BURNS McDONNELL

FINAL

Date: November 10, 2017

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Kansas Department of Health and Environment
Bureau of Environmental Remediation
Curtis State Office Building
1000 SW Jackson, Suite 410
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Re: Groundwater Sampling Report
Multiple Former ONE Gas MGP Sites –
Abilene, Atchison, Concordia, Hutchinson, Kansas City, Manhattan, Salina, and Topeka, Kansas
Consent Order No. 94-E-0172
Burns & McDonnell Project No. 96323

INTRODUCTION

ONE Gas, Inc. (ONE Gas) has retained Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to provide consulting and other professional services at multiple former manufactured gas plant (MGP) Sites including those located in Abilene, Atchison, Concordia, Hutchinson, Kansas City, Manhattan, Salina, and Topeka, Kansas. ONE Gas is conducting this work under the terms of Consent Order Number 94-E-0172 (CO) as issued by the Kansas Department of Health and Environment (KDHE). Groundwater sampling activities were performed from June 19, 2017 through June 28, 2017 and August 8, 2017 through August 10, 2017. This groundwater sampling report summarizes the field activities, findings, and analytical results for seven of the eight MGP Sites listed above on a site-by-site basis. The Manhattan, Kansas site is not included in this groundwater sampling report, as additional investigation work was performed at this site in 2017 and details of those investigations will be presented to the KDHE under separate cover.

1.0 ABILENE KANSAS MGP SITE

A description of the field activities conducted at the Abilene, Kansas MGP Site is provided in the sections below.

1.1 Groundwater Elevations

Water levels, free phase hydrocarbon (FPH) levels (if present), and total depths were measured and recorded in the field logbook for 36 monitoring wells prior to commencement of well purging and sampling activities. Groundwater elevations are presented on Table 1-1 and depicted on Figure 1-1. As measured during the August 2017 sampling event, depth of groundwater at the site ranges from 17.14 feet (ft) below top of casing (BTOC) to 20.12 ft BTOC. Groundwater flows toward the railroad tracks to the southeast. FPH was present at

Monitoring Wells ABMW-16S and ABMW-21, as measured during the August 2017 sampling event.

1.2 Groundwater Sampling

Groundwater sampling activities were conducted on August 8 and 10, 2017. Samples were collected from 17 monitoring wells (ABMW-5, ABMW-5D, ABMW-7, ABMW-8, ABMW-8D, ABMW-9, ABMW-9D, ABMW-10, ABMW-11, ABMW-12S, ABMW-12D, ABMW-13S, ABMW-13D, ABMW-15S, ABMW-15D, ABMW-16D, and ABMW-18D). Monitoring Wells ABMW- 16S and ABMW-21 had a presence of NAPL; therefore, no sample was collected. Monitoring wells were low-flow purged and sampled using a non-dedicated bladder pump in accordance with the low-flow sampling procedures described in Section 3.4.5 of the KDHE-approved amended Quality Assurance Project Plan (QAPP). Copies of the low-flow groundwater sampling forms are provided in Attachment 2.

Groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) of Lenexa, Kansas for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) using United States Environmental Protection Agency (USEPA) Method 8260/OA1; polycyclic aromatic hydrocarbons (PAHs) using USEPA Method 8270C Selective Ion Monitoring (SIM); eight Resource Conservation and Recovery Act (RCRA) metals using USEPA Methods 6010/7470; and total cyanide using Standard Method (SM) 4500-CN-E.

1.3 Analytical Results

Analytical results for the Abilene, Kansas MGP Site are summarized in Table 1-2. Detections of MGP constituents are illustrated on Figure 1-2. The groundwater sample results are compared to the Residential and Non-Residential Groundwater Risk-Based Standards for Kansas (RSK) values (September 2015). The complete analytical data reports for this groundwater sampling event are provided in Attachment 3. Historical groundwater sample results are provided in Attachment 4.

1.3.1 BTEX Results

Benzene exceeded its Residential and Non-Residential RSK levels for groundwater of 5 micrograms per liter (µg/L) in three of the seventeen monitoring wells (ABMW-5, ABMW-15S and ABMW-16D) at concentrations of 12.3 µg/L, 8,570 µg/L, and 1,880 µg/L, respectively.

Ethylbenzene exceeded its Residential and Non-Residential RSK levels for groundwater of 5 micrograms per liter (µg/L) in one of the seventeen monitoring wells (ABMW-15S) at a concentration of 1,490 µg/L.

There were no toluene and xylenes detections which exceeded their respective Residential RSKs and Non-Residential RSKs for groundwater of 1,000 µg/L and 10,000 µg/L, respectively.

1.3.2 PAH Results

Naphthalene exceeded its Residential RSK level for groundwater of 1.11 µg/L in the Monitoring Well ABMW-5 at a concentration of 1.9 µg/L. The Non-Residential RSK level of 2.1 µg/L for naphthalene was exceeded in four of the seventeen monitoring wells (ABMW-11, ABMW-15S, ABMW-15D, and ABMW-16D) and the field duplicate of ABMW-11 at concentrations ranging from 2.5 µg/L (ABMW-15D) to 744 µg/L (ABMW-15S).

None of the other PAH compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

1.3.3 Inorganic Results (Eight RCRA Metals and Cyanide)

Arsenic exceeded its Residential RSK and Non-Residential RSK for groundwater of 10 µg/L in eight of the seventeen monitoring wells (ABMW-5, ABMW-8, ABMW-9, ABMW-10, ABMW-13D, ABMW-15S, ABMW-16D, ABMW-18D) and the field duplicate of ABMW-10. The concentration of arsenic detections ranged from 11.2 µg/L (ABMW-18D) to 125 µg/L (ABMW-5 and ABMW-15S).

None of the other inorganic compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

1.4 Investigation Derived Waste

Purge water from groundwater sampling activities was containerized in a 55-gallon drum and staged at the Site. Disposal of the liquid IDW drums is currently pending. Disposable sampling equipment was containerized and will be disposed of at a properly permitted facility.

1.5 Data Evaluation

Groundwater analytical results from Monitoring Wells ABMW-5, ABMW-15S and ABMW-16D exceeded the Residential and Non-Residential Groundwater RSK levels for benzene. The concentration of benzene has decreased at ABMW-5 when compared to the June 2015 sampling event analytical results (see Attachment 4).

Groundwater analytical results from the Monitoring Well ABMW-5 exceeded the Residential RSK level for naphthalene. Groundwater analytical results from four Monitoring Wells (ABMW-11, ABMW-15S, ABMW-15D, and ABMW-16D) exceeded the Residential and Non-Residential Groundwater RSK levels for naphthalene. The concentration of naphthalene has

decreased at ABMW-5 when compared to the June 2015 sampling analytical results (see Attachment 4).

Groundwater analytical results from Monitoring Wells ABMW-5, ABMW-8, ABMW-9, ABMW-10, ABMW-13D, ABMW-15S, ABMW-16D, ABMW-18D exceeded the Residential and Non-Residential Groundwater RSK levels for arsenic. The groundwater analytical result from this sampling event for Monitoring Well ABMW-5 is consistent with the historical groundwater analytical data (see Attachment 4).

2.0 ATCHISON KANSAS MGP SITE

A description of the field activities conducted at the Atchison, Kansas MGP Site is provided in the sections below.

2.1 Groundwater Elevations

Water levels, free phase hydrocarbon FPH levels (if present), and total depths were measured and recorded in the field logbook for the nine monitoring wells prior to commencement of well purging and sampling activities. Groundwater elevations are presented on Table 2-1 and depicted on Figure 2-1. As measured during the June 2017 sampling event, depth of groundwater at the site ranges from 10.11 ft below top of casing BTOC to 20.13 ft BTOC. Groundwater flows toward the buried creek to the southeast. No FPH was present in the monitoring wells, as measured during the June 2017 sampling event.

2.2 Groundwater Sampling

Groundwater sampling activities were conducted on June 21 and 22, 2017. Samples were collected from seven monitoring wells (ATMW-1, ATMW-2, ATMW-3, ATMW-4, ATMW-5, ATMW-6, and ATMW-9). Monitoring Wells ATMW-7 and ATMW-8 had insufficient groundwater present to sample; therefore, no sample was collected. Wells which contained groundwater were low-flow purged and sampled using a non-dedicated bladder pump in accordance with the low-flow sampling procedures described in Section 3.4.5 of the KDHE-approved amended QAPP. Copies of the low-flow groundwater sampling forms are provided in Attachment 2.

Groundwater samples were submitted to Pace of Lenexa, Kansas for analysis of benzene, toluene, ethylbenzene, and xylenes BTEX using USEPA Method 8260/OA1; PAHs using USEPA Method 8270C Selective Ion Monitoring SIM; eight RCRA metals using USEPA Methods 6010/7470; and total cyanide using SM 4500-CN-E.

2.3 Analytical Results

Analytical results for the Atchison, Kansas MGP Site are summarized in Table 2-2. Detections of MGP constituents are illustrated on Figure 2-2. The groundwater sample results are compared to the Residential and Non-Residential Groundwater RSK values (September 2015). The complete analytical data reports for this groundwater sampling event are provided in Attachment 3. Historical groundwater sample results are provided in Attachment 4.

2.3.1 BTEX Results

Benzene exceeded its Residential and Non-Residential RSK levels for groundwater of 5 µg/L in two of the seven monitoring wells (ATMW-5 and ATMW-9) at concentrations of 112 µg/L and 317 µg/L, respectively.

There were no detections of ethylbenzene, toluene, or xylenes which exceeded their respective Residential RSKs and Non-Residential RSKs for groundwater of 700 µg/L, 1,000 µg/L and 10,000 µg/L, respectively.

2.3.2 PAH Results

Naphthalene exceeded its Residential and Non-Residential RSK levels for groundwater of 1.11 µg/L and 2.11 µg/L, respectively in each of the seven monitoring wells (except Monitoring Well ATMW-2, which only had a Residential RSK exceedance) at concentrations ranging from 1.5 µg/L in ATMW-4 to 122 µg/L in ATMW-9.

None of the other PAH compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

2.3.3 Inorganic Results (Eight RCRA Metals and Cyanide)

Arsenic exceeded its Residential RSK and Non-Residential RSK for groundwater of 10 µg/L in four of the eight monitoring wells (ATMW-2, ATMW-4, ATMW-5, and ATMW-9). The concentration of arsenic detections ranged from 10.4 µg/L (ATMW-4) to 212 µg/L (ATMW-2).

None of the other inorganic compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

2.4 Investigation Derived Waste

Purge water from groundwater sampling activities was containerized in a 55-gallon drum and staged at the Site. Disposal of the liquid IDW drums is currently pending. Disposable sampling equipment was containerized and will be disposed of at a properly permitted facility.

2.5 Data Evaluation

Groundwater analytical results from Monitoring Wells ATMW-5 and ATMW-9 exceeded the Residential and Non-Residential Groundwater RSK levels for benzene. The concentration of benzene has increased at ATMW-5 when compared to the July 2016 sampling event, but decreased when compared to the June 2015 sampling event analytical results. The benzene concentration has decreased at ATMW-9 (see Attachment 4).

Groundwater analytical results from the Monitoring Well ATMW-2 exceeded the Residential RSK level for naphthalene. Groundwater analytical results from the remaining six Monitoring Wells (ATMW-1, ATMW-3, ATMW-4, ATMW-5, ATMW-6, and ATMW-9) exceeded the Residential and Non-Residential Groundwater RSK levels for naphthalene.

Groundwater analytical results from Monitoring Wells ATMW-2, ATMW-4, ATMW-5 and ATMW-9 exceeded the Residential and Non-Residential Groundwater RSK levels for arsenic. Groundwater analytical results from Monitoring Wells ATMW-2, ATMW-4, ATMW-5, and ATMW-9 also exceeded the RSK levels in 2015 and 2016 (see Attachment 4).

3.0 CONCORDIA KANSAS MGP SITE

A description of the field activities conducted at the Concordia, Kansas MGP Site is provided in the sections below.

3.1 Groundwater Elevations

Water levels, FPH levels (if present), and total depths were measured and recorded in the field logbook for the four existing monitoring wells prior to commencement of well purging and sampling activities. The plant manager of Abram Ready Mix indicated to Burns & McDonnell field personnel that Monitoring Well CMW-1 was destroyed by them (Abram Ready Mix) during driveway re-grading activities prior to the July 2016 sampling event. Groundwater elevations are presented on Table 3-1 and depicted on Figure 3-1. As measured during the June 2017 sampling event, depth of groundwater at the site ranges from 13.80 ft BTOC to 15.32 ft BTOC. Groundwater flows toward the buried creek to the northwest. No FPH was present in the monitoring wells, as measured during the June 2017 sampling event.

3.2 Groundwater Sampling

Groundwater sampling activities were conducted on June 26, 2017. Samples were collected from four monitoring wells (CMW-2, CMW-3, CMW-4, and CMW-5). Wells were low-flow purged and sampled using a non-dedicated bladder pump in accordance with the low-flow sampling procedures described in Section 3.4.5 of the KDHE-approved amended QAPP. Copies of the low-flow groundwater sampling forms are provided in Attachment 2.

Groundwater samples were submitted to Pace of Lenexa, Kansas for analysis of BTEX using USEPA Method 8260/OA1; PAH using USEPA Method 8270C SIM; eight RCRA metals using USEPA Methods 6010/7470; and total cyanide using SM 4500-CN-E.

3.3 Analytical Results

Analytical results for the Concordia, Kansas MGP Site are summarized in Table 3-2. Detections of MGP constituents are illustrated on Figure 3-2. The groundwater sample results are compared to the Residential and Non-Residential Groundwater RSK values. The complete analytical data reports for this groundwater sampling event are provided in Attachment 3. Historical groundwater sample results are provided in Attachment 4.

3.3.1 BTEX Results

There were no detections of BTEX compounds.

3.3.2 PAH Results

There were no detections of PAH compounds.

3.3.3 Inorganic Results (Eight RCRA Metals and Cyanide)

Arsenic exceeded the Residential and Non-Residential Groundwater RSK levels of 10 µg/L in two of the four monitoring wells (CMW-2 and CMW-5) at concentrations of 13.2 µg/L and 20.6 µg/L, respectively.

None of the other inorganic compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

3.4 Investigation Derived Waste

Purge water from groundwater sampling activities was containerized in 55-gallon drums and staged at the Site. Disposal of the liquid IDW drums is currently pending. Disposable sampling equipment was containerized and will be disposed of at a properly permitted facility.

3.5 Data Evaluation

Groundwater analytical results from the four Monitoring Wells sampled during the June 2017 sampling event are generally consistent with historical analytical results, with some exceptions.

Analytical results indicate detections of lead in each of the four Monitoring Wells sampled during the June 2017 sampling event. Lead was not detected in any of these wells during either the July 2016 or June 2015 sampling events. The reported lead concentrations did not exceed Residential and Non-Residential RSK levels. The groundwater analytical results from Monitoring Well CMW-3 indicated no detection of arsenic during the June 2017 sampling event, which is consistent with analytical results from the July 2016 sampling event; however, during the June 2015 sampling event, arsenic was detected at concentration of 11.0 µg/L, which exceeds the Residential and Non-Residential Groundwater RSK level. Groundwater analytical results from Monitoring Wells CMW-2 and CMW-5 exceeded the Residential and Non-Residential Groundwater RSK level for arsenic of 10 µg/L. Except as noted above, analytical results for these Monitoring Wells are consistent with historical analytical data.

No other MGP constituents were detected above their respective Residential and/or Non-Residential Groundwater RSKs.

4.0 HUTCHINSON KANSAS MGP SITE

A description of the field activities conducted at the Hutchinson, Kansas MGP Site is provided in the sections below.

4.1 Groundwater Elevations

Water levels, FPH levels (if present), and total depths were measured and recorded in the field logbook for eight monitoring wells prior to commencement of well purging and sampling activities. Depth to groundwater measurements are presented on Table 4-1 and well locations are depicted on Figure 4-1. As measured during the June 2017 sampling event, depth of groundwater at the site ranges from 9.93 ft BTOC to 12.20 ft BTOC. FPH was present in Monitoring Well HMW-3 with a thickness of 0.60 feet, and therefore was not sampled. Groundwater flow direction was not evaluated for this site because none of the monitoring wells have survey data available.

4.2 Groundwater Sampling

Groundwater sampling activities were conducted on June 27 and 28, 2017. Samples were collected from seven monitoring wells (HMW-1S, HMW-1D, HMW-2, HMW-4S, HMW-4D, HWM-5S, and HWM-5D). Monitoring Well HMW-3 was not sampled due to the presence of FPH. Monitoring wells were low-flow purged and sampled using a non-dedicated bladder pump

in accordance with the low-flow sampling procedures described in Section 3.4.5 of the KDHE-approved amended QAPP. Copies of the low-flow groundwater sampling forms are provided in Attachment 2.

Groundwater samples were submitted to Pace of Lenexa, Kansas for analysis of BTEX using USEPA Method 8260/OA1; PAH using USEPA Method 8270C SIM; eight RCRA metals using USEPA Methods 6010/7470; and total cyanide using SM 4500-CN-E.

4.3 Analytical Results

Analytical results for the Hutchinson, Kansas MGP Site are summarized in Table 4-2. Detections of MGP constituents are illustrated on Figure 4-2. The groundwater sample results are compared to the Residential and Non-Residential Groundwater RSK values. The complete analytical data reports for this groundwater sampling event are provided in Attachment 3. Historical groundwater sample results are provided in Attachment 4.

4.3.1 BTEX Results

There were no detections of BTEX compounds which exceeded their respective Residential and Non-Residential Groundwater RSK levels.

4.3.2 PAH Results

PAHs were only detected in one monitoring well (HMW-4S) with the following exceedances: benzo(a)anthracene exceeded its Residential RSK level for groundwater of 0.223 µg/L at a concentration of 0.58 µg/L; benzo(a)pyrene exceeded its Residential and Non-Residential RSK levels for groundwater of 0.2 µg/L at a concentration of 1.1 µg/L; benzo(b)fluoranthene exceeded its Residential and Non-Residential RSK levels for groundwater of 0.16 µg/L and 0.537 µg/L, respectively at a concentration of 1.2 µg/L; dibenz(a,h)anthracene exceeded its Residential and Non-Residential RSK levels for groundwater of 0.00805 µg/L and 0.027 µg/L, respectively at a concentration of 0.16 µg/L; indeno(1,2,3-cd)pyrene exceeded its Residential and Non-Residential RSK levels for groundwater of 0.12 µg/L and 0.392 µg/L, respectively at a concentration of 0.55 µg/L; and naphthalene exceeded the Residential and Non-Residential RSK levels for groundwater of 1.11 µg/L and 2.11 µg/L, respectively at a concentration of 29.7 µg/L.

4.3.3 Inorganic Results (Eight RCRA Metals and Cyanide)

None of the inorganic compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

4.4 Investigation Derived Waste

Purge water from groundwater sampling activities was containerized in 55-gallon drums and staged at the Site. Disposal of the liquid IDW drums is currently pending. Disposable sampling equipment was containerized and will be disposed of at a properly permitted facility.

4.5 Data Evaluation

Groundwater analytical results from Monitoring Well HMW-4S exceeded the Residential and Non-Residential Groundwater RSK levels for benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene. Groundwater analytical results from Monitoring Well HMW-4S exceeded the Residential Groundwater RSK level for benzo(a)anthracene. These exceedances are consistent with the historical groundwater analytical data (see Attachment 4).

Groundwater analytical results from Monitoring Wells HMW-1D, HMW-1S, HMW-2, HMW-4D, HWM-5D, and HWM-5S did not exceed the Residential and Non-Residential Groundwater RSK levels for any of the MGP constituents analyzed during the June 2017 sampling event. Groundwater analytical results from these monitoring wells, this sampling event, are generally consistent with historical analytical results with some exceptions. Groundwater analytical results from the July 2016 sampling event indicate exceedances of the Residential and Non-Residential RSK levels for naphthalene in HMW-1 and HMW-5D in addition to HMW-4S. During the July 2016 sampling event, analytical results indicate exceedance of the Residential and Non-Residential RSK level for benzo(a)pyrene in HMW-5D as well as in HMW-4S. July 2016 sampling event analytical results indicate exceedances of the Residential RSK levels for benzo(a)anthracene and benzo(b)fluoranthene in HMW-5D and HMW-4S. Historical groundwater analytical data is presented in Attachment 4.

FPH was observed to be present in Monitoring Well HMW-3 at a thickness of 0.60 ft and has historically been present in this monitoring well.

5.0 KANSAS CITY KANSAS MGP SITE

A description of the field activities conducted at the Kansas City, Kansas MGP Site is provided in the sections below.

5.1 Groundwater Elevations

Water levels, FPH levels (if present), and total depths were measured and recorded in the field logbook for the twelve existing site monitoring wells on June 19, 2017, prior to commencement of well purging and sampling activities. Depth to groundwater measurements are presented on

Table 5-1 and well locations are depicted on Figure 5-1. As measured during the June 2017 sampling event, depth of groundwater at the site ranges from 10.62 ft BTOC to 29.91 ft BTOC. Potentiometric surface contours are presented on Figure 5-1 and indicate that groundwater flows radially to northeast, east and south. FPH was present in the bottom of Monitoring Well KCMW-8D and therefore KCMW-8D was not sampled during the June 2017 sampling event.

5.2 Groundwater Sampling

Groundwater sampling activities were conducted on June 19 and 20, 2017. Samples were collected from 11 monitoring wells (KCMW-1, KCMW-2, KCMW-3, KCMW-4, KCMW-7S, KCMW-8S, KCMW-10, KCMW-11S, KCMW-11D, KCMW-12S, and KCMW-12D). With the exception of Monitoring Well KCMW-11S which was bailed, monitoring wells were low-flow purged and sampled using a non-dedicated bladder pump in accordance with the low-flow sampling procedures described in Section 3.4.5 of the KDHE-approved amended QAPP. Monitoring Well KCMW-11 was sampled using a bailer because the amount of water in the well did not allow for low-flow sampling. Copies of the low-flow groundwater sampling forms are provided in Attachment 2.

Groundwater samples were submitted to Pace of Lenexa, Kansas for analysis of BTEX using USEPA Method 8260/OA1; PAH using USEPA Method 8270C SIM; eight RCRA metals using USEPA Methods 6010/7470; and total cyanide using SM 4500-CN-E.

5.3 Analytical Results

Analytical results for the Kansas City, Kansas MGP Site are summarized in Table 5-2. Detections of MGP constituents are illustrated on Figure 5-2. The groundwater sample results are compared to the Residential and Non-Residential Groundwater RSK values. The complete analytical data reports for the June 2017 groundwater sampling event are provided in Attachment 3. Historical groundwater sample results are provided in Attachment 4.

5.3.1 BTEX Results

Benzene exceeded its Residential and Non-Residential RSK levels for groundwater of 5 µg/L in Monitoring Wells KCMW-11S and KCMW-11D at concentrations of 6.7 µg/L and 8,540 µg/L, respectively.

There were no detections of ethylbenzene, toluene, or xylenes which exceeded their respective Residential and Non-Residential Groundwater RSK levels.

5.3.2 PAH Results

Benzo(a)anthracene exceeded its Residential level for groundwater of 0.223 µg/L in one monitoring well (KCMW-11S) at a concentration of 0.28 µg/L.

Benzo(a)pyrene exceeded its Residential and Non-Residential RSK levels for groundwater of 0.2 µg/L in Monitoring Well KCMW-3 at a concentration of 0.30 µg/L.

Benzo(b)fluoranthene exceeded its Residential RSK levels for groundwater of 0.16 µg/L in Monitoring Well KCMW-3 at a concentration of 0.20 µg/L.

Indeno(1,2,3-cd)pyrene exceeded its Residential RSK level for groundwater of 0.117 µg/L in one monitoring well (KCMW-3) at a concentration of 0.17 µg/L.

Naphthalene exceeded its Residential level for groundwater of 1.11 µg/L in the field duplicate of Monitoring Well KCMW-10 at a concentration of 1.4 µg/L. The Non-Residential RSK level of 2.1 µg/L for naphthalene was exceeded in Monitoring Wells KCMW-11S and KCMW-11D at concentrations of 498 µg/L and 1,200 µg/L, respectively.

5.3.3 Inorganic Results (Eight RCRA Metals and Cyanide)

Arsenic exceeded the Residential and Non-Residential RSK levels in groundwater of 10 µg/L in Monitoring Wells KCMW-3, KCMW-11D, and KCMW-12S at concentrations of 77.4 µg/L, 24.4 µg/L, and 29.0 µg/L, respectively.

None of the other inorganic compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

5.4 Investigation Derived Waste

Purge water from groundwater sampling activities was containerized in 55-gallon drums and staged at the Site. Disposal of the liquid IDW drums is currently pending. Disposable sampling equipment was containerized and will be disposed of at a properly permitted facility.

5.5 Data Evaluation

Groundwater analytical results from Monitoring Well KCMW-3 exceeded the Residential RSK levels for benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene. Analytical results from Monitoring Well KCMW-3 exceeded Residential and Non-Residential Groundwater RSK levels for benzo(a)pyrene and arsenic. These results are generally lower from those of the July 2016 sampling event in which the KCMW-3 concentrations for analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, and arsenic exceeded Residential and Non-Residential Groundwater RSK levels.

Groundwater analytical results from Monitoring Well KCMW-11S exceeded the Residential and Non-Residential Groundwater RSK levels for benzene and naphthalene. Groundwater analytical results from Monitoring Well KCMW-11S exceeded the Residential RSK level for benzo(a)anthracene. These results are generally lower from those gathered during the July 2016 sampling event in which Residential and Non-Residential RSK values were exceeded for the analytes benzene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and naphthalene; and the Residential RSK level was exceeded for indeno(1,2,3-cd)pyrene.

Groundwater analytical results from Monitoring Well KCMW-11D exceeded the Residential and Non-Residential Groundwater RSK levels for benzene, naphthalene, and arsenic. These results differ from those gathered during the July 2016 sampling event in which the Residential and Non-Residential Groundwater RSK levels were exceeded for the analytes benzene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, and arsenic.

6.0 SALINA KANSAS MGP SITE

A description of the field activities conducted at the Salina, Kansas MGP Site is provided in the sections below.

6.1 Groundwater Elevations

Water levels, FPH levels (if present), and total depths were measured and recorded in the field logbook for all three monitoring wells prior to commencement of well purging and sampling activities. Groundwater elevations are presented on Table 6-1 and depicted on Figure 6-1. As measured during the June 2017 sampling event, depth to groundwater at the site ranges from 32.15 ft BTOC to 32.98 ft BTOC. Groundwater flows toward the southeast. No FPH was present in the monitoring wells, as measured during the June 2017 sampling event.

6.2 Groundwater Sampling

Groundwater sampling activities were conducted on June 27, 2017. Samples were collected from three monitoring wells (SLMW-1, SLMW-2, and SLMW-3). All wells were low-flow purged and sampled using a non-dedicated bladder pump in accordance with the low-flow sampling procedures described in Section 3.4.5 of the KDHE-approved amended QAPP. Copies of the low-flow groundwater sampling forms are provided in Attachment 2.

Groundwater samples were submitted to Pace of Lenexa, Kansas for analysis of BTEX using USEPA Method 8260/OA1; PAH using USEPA Method 8270C SIM; eight RCRA metals using USEPA Methods 6010/7470; and total cyanide using SM 4500-CN-E.

6.3 Analytical Results

Analytical results for the Salina, Kansas MGP Site are summarized in Table 6-2. Detections of MGP constituents are illustrated on Figure 6-2. The groundwater sample results are compared to the Residential and Non-Residential Groundwater RSK values. The complete analytical data reports for this groundwater sampling event are provided in Attachment 3. Historical groundwater sample results are provided in Attachment 4.

6.3.1 BTEX Results

There were no detections of BTEX compounds which exceeded their respective Residential and Non-Residential Groundwater RSK levels.

6.3.2 PAH Results

Benzo(a)anthracene and benzo(b)fluoranthene exceeded their respective Residential Groundwater RSK levels in one of the three monitoring wells (SLMW-2) at concentrations of 0.52 µg/L and 0.39 µg/L, respectively.

Benzo(a)pyrene and naphthalene exceeded their respective Residential Groundwater and Non-Residential Groundwater RSK levels in one of the three monitoring wells (SLMW-2) at concentrations of 0.44 µg/L and 2.8 µg/L, respectively.

Indeno(1,2,3-cd)pyrene exceeded the Residential Groundwater RSK level in one of the three monitoring wells (SLMW-2) at a concentration of 0.25 µg/L.

Dibenz(a,h)anthracene exceeded the Residential and Non-Residential RSK level in Monitoring Well SLMW-1 at a concentration of 0.16 µg/L.

6.3.3 Inorganic Results (Eight RCRA Metals and Cyanide)

Arsenic exceeded the Residential and Non-Residential Groundwater RSK level in Monitoring Well SLMW-3 at a concentration of 20.4 µg/L.

None of the other inorganic compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

6.4 Investigation Derived Waste

Purge water and groundwater sampling activities was containerized in 55-gallon drums and staged at the Site. Disposal of the liquid IDW drums is currently pending. Disposable sampling equipment was containerized and will be disposed of at a properly permitted facility.

6.5 Data Evaluation

Groundwater analytical results from Monitoring Well SLMW-1 exceeded the Residential and Non-Residential RSK value for dibenz(a,h)anthracene. These results differ from those gathered during the July 2016 sampling event in which dibenz(a,h)anthracene was not detected in Monitoring Well SLMW-1.

Groundwater analytical results from Monitoring Well SLMW-2 exceeded the Residential Groundwater RSK levels for benzo(a)anthracene, benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene. Results for this well also exceeded both Residential and Non-Residential Groundwater RSK levels for benzo(a)pyrene and naphthalene. These results differ from those gathered during the July 2016 sampling event in which SLMW-2 concentrations did not exceed Residential and Non-Residential Groundwater RSK values for naphthalene.

Groundwater analytical results from Monitoring Well SLMW-3 exceeded the Residential and Non-Residential Groundwater RSK level for arsenic. The groundwater analytical results from Monitoring Well SLMW-3 are generally consistent with the historical groundwater analytical data (see Attachment 4).

7.0 TOPEKA KANSAS MGP SITE

A description of the field activities conducted at the Topeka, Kansas MGP Site is provided in the sections below.

7.1 Groundwater Elevations

Water levels, FPH levels (if present), and total depths were measured and recorded in the field logbook for the four Site monitoring wells prior to commencement of well purging and sampling activities. Groundwater elevations are presented on Table 7-1 and depicted on Figure 7-1. As measured during the June 2017 sampling event, depth of groundwater at the site ranges from 23.40 ft BTOC to 26.37 ft BTOC. Groundwater flows toward the northeast. No FPH was present in the monitoring wells, as measured during the June 2017 sampling event.

7.2 Groundwater Sampling

Groundwater sampling activities were conducted on June 22 and 23, 2017. Samples were collected from four monitoring wells (TPMW-1, TPMW-2, TPMW-3, and TPMW-4). Wells were low-flow purged and sampled using a non-dedicated bladder pump in accordance with the low-flow sampling procedures described in Section 3.4.5 of the KDHE-approved amended QAPP. Copies of the low-flow groundwater sampling forms are provided in Attachment 2.

Groundwater samples were submitted to Pace of Lenexa, Kansas for analysis of BTEX using USEPA Method 8260/OA1; PAH using USEPA Method 8270C SIM; eight RCRA metals using USEPA Methods 6010/7470; and total cyanide using SM 4500-CN-E.

7.3 Analytical Results

Analytical results for the Topeka, Kansas MGP Site are summarized in Table 7-2. Detections of MGP constituents are illustrated on Figure 7-2. The groundwater sample results are compared to the Residential and Non-Residential Groundwater RSK values. The complete analytical data reports for this groundwater sampling event are provided in Attachment 3. Historical groundwater sample results are provided in Attachment 4.

7.3.1 BTEX Results

There were no detections of BTEX compounds in any of the Monitoring Wells sampled during the June 2017 event.

7.3.2 PAH Results

There were no detections of PAH compounds which exceeded their respective Residential and Non-Residential Groundwater RSK levels.

7.3.3 Inorganic Results (Eight RCRA Metals and Cyanide)

None of the inorganic compounds analyzed exceeded their respective Residential and Non-Residential Groundwater RSK levels.

7.4 Investigation Derived Waste

Purge water from groundwater sampling activities was containerized in 55-gallon drums and staged at the Site. Disposal of the liquid IDW drums is currently pending. Disposable sampling equipment was containerized and will be disposed of at a properly permitted facility.

7.5 Data Evaluation

Groundwater analytical results from Monitoring Well TPMW-2 did not exceed the Residential and Non-Residential Groundwater RSK levels for any of the MGP constituents analyzed. These results are consistent with groundwater analytical data gathered during the July 2016 sampling event. However, these results differ from those gathered during the June 2015 sampling event in which the detected concentration of naphthalene in the sample from Monitoring Well TPMW-2 exceeded the Residential Groundwater RSK value.

Groundwater analytical results from Monitoring Well TPMW-3 did not exceed the Residential and Non-Residential Groundwater RSK levels for any of the MGP constituents analyzed. These

results are consistent with groundwater analytical data gathered during the July 2016 sampling event. However, these results were generally lower from those gathered during the June 2015 sampling event in which well TPMW-3 concentrations exceeded Residential Groundwater RSK values for analytes benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene; and Non-Residential Groundwater RSK values for the analytes benzo(a)pyrene and naphthalene.

Groundwater analytical results from Monitoring Well TPMW-4 did not exceed the Residential and Non-Residential Groundwater RSK levels for any of the MGP constituents analyzed. The groundwater analytical results from this monitoring well, this sampling event, are consistent with the historical groundwater analytical data (see Attachment 4).

If you have questions regarding this submittal, please do not hesitate to contact Mr. Matt Kaiser at (918) 947-7608 or at the undersigned (816) 823-6257.

