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2006 AGWMR

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BURLINGTON RESOURCES
San Juan Division

April 15, 2007

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Oil Conservation Division
Environmental Bureau

Glen Von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: 2006 Annual Groundwater Investigation and Remediation Reports
San Juan Basin, New Mexico

Dear Mr. Von Gonten:

As required in Burlington Resources approved Groundwater Investigation and Remediation Plan dated August, 1998, enclosed are the 2005 annual reports for Burlington's groundwater impact sites in the San Juan Basin. Separate reports are enclosed for the following locations:

✓ Hampton #4M
Johnson Federal #4 Metering Station
Flora Vista
Howell K-1

If you have questions or additional information is needed, please contact me at (505) 326-9537.

Sincerely,

Gregg Wurtz
Sr. Environmental Representative

Attachments - Groundwater Investigation and Remediation Reports

cc: Brandon Powell - NMOCD Aztec
WFS - Mark Harvey (Hampton #4M)
EPFS - Scott Pope (Johnson Fed. #4)
Facility and Correspondence Files

3401 East 30th Street, 87402-8807, P.O. Box 4289, Farmington, New Mexico 87499-4289, Telephone 505-326-9700, Fax 505-326-9833

BURLINGTON RESOURCES 2006 ANNUAL GROUND WATER REPORT

Hampton #4M

SITE DETAILS

Location: Unit Letter N, Section 13, Township 30N, Range 11W; San Juan County, New Mexico
Land Type: Federal

PREVIOUS ACTIVITIES

Various stages of excavation have been carried out at the Hampton #4M. PNM conducted limited excavation (approximately 60 cubic yards) of impacted soil underneath a former earthen pit, and installed ground water monitoring wells and a product recovery well.

Underneath Burlington Resources's (BR) former area of operation in the southeastern part of the location, impacted soil was excavated down to ground water depth, and ground water monitoring wells were installed. During November 1998, BR began another round excavation, removing impacted soils to a depth of approximately 27 feet from under and around PNM's former earthen pit. At that same time, an additional 77 cubic yards of soils were removed from BR's initial excavation.

In 1999, BR continued excavation at the Hampton #4M location, working south from PNM's area of operation toward BR's former area of operation. Impacted soils were excavated until all apparent source material had been removed. Prior to backfilling with clean soil, 30 barrels of Oxy-1 chemical was applied to the bottom and sides of the excavation to stimulate bioremediation. BR also installed new monitoring wells down-gradient of BR's original excavation under the former tank battery. Details on these activities can be found in the status report submitted to the New Mexico Oil and Gas Conservation Division (NMOCD) on September 16, 1999.

BR installed three additional monitoring wells on the Hampton #4M location in late 1999 and early 2000. BR also attempted to install two down-gradient offsite wells, but both wells hit "auger refusal" prior to reaching any groundwater. Details on these well installations and boreholes can be found in the status reports submitted to the NMOCD on October 28, 1999 and January 11, 2000.

The NMOCD sampled a groundwater seep to the northwest side of the well pad on April 14, 1999. The analytical results revealed that benzene was present in concentrations in excess of New Mexico Water Quality Control Commission (NMWQCC) groundwater standards. That same year, groundwater sampling from a monitoring well in the extreme southeast part of the location revealed a level of free phase hydrocarbons on top of the ground water.

2000 ACTIVITIES

Activities completed in 2000 included additional excavation, quarterly well monitoring, and PNM's transfer of environmental responsibility and ownership to Williams Field Services (WFS).

The excavation, proposed in a letter to the NMOCD dated April 12, 2000, was completed as planned. The excavation was located in the southeast corner of the location, adjacent to areas excavated in 1997 and 1998 and underneath the former tank battery location. The excavation activities were driven by the detection of free phase hydrocarbons in a monitoring well the previous year. Monitoring wells were destroyed during the excavation work and were replaced with one new well. The excavation was completed down to ground water, and approximately 120 cubic yards were removed. Impacted soils were excavated until all apparent source materials had been removed. The contaminated soils were land farmed off location on a BR location within the same lease. The bottom of the excavation ended at a dark green shale unit that was approximately 2 feet thick, dry and uncontaminated. The shale appears to be the confining layer for the catchment basin encompassing the Hampton location. The excavation remained open to allow seepage of any potential free product that was detected in the ground water and to promote volatilization of the excavated area. No measurable thickness of hydrocarbon was detected on the surface of the approximately 1 foot of water that pooled in the bottom of the excavation. A sample was collected of the water in the excavation in 2001 and analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) constituents.

Quarterly monitoring was performed for the first two quarters of 2000. The ground water results are listed in Table 1. The ground water monitoring for the last two quarters of 2000 did not occur due to a miscommunication with consultants and the transfer of monitoring activities from PNM and BR.

2001 GROUND WATER MONITORING

The excavation completed in 2000 was backfilled with clean soil during the third quarter of 2001. The landfarms associated with the excavated dirt were tested, determined to be clean and closed. Approximately a one-foot of static water level was observed in the open excavation in the first quarter of 2001. No visible sheen was observed on the water surface, and a benzene level of 2 ug/l was detected in a second quarter 2001 grab sample. BR applied a potassium permanganate solution to the excavation to enhance the degradation of the hydrocarbons remaining in the exposed soil and passively treat the soils and ground water down-gradient from the excavation before backfilling the excavation.

Quarterly monitoring continued during 2001. The analytical data are shown in Table 1. BR collected only water level data from the upgradient well MW-1. No constituents of concern were detected in the previous four consecutive quarters at MW-1 and no upgradient source of contamination was present.

Wells MW-15, MW-11, and MW-9 were clean during 2001. Wells MW-12, MW-16, MW-5 and MW-7 detected constituents of concern. A seep located northeast of the production location along the eastern side of the wash was sampled quarterly in 2001 and only the first quarter detected any contaminants of concern. TMW-1 is located in the wash between MW-5 and MW-7, and no samples were collected because of insufficient water to collect a sample.

2002 – 2006 GROUND WATER MONITORING

BR continued the quarterly ground water monitoring program from 2002 to 2006 to monitor progression of natural remediation at the site. BR also continued quarterly sampling at the seep on location. A site map showing the location of existing monitoring wells is shown in Figure 1. An aerial photograph is also included as Figure 2 for a better reference of scale. Results from ground water sampling are shown in Table 1.

Prior to sampling at monitoring wells, depth to ground water and total depth of wells is measured with a Keck oil/water interface probe. Presence of any free-phase crude oil is also investigated using the

interface probe. The interface probe is decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement. The volume of water in the wells is calculated, and a minimum of three casing volumes of water is purged from each well using a disposable bailer or a permanent decontaminated PVC bailer. As water is removed, pH, electric conductivity and temperature are monitored. Wells are purged until these properties stabilize, indicating that the purge water is representative of aquifer conditions. Stabilization is defined as three consecutive stable readings for each water property (±0.4 units for pH, ±10 percent for electric conductivity and ±2° C for temperature). All purge water is disposed into tanks on site. Data is recorded on the attached *Well Development and Sampling Logs* (Attachment 1). Once each monitoring well is properly purged, groundwater samples are collected by filling at least two 40-milliliter (ml) glass vials. The pre-cleaned and pre-preserved (with hydrochloric acid or mercuric chloride) vials are filled and capped with no air inside to prevent degradation of the sample. Samples are labeled with the date and time of collection, well designation, project name, collector's name and parameters to be analyzed. They are immediately sealed and packed on ice. The samples are shipped to ACZ Laboratory in Steamboat Springs, Colorado in a sealed cooler via FedEx before designated holding times expire. Proper chain-of-custody (COC) procedures are followed with logs documenting the date and time sampled, sample number, type of sample, sampler's name, preservative used, analyses required and sampler's signatures.

ACZ analyzes the samples for BTEX by USEPA Method 8021. Laboratory reports for 2006 sampling are included as Attachment 2. Upgradient MW-1 remains clean and below NMWQCC standards, indicating no upgradient source of contamination exists. MW-15 is located within the current BR well production equipment containment berm. BTEX constituents were not detected in ground water collected from MW-15 in 2006, suggesting that the current separator pit is not a source of contamination. MW-9 is upgradient to the former location of Williams' equipment and down-gradient to BR's historical and current production equipment, as well as the 2000 excavation work. BTEX constituents in ground water from MW-9 were not detected in 2006. Several years of clean samples indicate the 2000 excavation work was effective.

MW-16 and MW-12 are just down-gradient of the existing well pad. MW-16 is located on the eastern boundary of the site along a sandstone outcrop. MW-12 is located adjacent to and down-gradient from the former Williams' unlined pit. Results from both wells show levels of BTEX concentrations that are consistently above NMWQCC standards. A heavy sheen is often observed in ground water from MW-16. The sheen represents a trace amount of free phase hydrocarbon in the ground water and influences laboratory results. However, concentrations of benzene are decreasing over time as shown in Figure 3. Levels of BTEX concentrations in MW-12 remain elevated in 2006. However, when 2006 results in MW-12 are compared to historical results, it is clear that natural degradation of hydrocarbons is occurring (Figure 4).

The remaining ground water samples are collected from a sandy wash running north from the well site. Ground water from a natural seep, located near the head of the wash, was clean in 2006. Historically, wells along the wash have produced ground water high in BTEX concentrations, but values are decreasing over time (Figures 5-7). 2006 Results for MW-5 are above standards, but Figure 5 indicates that natural degradation of hydrocarbon constituents is occurring over time. TMW-1 is often dry, but when sampled during the first part of the year, BTEX concentrations remained just over NMWQCC standards. In October, BTEX concentrations fell under NMWQCC standards for the first time. Figure 6 shows how BTEX concentrations have decreased over time. Results from MW-7 indicate that concentrations of benzene are above NMWQCC standards, but concentrations of toluene, ethylbenzene and xylenes are below standards. Figure 7 shows the analytical results graphically, and natural degradation over time is evident.

MW-11 is the most down-gradient well on site. It is located on the north end of the wash. Ground water from the well has always been clean, but is monitored for plume migration. MW-11 was clean for all of 2006.

CONCLUSIONS

Historically, the source of contamination appeared to originate from two areas related to BR and WFS operations. A considerable amount of excavation and treatment work was performed by BR to remediate the areas of contamination. The approach has been excavation and offsite treatment. Chemical oxidizer (Potassium Permanganate) was also applied to the excavations. The goal of the remediation is to prevent potential plume migration away from the site and allow for the natural breakdown of the hydrocarbons.

The hydrologic gradient follows the topography of the sandy wash that extends down-gradient from the production location. The vertical extent of contamination migration is confined by a clay and sandstone unit. The auger refusal encountered on the two downgradient offsite monitoring well attempts in 1999 and observations of the stratigraphy during excavations support this theory. The ground water regime at the location appears to be typical for the San Jan Basin and the arid southwest. The hydrogeology consists of an unconfined aquifer comprised of fine eolian and alluvial sands and silts overlying an impermeable clay unit that forms the sides and basement of a box-type catchment basin. The confining unit acts as an impermeable catchment that collects and concentrates meteoric water filtering through the overlying sediments. The ground water then travels out of the canyon as bed flow along a narrow band generally following the ephemeral wash that drains the basin.

The current horizontal extent of the ground water contamination at this location appears to start approximately in an area near wells MW-16 and MW-12 and continues down the wash to well MW-7. Wells located within the wash exhibit high BTEX concentrations, but a gradual decrease in concentrations is evident over time. Ground water monitoring in wells located in the wash suggests that natural remediation is working to break down the dissolved hydrocarbons in the ground water. The down-gradient extent of ground water impact continues to be delineated by MW-7 based on the 2006 monitoring data. Ground water in MW-11 is clean, and indicates no plume migration has occurred since the previous year.

Burlington Resources has been in discussion with WFS to assure proper assessment and closure of this site. BR has been managing and funding the sampling and analysis activities since 2000. A cost sharing agreement with WFS and BR was established in 2000. WFS has not approached BR with arrangements to engage in the cost sharing agreement.

RECOMMENDATIONS

- BR recommends continuing a quarterly ground water monitoring program to measure passive natural remediation of hydrocarbons in the groundwater and any remaining trace amounts of soil hydrocarbon contamination.

Attachments:
Figure 1 - Site Map
Figure 2 - Aerial Photograph
Figure 3 – Laboratory Results of BTEX Constituents in MW-16 over Time
Figure 4 – Laboratory Results of BTEX Constituents in MW-12 over Time
Figure 5 - Laboratory Results of BTEX Constituents in MW-5 over Time
Figure 6 - Laboratory Results of BTEX Constituents in TMW-1 over Time

Figure 7 – Laboratory Results of BTEX Constituents in MW-7 over Time
Table 1 - Ground Water Sampling Results Summary
Attachment 1 - Well Development and Sampling Logs
Attachment 2 - Laboratory Reports

Figure 1: Site Map of Hampton #4M

Hampton #4M Site Diagram

(Not To Scale)

