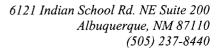
GW-054

Annual GW Report

DATE: 2009





September 15, 2009

Mr. Wayne Price New Mexico Oil Conservation Division 1220 S. St. Francis Drive Santa Fe. NM 87505

Subject:

2009 Annual Groundwater Monitoring Report

Groundwater Discharge Plan No. GW-054 ConocoPhillips Wingate Fractionating Plant

Gallup, New Mexico

Dear Mr. Price,

Tetra Tech is pleased to deliver the enclosed Annual Groundwater Monitoring Report per the requirements of the Groundwater Discharge Plan GW-054.

Should you have any questions, please contact Kelly Blanchard at 505-237-8440.

Sincerely,

Kelly E. Blanchard

Project Manager/Geologist

Enclosures (1)

Cc: Beverly Cox, ConocoPhillips

Kim Kamps, ConocoPhillips

2009 ANNUAL GROUNDWATER MONITORING REPORT

WINGATE FRACTIONATING PLANT Gallup, New Mexico

IN COMPLIANCE WITH GROUNDWATER DISCHARGE PLAN GW-054

Prepared For:



Wingate Fractionating Plant 68 El Paso Circle Gallup, New Mexico 87301

Prepared By:



TETRA TECH, INC.

6121 Indian School Rd. Suite 200 Albuquerque, New Mexico 87110 (505) 237-8440

ConocoPhillips Work Order No.: 4506659939 Tetra Tech Project No.: 114-690117

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1.0 INTRODUCTION AND SITE HISTORY

The Wingate Fractionating Plant is located in McKinley County, New Mexico, within portions of Sections 9, 10, 15, 16, and 17, Township 15 North, Range 17 West (**Figure 1**). A Groundwater Discharge Plan for the Wingate Plant was first approved by the New Mexico Oil Conservation Division (OCD) on August 17, 1992.

Four monitor wells were installed in June 2003. Three of these wells surround the evaporation ponds and one is located on the east side of the plant. Two of the wells surrounding the evaporation pond were installed above the groundwater table in order to determine if leakage from the ponds is occurring. Monitor well MW-I was damaged and was re-drilled; it is now referred to as MWR-I. To date there has been no indication of water in the two wells installed above the groundwater table.

In a letter dated March 24, 2004, OCD approved the current Groundwater Discharge Plan, GW-054, with amended conditions contained in an attachment to the plan. On September 22, 2004 and September 23, 2004, two monitor wells were installed as specified in the discharge plan amended conditions.

In accordance with Groundwater Discharge Plan GW-054, Tetra Tech Inc. (Tetra Tech) conducted an annual groundwater sampling event from June 22, 2009 through June 24, 2009. This report presents results from this groundwater monitoring event.

2.0 SITE DESCRIPTION

The site consists of a gas fractionating plant with associated pipelines and storage tanks. The site is surrounded by a chain-link fence, and the office is located on the south end of the site. Two evaporation ponds are located to the northwest of the site (**Figure I**). These ponds are used and maintained by ConocoPhillips Company (ConocoPhillips) and are surrounded by a chain-link fence. All monitor wells are on ConocoPhillips property except for WMW-8, which is on property belonging to El Paso Natural Gas. A site layout map is provided as **Figure 2**.

The site lies along the south side of an east-west trending alluvial drainage formed by the south fork of the Puerco River. The site is approximately 6,590 feet above mean sea level (amsl), and lies on Quaternary-aged alluvium. To the south of the plant are the Zuni Mountains, reaching a maximum elevation of approximately 9,000 feet amsl. To the north of the plant, a red sandstone escarpment rises 400 feet above the valley to an elevation of approximately 7,000 feet amsl. The escarpment is comprised of Jurassic-age sandstone and siltstone deposits of the Entrada Formation. Groundwater at the site has been encountered during drilling at

Tetra Tech August 2009 2

approximately 20 feet below ground surface (bgs), rising to approximately 8 feet bgs in well casing, suggesting confined aquifer conditions. **Table I** lists well completion information and groundwater elevations. During the 2009 groundwater sampling event, the groundwater flow direction was predominantly to the northwest. This is consistent with previous data. Groundwater potentiometric contours are presented in **Figure 2**.

There are currently 13 monitor wells on and surrounding the site (Figure 2)

3.0 GROUNDWATER SAMPLING METHODOLOGY

Tetra Tech performed groundwater monitoring activities from June 22, 2009 through June 24, 2009. Groundwater depths were measured using an electronic water level indicator; this data, along with casing diameter and total depth information, was used to calculate the water volume in each monitor well. An oil/water interface probe was used to measure groundwater depth in WMW-2 and check for the presence of free product. Before and after each use, the water level indicator and interface probe were cleaned with soap and water, then sprayed with an Alconox®/de-ionized water solution, and then were finally sprayed with de-ionized water. Graphs presenting groundwater elevations versus time for each monitor well are presented in Appendix A. Water was purged from the wells with a submersible pump or disposable bailer until field parameters such as pH, oxidation reduction potential (ORP), dissolved oxygen (DO), conductivity, and temperature stabilized and/or three well volumes of water were removed. Field parameters were monitored using a YSI instrumented flow-through cell. The purpose of the purge was to obtain a groundwater sample that would be representative of aquifer conditions rather than possible stagnant conditions in the well.

Following purging, groundwater samples were collected through vinyl tubing attached to the submersible pump and placed into laboratory-prepared sample containers. Disposable nitrile gloves were worn by sampling personnel and were changed at each well location. The pump and tubing were decontaminated following each well sampling by circulating Alconox® soap and de-ionized water solution through the pump followed by circulating a de-ionized water rinse. WMW-2, the monitor well known to contain constituents of concern (COCs), was sampled last.

Following collection, the sample containers were immediately labeled, placed on ice, and chilled to approximately 4° Celsius. Samples were submitted to Southern Petroleum Laboratory in Houston, Texas for analyses of benzene, toluene, ethylbenzene, and total xylene (BTEX) by Environmental Protection Agency (EPA) Method 8260B; semi-volatile organics by EPA Method 8270; chloride, sulfate, and nitrate by EPA Method 300.0A; alkalinity by EPA Method 310.1; metals including mercury, arsenic, barium, calcium, cadmium, chromium, magnesium, selenium,

silver, sodium, and lead by EPA Method 6010B; total dissolved solids (TDS) by EPA Method 160.1, and pH by EPA Method 150.1. These analytes are referred to as Data Set I, and results for these analyses are presented in **Table 2**. Data Set 2 is composed of samples collected from the evaporation pond area (MWR-1, MW-2, and MW-3, East Pond and West Pond). These locations were additionally analyzed for Biochemical Oxygen Demand, (BOD), Chemical Oxygen Demand (COD), and total coliform analyses under Environmental Protection Agency (EPA) procedures 405.1, 410.1, and Standard Method (SM) 19, 1995 9223B, respectively. Results for these analyses are presented in **Table 3**. Analytical results were compared to the New Mexico Water Quality Control Commission (NMWQCC) ground water quality standards contained in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Applicable ground water quality standards are found in Subsection A, *Human Health Standards*, and Subsection B, *Other Standards for Domestic Water Supply*.

A duplicate sample was collected from WMW-2 and analyzed for BTEX. The analytical results were comparable to the results for the primary sample.

4.0 GROUNDWATER ANALYTICAL RESULTS

The 2009 groundwater analytical results are presented in **Tables 2** and **3**. **Appendix A** contains graphs depicting selected analytical results versus time for each well in addition to site hydrographs. The laboratory analytical report (including the chain-of-custody) is presented in **Appendix B**.

4.1 Evaporation Pond Perimeter Monitor Wells and Evaporation Pond Surface Water Samples

The shallow, vadose zone wells installed to monitor possible evaporation pond leakage are MWS-I and MWS-2. These wells were installed at a depth of 15 feet and were screened from 5 to 15 feet. They were dry at the time they were constructed and were also dry at the time of the sampling fieldwork. Thus, no water samples were collected from these wells and no leakage is apparent from site evaporation ponds.

The samples from MWR-I, MW-2, and MW-3 did not contain BTEX above laboratory detection limits. Similarly, BOD was not found above laboratory detection limits in MW-2 and MW-3. BOD results for MWR-I were similar to historical results, which have never exceeded the Discharge Plan limit of 30 mg/l. MWR-I and MW-3 results for COD were comparable to historical results, while the COD result for MW-2 has increased significantly since it was last sampled in July 2008, but is only slightly higher than data collected from 2004 to 2007. However, none of these monitor wells have ever exceeded the COD limit of I25 mg/l. The samples from MW-3 and were below laboratory detection limits for coliform. MWR-I and

MW-2 contained coliform concentrations of 10 colonies per 100 milliliter (10/100 ml) and 7/100ml, respectively, while the Discharge Plan limit for coliform is 500/100 ml. Analytical result concentrations from MWR-1, MW-2, and MW-3 were above NMWQCC ground water quality standards for manganese. MWR-1 also contained concentrations of iron just above NMWQCC ground water quality standards. The MW-2 sample had a TDS concentration of 1,030 milligrams per liter (mg/L), which is above the NMWQCC ground water quality standard of 1,000 mg/L. No other analytical results exceeded applicable NMWQCC ground water quality standards.

The East Evaporation Pond sample had a COD result lower than the historical results and below the Discharge Plan limit. BOD and coliform results were also below the Discharge Plan limits, but the values did increase slightly in the East Evaporation Pond to 4.4 mg/L and 4/100ml, respectively. Note that the East Evaporation Pond water sample contained sulfate, chloride, and TDS concentrations in excess of ground water quality standards.

The West Evaporation Pond sample contained a COD concentration of I,600 mg/L; the Discharge Plan limit is 125 mg/L. The water sample collected from the West Evaporation Pond was below the laboratory detection limit for coliform and had a BOD concentration of 7.7 mg/L. The West Evaporation Pond water sample contained manganese, chloride, sulfate, and TDS concentrations above ground water quality standards.

4.2 Wingate Facility and Surrounding Monitor Wells

Monitor wells WMW-1, WMW-3, WMW-4, WMW-5, WMW-6, WMW-7, and WMW-8 did not contain BTEX in concentrations above laboratory detection limits. The ground water sample collected from WMW-2 contained 9,800 micrograms per liter (μg/L) benzene. This concentration is well above the human health groundwater quality standard of 10 μg/L for benzene. However, due to the introduction of RegenesisTM Oxygen Release Compound socks into WMW-2, the benzene concentration in this well has decreased significantly since the 29,000 μg/L result in 2005. Toluene, ethylbenzene, and xylenes were detected in WMW-2 at levels below the NMWQCC human health ground water quality standards. BTEX was not detected in two down-gradient monitor wells from WMW-2 (WMW-4 and WMW-7), which suggests that the benzene impact may be localized in the area of WMW-2.

The groundwater samples collected from WMW-1, WMW-2, WMW-3, and WMW-5 contained chloride in concentrations above the ground water quality standard of 250 mg/L. Chloride concentrations have remained relatively constant since the 2005 sampling event.

The samples collected from WMW-I, WMW-3, and WMW-5 contained sulfate and TDS concentrations above ground water quality standards, while ground water samples collected from WMW-2, WMW-4, WMW-6 and WMW-7 were found to contain TDS in concentrations above ground water quality standards. TDS and sulfate concentrations in these monitor wells have also remained relatively constant since the 2005 sampling event.

5.0 Summary and Recommendations

Site evaporation ponds showed no signs of leakage during the June 2009 monitoring event, and no evidence of bacterial contamination was found in water samples collected from the ponds. However, the COD of the West Evaporation Pond was found to be elevated relative to the limits imposed by the Discharge Plan for the site. Concentrations of TDS, iron, manganese, sulfate, chloride and lead have been found above NMWQCC ground water quality standards in site monitor wells and evaporation ponds. The concentration of benzene in monitor well WMW-2 continues to exceed ground water quality standards by several orders of magnitude; however, benzene was not detected down-gradient of WMW-2, suggesting a localized benzene impact around this monitor well. As a result of these findings, Tetra Tech recommends the continuation of annual monitoring at the site. The next monitoring event is scheduled to take place in June 2010.

Please contact Kelly Blanchard at (505) 237-8440 or at Kelly.blanchard@tetratech.com if you have any questions or concerns regarding the information contained in this report.

FIGURES

FIGURE 1. Site Location Map

FIGURE 2. Site Map with Groundwater Potentiometric Surface Contours and Analytical Results



FIGURE 1.

Site Location Map ConocoPhillips Wingate Gas Fractionating Plant Gallup, NM





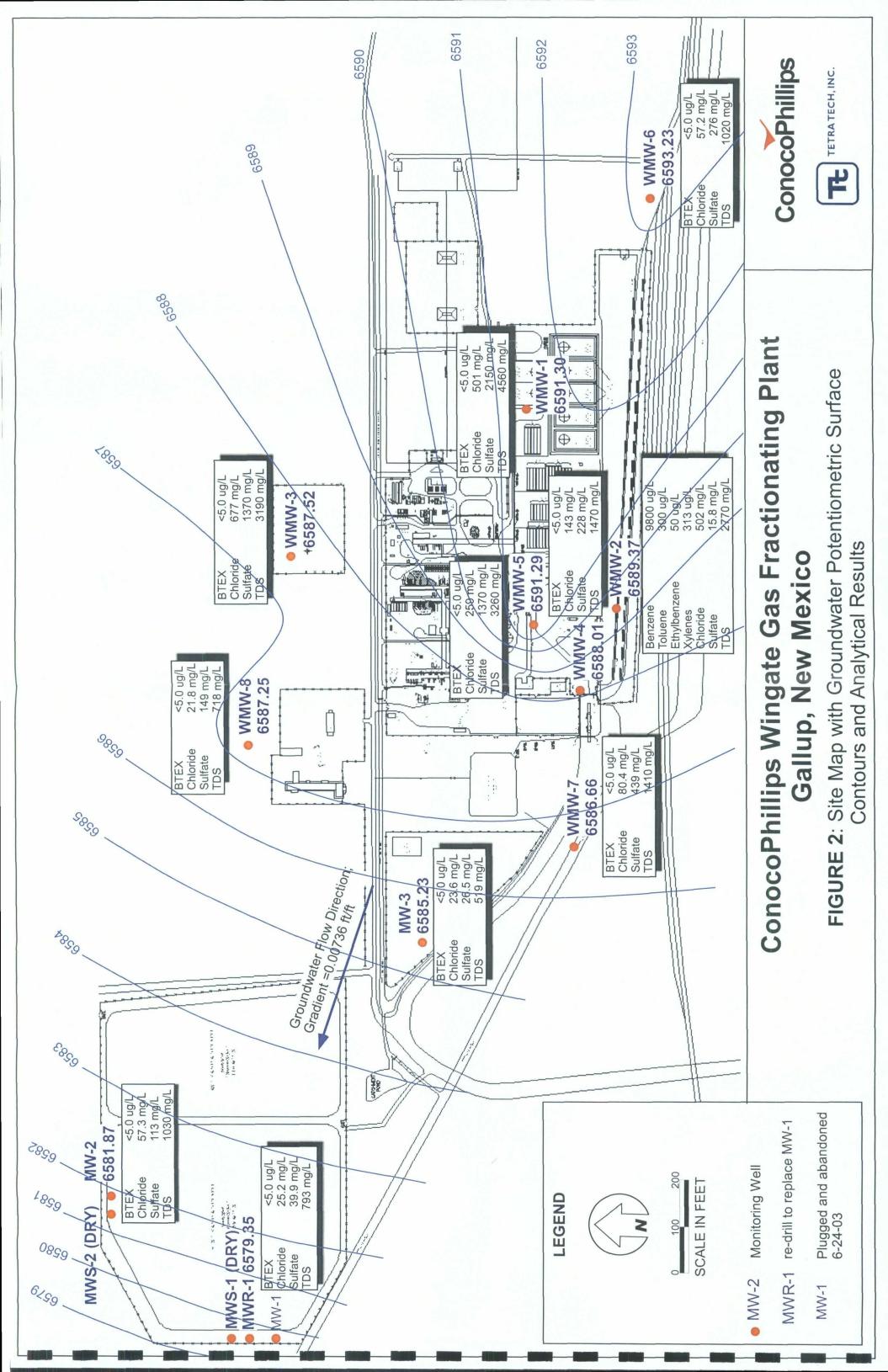
Approximate Boundary of the Wingate Plant

Evaporation Ponds Used for Facility Waste Water

ConocoPhillips



TETRA TECH, INC.



TABLES

TABLE 1. Well Completion and Groundwater Elevation Summary TABLE 2. Groundwater Analysis Summary (Data Set 1)
TABLE 3. Groundwater Analysis Summary (Data Set 2)

Table 1. 2009 Groundwater Elevations - Wingate Fractionating Plant, Gallup, New Mexico

Well ID	TOC Elevation (ft above msl)	Screened Interval (ft)	Total Depth (ft bgs)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (ft)
MWR-1	6585.13	20 - 45	45	5.78	6579.35
MW-2	6585.91	20 - 45	45	4.04	6581.87
MW-3	6590.08	20 - 45	45	4.85	6585.23
WMW-1	6597.13	5 - 15	15	5.83	6591.30
WMW-2	6594.88	5 - 20	20	5.51	6589.37
WMW-3	6594.92	5 - 20	20	7.4	6587.52
WMW-4	6595.49	5 - 20	20	7.48	6588.01
WMW-5	6597.11	5 - 20	20	5.82	6591.29
WMW-6	6603.86	20-35	35	10.63	6593.23
WMW-7	6594.7	16-38	38	8.04	6586.66
WMW-8	6594.05	17-38	38	6.8	6587.25

Explanation

bgs - below ground surface

ft - feet

msl - mean sea level

MW - Monitor Well

MWR - Redrilled Monitor Well

TOC - top of casing

WMW - Monitor well within the Wingate site boundary

Table 2. Groundwater Analysis Summary (Data Set 1), 2003 through 2009, Wingate Fractionating Plant, Gallup, New Mexico

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:			SW846 8260E	SW846 8260B Micrograms per Liter (ug/L)	ır Liter (ug	(1)				Total Me.	Total Metals by SW846 6020A/6010B, Milligrams per Liter	6020A/6010I	B, Milligrams	per Liter (mg/L)	.t.			S E)	SW 7470A (mg/L), Total	MCAWW	MCAWW 300.0A (mg/L)		SW846 8270C EP (ug/L) (pl	EPA 150.1 MC (pH units)	MCAWW 310.1 MC (mg/L)	MCAWW 160.1 (mg/L)
Sample Location	Date Sampled		⊢										-	-	+			+		}	\mid	+				
		Benzene	•	Ethylbenzene	Xylenes	TPH-GRO	Calcium		Magnesium	Manganese	Sodium	\dashv	٦		_		- 1	(Chloride	\dashv	و و	Naphthalene	\dashv	Alkalinity	\$E
	07/31/03	<0.5	<0.7	<0.8	<0.8	Q.	92.4	ΑN	46.1	ΑN	397	0.0114	H		\dashv		9800.0	<0.0018 <	<0.00016	154	<0.40	Ц	NA	7.9	725	1,340
	09/24/04	<0.5	<0.7	<0.8	<0.8	SN	12.5	¥	7.56	AN	291	<0.0047	0.252 <	\dashv		<0.0100	┰		<0.00028	\dashv	4		₹	8.0	553	712
	06/21/05	<0.5	<0.7	<0.8	<0.8	SN	10.2	Ϋ́	6.02	¥	278	<0.0093	\dashv	4	\dashv	\dashv	\neg		<0.000062		-		7	7.9	611	775
MWR-1	06/21/06	<0.5	<0.7	<0.8	<0.8	SN	11.1	ΑΝ	6.61	AA	317	<0.01	0.221		<0.0023	<0.0069	<0.0094	<0.0016 <(<0.000056	24.3	0.26	43.6	۲	8.1	611	684
	06/19/07	<0.5	<0.7	<0.8	<0.8	SN	31.3	Ą	15.2	AA	331	<0.01	0.728 <	<0.00090	\dashv	0.0126		-	0.000058	34.1	<0.25		<1	8.2	705	886
	07/01/08	<5.0	<5.0	<5.0	<5.0	SN	10.9	3	6.53	0.369	299	<0.005	-		-	<0.005		_	<0.0002	29.6	۲		<5	8.1	579	865
	06/24/09	<5	<5	<5	<5	SN	19.7	9.07	7.89	0.577	332	<0.005	0.488	<0.005	0.00666	<0.005	<0.005	<0.005	<0.0002	25.2	<0.5	> 6.68	<5	7.96	009	793
MWS-1													Dry Wells: Not Samn	Samulad												
MWS-2					,		١					,		Parent of the second												
	05/14/03	<0.1	<1.0	<1.0	<2.0	SN	14.7	AN	7.9	ΑN	418	<0.01	0.21	<0.002	<0.005	<0.003	AN A	A N	ΨŽ	64.4	<0.5	102 <9	9.6>	Ą	770	1,140
	09/24/04	<0.5	<0.7	8.0>	<0.8	QN	6.30	NA	2.96	AN	321	0.0131	<u> </u>	⊢	-	<0.0100	<0.0059	0	<0.000028	\vdash	<0.40	L	6.0>	8.3	718	860
	06/21/05	<0.5	<0.7	<0.8	¢0.8	SN	6.45	ΑN	3.14	Ą	310	0.0196	╆	┡	\vdash		1		<0.000062		<0.40	> 9.81	⊽	8.2	708	878
MW-2	06/21/06	<0.5	2.0>	<0.8	×0.8	SN	7.16	ΑN	3.57	NA	384	0.0212	0.141	<0.00091	<0.0023	H	-	<0.0016 <(<0.000056	38.6	<0.25	> 6.22	<1	8.2	712	908
	06/19/07	<0.5	<0.7	<0.8	8.0>	NS	6.73	AN	3.41	NA	284	0.0190	> 0.139 <			6900'0>	<0.0094	<0.0016 <(<0.000056	33.0	1.3	13.3	<1	8.3	708	888
	07/02/08	<5.0	<5.0	<5.0	0.5>	SN	13.2	0.601	9.6	0.354	361	0.00783	0.223	-		<0.005	-		<0.0002	62.9	<0.5	125 <	<5	7.77	929	1,050
	06/23/09	<5	<5	<5	<5	SN	14.5	0.611	8.18	0,314	403	0.0115	0.255	_	Н	<0.005	<0.005	<0.005	<0.0002	57.3	<0.5		<5	7.94	580	1,030
	05/14/03	<0.1	<1.0	<1.0	<2.0	SN	28.7	ΝΑ	13.5	ΑĀ	149	<0.01	<0.2	<0.002	<0.005	<0.003	Ϋ́	ΑN	AA	19.2	<0.5	15.5 <9	9.6>	NA	428	542
	09/24/04	<0.5	<0.7	<0.8	<0.8	SN	27.9	NA	13.4	ΑN	156	<0.0047	0.150 <	-0.00076	<0.0025	<0.0100	<0.0059	<0.0020 <	<0.00028	19.6	<0.40	14.6	<1	7.8	419	493
	06/21/05	<0.5	2.0>	<0.8	<0.8	SN	26.6	ΑN	12.8	NA	144	0.0108	0.160 <		Н	Н			<0.000062	\vdash	\dashv		<1	7.6	415	488
MW-3	06/21/06	<0.5	<0.7	<0.8	<0.8	SN	27.4	Ϋ́	13.3	ΑN	161	<0.010	\dashv	\dashv	\dashv	-	\neg		<0.000056	\dashv	_		₹	7.7	394	507
	06/19/07	<0.5	<0.7	<0.8	\$0.8	SN	28.4	Ϋ́	13.5	ΑN	170	<0.010	\dashv	_	\dashv	\dashv	一	-	<0.000056	+	_	_	₹ 	7.7	417	510
	07/01/08	<5.0	<5.0	<5.0	<5.0	SN	27.5	4.66	13.2	1.97	151	0.0388		<0.005	\dashv	<0.005	\dashv	4	<0.002	19.3	4		\$	7.64	382	538
	06/23/09	\$	\$	~ 2	<5	SN	29.5	0.255	14.5	0.703	172	0.00654	-	\dashv	┥	<0.005	2	2	<0.0002	23.6	┥	_	<5	7.74	339	519
	05/14/03	¢0.1	41.0	41.0	<2.0	SN	258	¥	69.7	Y.	1,140	<0.01	\dashv	\dashv	\dashv	<0.003	ΨN	\dashv	Ψ¥	1	+		8.6>	₹	1050	5,090
	09/24/04	<0.5	<0.7	<0.8	<0.8	SN	236	AA	63.8	NA	1,370	<0.0047	0.0256 <	-4	-	-	-+	_	<0.000028	_	4	4	<u>~</u>	7.8	1,030	5,150
	06/20/05	<0.5	<0.7	<0.8	×0.8	SN	224	AN	61.1	AA	1,370	<0.0093	0.0177	<0.00097		\dashv		_	<0.000062	\dashv	4	\downarrow	₽	7.0	1,060	5,140
WMW-1	06/21/06	<0.5	40.7	×0.8	×0.8	SN	279	¥.	76.8	AN	1,310	<0.01	\dashv	_	\dashv	+	-		<0.000056	+	4	_	₽	7.1	1,030	5,150
	06/18/07	<0.5	<0.7	<0.8	×0.8	SN	287	¥	77.2	¥	1,310	¢0.01	~	\dashv	ᆛ	\dashv	_		<0.000056	+	\dashv		₹	7.2	1,050	5,130
	80/30/98	<5.0	<5.0	<5.0	<5.0	SS	228	1.92	63.7	3.97	1,210		\dashv	\dashv	\dashv	<0.005	\dashv		<0.0002	\dashv	\dashv		\$	6.78	866	4,640
	06/22/09	\$	Ĉ.	~ 5	\$	SN	222	0.192	6.09	3.94	1,330	\dashv	<0.025	\dashv	4	<0.025	<0.025	50	<0.0002	\dashv	4		<5	7.05	845	4,560
	05/14/03	29,000	×200	<500	<1,000	SN	47.3	¥ V	27.4	AA	1,140	-1	\dashv	-	\dashv	+	-	_	ΨV	\dashv	4	_	24	₹	1,710	3,150
	09/24/04	28,000	450	110	650	SN	57.2	AN	33.8	AA	1,510	<0.0047	\dashv	-	\dashv	\dashv	-+		<0.000028	\dashv	4	_	21	7.6	2,110	4,220
	06/21/05	29,000	350	110	920	SZ	53.6	¥.	32.3	AN	1,450	<0.0093		0.0047	<u>_</u>	7	4	힜	<0.000062	+		+	17	7.5	2,090	3,800
	auplicate	25,000	3 3	\$ 2	4/0	SZ S	2 3	Ψ.	2 3	₹ :	SZ S	S S	┰	-	SN	+			SN 95	2	4	-	2 ,	2 3	2000	2 5
	dunlicate	3,300	ច ក្	47 77	150	ON AN	5 2	¥ 2	061	Y Y	050,1 AM	0.07	0.0841		╀	80000	40.0034 VA	V V V	ocnoon.	\dagger	CZ:US	7 2	ο Δ Ν	5 AN	2,000 AN	DAY N
WMW-2	06/20/07	7,200	06	40	280	SN	19.3	AN	104	¥	712	0.0138	+	2	4	- g	4	9	<0.000056	\dagger	1.0		60	6.6	1,200	1,900
	duplicate	5,200	87	39	270	ΑN	¥	Ą	¥	Ą	¥	¥	┡	ΑŽ	ΨŽ	\vdash	+	₹	Ą	¥	¥	AN	A'A	¥	Ą	Ą
	07/02/08	7,700	190	34	201	NS	128	Ā	110	0.476	852	0.00993	0.411	0.131	0.029	0.0288	<0.005	<0.005	<0.0002	565	<0.5	25.9	9	9.31	1,220	282
	duplicate	7,900	220	56	346	NA	Ą	48.8	ΝΑ	ΑN	NA	Ą	NA	NA	ΑN	AN	NA	ΝΑ	Ą				NA	Ą	Ą	Ą
	06/24/09	9,800	300	50	313	NA	16.2	0.482	6.66	<0.25	1,000	<0.005	0.11	<0.005	0.00809	<0.005	<0.01	<0.005	<0.0002	502	\dashv	15.8 5.	5.6	9.59	1,530	2,770
	duplicate	9,700	290	49	313	¥	Ą	Ą	¥	Ą	¥	₹		AN	ΝΑ	Ą	Ą.	ΔN	ΑN	₹ Z	-	4	NA	A A	ΑĀ	Α̈́
	05/14/03	0.1	0.6	۲٠0	<2.0	SN	186	ΑĀ	88.5	¥	1,860	0.014	\dashv	<0.002	0.19	+			¥	_	-	_	<9.5	¥	1,090	5,570
	09/25/04	<0.5	<0.7	×0.8	¢0.8	SN	470	¥	216	¥	1,810	0.0351	\dashv	4	\dashv	\dashv	-		<0.00028	+	4	4	<10	7.5	1,700	6,030
	06/20/05	<0.5	<0.7	8:0>	<0.8	NS	112	₹ Ž	48.0	¥	1,700	<0.0093	\dashv	4	1	\dashv	_		<0.000062	1	\dashv	4	₹	7.5	1,230	5,590
WMW-3	06/21/06	<0.5	<0.7	8.0>	<0.8	SS	155	¥	73.8	¥	1,850	¢0.01	\dashv	4	+	+			0.00012	+	+	4	- ;	7.5	1,210	5,640
	06/20/07	0.5	40.7	8.0.8	8.0.8	SN S	199	AN SE	70.4	AN .	2,040	0.0107	+	\perp	0.0701	0.0292		<0.0016 0	0.000076	1,540	1.5	_	×10	7.54	1,520	5,900
	06/24/00	200	3 4	977	200	2 2	200	300	101	4,40	1,300	0.0166	20.0	2000	1	0.130	50.00	+	20.00	277	1,,	1 370	5 4	7.65	1 410	3 190
	0012-100	,	,	?	,	2	201	?	1.70	0.00	01 / 10	20:00	┨	+	┪	0.000	1	٦.	70000	1	-		_	2001	<u>.</u>	31.5

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Table 2. Groundwater Analysis Summary (Data Set 1), 2003 through 2009, Wingate Fractionating Plant, Gallup, New Mexico

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Sample Location	Date Sampled	S	W846 8260B	SW846 8260B Micrograms per Liter (ug/L)	ır Liter (ug/L)					Total Mets	Total Metals by SW846 6020A/6010B, Milligrams per Li	20A/6010B, I	Willigrams pe	r Liter (mg/L)		!	,	SW 7470A (mg/L), Total	170A Total	MCAWW 300.0A (mg/L)	.0A (mg/L)	SW846 8270C (ug/L)	EPA 150.1 (pH units)	MCAWW 310.1 (mg/L)	MCAWW 160.1 (mg/L)
		Benzene	Toluene	Ethylbenzene	Xylenes	TPH-GRO	Calcium	Iron	Magnesium	Manganese	Sodium A	Arsenic Ba	Barium Cadı	Cadmium Chr	Chromium	Lead Seie	Selenium Si	Silver Mercury	<u> </u>	Chloride Nitrate	ate Sulfate	Naphthalene	Hd	Alkalinity	TDS
	05/14/03	<0.1	<1.0	<1.0	<2.0	SN	37.3	NA	16.8	NA	550	<0.01 0	0.28 <0.	<0.002 0	9000	16.8	NA	NA NA	\vdash	133 <0.5	.5 240	<9.7	NA	783	3,070
	07/30/03	<0.5	<0.7	<0.8	<0.8	53	Ą	A	NA VA	ΝA		\vdash	—ŧ		\dashv		\dashv	\rightarrow		NA NA	\dashv	NA	Ą	Ϋ́Α	AN
	09/23/04	<0.5	<0.7	<0.8	<0.8	SN	12.5	Ą	13.1	NA					-	<0.0100 <0.	<0.0059 0.0	0.0020 <0.000028		149 <0.40		۲۷	7.8	788	1,550
WWW	06/20/05	<0.5	<0.7	<0.8	<0.8	NS	11.7	ΑN	12.5	NA	529 <	<0.0093 0.0	0.0449 <0.0	_	<0.0048 <0	<0.0084 <0.	<0.0094 <0.	<0.0020 <0.000062		152 <0.40	40 243	۱>	7.8	764	1,470
	06/21/06	<0.5	<0.7	<0.8	<0.8	NS	12	NA NA	12.8	AN		<0.01 0.0	0.0414 <0.0		_	<0.0069 <0.	<0.0094 <0.	<0.0016 <0.000056		163 <0.25	25 266	4	7.8	722	1,480
	06/20/07	<0.5	<0.7	<0.8	<0.8	NS	15	NA	13.8	NA		<0.01 0.0	0.0782 <0.0	<0.00000 0.	0.0039 <0	<0.0069 <0.	<0.0094 <0.	<0.0016 <0.000056		184 <0.25	25 265	4	8.0	765	1,380
	80/02/90	<5.0	<5.0	<5.0	<5.0	SN	12.1	0.963	0.248	0.248		<0.005 0.0							L	186 <0.5	.5 240	\$	7.54	672	1,460
	06/22/09	<5	<5	<5	<5	NS	16.5	4.13	12.2	0.325	\vdash	\vdash		\vdash	-	\dashv	<0.025 <0	<0.025 <0.0002		143 <0.5	\vdash	<5	7.73	673	1,470
	05/14/03	<0.1	<1.0	<1.0	<2.0	NS	332	AN	88	NA		<0.01		2	<0.005 <(3			\dashv	598 <0.5		<9.5	NA	895	5,530
	07/30/03	<0.5	<0.7	<0.8	<0.8	Q	NA	AN	NA VA	NA A	NA	NA	NA		NA	NA	NA	NA NA		NA NA	A NA	NA	NA	NA	NA
	09/23/04	<0.5	<0.7	<0.8	<0.8	NS	186	NA	48.8	NA		<0.0047 0.0	0.0117 <0.0		<0.0025 <	<0.0100 <0.	<0.0059 <0.	<0.0020 0.000044		307 <0.40	1,330	۲	7.1	788	3,410
WWW.5	06/20/05	<0.5	<0.7	<0.8	<0.8	NS	187	NA	50.5	NA		<0.0093 0.0	_	<0.00007	<0.0048 <0	<0.0084 <0.		<0.0020 <0.000062		334 <0.40	1,400	۲	7.0	693	3,300
?	06/21/06	<0.5	<0.7	<0.8	<0.8	NS	144	NA	38.7	NA		<0.01 0.0	0.0076 <0.0		<0.0023 <0	<0.0069 <0.	<0.0094 <0.	<0.0016 <0.000056	L	224 <0.25	25 1,210	٧	7.1	680	2,380
	06/18/07	<0.5	<0.7	<0.8	8.0>	NS	253	NA	69	NA	1,170	<0.01 0.0	0.0213 <0.0	0> 060000'0>	<0.0023 <0	<0.0069 <0.	<0.0094 <0.	<0.0016 <0.000056	_	383 <0.25	25 1,730	۶	7.2	796	4,380
	80/02/90	<0.5	<0.5	<0.5	<0.5	SN	137	0.562	41.4	1.12	811 <	<0.005 0.	0.0163 <0.	<0.005	<0.005 <(<0.005 <0	<0.005 <0	<0.005 <0.0002	L	232 <0.5	.5 1,270	\$	7.15	548	3,020
	06/22/09	<2	<5	<5	<5	SN	172	0.346	49.4	0.693		_	<0.025 <0.		_	\vdash	<0.025 <0	<0.025 <0.0002		259 <0.5	5 1,370	\$	7.37	682	3,260
	09/24/04	<0.5	<0.7	<0.8	8:0>	QN	34.4	NA	13.2	NA	315 <	<0.0047 0.0	0.0517 <0.0	<0.00076 <0	_		<0.0059 <0.			57.5 <0.40	_	V-1	7.8	425	1,020
	06/21/05	<0.5	<0.7	<0.8	<.08	NS	35.9	NA	13.4	NA		_	-		<0.0048 <0	<0.0084 <0.		<0.0020 <0.000062		58.8 <0.40	40 290	4	7.7	428	952
WWW 6	06/21/06	<0.5	<0.7	<0.8	<0.8	NS	38.1	NA	14.1	NA	300	<0.01	0.049 <0.0	<0.00091 <0	<0.0023 <0	>0.0069 0.0	0.0094 <0.	<0.0016 <0.000056	L	58.9 <0.25	25 293	٠,	7.7	488	996
	06/18/07	<0.5	<0.7	<0.8	<0.8	NS	44.3	NA	15.5	NA		\vdash	0.0637 <0.0	<0.00000 <0	<0.0023 <0	<0.0069 0.0	0.0094 <0.	<0.0016 <0.000056		66.7 <0.25	25 280	۲۷	7.7	449	1,070
	07/01/08	<5.0	<5.0	<5.0	<5.0	NS	194	77	56.3	2.76	317 0	0.0119 2	2.34 <0.		0.0863 0.	0.0545 <0	_	<0.005 <0.0002		76.5 <1	328	<5	7.82	451	1,500
	06/23/09	<5	<5	\$	-€	NS	41.1	0.516	14.4	0.162	339 <	<0.005 0.	0.0679 <0.	<0.005 <(-	<0.005 <0	<0.005 <0	<0.005 <0.0002		57.2 <0.5	.5 276	<5	7.87	389	1,020
	09/24/04	<0.5	<0.7	<0.8	<0.8	NS	35.5	NA	15.8	NA		\rightarrow	-		\dashv	-	$\overline{}$	-		63.7 <0.40	\vdash	٢	7.7	526	1,200
	06/21/05	<0.5	<0.7	<0.8	<0.8	SN	48.0	Ā	25.4	NA A				\dashv	\dashv		-			-	\dashv		7.7	630	2,590
WMW-7	06/21/06	<0.5	<0.7	<0.8	<0.8	SN	42.2	NA NA	22.2	NA	\dashv	\dashv	\rightarrow	\dashv	\dashv	\dashv		-	_	-	_		7.6	589	2,360
	06/18/07	<0.5	<0.7	<0.8	<0.8	SN	42.9	ΑN	21.8	NA	_		_	_	_	\dashv	\dashv	~	4	\dashv	4	₽	7.7	643	2,310
	80/02/90	<5.0	<5.0	<5.0	<5.0	SN	50.5	15.3	24.9	0.511	478 <	<0.005 0	\dashv	-}		\dashv	\dashv	_	_	\dashv	\dashv	<5	7.34	514	1,580
	06/22/09	\$	\$	\$	\$	NS	41.1	0.284	16.9	0.2		\dashv	⊣		\dashv	一	\dashv	→	4	\dashv	4	<5	7.56	520	1,410
	09/24/04	<0.5	<0.7	<0.8	<0.8	SN	36.1	AA	17.6	¥.	T	-	-+	_	+	+	_		4	\dashv	4	₽	7.8	440	753
	06/21/05	<0.5	<0.7	×.08	<0.8	SN	29.3	¥	14.7	Y.	7		+	+	+	\dashv	\neg		4	+	_	₹	7.7	497	882
WMW-8	06/21/06	<0.5	<0.7	<0.8	\$0.8	NS	28.9	ΑĀ	14.8	AA	+	-+	+	4	\dashv	+	\neg	_	4	\dagger	4	₹	¥	506	Ā
	06/19/07	<0.5	<0.7	¢0.8	<0.8	SN	295	¥	186	¥	T	<0.01	\dashv	-	<0.0023 <0	\dashv	_	~	4	28.5 <0.25	\dashv	₹	7.6	487	795
	07/01/08	<5.0	<5.0	<5.0	<5.0	SN	38.5	0.083	18.2	0.311	7	+	+	\dashv	\dashv	+	+	+	4	+	-	\$	7.6	425	816
	06/23/09	\$	Ş.	\$	\$	SN	39.6	0.0771	18	0.278	+	-+	+	_	-	+	-†	_+	_	+	+	_	7.69	369	718
	09/23/04	<10	<14	416	<16	SN	869	¥.	8,830	₹ :	†	+		_	+		_	_	4	+	+		8.5	469	209,000
Man Daniel	06/20/02	6.05	V0./	8.00	8.0.8	2 5	826	¥ :	06,4	Y.	_	0.0253	-+	_	+	+	+	`+	+	+	+	1	7.	35/	369,000
1001	10/61/00	0.0	7.07	0.0	0.0	S N	757	0 223	1.0.1	270	20 000 02	+	0.050 7000 0	05 060000	0.0000	-0.008 -0.	0.00788 U.U	0.0009	+	36,000	15,000	7 2	F. 7	410	285,000
	06/24/09	3 ₹	\$ 5	\$ 5	\$ 5	SN	440	0.197	5.250	1.2	+	+-	+-	1_	+	╁	+-	+-	╁	Ļ	╁	_	8.1	435	397.000
	09/23/04	8	4	4	4	SN	1,080	A'A	625	A A	T	+-	0	92	╀	٥	1	tö	╄	╁┈	╁		8.6	148	46,200
	06/20/05	<0.5	<0.7	<0.8	<0.8	NS	1,010	Ą	488	NA	T	⊢	\vdash	╙	<0.0048 <0	<0.0084 <0.	Τ-	<0.0020 <0.000062	┞-	13,000 <0.40	10 5,090	۶	10.4	110	31,100
100	06/21/06	<0.5	<0.7	<0.8	8.0>	SN	1,400	¥	688	NA	9,640 0	0.0113 0.	0.117 <0.0	<0.00091 <0	<0.0023 <0	<0.0069 <0.	<0.0094 <0.	<0.0016 <0.000056	L	13,000 <0.25	25 9,180	۲	10.4	156	34,800
PIGST LOIG	06/19/07	<0.5	<0.7	8.0>	<0.8	SN	251	Ą	161	AN	4,340	\vdash	0.0> 7990.0	0> 060000.0>	<u> </u>	<0.0069 <0.	<0.0094 <0.	<0.0016 <0.000	_	5,720 1.3	3 5,860	۲۷	8.8	103	19,700
	07/02/08	<5.0	<5.0	<5.0	<5.0	NS	1,070	<0.02	736	<0.005		-	\Box	-	_	-		<0.005 <0.002	-	4,880 <5.0		<5.0	10	76	16,200
	06/24/09	<5	<5	< \$	<5	NS	849	<0.02	605	<0.25	2,510 <	<0.005 0.0	0.0443 <0.	<0.005 0.0	0.00521 <(<0.005 <0	<0.01 <0	<0.005 <0.0002	4	2,270 <0.5	5 5,360	<5	10	88	13,000
NMWQCC Groundwater Standards for Human Health or Domestic Water Supply ²	water Standards or Domestic Wate	10	750	750	620	NE .	¥	1.0	ÄË	0.2	NE .	0.1	1.0 0.	0.01	0.05	0.05 0	0.05 0	0.05 0.002		250 10	009	30	6.6 - 8.6 (see note 2)	NE NE	1,000
			1						1								$\left\{ \right.$			-					

Explanation

Due to an error on the chain-of-custody, WMWv-8 was not analyzed for the presense of Chloride, Sulfate, pH, or TDS.

MCAWW - "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983, subsequent revisions included

MW - Monitoring Well

MWS - Redrilled Monitor Well

MWS - Shallow Monitor Well

NA - Not Analyzed

ND - Not detected above laboratory detection limits

ND - NOT - N

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Table 3. Groundwater analysis Summary (Data Set 2), 2003 through 2009, Wingate Fractionating Plant, Gallup, New Mexico

Sample Leastion	Data Sampled	EPA 405.1	EPA 410.1	Standard Method 19, 1995, 9223B
Sample Location	Date Sampled	BOD (mg/L)	COD (mg/L)	Total Coliform (colonies/100 mL)
	07/31/03	9.2	32.1	NS
	09/24/04	11.0	20.6	<1.0
	06/21/05	<3.5	12.9	<1.0
MWR-1	06/21/06	<5.0	16.7	<1.0
	06/19/07	15.9	68.5	<1.0
	07/01/08	<2.0	9.41	<1.0
	06/24/09	2.87	17.5	10
	09/24/04	<6.0	26.70	<1.0
	06/21/05	<2.5	32.40	<1.0
MW-2	06/21/06	<5.8	28.30	<1.0
WW-2	06/19/07	<3.8	29.0	<1.0
	07/02/08	<2.0	7.23	<1.0
	06/23/09	< 2	40	7
 :	05/14/03	<4.0	ND	NS
	09/24/04	5.2	<1.4	<1.0
	06/21/05	<2.2	7.4	<1.0
MW-3	06/21/06	<2.0	6.8	<1.0
	06/19/07	<2.5	19.7	NA ¹
	07/01/08	<2.0	7.06	12
	06/23/09	< 2	7.5	< 1
MWS-1		Dry Well	s; Not Sampled	
MWS-2	00/02/04	10.0	450	>200 5
	09/23/04	18.9 8.7	150 105	>200.5
	06/21/05	8.7 <11.9	105	>200.5 8.7
East Pond	06/21/06			
	06/19/07	<9.8	462	>200.5
	07/02/08	<2.0	94	<1.0
	06/24/09	4.4	67.5	4
	09/23/04	62.5	1,210	<1.0
14/4 5 1	06/21/05	7.5	775	<1.0
West Pond	06/19/07	<42.4 ²	10,200	<1.0
	07/02/08	30.8	2,940	<1.0
	06/24/09	7.7	1,600	< 1
Discharge Per	mit Limit ³	< 30	< 125	< 500

Explanation

BOD - Biological Oxygen Demand

COD - Chemical Oxygen Demand

MW - Monitor Well

MWR - Redrilled Monitor Well

MWS - Shallow Monitor Well

NA - Not Analyzed

ND - Not detected above laboratory detection limits

NS - Not Sampled

¹The sample was positive for chlorine and therefore was considered invalid and could not be analyzed

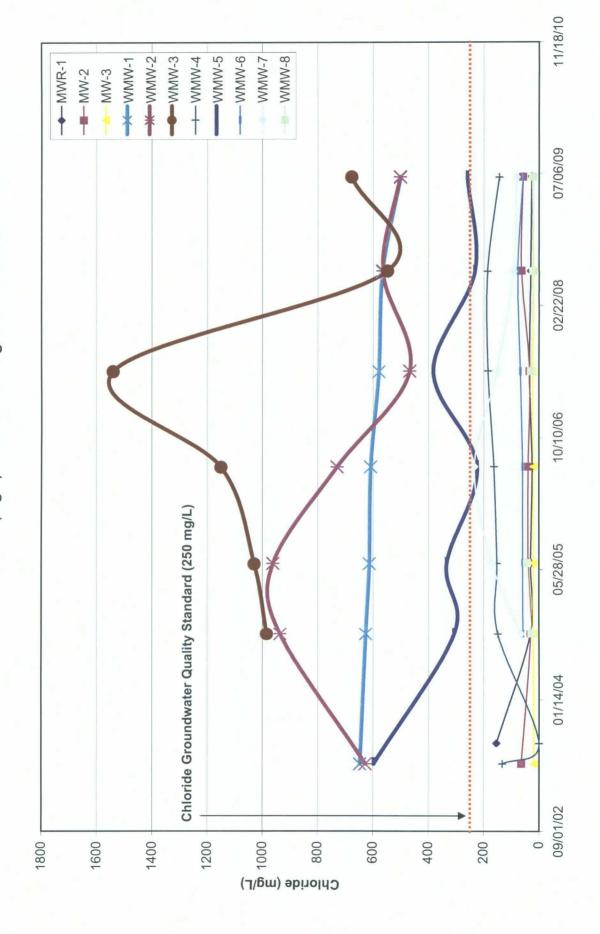
²Estimated BOD result

³Permit Limit as stipulated in the Discharge Permit and regulated by 20.6.2.2101 NMAC, Subpart A.

