

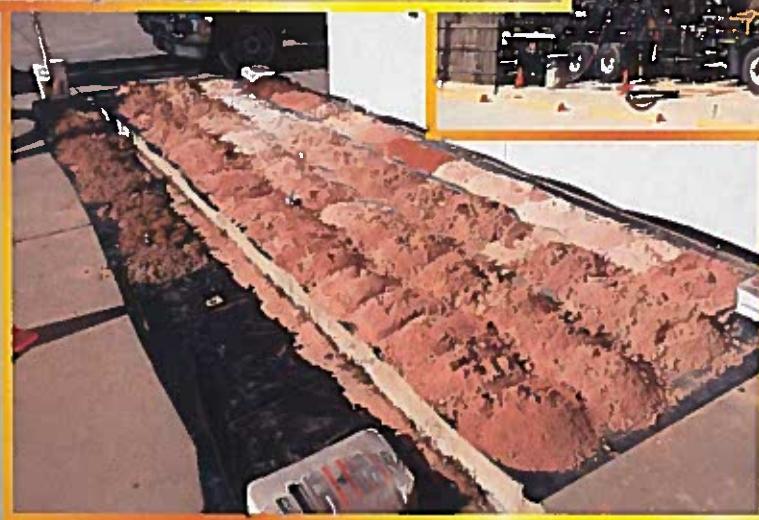
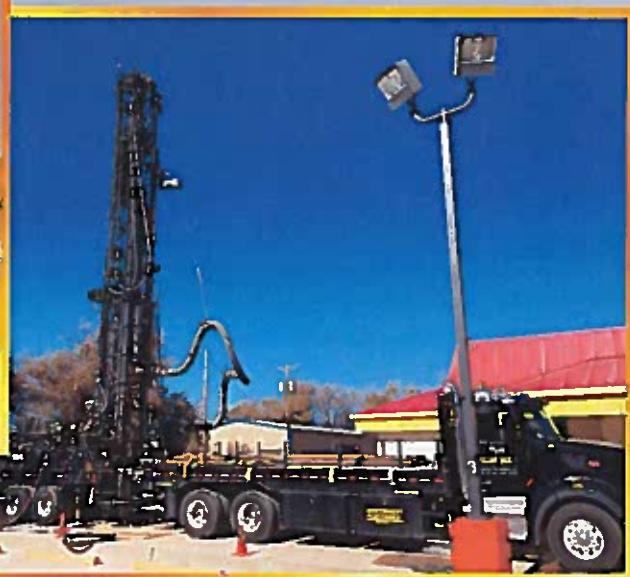
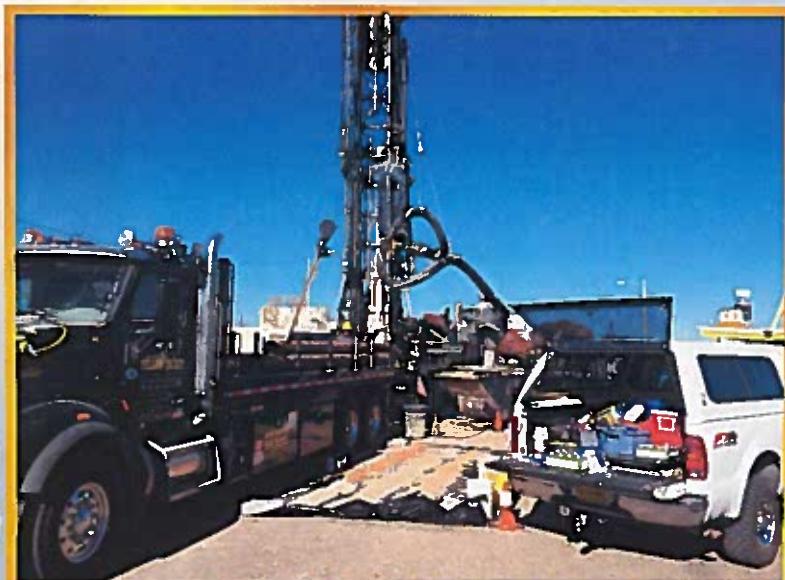


BROWN ENVIRONMENTAL, INC.

P.O. BOX 886 PLACITAS, NEW MEXICO 87043

4TH QUARTERLY GROUNDWATER SAMPLING REPORT 8-16

PRINCE AND COMMERCE SITE
CLOVIS, NEW MEXICO



Ms. Renee Romero
NMED-PSTB
1914 West 2nd Street
Roswell, New Mexico 88201

Submitted To:

Mr. Jeff Scarbrough
Allsups Petroleum, Inc
2112 Thornton Ave.
Clovis, New Mexico 88102

August 2016



4th Quarterly Groundwater Sampling Report

Allsups #320 Vicinity
Prince and Commerce Street Site
Clovis, New Mexico

BEI Job No. 1070
WPID #s17445
DID#17445-4
Facility #31013
RID #4623

Submitted to:

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1.0 INTRODUCTION

1.1 BACKGROUND/SITE HISTORY

On behalf of Allsups Petroleum, Inc. (Allsups) and the New Mexico Environment Department Petroleum Storage Tank Bureau (NMED), Brown Environmental, Inc. (BEI) performed tasks associated with completion of the 4th quarterly groundwater sampling of monitor wells located in the vicinity of Prince Street and Commerce Way in Clovis, New Mexico (the Site) (Figure 1). Four service stations historically operated in this area at the locations shown on Figure 2. Of these, the Allsups #320 station is the newest and only currently operating facility.

In early 2011, Allsups demolished and removed an older station and constructed a new larger facility at the Site. During the station upgrade, three former 8,000-gallon gasoline-containing petroleum storage tanks (PSTs) including piping and dispensers were removed. Elevated PID and soil laboratory readings were observed on select samples collected from immediately beneath the tank excavation.

BEI, on behalf of Allsups and NMED, subsequently performed drilling activities at the Site as part of a phased site investigation conducted between 2011 and 2015 (Figure 2). Initial investigation activities, which included advancement and sampling of 3 soil borings (B-1, B-2, and B-3) and 3 nested multiple completion wells (BW-1; BW-2; and BW-3), focused on the potential release of hydrocarbons from the former PST systems at the Allsups 320 property. However, with the installation and sampling of four off-site single completion wells in early 2014 (BW-4, BW-5, BW-6, and BW-7) and 3 more nested wells in late 2015 (BW-8, BW-9, and BW-10) it became apparent that significant and previously unknown off-site hydrocarbon source(s) were present south of the Allsups property. A former service station identified as either "Leo's Shamrock" or the "Y-Station" (Shamrock station) operated at the location shown in Figure 2 from the late 1950's through approximately 1981. This facility appears to have been responsible for the extensive soil and groundwater contamination in the Site vicinity.

This report documents the last of four quarterly groundwater-sampling events, approved and funded by the New Mexico Environment Department-Petroleum Storage Tank Bureau (NMED).

1.2 PHYSIOGRAPHY/LAND USE

The Allsups 320 facility is located in Clovis, New Mexico at an elevation is approximately 4,280 feet above mean sea level. Topography in the site vicinity generally slopes gently to the south

and southeast. Several small lakes are located between 0.5 miles and 1 mile from the Site (Figure 1).

In general, the areas immediately surrounding the Site are characterized by commercial and retail use along the primary roads with residential housing located along the smaller side streets. A large shopping mall is located to the east and south. Archival research has identified three former service stations in the immediate site vicinity other than the Allsups facility (Figure 2). Prince Street 66 was located immediately west of Allsups and is now the location of Fast Bucks auto loan. Completion of a MSA by Souder, Miller, and Associates, Inc. (SMA) at this facility in 2002 following tank removal suggested that hydrocarbon releases were minor in nature and not vertically extensive. This supposition may need to be reconfirmed in light of recently collected data. A second unnamed service station was located on the north side of Commerce Avenue just west of the edge of the map on Figure 2 and north of the Twin Cronies restaurant. The third facility is the former Shamrock station discussed earlier. The apparent location of the former PSTs at this facility was in the current location of the widened Commerce Way as it enters Prince Street.

Based on the combined subsurface data collected to date, the former Leo's Shamrock abandoned station appears to have been the primary source for soil and groundwater hydrocarbon contamination in the Site vicinity.

1.3 HYDROGEOLOGIC SETTING

Retrieved soil samples from BEI advanced drill holes identified four primary Lithologic Units at the Site. Lithologic Unit I consists predominantly of clayey sand, silt, and very fine sand. This Unit extends from the land surface to approximately 20 to 30 feet below surface grade (bsg) and transitions into the underlying Unit II. Minor to moderate stage 1 to 2 discontinuous caliche zones are present towards the bottom of Lithologic Unit I. Lithologic Unit II consists primarily of silty sand with prominent stage 3 to 4 caliche extending from the base of Lithologic Unit I to approximately 67 to 75 feet bsg. Lithologic Unit III extends below Unit II to a depth of between approximately 280 to 335 feet bsg and consists of very fine sand with minor silt. Lithologic Unit IV extends below Lithologic Unit III to the base of each borehole and consists predominantly of silty sands, sandy silts, and localized thin carbonate cemented fine sandstone layers and nodules.

Depth to groundwater in deep wells was approximately 325 to 328 feet bsg during the July 2016 sampling and gauging event. Historical water level measurements over time are presented in

Table 1. A potentiometric surface map using the data collected from this event is presented in Figure 3. Calculated groundwater flow direction was to the south-southeast at an average hydraulic gradient of approximately 0.0028 feet/foot. Based on discussions with local water well drillers, the regional groundwater has been declining up to several feet per year for several decades in the Site vicinity. Between April 2012 and August 2016, water levels have declined in monitor well BW-1d by 5.1 feet.

Multiple City of Clovis municipal wells are located west of the Site, which may affect groundwater flow.

1.4 SCOPE OF WORK

This quarterly report was prepared in accordance with the groundwater sampling and reporting workplan and budget submitted to NMED on February 11, 2015.

2.0 FIELD AND LABORATORY SAMPLING METHODS AND PROCEDURES

2.1 GENERAL

This section describes the methods and procedures for the following project activities:

- Groundwater Sampling and Analysis

As per the requirements of CFR 1910.120, BEI prepared a site-specific Health and Safety Plan prior to initiation of field activities at the Site.

2.2 GROUNDWATER SAMPLING AND ANALYSIS

During the week of July 26, 2016, groundwater samples were collected from all 10 deep monitor wells for laboratory analysis. Groundwater laboratory analytical results are presented on Table 2, Figures 4, 5, 6, and 7 and in Appendix A.

Prior to sampling, the water level in each well was measured and also gauged for the presence of light non-aqueous phase liquids (LNAPL). Temperature, pH, and conductivity measurements were taken during well purging to document well stabilization. Wells were purged using either a Grundfos downhole pump submersible pump or a 10-foot long stainless steel bailer mounted on a workover rig provided by Yellow Jacket Drilling Services (YJDS). Approximately three well volumes were removed from each well prior to collection of groundwater samples. The downhole pump was decontaminated prior to use and between each well by steam cleaning and using an alconox and tap water rinse. Visible/olfactory signs of groundwater hydrocarbon contamination were observed during the purging of three of the 10 wells; BW-5, BW-7, and BW-8d.

Groundwater samples were collected from each well using a new unused disposable bailer lowered into the well on the end of a water level probe. Samples were collected from the upper 3 feet of the water column in each well. Additionally, a blind duplicate was collected from well BW-8d during the sampling event (labelled as BW-12d in Appendix A) for quality assurance/quality control (QA/QC) purposes. Collected samples were stored in 40-milliliter vials preserved with mercuric chloride. Samples were collected using strict chain-of-custody procedures, stored on ice in a cooler, and hand-delivered to HEAL in Albuquerque, New Mexico. Purge water was discharged to an on-site paved surface to allow volatilization of any

volatile organic compounds (VOCs) per NMED guidance documents.