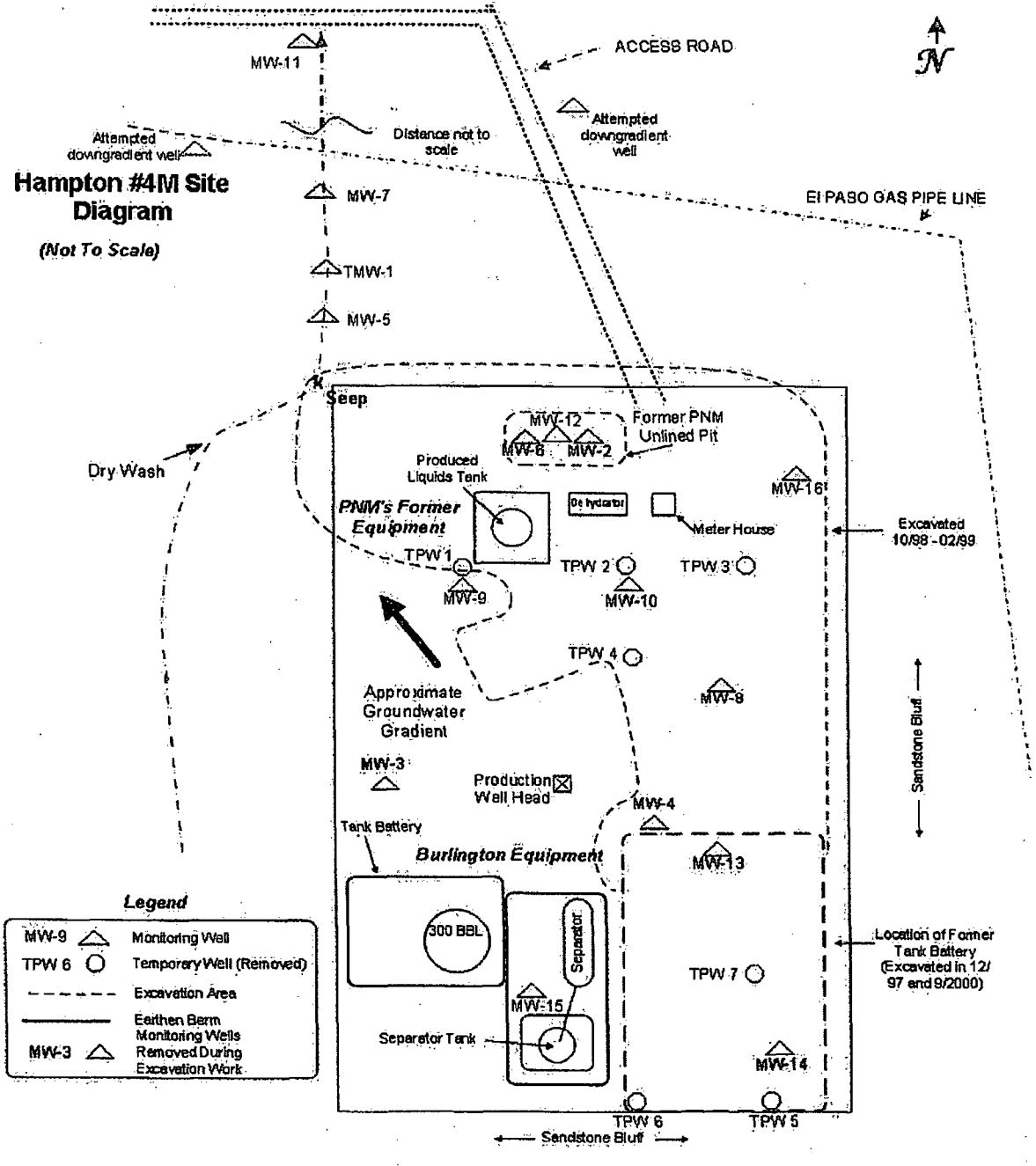


Figure 2: Aerial Photograph of Hampton #4M

Hampton #4M 30N 11W Sec13 Unit Letter N

N

BURLINGTON RESOURCES

San Juan Division
Created By
S. Herrera

Figure 3: Laboratory Results of BTEX constituents in MW-16

MW-16 Laboratory Analytical Results

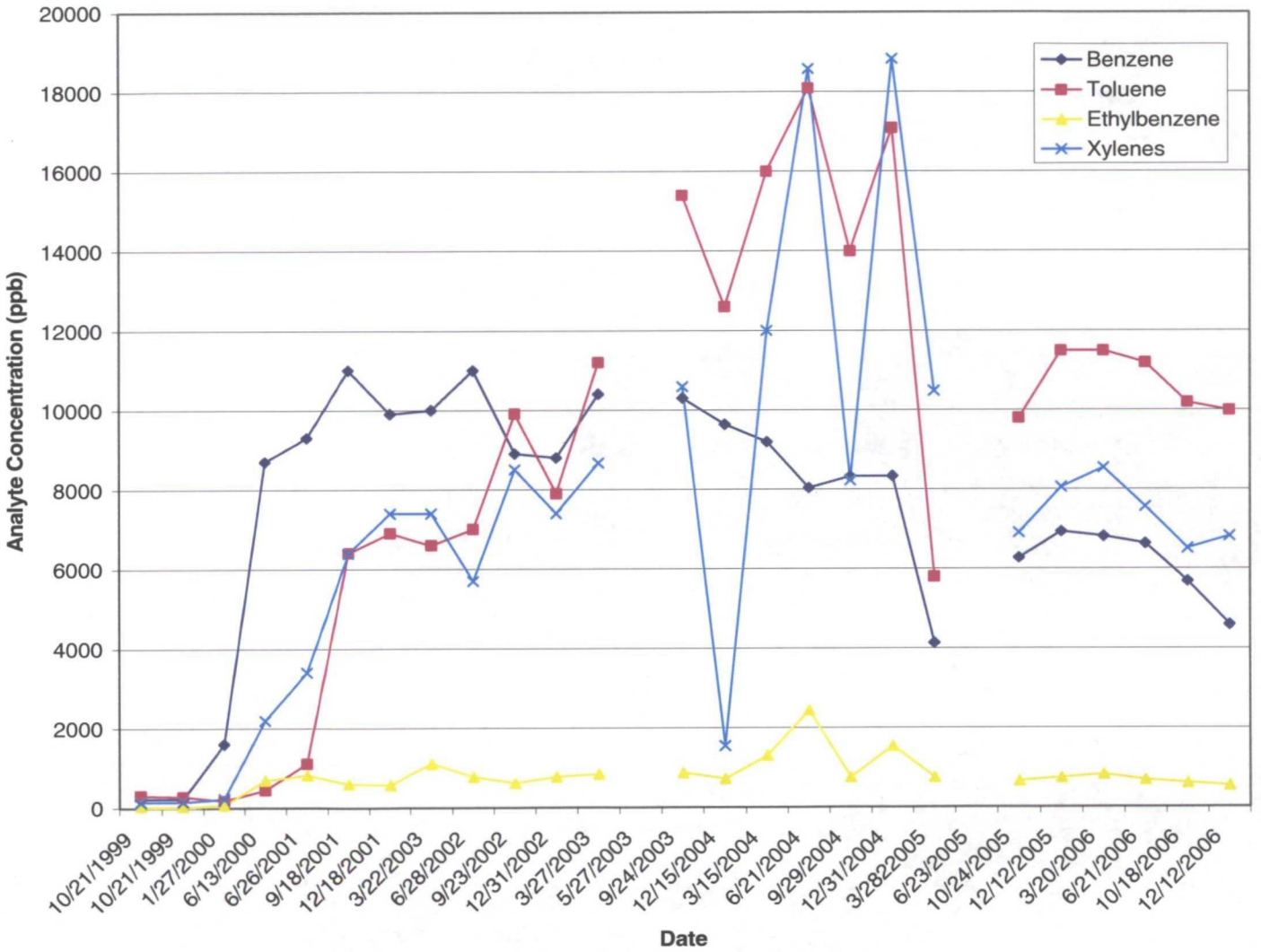


Figure 4: Laboratory Results of BTEX constituents in MW-12

MW-12 Laboratory Analytical Results

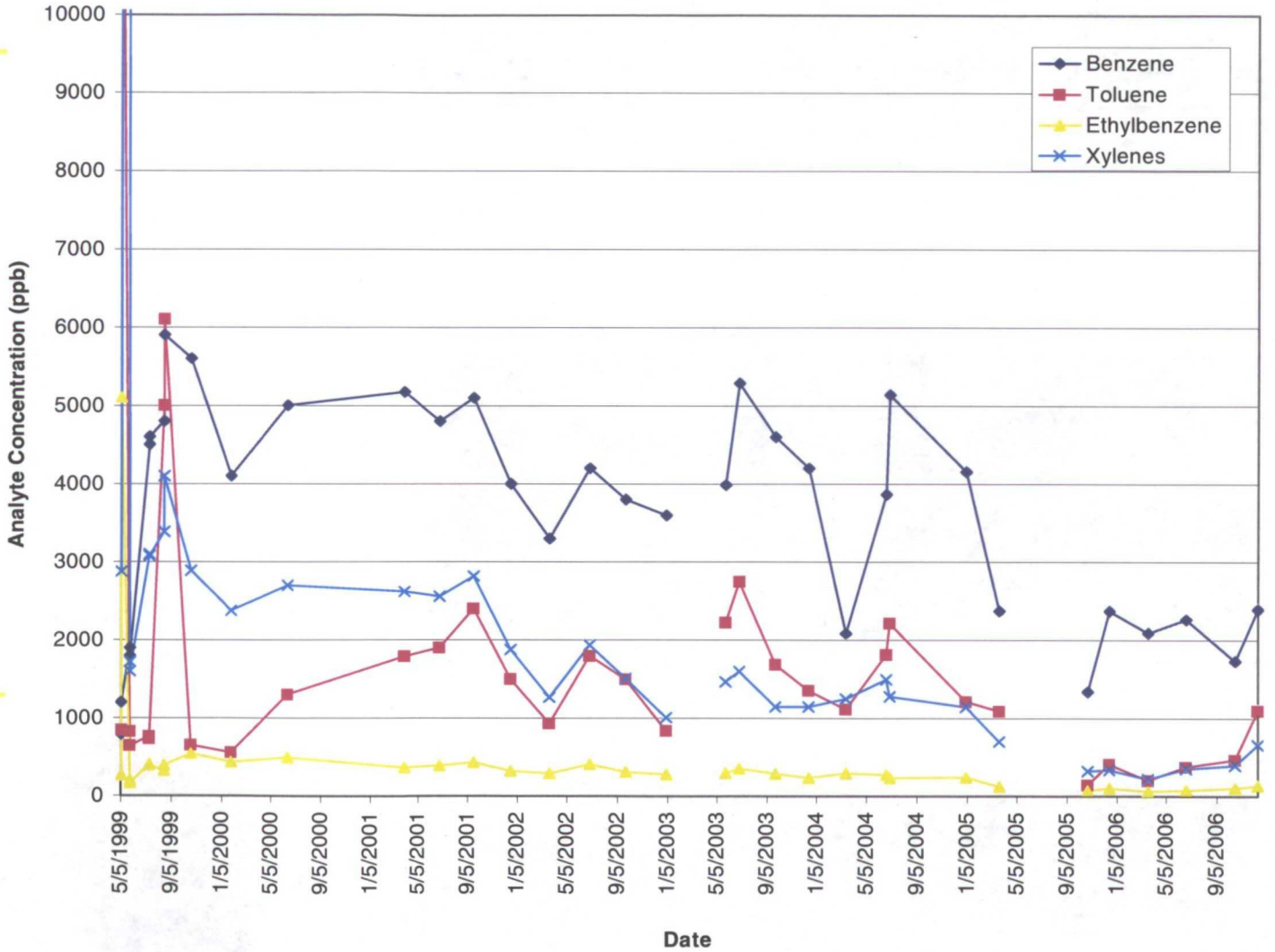


Figure 5: Laboratory Results of BTEX constituents in MW-5

MW-5 Laboratory Analytical Results

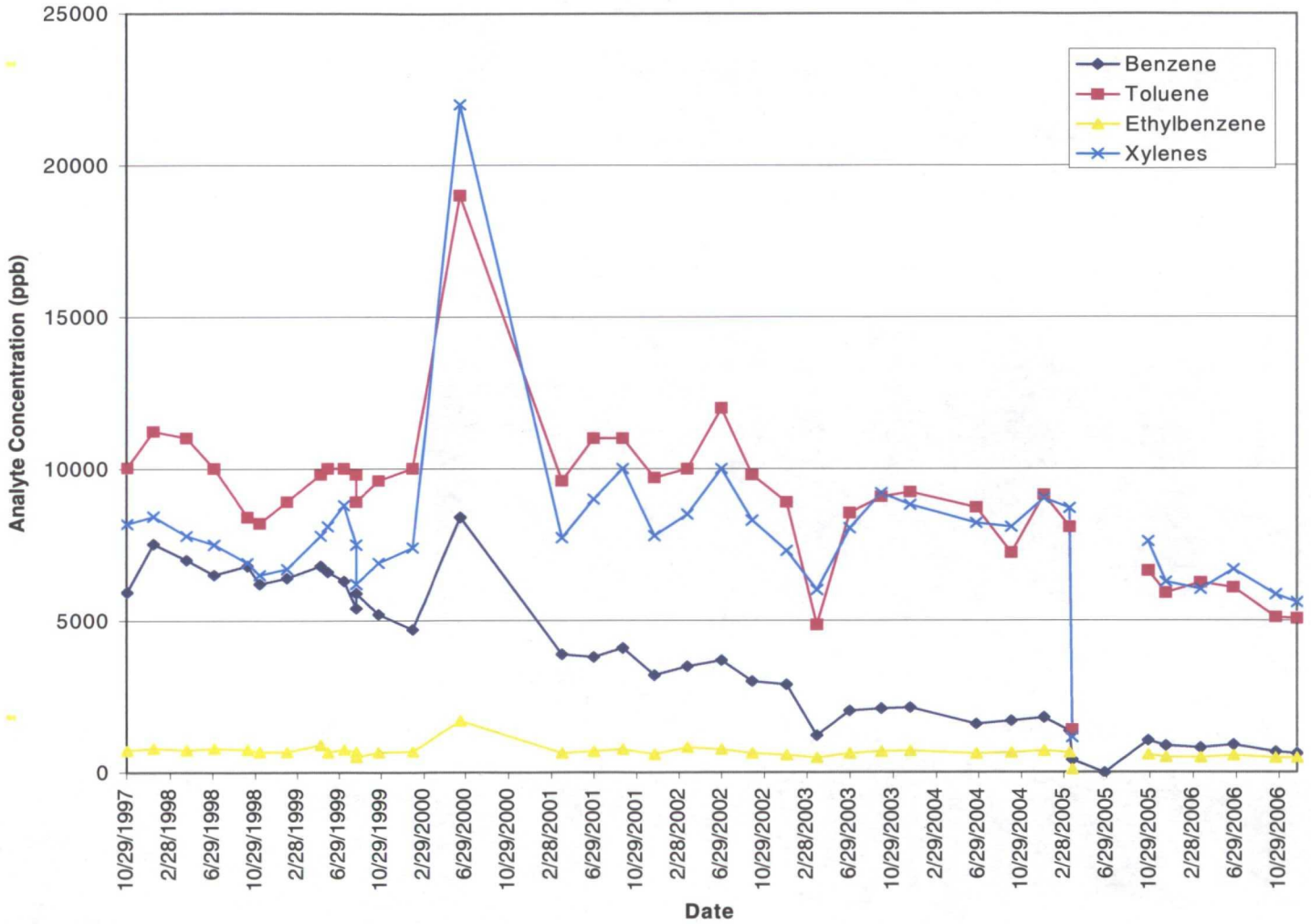


Figure 6: Laboratory Results of BTEX constituents in TMW-1

TMW-1 Laboratory Analytical Results

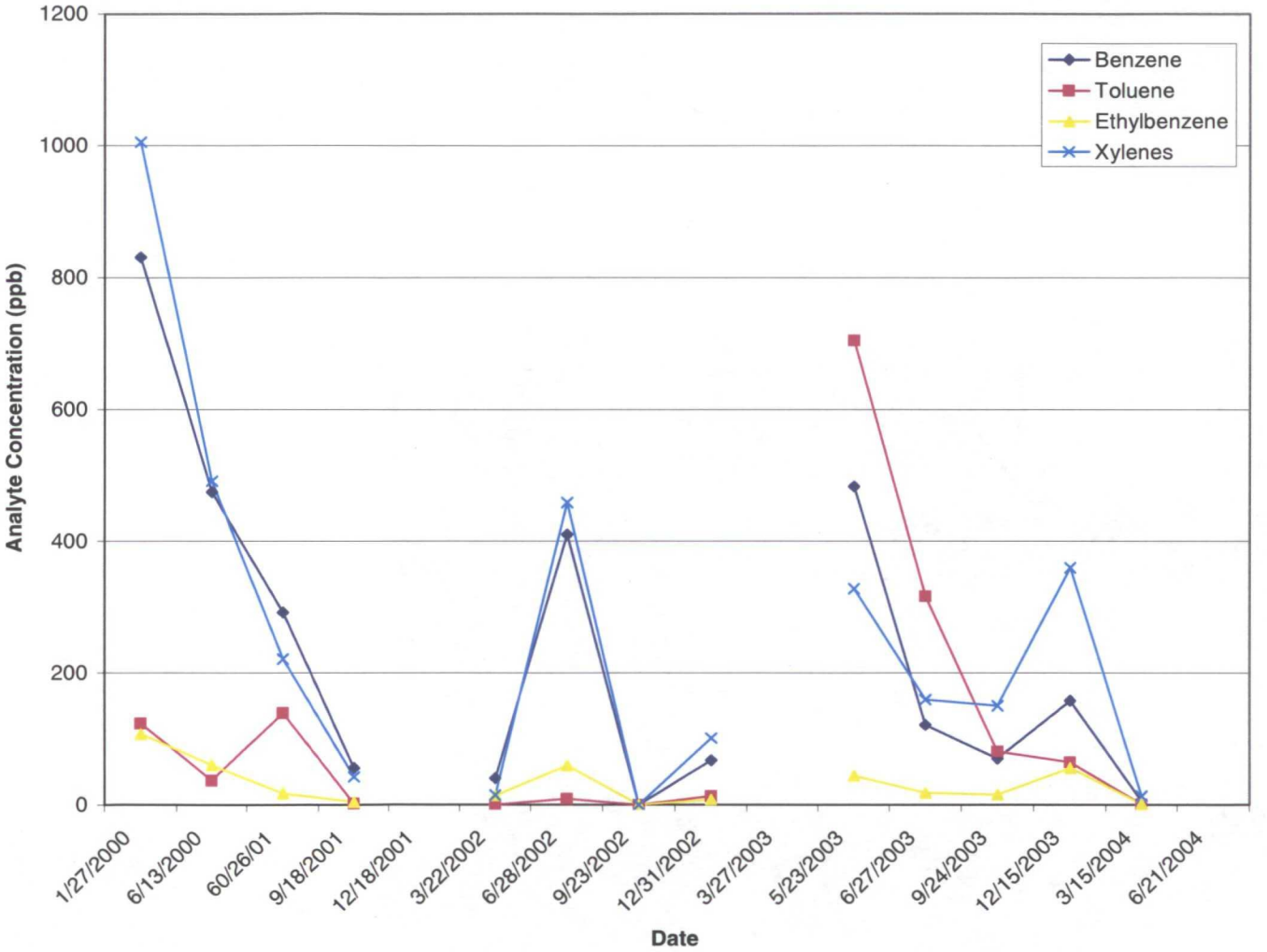
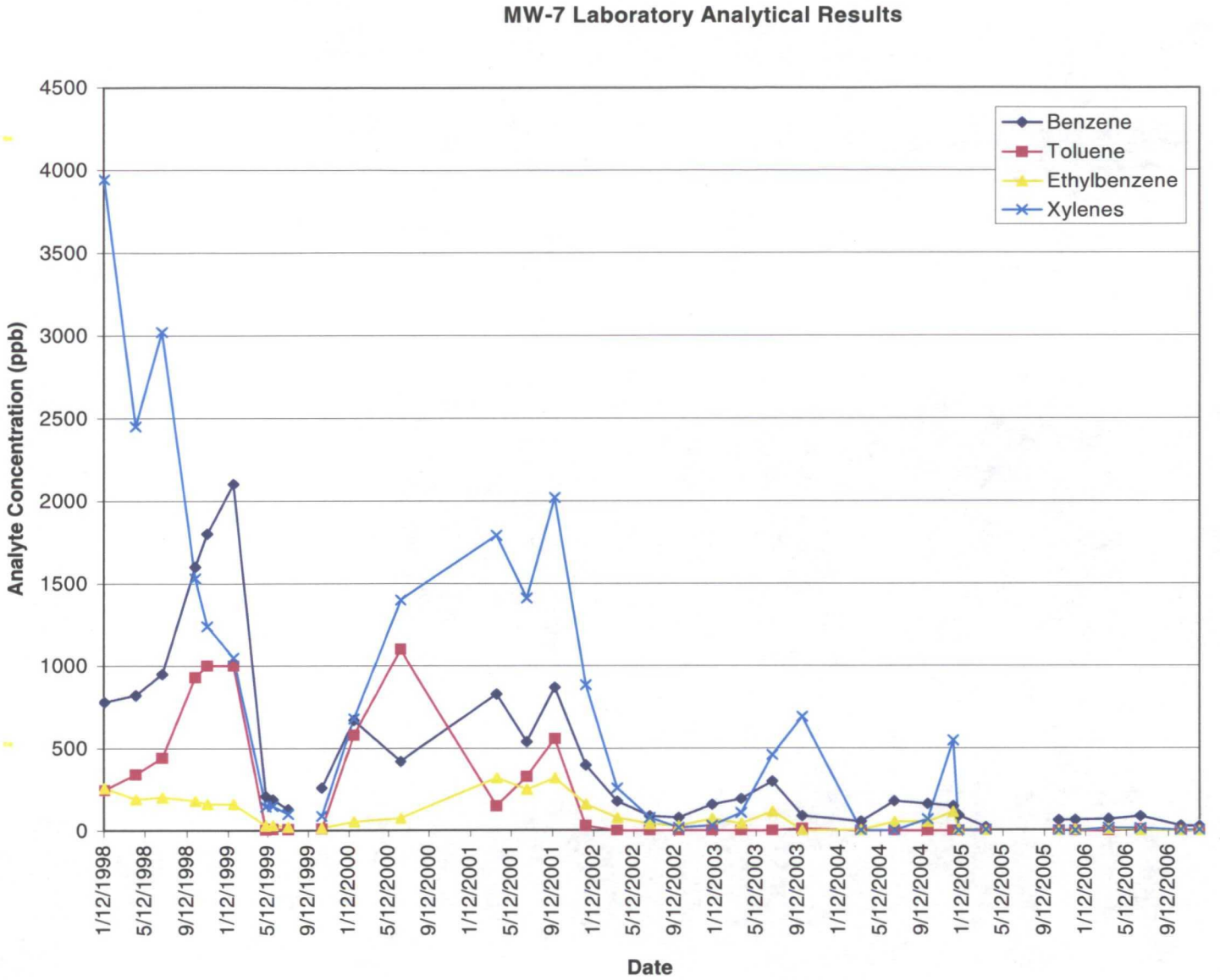