Sincerely,

Brian Hoye
Account Manager

Attachments:

Tables

Table 1-1	Groundwater Elevation Data – August 2017, Abilene, Kansas
Table 1-2	Groundwater Analytical Results – August 2017, Abilene, Kansas
Table 2-1	Groundwater Elevation Data – June 2017, Atchison, Kansas
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Table 4-1	Groundwater Elevation Data – June 2017, Hutchinson, Kansas
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Figures

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Figure 1-2	MGP Constituent Exceedance Map – August 2017, Abilene, Kansas
Figure 2-1	Potentiometric Surface Map – June 2017, Atchison, Kansas
Figure 2-2	MGP Constituent Exceedance Map – June 2017, Atchison, Kansas
Figure 3-1	Potentiometric Surface Map – June 2017, Concordia, Kansas
Figure 3-2	MGP Constituent Exceedance Map – June 2017, Concordia, Kansas
Figure 4-1	Potentiometric Surface Map – June 2017, Hutchinson, Kansas
Figure 4-2	MGP Constituent Exceedance Map – June 2017, Hutchinson, Kansas
Figure 5-1	Potentiometric Surface Map – June 2017, Kansas City, Kansas
Figure 5-2	MGP Constituent Exceedance Map – June 2017, Kansas City, Kansas
Figure 6-1	Potentiometric Surface Map – June 2017, Salina, Kansas
Figure 6-2	MGP Constituent Exceedance Map – June 2017, Salina, Kansas
Figure 7-1	Potentiometric Surface Map – June 2017, Topeka, Kansas
Figure 7-2	MGP Constituent Exceedance Map – June 2017, Topeka, Kansas

Attachment 1	Field Logbook
Attachment 2	Groundwater Sampling Forms
Attachment 3	Data Validation and Analytical Data Reports
Attachment 4	Historical Data

TABLES

Table 1-1
Groundwater Elevation Data - August 2017
Abilene, Kansas ONE Gas MGP Site

MONITORING WELL	GROUND SURFACE ELEVATION (feet above MSL)	TOC ELEVATION (feet above MSL)	DEPTH TO GROUNDWATER (feet below TOC)	DEPTH TO FPH (feet below TOC)	TOTAL DEPTH (feet below TOC)	GROUNDWATER SURFACE ELEVATION (feet above MSL)	GAUGING DATE
ABMW-1D	1151.03	1150.7	18.59	--	39.55	1,132.11	8/7/2017
ABMW-1S	1150.98	1150.58	18.03	--	24.40	1,132.55	8/7/2017
ABMW-2	1150.45	1150.06	17.63	--	24.59	1,132.43	8/7/2017
ABMW-3	1150.43	1150.27	17.65	--	24.71	1,132.62	8/7/2017
ABMW-3D	1150.57	1150.27	17.84	--	39.59	1,132.43	8/7/2017
ABMW-4	1150.3	1149.97	17.39	--	39.94	1,132.58	8/7/2017
ABMW-5	1148.61	1148.41	18.98	--	29.93	1,129.43	8/7/2017
ABMW-6	1148.25	1147.82	18.88	--	34.82	1,128.94	8/7/2017
ABMW-7	1147.84	1147.43	18.89	--	26.56	1,128.54	8/7/2017
ABMW-8	1148.43	1148.05	18.43	--	26.82	1,129.62	8/7/2017
ABMW-9	1147.82	1147.58	19.49	--	26.58	1,128.09	8/7/2017
ABMW-10	1149.35	1149.06	20.12	--	26.69	1,128.94	8/7/2017
ABMW-11	1150.4	1150.01	17.14	--	57.69	1,132.87	8/7/2017
ABMW-5D	1148.68	1148.15	18.43	--	43.58	1,129.72	8/7/2017
ABMW-8D	1148.48	1148.15	18.25	--	43.28	1,129.90	8/7/2017
ABMW-9D	1147.98	1147.53	18.69	--	42.82	1,128.84	8/7/2017
ABMW-12S	1150.43	1150.15	17.29	--	31.02	1,132.86	8/7/2017
ABMW-12D	1150.43	1150.1	17.20	--	47.95	1,132.90	8/7/2017
ABMW-13S	1150.71	1150.42	18.02	--	29.41	1,132.40	8/7/2017
ABMW-13D	1150.65	1150.15	17.51	--	43.19	1,132.64	8/7/2017
ABMW-14S	1150.43	1150.05	17.44	--	29.39	1,132.61	8/7/2017
ABMW-14D	1150.45	1150.03	17.74	--	42.89	1,132.29	8/7/2017
ABMW-15S	1149.92	1149.45	17.62	--	29.21	1,131.83	8/7/2017
ABMW-15D	1149.93	1149.48	17.29	--	43.02	1,132.19	8/7/2017
ABMW-16S	1150.67	1150.12	17.55	*	28.59	1,132.57	8/7/2017
ABMW-16D	1150.64	1150.29	18.29	--	42.77	1,132.00	8/7/2017
ABMW-17S	1148.66	1148.29	18.65	--	29.16	1,129.64	8/7/2017
ABMW-17D	1148.65	1147.81	18.05	--	42.34	1,129.76	8/7/2017
ABMW-17R	1148.66	1148.26	18.45	--	52.93	1,129.81	8/7/2017
ABMW-18S	1148.93	1148.58	18.98	--	29.58	1,129.60	8/7/2017

Table 1-1
Groundwater Elevation Data - August 2017
Abilene, Kansas ONE Gas MGP Site

MONITORING WELL	GROUND SURFACE ELEVATION (feet above MSL)	TOC ELEVATION (feet above MSL)	DEPTH TO GROUNDWATER (feet below TOC)	DEPTH TO FPH (feet below TOC)	TOTAL DEPTH (feet below TOC)	GROUNDWATER SURFACE ELEVATION (feet above MSL)	GAUGING DATE
ABMW-20	1150.65	1150.25	17.89	--	43.53	1,132.36	8/7/2017
ABMW-21	1150.29	1149.77	17.63	*	43.55	1,132.14	8/7/2017
CIMW-1	1149.71	1149.27	17.71	--	27.19	1,131.56	8/7/2017
CIMW-2	1150.44	1149.91	NM	NM	NM	NM	
CIMW-3	1150.9	1150.37	NM	NM	NM	NM	
CIMW-4	1151.88	1151.41	18.72	--	27.19	1,132.69	8/7/2017
CIMW-5	1154.51	1154.17	NM	NM	NM	NM	
CIMW-6	1148.95	1148.42	NM	NM	NM	NM	
CIMW-7	1147.86	1147.29	NM	NM	NM	NM	

NOTES:

FPH - Free Phase Hydrocarbon
MSL - Mean Sea Level
TOC - Top of Well Casing
-- - FPH Not Present
NM - Not Measured
* FPH Present But Depth Not Measurable

Table 1-2
Groundwater Analytical Results - August 2017
Abilene, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ABMW-5	ABMW-5D	ABMW-7	ABMW-8	ABMW-8D
BTEX								
Benzene	ug/L	5	5	**12.3**	**2.0**	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	700	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1,000	1,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (Total)	ug/L	10,000	10,000	**4.2**	3.0 U	3.0 U	3.0 U	3.0 U
PAHs								
Acenaphthene	ug/L	253	521	**7.0**	**0.50**	0.10 U	0.091 U	0.091 U
Acenaphthylene	ug/L	NA	NA	**0.8**	0.14	0.10 U	0.091 U	0.091 U
Anthracene	ug/L	1,150	2,500	**0.18**	0.091 U	0.10 U	0.091 U	0.091 U
Benzo(a)anthracene	ug/L	0.22	0.75	0.091 U	0.091 U	0.10 U	0.091 U	0.091 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	0.091 U	0.10 U	0.091 U	0.091 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.091 U	0.091 U	0.10 U	0.091 U	0.091 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	0.091 U	0.10 U	0.091 U	0.091 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.091 U	0.091 U	0.10 U	0.091 U	0.091 U
Chrysene	ug/L	22.3	75	0.091 U	0.091 U	0.10 U	0.091 U	0.091 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.091 U	0.091 U	0.10 U	0.091 U	0.091 U
Fluoranthene	ug/L	255	1,370	0.45 U	0.45 U	0.50 U	0.45 U	0.45 U
Fluorene	ug/L	162	341	**1.9**	0.091 U	0.10 U	0.091 U	0.091 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.091 U	0.091 U	0.10 U	0.091 U	0.091 U
Naphthalene	ug/L	1.11	2.11	**1.9**	0.45 U	0.50 U	0.45 U	0.45 U
Phenanthrene	ug/L	NA	NA	**0.48**	0.45 U	0.50 U	0.45 U	0.45 U
Pyrene	ug/L	202	1,090	**0.20**	0.091 U	0.10 U	0.091 U	0.091 U
Inorganics								
Arsenic	ug/L	10	10	**125**	10.0 U	10.0 U	**16.4**	10.0 U
Barium	ug/L	2,000	2,000	**479**	**121**	**96.3**	**110**	**72.3**
Cadmium	ug/L	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	ug/L	100	100	**5.7**	5.0 U	5.0 U	**6.3**	5.0 U
Lead	ug/L	15	15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Selenium	ug/L	50	50	15.0 U	15.0 U	15.0 U	15.0 U	15.0 U
Silver	ug/L	77.9	508	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U
Mercury	ug/L	2	2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Cyanide	mg/L	0.20	0.20	0.005 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 1-2
Groundwater Analytical Results - August 2017
Abilene, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ABMW-9	ABMW-9D	ABMW-10	DUP-1 Duplicate of ABMW-10	ABMW-11
BTEX								
Benzene	ug/L	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	700	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1,000	1,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (Total)	ug/L	10,000	10,000	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
PAHs								
Acenaphthene	ug/L	253	521	0.091 U	0.091 U	0.091 U	0.091 U	**0.16**
Acenaphthylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Anthracene	ug/L	1,150	2,500	0.091 U	0.091 U	0.091 U	0.091 U	**0.15**
Benzo(a)anthracene	ug/L	0.22	0.75	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Chrysene	ug/L	22.3	75	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Fluoranthene	ug/L	255	1,370	0.45 U	0.45 U	0.45 U	0.45 U	0.48 U
Fluorene	ug/L	162	341	0.091 U	0.091 U	0.091 U	0.091 U	**0.25**
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.091 U	0.091 U	0.091 U	0.091 U	0.095 U
Naphthalene	ug/L	1.11	2.11	0.45 U	0.45 U	0.45 U	0.45 U	**9.6**
Phenanthrene	ug/L	NA	NA	0.45 U	0.45 U	0.45 U	0.45 U	**0.65**
Pyrene	ug/L	202	1,090	0.091 U	0.091 U	0.091 U	0.091 U	**0.21**
Inorganics								
Arsenic	ug/L	10	10	**11.7**	10.0 U	**20.4**	**24.1**	10.0 U
Barium	ug/L	2,000	2,000	**171**	**84.9**	**234**	**234.0**	**85.1**
Cadmium	ug/L	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	ug/L	100	100	**10.2**	5.0 U	**17.6**	**15.4**	5.0 U
Lead	ug/L	15	15	5.0 U	5.0 U	**10.1**	**12.3**	5.0 U
Selenium	ug/L	50	50	15.0 U	15.0 U	15.0 U	15.0 U	15.0 U
Silver	ug/L	77.9	508	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U
Mercury	ug/L	2	2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Cyanide	mg/L	0.20	0.20	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 1-2
Groundwater Analytical Results - August 2017
Abilene, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	DUP-2 Duplicate of ABMW-11	ABMW-12S	ABMW-12D	ABMW-13S	ABMW-13D
BTEX								
Benzene	ug/L	5	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	700	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1,000	1,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (Total)	ug/L	10,000	10,000	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
PAHs								
Acenaphthene	ug/L	253	521	**0.20**	0.091 U	0.091 U	0.095 U	0.091 U
Acenaphthylene	ug/L	NA	NA	**0.11**	0.091 U	0.091 U	**0.33**	0.091 U
Anthracene	ug/L	1,150	2,500	**0.22**	0.091 U	0.091 U	**0.15**	0.091 U
Benzo(a)anthracene	ug/L	0.22	0.75	0.095 U	0.091 U	0.091 U	**0.22**	0.091 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.095 U	0.091 U	0.091 U	**0.14**	0.091 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.095 U	0.091 U	0.091 U	0.095 U	0.091 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.095 U	0.091 U	0.091 U	0.095 U	0.091 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.095 U	0.091 U	0.091 U	0.095 U	0.091 U
Chrysene	ug/L	22.3	75	0.095 U	0.091 U	0.091 U	**0.16**	0.091 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.095 U	0.091 U	0.091 U	0.095 U	0.091 U
Fluoranthene	ug/L	255	1,370	0.48 U	0.45 U	0.45 U	**2.6**	0.45 U
Fluorene	ug/L	162	341	**0.30**	0.091 U	0.091 U	0.095 U	0.091 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.095 U	0.091 U	0.091 U	0.095 U	0.091 U
Naphthalene	ug/L	1.11	2.11	**10.2**	0.45 U	0.45 U	0.48 U	0.45 U
Phenanthrene	ug/L	NA	NA	**0.77**	0.45 U	0.45 U	0.48 U	0.45 U
Pyrene	ug/L	202	1,090	**0.29**	0.091 U	0.091 U	**3.4** U	0.091 U
Inorganics								
Arsenic	ug/L	10	10	10.0 U	10.0 U	10.0 U	10.0 U	**13.5**
Barium	ug/L	2,000	2,000	**84.9**	**210**	**104**	**327**	**86.7**
Cadmium	ug/L	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	ug/L	100	100	5.0 U	5.0 U	5.0 U	**6.6**	5.0 U
Lead	ug/L	15	15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Selenium	ug/L	50	50	15.0 U	15.0 U	15.0 U	15.0 U	15.0 U
Silver	ug/L	77.9	508	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U
Mercury	ug/L	2	2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Cyanide	mg/L	0.20	0.20	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 1-2
Groundwater Analytical Results - August 2017
Abilene, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ABMW-15S	ABMW-15D	ABMW-16D	ABMW-18D
BTEX							
Benzene	ug/L	5	5	**8,570**	**4.8**	**1,880**	1.0 U
Ethylbenzene	ug/L	700	700	**1,490**	**4.9**	**362**	1.0 U
Toluene	ug/L	1,000	1,000	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (Total)	ug/L	10,000	10,000	3.0 U	3.0 U	3.0 U	3.0 U
PAHs							
Acenaphthene	ug/L	253	521	**21.9**	**0.22**	**5.2**	**1.2**
Acenaphthylene	ug/L	NA	NA	4.8 U	**0.29**	**0.57**	**0.23**
Anthracene	ug/L	1,150	2,500	4.8 U	0.091 U	**0.15**	0.091 U
Benzo(a)anthracene	ug/L	0.22	0.75	4.8 U	0.091 U	0.095 U	0.091 U
Benzo(a)pyrene	ug/L	0.2	0.2	4.8 U	0.091 U	0.095 U	0.091 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	4.8 U	0.091 U	0.095 U	0.091 U
Benzo(g,h,i)perylene	ug/L	NA	NA	4.8 U	0.091 U	0.095 U	0.091 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	4.8 U	0.091 U	0.095 U	0.091 U
Chrysene	ug/L	22.3	75	4.8 U	0.091 U	0.095 U	0.091 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	4.8 U	0.091 U	0.095 U	0.091 U
Fluoranthene	ug/L	255	1,370	23.8 U	0.45 U	0.48 U	0.45 U
Fluorene	ug/L	162	341	**13.6**	0.091 U	**1.6**	0.091 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	4.8 U	0.091 U	0.095 U	0.091 U
Naphthalene	ug/L	1.11	2.11	**744**	**2.5**	**240**	0.45 U
Phenanthrene	ug/L	NA	NA	23.8 U	0.45 U	**0.56**	0.45 U
Pyrene	ug/L	202	1,090	**4.8**	0.091 U	**0.10**	0.091 U
Inorganics							
Arsenic	ug/L	10	10	**125**	10.0 U	**11.4**	**11.2**
Barium	ug/L	2,000	2,000	**564**	**247**	**234**	**153.0**
Cadmium	ug/L	5	5	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	ug/L	100	100	5.0 U	5.0 U	5.0 U	**8.0**
Lead	ug/L	15	15	5.0 U	5.0 U	5.0 U	**7.3**
Selenium	ug/L	50	50	15.0 U	15.0 U	15.0 U	15.0 U
Silver	ug/L	77.9	508	7.0 U	7.0 U	7.0 U	7.0 U
Mercury	ug/L	2	2	0.20 U	0.20 U	0.20 U	0.20 U
Cyanide	mg/L	0.20	0.20	0.0050 U	0.0050 U	0.0050 U	0.0050 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 2-1
Groundwater Elevation Data - June 2017
Atchison, Kansas ONE Gas MGP Site

MONITORING WELL	GROUND SURFACE ELEVATION (feet above MSL)	TOC ELEVATION (feet above MSL)	DEPTH TO GROUNDWATER (feet below TOC)	DEPTH TO FPH (feet below TOC)	TOTAL DEPTH (feet below TOC)	GROUNDWATER SURFACE ELEVATION (feet above MSL)	GAUGING DATE
ATMW-1	809.91	809.55	12.54	--	16.75	797.01	6/21/2017
ATMW-2	810.64	810.36	11.92	--	18.83	798.44	6/21/2017
ATMW-3	809.43	809.18	12.96	--	17.18	796.22	6/21/2017
ATMW-4	811.62	811.10	10.11	--	19.80	800.99	6/21/2017
ATMW-5	810.08	809.68	14.95	--	21.57	794.73	6/21/2017
ATMW-6	809.90	809.53	13.48	--	18.77	796.05	6/21/2017
ATMW-7	SDNA	SDNA	19.29	--	20.15	NA	6/21/2017
ATMW-8	SDNA	SDNA	20.13	--	20.47	NA	6/21/2017
ATMW-9	SDNA	SDNA	17.16	--	19.90	NA	6/21/2017

NOTES:
FPH - Free Phase Hydrocarbon
MSL - Mean Sea Level
NA - Not Applicable
SDNA - Survey Data Not Available
TOC - Top of Well Casing
-- - FPH Not Present

Table 2-2
Groundwater Analytical Results - June 2017
Atchison, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ATMW-1	ATMW-2	ATMW-3	ATMW-4	ATMW-5	ATDUP-1 Duplicate of ATMW-5	ATMW-6	ATMW-9
BTEX											
Benzene	ug/L	5	5	**2.8**	**1.6**	**2.6**	**1.3**	**112**	**110**	**4.1**	**317**
Ethylbenzene	ug/L	700	700	**1.2**	1 U	**1.2**	1 U	**9.2**	**8.9**	**1.5**	10 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	**1.8**	**2.0**	1 U	10 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 U
PAHs											
Acenaphthene	ug/L	253	521	0.1 U	0.12 U	0.1 U	0.1 U	**3.4**	**4.1**	0.11 U	**3.6**
Acenaphthylene	ug/L	NA	NA	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	**1.5**
Anthracene	ug/L	1,150	2,500	0.1 U	0.12 U	0.1 U	0.1 U	**0.47**	**0.51**	0.11 U	**0.24**
Benzo(a)anthracene	ug/L	0.22	0.75	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
Benzo(a)pyrene	ug/L	0.20	0.20	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
Chrysene	ug/L	22.3	75	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
Dibenz(a,h)anthracene	ug/L	0.01	0.03	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
Fluoranthene	ug/L	255	1,370	0.5 U	0.62 U	0.5 U	0.5 U	**0.53**	**0.55**	0.53 U	0.53 U
Fluorene	ug/L	162	341	0.1 U	0.12 U	0.1 U	0.1 U	**2.8**	**2.7**	0.11 U	**0.66**
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U
Naphthalene	ug/L	1.11	2.11	**3.0 J**	**1.5**	**3.0**	**2.1**	**38.6**	**38.1**	**5.4**	**53.4**
Phenanthrene	ug/L	NA	NA	0.5 U	0.62 U	0.5 U	0.5 U	**1.5**	**1.5**	0.53 U	0.53 U
Pyrene	ug/L	202	1,090	0.1 U	0.12 U	0.1 U	0.1 U	**0.34**	**0.36**	0.11 U	0.11 U
Inorganics											
Arsenic	ug/L	10	10	10 U	**212**	10 U	**10.4**	**179**	**175**	10 U	**42.6**
Barium	ug/L	2,000	2,000	**124**	**769**	**72.5**	**84.9**	**613**	**601**	**64.4**	**287**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.20	0.20	0.005 U	0.005 U	**0.017**	0.005 U	**0.032**	**0.035**	**0.040**	**0.044**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 3-1
Groundwater Elevation Data - June 2017
Concordia, Kansas ONE Gas MGP Site

MONITORING WELL	GROUND SURFACE ELEVATION (feet above MSL)	TOC ELEVATION (feet above MSL)	DEPTH TO GROUNDWATER (feet below TOC)	DEPTH TO FPH (feet below TOC)	TOTAL DEPTH (feet below TOC)	GROUNDWATER SURFACE ELEVATION (feet above MSL)	GAUGING DATE
CMW-01*	1,359.28	1,358.92	NM	NM	NM	NM	
CMW-02	1,360.12	1,359.79	15.32	--	27.80	1,344.47	6/26/2017
CMW-03	1,359.33	1,359.16	14.80	--	25.65	1,344.36	6/26/2017
CMW-04	1,358.33	1,358.04	13.80	--	25.77	1,344.24	6/26/2017
CMW-05	1,358.87	1,358.73	14.42	--	25.67	1,344.31	6/26/2017

NOTES:

* Monitoring Well CMW-01 has been destroyed.

FPH - Free Phase Hydrocarbon

MSL - Mean Sea Level

NM - Not Measured

TOC - Top of Well Casing

-- - FPH Not Present

Table 3-2
Groundwater Analytical Results - June 2017
Concordia, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	CMW-02	CDUP-1 Duplicate of CMW-02	CMW-03	CMW-04	CMW-05
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	3 U
PAHs								
Acenaphthene	ug/L	253	521	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	NA	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Anthracene	ug/L	1,150	2,500	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)anthracene	ug/L	0.22	0.75	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chrysene	ug/L	22.3	75	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluoranthene	ug/L	255	1,370	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluorene	ug/L	162	341	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Naphthalene	ug/L	1.11	2.11	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Phenanthrene	ug/L	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	202	1,090	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Inorganics								
Arsenic	ug/L	10	10	**13.2**	**10.6**	10 U	10 U	**20.6**
Barium	ug/L	2,000	2,000	**116**	**116**	**239**	**114**	**439**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	**11.5**	**12.0**	**12.4**	**11.5**	**10.9**
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.20	0.20	0.005 U	0.005 U	0.005 U	0.005 U	**0.0094**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
PAH - polycyclic aromatic hydrocarbons
NA - not available
U - non-detect
ug/L - micrograms per liter

Table 4-1
Groundwater Elevation Data - June 2017
Hutchinson, Kansas ONE Gas MGP Site

MONITORING WELL	GROUND SURFACE ELEVATION (feet above MSL)	TOC ELEVATION (feet above MSL)	DEPTH TO GROUNDWATER (feet below TOC)	DEPTH TO FPH (feet below TOC)	TOTAL DEPTH (feet below TOC)	GROUNDWATER SURFACE ELEVATION (feet above MSL)	GAUGING DATE
HMW-1S	SDNA	SDNA	10.86	--	19.42	NA	6/27/2017
HMW-1D	SDNA	SDNA	10.83	--	79.70	NA	6/27/2017
HMW-2	SDNA	SDNA	10.13	--	17.59	NA	6/27/2017
HMW-3	SDNA	SDNA	12.20	11.60	NM	NA	6/27/2017
HMW-4S	SDNA	SDNA	10.89	--	19.29	NA	6/27/2017
HMW-4D	SDNA	SDNA	10.93	--	78.82	NA	6/27/2017
HMW-5S	SDNA	SDNA	9.93	--	16.81	NA	6/27/2017
HWM-5D	SDNA	SDNA	10.01	--	76.82	NA	6/27/2017
HWM-6	SDNA	SDNA	NM	--	NM	NM	NM
HWM-7	SDNA	SDNA	NM	--	NM	NM	NM

NOTES:
FPH - Free Phase Hydrocarbon
MSL - Mean Sea Level
NA - Not Applicable
NM - Not Measured
SDNA - Survey Data Not Available
TOC - Top of Well Casing
-- - FPH Not Present

Table 4-2
Groundwater Analytical Results - June 2017
Hutchinson, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	HMW-1D	HMW-1S	HMW-2	HMW-4D	HMW-4S
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	**5.4**
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	3 U
PAHs								
Acenaphthene	ug/L	253	521	0.1 U	0.1 U	0.11 U	0.1 U	**33.5**
Acenaphthylene	ug/L	NA	NA	0.1 U	0.1 U	0.11 U	0.1 U	**2.4**
Anthracene	ug/L	1,150	2,500	0.1 U	0.1 U	0.11 U	0.1 U	**0.96**
Benzo(a)anthracene	ug/L	0.22	0.75	0.1 U	0.1 U	0.11 U	0.1 U	**0.58**
Benzo(a)pyrene	ug/L	0.2	0.2	0.1 U	0.1 U	0.11 U	0.1 U	**1.1**
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.1 U	0.1 U	0.11 U	0.1 U	**1.2**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.1 U	0.1 U	0.11 U	0.1 U	**0.64**
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Chrysene	ug/L	22.3	75	0.1 U	0.1 U	0.11 U	0.1 U	**0.67**
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.1 U	0.1 U	0.11 U	0.1 U	**0.16**
Fluoranthene	ug/L	255	1,370	0.5 U	0.5 U	0.56 U	0.5 U	**1.1**
Fluorene	ug/L	162	341	0.1 U	0.1 U	0.11 U	0.1 U	**7.2**
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.1 U	0.1 U	0.11 U	0.1 U	**0.55**
Naphthalene	ug/L	1.11	2.11	0.5 U	0.5 U	0.56 U	0.5 U	**29.7**
Phenanthrene	ug/L	NA	NA	0.5 U	0.5 U	0.56 U	0.5 U	**0.63**
Pyrene	ug/L	202	1,090	0.1 U	0.1 U	0.11 U	0.1 U	**2.0**
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**50.0**	**124**	**97.3**	**53.0**	**429**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.20	0.20	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 4-2
Groundwater Analytical Results - June 2017
Hutchinson, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	HMW-5D	HDUP-1 Duplicate of HMW-5D	HMW-5S
BTEX						
Benzene	ug/L	5	5	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U
PAHs						
Acenaphthene	ug/L	253	521	0.1 U	0.11 U	0.1 U
Acenaphthylene	ug/L	NA	NA	0.1 U	0.11 U	0.1 U
Anthracene	ug/L	1,150	2,500	0.1 U	0.11 U	0.1 U
Benzo(a)anthracene	ug/L	0.22	0.75	0.1 U	0.11 U	0.1 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.1 U	0.11 U	0.1 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.1 U	0.11 U	0.1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.1 U	0.11 U	0.1 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.1 U	0.11 U	0.1 U
Chrysene	ug/L	22.3	75	0.1 U	0.11 U	0.1 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.1 U	0.11 U	0.1 U
Fluoranthene	ug/L	255	1,370	0.5 U	0.56 U	0.5 U
Fluorene	ug/L	162	341	0.1 U	0.11 U	0.1 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.1 U	0.11 U	0.1 U
Naphthalene	ug/L	1.11	2.11	0.5 U	0.56 U	0.5 U
Phenanthrene	ug/L	NA	NA	0.5 U	0.56 U	0.5 U
Pyrene	ug/L	202	1,090	0.1 U	0.11 U	0.1 U
Inorganics						
Arsenic	ug/L	10	10	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**54.4**	**54.3**	**106**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.20	0.20	0.005 U	0.005 U	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 5-1
Groundwater Elevation Data - June 2017
Kansas City, Kansas ONE Gas MGP Site

MONITORING WELL	GROUND SURFACE ELEVATION (feet above MSL)	TOC ELEVATION (feet above MSL)	DEPTH TO GROUNDWATER (feet below TOC)	DEPTH TO FPH (feet below TOC)	TOTAL DEPTH (feet below TOC)	GROUNDWATER SURFACE ELEVATION (feet above MSL)	GAUGING DATE
KCMW-01	764.94	764.74	15.86	--	31.35	748.88	6/19/2017
KCMW-02	768.92	768.65	19.50	--	39.51	749.15	6/19/2017
KCMW-03	764.04	763.84	12.16	--	35.25	751.68	6/19/2017
KCMW-03S	758.02	757.58	NM	NM	NM	NM	
KCMW-04	767.95	767.76	18.70	--	39.04	749.06	6/19/2017
KCMW-05	761.45	761.27	NM	NM	NM	NM	
KCMW-06	749.98	749.73	NM	NM	NM	NM	
KCMW-06S	749.58	749.29	NM	NM	NM	NM	
KCMW-06D	749.58	749.39	NM	NM	NM	NM	
KCMW-07	781.79	781.41	29.91	--	34.43	751.50	6/19/2017
KCMW-08S	762.76	762.20	10.62	--	17.50	751.58	6/19/2017
KCMW-08D	762.81	762.13	12.62	43.43	43.45	749.51	6/19/2017
KCMW-10	766.71	766.54	16.03	--	27.54	750.51	6/19/2017
KCMW-11S	764.20	763.93	12.44	--	15.03	751.49	6/19/2017
KCMW-11D	764.28	763.99	15.98	--	41.55	748.01	6/19/2017
KCMW-12S	757.66	761.56	14.27	--	29.26	747.29	6/19/2017
KCMW-12D	757.67	761.48	21.03	--	55.41	740.45	6/19/2017

NOTES:
FPH - Free Phase Hydrocarbon
MSL - Mean Sea Level
NM - Not Measured
TOC - Top of Well Casing
-- - FPH Not Present

Table 5-2
Groundwater Analytical Results - June 2017
Kansas City, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	KCMW -1	KCMW -2	KCMW -3	KCDUP-2 Duplicate of KCMW-3	KCMW -4
BTEX								
Benzene	ug/L	5	5	1 U	1 U	**4.9**	**4.7**	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	**1.9**	**1.8**	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	**5.0**	**5.5**	3 U
PAHs								
Acenaphthene	ug/L	253	521	0.11 U	0.10 U	**1.2**	**1.2**	0.10 U
Acenaphthylene	ug/L	NA	NA	0.11 U	0.10 U	**0.50**	**0.48**	0.10 U
Anthracene	ug/L	1,150	2,500	0.11 U	0.10 U	**0.38**	**0.38**	0.10 U
Benzo(a)anthracene	ug/L	0.22	0.75	0.11 U	0.10 U	**0.19**	**0.16**	0.10 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.11 U	0.10 U	**0.30**	**0.26**	0.10 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.11 U	0.10 U	**0.17**	**0.20**	0.10 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.11 U	0.10 U	**0.21**	**0.19**	0.10 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.11 U	0.10 U	**0.12**	0.10 U	0.10 U
Chrysene	ug/L	22.3	75	0.11 U	0.10 U	**0.21**	**0.18**	0.10 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.11 U	0.10 U	0.11 U	0.10 U	0.10 U
Fluoranthene	ug/L	255	1,370	0.56 U	0.50 U	0.56 U	0.50 U	0.50 U
Fluorene	ug/L	162	341	0.11 U	0.10 U	**1.7**	**1.6**	0.10 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.11 U	0.10 U	**0.17**	**0.14**	0.10 U
Naphthalene	ug/L	1.11	2.11	0.56 U	0.50 U	**0.70**	**0.77**	0.50 U
Phenanthrene	ug/L	NA	NA	0.56 U	0.50 U	**2.7**	**2.5**	0.50 U
Pyrene	ug/L	202	1,090	0.11 U	0.10 U	**0.70**	**0.64**	0.10 U
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	**77.4**	**77.1**	10 U
Barium	ug/L	2,000	2,000	**67.8**	**119**	**475**	**479**	**106**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Cyanide	mg/L	0.20	0.20	0.005 U	**0.016**	0.005 U	0.005 U	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 5-2
Groundwater Analytical Results - June 2017
Kansas City, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	KCMW -7S	KCMW -8S	KCMW -10	KCDUP-1 Duplicate of KCMW-10	KCMW -11D
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	**8540**
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	**498**
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	50 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	**288**
PAHs								
Acenaphthene	ug/L	253	521	0.10 U	0.11 U	0.11 U	0.10 U	**19.4**
Acenaphthylene	ug/L	NA	NA	0.10 U	0.11 U	0.11 U	0.10 U	**0.63**
Anthracene	ug/L	1,150	2,500	0.10 U	0.11 U	0.11 U	0.10 U	**0.64**
Benzo(a)anthracene	ug/L	0.22	0.75	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Chrysene	ug/L	22.3	75	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Fluoranthene	ug/L	255	1,370	0.50 U	0.56 U	0.56 U	0.50 U	0.50 U
Fluorene	ug/L	162	341	0.10 U	0.11 U	0.11 U	0.10 U	**10.7**
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.10 U	0.11 U	0.11 U	0.10 U	0.10 U
Naphthalene	ug/L	1.11	2.11	0.50 U	0.56 U	0.56 U	**1.4**	**1200**
Phenanthrene	ug/L	NA	NA	0.50 U	0.56 U	0.56 U	0.50 U	**3.9**
Pyrene	ug/L	202	1,090	0.10 U	0.11 U	0.11 U	0.10 U	**0.36**
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	10 U	**24.4**
Barium	ug/L	2,000	2,000	**79.2**	**94.5**	**103**	**104**	**260**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	**10.4**	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Cyanide	mg/L	0.20	0.20	0.005 U	0.005 U	**0.0051 J**	**0.11 J**	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 5-2
Groundwater Analytical Results - June 2017
Kansas City, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	KCMW -11S	KCMW -12D	KCMW -12S
BTEX						
Benzene	ug/L	5	5	**6.7**	1 U	1 U
Ethylbenzene	ug/L	700	700	5 U	1 U	1 U
Toluene	ug/L	1,000	1,000	**5.4**	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	15 U	3 U	3 U
PAHs						
Acenaphthene	ug/L	253	521	**5.6**	0.091 U	0.10 U
Acenaphthylene	ug/L	NA	NA	**48.4**	0.091 U	0.10 U
Anthracene	ug/L	1,150	2,500	**3.4**	0.091 U	0.10 U
Benzo(a)anthracene	ug/L	0.22	0.75	**0.28**	0.091 U	0.10 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.10 U	0.091 U	0.10 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	**0.11**	0.091 U	0.10 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.10 U	0.091 U	0.10 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.10 U	0.091 U	0.10 U
Chrysene	ug/L	22.3	75	**0.31**	0.091 U	0.10 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.10 U	0.091 U	0.10 U
Fluoranthene	ug/L	255	1,370	25 U	0.45 U	0.50 U
Fluorene	ug/L	162	341	**6.2**	0.091 U	0.10 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.10 U	0.091 U	0.10 U
Naphthalene	ug/L	1.11	2.11	**498**	0.45 U	0.50 U
Phenanthrene	ug/L	NA	NA	**115**	0.45 U	0.50 U
Pyrene	ug/L	202	1,090	**22.1**	0.091 U	0.10 U
Inorganics						
Arsenic	ug/L	10	10	10 U	10 U	**29.0**
Barium	ug/L	2,000	2,000	**159**	**514**	**170**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.20 U	0.20 U	0.20 U
Cyanide	mg/L	0.20	0.20	**0.013**	**0.028**	**0.005**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 6-1
Groundwater Elevation Data - June 2017
Salina, Kansas ONE Gas MGP Site

MONITORING WELL	GROUND SURFACE ELEVATION (feet above MSL)	TOC ELEVATION (feet above MSL)	DEPTH TO GROUNDWATER (feet below TOC)	DEPTH TO FPH (feet below TOC)	TOTAL DEPTH (feet below TOC)	GROUNDWATER SURFACE ELEVATION (feet above MSL)	GAUGING DATE
SLMW-01	1,228.15	1,227.70	32.15	--	39.44	1,195.55	6/27/2017
SLMW-02	1,228.02	1,227.67	32.98	--	39.96	1,194.69	6/27/2017
SLMW-03	1,227.77	1,227.53	32.55	--	39.22	1,194.98	6/27/2017

NOTES:

FPH - Free Phase Hydrocarbon

MSL - Mean Sea Level

TOC - Top of Well Casing

-- - FPH Not Present

Table 6-2
Groundwater Analytical Results - June 2017
Salina, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	SLMW-1	SLMW-2	SLDUP-1 Duplicate of SLMW-2	SLMW-3
BTEX							
Benzene	ug/L	5	5	1 U	**3.3**	**3.4**	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U
PAHs							
Acenaphthene	ug/L	253	521	0.11 U	**14.2**	**15.9**	**0.16**
Acenaphthylene	ug/L	NA	NA	0.11 U	**24.9**	**21.4**	**0.22**
Anthracene	ug/L	1,150	2,500	0.11 U	**0.46**	**0.37**	0.1 U
Benzo(a)anthracene	ug/L	0.22	0.75	0.11 U	**0.52**	**0.39**	0.1 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.11 U	**0.44**	**0.24**	0.1 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.11 U	**0.39**	**0.22**	0.1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.11 U	**0.30**	0.11 U	0.1 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.11 U	0.2 U	0.11 U	0.1 U
Chrysene	ug/L	22.3	75	0.11 U	**0.59**	**0.46**	0.1 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	**0.16**	0.2 U	0.11 U	0.1 U
Fluoranthene	ug/L	255	1,370	0.56 U	**3.6**	**3.8**	0.5 U
Fluorene	ug/L	162	341	0.11 U	**7.3**	**7.9**	0.1 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.11 U	**0.25**	0.11 U	0.1 U
Naphthalene	ug/L	1.11	2.11	0.56 U	**2.7**	**2.8**	0.5 U
Phenanthrene	ug/L	NA	NA	0.56 U	**2.5**	**2.8**	0.5 U
Pyrene	ug/L	202	1,090	0.11 U	**4.6**	**4.8**	0.1 U
Inorganics							
Arsenic	ug/L	10	10	10 U	10 U	10 U	**20.4**
Barium	ug/L	2,000	2,000	**120**	**109**	**111**	**450**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	**7.4**	**8.0**	**8.6**	**11.2**
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.20	0.20	**0.038**	**0.058**	**0.065**	**0.032**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 7-1
Groundwater Elevation Data - June 2017
Topeka, Kansas ONE Gas MGP Site