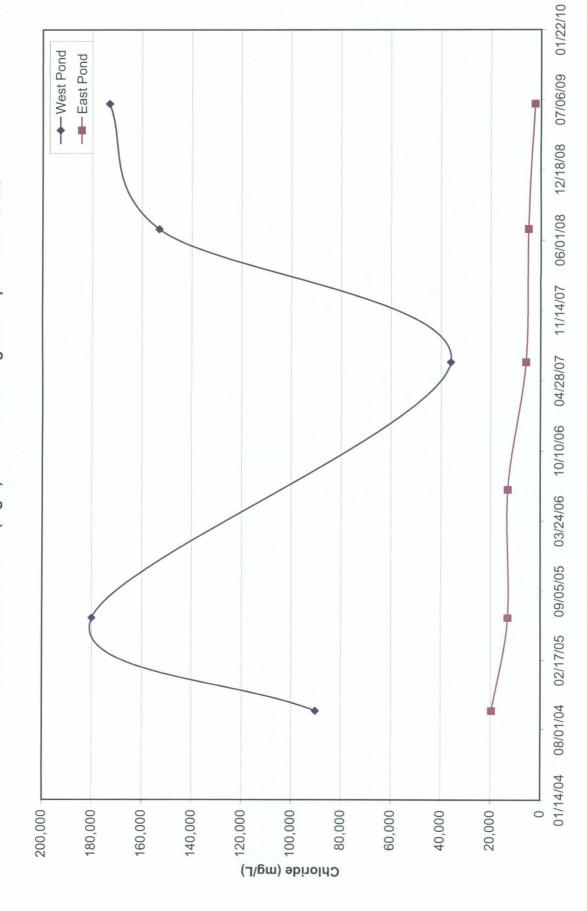
APPENDIX A

Analytical Concentrations vs. Time Graphs and Site Hydrographs

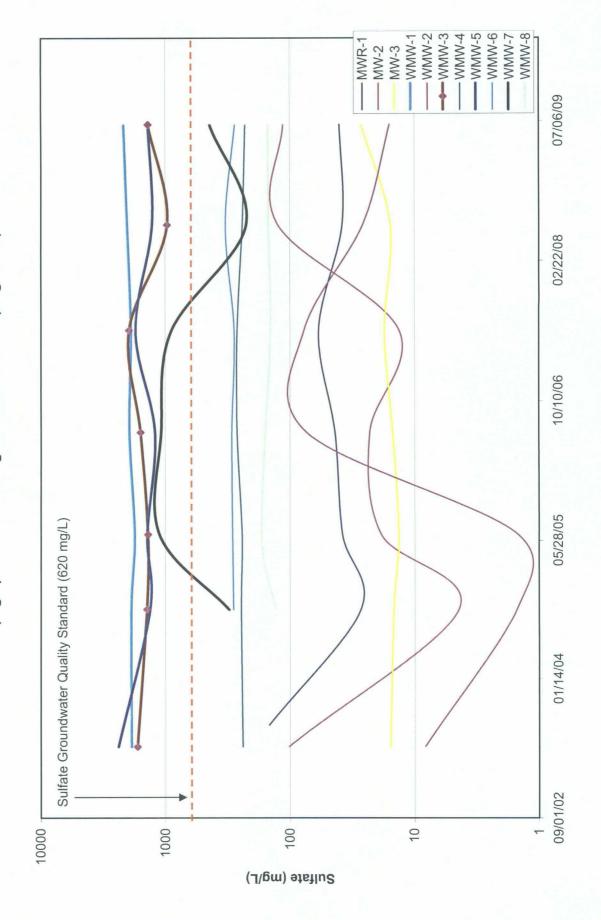
Chloride Concentrations (mg/L) vs. Time in Wingate Monitor Wells



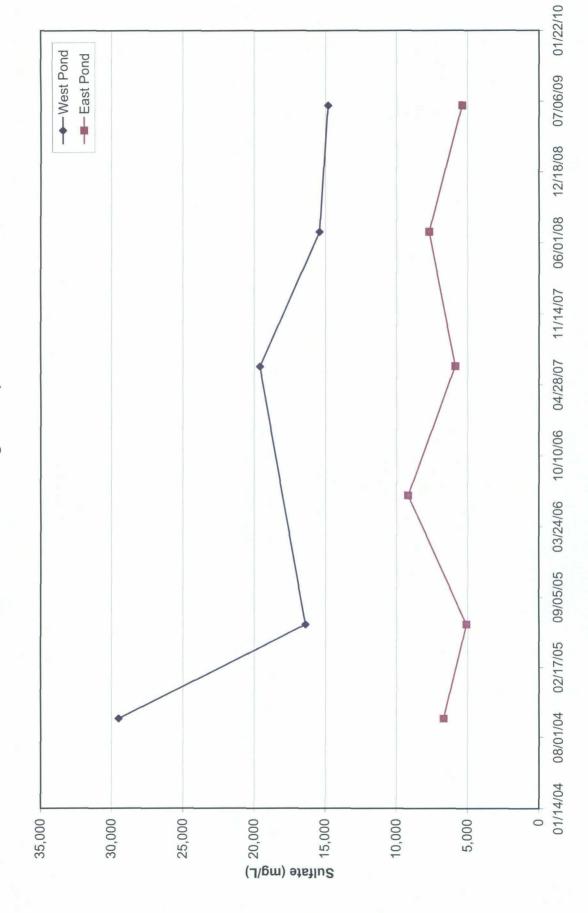
Chloride Concentrations (mg/L) vs. Time in Wingate Evaporation Ponds



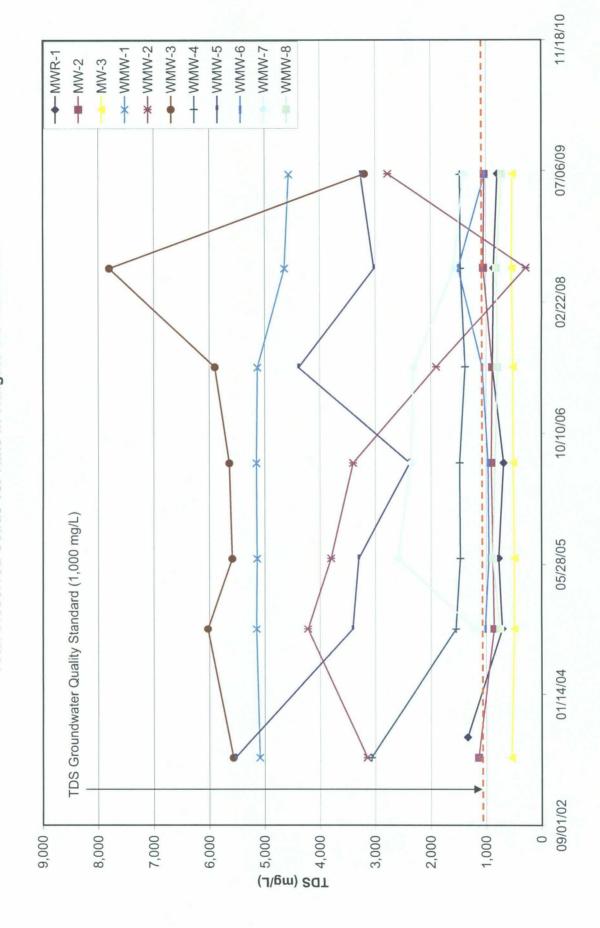
Sulfate (mg/L) vs Time in Wingate Monitor Wells (Log Scale)



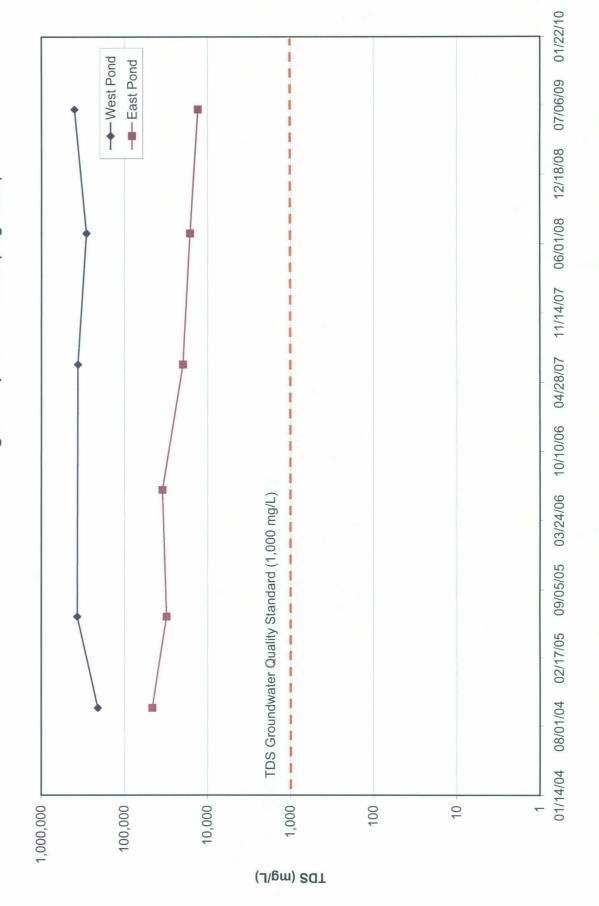
Sulfate vs. Time in Wingate Evaporation Ponds



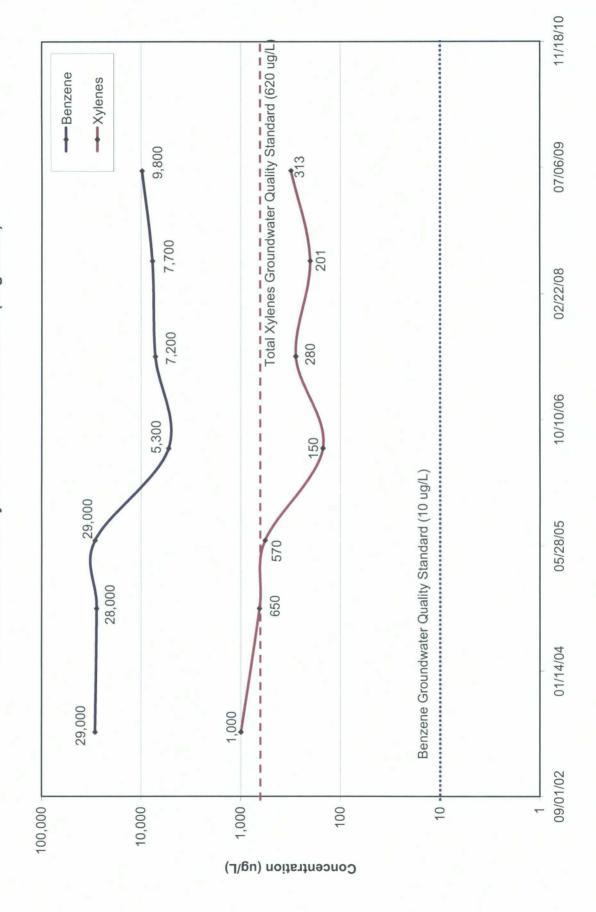
Total Dissolved Solids vs. Time in Wingate Monitor Wells



Total Dissolved Solids vs. Time in Wingate Evaporation Ponds (Log Scale)



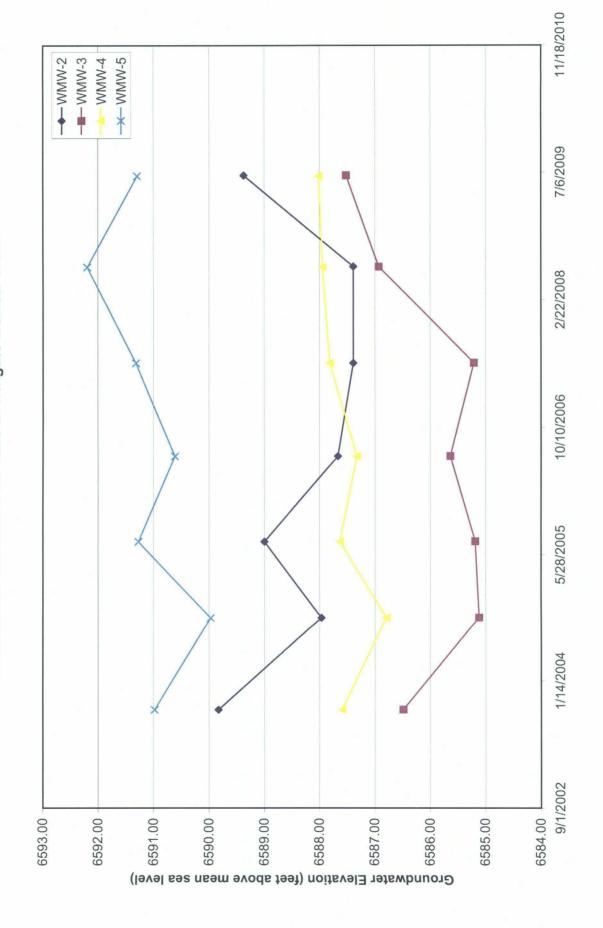
Benzene and Total Xylenes vs. Time in WMW-2 (Log Scale)



11/18/2010 X-WMW-1 → MWR-1 -MM-3 7/6/2009 2/22/2008 10/10/2006 5/28/2005 1/14/2004 9/1/2002 6576.00 6596.00 6592.00 6586.00 6594.00 6590.00 6588.00 6584.00 6582.00 6578.00 6580.00 Groundwater Elevation (feet above mean sea level)

Groundwater Elevations vs. Time in Wingate Monitor Wells

Groundwater Elevations vs. Time in Wingate Monitor Wells



Groundwater Elevation vs. Time in Wingate Monitor Wells



APPENDIX B

Laboratory Analytical Report



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

Conoco Phillips

Certificate of Analysis Number:

09061252

Report To: **Project Name: COP Wingate** Site: Gallup, NM Tetra Tech, Inc. Kelly Blanchard Site Address: 6121 Indian School Road, N.E. Suite 200 PO Number: 4511799321 Albuquerque State: **New Mexico** NM 87110-State Cert. No.: ph: (505) 237-8440 fax: **Date Reported:** 7/7/2009

This Report Contains A Total Of 49 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments



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

Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

09061252

Report To:

fax:

Project Name: COP W

COP Wingate

Tetra Tech, Inc.

<u>Site:</u>

Gallup, NM

Kelly Blanchard

Site Address:

6121 Indian School Road, N.E. Suite 200

PO Number:

4511799321

Albuquerque

State

New Mexico

NM .

State:

New Mexic

87110-

State Cert. No.:

ph: (505) 237-8440

Date Reported:

7/7/2009

I. SAMPLE RECEIPT:

Your samples "MW-2 and MW-3" were received expired for the Total Coliforms analysis. SPL continued with the analysis.

II: ANALYSIS AND EXCEPTIONS:

SW8270C Semivolatile Organics:

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted for Semivolatile Organics analysis. 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.

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 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.

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.

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7/8/2009



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

Conoco Phillips

Certificate of Analysis Number:

09061252

Report To:

Fax To:

Tetra Tech, Inc.

Kelly Blanchard

6121 Indian School Road, N.E.

Suite 200 Albuquerque

NM

87110-

ph: (505) 237-8440

fax: (505) 881-3283

Project Name:

COP Wingate

Site:

Gallup, NM

Site Address:

PO Number:

4511799321

State:

New Mexico

State Cert. No.:

Date Reported: 7

7/7/2009

	Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
WMW-6		09061252-01	Water	6/23/2009 11:45:00 AM	6/24/2009 10:00:00 AM		
MW-3		09061252-02	Water	6/23/2009 10:35:00 AM	6/24/2009 10:00:00 AM		
WMW-8		09061252-03	Water	6/23/2009 11:45:00 AM	6/24/2009 10:00:00 AM		
MW-2		09061252-04	Water	6/23/2009 2:50:00 PM	6/24/2009 10:00:00 AM		
TRIP BLANK		09061252-05	Water	6/23/2009	6/24/2009 10:00:00 AM		

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7/8/2009

Erica Cardenas Project Manager Date

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

Ted Yen

Quality Assurance Officer



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

Client Sample ID:WMW-6 Collected: 06/23/2009 11:45 SPL Sample ID: 09061252-01

Site: Gallup, NM

Analyses/Method	Result QUA	L Rep.Limit	Dil.	. Factor	Date Anal	lyzed	Analyst	Seq.#
ALKALINITY (AS CACO3), TOT	AL		MCL		E310.1	Ur	its: mg/L	
Alkalinity, Total (As CaCO3)	389	2		1	06/30/09	18:00	PAC	5094596
ION CHROMATOGRAPHY			MCL		E300.0	Ur	its: mg/L	<u>.</u>
Chloride	57.2	5		10	06/27/09	14:47	BDG	5088442
Sulfate	276	25		50	06/27/09	15:04	BDG	5088443
Nitrogen, Nitrate (As N)	ND	0.5		1	06/24/09	17:37	BDG	5084072
MERCURY, TOTAL			MCL	SI	N7470A	Ur	its: mg/L	
Mercury	ND	0.0002		1	07/02/09	14:57	FS	5097651

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7470A	07/02/2009 10:15	F_S	1.00

METALS BY METHOD 6	010B, TOTAL		MCL		SW6010B	Ur	nits: mg/L	
Calcium	41.1	0.1		1	07/04/09	17:23	EG	5101742
Iron	0.516	0.02		1	07/04/09	17:23	EG	5101742
Magnesium	14.4	0.1		1	07/04/09	17:23	EG	5101742
Sodium	339	1	1	0	07/05/09	14:51	EG	5101428

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/27/2009 13:30	AB1	1.00

METALS BY METHOD	6020A, TOTAL	M	CL	SW6020A	Units: mg/L	
Arsenic	ND	0.005	1	07/03/09	1:35 AL_H	5098298
Barium	0.0679	0.005	1	07/03/09	1:35 AL_H	5098298
Cadmium	ND	0.005	1	07/04/09	1:59 AL_H	5102035
Chromium	ND	0.005	1	07/03/09	1:35 AL_H	5098298
Lead	ND	0.005	1	07/03/09	1:35 AL_H	5098298
Manganese	0.162	0.005	1	07/03/09	1:35 AL_H	5098298
Selenium	ND	0.005	1	07/04/09	7:20 AL_H	5101301
Silver	ND	0.005	1	07/03/09	1:35 AL_H	5098298

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/27/2009 13:30	AB1	1.00

PH			MCL	SM4500-H B		Units: pH Units		
рН	7.87	0.1		1	06/24/09	13:45	S_H	5082652
Temperature (oC)	22.1	0.1		1	06/24/09	13:45	SH	5082652

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:WMW-6 Collected: 06/23/2009 11:45 SPL Sample ID: 09061252-01

Site: Gallup, NM

		Site: Gallup, NM						
Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed Analyst	Seq. #			
SEMIVOLATILE ORGANICS I	BY METHOD 8270C		MCL SV	V8270C Units: ug/L	=			
1,2,4-Trichlorobenzene	ND	5	1	06/29/09 20:17 S_G	5092149			
1,2-Dichlorobenzene	ND	5	1	06/29/09 20:17 S_G	5092149			
1,2-Diphenylhydrazine	ND	10	1	06/29/09 20:17 S_G	5092149			
1,3-Dichlorobenzene	ND	5	1	06/29/09 20:17 S_G	5092149			
1,4-Dichlorobenzene	ND	5	1	06/29/09 20:17 S_G	5092149			
2,4,5-Trichlorophenol	ND	10	1	06/29/09 20:17 S_G	5092149			
2,4,6-Trichlorophenol	ND	5	1	06/29/09 20:17 S_G	5092149			
2,4-Dichlorophenol	ND	5	1	06/29/09 20:17 S_G	5092149			
2,4-Dimethylphenol	ND	5	1	06/29/09 20:17 S_G	5092149			
2,4-Dinitrophenol	ND	25	1	06/29/09 20:17 S_G	5092149			
2,4-Dinitrotoluene	ND	5	1	06/29/09 20:17 S_G	5092149			
2,6-Dinitrotoluene	ND	5	1	06/29/09 20:17 S_G	5092149			
2-Chloronaphthalene	ND	5	1	06/29/09 20:17 S_G	5092149			
2-Chlorophenol	ND	5	1	06/29/09 20:17 S_G	5092149			
2-Methylnaphthalene	ND	5	1	06/29/09 20:17 S_G	5092149			
2-Nitroaniline	ND	25	1	06/29/09 20:17 S_G	5092149			
2-Nitrophenol	ND	5	1	06/29/09 20:17 S_G	5092149			
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 20:17 S_G	5092149			
3-Nitroaniline	ND	25	1	06/29/09 20:17 S G	5092149			
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 20:17 S_G	5092149			
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 20:17 S G	5092149			
4-Chloro-3-methylphenol	ND	5	1	06/29/09 20:17 S G	5092149			
4-Chloroaniline	ND	5	1	06/29/09 20:17 S_G	5092149			
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 20:17 S G	5092149			
4-Nitroaniline	ND	25	1	06/29/09 20:17 S G	5092149			
4-Nitrophenol	ND	25	1	06/29/09 20:17 S_G	5092149			
Acenaphthene	ND	5	1	06/29/09 20:17 S G	5092149			
Acenaphthylene	ND	5	1	06/29/09 20:17 S G	5092149			
Aniline	ND	5	1	06/29/09 20:17 S G	5092149			
Anthracene	ND	5	1	06/29/09 20:17 S G	5092149			
Benz(a)anthracene	ND	5	1	06/29/09 20:17 S_G	5092149			
Benzo(a)pyrene	ND	5	1	06/29/09 20:17 S_G	5092149			
Benzo(b)fluoranthene	ND	5	1	06/29/09 20:17 S_G	5092149			
Benzo(g,h,i)perylene	ND	5	1	06/29/09 20:17 S_G	5092149			
Benzo(k)fluoranthene	ND	5	1	06/29/09 20:17 S_G	5092149			
Benzoic acid	ND	25	1	06/29/09 20:17 S_G	5092149			
Benzyl alcohol	ND	5	1	06/29/09 20:17 S_G	5092149			
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 20:17 S_G	5092149			
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 20:17 S G	5092149			

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

09061252 Page 4 7/8/2009 3:57:58 PM



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

Client Sample ID: WMW-6 Collected: 06/23/2009 11:45 SPL Sample ID: 09061252-01

			Site	e:(Sallup,	NM			
Analyses/Method	Result	QUAL	Re	p.Lim	it	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND				5	1	06/29/09 20:17	S_G	5092149
Bis(2-ethylhexyl)phthalate	ND		5		1	06/29/09 20:17	S_G	5092149	
Butyl benzyl phthalate	ND		5		5	1	06/29/09 20:17	S_G	5092149
Carbazole	ND				5	1	06/29/09 20:17	S_G	5092149
Chrysene	ND				5	1	06/29/09 20:17	S_G	5092149
Dibenz(a,h)anthracene	ND				5	1	06/29/09 20:17	S_G	5092149
Dibenzofuran	ND				5	1	06/29/09 20:17	S_G	5092149
Diethyl phthalate	ND				5	1	06/29/09 20:17	S_G	5092149
Dimethyl phthalate	ND				5	1	06/29/09 20:17	S_G	5092149
Di-n-butyl phthalate	ND				5	1	06/29/09 20:17	S_G	5092149
Di-n-octyl phthalate	ND				5	1	06/29/09 20:17	S_G	5092149
Fluoranthene	ND				5	1	06/29/09 20:17	S_G	5092149
Fluorene	ND				5	1	06/29/09 20:17	S_G	5092149
Hexachlorobenzene	ND				5	1	06/29/09 20:17	S_G	5092149
Hexachlorobutadiene	ND		5		5	1	06/29/09 20:17	S_G	5092149
Hexachlorocyclopentadiene	ND				5	1	06/29/09 20:17	S_G	5092149
Hexachloroethane	ND		5		5	1	06/29/09 20:17	S_G	5092149
Indeno(1,2,3-cd)pyrene	ND				5	1	06/29/09 20:17	S_G	5092149
Isophorone	ND				5	1	06/29/09 20:17	S_G	5092149
Naphthalene	ND				5	1	06/29/09 20:17	S_G	5092149
Nitrobenzene	ND				5	1	06/29/09 20:17	S_G	5092149
N-Nitrosodi-n-propylamine	ND				5	1	06/29/09 20:17	S_G	5092149
N-Nitrosodiphenylamine	ND			* * *	5	1	06/29/09 20:17	S_G	5092149
Pentachlorophenol	ND			2	5	1	06/29/09 20:17	S_G	5092149
Phenanthrene	ND				5	1	06/29/09 20:17	S_G	5092149
Phenol	ND				5	1	06/29/09 20:17	S_G	5092149
Pyrene	ND				5	1	06/29/09 20:17	S_G	5092149
Pyridine	ND				5	1	06/29/09 20:17	S_G	5092149
2-Methylphenol	ND				5	1	06/29/09 20:17	S_G	5092149
3 & 4-Methylphenol	ND				5	1	06/29/09 20:17	S_G	5092149
Surr: 2,4,6-Tribromophenol	68.1		%	10-12	3	1	06/29/09 20:17	S_G	5092149
Surr: 2-Fluorobiphenyl	69.4		%	23-11	6	1	06/29/09 20:17	S_G	5092149
Surr: 2-Fluorophenol	43.2		%	16-11	0	1	06/29/09 20:17	S_G	5092149
Surr: Nitrobenzene-d5	62.4		%	21-11	4	1	06/29/09 20:17	S_G	5092149
Surr: Phenol-d5	36.4		%	10-11	0	1	06/29/09 20:17	S_G	5092149
Surr: Terphenyl-d14	62.6		%	22-14	1	1	06/29/09 20:17	S_G	5092149
									

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Client Sample ID:WMW-6 Collected: 06/23/2009 11:45 SPL Sample ID: 09061252-01

Site: Gallup, NM

		Site: Gallup, NW								
Analyses/Method	Result	QUAL	R	p.Limit	D	il. Factor	Date Anal	yzed	Analyst	Seq. #
TOTAL DISSOLVED SOLIDS				-	MCL		E160.1	Ur	its: mg/L	
Total Dissolved Solids (Residue,Filterable)	1020			10		1	06/25/09	15:00	BDG	5085793
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	S	W8260B	Ur	its: ug/L	
Benzene	ND			5		1	07/01/09	8:23	JC	5094852
Ethylbenzene	ND			5		1	07/01/09	8:23	JC	5094852
Toluene	ND			5		1	07/01/09	8:23	JC	5094852
m,p-Xylene	ND			5		1	07/01/09	8:23	JC	5094852
o-Xylene	ND			5		1	07/01/09	8:23	JC	5094852
Xylenes,Total	ND			5		1	07/01/09	8:23	JC	5094852
Surr: 1,2-Dichloroethane-d4	87.3		%	78-116		1	07/01/09	8:23	JC	5094852
Surr: 4-Bromofluorobenzene	93.4		%	74-125		1	07/01/09	8:23	JC	5094852
Surr: Toluene-d8	88.7		%	82-118		1	07/01/09	8:23	JC	5094852

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

Collected: 06/23/2009 10:35 09061252-02 Client Sample ID:MW-3 SPL Sample ID:

				Site: Ga	allup, N	м					
Analyses/Method	Res	sult	QUAL	Rep.Limit		Dil. Fa	ctor	Date Ana	lyzed	Analyst	Seq. #
ALKALINITY (AS CAC	CO3), TOTAL				MC	L		E310.1	Un	its: mg/L	
Alkalinity, Total (As CaC		39		2		1		06/30/09	18:00	PAC	5094597
BIOCHEMICAL OXYG	SEN DEMAND - 5 C	AY	<u></u>	· · · · · · · · · · · · · · · · · · ·	MC	L	SN	15210 B	Un	its: mg/L	
Biochemical Oxygen Der	mand N	ND		2		1		06/24/09	12:45	S_H	5089599
CHEMICAL OXYGEN	DEMAND				MC	L	SN	15220 C	Ur	its: mg/L	
Chemical Oxygen Dema	nd	7.5		3		1		06/25/09	12:00	PAC	5084743
ION CHROMATOGRA	VPHY				МС	L		E300.0	Un	its: mg/L	
Chloride		3.6		1			?	06/27/09		BDG	5088444
Sulfate	26	5.5		1		2	2	06/27/09	15:21	BDG	5088444
Nitrogen, Nitrate (As N)	1	۱D		0.5		1		06/24/09	17:56	BDG	5084073
MERCURY, TOTAL					МС	L	SV	V7470A	Un	its: mg/L	
Mercury	1	ND		0.0002		1		07/02/09	15:00	F_S	5097652
Prep Method	Prep Date	T	Prep Initials	Prep Factor							
SW7470A	07/02/2009 10:15		F_S	1.00							
METALS BY METHO	D 6010B. TOTAL				MC	L	SV	V6010B	Un	its: mg/L	
Calcium		9.5		0.1		1		07/04/09		EG	5101710
Iron	0.2	:55		0.02		1		07/04/09	14:49	EG	5101710
Magnesium	14	1.5		0.1		1		07/04/09	14:49	EG	5101710
Sodium	1	72		1		10)	07/05/09	13:29	EG	5101413

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/27/2009 13:30	AB1	1.00

METALS BY METHOD	6020A, TOTAL		MCL	SW6020	A U	nits: mg/L	
Arsenic	0.00654	0.005		1 07/0	3/09 0:21	AL_H	5098286
Barium	0.178	0.005		1 07/0	3/09 0:21	AL_H	5098286
Cadmium	ND	0.005		1 07/0	4/09 0:55	AL_H	5102022
Chromium	ND	0.005		1 07/0	3/09 0:21	AL_H	5098286
Lead	ND	0.005		1 07/0	3/09 0:21	AL_H	5098286
Manganese	0.703	0.005		1 07/0	3/09 0:21	AL_H	5098286
Selenium	ND	0.005		1 07/0	4/09 6:05	AL_H	5101288
Silver	ND	0.005		1 07/0	3/09 0:21	AL_H	5098286

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/27/2009 13:30	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 Collected: 06/23/2009 10:35 SPL Sample ID: 09061252-02

Site: Gallup, NM

Analyses/Method	Result QUAL	Rep.Limit	Dil	. Factor	Date Ana	lyzed	Analys	st Seq.#
PH			MCL	SM4	500-H B	Ur	nits: pH	Units
pH	7.74	0.1		1	06/24/09	13:45	S_H	5082653
Temperature (oC)	21.5	0.1		1	06/24/09	13:45	S_H	5082653

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



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

Client Sample ID:MW-3 Collected: 06/23/2009 10:35 SPL Sample ID: 09061252-02

Site: Gallup, NM

		Site: Gailt	лр, миі		
Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed Analyst	Seq. #
SEMIVOLATILE ORGANICS B	Y METHOD 8270C		MCL SV	W8270C Units: ug/L	
1,2,4-Trichlorobenzene	ND	5	1	06/29/09 20:57 S_G	5092150
1,2-Dichlorobenzene	ND	5	1	06/29/09 20:57 S_G	5092150
1,2-Diphenylhydrazine	ND	10	1	06/29/09 20:57 S_G	5092150
1,3-Dichlorobenzene	ND	5	1	06/29/09 20:57 S_G	5092150
1,4-Dichlorobenzene	ND	5	1	06/29/09 20:57 S_G	5092150
2,4,5-Trichlorophenol	ND	10	1	06/29/09 20:57 S_G	5092150
2,4,6-Trichlorophenol	ND	5	1	06/29/09 20:57 S_G	5092150
2,4-Dichlorophenol	ND	5	1	06/29/09 20:57 S_G	5092150
2,4-Dimethylphenol	ND	5	1	06/29/09 20:57 S_G	5092150
2,4-Dinitrophenol	ND	25	1	06/29/09 20:57 S_G	5092150
2,4-Dinitrotoluene	ND	5	1	06/29/09 20:57 S_G	5092150
2,6-Dinitrotoluene	ND	5	1	06/29/09 20:57 S_G	5092150
2-Chloronaphthalene	ND	5	1	06/29/09 20:57 S_G	5092150
2-Chlorophenol	ND	5	1	06/29/09 20:57 S_G	5092150
2-Methylnaphthalene	ND	5	1	06/29/09 20:57 S_G	5092150
2-Nitroaniline	ND	25	1	06/29/09 20:57 S_G	5092150
2-Nitrophenol	ND	5	1	06/29/09 20:57 S_G	5092150
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 20:57 S_G	5092150
3-Nitroaniline	ND	25	1	06/29/09 20:57 S_G	5092150
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 20:57 S_G	5092150
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 20:57 S_G	5092150
4-Chloro-3-methylphenol	ND	5	1	06/29/09 20:57 S_G	5092150
4-Chloroaniline	ND	5	1	06/29/09 20:57 S_G	5092150
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 20:57 S_G	5092150
4-Nitroaniline	ND	25	1	06/29/09 20:57 S_G	5092150
4-Nitrophenol	ND	25	1	06/29/09 20:57 S_G	5092150
Acenaphthene	ND	5	1	06/29/09 20:57 S_G	5092150
Acenaphthylene	ND	5	1	06/29/09 20:57 S_G	5092150
Aniline	ND	5	1	06/29/09 20:57 S_G	5092150
Anthracene	ND	5	1	06/29/09 20:57 S_G	5092150
Benz(a)anthracene	ND	5	1	06/29/09 20:57 S_G	5092150
Benzo(a)pyrene	ND	5	1	06/29/09 20:57 S_G	5092150
Benzo(b)fluoranthene	ND	5	1	06/29/09 20:57 S_G	5092150
Benzo(g,h,i)perylene	ND	5	1	06/29/09 20:57 S_G	5092150
Benzo(k)fluoranthene	ND	5	1	06/29/09 20:57 S_G	5092150
Benzoic acid	ND	25	1	06/29/09 20:57 S_G	5092150
Benzyl alcohol	ND	5	1	06/29/09 20:57 S_G	5092150
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 20:57 S_G	5092150
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 20:57 S_G	5092150

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



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

Client Sample ID:MW-3 Collected: 06/23/2009 10:35 SPL Sample ID: 09061252-02

			ite:	Gallup, N	M			
Analyses/Method	Result	QUAL	Rep.L	imit	Dil. Factor	Date Analyzed	Analyst	Seq.#
Bis(2-chloroisopropyl)ether	ND			5	1	06/29/09 20:57	S_G	5092150
Bis(2-ethylhexyl)phthalate	ND			5	1	06/29/09 20:57	S_G	5092150
Butyl benzyl phthalate	ND			5	1	06/29/09 20:57	S_G	5092150
Carbazole	ND			5	1	06/29/09 20:57	S_G	5092150
Chrysene	ND			5	1	06/29/09 20:57	S_G	5092150
Dibenz(a,h)anthracene	ND			5	1	06/29/09 20:57	S_G	5092150
Dibenzofuran	ND	•		5	1	06/29/09 20:57	S_G	5092150
Diethyl phthalate	ND			5	1	06/29/09 20:57	S_G	5092150
Dimethyl phthalate	ND			5	1	06/29/09 20:57	S_G	5092150
Di-n-butyl phthalate	ND			5	1	06/29/09 20:57	S_G	5092150
Di-n-octyl phthalate	ND			5	1	06/29/09 20:57	S_G	5092150
Fluoranthene	ND			5	1	06/29/09 20:57	S_G	5092150
Fluorene	ND			5	1	06/29/09 20:57	S_G	5092150
Hexachlorobenzene	ND			5	1	06/29/09 20:57	S_G	5092150
Hexachlorobutadiene	ND	<u>-</u>		5	1	06/29/09 20:57	S_G	5092150
Hexachlorocyclopentadiene	ND			5	1	06/29/09 20:57	S_G	5092150
Hexachloroethane	ND			5	1	06/29/09 20:57	S_G	5092150
Indeno(1,2,3-cd)pyrene	ND			5	1	06/29/09 20:57	S_G	5092150
Isophorone	ND			5	1	06/29/09 20:57	S_G	5092150
Naphthalene	ND			5	1	06/29/09 20:57	S_G	5092150
Nitrobenzene	ND			5	1	06/29/09 20:57	S_G	5092150
N-Nitrosodi-n-propylamine	ND			5	1	06/29/09 20:57	S_G	5092150
N-Nitrosodiphenylamine	ND			5	1	06/29/09 20:57	S_G	5092150
Pentachlorophenol	ND			25	1	06/29/09 20:57	S_G	5092150
Phenanthrene	ND			5	1	06/29/09 20:57	S_G	5092150
Phenol	ND			5	1	06/29/09 20:57	S_G	5092150
Pyrene	ND			5	1	06/29/09 20:57	S_G	5092150
Pyridine	ND			5	1	06/29/09 20:57	S_G	5092150
2-Methylphenol	ND			5	1	06/29/09 20:57	S_G	5092150
3 & 4-Methylphenol	ND			5	1	06/29/09 20:57	S_G	5092150
Surr: 2,4,6-Tribromophenol	84.0	C	6 10-	123	1	06/29/09 20:57	S_G	5092150
Surr: 2-Fluorobiphenyl	84.2	- 0	6 23-	116	1	06/29/09 20:57	S_G	5092150
Surr: 2-Fluorophenol	52.9	· ·	6 16-	110	1	06/29/09 20:57	S_G	5092150
Surr: Nitrobenzene-d5	77.2	· ·	6 21-	114	1	06/29/09 20:57	S_G	5092150
Surr: Phenol-d5	37.5	0	6 10-	110	1	06/29/09 20:57	S_G	5092150
Surr: Terphenyl-d14	78.6	· ·	6 22-	141	1	06/29/09 20:57	SG	5092150

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Client Sample ID:MW-3 Collected: 06/23/2009 10:35

SPL Sample ID:

09061252-02

S	ite:	Gallup.	NM

			Sit	e: Gall	up, NM					
Analyses/Method	Result	QUAL	R	ep.Limit	0	il. Fact	or Date Anal	yzed	Analyst	Seq.#
TOTAL COLIFORMS					MCL		M9222 B	Ur	its: colon	ies/100
Coliform, Total	ND			1		1	06/24/09	14:00	CFS	5084991
TOTAL DISSOLVED SOLIDS					MCL		E160.1	Ur	nits: mg/L	
Total Dissolved Solids (Residue,Filterable)	519			10		1	06/25/09	15:00	BDG	5085794
VOLATILE ORGANICS BY MET	HOD 8260B				MCL		SW8260B	Ur	nits: ug/L	
Benzene	ND			5		1	06/30/09	1:53	JC	5092169
Ethylbenzene	ND			5		1	06/30/09	1:53	JC	5092169
Toluene	ND			5		1	06/30/09	1:53	JC	5092169
m,p-Xylene	ND			5		1	06/30/09	1:53	JC	5092169
o-Xylene	ND			5		1	06/30/09	1:53	JC	5092169
Xylenes,Total	ND			5		1	06/30/09	1:53	JC	5092169
Surr: 1,2-Dichloroethane-d4	91.2		%	78-116		1	06/30/09	1:53	JC	5092169
Surr: 4-Bromofluorobenzene	96.1		%	74-125		1	06/30/09	1:53	JC	5092169
Surr: Toluene-d8	89.7		%	82-118		1	06/30/09	1:53	JC	5092169

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



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

Client Sample ID:WM	W-8		Collect	ed: 06	/23/2009	11:45	SPL San	nple l	ID : 0906	1252-03
			Site:	Gallu	p, NM					
Analyses/Method	Result	QUAL	Rep.L	mit	D	il. Factor	Date Anai	yzed	Analyst	Seq.#
ALKALINITY (AS CAC	O3), TOTAL				MCL		E310.1	Ur	nits: mg/L	
Alkalinity, Total (As CaCo	O3) 369			2		1	06/30/09	18:00	PAC	5094598
ION CHROMATOGRA	PHY				MCL		E300.0	Ur	nits: mg/L	
Chloride	21.8			1		2	06/27/09	15:37	BDG	5088445
Sulfate	149			5		10	06/27/09	16:27	BDG	5088448
Nitrogen, Nitrate (As N)	ND			0.5		1	06/24/09	18:15	BDG	5084074
MERCURY, TOTAL		····			MCL	SV	V7470A	Ur	nits: mg/L	<u></u> :
Mercury	ND		0.0	002		1	07/02/09			5097033
Deep Math and	Deep Date	Desa taitiala	D							
Prep Method SW7470A	Prep Date 07/02/2009 10:15	Prep Initials F S	Prep Fac	<u>tor</u>						
5VV1410A	07/02/2009 10.13	<u> -3</u>	11.00							
METALS BY METHOD					MCL	SV	V6010B		nits: mg/L	
Calcium	39.6			0.1		1	07/04/09	17:32	EG	5101744
Iron	0.0771		(0.02		1	07/04/09	17:32	EG	5101744
Magnesium	18			0.1		1	07/04/09	17:32	EG	5101744
Sodium	220			1		10	07/05/09	14:55	EG	5101429
Prep Method	Prep Date	Prep Initials	Prep Fac	tor						
SW3010A	06/27/2009 13:30	AB1	1.00							
METALS BY METHOD	0 6020A. TOTAL				MCL	SV	V6020A	Ur	nits: mg/L	
Arsenic	ND		0.	005		1	07/03/09			5098299
Barium	0.215		0.	005		1	07/03/09	1:40	AL_H	5098299
Cadmium	ND		0.	005		1	07/04/09			5102036
Chromium	ND	······································	0.	005		1	07/03/09	1:40	AL_H	5098299
Lead	ND			005		1	07/03/09			5098299

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/27/2009 13:30	AB1	1.00

0.278

ND

ND

PH		MCL	s	M4500-H B	Units: pH l	Jnits
pH	7.69	0.1	1	06/24/09	13:45 S_H	5082654
Temperature (oC)	21.9	0.1	1	00/24/03	13:45 S_H	5082654

0.005

0.005

0.005

Qualifiers:

Manganese

Selenium

Silver

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

1

1

1

07/03/09 1:40 AL_H

07/04/09 7:26 AL_H

07/03/09 1:40 AL_H

5098299

5101302

5098299



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

Client Sample ID:WMW-8

Collected: 06/23/2009 11:45

SPL Sample ID:

09061252-03

Sìte: (3allup,	NM
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Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY	METHOD 82	270C		MCL SV	V8270C Ur	nits: ug/L	
1,2,4-Trichlorobenzene	ND		5	1	06/30/09 11:46	S_G	5092565
1,2-Dichlorobenzene	ND		5	1	06/30/09 11:46	S_G	5092565
1,2-Diphenylhydrazine	ND		10	1	06/30/09 11:46	S_G	5092565
1,3-Dichlorobenzene	ND		5	1	06/30/09 11:46	S_G	5092565
1,4-Dichlorobenzene	ND		5	1	06/30/09 11:46	S_G	5092565
2,4,5-Trichlorophenol	ND		10	1	06/30/09 11:46	S_G	5092565
2,4,6-Trichlorophenol	ND		5	1	06/30/09 11:46	S_G	5092565
2,4-Dichlorophenol	ND	*	5	1	06/30/09 11:46	S_G	5092565
2,4-Dimethylphenol	ND		5	1	06/30/09 11:46	S_G	5092565
2,4-Dinitrophenol	ND		25	1	06/30/09 11:46	S_G	5092565
2,4-Dinitrotoluene	ND		5	1	06/30/09 11:46	S_G	5092565
2,6-Dinitrotoluene	ND		5	1	06/30/09 11:46	S_G	5092565
2-Chloronaphthalene	ND		5	1	06/30/09 11:46	S_G	5092565
2-Chlorophenol	ND		5	1	06/30/09 11:46	S_G	5092565
2-Methylnaphthalene	ND		5	1	06/30/09 11:46	S_G	5092565
2-Nitroaniline	ND		25	1	06/30/09 11:46	S_G	5092565
2-Nitrophenol	ND	-	5	1	06/30/09 11:46	S_G	5092565
3,3'-Dichlorobenzidine	ND		10	1	06/30/09 11:46	S_G	5092565
3-Nitroaniline	ND		25	1	06/30/09 11:46	S_G	5092565
4,6-Dinitro-2-methylphenol	ND	-	25	1	06/30/09 11:46	S_G	5092565
4-Bromophenyl phenyl ether	ND		5	1	06/30/09 11:46	S_G	5092565
4-Chloro-3-methylphenol	ND		5	1	06/30/09 11:46	S_G	5092565
4-Chloroaniline	ND		5	1	06/30/09 11:46	S_G	5092565
4-Chlorophenyl phenyl ether	ND		5	1	06/30/09 11:46	S_G	5092565
4-Nitroaniline	ND		25	1	06/30/09 11:46	S_G	5092565
4-Nitrophenol	ND		25	1	06/30/09 11:46	S_G	5092565
Acenaphthene	ND		5	1	06/30/09 11:46	S_G	5092565
Acenaphthylene	ND		5	1	06/30/09 11:46	S_G	5092565
Aniline	ND		5	1	06/30/09 11:46	S_G	5092565
Anthracene	ND		5	1	06/30/09 11:46	S_G	5092565
Benz(a)anthracene	ND		5	1	06/30/09 11:46	S_G	5092565
Benzo(a)pyrene	ND		5	1	06/30/09 11:46	S_G	5092565
Benzo(b)fluoranthene	ND		5	1	06/30/09 11:46	S_G	5092565
Benzo(g,h,i)perylene	ND_		5	1	06/30/09 11:46		5092565
Benzo(k)fluoranthene	ND		5	1	06/30/09 11:46	S_G	5092565
Benzoic acid	ND		25	1	06/30/09 11:46	S_G	5092565
Benzyl alcohol	ND		5	1	06/30/09 11:46	S_G	5092565
Bis(2-chloroethoxy)methane	ND		5	1	06/30/09 11:46	S_G	5092565
Bis(2-chloroethyl)ether	ND		5	1	06/30/09 11:46	S_G	5092565

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



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

Client Sample ID:WMW-8 Collected: 06/23/2009 11:45 SPL Sample ID: 09061252-03

Bis(2-chloroisopropyl)ether ND 5 Bis(2-ethylhexyl)phthalate ND 5 Butyl benzyl phthalate ND 5 Carbazole ND 5 Chrysene ND 5 Dibenz(a,h)anthracene ND 5 Dibenzofuran ND 5 Diethyl phthalate ND 5	. Factor 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Date Analyzed 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46	S_G S_G S_G S_G S_G S_G S_G S_G	Seq. # 5092565 5092565 5092565 5092565 5092565 5092565 5092565
Bis(2-chloroisopropyl)ether ND 5 Bis(2-ethylhexyl)phthalate ND 5 Butyl benzyl phthalate ND 5 Carbazole ND 5 Chrysene ND 5 Dibenz(a,h)anthracene ND 5 Dibenzofuran ND 5 Diethyl phthalate ND 5	1 1 1 1 1 1 1 1	06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46	S_G S_G S_G S_G S_G S_G S_G S_G	5092565 5092565 5092565 5092565 5092565 5092565
Butyl benzyl phthalate ND 5 Carbazole ND 5 Chrysene ND 5 Dibenz(a,h)anthracene ND 5 Dibenzofuran ND 5 Diethyl phthalate ND 5	1 1 1 1 1 1 1	06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46	\$_G \$_G \$_G \$_G \$_G \$_G \$_G	5092565 5092565 5092565 5092565 5092565
Carbazole ND 5 Chrysene ND 5 Dibenz(a,h)anthracene ND 5 Dibenzofuran ND 5 Diethyl phthalate ND 5	1 1 1 1 1 1	06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46	S_G S_G S_G S_G	5092565 5092565 5092565 5092565
Chrysene ND 5 Dibenz(a,h)anthracene ND 5 Dibenzofuran ND 5 Diethyl phthalate ND 5	1 1 1 1 1	06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46	S_G S_G S_G	5092565 5092565 5092565
Dibenz(a,h)anthracene ND 5 Dibenzofuran ND 5 Diethyl phthalate ND 5	1 1 1 1	06/30/09 11:46 06/30/09 11:46 06/30/09 11:46 06/30/09 11:46	s_G s_G	5092565 5092565
Dibenzofuran ND 5 Diethyl phthalate ND 5	1 1 1	06/30/09 11:46 06/30/09 11:46 06/30/09 11:46	s_G	5092565
Diethyl phthalate ND 5	1 1 1	06/30/09 11:46 06/30/09 11:46		
	1	06/30/09 11:46	S_G	5092565
Dimethyl phthelate	1			
Dimethyl phthalate ND 5			S_G	5092565
Di-n-butyl phthalate ND 5		06/30/09 11:46	S_G	5092565
Di-n-octyl phthalate ND 5	1	06/30/09 11:46	S_G	5092565
Fluoranthene ND 5	1	06/30/09 11:46	S_G	5092565
Fluorene ND 5	1	06/30/09 11:46	S_G	5092565
Hexachlorobenzene ND 5	1	06/30/09 11:46	S_G	5092565
Hexachlorobutadiene ND 5	1	06/30/09 11:46	S_G	5092565
Hexachlorocyclopentadiene ND 5	1	06/30/09 11:46	S_G	5092565
Hexachloroethane ND 5	1	06/30/09 11:46	S_G	5092565
Indeno(1,2,3-cd)pyrene ND 5	1	06/30/09 11:46	S_G	5092565
Isophorone ND 5	1	06/30/09 11:46	S_G	5092565
Naphthalene ND 5	1	06/30/09 11:46	S_G	5092565
Nitrobenzene ND 5	1	06/30/09 11:46	S_G	5092565
N-Nitrosodi-n-propylamine ND 5	1	06/30/09 11:46	S_G	5092565
N-Nitrosodiphenylamine ND 5	1	06/30/09 11:46	S_G	5092565
Pentachlorophenol ND 25	1	06/30/09 11:46	S_G	5092565
Phenanthrene ND 5	1	06/30/09 11:46	S_G	5092565
Phenol ND 5	1	06/30/09 11:46	S_G	5092565
Pyrene ND 5	1	06/30/09 11:46	S_G	5092565
Pyridine ND 5	1	06/30/09 11:46	S_G	5092565
2-Methylphenol ND 5	1	06/30/09 11:46	S_G	5092565
3 & 4-Methylphenol ND 5	1	06/30/09 11:46	S_G	5092565
Surr: 2,4,6-Tribromophenol 81.2 % 10-123	1	06/30/09 11:46	S_G	5092565
Surr: 2-Fluorobiphenyl 70.2 % 23-116	1	06/30/09 11:46	S_G	5092565
Surr: 2-Fluorophenol 47.9 % 16-110	1	06/30/09 11:46	S_G	5092565
Surr: Nitrobenzene-d5 65.4 % 21-114	1	06/30/09 11:46	S_G	5092565
Surr: Phenol-d5 35.9 % 10-110	1	06/30/09 11:46	S_G	5092565
Surr: Terphenyl-d14 81.8 % 22-141	1	06/30/09 11:46	S_G	5092565

<u>[</u>	Prep Method	Prep Date	Prep Initials	Prep Factor
5	SW3510C	06/26/2009 12:28	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



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

Client Sample ID:WMW-8

Collected: 06/23/2009 11:45

SPL Sample ID:

09061252-03

Site: Gallup, N	NM
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Analyses/Method	Result	QUAL F	Rep.Limit	Dil. Fac	tor Date Anal	yzed Analyst	Seq.#
TOTAL DISSOLVED SOLIDS				MCL	E160.1	Units: mg/L	·
Total Dissolved Solids (Residue,Filterable)	718		10	1	06/25/09	15:00 BDG	5085795
VOLATILE ORGANICS BY MI	ETHOD 8260B			MCL	SW8260B	Units: ug/L	
Benzene	ND		5	1	06/30/09	2:20 JC	5092170
Ethylbenzene	ND		5	1	06/30/09	2:20 JC	5092170
Toluene	ND		5	1	06/30/09	2:20 JC	5092170
m,p-Xylene	ND		5	1	06/30/09	2:20 JC	5092170
o-Xylene	ND		5	1	06/30/09	2:20 JC	5092170
Xylenes,Total	ND		5	1	06/30/09	2:20 JC	5092170
Surr: 1,2-Dichloroethane-d4	90.6	%	78-116	1	06/30/09	2:20 JC	5092170
Surr: 4-Bromofluorobenzene	94.8	%	74-125	1	06/30/09	2:20 JC	5092170
Surr: Toluene-d8	93.5	%	82-118	1	06/30/09	2:20 JC	5092170
							

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



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

Client Sample ID:MW-2 Collected: 06/23/2009 14:50 SPL Sample ID: 09061252-04

	Site:	Gallup, NM

Analyses/Method	Result QUAL	Rep.Limit	Di	I. Factor	Date Anal	yzed Analyst	Seq.#
ALKALINITY (AS CACO3), TOT	AL		MCL		E310.1	Units: mg/L	
Alkalinity, Total (As CaCO3)	580	2		1	06/30/09	18:00 PAC	5094599
BIOCHEMICAL OXYGEN DEMA	AND - 5 DAYS		MCL	SN	15210 B	Units: mg/L	
Biochemical Oxygen Demand	ND	2		1	06/24/09	12:45 S_H	5089600
CHEMICAL OXYGEN DEMAND			MCL	SN	15220 C	Units: mg/L	
Chemical Oxygen Demand	40	3		1	06/25/09	12:00 PAC	5084745
ION CHROMATOGRAPHY			MCL		E300.0	Units: mg/L	
Chloride	57.3	5		10	06/27/09	17:00 BDG	5088450
Sulfate	113	5		10	06/27/09	17:00 BDG	5088450
Nitrogen, Nitrate (As N)	ND	0.5		1	06/25/09	13:57 BDG	5088557
MERCURY, TOTAL			MCL	SI	N7470A	Units: mg/L	
Mercury	ND	0.0002		1	07/02/09	15:02 F S	5097653

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7470A	07/02/2009 10:15	F_S	1.00

METALS BY METHOD 6	010B, TOTAL		MCL	SW6010B	Units: mg/L	
Calcium	14.5	0.1	1	07/04/09	17:50 EG	5101748
Iron	0.611	0.02	1	07/04/09	17:50 EG	5101748
Magnesium	8.18	0.1	1	07/04/09	17:50 EG	5101748
Sodium	403	1	10	07/05/09	15:14 EG	5101431

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/27/2009 13:30	AB1	1.00

6020A, TOTAL	MCL		SW6020A	Units: mg/L	
0.0115	0.005	1	07/03/09	1:46 AL_H	5098300
0.255	0.005	1	07/03/09	1:46 AL_H	5098300
ND	0.005	1	07/04/09	2:09 AL_H	5102037
ND	0.005	1	07/03/09	1:46 AL_H	5098300
ND	0.005	1	07/03/09	1:46 AL_H	5098300
0.314	0.005	1	07/03/09	1:46 AL_H	5098300
ND	0.005	1	07/04/09	7:32 AL_H	5101303
ND	0.005	1	07/03/09	1:46 AL H	5098300
	0.255 ND ND ND ND 0.314 ND	0.0115 0.005 0.255 0.005 ND 0.005 ND 0.005 ND 0.005 ND 0.005 0.314 0.005 ND 0.005	0.0115 0.005 1 0.255 0.005 1 ND 0.005 1 ND 0.005 1 ND 0.005 1 0.314 0.005 1 ND 0.005 1 0.005 1	0.0115 0.005 1 07/03/05 0.255 0.005 1 07/03/05 ND 0.005 1 07/03/05 ND 0.005 1 07/03/05 ND 0.005 1 07/03/05 0.314 0.005 1 07/03/05 ND 0.005 1 07/04/05 ND 0.005 1 07/04/05	0.0115 0.005 1 07/03/09 1:46 AL_H 0.255 0.005 1 07/03/09 1:46 AL_H ND 0.005 1 07/04/09 2:09 AL_H ND 0.005 1 07/03/09 1:46 AL_H ND 0.005 1 07/03/09 1:46 AL_H 0.314 0.005 1 07/03/09 1:46 AL_H ND 0.005 1 07/03/09 1:46 AL_H ND 0.005 1 07/04/09 7:32 AL_H

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/27/2009 13:30	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



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

Client Sample ID:MW-2 Collected: 06/23/2009 14:50 SPL Sample ID: 09061252-04

Site: Gallup, NM

Analyses/Method	Result QUA	L Rep.Limit	Dil. Fact	or Date Analy	yzed Analyst	Seq. #
PH			MCL SM	4500-H B	Units: pH l	Jnits
pH	7.94	0.1	1	06/24/09 1	13:45 S_H	5082655
Temperature (oC)	22.2	0.1	1	06/24/09 1	13:45 S_H	5082655

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



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

Client Sample ID:MW-2

Collected: 06/23/2009 14:50

SPL Sample ID:

09061252-04

Site:	Gallup,	NM
O	ounap,	

Analyses/Method	Result QUA	AL Rep.Limit	Dil. Factor	Date Analyzed Analy	st Seq. #
SEMIVOLATILE ORGANICS B	SY METHOD 8270C	,	MCL SV	V8270C Units: ug	/L
1,2,4-Trichlorobenzene	ND	5	1	06/30/09 12:23 S_G	5092566
1,2-Dichlorobenzene	ND	5	1	06/30/09 12:23 S_G	5092566
1,2-Diphenylhydrazine	ND	10	1	06/30/09 12:23 S_G	5092566
1,3-Dichlorobenzene	ND	5	1	06/30/09 12:23 S_G	5092566
1,4-Dichlorobenzene	ND	5	1	06/30/09 12:23 S_G	5092566
2,4,5-Trichlorophenol	ND	10	1	06/30/09 12:23 S_G	5092566
2,4,6-Trichlorophenol	ND	5	1	06/30/09 12:23 S_G	5092566
2,4-Dichlorophenol	ND	5	1	06/30/09 12:23 S_G	5092566
2,4-Dimethylphenol	ND	5	1	06/30/09 12:23 S_G	5092566
2,4-Dinitrophenol	ND	25	1	06/30/09 12:23 S_G	5092566
2,4-Dinitrotoluene	ND	5	1	06/30/09 12:23 S_G	5092566
2,6-Dinitrotoluene	ND	5	1	06/30/09 12:23 S_G	5092566
2-Chloronaphthalene	ND	5	1	06/30/09 12:23 S_G	5092566
2-Chlorophenol	ND	5	1	06/30/09 12:23 S_G	5092566
2-Methylnaphthalene	ND	5	1	06/30/09 12:23 S G	5092566
2-Nitroaniline	ND	25	1	06/30/09 12:23 S G	5092566
2-Nitrophenol	ND	5	1	06/30/09 12:23 S_G	5092566
3,3'-Dichlorobenzidine	ND	10	1	06/30/09 12:23 S_G	5092566
3-Nitroaniline	ND	25	1	06/30/09 12:23 S G	5092566
4,6-Dinitro-2-methylphenol	ND	25	1	06/30/09 12:23 S G	5092566
4-Bromophenyl phenyl ether	ND	5	1	06/30/09 12:23 S G	5092566
4-Chloro-3-methylphenol	ND	5	1	06/30/09 12:23 S G	5092566
4-Chloroaniline	ND	5	1	06/30/09 12:23 S_G	5092566
4-Chlorophenyl phenyl ether	ND	5	1	06/30/09 12:23 S G	5092566
4-Nitroaniline	ND	25	1	06/30/09 12:23 S G	5092566
4-Nitrophenol	ND	25	1	06/30/09 12:23 S G	5092566
Acenaphthene	ND	5	1	06/30/09 12:23 S G	5092566
Acenaphthylene	ND	5	1	06/30/09 12:23 S G	5092566
Aniline	ND	5	1	06/30/09 12:23 S G	5092566
Anthracene	ND	5	1	06/30/09 12:23 S G	5092566
Benz(a)anthracene	ND	5	1	06/30/09 12:23 S G	5092566
Benzo(a)pyrene	ND	5	1	06/30/09 12:23 S G	5092566
Benzo(b)fluoranthene	ND	5	1	06/30/09 12:23 S G	5092566
Benzo(g,h,i)perylene	ND	5	1	06/30/09 12:23 S G	5092566
Benzo(k)fluoranthene	ND	5	1	06/30/09 12:23 S_G	5092566
Benzoic acid	ND	25	1	06/30/09 12:23 S_G	5092566
Benzyl alcohol	ND	5	1	06/30/09 12:23 S_G	5092566
Bis(2-chloroethoxy)methane	ND	5	1	06/30/09 12:23 S_G	5092566
Bis(2-chloroethyl)ether	ND	5	1	06/30/09 12:23 S G	5092566

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



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

Client Sample ID:MW-2

Collected: 06/23/2009 14:50

SPL Sample ID:

09061252-04

			Site:		ıp, NM			
Analyses/Method	Result	QUAL	Rep	Limit		Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND			5	1	06/30/09 12:23		5092566
Bis(2-ethylhexyl)phthalate	ND			5	1	06/30/09 12:23	S_G	5092566
Butyl benzyl phthalate	ND			5	1	06/30/09 12:23		5092566
Carbazole	ND_			5	1	06/30/09 12:23	S_G	5092566
Chrysene	ND			5	1	06/30/09 12:23	S_G	5092566
Dibenz(a,h)anthracene	ND			5	1	06/30/09 12:23	S_G	5092566
Dibenzofuran	ND			5	1	06/30/09 12:23	S_G	5092566
Diethyl phthalate	ND			5	1	06/30/09 12:23	S_G	5092566
Dimethyl phthalate	ND			5	1	06/30/09 12:23	S_G	5092566
Di-n-butyl phthalate	ND			5	1	06/30/09 12:23	S_G	509256
Di-n-octyl phthalate	ND			5	1	06/30/09 12:23	S_G	5092566
Fluoranthene	ND			5	1	06/30/09 12:23	S_G	5092566
Fluorene	ND			5	1	06/30/09 12:23	S_G	5092566
Hexachlorobenzene	ND		•	5	1	06/30/09 12:23	S_G	5092566
Hexachlorobutadiene	ND			5	1	06/30/09 12:23	S_G	5092566
Hexachlorocyclopentadiene	ND			5	1	06/30/09 12:23	S_G	5092566
Hexachloroethane	ND			5	1	06/30/09 12:23	S_G	5092566
Indeno(1,2,3-cd)pyrene	ND			5	1	06/30/09 12:23	S_G	5092566
Isophorone	ND			5	1	06/30/09 12:23	S_G	5092566
Naphthalene	ND			5	1	06/30/09 12:23	S_G	5092566
Nitrobenzene	ND			5	1	06/30/09 12:23	S_G	5092560
N-Nitrosodi-n-propylamine	ND	· · · · · · · · · · · · · · · · · · ·		5	1	06/30/09 12:23	S_G	509256
N-Nitrosodiphenylamine	ND			5	1	06/30/09 12:23	S_G	5092560
Pentachlorophenol	ND			25	1	06/30/09 12:23	S_G	5092566
Phenanthrene	ND			5	1	06/30/09 12:23	S_G	5092566
Phenol	ND			5	1	06/30/09 12:23	S_G	5092566
Pyrene	ND			5	1	06/30/09 12:23	S_G	5092566
Pyridine	ND			5	1	06/30/09 12:23	S.G	5092566
2-Methylphenol	ND			5	1	06/30/09 12:23	SG	5092566
3 & 4-Methylphenol	ND			5	1	06/30/09 12:23		5092566
Surr: 2,4,6-Tribromophenol	82.4		% 1	0-123	1	06/30/09 12:23	 S_G	5092566
Surr: 2-Fluorobiphenyl	75.8		% 2	3-116	1	06/30/09 12:23		5092566
Surr: 2-Fluorophenol	50.7		% 1	3-110	1	06/30/09 12:23		5092566
Surr: Nitrobenzene-d5	68.2		% 2	1-114	1	06/30/09 12:23	S_G	509256
Surr: Phenol-d5	38.9		% 10	0-110	1	06/30/09 12:23	 S_G	5092566
Surr: Terphenyl-d14	79.8		% 2:	2-141	1	06/30/09 12:23		5092566

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Collected: 06/23/2009 14:50 09061252-04 Client Sample ID:MW-2 SPL Sample ID:

Site: Gallup, NM

			Site	: Gall	up, NM					
Analyses/Method	Result	QUAL	Re	p.Limit	Di	il. Facto	or Date Analy	yzed	Analyst	Seq.#
TOTAL COLIFORMS					MCL		M9222 B	Ur	nits: coloni	es/100
Coliform, Total	7			1		1	06/24/09	14:00	CFS	5084993
TOTAL DISSOLVED SOLIDS					MCL		E160.1	Ur	nits: mg/L	=======================================
Total Dissolved Solids (Residue,Filterable)	1030			10		1	06/25/09	15:00	BDG	5085796
VOLATILE ORGANICS BY MET	HOD 8260B		-		MCL		SW8260B	Ur	nits: ug/L	
Benzene	ND			5		1	06/30/09	2:47	JC	5092171
Ethylbenzene	ND			5		1	06/30/09	2:47	JC	5092171
Toluene	ND			5		1	06/30/09	2:47	JC	5092171
m,p-Xylene	ND			5		1	06/30/09	2:47	JC	5092171
o-Xylene	ND			5		1	06/30/09	2:47	JC	5092171
Xylenes,Total	ND			5		1	06/30/09	2:47	JC	5092171
Surr: 1,2-Dichloroethane-d4	89.1		%	78-116		1	06/30/09	2:47	JC	5092171
Surr: 4-Bromofluorobenzene	92.1		%	74-125		1	06/30/09	2:47	JC	5092171
Surr: Toluene-d8	90.5		%	82-118		1	06/30/09	2:47	JC	5092171

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

09061252 Page 20 7/8/2009 3:58:06 PM



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

Client Sample ID:TRIP BLANK

Collected: 06/23/2009 0:00

SPL Sample ID:

09061252-05

Site:	Gallup,	NM
U	σunup,	. 41

Analyses/Method	Result QUA	L Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq.#
VOLATILE ORGANICS BY MET	HOD 8260B		MCL SV	V8260B Ur	its: ug/L	
Benzene	ND	5	1	06/30/09 3:14	JC	5092172
Ethylbenzene	ND	5	1	06/30/09 3:14	JC	5092172
Toluene	ND	5	1	06/30/09 3:14	JC	5092172
m,p-Xylene	ND	5	1	06/30/09 3:14	JC	5092172
o-Xylene	ND	5	1	06/30/09 3:14	JC	5092172
Xylenes,Total	ND	5	1	06/30/09 3:14	JC	5092172
Surr: 1,2-Dichloroethane-d4	89.9	% 78-116	1	06/30/09 3:14	JC	5092172
Surr: 4-Bromofluorobenzene	95.1	% 74-125	1	06/30/09 3:14	JC	5092172
Surr: Toluene-d8	87.3	% 82-118	1	06/30/09 3:14	JC	5092172

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

09061252 Page 21 7/8/2009 3:58:06 PM

Quality Control Documentation



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

Conoco Phillips COP Wingate

Analysis: Method:

RunID:

Metals by Method 6010B, Total

SW6010B

WorkOrder:

Samples in Analytical Batch:

09061252

Lab Batch ID:

91534

Method Blank

ICP2_090704A-5101708

Units:

mg/L

Lab Sample ID

Client Sample ID

Analysis Date: Preparation Date: 07/04/2009 14:40 06/27/2009 13:30 Analyst: EG

Prep By: AB1 Method SW3010A

09061252-01E 09061252-02E

WMW-6

MW-3

09061252-03E 09061252-04E 8-WMW MW-2

Analyte	Result	Rep Limit
Calcium	NE.	0.1
Iron	NC NC	0.02
Magnesium	NE	0.1

Laboratory Control Sample (LCS)

RunID:

ICP2_090704A-5101709

Units: mg/L

Analysis Date:

07/04/2009 14:44

Analyst: EG

Preparation Date: 06/27/2009 13:30 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Calcium	1.000	1.031	103.1	80	120
Iron	1.000	1.058	105.8	80	120
Magnesium	1.000	1.034	103.4	80	120

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

Sample Spiked:

09061252-02

RunID:

ICP2_090704A-5102070

Units:

mg/L

Analysis Date:

07/04/2009 14:53

Analyst: EG

Preparation Date: 06/27/2009 13:30

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
Calcium	29.46	1	29.41	N/C	1	30.20	N/C	N/C	20	75	125
Iron	0.2546	1	1.301	104.6	1	1.329	107.4	2.129	20	75	125
Magnesium	14.46	1	14.85	N/C	1	15.25	N/C	N/C	20	75	125

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

RunID:

Metals by Method 6010B, Total

SW6010B

WorkOrder: Lab Batch ID: 09061252

91534a

Method Blank

ICP2_090705A-5101411

Units: mg/L

Lab Sample ID 09061252-01E

Samples in Analytical Batch:

Client Sample ID

Analysis Date: Preparation Date: 07/05/2009 13:20 06/27/2009 13:30 Analyst: Prep By:

AB1 Method SW3010A

09061252-02E

WMW-6

09061252-03E

MW-3

09061252-04E

WMW-8 MW-2

Analyte	Result	Rep Limit
Sodium	ND	0,1

Laboratory Control Sample (LCS)

RunID:

ICP2_090705A-5101412

Units:

mg/L

Analysis Date:

07/05/2009 13:25

Analyst: EG

Preparation Date: 06/27/2009 13:30 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sodium	1.000	1.023	102.3	80	120

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

Sample Spiked:

09061252-02

RunID:

ICP2_090705A-5101414

Units:

mg/L

Analysis Date:

07/05/2009 13:33

EG Analyst:

Preparation Date: 06/27/2009 13:30 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
Sodium	171.8	1	171.9		1	176.5	N/C	N/C	20	75	125

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

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



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

Conoco Phillips **COP Wingate**

Analysis:

RunID:

Metals by Method 6020A, Total

Method:

SW6020A

WorkOrder:

09061252

Lab Batch ID:

91534A-I

Method Blank

ICPMS2_090706A-5101286

mg/L

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date: Preparation Date: 07/04/2009 5:54

Analyst:

AL H

0.005

09061252-01E

WMW-6

06/27/2009 13:30

Prep By:

Units:

AB1 Method SW3010A

09061252-02E

09061252-03E

MW-3

09061252-04E

WMW-8 MW-2

Analyte Result Rep Limit Selenium ND

Laboratory Control Sample (LCS)

RunID:

ICPMS2_090706A-5101287 Units:

Analysis Date:

07/04/2009 6:00

AL_H Analyst:

Preparation Date: 06/27/2009 13:30 Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Selenium	0.1000	0.1033	103.3	80	120

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

Sample Spiked:

RunID:

09061252-02

ICPMS2_090706A-5101289 Units:

mg/L

Analysis Date:

07/04/2009 6:11

Analyst:

AL_H

Preparation Date: 06/27/2009 13:30 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
Selenium	ND	0.1	0.09015	89.46	0.1	0.09449	93.80	4.701	20		125

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

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

09061252 Page 25

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.



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

Conoco Phillips COP Wingate

Analysis:

Method:

Metals by Method 6020A, Total

SW6020A

WorkOrder:

09061252

Lab Batch ID:

91534B-I

Method Blank

ICPMS_090703A-5102020 RunID:

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date:

07/04/2009 0:46

Analyst: AL_H

09061252-01E

Samples in Analytical Batch:

WMW-6

Preparation Date:

06/27/2009 13:30

09061252-02E

MW-3

Prep By: AB1 Method SW3010A

09061252-03E 09061252-04E WMW-8 MW-2

Cadmium

Result Analyte Rep Limit ND 0.005

Laboratory Control Sample (LCS)

RunID:

ICPMS_090703A-5102021

Units:

mg/L

Analysis Date:

Preparation Date:

07/04/2009 0:51 06/27/2009 13:30

AL_H Analyst:

Prep By: AB1 Method SW3010A

Analy	Analyte		Result	Percent Recovery	Lower Limit	Upper Limit
Cadmium		0.1000	0.1007	100.7	80	120

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

Sample Spiked:

Preparation Date:

09061252-02

RunID:

ICPMS_090703A-5102023

Units: mg/L

Analysis Date:

07/04/2009 1:00 06/27/2009 13:30 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
Cadmium	ND	0.1	0.09934	99.34	0.1	0.09795	97.95	1.409	20	75	125

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Metals by Method 6020A, Total

SW6020A

Lab Batch ID:

09061252

WorkOrder:

91534-I

Method Blank

RunID:

Arsenic

Silver

ICPMS2 090702A-5098284

Units:

mg/L

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date: Preparation Date: 07/03/2009 0:09 06/27/2009 13:30

Analyte

Analyst:

AL H

09061252-01E

WMW-6

Prep By: AB1 Method SW3010A 09061252-02E

MW-3

09061252-03E 09061252-04E WMW-8

Result	Rep Limit	
ND	0.005	
ND	0.005	

0.005

Barium Chromium ND 0.005 Lead ND 0.005 Manganese ND 0.005

MW-2

Laboratory Control Sample (LCS)

RunID:

ICPMS2 090702A-5098285 Units:

ND

mg/L

Analysis Date:

07/03/2009 0:15

Analyst: AL H

06/27/2009 13:30 Preparation Date:

Prep By: AB1 Method SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	0.1000	0.1161	116.1	80	120
Barium	0.1000	0.1144	114.4	80	120
Chromium	0.1000	0.1101	110.1	80	120
Lead	0.1000	0.1047	104.7	80	120
Manganese	0.1000	0.1033	103.3	80	120
Silver	0.1000	0.1087	108.7	80	120

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

Sample Spiked:

09061252-02

RunID:

ICPMS2_090702A-5098287 Units:

mg/L

Analysis Date:

07/03/2009 0:26

Analyst:

AL H

Preparation Date: 06/27/2009 13:30 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
Arsenic	0.006536	0.1	0.1279	121.4	0.1	0.1255	119.0	1.894	20	75	125
Barium	0.1778	0.1	0.2959	118.1	0.1	0.2902	112.4	1.945	20	75	125

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Metals by Method 6020A, Total

SW6020A

WorkOrder:

09061252

Lab Batch ID:

91534-I

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

Sample Spiked:

09061252-02

RunID:

ICPMS2_090702A-5098287 Units:

mg/L

Analysis Date:

07/03/2009 0:26

Analyst:

AL_H

Preparation Date:

06/27/2009 13:30

Prep By: AB1 Method SW3010A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD	Low Limit	High Limit
Chromium	ND	0.1	0.1168	116.8	0.1	0.1125	112.5	3.751	20	75	125
Lead	ND	0.1	0.1064	106.4	0.1	0.1072	107.2	0.7491	20	75	125
Manganese	0.7026	0.1	0.8438	N/C	0.1	0.8258	N/C	N/C	20	75	125
Silver	ND	0.1	0.1044	104.4	0.1	0.1055	105.5	1.048	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



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

Conoco Phillips COP Wingate

Analysis: Method:

Mercury, Total SW7470A

WorkOrder:

09061252

Lab Batch ID:

91688

Method Blank

HGLC_090702A-5097031 RunID:

Units:

mg/L

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date:

07/02/2009 14:01

F S Analyst:

09061252-01E

WMW-6

Preparation Date:

07/02/2009 10:15

Prep By:

09061252-02E

MW-3

F_S Method SW7470A

09061252-03E 09061252-04E 8-WMW MW-2

,	Analyte
Mercury	

Result Rep Limit 0.0002 ND

Laboratory Control Sample (LCS)

RunID:

HGLC 090702A-5097032

mg/L

Analysis Date:

Preparation Date:

07/02/2009 14:04 07/02/2009 10:15 Units: Analyst: F_S

Prep By: F S Method SW7470A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.001976		80	120

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

Sample Spiked:

09061252-03

RunID:

HGLC_090702A-5097034

Units:

mg/L

Analysis Date: Preparation Date: 07/02/2009 14:10 07/02/2009 10:15

F_S Analyst:

F_S Method SW7470A 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
Mercury		ND	0.002	0.001891	94.54	0.002	0.001916	95.80	1.319	20	75	125

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

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



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

Conoco Phillips COP Wingate

Analysis: Semivolatile Organics by Method 8270C

Method: SW8270C

WorkOrder:

09061252

Lab Batch ID:

91487

Method Blank

RunID: J_090629B-5090857

Analysis Date:

Preparation Date:

06/29/2009 11:44

06/26/2009 12:28

Units: ug/L

Analyst: S_G

Prep By: N_M N

S_G N_M Method SW3510C Lab Sample ID Client Sample ID

Samples in Analytical Batch:

09061252-01D WMW-6 09061252-02D MW-3 09061252-03D WMW-8 09061252-04D MW-2

Analyte	Result	Rep Limi
1,2,4-Trichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Diphenylhydrazine	ND	1(
1,3-Dichlorobenzene	ND ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,4,5-Trichlorophenol	ND	10
2,4,6-Trichlorophenol	ND	5.0
2,4-Dichlorophenol	ND	5.0
2,4-Dimethylphenol	ND	5.0
2,4-Dinitrophenol	ND	25
2,4-Dinitrotoluene	ND	5.0
2,6-Dinitrotoluene	ND	5.0
2-Chloronaphthalene	ND	5.0
2-Chlorophenol	ND	5.0
2-Methylnaphthalene	ND	5.0
2-Nitroaniline	ND	25
2-Nitrophenol	ND	5.0
3,3'-Dichlorobenzidine	ND	10
3-Nitroaniline	ND	25
4,6-Dinitro-2-methylphenol	ND	2
4-Bromophenyl phenyl ether	ND	5.6
4-Chloro-3-methylphenol	ND	5.0
4-Chloroaniline	ND	5.0
4-Chlorophenyl phenyl ether	ND	5.6
4-Nitroaniline	ND	2
4-Nitrophenol	ND	2
Acenaphthene	ND ND	5.0
Acenaphthylene	ND	5.0
Aniline	ND ND	5.0
Anthracene	ND	5.0
Benz(a)anthracene	ND	5.0
Benzo(a)pyrene	, ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzoic acid	ND	25
Benzyl alcohol	ND.	5.0
Bis(2-chloroethoxy)methane	ND.	5.0
Bis(2-chloroethyl)ether	ND ND	5.0
Bis(2-chloroisopropyl)ether	ND	5.0
Bis(2-ethylhexyl)phthalate	ND.	5.0
Butyl benzyl phthalate	ND.	5.0
Carbazole	ND.	5.0
Chrysene	ND.	5.0
Dibenz(a,h)anthracene	ND.	5.0
Dibenzofuran	ND	5.0

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

09061252 Page 30

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.



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

Conoco Phillips COP Wingate

Analysis:

Semivolatile Organics by Method 8270C

Method: SW8270C WorkOrder:

09061252

Lab Batch ID:

91487

Method Blank

RunID:

J_090629B-5090857

Units:

ug/L

Analysis Date: Preparation Date: 06/29/2009 11:44 06/26/2009 12:28

S_G Analyst:

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	75.3	10-123
Surr: 2-Fluorobiphenyl	78.0	23-116
Surr: 2-Fluorophenol	67.9	16-110
Surr: Nitrobenzene-d5	69.2	21-114
Surr: Phenol-d5	69.2	10-110
Surr: Terphenyl-d14	75.0	22-141

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J 090629B-5090852

ug/L

Analysis Date:

06/29/2009 10:15

Units: S_G Analyst:

Preparation Date:

06/26/2009 12:28

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	21.3	85.2	25.0	20.6	82.4	3.3	39	21	120
1,2-Dichlorobenzene	25.0	20.2	80.8	25.0	20.4	81.6	1.0	50	20	150

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061252

Lab Batch ID:

91487

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units:

Analysis Date:

06/29/2009 10:15

S_G Analyst:

Preparation Date: 06/26/2009 12:28

ug/L

Prep By: N_M Method SW3510C

4.5	Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
257	1,2-Diphenylhydrazine	25.0	20.9	83.6	25.0	20.7	82.8	1.0	50	10	251
15 M	1,3-Dichlorobenzene	25.0	19.7	78.8	25.0	19.5	78.0	1.0	50	20	150
	1,4-Dichlorobenzene	25.0	20.0	80.0	25.0	19.7	78.8	1.5	45	20	150
	2,4,5-Trichlorophenol	25.0	21.5	86.0	25.0	22.2	88.8	3.2	50	30	150
(E)	2,4,6-Trichlorophenol 2,4-Dichlorophenol	25.0	21.1	84.4	25.0	21.1	84.4	0.0	50	30	150
星	2,4-Dichlorophenol	25.0	21.8	87.2	25.0	21.4	85.6	1.9	50	30	150
	2,4-Dimethylphenol	25.0	21.0	84.0	25.0	20.9	83.6	0.5	50	32	140
	2,4-Dinitrophenol	25.0	23.3	93.2	25.0	22.5	90.0	3.5	50	10	160
4	2,4-Dimethylphenol 2,4-Dinitrophenol 2,4-Dinitrotoluene 2,6-Dinitrotoluene	25.0	23.7	94.8	25.0	24.0	96.0	1.3	50	30	150
	2,6-Dinitrotoluene	25.0	22.2	88.8	25.0	22.7	90.8	2.2	50	30	150
_	2-Chloronaphthalene	25.0	20.7	82.8	25.0	21.2	84.8	2.4	50	30	150
5	2-Chlorophenol 2-Methylnaphthalene	25.0	20.5	82.0	25.0	20.6	82.4	0.5	40	23	134
ij.	2-Methylnaphthalene	25.0	20.8	83.2	25.0	20.4	81.6	1.9	50	20	170
	2-Nitroaniline	25.0	20.2	80.8	25.0	20.9	83.6	3.4	50	20	160
ŧ, - €	2-Nitrophenol 3,3'-Dichlorobenzidine	25.0	20.5	82.0	25.0	20.9	83.6	1.9	50	29	182
di.	3,3'-Dichlorobenzidine	25.0	19.2	76.8	25.0	19.4	77.6	1.0	50	30	200
	3-Nitroaniline	25.0	20.0	80.0	25.0	20.6	82.4	3.0	50	20	160
ć st	4,6-Dinitro-2-methylphenol	25.0	20.6	82.4	25.0	20.4	81.6	1.0	50	10	160
A. S. L. A.	4-Bromophenyl phenyl ether	25.0	21.5	86.0	25.0	21.3	85.2	0.9	50	30	150
	4-Chloro-3-methylphenol	25.0	20.6	82.4	25.0	20.6	82.4	0.0	42	25	160
	4-Chloroaniline	25.0	21.4	85.6	25.0	21.1	84.4	1.4	50	20	160
1 m	4-Chlorophenyl phenyl ether 4-Nitroaniline	25.0	21.8	87.2	25.0	21.2	84.8	2.8	50	25	158
n (4-Nitroaniline	25.0	22.1	88.4	25.0	23.2	92.8	4.9	50	20	160
	4-Nitrophenol	25.0	19.6	78.4	25.0	20.6	82.4	5.0	50	10	132
in Mar	Acenaphthene Acenaphthylene	25.0	21.0	84.0	25.0	21.7	86.8	3.3	31	30	150
Y	Acenaphthylene	25.0	21.9	87.6	25.0	22.3	89.2	1.8	50	33	250
_	Aniline	50.0	37.8	75.6	50.0	38.4	76.8	1.6	50	10	135
-58	Anthracene	25.0	21.7	86.8	25.0	22.2	88.8	2.3	50	27	133
Ser.	Benz(a)anthracene Benzo(a)pyrene	25.0	22.6	90.4	25.0	22.5	90.0	0.4	50	33	143
2	Benzo(a)pyrene	25.0	20.8	83.2	25.0	21.0	84.0	1.0	50	17	163
	Benzo(b)fluoranthene	25.0	22.1	88.4	25.0	22.1	88.4	0.0	50	24	159
	Benzo(g,h,i)perylene Benzo(k)fluoranthene	25.0	22.5	90.0	25.0	22.5	90.0	0.0	50	30	160
6.0	Benzo(k)fluoranthene	25.0	23.0	92.0	25.0	23.1	92.4	0.4	50	11	162

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

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 than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count



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

Conoco Phillips COP Wingate

Analysis: Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061252

Lab Batch ID:

91487

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units: ug/L

Analysis Date:

06/29/2009 10:15

S_G

Analyst:

N_M Method SW3510C Preparation Date: 06/26/2009 12:28 Prep By:

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	4.22	16.9	25.0	4.70	18.8	10.8	50	10	400
Benzyl alcohol	25.0	19.9	79.6	25.0	20.4	81.6	2.5	50	30	160
Bis(2-chloroethoxy)methane	25.0	20.4	81.6	25.0	20.0	80.0	2.0	50	33	184
Bis(2-chloroethyl)ether	25.0	20.3	81.2	25.0	20.2	80.8	0.5	50	12	158
Bis(2-chloroisopropyl)ether	25.0	19.7	78.8	25.0	19.2	76.8	2.6	50	20	160
Bis(2-ethylhexyl)phthalate	25.0	22.8	91.2	25.0	20.7	82.8	9.7	50	10	158
Butyl benzyl phthalate	25.0	23.5	94.0	25.0	22.2	88.8	5.7	50	30	160
Carbazole	25.0	21.5	86.0	25.0	22.3	89.2	3.7	50	30	150
Chrysene	25.0	22.0	88.0	25.0	21.8	87.2	0.9	50	17	168
Dibenz(a,h)anthracene	25.0	22.5	90.0	25.0	22.9	91.6	1.8	50	30	160
Dibenzofuran	25.0	21.6	86.4	25.0	22.1	88.4	2.3	50	30	150
Diethyl phthalate	25.0	22.3	89.2	25.0	21.7	86.8	2.7	50	30	160
Dimethyl phthalate	25.0	22.0	88.0	25.0	21.8	87.2	0.9	50	30	160
Di-n-butyl phthalate	25.0	23.4	93.6	25.0	21.9	87.6	6.6	50	30	160
Di-n-octyl phthalate	25.0	22.9	91.6	25.0	21.1	84.4	8.2	50	20	150
Fluoranthene	25.0	22.9	91.6	25.0	23.2	92.8	1.3	50	26	137
Fluorene	25.0	21.7	86.8	25.0	21.8	87.2	0.5	50	30	150
Hexachlorobenzene	25.0	20.8	83.2	25.0	20.8	83.2	0.0	50	20	150
Hexachlorobutadiene	25.0	20.4	81.6	25.0	19.9	79.6	2.5	50	20	140
Hexachlorocyclopentadiene	25.0	19.9	79.6	25.0	19.3	77.2	3.1	50	10	150
Hexachloroethane	25.0	19.6	78.4	25.0	19.5	78.0	0.5	50	14	120
Indeno(1,2,3-cd)pyrene	25.0	24.7	98.8	25.0	25.0	100	1.2	50	30	160
Isophorone	25.0	22.8	91.2	25.0	22.4	89.6	1.8	50	21	196
Naphthalene	25.0	21.2	84.8	25.0	21.0	84.0	0.9	50	21	133
Nitrobenzene	25.0	20.1	80.4	25.0	19.8	79.2	1.5	50	20	160
N-Nitrosodi-n-propylamine	25.0	20.8	83.2	25.0	20.5	82.0	1.5	38	30	160
N-Nitrosodiphenylamine	50.0	50.6	101	50.0	50.9	102	0.6	50	30	150
Pentachlorophenol	25.0	20.5	82.0	25.0	20.2	80.8	1.5	50	14	176
Phenanthrene	25.0	21.8	87.2	25.0	21.8	87.2	0.0	50	10	140
Phenol	25.0	21.5	86.0	25.0	21.9	87.6	1.8	42	40	132
Pyrene	25.0	21.5	86.0	25.0	21.3	85.2	0.9	38	30	150
Pyridine	50.0	32.9	65.8	50.0	33.3	66.6	1.2	50	10	150
2-Methylphenol	25.0	20.8	83.2	25.0	20.9	83.6	0.5	50	30	160

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

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 than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count



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

Conoco Phillips COP Wingate

Analysis: Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061252

Lab Batch ID:

91487

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units:

Analysis Date:

06/29/2009 10:15

ug/L

Preparation Date:

Analyst: S_G

06/26/2009 12:28 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
3 & 4-Methylphenol	25.0	21.2	84.8	25.0	21.7	86.8	2.3	50	10	160
Surr: 2,4,6-Tribromophenol	75.0	67.8	90.4	75.0	68.9	91.9	1.6	30	10	123
Surr: 2-Fluorobiphenyl	50.0	41.1	82.2	50.0	42.2	84.4	2.6	30	23	116
Surr: 2-Fluorophenol	75.0	59.1	78.8	75.0	59.3	79.1	0.3	30	16	110
Surr: Nitrobenzene-d5	50.0	38.9	77.8	50.0	39.3	78.6	1.0	30	21	114
Surr: Phenol-d5	75.0	60.7	80.9	75.0	61.8	82.4	1.8	30	10	110
Surr: Terphenyl-d14	50.0	42.5	85.0	50.0	41.2	82.4	3.1	30	22	141

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

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

09061252 Page 34

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.