Figure 7: Laboratory Results of BTEX constituents in MW-7


MW-7 Laboratory Analytical Results
Analyte Concentration (ppb)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Benzene
Toluene
Ethylbenzene
Xylenes
1/12/1998
5/12/1998
9/12/1998
1/12/1999
5/12/1999
9/12/1999
1/12/2000
5/12/2000
9/12/2000
1/12/2001
5/12/2001
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9/12/2003
1/12/2004
5/12/2004
9/12/2004
1/12/2005
5/12/2005
9/12/2005
1/12/2006
5/12/2006
9/12/2006
Date

Table 1: Ground Water Analytical Results

Ground Water Analytical Results
Hampton 4M

Well Name	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	BTEX (ppb)	DTW (ft)
NMWQCC Standards		*10*	*750*	*750*	*620*	*50*	
Ground Water Monitoring Wells							
MW-1	10/30/1997	2.4	2.3	<0.2	1.1	5.8	39.92
	1/12/1998	4.3	3.3	0.2	1.0	8.8	41.95
	4/14/1998	1.0	1.3	<0.5	<0.5	2.3	41.90
	7/1/1998	1.3	1.0	<0.5	3.7	6.0	42.29
	10/5/1998	<1.0	<1.0	<1.0	<3.0	<6.0	43.33
	11/9/1998	No Sample Collected					42.02
	1/27/1999	0.8	0.9	<0.5	<1.5	1.7	41.91
	5/5/1999	No Sample Collected					42.66
	7/12/1999	1.1	0.5	<0.5	<0.5	1.6	42.87
	8/17/1999	No Sample Collected					42.95
	10/21/1999	No Sample Collected					42.82
	1/27/2000	No Sample Collected					43.03
	6/13/2000	No Sample Collected					43.03
	6/26/2001	No Sample Collected					44.94
	9/18/2001	No Sample Collected					44.47
	12/18/2002	No Sample Collected					44.22
	3/22/2002	No Sample Collected					44.04
	9/24/2003	0.9J	1	U	0.4J	2.3J	43.52
	12/15/2003	1.1	0.9J	U	U	2.0J	43.50
	3/15/2004	U	U	U	U	U	43.62
	6/21/2004	U	U	U	U	U	43.45
	9/29/2004	U	U	U	U	U	43.34
	12/31/2004	U	0.9J	U	3.3J	U	43.41
	3/22/2005	U	0.3J	U	U	0.3	43.19
	6/23/2005	Missing Lab Data					42.89
	10/24/2005	U	U	U	U	U	42.81
	12/12/2005	U	0.7J	U	0.6J	1.3	42.75
	3/20/2006	1.1	0.9J	U	0.6J	2.6	43.78
	6/21/2006	0.3J	1.4	0.4J	1.8J	3.9	42.91
	10/18/2006	U	0.2	0.2	1.3	1.7	43.04
	12/12/2006	U	0.2	0.2	1.4	1.8	43.02
MW-2 - destroyed during BR excavation in 1999	12/16/1996	**3840**	**7960**	**896**	**7920**	**20616**	NM
MW-3 - destroyed during BR excavation in 1999	1/31/1997	<0.2	<0.2	<0.2	<0.2	<0.2	NM
	2/4/1997	No Sample Collected					20.43
	10/29/1997	<0.2	<0.2	<0.2	<0.2	<0.2	20.30
	1/12/1998	<0.2	<0.2	<0.2	<0.2	<0.2	20.38
	4/14/1998	<0.5	<0.5	<0.5	<0.5	<0.5	20.52
	7/1/1998	0.03J	0.05J	<0.5	<0.5	0.08J	20.35
	10/5/1998	<1.0	<1.0	<1.0	<3.0	<6.0	20.92
	11/9/1998	<1.0	<1.0	<1.0	<3.0	<6.0	20.60

Well Name	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	BTEX (ppb)	DTW (ft)
MW-4 - destroyed during BR excavation in 1999	1/31/1997	**811.7**	**1420.5**	31.0	388.1	**2651.3**	NM
	2/4/1997	No Sample Collected					16.89
	5/1/1997	**1162.0**	**1797.0**	41.0	486.0	**3486.0**	NM
	8/27/1997	No Sample Collected					16.18
	10/29/1997	No Sample Collected					16.32
	1/12/1998	**1251.0**	6.0	82.0	24.0	**1363.0**	17.17
	4/14/1998	**1100.0**	7.2	28.0	12.0	**1147.2**	17.12
	7/1/1998	**1400.0**	50.0	120.0	124.0	**1694.0**	16.91
MW-5	10/29/1997	5934	10024	709	8188	24855	15.60
	1/12/1998	**7521**	**11213**	**779**	**8436**	**27949**	15.74
	4/14/1998	**7000**	**11000**	720	**7800**	**26520**	15.58
	7/1/1998	**6500**	**10000**	**780**	**7500**	**24780**	15.40
	10/5/1998	**6800**	**8400**	740	**6900**	**22840**	16.35
	11/9/1998	**6200**	**8200**	670	**6500**	**21570**	15.94
	1/27/1999	**6400**	**8900**	660	**6700**	**22660**	15.97
	5/5/1999	**6800**	**9800**	**900**	**7800**	**25300**	15.61
	5/26/1999	**6600**	**10000**	650	**8100**	**25350**	NM
	7/12/1999	**6300**	**10000**	**750**	**8800**	**25850**	15.23
	8/17/1999	**5400**	**9800**	670	**7500**	**23370**	14.61
	8/17/1999	**5900**	**8900**	500	**6200**	**21500**	14.61
	10/21/1999	**5200**	**9600**	650	**6900**	**22350**	14.67
	1/27/2000	**4700**	**10000**	680	**7400**	**22780**	14.73
	6/13/2000	**8400**	**19000**	**1700**	**22000**	**51100**	14.71
	3/29/2001	**3890**	**9600**	640	**7730**	**21860**	NM
	6/26/2001	**3800**	**11000**	700	**9000**	**24500**	15.35
	9/18/2001	**4100**	**11000**	**760**	**10000**	**25860**	15.87
	12/18/2001	**3200**	**9700**	600	**7800**	**21300**	15.83
	3/22/2002	**3500**	**10000**	**830**	**8500**	**22830**	15.54
	6/28/2002	**3700**	**12000**	**760**	**10000**	**26460**	15.86
	9/23/2002	**3000**	**9800**	640	**8300**	**21740**	15.82
	12/31/2002	**2900**	**8900**	580	**7300**	**19680**	14.82
	3/27/2003	**1220**	**4870**	487	**6010**	**12587**	13.79
	6/27/2003	**2040**	**8550**	640	**8050**	**19280**	15.32
	9/24/2003	**2110**	**9090**	700	**9200**	**21100**	15.88
	12/15/2003	**2150**	**9240**	720	**8810**	**20920**	15.46
	3/15/2005	**1370**	**8100**	660	**8710**	**18840**	14.59
	6/21/2004	**1610**	**8740**	640	**8220**	**19210**	15.48
	9/29/2004	**1710**	**7250**	670	**8090**	**17720**	16.20
	12/31/2004	**1820**	**9150**	730	**9030**	**20730**	15.58
	3/22/2005	**420**	**1420**	110	**1160**	**3110**	14.71
	6/23/2005	Missing Lab Data					15.15
	10/24/2005	**1070**	**6660**	610	**7620**	**15960**	NM
	12/12/2005	**900**	**5930**	520	**6280**	**13630**	15.13
	3/20/2006	**820**	**6270**	510	**6040**	**13640**	14.92
	6/21/2006	**930**	**6110**	580	**6690**	**14310**	15.70
	10/18/2006	**690**	**5140**	500	**5870**	**12200**	16.09
	12/18/2006	**640**	**5090**	500	**5610**	**11840**	15.69
	1/27/2000	**930**	**1400**	350	**6700**	**9380**	18.09
	6/13/2000	**2400**	**3400**	550	**9100**	**15450**	17.44

Well Name	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	BTEX (ppb)	DTW (ft)
TMW-1	60/26/01	**1100**	**3500**	330	**5500**	**10430**	18.23
	9/18/2001	No Sample Collected					18.99
	12/18/2001	No Sample Collected					19.59
	3/22/2002	No Sample Collected					19.52
	6/28/2002	No Sample Collected					20.05
	9/23/2002	No Sample Collected					19.51
	12/31/2002	No Sample Collected					19.50
	3/27/2003	No Sample Collected					19.50
	5/23/2003	**830**	123	107	**1004.7**	**2064.7**	NM
	6/27/2003	**474**	36.6	59.6	490.7	**1060.9**	17.75
	9/24/2003	**292**	139	17	221	**669**	18.83
	12/15/2003	**55.9**	1.3	3.9	42.5	**103.6**	19.08
	3/15/2004	No Sample Collected					Dry
	6/21/2004	**40.6**	U	14.1	14.7	**69.4**	18.85
	9/29/2004	**410**	8.7	59.6	458.5	**936.8**	19.08
	12/31/2004	3J	5J	1J	11J	U	19.32
	3/22/2005	**67.8**	13.3	8.1	101.7	**190.9**	18.88
	6/23/2005	Missing Lab Data					17.12
	10/24/2005	**483**	705	45	328	**1561**	NM
	12/12/2005	**122**	317	19	160	**618**	19.01
	3/20/2006	**71**	82	16	151	**320**	18.90
	6/21/2006	**159**	65.7	56.9	360	**641.6**	18.94
	10/18/2006	6.4	1.6	2.1	13.8	23.9	19.06
	12/12/2006	No Sample Collected b/c v					NM
MW-6 - destroyed during BR excavation in 1999	10/29/1997	No Sample Collected					19.50
	1/12/1998	**830**	123	107	**1004.7**	**2064.7**	Lost
	4/14/1998	**474**	36.6	59.6	490.7	**1060.9**	17.75
	7/1/1998	**292**	139	17	221	**669**	18.83
	10/5/1998	**55.9**	1.3	3.9	42.5	**103.6**	19.08
MW-7	1/12/1998	**780**	246	258	**3942**	**5226**	19.79
	4/14/1998	**820**	340	190	**2450**	**3800**	19.82
	7/1/1998	**950**	440	200	**3020**	**4610**	19.88
	10/5/1998	**1600**	**930**	180	**1530**	**4240**	20.14
	11/9/1998	**1800**	**1000**	160	**1240**	**4200**	20.14
	1/27/1999	**2100**	**1000**	160	**1050**	**4310**	20.14
	5/5/1999	**210**	3	30	147	**390**	20.47
	5/26/1999	**190**	7	32	150	**379**	NM
	7/12/1999	**130**	7	22	101	**261**	20.87
	8/17/1999	No Sample Collected					20.30
	10/21/1999	**260**	11	15	89	**375**	19.44
	1/27/2000	**670**	580	54	**680**	**1984**	19.26
	6/17/2000	**420**	**1100**	75	**1400**	**2995**	19.04
	3/29/2001	**830**	150	320	**1790**	**3090**	NM
	6/26/2001	**540**	330	250	**1410**	**2530**	19.52
	9/18/2001	**870**	560	320	**2020**	**3770**	19.85
	12/18/2001	**400**	30	160	**885**	**1475**	20.20
	3/22/2002	**180**	U	78	260	**518**	20.48
	6/28/2002	**89**	1	41	79	**210**	19.53
	9/23/2002	**80**	3	31	18.89	**133**	20.52

Well Name	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	BTEX (ppb)	DTW (ft)
	12/31/2002	**160**	2.2	74	31.5	**268**	20.15
	3/27/2003	**195**	0.4	44.2	109	**349**	19.78
	6/27/2003	**300**	1.4 J	117	461.6	**879**	19.34
	9/24/2003	**90**	12	2	**694**	**798**	19.88
	12/15/2004	**150**	4J	115	549	**814**	20.14
	3/15/2004	**56**	1J	6	3	**65**	20.20
	6/21/2004	**180**	U	55	58J	**235**	19.70
	9/29/2004	**163**	0.9J	54.5	69.8	**287**	20.12
	12/31/2004	**94**	3J	10	24J	**104**	20.03
	3/22/2005	**20.8**	U	2.4	4.8	28	20.25
	6/23/2005	Missing Lab Data					19.90
	10/24/2005	**65.2**	0.7J	2	2.7J	**71**	NM
	12/12/2005	**66.2**	1J	8.7	8.5J	**76**	19.87
	3/20/2006	**72**	U	12.6	16.9	**102**	19.98
	6/21/2006	**89.9**	10.6	4.8	14.5	**120**	19.90
	10/18/2006	**31.9**	0.4J	1.8	4.1	38	20.25
	12/12/2006	**29.4**	1.5	3.1	5.7	40	20.12
MW-8 - destroyed during BR excavation in 1999	4/14/1998	No Sample Collected b/c of product layer					18.56
	7/1/1998	No Sample Collected b/c of product layer					17.83
	10/5/1998	No Sample Collected b/c of product layer					18.43
	11/9/1998	No Sample Collected b/c of product layer					18.20
MW-9	7/1/1998	**12.0**	<1.0	<1.0	<3.0	12.0	22.40
	10/5/1998	0.8	<0.5	<0.5	2.2	3.0	22.49
	11/9/1998	**73.0**	<0.5	2.2	1.6	**76.8**	22.12
	1/27/1999	**120.0**	<0.5	2.5	1.8	**124.3**	23.30
	5/5/1999	**120.0**	<0.5	1.6	0.8	**122.4**	22.61
	5/26/1999	**140.0**	<0.5	1.5	<0.5	**141.5**	22.45
	5/26/1999	**290.0**	<0.5	0.6	<1.5	**290.6**	NM
	7/12/1999	**320.0**	<0.5	0.6	<1.5	**320.0**	22.35
	8/17/1999	**130.0**	U	U	U	**130.0**	21.61
	10/21/1999	<0.5	1.9	<0.5	2.5	4.4	21.80
	1/27/2000	<0.2	<0.2	<0.2	<0.2	U	21.90
	6/13/2000	<0.5	<0.5	<0.5	<1.0	U	21.98
	3/29/2001	<0.5	<0.5	<0.5	<1.0	U	NM
	6/26/2001	<0.5	<0.5	<0.5	<1.0	U	22.62
	9/18/2001	U	U	U	U	U	22.67
	12/18/2001	U	U	U	U	U	22.70
	3/22/2002	U	U	U	U	U	22.68
	6/28/2002	U	U	U	U	U	22.88
	9/23/2002	0.4 J	U	U	U	0.4J	22.90
	3/27/2003	U	U	U	U	U	22.43
	6/27/2003	0.5J	U	U	U	0.5J	22.52
	9/24/2003	U	U	U	U	U	22.71
	12/15/2003	U	U	U	U	U	22.64
	3/15/2004	U	U	U	U	U	22.68
	6/21/2004	U	0.4J	U	0.7J	1.1J	22.72
	9/29/2004	U	U	U	U	U	22.74
	12/31/2004	Missing Lab Data					22.70
	3/22/2005	U	U	U	U	N/A	22.20

Well Name	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	BTEX (ppb)	DTW (ft)
	6/23/2005	U	0.3J	U	U	0.3	22.28
	12/12/2005	No Sample Collected					17.93
	3/20/2006	U	U	U	U	U	20.88
	6/21/2006	U	U	U	U	U	22.84
	10/18/2006	U	U	U	0.3J	0.3	22.75
	12/12/2006	0.3J	0.7J	0.3J	1.2J	2.5	22.77
MW-10 - destroyed during BR excavation in 1999	7/1/1998	No Sample Collected b/c of product layer					NM
	10/5/1998	No Sample Collected b/c of product layer					NM
	11/9/1998	No Sample Collected b/c of product layer					NM
MW-11	1/27/1999	<0.5	2.5	0.7	13.1	16.3	57.15
	5/5/1999	<0.5	<0.5	<0.5	<1.5	0.0	57.10
	5/26/1999	0.8	1.7	<0.5	1.1	3.6	NM
	7/12/1999	No Sample Collected					57.48
	8/17/1999	No Sample Collected					57.13
	10/21/1999	<0.5	<0.5	<0.5	<1.5	<3.0	56.85
	1/27/2000	<0.5	<0.5	<0.5	<0.5	<0.5	56.65
	6/13/2000	<0.5	<0.5	<0.5	0.9	0.9	56.54
	3/29/2001	<0.2	<0.2	<0.2	<0.2	0.0	NM
	6/26/2001	<0.5	<0.5	<0.5	<1.0	0.0	56.61
	9/18/2001	<0.5	<0.5	<0.5	<1.0	0.0	56.47
	12/18/2001	<0.5	<0.5	<0.5	<1.0	0.0	56.50
	12/19/2001	U	U	U	U	U	56.55
	12/20/2001	U	U	U	U	U	56.43
	12/21/2001	U	U	U	U	U	56.50
	12/22/2001	U	U	U	U	U	56.35
	5/24/2003	U	U	U	U	U	NM
	6/27/2003	0.4J	0.3J	U	0.4J	1.1J	56.35
	9/24/2003	U	U	U	U	U	56.24
	12/15/2003	0.5J	U	U	U	0.5J	56.16
	3/15/2004	U	U	U	U	U	56.14
	6/210/04	U	U	U	0.5J	U	56.14
	9/29/2004	U	U	U	U	U	56.15
	12/31/2004	U	U	U	U	U	56.22
	3/22/2005	U	U	U	U	U	56.20
	6/23/2005	Missing Lab Data					56.27
	10/24/2005	U	U	U	U	U	NM
	12/12/2005	U	0.3J	U	U	0.3	56.03
	3/20/2006	U	U	U	U	U	55.79
	6/21/2006	U	0.3J	U	0.8J	1.1	55.92
	10/18/2006	U	0.3J	0.4J	1.2J	1.9	55.96
	12/12/2006	U	U	U	0.3J	0.3	54.60
	5/5/1999	**790**	**840**	260	**2880**	**4770**	NM
	5/5/1999	**1200**	**13000**	**5100**	**68000**	**87300**	NM
	5/26/1999	**1900**	**820**	200	**1720**	**4640**	9.57
	5/26/1999	**1800**	640	160	**1600**	**4200**	NM
	7/12/1999	**4500**	**760**	400	**3100**	**8760**	9.39
	7/12/1999	**4600**	730	390	**3080**	**8800**	NM
	8/17/1999	**4800**	**5000**	320	**3390**	**13510**	8.46
	8/17/1999	**5900**	**6100**	390	**4100**	**16490**	8.46