MONITORING WELL	GROUND SURFACE ELEVATION (feet above MSL)	TOC ELEVATION (feet above MSL)	DEPTH TO GROUNDWATER (feet below TOC)	DEPTH TO FPH (feet below TOC)	TOTAL DEPTH (feet below TOC)	GROUNDWATER SURFACE ELEVATION (feet above MSL)	GAUGING DATE
TPMW-01	883.45	883.14	23.65	--	39.10	859.49	6/22/2017
TPMW-02	883.74	883.33	23.62	--	36.65	859.71	6/22/2017
TPMW-03	886.39	885.96	26.37	--	41.75	859.59	6/22/2017
TPMW-04	883.00	882.89	23.40	--	39.60	859.49	6/22/2017

NOTES:

FPH - Free Phase Hydrocarbon

MSL - Mean Sea Level

TOC - Top of Well Casing

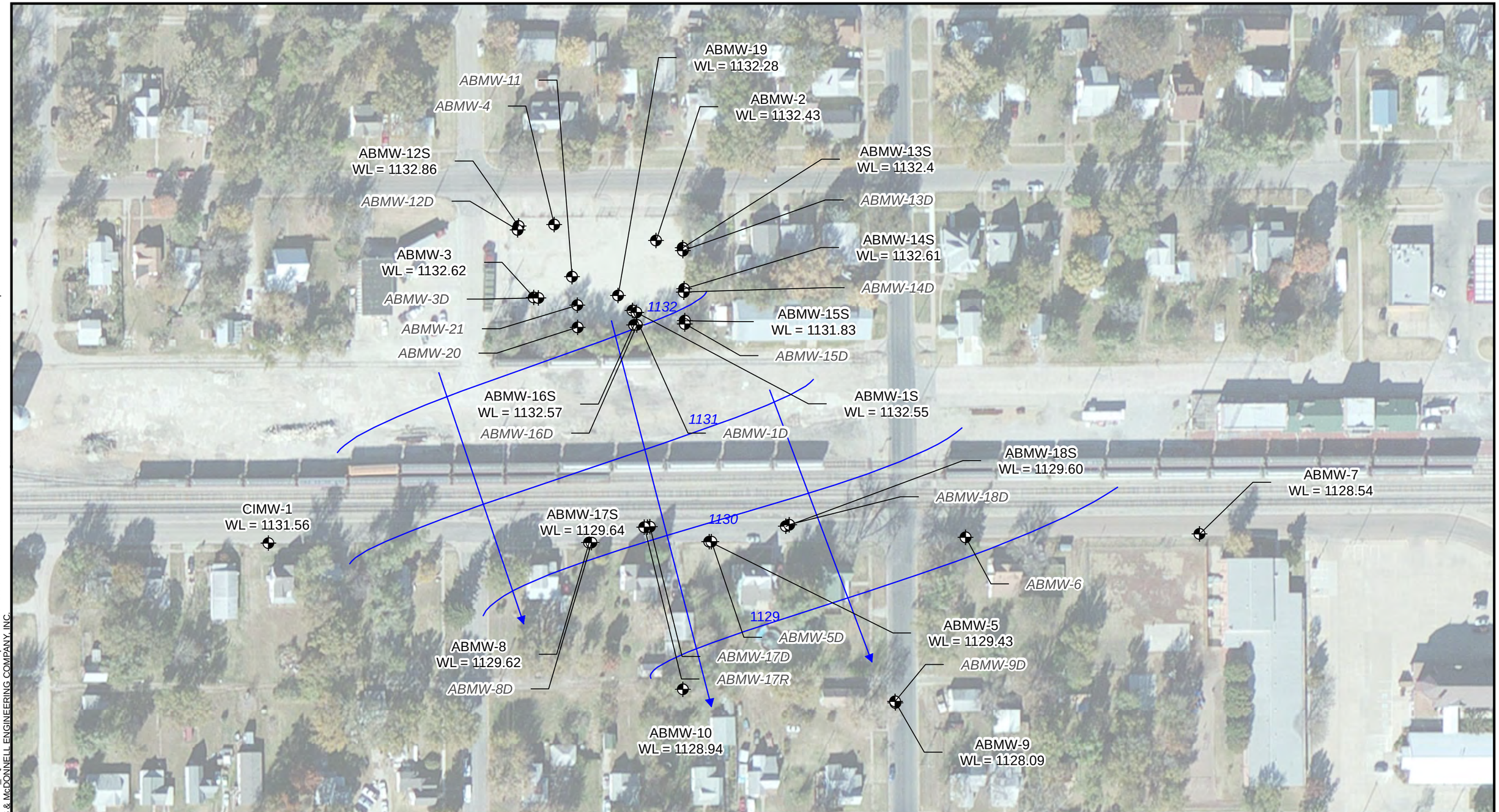
-- - FPH Not Present

Table 7-2
Groundwater Analytical Results - June 2017
Topeka, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	TPMW-1	TPMW-2	TPDUP-1 Duplicate of TPMW-2	TPMW-3	TPMW-4
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	3 U
PAHs								
Acenaphthene	ug/L	253	521	0.1 U	0.1 U	0.11 U	**1.6**	**0.20**
Acenaphthylene	ug/L	NA	NA	0.1 U	0.1 U	0.11 U	**5.9**	**0.18**
Anthracene	ug/L	1,150	2,500	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Benzo(a)anthracene	ug/L	0.22	0.75	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	0.16	0.54	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	1.6	5.4	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Chrysene	ug/L	22.3	75	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Dibenz(a,h)anthracene	ug/L	0.0081	0.027	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Fluoranthene	ug/L	255	1,370	0.5 U	0.5 U	0.56 U	**0.51**	0.5 U
Fluorene	ug/L	162	341	0.1 U	0.1 U	0.11 U	**0.59**	0.1 U
Indeno(1,2,3-cd)pyrene	ug/L	0.12	0.39	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U
Naphthalene	ug/L	1.11	2.11	0.5 U	**0.62**	0.56 U	0.5 U	**0.58**
Phenanthrene	ug/L	NA	NA	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U
Pyrene	ug/L	202	1,090	0.1 U	0.1 U	0.11 U	**0.53**	0.1 U
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**113**	**95.8**	**96.1**	**195**	**120**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	**16.4**	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.20	0.20	**0.016**	0.005 U	0.005 U	0.005 U	**0.010**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

FIGURES



Legend

- FMGP Monitoring Well
- Approximate Direction of Groundwater Flow
- Inferred Potentiometric Surface Contour
- Estimated Potentiometric Surface Contour

Notes

1 - Figure presents the location of monitoring wells installed as part of CI / CAS Investigation as well as wells that were installed following that event as part of a seperate effort.

2 - Piezometric Surface contours were inferred using shallow monitoring wells screened within the silt unit present at the Site. Wells not used in contouring are identified with gray italic labels.

0 50 100 200
Feet

NORTH

BURNS McDONNELL

Figure 1-1
POTENTIOMETRIC SURFACE MAP
AUGUST 2017
ABILENE, KANSAS

Path: Z:\Clients\ENS\OneGas\96323_1Q2017MGPServ\Studies\Geospatial\ArcDocs\Abilene\96323-FIG 1-1 ABILENE-Groundwater Potentiometric Surface Map.mxd

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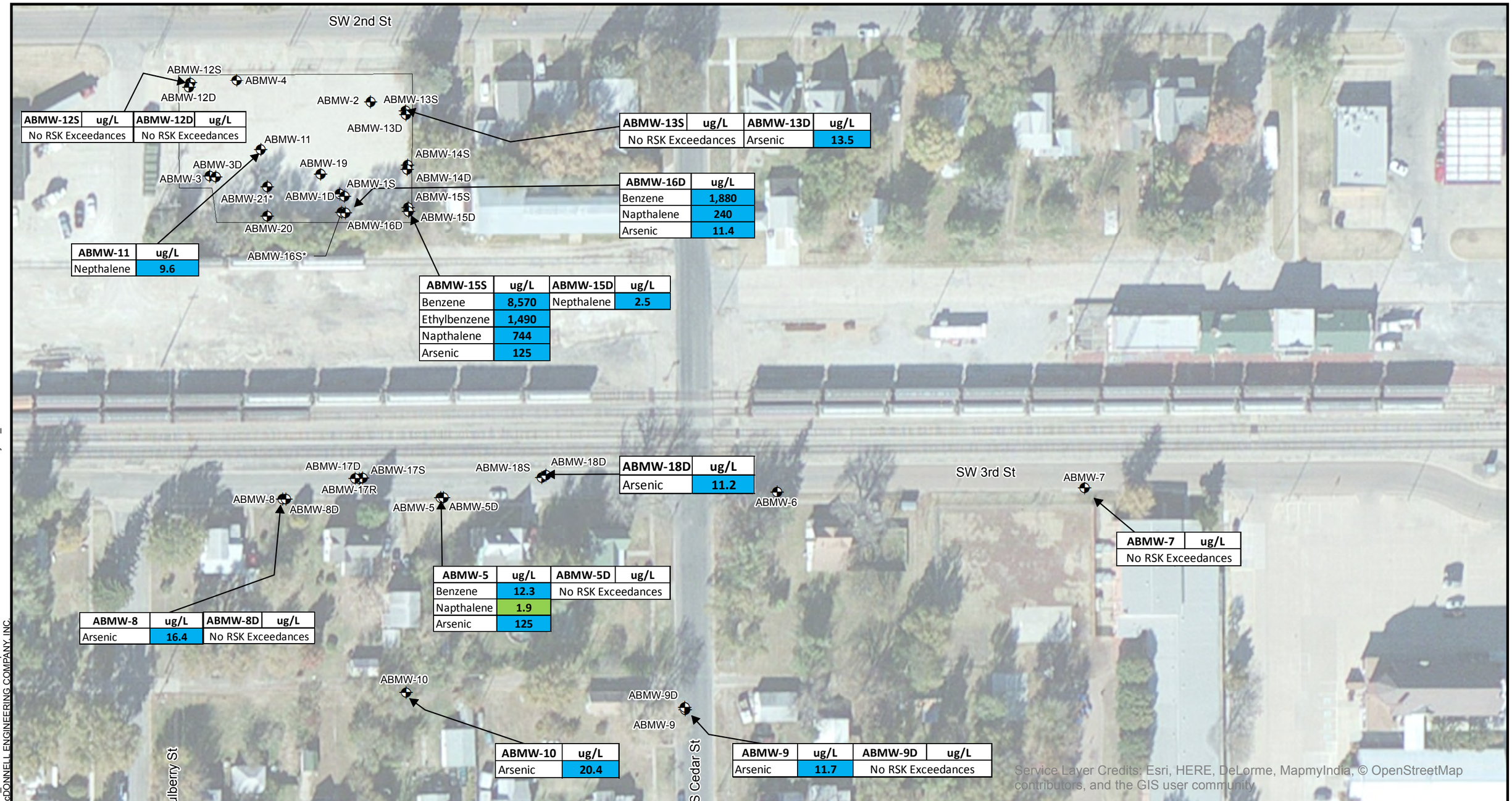
Issued: November, 10 2017



ABMW-12S	ug/L	ABMW-12D	ug/L
No RSK Exceedances		No RSK Exceedances	

ABMW-13S	ug/L	ABMW-13D	ug/L
No RSK Exceedances		Arsenic	13.5

ABMW-16D	ug/L
Benzene	1,880
Napthalene	240
Arsenic	11.4

ABMW-11	ug/L
Nepthalene	9.6

ABMW-15S	ug/L	ABMW-15D	ug/L
Benzene	8,570	Nepthalene	2.5
Ethylbenzene	1,490		
Napthalene	744		
Arsenic	125		

ABMW-18D	ug/L
Arsenic	11.2

ABMW-7	ug/L
No RSK Exceedances	

ABMW-5	ug/L	ABMW-5D	ug/L
Benzene	12.3	No RSK Exceedances	
Napthalene	1.9		
Arsenic	125		

ABMW-8	ug/L	ABMW-8D	ug/L
Arsenic	16.4	No RSK Exceedances	

ABMW-10	ug/L
Arsenic	20.4

ABMW-9	ug/L	ABMW-9D	ug/L
Arsenic	11.7	No RSK Exceedances	

Legend

- Monitoring Well
- Site Fenceline

Notes

1 - Monitoring well locations are approximate.
2 - ug/L = micrograms per liter
3 - Blue highlighted cells indicate a detection above Non-Residential RSK.
4 - Green highlighted cells indicate a detection above Residential RSK.
5 - LNAPL was observed in Monitoring Wells ABMW-16S and ABMW-21. These wells are identified with (*).

0 40 80 160
Feet

NORTH

BURNS McDONNELL

Figure 1-2
MGP CONSTITUENT EXCEEDANCES MAP
AUGUST 2017
FORMER ONE GAS MGP SITE
ABILENE, KANSAS

Path: Z:\Clients\ENS\OneGas\96323_1Q2017MGPServ\Studies\Geospatial\ArcDocs\Abilene\96323-FIG 1-2 ABILENE-Layout_New.mxd

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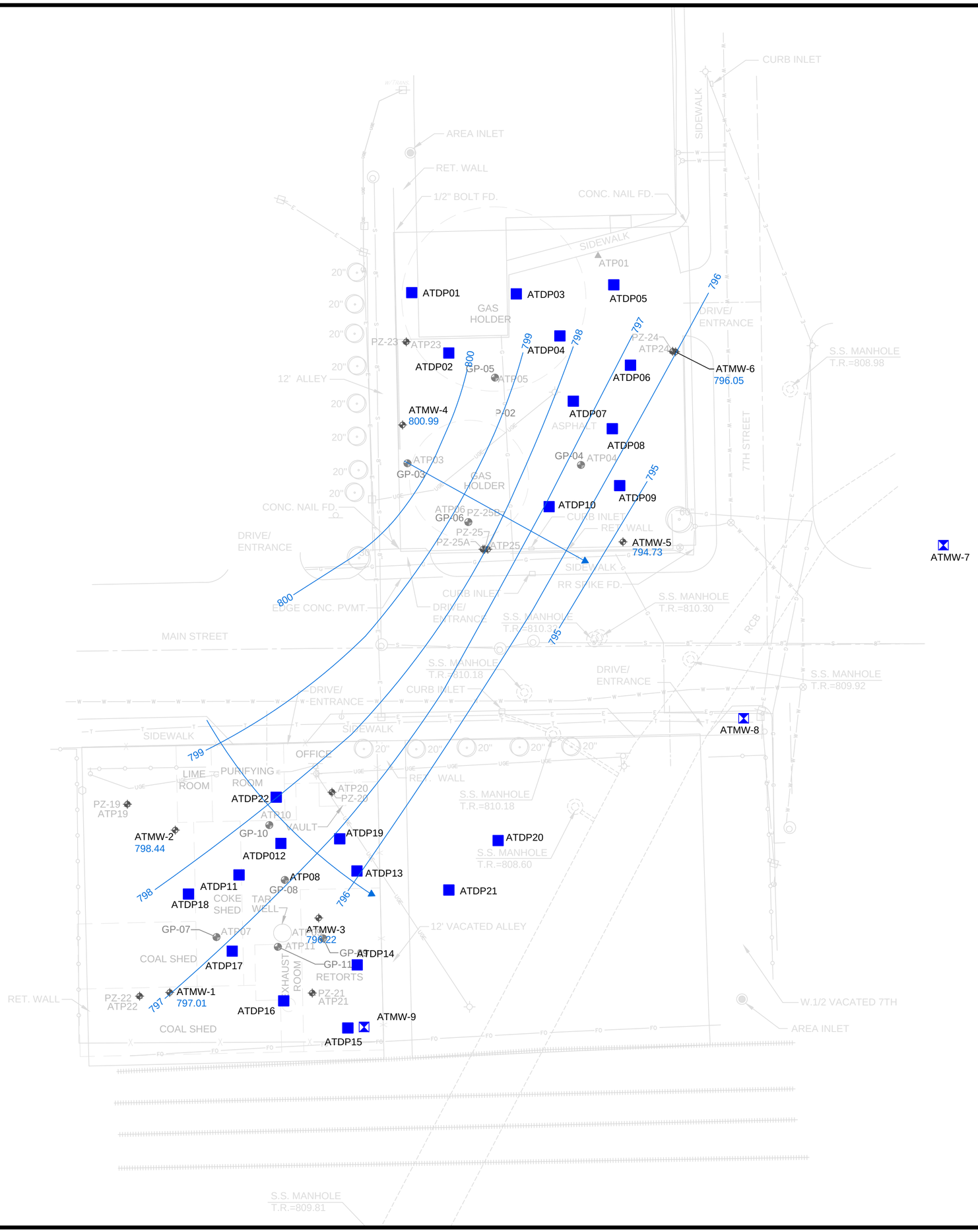
Issued: November, 10 2017

NOTES:

1. MGP STRUCTURES IN DASHED LINES ARE BASED ON INFORMATION FROM SELECT SANBORN MAPS; LOCATIONS ARE APPROXIMATE.
2. SURVEY COMPLETED BY SCHWAB-EATON, P.A. OF MANHATTAN, KS, 2003.
3. ATMW-7 AND ATMW-8 NOT USED IN CONSTRUCTING POTENTIEMETRIC SURFACE.

LEGEND

- DIRECT PUSH BORING LOCATION
- WELL OR TEMPORARY PIEZOMETER LOCATION
- 2015 DIRECT-PUSH/MONITORING WELL LOCATION
- GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- 796.62 GROUNDWATER ELEVATION (MEASURED JUNE 2017)
- GROUNDWATER FLOW DIRECTION



NORTH

0 30' 60'
SCALE IN FEET

BURNS McDONNELL

Figure 2-1
GROUNDWATER POTENTIOMETRIC SURFACE MAP
JUNE 2017
ATCHISON, KANSAS

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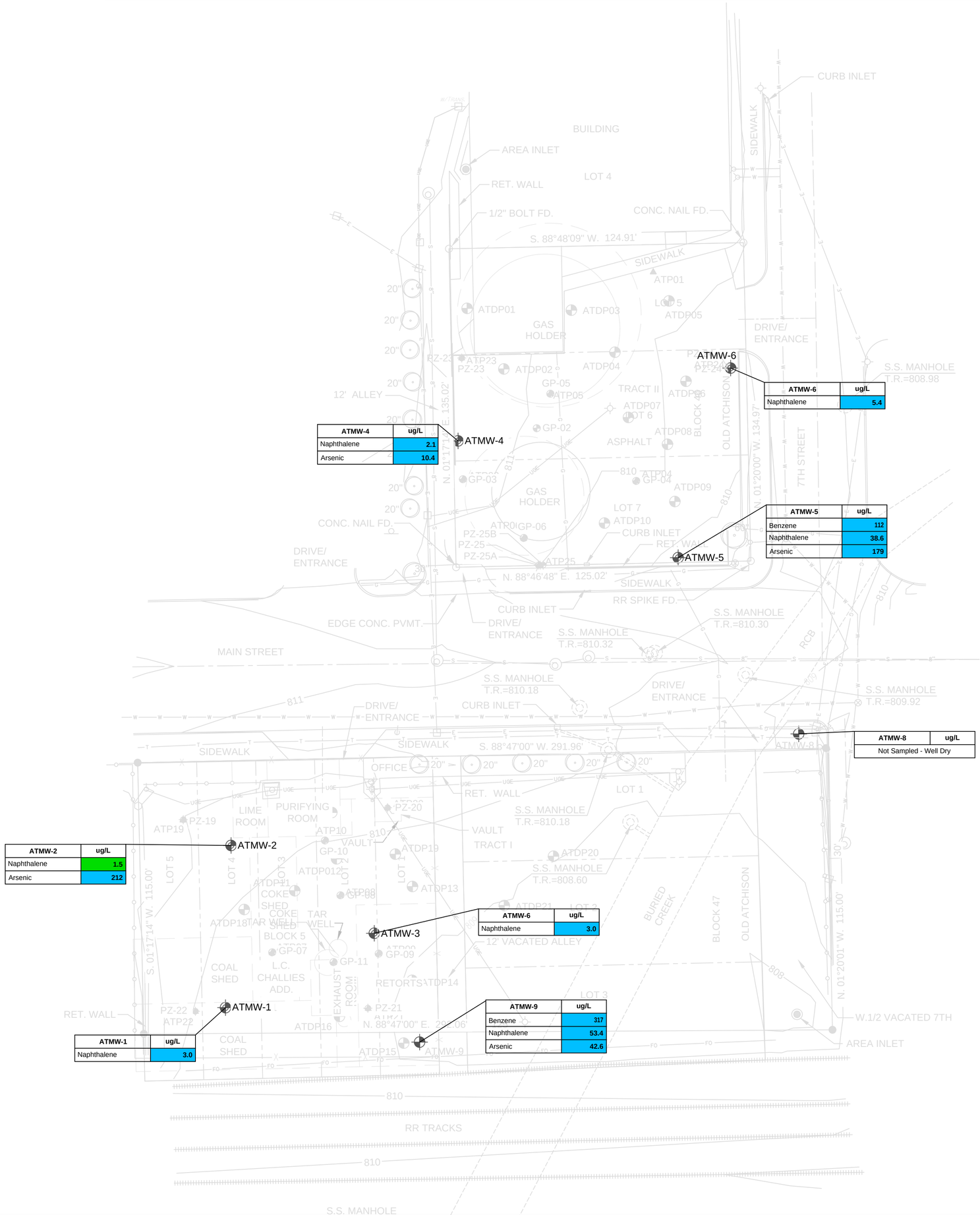
Z:\CLIENTS\ENS\ONEGAS\96323_1Q2017MGPSERV\STUDIES\DELIVERABLES\MULTIPLE SITES\ONEGAS GW SAMPLING REPORT (MULTIPLE SITES)\2017\FIGURES\82269-FIG 2-1 ATCHISON.DWG 11/10/2017 11:17 AM JABRAGG

NOTES:

1. MGP STRUCTURES IN DASHED LINES ARE BASED ON INFORMATION FROM SELECT SANBORN MAPS; LOCATIONS ARE APPROXIMATE.
2. SURVEY COMPLETED BY SCHWAB-EATON, P.A. OF MANHATTAN, KS, 2003.
3. ANALYTICAL DATA INDICATES DETECTED CONCENTRATIONS EXCEEDING RESIDENTIAL AND/OR NON-RESIDENTIAL RSK VALUES FOR THE GROUNDWATER PATHWAY.



LEGEND

92.8	SPOT ELEVATION
	GAS METER
	DECIDUOUS TREE
UGE	EXIST. UNDERGROUND ELECTRIC
W	EXIST. WATER LINE
G	EXIST. GAS LINE
T	EXIST. TELEPHONE CABLE
FO	EXIST. UNDERGROUND ELECTRIC
S	EXIST. SANITARY SEWER LINE
	KDHE SITE TRACT
	HISTORICAL DIRECT-PUSH BORING LOCATION
	HISTORICAL TEMPORARY PIEZOMETER LOCATION
	SUPPLEMENTAL SITE INVESTIGATION DIRECT-PUSH BORING LOCATION
	MONITORING WELL LOCATION
ug/L	MICROGRAMS PER LITER
1.5	RESULTS EXCEED RESIDENTIAL GROUNDWATER RSK VALUES
1.5	RESULTS EXCEED NON-RESIDENTIAL GROUNDWATER RSK VALUES

NORTH

0 30' 60'
SCALE IN FEET

BURNS McDONNELL

Figure 2-2
MGP CONSTITUENT EXCEEDANCE MAP
June 2017
ATCHISON, KANSAS

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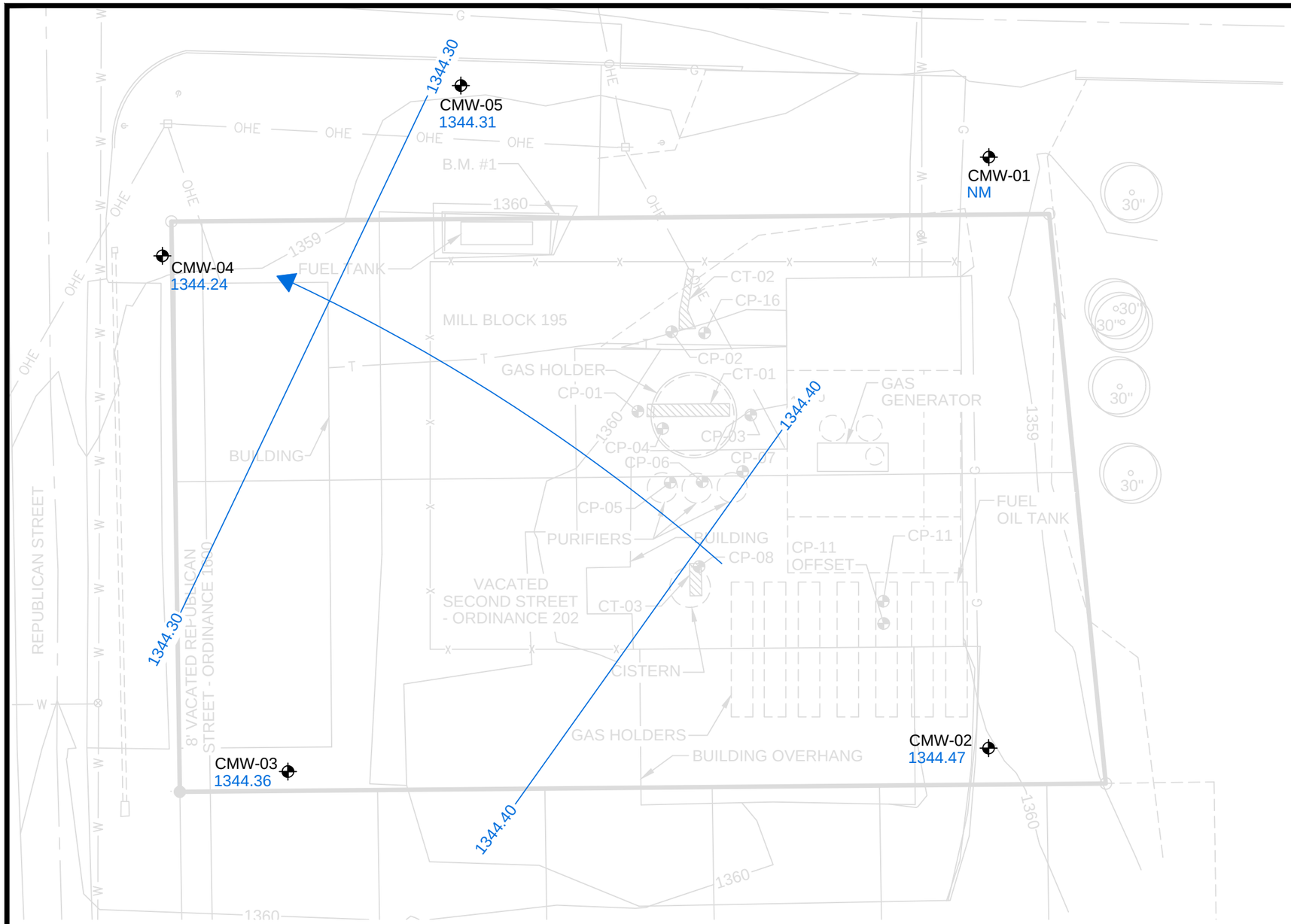

NOTES:

1. MGP STRUCTURES IN DASHED LINES ARE BASED ON INFORMATION FROM SELECT SANBORN MAPS; LOCATIONS ARE APPROXIMATE.
2. MGP STRUCTURE IN SOLID LINES ARE BASED ON FIELD SURVEYS.
3. SURVEY COMPLETED BY SCHWAB-EATON, P.A. OF MANHATTAN, KS, 2003.
4. GROUNDWATER LEVELS MEASURED ON JUNE 26, 2017.

LEGEND

	GROUNDWATER CONTOUR
1343.08	GROUNDWATER SURFACE ELEVATION (MSL)
	MONITORING WELL LOCATION
NM	NOT MEASURED
	GROUNDWATER FLOW DIRECTION

N

0 30' 60'

SCALE IN FEET

BURNS McDONNELL

Figure 3-1
GROUNDWATER POTENTIOMETRIC SURFACE MAP
JUNE 2017
CONCORDIA, KANSAS

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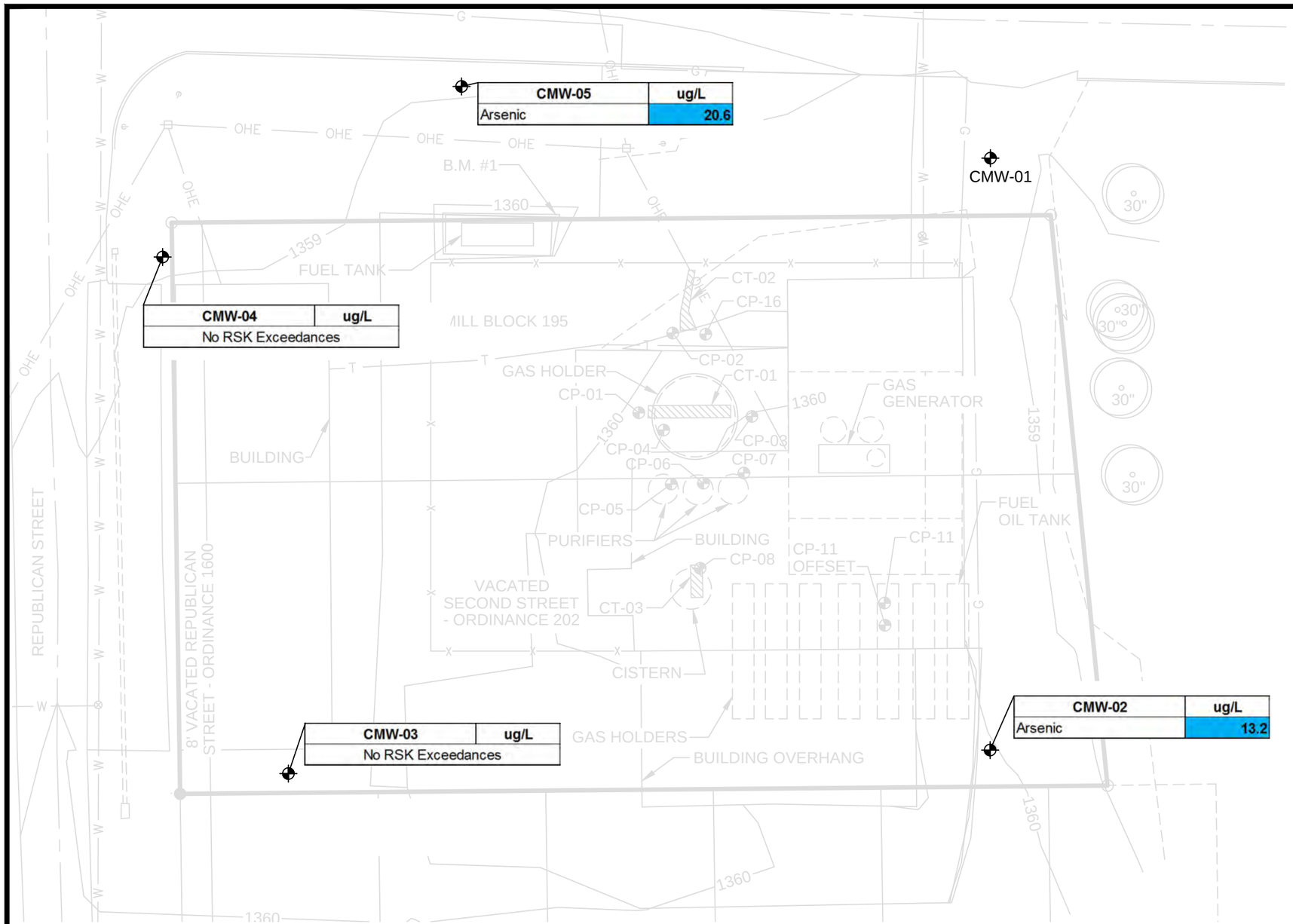

NOTES:

1. MGP STRUCTURES IN DASHED LINES ARE BASED ON INFORMATION FROM SELECT SANBORN MAPS; LOCATIONS ARE APPROXIMATE.
2. MGP STRUCTURE IN SOLID LINES ARE BASED ON FIELD SURVEYS.
3. SURVEY COMPLETED BY SCHWAB-EATON, P.A. OF MANHATTAN, KS, 2003.
4. ANALYTICAL DATA INDICATES DETECTED CONCENTRATIONS EXCEEDING RESIDENTIAL AND/OR NON-RESIDENTIAL RSK VALUES FOR THE GROUNDWATER PATHWAY.

LEGEND

⌖	MONITORING WELL LOCATION
ug/L	MICROGRAMS PER LITER
1.5	RESULTS EXCEED NON-RESIDENTUAL GROUNDWATER RSK VALUE

N

0 30' 60'

SCALE IN FEET

BURNS McDONNELL

Figure 3-2
MGP CONSTITUENT EXCEEDANCE MAP
JUNE 2017
CONCORDIA, KANSAS

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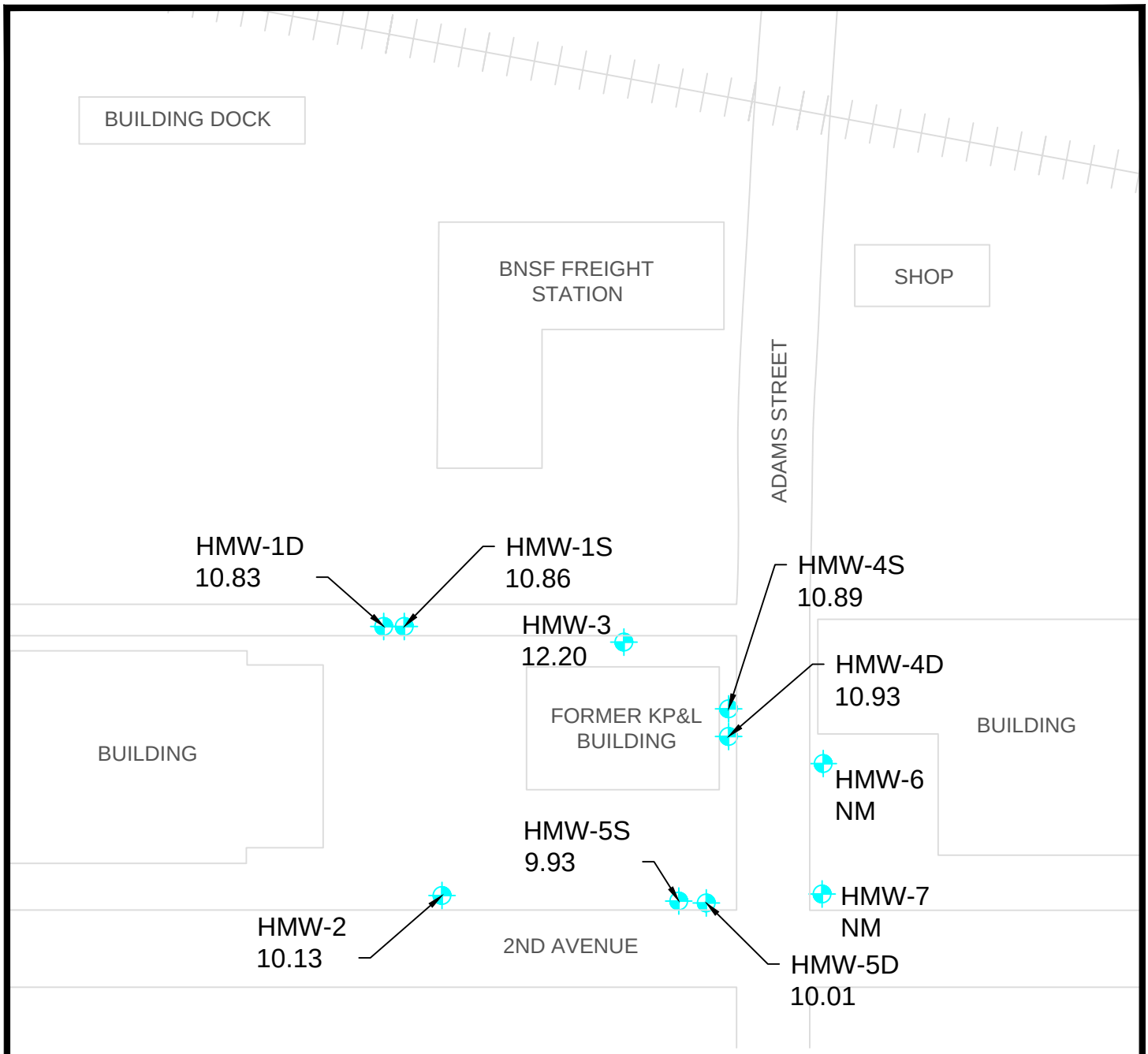

NOTES:

1. SURVEY DATA NOT AVAILABLE FOR ALL WELLS; THEREFORE, DEPTHS TO GROUNDWATER SHOWN.
2. FPH NOTED IN HMW-3, THICKNESS = 0.60 FEET.
3. DEPTHS TO GROUNDWATER LEVELS MEASURED ON JUNE 27, 2017.