Laboratory groundwater samples were analyzed for the following parameters:

- VOCs including BTEX, tri-methyl benzenes (TMBs), 1,2 dichloroethane (EDC), 1,2 dibromoethane (EDB), total naphthalenes (NAPH), MTBE, acetone, and methyl-ethyl ketone (MEK) using EPA Method 8260.

3.0 GROUNDWATER SAMPLING RESULTS

Results of the July 2016 groundwater-sampling event are highlighted in Figures 4, 5, 6, and 7 and in Table 2. Combined sampling data indicate the presence of an extensive dissolved-phase gasoline hydrocarbon groundwater plume in the Site vicinity. In comparison to the previous March 2016 sampling event, the dissolved-phase groundwater hydrocarbon plume remained relatively consistent with minor localized variations.

Dissolved-phase benzene was detected at levels exceeding the 10 ppb WQCC standard in groundwater samples collected from five wells, with the highest concentrations in off-site wells BW-5 (2,000 ppb), BW-7 (8,000 ppb), and BW-8 (3,600/3,400 ppb). Only one well (BW-1d) on the Allsups property contained benzene above laboratory method detection limits (MDLs) at a concentration of 18 ppb. Samples collected from well BW-4d contained benzene at 140 ppb.

Groundwater isoconcentration maps highlighting both EDC and NAPH are presented in Figures 5 and 6, respectively. EDC exceeded the 10 ppb WQCC standard in wells BW-5d (110 ppb), BW-7d (500 ppb), and BW-8d (180/180 ppb). NAPH exceeded the 30 ppb WQCC standard in wells BW-5 (141 ppb), BW-7 (120 ppb) and BW-8d (120/120 ppb). Total xylenes, EDB, and toluene were also identified in groundwater samples at concentrations above WQCC standards in one or more off-site wells.

The compound acetone was only found in the off-site wells immediately surrounding the former Leo's Shamrock station: BW-5 (290 ppb) and BW-8d (940 and 930 ppb) as shown in Figure 7. Acetone was not identified in samples collected from any other well in the site vicinity at levels exceeding MDLs during the July 2016 sampling event. The dissolved-phase compound MEK also shows a similar configuration. The presence of these two compounds act as a distinct chemical signature to the extensive off-site release.

As noted in earlier reports, the presence of the lead scavengers EDB and EDC in groundwater suggest that at least portions of the hydrocarbon release(s) occurred pre-1978 when the sale of leaded gasoline was discontinued in the United States for use in private and commercial vehicles.

In general, discounting lithologic heterogeneities, the highest levels of soil and groundwater contamination at a hydrocarbon release site are typically found in the immediate vicinity of the source area. Additionally, partitioning of individual chemical constituents in a gasoline plume favors migration of more soluble compounds such as benzene vs. less soluble compounds such

as NAPH. BW-5, BW-7, and BW-8d appear to be the closest wells to the primary hydrocarbon source impacting soil and groundwater taking these factors into account.

Historic groundwater flow determined by calculating the potentiometric surface during BEI investigations and sampling events has been calculated to be south and southeasterly. This trend continues based on groundwater level measurements collected during the most recent July 2016 sampling event (Figure 3). The current distribution of the dissolved-phase groundwater plume clearly indicates the primary hydrocarbon source area to the south and hydraulically downgradient of the Allsups and former Prince Street 66 locations, in the vicinity of the former Shamrock station.

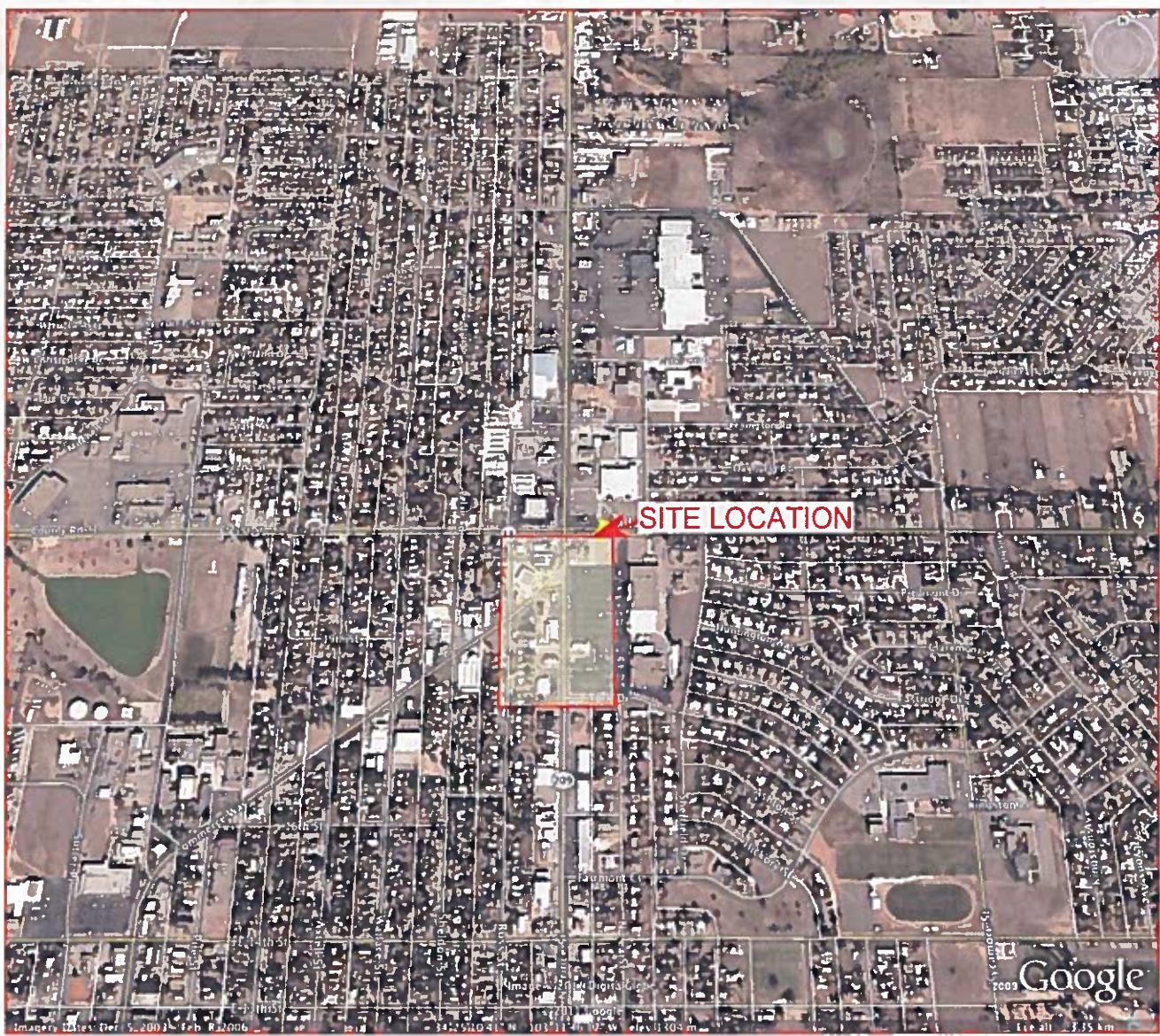
4.0 STATEMENT OF FAMILIARITY

We are personally familiar with the information presented in this report and it is accurate and complete to the best of our knowledge.

Brown Environmental, Inc.



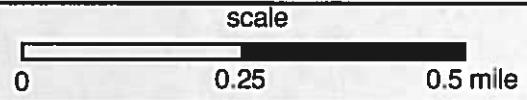
William J. Brown, PG
Vice President



EXPLANATION:

Downloaded from Google Earth Maps,
Image © 2009 DigitalGlobe © 2011 Tele Atlas

NORTH



SITE VICINITY MAP

Prince and Commerce Site
Clovis, New Mexico



BROWN ENVIRONMENTAL, INC.
P.O. BOX 886 PLACITAS, NM 87043

Drawn by:	WJB	8/16	Client: Allsups Petroleum
Drafted by:	EMB	8/16	Job #: 1070
Reviewed by:	WJB	8/16	Figure: 1



EXPLANATION

- BW-6 (●) Single Completion Monitor Well Location
BW-3 (●) Nested Monitor Well Location

NORTH

0 100 ft
Scale

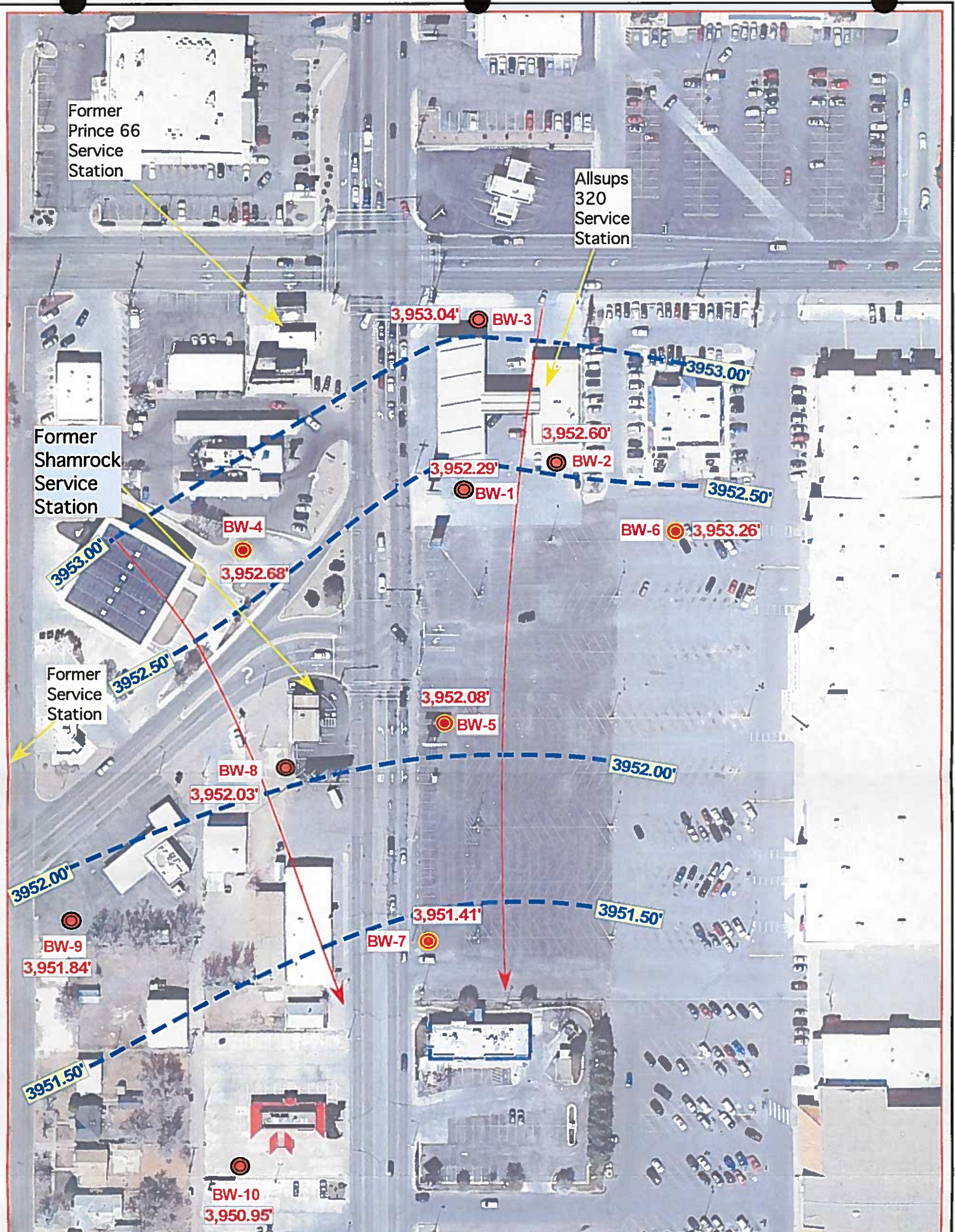
SITE BASE MAP

Prince and Commerce Site - Clovis, New Mexico



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P.O. Box 886 Placitas, NM 87043