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Volatile Organics by Method 8260B

SW8260B

06/29/2009 18:41

WorkOrder:

Samples in Analytical Batch:

09061252 R276914

Lab Batch ID:

Method Blank

Units:

Analyst:

Q_090629A-5092157 RunID:

ug/L JC

Lab Sample ID

Client Sample ID

09061252-02A 09061252-03A

MW-3 WMW-8

09061252-04A

MW-2

09061252-05A

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 ND	5.0
Surr: 1,2-Dichloroethane-d4	91.5	78-116
Surr: 4-Bromofluorobenzene	95.9	74-125
Surr: Toluene-d8	94.7	82-118

Laboratory Control Sample (LCS)

RunID:

Q_090629A-5092156

Units:

ug/L

Analysis Date:

06/29/2009 18:13

Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	19.1	95.5	74	123
Ethylbenzene	20.0	22.0	110	72	127
Toluene	20.0	19.7	98.7	74	126
m,p-Xylene	40.0	45.7	114	71	129
o-Xylene	20.0	22.7	113	74	130
Xylenes,Total	60.0	68.4	114	71	130
Surr: 1,2-Dichloroethane-d4	50.0	45.1	90.2	78	116
Surr: 4-Bromofluorobenzene	50.0	51.4	103	74	125
Surr: Toluene-d8	50.0	49	98.0	82	118

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

Sample Spiked:

09061336-01

RunID:

Q 090629A-5092159

Units:

ug/L

Analysis Date:

06/29/2009 19:35

Analyst:

JC

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

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



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips COP Wingate

Analysis:Volatile Organics by Method 8260BWorkOrder:09061252Method:SW8260BLab Batch ID:R276914

Ø.												
	Analyte	Sample	MS	MS	MS %	MSD	MSD	MSD %	RPD	RPD	Low	High
-		Result	Spike	Result	Recovery	Spike	Result	Recovery		Limit	Limit	Limit
_			Added			Added						
See .	Benzene	ND	1000	830	83.0	1000	843	84.3	1.51	22	70	124
	Ethylbenzene	ND	1000	949	94.9	1000	964	96.4	1.54	20	76	122
Ī	Toluene	ND	1000	857	85.7	1000	881	88.1	2.68	24	80	117
	m,p-Xylene	ND	2000	2000	100	2000	1980	99.0	1.09	20	69	127
j	o-Xylene	ND	1000	1010	101	1000	1030	103	1.33	20	84	114
ĺ	Xylenes,Total	ND	3000	3010	100	3000	3010	100	0.273	20	69	127
	Surr: 1,2-Dichloroethane-d4	ND	2500	2110	84.6	2500	2270	90.8	7.12	30	78	116
₹ ₩	Surr: 4-Bromofluorobenzene	ND	2500	2530	101	2500	2560	103	1.30	30	74	125
ا تعد	Surr: Toluene-d8	ND	2500	2360	94.4	2500	2350	94.1	0.232	30	82	118

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

RunID:

Volatile Organics by Method 8260B

SW8260B

07/01/2009 4:48

WorkOrder:

Samples in Analytical Batch:

09061252

Lab Batch ID:

R277121

Method Blank

Q_090701A-5094845

Units: Analyst:

ug/L JC

Lab Sample ID

Client Sample ID

09061252-01A

WMW-6

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	89.5	78-116
Surr: 4-Bromofluorobenzene	95.0	74-125
Surr: Toluene-d8	90.7	82-118

Laboratory Control Sample (LCS)

RunID:

Q_090701A-5094842

Units:

ug/L Analyst: JC

07/01/2009 4:21 Analysis Date:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	20.7	104	74	123
Ethylbenzene	20.0	21.6	108	72	127
Toluene	20.0	19.3	96.7	74	126
m,p-Xylene	40.0	45.3	113	71	129
o-Xylene	20.0	23.8	119	74	130
Xylenes,Total	60.0	69.1	115	71	130
Surr: 1,2-Dichloroethane-d4	50.0	45.1	90.3	78	116
Surr: 4-Bromofluorobenzene	50.0	49.7	99.4	74	125
Surr: Toluene-d8	50.0	44.7	89.5	82	118

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

Sample Spiked:

09061467-01

RunID:

Q_090701A-5094855

Units:

ug/L

Analysis Date:

07/01/2009 10:12

Analyst:

JC

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

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

09061252 Page 37

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.



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips COP Wingate

Volatile Organics by Method 8260B WorkOrder: 09061252 Analysis: SW8260B Lab Batch ID: Method: R277121

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	20.3	102	2.98	22	70	124
Ethylbenzene	ND	20	22.1	110	20	21.2	106	4.03	20	76	122
Toluene	ND	20	19.9	99.4	20	19.1	95.4	4.02	24	80	117
m,p-Xylene	ND	40	44.8	112	40	43.3	108	3.57	20	69	127
o-Xylene	ND	20	22.6	113	20	22.5	112	0.700	20	84	114
Xylenes,Total	ND	60	67.4	112	60	65.8	110	2.60	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	50	42.8	85.7	50	42.6	85.2	0.564	30	78	116
Surr: 4-Bromofluorobenzene	ND	50	48.1	96.2	50	49.3	98.6	2.45	30	74	125
Surr: Toluene-d8	ND	50	45.7	91.3	50	45.2	90.4	0.957	30	82	118

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

рΗ

SM4500-H B

WorkOrder:

09061252

Lab Batch ID:

R276359

Samples in Analytical Batch:

Lab Sample ID

09061252-01C

Client Sample ID WMW-6

09061252-02C

MW-3

09061252-03C

WMW-8

09061252-04C

MW-2

Laboratory Control Sample (LCS)

RunID:

WET_090624E-5082642

Units:

pH Units

Analysis Date:

06/24/2009 12:40

Analyst:

S_H

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
pH	7.000	7.040	100.6	98	102

Sample Duplicate

Original Sample:

09061246-01

RunID:

WET_090624E-5082643

Units:

pH Units

Analysis Date:

06/24/2009 12:40

Analyst:

S_H

Analyte	Sample Result	DUP Result	RPD	RPD Limit
рН	7.98	7.97	0.125	5
Temperature (oC)	23	23	0	5

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Ion Chromatography

06/24/2009 14:37

E300.0

WorkOrder:

09061252

Lab Batch ID:

R276459

Method Blank

RunID:

Analysis Date:

IC2_090624A-5084064

Units: Analyst: mg/L BDG

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061252-01C

WMW-6

09061252-02C

MW-3

09061252-03C

WMW-8

Analyte	Result	Rep Limit
Nitrogen,Nitrate (As N)	ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC2_090624A-5084065

Units:

mg/L

Analysis Date:

06/24/2009 14:56

BDG Analyst:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	10.00	9.832	98.32	90	110

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

Sample Spiked:

09061259-01

RunID:

IC2_090624A-5084080

Units:

mg/L

Analysis Date:

06/24/2009 20:30

Analyst:

BDG

Analyte Nitrogen,Nitrate (As N)	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	10	8.947	84.75	10	7.430	69.58 *	18.53	20	80	120

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

RunID:

Chemical Oxygen Demand

SM5220 C

-.**...**

WorkOrder:

09061252

Lab Batch ID:

R276490

Method Blank

WET_090625H-5084707

Units:

mg/L PAC

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date:

06/25/2009 12:00

Analyst:

09061252-02G

MW-3

09061252-04G

MW-2

Analyte	Result	Rep Limit
Chemical Oxygen Demand	ND	3.0

Laboratory Control Sample (LCS)

RunID:

WET_090625H-5084712

Units:

mg/L

Analysis Date:

06/25/2009 12:00

Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chemical Oxygen Demand	104.0	100.0	96.15	85	115

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

Sample Spiked:

09061330-01

RunID:

WET_090625H-5084717

Units:

mg/L

Analysis Date:

06/25/2009 12:00

Analyst: PAC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chemical Oxygen Demand	40.00	50	85.00	90.00	50	85.00	90.00	0	10	80	120

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

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

09061252 Page 41 7/8/2009 3:58:17 PM



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

Conoco Phillips COP Wingate

Analysis: Method:

Total Coliforms

M9222 B

WorkOrder:

09061252

Lab Batch ID:

R276507

Method Blank

WET_090624ZG-5084990 RunID:

Units:

colonies/100mL

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date:

06/24/2009 14:00

Analyst:

CFS

09061252-02H

MW-3

09061252-04H

MW-2

Analyte	Result	Rep Limit
Coliform, Total	ND	1.0

Sample Duplicate

Original Sample:

09061252-02

RunID:

WET_090624ZG-5084991

Units:

colonies/100mL

Analysis Date:

06/24/2009 14:00

Analyst:

CFS

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Coliform, Total	ND	1	200 *	48

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

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

09061252 Page 42

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.



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Total Dissolved Solids

06/25/2009 15:00

E160.1

WorkOrder:

09061252

Lab Batch ID:

R276566

Method Blank

RunID: WET_090625ZA-5085789 Units: Analyst: mg/L BDG

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061252-01B 09061252-02B WMW-6

09061252-03B

MW-3

09061252-04B

WMW-8 MW-2

Analyte

Result Rep Limit Total Dissolved Solids (Residue, Filterable) ND 10

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

WET_090625ZA-5085791

Analysis Date:

06/25/2009 15:00

Units: mg/L **BDG** Analyst:

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Total Dissolved Solids (Residue, Filterabl	200.0	202.0	101.0	200.0	199.0	99.50	1.5	10	95	107

Sample Duplicate

Original Sample:

09061252-04

RunID: Analysis Date: WET_090625ZA-5085796

06/25/2009 15:00

Units: Analyst: mg/L **BDG**

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Total Dissolved Solids (Residue, Filterabl	1030	1033	0.583	10

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

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

09061252 Page 43



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Ion Chromatography

WorkOrder:

09061252

Lab Batch ID:

R276737

Method Blank

RunID:

IC1_090627A-5088433

06/27/2009 12:01

mg/L Units:

Analyst:

BDG

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061252-01C

WMW-6

09061252-02C 09061252-03C MW-3

09061252-04C

WMW-8 MW-2

	Analyte	Result	Rep Limit
Chloride		ND	0.50
Sulfate		ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC1_090627A-5088434

Units:

Analysis Date:

06/27/2009 12:17

mg/L Analyst: **BDG**

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	10.00	9.125	91.25	85	115
Sulfate	10.00	10.44	104.4	85	115

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

Sample Spiked:

09061415-14

RunID:

IC1_090627A-5088463

Units:

mg/L

Analysis Date:

06/27/2009 20:37

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	25.40	500	470.0	88.92	500	471.1	89.15	0.2376	20	80	120
Sulfate	105.1	500	615.7	102.1	500	616.0	102.2	0.05018	20	80	120

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

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

09061252 Page 44

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.



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Ion Chromatography

06/25/2009 12:11

E300.0

WorkOrder:

09061252

Lab Batch ID:

R276740A

Method Blank

IC2 090625A-5088555 RunID:

Units: Analyst: mg/L **BDG**

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061252-04C

MW-2

Analyte	Result	Rep Limit
Nitrogen, Nitrate (As N)	ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC2_090625A-5088556

Units:

mg/L

Analysis Date:

06/25/2009 12:31

BDG Analyst:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen, Nitrate (As N)	10.00	10.09	100.9	90	110

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

Sample Spiked:

09061263-01

RunID:

IC2_090625A-5088585

Units:

mg/L

Analysis Date:

06/26/2009 0:05

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	10	7.532	75.32 *	10	7.309	73.09 *	3.005	20	80	12

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

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

09061252 Page 45

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.



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

Conoco Phillips COP Wingate

Analysis: Method: **Biochemical Oxygen Demand - 5 Days**

SM5210 B

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WorkOrder:

09061252

Lab Batch ID:

R276797

Method Blank

RunID: WET_090624ZO-5089589

Units:

mg/L

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date: 06/24/2009 10:30

Analyst:

S_H

09061252-02F

MW-3

09061252-04F

MW-2

Analyte	Result	Rep Limit
Biochemical Oxygen Demand	ND	2.0

Laboratory Control Sample (LCS)

RunID:

WET_090624ZO-5089591

Units:

mg/L

Analysis Date:

06/24/2009 10:30

Analyst: S_H

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Biochemical Oxygen Demand	198.0	198.4	100.2	83.7	114

Sample Duplicate

Original Sample:

09061234-03

RunID:

WET_090624ZO-5089592 Units:

mg/L

Analysis Date:

06/24/2009 10:30

Analyst:

S_H

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Biochemical Oxygen Demand	39	39.75	1.90	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

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

09061252 Page 46



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Alkalinity (as CaCO3), Total

E310.1

WorkOrder:

Lab Batch ID:

09061252

R277103

Method Blank

RunID: WET_090630N-5094587 Units:

mg/L PAC

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

06/30/2009 18:00

Analyst:

09061252-01B 09061252-02B

WMW-6

MW-3

09061252-03B 09061252-04B WMW-8 MW-2

Analyte Alkalinity, Total (As CaCO3)

Result Rep Limit ND 2.0

Laboratory Control Sample (LCS)

RunID:

WET_090630N-5094589

Units: mg/L

Analysis Date:

06/30/2009 18:00

PAC Analyst:

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:

09061339-05

RunID:

WET_090630N-5094594

Units:

mg/L PAC

Analysis Date:

06/30/2009 18:00

Analyst:

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Alkalinity, Total (As CaCO3)	435	435	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

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

09061252 Page 47

Sample Receipt Checklist And Chain of Custody



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

Sample Receipt Checklist

	061252 4/2009 10:00:00 AM 5°C			Received By Carrier name Chilled by:		RE Fedex-Standa Water Ice	rd Overnight
1. Shipping container/cooler	in good condition?	Yes	✓	No 🗆		Not Present	
2. Custody seals intact on sh	nippping container/cooler?	Yes	✓	No 🗆		Not Present	
3. Custody seals intact on sa	ample bottles?	Yes		No \square		Not Present	\checkmark
4. Chain of custody present?	?	Yes	✓	No 🗌			
5. Chain of custody signed w	when relinquished and received?	Yes	✓	No 🗆			
6. Chain of custody agrees w	vith sample labels?	Yes	•	No 🗌			
7. Samples in proper contain	ner/bottle?	Yes	✓	No 🗌			
8. Sample containers intact?		Yes	✓	No \square			
9. Sufficient sample volume t	for indicated test?	Yes	✓	No \square			
10. All samples received within 1.Received 2-sets of colifor 6/23/09	n holding time? orms (MW-2 and MW-3)expired collected	Yes		No 🗹			
11. Container/Temp Blank tem 867026830566-2.0,867026		Yes	✓	No 🗆			
12. Water - VOA vials have zer	ro headspace?	Yes	✓	No 🗆	VOA Via	ils Not Present	
13. Water - Preservation check	ked upon receipt (except VOA*)?	Yes	✓	No 🗆		Not Applicable	
*VOA Preservation Checke	ed After Sample Analysis						
SPL Representative:		Cont	act Date & Ti	me:			
Client Name Contacted:							
Non Conformance 1.Continus Issues:	nue with analysis until client can be notified	l.					
Client Instructions:							

		 							1		:	•	İ	
		Chain of Custody	Ö	stody	Record	ord	*****	*	1	1	4	j	1	į
Client: Tetra Tech/ Conoco Phillips	co Phillips			SP	Work	SPL Workorder Number:	Humb	.) - -	5	ر. ارد	3	۲	i	j
Attention: Keily Blandchard/Tetra Tech		1	1		-					<u> </u>) ! ! !			-
Phone; 505-237-8440	email kely.	blanchard@tetratech.c	Wietro!	acho acho					문	Requested Analysis	Inalys		-	ļ
Address: 512) Indian School Road, NE Stal, 200								•				•		౽:
Ch: Abuquerque	<u>1</u> 2	Cade: 871 10	0											> 8
Project Floring: Wingate Fractionating Piant	dionating Plant				-									9109
P.O. Number:	j				qΥΊ	ដូរ	1	J.T.M	13.	æµ₽	•	7.		5 014
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Sample ID	TENE		Water	Soil	∤-	•	29	8 5	<u></u>	+) 	3	72	ž1
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J - 7.8.8	(3) of 910	×	×	33		H				X				
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24 hrt 28 hrt		}; };	, , ,	ŀ			•	į.	<u>*</u>	9			12	~ ⟨>
72 hrt) 5 waay()		3/40	I: 3/40ml Vidis	•		3. It Masne 3. EC.		_, •	it Amber Gloss		s. Boz riesmo		۲.,	
Referenced by Sampler	Preservanve Lypes:		# @	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		RECeived by	 } }	#. 1459CA	\$			12	1	} } }
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Client: Tetra Tech/ Conoco Philips	to Phillips				SPL	Worko	SPL Workorder Number:	mber	1		26-25-173 MB			######################################
Phone: 605-237-8440		omolikely bar shard@latroffic	shardē	Pico Prote	 2 10 10			i	4	People	Z		32 4	
Address: 6121 Indian School Road, NE Ste. 200			(• • •		_		, , ,			-	7
Ch: Albuquerque	Sighe: NW	Zip Cade: 871 ! 3	6:871	0										< 0
Project vame: Wingate Fracti	ionating Plant			j	1	3 1		ļ						169
P.O. Number:			ļ 	<u> </u>	! !	lyp			101		31D			/02
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Sample 10	Collected Date Time	Sample Type Compl Grob	Srob V	Matrix Water S.	장 카IIOS	49999	5 to 4	9 - 0978 A -0978	2.0728	Hq,8QT	25/142	LONG 3	ROD COD	12 14 4
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mw-13	1.27 1035	A	X	X	3,6	יון גר	7	155				\triangle	\times	. 1
	6-23 1035	, , , , ,	X		1 20cm	7	ď				<u> </u>			
Nernarcand Time Requirements Remarks:	S Remarks:	A.S.C	2 - 1X	\$7(C; D)	Run-1776 Wank for		BTEK CHLY	- 3 6		Infact? Y o Temperature:	+ afvire:	2 0	¦	بران
72 hrt J 5 wdoyt	Bottle Types:		1: 3/40H	1: 3/40ml Vials	1	#	3. 11 Mastic	=	Аттре	If Amber Gloss	5. 60		꾩	١
10 waay - Standard(X)	Preservative 1	ypes	I NONE		2 HNO3		3. HCL	4	HXXQ4	ک	5 6 7		₹ 4.547¢	j
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8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Certificate of Analysis Number:

09061178

Report To: **Project Name: COP Wingate** Site: Gallup, NM Tetra Tech, Inc. Kelly Blanchard Site Address: 6121 Indian School Road, N.E. Suite 200 4511799321 PO Number: Albuquerque State: **New Mexico** NM 87110-State Cert. No.: ph: (505) 237-8440 fax: **Date Reported:** 7/9/2009

This Report Contains A Total Of 38 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments



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

Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

09061178

COP Wingate Report To: Project Name: Site: Gallup, NM Tetra Tech, Inc. Kelly Blanchard Site Address: 6121 Indian School Road, N.E. Suite 200 4511799321 PO Number: **Albuquerque** State: **New Mexico** NM 87110-State Cert. No.: ph: (505) 237-8440 fax: 7/9/2009 **Date Reported:**

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: ANALYSIS AND EXCEPTIONS:

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.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID: 91487 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.

III. GENERAL REPORTING COMMENTS:

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.

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.

5 ca Cardinas

09061178 Page 1

7/10/2009



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

Conoco Phillips

Certificate of Analysis Number:

09061178

Report To: Tetra Tech, Inc.

Kelly Blanchard

6121 Indian School Road, N.E.

Suite 200

Albuquerque

NM

Fax To:

87110-

ph: (505) 237-8440

fax: (505) 881-3283

Project Name:

COP Wingate

Site:

Gallup, NM

Site Address:

PO Number:

4511799321

State:

New Mexico

State Cert. No.:

Date Reported: 7/9/2009

	Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
WMW-1		09061178-01	Water	6/22/2009 10:30:00 AM	6/23/2009 9:30:00 AM		
WMW-5		09061178-02	Water	6/22/2009 11:30:00 AM	6/23/2009 9:30:00 AM	•	
WMW-4		09061178-03	Water	6/22/2009 1:05:00 PM	6/23/2009 9:30:00 AM		
WMW-7		09061178-04	Water	6/22/2009 2:25:00 PM	6/23/2009 9:30:00 AM		

500 Cardinas

7/10/2009

Date

Erica Cardenas

Project Manager

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

Ted Yen
Quality Assurance Officer



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

						()		
Client Sample ID:\	/MW-1		Collected	: 06/22/2	009 10:3	0 SPL Sample	∍ ID : 0906	1178-01
			Site: 0	Sallup, N	М			
Analyses/Method	Resul	t QUAL	Rep.Lim	t	Dil. Fac	tor Date Analyze	d Analyst	Seq. #
ALKALINITY (AS C	ACO3), TOTAL		,	MC)L	E310.1	Units: mg/L	
Alkalinity, Total (As Ca		,		2	1	06/24/09 17:0	00 PAC	508334
ION CHROMATOGI	RAPHY			МС	:L	E300.0	Units: mg/L	
Chloride	501		25		500	06/26/09 23:		508724
Sulfate	2150		25		500	06/26/09 23:		508724
MEDCUDY TOTAL				MC	\	CVA/7.470.A		
MERCURY, TOTAL	ND		0.000	MC	<u>;L</u>	SW7470A 06/30/09 15:5	Units: mg/L	509335
Mercury	INL		0.000		1	00/30/09 13.0	<u>ю г_3</u>	509333
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW7470A	06/30/2009 10:30	F_S	1.00	Ī				
METALS BY METH	OD 6010B TOTAL			MC	`1	SW6010B	Units: mg/L	=
Calcium	222)	0.		1	07/02/09 13:1		509722
Iron	0.192		0.0		<u>`</u>	07/02/09 13:1		509722
Magnesium	60.9		0.		1	07/02/09 13:1		5097224
Sodium	1330			<u>. </u>	10	07/02/09 14:2		5097232
				_				
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW3010A	06/26/2009 12:00	AB1	1.00					
METALS BY METH	OD 6020A. TOTAL			MC	CL	SW6020A	Units: mg/L	
Arsenic	NC)	0.02		5	07/02/09 13:4		509745
Barium	NC)	0.02	5	5	07/02/09 13:4	#8 S_C	509745
Cadmium	NC)	0.02	5	5	07/02/09 13:4	18 S_C	509745
Chromium	NC)	0.02	5	5	07/02/09 13:4	18 S_C	509745
Lead	NC		0.02	5	5	07/02/09 13:4	18 S_C	509745
Manganese	3.94		0.02	5	5	07/02/09 13:4	18 S_C	509745
Selenium	NC)	0.02	5	5	07/02/09 13:4	18 S_C	509745
Silver	NC		0.02	5	5	07/02/09 13:4	₽8 S_C	509745
Prep Method	Drop Date	Dran Initials	Prep Factor	٦				
SW3010A	Prep Date 06/26/2009 12:00	Prep Initials AB1	1.00	-				
		וטאן	1.00					
NITRATE NITROGE				MC	-		Units: mg/L	
Nitrogen, Nitrate (As N	N) NC) 	0.	5	1	06/23/09 18:3	30 ESK	508231
PH				МС	L SI	VI4500-H B	Units: pH Ur	nits
pH	7.05		0.		1	06/23/09 14:0		508145

0.1

Qualifiers:

Temperature (oC)

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

24.7

* - 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)

06/23/09 14:00 S_H

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

5081450



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

Client Sample ID:WMW-1 Collected: 06/22/2009 10:30 SPL Sample ID: 09061178-01

Site: Gallup, NM

			IP, NIVI			
Analyses/Method	Result QUA	L Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY	METHOD 8270C		MCL SV	V8270C Un	its: ug/L	
1,2,4-Trichlorobenzene	ND	5	1	06/29/09 13:05	S_G	5090862
1,2-Dichlorobenzene	ND	5	1	06/29/09 13:05	S_G	5090862
1,2-Diphenylhydrazine	ND	10	1	06/29/09 13:05	S_G	5090862
1,3-Dichlorobenzene	NĎ	5	1	06/29/09 13:05	S_G	5090862
1,4-Dichlorobenzene	ND	5	1	06/29/09 13:05	S_G	5090862
2,4,5-Trichlorophenol	ND	10	1	06/29/09 13:05	S_G	5090862
2,4,6-Trichlorophenol	ND	5	1	06/29/09 13:05	S_G	5090862
2,4-Dichlorophenol	ND	5	1	06/29/09 13:05	S_G	5090862
2,4-Dimethylphenol	ND	5	1	06/29/09 13:05	S_G	5090862
2,4-Dinitrophenol	ND	25	1	06/29/09 13:05	S_G	5090862
2,4-Dinitrotoluene	ND	5	1	06/29/09 13:05	S_G	5090862
2,6-Dinitrotoluene	ND	5	1	06/29/09 13:05	S_G	5090862
2-Chloronaphthalene	ND	5	1	06/29/09 13:05	S_G	5090862
2-Chlorophenol	ND	5	1	06/29/09 13:05	S_G	5090862
2-Methylnaphthalene	ND	5	1	06/29/09 13:05	S_G	5090862
2-Nitroaniline	ND	25	1	06/29/09 13:05	S_G	5090862
2-Nitrophenol	ND	5	1	06/29/09 13:05	S_G	5090862
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 13:05	S_G	5090862
3-Nitroaniline	ND	25	1	06/29/09 13:05	S_G	5090862
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 13:05	S_G	5090862
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 13:05	S_G	5090862
4-Chloro-3-methylphenol	ND	5	1	06/29/09 13:05	S_G	5090862
4-Chloroaniline	ND	5	1	06/29/09 13:05	S_G	5090862
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 13:05	S_G	5090862
4-Nitroaniline	ND	25	1	06/29/09 13:05	S_G	5090862
4-Nitrophenol	ND	25	1	06/29/09 13:05	S_G	5090862
Acenaphthene	ND	5	1	06/29/09 13:05	S_G	5090862
Acenaphthylene	ND	5	1	06/29/09 13:05	S_G	5090862
Aniline	ND	5	1	06/29/09 13:05	S_G	5090862
Anthracene	ND	5	1	06/29/09 13:05	S_G	5090862
Benz(a)anthracene	ND	5	1	06/29/09 13:05	S_G	5090862
Benzo(a)pyrene	ND	5	1	06/29/09 13:05	S_G	5090862
Benzo(b)fluoranthene	ND	5	1	06/29/09 13:05	S_G	5090862
Benzo(g,h,i)perylene	ND	5	1	06/29/09 13:05	S_G	5090862
Benzo(k)fluoranthene	ND	5	1	06/29/09 13:05	S_G	5090862
Benzoic acid	ND	25	1	06/29/09 13:05	S_G	5090862
Benzyl alcohol	ND	5	1	06/29/09 13:05	S_G	5090862
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 13:05	S_G	5090862
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 13:05	S_G	5090862

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



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

Client Sample ID:WMW-1 Collected: 06/22/2009 10:30 SPL Sample ID: 09061178-01

		S	ite: Gallu _l	p, NM			
Analyses/Method	Result	QUAL I	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	06/29/09 13:05	S_G	5090862
Bis(2-ethylhexyl)phthalate	ND		5	1	06/29/09 13:05	S_G	5090862
Butyl benzyl phthalate	ND		5	1	06/29/09 13:05	S_G	5090862
Carbazole	ND		5	1	06/29/09 13:05	S_G	5090862
Chrysene	ND		5	1	06/29/09 13:05	S_G	5090862
Dibenz(a,h)anthracene	ND		5	1	06/29/09 13:05	S_G	5090862
Dibenzofuran	ND		5	1	06/29/09 13:05	S_G	5090862
Diethyl phthalate	ND		5	1	06/29/09 13:05	S_G	5090862
Dimethyl phthalate	ND		5	1	06/29/09 13:05	S_G	5090862
Di-n-butyl phthalate	ND		5	1	06/29/09 13:05	S_G	5090862
Di-n-octyl phthalate	ND		5	1	06/29/09 13:05	S_G	5090862
Fluoranthene	ND		5	1	06/29/09 13:05	S_G	5090862
Fluorene	ND		5	1	06/29/09 13:05	S_G	5090862
Hexachlorobenzene	ND		5	1	06/29/09 13:05	S_G	5090862
Hexachlorobutadiene	ND		5	1	06/29/09 13:05	S_G	5090862
Hexachlorocyclopentadiene	ND		5	1	06/29/09 13:05	S_G	5090862
Hexachloroethane	ND		5	1	06/29/09 13:05	S_G	5090862
Indeno(1,2,3-cd)pyrene	ND		5	1	06/29/09 13:05	S_G	5090862
Isophorone	ND		5	1	06/29/09 13:05	S_G	5090862
Naphthalene	ND		5	1	06/29/09 13:05	S_G	5090862
Nitrobenzene	ND		5	1	06/29/09 13:05	S_G	5090862
N-Nitrosodi-n-propylamine	ND		5	1	06/29/09 13:05	S_G	5090862
N-Nitrosodiphenylamine	ND		5	1	06/29/09 13:05	S_G	5090862
Pentachlorophenol	ND		25	1	06/29/09 13:05	S_G	5090862
Phenanthrene	ND		5	1	06/29/09 13:05	S_G	5090862
Phenol	ND		5	1	06/29/09 13:05	S_G	5090862
Pyrene	ND		5	1	06/29/09 13:05	S_G	5090862
Pyridine	ND		5	1	06/29/09 13:05	S_G	5090862
2-Methylphenol	ND		5	1	06/29/09 13:05	S_G	5090862
3 & 4-Methylphenol	ND		5	1	06/29/09 13:05	S_G	5090862
Surr: 2,4,6-Tribromophenol	71.2	%	10-123	1	06/29/09 13:05	S_G	5090862
Surr: 2-Fluorobiphenyl	72.4	%	23-116	1	06/29/09 13:05	S_G	5090862
Surr: 2-Fluorophenol	48.7	%	16-110	1	06/29/09 13:05	S_G	5090862
Surr: Nitrobenzene-d5	64.8	%	21-114	1	06/29/09 13:05	S_G	5090862
Surr: Phenol-d5	34.8	%	10-110	1	06/29/09 13:05	S_G	5090862
Surr: Terphenyl-d14	69.4	%	22-141	1	06/29/09 13:05	S_G	5090862

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Client Sample ID:WMW-1 Collected: 06/22/2009 10:30 SPL Sample ID: 09061178-01

•			Sit	e: Galle	up, NM					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Facto	or Date Analy	zed	Analyst	Seq. #
TOTAL DISSOLVED SOLIDS	· · · ·				MCL		E160.1	Ur	nits: mg/L	
Total Dissolved Solids (Residue,Filterable)	4560			40		4	06/23/09 1	6:00	CFS	5081775
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	. ;	SW8260B	Ur	nits: ug/L	
Benzene	ND			5		1	06/29/09 2	0:30	JC	5092161
Ethylbenzene	ND			5		1	06/29/09 2	20:30	JC	5092161
Toluene	ND			5		1	06/29/09 2	20:30	JC	5092161
m,p-Xylene	ND			5		1	06/29/09 2	20:30	JC	5092161
o-Xylene	ND			5		1	06/29/09 2	0:30	JC	5092161
Xylenes,Total	ND			5		1	06/29/09 2	0:30	JC	5092161
Surr: 1,2-Dichloroethane-d4	92.7		%	78-116		1	06/29/09 2	20:30	JC	5092161
Surr: 4-Bromofluorobenzene	98.1	•	%	74-125		1	06/29/09 2	20:30	JC	5092161
Surr: Toluene-d8	94.7		%	82-118		1	06/29/09 2	0:30	JC	5092161

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



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

Client Sample ID:WMW-5 Collected: 06/22/2009 11:30 09061178-02 SPL Sample ID:

G-VVI		Conected.	01221200	3 11.50	SFL Samp	NE ID. 0000	1170-02
- 111 -		Site: Gal	lup, NM				
Result	QUAL	Rep.Limit	[Dil. Factor	Date Analyz	zed Analyst	Seq. #
CO3), TOTAL			MCL		E310.1	Units: mg/L	
O3) 682		2		1	06/24/09 17	7:00 PAC	508334
\PHY			MCL		E300.0	Units: mg/L	
259		100		200	06/26/09 23		508724
1370		100		200	06/26/09 23	3:34 BDG	508724
			MCL	S	W7470A	Units: ma/L	
ND		0.0002		1			509335
	I						

06/30/2009 10:30	F_S	1.00					
O 6010B, TOTAL			MCL		W6010B	Units: mg/L	
172		0.1		1	07/02/09 13		509722
0.346		0.02		1	07/02/09 13	3:19 EG	509722
49.4	<u></u>	0.1		11	07/02/09 13	3:19 EG	509722
912		1		10	07/02/09 14	1:25 EG	509723
Prep Date	Prep Initials	Pren Factor					
06/26/2009 12:00	AB1	1.00					
D 6020A. TOTAL			MCL	S	W6020A	Units: ma/L	
ND		0.025		5			509746
ND		0.025		5	07/02/09 13	3:53 S_C	509746
ND		0.025		5	07/02/09 13	3:53 S_C	509746
ND		0.025		5	07/02/09 13	3:53 S_C	509746
ND		0.025		5	07/02/09 13	3:53 S_C	509746
0.693		0.025		5	07/02/09 13	3:53 S_C	509746
ND		0.025		5	07/02/09 13	3:53 S_C	509746
ND		0.025		5	07/02/09 13	3:53 S_C	509746
Prop Data	Prop Initiale	Prop Eactor					
	AB1	1.00					
1			MCI	SM450	0-NO3 E	Unite: ma/l	
ND		0.5	HICL	1			5082314
			MCL	SM4	500-H B	Units: pH Ur	its
7.37		0.1		1			508145
	Result	Result QUAL	Result QUAL Rep.Limit	No	Site: Gallup, NM	Result QUAL Rep.Limit Dil. Factor Date Analyst Dil. Factor Date Date Dil. Factor Date Dil. Factor Date Date	Result QUAL Rep.Limit Dil. Factor Date Analyzed Analyst

0.1

Qualifiers:

Temperature (oC)

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

25

* - 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)

06/23/09 14:00 S_H

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

5081451



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

Client Sample ID:WMW-5 Collected: 06/22/2009 11:30 SPL Sample ID: 09061178-02

Site: Gallup, NM

		Site. Gail	up, NW			
Analyses/Method	Result Q	UAL Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq.#
SEMIVOLATILE ORGANICS B	Y METHOD 8270	C	MCL SV	V8270C Un	its: ug/L	
1,2,4-Trichlorobenzene	ND	5	1	06/29/09 13:49	S_G	5090863
1,2-Dichlorobenzene	ND	5	1	06/29/09 13:49	S_G	5090863
1,2-Diphenylhydrazine	ND	10	1	06/29/09 13:49	S_G	5090863
1,3-Dichlorobenzene	ND	5	1	06/29/09 13:49	S_G	5090863
1,4-Dichlorobenzene	ND	5	1	06/29/09 13:49	S_G	5090863
2,4,5-Trichlorophenol	ND	10	1	06/29/09 13:49	S_G	5090863
2,4,6-Trichlorophenol	ND	5	1	06/29/09 13:49	S_G	5090863
2,4-Dichlorophenol	ND	5	1	06/29/09 13:49	S_G	5090863
2,4-Dimethylphenol	ND	5	1	06/29/09 13:49	S_G	5090863
2,4-Dinitrophenol	ND	25	1	06/29/09 13:49	S_G	5090863
2,4-Dinitrotoluene	ND	5	1	06/29/09 13:49	S_G	5090863
2,6-Dinitrotoluene	ND	5	1	06/29/09 13:49	S_G	5090863
2-Chloronaphthalene	ND	5	1	06/29/09 13:49	S_G	5090863
2-Chlorophenol	ND	5	1	06/29/09 13:49	S_G	5090863
2-Methylnaphthalene	ND	5	1	06/29/09 13:49	S_G	5090863
2-Nitroaniline	ND	25	1	06/29/09 13:49	S_G	5090863
2-Nitrophenol	ND	5	1	06/29/09 13:49	S_G	5090863
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 13:49	S_G	5090863
3-Nitroaniline	ND	25	1	06/29/09 13:49	S_G	5090863
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 13:49	S_G	5090863
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 13:49	S_G	5090863
4-Chloro-3-methylphenol	ND	5	1	06/29/09 13:49	S_G	5090863
4-Chloroaniline	ND	5	1	06/29/09 13:49	S_G	5090863
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 13:49	S_G	5090863
4-Nitroaniline	ND	25	1	06/29/09 13:49	S_G	5090863
4-Nitrophenol	ND	25	1	06/29/09 13:49	S_G	5090863
Acenaphthene	ND	5	1	06/29/09 13:49	S_G	5090863
Acenaphthylene	ND	5	1	06/29/09 13:49	S_G	5090863
Aniline	ND	5	1	06/29/09 13:49	S_G	5090863
Anthracene	ND	5	1	06/29/09 13:49	S_G	5090863
Benz(a)anthracene	ND	5	1	06/29/09 13:49	S_G	5090863
Benzo(a)pyrene	ND	5	1	06/29/09 13:49	S_G	5090863
Benzo(b)fluoranthene	ND	5	1	06/29/09 13:49	S_G	5090863
Benzo(g,h,i)perylene	ND	5	1	06/29/09 13:49	S_G	5090863
Benzo(k)fluoranthene	ND	5	1	06/29/09 13:49	s_g	5090863
Benzoic acid	ND	25	1	06/29/09 13:49	. -	5090863
Benzyl alcohol	ND	5	11	06/29/09 13:49		5090863
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 13:49	S_G	5090863
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 13:49	S_G	5090863

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



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

Client Sample ID:WMW-5 Collected: 06/22/2009 11:30 SPL Sample ID: 09061178-02

Bis(2-chloroisopropyl)ether			Site: (Gallup, NM			
Bis(2-ethylhexyl)phthalate	Analyses/Method	Result	QUAL Rep.Lim	it Dil. Factor	Date Analyzed	Analyst	Seq.#
Butyl benzyl phthalate	Bis(2-chloroisopropyl)ether	ND		5 1	06/29/09 13:49	S_G	5090863
Carbazole ND 5 1 06/29/09 13:49 S_G 500086 Chrysene ND 5 1 06/29/09 13:49 S_G 509086 Dibenz(a,h)anthracene ND 5 1 06/29/09 13:49 S_G 509086 Dibenzofuran ND 5 1 06/29/09 13:49 S_G 509086 Diethyl phthalate ND 5 1 06/29/09 13:49 S_G 509086 Di-n-butyl phthalate ND 5 1 06/29/09 13:49 S_G 509086 Di-n-cyl phthalate ND 5 1 06/29/09 13:49 S_G 509086 Fluoranthene ND 5 1 06/29/09 13:49 S_G 509086	Bis(2-ethylhexyl)phthalate	ND		5 1	06/29/09 13:49	S_G	5090863
Chrysene	Butyl benzyl phthalate	ND		5 1	06/29/09 13:49	S_G	5090863
Dibenz(a,h)anthracene ND 5 1 06/29/09 13:49 S_G 509086 Dibenzofuran ND 5 1 06/29/09 13:49 S_G 509086 Diethyl phthalate ND 5 1 06/29/09 13:49 S_G 509086 Dirn-butyl phthalate ND 5 1 06/29/09 13:49 S_G 509086 Dirn-butyl phthalate ND 5 1 06/29/09 13:49 S_G 509086 Fluoranthene ND 5 1 06/29/09 13:49 S_G 509086 Fluorene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorobenzene ND 5 1 06/29/09 13:49 S_G	Carbazole	ND		5 1	06/29/09 13:49	S_G	5090863
Dibenzoluran	Chrysene	ND		5 1	06/29/09 13:49	S_G	5090863
Diethyl phthalate	Dibenz(a,h)anthracene	ND		5 1	06/29/09 13:49	S_G	5090863
Dimethyl phthalate	Dibenzofuran	ND		5 1	06/29/09 13:49	S_G	5090863
Di-n-buty phthalate	Diethyl phthalate	ND		5 1	06/29/09 13:49	S_G	5090863
Di-n-octyl phthalate ND 5 1 06/29/09 13:49 S_G 509086 Fluoranthene ND 5 1 06/29/09 13:49 S_G 509086 Fluorene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorobenzene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorobutadiene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 S_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 S_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/0	Dimethyl phthalate	ND		5 1	06/29/09 13:49	S_G	5090863
Fluoranthene ND 5 1 06/29/09 13:49 S_G 509086 Fluorene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorobenzene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorobutadiene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 S_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 S_G 509086 Isophorone ND 5 1 06/29/09 13:49 S_G 509086 Isophorone ND 5 1 06/29/09 13:49 S_G 509086 Isophorone ND 5 1 06/29/09 13:49 S_G 509086 Naphthalene ND 5 1 06/29/09 13:49 S_G 50908	Di-n-butyl phthalate	ND		5 1	06/29/09 13:49	S_G	5090863
Fluorene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachlorobenzene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachlorobutadiene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachlorocthane ND 5 1 06/29/09 13:49 \$_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 \$_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 \$_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 \$_G 509086 Naphthalene ND 5 1 06/29/09 13:49 \$_G 509086 N-Nitrosodi-n-propylamine ND 5 1 06/29/09 13:49<	Di-n-octyl phthalate	ND		5 1	06/29/09 13:49	S_G	5090863
Hexachlorobenzene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachlorobutadiene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 \$_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 \$_G 509086 Isophorone ND 5 1 06/29/09 13:49 \$_G 509086 Naphthalene ND 5 1 06/29/09 13:49 \$_G 5	Fluoranthene	ND		5 1	06/29/09 13:49	S_G	5090863
Hexachlorobutadiene ND 5 1 06/29/09 13:49 S_G 509086 Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 S_G 509086 Hexachloroethane ND 5 1 06/29/09 13:49 S_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 S_G 509086 Isophorone ND 5 1 06/29/09 13:49 S_G 509086 Naphthalene ND 5 1 06/29/09 13:49 S_G 509086 Nitrobenzene ND 5 1 06/29/09 13:49 S_G 509086 N-Nitrosodi-n-propylamine ND 5 1 06/29/09 13:49 S_G 509086 N-Nitrosodi/penylamine ND 5 1 06/29/09 13:49 S_G 509086 N-Nitrosodi/penylamine ND 5 1 06/29/09 13:49 S_G 509086 Pentachlorophenol ND 5 1 06/29/09 13:49	Fluorene	ND		5 1	06/29/09 13:49	S_G	5090863
Hexachlorocyclopentadiene ND 5 1 06/29/09 13:49 \$_G 509086 Hexachloroethane ND 5 1 06/29/09 13:49 \$_G 509086 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 \$_G 509086 Isophorone ND 5 1 06/29/09 13:49 \$_G 509086 Naphthalene ND 5 1 06/29/09 13:49 \$_G 509086 Nitrobenzene ND 5 1 06/29/09 13:49 \$_G 509086 N-Nitrosodi-n-propylamine ND 5 1 06/29/09 13:49 \$_G 509086 N-Nitrosodi-phenylamine ND 5 1 06/29/09 13:49 \$_G 509086 Pentachlorophenol ND 25 1 06/29/09 13:49 \$_G 509086 Phenol ND 5 1 06/29/09 13:49 \$_G 509086 Pyrene ND 5 1 06/29/09 13:49 \$_G	Hexachlorobenzene	ND		5 1	06/29/09 13:49	S_G	5090863
Hexachloroethane ND 5 1 06/29/09 13:49 \$_G 509080 Indeno(1,2,3-cd)pyrene ND 5 1 06/29/09 13:49 \$_G 509080 Isophorone ND 5 1 06/29/09 13:49 \$_G 509080 Naphthalene ND 5 1 06/29/09 13:49 \$_G 509080 Nitrobenzene ND 5 1 06/29/09 13:49 \$_G 509080 N-Nitrosodi-n-propylamine ND 5 1 06/29/09 13:49 \$_G 509080 N-Nitrosodiphenylamine ND 5 1 06/29/09 13:49 \$_G 509080 Pentachlorophenol ND 25 1 06/29/09 13:49 \$_G 509080 Phenol ND 5 1 06/29/09 13:49 \$_G 509080 Pyrene ND 5 1 06/29/09 13:49 \$_G 509080 Pyridine ND 5 1 06/29/09 13:49 \$_G 509080 </td <td>Hexachlorobutadiene</td> <td>ND</td> <td></td> <td>5 1</td> <td>06/29/09 13:49</td> <td>S_G</td> <td>5090863</td>	Hexachlorobutadiene	ND		5 1	06/29/09 13:49	S_G	5090863
Indeno(1,2,3-cd)pyrene	Hexachlorocyclopentadiene	ND		5 1	06/29/09 13:49	S_G	5090863
Isophorone ND 5	Hexachloroethane	ND		5 1	06/29/09 13:49	S_G	5090863
Isophorone ND 5	Indeno(1,2,3-cd)pyrene	ND		5 1	06/29/09 13:49	S_G	5090863
Nitrobenzene ND 5 1 06/29/09 13:49 S_G 509086 N-Nitrosodi-n-propylamine ND 5 1 06/29/09 13:49 S_G 509086 N-Nitrosodiphenylamine ND 5 1 06/29/09 13:49 S_G 509086 N-Nitrosodiphenylamine ND 5 1 06/29/09 13:49 S_G 509086 Pentachlorophenol ND 5 1 06/29/09 13:49 S_G 509086 Phenanthrene ND 5 1 06/29/09 13:49 S_G 509086 Phenol ND 5 1 06/29/09 13:49 S_G 509086 Pyrene ND 5 1 06/29/09 13:49 S_G 509086 Pyridine ND 5 1 06/29/09 13:49 S_G 509086 2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G		ND	· · · · · · · · · · · · · · · · · · ·	5 1	06/29/09 13:49	S_G	5090863
N-Nitrosodi-n-propylamine ND 5 1 06/29/09 13:49 S_G 509086 N-Nitrosodiphenylamine ND 5 1 06/29/09 13:49 S_G 509086 Pentachlorophenol ND 25 1 06/29/09 13:49 S_G 509086 Phenanthrene ND 5 1 06/29/09 13:49 S_G 509086 Pyrene ND 5 1 06/29/09 13:49 S_G 509086 Pyridine ND 5 1 06/29/09 13:49 S_G 509086 Pyridine ND 5 1 06/29/09 13:49 S_G 509086 2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 3 & 4-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1	Naphthalene	ND		5 1	06/29/09 13:49	S_G	5090863
N-Nitrosodiphenylamine ND 5 1 06/29/09 13:49 S_G 509086 Pentachlorophenol ND 25 1 06/29/09 13:49 S_G 509086 Phenanthrene ND 5 1 06/29/09 13:49 S_G 509086 Phenol ND 5 1 06/29/09 13:49 S_G 509086 Pyrene ND 5 1 06/29/09 13:49 S_G 509086 Pyridine ND 5 1 06/29/09 13:49 S_G 509086 2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 3 & 4-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114	Nitrobenzene	ND		5 1	06/29/09 13:49	S_G	5090863
Pentachlorophenol ND 25 1 06/29/09 13:49 S_G 509086 Phenanthrene ND 5 1 06/29/09 13:49 S_G 509086 Phenol ND 5 1 06/29/09 13:49 S_G 509086 Pyrene ND 5 1 06/29/09 13:49 S_G 509086 Pyridine ND 5 1 06/29/09 13:49 S_G 509086 2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	N-Nitrosodi-n-propylamine	ND		5 1	06/29/09 13:49	S_G	5090863
Phenanthrene ND 5 1 06/29/09 13:49 S_G 509086 Phenol ND 5 1 06/29/09 13:49 S_G 509086 Pyrene ND 5 1 06/29/09 13:49 S_G 509086 Pyridine ND 5 1 06/29/09 13:49 S_G 509086 2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 3 & 4-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2	N-Nitrosodiphenylamine	ND		5 1	06/29/09 13:49	S_G	5090863
Phenol ND 5 1 06/29/09 13:49 S_G 509086 Pyrene ND 5 1 06/29/09 13:49 S_G 509086 Pyridine ND 5 1 06/29/09 13:49 S_G 509086 2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 3 & 4-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	Pentachlorophenol	ND	2	25 1	06/29/09 13:49	S_G	5090863
Pyrene ND 5 1 06/29/09 13:49 S_G 509086 Pyridine ND 5 1 06/29/09 13:49 S_G 509086 2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 3 & 4-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	Phenanthrene	ND		5 1	06/29/09 13:49	s G	5090863
Pyridine ND 5 1 06/29/09 13:49 S_G 509086 2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 3 & 4-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	Phenol	ND		5 1	06/29/09 13:49	S_G	5090863
2-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 3 & 4-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	Pyrene	ND		5 1	06/29/09 13:49	S_G	5090863
3 & 4-Methylphenol ND 5 1 06/29/09 13:49 S_G 509086 Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	Pyridine	ND		5 1	06/29/09 13:49	S G	5090863
Surr: 2,4,6-Tribromophenol 73.5 % 10-123 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	2-Methylphenol	ND		5 1	06/29/09 13:49	 S_G	5090863
Surr: 2-Fluorobiphenyl 77.4 % 23-116 1 06/29/09 13:49 S_G 509086 Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	3 & 4-Methylphenol	ND		5 1	06/29/09 13:49	S_G	5090863
Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	Surr: 2,4,6-Tribromophenol	73.5	% 10-12	23 1	06/29/09 13:49	S_G	5090863
Surr: 2-Fluorophenol 46.4 % 16-110 1 06/29/09 13:49 S_G 509086 Surr: Nitrobenzene-d5 68.8 % 21-114 1 06/29/09 13:49 S_G 509086 Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	Surr: 2-Fluorobiphenyl	77.4	% 23-11	6 1	06/29/09 13:49	 S_G	5090863
Surr: Phenol-d5 35.2 % 10-110 1 06/29/09 13:49 S_G 509086	Surr: 2-Fluorophenol	46.4		0 1			5090863
	Surr: Nitrobenzene-d5	68.8	% 21-11	4 1	06/29/09 13:49	S_G	5090863
	Surr: Phenol-d5	35.2	% 10-11	0 1	06/29/09 13:49	S_G	5090863
	Surr: Terphenyl-d14	67.8	% 22-14	1 1	06/29/09 13:49	S_G	5090863