N

0 100' 200'

SCALE IN FEET

LEGEND:

MONITORING WELL LOCATION

NM NOT MEASURED

BURNS McDONNELL

Figure 4-1
GROUNDWATER POTENTIOMETRIC SURFACE MAP
JUNE 2017
HUTCHINSON, KANSAS

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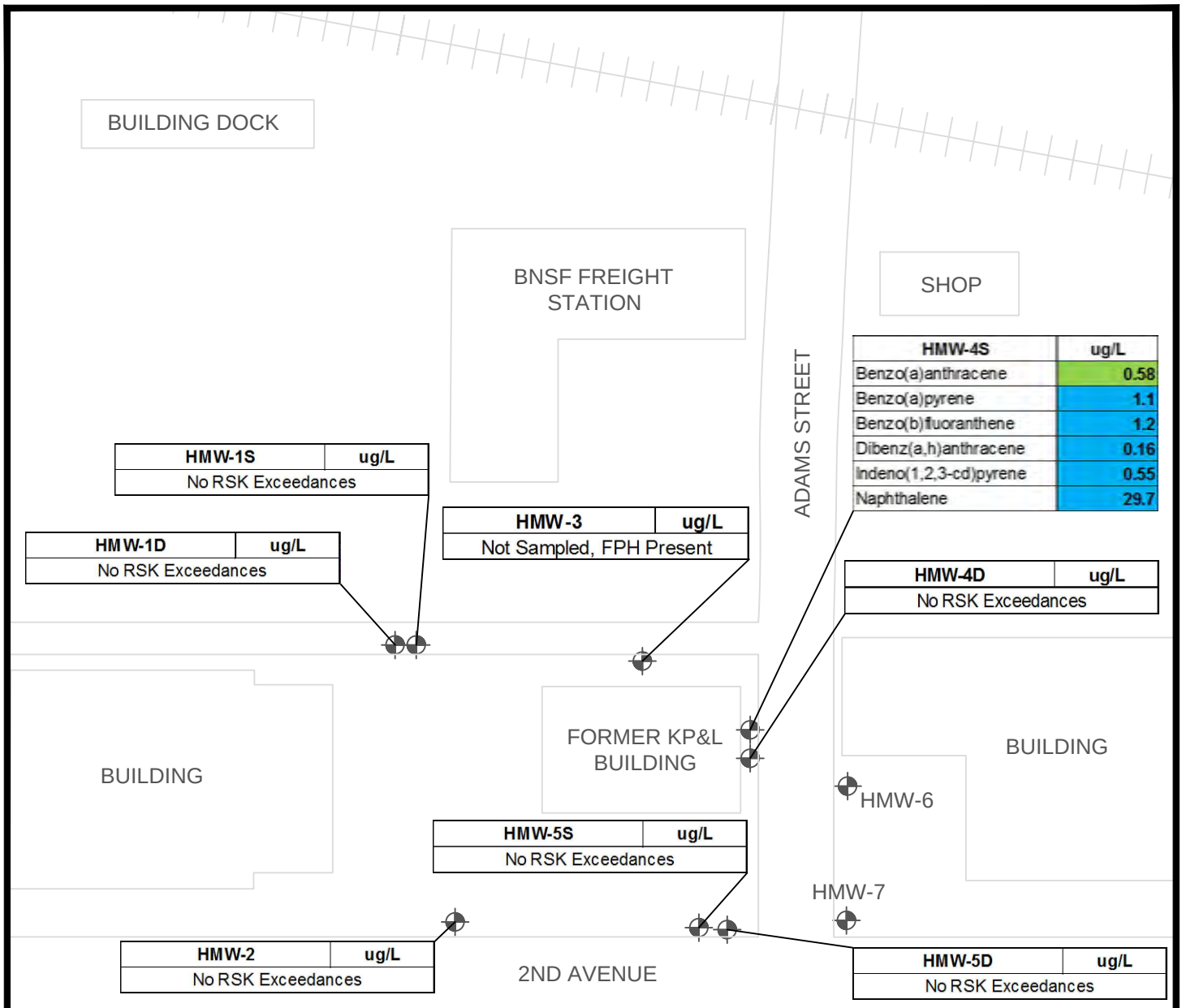
Z:\CLIENTS\ENS\ONEGAS\96323_1Q2017MGPSERV\STUDIES\DELIVERABLES\MULTIPLE SITES\ONEGAS GW SAMPLING REPORT (MULTIPLE SITES)\2017\FIGURES\82269-FIG 4-1 HUTCH.DWG 11/10/2017



NOTES:

1. SURVEY DATA NOT AVAILABLE FOR ALL WELLS.
2. ANALYTICAL DATA INDICATES DETECTED CONCENTRATIONS EXCEEDING RESIDENTIAL AND/OR NON-RESIDENTIAL RSK VALUES FOR THE GROUNDWATER PATHWAY.

LEGEND:

⊕	MONITORING WELL LOCATION
ug/L	MICROGRAMS PER LITER
1.5	RESULTS EXCEED NON-RESIDENTIAL GROUNDWATER RSK VALUES
1.5	RESULTS EXCEED RESIDENTIAL GROUNDWATER RSK VALUES

N

0 100' 200'

SCALE IN FEET

BURNS McDONNELL

Figure 4-2
MGP CONSTITUENT EXCEEDANCE MAP
JUNE 2017
HUTCHINSON, KANSAS

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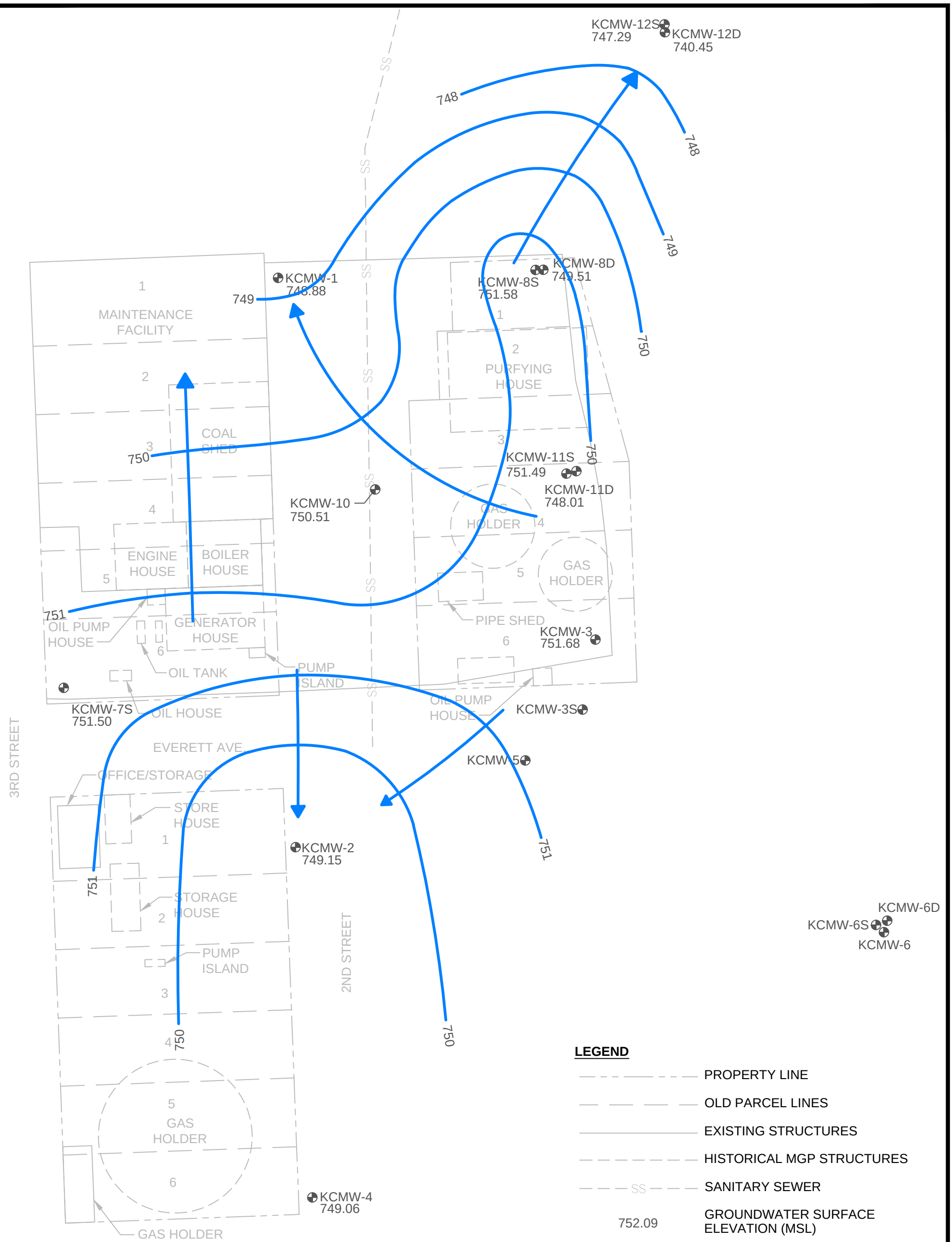
Z:\CLIENTS\ENS\ONEGAS\96323_1Q2017MGPSERV\STUDIES\DELIVERABLES\MULTIPLE SITES\ONEGAS GW SAMPLING REPORT (MULTIPLE SITES)\2017\FIGURES\96323-FIG 4-2 HUTCH.DWG 11/10/2017



LEGEND

	PROPERTY LINE
	OLD PARCEL LINES
	EXISTING STRUCTURES
	HISTORICAL MGP STRUCTURES
SS	SANITARY SEWER
752.09	GROUNDWATER SURFACE ELEVATION (MSL)
	MONITORING WELL LOCATION
ug/L	MICROGRAMS PER LITER
	GROUNDWATER FLOW DIRECTION
	GROUNDWATER ELEVATION (DASHED WHERE INFERRED)

NOTES:

1. MGP STRUCTURES IN DASHED LINES ARE BASED ON INFORMATION FROM SANDORN MAPS; LOCATIONS ARE APPROXIMATE.
2. GROUNDWATER LEVELS MEASURED ON JUNE 19, 2017.

N

0 60' 120'

SCALE IN FEET

BURNS McDONNELL

Figure 5-1
GROUNDWATER POTENTIOMETRIC SURFACE MAP
JUNE 2017
KANSAS CITY, KANSAS

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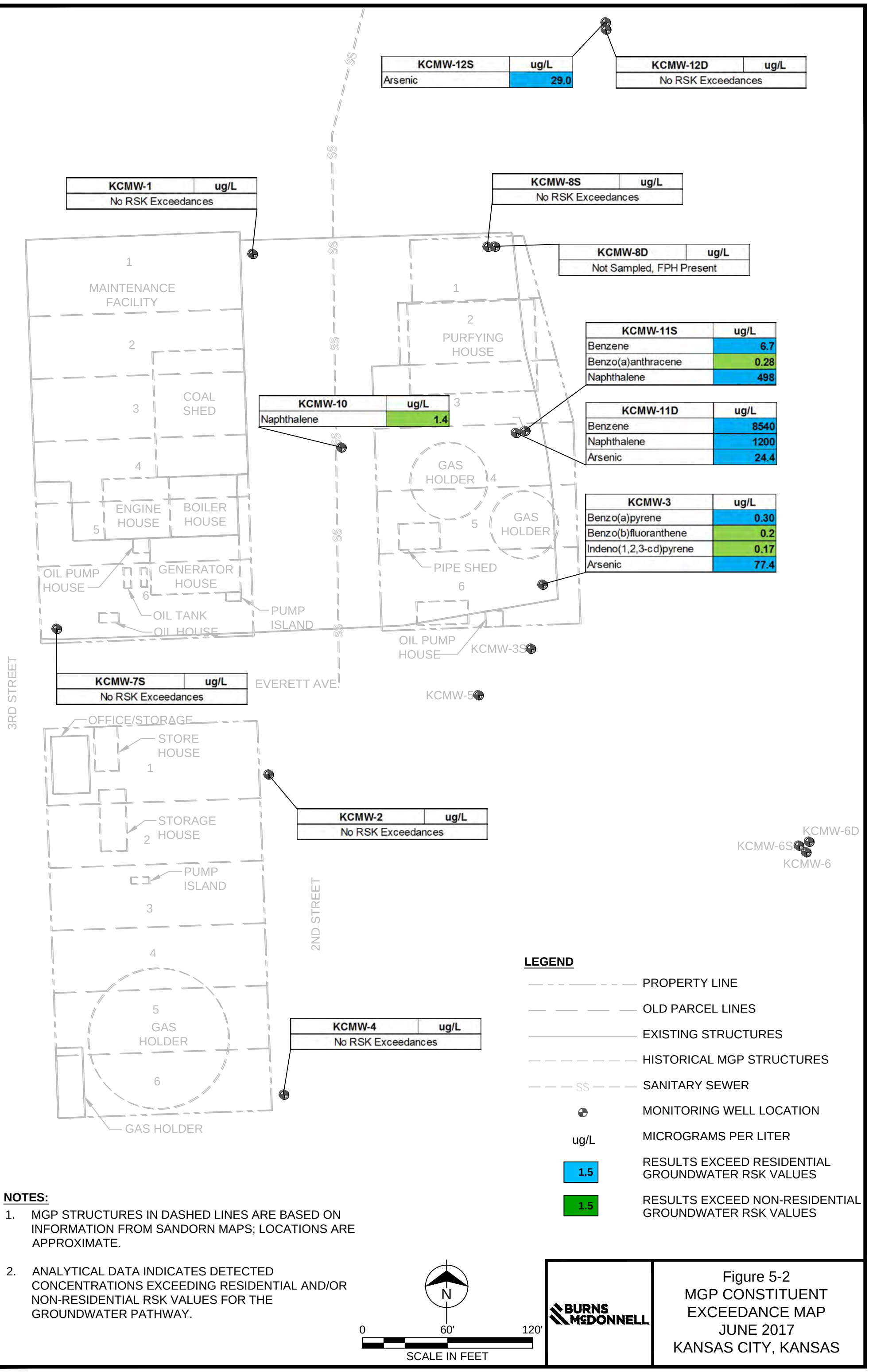

NOTES:

1. MGP STRUCTURES IN DASHED LINES ARE BASED ON INFORMATION FROM SANDORN MAPS; LOCATIONS ARE APPROXIMATE.
2. ANALYTICAL DATA INDICATES DETECTED CONCENTRATIONS EXCEEDING RESIDENTIAL AND/OR NON-RESIDENTIAL RSK VALUES FOR THE GROUNDWATER PATHWAY.

BURNS McDONNELL

Figure 5-2
MGP CONSTITUENT EXCEEDANCE MAP
JUNE 2017
KANSAS CITY, KANSAS

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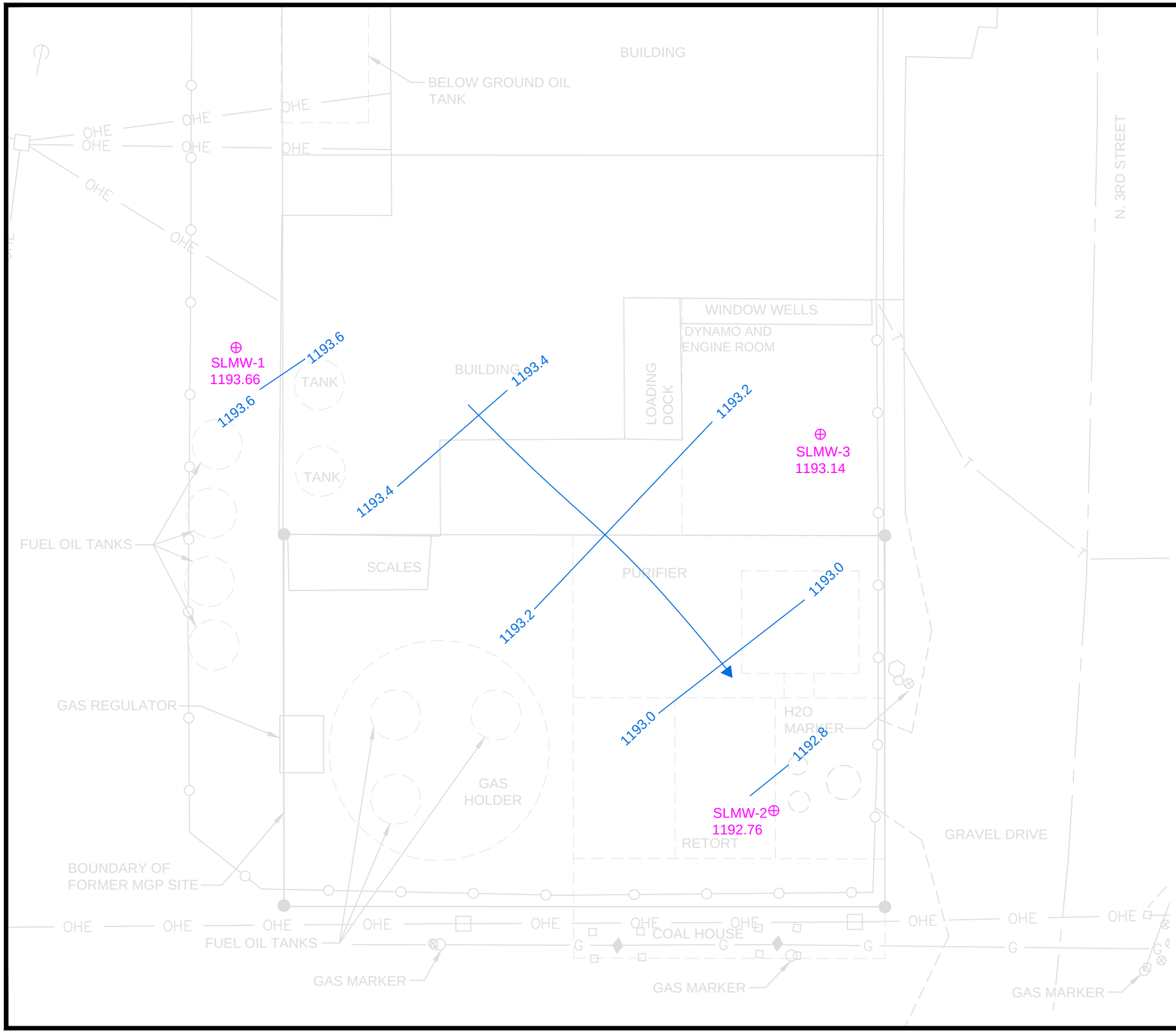

LEGEND

- FORMER MGP SITE
- GAS LINE (EXIST.)
- TELEPHONE CABLE (EXIST.)
- OVERHEAD ELECTRIC (EXIST.)
- EXIST. CHAIN LINK FENCE
- GROUNDWATER CONTOUR
- 1198.18 GROUNDWATER SURFACE ELEVATION
- MONITORING WELL LOCATION
- GROUNDWATER FLOW DIRECTION

NOTES:

1. MGP STRUCTURES IN DASHED LINES ARE BASED ON INFORMATION FROM THE 1923 SANBORN MAP; LOCATIONS ARE APPROXIMATE.
2. SURVEY COMPLETED BY SCHWAB-EATON, P.A. OF MANHATTAN, KS, 2003.
3. GROUNDWATER LEVELS MEASURED ON JULY 21, 2016.

N

0 10' 20' 40'

SCALE IN FEET

BURNS McDONNELL

Figure 6-1
GROUNDWATER POTENTIOMETRIC SURFACE MAP
JULY 2016
SALINA, KANSAS

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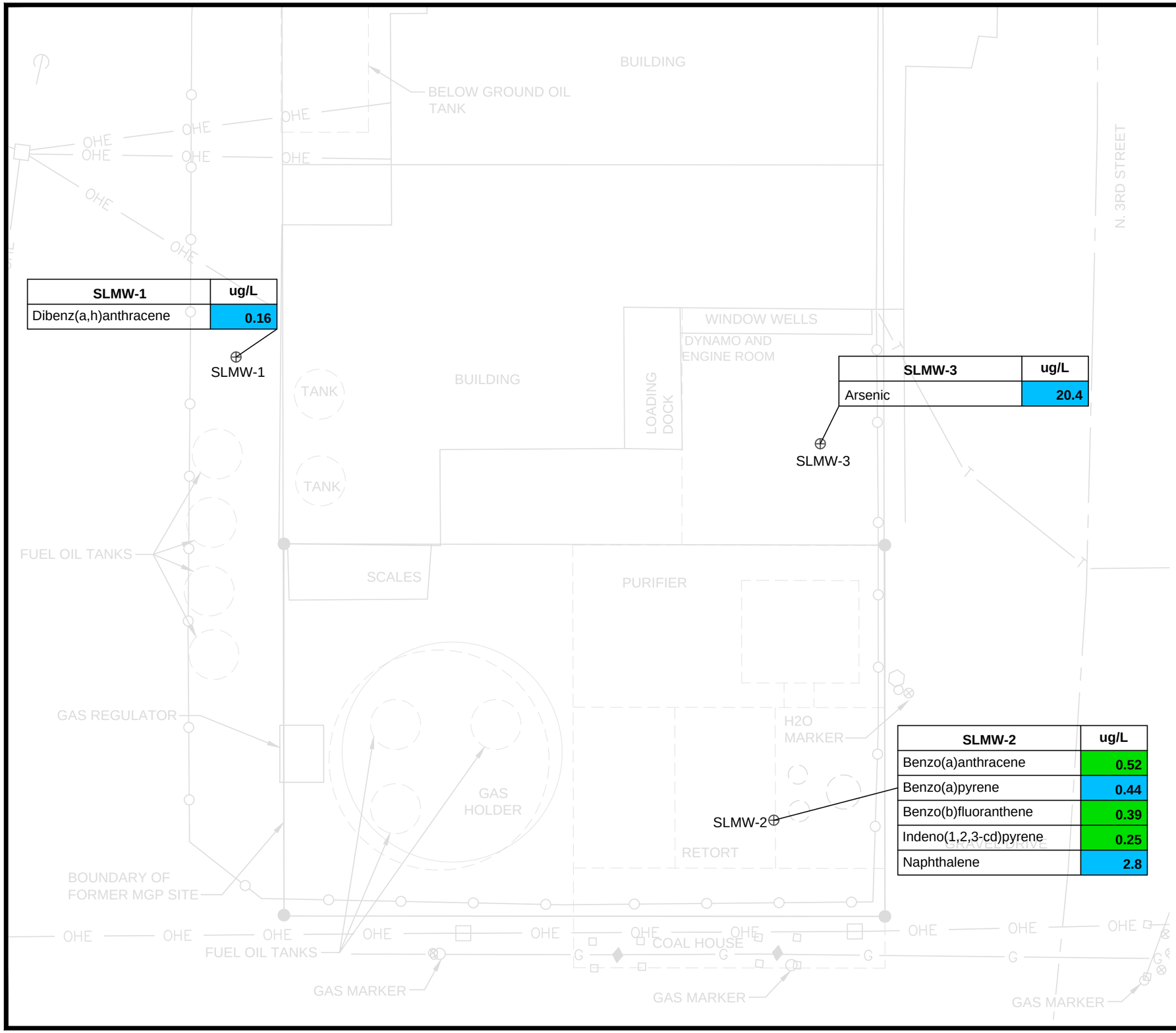

SLMW-1	ug/L
Dibenz(a,h)anthracene	0.16

SLMW-3	ug/L
Arsenic	20.4

SLMW-2	ug/L
Benzo(a)anthracene	0.52
Benzo(a)pyrene	0.44
Benzo(b)fluoranthene	0.39
Indeno(1,2,3-cd)pyrene	0.25
Naphthalene	2.8

LEGEND

- FORMER MGP SITE
- G — GAS LINE (EXIST.)
- T — TELEPHONE CABLE (EXIST.)
- OHE — OVERHEAD ELECTRIC (EXIST.)
- EXIST. CHAIN LINK FENCE
- ug/L — MICROGRAMS PER LITER
- 1.5 — RESULTS EXCEED RESIDENTIAL GROUNDWATER RSK VALUES
- 1.5 — RESULTS EXCEED NON-RESIDENTIAL GROUNDWATER RSK VALUES
- ⊕ — MONITORING WELL LOCATION

NOTES:

1. MGP STRUCTURES IN DASHED LINES ARE BASED ON INFORMATION FROM THE 1923 SANBORN MAP; LOCATIONS ARE APPROXIMATE.
2. SURVEY COMPLETED BY SCHWAB-EATON, P.A. OF MANHATTAN, KS, 2003.
3. ANALYTICAL DATA INDICATES DETECTED CONCENTRATIONS EXCEEDING RESIDENTIAL AND/OR NON-RESIDENTIAL RSK VALUES FOR THE GROUNDWATER PATHWAY.

N

0 10' 20' 40'
SCALE IN FEET

BURNS McDONNELL

Figure 6-2
MGP CONSTITUENT EXCEEDANCE MAP
June 2017
SALINA, KANSAS

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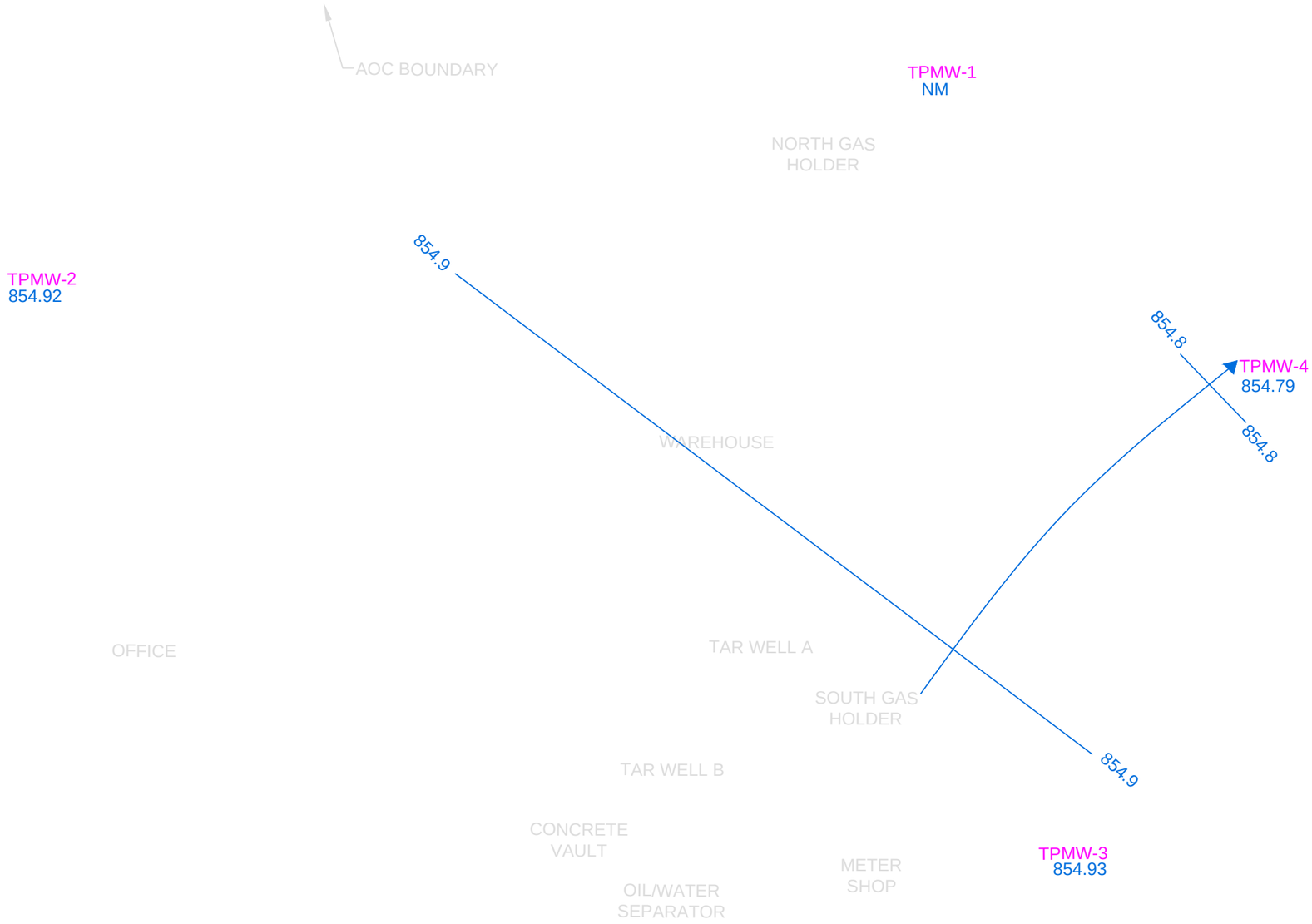

NOTES:

1. GROUNDWATER LEVELS MEASURED ON JULY 25, 2016.

LEGEND

⊕	MONITORING WELL LOCATION
	CURRENT STRUCTURES
	HISTORICAL STRUCTURES
	GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
861.54	GROUNDWATER SURFACE ELEVATION (MSL)
	GROUNDWATER FLOW DIRECTION

N

0 20' 40' 80'

SCALE IN FEET

BURNS McDONNELL

Figure 7-1
GROUNDWATER
POTENTIOMETRIC
SURFACE MAP
JULY 2016
TOPEKA, KANSAS

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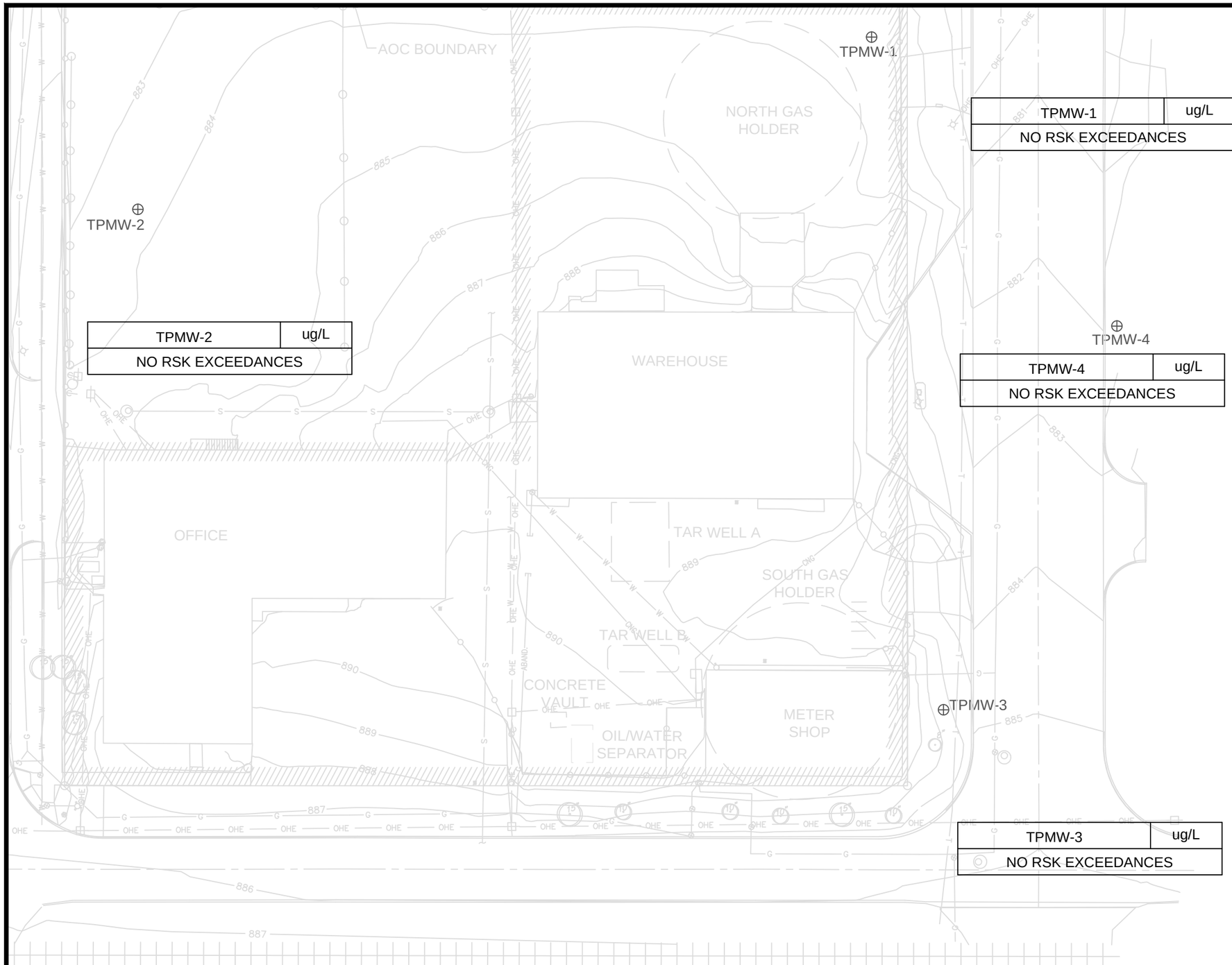
Z:\CLIENTS\ENS\ONEGAS\96323_1Q2017MGPSERV\STUDIES\DELIVERABLES\MULTIPLE SITES\ONEGAS GW SAMPLING REPORT (MULTIPLE SITES)\2017\FIGURES\82269-FIG 7-1 TOPEKA.DWG 11/10/2017 11:31 AM JABRAGG



TPMW-1	ug/L
NO RSK EXCEEDANCES	

TPMW-2	ug/L
NO RSK EXCEEDANCES	

TPMW-4	ug/L
NO RSK EXCEEDANCES	

TPMW-3	ug/L
NO RSK EXCEEDANCES	

NOTES:

1. ANALYTICAL DATA INDICATES DETECTED CONCENTRATIONS EXCEEDING RESIDENTIAL AND/OR NON-RESIDENTIAL RSK VALUES FOR THE GROUNDWATER PATHWAY.