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Drafted by:	EMB	8/16	Job #1070
Reviewed by:	WJB	8/16	FIGURE 2



EXPLANATION

BW-6 (●) Single Completion Monitor Well Location

BW-3 (●) Nested Monitor Well Location

Approximate Direction of Groundwater Flow

Equipotential Line

Groundwater Elevation in Feet Above Mean Sea Level

'3957.20'
6,469.74'

0 100 ft
Scale

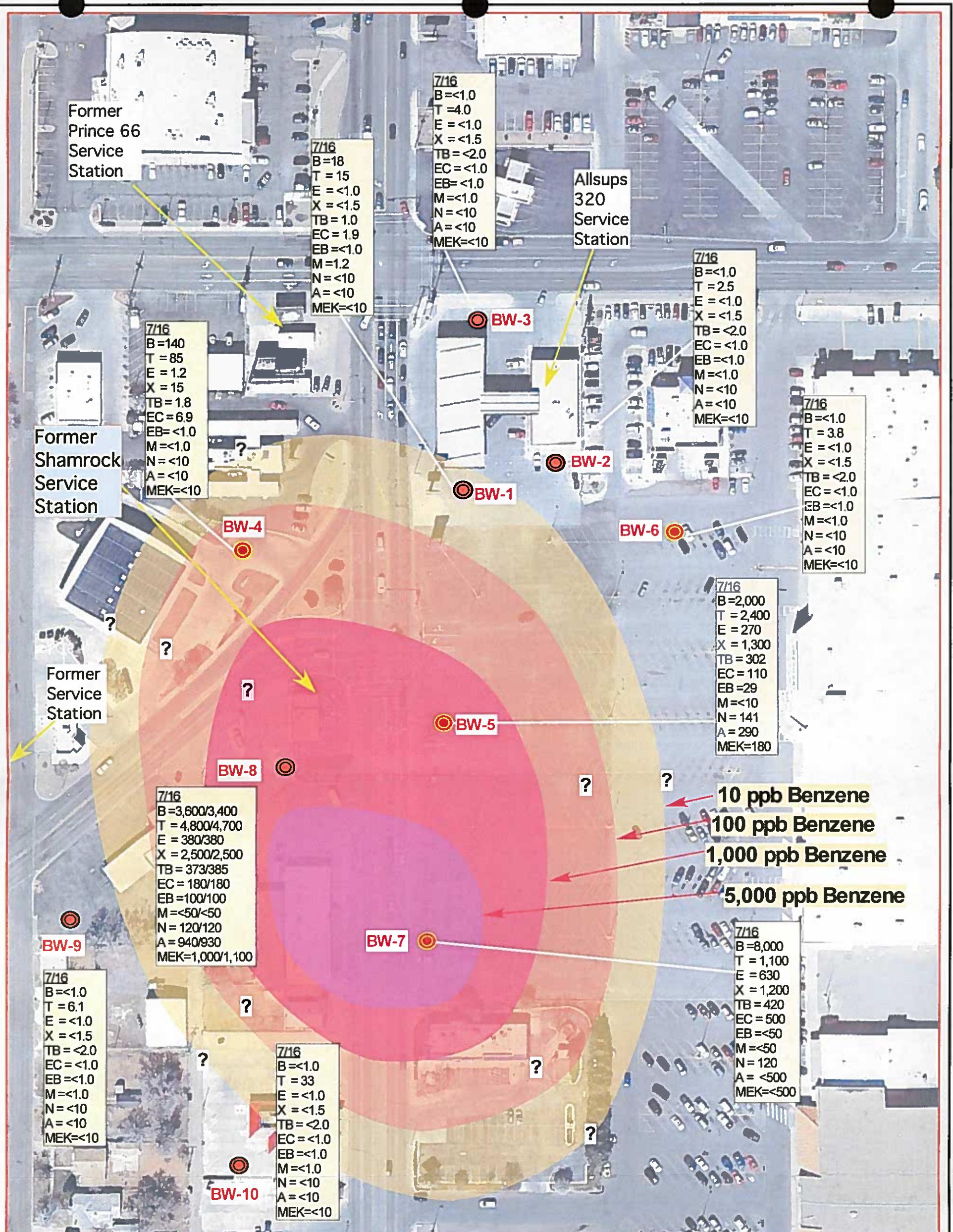
GROUNDWATER POTENTIOMETRIC SURFACE MAP 7/26/16

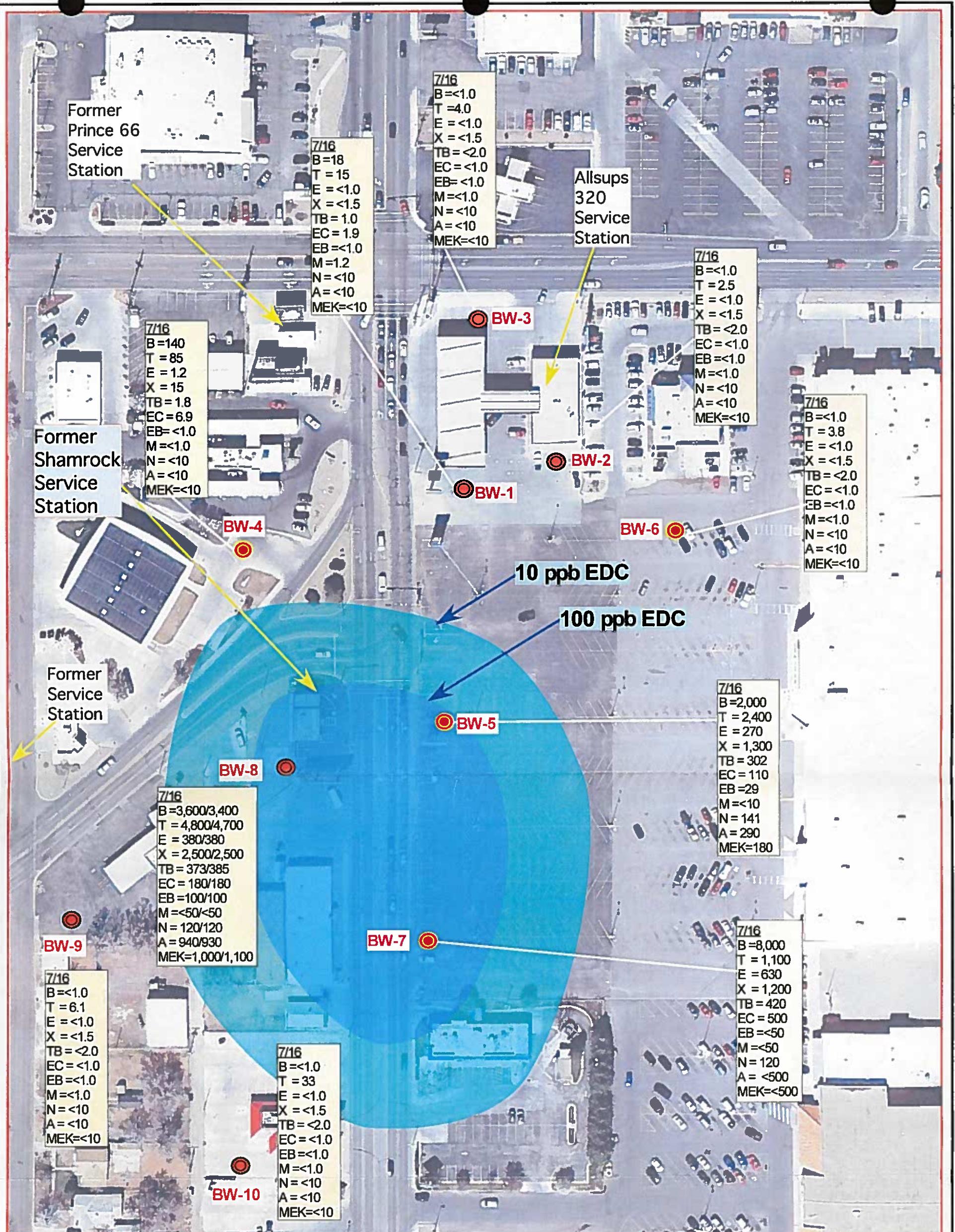
Prince and Commerce Site - Clovis, New Mexico



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P.O. Box 886 Placitas, NM 87043

Drawn by:	WJB	8/16	Client: Allsups/NMED
Drafted by:	EMB	8/16	Job #1070
Reviewed by:	WJB	8/16	FIGURE 3





10 ppb

EDC Isoncontour
(in parts per billion)

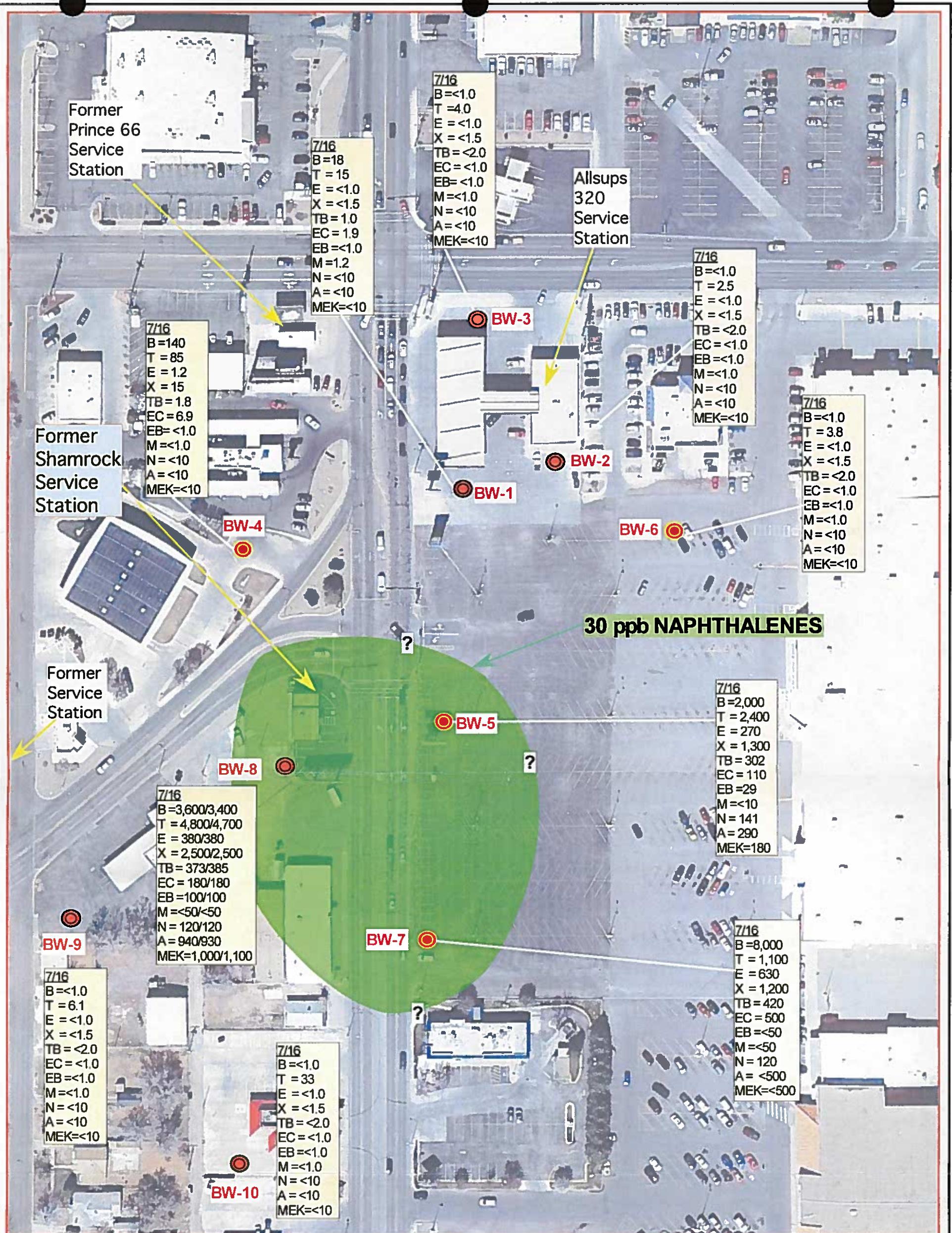
1,2 DICHLOROETHANE (EDC) GROUNDWATER QUALITY MAP 7/16 SAMPLING EVENT

Prince and Commerce Site - Clovis, New Mexico

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Drafted by:	EMB	8/16	Job #1070
Reviewed by:	WJB	8/16	FIGURE 5