Well Name	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	BTEX (ppb)	DTW (ft)
MW-12	10/21/1999	**5600**	650	540	**2890**	**9680**	8.85
	1/27/2000	**4100**	550	430	**2379**	**7459**	38.53
	6/13/2000	**5000**	**1300**	490	**2700**	**9490**	23.59
	3/29/2001	**5170**	**1790**	366	**2620**	**9946**	NM
	6/26/2001	**4800**	**1900**	390	**2560**	**9650**	24.22
	9/18/2001	**5100**	**2400**	430	**2820**	**10750**	24.31
	12/18/2001	**4000**	**1500**	320	**1880**	**7700**	24.30
	3/22/2002	**3300**	**930**	290	**1270**	**5790**	24.30
	6/28/2002	**4200**	**1800**	410	**1940**	**8350**	24.46
	9/23/2002	**3800**	**1500**	310	**1510**	**7120**	24.46
	12/31/2002	**3600**	**840**	280	**1010**	**5730**	24.40
	3/27/2003	No Sample Collected b/c well was dry					NM
	5/24/2003	**3990**	**2230**	299	**1470**	**7989**	NM
	6/27/2003	**5290**	**2750**	360	**1600**	**10000**	24.10
	9/24/2003	**4600**	**1690**	290	**1150**	**7730**	24.29
	12/15/2003	**4200**	**1360**	240	**1150**	**6950**	24.23
	3/15/2004	**2090**	**1120**	300	**1250**	**4760**	24.26
	6/21/2004	**3870**	**1820**	280	**1500**	**7470**	24.30
	6/29/2004	**5140**	**2220**	240	**1280**	**8880**	20.28
	12/31/2004	**4160**	**1220**	250	**1150**	**6780**	20.26
	3/22/2005	**2380**	**1100**	130	**710**	**4320**	19.64
	6/23/2005	Missing Lab Data					17.39
	10/24/2005	**1350**	150	80	330	**1910**	NM
	12/16/2005	**2380**	422	111	341	**3254**	19.85
	3/20/2006	**2100**	210	71	225	**2606**	19.89
	6/21/2006	**2270**	385	85	355	**3095**	20.43
	10/18/2006	**1740**	477	112	399	**2728**	20.28
	12/12/2006	**2400**	**1110**	142	**668**	**4320**	20.26
MW-13 - destroyed during BR excavation in 2000	5/26/1999	**1800**	25	12	35	**1872**	NM
	5/26/1999	**2100**	22	9	29	**2160**	NM
	7/12/1999	**2100**	14	10	11	**2135**	18.46
	8/17/1999	**1900**	<10	<10	<30	**1900**	18.06
	10/21/1999	**1600**	<10	<10	<30	**1600**	18.05
	1/27/2000	**1600**	2	2	1	**1604**	18.32
	6/13/2000	**730**	<2.5	<2.5	<2.5	**730**	18.17
MW-14 - destroyed during BR excavation in 2000	10/21/1999	No Sample Collected b/c of product layer					NM
	1/27/2000	No Sample Collected b/c of product layer					22.90
	6/13/2000	No Sample Collected b/c of product layer					22.51
	10/21/1999	<0.5	1.2	<0.5	1.5	2.7	17.84
	1/27/2000	<0.5	<0.5	<0.5	<0.5	0.0	18.36
	6/13/2000	<0.5	<0.5	<0.5	<0.5	<0.5	NM
	3/29/2001	<0.2	<0.2	<0.2	<0.2	0	NM
	6/26/2001	<0.5	<0.5	<0.5	<0.5	0.0	19.66
	9/18/2001	<0.5	<0.5	<0.5	<0.5	0.0	19.22
	12/18/2001	<0.5	<0.5	<0.5	<0.5	0.0	19.12
	3/22/2002	U	U	U	U	U	19.10
	6/28/2002	U	U	U	U	U	19.08
	9/23/2002	U	U	U	U	U	19.05
	12/31/2002	U	U	U	U	U	19.00

Well Name	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	BTEX (ppb)	DTW (ft)
MW-15	3/27/2003	U	0.3J	U	0.9J	1.2 J	18.72
	6/27/2003	0.4J	U	U	U	0.4J	18.12
	9/24/2003	U	U	U	U	0.0	18.43
	12/15/2004	0.7J	U	U	U	0.7J	18.61
	3/15/2004	U	0.3J	U	U	0.3J	18.75
	6/21/2004	U	U	U	U	U	18.25
	9/29/2004	U	U	U	U	U	18.33
	12/31/2004	U	0.9J	0.3J	1.4J	1.6J	18.48
	3/22/2005	U	U	U	U	U	17.45
	6/23/2005					Missing Lab Data	17.70
	10/24/2005	U	U	U	U	U	NM
	12/12/2005	U	0.3J	U	0.4J	0.7	17.93
	3/20/2006	U	U	U	U	U	18.09
	6/21/2006	0.7J	U	0.3J	U	1	18.28
	10/18/2006	U	0.3J	U	0.2J	0.5	18.29
	12/12/2006	U	U	U	U	U	18.21
MW-16	10/21/1999	**220**	300	5	142	**667**	NM
	10/21/1999	**214**	268	4	151	**637**	14.93
	1/27/2000	**1600**	170	56	225	**2051**	NM
	6/13/2000	**8700**	430	680	**2200**	**12010**	24.16
	6/26/2001	**9300**	**1100**	**810**	**3410**	**51688**	24.91
	9/18/2001	**11000**	**6400**	590	**6400**	**61542**	24.77
	12/18/2001	**9900**	**6900**	570	**7400**	**24770**	24.82
	3/22/2003	**10000**	**6600**	**1100**	**7400**	**25100**	24.92
	6/28/2002	**11000**	**7000**	**770**	**5700**	**24470**	25.03
	9/23/2002	**8900**	**9900**	610	**8500**	**27910**	25.04
	12/31/2002	**8800**	**7900**	**770**	**7400**	**24870**	24.50
	3/27/2003	**10400**	**11200**	**840**	**8670**	**31110**	24.63
	5/27/2003					No Sample Collected	24.67
	9/24/2003	**10300**	**15400**	**870**	**10590**	**37160**	24.74
	12/15/2004	**9640**	**12600**	720	**1550**	**24510**	27.70
	3/15/2004	**9200**	**16000**	**1310**	**12000**	**38510**	24.79
	6/21/2004	**8040**	**18100**	**2450**	**18580**	**47170**	24.76
	9/29/2004	**8330**	**14000**	**760**	**8230**	**31320**	24.79
	12/31/2004	**8340**	**17100**	**1550**	**18830**	**45820**	24.77
	3/2822005	**4140**	**5810**	**760**	**10480**	**21190**	24.18
	6/23/2005					Missing Lab Data	24.28
	10/24/2005	**6280**	**9800**	670	**6910**	**23660**	NM
	12/12/2005	**6940**	**11500**	**750**	**8060**	**27250**	24.38
	3/20/2006	**6820**	**11500**	**830**	**8550**	**27700**	24.46
	6/21/2006	**6640**	**11200**	**690**	**7570**	**26100**	25.00
	10/18/2006	**5700**	**10200**	620	**6520**	**23040**	24.82
	12/12/2006	**4600**	**10000**	550	**6830**	**21980**	25.00
	7/1/1998	1.6	0.7	0.6	0.36	3.26	
	4/14/1999	**40.0**	2.2	2.1	19	**63**	
	10/21/1999	**65.0**	230	11.0	434	**740**	
	3/29/2001	**11.6**	<0.2	0.7J	25	37	
	6/26/2001	<0.5	<0.5	<0.5	<1.0	0.00	
	9/18/2001	<0.5	<0.5	<0.5	<1.0	0.00	

Well Name	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	BTEX (ppb)	DTW (ft)
Seep	12/18/2001	<0.5	<0.5	<0.5	<1.0	0.00	
	3/22/2002	5.9	U	0.8	3.4	10.1	
	6/28/2002	U	U	U	U	0	
	9/23/2002	U	U	U	U	0	
	12/31/2002	0.7	U	U	U	0.7	
	3/27/2003	6.3	0.2J	1.8	10	18	
	9/24/2003	U	0.3J	U	U	0.3J	
	12/15/2003	0.4J	0.3J	U	U	0.7J	
	3/15/2004	U	U	U	U	U	
	6/21/2004	U	U	U	U	U	
	9/29/2004	U	U	U	U	U	
	12/31/2004	U	0.2J	U	0.4J	0.6	
	3/28/2005	U	U	U	U	U	
	6/23/2005	Missing Lab Data					
	10/24/2005	U	J	U	U	U	
	12/12/2005	U	0.5J	0.3J	0.9J	1.7J	
	3/20/2006	U	U	U	U	U	
	6/21/2006	4	12.9	0.8J	15	32.7	
	10/18/2006	U	0.5J	0.3J	1.4J	2.2	
	12/12/2006	U	U	U	U	U	
TMP-1	11/11/1997	**2171**	**4185**	190	**2856**	**9402**	NM
	7/1/1998	**2000**	**4300**	180	**2700**	**9180**	18.87
	11/9/1998	**980**	**1900**	84	**1540**	**4504**	NM
	10/21/1999	**1000**	**3100**	410	**9700**	**14210**	18.37
EB Well (downgradient domestic well)	11/25/1997	<0.2	<0.2	<0.2	<0.2	<0.2	68.90
	10/21/1999						67.71
Temporary Ground Water Monitoring Wells							
TPW-1	6/5/1997	**20**	<1	<1	<1	20.0	NM
TPW-2	6/5/1997	No Sample Collected					
TPW-3	6/5/1997	No Sample Collected					
TPW-4	6/6/1997	**2000**	**3100**	57	**810**	**5967**	NM
TPW-5	6/6/1997	**5800**	460	**16000**	**7000**	**29260**	NM
TPW-6	6/6/1997	**1600**	**3400**	48	**690**	**5738**	NM
TPW-7	6/6/1997	**5300**	**18000**	620	**9300**	**33220**	NM
Surface Water Samples							
BR Excavation - surface water	2/11/1998	**1800**	**1700**	<25	**1420**	**4920**	
	7/1/1998	**10**	0.4	0.1	1.5	12	
	11/9/1998	2.9	16.0	<1	18.1	37	
	6/26/2002	2	<0.5	<0.5	<0.5	2	

Notes:
DTW is Depth to Water measured from top of well casing
J: analyte concentration detected at a value between Method Detection Limit and Pratical Quantitation Limit
U: denotes analyte was not detected
NM: Not Measured

Attachment 1: Ground Water Monitoring Well Development and Sampling Logs

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-16 Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 1313 Weather clear 40s

Depth to Water 24.46 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 7.14 Well Dia. 4"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
7.14 x 0.16	4.64		13.92

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1119	**6.87**	**3300**	**59.8**				**1**	**light grey, sheen, HC odor**
	6.86	**3360**	**58.6**				**2**	**light grey, sheen, HC odor**
	6.84	**3370**	**58.0**				**3**	**light grey, sheen, HC odor**
	6.84	**3420**	**57.2**				**4.5**	**light grey, sheen, HC odor, well is bailing down**
1128	**6.84**	**3620**	**57.0**				**5**	**light grey, sheen, HC odor, well has bailed down**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1128	**6.84**	**3620**	**57.0**					**5**	**light grey, sheen, HC odor, well has bailed down**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4M MW-16 Sample Time 1130

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-15 Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 0900 Weather clear 30s

Depth to Water 18.09 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 9.2 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
9.2 x 0.16	1.47		4.42

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
0902	**6.27**	**3110**	**53.5**				**0.25**	**clear with silt**
	6.26	**3140**	**53.2**				**0.5**	**cloudy/silty**
	6.28	**3150**	**52.9**				**0.75**	**cloudy/silty**
	6.26	**3140**	**52.2**				**1**	**cloudy/silty**
	6.30	**3140**	**51.1**				**2**	**cloudy/silty**
	6.29	**3130**	**50.9**				**3**	**cloudy/silty**
	6.30	**3130**	**50.6**				**4**	**cloudy/silty**
0925	**6.28**	**3150**	**51.1**				**4.5**	**cloudy/silty**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
0925	**6.28**	**3150**	**51.1**					**4.5**	**cloudy/silty**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M MW-15 Sample Time 0927

BTEX VOCs

MS/MSD _____ BD _____ BD Name/Time _____ TB _____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: Seep Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 1151 Weather sunny 40s

Depth to Water _____ Depth to Product na Product Thickness na Measuring Point TOC

Water Column Height _____ Well Dia. _____

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		**Gal**/oz to be removed
	Gallons	Ounces	

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1335									

COMMENTS: Water was clear.

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M Seep Sample Time 1151

BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Ammonia TKN NMWQCC Metals Total Phosphorus

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No.:_____ Project Name BR Groundwater Sampling Client: Burlington

Location: :_Hampton 4M _ Well No: MW-1 Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 0810 Weather clear 30s

Depth to Water 43.78 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 6.76 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer ☐ Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
6.76 x 0.16	1.08		3.24

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
0813	**6.43**	**2550**	**50.2**				**0.25**	**clear**
	6.24	**2550**	**50.7**				**0.5**	**clear**
	6.31	**2560**	**50.1**				**0.75**	**clear**
	6.25	**2590**	**50.1**				**1**	**clear**
	6.45	**2570**	**47.9**				**2**	**clear**
	6.47	**2640**	**48.3**				**3**	**clear**
0846	**6.44**	**2650**	**48.2**				**3.25**	**clear**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
0846	**6.44**	**2650**	**48.2**					**3.25**	**clear**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M MW-1 Sample Time 0848

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-5 Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 1202 Weather clear 40s

Depth to Water 14.92 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 7.24 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Water Volume in Well			
Gal/ft x ft of water	Gallons	Ounces	Gal/**oz** to be removed
7.24 x 0.16	1.16		3.49

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1203	**6.80**	**4000**	**53.3**				**.25**	**HC odor, clear, sheen**
	6.76	**4000**	**53.3**				**.5**	**HC odor, clear, grey, sheen**
	6.74	**3970**	**52.9**				**.75**	**HC odor, clear, grey, sheen**
	6.76	**3930**	**52.4**				**1**	**HC odor, clear, grey, sheen**
	6.75	**3930**	**52.1**				**2**	**HC odor, clear, grey, sheen**
	6.82	**4020**	**52.5**				**2.25**	**HC odor, clear, grey, sheen**
	6.82	**4050**	**52.6**				**2.5**	**HC odor, clear, grey, sheen**
	6.85	**4040**	**52.6**				**2.75**	**HC odor, clear, grey, sheen**
	6.86	**4040**	**52.6**				**3.0**	**HC odor, light grey**
	6.87	**4050**	**52.6**				**3.25**	**HC odor, light grey**
1219	**6.87**	**4030**	**52.4**				**3.5**	**HC odor, light grey**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1219	**6.87**	**4030**	**52.4**					**3.5**	**HC odor, light grey**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4M MW-5 Sample Time 1221

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-7 Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 1255 Weather clear 40s

Depth to Water 19.98 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 1.17 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
1.17 x 0.16		24	71

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1259	**6.64**	**4550**	**53.7**				**16**	**clear**
	6.65	**6080**	**53.6**				**22**	**clear**
	6.60	**6160**	**54.0**				**34**	**clear**
	6.62	**6150**	**53.8**				**46**	**clear**
	6.58	**6130**	**53.5**				**58**	**clear**
	6.60	**6150**	**53.4**				**70**	**clear**
1310	**6.62**	**6150**	**53.5**				**82**	**clear**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1310	**6.62**	**6150**	**53.5**					**82**	**clear**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-7 Sample Time 1312

BTEX VOCs

MS/MSD _____ BD _____ BD Name/Time _____ TB _____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-11 Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 1318 Weather clear 40s

Depth to Water 55.79 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 15.10 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	**Gal**/oz to be removed
15.10 x 0.16	2.53		7.6