LEGEND

⊕	MONITORING WELL LOCATION
	CURRENT STRUCTURES
	HISTORICAL STRUCTURES
ug/L	MICROGRAMS PER LITER
1.5	RESULTS EXCEED RESIDENTIAL GROUNDWATER RSK VALUES
1.5	RESULTS EXCEED NON-RESIDENTIAL GROUNDWATER RSK VALUES

N

0 20' 40' 80'

SCALE IN FEET

BURNS McDONNELL

Figure 7-2
MGP CONSTITUENT EXCEEDANCE MAP
JUNE 2017
TOPEKA, KANSAS

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ATTACHMENT 1

J. YEAGER

9/30/16 B2269 ONEGAS

0730 DEPART FOR ONEGAS ABILENE

1000 J. YEAGER / CLEAN HARBORS ON-SITE TO PICKUP IDW DRUMS.

1010 CLEAN HARBORS LABELING IDW DRUMS

1025 BEGIN LOADING IDW DRUMS

1200 FINISH LOADING DRUMS / SIGN WASTE MANIFESTS

1205 CLEAN HARBORS / J. YEAGER OFF-SITE LOCK GATE

Monday ONEGAS-KC
6/19/17 96323 J. Bryant

Weather: PC, 70s-80s, S wind 10-15 mph.

Task: Annual sampling for ONEGAS in Kansas City, KS.

Personnel: J. Bryant - BMCD

0700: Depart for site from Wichita, KS.

1030: Pick up coolers @ Pace - Lenexa

1100: Pick up drums (3) @ A-1 Barrel.

1125: Arrive onsite. Check in w/ security.

1130: K. White onsite. Review scope & check well locations.

1215: K. White offsite. Begin WL & TD measurements.

Well ID	WL	TD	Misc
KCMW-3	12.16	35.25	
KCMW-11D	15.98	41.55	soft bottom
KCMW-11S	12.44	15.03	2.59' WC
KCMW-8S	10.62	17.50	J-plug covered in mud. Dig out before opening well.
KCMW-8D	12.42	43.45	DNAPL on probe tip
KCMW-1	15.86	31.35	
KCMW-10	16.03	27.54	No J plug
KCMW-2	19.50	39.51	No vault cover
KCMW-4	18.70	39.04	J plug covered in sediment. Dig out before opening.
KCMW-12S	14.27	29.26	
KCMW-12D	27.03	55.41	
KCMW-7S	29.91	34.43	

Monday 6-19-17 ONEGAS-KC 96323 J. Bryant

1415: WL measurements complete. Calibrate YSI for pH, Cond, ORP, & DO. Calibrate Turbidity meter.

1500: Begin moving equipment to KCMW-12S/D.

1534: Begin purging KCMW-12S. Details on sample form.

1650: Collect KCMW-12S/GW01 for BTEX, PAH, RCRA8, & Cyanide.

1700: Decon & set up @ KCMW-12D

1714: Begin purging KCMW-12D. Details on sample form.

1750: Collect KCMW-12D/GW01 for BTEX, PAH, RCRA 8, & Cyanide.

1800: Move equipment out of the area, back to the truck.

- Decon pump & set up equipment to work off tailgate.

1830: Set up @ KCMW-4.

1842: Begin purging KCMW-4. Details on sample form.

1910: Collect KCMW-4/GW01 ~~& KCMW-4/ERB (Rinsate)~~ JB for BTEX, PAH, RCRA 8, & Cyanide.

- Decon pump.

1930: Collect KCMW-4/ERB (Rinsate) for BTEX, PAH, RCRA 8, & Cyanide.

Monday 6-19-17 ONEGAS-KC 96323 J. Bryant

1935: Tear down & load equipment.

1945: Depart site & secure lodging for the night.

6-19-17

Tuesday 6-20-17 ONEGAS - KC 96323 J. Bryant

Weather: Clear to PC, 70s-90s, SW wind 5-15mph

Task: Annual GW sampling @ Kansas City facility for ONEGAS.

Personnel: J. Bryant - BMCD

0630: Calibrate YSI for pH, Cond, ORP, & DO. Calibrate Turbidity meter.

0705: Depart for site. Purchase ice enroute.

0725: Arrive onsite. Meet w/ Jeremy Hansen for access to KCMW-7S.

0735: Set up @ KCMW-7S.

0748: Begin purging KCMW-7S. Details on sample form.

0825: Collect KCMW-7S/GW01 for BTEX, PAHs, Metals, & Cyanide.

- Decon pump & set up @ KCMW-1.

0903: Begin purging KCMW-1. Details on sample form.

0945: Collect KCMW-1/GW01 & KCMW-1/GW01MS/MSD for BTEX, PAHs, Metals, & Cyanide.

- Decon pump & set up @ KCMW-8S.

1028: Begin purging KCMW-8S. Details on sample form.

1120: Collect KCMW-8S/GW01 for BTEX, PAHs, Metals, & Cyanide.

- Decon pump.
- Will not sample KCMW-8D due to presence of NAPL.
- Set up @ KCMW-10.

Tuesday 6-20-17 ONEGAS - KC 96323 J. Bryant

1156: Begin purging KCMW-10. Details on sample form.

1235: Collect KCMW-10/GW01 & KCDup-1/GW01 for BTEX, PAHs, Metals, & Cyanide.

- Decon pump & set up @ KCMW-2.

1316: Begin purging KCMW-2. Details on sample form.

1345: Collect KCMW-2/GW01 for BTEX, PAHs, Metals, & Cyanide.

- Decon pump & set up @ KCMW-3.

1421: Begin purging KCMW-3. Details on sample form.

1535: Collect KCMW-3/GW01 & KCDup-2/GW01 for BTEX, PAHs, Metals, & Cyanide.

- Decon pump & set up @ KCMW-11S.
- Due to short water column, set up to bail KCMW-11S. 1WV = 0.42 gal, 3WV = 1.26 gal

1625: Begin bailing KCMW-11S. Details on sample form.

1635: Well dry @ 0.5 gal. Wait for recharge, then sample. Set up to purge KCMW-11D.

1649: Begin purging KCMW-11D. Details on sample form.

1750: Collect KCMW-11D/GW01 for BTEX, PAHs, Metals, & Cyanide.

- Decon pump & prepare to sample KCMW-11S.

1820: Collect KCMW-11S/GW01 for BTEX, PAHs, Metals, & Cyanide.

Tuesday 6-20-17 ONEGAS-KC 96323 J. Bryant

- Load equipment. Stage IDW in drum near entrance. Approx 1/2 full.

1840: Depart site.

6/20/17

6-21-17:

0715: Deliver samples to Pace Analytical - Lenexa, KS (3 Coolers)

- Mobe to ONEGAS facility to pick up 2 drums.

0745: Pick up 2 drums (empty) for other ONEGAS sites.

0755: Depart for Atchison, KS.

6/21/17

Wednesday 6-21-17 ONEGAS - Atchison 96323 J. Bryant

Weather: Clear, 80s-90s, SW wind 5-15 mph.

Task: Annual GW sampling for ONEGAS @ Atchison facility.

Personnel: J. Bryant - BMCD

0755: Depart Kansas City for Atchison. Purchase ice enroute.

0910: Arrive onsite. Check in w/ site personnel, discuss location of wells & location for IDW drum staging.

0930: Begin round of water level & Total depth measurements.

Well ID	WL	TD	Misc
ATMW-6	13.48	18.77	-
ATMW-7	19.29	20.15	0.86' WC
ATMW-5	14.95	21.57	-
ATMW-4	10.11	19.80	-
ATMW-8	20.13	20.47	0.34' WC
ATMW-1	12.54	16.75	-
ATMW-3	12.96	17.18	-
ATMW-2	11.92	18.83	-
ATMW-9	17.16	19.90	2.74' WC

1045: Water levels complete. Calibrate YSI for pH, Cond, DO, & ORP. Calibrate Turbidity meter for turbidity.

1115: Collect AT-RINSATS prior to start of sampling (due to change of site), for BTEX, PAHs, metals, & cyanide.

Wednesday 6-21-17 ONEGAS - Atchison 96323 J. Bryant

1145: Set up @ ATMW-6.

1148: Begin purging ATMW-6. Details on sample form.

1230: Collect [ATMW-6/GW01] for BTEX, PAHs, Metals, & Cyanide.

- Decon pump & set up @ ATMW-1.

1317: Begin purging ATMW-1/GW01 ~~for BTEX~~ Details on sample form.

1355: Collect [ATMW-1/GW01] & [ATMW-1/GW01 MS/MSD] for BTEX, PAHs, Metals, & Cyanide.

1447: Decon pump & set up @ ATMW-3.

1506: Begin purging ATMW-3. Details on sample form.

1545: Collect [ATMW-3/GW01] for BTEX, PAHs, Metals, & Cyanide.

1603: Decon pump & set up @ ATMW-4.

1626: Begin purging ATMW-4. Details on sample form.

1735: Collect [ATMW-4/GW01] for BTEX, PAHs, Metals, & Cyanide.

1747: Decon pump & break down/load equipment.

- Stage IDW in drum located near entrance to E storage lot.

1805: Depart site. Secure lodging for the night.

6-21-17

Thursday 6-22-17 ONEGAS - Atchison 96323 J. Bryant

Weather: PC, 70s-80s, S wind 5-10 mph.

Task: Annual GW sampling for ONEGAS.

Personnel: J. Bryant - BMCD

0700: Calibrate YSI for pH, Cond, DO, & ORP.
Calibrate Turbidity meter for turbidity

0725: Depart for site.

0735: Arrive onsite. Contact site personnel for access to storage lot (leave message).

- Set up @ ATMW-5.

0749: Begin purging ATMW-5. Details on sample form.

0825: Collect [ATMW-5/GW01] & [ATDUP-1/GW01] for BTEX, PAHs, Metals, & Cyanide

0847: Decon pump & set up @ ATMW-2.

0917: Begin purging ATMW-2. Details on sample form.

0945: Collect [ATMW-2/GW01] for BTEX, PAHs, metals, & Cyanide

1001: Decon pump & set up @ ATMW-9.

1028: Begin purging ATMW-9. Details on sample form.

1100: Collect [ATMW-9/GW01] for BTEX, PAHs, Metals, & Cyanide.

1115: Decon pump, load equipment, place IDW in drum.

1135: Depart for Pace-Lenexa.

1255: Deliver samples to Pace.

1310: Depart for Topeka, KS.

6-22-17

Thursday ONEGAS - Topeka
6-22-17 96323 J. Bryant

Weather: PC, 80s, S wind 5-10 mph.

Task: Annual GW sampling.

Personnel: J. Bryant - BMCD

1310: Depart Kansas City for site.

1430: Arrive onsite. Meet w/ site contact. Discuss well locations. John - (785) 250-2311

1443: Begin WL & TD measurements

Well ID	WL	TD	Misc
TPMW-1	23.65	39.10	-
TPMW-2	23.62	36.65	-
TPMW-3	26.37	41.75	-
TPMW-4	23.40	39.60	-

1515: Set up @ TPMW-4.

1527: Begin purging TPMW-4. Details on sample form.

1610: Collect TPMW-4/GW01 & TPMW-4/GW01 MS/MSD for BTEX, PAHs, Metals, & Cyanide

1637: Decon pump & load equipment. Stage IDW drum near SSW gate as directed.

1700: Depart site.

6-22-17

Friday ONEGAS - Topeka
6-23-17 96323 J. Bryant

Weather: Cloudy, 70s, N wind 5 mph.

Task: Annual GW sampling for ONEGAS.

Personnel: J. Bryant - BMCD

0645: Calibrate YSI for pH, ~~Temp~~ Cond, ORP, & DO. Calibrate Turbidity meter for Turbidity.

0715: Depart for site.

0725: Arrive onsite. Contact John for site access.

0735: Set up @ TPMW-1.

0744: Begin purging TPMW-1. Details on sample form.

0835: Collect TPMW-1/GW01 for BTEX, PAHs, Metals, & Cyanide.

0843: Decon pump & set up @ TPMW-2.

0910: Begin purging TPMW-2. Details on sample form.

0940: Collect TPMW-2/GW01 & TPDUP-1/GW01 for BTEX, PAHs, Metals, & Cyanide.

0955: Decon pump & set up @ TPMW-3.

1017: Begin purging TPMW-3. Details on sample form.

1045: Collect TPMW-3/GW01 for BTEX, PAHs, metals, & Cyanide.

1055: Decon pump.

1110: Collect TPMW-3/ERB (Rinsate) for BTEX, PAHs, metals, & Cyanide.

- Breakdown & load equipment, stage IDW in drum, & complete COC.

1200: Depart site.

1355: Deliver samples to Pace - Salina. 1545: Arrive in Wichita. JB

Weather: PC, 70s-80s, N wind 10-15 mph

Task: Annual GW sampling

Personnel: J. Bryant - EMID

0730: Depart for site from Wichita, KS.
- Purchase/pick up drum @ Geocore in Salina, KS & Distilled water & ice enroute to site.

1040: Arrive onsite. Begin locating wells & check in w/ Abram Rediminix personnel.
- Collect WL & TD measurements.

Well ID	WL	TD	Misc
CMW-03	14.80	25.65	-
CMW-02	15.32	27.80	-
CMW-05	14.42	25.67	-
CMW-04	13.80	25.77	-

1120: Calibrate YSI for pH, ~~Temp~~ Cond, ORP, & DO. Calibrate Turbidity meter for turbidity.

1145: Set up @ CMW-04.

1151: Begin purging CMW-04. Details on sample form.

1245: Collect [CMW-04/GW01] & [CMW-04/GW01 MS/MSD] for BTEX, PAHs, Metals, & Cyanide.

1303: Decon pump & set up @ CMW-03.

1345: Begin purging CMW-03. Details on sample form.

1420: Collect [CMW-03/GW01] for BTEX, PAHs, Metals, & Cyanide.

1428: Decon pump & set up @ CMW-02.

1449: Begin purging CMW-02. Details on sample form.

1630: Collect [CMW-02/GW01] & [CDUP-1/GW01] for BTEX, PAHs, Metals, & Cyanide.

1644: Decon pump & set up @ CMW-05.

1703: Begin purging CMW-05. Details on sample form.

1735: Collect [CMW-05/GW01] for BTEX, PAHs, Metals & Cyanide.

1744: Decon pump.

1755: Collect [CMW-05/ERB] (Rinsate) for BTEX, PAHs, Metals, & Cyanide

1805: Load equipment, complete COC, & depart site. Place IDW in drum staged @ SW corner of building on NW corner of lot.

1825: Depart site.

1930: Arrive in Salina, KS. Secure lodging for the night.

6-26-17

Tuesday 6-27-17 ONEGAS - Salina 96323 J. Bryant

Weather: MC to sunny, 60s-80s, S wind 10-15 mph.

Task: Annual GW sampling.

Personnel: J. Bryant - BMCD

0700: Depart for site.

- Refresh ice & purchase additional ice.
- Pick up IDW drum @ Geocore.

0740: Arrive @ site address. No apparent landmarks. Contact K. White & J. Yeager for assistance.

- Calibrate YSI for pH, Cond, DO, & ORP.
- Calibrate Turbidity meter for turbidity.

0810: Onsite @ M&H meters. Contact onsite personnel. Gain site access.

0820: Begin WL & TD measurements.

Well ID	WL	TD	Misc
SLMW-1	32.15	39.44	OK.
SLMW-2	32.98	39.96	OK
SLMW-3	32.55	39.22	Pad & Vault have been removed. PVC ok. Photo.

0835: Set up @ SLMW-1.

0844: Begin purging SLMW-1. Details on sample form.

0915: Collect SLMW-1/GW01 & SLMW11/GW01 MS/MSD for BTEX, PAHs, Metals, & Cyanide.

0940: Decon pump & set up @ SLMW-2.

1001: Begin purging SLMW-2. Details on sample form.

1030: Collect SLMW-2/GW01 & SLDUP-1/GW01 for BTEX, PAHs, Metals, & Cyanide.

Tuesday 6-27-17 ONEGAS - Salina 96323 J. Bryant

1044: Decon pump & set up @ SLMW-3.

1106: Begin purging SLMW-3. Details on Sample form.

1135: Collect SLMW-3/GW01 for BTEX, PAHs, metals, & Cyanide.

1144: Decon pump.

1155: Collect SLMW-3/ERB (Rinsate) for BTEX, PAHs, Metals, & Cyanide.

1205: Load equipment, complete COC, & prep samples for delivery.

1245: Deliver samples to Pace-Salina for transport to Pace-Lenexa.

1255: Depart Salina, KS.

1415: Arrive in Hutchinson, KS.

6-27-17

Tuesday 6-27-17 ONEGAS - Hutchinson 96323 J. Bryant

Weather: PC, 80s-90s, S wind 10-15 mph.

Task: Annual GW sampling.

Personnel: J. Bryant - BMCD

1255: Depart Salina, KS.

1415: Arrive onsite. Begin WL & TD measurements.

Well ID	WL	TD	PL
HMW-1S	10.86	19.42	-
HMW-1D	10.83	79.70	-
HMW-2	10.13	17.59	-
HMW-4D	10.93	78.82	-
HMW-4S	10.89	19.29	-
HMW-5S	9.93	16.81	-
HMW-5D	10.01	76.82	-
HMW-3	12.20	-	11.60

1525: WL & TD measurements complete. Locate a drum supplier in Hutchinson.

1545: Supplier located. Set up to begin sampling.

1554: Begin purging HMW-2. Details on sample form.

1620: Collect [HMW-2/GW01] & [HMW-2/GW01 MS/MSD] for BTEX, PAHs, Metals, & Cyanide.

1640: Decon & load equipment.

1700: Depart site.

6-27-17

Wednesday 6-28-17 ONEGAS - Hutchinson 96323 J. Bryant

Weather: Cloudy, 70s-80s, SE wind 5-15 mph.

Task: Annual GW sampling.

Personnel: J. Bryant - BMCD

0730: Depart Wichita.

0815: Arrive onsite.

- Calibrate YSI for pH, Cond, DO, & ORP.
- Calibrate Turbidity meter.
- Set up @ HMW-1S.

0830: Begin purging HMW-1S. Details on sample form.

0900: Collect [HMW-1S/GW01] for BTEX, PAHs, Metals, & Cyanide.

0907: Decon pump & set up @ HMW-1D.

0921: Begin purging HMW-1D. Details on sample form.

0945: Collect [HMW-1D/GW01] for BTEX, PAHs, Metals, & Cyanide

0952: Decon pump & set up @ HMW-5S.

1022: Begin purging HMW-5S. Details on sample form.

1045: Collect [HMW-5S/GW01] for BTEX, PAHs, Metals, & Cyanide.

1052: Decon pump & set up @ HMW-5D.

1113: Begin purging HMW-5D. Details on sample form.

1140: Collect [HMW-5D/GW01] & [HDUP-1/GW01] for BTEX, PAHs, Metals, & Cyanide.

1155: Decon pump & set up @ HMW-4D.

1216: Begin purging HMW-4D. Details on sample form.

Wednesday ONEGAS - Hutchinson
6-28-17 96323 J. Bryant

1240 : Collect HMW-4D/GW01 for BTEX, PAHs, Metals, & Cyanide.

1247 : Decon pump & set up @ HMW-4S.

1300 : Begin purging HMW-4S. Details on sample form.

1325 : Collect HMW-4S/GW01 for BTEX, PAHs, Metals, & Cyanide.

1335 : Decon pump, Pack up equipment.

1345 : Collect HMW-4S/ERB (Rinsate) for BTEX, PAHs, Metals, & Cyanide.

1355 : Finish loading equipment, prepare COC.

1425 : Depart for Salina, KS.

1550 : Deliver samples to Pace - Salina for transport to Pace - Lenexa.

1615 : Pick up IDW drum @ Geocore - Salina. - Return to Hutchinson.

1720 : Stage IDW in drum located behind the building at 2nd & Adams (NW corner).

1730 : Depart Hutchinson

1815 : Arrive in Wichita.

6-28-17

4-7-17 96323 J. Reimason

1620: TD ~~WL~~ ABMW-17R: TD 152.96

1630: Off-site

Jillian Kinsam

4-7-17

8/7/17 96323 J. Bragg

Task: Low Flow GW Sampling

Weather: Cloudy, 70s, Variable Wind 3.8 mph

Personnel: Joshua Bragg

1145 Arrive on site

1220 Start gauging wells

Well ID	WL	TD	NAPL	Notes
ABMW-12S	15.90	31.02	—	— *See Page 60
ABMW-12D	17.20	47.95	—	—
ABMW-16S	17.55	28.59	—	—
ABMW-16D	18.29	42.77	—	—
ABMW-15S	17.62	29.21	—	—
ABMW-15D	17.29	43.02	—	—
ABMW-13S	18.02	29.41	—	—
ABMW-13D	16.69	43.19	—	— *See page 60
ABMW-11	17.14	57.69	—	—
ABMW-4	17.39	39.94	—	Opened well cap; Full of water
ABMW-3S	17.65	24.71	—	
ABMW-3D	17.84	39.59	—	—
ABMW-21	17.63	43.55	—	—
ABMW-20	17.89	43.53	—	—
ABMW-19	18.18	26.08	—	—
ABMW-1S	18.03	24.40	—	—
ABMW-1D	18.59	39.45	—	—
ABMW-2	17.63	24.59		
ABMW-14S	17.44	29.39	—	—
ABMW-14D	17.74	42.89	—	—

8/7/17 96323 J. Bragg

Well ID	WL	TD	NAPL	Notes
CIMW-~~4~~ 8/7-4	18.72	27.19	—	—
CIMW-1	17.71	27.32	—	—
ABMW-17S	18.65	29.16	—	—
ABMW-17R	18.45	52.93	—	—
ABMW-17D	18.06	42.34	—	—
ABMW-5	~~18.43~~ 8/7	18.98	29.93	— —
ABMW-5D	18.43	43.58	—	—
ABMW-18S	18.98	29.58	—	—
ABMW-18D	19.02	43.00	—	—
ABMW-8	18.43	~~43.28~~ 8/7	26.82	— —
ABMW-8D	18.25	43.28	—	—
ABMW-6	18.88	34.82	—	—
ABMW-7	18.89	26.56	—	No Bolts
ABMW-9	19.49	26.58	—	—
ABMW-9D	18.69	42.82	—	—
ABMW-10	20.12	26.69	—	—

1801 Done gauging wells. Leaving job site.

Joshua Bragg 8/7/17

8/8/17 96323 J. Bragg

Task: Low Flow GW Sampling

Weather: 60s-80s, Partly Cloudy, ESE 5-10mph

Personnel: Joshua Bragg

0702 Arrive to off-site wells

0706 Calibrate YSI and check turbidimeter

0738 Setting up on ABMW-7

0805 Started purging

0833 Collect [ABMW-7/GW] For BTEX, RCRA Metals, Total Cyanide, PAHs

0918 Set up on ABMW-8

0944 Start Purging

1008 Air leak; Going to hardware store

1116 Set up on ABMW-8

1132 Start Purging

1203 Collect [ABMW-8/GW] For BTEX, RCRA Metals, Total Cyanide, PAHs

1216 Set up on ABMW-8D + ~~per~~ 8/8

1234 Start Purging

1300 Collect [ABMW-8D/GW] for BTEX, RCRA Metals, Total Cyanide, PAHs

1330 Leave for Lunch

1214 Arrived at off-site wells; Set up on ABMW-5

1230 Start Purging

8/8/17 96323 J. Bragg

1458 Collect ABMW-5/GW1 For BTEX, RCRA Metals, Total Cyanide, PAHs

1520 Setting up on ABMW-5D

1540 Start Purging

1609 Collect ABMW-5D/GW1 For BTEX, RCRA Metals, Total Cyanide, PAHs

1647 Set up on ABMW-18D

1703 Start Purging

1734 Collect ABMW-18D/GW1 For BTEX, RCRA Metals, Total Cyanide, PAHs

1811 Place IDW From Sampling in IDW Drums On-Site

1832 Leaving Site

Joshua Bragg 8/8/17

8/9/17 96323 J. Bragg

Task: Low Flow GW Sampling

Weather: 60s-80s, Mostly Cloudy, Wind Variable 1.8 mph

Personnel: Joshua Bragg

0715 Arrive at off-site wells

0718 Calibrate YSI and check turbidimeter

0733 Set up on ABMW-~~9S~~ 9D

0752 Started Purging

0820 Collect ABMW-9/GW1 For BTEX, RCRA Metals, Total Cyanide, PAHs

0853 Started Purging

0935 Collect ABMW-9D/GW1 For BTEX, RCRA Metals, Total Cyanide, PAHs

0955 Collect RB-1 For BTEX, RCRA Metals, Total Cyanide, PAHs

1050 Set up on ABMW-10

1104 Start Purging

1133 Collect ABMW-10/GW1 And DUP-1/GW1 For BTEX, RCRA Metals, Total Cyanide, PAHs

1215 Leave For Lunch

1250 Set up on ABMW-~~12S~~ 12-D

1320 Vertical Descent Impeded; Move on to ABMW-12S

1400 Begin Purging

1433 Collect ABMW-12S/GW1 For BTEX,

8/9/17 96323 J. Bragg

RCRA Metals, Total Cyanide, PAHs

1505 Addressing note from pg. 55: Well gauging on 8/7/17 does not seem accurate for WL. Use 17.29 ft for current WL. TD was the same.

1522 Set up on ABMW-12D

1532 Started Purging

↑ Collect [ABMW-12D/GW1] For BTEX,

1609 RCRA Metals, Total Cyanide, PAHs

1648 Collect [RB-2] For BTEX, RCRA Metals, Total Cyanide, PAHs

1706 Set up on ABMW-13D

1713 Regauging ABMW-12D. WL is 17.51. Possible probe was malfunctioning on this well. Other wells in range. TD the same.

1720 Start purging

1753 Collect [ABMW-13D/GW1] For BTEX, RCRA Metals, Total Cyanide, PAHs

1620 Placed IDW in drums; Leaving site

Joshua Bragg 8/9/17

8/10/17 96323 J. Bragg

Task: Low Flow Groundwater Sampling

Weather: 60s-80s, Cloudy, ENE 6 mph

Personnel: Joshua Bragg

0701 Arrive on site

0704 Calibrate YSI Pro Plus and check turbidimeter

0732 Set up on ABMW-13S

0750 Start Purging

0813 Collect [ABMW-13S/GW1] For BTEX, RCRA Metals, Total Cyanide, PAHs

0845 Set up on ABMW-15S

0852 Start Purging

~~0908~~ 8/10 0913 Collect [ABMW-15S/GW1] For BTEX, RCRA Metals, Total Cyanide, PAHs

0940 Set up on ABMW-15D

0948 Start Purging

1034 Collect [ABMW-15D/GW1] For BTEX, RCRA Metals, Total Cyanide, PAHs

1100 Leave site for supplies

1132 Back on site

1133 Set up on ABMW-16D

1201 Start purging

1242 Collect [ABMW-16D/GW1] For BTEX, RCRA Metals, Total Cyanide, PAHs

1356 Set up on ABMW-16S

~~Start Purging~~ ~~8/10/17~~

8/10/17 96323 J. Bragg

1410 ABMW-16S has NAPL on interface Probe, ~~2.7 inch~~ 1.27 ft thickness

1450 Leave for Lunch

1522 Returned to site

1528 Set up on ABMW-11

1545 Start Purging

1616 Collect ABMW-11/GW1 and DUP-2/GW1 for BTEX, RCRA Metals, Total Cyanide, PAHs

1721 Place Purge water in IDW Drum

1728 Leave site

Joshua Bragg 8-10-17

8/11/17 96323 J. Bragg

Task: Slug Testing

Weather: 60s-80s, Sunny, NNE 8 mph

Personnel: Joshua Bragg

0735 Arrive on site

0741 Set up on ABMW-13D

0847 Set up on ABMW-13S

1012 Set up on ABMW-12D

1046 Set up on ABMW-12S

1121 Set up on ABMW-11

1213 Inspected ABMW-21; NAPL Present on Tape; thickness at least 0.28 ft.

1229 Leave site for supplies

1255 Returned to site

1257 Place IDW Purge Water in IDW-1

1305 Leave site

Joshua Bragg 8-11-17

ATTACHMENT 2

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-10-17 SITE: One Gas FMGP Abilene PROJECT 96323

WEATHER: 70s, Cloudy

WELL IDENTIFICATION

ABMW-155

DEPTH TO WATER (ft bTOC): 17.88

WELL TOTAL DEPTH (ft bTOC): 29.26

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 11.38 ft of water in casing X .1632 gallon/foot = 1.86 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0856	1	100	6.48	16.3	1.203	90.4	93.6	0.53	17.91
0859	0.079	100	6.33	16.3	1.184	36.1	87.9	0.32	17.91
0902	0.079	100	6.26	16.2	1.180	15.9	85.6	0.27	17.91
0905	0.079	100	6.22	16.2	1.179	13.1	84.2	0.23	17.91
0908	0.079	100	6.19	16.1	1.186	13.0	84.2	0.19	17.91
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0913	0.316	6.19	16.1	1.186	13.0	84.2	0.19	17.91	—

FINAL DEPTH TO WATER (ft bTOC): 17.88 TIME FINAL DEPTH TAKEN: 0938

SAMPLE ID: ABMW-155/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.316 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg		8-10-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-9-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 60s, Partly Cloudy

WELL IDENTIFICATION

ABMW-9

DEPTH TO WATER (ft bTOC): 19.50

WELL TOTAL DEPTH (ft bTOC): 26.58

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 7.08 ft of water in casing X .1632 gallon/foot = 1.16 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0755	1	100	6.68	18.3	1.258	477	126.1	0.49	19.54
0759	.106	100	6.73	18.7	1.270	830	116.6	0.44	19.54
0803	.106	100	6.80	18.5	1.292	732	106.6	0.24	19.54
0807	.106	100	6.84	18.6	1.300	614	95.4	0.22	19.54
0811	.106	100	6.85	18.6	1.300	584	94.2	0.21	19.54
0815	.106	100	6.85	18.6	1.301	546	93.6	0.19	19.54
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0820	0.53	6.85	18.6	1.301	546	93.6	0.19	19.54	—

FINAL DEPTH TO WATER (ft bTOC): 19.50 TIME FINAL DEPTH TAKEN: 0836

SAMPLE ID: ABMW-9/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.53 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-9-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-9-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 70s, Mostly Cloudy

WELL IDENTIFICATION

ABMW-9D

DEPTH TO WATER (ft bTOC): 18.77

WELL TOTAL DEPTH (ft bTOC): 42.82

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 24.05 ft of water in casing X .162 gallon/foot = 3.92 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0900	1	100	6.93	20.8	1.304	546	68.7	2.10	18.76
0905	.132	100	6.95	19.1	1.401	38.5	40.3	0.45	18.76
0910	.132	150	6.94	18.6	1.404	29.4	31.3	0.26	18.76
0915	.132	150	6.93	18.0	1.400	23.5	28.1	0.20	18.76
0920	.132	150	6.89	17.7	1.396	24.5	20.3	0.14	18.76
0925	.132	150	6.87	17.7	1.395	19.2	17.4	0.11	18.76
0930	.132	150	6.86	17.8	1.396	21.2	12.2	0.10	18.76
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0935	0.792	6.86	17.8	1.396	21.2	12.2	0.10	18.76	—

FINAL DEPTH TO WATER (ft bTOC): 18.77 TIME FINAL DEPTH TAKEN: 0945

SAMPLE ID: ABMW-9D/GW1 SAMPLE FOR QC: RB-1

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.792 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-9-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-8-17 SITE: One Gas FMGP Abilene PROJECT 96323

WEATHER: 80s, Sunny

WELL IDENTIFICATION

ABMW-5

DEPTH TO WATER (ft bTOC): 19.01

WELL TOTAL DEPTH (ft bTOC): 29.03

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 10.02 ft of water in casing X .1632 gallon/foot = 1.64 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump (Nondedicated Bladder Pump) Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1436	1	100	6.87	19.6	1.274	ORR	58.7	0.20	19.05
1440	.106	100	6.84	20.4	1.265	1000	49.5	0.14	19.05
1444	.106	100	6.86	20.5	1.254	1000	41.6	0.11	19.05
1447	.079	100	6.86	20.2	1.240	722	34.3	0.09	19.05
1450	.079	100	6.86	20.1	1.241	604	31.3	0.09	19.05
1453	.079	100	6.86	19.6	1.239	327	27.0	0.09	19.05
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: (Same as Above) Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1458	0.449	6.86	19.6	1.239	327	27.0	0.09	19.05	—

FINAL DEPTH TO WATER (ft bTOC): 19.01 TIME FINAL DEPTH TAKEN: 1513

SAMPLE ID: ABMW-5/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.449 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? South	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-8-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-8-17 SITE: One Gas FMGP Abilene PROJECT 96323

WEATHER: 80s, Sunny

WELL IDENTIFICATION

ABMW-5D

DEPTH TO WATER (ft bTOC): 18.44

WELL TOTAL DEPTH (ft bTOC): 43.58

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION 25.14 ft of water in casing X .1632 gallon/foot = 4.10 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1544	i	100	6.97	21.9	1.370	50.9	63.5	0.40	18.46
1548	.106	100	6.97	21.9	1.389	17.8	53.3	0.31	18.46
1552	.106	100	6.97	22.4	1.396	8.47	41.1	0.21	18.46
1555	.079	100	6.97	21.7	1.397	7.39	37.0	0.18	18.46
1558	.079	100	6.97	21.9	1.394	12.7	30.9	0.16	18.46
1601	.079	100	6.97	21.8	1.400	11.8	24.8	0.20	18.46
1604	.079	100	6.98	21.6	1.402	11.5	22.6	0.17	18.46
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1609	0.528	6.98	21.6	1.402	11.5	22.6	0.17	18.46	—

FINAL DEPTH TO WATER (ft bTOC): 18.44 TIME FINAL DEPTH TAKEN: 1619

SAMPLE ID: ABMW-5D/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.528 FLOW THROUGH CELL MODEL #: YSI ProPlus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-8-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-8-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 70s, Sunny

WELL IDENTIFICATION

AB MW-8

DEPTH TO WATER (ft bTOC): 18.44

WELL TOTAL DEPTH (ft bTOC): 26.82

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 8.38 ft of water in casing X .1632 gallon/foot = 1.37 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1136	1	100	6.27	20.9	1.137	ORR	108.5	0.90	18.14
1140	.106	100	6.57	20.2	1.123	1000	107.2	0.68	18.14
1144	.106	100	6.60	20.2	1.118	1000	106.7	0.64	18.14
1148	.106	100	6.60	19.7	1.117	705	105.1	0.60	18.14
1152	.106	100	6.54	19.1	1.121	281	105.5	0.59	18.14
1155	.079	100	6.60	19.0	1.119	168	105.1	0.60	18.14
1158	.079	100	6.54	18.6	1.121	80.9	104.5	0.58	18.14
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1203	0.582	6.54	18.6	1.121	80.9	104.5	0.58	18.14	—

FINAL DEPTH TO WATER (ft bTOC): 18.44 TIME FINAL DEPTH TAKEN: 1215

SAMPLE ID: ABMW-8/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.582 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-8-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-8-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 80s, Sunny