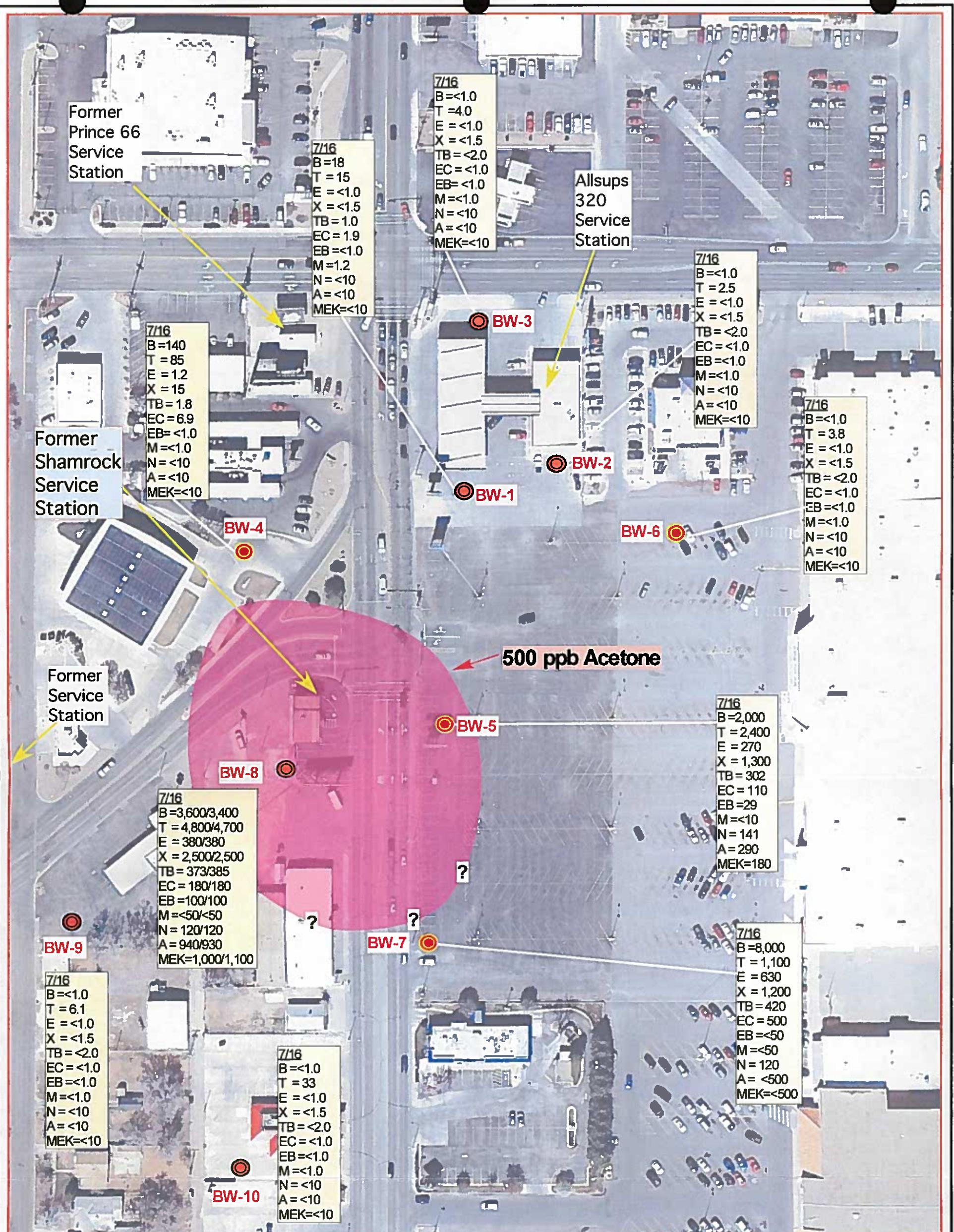
TOTAL NAPHTHALENES GROUNDWATER QUALITY MAP 7/16 SAMPLING EVENT

Prince and Commerce Site - Clovis, New Mexico



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Reviewed by:	WJB	8/16	FIGURE 6



ACETONE GROUNDWATER MAP 7/16 SAMPLING EVENT

Prince and Commerce Site - Clovis, New Mexico



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Drafted by:	EMB	8/16	Job #1070
Reviewed by:	WJB	8/16	FIGURE 7

TABLE 1 -
SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS
ALLSUPS #320 VICINITY - CLOVIS, NEW MEXICO

LOCATION OF WELL	DATE OF MEASUREMENT	TOP OF CASING ELEVATION (in feet msl)	DEPTH TO GROUNDWATER (in feet)	GROUNDWATER ELEVATION (in feet msl)	TOTAL DEPTH OF WELL* (in feet)	WATER COLUMN THICKNESS (in feet)
BW-1d	4/13/12	4279.88	322.49	3957.39	344.48	21.99
	7/27/12	4279.88	322.69	3957.19	344.48	21.79
	9/24/12	4279.88	322.75	3957.13	344.48	21.73
	4/29/14	4279.63	325.75	3953.88	341.50	15.75
	5/8/15	4279.63	326.60	3953.03	341.50	14.90
	9/10/15	4279.63	326.96	3952.67	341.70	14.74
	3/29/16	4279.63	327.12	3952.51	341.50	14.38
	7/26/16	4279.63	327.34	3952.29	341.70	14.36
BW-2d	10/26/09	4280.53	323.12	3957.41	347.60	24.48
	9/24/12	4280.53	323.21	3957.32	347.60	24.39
	4/29/14	4280.38	326.14	3954.24	345.40	19.26
	5/8/15	4280.38	327.00	3953.38	345.40	18.40
	9/10/15	4280.38	327.33	3953.05	345.40	18.07
	3/29/16	4280.38	327.52	3952.86	345.40	17.88
	7/26/16	4280.38	327.78	3952.60	345.40	17.62
	10/26/09	4280.17	322.36	3957.81	347.20	24.84
BW-3d	9/24/12	4280.17	322.44	3957.73	347.20	24.76
	4/29/14	4279.98	325.38	3954.60	347.20	21.82
	5/8/15	4279.98	326.20	3953.78	347.20	21.00
	9/10/15	4279.98	326.56	3953.42	347.20	20.64
	3/29/16	4279.98	326.71	3953.27	347.20	20.49
	7/26/16	4279.98	326.94	3953.04	347.20	20.26
	4/29/14	4280.20	326.04	3954.16	349.39	23.35
	5/8/15	4280.20	326.80	3953.40	349.39	22.59
BW-4	9/10/15	4280.20	327.23	3952.97	349.39	22.16
	3/29/16	4280.20	327.27	3952.93	349.39	22.12
	7/26/16	4280.20	327.52	3952.68	349.39	21.87
	4/29/14	4279.06	325.53	3953.53	352.72	27.19
	5/8/15	4279.06	326.27	3952.79	352.72	26.45
BW-5	9/10/15	4279.06	326.73	3952.33	352.72	25.99
	3/29/16	4279.06	326.87	3952.19	352.72	25.85
	7/26/16	4279.06	326.98	3952.08	352.72	25.74
	4/29/14	4280.34	326.46	3953.88	350.60	24.14
	5/8/15	4280.34	327.27	3953.07	350.60	23.33
BW-6	9/10/15	4280.34	327.60	3952.74	350.60	23.00
	3/29/16	4280.34	327.70	3952.64	350.60	22.90
	7/26/16	4280.34	327.08	3953.26	350.60	23.52
	4/29/14	4277.55	324.63	3952.92	349.00	24.37
	5/8/15	4277.55	325.42	3952.13	349.00	23.58
BW-7	9/10/15	4277.55	325.84	3951.71	332.30	6.46
	3/29/16	4277.55	326.01	3951.54	332.45	6.44
	7/26/16	4277.55	326.14	3951.41	332.45	6.31
	3/29/16	4278.78	326.61	3952.17	349.00	22.39
	7/26/16	4278.78	326.75	3952.03	352.04	25.29
BW-9d	3/29/16	4278.44	326.30	3952.14	349.00	22.70
	7/26/16	4278.44	326.60	3951.84	351.74	25.14
BW-10d	3/29/16	4275.16	323.92	3951.24	349.00	25.08
	7/26/16	4275.16	324.21	3950.95	350.90	26.89

TABLE 2
SUMMARY OF ORGANIC GROUNDWATER LABORATORY ANALYTICAL DATA-
PRINCE AND COMMERCE SITE, CLOVIS, NM

LOCATION OF WELL	SAMPLE DATE	BENZENE ug/l	TOLUENE ug/l	ETHYL BENZENE ug/l	TOTAL XYLEMES ug/l	METHYL-TERTIARY BUTYL ETHER ug/l	TRI-METHYL BENZENES ug/l	1,2-DICHLORO-ETHANE (EDC) ug/l	1,2-DIBROMO-ETHANE (EDB) ug/l	NAPHTH + MONO-METHYL NAPHTH ug/l
WQCC/PSTR STANDARDS		10	750	750	620	100		10	0.1	30
BW-1d (duplicate)	04/13/12	240	61	4.5	20	1.6	6.3	3.5	<1.0	<10
	09/25/12	290	29	4.9	34	<1.0	11.3	5.2	<1.0	<10
	09/25/12	200	46	7.8	45	<1.0	13.5	6.2	<1.0	<10
	04/30/14	50	6.0	<1.0	1.6	<1.0	2.5	1.4	<1.0	<10
	05/07/15	130	5.5	<1.0	5.6	1.1	8.9	2.6	<1.0	<10
	09/11/15	13	55	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	03/30/16	40	130	<1.0	<1.5	<1.0	1.0	1.3	<1.0	<10
	07/27/16	18	15	<1.0	<1.5	1.2	1.0	1.9	<1.0	<10
BW-2d										
	09/25/12	21	15	<1.0	6.2	<1.0	2.5	1.0	<1.0	<10
	04/29/14	<1.0	5.6	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	05/07/15	<1.0	18	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	09/10/15	7.2	21	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	03/29/16	<1.0	97	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	07/26/16	<1.0	2.5	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
BW-3d										
	09/25/12	1.4	56	<1.0	6.1	<1.0	1.9	<1.0	<1.0	<10
	04/29/14	<1.0	14	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	05/07/15	2.6	5.0	<1.0	3.5	<1.0	<2.0	<1.0	<1.0	<10
	09/10/15	<1.0	46	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	03/29/16	<1.0	180	<1.0	2.2	<1.0	<2.0	<1.0	<1.0	<10
	07/26/16	<1.0	4.0	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
BW-4										
	04/30/14	<1.0	11	<1.0	<1.5	<1.0	<2.0	1.8	<1.0	<10
	05/07/15	1,100	1,100	61	600	<1.0	67	32	<1.0	<10
	09/10/15	1.9	43	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	03/30/16	200	200	5.1	33	<1.0	4.4	6.9	<1.0	<10
	07/27/16	140	85	1.2	15	<1.0	1.8	6.9	<1.0	<10
BW-5 duplicate										
	04/29/14	2,100	1,800	200	990	<1.0	138	100	29	59.9
	05/08/15	3,700	2,800	300	1,700	<5.0	256	180	51	83
	09/11/15	2,000	1,400	220	900	<5.0	216	100	18	80
	09/11/15	1,900	1,300	230	960	<5.0	228	100	20	64
	03/30/16	5,000	4,200	500	2,000	<5.0	381	230	54	<500
	07/28/16	2,000	2,400	270	1,300	<10	302	110	29	141
BW-6										
	04/29/14	<1.0	10	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	05/07/15	<1.0	8.4	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	09/10/15	<1.0	36	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	03/29/16	<1.0	130	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	07/26/16	<1.0	3.8	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
BW-7 duplicate										
	04/30/14	990	3.4	67	260	<1.0	51	75	2.6	21.1
	04/30/14	1,100	4.4	74	300	<1.0	55	75	2.9	20.1
	05/08/15	3,200	1,200	210	920	<1.0	128	230	9.6	45.5
	09/11/15	9,400	5,000	750	2,600	<1.0	488	590	36	204
	03/31/16	8,800	2,900	650	2,100	<1.0	464	580	<50	120
	07/28/16	8,000	1,100	630	1,200	<50	420	500	<50	120
BW-8d duplicate										
	03/31/16	3,900	5,400	440	2,400	<1.0	347	210	95	<500
	03/31/16	4,300	5,900	500	2,700	<1.0	384	230	110	100
	07/28/16	3,600	4,800	380	2,500	<50	373	180	100	120
	07/28/16	3,400	4,700	380	2,500	<50	385	180	100	120
BW-9d										
	03/30/16	<1.0	190	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
BW-10d										
	03/29/16	<1.0	280	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
trip blank										
	4/13/12	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	9/25/12	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	5/7/15	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	9/14/15	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	3/29/16	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10
	7/29/16	<1.0	<1.0	<1.0	<1.5	<1.0	<2.0	<1.0	<1.0	<10