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1325	**6.73**	**3850**	**55.0**				**.25**	**clear**
	6.67	**3930**	**55.7**				**.5**	**clear, rust color**
	6.56	**3910**	**56.1**				**.75**	**clear, rust color**
	6.64	**3960**	**56.4**				**1**	**clear, rust color**
	6.65	**3950**	**55.9**				**2**	**clear, rust color**
	6.65	**3960**	**55.7**				**3**	**clear, rust color**
	6.65	**3950**	**55.7**				**4**	**clear, rust color**
	6.54	**3850**	**54.7**				**5**	**clear, rust color**
	6.69	**3910**	**55.2**				**6**	**clear, rust color**
	6.64	**3940**	**55.8**				**7**	**clear, rust color**
1416	**6.65**	**3940**	**55.3**				**7.75**	**clear, rust color**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1416	**6.65**	**3940**	**55.3**					**7.75**	**clear, rust colar**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-11 Sample Time 1417

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-12 Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 1027 Weather clear 40s

Depth to Water 19.89 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 16.18 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	**Gal**/oz to be removed
16.18 x 0.65	2.59		7.77

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1030	**6.80**	**3080**	**54.5**				**.25**	**grey, HC odor, sheen**
	6.84	**3160**	**54.8**				**.5**	**grey, HC odor, sheen**
	6.86	**3220**	**54.4**				**.75**	**grey, HC odor, sheen**
	6.85	**3250**	**54.4**				**1**	**grey, HC odor, sheen**
	6.78	**3330**	**54.1**				**2**	**grey, HC odor, sheen**
	6.80	**3350**	**54.0**				**3**	**grey, HC odor, sheen**
	6.74	**3350**	**53.6**				**4**	**grey, HC odor, sheen**
	6.77	**3410**	**53.7**				**5**	**grey, HC odor, sheen**
	6.76	**3460**	**54.1**				**6**	**grey, HC odor, sheen**
	6.72	**3460**	**53.8**				**7**	**grey, HC odor, sheen**
1054	**6.73**	**3480**	**53.9**				**8**	**grey, HC odor, sheen**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1054	**6.73**	**3480**	**53.9**					**8**	**grey, HC odor, sheen**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-12 Sample Time 1056

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: TMW-1 Development **Sampling**

Project Manager MJN Date 3/21/06 Start Time 1235 Weather clear 40s

Depth to Water 18.90 Depth to Product na Product Thickness na Measuring Point TOC

Water Column Height 0.70 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	Gal/**oz** to be removed
0.72 x 0.16	.11	14.00	43.04

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1240	**6.64**	**5170**	**51.6**				**14**	**dark grey, well bailed dry**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1240	**6.64**	**5170**	**51.6**					**14**	**dark grey, well bailed dry**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4 M TMW-1 Sample Time 1243

Analytes: **BTEX**

MS/MSD _____ BD _____ BD Name/Time _____ TB _____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-16 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1145 Weather clear

Depth to Water 25.00 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 6.6 Well Dia. 4"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	Gal/**oz** to be removed
6.6 x 0.16	4.29		12.87

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1145	**7.09**	**2230**	**66.3**				**.5**	**light grey, sheen, HC odor**
	7.07	**2220**	**64.5**				**1**	**light grey, sheen, HC odor**
	7.05	**2240**	**62.5**				**1.5**	**light grey, sheen, HC odor**
	7.03	**2270**	**61.2**				**2**	**light grey, sheen, HC odor,**
	7.04	**2300**	**60.6**				**3**	**light grey, sheen, HC odor**
	7.05	**2280**	**60.8**				**4**	**well is bailing down**
	7.06	**2280**	**61.0**				**4.37**	grey, sheen, HC odor
	7.06	**2330**	**61.0**				**4.68**	grey, sheen, HC odor
	7.05	**2370**	**60.9**				**4.93**	grey, sheen, HC odor
	7.05	**2430**	**60.9**				**5.18**	grey, sheen, HC odor
1207	**7.05**	**2480**	**60.7**				**5.38**	well has bailed down

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Vol Evac.	Comments/Flow Rate
1207	**7.05**	**2480**	**60.7**				**5.38**	well has bailed down

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4M MW-16 Sample Time 1209

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-15 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1008 Weather clear

Depth to Water 18.28 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 9.01 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
9.01 x 0.16	1.44		4.32

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1008	**4.95**	**2510**	**66**				**.25**	**cloudy**
	5.00	**2430**	**61.8**				**.5**	**cloudy**
	5.02	**2410**	**60.5**				**.75**	**cloudy**
	5.01	**2410**	**60.1**				**1**	**cloudy**
	5.01	**2410**	**59.8**				**1.25**	**cloudy**
	5.08	**2410**	**59.6**				**2**	**cloudy**
	5.07	**2420**	**60.0**				**3**	**cloudy**
	5.10	**2400**	**60.0**				**4**	**cloudy**
1027	**5.07**	**2380**	**59.9**				**4.5**	**cloudy**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1027	**5.07**	**2380**	**59.9**					**4.5**	**cloudy**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M MW-15 Sample Time 1029

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: Seep Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1215 Weather sunny

Depth to Water _____ Depth to Product na Product Thickness na Measuring Point TOC

Water Column Height _____ Well Dia. _____

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		**Gal**/oz to be removed
	Gallons	Ounces	

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1335									

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M Seep Sample Time 1215

BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Ammonia TKN NMWQCC Metals Total Phosphorus

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No.:_____ Project Name BR Groundwater Sampling Client: Burlington

Location: : Hampton 4M Well No: MW-1 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 0928 Weather clear

Depth to Water 42.91 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 6.63 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer ☐ Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
6.63 x 0.16	1.06		3.18

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
0929	**5.09**	**2640**	**63.2**				**.25**	**cloudy**
	5.13	**2600**	**60.9**				**0.5**	**cloudy**
	5.19	**2570**	**60.0**				**0.75**	**cloudy**
	5.28	**2570**	**59.9**				**1**	**cloudy**
	5.37	**2590**	**60.0**				**2**	**cloudy**
	5.46	**2600**	**60.3**				**3**	**cloudy**
1000	**5.46**	**2580**	**60.5**				**3.25**	**cloudy**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1000	**5.46**	**2580**	**60.5**					**3.25**	**cloudy**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M MW-1 Sample Time: 1002

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-5 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1220 Weather clear

Depth to Water 15.70 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 6.47 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
6.49 x 0.16	1.04		3.12

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1220	**7.00**	**3030**	**66.0**				**.25**	**HC odor, clear, sheen**
	7.00	**2970**	**63.5**				**.5**	**HC odor, clear, grey, sheen**
	7.01	**2920**	**62.4**				**.75**	**HC odor, clear, grey, sheen**
	7.02	**2900**	**61.5**				**1**	**HC odor, clear, grey, sheen**
	7.02	**2880**	**61.2**				**1.25**	**well is bailing down**
	7.04	**2870**	**60.9**				**1.5**	**HC odor, clear, grey, sheen**
1230	**7.07**	**2880**	**61.0**				**2**	**well has bailed down**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Vol Evac.	Comments/Flow Rate
1230	**7.07**	**2880**	**61.0**				**2**	**well has bailed down**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4M MW-5 Sample Time 1232

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-7 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1250 Weather clear

Depth to Water 19.90 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 1.25 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
1.25 x 0.16	.2	26	77

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1250	**7.12**	**3480**	**70**				**10**	**clear, hydrocarbon odor**
	7.10	**3300**	**65**				**25**	**clear, hydrocarbon odor**
	7.13	**3230**	**61.5**				**40**	**clear, hydrocarbon odor**
	7.26	**3180**	**60**				**55**	**clear, hydrocarbon odor**
	7.13	**3150**	**59**				**65**	**clear, hydrocarbon odor**
	7.15	**3140**	**58.3**				**73**	**clear, hydrocarbon odor**
1305	**7.15**	**3160**	**58.3**				**80**	**clear, hydrocarbon odor**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Vol Evac.	Comments/Flow Rate
1305	**7.15**	**3160**	**58.3**				**80**	**clear, hydrocarbon odor**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-7 Sample Time 1307

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-9 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1038 Weather clear

Depth to Water 22.84 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 11.71 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	Gal/**oz** to be removed
11.71 x 0.16	1.87		5.62

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1039	**6.55**	**2570**	**63.3**				**.25**	**cloudy**
	6.77	**2560**	**61.5**				**.5**	**cloudy**
	6.84	**2540**	**61.9**				**.75**	**cloudy**
	6.85	**2540**	**60.0**				**1**	**cloudy**
	7.01	**2620**	**60.0**				**2**	**cloudy**
	6.98	**2620**	**59.9**				**3**	**cloudy**
	7.03	**2640**	**60.3**				**4**	**cloudy**
	7.03	**2640**	**60.5**				**5**	**cloudy**
1102	**7.03**	**2650**	**60.6**				**5.75**	**cloudy**

Final: Time	pH	SC	Temp.	Eh-ORP	D.O.	Turbidity	Vol Evac.	Comments/Flow Rate
1102	**7.03**	**2650**	**60.6**				**5.75**	**cloudy**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4M MW-9 Sample Time 1104

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No. 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-11 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1312 Weather clear

Depth to Water 55.92 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 15.71 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	**Gal**/oz to be removed
15.71 x 0.16	2.50		7.54

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1312	**6.95**	**2180**	**66.6**				**.25**	**Rusty color**
	6.91	**2100**	**65.0**				**.75**	**Rusty color**
	6.92	**2100**	**64.8**				**1**	**Rusty color**
	6.94	**2130**	**67.3**				**2**	**Rusty color**
	6.95	**2140**	**68.5**				**3**	**Rusty color**
	6.92	**2130**	**67.1**				**4**	**Rusty color**
	6.94	**2090**	**65.7**				**5**	**Rusty color**
	6.91	**2110**	**66.5**				**6**	**Rusty color**
	6.88	**2110**	**66.3**				**7**	**Rusty color**
1353	**6.9**	**2120**	**66.4**				**7.75**	**Rusty color**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Vol Evac.	Comments/Flow Rate
1353	**6.9**	**2120**	**66.4**				**7.75**	**Rusty color**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-11 Sample Time 1355

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-12 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1111 Weather clear

Depth to Water 20.43 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 15.64 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	**Gal**/oz to be removed
15.64 x 0.65	2.5		7.5

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1111	**7.02**	**2090**	**62.2**				**.25**	**grey, HC odor, sheen**
	6.99	**2160**	**61.4**				**.5**	**grey, HC odor, sheen**
	6.99	**2170**	**59.9**				**.75**	**grey, HC odor, sheen**
	7.02	**2150**	**59.5**				**1**	**grey, HC odor, sheen**
	6.96	**2320**	**60.3**				**2**	**grey, HC odor, sheen**
	6.91	**2380**	**60.0**				**3**	**grey, HC odor, sheen**
	6.9	**2400**	**60.3**				**4**	**grey, HC odor, sheen**
	6.86	**2430**	**60.5**				**5**	**grey, HC odor, sheen**
	6.85	**2440**	**60.3**				**6**	**grey, HC odor, sheen**
	6.85	**2470**	**61.0**				**7**	**grey, HC odor, sheen**
1138	**6.86**	**2440**	**61.0**				**7.5**	**grey, HC odor, sheen**

Final: Time	pH	SC	Temp.	Eh ORP	D.O.	Turbidity	Vol Evac.	Comments/Flow Rate
1138	**6.86**	**2440**	**61.0**				**7.5**	**grey, HC odor, sheen**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-12 Sample Time 1140

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: TMW-1 Development **Sampling**

Project Manager MJN Date 06/21/06 Start Time 1239 Weather clear

Depth to Water 18.94 Depth to Product na Product Thickness na Measuring Point TOC

Water Column Height 0.66 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
0.66 x 0.16	.11	13	41

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (cc)	Comments/ Flow rate
1239								**clear**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Vol Evac.	Comments/Flow Rate
1239								**clear**

COMMENTS: Not enough water to purge or measure parameters

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4 M TMW-1 Sample Time 1246

Analytes: **BTEX**

MS/MSD _____ BD _____ BD Name/Time _____ TB _____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-16 Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1325 Weather clear

Depth to Water 24.82 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 6.78 Well Dia. 4"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
6.78 x 0.16	4.41		13.22

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
13.26	**6.83**	**1890**	**12.9**				**.5**	**light grey, sheen, HC odor**
	6.26	**1960**	**13.3**				**2**	**light grey, sheen, HC odor**
	6.03	**2110**	**13.9**				**3**	**light grey, sheen, HC odor**
	6.80	**2500**	**13.6**				**3.5**	**light grey, sheen, HC odor, well is bailing down**
	6.84	**2270**	**13.6**				**4.5**	**light grey, sheen, HC odor**
1335	**6.84**	**2470**	**13.6**				**5**	**light grey, sheen, HC odor, well has bailed down**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1335	**6.84**	**2470**	**13.6**					**5**	**light grey, sheen, HC odor, well has bailed down**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4M MW-16 Sample Time 1342

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-15 Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1039 Weather clear

Depth to Water 18.29 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 9. Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	Gal/**oz** to be removed
9. x 0.16	1.44		4.32

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1040	**6.88**	**2520**	**15.0**				**.25**	**clear with silt**
	6.80	**2530**	**15.2**				**.5**	**clear with silt**
	6.73	**2540**	**15.6**				**.75**	**clear with silt**
	6.72	**2550**	**16.3**				**2**	**cloudy/silty**
	6.68	**2560**	**16.6**				**3**	**cloudy/silty**
	6.70	**2520**	**16.0**				**4**	**cloudy/silty**
	6.69	**2530**	**15.9**				**4.25**	**cloudy/silty**
1111	**6.67**	**2540**	**15.9**				**4.5**	**cloudy/silty**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1111	**6.67**	**2540**	**15.9**					**4.5**	**cloudy/silty**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M MW-15 Sample Time 1112

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: Seep Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1350 Weather sunny

Depth to Water _____ Depth to Product na Product Thickness na Measuring Point TOC

Water Column Height _____ Well Dia. _____

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		**Gal**/oz to be removed
	Gallons	Ounces	

Time (military)	pH (su)	SC (umhos/cm)	Temp (°F)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1335									

COMMENTS: No standing water, dug into sand and collected sample

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M Seep Sample Time 1350

BTEX VOCs Alkalinity TDS Cations Anions Nitrate Nitrite Ammonia TKN NMWQCC Metals Total Phosphorus

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No.:_____ Project Name BR Groundwater Sampling Client: Burlington

Location: :_Hampton 4M _ Well No:__MW-1_____ Development **Sampling**

Project Manager ___MJN_____ Date___10/18/06___ Start Time__0947___ Weather__clear

Depth to Water ___43.04___ Depth to Product _na__ Product Thickness:__na___ Measuring Point __TOC____

Water Column Height _7.50_ Well Dia. _____2"_____

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer ☐ Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other_or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
7.50 x 0.16	1.20		3.60

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
0950	**6.33**	**2060**	**10.7**				**.25**	**clear**
	6.37	**2080**	**11.6**				**.5**	**clear**
	6.37	**2090**	**11.8**				**.75**	**clear**
	6.38	**2020**	**12.0**				**1**	**clear**
	6.38	**1990**	**11.9**				**2**	**clear**
	6.38	**2030**	**12.1**				**3**	**clear**
1015	**6.38**	**2030**	**12.0**				**3.75**	**clear**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1015	**6.38**	**2030**	**12.0**					**3.75**	**clear**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4M MW-1 Sample Time: 1016

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-5 Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1356 Weather clear

Depth to Water 16.09 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 6.07 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
6.07 x 0.16	0.97		2.9

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1357	**6.83**	**2970**	**15.3**				**.25**	**HC odor, clear, sheen**
	6.84	**3090**	**16.2**				**.5**	**HC odor, clear, grey, sheen**
	6.85	**3040**	**16.6**				**.75**	**HC odor, clear, grey, sheen**
	6.87	**3190**	**16.7**				**1**	**HC odor, clear, grey, sheen**
	6.94	**3080**	**16.2**				**1.25**	**well is bailing down**
1408	**6.96**	**3040**	**15.9**				**1.4**	**well has bailed down**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1408	**6.96**	**3040**	**15.9**					**1.4**	**well has bailed down**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4M MW-5 Sample Time 1411

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-7 Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1432 Weather clear

Depth to Water 20.25 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 0.90 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
0.90 x 0.16		18	54

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1433	**6.97**	**3170**	**18.5**				**12**	**silty, grey, odor**
	6.95	**3220**	**16.6**				**20**	**silty, grey, odor**
	7.16	**3220**	**15.9**				**28**	**silty, grey, odor**
1455	**7.24**	**3250**	**15.6**				**32**	**well has bailed down**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1310	**6.62**	**6150**	**53.5**					**82**	**clear**

COMMENTS: well has been washed out of original position, PVC riser is bent, able to get probe and bailer down well

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-7 Sample Time 1457

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-9 Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1119 Weather clear

Depth to Water 22.75 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 11.8 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	Gal/**oz** to be removed
11.8 x 0.16	1.89		5.66

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1129	**6.73**	**2580**	**14.9**				**.25**	**clear**
	6.64	**2640**	**14.9**				**.5**	**clear**
	6.71	**2630**	**14.3**				**.75**	**cloudy**
	6.83	**2680**	**14.1**				**3**	**grey, cloudy**
	6.81	**2680**	**13.9**				**5**	**grey, cloudy**
	6.81	**2720**	**14.2**				**5.25**	**grey, cloudy**
	6.81	**2770**	**14.2**				**5.5**	**grey, cloudy**
1115	**6.81**	**2740**	**14.3**				**5.75**	**grey, cloudy**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1115	**6.81**	**2740**	**14.3**					**5.75**	**grey, cloudy**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4M MW-9 Sample Time 1156

BTEX VOCs

MS/MSD _____ BD _____ BD Name/Time _____ TB _____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-11 Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1512 Weather clear

Depth to Water 55.96 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 14.90 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		**Gal**/oz to be removed
	Gallons	Ounces	
14.90 x 0.16	2.39		7.12