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Client Sample ID:WMW-5 Collected: 06/22/2009 11:30 SPL Sample ID: 09061178-02

Site: Gallup, NM

			Jit	c. Can	up, mi					
Analyses/Method	Result	QUAL	R	ep.Limit	D	il. Facto	r Date Anal	yzed	Analyst	Seq.#
TOTAL DISSOLVED SOLIDS					MCL		E160.1	Ur	nits: mg/L	
Total Dissolved Solids (Residue,Filterable)	3260			20		2	06/23/09	16:00	CFS	5081777
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	S	W8260B	Ur	nits: ug/L	
Benzene	ND			5		1	06/29/09	20:57	JC	5092162
Ethylbenzene	ND			5		1	06/29/09	20:57	JC	5092162
Toluene	ND			5		1	06/29/09	20:57	JC	5092162
m,p-Xylene	ND			5		1	06/29/09	20:57	JC	5092162
o-Xylene	ND			5		1	06/29/09	20:57	JC	5092162
Xylenes,Total	ND			5		1	06/29/09	20:57	JC	5092162
Surr: 1,2-Dichloroethane-d4	90.6		%	78-116		1	06/29/09	20:57	JC	5092162
Surr: 4-Bromofluorobenzene	96.5		%	74-125		1	06/29/09	20:57	JC	5092162
Surr: Toluene-d8	94.3		%	82-118		1	06/29/09	20:57	JC	5092162
	-									

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



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

Client Sample ID:WMW-4 Collected: 06/22/2009 13:05 SPL Sample ID: 09061178-03

Client Sample ID:WW			Collected: 00	3/22/200	9 13.03	SPL San	ipie iD:	09001170-03
			Site: Gall	up, NM				
Analyses/Method	Result	QUAL	Rep.Limit		Dil. Facto	r Date Anal	yzed Ana	lyst Seq. #
ALKALINITY (AS CAC	O3), TOTAL			MCL		E310.1	Units: n	ng/L
Alkalinity, Total (As CaCo			2		1	06/24/09	17:00 PAC	508334
ION CHROMATOGRA	PHY			MCL		E300.0	Units: n	ng/L
Chloride	143		50		100	06/26/09	23:54 BDG	508724
Sulfate	228		50		100	06/26/09	23:54 BDG	508724
MERCURY, TOTAL				MCL	S	W7470A	Units: n	na/L
Mercury	ND		0.0002		1		16:00 F_S	509336
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW7470A	06/30/2009 10:30	F S	1.00					
		r_3	1.00					
METALS BY METHOD				MCL		W6010B	Units: n	
Calcium	16.5		0.1		1	07/02/09		509722
Iron	4.13		0.02		1	07/02/09		509722
Magnesium	12.2		0.1		1	07/02/09		509722
Sodium	566		1		10	07/02/09	14:29 EG	509723
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW3010A	06/26/2009 12:00	AB1	1.00					
METALS BY METHOD	0 6020A. TOTAL			MCL	S	W6020A	Units: n	ng/L
Arsenic	ND		0.025		5	07/02/09	13:58 S_C	509746
Barium	0.0627		0.025		5	07/02/09	13:58 S_C	509746
Cadmium	ND		0.025		5	07/02/09	13:58 S_C	509746
Chromium	ND		0.025		5	07/02/09	13:58 S_C	509746
Lead	ND		0.025		5	07/02/09	13:58 S_C	509746
Manganese	0.325		0.025		5	07/02/09	13:58 S_C	509746
Selenium	ND		0.025		5	07/02/09	13:58 S_C	509746
Silver	ND		0.025		5	07/02/09	13:58 S_C	509746
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW3010A	06/26/2009 12:00	AB1	1.00					
NITRATE NITROGEN	(AS N) TOTAL			MCL	SM450	0-NO3 F	Units: n	na/L
Nitrogen, Nitrate (As N)	ND ND		0.5		1		18:30 ESK	508231
PH				MCL	SMA	1500-H B	Units: n	H Units
pH	7.73		0.1	111.02	1		14:00 S H	508145
<u></u>								

0.1

Qualifiers:

Temperature (oC)

ND/U - Not Detected at the Reporting Limit

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

24.8

* - 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)

06/23/09 14:00 S_H

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

5081452



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

Client Sample ID:WMW-4

Collected: 06/22/2009 13:05

SPL Sample ID:

09061178-03

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS E	Y METHOD 82	70C		MCL SV	V8270C Ur	nits: ug/L	
1,2,4-Trichlorobenzene	ND		5	1	06/29/09 14:32	S_G	5090864
1,2-Dichlorobenzene	ND		5	1	06/29/09 14:32	S_G	5090864
1,2-Diphenylhydrazine	ND		10	1	06/29/09 14:32	S_G	5090864
1,3-Dichlorobenzene	ND		5	1	06/29/09 14:32	S_G	5090864
1,4-Dichlorobenzene	ND	•	5	1	06/29/09 14:32	S_G	5090864
2,4,5-Trichlorophenol	ND		10	1	06/29/09 14:32	S_G	5090864
2,4,6-Trichlorophenol	ND		5	1	06/29/09 14:32	S_G	5090864
2,4-Dichlorophenol	ND		5	1	06/29/09 14:32	S_G	5090864
2,4-Dimethylphenol	ND		5	1	06/29/09 14:32	S_G	5090864
2,4-Dinitrophenol	ND		25	1	06/29/09 14:32	S_G	5090864
2,4-Dinitrotoluene	ND		5	1	06/29/09 14:32	S_G	5090864
2,6-Dinitrotoluene	ND		5	1	06/29/09 14:32	S_G	5090864
2-Chloronaphthalene	ND		5	1	06/29/09 14:32	S_G	5090864
2-Chlorophenol	ND		5	1	06/29/09 14:32	S_G	5090864
2-Methylnaphthalene	ND		5	1	06/29/09 14:32	S_G	5090864
2-Nitroaniline	ND		25	1	06/29/09 14:32	S_G	5090864
2-Nitrophenol	ND	•	5	1	06/29/09 14:32	S_G	5090864
3,3'-Dichlorobenzidine	ND		10	1	06/29/09 14:32	S_G	5090864
3-Nitroaniline	ND		25	1	06/29/09 14:32	S_G	5090864
4,6-Dinitro-2-methylphenol	ND		25	1	06/29/09 14:32	S_G	5090864
4-Bromophenyl phenyl ether	ND		5	1	06/29/09 14:32	S_G	5090864
4-Chloro-3-methylphenol	ND		5	1	06/29/09 14:32	S_G	5090864
4-Chloroaniline	ND		5	1	06/29/09 14:32	S_G	509086
4-Chlorophenyl phenyl ether	ND		5	1	06/29/09 14:32	S_G	5090864
4-Nitroaniline	ND		25	1	06/29/09 14:32	S_G	509086
4-Nitrophenol	ND		25	1	06/29/09 14:32	S_G	5090864
Acenaphthene	ND		5	1	06/29/09 14:32	S_G	5090864
Acenaphthylene	ND		5	1	06/29/09 14:32	S_G	5090864
Aniline	ND		5	1	06/29/09 14:32	S_G	5090864
Anthracene	ND		5	1	06/29/09 14:32	S_G	5090864
Benz(a)anthracene	ND		5	1	06/29/09 14:32	S_G	5090864
Benzo(a)pyrene	ND		5	1	06/29/09 14:32	S_G	5090864
Benzo(b)fluoranthene	ND		5	1	06/29/09 14:32	S_G	5090864
Benzo(g,h,i)perylene	ND		5	1	06/29/09 14:32	S_G	5090864
Benzo(k)fluoranthene	ND		5	1	06/29/09 14:32	S_G	5090864
Benzoic acid	ND		25	1	06/29/09 14:32	S_G	5090864
Benzyl alcohol	ND		5	1	06/29/09 14:32	S_G	5090864
Bis(2-chloroethoxy)methane	ND		5	1	06/29/09 14:32	S_G	5090864
Bis(2-chloroethyl)ether	ND		5	1	06/29/09 14:32	SG	5090864

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



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

Client Sample ID:WMW-4

Collected: 06/22/2009 13:05

SPL Sample ID:

09061178-03

			Site:	Gallup	, NM			
Analyses/Method	Result	QUAL	Rep.l	_imit	Dil. Factor	Date Analyzed	Analyst	Seq.#
Bis(2-chloroisopropyl)ether	ND			5	1	06/29/09 14:32	S_G	509086
Bis(2-ethylhexyl)phthalate	ND			5	1	06/29/09 14:32	S_G	5090864
Butyl benzyl phthalate	ND			5	1	06/29/09 14:32	S_G	5090864
Carbazole	ND			5	1	06/29/09 14:32	S_G	5090864
Chrysene	ND			5	1	06/29/09 14:32	S_G	5090864
Dibenz(a,h)anthracene	ND			5	1	06/29/09 14:32	S_G	509086
Dibenzofuran	ND			5	1	06/29/09 14:32	S_G	509086
Diethyl phthalate	ND			5	1	06/29/09 14:32	S_G	5090864
Dimethyl phthalate	ND			5	1	06/29/09 14:32	S_G	5090864
Di-n-butyl phthalate	ND			5	1	06/29/09 14:32	S_G	5090864
Di-n-octyl phthalate	ND			5	1	06/29/09 14:32	S_G	5090864
Fluoranthene	ND			5	1	06/29/09 14:32	S_G	5090864
Fluorene	ND			5	1	06/29/09 14:32	S_G	5090864
Hexachlorobenzene	ND			5	1	06/29/09 14:32	S_G	5090864
Hexachlorobutadiene	ND			5	1	06/29/09 14:32	S_G	5090864
Hexachlorocyclopentadiene	ND			5	1	06/29/09 14:32	S_G	509086
Hexachloroethane	ND			5	1	06/29/09 14:32	S_G	509086
Indeno(1,2,3-cd)pyrene	ND			5	1	06/29/09 14:32	S_G	509086
Isophorone	ND			5	1	06/29/09 14:32	S_G	509086
Naphthalene	ND			5	1	06/29/09 14:32	S_G	509086
Nitrobenzene	ND			5	1	06/29/09 14:32	S_G	509086
N-Nitrosodi-n-propylamine	ND			5	1	06/29/09 14:32	S_G	509086
N-Nitrosodiphenylamine	ND			5	1	06/29/09 14:32	S_G	509086
Pentachlorophenol	ND			25	1	06/29/09 14:32	S_G	509086
Phenanthrene	ND			5	1	06/29/09 14:32	S_G	509086
Phenol	ND			5	1	06/29/09 14:32	S_G	509086
Pyrene	ND			5	1	06/29/09 14:32	S_G	509086
Pyridine	ND			5	1	06/29/09 14:32	S_G	509086
2-Methylphenol	ND			5	1	06/29/09 14:32	S_G	509086
3 & 4-Methylphenol	ND			5	1	06/29/09 14:32	S_G	509086
Surr: 2,4,6-Tribromophenol	40.5		% 10)-123	1	06/29/09 14:32	S_G	509086
Surr: 2-Fluorobiphenyl	48.6		% 23	3-116	1	06/29/09 14:32	S_G	509086
Surr: 2-Fluorophenol	36.5		% 16	5-110	1	06/29/09 14:32	S_G	509086
Surr: Nitrobenzene-d5	44.8		% 21	-114	1	06/29/09 14:32	-	509086
Surr: Phenol-d5	29.6		% 10)-110	1	06/29/09 14:32	S_G	509086
Surr: Terphenyl-d14	40.2		% 22	2-141	1	06/29/09 14:32	S_G	509086

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Client Sample ID:WMW-4

Collected: 06/22/2009 13:05

SPL Sample ID:

09061178-03

Site:	Gallup,	NM
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Site. Gailup, Nin										
Result	QUAL	R	p.Limit	ı	Dil. Facto	r Date Anal	yzed	Analyst	Seq.#	
				MCL		E160.1	Ur	its: mg/L		
1470			10		1	06/23/09	16:00	CFS	5081778	
HOD 8260B		_	-	MCL	S	W8260B	Ur	its: ug/L		
ND			5		1	06/29/09	21:24	JC	5092163	
ND			5		1	06/29/09	21:24	JC	5092163	
ND			5		1	06/29/09	21:24	JC	5092163	
ND			5		1	06/29/09	21:24	JC	5092163	
ND			5		1	06/29/09	21:24	JC	5092163	
ND			5		1	06/29/09	21:24	JC	5092163	
92.1		%	78-116		1	06/29/09	21:24	JC	5092163	
95.6		%	74-125		1	06/29/09	21:24	JC	5092163	
90.3		%	82-118		1	06/29/09	21:24	JC	5092163	
	1470 HOD 8260B ND ND ND ND ND ND 92.1 95.6	1470 HOD 8260B ND ND ND ND ND ND ND 92.1 95.6	Result QUAL Re 1470 THOD 8260B ND ND ND ND ND ND ND ND 92.1 % 95.6 %	Result QUAL Rep.Limit 1470 10 HOD 8260B 5 ND 5 92.1 % 78-116 95.6 % 74-125	Result QUAL Rep.Limit MCL	Result QUAL Rep.Limit Dil. Factor MCL MCL MCL S 1470 10 1 1 HOD 8260B MCL S 1 ND 5 1 1 92.1 % 78-116 1 1 95.6 % 74-125 1 1	Result QUAL Rep.Limit Dil. Factor Date Anal MCL E160.1 1470 10 1 06/23/09 HOD 8260B MCL SW8260B ND 5 1 06/29/09 92.1 % 78-116 1 06/29/09 95.6 % 74-125 1 06/29/09	Result QUAL Rep.Limit Dil. Factor Date Analyzed MCL E160.1 Un 1470 10 1 06/23/09 16:00 HOD 8260B MCL SW8260B Un ND 5 1 06/29/09 21:24 92.1 % 78-116 1 06/29/09 21:24 95.6 % 74-125 1 06/29/09 21:24	MCL E160.1 Units: mg/L 1470 10 1 06/23/09 16:00 CFS HOD 8260B MCL SW8260B Units: ug/L ND 5 1 06/29/09 21:24 JC 92.1 % 78-116 1 06/29/09 21:24 JC 95.6 % 74-125 1 06/29/09 21:24 JC	

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



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

Client Sample ID:WMW-7 Collected: 06/22/2009 14:25 SPL Sample ID: 09061178-04

Cilei	t Sample ID: WW	· · · · · · · · · · · · · · · · · ·		Conected	. 00/2	22/2003	14.20	OF L Gall	ipie ib.		1170 04
				Site: G	allup	o, NM					
Analy	ses/Method	Result	QUAL	Rep.Limi	it	0	il. Facto	r Date Anal	yzed Aı	nalyst	Seq.#
ALK	ALINITY (AS CAC	O3), TOTAL				MCL		E310.1	Units:	mg/L	
	alinity, Total (As CaCo				2		1	06/24/09	17:00 PA	C	5083346
ION	CHROMATOGRA	PHY				MCL		E300.0	Units	: mg/L	
Chle	oride	80.4		50	0		100	06/27/09	0:13 BD	G	5087244
Sulf	ate	439		50	0		100	06/27/09	0:13 BD	G	5087244
MER	CURY, TOTAL					MCL	S	W7470A	Units	mg/L	
	cury	ND		0.000	2	•	1	06/30/09	16:03 F_:		5093361
	Prep Method	Prep Date	Prep Initials	Prep Factor	П						
	SW7470A	06/30/2009 10:30	F S	1.00	\dashv						
			1-0	1.00							
	ALS BY METHOD			0.	4	MCL	1	07/02/09	_	mg/L	5097227
	cium	41.1 0.284		0.0			1	07/02/09			5097227
Iron							1				5097227
	gnesium	16.9		0.				07/02/09			
Soc	lium	509			1		10	07/02/09	14:33 EG	· · · · · · · · · · · · · · · · · · ·	5097235
	Prep Method	Prep Date	Prep Initials	Prep Factor							
	SW3010A	06/26/2009 12:00	AB1	1.00							
MET	ALS BY METHOD	6020A, TOTAL				MCL	S	SW6020A	Units	: mg/L	
	enic	ND		0.02	5		5	07/02/09	14:03 S_	С	5097462
Bari	ium	0.0371		0.02	5		5	07/02/09	14:03 S_	С	5097462
Cad	lmium	ND		0.02	5		5	07/02/09	14:03 S_	С	5097462
Chr	omium	ND		0.02	5		5	07/02/09	14:03 S_	С	5097462
Lea	d	ND		0.02	5		5	07/02/09	14:03 S_	С	5097462
Mar	nganese	0.2		0.02	5		5	07/02/09	14:03 S_	С	5097462
Sele	enium	ND		0.02	5		5	07/02/09	14:03 S_	С	5097462
Silve	er	ND		0.02	5		5	07/02/09	14:03 S_	С	5097462
	Prep Method	Prep Date	Prep Initials	Prep Factor							
	SW3010A	06/26/2009 12:00	AB1	1.00	<u></u>						
NUTD	ATE NITROGEN					MCL	CM 45	00-NO3 F	Unita	: mg/L	
	ogen, Nitrate (As N)	ND		0.	5	IVICL	1		18:30 ES		5082316
						MCL	Cta				
PH		7.56		0.	1	NICL		4500-H B	14:00 S	: pH Un	1 ts 5081453
pH		7.50		<u> </u>	<u> </u>		ı	00/23/09	14.00 5_	П	300 1433

0.1

Qualifiers:

Temperature (oC)

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

24.8

* - 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)

06/23/09 14:00 S H

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

5081453



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

Client Sample ID:WMW-7

Collected: 06/22/2009 14:25

SPL Sample ID:

09061178-04

Site:	Gallup,	NM
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Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq.#
SEMIVOLATILE ORGANICS B	Y METHOD 8270C		MCL SV	V8270C Ur	its: ug/L	
1,2,4-Trichlorobenzene	ND	5	1	06/29/09 15:58	S_G	5092143
1,2-Dichlorobenzene	ND	5	1	06/29/09 15:58	S_G	5092143
1,2-Diphenylhydrazine	ND	10	1	06/29/09 15:58	S_G	5092143
1,3-Dichlorobenzene	ND	5	1	06/29/09 15:58	S_G	5092143
1,4-Dichlorobenzene	ND	5	1	06/29/09 15:58	S_G	5092143
2,4,5-Trichlorophenol	ND	10	1	06/29/09 15:58	S_G	5092143
2,4,6-Trichlorophenol	ND	5	1	06/29/09 15:58	S_G	5092143
2,4-Dichlorophenol	ND	5	1	06/29/09 15:58	S_G	5092143
2,4-Dimethylphenol	ND	5	1	06/29/09 15:58	S_G	5092143
2,4-Dinitrophenol	ND	25	1	06/29/09 15:58	S_G	5092143
2,4-Dinitrotoluene	ND	5	1	06/29/09 15:58	S_G	5092143
2,6-Dinitrotoluene	ND	5	1	06/29/09 15:58	S_G	5092143
2-Chloronaphthalene	ND	5	1	06/29/09 15:58	S_G	5092143
2-Chlorophenol	ND	5	1	06/29/09 15:58	S_G	5092143
2-Methylnaphthalene	ND	5	1	06/29/09 15:58	S_G	5092143
2-Nitroaniline	ND	25	1	06/29/09 15:58	S_G	5092143
2-Nitrophenol	ND	5	1	06/29/09 15:58	S_G	5092143
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 15:58	S_G	5092143
3-Nitroaniline	ND	25	1	06/29/09 15:58	S_G	5092143
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 15:58	S_G	5092143
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 15:58	S_G	5092143
4-Chloro-3-methylphenol	ND	5	1	06/29/09 15:58	S_G	5092143
4-Chloroaniline	ND	5	1	06/29/09 15:58	S_G	5092143
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 15:58	S_G	5092143
4-Nitroaniline	ND	25	1	06/29/09 15:58	S_G	5092143
4-Nitrophenol	ND	25	1	06/29/09 15:58	S_G	5092143
Acenaphthene	ND	5	1	06/29/09 15:58	S_G	5092143
Acenaphthylene	ND	5	1	06/29/09 15:58	S_G	5092143
Aniline	ND	5	1	06/29/09 15:58	S_G	5092143
Anthracene	ND	5	1	06/29/09 15:58	S_G	5092143
Benz(a)anthracene	ND	5	1	06/29/09 15:58	S_G	5092143
Benzo(a)pyrene	ND	5	1	06/29/09 15:58	S_G	5092143
Benzo(b)fluoranthene	ND	5	1	06/29/09 15:58	S_G	5092143
Benzo(g,h,i)perylene	ND	5	1	06/29/09 15:58	S_G	5092143
Benzo(k)fluoranthene	ND	5	1	06/29/09 15:58	S_G	5092143
Benzoic acid	ND	25	1	06/29/09 15:58	S_G	5092143
Benzyl alcohol	ND	5	1	06/29/09 15:58	S_G	5092143
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 15:58	S_G	5092143
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 15:58	S_G	5092143

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 Wibl 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

09061178 Page 16 7/10/2009 5:19:43 PM



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

Client Sample ID:WMW-7

Collected: 06/22/2009 14:25

SPL Sample ID:

09061178-04

Analyses/Method	Result	QUAL	Rep.Li	mit	Dil. Factor	Date Analyzed	Analyst	Seq.#
Bis(2-chloroisopropyl)ether	ND			5	1	06/29/09 15:58	S_G	5092143
Bis(2-ethylhexyl)phthalate	ND			5	1	06/29/09 15:58	S_G	5092143
Butyl benzyl phthalate	ND			5	1	06/29/09 15:58	S_G	5092143
Carbazole	ND			5	1	06/29/09 15:58	S_G	5092143
Chrysene	ND			5	1	06/29/09 15:58	S_G	5092143
Dibenz(a,h)anthracene	ND			5	1	06/29/09 15:58	S_G	5092143
Dibenzofuran	ND			5	1	06/29/09 15:58	S_G	5092143
Diethyl phthalate	ND			5	1	06/29/09 15:58	S_G	5092143
Dimethyl phthalate	ND			5	1	06/29/09 15:58	S_G	5092143
Di-n-butyl phthalate	ND			5	1	06/29/09 15:58	S_G	5092143
Di-n-octyl phthalate	ND			5	1	06/29/09 15:58	S_G	5092143
Fluoranthene	ND			5	1	06/29/09 15:58	S_G	5092143
Fluorene	ND			5	1	06/29/09 15:58	S_G	5092143
Hexachlorobenzene	ND			5	1	06/29/09 15:58	S_G	5092143
Hexachlorobutadiene	ND			5	1	06/29/09 15:58	S_G	5092143
Hexachlorocyclopentadiene	ND		· -	5	1	06/29/09 15:58	S_G	5092143
Hexachloroethane	ND			5	1	06/29/09 15:58	S_G	5092143
Indeno(1,2,3-cd)pyrene	ND			5	1	06/29/09 15:58	S_G	5092143
Isophorone	ND			5	1	06/29/09 15:58	S_G	509214
Naphthalene	ND			5	1	06/29/09 15:58	S_G	5092143
Nitrobenzene	ND			5	1	06/29/09 15:58	S_G	5092143
N-Nitrosodi-n-propylamine	ND			5	1	06/29/09 15:58	S_G	5092143
N-Nitrosodiphenylamine	ND		-	5	1	06/29/09 15:58	S_G	5092143
Pentachlorophenol	ND			25	1	06/29/09 15:58	S_G	5092143
Phenanthrene	ND			5	1	06/29/09 15:58	S_G	5092143
Phenol	ND			5	1	06/29/09 15:58	S_G	5092143
Pyrene	ND			5	1	06/29/09 15:58	S_G	5092143
Pyridine	ND			5	1	06/29/09 15:58	S_G	5092143
2-Methylphenol	ND			5	1	06/29/09 15:58	S_G	5092143
3 & 4-Methylphenol	ND			5	1	06/29/09 15:58	S_G	5092143
Surr: 2,4,6-Tribromophenol	59.3		% 10-	123	1	06/29/09 15:58	S_G	5092143
Surr: 2-Fluorobiphenyl	63.4		% 23-	116	1	06/29/09 15:58	S_G	5092143
Surr: 2-Fluorophenol	39.2		% 16-	110	1	06/29/09 15:58	S_G	5092143
Surr: Nitrobenzene-d5	55.6		% 21-	114	1	06/29/09 15:58	S_G	509214
Surr: Phenol-d5	27.5		% 10-	110	1	06/29/09 15:58	S_G	509214
Surr: Terphenyl-d14	60.4		% 22-	141	1	06/29/09 15:58	S_G	5092143

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Client Sample ID:WMW-7 Collected: 06/22/2009 14:25 SPL Sample ID: 09061178-04

Site:	Gallup.	NIM
Site:	Gailub.	NIVI

		Sit	e: Gaiii	up, NIVI					
Result	QUAL	R	ep.Limit	D	il. Facto	r Date Anal	yzed	Analyst	Seq. #
				MCL		E160.1	Ur	nits: mg/L	
1410			10		1	06/23/09	16:00	CFS	5081779
HOD 8260B		-		MCL	S	W8260B	Ur	nits: ug/L	
ND			5		1	06/29/09	21:51	JC	5092164
ND			5		1	06/29/09	21:51	JC	5092164
ND			5		1	06/29/09	21:51	JC	5092164
ND			5		1	06/29/09	21:51	JC	5092164
ND			5		1	06/29/09	21:51	JC	5092164
ND			5		1	06/29/09	21:51	JC	5092164
88.6		%	78-116		1	06/29/09	21:51	JC	5092164
99.5		%	74-125		1	06/29/09	21:51	JC	5092164
91.6	· · · ·	%	82-118		1	06/29/09 2	21:51	JC	5092164
	1410 HOD 8260B ND ND ND ND ND ND ND ND ND 99.5	1410 HOD 8260B ND ND ND ND ND ND ND ND ND 90.5	Result QUAL Result QUAL Result QUAL Result QUAL Result QUAL Result QUAL Result QUAL Result QUAL Result QUAL QUAL	Result QUAL Rep.Limit 1410 10 HOD 8260B ND 5 88.6 % 78-116 99.5 % 74-125	Result QUAL Rep.Limit D	Result QUAL Rep.Limit Dil. Factor MCL 1410 10 1 HOD 8260B MCL S ND 5 1 88.6 % 78-116 1 99.5 % 74-125 1	Result QUAL Rep.Limit Dil. Factor Date Analy MCL E160.1 1410 10 1 06/23/09 HOD 8260B MCL SW8260B ND 5 1 06/29/09 88.6 % 78-116 1 06/29/09 99.5 % 74-125 1 06/29/09	Result QUAL Rep.Limit Dil. Factor Date Analyzed MCL E160.1 Ur 1410 10 1 06/23/09 16:00 HOD 8260B MCL SW8260B Ur ND 5 1 06/29/09 21:51 88.6 % 78-116 1 06/29/09 21:51 99.5 % 74-125 1 06/29/09 21:51	Result QUAL Rep.Limit Dil. Factor Date Analyzed Analyst MCL E160.1 Units: mg/L HOD 8260B MCL SW8260B Units: ug/L ND 5 1 06/29/09 21:51 JC 88.6 % 78-116 1 06/29/09 21:51 JC 99.5 % 74-125 1 06/29/09 21:51 JC

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B}}\xspace\ensuremath{\mathsf{N}}\xspace$ - 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

Quality Control Documentation



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

Conoco Phillips COP Wingate

Analysis:

Metals by Method 6010B, Total

Method: SW6010B

WorkOrder:

09061178

Lab Batch ID:

91486b

Method Blank

RunID: ICP2_090702A-5097214 Units:

Prep By:

mg/L

Lab Sample ID 09061178-01E

Samples in Analytical Batch:

Client Sample ID

Analysis Date: Preparation Date:

07/02/2009 12:31

06/26/2009 12:00

Analyst: EG

09061178-02E

WMW-1

WMW-5

09061178-03E

WMW-4

09061178-04E

WMW-7

Analyte	Result	Rep Limit
Calcium	ND ND	0.1
Iron	ND	0.02
Magnesium	ND	0.1
Sodium	ND	0.1

Laboratory Control Sample (LCS)

RunID:

ICP2 090702A-5097215 07/02/2009 12:35

AB1 Method: SW3010A

Units: mg/L

Analyst: EG

Analysis Date: Preparation Date:

06/26/2009 12:00

Prep By:

AB1 Method: SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Calcium	1.000	1.080	108.0	80	120
Iron	1.000	1.081	108.1	80	120
Magnesium	1.000	1.065	106.5	80	120
Sodium	1.000	1.002	100.2	80	120

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

Sample Spiked:

09061319-01

RunID:

ICP2_090702A-5097217

Units:

mg/L

Analysis Date:

07/02/2009 12:44

Analyst:

EĢ

Preparation Date: 06/26/2009 12:00 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
Calcium	92.92	1	92.67	N/C	1	93.95	N/C	N/C	20	75	125
Iron	3.054	1	4.115	106.1	1	4.101	104.7	0.3408	20	75	125
Magnesium	22.58	_ 1	23.46	N/C	1	23.67	N/C	N/C	20	75	125
Sodium	280.1	1	279.2	N/C	1	282.6	N/C	N/C	20	75	125

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

09061178 Page 20

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.



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

Conoco Phillips COP Wingate

Analysis:

Method:

RunID:

Metals by Method 6020A, Total

SW6020A

WorkOrder: Lab Batch ID: 09061178

Method Blank

mg/L

Samples in Analytical Batch:

91486B-I

ICPMS_090702A-5097444

Analyst:

s_c

Lab Sample ID 09061178-01E

Client Sample ID

Analysis Date: Preparation Date:

07/02/2009 12:34 06/26/2009 12:00

Prep By:

Units:

AB1 Method: SW3010A

09061178-02E

WMW-1

09061178-03E

WMW-5

09061178-04E

WMW-4 WMW-7

Analyte	Result	Rep Limit
Arsenic	ND	0.005
Barium	ND	0.005
Cadmium	ND	0.005
Chromium	ND	0.005
Lead	ND	0.005
Manganese	ND	0.005
Selenium	ND	0.005
Silver	ND	0.005

Laboratory Control Sample (LCS)

RunID: Analysis Date: ICPMS 090702A-5097466 07/02/2009 14:26

Units: mg/L Analyst: s c

Preparation Date:

06/26/2009 12:00

AB1 Method: SW3010A Prep By:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	0.1000	0.1065	106.5	80	120
Barium	0.1000	0.09103	91.03	80	120
Cadmium	0.1000	0.1129	112.9	80	120
Chromium	0.1000	0.09849	98.49	80	120
Lead	0.1000	0.09087	90.87	80	120
Manganese	0.1000	0.09855	98.55	80	120
Selenium	0.1000	0.1151	115.1	80	120
Silver	0.1000	0.1054	105.4	80	120

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

Sample Spiked:

Analysis Date:

09061319-01

07/02/2009 13:03

RunID:

ICPMS_090702A-5097449

Units:

mg/L s c Analyst:

Analyte	Sample	PDS	PDS	PDS %	PDSD	PDSD	PDSD %	RPD	RPD	Low	High
	Result	Spike	Result	Recovery	Spike	Result	Recovery		Limit	Limit	Limit
		Added			Added						

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

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

09061178 Page 21



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

Conoco Phillips COP Wingate

Metals by Method 6020A, Total Analysis:

WorkOrder:

09061178

SW6020A

91486B-I

Method: SW6020A							Lab Batch	ID: 914	86B-I		
Arsenic	ND	5	5.938	118.8	5	5.979	119.6	0.6881	20	75	125
Barium	ND	5	5.063	101.3	5	5.059	101.2	0.07904	20	75	125
Selenium	ND	5	6.633	132.7 *	5	6.764	135.3 *	1.956	20	75	125

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

Sample Spiked:

09061319-01

RunID:

ICPMS_090702A-5097446 Units:

mg/L

Analysis Date:

07/02/2009 12:49

Analyst:

s c

Preparation Date:

06/26/2009 12:00

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
Arsenic	ND	0.1	0.1497	149.7 *	0.1	0.1486	148.6 *	0.7375	20	75	125
Barium	ND	0.1	0.2628	262.8 *	0.1	0.2588	258.8 *	1.534	20	75	125
Cadmium	ND	0.1	D	D	0.1	D	D	D	20	75	125
Chromium	ND	0.1	D	D	0.1	D	D	D	20	75	125
Lead	ND	0.1	0.1223	122.3	0.1	0.1196	119.6	2.232	20	75	125
Manganese	0.8558	0.1	0.8875	N/C	0.1	0.8575	N/C	N/C	20	75	125
Selenium	ND	0.1	0.1273	127.3 *	0.1	0.1199	119.9	5.987	20	75	125
Silver	ND	0.1	0.1074	107.4	0.1	0.1040	104.0	3.217	20	75	125

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

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

09061178 Page 22

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.



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

Conoco Phillips COP Wingate

Analysis: Method:

RunID:

Mercury, Total

WorkOrder:

09061178

SW7470A

Lab Batch ID:

91605

Method Blank

HGLC 090630A-5092798

Units: mg/L

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date:

06/30/2009 14:13

Analyst:

F S

09061178-01E

WMW-1

Preparation Date:

06/30/2009 10:30

F S Method: SW7470A

09061178-02E

Prep By:

WMW-5

09061178-03E

WMW-4

09061178-04E

WMW-7

	Analyte	Result	Rep Limit		
ĺ	Mercury	ND	0.0002		

Laboratory Control Sample (LCS)

RunID:

HGLC_090630A-5092799

Units:

mg/L

Analysis Date: Preparation Date: 06/30/2009 14:15 06/30/2009 10:30 Analyst: F_S

Prep By: F_S Method: SW7470A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit	
Mercury	0.002000	0.001963	98.13	80	120	

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

Sample Spiked:

09061076-02

RunID:

HGLC_090630A-5092801

Units:

Prep By:

mg/L

Analysis Date: Preparation Date:

06/30/2009 14:21 06/30/2009 10:30

F_S Analyst:

F_S Method: SW7470A

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	0.002	0.001919	95.93	0.002	0.001843	92.17	3.996	20	75	125

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

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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7/10/2009 5:19:46 PM



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

Conoco Phillips COP Wingate

Analysis:

Analysis Date:

Semivolatile Organics by Method 8270C

SW8270C Method:

WorkOrder:

09061178

Lab Batch ID:

WMW-7

91487

Method Blank

RunID: J_090629B-5090857

06/29/2009 11:44

Units: ug/L

Analyst: SG

Preparation Date: 06/26/2009 12:28 Prep By: N_M Method: SW3510C Samples in Analytical Batch:

09061178-04B

Lab Sample ID Client Sample ID 09061178-01B WMW-1 09061178-02B WMW-5 WMW-4 09061178-03B

Analyte	Result	Rep Limit
1,2,4-Trichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Diphenylhydrazine	ND	10
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,4,5-Trichlorophenol	ND	10
2,4,6-Trichlorophenol	ND	5.0
2,4-Dichlorophenol	ND	5.0
2,4-Dimethylphenol	ND	5.0
2,4-Dinitrophenol	. ND	25
2,4-Dinitrotoluene	ND	5.0
2,6-Dinitrotoluene	ND	5.0
2-Chloronaphthalene	ND	5.0
2-Chlorophenol	ND	5.0
2-Methylnaphthalene	ND	5.0
2-Nitroaniline	ND	25
2-Nitrophenol	ND	5.0
3,3'-Dichlorobenzidine	ND	10
3-Nitroaniline	ND	25
4,6-Dinitro-2-methylphenol	ND	25
4-Bromophenyl phenyl ether	ND	5.0
4-Chloro-3-methylphenol	ND	5.0
4-Chloroaniline	ND	5.0
4-Chlorophenyl phenyl ether	ND	5.0
4-Nitroaniline	ND	25
4-Nitrophenol	ND	25
Acenaphthene	ND	5.0
Acenaphthylene	ND	5.0
Aniline	ND	5.0
Anthracene	ND	5.0
Benz(a)anthracene	ND.	5.0
Benzo(a)pyrene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzoic acid	ND	25
Benzyl alcohol	ND	5.0
Bis(2-chloroethoxy)methane	ND	5.0
Bis(2-chloroethyl)ether	ND	5.0
Bis(2-chloroisopropyl)ether	ND	5.0
Bis(2-ethylhexyl)phthalate	ND	5.0
Butyl benzyl phthalate	ND	5.0
Carbazole	ND	5.0
Chrysene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Dibenzofuran	ND	5.0

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

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

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

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.