ALL CONCENTRATIONS REPORTED IN micrograms/liter (ug/l)



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 12, 2016

Bill Brown

Brown Environmental Inc.
P. O. Box 886
Placitas, NM 87043
TEL: (505) 934-7707
FAX

RE: Prince and Commerce

OrderNo.: 1604058

Dear Bill Brown:

Hall Environmental Analysis Laboratory received 12 sample(s) on 4/1/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Client Sample ID: BW-10d

Project: Prince and Commerce

Collection Date: 3/29/2016 3:16:00 PM

Lab ID: 1604058-001

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Toluene	280	10		µg/L	10	4/8/2016 2:33:15 PM	R33419
Ethylbenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Naphthalene	ND	2.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
2-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Acetone	ND	10		µg/L	1	4/7/2016 6:17:40 PM	R33378
Bromobenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Bromodichloromethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Bromoform	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Bromomethane	ND	3.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
2-Butanone	ND	10		µg/L	1	4/7/2016 6:17:40 PM	R33378
Carbon disulfide	ND	10		µg/L	1	4/7/2016 6:17:40 PM	R33378
Carbon Tetrachloride	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Chlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Chloroethane	ND	2.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Chloroform	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Chloromethane	ND	3.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
2-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
4-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
cis-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Dibromochloromethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Dibromomethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,1-Dichloroethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,1-Dichloroethene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,3-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
2,2-Dichloropropane	ND	2.0		µg/L	1	4/7/2016 6:17:40 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Client Sample ID: BW-10d

Project: Prince and Commerce

Collection Date: 3/29/2016 3:16:00 PM

Lab ID: 1604058-001

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Hexachlorobutadiene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
2-Hexanone	ND	10		µg/L	1	4/7/2016 6:17:40 PM	R33378
Isopropylbenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
4-Isopropyltoluene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
4-Methyl-2-pentanone	ND	10		µg/L	1	4/7/2016 6:17:40 PM	R33378
Methylene Chloride	ND	3.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
n-Butylbenzene	ND	3.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
n-Propylbenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
sec-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Styrene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
tert-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
trans-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Trichlorofluoromethane	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Vinyl chloride	ND	1.0		µg/L	1	4/7/2016 6:17:40 PM	R33378
Xylenes, Total	ND	1.5		µg/L	1	4/7/2016 6:17:40 PM	R33378
Surr: 1,2-Dichloroethane-d4	98.4	70-130		%Rec	1	4/7/2016 6:17:40 PM	R33378
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	4/7/2016 6:17:40 PM	R33378
Surr: Dibromofluoromethane	106	70-130		%Rec	1	4/7/2016 6:17:40 PM	R33378
Surr: Toluene-d8	102	70-130		%Rec	1	4/7/2016 6:17:40 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits Page 2 of 30
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Project: Prince and Commerce

Lab ID: 1604058-002

Client Sample ID: BW-3d

Collection Date: 3/29/2016 6:38:00 PM

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Toluene	180	10		µg/L	10	4/8/2016 3:01:58 PM	R33419
Ethylbenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Naphthalene	ND	2.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
2-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Acetone	ND	10		µg/L	1	4/7/2016 6:46:28 PM	R33378
Bromobenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Bromodichloromethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Bromoform	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Bromomethane	ND	3.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
2-Butanone	ND	10		µg/L	1	4/7/2016 6:46:28 PM	R33378
Carbon disulfide	ND	10		µg/L	1	4/7/2016 6:46:28 PM	R33378
Carbon Tetrachloride	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Chlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Chloroethane	ND	2.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Chloroform	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Chloromethane	ND	3.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
2-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
4-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
cis-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Dibromochloromethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Dibromomethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,1-Dichloroethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,1-Dichloroethene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,3-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
2,2-Dichloropropane	ND	2.0		µg/L	1	4/7/2016 6:46:28 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	Page 3 of 30
R	RPD outside accepted recovery limits	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Brown Environmental Inc.**Client Sample ID:** BW-3d**Project:** Prince and Commerce**Collection Date:** 3/29/2016 6:38:00 PM**Lab ID:** 1604058-002**Matrix:** AQUEOUS**Received Date:** 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
							Analyst: AG
1,1-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Hexachlorobutadiene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
2-Hexanone	ND	10		µg/L	1	4/7/2016 6:46:28 PM	R33378
Isopropylbenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
4-Isopropyltoluene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
4-Methyl-2-pentanone	ND	10		µg/L	1	4/7/2016 6:46:28 PM	R33378
Methylene Chloride	ND	3.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
n-Butylbenzene	ND	3.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
n-Propylbenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
sec-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Styrene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
tert-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
trans-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Trichlorofluoromethane	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Vinyl chloride	ND	1.0		µg/L	1	4/7/2016 6:46:28 PM	R33378
Xylenes, Total	2.2	1.5		µg/L	1	4/7/2016 6:46:28 PM	R33378
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%Rec	1	4/7/2016 6:46:28 PM	R33378
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	4/7/2016 6:46:28 PM	R33378
Surr: Dibromofluoromethane	102	70-130		%Rec	1	4/7/2016 6:46:28 PM	R33378
Surr: Toluene-d8	100	70-130		%Rec	1	4/7/2016 6:46:28 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.
Project: Prince and Commerce
Lab ID: 1604058-003

Matrix: AQUEOUS

Client Sample ID: BW-2d
Collection Date: 3/30/2016 9:54:00 AM
Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Toluene	97	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Ethylbenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Naphthalene	ND	2.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
2-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Acetone	ND	10		µg/L	1	4/7/2016 7:15:09 PM	R33378
Bromobenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Bromodichloromethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Bromoform	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Bromomethane	ND	3.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
2-Butanone	ND	10		µg/L	1	4/7/2016 7:15:09 PM	R33378
Carbon disulfide	ND	10		µg/L	1	4/7/2016 7:15:09 PM	R33378
Carbon Tetrachloride	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Chlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Chloroethane	ND	2.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Chloroform	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Chloromethane	ND	3.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
2-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
4-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
cis-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Dibromochloromethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Dibromomethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,1-Dichloroethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,1-Dichloroethene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,3-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
2,2-Dichloropropane	ND	2.0		µg/L	1	4/7/2016 7:15:09 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	Page 5 of 30
R	RPD outside accepted recovery limits	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Project: Prince and Commerce

Lab ID: 1604058-003

Client Sample ID: BW-2d

Collection Date: 3/30/2016 9:54:00 AM

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Hexachlorobutadiene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
2-Hexanone	ND	10		µg/L	1	4/7/2016 7:15:09 PM	R33378
Isopropylbenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
4-Isopropyltoluene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
4-Methyl-2-pentanone	ND	10		µg/L	1	4/7/2016 7:15:09 PM	R33378
Methylene Chloride	ND	3.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
n-Butylbenzene	ND	3.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
n-Propylbenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
sec-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Styrene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
tert-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
trans-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Trichlorofluoromethane	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Vinyl chloride	ND	1.0		µg/L	1	4/7/2016 7:15:09 PM	R33378
Xylenes, Total	ND	1.5		µg/L	1	4/7/2016 7:15:09 PM	R33378
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	4/7/2016 7:15:09 PM	R33378
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	4/7/2016 7:15:09 PM	R33378
Surr: Dibromofluoromethane	106	70-130		%Rec	1	4/7/2016 7:15:09 PM	R33378
Surr: Toluene-d8	101	70-130		%Rec	1	4/7/2016 7:15:09 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	Page 6 of 30
R	RPD outside accepted recovery limits	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Client Sample ID: BW-6d

Project: Prince and Commerce

Collection Date: 3/30/2016 1:14:00 PM

Lab ID: 1604058-004

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: AG
EPA METHOD 8260B: VOLATILES								
Benzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Toluene	130	10		µg/L	10	4/8/2016 3:30:37 PM	R33419	
Ethylbenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Naphthalene	ND	2.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
2-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Acetone	ND	10		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Bromobenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Bromodichloromethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Bromoform	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Bromomethane	ND	3.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
2-Butanone	ND	10		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Carbon disulfide	ND	10		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Carbon Tetrachloride	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Chlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Chloroethane	ND	2.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Chloroform	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Chloromethane	ND	3.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
2-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
4-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
cis-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Dibromochloromethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Dibromomethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,1-Dichloroethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,1-Dichloroethene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,2-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
1,3-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	
2,2-Dichloropropane	ND	2.0		µg/L	1	4/7/2016 7:43:48 PM	R33378	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	Page 7 of 30
R	RPD outside accepted recovery limits	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Project: Prince and Commerce

Lab ID: 1604058-004

Client Sample ID: BW-6d

Collection Date: 3/30/2016 1:14:00 PM

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
Hexachlorobutadiene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
2-Hexanone	ND	10		µg/L	1	4/7/2016 7:43:48 PM	R33378
Isopropylbenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
4-Isopropyltoluene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
4-Methyl-2-pentanone	ND	10		µg/L	1	4/7/2016 7:43:48 PM	R33378
Methylene Chloride	ND	3.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
n-Butylbenzene	ND	3.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
n-Propylbenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
sec-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
Styrene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
tert-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
trans-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
Trichlorofluoromethane	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
Vinyl chloride	ND	1.0		µg/L	1	4/7/2016 7:43:48 PM	R33378
Xylenes, Total	ND	1.5		µg/L	1	4/7/2016 7:43:48 PM	R33378
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	4/7/2016 7:43:48 PM	R33378
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/7/2016 7:43:48 PM	R33378
Surr: Dibromofluoromethane	112	70-130		%Rec	1	4/7/2016 7:43:48 PM	R33378
Surr: Toluene-d8	100	70-130		%Rec	1	4/7/2016 7:43:48 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.
Project: Prince and Commerce
Lab ID: 1604058-005