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1514	**6.59**	**2010**	**15.4**				**1**	**reddish tinge, silty**
	6.73	**1920**	**14.4**				**2**	**reddish tinge, silty**
	6.76	**1900**	**14.1**				**3.25**	**reddish tinge, silty**
	6.75	**1820**	**13.3**				**4.25**	**reddish tinge, silty**
	6.69	**1780**	**12.8**				**5.25**	**reddish tinge, silty**
	6.71	**1830**	**13.2**				**6.25**	**clearing**
	6.72	**1820**	**12.8**				**7.25**	**clearing**
1550	**6.71**	**1810**	**12.9**				**7.75**	**clearing**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1550	**6.71**	**1810**	**12.9**					**7.75**	**clearing**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-11 Sample Time 1553

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: MW-12 Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1218 Weather clear

Depth to Water 20.28 Depth to Product na Product Thickness: na Measuring Point TOC

Water Column Height 15.79 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	**Gal**/oz to be removed
15.79 x 0.65	2.53		7.6

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (gal)	Comments/ Flow rate
1231	**6.78**	**2090**	**13.9**				**1**	**grey, HC odor, sheen**
	6.6	**2240**	**14.0**				**2**	**grey, HC odor, sheen**
	6.6	**2280**	**14.2**				**3**	**grey, HC odor, sheen**
	6.49	**2320**	**14.2**				**4**	**grey, HC odor, sheen**
	6.46	**2310**	**14.2**				**5**	**grey, HC odor, sheen**
	6.49	**2310**	**14.3**				**6**	**grey, HC odor, sheen**
	6.45	**2320**	**14.1**				**7**	**grey, HC odor, sheen**
1305	**6.47**	**2330**	**14.1**				**7.75**	**grey, HC odor, sheen**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1305	**6.47**	**2330**	**14.1**					**7.75**	**grey, HC odor, sheen**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID: Hampton 4 M MW-12 Sample Time 1306

BTEX VOCs

MS/MSD_____ BD_____ BD Name/Time_____ TB_____

WELL DEVELOPMENT AND SAMPLING LOG

Project No 30003.0 Project Name BR Groundwater Sampling Client: Burlington

Location: Hampton 4M Well No: TMW-1 Development **Sampling**

Project Manager MJN Date 10/18/06 Start Time 1417 Weather clear

Depth to Water 19.06 Depth to Product na Product Thickness na Measuring Point TOC

Water Column Height 0.56 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	Gal/**oz** to be removed
0.56 x 0.16	.09	11.52	34.56

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (cc)	Comments/ Flow rate
1418	**6.96**	**3590**	**20.5**				**40**	**grayish, silty, roots**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1240	**6.64**	**5170**	**51.6**					**14**	**dark grey, well bailed dry**

COMMENTS: Not enough water to purge, just enough to fill VOAs and get 1 reading

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**

DO Monitor _____ Other _____

Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton 4 M TMW-1 Sample Time 1435

Analytes: **BTEX**

MS/MSD _____ BD _____ BD Name/Time _____ TB _____

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: MW-16 Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 1016 Weather clear 29
Depth to Water 25.00 ft Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height 4.62 ft Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

	Water Volume in Well		
Gal/ft x ft of water	Gallons	Ounces	**Gal**/oz to be removed
4.62 x 0.65	3 x 3		9

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (g)	Comments/ Flow rate
1020	**6.42**	**4170**	**54.0**				**1**	**Clear, strong HC odor**
	6.58	**4260**	**56.1**				**2**	**Gray color**
	6.65	**4550**	**56.7**				**3**	
	6.62	**4730**	**57.0**				**4**	**Well is bailing down**
	6.61	**4700**	**57.5**				**5**	

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1047	**6.60**	**4750**	**57.8**					**5.72 g**	**Well has bailed dry**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton MW-16 Sample Time 1052
BTEX VOCs Diesel
MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: MW-1 Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 0900 Weather clear 29
Depth to Water 43.02 ft Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height 6.52 ft Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
6.52 x 0.16		133.5 x 3	400.6 oz

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
0915	**4.08**	**4700**	**51.6**				**64**	**Brown, cloudy**
	3.66	**4120**	**47.2**				**128**	**Slight odor**
	3.65	**3990**	**43.7**				**256**	**Silty**
	3.54	**3970**	**41.2**				**384**	
	3.55	**3990**	**41.2**				**416**	

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
0930	**3.54**	**3990**	**41.0**					**448**	

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____
Water Disposal onsite Sample ID Hampton MW-1 Sample Time 0934
BTEX VOCs Diesel
MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: MW-5 Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 1209 Weather clear 30s
Depth to Water 15.69 Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height 4.41 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ↑ Stainless-Steel Kemmerer ↑

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
4.41 x .16		90.3 x 3	271

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1214	**5.99**	**6120**	**59.7**				**32**	**Gray color, sheen, strong odor**
	6.08	**6300**	**58.2**				**64**	
	6.11	**6060**	**56.5**				**96**	
	6.12	**6160**	**55.5**				**128**	
	6.15	**5930**	**53.6**				**256**	**Bailing down**
	6.16	**6090**	**53.5**				**268**	

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1225	**6.16**	**6010**	**53.4**					**274 oz**	**Well has bailed dry**

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton MW-5 Sample Time 1229

BTEX VOCs Diesel

MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: MW-7 Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 1303 Weather clear 30s
Depth to Water 20.12 Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height 1.04 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
1.04 x .16		21.3 x 3	63.9

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
1306	**6.28**	**6540**	**56.4**				**10**	**Gray color, sheen, strong odor**

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1309	**6.32**	**6280**	**55.4**					**16 oz**	**Well has bailed dry**

COMMENTS: only enough water in well to fill two sample voas.

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____
Water Disposal onsite Sample ID Hampton MW-7 Sample Time 1310
BTEX VOCs Diesel
MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: MW-9 Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 1120 Weather clear 29
Depth to Water 22.77 ft Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height 9.40 ft Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ↑ Stainless-Steel Kemmerer ↑

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		**Gal**/oz to be removed
	Gallons	Ounces	
9.740 x 0.16	1.5 x 3		4.51

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (g)	Comments/ Flow rate
1122	**6.08**	**5310**	**52.4**				**0.5**	**Cloudy, brown**
	6.15	**5620**	**54.7**				**1**	
	6.28	**5870**	**55.7**				**2**	
	6.33	**5840**	**55.7**				**3**	
	6.32	**4810**	**55.7**				**4**	
	6.33	**5840**	**55.5**				**4.25**	
	6.31	**5830**	**55.7**				**4.50**	
	6.44	**4470**	**50.2**				**4.75**	

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1140	**6.32**	**5810**	**55.5**					**4.75 g**	

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton MW-9 Sample Time 1145

BTEX VOCs Diesel

MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: MW-11 Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 1316 Weather clear 30s
Depth to Water 54.60 Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height 13.54 Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		**Gal**/oz to be removed
	Gallons	Ounces	
13.54 x .16	2.17 x 3		6.5

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (g)	Comments/ Flow rate
1320	**5.47**	**4160**	**55.4**				**1**	**Brown, cloudy**
	5.04	**3930**	**54.6**				**2**	
	5.14	**3320**	**53.9**				**3**	
	5.32	**3560**	**53.1**				**4**	
	5.34	**3480**	**53.0**				**5**	
	5.37	**3410**	**53.2**				**6**	
	5.37	**3400**	**53.0**				**6.5**	

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1405	**5.38**	**3980**	**53.1**					**7 g**	

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton MW-11 Sample Time 1410

BTEX VOCs Diesel

MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: MW-12 Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 1059 Weather clear 29
Depth to Water 20.26 ft Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height 9.76 ft Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		**Gal**/oz to be removed
	Gallons	Ounces	
9.76 x 0.16	1.56 x 3		4.68

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (g)	Comments/ Flow rate
1103	**6.29**	**4170**	**51.0**				**0.5**	**Black color, strong HC odor, silty**
	6.32	**4280**	**51.3**				**1**	
	6.42	**4450**	**49.7**				**2**	**Sheen**
	6.45	**4460**	**49.9**				**3**	
	6.46	**4470**	**50.2**				**4**	
	6.45	**4410**	**50.1**				**4.25**	
	6.46	**4400**	**50.0**				**4.50**	
	6.44	**4470**	**50.2**				**4.75**	
	6.43	**4460**	**50.1**				**5**	

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1115	**6.43**	**4470**	**50.0**					**5.25**	

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____
Water Disposal onsite Sample ID Hampton MW-12 Sample Time 1117
BTEX VOCs Diesel
MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: MW-15 Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 0944 Weather clear 29
Depth to Water 18.21 ft Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height 6.65 ft Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		Gal/**oz** to be removed
	Gallons	Ounces	
6.65 x 0.16		136.2 x 3	408.6

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (oz)	Comments/ Flow rate
0950	**6.54**	**4660**	**43.4**				**64**	**Brown, cloudy**
	6.56	**4760**	**48.4**				**128**	
	6.60	**4910**	**50.4**				**256**	
	6.62	**4860**	**50.1**				**384**	
	6.62	**4840**	**50.0**				**416**	

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate
1007	**6.62**	**4820**	**50.0**					**448**	

COMMENTS:

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____
Water Disposal onsite Sample ID Hampton MW-15 Sample Time 1011
BTEX VOCs Diesel
MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

WELL DEVELOPMENT AND SAMPLING LOG

Project No_____ Project Name Burlington Ground Water Sampling Client: Burlington
Location: Hampton Well No: seep Development **Sampling**
Project Manager MJN Date 12/12/06 Start Time 1155 Weather clear 30s
Depth to Water NA Depth to Product na Product Thickness: na Measuring Point TOC
Water Column Height NA Well Dia. 2"

Sampling Method: Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other ☐

Bottom Valve Bailer X Double Check Valve Bailer ☐ Stainless-Steel Kemmerer ☐

Criteria: 3 to 5 Casing Volumes of Water Removal **X** stabilization of Indicator Parameters **X** Other or bail dry

Gal/ft x ft of water	Water Volume in Well		**Gal**/oz to be removed
	Gallons	Ounces	

Time (military)	pH (su)	SC (umhos/cm)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. (g)	Comments/ Flow rate

Final: Time	pH	SC	Temp	Eh-ORP	D.O.	Turbidity	Ferrous Iron	Vol Evac.	Comments/Flow Rate

COMMENTS: only enough water in seep to collect a grab sample. Two voas filled. Most of the standing water is frozen.

INSTRUMENTATION: pH Meter **X** _____ Temperature Meter **x**
DO Monitor _____ Other _____
Conductivity Meter **X** _____

Water Disposal onsite Sample ID Hampton seep Sample Time 1205

BTEX VOCs Diesel

MS/MSD_____ BD_____ BD Name/Time_____ TB 12122006TB01

Attachment 2: Laboratory Analytical Reports

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

April 04, 2006

Report to:
Gregg Wurtz
Burlington Resources, Inc.
3401 E. 30th St. P.O. Box 4289
Farmington, NM 87499

Bill to:
Gregg Wurtz
Burlington Resources, Inc.
P.O. Box 4289
Farmington, NM 87499

cc: Martin Nee

Project ID: HAMPTON
ACZ Project ID: L55781

Gregg Wurtz:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on March 23, 2006. This project has been assigned to ACZ's project number, L55781. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L55781. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after May 04, 2006. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than $10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

05/Apr/06

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON MW-1

ACZ Sample ID: ***L55781-01***
Date Sampled: *03/20/06 8:48*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204013***
Analyst: *km*
Extract Date: *03/27/06 18:01*
Analysis Date: ***03/27/06 18:01***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2	1.1		1	*	ug/L	0.3	1
Ethylbenzene	000100-41-4		U	1		ug/L	0.2	1
m p Xylene	01330 20 7	0.6	J	1		ug/L	0.4	2
o Xylene	00095-47- 6		U	1		ug/L	0.2	1
Toluene	000108-88-3	0.9	J	1		ug/L	0.2	1

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	94		1		%	83	117

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON MW-15

ACZ Sample ID: ***L55781-02***
Date Sampled: *03/20/06 9:27*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204013***
Analyst: *km*
Extract Date: *03/27/06 18:44*
Analysis Date: ***03/27/06 18:44***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	1	*	ug/L	0.3	1
Ethylbenzene	000100-41-4		U	1		ug/L	0.2	1
m p Xylene	01330 20 7		U	1		ug/L	0.4	2
o Xylene	00095-47- 6		U	1		ug/L	0.2	1
Toluene	000108-88-3		U	1		ug/L	0.2	1

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	94.7		1		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON MW-9

ACZ Sample ID: ***L55781-03***
Date Sampled: *03/20/06 10:15*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204054***
Analyst: *km*
Extract Date: *03/29/06 11:15*
Analysis Date: ***03/29/06 11:15***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	1	*	ug/L	0.3	1
Ethylbenzene	000100-41-4		U	1		ug/L	0.2	1
m p Xylene	01330 20 7		U	1		ug/L	0.4	2
o Xylene	00095-47- 6		U	1	*	ug/L	0.2	1
Toluene	000108-88-3		U	1	*	ug/L	0.2	1

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	97.3		1		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON MW-12

ACZ Sample ID: ***L55781-04***
Date Sampled: *03/20/06 10:56*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204054***
Analyst: *km*
Extract Date: *03/29/06 13:25*
Analysis Date: ***03/29/06 13:25***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2	2100		20	*	ug/L	6	20
Ethylbenzene	000100-41-4	71		20		ug/L	4	20
m,p Xylene	01330 20 7	182		20		ug/L	8	40
o Xylene	00095-47- 6	43		20	*	ug/L	4	20
Toluene	000108-88-3	210		20	*	ug/L	4	20

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	101.7		20		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON MW-16

ACZ Sample ID: ***L55781-05***
Date Sampled: *03/20/06 11:30*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204054***
Analyst: *km*
Extract Date: *03/29/06 14:08*
Analysis Date: ***03/29/06 14:08***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2	6820		100	*	ug/L	30	100
Ethylbenzene	000100-41-4	830		100		ug/L	20	100
m p Xylene	01330 20 7	6680		100		ug/L	40	200
o Xylene	00095-47- 6	1930		100	*	ug/L	20	100
Toluene	000108-88-3	11500		100	*	ug/L	20	100

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	100.6		100		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON SEEP

ACZ Sample ID: ***L55781-06***
Date Sampled: *03/20/06 11:51*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204054***
Analyst: *km*
Extract Date: *03/29/06 14:51*
Analysis Date: ***03/29/06 14:51***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	1	*	ug/L	0.3	1
Ethylbenzene	000100-41-4		U	1		ug/L	0.2	1
m p Xylene	01330 20 7		U	1		ug/L	0.4	2
o Xylene	00095-47- 6		U	1	*	ug/L	0.2	1
Toluene	000108-88-3		U	1	*	ug/L	0.2	1

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	95.3		1		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON MW-5

ACZ Sample ID: ***L55781-07***
Date Sampled: *03/20/06 12:21*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204054***
Analyst: *km*
Extract Date: *03/29/06 15:35*
Analysis Date: ***03/29/06 15:35***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2	820		100	*	ug/L	30	100
Ethylbenzene	000100-41-4	510		100		ug/L	20	100
m p Xylene	01330 20 7	4790		100		ug/L	40	200
o Xylene	00095-47- 6	1250		100	*	ug/L	20	100
Toluene	000108-88-3	6270		100	*	ug/L	20	100

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	97		100		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON TMW-1

ACZ Sample ID: ***L55781-08***
Date Sampled: *03/20/06 12:43*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204054***
Analyst: *km*
Extract Date: *03/29/06 17:00*
Analysis Date: ***03/29/06 17:00***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2	71		5		ug/L	2	5
Ethylbenzene	000100-41-4	16		5		ug/L	1	5
m p Xylene	01330 20 7	93		5		ug/L	2	10
o Xylene	00095-47- 6	58		5		ug/L	1	5
Toluene	000108-88-3	82		5	*	ug/L	1	5

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	100		5		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON MW-7

ACZ Sample ID: ***L55781-09***
Date Sampled: *03/20/06 13:12*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204054***
Analyst: *km*
Extract Date: *03/29/06 17:42*
Analysis Date: ***03/29/06 17:42***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2	72		2.5		ug/L	0.8	3
Ethylbenzene	000100-41-4	12.6		2.5		ug/L	0.5	3
m p Xylene	01330 20 7	8		2.5		ug/L	1	5
o Xylene	00095-47- 6	8.9		2.5		ug/L	0.5	3
Toluene	000108-88-3		U	2.5	*	ug/L	0.5	3

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	98.1		2.5		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON
Sample ID: HAMPTON MW-14

ACZ Sample ID: ***L55781-10***
Date Sampled: *03/20/06 14:17*
Date Received: *03/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method: **Method**

Workgroup: ***WG204054***
Analyst: *km*
Extract Date: *03/29/06 18:25*
Analysis Date: ***03/29/06 18:25***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	000071-43-2		U	1		ug/L	0.3	1
Ethylbenzene	000100-41-4		U	1		ug/L	0.2	1
m p Xylene	01330 20 7		U	1		ug/L	0.4	2
o Xylene	00095-47- 6		U	1		ug/L	0.2	1
Toluene	000108-88-3		U	1	*	ug/L	0.2	1

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bromofluorobenzene	000460-00-4	97.9		1		%	83	117

ACZ Laboratories, Inc.
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Organic Reference

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
LCL	Lower Control Limit
MDL	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
UCL	Upper Control Limit
Sample	Value of the Sample of interest

QC Sample Types

SURR	Surrogate	*LFM*	Laboratory Fortified Matrix
INTS	Internal Standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
LCSS	Laboratory Control Sample - Soil	*MS/MSD*	Matrix Spike/Matrix Spike Duplicate
LCSW	Laboratory Control Sample - Water	*PBS*	Prep Blank - Soil
LFB	Laboratory Fortified Blank	*PBW*	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

B	Analyte detected in daily blank
H	Analysis exceeded method hold time.
J	Analyte concentration detected at a value between MDL and PQL
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality contreol sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
P	Analyte concentration differs from second detector by more than 40%.
E	Analyte concentration is estimated due to result exceeding calibration range.
M	Analyte concentration is estimated due to matrix interferences.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
(3)	EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
(5)	EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December, 1996.
(6)	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Organic analyses are reported on an "as received" basis.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Extended Qualifier Report

Burlington Resources, Inc.