09061178 Page 24 7/10/2009 5:19:46 PM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips COP Wingate

Analysis: Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061178

Lab Batch ID:

91487

Method Blank

J_090629B-5090857 RunID:

Units: ug/L

06/29/2009 11:44

Analysis Date: Preparation Date:

06/26/2009 12:28

SG Analyst:

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	NDND	5.0
Pyridine	ND	5.0
2-Methylphenol	ND	5.0
3 & 4-Methylphenol	ND	5.0
Surr: 2,4,6-Tribromophenol	75.3	10-123
Surr: 2-Fluorobiphenyl	78.0	23-116
Surr: 2-Fluorophenol	67.9	16-110
Surr: Nitrobenzene-d5	69.2	21-114
Surr: Phenoi-d5	69.2	10-110
Surr: Terphenyl-d14	75.0	22-141

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units:

ug/L

Analysis Date:

06/29/2009 10:15

Analyst: S_G

Preparation Date:

06/26/2009 12:28

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	21.3	85.2	25.0	20.6	82.4	3.3	39	21	120
1,2-Dichlorobenzene	25.0	20.2	80.8	25.0	20.4	81.6	1.0	50	20	150

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

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

09061178 Page 25



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

Conoco Phillips COP Wingate

Analysis: Semivolatile Organics by Method 8270C

Method:

WorkOrder:

09061178

91487

Lab Batch ID: SW8270C Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units: ug/L

Analysis Date:

06/29/2009 10:15

Analyst: S_G

Preparation Date: 06/26/2009 12:28 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	20.9	83.6	25.0	20.7	82.8	1.0	50		251
	1,3-Dichlorobenzene	25.0	19.7	78.8	25.0	19.5	78.0	1.0	50	20	150
κ	1,4-Dichlorobenzene	25.0	20.0	80.0	25.0	19.7	78.8	1.5	45	20	150
	2,4,5-Trichlorophenol	25.0	21.5	86.0	25.0	22.2	88.8	3.2	50	30	150
	2,4,6-Trichlorophenol	25.0	21.1	84.4	25.0	21.1	84.4	0.0	50		150
	2,4-Dichlorophenol	25.0	21.8	87.2	25.0	21.4	85.6	1.9	50	30	150
_	2,4-Dimethylphenol	25.0	21.0	84.0	25.0	20.9	83.6	0.5	50		140
	2,4-Dinitrophenol	25.0	23.3	93.2	25.0	22.5	90.0	3.5	50	10	160
ı	2,4-Dinitrotoluene	25.0	23.7	94.8	25.0	24.0	96.0	1.3	50	30	150
-	2,6-Dinitrotoluene	25.0	22.2	88.8	25.0	22.7	90.8	2.2	50	30	150
_	2-Chloronaphthalene	25.0	20.7	82.8	25.0	21.2	84.8	2.4	50	30	150
	2-Chlorophenol	25.0	20.5	82.0	25.0	20.6	82.4	0.5	40	23	134
i -	2-Methylnaphthalene	25.0	20.8	83.2	25.0	20.4	81.6	1.9	50	20	170
	2-Nitroaniline	25.0	20.2	80.8	25.0	20.9	83.6	3.4	50	20	160
	2-Nitrophenol	25.0	20.5	82.0	25.0	20.9	83.6	1.9	50	29	182
ì	3,3'-Dichlorobenzidine	25.0	19.2	76.8	25.0	19.4	77.6	1.0	50	30	200
_	3-Nitroaniline	25.0	20.0	80.0	25.0	20.6	82.4	3.0	50	20	160
	4,6-Dinitro-2-methylphenol	25.0	20.6	82.4	25.0	20.4	81.6	1.0	50	10	160
	4-Bromophenyl phenyl ether	25.0	21.5	86.0	25.0	21.3	85.2	0.9	50	30	150
	4-Chloro-3-methylphenol	25.0	20.6	82.4	25.0	20.6	82.4	0.0	42	25	160
١,	4-Chloroaniline	25.0	21.4	85.6	25.0	21.1	84.4	1.4	50	20	160
	4-Chlorophenyl phenyl ether	25.0	21.8	87.2	25.0	21.2	84.8	2.8	50	25	158
١	4-Nitroaniline	25.0	22.1	88.4	25.0	23.2	92.8	4.9	50	20	160
- 1	4-Nitrophenol	25.0	19.6	78.4	25.0	20.6	82.4	5.0	50	10	132
	Acenaphthene	25.0	21.0	84.0	25.0	21.7	86.8	3.3	31	30	150
28 J	Acenaphthylene	25.0	21.9	87.6	25.0	22.3	89.2	1.8	50	33	250
-	Aniline	50.0	37.8	75.6	50.0	38.4	76.8	1.6	50	10	135
3 1	Anthracene	25.0	21.7	86.8	25.0	22.2	88.8	2.3	50	27	133
-	Benz(a)anthracene	25.0	22.6	90.4	25.0	22.5	90.0	0.4	50	33	143
ŀ	Benzo(a)pyrene	25.0	20.8	83.2	25.0	21.0	84.0	1.0	50		163
- }	Benzo(b)fluoranthene	25.0	22.1	88.4	25.0	22.1	88.4	0.0	50		159
	Benzo(g,h,i)perylene	25.0	22.5	90.0	25.0	22.5	90.0	0.0	50	30	160
.1	Benzo(k)fluoranthene	25.0	23.0	92.0	25.0	23.1	92.4	0.4	50	11	162

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

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 than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

09061178 Page 26



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

Conoco Phillips COP Wingate

Analysis: Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061178

Lab Batch ID:

91487

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units:

06/29/2009 10:15

ug/L

Analysis Date: Preparation Date:

06/26/2009 12:28

S_G Analyst:

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	4.22	16.9	25.0	4.70	18.8	10.8	50	10	400
Benzyl alcohol	25.0	19.9	79.6	25.0	20.4	81.6	2.5	50	30	160
Bis(2-chloroethoxy)methane	25.0	20.4	81.6	25.0	20.0	80.0	2.0	50	33	184
Bis(2-chloroethyl)ether	25.0	20.3	81.2	25.0	20.2	80.8	0.5	50	12	158
Bis(2-chloroisopropyl)ether	25.0	19.7	78.8	25.0	19.2	76.8	2.6	50	20	160
Bis(2-ethylhexyl)phthalate	25.0	22.8	91.2	25.0	20.7	82.8	9.7	50	10	158
Butyl benzyl phthalate	25.0	23.5	94.0	25.0	22.2	88.8	5.7	50	30	160
Carbazole	25.0	21.5	86.0	25.0	22.3	89.2	3.7	50	30	150
Chrysene	25.0	22.0	88.0	25.0	21.8	87.2	0.9	50	17	168
Dibenz(a,h)anthracene	25.0	22.5	90.0	25.0	22.9	91.6	1.8	50	30	160
Dibenzofuran	25.0	21.6	86.4	25.0	22.1	88.4	2.3	50	30	150
Diethyl phthalate	25.0	22.3	89.2	25.0	21.7	86.8	2.7	50	30	160
Dimethyl phthalate	25.0	22.0	88.0	25.0	21.8	87.2	0.9	50	30	160
Di-n-butyl phthalate	25.0	23.4	93.6	25.0	21.9	87.6	6.6	50	30	160
Di-n-octyl phthalate	25.0	22.9	91.6	25.0	21.1	84.4	8.2	50	20	150
Fluoranthene	25.0	22.9	91.6	25.0	23.2	92.8	1.3	50	26	137
Fluorene	25.0	21.7	86.8	25.0	21.8	87.2	0.5	50	30	150
Hexachlorobenzene	25.0	20.8	83.2	25.0	20.8	83.2	0.0	50	20	150
Hexachlorobutadiene	25.0	20.4	81.6	25.0	19.9	79.6	2.5	50	20	140
Hexachlorocyclopentadiene	25.0	19.9	79.6	25.0	19.3	77.2	3.1	50	10	150
Hexachloroethane	25.0	19.6	78.4	25.0	19.5	78.0	0.5	50	14	120
Indeno(1,2,3-cd)pyrene	25.0	24.7	98.8	25.0	25.0	100	1.2	50	30	160
Isophorone	25.0	22.8	91.2	25.0	22.4	89.6	1.8	50	21	196
Naphthalene	25.0	21.2	84.8	25.0	21.0	84.0	0.9	50	21	133
Nitrobenzene	25.0	20.1	80.4	25.0	19.8	79.2	1.5	50	20	160
N-Nitrosodi-n-propylamine	25.0	20.8	83.2	25.0	20.5	82.0	1.5	38	30	160
N-Nitrosodiphenylamine	50.0	50.6	101	50.0	50.9	102	0.6	50	30	150
Pentachlorophenol	25.0	20.5	82.0	25.0	20.2	80.8	1.5	50	14	176
Phenanthrene	25.0	21.8	87.2	25.0	21.8	87.2	0.0	50	10	140
Phenol	25.0	21.5	86.0	25.0	21.9	87.6	1.8	42	40	132
Pyrene	25.0	21.5	86.0	25.0	21.3	85.2	0.9	38	30	150
Pyridine	50.0	32.9	65.8	50.0	33.3	66.6	1.2	50	10	150
2-Methylphenol	25.0	20.8	83.2	25.0	20.9	83.6	0.5	50	30	160

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

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 than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count



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

Conoco Phillips COP Wingate

Analysis: Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061178

Lab Batch ID:

91487

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units: ug/L

Analysis Date:

06/29/2009 10:15

Analyst: S_G

Preparation Date: 06/2

06/26/2009 12:28

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
3 & 4-Methylphenol	25.0	21.2	84.8	25.0	21.7	86.8	2.3	50	10	160
Surr: 2,4,6-Tribromophenol	75.0	67.8	90.4	75.0	68.9	91.9	1.6	30	10	123
Surr: 2-Fluorobiphenyl	50.0	41.1	82.2	50.0	42.2	84.4	2.6	30	23	116
Surr: 2-Fluorophenol	75.0	59.1	78.8	75.0	59.3	79.1	0.3	30	16	110
Surr: Nitrobenzene-d5	50.0	38.9	77.8	50.0	39.3	78.6	1.0	30	21	114
Surr: Phenol-d5	75.0	60.7	80.9	75.0	61.8	82.4	1.8	30	10	110
Surr: Terphenyl-d14	50.0	42.5	85.0	50.0	41.2	82.4	3.1	30	22	141

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Volatile Organics by Method 8260B

SW8260B

WorkOrder: Lab Batch ID: 09061178 R276914

Method Blank

RunID: Q_090629A-5092157

06/29/2009 18:41

Units: ug

Analyst:

ug/L JC

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061178-01A 09061178-02A WMW-1 WMW-5

09061178-03A 09061178-04A WMW-4 WMW-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	91.5	78-116
Surr: 4-Bromofluorobenzene	95.9	74-125
Surr: Toluene-d8	94.7	82-118

Laboratory Control Sample (LCS)

RunID:

Q_090629A-5092156

Units:

ug/L

Analysis Date:

06/29/2009 18:13

Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	19.1	95.5	74	123
Ethylbenzene	20.0	22.0	110	72	127
Toluene	20.0	19.7	98.7	74	126
m,p-Xylene	40.0	45.7	114	71	129
o-Xylene	20.0	22.7	113	74	130
Xylenes,Total	60.0	68.4	114	71	130
Surr: 1,2-Dichloroethane-d4	50.0	45.1	90.2	78	116
Surr: 4-Bromofluorobenzene	50.0	51.4	103	74	125
Surr: Toluene-d8	50.0	49	98.0	82	118

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

Sample Spiked:

09061336-01

RunID:

Analysis Date:

Q_090629A-5092159 06/29/2009 19:35

Units:

ug/L

Analyst: JC

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

 ${\bf J}$ - 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

09061178 Page 29

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.



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

Conoco Phillips COP Wingate

Analysis: Method:	Volatile Organic SW8260B	s by Method 826	0B					WorkOrder: Lab Batch II		61178 76914		
	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	1000	830	83.0	1000	843	84.3	1.51	22	70	124
Ethylbenzene	· · · · · · · · · · · · · · · · · · ·	ND	1000	949	94.9	1000	964	96.4	1.54	20	76	122
Toluene		ND	1000	857	85.7	1000	881	88.1	2.68	24	80	117
m,p-Xylene		ND	2000	2000	100	2000	1980	99.0	1.09	20	69	127
o-Xylene		ND	1000	1010	101	1000	1030	103	1.33	20	84	114
Xylenes,Total		ND	3000	3010	100	3000	3010	100	0.273	20	69	127
Surr: 1,2-Dicl	hloroethane-d4	ND	2500	2110	84.6	2500	2270	90.8	7.12	30	78	116
Surr: 4-Brome	ofluorobenzene	ND	2500	2530	101	2500	2560	103	1.30	30	74	125
Surr: Toluene	÷d8	ND	2500	2360	94.4	2500	2350	94.1	0.232	30	82	118

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

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



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

Conoco Phillips COP Wingate

Analysis: Method: pН

SM4500-H B

OP wingate

WorkOrder:

09061178

Lab Batch ID:

R276295

Samples in Analytical Batch:

 Lab Sample ID
 Client Sample ID

 09061178-01C
 WMW-1

 09061178-02C
 WMW-5

 09061178-03C
 WMW-4

 09061178-04C
 WMW-7

Laboratory Control Sample (LCS)

RunID:

WET_090623N-5081443

Units:

pH Units

Analysis Date:

06/23/2009 14:00

Analyst:

S_H

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
pH	7.000	7.030	100.4	98	102

Sample Duplicate

Original Sample:

09061180-01

RunID:

WET_090623N-5081447

Units:

pH Units

Analysis Date:

06/23/2009 14:00

Analyst:

S_H

Analyte	Sample Result	DUP Result	RPD	RPD Limit
рН	7.14	7.13	0.140	5
Temperature (oC)	25	25	0	5

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

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



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

Conoco Phillips COP Wingate

Analysis:

Analysis Date:

Total Dissolved Solids

Method: E160.1

WorkOrder:

09061178

Lab Batch ID:

R276307

Method Blank

WET_090623R-5081771 RuniD:

Units:

mg/L

Lab Sample ID

Client Sample ID

06/23/2009 16:00 Analyst:

CFS

09061178-01C

Samples in Analytical Batch:

WMW-1

09061178-02C

WMW-5

09061178-03C

09061178-04C

WMW-4 WMW-7

Analyte Total Dissolved Solids (Residue, Filterable)

Result Rep Limit ND

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

WET_090623R-5081773

Units:

mg/L

Analysis Date:

06/23/2009 16:00

CFS Analyst:

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Total Dissolved Solids (Residue, Filterabl	200.0	202.0	101.0	200.0	198.0	99.00	2.0	10	95	107

Sample Duplicate

Original Sample:

09061178-01

RunID:

WET_090623R-5081775

Units:

ma/L

Analysis Date:

06/23/2009 16:00

Analyst:

CFS

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Total Dissolved Solids (Residue, Filterabl	4560	4564	0.0877	10

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

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



06/23/2009 18:30

HOUSTON LABORATORY

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

Conoco Phillips COP Wingate

Analysis:

Analysis Date:

Nitrate Nitrogen (as N), Total

SM4500-NO3 F Method:

WorkOrder:

09061178

Lab Batch ID:

R276343

Method Blank

RunID: WET_090623X-5082309 Units:

Analyst:

mg/L **ESK**

Lab Sample ID 09061178-01D

Samples in Analytical Batch:

Client Sample ID

09061178-02D

WMW-1 WMW-5

09061178-03D

09061178-04D

WMW-4 WMW-7

Analyte Result Rep Limit Nitrogen, Nitrate (As N) ND

Laboratory Control Sample (LCS)

RunID:

WET_090623X-5082310

0.50

Units:

mg/L

Analysis Date:

06/23/2009 18:30

Analyst: **ESK**

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen, Nitrate (As N)	5.00	5.22	104	90	110

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

Sample Spiked:

09060957-01

RunID:

WET_090623X-5082318

Units:

mg/L

Analysis Date:

06/23/2009 18:30

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)	9.05	5	14.9	116 *	5	14.9	116 *	0.0606	20	90	110

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

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

09061178 Page 33 7/10/2009 5:19:47 PM



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

Conoco Phillips COP Wingate

Analysis:

Alkalinity (as CaCO3), Total

Method:

Analysis Date:

E310.1

06/24/2009 17:00

WorkOrder:

09061178

Lab Batch ID:

R276410

Method Blank

RunID:

WET 090624W-5083338

Units: Analyst: mg/L PAC

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061178-01C

WMW-1

09061178-02C 09061178-03C WMW-5

09061178-04C

WMW-4 WMW-7

Analyte Result Rep Limit Alkalinity, Total (As CaCO3) ND

Laboratory Control Sample (LCS)

2.0

RunID:

WET 090624W-5083340

Units:

mg/L

Analysis Date:

06/24/2009 17:00

Analyst:

PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit	
Alkalinity, Total (As CaCO3)	38.70	37.00	95.61	90	110	

Sample Duplicate

Original Sample:

09060943-01

RunID:

WET 090624W-5083341

Units:

mg/L

Analysis Date:

06/24/2009 17:00

Analyst:

PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Alkalinity, Total (As CaCO3)	449	449	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

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

09061178 Page 34

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.



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

Conoco Phillips COP Wingate

Analysis:

RunID:

Ion Chromatography

Method: E300.0

WorkOrder: Lab Batch ID: 09061178

R276654

Method Blank

IC2 090626A-5087226

Units:

mg/L **BDG**

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date:

06/26/2009 16:05

Analyst:

09061178-04D

WMW-7

Analyte	Result	Rep Limit
Chloride	ND	0.50
Sulfate	ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC2 090626A-5087227

Units:

mg/L

Analysis Date:

06/26/2009 16:24

Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	10.00	9.233	92.33	85	115
Sulfate	10.00	9.926	99.26	85	115

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

Sample Spiked:

09061178-04

RunID:

IC2_090626A-5087247

Units:

mg/L

Analysis Date:

06/27/2009 1:11

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	80.35	1000	973.9	89.36	1000	987.9	90.75	1.424	20	80	120
Sulfate	438.6	1000	1416	97.70	1000	1424	98.55	0.5973	20	80	120

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

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



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

Conoco Phillips COP Wingate

Analysis:

Analysis Date:

Ion Chromatography

06/26/2009 16:05

E300.0 Method:

WorkOrder:

09061178

Lab Batch ID:

R276654A

Method Blank

IC2_090626A-5087226 RunID:

Units: Analyst:

mg/L BDG

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061178-01D

WMW-1

09061178-02D

WMW-5

09061178-03D

WMW-4

	Analyte	Result	Rep Limit
Chloride		ND	0.50
Sulfate		ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC2_090626A-5087227

Units:

Analysis Date:

06/26/2009 16:24

mg/L Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	10.00	9.233	92.33	85	115
Sulfate	10.00	9.926	99.26	85	115

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

Sample Spiked:

09061274-01

RuniD:

IC2_090626A-5087239

Units:

mg/L **BDG**

Analysis Date:

06/26/2009 22:37

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
Chloride	ND	10	8.974	89.74	10	8.832	88.32	1.595	20	80	120
Sulfate	ND	10	9.530	95.30	10	9.497	94.97	0.3469	20	80	120

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

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

Sample Receipt Checklist And Chain of Custody



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

Sample Receipt Checklist

Temperature: 1.4°C	Workorder: Date and Time Received:	09061178 6/23/2009 9:30:00 AM			Received B	-	CAW Fedex-Priority	
2. Custody seals intact on shippping container/cooler? 2. Custody seals intact on shippping container/cooler? 3. Custody seals intact on sample bottles? 4. Chain of custody present? 5. Chain of custody signed when relinquished and received? 7. Chain of custody signed when relinquished and received? 7. Samples in proper container/bottle? 8. Sample containers intact? 9. Sufficient sample volume for indicated test? 9. Sufficient sample volume for indicated test? 10. All samples received within holding time? 11. Container/Temp Blank temperature in compliance? 12. Water - VOA vials have zero headspace? 13. Water - Preservation checked upon receipt (except VOA*)? 15. Chain of custody signed when relinquished and received? 16. Chain of custody agrees with sample labels? 17. Samples in proper container/bottle? 18. Sample containers intact? 19. Sufficient sample volume for indicated test? 19. Sufficient sample volume for indicated test? 19. No	Temperature:	1.4°C			Chilled by:		Water Ice	
3. Custody seals intact on sample bottles? 4. Chain of custody present? 5. Chain of custody signed when relinquished and received? 6. Chain of custody agrees with sample labeis? 7. Samples in proper container/bottle? 8. Sample containers intact? 9. Sufficient sample volume for indicated test? Yes V No 10. All samples received within holding time? 11. Container/Temp Blank temperature in compliance? Yes V No 12. Water - VOA vials have zero headspace? Yes V No No Not Applicable **VOA Preservation Checked upon receipt (except VOA*)? **VOA Preservation Checked After Sample Analysis **SPL Representative: Client Name Contacted: Non Conformance Issues: **Issues: **No Not Not Present **Issues: **Contact Date & Time: **Contact			Yes	✓	No 🗆		Not Present	
4. Chain of custody present? Yes No	2. Custody seals intact	on shippping container/cooler?	Yes	\checkmark	No 🗌		Not Present	
5. Chain of custody signed when relinquished and received? 6. Chain of custody agrees with sample labels? 7. Samples in proper container/bottle? 8. Sample containers intact? 9. Sufficient sample volume for indicated test? 10. All samples received within holding time? 11. Container/Temp Blank temperature in compliance? 12. Water - VOA vials have zero headspace? 13. Water - Preservation Checked After Sample Analysis SPL Representative: Client Name Contacted: Non Conformance Issues: Contact Date & Time: Contact Date & Time:	3. Custody seals intact	on sample bottles?	Yes		No 🗀		Not Present	~
6. Chain of custody agrees with sample labels? 7. Samples in proper container/bottle? 8. Sample containers intact? 9. Sufficient sample volume for indicated test? 9. Sufficient sample volume for indicated test? 10. All samples received within holding time? 11. Container/Temp Blank temperature in compliance? 12. Water - VOA vials have zero headspace? 13. Water - Preservation checked upon receipt (except VOA*)? 14. VOA Preservation Checked After Sample Analysis SPL Representative: Client Name Contacted: Non Conformance Issues:	4. Chain of custody pre	esent?	Yes	✓	No 🗆			
7. Samples in proper container/bottle? 8. Sample containers intact? 9. Sufficient sample volume for indicated test? 10. All samples received within holding time? 11. Container/Temp Blank temperature in compliance? 12. Water - VOA vials have zero headspace? 13. Water - Preservation checked upon receipt (except VOA*)? 14. VOA Preservation Checked After Sample Analysis SPL Representative: Client Name Contacted: Non Conformance Issues:	5. Chain of custody sig	ned when relinquished and received?	Yes	✓	No 🗆			
8. Sample containers intact? 9. Sufficient sample volume for indicated test? Yes V 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: Non Conformance Issues:	6. Chain of custody ago	rees with sample labels?	Yes	✓	No 🗌			
9. Sufficient sample volume for indicated test? Yes V No 10. All samples received within holding time? Yes V No 11. Container/Temp Blank temperature in compliance? Yes No VOA Vials Not Present Water - VOA vials have zero headspace? Yes No No Not Applicable *VOA Preservation Checked After Sample Analysis SPL Representative: Client Name Contacted: Non Conformance Issues:	7. Samples in proper co	ontainer/bottle?	Yes	✓	No 🗌			
10. All samples received within holding time?	8. Sample containers in	ntact?	Yes	\checkmark	No 🗆			
1. Container/Temp Blank temperature in compliance? Yes	9. Sufficient sample vo	lume for indicated test?	Yes	✓	No 🗀			
2. Water - VOA vials have zero headspace? Yes No VOA Vials Not Present 3. Water - Preservation checked upon receipt (except VOA*)? Yes No Not Applicable *VOA Preservation Checked After Sample Analysis SPL Representative:	10. All samples received	within holding time?	Yes	✓	No 🗆			
*VOA Preservation Checked After Sample Analysis SPL Representative: Client Name Contacted: Non Conformance Issues:	11. Container/Temp Blar	nk temperature in compliance?	Yes	✓	No 🗌			
*VOA Preservation Checked After Sample Analysis SPL Representative: Contact Date & Time: Client Name Contacted: Non Conformance Issues:	12. Water - VOA vials ha	ve zero headspace?	Yes	✓	No 🗌	VOA Via	als Not Present	
SPL Representative: Contact Date & Time: Client Name Contacted: Non Conformance Issues:	13. Water - Preservation	checked upon receipt (except VOA*)?	Yes	✓	No 🗌		Not Applicable	
Client Name Contacted: Non Conformance Issues:	*VOA Preservation C	hecked After Sample Analysis						
Non Conformance Issues:	SPL Representat	tive:	Cont	act Date & T	ime:			
Issues:	Client Name Contac	ted:						
Client Instructions:								····
	Client Instructions:							

Chair of Custody Record Afterflow (Edy Blanck-burchord) Fig. 1 Workouder Number: Afterflow (Edy Blanck-burchord) Fig. 1 Workouder Number: Address 612 Millips Address 612 Mill								0	25			Alexandra de la compansión
Sech Conoco Phillips Bird And Market N. Bird Code. 87110 Gin School Root Net Ster. 200 Gin		ain	1	ecor	77					,		
Activity of the first of the fi	llerit: Tefra Tech/ Conoco Phillips		SPL	Workord	er Numb	.:	2	8	128			
State Stat		-	-	<u>+</u>								
State March Marc		anchard@tetra	tech.c	·······		-	Reger		nalysis	-	Ü	-
Colored Fractionaling Plant	State: NM	ode: 87110									<u>,</u>	
	1									•	010	3 × 120
Collected dample type Moditive Composition Collected dample type Col	J. Numper:					47.	10	əft		-	9/0	
Collected Sample 19/pe Maritx Electron Group Grob Wayer Soil Electron Grob Wayer E	orbited for the public of the	The Mark	50		<u>.</u>	40 X3T			w		50è-etd	49.
	Collected	e Type	:			.g-09			nomo			** + e * *
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	MMW5 SHAMINGO	×	c	7			×	×				î ···
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		X X	\mathcal{C}	2	1						X	
W - U	6,2km	X X			X							
Requirements Remarks: Brit) Bottle Types: 1: 3/40ml Vials 2: 11 Class 3: 11 Plasfic 4: 11 Armber Glass 5: 8oz Plastadard() Preservative Types: 1: NONE 2: HNO3 3: HCL 4: HZSO4 Sampler: Date Time Received by: Date Time Received by: Date Time Received by: C 22-09 C 00 3: 0 4:30	(WMW-4, Kerin 1305)	X	3		7		X.	\times				1. 10 D.
wday() Bottle Types: 1: 3/40ml Vials 2: 11 Flashe 4. 11 Amber Glass 5. 80z Plandard() Preservative Types: 1: NONE 2. HNOS 3. HCL 4. HZSO4 Sampler: Date Time Received by: Date Time Received by: Date Time Received by: (5/27)54 0430	d Time Requirements				6.00 m		Into	ict?		_ <	,	
Sampler: Date Time Received by: Date Time Received by: Date Time Received by: Date Time Received by: (5/27)54 0430) 5 wday()	1: 3/40ml Via	1	Q	Plasfic	1. 11. Ar	Ped G	,	80z P	astic		19Y-n
Sampler: Complete Time Received by: Date Time Received by: Date Time Reference Column Co	- Standard()	1: NONE	2. HNO3		7	4. HZS	8		İ			
Date Time Received by: Date Time Received by: Date Time Received by: C/23/54 0430 U.D. St. fee.	individual by sompler:	Date	Time	Receive	d by:							
Date Time Received by: (Date Time Redeived by SPL, fac.) (5/23/54 0430 0430		620	9									4
(bate Time Redelived by SPL, fac.	nguished by:	Dafe	Time	Receive	d by:							\$7
C/23/54 0430 Regelved by SPL, fac.						9)
04.50	nquished by:	Date	Time	Redeive	B	à.						3443 - 1
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	Chain of Custody		Record			-				
Client: Tefra Tech/ Conoco Phillips		148	SPL Workorder Number:	Nump	j.		2	0	17/2	X
dchard/Tetra Tech										
Phone: 505-237-8440 email: kelly.bl	email:kelly.blanchard@tetratech.c	atech.c			_	Requested		Analysis		
an School Road, NE Ste. 20										-
	Zip Code: 87110									
Project Name: Wingate Fractionating Plant			•							
P.O. Number:				1			əţt			
Sampled My () ()	Avistin Man	- dy	avite reinte	OT 30	EX OI	AIK.	uan'i		<u></u>	209 · 91
Collected	Sample Type	Motrix		PA-0			юs′	moi		
-	Grab Wa	Soil		8590			140	EoB	100	008
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(WMM) - 7 4/2/6/1425	> \ \	\$C	2							
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Tumaround Time Requirements Remarks : 24 hr() 48 hr()						Intact? Tempe	Intact? (Y). Temperature:	e:	.ς, Σ,ς,	
5 wday() Bottle lypes:	1: 3/40ml Vials	1		1	4. 11 Amber Glass	Se Ge		5. Boz Plastic	astic	
Orwady - Standard Preservative Types:	1: NONE	2 HNQ3	<u> </u>		4. H2SO4					
		ime	Received by:	Ω Ω						
	(g. 66-02)	000								
Refinquished by:	Date	Time	Received by:	þ.:						
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8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Certificate of Analysis Number:

09061339

Report To:

Tetra Tech, Inc. Kelly Blanchard

6121 Indian School Road, N.E.

Suite 200 Albuquerque

NM 87110-

ph: (505) 237-8440

fax:

Project Name:

COP Wingate

Site:

Gallup, NM

Site Address:

PO Number:

4511799321

State:

New Mexico

State Cert. No.:

Date Reported: 7/1

7/11/2009

This Report Contains A Total Of 61 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

7/11/2009



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

Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

09061339

Report To: **Project Name: COP Wingate** Gallup, NM Site: Tetra Tech, Inc. **Kelly Blanchard** Site Address: 6121 Indian School Road, N.E. Suite 200 PO Number: 4511799321 Albuquerque State: **New Mexico** NM 87110-State Cert. No.: ph: (505) 237-8440 fax: **Date Reported:** 7/11/2009

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.

All samples were received expired for Total Coliform. Client is aware of the holding time and request SPL to perform the analysis.

II: ANALYSES AND EXCEPTIONS:

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.

Semivolatile Organics (8270):

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID: 91487 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.

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 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.

Ed Cardenas

09061339 Page 1

7/11/2009

Erica Cardenas Project Manager

Date



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

Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

09061339

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.



Date



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

Conoco Phillips

Certificate of Analysis Number:

09061339

Report To:

Fax To:

Tetra Tech, Inc.

Kelly Blanchard

6121 Indian School Road, N.E.

Suite 200

Albuquerque

NM 87110-

ph: (505) 237-8440

fax: (505) 881-3283

Project Name:

COP Wingate

Site:

Gallup, NM

Site Address:

PO Number:

4511799321

State:

New Mexico

State Cert. No.:

Date Reported:

7/11/2009

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MWR-1	09061339-01	Water	6/24/2009 9:40:00 AM	6/25/2009 9:15:00 AM	327819	
MWR-1 MWR-1	09061339-01	Water	6/24/2009 9:40:00 AM	6/25/2009 9:15:00 AM	819, 327820,327	
WMW-3	09061339-02	Water	6/24/2009 10:55:00 AM	6/25/2009 9:15:00 AM		
WMW-2	09061339-03	Water	6/24/2009 12:10:00 PM	6/25/2009 9:15:00 AM		
WMW-2 WMW-2 Pond 1 (East)	09061339-03	Water	6/24/2009 12:10:00 PM	6/25/2009 9:15:00 AM	819, 327820,327	
Pond 1 (East)	09061339-04	Water	6/24/2009 8:40:00 AM	6/25/2009 9:15:00 AM		
Pond 1 (East)	09061339-04	Water	6/24/2009 8:40:00 AM	6/25/2009 9:15:00 AM	819, 327820,327	
Pond 2 (West) Pond 2 (West)	09061339-05	Water	6/24/2009 9:35:00 AM	6/25/2009 9:15:00 AM		
Pond 2 (West)	09061339-05	Water	6/24/2009 9:35:00 AM	6/25/2009 9:15:00 AM	819, 327820,327	
Duplicate	09061339-06	Water	6/24/2009 9:30:00 AM	6/25/2009 9:15:00 AM		
Trip Blank (SPL Prepared)	09061339-07	Water	6/24/2009	6/25/2009 9:15:00 AM		П



7/11/2009

Erica Cardenas Project Manager Date

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

> Ted Yen Quality Assurance Officer



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

Client Sample ID: MWR-1 Collected: 06/24/2009 9:40 SPL Sample ID: 09061339-01

Site:	Gallup,	NM
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				Oito. Ouii	ар, пп				
Analyses/Method		Result	QUAL	Rep.Limit		Dil. Factor	Date Anal	yzed Analyst	Seq.#
ALKALINITY (AS CAC	CO3), TOTAL				MCL		E310.1	Units: mg/L	
Alkalinity, Total (As CaC	O3)	600		2		1	06/30/09	18:00 PAC	5094590
BIOCHEMICAL OXYG	EN DEMAND -	5 DAY	S		MCL	SN	15210 B	Units: mg/L	
Biochemical Oxygen Der	nand	2.87		2		1	06/25/09	14:00 S_H	5092618
CHEMICAL OXYGEN	DEMAND				MCL	SN	15220 C	Units: mg/L	
Chemical Oxygen Dema	nd	17.5		3		1	06/26/09	10:30 PAC	5086235
ION CHROMATOGRA	PHY				MCL		E300.0	Units: mg/L	
Chloride		25.2		2.5		5	06/27/09	13:24 BDG	5088437
Sulfate		39.9		2.5		5	06/27/09	13:24 BDG	5088437
Nitrogen,Nitrate (As N)		ND		0.5		1	06/25/09	21:50 BDG	5088578
MERCURY, TOTAL					MCL	SI	N7470A	Units: mg/L	
Mercury		ND		0.0002		1	07/02/09	14:43 F_S	5097646
Prep Method	Prep Date		Prep Initials	Prep Factor					
SW7470A	07/02/2009 10:15		s	1.00					
METALS BY METHOD	0 6010B, TOTA	L			MCL	SV	W6010B	Units: mg/L	
Calcium		19.7		0.1		1	07/04/09	17:00 EG	5101734

METALS BY METHOD 60	010B, TOTAL		MCL		SW6010B	Ur	its: mg/L	
Calcium	19.7	0.1		1	07/04/09	17:00	EG	5101734
Iron	9.07	0.02		1	07/04/09	17:00	EG	5101734
Magnesium	7.89	0.1		1	07/04/09	17:00	EG	5101734
Sodium	332	1		10	07/05/09	14:04	EG	5101421

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/27/2009 13:30	AB1	1.00

TETALS BY METHOD	6020A, TOTAL		MCL	SW6020A	Units: mg/L	
Arsenic	ND	0.005	1	07/03/09	1:06 AL_H	5098294
Barium	0.488	0.005	1	07/03/09	1:06 AL_H	5098294
Cadmium	ND	0.005	1	07/04/09	1:35 AL_H	5102030
Chromium	0.00666	0.005	1	07/03/09	1:06 AL_H	5098294
Lead	ND	0.005	1	07/03/09	1:06 AL_H	5098294
Manganese	0.577	0.005	1	07/03/09	1:06 AL_H	5098294
Selenium	ND	0.005	1	07/04/09	6:51 AL_H	5101296
Silver	ND	0.005	1	07/03/09	1:06 AL_H	5098294

Į	Prep Method	Prep Date	Prep Initials	Prep Factor
Į	SW3010A	06/27/2009 13:30	AB1	1.00

PH			MCL	SM4500-H B	Units: pH	Units
рН	7.96	0.1		1 06/25/09		5084672

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B}}\xspace\ensuremath{\mathsf{N}}$ - 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



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

Client Sample ID:MWR-1

Collected: 06/24/2009 9:40

SPL Sample ID:

09061339-01

Site: Gallup, 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	06/29/09 16:41	S_G	5092144
1,2-Dichlorobenzene	ND	5	1	06/29/09 16:41	S_G	5092144
1,2-Diphenylhydrazine	ND	10	1	06/29/09 16:41	S_G	5092144
1,3-Dichlorobenzene	ND	5	1	06/29/09 16:41	S_G	5092144
1,4-Dichlorobenzene	ND	5	1	06/29/09 16:41	S_G	5092144
2,4,5-Trichlorophenol	ND	10	1	06/29/09 16:41	S_G	5092144
2,4,6-Trichlorophenol	ND	5	1	06/29/09 16:41	S_G	5092144
2,4-Dichlorophenol	ND	5	1	06/29/09 16:41	S_G	5092144
2,4-Dimethylphenol	ND	5	1	06/29/09 16:41	S_G	5092144
2,4-Dinitrophenol	ND	25	1	06/29/09 16:41	S_G	5092144
2,4-Dinitrotoluene	ND	5	1	06/29/09 16:41	S_G	5092144
2,6-Dinitrotoluene	ND	5	1	06/29/09 16:41	S_G	5092144
2-Chloronaphthalene	ND	5	1	06/29/09 16:41	S_G	5092144
2-Chlorophenol	ND	5	1	06/29/09 16:41	S_G	5092144
2-Methylnaphthalene	ND	5	1	06/29/09 16:41	S_G	5092144
2-Nitroaniline	ND	25	1	06/29/09 16:41	S_G	5092144
2-Nitrophenol	ND	5	1	06/29/09 16:41		5092144
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 16:41	S_G	5092144
3-Nitroaniline	ND	25	1	06/29/09 16:41	S_G	5092144
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 16:41	S_G	5092144
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 16:41	S_G	5092144
4-Chloro-3-methylphenol	ND	5	1	06/29/09 16:41	S_G	5092144
4-Chloroaniline	ND	5	1	06/29/09 16:41	S_G	5092144
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 16:41	S_G	5092144
4-Nitroaniline	ND	25	1	06/29/09 16:41	SG	5092144
4-Nitrophenol	ND	25	1	06/29/09 16:41	SG	5092144
Acenaphthene	ND	5	1	06/29/09 16:41	s G	5092144
Acenaphthylene	ND	5	1	06/29/09 16:41	S G	5092144
Aniline	ND	5	1	06/29/09 16:41	S_G	5092144
Anthracene	ND	5	1	06/29/09 16:41	S_G	5092144
Benz(a)anthracene	ND	5	1	06/29/09 16:41	 S_G	5092144
Benzo(a)pyrene	ND	5	1	06/29/09 16:41	S_G	5092144
Benzo(b)fluoranthene	ND	5	1	06/29/09 16:41	S_G	5092144
Benzo(g,h,i)perylene	ND	5	1	06/29/09 16:41	S_G	5092144
Benzo(k)fluoranthene	ND	5	1	06/29/09 16:41	S_G	5092144
Benzoic acid	ND	25	1	06/29/09 16:41	S_G	5092144
Benzyl alcohol	ND	5	1	06/29/09 16:41	S_G	5092144
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 16:41	S_G	5092144
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 16:41	S_G	5092144

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



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

Client Sample ID:MWR-1 Collected: 06/24/2009 9:40 SPL Sample ID: 09061339-01

Site: Gallup, NM

Gallup, NM			
Limit Dil. Factor	Date Analyzed	Analyst	Seq. #
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
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5 1	06/29/09 16:41	S_G	5092144
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5 1	06/29/09 16:41	S_G	5092144
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5 1	06/29/09 16:41	S_G	5092144
25 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
5 1	06/29/09 16:41	S_G	5092144
10-123 1	06/29/09 16:41	S_G	5092144
23-116 1	06/29/09 16:41	S_G	5092144
16-110 1	06/29/09 16:41	S_G	5092144
21-114 1	06/20/00 16:41	SG	5092144
	00/29/09 10.41	0_0	
10-110 1	06/29/09 16:41		5092144
23- 16- 21-	5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 -123 1 -110 1	5 1 06/29/09 16:41 5 1 06/29/09 16:41 <td>5 1 06/29/09 16:41 S_G 5 1 06/29</td>	5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29/09 16:41 S_G 5 1 06/29

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	N_M	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

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

Client Sample ID:MWR-1 Collected: 06/24/2009 9:40 SPL Sample ID: 09061339-01

			Sit	e: Gall	up, NM					
Analyses/Method	Result	QUAL	R	ep.Limit	D	il. Facto	r Date Analy	yzed	Analyst	Seq.#
TOTAL COLIFORMS					MCL		M9222 B	Ur	its: colon	ies/100
Coliform, Total	10			2		2	06/25/09	13:30	S_H	5086700
TOTAL DISSOLVED SOLIDS					MCL		E160.1	Ur	nits: mg/L	
Total Dissolved Solids (Residue,Filterable)	793			10		1	06/25/09	15:00	BDG	5085798
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	S	W8260B	Ur	nits: ug/L	
Benzene	ND			5		1	06/29/09	22:18	JC	5092165
Ethylbenzene	ND			5		1	06/29/09	22:18	JC	5092165
Toluene	ND			5		1	06/29/09	22:18	JC	5092165
m,p-Xylene	ND			5		1	06/29/09	22:18	JC	5092165
o-Xylene	ND			5		1	06/29/09	22:18	JC	5092165
Xylenes,Total	ND			5		1	06/29/09	22:18	JC	5092165
Surr: 1,2-Dichloroethane-d4	90.0		%	78-116		1	06/29/09	22:18	JC	5092165
Surr: 4-Bromofluorobenzene	97.3		%	74-125		1	06/29/09	22:18	JC	5092165
Surr: Toluene-d8	92.0		%	82-118		1	06/29/09	22:18	JC	5092165

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



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

Client Sample ID:WMW-3	Collected: 06/24/2009 10:55	SPL Sample ID:	09061339-02

Client Sample ID:WM	IW-3		Collected	I: 06/24/20	09 10:55	SPL San	iple l	D : 0906	1339-02
			Site:	Sallup, NN	1				
Analyses/Method	Result	QUAL	Rep.Lim	it	Dil. Facto	r Date Anal	yzed	Analyst	Seq.#
ALKALINITY (AS CAC	CO3), TOTAL			MCI	<u> </u>	E310.1	Ur	its: mg/L	
Alkalinity, Total (As CaC	O3) 1410			2	1	06/30/09	18:00	PAC	509459
ION CHROMATOGRA	NPHY			MCI	<u> </u>	E300.0	Ur	its: mg/L	
Chloride	677		10	10	200	06/27/09	13:41	BDG	508843
Sulfate	1370		10	0	200	06/27/09	13:41	BDG	508843
Nitrogen, Nitrate (As N)	0.716		0	.5	1	06/25/09	22:09	BDG	508857
MERCURY, TOTAL				MCI	L S	W7470A	Ur	its: mg/L	
Mercury	ND		0.000	12	1	07/02/09	14:46	F_S	509764
Deca Marked	Davis Data	D l-:4:-l-	Draw Coata						
Prep Method	Prep Date	Prep Initials							
SW7470A	07/02/2009 10:15	F_S	1.00						
METALS BY METHO	O 6010B, TOTAL			MCI	L S	W6010B	Ur	its: mg/L	
Arsenic	0.0166		0.00)5	1	07/04/09	17:05	EG	510173
Calcium	400			1	10	07/04/09	15:33	EG	510172
Iron	4.3		0.0)2	1	07/04/09	17:05	EG	510173
Magnesium	57.4		0	.1	1	07/04/09	17:05	EG	510173
Selenium	ND		0.0)1	1	07/04/09	17:05	EG	510173
Sodium	1710			2	20	07/05/09	14:08	EG	510142
Prep Method	Prep Date	Prep Initials	Prep Facto						
SW3010A	06/27/2009 13:30	AB1	1.00						
METALS BY METHO	D 6020A, TOTAL			MCI	L S	W6020A	Ur	nits: mg/L	
Barium	0.265		0.00		1	07/03/09			509829
Cadmium	ND		0.00)5	1	07/04/09	1:40	AL_H	510203
Chromium	0.0154		0.00)5	1	07/03/09	9 1:12	AL_H	509829
Lead	0.0568		0.00)5	1	07/03/09	1:12	AL_H	509829
Manganese	3.35		0.2	25	50	07/06/09	13:59	S_C	510294
Silver	ND		0.00)5	1	07/03/09	1:12	AL_H	509829
Prep Method	Prep Date	Prep Initials	Prep Facto	7					
SW3010A	06/27/2009 13:30	AB1	1.00	≒					

Qualifiers:

PH

рΗ

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

7.65

* - 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

SM4500-H B

06/25/09 14:00 PAC

MI - Matrix Interference

MCL

0.1

Units: pH Units

5084673



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

Client Sample ID:WMW-3

Collected: 06/24/2009 10:55

SPL Sample ID:

09061339-02

Site:	Gallup.	NM
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Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS E	SY METHOD 82	70C		MCL SV	V8270C U	nits: ug/L	
1,2,4-Trichlorobenzene	ND		5	1	06/29/09 17:25	S_G	5092145
1,2-Dichlorobenzene	ND		5	1	06/29/09 17:25	S_G	5092145
1,2-Diphenylhydrazine	ND		10	1	06/29/09 17:25	S_G	5092145
1,3-Dichlorobenzene	ND		5	1	06/29/09 17:25	S_G	5092145
1,4-Dichlorobenzene	ND		5	1	06/29/09 17:25	S_G	5092145
2,4,5-Trichlorophenol	ND		10	1	06/29/09 17:25	S_G	5092145
2,4,6-Trichlorophenol	ND		5	1	06/29/09 17:25	S_G	5092145
2,4-Dichlorophenol	ND		5	1	06/29/09 17:25	S_G	5092145
2,4-Dimethylphenol	ND		5	1	06/29/09 17:25	S_G	5092145
2,4-Dinitrophenol	ND		25	1	06/29/09 17:25	S_G	5092145
2,4-Dinitrotoluene	ND		5	1	06/29/09 17:25	S_G	5092145
2,6-Dinitrotoluene	ND		5	1	06/29/09 17:25	S_G	5092145
2-Chloronaphthalene	ND		5	1	06/29/09 17:25	S_G	5092145
2-Chlorophenol	ND		5	1	06/29/09 17:25	S_G	5092145
2-Methylnaphthalene	ND		5	1	06/29/09 17:25	S_G	5092145
2-Nitroaniline	ND		25	1	06/29/09 17:25	S_G	5092145
2-Nitrophenol	ND		5	1	06/29/09 17:25	S_G	5092145
3,3'-Dichlorobenzidine	ND		10	1	06/29/09 17:25	S_G	5092145
3-Nitroaniline	ND		25	1	06/29/09 17:25	S_G	5092145
4,6-Dinitro-2-methylphenol	ND		25	1	06/29/09 17:25	S_G	5092145
4-Bromophenyl phenyl ether	ND		5	1	06/29/09 17:25	S_G	509214
4-Chloro-3-methylphenol	ND		5	1	06/29/09 17:25	S_G	509214
4-Chloroaniline	ND		5	1	06/29/09 17:25	S_G	509214
4-Chlorophenyl phenyl ether	ND		5	1	06/29/09 17:25	S_G	5092145
4-Nitroaniline	ND		25	1	06/29/09 17:25	S_G	5092145
4-Nitrophenol	ND		25	1	06/29/09 17:25	S_G	5092145
Acenaphthene	ND		5	1	06/29/09 17:25	S_G	5092145
Acenaphthylene	ND		5	1	06/29/09 17:25	S_G	5092145
Aniline	ND		5	1	06/29/09 17:25	S_G	5092145
Anthracene	ND		5	1	06/29/09 17:25	S_G	5092145
Benz(a)anthracene	ND		5	1	06/29/09 17:25	S_G	5092145
Benzo(a)pyrene	ND		5	1	06/29/09 17:25	S_G	5092145
Benzo(b)fluoranthene	ND		5	1	06/29/09 17:25	S_G	509214
Benzo(g,h,i)perylene	ND		5	1	06/29/09 17:25	S_G	509214
Benzo(k)fluoranthene	ND		5	1	06/29/09 17:25	S_G	509214
Benzoic acid	ND		25	1	06/29/09 17:25	S_G	509214
Benzyl alcohol	ND		5	1	06/29/09 17:25	S_G	509214
Bis(2-chloroethoxy)methane	ND		5	1	06/29/09 17:25	S_G	509214
Bis(2-chloroethyl)ether	ND		5	1	06/29/09 17:25	S_G	509214

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



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

Client Sample ID:WMW-3

Collected: 06/24/2009 10:55 SPL Sample ID:

09061339-02

			Site:	Gallup, I				
Analyses/Method	Result	QUAL	Rep.L			Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND			5	1	06/29/09 17:25	S_G	509214
Bis(2-ethylhexyl)phthalate	ND			5	1	06/29/09 17:25	S_G	509214
Butyl benzyl phthalate	ND			5	1	06/29/09 17:25	S_G	509214
Carbazole	ND			5	1	06/29/09 17:25	S_G	509214
Chrysene	ND			5	1	06/29/09 17:25	S_G	509214
Dibenz(a,h)anthracene	ND			5	1	06/29/09 17:25	S_G	509214
Dibenzofuran	ND			5	1	06/29/09 17:25	S_G	509214
Diethyl phthalate	ND			5	1	06/29/09 17:25	S_G	509214
Dimethyl phthalate	ND			5	1	06/29/09 17:25	S_G	509214
Di-n-butyl phthalate	ND			5	1	06/29/09 17:25	S_G	509214
Di-n-octyl phthalate	ND			5	1	06/29/09 17:25	S_G	509214
Fluoranthene	ND			5	1	06/29/09 17:25	S_G	509214
Fluorene	ND	-		5	1	06/29/09 17:25	S_G	509214
Hexachlorobenzene	ND			5	1	06/29/09 17:25	S_G	509214
Hexachlorobutadiene	ND			5	1	06/29/09 17:25	S_G	509214
Hexachlorocyclopentadiene	ND			5	1	06/29/09 17:25	S_G	509214
Hexachloroethane	ND	***		5	1	06/29/09 17:25	S_G	509214
Indeno(1,2,3-cd)pyrene	ND			5	1	06/29/09 17:25	S_G	509214
Isophorone	ND		•	5	1	06/29/09 17:25	S_G	509214
Naphthalene	ND			5	1	06/29/09 17:25	S_G	509214
Nitrobenzene	ND			5	1	06/29/09 17:25	SG	509214
N-Nitrosodi-n-propylamine	ND	**		5	1	06/29/09 17:25	SG	509214
N-Nitrosodiphenylamine	ND			5	1	06/29/09 17:25	S G	509214
Pentachlorophenol	ND			25	1	06/29/09 17:25	S G	509214
Phenanthrene	ND			5	1	06/29/09 17:25	s G	509214
Phenol	ND			5	1	06/29/09 17:25	s G	509214
Pyrene	ND			5	1	06/29/09 17:25	S G	509214
Pyridine	ND		•	5	1	06/29/09 17:25	S G	509214
2-Methylphenol	ND			5	1	06/29/09 17:25	S G	509214
3 & 4-Methylphenol	ND			5	1	06/29/09 17:25	S G	509214
Surr: 2,4,6-Tribromophenol	77.2		% 10	-123	1	06/29/09 17:25	S G	509214
Surr: 2-Fluorobiphenyl	86.6		% 23	-116	1	06/29/09 17:25		509214
Surr: 2-Fluorophenol	46.3			-110	1	06/29/09 17:25		509214
Surr: Nitrobenzene-d5	81.6		% 21	-114	1	06/29/09 17:25	S_G	509214
Surr: Phenol-d5	38.4			-110	1	06/29/09 17:25		509214
Surr: Terphenyl-d14	46.2			-141	1	06/29/09 17:25		509214