Matrix: AQUEOUS

Client Sample ID: BW-1d
Collection Date: 3/30/2016 4:09:00 PM
Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	40	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Toluene	130	10		µg/L	10	4/8/2016 3:59:24 PM	R33419
Ethylbenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2-Dichloroethane (EDC)	1.3	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Naphthalene	ND	2.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
2-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Acetone	ND	10		µg/L	1	4/7/2016 8:12:42 PM	R33378
Bromobenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Bromodichloromethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Bromoform	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Bromomethane	ND	3.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
2-Butanone	ND	10		µg/L	1	4/7/2016 8:12:42 PM	R33378
Carbon disulfide	ND	10		µg/L	1	4/7/2016 8:12:42 PM	R33378
Carbon Tetrachloride	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Chlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Chloroethane	ND	2.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Chloroform	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Chloromethane	ND	3.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
2-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
4-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
cis-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Dibromochloromethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Dibromomethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,1-Dichloroethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,1-Dichloroethene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,3-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
2,2-Dichloropropane	ND	2.0		µg/L	1	4/7/2016 8:12:42 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	Page 9 of 30
	R RPD outside accepted recovery limits	P Sample pH Not In Range
	S % Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Project: Prince and Commerce

Lab ID: 1604058-005

Client Sample ID: BW-1d

Collection Date: 3/30/2016 4:09:00 PM

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
						Analyst: AG	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Hexachlorobutadiene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
2-Hexanone	ND	10		µg/L	1	4/7/2016 8:12:42 PM	R33378
Isopropylbenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
4-Isopropyltoluene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
4-Methyl-2-pentanone	ND	10		µg/L	1	4/7/2016 8:12:42 PM	R33378
Methylene Chloride	ND	3.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
n-Butylbenzene	ND	3.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
n-Propylbenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
sec-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Styrene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
tert-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
trans-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Trichlorofluoromethane	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Vinyl chloride	ND	1.0		µg/L	1	4/7/2016 8:12:42 PM	R33378
Xylenes, Total	ND	1.5		µg/L	1	4/7/2016 8:12:42 PM	R33378
Sur: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	1	4/7/2016 8:12:42 PM	R33378
Sur: 4-Bromofluorobenzene	105	70-130		%Rec	1	4/7/2016 8:12:42 PM	R33378
Sur: Dibromofluoromethane	103	70-130		%Rec	1	4/7/2016 8:12:42 PM	R33378
Sur: Toluene-d8	101	70-130		%Rec	1	4/7/2016 8:12:42 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.
Project: Prince and Commerce
Lab ID: 1604058-006

Matrix: AQUEOUS

Client Sample ID: BW-9d

Collection Date: 3/30/2016 7:04:00 PM
Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: AG
EPA METHOD 8260B: VOLATILES								
Benzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Toluene	190	10		µg/L	10	4/8/2016 4:28:19 PM	R33419	
Ethylbenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Naphthalene	ND	2.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
2-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Acetone	ND	10		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Bromobenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Bromodichloromethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Bromoform	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Bromomethane	ND	3.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
2-Butanone	ND	10		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Carbon disulfide	ND	10		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Carbon Tetrachloride	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Chlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Chloroethane	ND	2.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Chloroform	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Chloromethane	ND	3.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
2-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
4-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
cis-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Dibromochloromethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Dibromomethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,1-Dichloroethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,1-Dichloroethene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,2-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
1,3-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	
2,2-Dichloropropane	ND	2.0		µg/L	1	4/7/2016 8:41:22 PM	R33378	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Brown Environmental Inc.**Client Sample ID:** BW-9d**Project:** Prince and Commerce**Collection Date:** 3/30/2016 7:04:00 PM**Lab ID:** 1604058-006**Matrix:** AQUEOUS**Received Date:** 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
							Analyst: AG
1,1-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
Hexachlorobutadiene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
2-Hexanone	ND	10		µg/L	1	4/7/2016 8:41:22 PM	R33378
Isopropylbenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
4-Isopropyltoluene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
4-Methyl-2-pentanone	ND	10		µg/L	1	4/7/2016 8:41:22 PM	R33378
Methylene Chloride	ND	3.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
n-Butylbenzene	ND	3.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
n-Propylbenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
sec-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
Styrene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
tert-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
Tetrachloroethylene (PCE)	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
trans-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
Trichloroethylene (TCE)	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
Trichlorofluoromethane	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
Vinyl chloride	ND	1.0		µg/L	1	4/7/2016 8:41:22 PM	R33378
Xylenes, Total	ND	1.5		µg/L	1	4/7/2016 8:41:22 PM	R33378
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	4/7/2016 8:41:22 PM	R33378
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	4/7/2016 8:41:22 PM	R33378
Surr: Dibromofluoromethane	112	70-130		%Rec	1	4/7/2016 8:41:22 PM	R33378
Surr: Toluene-d8	99.0	70-130		%Rec	1	4/7/2016 8:41:22 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.
Project: Prince and Commerce
Lab ID: 1604058-007

Matrix: AQUEOUS

Client Sample ID: BW-4d
Collection Date: 3/30/2016 9:53:00 PM
Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: AG
EPA METHOD 8260B: VOLATILES								
Benzene	200	10		µg/L	10	4/8/2016 4:57:03 PM	R33419	
Toluene	200	10		µg/L	10	4/8/2016 4:57:03 PM	R33419	
Ethylbenzene	5.1	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,2,4-Trimethylbenzene	3.2	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,3,5-Trimethylbenzene	1.2	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,2-Dichloroethane (EDC)	6.9	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Naphthalene	ND	2.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
2-Methylnaphthalene	ND	4.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Acetone	ND	10		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Bromobenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Bromodichloromethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Bromoform	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Bromomethane	ND	3.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
2-Butanone	ND	10		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Carbon disulfide	ND	10		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Carbon Tetrachloride	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Chlorobenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Chloroethane	ND	2.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Chloroform	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Chloromethane	ND	3.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
2-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
4-Chlorotoluene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
cis-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Dibromochloromethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Dibromomethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,1-Dichloroethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,1-Dichloroethene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,2-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
1,3-Dichloropropane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	
2,2-Dichloropropane	ND	2.0		µg/L	1	4/7/2016 9:10:01 PM	R33378	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	Page 13 of 30
R	RPD outside accepted recovery limits	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Client Sample ID: BW-4d

Project: Prince and Commerce

Collection Date: 3/30/2016 9:53:00 PM

Lab ID: 1604058-007

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
Hexachlorobutadiene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
2-Hexanone	ND	10		µg/L	1	4/7/2016 9:10:01 PM	R33378
Isopropylbenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
4-Isopropyltoluene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
4-Methyl-2-pentanone	ND	10		µg/L	1	4/7/2016 9:10:01 PM	R33378
Methylene Chloride	ND	3.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
n-Butylbenzene	ND	3.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
n-Propylbenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
sec-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
Styrene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
tert-Butylbenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
trans-1,2-DCE	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
Trichlorofluoromethane	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
Vinyl chloride	ND	1.0		µg/L	1	4/7/2016 9:10:01 PM	R33378
Xylenes, Total	33	1.5		µg/L	1	4/7/2016 9:10:01 PM	R33378
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%Rec	1	4/7/2016 9:10:01 PM	R33378
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	4/7/2016 9:10:01 PM	R33378
Surr: Dibromofluoromethane	101	70-130		%Rec	1	4/7/2016 9:10:01 PM	R33378
Surr: Toluene-d8	104	70-130		%Rec	1	4/7/2016 9:10:01 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 R RPD outside accepted recovery limits
 S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 P Sample pH Not In Range
 RL Reporting Detection Limit
 W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Brown Environmental Inc.**Client Sample ID:** BW-5d**Project:** Prince and Commerce**Collection Date:** 3/31/2016 10:57:00 AM**Lab ID:** 1604058-008**Matrix:** AQUEOUS**Received Date:** 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: AG
EPA METHOD 8260B: VOLATILES								
Benzene	5000	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Toluene	4200	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Ethylbenzene	500	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,2,4-Trimethylbenzene	300	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,3,5-Trimethylbenzene	81	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,2-Dichloroethane (EDC)	230	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,2-Dibromoethane (EDB)	54	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Naphthalene	ND	100		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1-Methylnaphthalene	ND	200		µg/L	50	4/7/2016 9:38:52 PM	R33378	
2-Methylnaphthalene	ND	200		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Acetone	600	500		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Bromobenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Bromodichloromethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Bromoform	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Bromomethane	ND	150		µg/L	50	4/7/2016 9:38:52 PM	R33378	
2-Butanone	ND	500		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Carbon disulfide	ND	500		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Carbon Tetrachloride	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Chlorobenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Chloroethane	ND	100		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Chloroform	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Chloromethane	ND	150		µg/L	50	4/7/2016 9:38:52 PM	R33378	
2-Chlorotoluene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
4-Chlorotoluene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
cis-1,2-DCE	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Dibromochloromethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Dibromomethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,2-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,3-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,4-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
Dichlorodifluoromethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,1-Dichloroethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,1-Dichloroethene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,2-Dichloropropane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
1,3-Dichloropropane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378	
2,2-Dichloropropane	ND	100		µg/L	50	4/7/2016 9:38:52 PM	R33378	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limit
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Project: Prince and Commerce

Lab ID: 1604058-008

Client Sample ID: BW-5d

Collection Date: 3/31/2016 10:57:00 AM

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
							Analyst: AG
1,1-Dichloropropene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
Hexachlorobutadiene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
2-Hexanone	ND	500		µg/L	50	4/7/2016 9:38:52 PM	R33378
Isopropylbenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
4-Isopropyltoluene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
4-Methyl-2-pentanone	ND	500		µg/L	50	4/7/2016 9:38:52 PM	R33378
Methylene Chloride	ND	150		µg/L	50	4/7/2016 9:38:52 PM	R33378
n-Butylbenzene	ND	150		µg/L	50	4/7/2016 9:38:52 PM	R33378
n-Propylbenzene	54	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
sec-Butylbenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
Styrene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
tert-Butylbenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/7/2016 9:38:52 PM	R33378
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
trans-1,2-DCE	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
1,1,1-Trichloroethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
1,1,2-Trichloroethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
Trichloroethene (TCE)	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
Trichlorofluoromethane	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
1,2,3-Trichloropropane	ND	100		µg/L	50	4/7/2016 9:38:52 PM	R33378
Vinyl chloride	ND	50		µg/L	50	4/7/2016 9:38:52 PM	R33378
Xylenes, Total	2000	75		µg/L	50	4/7/2016 9:38:52 PM	R33378
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%Rec	50	4/7/2016 9:38:52 PM	R33378
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	50	4/7/2016 9:38:52 PM	R33378
Surr: Dibromofluoromethane	104	70-130		%Rec	50	4/7/2016 9:38:52 PM	R33378
Surr: Toluene-d8	102	70-130		%Rec	50	4/7/2016 9:38:52 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.
Project: Prince and Commerce
Lab ID: 1604058-009

Matrix: AQUEOUS

Client Sample ID: BW-8d
Collection Date: 3/31/2016 3:29:00 PM
Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: AG
EPA METHOD 8260B: VOLATILES								
Benzene	3900	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Toluene	5400	500		µg/L	500	4/8/2016 5:25:43 PM	R33419	
Ethylbenzene	440	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,2,4-Trimethylbenzene	280	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,3,5-Trimethylbenzene	67	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,2-Dichloroethane (EDC)	210	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,2-Dibromoethane (EDB)	95	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Naphthalene	ND	100		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1-Methylnaphthalene	ND	200		µg/L	50	4/7/2016 10:07:30 PM	R33378	
2-Methylnaphthalene	ND	200		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Acelone	1200	500		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Bromobenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Bromodichloromethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Bromoform	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Bromomethane	ND	150		µg/L	50	4/7/2016 10:07:30 PM	R33378	
2-Butanone	740	500		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Carbon disulfide	ND	500		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Carbon Tetrachloride	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Chlorobenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Chloroethane	ND	100		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Chloroform	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Chloromethane	ND	150		µg/L	50	4/7/2016 10:07:30 PM	R33378	
2-Chlorotoluene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
4-Chlorotoluene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
cis-1,2-DCE	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Dibromochloromethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Dibromomethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,2-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,3-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,4-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
Dichlorodifluoromethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,1-Dichloroethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,1-Dichloroethene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,2-Dichloropropane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
1,3-Dichloropropane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378	
2,2-Dichloropropane	ND	100		µg/L	50	4/7/2016 10:07:30 PM	R33378	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.
Project: Prince and Commerce
Lab ID: 1604058-009