ACZ Project ID: ***L55781***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L55781-01	WG204013	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L55781-02	WG204013	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L55781-03	WG204054	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		o Xylene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		Toluene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
			M8021B GC/PID	ZI	One LCS was outside the recovery method limits while another LCS was within the recovery limits, RPD is within limits.
L55781-04	WG204054	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		o Xylene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		Toluene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
			M8021B GC/PID	ZI	One LCS was outside the recovery method limits while another LCS was within the recovery limits, RPD is within limits.
L55781-05	WG204054	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		o Xylene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		Toluene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
			M8021B GC/PID	ZI	One LCS was outside the recovery method limits while another LCS was within the recovery limits, RPD is within limits.
L55781-06	WG204054	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		o Xylene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		Toluene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
			M8021B GC/PID	ZI	One LCS was outside the recovery method limits while another LCS was within the recovery limits, RPD is within limits.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Extended Qualifier Report

Burlington Resources, Inc.

ACZ Project ID: ***L55781***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L55781-07	WG204054	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		o Xylene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		Toluene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
			M8021B GC/PID	ZI	One LCS was outside the recovery method limits while another LCS was within the recovery limits, RPD is within limits.
L55781-08	WG204054	Toluene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
			M8021B GC/PID	ZI	One LCS was outside the recovery method limits while another LCS was within the recovery limits, RPD is within limits.
L55781-09	WG204054	Toluene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
			M8021B GC/PID	ZI	One LCS was outside the recovery method limits while another LCS was within the recovery limits, RPD is within limits.
L55781-10	WG204054	Toluene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
			M8021B GC/PID	ZI	One LCS was outside the recovery method limits while another LCS was within the recovery limits, RPD is within limits.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Certification Qualifiers

Burlington Resources, Inc.

ACZ Project ID: ***L55781***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Burlington Resources, Inc.
HAMPTON

ACZ Project ID: L55781
Date Received: 3/23/2006
Received By:
Date Printed: 3/24/2006

Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?	X		
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?	X		
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers

Cooler Id		Temp (°C)	Rad (µR/hr)
293		8.5	14

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

"Trip" was noted on COC.Did not receive a container associated with this sample ID.

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Burlington Resources, Inc.
HAMPTON

ACZ Project ID: L55781
Date Received: 3/23/2006
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y< 2	YG< 2	B< 2	O < 2	T >12	N/A	RAD	ID
L55781-01	HAMPTON MW-1									X		☐
L55781-02	HAMPTON MW-15									X		☐
L55781-03	HAMPTON MW-9									X		☐
L55781-04	HAMPTON MW-12									X		☐
L55781-05	HAMPTON MW-16									X		☐
L55781-06	HAMPTON SEEP									X		☐
L55781-07	HAMPTON MW-5									X		☐
L55781-08	HAMPTON TMW-1									X		☐
L55781-09	HAMPTON MW-7									X		☐
L55781-10	HAMPTON MW-14									X		☐

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

L55781

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Gregg Wurtz	Address: PO Box 4289
Company: Burlington	Farmington NM 87499
E-mail:	Telephone: 505 326 9537

Copy of Report to:

Name: MNee	E-mail: MJN@ladestarservices.com
Company: Ladestar	Telephone:

Invoice to:

Name: Gregg Wurtz	Address:
Company: ASabove	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES [Y] NO [ ]

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

Quote #:
Project/PO #: Hampton
Shipping Co.: FedEx
Tracking #: 879825926 40
Reporting State for compliance testing: NM
MNee

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	BTEX							
Hampton MW-1	3200 0840	WG	2	2							
Hampton MW-15	3200 0927	WG	2	2							
Hampton MW-9	3200 1015	WG	2	2							
Hampton MW-12	3200 1056	WG	2	2							
Hampton MW-16	3200 1130	WG	2	2							
Hampton Seep	3200 1151	WG	2	2							
Hampton MW-5	3200 1221	WG	2	2							
Hampton TMW-1	3200 1243	WG	2	2							
Hampton MW-7	3200 1312	WG	2	2							
Hampton MW-11	3200 1417	WG	2	2							
TRIP											

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

MW-15 sample time 0927

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature]	3229 1600	[signature]	3-23-06 10:20

PAGE 1 Of 1

FRMQA021.06.03.05

White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

July 20, 2006

Report to:
Gregg Wurtz
Burlington Resources, Inc.
3401 E. 30th St. P.O. Box 4289
Farmington, NM 87499

Bill to:
Gregg Wurtz
Burlington Resources, Inc.
P.O. Box 4289
Farmington, NM 87499

cc: Martin Nee

Project ID: HAMPTON 4M
ACZ Project ID: L57329

Gregg Wurtz:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 23, 2006. This project has been assigned to ACZ's project number, L57329. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L57329. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after August 20, 2006. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than $10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

20/Jul/06

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-1

ACZ Sample ID: ***L57329-01***
Date Sampled: *06/21/06 10:02*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG208791***
Analyst: *cbr*
Extract Date:
Analysis Date: ***06/29/06 19:12***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	0.3	J	1		ug/L	0.3	1
Ethylbenzene	100-41-4	0.4	J	1		ug/L	0.2	1
m p Xylene	1330 20 7	1.1	J	1		ug/L	0.4	2
o Xylene	95-47- 6	0.7	J	1		ug/L	0.2	1
Toluene	108-88-3	1.4		1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	95.8	1		%	83	117

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-15

ACZ Sample ID: ***L57329-02***
Date Sampled: *06/21/06 10:29*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG208791***
Analyst: *cbr*
Extract Date:
Analysis Date: ***06/29/06 19:56***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	0.7	J	1		ug/L	0.3	1
Ethylbenzene	100-41-4	0.3	J	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3		U	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	94.7	1		%	83	117

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-9

ACZ Sample ID: ***L57329-03***
Date Sampled: *06/21/06 11:04*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG208791***
Analyst: *cbr*
Extract Date:
Analysis Date: ***06/29/06 20:39***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3		U	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	94.3	1		%	83	117

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-12

ACZ Sample ID: ***L57329-04***
Date Sampled: *06/21/06 11:40*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG209185***
Analyst: *ccp*
Extract Date:
Analysis Date: ***07/07/06 16:43***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	2270	H	20	*	ug/L	6	20
Ethylbenzene	100-41-4	85	H	20	*	ug/L	4	20
m p Xylene	1330 20 7	261	H	20	*	ug/L	8	40
o Xylene	95-47- 6	94	H	20	*	ug/L	4	20
Toluene	108-88-3	385	H	20	*	ug/L	4	20

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	102.6	20		%	83	117

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-16

ACZ Sample ID: ***L57329-05***
Date Sampled: *06/21/06 12:09*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG209258***
Analyst: *ccp*
Extract Date:
Analysis Date: ***07/10/06 12:45***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	6640	H	100	*	ug/L	30	100
Ethylbenzene	100-41-4	690	H	100	*	ug/L	20	100
m p Xylene	1330 20 7	5860	H	100	*	ug/L	40	200
o Xylene	95-47- 6	1710	H	100	*	ug/L	20	100
Toluene	108-88-3	11200	H	100	*	ug/L	20	100

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	93.6	100	*	%	83	117

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON SEEP

ACZ Sample ID: ***L57329-06***
Date Sampled: *06/21/06 12:15*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG208791***
Analyst: *cbr*
Extract Date:
Analysis Date: ***06/29/06 22:46***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	4		1		ug/L	0.3	1
Ethylbenzene	100-41-4	0.8	J	1		ug/L	0.2	1
m p Xylene	1330 20 7	9.9		1		ug/L	0.4	2
o Xylene	95-47- 6	5.1		1		ug/L	0.2	1
Toluene	108-88-3	12.9		1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	93.8	1		%	83	117

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-5

ACZ Sample ID: ***L57329-07***
Date Sampled: *06/21/06 12:32*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG209185***
Analyst: *ccp*
Extract Date:
Analysis Date: ***07/07/06 18:09***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	1720	H	50	*	ug/L	20	50
Ethylbenzene	100-41-4	970	H	50	*	ug/L	10	50
m p Xylene	1330 20 7	8610	H	50	*	ug/L	20	100
o Xylene	95-47- 6	2250	H	50	*	ug/L	10	50

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	101.6	50		%	83	117

Workgroup: ***WG209258***
Analyst: *ccp*
Extract Date:
Analysis Date: ***07/10/06 14:54***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	930	H	100	*	ug/L	30	100
Ethylbenzene	100-41-4	580	H	100	*	ug/L	20	100
m p Xylene	1330 20 7	5280	H	100	*	ug/L	40	200
o Xylene	95-47- 6	1410	H	100	*	ug/L	20	100
Toluene	108-88-3	6110	H	100	*	ug/L	20	100

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	95.6	100	*	%	83	117

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON TMW-1

ACZ Sample ID: ***L57329-08***
Date Sampled: *06/21/06 12:46*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG208791***
Analyst: *cbr*
Extract Date:
Analysis Date: ***06/30/06 0:12***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	159		1		ug/L	0.3	1
Ethylbenzene	100-41-4	56.9		1		ug/L	0.2	1
m p Xylene	1330 20 7	250		1		ug/L	0.4	2
o Xylene	95-47- 6	110		1		ug/L	0.2	1
Toluene	108-88-3	65.7		1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	98.9	1		%	83	117

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-7

ACZ Sample ID: ***L57329-09***
Date Sampled: *06/21/06 13:07*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG208791***
Analyst: *cbr*
Extract Date:
Analysis Date: ***06/30/06 0:54***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	89.9		1		ug/L	0.3	1
Ethylbenzene	100-41-4	4.8		1		ug/L	0.2	1
m p Xylene	1330 20 7	14.5		1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3	10.6		1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	105.6	1		%	83	117

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-11

ACZ Sample ID: ***L57329-10***
Date Sampled: *06/21/06 13:55*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG208791***
Analyst: *cbr*
Extract Date:
Analysis Date: ***06/30/06 1:37***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL*
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7	0.8	J	1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3	0.3	J	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	106.8	1		%	83	117

* *Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: TB060506-01

ACZ Sample ID: ***L57329-11***
Date Sampled: *06/21/06 0:00*
Date Received: *06/23/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG208791***
Analyst: *cbr*
Extract Date:
Analysis Date: ***06/30/06 3:01***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7	0.4	J	1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3		U	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	104.2	1		%	83	117

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Reference

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
LCL	Lower Control Limit
MDL	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
UCL	Upper Control Limit
Sample	Value of the Sample of interest

QC Sample Types

SURR	Surrogate	*LFM*	Laboratory Fortified Matrix
INTS	Internal Standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
LCSS	Laboratory Control Sample - Soil	*MS/MSD*	Matrix Spike/Matrix Spike Duplicate
LCSW	Laboratory Control Sample - Water	*PBS*	Prep Blank - Soil
LFB	Laboratory Fortified Blank	*PBW*	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

B	Analyte detected in daily blank
H	Analysis exceeded method hold time.
J	Analyte concentration detected at a value between MDL and PQL
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality contreol sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
P	Analyte concentration differs from second detector by more than 40%.
E	Analyte concentration is estimated due to result exceeding calibration range.
M	Analyte concentration is estimated due to matrix interferences.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
(3)	EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
(5)	EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December, 1996.
(6)	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Organic analyses are reported on an "as received" basis.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Extended Qualifier Report

Burlington Resources, Inc.

ACZ Project ID: ***L57329***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L57329-04	WG209185	Benzene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		Ethylbenzene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		m p Xylene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		o Xylene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		Toluene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
L57329-05	WG209258	*All Compounds*	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		m p Xylene	M8021B GC/PID	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		o Xylene	M8021B GC/PID	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Toluene	M8021B GC/PID	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
L57329-07	WG209185	Benzene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		Ethylbenzene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		m p Xylene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		o Xylene	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG209258	*All Compounds*	M8021B GC/PID	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
		Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		m p Xylene	M8021B GC/PID	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		o Xylene	M8021B GC/PID	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
		Toluene	M8021B GC/PID	M2	Matrix spike recovery was low, the method control sample recovery was acceptable.

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Certification Qualifiers

Burlington Resources, Inc.

ACZ Project ID: ***L57329***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Burlington Resources, Inc.
HAMPTON 4M

ACZ Project ID: L57329
Date Received: 6/23/2006
Received By:
Date Printed: 6/24/2006

Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?	X		
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?		X	
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

The following contained headspace: #1- 1 of 2, #8- 2 of 2.

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers

Cooler Id		Temp (°C)	Rad (µR/hr)
1410		0.5	17

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

ACZ Laboratories, Inc.

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Sample Receipt

Burlington Resources, Inc.
HAMPTON 4M

ACZ Project ID: L57329
Date Received: 6/23/2006
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y< 2	YG< 2	B< 2	O < 2	T >12	N/A	RAD	ID
L57329-01	HAMPTON MW-1									X		
L57329-02	HAMPTON MW-15									X		
L57329-03	HAMPTON MW-9									X		
L57329-04	HAMPTON MW-12									X		
L57329-05	HAMPTON MW-16									X		
L57329-06	HAMPTON SEEP									X		
L57329-07	HAMPTON MW-5									X		
L57329-08	HAMPTON TMW-1									X		
L57329-09	HAMPTON MW-7									X		
L57329-10	HAMPTON MW-11									X		
L57329-11	TB060506-01									X		

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

L57329

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Gregg Wurtz
Company: Burlington
E-mail:
Address: P.O Box 4289
Farmington, N.M 87499
Telephone: 565-326-9537

Copy of Report to:

Name: M. Nee
Company: Lodestar
E-mail: mjn@lodestarservices.com
Telephone:

Invoice to:

Name: Gregg Wurtz
Company: Aspaboe
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES [X] NO [ ]
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

Quote #:
Project/PO #: Hampton 4m
Reporting state for compliance testing: NM
Sampler's Name:
Are any samples NRC licensable material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	BTEX							
Hampton MW-1	62106 1002	WG	2	2							
Hampton MW-15	62106 1029	WG	2	2							
Hampton MW-9	62106 1104	WG	2	2							
Hampton MW-12	62106 1140	WG	2	2							
Hampton MW-16	62106 1209	WG	2	2							
Hampton Seep	62106 1215	WG	2	2							
Hampton MW-5	62106 1232	WG	2	2							
Hampton TMW-1	62106 1246	WG	2	2							
Hampton MW-7	62106 1307	WG	2	2							
Hampton MW-11	62106 1355	WG	2	2							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Fed Ex 847982594263

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	6226 1600		6/23/06 1020

FRMAD050.03.05.02 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

December 22, 2006

Report to:
Gregg Wurtz
Burlington Resources, Inc.
3401 E. 30th St. P.O. Box 4289
Farmington, NM 87499

Bill to:
Gregg Wurtz
Burlington Resources, Inc.
P.O. Box 4289
Farmington, NM 87499

cc: Martin Nee

Project ID: HAMPTON 4M
ACZ Project ID: L59604

Gregg Wurtz:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 24, 2006. This project has been assigned to ACZ's project number, L59604. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L59604. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after January 22, 2007. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than $10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

22/Dec/06

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-1

ACZ Sample ID: ***L59604-01***
Date Sampled: *10/18/06 10:16*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 13:56***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4	0.2	J	1		ug/L	0.2	1
m p Xylene	1330 20 7	0.8	J	1		ug/L	0.4	2
o Xylene	95-47- 6	0.5	J	1		ug/L	0.2	1
Toluene	108-88-3	0.2	J	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	102.4	1		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-15

ACZ Sample ID: ***L59604-02***
Date Sampled: *10/18/06 11:12*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 18:12***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6	0.2	J	1		ug/L	0.2	1
Toluene	108-88-3	0.3	J	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	99.6	1		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-9

ACZ Sample ID: ***L59604-03***
Date Sampled: *10/18/06 11:56*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 19:37***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6	0.3	J	1		ug/L	0.2	1
Toluene	108-88-3		U	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	99.3	1		%	70	130

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-12

ACZ Sample ID: ***L59604-04***
Date Sampled: *10/18/06 13:06*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 20:19***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	1740		20		ug/L	6	20
Ethylbenzene	100-41-4	112		20		ug/L	4	20
m p Xylene	1330 20 7	304		20		ug/L	8	40
o Xylene	95-47- 6	95		20		ug/L	4	20
Toluene	108-88-3	477		20		ug/L	4	20

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	111.2	20		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-16

ACZ Sample ID: ***L59604-05***
Date Sampled: *10/18/06 13:42*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 21:02***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	5700		100		ug/L	30	100
Ethylbenzene	100-41-4	620		100		ug/L	20	100
m p Xylene	1330 20 7	4990		100		ug/L	40	200
o Xylene	95-47- 6	1530		100		ug/L	20	100
Toluene	108-88-3	10200		100		ug/L	20	100

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	106.6	100		%	70	130

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON SEEP

ACZ Sample ID: ***L59604-06***
Date Sampled: *10/18/06 13:50*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 21:45***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4	0.3	J	1		ug/L	0.2	1
m p Xylene	1330 20 7	1.1	J	1		ug/L	0.4	2
o Xylene	95-47- 6	0.3	J	1		ug/L	0.2	1
Toluene	108-88-3	0.5	J	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	97.8	1		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-5