WELL IDENTIFICATION

ABMW-8D

DEPTH TO WATER (ft bTOC): 18.35

WELL TOTAL DEPTH (ft bTOC): 43.28

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 24.93 ft of water in casing X .163 gallon/foot = 4.07 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump (Nondedicated Bladder Pump) Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1238	1	100	6.96	22.1	1.065	18.5	61.7	0.86	18.34
1242	.106	100	6.98	21.5	1.096	18.2	50.7	0.57	18.34
1246	.106	100	6.98	21.5	1.110	18.5	36.4	0.42	18.34
1249	.079	100	6.98	21.1	1.111	17.8	35.5	0.38	18.34
1252	.079	100	6.99	20.9	1.110	14.8	33.2	0.36	18.34
1255	.079	100	6.99	20.9	1.109	15.0	31.0	0.28	18.34
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: (Same as Above) Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1300	0.449	6.99	20.9	1.109	15.0	31.0	0.28	18.34	—

FINAL DEPTH TO WATER (ft bTOC): 18.35 TIME FINAL DEPTH TAKEN: 1305

SAMPLE ID: ABMW-8D/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.449 FLOW THROUGH CELL MODEL #:

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s):

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-8-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-9-17 SITE: One Gas FMGP Abilene PROJECT 96323

WEATHER: 80s, Sunny

WELL IDENTIFICATION

ABMW-13D

DEPTH TO WATER (ft bTOC): 17.51

WELL TOTAL DEPTH (ft bTOC): 43.19

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 25.68 ft of water in casing X .1612 gallon/foot = 4.14 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1724	0	100	6.96	20.7	1.266	84.5	68.1	1.44	17.51
1727	.079	100	7.00	18.8	1.373	16.2	45.1	0.36	17.51
1730	.079	100	7.01	18.7	1.379	15.8	37.8	0.27	17.51
1733	.079	100	7.01	18.8	1.382	10.0	33.5	0.24	17.51
1736	.079	100	7.02	18.4	1.387	7.86	24.2	0.18	17.51
1739	.079	100	7.03	18.3	1.386	7.45	17.9	0.15	17.51
1742	.079	100	7.03	18.1	1.387	9.10	12.6	0.14	17.51
1745	.079	100	7.04	18.0	1.387	7.14	7.2	0.15	17.51
1748	.079	100	7.04	18.1	1.385	6.58	2.9	0.13	17.51

Continued on back (circle one) yes / no

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1753	0.632	7.04	18.1	1.385	6.58	2.9	0.13	17.51	—

FINAL DEPTH TO WATER (ft bTOC): 17.44 TIME FINAL DEPTH TAKEN: 1807

SAMPLE ID: ABMW-13D/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.632 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? NA	
Bumper Posts? NA	
Protective Casing? Good	
Paint and Label? Good	
Lock? NA	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-9-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-10-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 60s, Cloudy

WELL IDENTIFICATION

ABMW-13S

DEPTH TO WATER (ft bTOC): 18.08

WELL TOTAL DEPTH (ft bTOC): 29.45

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 11.37 ft of water in casing X .1632 gallon/foot = 1.86 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0756	i	100	5.87	16.9	1.331	7.74	127.6	0.37	18.10
0759	.079	100	5.88	16.9	1.330	273	122.1	0.17	18.10
0802	.079	100	5.85	16.8	1.330	326	118.6	0.14	18.10
0805	.079	100	5.88	16.8	1.330	324	114.1	0.10	18.10
0808	.079	100	5.88	16.8	1.330	231	111.8	0.09	18.10
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0813	0.316	5.88	16.8	1.330	231	111.8	0.09	18.10	—

FINAL DEPTH TO WATER (ft bTOC): 18.10 TIME FINAL DEPTH TAKEN: 0822

SAMPLE ID: ABMW-13S/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.316 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? NA	
Bumper Posts? NA	
Protective Casing? Good	
Paint and Label? Good	
Lock? NA	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-10-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-10-17 SITE: One Gas FMGP Abilene PROJECT 96323

WEATHER: 80s, Cloudy

WELL IDENTIFICATION

ABMW-16D

DEPTH TO WATER (ft bTOC): 18.34

WELL TOTAL DEPTH (ft bTOC): 42.79

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 24.45 ft of water in casing X .1632 gallon/foot = 3.99 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1210	1	100	6.22	18.0	1.162	24.9	70.8	0.91	18.20
1213	.079	100	6.01	17.9	1.174	19.4	71.7	0.72	18.20
1216	.079	100	5.95	17.8	1.183	18.9	71.4	0.52	18.20
1219	.079	100	5.90	17.9	1.184	15.6	71.2	0.49	18.20
1222	.079	100	5.84	17.7	1.189	13.0	70.9	0.33	18.20
1225	.079	100	5.82	17.7	1.189	7.01	70.6	0.25	18.20
1228	.079	100	5.79	17.7	1.188	6.55	70.3	0.19	18.20
1231	.079	100	5.75	18.0	1.184	5.94	70.2	0.20	18.18
1234	.079	100	5.74	18.0	1.184	6.47	70.1	0.17	18.18
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1242	0.711	5.73	17.8	1.186	5.52	70.3	0.20	18.18	—

FINAL DEPTH TO WATER (ft bTOC): 18.34 TIME FINAL DEPTH TAKEN: 1312

SAMPLE ID: ABMW-16D/GW1 SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.711 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-10-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-9-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 80s, Cloudy

WELL IDENTIFICATION

ABMW-10

DEPTH TO WATER (ft bTOC): 20.12

WELL TOTAL DEPTH (ft bTOC): 26.69

WELL DIAMETER (inches): 2"

PURGING:

CASING VOLUME CALCULATION: 6.57 ft of water in casing X .1632 gallon/foot = 1.07 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1108	1	100	5.76	17.3	1.175	ORR	89.5	0.49	20.12
1112	.106	100	5.73	16.7	1.185	ORR	89.8	0.42	20.12
1116	.106	100	5.73	16.6	1.186	ORR	89.9	0.30	20.12
1120	.106	100	5.74	16.5	1.198	ORR	89.3	0.25	20.12
1124	.106	100	5.76	16.7	1.202	ORR	88.0	0.20	20.12
1128	.106	100	5.85	16.6	1.199	ORR	86.0	0.18	20.12
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1133	0.53	5.85	16.6	1.199	ORR	86.0	0.18	20.12	—

FINAL DEPTH TO WATER (ft bTOC): 20.12 TIME FINAL DEPTH TAKEN: 1214

SAMPLE ID: ABMW-10/6 W1 SAMPLE FOR QC: DUP-1/6 W1

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.53 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg		8-9-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-8-17 SITE: One Gas FMGP Abilene PROJECT 96323

WEATHER: 70s, Sunny

WELL IDENTIFICATION

ABMW-7

DEPTH TO WATER (ft bTOC): 19.04

WELL TOTAL DEPTH (ft bTOC): 26.58

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 7.54 ft of water in casing X .1632 gallon/foot = 1.23 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump (Nondedicated Bladder Pump) Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0808	i	100	6.84	18.1	1.142	24.1	127.4	0.36	19.04
0812	0.106	200	6.88	18.2	1.136	18.9	119.6	0.33	19.04
0816	0.106	200	6.90	18.3	1.139	19.4	115.2	0.34	19.04
0820	0.106	200	6.90	18.3	1.137	19.1	109.0	0.26	19.04
0824	0.106	200	6.90	18.3	1.137	18.7	104.6	0.25	19.04
0828	0.106	200	6.91	18.9	1.132	15.5	99.7	0.24	19.04
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: (Same as Above) Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0833	0.53	6.91	18.9	1132	15.5	99.7	0.24	19.04	—

FINAL DEPTH TO WATER (ft bTOC): 19.04 TIME FINAL DEPTH TAKEN: 0856

SAMPLE ID: ABMW-7/GW1 SAMPLE FOR QC:

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.53 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): Joshua Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-8-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-10-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 80s, Cloudy

WELL IDENTIFICATION

ABMW-11

DEPTH TO WATER (ft bTOC): 17.69

WELL TOTAL DEPTH (ft bTOC): 57.72

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 40.03 ft of water in casing X .1632 gallon/foot = 6.53 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump? Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1553	0	100	5.74	21.0	1.177	11.3	216.3	0.98	17.68
1556	.079	100	5.73	19.7	1.201	10.3	201.4	0.82	17.69
1559	.079	100	5.97	19.6	1.227	13.6	193.9	0.58	17.69
1602	.079	100	5.99	19.7	1.251	13.0	184.0	0.44	17.69
1605	.079	100	5.88	20.0	1.264	12.7	156.0	0.30	17.69
1608	.079	100	5.83	20.0	1.268	6.35	153.0	0.26	17.69
1611	.079	100	5.79	20.1	1.269	6.61	149.2	0.24	17.69
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1616	0.474	5.79	20.1	1.269	6.61	149.2	0.24	17.69	—

FINAL DEPTH TO WATER (ft bTOC): 17.06 TIME FINAL DEPTH TAKEN: 17.60

SAMPLE ID: ABMW-11 SAMPLE FOR QC: DUP-2/GW1

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.474 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	—
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing?	
Reference Point?	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg		8-10-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-9-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 70s, Cloudy

WELL IDENTIFICATION

ABMW-12S

DEPTH TO WATER (ft bTOC): 17.29

WELL TOTAL DEPTH (ft bTOC): 31.02

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 13.73 ft of water in casing X .1632 gallon/foot = 2.24 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump (Nondedicated Bladder Pump) Baller Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1407	1	100	6.61	19.0	1.224	34.7	88.1	0.34	17.48
1411	.106	100	6.70	19.3	1.268	24.9	87.0	0.13	17.48
1415	.106	100	6.70	19.2	1.268	22.3	86.9	0.13	17.48
1419	.106	100	6.70	19.2	1.271	13.2	85.9	0.11	17.48
1423	.106	100	6.70	19.2	1.266	8.65	84.5	0.12	17.48
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: (Same as Above) Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1428	0.424	6.70	19.2	1.266	8.65	84.5	0.12	17.48	—

FINAL DEPTH TO WATER (ft bTOC): 17.29 TIME FINAL DEPTH TAKEN: 1505

SAMPLE ID: ABMW-12S/GW1 SAMPLE FOR QC:

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.424 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? NA	
Bumper Posts? NA	
Protective Casing? Good	
Paint and Label? Good	
Lock? NA	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-9-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-9-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 70s, Cloudy

WELL IDENTIFICATION: AB/MW-12D

DEPTH TO WATER (ft bTOC): 17.25

WELL TOTAL DEPTH (ft bTOC): 47.95

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 30.7 ft of water in casing X .1632 gallon/foot = 5.01 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump (Nondedicated Bladder Pump) Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1538	0	100	6.86	21.0	1.197	22.5	80.0	0.86	17.27
1542	.106	100	6.84	21.1	1.278	27.2	72.2	0.37	17.27
1546	.106	100	6.83	20.9	1.290	28.5	66.9	0.25	17.27
1550	.106	100	6.83	20.5	1.311	81.9	50.8	0.13	17.27
1554	.106	100	6.84	20.6	1.310	83.1	45.7	0.10	17.27
1558	.106	100	6.83	20.6	1.319	84.4	30.8	0.07	17.27
1601	0.079	100	6.84	20.6	1.319	97.1	28.6	0.08	17.27
1604	0.079	100	6.84	20.5	1.319	84.5	25.5	0.09	17.27
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: (Same as Above) Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1609	0.688	6.84	20.5	1.319	84.5	25.5	0.09	17.27	—

FINAL DEPTH TO WATER (ft bTOC): 17.25 TIME FINAL DEPTH TAKEN: 1614

SAMPLE ID: AB/MW-12D/GW1 SAMPLE FOR QC: RB-2

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? NA	
Bumper Posts? NA	
Protective Casing? Good	
Paint and Label? Good	
Lock? NA	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-9-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-8-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 80s, Sunny

WELL IDENTIFICATION

ABMW-18D

DEPTH TO WATER (ft bTOC): 19.02

WELL TOTAL DEPTH (ft bTOC): 43.00

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 23.98 ft of water in casing X .1632 gallon/foot = 3.91 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump (Nondedicated Bladder Pump) Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1707	1	100	6.89	20.4	1.420	ORR	66.3	0.39	19.02
1711	.106	100	6.89	19.9	1.447	ORR	56.2	0.19	19.02
1716	.106	100	6.91	19.7	1.448	1000	47.4	0.15	19.02
1719	.106	100	6.91	19.8	1.447	713	41.5	0.13	19.02
1723	.106	100	6.91	19.7	1.447	532	34.1	0.11	19.02
1726	.079	100	6.92	19.5	1.447	425	29.9	0.11	19.02
1729	.079	100	6.92	19.5	1.447	394	27.7	0.10	19.02
Continued on back (circle one) yes / no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: (Same as Above) Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1734	0.582	6.92	19.5	1.447	394	27.7	0.10	19.02	—

FINAL DEPTH TO WATER (ft bTOC): 19.02 TIME FINAL DEPTH TAKEN: ~~19.02~~ ~~8/8~~ 1752

SAMPLE ID: ABMW-18D/GW1 SAMPLE FOR QC:

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.582 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-8-17
REVIEWED:			

FIELD GROUNDWATER SAMPLING DATA FORM

DATE: 8-10-17 SITE: OneGas FMGP Abilene PROJECT 96323

WEATHER: 70s, Cloudy

WELL IDENTIFICATION

ABMW-15D

DEPTH TO WATER (ft bTOC): 17.55

WELL TOTAL DEPTH (ft bTOC): 43.00

WELL DIAMETER (inches): 2

PURGING:

CASING VOLUME CALCULATION: 25.45 ft of water in casing X .1632 gallon/foot = 4.15 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other:

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0956	i	100	6.96	17.0	1.227	25.1	75.6	0.84	17.60
0959	0.079	100	6.98	16.8	1.294	22.3	58.6	0.38	17.60
1002	0.079	100	6.98	16.8	1.306	22.9	51.0	0.29	17.60
1005	0.079	100	6.99	16.9	1.314	22.4	42.1	0.23	17.60
1008	0.079	100	6.99	16.9	1.318	20.1	36.1	0.21	17.60
1011	0.079	100	6.99	16.9	1.320	23.7	30.6	0.17	17.60
1014	0.079	100	7.00	17.0	1.322	22.1	25.0	0.15	17.60
1017	0.079	100	7.00	16.9	1.323	19.1	19.7	0.15	17.60
1020	0.079	100	7.00	16.9	1.322	16.1	14.0	0.13	17.60
Continued on back (circle one) yes no									

Well Purged Below Top of Pump? (Y/N): N Time to Recharge: — Depth to Water (ft bTOC): —

SAMPLING Equipment Used: Same as Above Other:

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1034	0.869	7.00	16.8	1.325	10.2	0.3	0.12	17.60	—

FINAL DEPTH TO WATER (ft bTOC): 17.55 TIME FINAL DEPTH TAKEN: 1051

SAMPLE ID: ABMW-15D SAMPLE FOR QC: —

PARAMETERS REQUESTD FOR ANALYSIS: BTEX, RCRA Metals, Total Cyanide, PAHs

IDW PURGE WATER TOTAL (gal): 0.869 FLOW THROUGH CELL MODEL #: YSI Pro Plus

Well Condition	Remarks
Concrete Pad? N/A	
Bumper Posts? N/A	
Protective Casing? Good	
Paint and Label? Good	
Lock? N/A	
Well Casing? Good	
Reference Point? Good	

Field Sampler(s) Name(s): J. Bragg

	NAME	SIGNATURE	DATE
PREPARED:	Joshua Bragg	[signature]	8-10-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING DATA FORM (continued)

WELL IDENTIFICATION

ABMW-15D

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1023	0.079	100	7.00	16.8	1.324	15.0	7.9	0.12	17.60
1026	0.079	100	7.00	16.9	1.324	14.7	2.8	0.14	17.60
1029	0.079	100	7.00	16.8	1.325	10.2	0.3	0.12	17.60

COMMENTS

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-20-17 SITE: ONEGAS - Kansas City PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear, 80s, SW wind 5-10 mph

WELL NUMBER: KCMW-1

DEPTH TO WATER (ft): 15.86

TOTAL DEPTH (ft): 31.35 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0907	I	150	6.67	23.83	1.414	35.4	117.9	8.03	15.99
0912	0.2	100	6.47	22.60	1.432	29.1	120.4	2.88	16.04
0917	0.33	100	6.54	23.05	1.464	25.7	114.8	2.15	16.09
0922	0.46	100	6.52	22.89	1.465	22.0	114.5	1.94	16.09
0927	0.59	100	6.52	23.14	1.479	19.7	112.5	1.78	16.09
0932	0.72	100	6.53	23.27	1.487	15.7	111.8	1.60	16.11
0937	0.85	100	6.53	23.38	1.491	15.1	110.1	1.58	16.11
0942	0.98	100	6.52	23.38	1.491	14.8	109.0	1.52	16.11

Continued on back (circle one) yes / ~~no~~

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0945	1.05	6.52	23.40	1.491	14.8	109.0	1.51	16.11	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.5

FINAL DEPTH TO WATER (ft TOC): 16.15 TIME FINAL DEPTH TAKEN: 1008

SAMPLE ID: KCMW-1/GW01 SAMPLE ID FOR QC: KCMW-1/GW01MS/MSD

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, RCRA8 Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: _____

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-20-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-20-17 SITE: ONEGAS - Kansas City PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear, 80s, S wind 5-10 mph

WELL NUMBER

KCMW-2

DEPTH TO WATER (ft): 19.50

TOTAL DEPTH (ft): 39.51 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1319	I	150	7.35	26.74	0.459	32.6	67.7	12.62	20.03
1324	0.2	150	6.80	25.40	0.411	14.6	91.1	5.81	19.95
1329	0.4	150	6.66	25.03	0.398	12.9	99.1	5.05	19.95
1334	0.6	150	6.63	24.76	0.396	11.2	101.3	4.88	19.95
1339	0.8	150	6.64	24.65	0.393	10.8	101.7	4.77	19.95
1344	1.0	150	6.62	24.80	0.393	10.5	102.3	4.80	19.95

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1345	1.1	6.66	24.82	0.393	10.5	101.2	4.60	19.95	clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.6

FINAL DEPTH TO WATER (ft TOC): 19.95 TIME FINAL DEPTH TAKEN: 1355

SAMPLE ID: KCMW-2/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: - After: -

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	I. Bryant	[signature]	6-20-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-20-17 SITE: ONEGAS - Kansas City PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear, 80s, S wind 5-10 mph

WELL NUMBER: KCMW-3

DEPTH TO WATER (ft): 12.16

TOTAL DEPTH (ft): 35.25 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1424	I	150	6.95	27.21	1.150	125	-113.4	15.10	12.51
1429	0.2	100	6.77	24.88	1.190	170	-114.1	2.97	12.65
1434	0.33	100	6.80	25.60	1.225	255	-120.5	1.75	12.65
1439	0.46	100	6.81	25.71	1.232	223	-122.5	1.23	12.69
1444	0.59	100	6.82	26.03	1.240	219	-122.7	1.09	12.69
1449	0.72	100	6.82	25.94	1.242	224	-124.2	0.94	12.74
1454	0.85	100	6.81	26.09	1.246	198	-123.6	0.85	12.79
1459	0.98	100	6.81	25.89	1.241	177	-124.3	0.81	12.81
1504	1.11	100	6.79	25.85	1.225	136	-119.7	0.79	12.81
1509	1.24	100	6.79	25.36	1.227	121	-118.6	0.79	12.81
1514	1.37	100	6.79	25.48	1.229	109	-120.4	0.77	12.81
1519	1.50	100	6.80	25.32	1.224	89.4	-119.7	0.76	12.83
1524	1.67	100	6.79	25.47	1.229	47.9	-118.6	0.76	12.83
1529	1.80	100	6.80	25.45	1.236	40.8	-118.0	0.75	12.83

Continued on back (circle one) yes / ~~no~~ JB

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1535	2.0	6.81	25.62	1.247	24.7	-122.0	0.74	12.83	clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.5

FINAL DEPTH TO WATER (ft TOC): 12.83 TIME FINAL DEPTH TAKEN: 1602

SAMPLE ID: KCMW-3 1GW01 SAMPLE ID FOR QC: KCDUP-2 1GW01

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-20-17
REVIEWED:			

WELL NUMBER

KCMW-3

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1534	1.93	100	6.81	25.57	1,241	24.7	-119.5	0.78	12.83

COMMENTS

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-19-17 SITE: ONEGAS PID READING at WELL HEAD (ppm): NA

PROJECT NUMBER: 96323 WEATHER: Clear to PC, 80s, S wind 5 mph

WELL NUMBER: KCMW-4

DEPTH TO WATER (ft): 18.70

TOTAL DEPTH (ft): 39.04 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1845	I	200	6.98	24.86	0.695	39.5	61.9	11.49	19.70
1850	0.26	100	6.56	23.51	0.610	29.7	83.4	7.05	19.80
1855	0.39	100	6.30	24.17	0.604	20.1	84.6	6.37	19.89
1900	0.52	75	6.44	24.50	0.603	17.6	87.8	5.64	19.89
1905	0.62	75	6.41	24.45	0.603	15.0	90.1	5.39	19.89
1910	0.72	75	6.36	24.39	0.598	14.6	96.2	5.54	19.89

Continued on back (circle one) yes (no)

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1910	0.72	6.36	24.39	0.598	14.6	96.2	5.54	19.89	Clear

FERROUS IRON (mg/L): NA ALKALINITY (mg/L): NA IDW TOTAL: 1.2

FINAL DEPTH TO WATER (ft TOC): 19.89 TIME FINAL DEPTH TAKEN: 1920

SAMPLE ID: KCMW-4/GW01 SAMPLE ID FOR QC: KCMW-4/~~GW02~~ ERB

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, RCRA 8, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: 70 After: 70

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-19-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-20-17 SITE: ONEGAS - Kansas City PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear, 70s, SW 5-10 mph

WELL NUMBER: KCMW-7S

DEPTH TO WATER (ft): 29.91

TOTAL DEPTH (ft): 34.43 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0755	I	100	6.51	21.87	0.618	60.1	112.4	10.71	29.99
0800	0.13	100	6.35	21.27	0.605	57.6	132.6	9.05	29.99
0805	0.26	100	6.26	21.10	0.623	33.8	136.8	8.39	29.98
0810	0.39	100	6.26	21.06	0.640	25.6	136.2	8.08	29.99
0815	0.52	100	6.30	21.18	0.658	16.9	136.1	7.81	29.99
0820	0.65	100	6.29	21.24	0.681	12.9	137.8	8.24	29.99
0825	0.78	100	6.31	21.32	0.685	10.4	138.5	7.96	29.99

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0825	0.78	6.31	21.32	0.685	10.4	138.5	7.96	29.99	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.2

FINAL DEPTH TO WATER (ft TOC): 29.99 TIME FINAL DEPTH TAKEN: 0840

SAMPLE ID: KCMW-7S/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, RCRA 8, Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-20-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-20-17 SITE: ONEGAS - Kansas City PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear, 80s, SW wind 5-10 mph

WELL NUMBER

KCMW-8S

DEPTH TO WATER (ft): 10.62

TOTAL DEPTH (ft): 17.50 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1030	I	125	7.26	23.81	0.965	143	68.0	15.02	10.96
1035	0.17	100	6.99	22.17	0.902	143	85.2	10.88	11.04
1040	0.30	90	6.88	22.96	0.912	130	98.3	9.17	11.09
1045	0.42	70	6.89	24.30	0.938	115	101.5	8.87	11.11
1050	0.51	70	6.91	25.35	0.964	61.7	104.0	8.22	11.11
1055	0.60	70	6.90	25.81	0.977	58.8	104.8	7.76	11.12
1100	0.69	70	6.90	26.25	0.987	49.6	106.1	7.56	11.12
1105	0.78	70	6.90	26.30	0.992	38.1	104.9	7.34	11.12
1110	0.87	70	6.90	26.37	0.998	23.2	105.5	7.19	11.12
1115	0.96	70	6.90	26.40	1.000	21.4	103.2	7.09	11.12

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1120	1.05	6.90	26.42	0.997	18.4	103.4	7.10	11.12	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.5

FINAL DEPTH TO WATER (ft TOC): 11.12 TIME FINAL DEPTH TAKEN: 1137

SAMPLE ID: KCMW-8S 16W01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: – After: –

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: –

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-20-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-20-17 SITE: ONEGAS - Kansas City PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear, 80s, SW wind 5-10 mph

WELL NUMBER: KCMW-10

DEPTH TO WATER (ft): 16.03

TOTAL DEPTH (ft): 27.54 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1200	I	175	7.18	25.40	1.331	128	60.5	10.57	16.12
1205	0.23	175	6.83	22.67	1.288	64.5	52.3	2.33	16.12
1210	0.46	175	6.81	22.77	1.293	56.0	50.8	1.78	16.12
1215	0.69	175	6.80	22.29	1.285	45.1	48.9	1.40	16.12
1220	0.92	175	6.82	22.63	1.291	35.9	40.9	1.51	16.12
1225	1.15	175	6.83	22.59	1.294	23.9	25.6	1.29	16.12
1230	1.38	175	6.84	22.61	1.298	19.4	14.0	1.20	16.12
1235	1.61	175	6.84	22.48	1.297	17.7	8.4	1.14	16.12

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1235	1.61	6.84	22.48	1.297	17.7	8.4	1.14	16.12	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.0

FINAL DEPTH TO WATER (ft TOC): 16.12 TIME FINAL DEPTH TAKEN: 1250

SAMPLE ID: KCMW-10/GW01 SAMPLE ID FOR QC: KCDup-1/GW01

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: – After: –

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: –

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-20-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-20-17 SITE: ONEGAS-Kansas City PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 94323 WEATHER: Clear 90s, S wind 5-10 mph

WELL NUMBER

KCMW-11D

DEPTH TO WATER (ft): 15.98

TOTAL DEPTH (ft): 41.55 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X ___ gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other ___

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1650	I	175	8.17	25.91	0.668	304	-30.1	12.29	16.30
1655	0.23	100	7.08	22.83	0.829	271	-84.2	2.48	16.95
1700	0.36	70	6.93	24.81	0.877	208	-86.7	1.91	17.29
1705	0.45	50	6.89	26.92	0.922	151	-88.3	1.56	17.55
1710	0.52	50	6.89	27.88	0.944	119	-87.7	1.54	17.70
1715	0.59	50	6.89	28.04	0.950	106	-90.1	1.61	17.85
1720	0.66	50	6.88	28.11	0.959	94.1	-89.1	1.45	18.05
1725	0.73	50	6.87	28.36	0.968	76.1	-90.1	1.40	18.22
1730	0.80	50	6.87	28.28	0.973	55.7	-88.7	1.34	18.32
1735	0.87	50	6.86	28.31	0.978	39.4	-88.2	1.41	18.50
1740	0.94	50	6.86	28.23	0.975	23.3	-91.7	1.36	18.71
1745	1.01	50	6.86	28.27	0.972	17.1	-90.4	1.33	18.83

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other ___

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1750	1.08	6.85	28.21	0.980	19.4	-92.8	1.35	18.90	clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.5

FINAL DEPTH TO WATER (ft TOC): 19.28 TIME FINAL DEPTH TAKEN: 1804

SAMPLE ID: KCMW-11D/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: ___

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-20-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-20-17 SITE: ONEGAS - Kansas City PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 94323 WEATHER: clear, 90s, S wind 5-10 mph

WELL NUMBER

KCMW-11S

DEPTH TO WATER (ft): 12.44

TOTAL DEPTH (ft): 15.03 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: 2.59 ft of water in casing X .163 gallons/foot = 0.42 total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump (Bailer) Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1629	I	—	10.5	21.3	1.970	clear	—	—	—
1634	0.5	-	10.8	19.4	1.700	clear	—	—	—
		Dry @ 0.5 gal. Allow recharge, then sample.							
Continued on back (circle one) yes / (NO)									

SAMPLING Equipment Used: (Same as above) Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1820	0.5	—	-	—	—	—	—	—	Clear

FERROUS IRON (mg/L): — ALKALINITY (mg/L): — IDW TOTAL: _____

FINAL DEPTH TO WATER (ft TOC): — TIME FINAL DEPTH TAKEN: —

SAMPLE ID: KCMW-11S 1GW01 SAMPLE ID FOR QC: —

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, Cyanide

DO METER MODEL No.: — ORP METER MODEL No.: — FLOW CELL TYPE.: —

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ N/A COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-20-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-19-17 SITE: ONEGAS PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 80s, S wind 5-10 mph

WELL NUMBER

KCMW-12D

DEPTH TO WATER (ft): 21.03

TOTAL DEPTH (ft): 55.41 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1718	I	200	6.86	21.17	1.131	31.8	38.3	6.50	20.89
1723	0.26	150	6.66	20.74	1.186	26.3	5.2	2.72	21.21
1728	0.46	150	6.58	20.49	1.249	18.5	-44.5	1.84	21.15
1733	0.66	150	6.55	20.15	1.273	17.9	-67.2	1.40	21.15
1738	0.88	150	6.54	19.91	1.300	19.6	-79.2	1.41	21.15
1743	1.08	150	6.53	19.84	1.314	18.5	-82.9	1.38	21.15
1748	1.28	150	6.53	19.75	1.329	18.3	-85.4	1.28	21.15
Continued on back (circle one) yes / no									

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1750	1.35	6.53	19.72	1.330	18.3	-85.8	1.31	21.15	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.5

FINAL DEPTH TO WATER (ft TOC): 21.15 TIME FINAL DEPTH TAKEN: 1800

SAMPLE ID: KCMW-12D/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAH, RCRA8, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: 10 After: 10

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-19-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-19-17 SITE: ONLGAS PID READING at WELL HEAD (ppm): NA

PROJECT NUMBER: 96323 WEATHER: PC, 80s, S wind 5-10 mph

WELL NUMBER

KCMW-125

DEPTH TO WATER (ft): 14.27

TOTAL DEPTH (ft): 29.26 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1535	I	250	6.46	19.65	0.912	OOR	-19.7	19.02	14.34
1540	0.33	200	6.36	18.65	0.880	848	-10.0	2.98	14.74
1545	0.64	150	6.51	18.89	0.884	561	-23.4	1.87	14.81
1550	0.84	150	6.58	19.27	0.891	353	-31.1	1.66	14.93
1555	1.04	150	6.60	19.51	0.894	265	-29.3	1.56	14.94
1600	1.24	150	6.61	19.41	0.889	209	-29.8	1.50	14.96
1605	1.44	150	6.60	19.16	0.881	166	-30.3	1.44	14.96
1610	1.64	150	6.60	19.21	0.879	139	-30.3	1.41	14.96
1615	1.84	150	6.61	19.22	0.875	119	-27.9	1.36	14.96
1620	2.04	150	6.61	19.16	0.870	102	-30.8	1.34	14.97
1625	2.24	150	6.60	19.16	0.868	89.4	-29.4	1.33	14.97
1630	2.44	150	6.61	19.19	0.864	73.7	-29.1	1.31	14.97
1635	2.64	150	6.60	19.15	0.859	55.8	-27.2	1.30	14.97
1640	2.84	150	6.60	19.10	0.855	38.6	-29.7	1.28	14.98

Continued on back (circle one) yes / ~~no~~

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1650	3.24	6.57	19.02	0.842	19.8	-25.1	1.28	14.98	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 3.5

FINAL DEPTH TO WATER (ft TOC): 14.99 TIME FINAL DEPTH TAKEN: 1700

SAMPLE ID: KCMW-125/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: VOCs (DTEX), PAH, RCRA-8, Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: 10 After: 10

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6/19/17
REVIEWED:			

WELL NUMBER

KCMW-12S

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1645	3.04	150	6.57	19.05	0.846	29.7	-26.8	1.29	14.98
1650	3.24	150	6.57	19.02	0.842	19.8	-25.1	1.28	14.98

COMMENTS

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-21-17 SITE: ONEGAS - Atchison PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC to Clear, 80s, S wind 5-10 mph

WELL NUMBER: ATMW-1

DEPTH TO WATER (ft): 12.54

TOTAL DEPTH (ft): 16.75 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1321	F	125	6.64	25.87	1.072	14.7	60.6	9.80	12.69
1326	0.17	100	6.60	24.43	0.975	8.20	90.4	6.46	12.80
1331	0.30	50	6.39	24.30	0.993	7.70	104.1	6.36	12.87
1336	0.37	50	6.38	28.27	1.029	5.67	113.1	6.09	12.96
1341	0.44	50	6.37	28.66	1.039	4.98	117.7	5.33	13.04
1346	0.51	50	6.34	28.54	1.034	5.32	123.9	5.49	13.11
1351	0.58	50	6.31	28.49	1.025	4.67	129.4	5.74	13.18

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1355	0.64	6.31	28.51	1.022	4.67	130.5	5.74	1321	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.1

FINAL DEPTH TO WATER (ft TOC): 14.15 TIME FINAL DEPTH TAKEN: 1447

SAMPLE ID: ATMW-1/GW01 SAMPLE ID FOR QC: ATMW-1/GW01 MS/MSD

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-21-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-22-17 SITE: ONEGAS-Atchison PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 70s, S wind 5-10 mph

WELL NUMBER: ATMW-2

DEPTH TO WATER (ft): 11.92

TOTAL DEPTH (ft): 18.83 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0920	I	125	6.88	21.71	1.603	34.5	-64.3	13.83	11.99
0925	0.17	90	6.54	20.05	1.602	28.5	-89.7	2.13	12.14
0930	0.29	90	6.52	20.67	1.626	29.1	-89.0	1.46	12.20
0935	0.41	80	6.59	21.45	1.645	24.6	-93.1	1.20	12.32
0940	0.53	50	6.60	21.54	1.636	22.4	-93.7	1.12	12.45
0945	0.60	50	6.60	21.61	1.622	22.8	-91.7	1.09	12.55

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0945	0.60	6.60	21.61	1.622	22.8	-91.7	1.09	12.55	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.1

FINAL DEPTH TO WATER (ft TOC): 12.85 TIME FINAL DEPTH TAKEN: 1001

SAMPLE ID: ATMW-2/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: _____

	NAME	SIGNATURE	DATE
PREPARED:	T. Bryant	[signature]	6-22-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-21-17 SITE: ONE GAS - Atchison PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 80s, S wind 5-10 mph

WELL NUMBER: ATMW-3

DEPTH TO WATER (ft): 12.96

TOTAL DEPTH (ft): 17.18 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1512	I	100	6.29	28.17	1.960	8.97	95.4	7.38	13.05
1517	0.13	50	6.12	26.64	1.908	7.51	106.7	2.29	13.16
1522	0.20	50	6.09	27.94	1.951	6.35	111.4	1.61	13.25
1527	0.27	50	6.09	28.65	1.979	5.61	113.4	1.68	13.29
1532	0.34	50	6.08	28.74	2.033	5.82	111.5	1.69	13.36
1537	0.41	50	6.08	28.79	2.047	4.49	110.9	1.76	13.42
1542	0.48	50	6.06	28.75	2.054	3.32	110.7	1.62	13.49

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1545	0.54	6.04	28.72	2.054	3.32	110.3	1.60	13.53	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1

FINAL DEPTH TO WATER (ft TOC): 13.78 TIME FINAL DEPTH TAKEN: 1603

SAMPLE ID: ATMW-3 | GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-21-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-21-17 SITE: ONEGAS - Atchison PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 80s, SSE wind 5-15 mph

WELL NUMBER

ATMW-4

DEPTH TO WATER (ft): 10.11

TOTAL DEPTH (ft): 19.80 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1631	±	100	6.50	29.14	0.785	50.3	-11.5	13.69	10.11
1636	0.13	100	6.31	27.22	0.802	54.6	-34.8	2.49	10.21
1641	0.26	100	6.29	27.01	0.807	58.8	-37.7	1.51	10.36
1646	0.39	50	6.33	27.59	0.815	56.7	-46.9	1.40	10.45
1651	0.46	50	6.38	28.89	0.835	52.5	-48.2	1.36	10.52
1656	0.53	50	6.38	28.98	0.831	50.2	-43.8	1.21	10.60
1701	0.60	50	6.38	29.72	0.820	52.4	-39.4	1.19	10.70
1706	0.67	50	6.37	29.77	0.795	54.3	-28.7	1.08	10.75
1711	0.74	50	6.36	29.70	0.782	57.8	-24.7	1.22	10.81
1716	0.81	50	6.34	29.21	0.727	48.5	-16.7	1.24	10.88
1721	0.88	50	6.32	29.11	0.711	31.3	-9.7	1.36	10.94
1726	0.95	50	6.29	29.04	0.698	24.2	3.4	1.36	11.00
1731	1.02	50	6.28	28.98	0.696	22.1	8.7	1.40	11.06

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1735	1.08	6.28	28.96	0.696	19.0	9.6	1.42	11.11	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.5

FINAL DEPTH TO WATER (ft TOC): 11.30 TIME FINAL DEPTH TAKEN: 1747

SAMPLE ID: ATMW-4 160601 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-21-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-22-17 SITE: ONEGAS - Atchison PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 70s, S wind 5-10 mph

WELL NUMBER: ATMW-5

DEPTH TO WATER (ft): 14.95

TOTAL DEPTH (ft): 21.57 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0755	I	100	6.38	21.68	1.833	19.6	-64.6	6.90	15.03
0800	0.13	90	6.24	20.95	1.868	12.8	-75.7	2.47	15.06
0805	0.25	90	6.27	21.12	1.886	10.5	-78.2	1.56	15.11
0810	0.37	90	6.30	21.32	1.901	9.8	-80.1	1.41	15.12
0815	0.49	90	6.35	21.60	1.933	8.3	-85.4	1.24	15.15
0820	0.61	90	6.36	21.74	1.955	7.4	-85.7	1.17	15.17
0825	0.73	90	6.36	21.79	1.966	5.7	-85.2	1.10	15.20

Continued on back (circle one) yes / ~~no~~

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0825	0.73	6.36	21.79	1.966	5.7	-85.2	1.10	15.20	Clear/odor

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.2

FINAL DEPTH TO WATER (ft TOC): 15.25 TIME FINAL DEPTH TAKEN: 0847

SAMPLE ID: ATMW-5/GW01 SAMPLE ID FOR QC: ATDUP-1/GW01

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-22-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-21-17 SITE: ONEGAS - Atchison PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear to PC, 80s, S wind 5-15 mph.