Matrix: AQUEOUS

Client Sample ID: BW-8d
Collection Date: 3/31/2016 3:29:00 PM
Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
Hexachlorobutadiene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
2-Hexanone	ND	500		µg/L	50	4/7/2016 10:07:30 PM	R33378
Isopropylbenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
4-Isopropyltoluene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
4-Methyl-2-pentanone	ND	500		µg/L	50	4/7/2016 10:07:30 PM	R33378
Methylene Chloride	ND	150		µg/L	50	4/7/2016 10:07:30 PM	R33378
n-Butylbenzene	ND	150		µg/L	50	4/7/2016 10:07:30 PM	R33378
n-Propylbenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
sec-Butylbenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
Styrene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
tert-Butylbenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/7/2016 10:07:30 PM	R33378
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
trans-1,2-DCE	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
1,1,1-Trichloroethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
1,1,2-Trichloroethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
Trichloroethene (TCE)	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
Trichlorofluoromethane	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
1,2,3-Trichloropropane	ND	100		µg/L	50	4/7/2016 10:07:30 PM	R33378
Vinyl chloride	ND	50		µg/L	50	4/7/2016 10:07:30 PM	R33378
Xylenes, Total	2400	75		µg/L	50	4/7/2016 10:07:30 PM	R33378
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	50	4/7/2016 10:07:30 PM	R33378
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	50	4/7/2016 10:07:30 PM	R33378
Surr: Dibromofluoromethane	110	70-130		%Rec	50	4/7/2016 10:07:30 PM	R33378
Surr: Toluene-d8	100	70-130		%Rec	50	4/7/2016 10:07:30 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order 1604058
Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Project: Prince and Commerce

Lab ID: 1604058-010

Client Sample ID: BW-11d

Collection Date: 3/31/2016 3:48:00 PM

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: AG
EPA METHOD 8260B: VOLATILES								
Benzene	4300	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Toluene	5900	500		µg/L	500	4/8/2016 5:54:28 PM	R33419	
Ethylbenzene	500	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,2,4-Trimethylbenzene	310	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,3,5-Trimethylbenzene	74	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,2-Dichloroethane (EDC)	230	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,2-Dibromoethane (EDB)	110	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Naphthalene	100	100		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1-Methylnaphthalene	ND	200		µg/L	50	4/7/2016 10:36:05 PM	R33378	
2-Methylnaphthalene	ND	200		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Acetone	1300	500		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Bromobenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Bromodichloromethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Bromoform	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Bromomethane	ND	150		µg/L	50	4/7/2016 10:36:05 PM	R33378	
2-Butanone	750	500		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Carbon disulfide	ND	500		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Carbon Tetrachloride	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Chlorobenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Chloroethane	ND	100		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Chloroform	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Chloromethane	ND	150		µg/L	50	4/7/2016 10:36:05 PM	R33378	
2-Chlorotoluene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
4-Chlorotoluene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
cis-1,2-DCE	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Dibromochloromethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Dibromomethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,2-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,3-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,4-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
Dichlorodifluoromethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,1-Dichloroethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,1-Dichloroethene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,2-Dichloropropane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
1,3-Dichloropropane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378	
2,2-Dichloropropane	ND	100		µg/L	50	4/7/2016 10:36:05 PM	R33378	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

CLIENT: Brown Environmental Inc.

Project: Prince and Commerce

Lab ID: 1604058-010

Client Sample ID: BW-11d

Collection Date: 3/31/2016 3:48:00 PM

Matrix: AQUEOUS

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
Hexachlorobutadiene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
2-Hexanone	ND	500		µg/L	50	4/7/2016 10:36:05 PM	R33378
Isopropylbenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
4-Isopropyltoluene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
4-Methyl-2-pentanone	ND	500		µg/L	50	4/7/2016 10:36:05 PM	R33378
Methylene Chloride	ND	150		µg/L	50	4/7/2016 10:36:05 PM	R33378
n-Butylbenzene	ND	150		µg/L	50	4/7/2016 10:36:05 PM	R33378
n-Propylbenzene	52	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
sec-Butylbenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
Styrene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
tert-Butylbenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/7/2016 10:36:05 PM	R33378
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
trans-1,2-DCE	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
1,1,1-Trichloroethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
1,1,2-Trichloroethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
Trichloroethene (TCE)	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
Trichlorofluoromethane	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
1,2,3-Trichloropropane	ND	100		µg/L	50	4/7/2016 10:36:05 PM	R33378
Vinyl chloride	ND	50		µg/L	50	4/7/2016 10:36:05 PM	R33378
Xylenes, Total	2700	75		µg/L	50	4/7/2016 10:36:05 PM	R33378
Sur: 1,2-Dichloroethane-d4	99.4	70-130		%Rec	50	4/7/2016 10:36:05 PM	R33378
Sur: 4-Bromofluorobenzene	98.7	70-130		%Rec	50	4/7/2016 10:36:05 PM	R33378
Sur: Dibromofluoromethane	107	70-130		%Rec	50	4/7/2016 10:36:05 PM	R33378
Sur: Toluene-d8	104	70-130		%Rec	50	4/7/2016 10:36:05 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Project: Prince and Commerce

Lab ID: 1604058-011

Matrix: AQUEOUS

Client Sample ID: BW-7d

Collection Date: 3/31/2016 4:23:00 PM

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	8800	500		µg/L	50	4/8/2016 6:23:18 PM	R33419
Toluene	2900	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Ethylbenzene	650	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2,4-Trimethylbenzene	370	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,3,5-Trimethylbenzene	94	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2-Dichloroethane (EDC)	580	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Naphthalene	120	100		µg/L	50	4/7/2016 11:04:53 PM	R33378
1-Methylnaphthalene	ND	200		µg/L	50	4/7/2016 11:04:53 PM	R33378
2-Methylnaphthalene	ND	200		µg/L	50	4/7/2016 11:04:53 PM	R33378
Acetone	560	500		µg/L	50	4/7/2016 11:04:53 PM	R33378
Bromobenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Bromodichloromethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Bromoform	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Bromomethane	ND	150		µg/L	50	4/7/2016 11:04:53 PM	R33378
2-Butanone	ND	500		µg/L	50	4/7/2016 11:04:53 PM	R33378
Carbon disulfide	ND	500		µg/L	50	4/7/2016 11:04:53 PM	R33378
Carbon Tetrachloride	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Chlorobenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Chloroethane	ND	100		µg/L	50	4/7/2016 11:04:53 PM	R33378
Chloroform	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Chloromethane	ND	150		µg/L	50	4/7/2016 11:04:53 PM	R33378
2-Chlorotoluene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
4-Chlorotoluene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
cis-1,2-DCE	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/7/2016 11:04:53 PM	R33378
Dibromochloromethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Dibromomethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,3-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,4-Dichlorobenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Dichlorodifluoromethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,1-Dichloroethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,1-Dichloroethene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2-Dichloropropane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,3-Dichloropropane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
2,2-Dichloropropane	ND	100		µg/L	50	4/7/2016 11:04:53 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Brown Environmental Inc.**Client Sample ID:** BW-7d**Project:** Prince and Commerce**Collection Date:** 3/31/2016 4:23:00 PM**Lab ID:** 1604058-011**Matrix:** AQUEOUS**Received Date:** 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Hexachlorobutadiene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
2-Hexanone	ND	500		µg/L	50	4/7/2016 11:04:53 PM	R33378
Isopropylbenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
4-Isopropyltoluene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
4-Methyl-2-pentanone	ND	500		µg/L	50	4/7/2016 11:04:53 PM	R33378
Methylene Chloride	ND	150		µg/L	50	4/7/2016 11:04:53 PM	R33378
n-Butylbenzene	ND	150		µg/L	50	4/7/2016 11:04:53 PM	R33378
n-Propylbenzene	63	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
sec-Butylbenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Styrene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
tert-Butylbenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/7/2016 11:04:53 PM	R33378
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
trans-1,2-DCE	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,1,1-Trichloroethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,1,2-Trichloroethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Trichloroethene (TCE)	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Trichlorofluoromethane	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
1,2,3-Trichloropropane	ND	100		µg/L	50	4/7/2016 11:04:53 PM	R33378
Vinyl chloride	ND	50		µg/L	50	4/7/2016 11:04:53 PM	R33378
Xylenes, Total	2100	75		µg/L	50	4/7/2016 11:04:53 PM	R33378
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%Rec	50	4/7/2016 11:04:53 PM	R33378
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	50	4/7/2016 11:04:53 PM	R33378
Surr: Dibromofluoromethane	102	70-130		%Rec	50	4/7/2016 11:04:53 PM	R33378
Surr: Toluene-d8	95.0	70-130		%Rec	50	4/7/2016 11:04:53 PM	R33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	Page 22 of 30
R	RPD outside accepted recovery limits	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.
Project: Prince and Commerce
Lab ID: 1604058-012

Client Sample ID: TRip Blank
Collection Date:
Matrix: TRIP BLANK **Received Date:** 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: AG
EPA METHOD 8260B: VOLATILES								
Benzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Toluene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Ethylbenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Naphthalene	ND	2.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
2-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Acetone	ND	10		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Bromobenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Bromodichloromethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Bromoform	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Bromomethane	ND	3.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
2-Butanone	ND	10		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Carbon disulfide	ND	10		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Carbon Tetrachloride	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Chlorobenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Chloroethane	ND	2.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Chloroform	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Chloromethane	ND	3.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
2-Chlorotoluene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
4-Chlorotoluene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
cis-1,2-DCE	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Dibromochloromethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Dibromomethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,1-Dichloroethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,1-Dichloroethene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,2-Dichloropropane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
1,3-Dichloropropane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	
2,2-Dichloropropane	ND	2.0		µg/L	1	4/8/2016 1:28:27 AM	A33378	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	Page 23 of 30
R	RPD outside accepted recovery limits	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1604058

Date Reported: 4/12/2016

CLIENT: Brown Environmental Inc.

Client Sample ID: TRip Blank

Project: Prince and Commerce

Collection Date:

Lab ID: 1604058-012

Matrix: TRIP BLANK

Received Date: 4/1/2016 4:47:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
Hexachlorobutadiene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
2-Hexanone	ND	10		µg/L	1	4/8/2016 1:28:27 AM	A33378
Isopropylbenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
4-Isopropyltoluene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
4-Methyl-2-pentanone	ND	10		µg/L	1	4/8/2016 1:28:27 AM	A33378
Methylene Chloride	ND	3.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
n-Butylbenzene	ND	3.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
n-Propylbenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
sec-Butylbenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
Styrene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
tert-Butylbenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
trans-1,2-DCE	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
Trichlorofluoromethane	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
Vinyl chloride	ND	1.0		µg/L	1	4/8/2016 1:28:27 AM	A33378
Xylenes, Total	ND	1.5		µg/L	1	4/8/2016 1:28:27 AM	A33378
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/8/2016 1:28:27 AM	A33378
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	4/8/2016 1:28:27 AM	A33378
Surr: Dibromofluoromethane	104	70-130		%Rec	1	4/8/2016 1:28:27 AM	A33378
Surr: Toluene-d8	103	70-130		%Rec	1	4/8/2016 1:28:27 AM	A33378

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604058

12-Apr-16

Client: Brown Environmental Inc.
Project: Prince and Commerce

Sample ID 100ng lcs		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	R33378	RunNo: 33378						
Prep Date:		Analysis Date:	4/7/2016	SeqNo: 1026175		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	97.6	70	130			
Chlorobenzene	20	1.0	20.00	0	99.0	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	90.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID 100ng lcs2		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	A33378	RunNo: 33378						
Prep Date:		Analysis Date:	4/8/2016	SeqNo: 1026176		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	111	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	110	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.2	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID rb		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	R33378	RunNo: 33378						
Prep Date:		Analysis Date:	4/7/2016	SeqNo: 1026177		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604058

12-Apr-16

Client: Brown Environmental Inc.