ACZ Sample ID: ***L59604-07***
Date Sampled: *10/18/06 14:11*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 22:27***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	690		100		ug/L	30	100
Ethylbenzene	100-41-4	500		100		ug/L	20	100
m p Xylene	1330 20 7	4640		100		ug/L	40	200
o Xylene	95-47- 6	1230		100		ug/L	20	100
Toluene	108-88-3	5140		100		ug/L	20	100

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	104.7	100		%	70	130

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON TMW-1

ACZ Sample ID: ***L59604-08***
Date Sampled: *10/18/06 14:27*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 23:11***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	6.4		1		ug/L	0.3	1
Ethylbenzene	100-41-4	2.1		1		ug/L	0.2	1
m p Xylene	1330 20 7	11.3		1		ug/L	0.4	2
o Xylene	95-47- 6	2.5		1		ug/L	0.2	1
Toluene	108-88-3	1.6		1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	102.9	1		%	70	130

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-7

ACZ Sample ID: ***L59604-09***
Date Sampled: *10/18/06 14:57*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***10/31/06 23:53***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	31.9		1	*	ug/L	0.3	1
Ethylbenzene	100-41-4	1.8		1	*	ug/L	0.2	1
m p Xylene	1330 20 7	3.9		1	*	ug/L	0.4	2
o Xylene	95-47- 6	0.2	J	1	*	ug/L	0.2	1
Toluene	108-88-3	0.4	J	1	*	ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	131	1	*	%	70	130

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-11

ACZ Sample ID: ***L59604-10***
Date Sampled: *10/18/06 15:53*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***11/01/06 0:36***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4	0.4	J	1		ug/L	0.2	1
m p Xylene	1330 20 7	0.8	J	1		ug/L	0.4	2
o Xylene	95-47- 6	0.4	J	1		ug/L	0.2	1
Toluene	108-88-3	0.3	J	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	102.4	1		%	70	130

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID:
Sample ID: TRIP BLANK

ACZ Sample ID: ***L59604-11***
Date Sampled: *10/18/06 0:00*
Date Received: *10/24/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG215701***
Analyst: *ccp*
Extract Date:
Analysis Date: ***11/01/06 1:19***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1		ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3	1.1		1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	101.3	1		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Reference

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
LCL	Lower Control Limit
MDL	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
UCL	Upper Control Limit
Sample	Value of the Sample of interest

QC Sample Types

SURR	Surrogate	*LFM*	Laboratory Fortified Matrix
INTS	Internal Standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
LCSS	Laboratory Control Sample - Soil	*MS/MSD*	Matrix Spike/Matrix Spike Duplicate
LCSW	Laboratory Control Sample - Water	*PBS*	Prep Blank - Soil
LFB	Laboratory Fortified Blank	*PBW*	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

B	Analyte detected in daily blank
H	Analysis exceeded method hold time.
J	Analyte concentration detected at a value between MDL and PQL
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality contreol sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
P	Analyte concentration differs from second detector by more than 40%.
E	Analyte concentration is estimated due to result exceeding calibration range.
M	Analyte concentration is estimated due to matrix interferences.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
(3)	EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
(5)	EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December, 1996.
(6)	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Organic analyses are reported on an "as received" basis.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Extended Qualifier Report

Burlington Resources, Inc.

ACZ Project ID: ***L59604***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L59604-09	WG215701	*All Compounds*	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
			M8021B GC/PID	SA	Surrogate recovery was outside acceptance limits due to matrix interference.
		Ethylbenzene	M8021B GC/PID	C7	Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.
		Toluene	M8021B GC/PID	C7	Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.

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Certification Qualifiers

Burlington Resources, Inc.

ACZ Project ID: ***L59604***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.

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Sample Receipt

Burlington Resources, Inc.
HAMPTON 4M

ACZ Project ID: L59604
Date Received: 10/24/2006
Received By:
Date Printed: 10/24/2006

Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?	X		
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?	X		
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers

Cooler Id		Temp (°C)	Rad (µR/hr)
1019		4.1	15

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Burlington Resources, Inc.
HAMPTON 4M

ACZ Project ID: L59604
Date Received: 10/24/2006
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y< 2	YG< 2	B< 2	O < 2	T >12	N/A	RAD	ID
L59604-01	HAMPTON MW-1									X		
L59604-02	HAMPTON MW-15									X		
L59604-03	HAMPTON MW-9									X		
L59604-04	HAMPTON MW-12									X		
L59604-05	HAMPTON MW-16									X		
L59604-06	HAMPTON SEEP									X		
L59604-07	HAMPTON MW-5									X		
L59604-08	HAMPTON TMW-1									X		
L59604-09	HAMPTON MW-7									X		
L59604-10	HAMPTON MW-11									X		
L59604-11	TRIP BLANK									X		

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

L59604

ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Gregg Wurtz	Address: Box 4289
Company: Burlington Conoco Phillips	Farmington NM 87499
E-mail: gwurtz@br-inc.com	Telephone: 505 326 9537

Copy of Report to:

Name: M. Nee	E-mail: mjn@Lodestarservices.com
Company: Lodestar Services	Telephone: 505 334 2791

Invoice to:

Name: Gregg Wurtz	Address:
Company: As above	
E-mail: "	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ / NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

Quote #:
Project/PO #: Hampton 4M
Reporting state for compliance testing:
Sampler's Name:
Are any samples NRC licensable material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE	TIME	Matrix	# of Containers	BTEX 8021b							
Hampton MW-1	101806	1016	GW	3	✓							
" MW-15	101806	1112	GW	3	✓							
" MW-9	101806	1156	GW	3	✓							
" MW-12	101806	1306	GW	3	✓							
" MW-16	101806	1342	GW	3	✓							
" Seep	101806	1350	GW	3	✓							
" MW-5	101806	1411	GW	3	✓							
" TMW-1	101806	1427	GW	3	✓							
" MW-7	101806	1457	GW	2	✓							
" MW-11	101806	1553	GW	3	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

FedEx 847825594285

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	102306 1600	MS	10.24.06 9:43

FRMAD050.03.05.02 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

January 09, 2007

Report to:
Gregg Wurtz
Burlington Resources, Inc.
3401 E. 30th St. P.O. Box 4289
Farmington, NM 87499

Bill to:
Gregg Wurtz
Burlington Resources, Inc.
P.O. Box 4289
Farmington, NM 87499

cc: Martin Nee

Project ID: HAMPTON 4M
ACZ Project ID: L60372

Gregg Wurtz:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on December 14, 2006. This project has been assigned to ACZ's project number, L60372. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L60372. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after February 09, 2007. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than $10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

09/Jan/07

Sue Webber, Project Manager, has reviewed and approved this report in its entirety.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-1

ACZ Sample ID: ***L60372-01***
Date Sampled: *12/12/06 9:34*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/21/06 18:04***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1	*	ug/L	0.3	1
Ethylbenzene	100-41-4	0.2	J	1		ug/L	0.2	1
m p Xylene	1330 20 7	0.6	J	1		ug/L	0.4	2
o Xylene	95-47- 6	0.8	J	1		ug/L	0.2	1
Toluene	108-88-3	0.2	J	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	109.2	1		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-15

ACZ Sample ID: ***L60372-02***
Date Sampled: *12/12/06 10:11*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/21/06 18:47***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1	*	ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3		U	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	104.2	1		%	70	130

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-16

ACZ Sample ID: ***L60372-03***
Date Sampled: *12/12/06 10:52*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/21/06 19:30***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	4600		100	*	ug/L	30	100
Ethylbenzene	100-41-4	550		100	*	ug/L	20	100
m p Xylene	1330 20 7	5130		100	*	ug/L	40	200
o Xylene	95-47- 6	1700		100	*	ug/L	20	100
Toluene	108-88-3	10000		100	*	ug/L	20	100

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	107.8	100	*	%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-12

ACZ Sample ID: ***L60372-04***
Date Sampled: *12/12/06 11:17*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/21/06 20:13***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	2400		20	*	ug/L	6	20
Ethylbenzene	100-41-4	142		20		ug/L	4	20
m p Xylene	1330 20 7	465		20		ug/L	8	40
o Xylene	95-47- 6	203		20		ug/L	4	20
Toluene	108-88-3	1110		20		ug/L	4	20

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	109.2	20		%	70	130

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-9

ACZ Sample ID: ***L60372-05***
Date Sampled: *12/12/06 11:45*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/21/06 21:39***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	0.3	J	1	*	ug/L	0.3	1
Ethylbenzene	100-41-4	0.3	J	1	*	ug/L	0.2	1
m p Xylene	1330 20 7	0.6	J	1	*	ug/L	0.4	2
o Xylene	95-47- 6	0.6	J	1	*	ug/L	0.2	1
Toluene	108-88-3	0.7	J	1	*	ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	103.1	1	*	%	70	130

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-5

ACZ Sample ID: ***L60372-06***
Date Sampled: *12/12/06 12:29*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/21/06 22:22***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	640		100	*	ug/L	30	100
Ethylbenzene	100-41-4	500		100	*	ug/L	20	100
m p Xylene	1330 20 7	4400		100	*	ug/L	40	200
o Xylene	95-47- 6	1210		100	*	ug/L	20	100
Toluene	108-88-3	5090		100	*	ug/L	20	100

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	105.9	100	*	%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON SEEP

ACZ Sample ID: ***L60372-07***
Date Sampled: *12/12/06 12:05*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/21/06 23:05***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1	*	ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3	0.3	J	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	99.9	1		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
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Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-7

ACZ Sample ID: ***L60372-08***
Date Sampled: *12/12/06 13:10*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/21/06 23:48***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2	29.4		1	*	ug/L	0.3	1
Ethylbenzene	100-41-4	3.1		1	*	ug/L	0.2	1
m p Xylene	1330 20 7	5.3		1	*	ug/L	0.4	2
o Xylene	95-47- 6	0.4	J	1	*	ug/L	0.2	1
Toluene	108-88-3	1.5		1	*	ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	126.5	1	*	%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: HAMPTON MW-11

ACZ Sample ID: ***L60372-09***
Date Sampled: *12/12/06 14:10*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/22/06 0:31***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1	*	ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6	0.3	J	1		ug/L	0.2	1
Toluene	108-88-3		U	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	106.4	1		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

Burlington Resources, Inc.
Project ID: HAMPTON 4M
Sample ID: TB120706-01

ACZ Sample ID: ***L60372-10***
Date Sampled: *12/12/06 7:00*
Date Received: *12/14/06*
Sample Matrix: *Ground Water*

Benzene, Toluene, Ethylbenzene & Xylene

Analysis Method: **M8021B GC/PID**
Extract Method:

Workgroup: ***WG218465***
Analyst: *ccp*
Extract Date:
Analysis Date: ***12/22/06 1:14***

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1	*	ug/L	0.3	1
Ethylbenzene	100-41-4		U	1		ug/L	0.2	1
m p Xylene	1330 20 7		U	1		ug/L	0.4	2
o Xylene	95-47- 6		U	1		ug/L	0.2	1
Toluene	108-88-3		U	1		ug/L	0.2	1

Surrogate Recoveries	CAS	% Recovery	Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	103	1		%	70	130

** Please refer to Qualifier Reports for detail.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Reference

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
LCL	Lower Control Limit
MDL	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
UCL	Upper Control Limit
Sample	Value of the Sample of interest

QC Sample Types

SURR	Surrogate	*LFM*	Laboratory Fortified Matrix
INTS	Internal Standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
LCSS	Laboratory Control Sample - Soil	*MS/MSD*	Matrix Spike/Matrix Spike Duplicate
LCSW	Laboratory Control Sample - Water	*PBS*	Prep Blank - Soil
LFB	Laboratory Fortified Blank	*PBW*	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

B	Analyte detected in daily blank
H	Analysis exceeded method hold time.
J	Analyte concentration detected at a value between MDL and PQL
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	Analyte was analyzed for but not detected at the indicated MDL
V	High blank data accepted because sample concentration is 10 times higher than blank concentration
W	Poor recovery for Silver quality control is accepted because Silver often precipitates with Chloride.
X	Quality contreol sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
P	Analyte concentration differs from second detector by more than 40%.
E	Analyte concentration is estimated due to result exceeding calibration range.
M	Analyte concentration is estimated due to matrix interferences.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
(3)	EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
(5)	EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December, 1996.
(6)	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Organic analyses are reported on an "as received" basis.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Extended Qualifier Report

Burlington Resources, Inc.

ACZ Project ID: ***L60372***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L60372-01	WG218465	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L60372-02	WG218465	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L60372-03	WG218465	*All Compounds*	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L60372-04	WG218465	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L60372-05	WG218465	*All Compounds*	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L60372-06	WG218465	*All Compounds*	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
		Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L60372-07	WG218465	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L60372-08	WG218465	*All Compounds*	M8021B GC/PID	Q3	Sample received with improper chemical preservation.
			M8021B GC/PID	SA	Surrogate recovery was outside acceptance limits due to matrix interference.
		Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
		Ethylbenzene	M8021B GC/PID	C7	Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the lower value was reported due to apparent chromatographic interference.
L60372-09	WG218465	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.
L60372-10	WG218465	Benzene	M8021B GC/PID	V8	Calibration verification recovery was below the method control limit for this analyte, however the average % difference or % drift for all the analytes met method criteria.

Certification Qualifiers

Burlington Resources, Inc.

ACZ Project ID: ***L60372***

No certification qualifiers associated with this analysis

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Burlington Resources, Inc.
HAMPTON 4M

ACZ Project ID: L60372
Date Received: 12/14/2006
Received By:
Date Printed: 12/14/2006

Receipt Verification

	YES	NO	NA
1) Does this project require special handling procedures such as CLP protocol?			X
2) Are the custody seals on the cooler intact?	X		
3) Are the custody seals on the sample containers intact?			X
4) Is there a Chain of Custody or other directive shipping papers present?	X		
5) Is the Chain of Custody complete?	X		
6) Is the Chain of Custody in agreement with the samples received?	X		
7) Is there enough sample for all requested analyses?	X		
8) Are all samples within holding times for requested analyses?	X		
9) Were all sample containers received intact?	X		
10) Are the temperature blanks present?			X
11) Are the trip blanks (VOA and/or Cyanide) present?			X
12) Are samples requiring no headspace, headspace free?	X		
13) Do the samples that require a Foreign Soils Permit have one?			X

Exceptions: If you answered no to any of the above questions, please describe

N/A

Contact (For any discrepancies, the client must be contacted)

N/A

Shipping Containers

Cooler Id		Temp (°C)	Rad (µR/hr)
1244		5.9	22

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

Notes

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Burlington Resources, Inc.
HAMPTON 4M

ACZ Project ID: L60372
Date Received: 12/14/2006
Received By:

Sample Container Preservation

SAMPLE	CLIENT ID	R < 2	G < 2	BK < 2	Y< 2	YG< 2	B< 2	O < 2	T >12	N/A	RAD	ID
L60372-01	HAMPTON MW-1									X		
L60372-02	HAMPTON MW-15									X		
L60372-03	HAMPTON MW-16									X		
L60372-04	HAMPTON MW-12									X		
L60372-05	HAMPTON MW-9									X		
L60372-06	HAMPTON MW-5									X		
L60372-07	HAMPTON SEEP									X		
L60372-08	HAMPTON MW-7									X		
L60372-09	HAMPTON MW-11									X		
L60372-10	TB120706-01									X		

Sample Container Preservation Legend

Abbreviation	Description	Container Type	Preservative/Limits
R	Raw/Nitric	RED	pH must be < 2
B	Filtered/Sulfuric	BLUE	pH must be < 2
BK	Filtered/Nitric	BLACK	pH must be < 2
G	Filtered/Nitric	GREEN	pH must be < 2
O	Raw/Sulfuric	ORANGE	pH must be < 2
P	Raw/NaOH	PURPLE	pH must be > 12 *
T	Raw/NaOH Zinc Acetate	TAN	pH must be > 12
Y	Raw/Sulfuric	YELLOW	pH must be < 2
YG	Raw/Sulfuric	YELLOW GLASS	pH must be < 2
N/A	No preservative needed	Not applicable	
RAD	Gamma/Beta dose rate	Not applicable	must be < 250 µR/hr

* pH check performed by analyst prior to sample preparation

Sample IDs Reviewed By: _____

ACZ Laboratories, Inc. L60372

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Gregg Wurtz	Address: Box 4289
Company: Burlington ConocoPhillips	Farmington NM 87499
E-mail: gwurtz@Br-inc.com	Telephone: 505 326 9537

Copy of Report to:

Name: M Nee	E-mail: mjn@lodestarservices.com
Company: Lodestar Services	Telephone: 505 334 2791

Invoice to:

Name: Gregg Wurtz	Address:
Company: As above	
E-mail: "	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

PROJECT INFORMATION

Quote #:

Project/PO #: Hampton 4M

Reporting state for compliance testing:

Sampler's Name: ALA

Are any samples NRC licensable material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	802 1B BTEX							
Hampton MW-1	12-12-06 0934	GW	3	✓							
" MW-15	12-12-06 1011	GW	3	✓							
" MW-16	12-12-06 1052	GW	3	✓							
" MW-12	12-12-06 1117	GW	3	✓							
" MW-9	12-12-06 1145	GW	3	✓							
" MW-5	12-12-06 1229	GW	3	✓							
" Seep	12-12-06 1205	GW	2	✓							
" MW-7	12-12-06 1310	GW	2	✓							
" MW-11	12-12-06 1410	GW	3	✓							
121220061301	12-12-06 0700	GW	2	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

FedEX

847982594300

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Ashley Ellzey	121306 1330	MSS	12.14.06 11:06

FRMAD050.03.05.02 White - Return with sample. Yellow - Retain for your records.