WELL NUMBER: ATMW-6

DEPTH TO WATER (ft): 13.48

TOTAL DEPTH (ft): 18.77 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1157	I	100	6.16	27.69	3.178	24.3	114.3	6.50	13.60
1202	0.13	100	6.07	26.25	3.128	25.4	117.6	2.81	13.71
1207	0.26	75	5.99	26.24	3.135	23.1	121.6	2.35	13.76
1212	0.36	75	5.96	26.70	3.164	16.4	124.2	2.28	13.82
1217	0.46	50	5.93	26.83	3.222	9.77	124.8	2.52	13.84
1222	0.53	50	5.89	26.79	3.312	8.64	127.6	2.43	13.87
1227	0.60	50	5.87	26.76	3.316	8.92	127.4	2.38	13.92

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1230	0.65	5.86	26.75	3.316	8.92	127.0	2.37	13.94	Clear

FERROUS IRON (mg/L): NA ALKALINITY (mg/L): N/A IDW TOTAL: 1.1

FINAL DEPTH TO WATER (ft TOC): 14.04 TIME FINAL DEPTH TAKEN: 1251

SAMPLE ID: ATMW-6 GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-21-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-22-17 SITE: ONEGAS - Atchison PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 80s, S wind 5-10 mph

WELL NUMBER: ATMW-9

DEPTH TO WATER (ft): 17.16

TOTAL DEPTH (ft): 19.90 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1036	I	45	6.80	26.82	1.671	32.1	70.2	8.53	17.25
1041	0.06	45	6.69	26.41	1.654	20.2	65.6	3.02	17.32
1046	0.12	45	6.60	26.67	1.652	18.9	66.4	2.19	17.36
1051	0.18	45	6.53	26.74	1.652	15.4	70.8	2.08	17.43
1056	0.24	45	6.49	26.79	1.650	12.7	74.8	1.99	17.51

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1100	0.30	6.47	26.84	1.648	12.7	76.2	1.99	17.58	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1

FINAL DEPTH TO WATER (ft TOC): 17.74 TIME FINAL DEPTH TAKEN: 1115

SAMPLE ID: ATMW-9/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-22-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-23-17 SITE: ONEGAS - Topeka PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Cloudy, 70s, N wind 5-10 mph

WELL NUMBER

TPMW-1

DEPTH TO WATER (ft): 23.95

TOTAL DEPTH (ft): 39.10 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0747	I	200	6.40	21.31	1.623	270	154.0	7.37	23.95
0752	0.26	200	6.21	20.40	1.672	282	165.3	3.57	23.95
0757	0.52	300	6.22	19.61	1.669	207	167.3	2.83	23.95
0802	0.92	300	6.23	19.49	1.672	132	168.3	2.39	23.95
0807	1.32	300	6.27	19.42	1.669	74.8	167.6	2.07	23.95
0812	1.72	300	6.30	19.43	1.665	53.6	167.1	1.92	23.95
0817	2.12	300	6.35	19.39	1.660	44.5	162.4	1.88	23.95
0822	2.62	300	6.34	19.39	1.658	33.5	164.0	1.85	23.95
0827	3.02	300	6.35	19.37	1.656	22.4	164.7	1.89	23.95
0832	3.42	300	6.36	19.37	1.654	16.7	165.3	1.89	23.95

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0835	3.70	6.36	19.37	1.654	16.7	165.5	1.89	23.95	clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 4.2

FINAL DEPTH TO WATER (ft TOC): 23.95 TIME FINAL DEPTH TAKEN: 0843

SAMPLE ID: TPMW-1/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: – After: –

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: –

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-23-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-23-17 SITE: ONEGAS PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 70s-80s,

WELL NUMBER

TPMW-2

DEPTH TO WATER (ft): 23.62

TOTAL DEPTH (ft): 36.65 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0914	I	250	6.84	21.39	1.422	17.1	177.0	6.67	23.95
0919	0.33	250	6.63	20.74	1.400	9.38	177.1	2.00	23.95
0924	0.66	250	6.57	20.74	1.397	4.16	174.9	1.54	23.95
0929	0.99	250	6.58	20.60	1.393	2.72	169.7	1.24	23.95
0934	0.32	250	6.55	20.52	1.382	2.84	167.8	1.20	23.95
0939	0.65	250	6.55	20.47	1.377	2.58	164.9	1.17	23.95

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0940	0.70	6.54	20.45	1.376	2.58	145.2	1.16	23.95	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.2

FINAL DEPTH TO WATER (ft TOC): 23.95 TIME FINAL DEPTH TAKEN: 0955

SAMPLE ID: TPMW-2/GW01 SAMPLE ID FOR QC: TPDUP-1/GW01

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-23-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-23-17 SITE: UNEGAS - Topeka PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 70s-80s, N wind 5-10 mph

WELL NUMBER: TPMW-3

DEPTH TO WATER (ft): 26.37

TOTAL DEPTH (ft): 41.75 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1019	I	250	6.81	22.53	1.300	24.0	143.4	5.18	26.75
1024	0.33	250	6.20	21.37	1.319	21.1	158.6	1.56	26.75
1029	0.66	250	5.81	21.44	1.321	18.6	159.5	1.06	26.75
1034	0.99	250	5.60	21.31	1.309	15.1	160.8	0.84	26.75
1039	1.32	250	5.54	21.25	1.295	13.7	162.4	0.70	26.75
1044	1.65	250	5.54	21.26	1.287	10.9	164.1	0.69	26.75
~~1049~~	~~1.98~~	~~250~~							~~26.75~~

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
~~1045~~ ~~1050~~	1.7	5.54	21.36	1.288	10.9	144.2	0.67	26.75	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.3

FINAL DEPTH TO WATER (ft TOC): 26.75 TIME FINAL DEPTH TAKEN: 1055

SAMPLE ID: TPMW-3/GW01 SAMPLE ID FOR QC: TPMW-3/ERD

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-23-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-22-17 SITE: ONEGAS - Topeka PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear, 90s, S wind 5-15 mph

WELL NUMBER: TPMW-4

DEPTH TO WATER (ft): 23.40

TOTAL DEPTH (ft): 39.60 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1530	I	200	6.52	28.10	1.765	59.2	110.1	4.16	23.40
1535	0.26	275	6.12	23.64	1.702	63.6	131.1	3.37	23.40
1540	0.62	275	5.75	22.23	1.661	45.8	148.1	2.46	23.40
1545	0.98	275	5.65	22.06	1.659	31.8	153.8	2.12	23.40
1550	1.34	275	5.62	21.84	1.657	23.7	156.5	2.02	23.40
1555	1.70	275	5.56	21.75	1.651	19.9	161.2	1.70	23.40
1600	2.06	275	5.45	21.67	1.655	17.4	165.3	1.49	23.40
1605	2.42	275	5.42	21.58	1.649	19.7	167.7	1.38	23.40
1610	2.78	275	5.41	21.66	1.661	19.2	168.5	1.32	23.40

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1610	2.78	5.41	21.66	1.661	19.2	168.5	1.32	23.40	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 3.3

FINAL DEPTH TO WATER (ft TOC): 23.40 TIME FINAL DEPTH TAKEN: 1637

SAMPLE ID: TPMW-4/GW01 SAMPLE ID FOR QC: TPMW-4/GW01 MS/MSD

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: _____

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-22-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-26-17 SITE: ONEGAS - Concordia PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 80s, wind 5-15 mph

WELL NUMBER

CMW-02

DEPTH TO WATER (ft): 15.32

TOTAL DEPTH (ft): 27.80 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1452	I	200	7.47	24.43	0.615	333	132.3	10.48	15.32
1457	0.26	200	7.10	21.00	0.522	298	133.6	2.83	15.32
1502	0.52	200	6.82	20.42	0.497	257	141.3	1.81	15.32
1507	0.78	200	7.05	20.58	0.491	230	125.1	1.53	15.32
1512	1.04	200	7.02	19.80	0.474	199	123.7	1.41	15.32
1517	1.30	200	6.95	19.51	0.465	158	125.2	1.38	15.32
1522	1.56	200	7.05	20.40	0.469	99.5	118.3	1.35	15.32
1527	1.82	200	7.07	20.78	0.471	102	115.2	1.28	15.32
1532	2.08	200	7.08	20.74	0.464	99.7	113.1	1.36	15.32
1537	2.34	200	7.08	20.48	0.458	91.6	112.7	1.33	15.32
1542	2.60	200	7.08	20.94	0.462	81.1	110.2	1.29	15.32
1547	2.86	200	7.09	20.85	0.460	63.6	107.8	1.32	15.32
1552	3.12	200	7.09	20.34	0.452	58.4	105.7	1.36	15.32
1557	3.38	200	7.09	19.96	0.449	58.1	105.9	1.39	15.32

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1630	5.60	7.04	17.24	0.415	18.6	116.7	1.35	15.32	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 6.1

FINAL DEPTH TO WATER (ft TOC): 15.32 TIME FINAL DEPTH TAKEN: 1644

SAMPLE ID: CMW-02/GW01 SAMPLE ID FOR QC: CDUP-1/GW01

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant		6-26-17
REVIEWED:			

WELL NUMBER

CMW-02

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1602	3.64	200	7.07	19.34	0.441	52.7	108.2	1.38	15.32
1607	3.90	200	6.96	19.27	0.429	56.4	118.6	1.43	15.32
1612	~~3.76~~ 4.14	300	6.80	17.16	0.414	45.2	124.2	1.41	15.32
1617	4.52	300	6.95	17.11	0.412	31.9	120.4	1.40	15.32
1622	4.92	300	7.01	17.16	0.411	24.4	118.4	1.37	15.32
1627	5.32	300	7.04	17.20	0.416	20.7	116.6	1.35	15.32

COMMENTS

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-26-17 SITE: ONEGAS-Concordia PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 80s, N wind 5-15 mph

WELL NUMBER

CMW-03

DEPTH TO WATER (ft): 14.80

TOTAL DEPTH (ft): 25.65 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1348	I	200	7.16	24.85	1.140	34.5	145.4	12.08	14.82
1353	0.26	200	6.48	20.98	1.095	29.4	159.6	1.81	15.05
1358	0.52	100	6.47	22.29	1.123	26.7	151.3	1.34	15.06
1403	0.65	100	6.57	22.87	1.140	23.8	143.1	1.15	15.10
1408	0.78	100	6.56	22.90	1.140	19.3	142.7	0.95	15.11
1413	0.91	100	6.55	23.03	1.131	15.1	140.9	0.92	15.13
1418	1.04	100	6.55	23.09	1.122	13.2	138.7	0.89	15.14

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1420	1.10	6.55	23.10	1.118	13.2	138.2	0.87	15.14	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.6

FINAL DEPTH TO WATER (ft TOC): 15.16 TIME FINAL DEPTH TAKEN: 1428

SAMPLE ID: CMW-03/6-W01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bogart	[signature]	6-26-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-26-17 SITE: ONEGAS - Concord, CA PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 70s-80s, NNW wind 10-15 mph

WELL NUMBER

CMW-04

DEPTH TO WATER (ft): 13.80

TOTAL DEPTH (ft): 25.77 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1155	I	200	6.79	22.35	1.112	13.8	142.7	11.62	13.81
1200	0.26	200	6.65	20.07	1.055	12.6	157.3	4.66	13.81
1205	0.52	200	6.47	19.33	1.036	15.7	168.9	4.01	13.81
1210	0.78	200	6.55	19.10	1.025	12.4	163.7	3.31	13.81
1215	1.04	200	6.54	19.02	1.015	8.09	164.0	2.92	13.81
1220	1.30	200	6.58	19.02	1.011	6.98	160.2	2.72	13.81
1225	1.56	200	6.58	19.14	1.007	5.87	157.5	2.37	13.81
1230	1.82	200	6.60	19.24	1.008	4.44	154.5	2.25	13.81
1235	2.08	200	6.60	19.22	1.004	3.94	151.4	2.05	13.81
1240	2.34	200	6.59	19.09	0.999	3.63	149.9	1.97	13.81
1245	2.60	200	6.61	19.26	1.004	3.48	146.6	1.86	13.81
Continued on back (circle one) yes / no									

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1245	2.60	6.61	19.26	1.004	3.48	146.6	1.86	13.81	13.81

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 3.1

FINAL DEPTH TO WATER (ft TOC): 13.81 TIME FINAL DEPTH TAKEN: 1303

SAMPLE ID: CMW-04/GW01 SAMPLE ID FOR QC: CMW-04/GW01 MS/MSD

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: _____

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-26-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-26-17 SITE: ONEGAS - Concordia PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Cloudy, 80s, N wind 5-10 mph

WELL NUMBER

CMW-05

DEPTH TO WATER (ft): 14.42

TOTAL DEPTH (ft): 25.67 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1705	I	200	6.87	21.83	1.298	68.6	105.5	5.81	14.51
1710	0.26	200	6.72	19.30	1.278	48.7	4.2	1.52	14.51
1715	0.52	200	6.71	19.09	1.269	39.6	-8.9	1.08	14.51
1720	0.78	200	6.71	18.62	1.235	32.2	-15.4	0.78	14.51
1725	1.04	200	6.68	18.85	1.198	19.7	-13.6	0.64	14.51
1730	1.30	200	6.68	18.76	1.181	14.3	-10.4	0.58	14.51
1735	1.56	200	6.67	18.69	1.173	10.2	-7.7	0.56	14.51

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1735	1.56	6.67	18.69	1.173	10.2	-7.7	0.56	14.51	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2

FINAL DEPTH TO WATER (ft TOC): 14.51 TIME FINAL DEPTH TAKEN: 1744

SAMPLE ID: CMW-05/GW01 SAMPLE ID FOR QC: CMW-05/ERB

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-26-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-27-17 SITE: ONEGAS - Salina PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Cloudy, 60s, S wind 5-10 mph

WELL NUMBER

SLMW-1

DEPTH TO WATER (ft): 32.15

TOTAL DEPTH (ft): 39.44 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0845	I	225	7.07	18.42	0.944	138	165.6	5.72	32.21
0850	0.3	225	6.39	17.44	0.924	81.~~225~~ 18	108.1	1.64	32.17
0855	0.6	225	6.37	17.19	0.921	47.1	87.8	1.19	32.18
0900	0.9	225	6.43	17.12	0.924	27.3	66.2	0.88	32.18
0905	1.2	225	6.48	17.20	0.928	13.3	50.3	0.68	32.18
0910	1.5	225	6.48	17.17	0.928	10.5	47.2	0.62	32.18
0915	1.8	225	6.49	17.16	0.928	8.98	42.2	0.60	32.18

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0915	1.8	6.49	17.16	0.928	8.98	42.2	0.60	32.18	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.3

FINAL DEPTH TO WATER (ft TOC): 32.18 TIME FINAL DEPTH TAKEN: 0940

SAMPLE ID: SLMW-1/GW01 SAMPLE ID FOR QC: SLMW-1/GW01 MS/MSD

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-27-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-27-17 SITE: ONEGAS - Salina, KS PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Cloudy, 60s, SE wind 5-10 mph

WELL NUMBER

SLMW-2

DEPTH TO WATER (ft): 32.98

TOTAL DEPTH (ft): 39.96 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1003	I	175	7.17	19.85	0.695	40.3	60.5	14.11	32.97
1008	0.23	250	6.91	18.81	1.354	28.3	-57.2	2.78	32.98
1013	0.56	250	6.85	18.10	1.331	17.1	-90.9	1.12	32.98
1018	0.89	250	6.81	18.24	1.315	11.7	-107.4	0.75	32.98
1023	1.22	250	6.84	18.15	1.306	7.83	-115.3	0.60	32.98
1028	1.55	250	6.82	18.13	1.295	6.09	-120.5	0.57	32.98

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1030	1.65	6.82	18.14	1.295	6.09	-120.7	0.56	32.98	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.1

FINAL DEPTH TO WATER (ft TOC): 32.98 TIME FINAL DEPTH TAKEN: 1044

SAMPLE ID: SLMW-2/GW01 SAMPLE ID FOR QC: SLDUP-1/GW01

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-27-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-27-17 SITE: ONEGAS-Salina, KS PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Cloudy, 70s, Sound 5-15 mph

WELL NUMBER: SLMW-3

DEPTH TO WATER (ft): 32.55

TOTAL DEPTH (ft): 39.27 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1108	I	175	7.25	20.73	0.646	24.9	-30.2	13.80	32.55
1113	0.23	175	6.90	19.13	1.154	13.0	-86.9	1.75	32.55
1118	0.46	175	6.71	18.44	1.134	4.94	-87.3	1.04	32.55
1123	0.69	175	6.74	18.42	1.130	2.78	-92.1	0.83	32.55
1128	0.92	175	6.79	18.30	1.125	2.15	-100.3	0.72	32.55
1133	1.15	175	6.82	18.44	1.132	1.17	-104.6	0.65	32.55

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1135	1.25	6.82	18.49	1.133	1.17	-104.4	0.64	32.55	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 1.7

FINAL DEPTH TO WATER (ft TOC): 32.55 TIME FINAL DEPTH TAKEN: 1144

SAMPLE ID: SLMW-3/GW01 SAMPLE ID FOR QC: SLMW-3/ERB

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-27-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-28-17 SITE: ONEGAS - Hutchinson PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 86323 WEATHER: PC, 70's, SE wind 5-15 mph

WELL NUMBER

HMW-1D

DEPTH TO WATER (ft): 10.83

TOTAL DEPTH (ft): 79.70 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0922	I	350	7.34	19.84	1.838	112.	169.0	5.76	10.84
0927	0.46	350	7.21	18.89	1.848	54.4	168.5	1.09	10.84
0932	0.92	350	7.07	18.81	1.848	34.3	168.5	0.75	10.84
0937	1.38	350	6.97	18.92	1.841	21.1	161.6	0.62	10.84
0942	1.84	350	6.90	18.88	1.835	17.6	160.6	0.58	10.84

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0945	2.1	6.88	18.86	1.834	13.1	160.4	0.57	10.84	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.6

FINAL DEPTH TO WATER (ft TOC): 10.84 TIME FINAL DEPTH TAKEN: 0952

SAMPLE ID: HMW-1D/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAH, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-28-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-28-17 SITE: ONEGAS - Hutchinson PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Cloudy, 70s, SE wind 5-15 mph

WELL NUMBER

HMW-1S

DEPTH TO WATER (ft): 10.86

TOTAL DEPTH (ft): 19.42 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0831	I	250	7.24	21.12	0.820	26.7	147.9	7.88	10.88
0836	0.33	250	6.53	19.49	0.813	17.5	168.9	3.05	10.88
0841	0.66	250	6.59	19.26	0.820	13.4	165.9	2.58	10.88
0846	0.99	250	6.67	19.23	0.849	8.36	162.0	2.26	10.88
0851	1.32	250	6.71	19.17	0.861	6.17	161.3	2.11	10.88
0856	1.65	250	6.72	19.12	0.864	3.78	161.8	2.10	10.88

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0900	1.95	6.73	19.13	0.864	3.78	161.8	2.09	10.88	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.4

FINAL DEPTH TO WATER (ft TOC): 10.88 TIME FINAL DEPTH TAKEN: 0907

SAMPLE ID: HMW-1S / GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ — COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-28-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-27-17 SITE: ONEGAS - Hutchinson PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 90s, S wind 10-15 mph

WELL NUMBER: HMW-2

DEPTH TO WATER (ft): 10.13

TOTAL DEPTH (ft): 17.59 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1557	I	250	7.36	25.32	1.007	30.9	97.3	4.83	10.14
1602	0.33	250	6.99	22.98	0.944	24.2	105.7	1.67	10.13
1607	0.66	250	6.83	22.52	0.926	19.7	107.1	1.55	10.13
1612	0.99	250	6.93	22.43	0.913	17.0	99.0	1.46	10.13
1617	1.32	250	6.97	22.34	0.901	22.3	97.3	1.51	10.13
Continued on back (circle one) yes / no									

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1620	1.45	6.94	22.34	0.898	21.4	98.3	1.57	10.13	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2

FINAL DEPTH TO WATER (ft TOC): 10.13 TIME FINAL DEPTH TAKEN: 1640

SAMPLE ID: Hmw-2 / GW01 SAMPLE ID FOR QC: Hmw-2 / GW01 MS/MSD

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☒ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6/27/17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-28-17 SITE: ONEGAS - Hutchinson PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: Clear, 80s, 5 wind 5-15 mph.

WELL NUMBER: HMW-4D

DEPTH TO WATER (ft): 10.93

TOTAL DEPTH (ft): 78.82 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1218	I	400	7.51	21.75	2.111	8.09	59.0	4.78	10.95
1223	0.53	400	7.25	20.55	2.063	3.12	67.0	0.77	10.95
1228	1.06	400	7.20	20.44	2.066	2.41	69.1	0.56	10.95
1233	1.59	400	7.18	20.31	2.072	2.94	70.1	0.48	10.95
1238	2.12	400	7.17	20.30	2.083	2.63	70.9	0.43	10.95

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1240	2.3	7.17	20.32	2.084	2.63	70.8	0.42	10.95	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.8

FINAL DEPTH TO WATER (ft TOC): 10.95 TIME FINAL DEPTH TAKEN: 1247

SAMPLE ID: HMW-4D/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: _____

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-28-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-28-17 SITE: ONEGAS - Hutchinson PID READING at WELL HEAD (ppm): NA

PROJECT NUMBER: 96323 WEATHER: Clear, 80s, S wind 5-15 mph

WELL NUMBER

HMW-4S

DEPTH TO WATER (ft): 10.89

TOTAL DEPTH (ft): 19.29 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1302	I	250	7.29	26.01	1.079	19.5	93.5	5.05	10.90
1307	0.33	250	6.97	23.55	0.967	14.1	5.6	1.07	10.90
1312	0.66	250	6.90	22.57	0.946	8.79	-27.9	0.66	10.90
1317	0.99	250	6.92	22.62	0.949	6.12	-35.1	0.56	10.90
1322	1.32	250	6.93	22.48	0.945	3.94	-44.5	0.48	10.90

Continued on back (circle one) yes (no)

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1325	1.5	6.93	22.45	0.945	3.94	-44.1	0.48	10.90	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2.0

FINAL DEPTH TO WATER (ft TOC): 10.90 TIME FINAL DEPTH TAKEN: 1335

SAMPLE ID: HMW-4S/GW01 SAMPLE ID FOR QC: HMW-4S/ERB

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: – After: –

CHECKED FLOW THROUGH CELL FOR LEAKS: ☐ COMMENTS: –

	NAME	SIGNATURE	DATE
PREPARED:	T. Bryant	[signature]	6-28-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-28-17 SITE: ONEGAS - Hutchinson PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 80s, S wind 5-15 mph

WELL NUMBER

HMW-5D

DEPTH TO WATER (ft): 10.01

TOTAL DEPTH (ft): 76.82 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1115	I	400	7.36	21.50	1.608	8.83	121.2	4.91	10.03
1120	0.53	400	7.05	20.10	1.765	6.34	129.3	0.87	10.03
1125	1.06	400	7.05	20.14	1.840	4.84	120.4	0.68	10.03
1130	1.59	400	7.10	20.05	1.874	2.72	115.8	0.47	10.03
1135	2.12	400	7.13	20.03	1.887	3.03	112.4	0.42	10.03
1140	2.65	400	7.14	20.02	1.893	2.89	109.1	0.40	10.03

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1140	2.65	7.14	20.02	1.893	2.89	109.1	0.40	10.03	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 3.1

FINAL DEPTH TO WATER (ft TOC): 10.03 TIME FINAL DEPTH TAKEN: 1155

SAMPLE ID: HMW-5D/GW01 SAMPLE ID FOR QC: HDUP-1/GW01

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS: —

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-28-17
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 6-28-17 SITE: ONEGAS - Hutchinson PID READING at WELL HEAD (ppm): N/A

PROJECT NUMBER: 96323 WEATHER: PC, 70s, S wind 5-15 mph

WELL NUMBER

HMW-55

DEPTH TO WATER (ft): 9.93

TOTAL DEPTH (ft): 16.81 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1024	I	250	7.26	22.95	1.096	31.4	160.6	7.08	9.94
1029	0.33	250	6.96	21.25	1.014	25.3	159.8	1.28	9.94
1034	0.66	250	6.78	20.17	0.973	16.9	166.9	1.02	9.94
1039	0.99	250	6.73	20.30	0.966	10.4	143.5	1.00	9.95
1044	1.32	250	6.85	20.34	0.967	6.72	152.6	1.05	9.94
Continued on back (circle one) yes / no									

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mmhos/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1045	1.4	6.85	20.35	0.967	6.72	152.3	1.05	9.94	Clear

FERROUS IRON (mg/L): N/A ALKALINITY (mg/L): N/A IDW TOTAL: 2

FINAL DEPTH TO WATER (ft TOC): 9.94 TIME FINAL DEPTH TAKEN: 1052

SAMPLE ID: HMW-55/GW01 SAMPLE ID FOR QC: N/A

PARAMETERS REQUESTED FOR ANALYSIS: BTEX, PAHs, Metals, & Cyanide

DO METER MODEL No.: YSI 556 ORP METER MODEL No.: " FLOW CELL TYPE.: "

DO CHECK IN AIR: Before: — After: —

CHECKED FLOW THROUGH CELL FOR LEAKS: ☑ COMMENTS:

	NAME	SIGNATURE	DATE
PREPARED:	J. Bryant	[signature]	6-28-17
REVIEWED:			

ATTACHMENT 3

Memorandum

Date: September 7, 2017

To: Brian Hoye

From: Kalli Travlos/Shauna Lawrence

Re: Quality Assurance/Quality Control (QA/QC) Review of Analytical Data
Groundwater Sampling for the 2017 Enterprise Wide Sampling Event
at OneGas – Kansas City, Topeka, Atchison, Salina, Concordia, Hutchinson, and Abilene
Project No. 96323

Groundwater samples were collected from multiple OneGas sites in Kansas (Kansas City, Topeka, Atchison, Salina, Concordia, and Hutchinson) in June 2017. Additionally, groundwater samples were collected at the Abilene site in August 2017 (see below for exact dates). The samples were analyzed by Pace Analytical Services, Inc. (Pace) of Lenexa, Kansas for one or more of the following parameters:

Analysis	Method
Groundwater Samples	
Volatile Organic Compounds (VOCs) Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)	SW-846 Method 8260/OA1
Polycyclic Aromatic Hydrocarbons (PAHs)	SW-846 Method 8270C – Selective Ion Monitoring (SIM)
Metals Method 6010: arsenic, barium, cadmium, chromium, lead, selenium, silver Method 7470: mercury	SW-846 Method 6010 Method 7470
Cyanide, Total	SM 4500-CN-E

The following data sets were reviewed in support of this investigation:

Data Set	Date Collected	OneGas Location in Kansas
60246986	6/19-20/2017	Kansas City
60247235	6/21-22/2017	Atchison
60247320	6/22-23/2017	Topeka
60247554	6/27/2017	Salina
60247555	6/26/2017	Concordia
60247642	6/27-28/2017	Hutchinson
60250818	8/8-10/2017	Abilene

The QA/QC results in association with the samples collected were examined for any method-specific requirements. Data qualifiers, when appropriate, were added to the data as recommended in United States Environmental Protection Agency's (USEPA's) *National Functional Guidelines for Inorganic Superfund Data Review* (NFGI, 2017) and *National Functional Guidelines for Organic Superfund Methods Data Review* (NFGO, 2017). The QA/QC review results are discussed below. All qualifiers are presented in Table 1.

1. Chain-of-Custody (COC) – The relinquished and received signatures, times, and dates on the COCs were present, except for the following:

- In SDG 60246986, sample KCMW-11S did not have a collection time indicated on the COC. The sample receipt form noted the correct sample collection time of 1820, which was used for reporting with the sample results.

- In SDG 60250818, the relinquish times were not noted by the sampler. All samples were delivered directly to Pace by the field crew, and the received time was noted. Overall, impact was negligible and no further actions were necessary.

  Also in this SDG, sample MMW-4/GW1 is noted on the COC but not reported in this SDG. This sample was part of a different site, and not data review was not included in this SDG.

2. Requested Analyses Completed – All analyses were completed as requested.

3. Holding Times – All samples were analyzed within the recommended method holding times.

4. Sample Preservation – The samples were received by Pace at or slightly below the recommended 4 °C ± 2 °C sample preservation temperature range. Since no samples were frozen, all results are considered viable and no qualification was needed.

5. Laboratory Method Blanks – Method blanks were reviewed to determine the potential for sample cross-contamination due to laboratory handling. No detections of target analytes were noted in the method blanks.

6. Trip Blanks – Trip blanks were supplied by the laboratory and sent to the field with the sample containers to evaluate potential cross-contamination during sample shipment. Trip blanks were included with the shipment of VOCs. No detections of target analytes were noted in the trip blanks.

7. Equipment Rinsate Blanks – Equipment rinsate blanks were collected due to the use of non-dedicated sampling equipment to evaluate potential cross-contamination between samples caused by residual contamination on sampling equipment. Equipment rinsate blanks were for the same analytes as their associated groundwater samples. No detections of target analytes were noted in the equipment rinsate blanks.

8. Surrogates – Surrogates are added for organic analyses. Surrogates are compounds not normally found in the environment that are added (spiked) into samples and analyzed for percent recovery (REC). The laboratory sets minimum and maximum limits on the REC for the method used. All surrogate RECs were within their respective QC limits except for the following:

   - For extractable organic analyses, surrogates may not be recovered when samples are diluted by a factor of 5 or more. Therefore, surrogates are not evaluated for extractable organic analyses with elevated dilution factors. Qualification is not required for these samples if the lab reports RECs outside QC limits.

All surrogate RECs were within their respective QC limits.

9. Laboratory Control Sample (LCS) – The LCS contains a matrix similar to that of the sample that has been spiked with known concentrations of target analytes. The LCS is prepared and analyzed by the same method as the samples. As a measure of analytical accuracy, the results of the LCS are compared against the known analyte concentrations in the spike to determine the REC. The purpose of the LCS is to determine the performance of the laboratory with respect to analyte recovery, independent of field sample matrix interference. All LCS RECs were within their respective QC limits, except for the following:

   - SDG 60246986: The LCS RECs for all VOC parameters (BTEX) in QC batch 48302 were above their control limits. All of the associated samples were nondetect for the noted analytes; thus, high bias was not a concern and no qualifiers were necessary.

10. Matrix Spike/Matrix Spike Duplicates (MS/MSD) – MS/MSDs are typically run for organic and inorganic analyses. A sample is split into three portions (original, MS and MSD), and a known amount of a target analyte is added (spiked) to two portions (MS and MSD) of the sample. The results of these two portions are compared with each other for reproducibility using the relative percent difference (RPD). They are also compared against the unspiked portion of the sample for REC of the spike. Note, only project-specific MS/MSD samples were evaluated.

    - SDG 60247235: Almost all of the PAH MS/MSD results for sample ATMW-1/GW01 (60247235003) had RPD exceedances, as the MSD results were consistently lower than the MS results. All of the PAHs were nondetect for this sample with the exception of naphthalene, which was qualified as estimated (J). Qualifiers were not necessary for the nondetect results based on NFGO guidance.

    All other project-specific MS/MSD RECs and/or RPDs were within QC limits.

11. Field Duplicate Results – Field duplicate results provide information on the ability to reproduce field results and account for error introduced from handling, shipping, storage, preparation, and analysis of field samples. There are no specific USEPA criteria for qualifying data from field duplicate results. Depending upon the sample concentration, one of the following criteria based upon NFGI is applicable:

    - Is the compound detected in both portions?

    - If the sample concentrations are greater than 5 times the reporting limit, then the maximum allowable RPD is 20 percent for water samples.

    - If the sample concentrations are less than 5 times the reporting limit, then a sensitivity test is applied. For the sensitivity test, the sample concentrations must agree within ± the reporting limit for water samples.

The following field duplicate pairs were collected:

- KCMW-10/GW01 // KCDUP-1/GW01 (60246986008 // 60246986013): The cyanide results failed the sensitivity test, and were qualified as estimated (J). All other analytes were adequately replicated.

- KCMW-3/GW01 // KCDUP-2/GW01 (60246986009 // 60246986014): All analytes were adequately replicated.

- ATMW-5/GW01 // ATDUP-1/GW01 (60247235006 // 60247235009): All analytes were adequately replicated.

- TPMW-2/GW01 // TPDUP-1/GW01 (60247320003 // 60247320006): All analytes were adequately replicated.

- SLMW-2/GW01 // SLDUP-1/GW01 (60247554002 // 60247554005): The following PAH results for this duplicate pair failed the sensitivity test: benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, and chrysene. During the SVOC extraction method, these two samples were diluted at different dilution factors (1:2 versus 1:1, respectively). Due to this, no conclusions could be drawn from duplicate comparison, and no qualifiers were added.

- CMW-02/GW01 // CDUP-1/GW01 (60247555003 // 60247555005): Arsenic slightly exceeded the RPD control limit, and was qualified as estimated (J). All other analytes were adequately replicated.

- HMW-5D/GW01 // HDUP-1/GW01 (60247642005 // 60247642009): All analytes were adequately replicated.

- ABMW-10/GW1 // Dup-1/GW1 (60250818012 // 60250818008): All analytes were adequately replicated.

- ABMW-11/GW1 // Dup-2/GW1 (60250818022 // 60250818019): All analytes were adequately replicated.

Table 2 presents a comparison of the field duplicate results (detections only).