Project: Prince and Commerce

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	R33378	RunNo: 33378						
Prep Date:		Analysis Date:	4/7/2016	SeqNo:	1026177	Units:	%RPD	RPDLimit	Qual	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
2-Methylnaphthalene		ND	4.0							
Acetone		ND	10							
Bromobenzene		ND	1.0							
Bromodichloromethane		ND	1.0							
Bromoform		ND	1.0							
Bromomethane		ND	3.0							
2-Butanone		ND	10							
Carbon disulfide		ND	10							
Carbon Tetrachloride		ND	1.0							
Chlorobenzene		ND	1.0							
Chloroethane		ND	2.0							
Chloroform		ND	1.0							
Chloromethane		ND	3.0							
2-Chlorotoluene		ND	1.0							
4-Chlorotoluene		1.1	1.0							
cis-1,2-DCE		ND	1.0							
cis-1,3-Dichloropropene		ND	1.0							
1,2-Dibromo-3-chloropropane		ND	2.0							
Dibromochloromethane		ND	1.0							
Dibromomethane		ND	1.0							
1,2-Dichlorobenzene		ND	1.0							
1,3-Dichlorobenzene		ND	1.0							
1,4-Dichlorobenzene		ND	1.0							
Dichlorodifluoromethane		ND	1.0							
1,1-Dichloroethane		ND	1.0							
1,1-Dichloroethene		ND	1.0							
1,2-Dichloropropane		ND	1.0							
1,3-Dichloropropane		ND	1.0							
2,2-Dichloropropane		ND	2.0							
1,1-Dichloropropene		ND	1.0							
Hexachlorobutadiene		ND	1.0							
2-Hexanone		ND	10							
Isopropylbenzene		ND	1.0							
4-Isopropyltoluene		ND	1.0							
4-Methyl-2-pentanone		ND	10							
Methylene Chloride		ND	3.0							
n-Butylbenzene		ND	3.0							
n-Propylbenzene		ND	1.0							
sec-Butylbenzene		ND	1.0							

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604058

12-Apr-16

Client: Brown Environmental Inc.

Project: Prince and Commerce

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	PBW	Batch ID:	R33378	RunNo: 33378							
Prep Date:		Analysis Date:	4/7/2016	SeqNo: 1026177 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Styrene		ND	1.0								
tert-Butylbenzene		ND	1.0								
1,1,1,2-Tetrachloroethane		ND	1.0								
1,1,2,2-Tetrachloroethane		ND	2.0								
Tetrachloroethene (PCE)		ND	1.0								
trans-1,2-DCE		ND	1.0								
trans-1,3-Dichloropropene		ND	1.0								
1,2,3-Trichlorobenzene		ND	1.0								
1,2,4-Trichlorobenzene		ND	1.0								
1,1,1-Trichloroethane		ND	1.0								
1,1,2-Trichloroethane		ND	1.0								
Trichloroethene (TCE)		ND	1.0								
Trichlorofluoromethane		ND	1.0								
1,2,3-Trichloropropane		ND	2.0								
Vinyl chloride		ND	1.0								
Xylenes, Total		ND	1.5								
Surr: 1,2-Dichloroethane-d4		10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene		10		10.00		104	70	130			
Surr: Dibromofluoromethane		11		10.00		112	70	130			
Surr: Toluene-d8		10		10.00		104	70	130			

Sample ID	rb3	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	PBW	Batch ID:	A33378	RunNo: 33378							
Prep Date:		Analysis Date:	4/8/2016	SeqNo: 1026178 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	1.0								
Toluene		ND	1.0								
Ethylbenzene		ND	1.0								
Methyl tert-butyl ether (MTBE)		ND	1.0								
1,2,4-Trimethylbenzene		ND	1.0								
1,3,5-Trimethylbenzene		ND	1.0								
1,2-Dichloroethane (EDC)		ND	1.0								
1,2-Dibromoethane (EDB)		ND	1.0								
Naphthalene		ND	2.0								
1-Methylnaphthalene		ND	4.0								
2-Methylnaphthalene		ND	4.0								
Acetone		ND	10								
Bromobenzene		ND	1.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604058

12-Apr-16

Client: Brown Environmental Inc.

Project: Prince and Commerce

Sample ID	rb3	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	A33378	RunNo: 33378						
Prep Date:		Analysis Date:	4/8/2016	SeqNo:	1026178	Units:	%RPD	RPDLimit	Qual	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Bromodichloromethane		ND	1.0							
Bromoform		ND	1.0							
Bromomethane		ND	3.0							
2-Butanone		ND	10							
Carbon disulfide		ND	10							
Carbon Tetrachloride		ND	1.0							
Chlorobenzene		ND	1.0							
Chloroethane		ND	2.0							
Chloroform		ND	1.0							
Chloromethane		ND	3.0							
2-Chlorotoluene		ND	1.0							
4-Chlorotoluene		ND	1.0							
cis-1,2-DCE		ND	1.0							
cis-1,3-Dichloropropene		ND	1.0							
1,2-Dibromo-3-chloropropane		ND	2.0							
Dibromochloromethane		ND	1.0							
Dibromomethane		ND	1.0							
1,2-Dichlorobenzene		ND	1.0							
1,3-Dichlorobenzene		ND	1.0							
1,4-Dichlorobenzene		ND	1.0							
Dichlorodifluoromethane		ND	1.0							
1,1-Dichloroethane		ND	1.0							
1,1-Dichloroethene		ND	1.0							
1,2-Dichloropropane		ND	1.0							
1,3-Dichloropropene		ND	1.0							
2,2-Dichloropropane		ND	2.0							
1,1-Dichloropropene		ND	1.0							
Hexachlorobutadiene		ND	1.0							
2-Hexanone		ND	10							
Isopropylbenzene		ND	1.0							
4-Isopropyltoluene		ND	1.0							
4-Methyl-2-pentanone		ND	10							
Methylene Chloride		ND	3.0							
n-Butylbenzene		ND	3.0							
n-Propylbenzene		ND	1.0							
sec-Butylbenzene		ND	1.0							
Styrene		ND	1.0							
tert-Butylbenzene		ND	1.0							
1,1,1,2-Tetrachloroethane		ND	1.0							

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604058

12-Apr-16

Client: Brown Environmental Inc.
Project: Prince and Commerce

Sample ID	rb3	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	A33378	RunNo: 33378						
Prep Date:		Analysis Date:	4/8/2016	SeqNo: 1026178 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Sur: 1,2-Dichloroethane-d4	9.8		10.00		98.2	70	130			
Sur: 4-Bromofluorobenzene	9.7		10.00		96.9	70	130			
Sur: Dibromofluoromethane	11		10.00		114	70	130			
Sur: Toluene-d8	9.0		10.00		90.3	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	R33419	RunNo: 33419						
Prep Date:		Analysis Date:	4/8/2016	SeqNo: 1027647 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Sur: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Sur: 4-Bromofluorobenzene	11		10.00		107	70	130			
Sur: Dibromofluoromethane	12		10.00		115	70	130			
Sur: Toluene-d8	10		10.00		101	70	130			

Sample ID	vsb dell	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	R33419	RunNo: 33419						
Prep Date:		Analysis Date:	4/8/2016	SeqNo: 1027648 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Sur: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Sur: 4-Bromofluorobenzene	10		10.00		104	70	130			
Sur: Dibromofluoromethane	11		10.00		113	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- D Sample Diluted Due to Matrix
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1604058

12-Apr-16

Client: Brown Environmental Inc.

Project: Prince and Commerce

Sample ID	vsb dell	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	PBW	Batch ID:	R33419	RunNo: 33419							
Prep Date:		Analysis Date:	4/8/2016	SeqNo: 1027648 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sur: Toluene-d8		9.9		10.00		99.2	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	Brown Env	Work Order Number:	1804058	RcptNo:	1
Received by/date:	>A	04/01/16			
Logged By:	Lindsay Mangin	4/1/2016 4:47:00 PM			
Completed By:	Lindsay Mangin	4/4/2016 10:14:31 AM			
Reviewed By:	IO	04/04/16			

Chain of Custody

1. Custody seals intact on sample bottles? Yes No Not Present
2. Is Chain of Custody complete? Yes No Not Present
3. How was the sample delivered? Client

Log In

4. Was an attempt made to cool the samples? Yes No NA
5. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
6. Sample(s) in proper container(s)? Yes No
7. Sufficient sample volume for indicated test(s)? Yes No
8. Are samples (except VOA and ONG) properly preserved? Yes No
9. Was preservative added to bottles? Yes No NA
10. VOA vials have zero headspace? Yes No No VOA Vials
11. Were any sample containers received broken? Yes No
of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody? Yes No
14. Is it clear what analyses were requested? Yes No
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes No Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: _____ Date: _____
By Whom: _____ Via: eMail Phone Fax In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record

Shipment Details							Sample Information			Analysis Request		
Address: Box 886 P.O. Box 87043 Santa Fe, NM 87043 Phone #: 505-934-7707			Project #: PRNCT3 commercc		Project Name:		Sample Temperature: 1.0			Analysis Request		
Mail or Fax#:			Project Manager:		Sampler:		Container Type and #			Preservative Type		
QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			Willem Brown		Willem Brown		3V105			1/2 Oz -001		
Accreditation: <input checked="" type="checkbox"/> NELAP <input type="checkbox"/> Other _____			On Ice:		On Ice:		3V115			1/2 Oz -002		
EDD (Type)			Sample Request ID		Sample Request ID		3V113			1/2 Oz -003		
Date	Time	Matrix					3V113			1/2 Oz -004		
1/16/16	15:10	• BW-101					3V113			1/2 Oz -005		
1/16/16	15:38	• BW-3d					2v115			1/2 Oz -006		
1/16/16	9:34	• BW-2d					3V115			1/2 Oz -007		
1/16/16	15:19	• BW-6d					3V115			1/2 Oz -008		
1/16/16	16:09	• BW-1d					3V115			1/2 Oz -009		
1/16/16	19:00	• BW-9d					3V115			1/2 Oz -010		
1/16/16	21:59	• BW-4d					3V108			1/2 Oz -011		
1/16/16	10:57	• BW-5d					3V109			1/2 Oz -012		
1/16/16	15:29	• BW-8d					3V109			1/2 Oz -013		
1/16/16	15:48	• BW-11d					3V109			1/2 Oz -014		
1/16/16	16:13	• BW-7d					3V109			1/2 Oz -015		
Relinquished by:			Received by:		Date		Time			Remarks:		
1/16/16			Dr. Carl O'Gallagher		1/16/16		16:47					
Time:			Relinquished by:		Received by:		Date			Time		
Time:			Relinquished by:		Received by:		Date			Time		
If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.												

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Air Bubbles (Y or N)

8270 (Semi-VOA)

8260B (VOA)

X 8081 Pesticides / 8082 PCB's

Antimony (F, Cl, NO₃, NO₂, PO₄, SO₄)

RCRA 8 Metals

PAH's (8310 or 8270 SIMS)

EDB (Method 504.1)

TPH (Method 418.1)

TPH 8015B (GRO / DRO / MRO)

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TMB's (8021)