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Client Sample ID:WMW-3 Collected: 06/24/2009 10:55 SPL Sample ID: 09061339-02

			Sit	e: Gall	up, NM					
Analyses/Method	Result	QUAL	R	ep.Limit	,	Dil. Facto	r Date Ana	lyzed	Analyst	Seq. #
TOTAL DISSOLVED SOLIDS					MCL		E160.1	Ur	nits: mg/L	
Total Dissolved Solids (Residue,Filterable)	3190			100		10	06/30/09	10:30	CFS	5097161
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	S	W8260B	Ur	nits: ug/L	
Benzene	ND			5		1	06/29/09	22:45	JC	5092166
Ethylbenzene	ND			5		1	06/29/09	22:45	JC	5092166
Toluene	ND			5		1	06/29/09	22:45	JC	5092166
m,p-Xylene	ND			5		1	06/29/09	22:45	JC	5092166
o-Xylene	ND			5		1	06/29/09	22:45	JC	5092166
Xylenes,Total	ND			5		1	06/29/09	22:45	JC	5092166
Surr: 1,2-Dichloroethane-d4	92.4		%	78-116		1	06/29/09	22:45	JC	5092166
Surr: 4-Bromofluorobenzene	96.9		%	74-125		1	06/29/09	22:45	JC	5092166
Surr: Toluene-d8	93.1		%	82-118		1	06/29/09	22:45	JC	5092166

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



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

Client Sample ID:WMW-2	Collected: 06/24/2009 12:10	SPL Sample ID:	09061339-03

Client Sample ID:WM	1W-2		Collected: (06/24/2009	12:10	SPL Samp	le ID: 0906	1339-03
			Site: Ga	llup, NM				
Analyses/Method	Resul	QUAL	Rep.Limit	D	il. Factor	Date Analyz	ed Analyst	Seq. #
ALKALINITY (AS CAC	CO3), TOTAL			MCL		E310.1	Units: mg/L	
Alkalinity, Total (As CaC	O3) 1530		2		1	06/30/09 18	3:00 PAC	5094592
ION CHROMATOGRA	\PHY			MCL		E300.0	Units: mg/L	
Chloride	502		50		100	06/27/09 13	3:57 BDG	5088439
Sulfate	15.8		0.5		1	06/29/09 12	2:30 BDG	5092299
Nitrogen, Nitrate (As N)	ND		0.5		1	06/25/09 22	2:29 BDG	5088580
MERCURY, TOTAL				MCL	SI	N7470A	Units: mg/L	
Mercury	ND		0.0002		1	07/02/09 14		5097648
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW7470A	07/02/2009 10:15	F S	1.00					
METALS BY METHO		· -		MCL	91	V6010B	Units: mg/L	
Arsenic	ND		0.005	WOL	1	07/04/09 17		5101737
Calcium	16.2		0.1		1	07/04/09 17		5101737
Iron	0.482		0.02		1	07/04/09 17		5101737
Magnesium	99.9		0.1		1	07/04/09 17	7:09 EG	5101737
Selenium	ND		0.01		1	07/04/09 17	7:09 EG	5101737
Sodium	1000		1		10	07/05/09 14	l:12 EG	5101423
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW3010A	06/27/2009 13:30	AB1	1.00					
METALS BY METHOI	D 6020A. TOTAL			MCL	SI	N6020A	Units: mg/L	
Barium	0.11		0.005		1	07/03/09 1		5098563
Cadmium	ND		0.005		1	07/04/09 1	I:44 AL_H	5102032
Chromium	0.00809		0.005		1	07/03/09 1	I:18 AL_H	5098563
Lead	ND		0.005	-	1	07/03/09 1	I:18 AL_H	5098563
Manganese	ND		0.25		50	07/06/09 14	1:04 S_C	5102946
Silver	ND		0.005		1	07/03/09 1	I:18 AL_H	5098563
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW3010A	06/27/2009 13:30	AB1	1.00					
PH				MCL	SM4	500-Н В	Units: pH Un	its
	0.50		0.4			00/05/00 4/		500407

0.1

Qualifiers:

pН

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

9.59

* - 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)

06/25/09 14:00 PAC

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

1

5084674



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

Client Sample ID:WMW-2

Collected: 06/24/2009 12:10

SPL Sample ID:

09061339-03

Site:	C-11	A I B A
Site:	Gallup,	IAIAI

Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS E	BY METHOD 8270C		MCL SV	V8270C Ur	nits: ug/L	
1,2,4-Trichlorobenzene	ND	5	1	06/29/09 18:09	S_G	5092146
1,2-Dichlorobenzene	ND	5	1	06/29/09 18:09	S_G	5092146
1,2-Diphenylhydrazine	ND	10	1	06/29/09 18:09	S_G	5092146
1,3-Dichlorobenzene	ND	5	1	06/29/09 18:09	S_G	5092146
1,4-Dichlorobenzene	ND	5	1	06/29/09 18:09	S_G	5092146
2,4,5-Trichlorophenol	ND	10	1	06/29/09 18:09	S_G	5092146
2,4,6-Trichlorophenol	ND	5	1	06/29/09 18:09	S_G	5092146
2,4-Dichlorophenol	ND	5	1	06/29/09 18:09	S_G	5092146
2,4-Dimethylphenol	ND	5	1	06/29/09 18:09	S_G	5092146
2,4-Dinitrophenol	ND	25	1	06/29/09 18:09	S_G	5092146
2,4-Dinitrotoluene	ND	5	1	06/29/09 18:09	S_G	5092146
2,6-Dinitrotoluene	ND	5	1	06/29/09 18:09	S_G	5092146
2-Chloronaphthalene	ND	5	1	06/29/09 18:09	S_G	5092146
2-Chlorophenol	ND	5	1	06/29/09 18:09	S_G	5092146
2-Methylnaphthalene	ND	5	1	06/29/09 18:09	S_G	5092146
2-Nitroaniline	ND	25	1	06/29/09 18:09	S_G	5092146
2-Nitrophenol	ND	5	1	06/29/09 18:09	S_G	5092146
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 18:09	S_G	5092146
3-Nitroaniline	ND	25	1	06/29/09 18:09	S G	5092146
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 18:09	S_G	5092146
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 18:09	S_G	5092146
4-Chloro-3-methylphenol	ND	5	1	06/29/09 18:09	S_G	5092146
4-Chloroaniline	ND	5	1	06/29/09 18:09	S_G	5092146
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 18:09	S_G	5092146
4-Nitroaniline	ND	25	1	06/29/09 18:09	S_G	5092146
4-Nitrophenol	ND	25	1	06/29/09 18:09	s G	5092146
Acenaphthene	ND	5	1	06/29/09 18:09	S G	5092146
Acenaphthylene	ND	5	1	06/29/09 18:09	S G	5092146
Aniline	ND	5	1	06/29/09 18:09	S G	5092146
Anthracene	ND	5	1	06/29/09 18:09	S G	5092146
Benz(a)anthracene	ND	5	1	06/29/09 18:09	 S_G	5092146
Benzo(a)pyrene	ND	5	1	06/29/09 18:09		5092146
Benzo(b)fluoranthene	ND	5	1	06/29/09 18:09	S_G	5092146
Benzo(g,h,i)perylene	ND	5	1	06/29/09 18:09	S_G	5092146
Benzo(k)fluoranthene	ND	5	1	06/29/09 18:09	S_G	5092146
Benzoic acid	ND	25	1	06/29/09 18:09	S_G	5092146
Benzyl alcohol	ND	5	1	06/29/09 18:09	S_G	5092146
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 18:09	_	5092146
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 18:09		5092146

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



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

Client Sample ID:WMW-2

Collected: 06/24/2009 12:10

SPL Sample ID:

09061339-03

A malura a c/Bl a throad	Dag.:#	QUAL	Par	1 imit	Dil Easter	Data Analyzad	Analyst	Seq. #
Analyses/Method Bis(2-chloroisopropyl)ether	Result ND	QUAL	кер.	Limit 5	1 Dil. Factor	Date Analyzed 06/29/09 18:09		5092146
Bis(2-ethylhexyl)phthalate	ND		5		1	06/29/09 18:09		5092146
Butyl benzyl phthalate	ND ND			5	1	06/29/09 18:09	-	5092146
Carbazole	ND ND			5	<u>'</u> 1	06/29/09 18:09	_=	5092146
Chrysene	ND ND			<u></u> 5	<u>'</u> 1	06/29/09 18:09		5092146
Dibenz(a,h)anthracene	ND			5	<u>'</u> 1	06/29/09 18:09		5092146
Dibenzofuran	ND			5	1	06/29/09 18:09	_	5092146
Diethyl phthalate	ND			5	<u>'</u> 1	06/29/09 18:09		5092146
Dimethyl phthalate	ND ND			5	<u>'</u> 1	06/29/09 18:09	-	5092146
* '	ND			5	1	06/29/09 18:09		5092146
Di-n-butyl phthalate				5		06/29/09 18:09		5092146
Di-n-octyl phthalate	ND			5 5	1			5092146
Fluoranthene	ND ND			5	1	06/29/09 18:09	_=	
Fluorene	ND			5 5	1	06/29/09 18:09		5092146 5092146
Hexachlorobenzene	ND			5 5	1	06/29/09 18:09		
Hexachlorobutadiene	ND				1	06/29/09 18:09		5092146
Hexachlorocyclopentadiene	ND			5	1	06/29/09 18:09	_ _	5092146
Hexachloroethane	ND			5	1	06/29/09 18:09		5092146
Indeno(1,2,3-cd)pyrene	ND			5	1	06/29/09 18:09	- -	5092146
Isophorone	ND			5	11	06/29/09 18:09		5092146
Naphthalene	5.6			5	1	06/29/09 18:09		5092146
Nitrobenzene	ND			5	1	06/29/09 18:09	_	5092146
N-Nitrosodi-n-propylamine	ND			5	1	06/29/09 18:09	S_G	5092146
N-Nitrosodiphenylamine	ND			5	1	06/29/09 18:09		5092146
Pentachlorophenol	ND			25	1	06/29/09 18:09	S_G	5092146
Phenanthrene	ND			5	11	06/29/09 18:09	S_G	5092146
Phenol	41			5	1	06/29/09 18:09	S_G	5092146
Pyrene	ND			5	1	06/29/09 18:09	S_G	5092146
Pyridine	ND			5	1	06/29/09 18:09	S_G	5092146
2-Methylphenol	5.7			5	1	06/29/09 18:09	S_G	5092146
3 & 4-Methylphenol	ND			5	1	06/29/09 18:09	S_G	5092146
Surr: 2,4,6-Tribromophenol	68.7		% 1	0-123	1	06/29/09 18:09	S_G	5092146
Surr: 2-Fluorobiphenyl	64.2		% 2	3-116	1	06/29/09 18:09	S_G	5092146
Surr: 2-Fluorophenol	46.0		% 1	6-110	1	06/29/09 18:09	S_G	5092146
Surr: Nitrobenzene-d5	63.8		% 2	1-114	1	06/29/09 18:09	S_G	5092146
Surr: Phenol-d5	40.1		% 1	0-110	1	06/29/09 18:09	S_G	5092146
Surr: Terphenyl-d14	55.6		% 2:	2-141	1	06/29/09 18:09	S_G	5092146

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Collected: 06/24/2009 12:10 09061339-03 Client Sample ID:WMW-2 SPL Sample ID:

			Site	e: Gall	up, NM					
Analyses/Method	Result	QUAL	Re	p.Limit		Dil. Factor	Date Anal	lyzed	Analyst	Seq.#
TOTAL DISSOLVED SOLIDS					MCL		E160.1	Ur	nits: mg/L	
Total Dissolved Solids (Residue,Filterable)	2770			20		2	06/25/09	15:00	BDG	5085799
VOLATILE ORGANICS BY ME	THOD 8260B				MCL	S	W8260B	Ur	nits: ug/L	
Benzene	9800			250		50	06/30/09	11:54	JC	5093400
Ethylbenzene	50			5	-	1	06/29/09	23:11	JC	5092167
Toluene	300			250		50	06/30/09	11:54	JC	5093400
m,p-Xylene	240			5		1	06/29/09	23:11	JC	5092167
o-Xylene	73			5		1	06/29/09	23:11	JC	5092167
Xylenes,Total	313			5		1	06/29/09	23:11	JC	5092167
Surr: 1,2-Dichloroethane-d4	87.4		%	78-116		50	06/30/09	11:54	JC	5093400
Surr: 1,2-Dichloroethane-d4	72.1 MI	*	%	78-116		1	06/29/09	23:11	JC	5092167
Surr: 4-Bromofluorobenzene	95.6		%	74-125		50	06/30/09	11:54	JC	5093400
Surr: 4-Bromofluorobenzene	98.7		%	74-125		1	06/29/09	23:11	JC	5092167
Surr: Toluene-d8	92.0		%	82-118		50	06/30/09	11:54	JC	5093400
Surr: Toluene-d8	98.3		%	82-118		1	06/29/09	23:11	JC	5092167

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



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

Client Sample ID: Pond 1 (East) Collected: 06/24/2009 8:40 SPL Sample ID: 09061339-04

Cheft Sample ID. For	114 1 (2401)		Conected. 0		0 0.10	SFL Saili	PIC ID . 0000	1000-0-
				lup, NM				
Analyses/Method	Result	QUAL	Rep.Limit		Dil. Factor	Date Analy	zed Analyst	Seq.
ALKALINITY (AS CA	CO3), TOTAL			MCL		E310.1	Units: mg/L	
Alkalinity, Total (As CaC	CO3) 88		2		1	06/30/09	18:00 PAC	509459
BIOCHEMICAL OXY	GEN DEMAND - 5 DAY	YS		MCL	SI	M5210 B	Units: mg/L	
Biochemical Oxygen De	emand 4.4		2		1	06/25/09	14:00 S_H	509261
CHEMICAL OXYGEN	I DEMAND			MCL	SI	M5220 C	Units: mg/L	
Chemical Oxygen Dema			3		1		10:30 PAC	508623
ION CHROMATOGRA	ADHV			MCL		E300.0	Units: mg/L	
Chloride	2270		500	WOL	1000		14:14 BDG	508844
Sulfate	5360		500		1000	06/27/09	14:14 BDG	508844
Nitrogen, Nitrate (As N)	ND		0.5		1	06/25/09 2	22:48 BDG	508858
MERCURY, TOTAL				MCL	C.	W7470A	Units: mg/L	
Mercury	ND		0.0002	WICE	1		14:51 F S	509764
Prep Method	Prep Date	Prep Initials						
SW7470A	07/02/2009 10:15	F_S	1.00					
METALS BY METHO	D 6010B, TOTAL			MCL	S	W6010B	Units: mg/L	
Arsenic	ND		0.005		1	07/04/09 1	17:14 EG	510173
Calcium	849		1		10	07/04/09 1	15:50 EG	510172
Iron	ND		0.02		1	07/04/09 1	17:14 EG	510173
Magnesium	605		1		10	07/04/09	15:50 EG	510172
Selenium	ND		0.01		1	07/04/09	17:14 EG	510173
Sodium	2510		2		20	07/05/09	14:21 EG	510142
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW3010A	06/27/2009 13:30	AB1	1.00					
METAL C DV METUO	D CO20A TOTAL			MCI	C	MCOOOA	Unite mel	
METALS BY METHO Barium	0.0443		0.005	MCL	<u></u>	W6020A	Units: mg/L 1:23 AL H	509829
Cadmium	ND		0.005		1		1:49 AL H	510203
Chromium	0.00521		0.005		1		1:23 AL H	509829
Lead	0.00321 ND		0.005		<u>.</u>		1:23 AL H	509829
Manganese	ND		0.25		50		14:09 S C	510294
Silver	ND		0.005		1		1:23 AL_H	509829
		Ta					-	
Prep Method	Prep Date	Prep Initials						
SW3010A	06/27/2009 13:30	AB1	1.00					
PH				MCL	SM4	500-H B	Units: pH Un	its

Qualifiers:

pН

ND/U - Not Detected at the Reporting Limit

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

10

- * 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)

06/25/09 14:00 PAC

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

1

0.1

5084676



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

Client Sample ID: Pond 1 (East) Collected: 06/24/2009 8:40 SPL Sample ID: 09061339-04

Site: Gallup, NM

Site: Gallup, NM								
Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	r Date Analyzed Ar	nalyst Seq. #			
SEMIVOLATILE ORGANICS B	Y METHOD 8270C		MCL S	W8270C Units:	ug/L			
1,2,4-Trichlorobenzene	ND	5	1	06/29/09 18:52 S_0	5 5092147			
1,2-Dichlorobenzene	ND	5	1	06/29/09 18:52 S_C	5092147			
1,2-Diphenylhydrazine	ND	10	1	06/29/09 18:52 S_0	5092147			
1,3-Dichlorobenzene	ND	5	1	06/29/09 18:52 S_0	5092147			
1,4-Dichlorobenzene	ND	5	1	06/29/09 18:52 S_0	5092147			
2,4,5-Trichlorophenol	ND	10	1	06/29/09 18:52 S_0	5092147			
2,4,6-Trichlorophenol	ND	5	1	06/29/09 18:52 S_0	5092147			
2,4-Dichlorophenol	ND	5	1	06/29/09 18:52 S_0	5092147			
2,4-Dimethylphenol	ND	5	1	06/29/09 18:52 S_0	5092147			
2,4-Dinitrophenol	ND	25	1	06/29/09 18:52 S_0	5092147			
2,4-Dinitrotoluene	ND	5	1	06/29/09 18:52 S_0	5092147			
2,6-Dinitrotoluene	ND	5	1	06/29/09 18:52 S_0	5092147			
2-Chloronaphthalene	ND	5	1	06/29/09 18:52 S_0	5092147			
2-Chlorophenol	ND	5	1	06/29/09 18:52 S_0	5092147			
2-Methylnaphthalene	ND	5	1	06/29/09 18:52 S_0	5092147			
2-Nitroaniline	ND	25	1	06/29/09 18:52 S C	5092147			
2-Nitrophenol	ND	5	1	06/29/09 18:52 S C	5092147			
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 18:52 S_0	5092147			
3-Nitroaniline	ND	25	1	06/29/09 18:52 S_0	5092147			
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 18:52 S_0	5092147			
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 18:52 S C	5092147			
4-Chloro-3-methylphenol	ND	5	1	06/29/09 18:52 S 0	5092147			
4-Chloroaniline	ND	5	1	06/29/09 18:52 S C	5092147			
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 18:52 S C				
4-Nitroaniline	ND	25	1	06/29/09 18:52 S_0	5092147			
4-Nitrophenol	ND	25	1	06/29/09 18:52 S_0				
Acenaphthene	ND	5	1	06/29/09 18:52 S_0				
Acenaphthylene	ND	5	1	06/29/09 18:52 S_0	5092147			
Aniline	ND	5	1	06/29/09 18:52 S_0	5 5092147			
Anthracene	ND	5	1	06/29/09 18:52 S_0	5 5092147			
Benz(a)anthracene	ND	5	1	06/29/09 18:52 S_0	5092147			
Benzo(a)pyrene	ND	5	1	06/29/09 18:52 S_0	5092147			
Benzo(b)fluoranthene	ND	5	1	06/29/09 18:52 S_0	5092147			
Benzo(g,h,i)perylene	ND	5	1	06/29/09 18:52 S_0	5092147			
Benzo(k)fluoranthene	ND	5	1	06/29/09 18:52 S_0	5092147			
Benzoic acid	ND	25	1	06/29/09 18:52 S_0	5092147			
Benzyl alcohol	ND	5	1	06/29/09 18:52 S_0	5092147			
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 18:52 S_0	5092147			
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 18:52 S_0	5092147			

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



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

Client Sample ID: Pond 1 (East) Collected: 06/24/2009 8:40 SPL Sample ID: 09061339-04

		S	ite:	Gallup, NN	1			
Analyses/Method	Result	QUAL	Rep.Lir	nit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND			5	1	06/29/09 18:52	S_G	5092147
Bis(2-ethylhexyl)phthalate	ND			5	1	06/29/09 18:52	S_G	5092147
Butyl benzyl phthalate	ND			5	1	06/29/09 18:52	S_G	5092147
Carbazole	ND			5	1	06/29/09 18:52	S_G	5092147
Chrysene	ND			5	1	06/29/09 18:52	S_G	5092147
Dibenz(a,h)anthracene	ND			5	1	06/29/09 18:52	S_G	5092147
Dibenzofuran	ND			5	1	06/29/09 18:52	S_G	5092147
Diethyl phthalate	ND			5	1	06/29/09 18:52	S_G	5092147
Dimethyl phthalate	ND	-		5	1	06/29/09 18:52	S_G	5092147
Di-n-butyl phthalate	ND			5	1	06/29/09 18:52	S_G	5092147
Di-n-octyl phthalate	ND			5	1	06/29/09 18:52	S_G	5092147
Fluoranthene	ND			5	1	06/29/09 18:52	S_G	5092147
Fluorene	ND		•	5	1	06/29/09 18:52	S_G	5092147
Hexachlorobenzene	ND			5	1	06/29/09 18:52	S_G	5092147
Hexachlorobutadiene	ND			5	1	06/29/09 18:52	S_G	5092147
Hexachlorocyclopentadiene	ND			5	1	06/29/09 18:52	S_G	5092147
Hexachloroethane	ND			5	1	06/29/09 18:52	S_G	5092147
Indeno(1,2,3-cd)pyrene	ND			5	1	06/29/09 18:52	S_G	5092147
Isophorone	ND			5	1	06/29/09 18:52	S_G	5092147
Naphthalene	ND			5	1	06/29/09 18:52	S_G	5092147
Nitrobenzene	ND			5	1	06/29/09 18:52	S_G	5092147
N-Nitrosodi-n-propylamine	ND			5	1	06/29/09 18:52	S_G	5092147
N-Nitrosodiphenylamine	ND			5	1	06/29/09 18:52	S_G	5092147
Pentachlorophenol	ND			25	1	06/29/09 18:52	S_G	5092147
Phenanthrene	ND			5	1	06/29/09 18:52	S_G	5092147
Phenol	ND			5	1	06/29/09 18:52	S_G	5092147
Pyrene	ND			5	1	06/29/09 18:52	S_G	5092147
Pyridine	ND			5	1	06/29/09 18:52	S_G	5092147
2-Methylphenol	ND			5	1	06/29/09 18:52	S_G	5092147
3 & 4-Methylphenol	ND			5	1	06/29/09 18:52	S_G	5092147
Surr: 2,4,6-Tribromophenol	68.1	%	10-1	23	1	06/29/09 18:52	S_G	5092147
Surr: 2-Fluorobiphenyl	66.4	%	23-1	16	1	06/29/09 18:52	S_G	5092147
Surr: 2-Fluorophenol	53.1	%	16-1	10	1	06/29/09 18:52	S_G	5092147
Surr: Nitrobenzene-d5	61.2	%	21-1	14	1	06/29/09 18:52	S_G	5092147
Surr: Phenol-d5	44.0	%	10-1	10	1	06/29/09 18:52	S_G	5092147
Surr: Terphenyl-d14	58.6	%	22-1	41	1	06/29/09 18:52	S_G	5092147
	·		-					

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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



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

Client Sample ID:Pond 1 (East)

Collected: 06/24/2009 8:40

SPL Sample ID:

09061339-04

Site: G	iallup,	NM
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			Sit	e: Gallu	ıp, NM					
Analyses/Method	Result	QUAL	Re	ep.Limit	1	Dil. Facto	or Date Analy	yzed	Analyst	Seq.#
TOTAL COLIFORMS					MCL		M9222 B	Ur	its: colon	ies/100
Coliform, Total	4			1		1	06/25/09	13:30	S_H	5086701
TOTAL DISSOLVED SOLIDS					MCL		E160.1	Ur	its: mg/L	
Total Dissolved Solids (Residue,Filterable)	13000			100		10	06/25/09	15:00	BDG	5085800
VOLATILE ORGANICS BY METI	HOD 8260B	•			MCL		SW8260B	Ur	its: ug/L	
Benzene	ND			5		1	07/01/09	6:37	JC	5094847
Ethylbenzene	ND			5		1	07/01/09	6:37	JC	5094847
Toluene	ND			5		1	07/01/09	6:37	JC	5094847
m,p-Xylene	ND			5		1	07/01/09	6:37	JC	5094847
o-Xylene	ND			5		1	07/01/09	6:37	JC	5094847
Xylenes, Total	ND			5		1	07/01/09	6:37	JC	5094847
Surr: 1,2-Dichloroethane-d4	88.8		%	78-116		1	07/01/09	6:37	JC	5094847
Surr: 4-Bromofluorobenzene	100		%	74-125		1	07/01/09	6:37	JC	5094847
Surr: Toluene-d8	90.2		%	82-118		1	07/01/09	6:37	JC	5094847

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



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

Client Sample ID: Pond 2 (West) Collected: 06/24/2009 9:35 SPL Sample ID: 09061339-05

Client Sample ID.1 of			Collected.	5/2-1/2000	0.00	Or L Sain	pic ib.	
			Site: Gall	up, NM				
Analyses/Method	Result	QUAL	Rep.Limit		il. Factor	Date Analy	yzed Ana	lyst Seq.
ALKALINITY (AS CA	CO3), TOTAL			MCL		E310.1	Units: n	ng/L
Alkalinity, Total (As CaC	O3) 435		2		1	06/30/09	18:00 PAC	50945
BIOCHEMICAL OXYO	SEN DEMAND - 5 DAY	/S		MCL	SM	15210 B	Units: n	ng/L
Biochemical Oxygen De			4		2		14:00 S_H	50926
CHEMICAL OXYGEN	DEMAND			MCL	SN	15220 C	Units: n	na/L
Chemical Oxygen Dema			60		20		10:30 PAC	50862
ION CHROMATOGRA	APHY			MCL		E300.0	Units: n	na/l
Chloride	173000		10000		20000		14:31 BDG	50884
Sulfate	14800		10000		20000		14:31 BDG	50884
Nitrogen, Nitrate (As N)	ND		2500		5000		17:22 BDG	50873
MERCURY, TOTAL				MCL	SV	V7470A	Units: n	na/L
Mercury	ND		0.0002		1		14:53 F S	50976
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW7470A	07/02/2009 10:15	F_S	1.00					
METALS BY METHOI	D 6010B. TOTAL			MCL	SV	V6010B	Units: n	na/L
Arsenic	0.0336		0.005		1	07/04/09		51017
Calcium	440		1		10	07/04/09	15:59 EG	51017
Iron	0.197		0.02		1	07/04/09	17:19 EG	51017
Magnesium	5250		2		20	07/04/09	16:04 EG	51017
Selenium	ND		0.01		1	07/04/09	17:19 EG	51017
Sodium	68000		100		1000	07/05/09	14:42 EG	51014
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW3010A	06/27/2009 13:30	AB1	1.00					
METALS BY METHO	DECOMA TOTAL			MCL	C)	V6020A	Unitorn	
Barium	ND		0.1	IVICL	20		Units: n	1 9/L 51020
Cadmium	ND ND	·	0.1		20		1:54 AL H	51020
Chromium	ND ND		0.25		50		14:14 S_C	51029
Lead	ND		0.1	-	20		1:54 AL H	51020
Manganese	1.2		0.25		50		14:14 S C	51029
Silver	ND		0.1		20		1:54 AL_H	51020
Prep Method	Prop Data	Drop Initials	Pron Ecotor					
SW3010A	Prep Date 06/27/2009 13:30	Prep Initials AB1	Prep Factor 1.00					
	100/21/2000 10:00	J, 40 I	11.00					
PH				MCL		500-H B		H Units
pH	8.1		0.1		1	06/25/09	14:00 PAC	50846

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



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

Client Sample ID: Pond 2 (West)

Collected: 06/24/2009 9:35

SPL Sample ID:

09061339-05

Site:	Gallup,	NM
Site.	Ganup,	14141

Analyses/Method	Result QUA	L Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq.#
SEMIVOLATILE ORGANICS E	SY METHOD 8270C		MCL SV	V8270C Un	its: ug/L	
1,2,4-Trichlorobenzene	ND	5	1	06/29/09 19:34	S_G	5092148
1,2-Dichlorobenzene	ND	5	1	06/29/09 19:34	S_G	5092148
1,2-Diphenylhydrazine	ND	10	1	06/29/09 19:34	S_G	5092148
1,3-Dichlorobenzene	ND	5	1	06/29/09 19:34	S_G	5092148
1,4-Dichlorobenzene	ND	5	1	06/29/09 19:34	S_G	5092148
2,4,5-Trichlorophenol	ND	10	1	06/29/09 19:34	S_G	5092148
2,4,6-Trichlorophenol	ND	5	1	06/29/09 19:34	S_G	5092148
2,4-Dichlorophenol	ND	5	1	06/29/09 19:34	S_G	5092148
2,4-Dimethylphenol	ND	5	1	06/29/09 19:34	S_G	5092148
2,4-Dinitrophenol	ND	25	1	06/29/09 19:34	S_G	5092148
2,4-Dinitrotoluene	ND	5	1	06/29/09 19:34	S_G	5092148
2,6-Dinitrotoluene	ND	5	1	06/29/09 19:34	S_G	5092148
2-Chloronaphthalene	ND	5	1	06/29/09 19:34	S_G	5092148
2-Chlorophenol	ND	5	1	06/29/09 19:34	S_G	5092148
2-Methylnaphthalene	ND	5	1	06/29/09 19:34	S_G	5092148
2-Nitroaniline	ND	25	1	06/29/09 19:34	S_G	5092148
2-Nitrophenol	ND	5	1	06/29/09 19:34	 S_G	5092148
3,3'-Dichlorobenzidine	ND	10	1	06/29/09 19:34	S_G	5092148
3-Nitroaniline	ND	25	1	06/29/09 19:34	S_G	5092148
4,6-Dinitro-2-methylphenol	ND	25	1	06/29/09 19:34	S_G	5092148
4-Bromophenyl phenyl ether	ND	5	1	06/29/09 19:34	 S_G	5092148
4-Chloro-3-methylphenol	ND	5	1	06/29/09 19:34	S_G	5092148
4-Chloroaniline	ND	5	1	06/29/09 19:34	S_G	5092148
4-Chlorophenyl phenyl ether	ND	5	1	06/29/09 19:34	S_G	5092148
4-Nitroaniline	ND	25	1	06/29/09 19:34	 S_G	5092148
4-Nitrophenol	ND	25	1	06/29/09 19:34	S_G	5092148
Acenaphthene	ND	5	1	06/29/09 19:34	S_G	5092148
Acenaphthylene	ND	5	1	06/29/09 19:34	S_G	5092148
Aniline	ND	5	1	06/29/09 19:34	S_G	5092148
Anthracene	ND	5	1	06/29/09 19:34	 S_G	5092148
Benz(a)anthracene	ND	5	1	06/29/09 19:34	 S_G	5092148
Benzo(a)pyrene	ND	5	1	06/29/09 19:34		5092148
Benzo(b)fluoranthene	ND	5	1	06/29/09 19:34	S_G	5092148
Benzo(g,h,i)perylene	ND	5	1	06/29/09 19:34	S_G	5092148
Benzo(k)fluoranthene	ND	5	1	06/29/09 19:34	S_G	5092148
Benzoic acid	ND	25	1	06/29/09 19:34	S_G	5092148
Benzyl alcohol	ND	5	1	06/29/09 19:34	S_G	5092148
Bis(2-chloroethoxy)methane	ND	5	1	06/29/09 19:34	S_G	5092148
Bis(2-chloroethyl)ether	ND	5	1	06/29/09 19:34	S G	5092148

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



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

Client Sample ID: Pond 2 (West) Collected: 06/24/2009 9:35 SPL Sample ID: 09061339-05

		Site:	Gallup, l	NM	- ·		
Analyses/Method	Result	QUAL Rep.	Limit	Dil. Factor	Date Analyzed	Analyst	Seq.#
Bis(2-chloroisopropyl)ether	ND		5	1	06/29/09 19:34	S_G	5092148
Bis(2-ethylhexyl)phthalate	ND		5	1	06/29/09 19:34	S_G	5092148
Butyl benzyl phthalate	ND		5	1	06/29/09 19:34	S_G	5092148
Carbazole	ND		5	1	06/29/09 19:34	S_G	5092148
Chrysene	ND		5	1	06/29/09 19:34	S_G	5092148
Dibenz(a,h)anthracene	ND		5	1	06/29/09 19:34	S_G	5092148
Dibenzofuran	ND		5	1	06/29/09 19:34	S_G	5092148
Diethyl phthalate	ND		5	1	06/29/09 19:34	S_G	5092148
Dimethyl phthalate	ND		5	1	06/29/09 19:34	S_G	5092148
Di-n-butyl phthalate	ND		5	1	06/29/09 19:34	S_G	5092148
Di-n-octyl phthalate	ND		5	1	06/29/09 19:34	S_G	5092148
Fluoranthene	ND		5	1	06/29/09 19:34	S_G	5092148
Fluorene	ND		5	1	06/29/09 19:34	S_G	5092148
Hexachlorobenzene	ND		5	1	06/29/09 19:34	S_G	5092148
Hexachlorobutadiene	ND		5	1	06/29/09 19:34	S_G	5092148
Hexachlorocyclopentadiene	ND		5	1	06/29/09 19:34	S_G	5092148
Hexachloroethane	ND		5	1	06/29/09 19:34	S_G	5092148
Indeno(1,2,3-cd)pyrene	ND		5	1	06/29/09 19:34	S_G	5092148
Isophorone	ND		5	1	06/29/09 19:34	S_G	5092148
Naphthalene	ND		5	1	06/29/09 19:34	S_G	5092148
Nitrobenzene	ND		5	1	06/29/09 19:34	S_G	5092148
N-Nitrosodi-n-propylamine	ND		5	1	06/29/09 19:34	S_G	5092148
N-Nitrosodiphenylamine	ND		5	1	06/29/09 19:34	S_G	5092148
Pentachlorophenol	ND		25	1	06/29/09 19:34	S_G	5092148
Phenanthrene	ND		5	1	06/29/09 19:34	S_G	5092148
Phenol	ND		5	1	06/29/09 19:34	S_G	5092148
Pyrene	ND		5	1	06/29/09 19:34	S_G	5092148
Pyridine	ND		5	1	06/29/09 19:34	S_G	5092148
2-Methylphenol	ND		5	1	06/29/09 19:34	S_G	5092148
3 & 4-Methylphenol	ND		5	1	06/29/09 19:34	S_G	5092148
Surr: 2,4,6-Tribromophenol	60.4	% 10	0-123	1	06/29/09 19:34	S_G	5092148
Surr: 2-Fluorobiphenyl	44.2	% 2:	3-116	1	06/29/09 19:34	S_G	5092148
Surr: 2-Fluorophenol	53.1	% 10	6-110	1	06/29/09 19:34	S_G	5092148
Surr: Nitrobenzene-d5	56.6	% 2	1-114	1	06/29/09 19:34	S_G	5092148
Surr: Phenol-d5	54.9	% 10	0-110	1	06/29/09 19:34	S_G	5092148
Surr: Terphenyl-d14	45.8	% 22	2-141	1	06/29/09 19:34	S_G	5092148

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/26/2009 12:28	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

09061339 Page 22 7/11/2009 7:27:37 AM



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

Client Sample ID: Pond 2 (West) Collected: 06/24/2009 9:35 SPL Sample ID: 09061339-05

Client Sample ID:Polld 2 (West	·)		COI	ected: 00	3/24/200	9 9.33	SPL Sai	npie	D : 0300	1333-03
			Sit	e: Gall	up, NM					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Facto	or Date Ana	lyzed	Analyst	Seq.#
TOTAL COLIFORMS					MCL	-	M9222 B	Uı	nits: colon	ies/100
Coliform, Total	ND			1		1	06/25/09	13:30	S_H	5086703
TOTAL DISSOLVED SOLIDS					MCL		E160.1	Uı	nits: mg/L	-
Total Dissolved Solids (Residue,Filterable)	397000			2000		200	06/30/09	10:30	CFS	5095621
VOLATILE ORGANICS BY ME	THOD 8260B				MCL	5	W8260B	Ui	nits: ug/L	
Benzene	ND			5		1	07/01/0	9 7:57	JC	5094850
Ethylbenzene	ND			5		1	07/01/0	9 7:57	JC	5094850
Toluene	ND			5		1	07/01/0	9 7:57	JC	5094850
m,p-Xylene	ND			5		1	07/01/0	9 7:57	JC	5094850
o-Xylene	ND			5		1	07/01/0	9 7:57	JC	5094850
Xylenes,Total	ND			5		1	07/01/0	9 7:57	JC	5094850
Surr: 1,2-Dichloroethane-d4	95.0		%	78-116		1	07/01/0	9 7:57	JC	5094850
Surr: 4-Bromofluorobenzene	83.8		%	74-125		1	07/01/0	9 7:57	JC	5094850
Surr: Toluene-d8	89.7		%	82-118		1	07/01/0	9 7:57	JC	5094850

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: Duplicate Collected: 06/24/2009 9:30 SPL Sample ID: 09061339-06

Site:	Gallup.	NM
OILE.	Gallub.	14141

Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Facto	or Date Analy	zed	Analyst	Seq.#
VOLATILE ORGANICS BY ME	THOD 8260B				MCL S	SW8260B	Unit	s: ug/L	
Benzene	9700			250	50	06/30/09 1	2:21	JC	5093401
Ethylbenzene	49			5	1	06/30/09	0:32	IC .	5092168
Toluene	290			250	50	06/30/09 1	2:21	IC	5093401
m,p-Xylene	240			5	1	06/30/09	0:32	IC .	5092168
o-Xylene	73			5	1	06/30/09	0:32	IC	5092168
Xylenes,Total	313			5	1	06/30/09	0:32	IC	5092168
Surr: 1,2-Dichloroethane-d4	89.8		%	78-116	50	06/30/09 1	2:21	JC	5093401
Surr: 1,2-Dichloroethane-d4	76 MI	*	%	78-116	1	06/30/09	0:32	JC	5092168
Surr: 4-Bromofluorobenzene	95.9		%	74-125	50	06/30/09 1	2:21	JC	5093401
Surr: 4-Bromofluorobenzene	98.6		%	74-125	1	06/30/09	0:32	IC	5092168
Surr: Toluene-d8	92.7		%	82-118	50	06/30/09 1	2:21	IC	5093401
Surr: Toluene-d8	96.1		%	82-118	1	06/30/09	0:32	JC .	5092168

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: Trip Blank (SPL Prepared) Collected: 06/24/2009 0:00 SPL Sample ID: 09061339-07

		S	ite: Gall	up, NM					
Analyses/Method	Result	QUAL	Rep.Limit	Dil. I	Factor	Date Analy	zed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B			MCL	SV	V8260B	Un	its: ug/L	
Benzene	ND		5		1	07/01/09	7:30	JC	5094848
Ethylbenzene	ND		5		1	07/01/09	7:30	JC	5094848
Toluene	ND		5		1	07/01/09	7:30	JC	5094848
m,p-Xylene	ND		5		1	07/01/09	7:30	JC	5094848
o-Xylene	ND		5		1	07/01/09	7:30	JC	5094848
Xylenes,Total	ND		5		1	07/01/09	7:30	JC	5094848
Surr: 1,2-Dichloroethane-d4	91.4	9,	6 78-116		1	07/01/09	7:30	JC	5094848
Surr: 4-Bromofluorobenzene	95.6	9	6 74-125		1	07/01/09	7:30	JC	5094848
Surr: Toluene-d8	85.6	9	6 82-118		1	07/01/09	7:30	JC	5094848

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Metals by Method 6010B, Total

SW6010B

WorkOrder:

09061339

Lab Batch ID:

91534

Method Blank

ICP2_090704A-5101708 RunID:

Selenium

Units:

mg/L

Lab Sample ID 09061339-01E

Samples in Analytical Batch:

Client Sample ID

Analysis Date:

07/04/2009 14:40

EG

MWR-1

Preparation Date:

06/27/2009 13:30

Analyst: AB1 Method: SW3010A

09061339-02E

WMW-3

Prep By:

09061339-03E

09061339-04E

WMW-2

09061339-05E

Pond 1 (East) Pond 2 (West)

Analyte	Result	Rep Limit
Arsenic	ND	0.005
Calcium	ND	0.1
Iron	ND	0.02
Magnesium	ND	0.1

Laboratory Control Sample (LCS)

0.01

RunID:

ICP2_090704A-5101709

Units:

mg/L

Analysis Date:

07/04/2009 14:44

ND

EG Analyst:

Preparation Date: 06/27/2009 13:30 Prep By:

AB1 Method: SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Arsenic	1.000	1.052	105.2	80	120
Calcium	1.000	1.031	103.1	80	120
Iron	1.000	1.058	105.8	80	120
Magnesium	1.000	1.034	103.4	80	120
Selenium	1.000	1.065	106.5	80	120

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

Sample Spiked:

09061252-02

RunID:

ICP2_090704A-5102070

Units:

mg/L

Analysis Date:

07/04/2009 14:53

Analyst:

Preparation Date: 06/27/2009 13:30 EG

Prep By: AB1 Method: SW3010A

4	Analyte Arsenic	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Ź	Arsenic	0.006600	1	1.070	106.3	1	1.071	106.4	0.09341	20	75	125
	Calcium	29.46	1	29.41	N/C	1	30.20	N/C	N/C	20	75	125
Ž.	Iron	0.2546	1	1.301	104.6	1	1.329	107.4	2.129	20	75	125
Ť,	Magnesium	14.46	1	14.85	N/C	1	15.25	N/C	N/C	20	75	125

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Metals by Method 6010B, Total

SW6010B

WorkOrder:

09061339

Lab Batch ID:

91534

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

Sample Spiked:

09061252-02

RunID:

ICP2_090704A-5102070

Units:

mg/L

Analysis Date: Preparation Date: 07/04/2009 14:53 06/27/2009 13:30 Analyst: EG 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
Selenium		ND	1	1.058	105.8	1	1.068	106.8	0.9407	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



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

Conoco Phillips COP Wingate

Analysis: Method:

RunID:

Metals by Method 6010B, Total

SW6010B

WorkOrder:

Samples in Analytical Batch:

09061339

Lab Batch ID:

91534a

Method Blank

ICP2_090705A-5101411

Units: mg/L Lab Sample ID

Analysis Date:

09061339-01E

Client Sample ID

Preparation Date:

07/05/2009 13:20 06/27/2009 13:30 Analyst: EG

MWR-1

AB1 Method: SW3010A Prep By:

09061339-02E

WMW-3

09061339-03E

WMW-2

09061339-04E

Pond 1 (East)

Sodium

Analyte

Result Rep Limit ND 0.1

09061339-05E

Pond 2 (West)

Laboratory Control Sample (LCS)

RunID:

ICP2_090705A-5101412

Units:

mg/L

Analysis Date: Preparation Date: 07/05/2009 13:25 06/27/2009 13:30 Analyst: EG Prep By:

AB1 Method: SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sodium	1.000	1.023	102.3	80	120

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

Sample Spiked:

09061252-02

RunID:

ICP2_090705A-5101414

Units:

mg/L

Analysis Date:

07/05/2009 13:33

Analyst: EG

Preparation Date:

06/27/2009 13:30

Prep By: AB1 Method: SW3010A

1. Com	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
So	dium	171.8	1	171.9	N/C	1	176.5	N/C	N/C	20	75	125

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

RunID:

Metals by Method 6020A, Total

SW6020A

WorkOrder:

Samples in Analytical Batch:

Lab Batch ID:

09061339

91534A-I

Method Blank

ICPMS2_090706A-5101286

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date:

07/04/2009 5:54

AL_H Analyst:

09061339-01E

MWR-1

Preparation Date:

06/27/2009 13:30

AB1 Method: SW3010A

09061339-02E

Prep By:

WMW-3

09061339-03E 09061339-04E WMW-2

Pond 1 (East)

Analyte Selenium

Result Rep Limit ND 0.005

09061339-05E

Pond 2 (West)

Laboratory Control Sample (LCS)

RunID:

ICPMS2_090706A-5101287 Units:

mg/L

Analysis Date:

07/04/2009 6:00

Analyst: AL_H

Preparation Date:

06/27/2009 13:30

AB1 Method: SW3010A Prep By:

Analyte	Spike Added	- 1		Lower Limit	Upper Limit
Selenium	0.1000	0.1033	103.3	80	120

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

Sample Spiked:

09061252-02

RunID:

ICPMS2_090706A-5101289 Units:

mg/L

Analysis Date:

07/04/2009 6:11

Analyst:

AL_H

Preparation Date:

06/27/2009 13:30

Prep By:

AB1 Method: SW3010A

rro	Analyte elenium	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
s	elenium	ND	0.1	0.09015	89.46	0.1	0.09449	93.80	4.701	20	75	125

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



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

Conoco Phillips **COP Wingate**

Analysis: Method:

RunID:

Metals by Method 6020A, Total

SW6020A

WorkOrder:

Samples in Analytical Batch:

09061339

Lab Batch ID:

91534B-I

Method Blank

ICPMS_090703A-5102020

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date:

07/04/2009 0:46

Analyst: AL H

09061339-01E

MWR-1

Preparation Date:

06/27/2009 13:30

AB1 Method: SW3010A

09061339-02E

Prep By:

WMW-3

09061339-03E

WMW-2

09061339-04E 09061339-05E Pond 1 (East) Pond 2 (West)

Analyte	Result	Rep Limit
Barium	ND	0.005
Cadmium	ND	0.005
Lead	ND	0.005
Silver	ND	0.005

Laboratory Control Sample (LCS)

RunID:

ICPMS_090703A-5102021

Units: mg/L

Analysis Date: Preparation Date: 07/04/2009 0:51 06/27/2009 13:30 Analyst: AL H

Prep By: AB1 Method: SW3010A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Barium	0.1000	0.09731	97.31	80	120
Cadmium	0.1000	0.1007	100.7	80	120
Lead	0.1000	0.09670	96.70	80	120
Silver	0.1000	0.09948	99.48	80	120

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

Sample Spiked:

09061252-02

RunID:

ICPMS_090703A-5102023

Units:

mg/L

Analysis Date:

07/04/2009 1:00

Analyst:

AL_H

Preparation Date:

06/27/2009 13:30

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
Ва	nrium	0.1599	0.1	0.2623	102.4	0.1	0.2545	94.60	3.019	20	75	125
Ca	admium	ND	0.1	0.09934	99.34	0.1	0.09795	97.95	1.409	20	75	125
Le	ad	ND	0.1	0.09947	99.47	0.1	0.09992	99.92	0.4514	20	75	125
Sil	ver	ND	0.1	0.09348	93.48	0.1	0.09237	92.37	1.195	20	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



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

Conoco Phillips **COP Wingate**

Analysis: Method:

RunID:

Metals by Method 6020A, Total

SW6020A

09061339

WorkOrder: Lab Batch ID:

91534C-I

Method Blank

ICPMS_090706A-5102939

Units:

mg/L

Lab Sample ID 09061339-02E

Samples in Analytical Batch:

Client Sample ID

Analysis Date: Preparation Date:

07/06/2009 13:29 06/27/2009 13:30

SC Analyst:

09061339-03E

WMW-3

WMW-2

Prep By: AB1 Method: SW3010A

> 09061339-04E 09061339-05E

Pond 1 (East) Pond 2 (West)

Result	Rep Limit
ND	0.005
ND	0.005
	ND

Laboratory Control Sample (LCS)

RunID:

ICPMS_090706A-5102940

mg/L

Analysis Date:

Preparation Date:

07/06/2009 13:34 06/27/2009 13:30 Analyst: s c

Prep By:

Units:

AB1 Method: SW3010A

Analyte	T		Percent Recovery	Lower Limit	Upper Limit	
Chromium	0.1000	0.1049	104.9	80	120	
Manganese	0.1000	0.1025	102.5	80	120	

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

Sample Spiked:

09061252-02

RunID:

ICPMS_090706A-5102942

Units:

mg/L

Analysis Date:

07/06/2009 13:43

Analyst:

s c

Preparation Date: 06/27/2009 13:30 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
Chromium	ND	0.1	0.1045	104.5	0.1	0.1016	101.6	2.814	20	75	125
Manganese	0.6248	0.1	0.7723	N/C	0.1	0.7078	N/C	N/C	20	75	125

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



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

Conoco Phillips COP Wingate

Analysis: Method:

RunID:

Metals by Method 6020A, Total

SW6020A

WorkOrder:

09061339

Lab Batch ID:

91534-I

Method Blank

ICPMS2_090702A-5098284

Units: mq/L

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date: Preparation Date:

07/03/2009 0:09 06/27/2009 13:30 Analyst: AL H

Prep By:

09061339-01E

MWR-1

AB1 Method: SW3010A

09061339-02E

WMW-3

09061339-03E

WMW-2

09061339-04E

Pond 1 (East)

Analyte	Result	Rep Limit
Arsenic	ND	0.005
Barium	ND	0.005
Chromium	ND	0.005
Lead	ND	0.005
Manganese	ND	0.005
Silver	ND	0.005

Laboratory Control Sample (LCS)

RunID:

ICPMS2_090702A-5098285 Units:

mg/L

AL_H

Analysis Date:

Preparation Date:

07/03/2009 0:15 06/27/2009 13:30 Analyst:

Prep By: AB1 Method: SW3010A

Analyte	Analyte Spike Resu Added		Percent Recovery	Lower Limit	Upper Limit
Arsenic	0.1000	0.1161	116.1	80	120
Barium	0.1000	0.1144	114.4	80	120
Chromium	0.1000	0.1101	110.1	80	120
Lead	0.1000	0.1047	104.7	80	120
Manganese	0.1000	0.1033	103.3	80	120
Silver	0.1000	0.1087	108.7	80	120

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

Sample Spiked:

09061252-02

RunID:

ICPMS2_090702A-5098287 Units:

mg/L

Analysis Date:

07/03/2009 0:26

Analyst: AL_H

Preparation Date: 06/27/2009 13:30

AB1 Method: SW3010A Prep By:

6 P	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Ĝ#	Arsenic	0.006536	0.1	0.1279	121.4	0.1	0.1255	119.0	1.894	20	75	125
	Barium	0.1778	0.1	0.2959	118.1	0.1	0.2902	112.4	1.945	20	75	125

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Metals by Method 6020A, Total

SW6020A

WorkOrder:

09061339

Lab Batch ID:

91534-I

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

Sample Spiked:

09061252-02

RunID:

ICPMS2_090702A-5098287 Units:

mg/L

Analysis Date:

07/03/2009 0:26

AL H Analyst:

Preparation Date: 06/27/2009 13:30

Prep By: AB1 Method: SW3010A

1											
Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chromium	ND	0.1	0.1168	116.8	0.1	0.1125	112.5	3.751	20	75	125
Lead	ND		0.1064		0.1	0.1072	107.2	0.7491	20	75	125
Manganese	0.7026	0.1	0.8438	N/C	0.1	0.8258	N/C	N/C	20	75	125
Silver	ND	0.1	0.1044	104.4	0.1	0.1055	105.5	1.048	20	75	125

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

09061339 Page 34

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.



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

Conoco Phillips COP Wingate

Analysis: Method:

Mercury, Total SW7470A

WorkOrder:

Samples in Analytical Batch:

09061339

Lab Batch ID:

91688

Method Blank

HGLC_090702A-5097031 RunID:

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date:

07/02/2009 14:01

09061339-01E

MWR-1

Preparation Date:

07/02/2009 10:15

Analyst: F S

WMW-3

Prep By: F_S Method: SW7470A 09061339-02E

09061339-03E 09061339-04E WMW-2

Analyte

Result Rep Limit

09061339-05E

Pond 1 (East) Pond 2 (West)

ND 0.0002 Mercury

Laboratory Control Sample (LCS)

RunID:

HGLC_090702A-5097032

Units: mg/L

Analysis Date:

Preparation Date:

07/02/2009 14:04 07/02/2009 10:15

F_S Analyst:

Prep By: F_S Method: SW7470A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.001976	98.79	80	120

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

Sample Spiked:

09061252-03

RunID:

HGLC 090702A-5097034

Units:

mg/L

Analysis Date: Preparation Date: 07/02/2009 14:10 07/02/2009 10:15 Analyst: F S

Prep By: F_S Method: SW7470A

	Analyte lercury	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Ν	lercury	ND	0.002	0.001891	94.54	0.002	0.001916	95.80	1.319	20	75	125

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



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

Conoco Phillips COP Wingate

Analysis:

Semivolatile Organics by Method 8270C

Method: SW8270C

WorkOrder:

09061339

Lab Batch ID:

91487

Method Blank

RunID: J_0906 Analysis Date:

Preparation Date:

J_090629B-5090857

06/29/2009 11:44

Units: ug/L

Analyst: S_G

06/26/2009 12:28

Prep By:

r: N_M Method: SW3510C

Lab Sample ID	Client Sample ID
09061339-01D	MWR-1
09061339-02D	WMW-3
09061339-03D	WMW-2
09061339-04D	Pond 1 (East)
09061339-05D	Pond 2 (West)

Analyte	Result	Rep Limit
1,2,4-Trichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Diphenylhydrazine	ND	10
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,4,5-Trichlorophenol	ND	10
2,4,6-Trichlorophenol	ND	5.0
2,4-Dichlorophenol	ND	5.0
2,4-Dimethylphenol	ND	5.0
2,4-Dinitrophenol	ND	25
2,4-Dinitrotoluene	ND	5.0
2,6-Dinitrotoluene	ND.	5.0
2-Chloronaphthalene	ND	5.0
2-Chlorophenol	ND	5.0
2-Methylnaphthalene	ND	5.0
2-Nitroaniline	ND	25
2-Nitrophenol	ND	5.0
3,3'-Dichlorobenzidine	ND	10
3-Nitroaniline	ND	25
4,6-Dinitro-2-methylphenol	ND	25
4-Bromophenyl phenyl ether	ND	5.0
4-Chloro-3-methylphenol	ND	5.0
4-Chloroaniline	ND	5.0
4-Chlorophenyl phenyl ether	ND	5.0
4-Nitroaniline	ND	25
4-Nitrophenol	ND	25
Acenaphthene	ND	5.0
Acenaphthylene	ND	5.0
Aniline	ND	5.0
Anthracene	ND	5.0
Benz(a)anthracene	ND	5.0
Benzo(a)pyrene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(g,h,i)perylene	ND ND	5.0
Benzo(k)fluoranthene	ND.	5.0
Benzoic acid	ND.	25
Benzyl alcohol	ND.	5.0
Bis(2-chloroethoxy)methane	ND ND	5.0
Bis(2-chloroethyl)ether	ND.	5.0
Bis(2-chloroisopropyl)ether	ND ND	5.0
Bis(2-ethylhexyl)phthalate	ND ND	5.0
Butyl benzyl phthalate	ND ND	5.0
Carbazole	ND.	5.0
Chrysene	ND ND	5.0
Dibenz(a,h)anthracene	ND.	5.0
Dibenzofuran	ND	5.0

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

09061339 Page 36

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.

7/11/2009 7:27:40 AM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips COP Wingate

Analysis: Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061339

Lab Batch ID:

91487

Method Blank

J 090629B-5090857 RunID:

Units: ug/L

Analysis Date: Preparation Date: 06/29/2009 11:44 06/26/2009 12:28 Analyst: SG

N_M Method: SW3510C Prep By:

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	75.3	10-123
Surr: 2-Fluorobiphenyl	78.0	23-116
Surr: 2-Fluorophenol	67.9	16-110
Surr: Nitrobenzene-d5	69.2	21-114
Surr: Phenol-d5	69.2	10-110
Surr: Terphenyl-d14	75.0	22-141

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units:

ug/L

Analysis Date:

06/29/2009 10:15

Analyst: S_G

Preparation Date:

06/26/2009 12:28

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	21.3	85.2	25.0	20.6	82.4	3.3	39	21	120
1,2-Dichlorobenzene	25.0	20.2	80.8	25.0	20.4	81.6	1.0	50	20	150

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

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



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

Conoco Phillips COP Wingate

Analysis:

Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061339

Lab Batch ID: 91487

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units:

Analysis Date:

06/29/2009 10:15

ug/L Analyst: S_G

N_M Method: SW3510C Preparation Date: 06/26/2009 12:28 Prep By:

B	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	20.9	83.6	25.0	20.7	82.8	1.0	50	10	251
蘿	1,3-Dichlorobenzene	25.0	19.7	78.8	25.0	19.5	78.0	1.0	50	20	150
	1,3-Dichlorobenzene 1,4-Dichlorobenzene	25.0	20.0	80.0	25.0	19.7	78.8	1.5	45	20	150
	2,4,5-Trichlorophenol	25.0	21.5	86.0	25.0	22.2	88.8	3.2	50	30	150
a	2,4,6-Trichlorophenol	25.0	21.1	84.4	25.0	21.1	84.4	0.0	50	30	150
100	2,4-Dichlorophenol	25.0	21.8	87.2	25.0	21.4	85.6	1.9	50	30	150
	2,4-Dimethylphenol	25.0	21.0	84.0	25.0	20.9	83.6	0.5	50	32	140
,Re.	2,4-Dinitrophenol	25.0	23.3	93.2	25.0	22.5	90.0	3.5	50	10	160
是	2,4-Dinitrotoluene	25.0	23.7	94.8	25.0	24.0	96.0	1.3	50	30	150
	2,6-Dinitrotoluene	25.0	22.2	88.8	25.0	22.7	90.8	2.2	50	30	150
	2-Chloronaphthalene	25.0	20.7	82.8	25.0	21.2	84.8	2.4	50	30	150
	2-Chlorophenol 2-Methylnaphthalene	25.0	20.5	82.0	25.0	20.6	82.4	0.5	40	23	134
ŧ,	2-Methylnaphthalene	25.0	20.8	83.2	25.0	20.4	81.6	1.9	50	20	170
	2-Nitroaniline	25.0	20.2	80.8	25.0	20.9	83.6	3.4	50	20	160
, Sec	2-Nitrophenol	25.0	20.5	82.0	25.0	20.9	83.6	1.9	50	29	182
	3,3'-Dichlorobenzidine	25.0	19.2	76.8	25.0	19.4	77.6	1.0	50	30	200
	3-Nitroaniline	25.0	20.0	80.0	25.0	20.6	82.4	3.0	50	20	160
.	4,6-Dinitro-2-methylphenol	25.0	20.6	82.4	25.0	20.4	81.6	1.0	50	10	160
	4-Bromophenyl phenyl ether	25.0	21.5	86.0	25.0	21.3	85.2	0.9	50	30	
	4-Chloro-3-methylphenol	25.0	20.6	82.4	25.0	20.6	82.4	0.0	42	25	
	4-Chloroaniline	25.0	21.4	85.6	25.0	21.1	84.4	1.4	50	20	160
4	4-Chlorophenyl phenyl ether	25.0	21.8	87.2	25.0	21.2	84.8	2.8	50	25	
ı î	4-Nitroaniline	25.0	22.1	88.4	25.0	23.2	92.8	4.9	50	20	
	4-Nitrophenol	25.0	19.6	78.4	25.0	20.6	82.4	5.0	50	10	
iji i	Acenaphthene	25.0	21.0	84.0	25.0	21.7	86.8	3.3	31	30	
糖	Acenaphthylene	25.0	21.9	87.6	25.0	22.3	89.2	1.8	50	33	
	Aniline	50.0	37.8	75.6	50.0	38.4	76.8	1.6	50		
1.89	Anthracene	25.0	21.7	86.8	25.0	22.2	88.8	2.3	50		133
がない	Benz(a)anthracene	25.0	22.6	90.4	25.0	22.5	90.0	0.4	50	33	
1,14	Benzo(a)pyrene	25.0	20.8	83.2	25.0	21.0	84.0	1.0	50	17	163
	Benzo(b)fluoranthene	25.0	22.1	88.4	25.0	22.1	88.4	0.0	50	24	
Į.	Benzo(g,h,i)perylene Benzo(k)fluoranthene	25.0	22.5	90.0	25.0	22.5	90.0	0.0	50	30	
	Benzo(k)fluoranthene	25.0	23.0	92.0	25.0	23.1	92.4	0.4	50	11	162

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

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 than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

09061339 Page 38

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.



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

Conoco Phillips COP Wingate

Analysis: Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder:

09061339 91487

Lab Batch ID:

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J 090629B-5090852

Units:

Analysis Date:

06/29/2009 10:15

Analyst: SG

ug/L

Preparation Date:

06/26/2009 12:28

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	4.22	16.9	25.0	4.70	18.8	10.8	50	10	400
e Ç	Benzyl alcohol	25.0	19.9	79.6	25.0	20.4	81.6	2.5	50	30	160
(C)	Benzyl alcohol Bis(2-chloroethoxy)methane	25.0	20.4	81.6	25.0	20.0	80.0	2.0	50	33	184
	Bis(2-chloroethyl)ether	25.0	20.3	81.2	25.0	20.2	80.8	0.5	50	12	158
1.6	Bis(2-chloroisopropyl)ether	25.0	19.7	78.8	25.0	19.2	76.8	2.6	50	20	160
1	Bis(2-ethylhexyl)phthalate	25.0	22.8	91.2	25.0	20.7	82.8	9.7	50	10	158
, e	Butyl benzyl phthalate	25.0	23.5	94.0	25.0	22.2	88.8	5.7	50	30	160
	Carbazole	25.0	21.5	86.0	25.0	22.3	89.2	3.7	50	30	150
	Chrysene	25.0	22.0	88.0	25.0	21.8	87.2	0.9	50	17	168
	Dibenz(a,h)anthracene	25.0	22.5	90.0	25.0	22.9	91.6	1.8	50	30	160
	Dibenzofuran	25.0	21.6	86.4	25.0	22.1	88.4	2.3	50	30	150
j. Ja	Diethyl phthalate	25.0	22.3	89.2	25.0	21.7	86.8	2.7	50	30	160
9	Dimethyl phthalate	25.0	22.0	88.0	25.0	21.8	87.2	0.9	50	30	160
	Di-n-butyl phthalate	25.0	23.4	93.6	25.0	21.9	87.6	6.6	50	30	160
经	Di-n-octyl phthalate	25.0	22.9	91.6	25.0	21.1	84.4	8.2	50	20	150
	Fluoranthene	25.0	22.9	91.6	25.0	23.2	92.8	1.3	50	26	137
	Fluorene	25.0	21.7	86.8	25.0	21.8	87.2	0.5	50	30	150
	Hexachlorobenzene	25.0	20.8	83.2	25.0	20.8	83.2	0.0	50	20	150
8	Hexachlorobutadiene Hexachlorocyclopentadiene	25.0	20.4	81.6	25.0	19.9	79.6	2.5	50	20	140
3.	Hexachlorocyclopentadiene	25.0	19.9	79.6	25.0	19.3	77.2	3.1	50	10	150
	Hexachloroethane	25.0	19.6	78.4	25.0	19.5	78.0	0.5	50	14	120
	Indeno(1,2,3-cd)pyrene	25.0	24.7	98.8	25.0	25.0	100	1.2	50	30	160
	Isophorone	25.0	22.8	91.2	25.0	22.4	89.6	1.8	50	21	196
	Naphthalene	25.0	21.2	84.8	25.0	21.0	84.0	0.9	L		133
È,	Nitrobenzene	25.0	20.1	80.4	25.0	19.8	79.2	1.5			
1	N-Nitrosodi-n-propylamine	25.0	20.8	83.2	25.0	20.5	82.0	1.5	38	30	160
24.1	N-Nitrosodiphenylamine	50.0	50.6	101	50.0	50.9	102	0.6			
¥5	Pentachlorophenol	25.0	20.5	82.0	25.0	20.2	80.8	1.5	50		176
. 단독	Phenanthrene	25.0	21.8	87.2	25.0	21.8	87.2	0.0	50		
	Phenol	25.0	21.5	86.0	25.0	21.9	87.6	1.8	42		132
	Pyrene	25.0	21.5	86.0	25.0	21.3	85.2	0.9			
à	Pyridine 2-Methylphenol	50.0	32.9	65.8	50.0	33.3	66.6	1.2			
1	2-Methylphenol	25.0	20.8	83.2	25.0	20.9	83.6	0.5	50	30	160

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

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 than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

09061339 Page 39

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.

7/11/2009 7:27:41 AM



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

Conoco Phillips COP Wingate

Analysis:

Method:

Semivolatile Organics by Method 8270C

SW8270C

WorkOrder: Lab Batch ID: 09061339

91487

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

J_090629B-5090852

Units:

ug/L

Analysis Date:

06/29/2009 10:15

Analyst: S_G

Preparation Date:

06/26/2009 12:28

Prep Bv: 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
3 & 4-Methylphenol	25.0	21.2	84.8	25.0	21.7	86.8	2.3	50	10	160
Surr: 2,4,6-Tribromophenol	75.0	67.8	90.4	75.0	68.9	91.9	1.6	30	10	123
Surr: 2-Fluorobiphenyl	50.0	41.1	82.2	50.0	42.2	84.4	2.6	30	23	116
Surr: 2-Fluorophenol	75.0	59.1	78.8	75.0	59.3	79.1	0.3	30	16	110
Surr: Nitrobenzene-d5	50.0	38.9	77.8	50.0	39.3	78.6	1.0	30	21	114
Surr: Phenol-d5	75.0	60.7	80.9	75.0	61.8	82.4	1.8	30	10	110
Surr: Terphenyl-d14	50.0	42.5	85.0	50.0	41.2	82.4	3.1	30	22	141

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

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



06/29/2009 18:41

HOUSTON LABORATORY

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

Conoco Phillips COP Wingate

Analysis:

Volatile Organics by Method 8260B

SW8260B Method:

WorkOrder:

09061339

Lab Batch ID:

R276914

Method Blank

RunID:

Analysis Date:

Q_090629A-5092157

Units: Analyst: ug/L JC

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061339-01A

MWR-1

09061339-02A 09061339-03A WMW-3 WMW-2

09061339-06A

Duplicate

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	91.5	78-116
Surr: 4-Bromofluorobenzene	95.9	74-125
Surr: Toluene-d8	94.7	82-118

Laboratory Control Sample (LCS)

RunID:

Q_090629A-5092156

Units:

ug/L JC

Analysis Date:

06/29/2009 18:13

Analyst:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	19.1	95.5	74	123
Ethylbenzene	20.0	22.0	110	72	127
Toluene	20.0	19.7	98.7	74	126
m,p-Xylene	40.0	45.7	114	71	129
o-Xylene	20.0	22.7	113	74	130
Xylenes,Total	60.0	68.4	114	71	130
Surr: 1,2-Dichloroethane-d4	50.0	45.1	90.2	78	116
Surr: 4-Bromofluorobenzene	50.0	51.4	103	74	125
Surr: Toluene-d8	50.0	49	98.0	82	118

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

Sample Spiked:

09061336-01

RunID:

Q_090629A-5092159

Units:

ug/L JC

Analysis Date:

06/29/2009 19:35

Analyst:

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

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

09061339 Page 41

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.



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

Conoco Phillips COP Wingate

Analysis: Volatile Organics by Method 8260B WorkOrder: 09061339

Method: SW8260B Lab Batch ID: R276914

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	1000	830	83.0	1000	843	84.3	1.51	22	70	124
Ethylbenzene	ND	1000	949	94.9	1000	964	96.4	1.54	20	76	122
Toluene	ND	1000	857	85.7	1000	881	88.1	2.68	24	80	117
m,p-Xylene	ND	2000	2000	100	2000	1980	99.0	1.09	20	69	127
o-Xylene	ND	1000	1010	101	1000	1030	103	1.33	20	84	114
Xylenes,Total	ND	3000	3010	100	3000	3010	100	0.273	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	2500	2110	84.6	2500	2270	90.8	7.12	30	78	116
Surr: 4-Bromofluorobenzene	ND	2500	2530	101	2500	2560	103	1.30	30	74	125
Surr: Toluene-d8	ND	2500	2360	94.4	2500	2350	94.1	0.232	30	82	118

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Volatile Organics by Method 8260B

SW8260B

06/30/2009 11:26

WorkOrder: Lab Batch ID: 09061339

R277035

Method Blank

RunID: Q 090630A-5093399 Units: Analyst: ug/L JC

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061339-03A

WMW-2

09061339-06A

Duplicate

Analyte	Result	Rep Limit
Benzene	ND	5.0
Toluene	ND	5.0
Surr: 1,2-Dichloroethane-d4	95.9	78-116
Surr: 4-Bromofluorobenzene	96.6	74-125
Surr: Toluene-d8	92.2	82-118

Laboratory Control Sample (LCS)

RunID:

Q 090630A-5093398

Units:

ug/L

Analysis Date:

06/30/2009 10:59

Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit	
Benzene	20.0	19.0	94.8	74	123	
Toluene	20.0	20.0	100	74	126	
Surr: 1,2-Dichloroethane-d4	50.0	45.8	91.5	78	116	
Surr: 4-Bromofluorobenzene	50.0	52	104	74	125	
Surr: Toluene-d8	50.0	48.6	97.2	82	118	

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

Sample Spiked:

Analysis Date:

09061339-06

RunID:

Q_090630A-5093402 06/30/2009 12:48

Units: Analyst: ug/L JC

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	9650	1000	10800	N/C	1000	10800	N/C	N/C	22	70	124
Toluene	288	1000	1280	99.4	1000	1310	102	1.90	24	80	117
Surr: 1,2-Dichloroethane-d4	ND	2500	2110	84.3	2500	2120	84.7	0.415	30	78	116
Surr: 4-Bromofluorobenzene	ND	2500	2510	100	2500	2510	100	0.278	30	74	125

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

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



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips COP Wingate

Analysis: Method: Volatile Organics by Method 8260B

SW8260B

OP wingate

WorkOrder:

09061339

Lab Batch ID:

R277035

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

Sample Spiked:

09061339-06

RunID:

Q_090630A-5093402

Units:

ug/L

Analysis Date:

06/30/2009 12:48

Analyst:

JÇ

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Surr: Toluene-d8	ND	2500	2290	91.6	2500		92.3	0.757		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

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

09061339 Page 44

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.



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

Conoco Phillips COP Wingate

Analysis:

Volatile Organics by Method 8260B

Method:

Analysis Date:

SW8260B

07/01/2009 4:48

Or winguto

WorkOrder:

09061339

Lab Batch ID:

R277121

Method Blank

Units:

Analyst:

RunID: Q_090701A-5094845

ug/L JC

Lab Sample ID

Client Sample ID

09061339-04A

Pond 1 (East)

09061339-05A

Samples in Analytical Batch:

Pond 2 (West)

09061339-07A

Trip Blank (SPL Prepared)

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	89.5	78-116
Surr: 4-Bromofluorobenzene	95.0	74-125
Surr: Toluene-d8	90.7	82-118

Laboratory Control Sample (LCS)

RunID:

Q_090701A-5094842

Units:

ug/L

Analysis Date:

07/01/2009 4:21

Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	20.7	104	74	123
Ethylbenzene	20.0	21.6	108	72	127
Toluene	20.0	19.3	96.7	74	126
m,p-Xylene	40.0	45.3	113	71	129
o-Xylene	20.0	23.8	119	74	130
Xylenes,Total	60.0	69.1	115	71	130
Surr: 1,2-Dichloroethane-d4	50.0	45.1	90.3	78	116
Surr: 4-Bromofluorobenzene	50.0	49.7	99.4	74	125
Surr: Toluene-d8	50.0	44.7	89.5	82	118

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

Sample Spiked:

09061467-01

RunID:

Q_090701A-5094855

Units:

ug/L

Analysis Date:

07/01/2009 10:12

Analyst:

t: JC

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

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



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

Conoco Phillips COP Wingate

Analysis: Volatile Organics by Method 8260B

WorkOrder:

09061339

SW8260B

Method:

Lab Batch ID:

R277121

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	20.3	102	2.98	22	70	124
Ethylbenzene	ND	20	22.1	110	20	21.2	106	4.03	20	76	122
Toluene	ND	20	19.9	99.4	20	19.1	95.4	4.02	24	80	117
m,p-Xylene	ND	40	44.8	112	40	43.3	108	3.57	20	69	127
o-Xylene	ND	20	22.6	113	20	22.5	112	0.700	20	84	114
Xylenes,Total	ND	60	67.4	112	60	65.8	110	2.60	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	50	42.8	85.7	50	42.6	85.2	0.564	30	78	116
Surr: 4-Bromofluorobenzene	ND	50	48.1	96.2	50	49.3	98.6	2.45	30	74	125
Surr: Toluene-d8	ND	50	45.7	91.3	50	45.2	90.4	0.957	30	82	118

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

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

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

TNTC - Too numerous to count

09061339 Page 46

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.

7/11/2009 7:27:41 AM



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

Conoco Phillips COP Wingate

Analysis: Method: μН

SM4500-H B

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WorkOrder:

09061339

Lab Batch ID:

R276491

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09061339-01C	MWR-1
09061339-02C	WMW-3
09061339-03C	WMW-2
09061339-04C	Pond 1 (East)
09061339-05C	Pond 2 (West)

Laboratory Control Sample (LCS)

RunID:

Analysis Date:

WET_090625I-5084667

06/25/2009 14:00

Units:

ts: pH Units

Analyst: I

PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
pH	7.000	7.030	100.4	98	102

Sample Duplicate

Original Sample: RunID: 09061344-01

WET_090625I-5084680

Units:

pH Units

Analysis Date:

06/25/2009 14:00

Analyst: F

PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
pH	7.72	7.7	0.259	5

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Total Dissolved Solids

E160.1

Or wingate

WorkOrder:

09061339

Lab Batch ID:

R276566

Method Blank

RunID: WET_090625ZA-5085789

Units:

mg/L BDG

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

06/25/2009 15:00

Analyst:

09061339-01B 09061339-03B MWR-1

09001339-03

WMW-2

09061339-04B

Pond 1 (East)

Analyte	Result	Rep Limit
Total Dissolved Solids (Residue, Filterable)	ND	10

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

WET_090625ZA-5085791

Units:

mg/L

Analysis Date:

06/25/2009 15:00

Analyst:

BDG

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Total Dissolved Solids (Residue,Filterabl	200.0	202.0	101.0	200.0	199.0	99.50	1.5	10	95	107

Sample Duplicate

Original Sample:

09061252-04

RunID:

WET_090625ZA-5085796

Units:

mg/L

Analysis Date:

06/25/2009 15:00

Analyst:

BDG

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Total Dissolved Solids (Residue, Filterabl	1030	1033	0.583	10

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

Chemical Oxygen Demand

SM5220 C

WorkOrder:

09061339

Lab Batch ID:

R276598

Method Blank

RunID: WET_090626F-5086221

Analyte

Units:

mg/L

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date: 06/26/2009 10:30 Analyst:

PAC

09061339-01G

MWR-1

09061339-05G

Pond 2 (West)

Analyte	Result	Rep Limit
Chemical Oxygen Demand	ND	3.0

Laboratory Control Sample (LCS)

RunID:

WET_090626F-5086223

Units:

mg/L

Analysis Date:

06/26/2009 10:30

Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chemical Oxygen Demand	104.0	100.0	96.15	85	115

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

Sample Spiked:

09061399-01

MS

RunID:

WET 090626F-5086228

MS

Units:

mg/L

Analysis Date:

Sample

06/26/2009 10:30

PAC Analyst:

MS % MSD MSD MSD % RPD RPD Low High Spike Result Recovery Limit Limit Limit

Result Spike Result Recovery Added Added Chemical Oxygen Demand 35.00 50 87.50 105.0 87.50 105.0 0 10 80 120

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

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

09061339 Page 49

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.



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

Conoco Phillips COP Wingate

Analysis:

Chemical Oxygen Demand

SM5220 C Method:

WorkOrder:

Samples in Analytical Batch:

09061339

Lab Batch ID:

R276598A

Method Blank

WET 090626F-5086221 RunID:

Units:

mg/L

Lab Sample ID

Client Sample ID

Analysis Date:

06/26/2009 10:30 Analyst: PAC

09061339-04G

Pond 1 (East)

Analyte	Result	Rep Limit
Chemical Oxygen Demand	ND	3.0

Laboratory Control Sample (LCS)

RunID:

WET_090626F-5086223

Units:

Analysis Date:

06/26/2009 10:30

PAC Analyst:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chemical Oxygen Demand	104.0	100.0	96.15	85	115

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

Sample Spiked:

09061339-04

RunID: Analysis Date: WET_090626F-5086237

06/26/2009 10:30

Units: Analyst: mg/L PAC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chemical Oxygen Demand	67.50	50	112.5	90.00	50	112.5	90.00	0	10	80	120

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

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



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

Conoco Phillips COP Wingate

Analysis: Method:

RunID:

Analysis Date:

Total Coliforms

06/25/2009 13:30

M9222 B

Or Winguit

WorkOrder:

09061339

Lab Batch ID:

R276619

Method Blank

WET_090625ZC-5086699

Units: Analyst: colonies/100mL

S_H

Lab Sample ID 09061339-01H

Samples in Analytical Batch:

Client Sample ID

09001339-0

MWR-1

09061339-04H

Pond 1 (East)

09061339-05H

Pond 2 (West)

Analyte	Result	Rep Limit
Coliform, Total	ND	1.0

Sample Duplicate

Original Sample:

09061339-04

RunID:

WET_090625ZC-5086701

Units:

colonies/100mL

Analysis Date:

06/25/2009 13:30

Analyst:

S_H

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Coliform, Total	4	2	67 *	48

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

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

09061339 Page 51

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.



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

Conoco Phillips COP Wingate

Analysis:

Ion Chromatography

Method:

E300.0

WorkOrder:

09061339

Lab Batch ID:

R276662

Method Blank

IC2_090626C-5087304 RunID:

Units:

mg/L BDG

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

Analysis Date:

06/26/2009 16:05

Analyst:

09061339-05C

Pond 2 (West)

Analyte	Result	Rep Limit
Nitrogen Nitrate (As N)	ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC2_090626C-5087305

Units:

Analyst:

Analysis Date:

06/26/2009 16:24

BDG

mg/L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	10.00	9.450	94.50	90	110

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

Sample Spiked:

RunID:

09061274-01

IC2_090626C-5087312

Units:

mg/L

Analysis Date:

06/26/2009 22:37

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	10	9.126	91.26	10	9.114	91.14	0.1316	20	80	120

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

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

09061339 Page 52

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.



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Ion Chromatography

06/27/2009 12:01

E300.0

WorkOrder:

09061339

Lab Batch ID:

R276737

Method Blank

RunID:

IC1_090627A-5088433

Units: Analyst:

mg/L **BDG**

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061339-01C 09061339-02C MWR-1 WMW-3

09061339-03C

WMW-2

09061339-04C

Pond 1 (East)

09061339-05C

Pond 2 (West)

	Analyte	Result	Rep Limit
Chloride		ND	0.50
Sulfate		ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC1_090627A-5088434

Units:

mg/L

Analysis Date:

06/27/2009 12:17

Analyst: **BDG**

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	10.00	9.125	91.25	85	115
Sulfate	10.00	10.44	104.4	85	115

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

Sample Spiked:

09061415-14

RunID:

IC1_090627A-5088463

Units:

mg/L

Analysis Date:

06/27/2009 20:37

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	25.40	500	470.0	88.92	500	471.1	89.15	0.2376	20	80	120
Sulfate	105.1	500	615.7	102.1	500	616.0	102.2	0.05018	20	80	120

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

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



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

Conoco Phillips COP Wingate

Analysis:

Analysis Date:

Ion Chromatography

06/25/2009 12:11

E300.0 Method:

WorkOrder:

09061339

Lab Batch ID:

R276740

Method Blank

IC2 090625A-5088555 RunID:

Units:

Analyst:

mg/L **BDG**

Lab Sample ID 09061339-01C

Samples in Analytical Batch:

Client Sample ID

09061339-02C

MWR-1 WMW-3

09061339-03C

WMW-2

09061339-04C

Pond 1 (East)

Analyte	Result	Rep Limit
Nitrogen, Nitrate (As N)	ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC2_090625A-5088556

Units:

mg/L

Analysis Date:

06/25/2009 12:31

Analyst: BDG

Spike Result Percent Lower

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	10.00	10.09	100.9	90	110

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

Sample Spiked:

09061338-01

RunID:

IC2_090625A-5088591

Units:

mg/L

Analysis Date:

06/26/2009 2:01

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)	4.915	10	12.06	71.41 *	10	12.25	73.32 *	1.568	20	80	120

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

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

09061339 Page 54

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.



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Ion Chromatography

06/29/2009 11:24

E300.0

WorkOrder:

09061339

Lab Batch ID:

R276983A

Method Blank

RunID: IC1 090629A-5092295 Units: Analyst:

mg/L BDG

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

09061339-03C

WMW-2

Analyte	Result	Rep Limit
Sulfate	ND	0.50

Laboratory Control Sample (LCS)

RunID:

IC1 090629A-5092296

Units:

mg/L

Analysis Date:

06/29/2009 11:41

BDG Analyst:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sulfate	10.00	10.90	109.0	85	115

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

Sample Spiked: RunID:

09061343-01

IC1_090629A-5092319

Units:

mg/L

Analysis Date:

06/29/2009 21:23

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
Sulfate		90.43	100	209.3	118.9	100	201.5	111.1	3.789	20	80	120

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

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

09061339 Page 55

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.



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

Conoco Phillips COP Wingate

Analysis: Method:

Analysis Date:

Biochemical Oxygen Demand - 5 Days

SM5210 B

WorkOrder:

09061339

Lab Batch ID:

R276993

Method Blank

WET_090625ZH-5092613 RunID:

06/25/2009 12:30

Units: Analyst: mg/L S_H

Lab Sample ID

Client Sample ID

09061339-01F

Samples in Analytical Batch:

MWR-1

09061339-04F

Pond 1 (East)

09061339-05F

Pond 2 (West)

Analyte	Result	Rep Limit
Biochemical Oxygen Demand	ND	2.0

Laboratory Control Sample (LCS)

RunID:

WET_090625ZH-5092615 Units:

mg/L

Analysis Date:

06/25/2009 12:30

S_H Analyst:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Biochemical Oxygen Demand	198.0	198.0	100.0	83.7	114

Sample Duplicate

Original Sample:

09061327-04

RunID:

WET_090625ZH-5092616 Units:

Analysis Date:

06/25/2009 12:30

Analyst:

mg/L S_H

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Biochemical Oxygen Demand	65.6	63.75	2.94	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

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



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

Conoco Phillips COP Wingate

Analysis:

Analysis Date:

Alkalinity (as CaCO3), Total

Method: E310.1 WorkOrder:

Samples in Analytical Batch:

09061339

Lab Batch ID:

R277103

Method Blank

RunID: WET_090630N-5094587 Units:

mg/L

Lab Sample ID

Client Sample ID

Analyst: PAC 09061339-01B 09061339-02B MWR-1

09061339-03B

WMW-3

WMW-2

09061339-04B

Pond 1 (East)

Analyte Alkalinity, Total (As CaCO3)

06/30/2009 18:00

Result Rep Limit ND 2.0

09061339-05B

Pond 2 (West)

Laboratory Control Sample (LCS)

RunID:

WET_090630N-5094589

Units:

mg/L

Analysis Date:

06/30/2009 18:00

PAC Analyst:

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:

RunID:

WET_090630N-5094594

Units:

mg/L

Analysis Date:

06/30/2009 18:00

09061339-05

Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Alkalinity, Total (As CaCO3)	435	435	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

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



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

Conoco Phillips COP Wingate

Analysis:

Total Dissolved Solids

Method: E160.1 WorkOrder:

Samples in Analytical Batch:

09061339

Lab Batch ID:

R277174

Method Blank

WET_090630Y-5095616 RunID:

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date:

06/30/2009 10:30

Analyst: CFS 09061339-05B

Pond 2 (West)

Analyte	Result	Rep Limit
Total Dissolved Solids (Residue Filterable)	ND	10

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RuniD:

WET_090630Y-5095618

Units:

mg/L

Analysis Date:

06/30/2009 10:30

CFS Analyst:

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Total Dissolved Solids (Residue, Filterabl	200.0	201.0	100.5	200.0	202.0	101.0	0.5	10	95	107

Sample Duplicate

Original Sample:

09061426-01

RuniD:

WET_090630Y-5095622

Units:

mg/L

Analysis Date:

06/30/2009 10:30

CFS Analyst:

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Total Dissolved Solids (Residue, Filterabl	533	534	0.187	10

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

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

09061339 Page 58

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.

7/11/2009 7:27:42 AM



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

Conoco Phillips COP Wingate

Analysis:

Total Dissolved Solids

Method:

E160.1

WorkOrder:

09061339

Lab Batch ID:

R277267

Method Blank

RunID: WET 090630ZE-5097156 Units:

mg/L CFS

Lab Sample ID

Client Sample ID

Analysis Date:

06/30/2009 10:30

Analyst:

09061339-02B

Samples in Analytical Batch:

WMW-3

Analyte	Result	Rep Limit
Total Dissolved Solids (Residue, Filterable)	ND	10

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID:

WET_090630ZE-5097158

mg/L

Analysis Date:

06/30/2009 10:30

Units: Analyst: **CFS**

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Total Dissolved Solids (Residue,Filterabl	200.0	201.0	100.5	200.0	202.0	101.0	0.5	10	95	107

Sample Duplicate

Original Sample:

09061426-01

RunID:

WET 090630ZE-5097162

Units:

mg/L

Analysis Date:

06/30/2009 10:30

Analyst:

CFS

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Total Dissolved Solids (Residue, Filterabl	533	534	0.187	10

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

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

09061339 Page 59

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.

Sample Receipt Checklist And Chain of Custody



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

Sample Receipt Checklist

Date	korder: and Time Received: perature:	09061339 6/25/2009 9:15:00 AM 1.3°C			Received By: Carrier name Chilled by:		у
1. 5		poler in good condition? ,8670268305880.7 C,867026830614 1.3 C	Yes	✓	No 🗀	Not Present	
2. (on shippping container/cooler?	Yes	\checkmark	No 🗆	Not Present	t 🗆
3. (Custody seals intact of	on sample bottles?	Yes		No 🗆	Not Present	· 🗹
4. (Chain of custody pres	sent?	Yes	✓	No 🗆		
5. ⁽	Chain of custody sign	ned when relinquished and received?	Yes	✓	No 🗆		
6. (Chain of custody agre	ees with sample labels?	Yes	•	No 🗆		
7. 5	Samples in proper co	ntainer/bottle?	Yes	✓	No 🗌		
8. 5	Sample containers int	act?	Yes	\checkmark	No 🗆		
9. ^s	Sufficient sample volu	ume for indicated test?	Yes	✓	No 🗆		
10. 4	All samples received to 1. Received coliforms		Yes		No 🗹		
11. ⁽	Container/Temp Blan	k temperature in compliance?	Yes	✓	No 🗆		
12. \	Water - VOA vials hav	e zero headspace?	Yes	✓	No 🗆 🛝	VOA Vials Not Present	t 🗆
13. \	Water - Preservation	checked upon receipt (except VOA*)?	Yes	✓	No 🗆	Not Applicable	. 🗆
*	VOA Preservation Ch	necked After Sample Analysis					
	SPL Representati	ve:	Cont	act Date & T	ime:		
	Client Name Contact	ed:					
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7 PM review (initial) 10199- CHAM 2.0 327820 CPD Requested Analysis Da €**** Intact? Ice? Temp: page C 400123 6. Received by Laboratory ISPL Workorder No. Email A PDF Poecial Detection Limits (specify): 4. Received by: 2. Received by: 3 Number of Containers pres. . Ö Ø 16,30 46. z09[=9[zo8=8 8 size (د time 2 ___ 500 Ambassador Caffery Parkway Scott, LA 70583 (337) 237-4775 matrix bottle G=glass P=plastic > \mathcal{D} Q 女 \supset 25/09 Standard QCX Level 3 QC Level 4 QC TX TRRP LA RECAP SL=sludge 3 3 3 7 3 W=water grab date B terret X Laboratory remarks: Wing of Chromodocter comp Fax is beneven 0/2/ TIME 048 210 9 Special Reporting Requirements Results: 840 340 5 340 コアイ Sec. 6" Analysis Request & Chain of Custody Record Email: [LEUV 6-44-09 6-24-09 10-h7-9 らったっ 192-112-9 19-hC-7 1. Relinguished by Sampler: 68-K-9 ローフャーの さったから かってでし X1038A DATE 3. Relinquished by: 5. Relinquished by: SPL, Inc. That shouther State ☐ 8880 Interchange Drive Houston, TX 77054 (713) 660-0901 School 6 8 G 2016 CD OM: 11205 Signation シマ Correct Phi MOS 3 Standard Contract Rush TAT requires prior notice Tast Tast maide バルン SAMPLE ID (だのみ) Rait Pondi (Kad Requested TAT Client/Consultant Remarks: Park Area THE PARTY Y-MWM M. M. M. DEWM? E-MMM WMW 7 2 Business Days 1 Business Day Penal (3 Business Days - Jaras Pend Project Name/No.: Pond Client Name: Client Contact: 1000 Phone/Fax: Site Location: Site Name: Invoice To: Other Address:

☐ 459 Hughes Drive Traverse City, MI 49686 (231) 947-5777

M S PM review (inifial) 327821 Requested Analysis ð Intact? Ice? Temp: page 6. Received by Laboratory: C9061339 rip Blank for BIEX own please Email Dept. | Special Detection Limits (specify): SFL WOFKOFAEF INO. 2. Received by: 4. Received by: 3=H52Ot I=HCI 00 pres. 汉 \varnothing oil [=1 sos=8 16=160z X=other 0 size Z07=7 liter time time matrix bottle [siv=V G=glass P=plastic > amber glass Standard QC Level 3 QC Level 4 QC TX TRRP LA RECAP W=water S=soil! O=oil A=air
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500 Ambassador Caffery Parkway Scott, LA 70583 (337) 237-4775

Traverse City MI 49686 (231) 947-5777 **⊿** 459 Hughes Drive