12. Detection and Quantitation Limits – Dilutions were required for one or more samples. These dilutions were required to bring target analyte concentrations into the linearity range of the instrument calibration and/or to compensate for matrix interference. All reporting limits were adjusted accordingly. No data qualifiers were added based on the dilutions.

13. Miscellaneous – In one or more Initial Calibration or Continuing Calibration Verification (ICV/CCV) samples, separation for one or more isomers were less than the expected 50% valley to baseline. These compounds were still being reported as individual isomers and not a combined total, since there was separation between the two isomers. Review for these ICV/CCV samples is not typically included at this level of review. Impact to the results was negligible, and no further actions were necessary. No data qualifiers were added.

    In one or more of the data packages, isomers benzo(B) and benzo(k)fluoranthene could not be sufficiently separated due to sample matrix interferences. The results for these isomers were reported as a combined under the name benzo(b)fluoranthene.

    Additionally, 1,2-diphenylhydrazine decomposes to azobenene and n-nitrosodiphenylamine decomposes to diphenylamine. These analytes cannot be separated using SW-846 8270 SIM, and the results for each noted pair were reported their respective combined concentration. These were not target analytes for this project; thus, no further actions were necessary.

14. Conclusion – The data were reviewed for achievement of any method-specified QA/QC criteria. All qualifiers added during the course of the review are presented in Table 1. All data are valid for use, as qualified, in reporting the results of this investigation.

    Attachments
    Table 1: Data Qualifiers
    Table 2: Duplicate Analyses Comparison

Table 1
Data Qualifiers
OneGas - Enterprise Wide Sampling Event 2017

Sample Name	Lab Number	Analysis	Target Analyte	Data Review Qualifier	Reported Result		Units	Reason for Qualification
Groundwater Samples								
ATMW-1/GW01	60247235003	PAH	Naphthalene	J	3.0	J	ug/L	MS/MSD RPD > QC Limit
KCMW-10/GW01	60246986008	CHEM	Cyanide	J	0.0051	J	mg/L	Field Duplicate; STF
KCDUP-1/GW01	60246986013	CHEM	Cyanide	J	0.11	J	mg/L	Field Duplicate; STF

Notes:

CHEM = general chemistry parameters
J = estimated value
MS/MSD = matrix spike/matrix spike duplicate
ug/L = micrograms per liter
mg/L = milligrams per liter
PAH = polycyclic aromatic hydrocarbon
QC = quality control
RPD = relative percent difference

Table 2
Duplicate Analyses Comparison - Groundwater Samples
OneGas - Enterprise Wide Sampling Event 2017

Analytes	KCMW-10/GW01 (60246986008)	KCDUP-1/GW01 (60246986013)	Units	Meets QC Criteria?
Barium	103	104	ug/L	Yes
Cyanide	0.005	0.11 J	mg/L	No - STF
Analytes	**KCMW-3/GW01 (60246986010)**	**KCDUP-2/GW01 (60246986014)**	**Units**	**Meets QC Criteria?**
Arsenic	77.4	77.1	ug/L	Yes
Barium	475	479	ug/L	Yes
Benzene	4.9	4.7	ug/L	Yes
Toluene	1.9	1.8	ug/L	Yes
Xylene (Total)	5.0	5.5	ug/L	Yes
Acenaphthene	1.2	1.2	ug/L	Yes
Acenaphthylene	0.50	0.48	ug/L	Yes
Anthracene	0.38	0.38	ug/L	Yes
Benzo(a)anthracene	0.19	0.16	ug/L	Yes
Benzo(a)pyrene	0.30	0.26	ug/L	Yes
Benzo(b)fluoranthene	0.17	0.20	ug/L	Yes
Benzo(g,h,i)perylene	0.21	0.19	ug/L	Yes
Benzo(k)fluoranthene	0.12	0.10 U	ug/L	Yes
Chrysene	0.21	0.18	ug/L	Yes
Fluorene	1.7	1.6	ug/L	Yes
Indeno(1,2,3-cd)pyrene	0.17	0.14	ug/L	Yes
Naphthalene	0.70	0.77	ug/L	Yes
Phenanthrene	2.7	2.5	ug/L	Yes
Pyrene	0.70	0.64	ug/L	Yes
Analytes	**ATMW-5/GW01 (60247235006)**	**ATDUP-1/GW01 (60247235009)**	**Units**	**Meets QC Criteria?**
Arsenic	179	175	ug/L	Yes
Barium	613	601	ug/L	Yes
Benzene	112	110	ug/L	Yes
Ethylbenzene	9.2	8.90	ug/L	Yes
Naphthalene	73.4	72.5	ug/L	Yes
Toluene	1.8	2.0	ug/L	Yes
Acenaphthene	3.4	4.1	ug/L	Yes
Anthracene	0.47	0.51	ug/L	Yes
Fluoranthene	0.53	0.55	ug/L	Yes
Fluorene	2.8	2.7	ug/L	Yes
Naphthalene	38.6	38.1	ug/L	Yes
Phenanthrene	1.5	1.5	ug/L	Yes
Pyrene	0.34	0.36	ug/L	Yes
Cyanide	0.032	0.035	mg/L	Yes

Table 2
Duplicate Analyses Comparison - Groundwater Samples
OneGas - Enterprise Wide Sampling Event 2017

Analytes	TPMW-2/GW01 (60247320003)	TPDUP-1/GW01 (60247320006)	Units	Meets QC Criteria?
Barium	95.8	96.1	ug/L	Yes
Naphthalene	0.62	0.56 U	ug/L	Yes
Analytes	**SLMW-2/GW01 (60247554002)**	**SLDUP-1/GW01 (60247554005)**	**Units**	**Meets QC Criteria?**
Barium	109	111	ug/L	Yes
Lead	8.0	8.6	ug/L	Yes
Benzene	3.3	3.4	ug/L	Yes
Acenaphthene	14.2	15.9	ug/L	Yes
Acenaphthylene	24.9	21.4	ug/L	Yes
Anthracene	0.46	0.37	ug/L	Yes
Benzo(a)anthracene	0.52	0.39	ug/L	Yes
Benzo(a)pyrene	0.44	0.24	ug/L	*No - STF
Benzo(b)fluoranthene	0.39	0.22	ug/L	*No - STF
Benzo(g,h,i)perylene	0.30	0.11 U	ug/L	*No - STF
Chrysene	0.59	0.46	ug/L	*No - STF
Fluoranthene	3.6	3.8	ug/L	Yes
Fluorene	7.3	7.9	ug/L	Yes
Indeno(1,2,3-cd)pyrene	0.25	ND	ug/L	Yes
Naphthalene	2.7	2.8	ug/L	Yes
Phenanthrene	2.5	2.8	ug/L	Yes
Pyrene	4.6	4.8	ug/L	Yes
Cyanide	0.058	0.065	mg/L	Yes
Analytes	**CMW-02/GW01 (60247555003)**	**CDUP-1/GW01 (60247555005)**	**Units**	**Meets QC Criteria?**
Arsenic	13.2	10.6	ug/L	No - RPD
Barium	116	116	ug/L	Yes
Lead	11.5	12.0	ug/L	Yes
Analytes	**HMW-5D/GW01 (60247642005)**	**HDUP-1/GW01 (60247642009)**	**Units**	**Meets QC Criteria?**
Barium	54.4	54.3	ug/L	Yes

Table 2
Duplicate Analyses Comparison - Groundwater Samples
OneGas - Enterprise Wide Sampling Event 2017

Analytes	ABMW-10/GW1 (60250818012)	DUP-1/GW1 (60250818008)	Units	Meets QC Criteria?
Arsenic	20.4	24.1	ug/L	Yes
Barium	234	234	ug/L	Yes
Chromium	17.6	15.4	ug/L	Yes
Lead	10	12.3	ug/L	Yes
Analytes	**ABMW-11/GW1 (60250818022)**	**DUP-2/GW1 (60250818019)**	**Units**	**Meets QC Criteria?**
Barium	85.1	84.9	ug/L	Yes
Acenaphthene	0.16	0.20	ug/L	Yes
Acenaphthylene	0.0958 U	0.11	ug/L	Yes
Anthracene	0.15	0.22	ug/L	Yes
Fluorene	0.25	0.30	ug/L	Yes
Naphthalene	9.6	10.2	ug/L	Yes
Phenanthrene	0.65	0.77	ug/L	Yes
Pyrene	0.21	0.29	ug/L	Yes

Notes:

ug/L - micrograms per liter
mg/L - milligrams per liter
J - estimated value
RPD - relative percent difference
STF - sensitivity test failure
U - nondetect
* This duplicate pair was diluted at different dilution factors for SVOC analysis (1:2 versus 1:1 dilution factors). No conclusions can be drawn by comparing their results, so no qualifiers were added based on STFs.

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September 07, 2017

KEVIN WHITE
BURNS & MCDONNELL
9400 WARD PARKWAY
Kansas City, MO 64131

RE: Project: 96323 ONEGAS
Pace Project No.: 60250818

Dear KEVIN WHITE:
Enclosed are the analytical results for sample(s) received by the laboratory on August 12, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

REVISED

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller

Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

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CERTIFICATIONS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

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SAMPLE SUMMARY

Project: 96323 ONEGAS
Pace Project No.: 60250818

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60250818001	**ABMW-7/GW1**	Water	08/08/17 08:33	08/12/17 09:20
60250818002	**TB-080817**	Water	08/08/17 08:00	08/12/17 09:20
60250818003	**ABMW-8/6W1**	Water	08/08/17 12:03	08/12/17 09:20
60250818004	**ABMW-8D/6W1**	Water	08/08/17 13:00	08/12/17 09:20
60250818005	**ABMW-5/GW1**	Water	08/08/17 14:58	08/12/17 09:20
60250818006	**ABMW-5D/GW1**	Water	08/08/17 16:09	08/12/17 09:20
60250818007	**ABMW-18D/GW1**	Water	08/08/17 17:34	08/12/17 09:20
60250818008	**DUP-1/GW1**	Water	08/09/17 00:00	08/12/17 09:20
60250818009	**ABMW-9/GW1**	Water	08/09/17 08:20	08/12/17 09:20
60250818010	**ABMW-9D/GW1**	Water	08/09/17 09:35	08/12/17 09:20
60250818011	**RB-1**	Water	08/09/17 09:55	08/12/17 09:20
60250818012	**ABMW-10/GW1**	Water	08/09/17 11:35	08/12/17 09:20
60250818013	**ABMW-12S/GW1**	Water	08/09/17 14:33	08/12/17 09:20
60250818014	**ABMW-12D/GW1**	Water	08/09/17 16:09	08/12/17 09:20
60250818015	**RB-2**	Water	08/09/17 16:08	08/12/17 09:20
60250818016	**ABMW-13D/GW1**	Water	08/09/17 17:53	08/12/17 09:20
60250818017	**ABMW-13S/GW1**	Water	08/10/17 08:13	08/12/17 09:20
60250818018	**ABMW-15S/GW1**	Water	08/10/17 09:13	08/12/17 09:20
60250818019	**DUP-2/GW1**	Water	08/10/17 00:00	08/12/17 09:20
60250818020	**ABMW-15D/GW1**	Water	08/10/17 10:34	08/12/17 09:20
60250818021	**ABMW-16D/GW1**	Water	08/10/17 12:42	08/12/17 09:20
60250818022	**ABMW-11/GW1**	Water	08/10/17 16:16	08/12/17 09:20

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SAMPLE ANALYTE COUNT

Project: 96323 ONEGAS
Pace Project No.: 60250818

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60250818001	**ABMW-7/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818002	**TB-080817**	EPA 8260	JTK	8	PASI-K
60250818003	**ABMW-8/6W1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818004	**ABMW-8D/6W1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818005	**ABMW-5/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818006	**ABMW-5D/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818007	**ABMW-18D/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818008	**DUP-1/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818009	**ABMW-9/GW1**	EPA 6010	SMW	7	PASI-K

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SAMPLE ANALYTE COUNT

Project: 96323 ONEGAS
Pace Project No.: 60250818

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818010	**ABMW-9D/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818011	**RB-1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818012	**ABMW-10/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818013	**ABMW-12S/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818014	**ABMW-12D/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818015	**RB-2**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818016	**ABMW-13D/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K

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SAMPLE ANALYTE COUNT

Project: 96323 ONEGAS
Pace Project No.: 60250818

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818017	**ABMW-13S/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818018	**ABMW-15S/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818019	**DUP-2/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818020	**ABMW-15D/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818021	**ABMW-16D/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60250818022	**ABMW-11/GW1**	EPA 6010	SMW	7	PASI-K
		EPA 7470	NSM	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K

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PROJECT NARRATIVE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Method: **EPA 6010**
Description: 6010 MET ICP
Client: BURNS & MCDONNELL
Date: September 07, 2017

General Information:
21 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Method: **EPA 7470**
Description: 7470 Mercury
Client: BURNS & MCDONNELL
Date: September 07, 2017

General Information:
21 samples were analyzed for EPA 7470. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Method: **EPA 8270C by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: September 07, 2017

General Information:
21 samples were analyzed for EPA 8270C by SIM. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 490006

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

Analyte Comments:

QC Batch: 490006

1e: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- ABMW-11/GW1 (Lab ID: 60250818022)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(k)fluoranthene

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PROJECT NARRATIVE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Method: **EPA 8270C by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: September 07, 2017

Analyte Comments:

QC Batch: 490006

1e: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- ABMW-11/GW1 (Lab ID: 60250818022)
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluorene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- ABMW-13S/GW1 (Lab ID: 60250818017)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluorene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- ABMW-15D/GW1 (Lab ID: 60250818020)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluorene
  - Fluoranthene

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PROJECT NARRATIVE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Method: **EPA 8270C by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: September 07, 2017

Analyte Comments:

QC Batch: 490006

1e: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- ABMW-15D/GW1 (Lab ID: 60250818020)
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- ABMW-15S/GW1 (Lab ID: 60250818018)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluorene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- ABMW-16D/GW1 (Lab ID: 60250818021)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluorene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- DUP-2/GW1 (Lab ID: 60250818019)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene

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PROJECT NARRATIVE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Method: **EPA 8270C by SIM**
Description: 8270 MSSV PAH by SIM
Client: BURNS & MCDONNELL
Date: September 07, 2017

Analyte Comments:

QC Batch: 490006

1e: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- DUP-2/GW1 (Lab ID: 60250818019)
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluorene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene

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PROJECT NARRATIVE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Method: **EPA 8260**
Description: 8260 MSV UST, Water
Client: BURNS & MCDONNELL
Date: September 07, 2017

General Information:
22 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 489974

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: 489977

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: 490383

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Method: **SM 4500-CN-E**
Description: 4500CNE Cyanide, Total
Client: BURNS & MCDONNELL
Date: September 07, 2017

General Information:
21 samples were analyzed for SM 4500-CN-E. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 489990

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60250524001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2005775)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-7/GW1 **Lab ID: 60250818001** Collected: 08/08/17 08:33 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 17:50	7440-38-2	
Barium	**96.3**	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:50	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:50	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:50	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:50	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 17:50	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 17:50	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 10:47	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	208-96-8	
Anthracene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	207-08-9	
Chrysene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	08/15/17 00:00	08/15/17 16:08	206-44-0	
Fluorene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	193-39-5	
Naphthalene	ND	ug/L	0.50	1	08/15/17 00:00	08/15/17 16:08	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	08/15/17 00:00	08/15/17 16:08	85-01-8	
Pyrene	ND	ug/L	0.10	1	08/15/17 00:00	08/15/17 16:08	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	62	%	39-114	1	08/15/17 00:00	08/15/17 16:08	321-60-8	
Terphenyl-d14 (S)	78	%	43-117	1	08/15/17 00:00	08/15/17 16:08	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 04:45	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 04:45	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 04:45	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 04:45	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 04:45	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/16/17 04:45	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-114	1		08/16/17 04:45	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 04:45		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/17/17 15:38	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: TB-080817 **Lab ID: 60250818002** Collected: 08/08/17 08:00 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 05:00	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 05:00	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 05:00	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 05:00	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		08/16/17 05:00	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/16/17 05:00	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-114	1		08/16/17 05:00	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 05:00		

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-8/6W1 **Lab ID: 60250818003** Collected: 08/08/17 12:03 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**16.4**	ug/L	10.0	1	08/21/17 11:15	08/21/17 17:56	7440-38-2	
Barium	**110**	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:56	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:56	7440-43-9	
Chromium	**6.3**	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:56	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:56	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 17:56	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 17:56	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 10:53	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 16:28	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 16:28	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 16:28	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:28	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	75	%	39-114	1	08/15/17 00:00	08/15/17 16:28	321-60-8	
Terphenyl-d14 (S)	91	%	43-117	1	08/15/17 00:00	08/15/17 16:28	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 05:15	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 05:15	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 05:15	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 05:15	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		08/16/17 05:15	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/16/17 05:15	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-114	1		08/16/17 05:15	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 05:15		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/17/17 15:41	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-8D/6W1 **Lab ID: 60250818004** Collected: 08/08/17 13:00 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 17:59	7440-38-2	
Barium	**72.3**	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:59	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:59	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:59	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 17:59	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 17:59	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 17:59	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 10:56	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 16:48	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 16:48	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 16:48	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 16:48	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	81	%	39-114	1	08/15/17 00:00	08/15/17 16:48	321-60-8	
Terphenyl-d14 (S)	95	%	43-117	1	08/15/17 00:00	08/15/17 16:48	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 06:15	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 06:15	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 06:15	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 06:15	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 06:15	2037-26-5	
4-Bromofluorobenzene (S)	109	%	80-113	1		08/16/17 06:15	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-114	1		08/16/17 06:15	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 06:15		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/17/17 15:41	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-5/GW1 **Lab ID: 60250818005** Collected: 08/08/17 14:58 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**125**	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:01	7440-38-2	
Barium	**479**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:01	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:01	7440-43-9	
Chromium	**5.7**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:01	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:01	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:01	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:01	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 10:58	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**7.0**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	83-32-9	
Acenaphthylene	**0.80**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	208-96-8	
Anthracene	**0.18**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:07	206-44-0	
Fluorene	**1.9**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	193-39-5	
Naphthalene	**1.9**	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:07	91-20-3	
Phenanthrene	**0.48**	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:07	85-01-8	
Pyrene	**0.20**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:07	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	60	%	39-114	1	08/15/17 00:00	08/15/17 17:07	321-60-8	
Terphenyl-d14 (S)	74	%	43-117	1	08/15/17 00:00	08/15/17 17:07	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**12.3**	ug/L	1.0	1		08/16/17 06:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 06:31	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 06:31	108-88-3	
Xylene (Total)	**4.2**	ug/L	3.0	1		08/16/17 06:31	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		08/16/17 06:31	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-113	1		08/16/17 06:31	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-114	1		08/16/17 06:31	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 06:31		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/17/17 15:45	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-5D/GW1 **Lab ID: 60250818006** Collected: 08/08/17 16:09 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:03	7440-38-2	
Barium	**121**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:03	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:03	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:03	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:03	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:03	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:03	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:00	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**0.50**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	83-32-9	
Acenaphthylene	**0.14**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:27	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:27	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:27	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:27	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%	39-114	1	08/15/17 00:00	08/15/17 17:27	321-60-8	
Terphenyl-d14 (S)	81	%	43-117	1	08/15/17 00:00	08/15/17 17:27	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**2.0**	ug/L	1.0	1		08/16/17 06:46	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 06:46	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 06:46	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 06:46	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 06:46	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/16/17 06:46	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-114	1		08/16/17 06:46	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 06:46		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/17/17 15:46	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-18D/GW1 **Lab ID: 60250818007** Collected: 08/08/17 17:34 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**11.2**	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:05	7440-38-2	
Barium	**153**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:05	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:05	7440-43-9	
Chromium	**8.0**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:05	7440-47-3	
Lead	**7.3**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:05	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:05	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:05	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:02	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**1.2**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	83-32-9	
Acenaphthylene	**0.23**	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:47	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:47	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 17:47	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 17:47	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	68	%	39-114	1	08/15/17 00:00	08/15/17 17:47	321-60-8	
Terphenyl-d14 (S)	81	%	43-117	1	08/15/17 00:00	08/15/17 17:47	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 07:01	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 07:01	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 07:01	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 07:01	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 07:01	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-113	1		08/16/17 07:01	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-114	1		08/16/17 07:01	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 07:01		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/17/17 15:47	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: DUP-1/GW1 **Lab ID: 60250818008** Collected: 08/09/17 00:00 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**24.1**	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:08	7440-38-2	
Barium	**234**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:08	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:08	7440-43-9	
Chromium	**15.4**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:08	7440-47-3	
Lead	**12.3**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:08	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:08	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:08	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:09	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:07	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:07	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:07	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:07	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	59	%	39-114	1	08/15/17 00:00	08/15/17 18:07	321-60-8	
Terphenyl-d14 (S)	68	%	43-117	1	08/15/17 00:00	08/15/17 18:07	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 07:16	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 07:16	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 07:16	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 07:16	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 07:16	2037-26-5	
4-Bromofluorobenzene (S)	108	%	80-113	1		08/16/17 07:16	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-114	1		08/16/17 07:16	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 07:16		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/17/17 15:47	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-9/GW1 **Lab ID: 60250818009** Collected: 08/09/17 08:20 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**11.7**	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:10	7440-38-2	
Barium	**171**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:10	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:10	7440-43-9	
Chromium	**10.2**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:10	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:10	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:10	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:10	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:11	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:27	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:27	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:27	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:27	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	64	%	39-114	1	08/15/17 00:00	08/15/17 18:27	321-60-8	
Terphenyl-d14 (S)	80	%	43-117	1	08/15/17 00:00	08/15/17 18:27	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 07:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 07:31	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 07:31	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 07:31	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 07:31	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-113	1		08/16/17 07:31	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-114	1		08/16/17 07:31	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 07:31		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/17/17 15:50	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-9D/GW1 **Lab ID: 60250818010** Collected: 08/09/17 09:35 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:17	7440-38-2	
Barium	**84.9**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:17	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:17	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:17	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:17	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:17	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:17	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:13	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:47	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:47	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 18:47	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 18:47	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	64	%	39-114	1	08/15/17 00:00	08/15/17 18:47	321-60-8	
Terphenyl-d14 (S)	71	%	43-117	1	08/15/17 00:00	08/15/17 18:47	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 07:46	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 07:46	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 07:46	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 07:46	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 07:46	2037-26-5	
4-Bromofluorobenzene (S)	108	%	80-113	1		08/16/17 07:46	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-114	1		08/16/17 07:46	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 07:46		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/22/17 15:00	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: RB-1 **Lab ID: 60250818011** Collected: 08/09/17 09:55 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:19	7440-38-2	
Barium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:19	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:19	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:19	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:19	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:19	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:19	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:16	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 19:06	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 19:06	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 19:06	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:06	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	73	%	39-114	1	08/15/17 00:00	08/15/17 19:06	321-60-8	
Terphenyl-d14 (S)	88	%	43-117	1	08/15/17 00:00	08/15/17 19:06	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 08:01	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 08:01	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 08:01	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 08:01	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 08:01	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/16/17 08:01	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-114	1		08/16/17 08:01	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 08:01		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/22/17 15:04	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-10/GW1 **Lab ID: 60250818012** Collected: 08/09/17 11:35 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**20.4**	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:21	7440-38-2	
Barium	**234**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:21	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:21	7440-43-9	
Chromium	**17.6**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:21	7440-47-3	
Lead	**10.1**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:21	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:21	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:21	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:18	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 19:26	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 19:26	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/15/17 19:26	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/15/17 19:26	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	70	%	39-114	1	08/15/17 00:00	08/15/17 19:26	321-60-8	
Terphenyl-d14 (S)	82	%	43-117	1	08/15/17 00:00	08/15/17 19:26	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 08:16	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 08:16	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 08:16	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 08:16	1330-20-7	
Surrogates								
Toluene-d8 (S)	101	%	80-108	1		08/16/17 08:16	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-113	1		08/16/17 08:16	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-114	1		08/16/17 08:16	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 08:16		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/22/17 15:05	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-12S/GW1 **Lab ID: 60250818013** Collected: 08/09/17 14:33 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:28	7440-38-2	
Barium	**210**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:28	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:28	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:28	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:28	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:28	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:28	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:20	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 08:40	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 08:40	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 08:40	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:40	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	74	%	39-114	1	08/15/17 00:00	08/16/17 08:40	321-60-8	
Terphenyl-d14 (S)	92	%	43-117	1	08/15/17 00:00	08/16/17 08:40	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 08:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 08:31	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 08:31	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 08:31	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/16/17 08:31	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/16/17 08:31	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-114	1		08/16/17 08:31	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 08:31		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/22/17 15:05	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-12D/GW1 **Lab ID: 60250818014** Collected: 08/09/17 16:09 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:35	7440-38-2	
Barium	**104**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:35	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:35	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:35	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:35	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:35	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:35	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:22	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 08:59	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 08:59	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 08:59	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 08:59	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%	39-114	1	08/15/17 00:00	08/16/17 08:59	321-60-8	
Terphenyl-d14 (S)	86	%	43-117	1	08/15/17 00:00	08/16/17 08:59	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 08:46	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 08:46	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 08:46	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 08:46	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		08/16/17 08:46	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/16/17 08:46	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-114	1		08/16/17 08:46	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 08:46		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/22/17 15:06	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: RB-2 **Lab ID: 60250818015** Collected: 08/09/17 16:08 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:37	7440-38-2	
Barium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:37	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:37	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:37	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:37	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:37	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:37	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:24	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 09:19	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 09:19	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 09:19	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:19	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	51	%	39-114	1	08/15/17 00:00	08/16/17 09:19	321-60-8	
Terphenyl-d14 (S)	67	%	43-117	1	08/15/17 00:00	08/16/17 09:19	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 09:01	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 09:01	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 09:01	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 09:01	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-108	1		08/16/17 09:01	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/16/17 09:01	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-114	1		08/16/17 09:01	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 09:01		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/22/17 15:08	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-13D/GW1 **Lab ID: 60250818016** Collected: 08/09/17 17:53 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**13.5**	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:44	7440-38-2	
Barium	**86.7**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:44	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:44	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:44	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:44	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:44	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:44	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:27	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	208-96-8	
Anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	207-08-9	
Chrysene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 09:39	206-44-0	
Fluorene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	193-39-5	
Naphthalene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 09:39	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	08/15/17 00:00	08/16/17 09:39	85-01-8	
Pyrene	ND	ug/L	0.091	1	08/15/17 00:00	08/16/17 09:39	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	75	%	39-114	1	08/15/17 00:00	08/16/17 09:39	321-60-8	
Terphenyl-d14 (S)	98	%	43-117	1	08/15/17 00:00	08/16/17 09:39	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 09:16	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 09:16	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 09:16	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 09:16	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		08/16/17 09:16	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-113	1		08/16/17 09:16	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-114	1		08/16/17 09:16	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 09:16		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/22/17 15:09	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-13S/GW1 **Lab ID: 60250818017** Collected: 08/10/17 08:13 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:46	7440-38-2	
Barium	**327**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:46	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:46	7440-43-9	
Chromium	**6.6**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:46	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:46	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:46	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:46	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:29	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	83-32-9	1e
Acenaphthylene	**0.33**	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	208-96-8	1e
Anthracene	**0.15**	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	120-12-7	1e
Benzo(a)anthracene	**0.22**	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	56-55-3	1e
Benzo(a)pyrene	**0.14**	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	50-32-8	1e
Benzo(b)fluoranthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	205-99-2	1e
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	191-24-2	1e
Benzo(k)fluoranthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	207-08-9	1e
Chrysene	**0.16**	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	218-01-9	1e
Dibenz(a,h)anthracene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	53-70-3	1e
Fluoranthene	**2.6**	ug/L	0.48	1	08/16/17 08:40	08/23/17 03:29	206-44-0	1e
Fluorene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	86-73-7	1e
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	193-39-5	1e
Naphthalene	ND	ug/L	0.48	1	08/16/17 08:40	08/23/17 03:29	91-20-3	1e
Phenanthrene	ND	ug/L	0.48	1	08/16/17 08:40	08/23/17 03:29	85-01-8	1e
Pyrene	**3.4**	ug/L	0.095	1	08/16/17 08:40	08/23/17 03:29	129-00-0	1e
Surrogates								
2-Fluorobiphenyl (S)	84	%	39-114	1	08/16/17 08:40	08/23/17 03:29	321-60-8	
Terphenyl-d14 (S)	92	%	43-117	1	08/16/17 08:40	08/23/17 03:29	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/16/17 09:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/16/17 09:31	100-41-4	
Toluene	ND	ug/L	1.0	1		08/16/17 09:31	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/16/17 09:31	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		08/16/17 09:31	2037-26-5	
4-Bromofluorobenzene (S)	110	%	80-113	1		08/16/17 09:31	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-114	1		08/16/17 09:31	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/16/17 09:31		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/23/17 14:58	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-15S/GW1 **Lab ID: 60250818018** Collected: 08/10/17 09:13 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**125**	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:48	7440-38-2	
Barium	**564**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:48	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:48	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:48	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:48	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:48	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:48	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:35	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**21.9**	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	83-32-9	1e
Acenaphthylene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	208-96-8	1e
Anthracene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	120-12-7	1e
Benzo(a)anthracene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	56-55-3	1e
Benzo(a)pyrene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	50-32-8	1e
Benzo(b)fluoranthene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	205-99-2	1e
Benzo(g,h,i)perylene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	191-24-2	1e
Benzo(k)fluoranthene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	207-08-9	1e
Chrysene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	218-01-9	1e
Dibenz(a,h)anthracene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	53-70-3	1e
Fluoranthene	ND	ug/L	23.8	50	08/16/17 08:40	08/23/17 14:31	206-44-0	1e
Fluorene	**13.6**	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	86-73-7	1e
Indeno(1,2,3-cd)pyrene	ND	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	193-39-5	1e
Naphthalene	**744**	ug/L	23.8	50	08/16/17 08:40	08/23/17 14:31	91-20-3	1e
Phenanthrene	ND	ug/L	23.8	50	08/16/17 08:40	08/23/17 14:31	85-01-8	1e
Pyrene	**4.8**	ug/L	4.8	50	08/16/17 08:40	08/23/17 14:31	129-00-0	1e
Surrogates								
2-Fluorobiphenyl (S)	83	%	39-114	50	08/16/17 08:40	08/23/17 14:31	321-60-8	
Terphenyl-d14 (S)	72	%	43-117	50	08/16/17 08:40	08/23/17 14:31	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**8570**	ug/L	100	100		08/17/17 20:16	71-43-2	
Ethylbenzene	**1490**	ug/L	100	100		08/17/17 20:16	100-41-4	
Toluene	ND	ug/L	100	100		08/17/17 20:16	108-88-3	
Xylene (Total)	ND	ug/L	300	100		08/17/17 20:16	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-108	100		08/17/17 20:16	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	100		08/17/17 20:16	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-114	100		08/17/17 20:16	17060-07-0	
Preservation pH	**1.0**		1.0	100		08/17/17 20:16		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/23/17 15:01	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: DUP-2/GW1 **Lab ID: 60250818019** Collected: 08/10/17 00:00 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:51	7440-38-2	
Barium	**84.9**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:51	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:51	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:51	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:51	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:51	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:51	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:38	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**0.20**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	83-32-9	1e
Acenaphthylene	**0.11**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	208-96-8	1e
Anthracene	**0.22**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	120-12-7	1e
Benzo(a)anthracene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	56-55-3	1e
Benzo(a)pyrene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	50-32-8	1e
Benzo(b)fluoranthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	205-99-2	1e
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	191-24-2	1e
Benzo(k)fluoranthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	207-08-9	1e
Chrysene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	218-01-9	1e
Dibenz(a,h)anthracene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	53-70-3	1e
Fluoranthene	ND	ug/L	0.48	1	08/16/17 08:40	08/23/17 04:09	206-44-0	1e
Fluorene	**0.30**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	86-73-7	1e
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	193-39-5	1e
Naphthalene	**10.2**	ug/L	0.48	1	08/16/17 08:40	08/23/17 04:09	91-20-3	1e
Phenanthrene	**0.77**	ug/L	0.48	1	08/16/17 08:40	08/23/17 04:09	85-01-8	1e
Pyrene	**0.29**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:09	129-00-0	1e
Surrogates								
2-Fluorobiphenyl (S)	78	%	39-114	1	08/16/17 08:40	08/23/17 04:09	321-60-8	
Terphenyl-d14 (S)	89	%	43-117	1	08/16/17 08:40	08/23/17 04:09	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/17/17 20:31	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/17/17 20:31	100-41-4	
Toluene	ND	ug/L	1.0	1		08/17/17 20:31	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/17/17 20:31	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		08/17/17 20:31	2037-26-5	
4-Bromofluorobenzene (S)	108	%	80-113	1		08/17/17 20:31	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-114	1		08/17/17 20:31	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/17/17 20:31		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/23/17 15:01	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-15D/GW1 **Lab ID: 60250818020** Collected: 08/10/17 10:34 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:53	7440-38-2	
Barium	**247**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:53	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:53	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:53	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:53	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:53	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:53	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:40	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**0.22**	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	83-32-9	1e
Acenaphthylene	**0.29**	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	208-96-8	1e
Anthracene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	120-12-7	1e
Benzo(a)anthracene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	56-55-3	1e
Benzo(a)pyrene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	50-32-8	1e
Benzo(b)fluoranthene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	205-99-2	1e
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	191-24-2	1e
Benzo(k)fluoranthene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	207-08-9	1e
Chrysene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	218-01-9	1e
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	53-70-3	1e
Fluoranthene	ND	ug/L	0.45	1	08/16/17 08:40	08/23/17 04:29	206-44-0	1e
Fluorene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	86-73-7	1e
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	193-39-5	1e
Naphthalene	**2.5**	ug/L	0.45	1	08/16/17 08:40	08/23/17 04:29	91-20-3	1e
Phenanthrene	ND	ug/L	0.45	1	08/16/17 08:40	08/23/17 04:29	85-01-8	1e
Pyrene	ND	ug/L	0.091	1	08/16/17 08:40	08/23/17 04:29	129-00-0	1e
Surrogates								
2-Fluorobiphenyl (S)	73	%	39-114	1	08/16/17 08:40	08/23/17 04:29	321-60-8	
Terphenyl-d14 (S)	78	%	43-117	1	08/16/17 08:40	08/23/17 04:29	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**4.8**	ug/L	1.0	1		08/17/17 20:46	71-43-2	
Ethylbenzene	**4.9**	ug/L	1.0	1		08/17/17 20:46	100-41-4	
Toluene	ND	ug/L	1.0	1		08/17/17 20:46	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/17/17 20:46	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		08/17/17 20:46	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		08/17/17 20:46	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-114	1		08/17/17 20:46	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/17/17 20:46		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/23/17 15:02	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-16D/GW1 **Lab ID: 60250818021** Collected: 08/10/17 12:42 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**11.4**	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:55	7440-38-2	
Barium	**234**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:55	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:55	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:55	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:55	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:55	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:55	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 11:42	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**5.2**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	83-32-9	1e
Acenaphthylene	**0.57**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	208-96-8	1e
Anthracene	**0.15**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	120-12-7	1e
Benzo(a)anthracene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	56-55-3	1e
Benzo(a)pyrene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	50-32-8	1e
Benzo(b)fluoranthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	205-99-2	1e
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	191-24-2	1e
Benzo(k)fluoranthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	207-08-9	1e
Chrysene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	218-01-9	1e
Dibenz(a,h)anthracene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	53-70-3	1e
Fluoranthene	ND	ug/L	0.48	1	08/16/17 08:40	08/23/17 04:49	206-44-0	1e
Fluorene	**1.6**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	86-73-7	1e
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	193-39-5	1e
Naphthalene	**240**	ug/L	11.9	25	08/16/17 08:40	08/24/17 11:19	91-20-3	1e
Phenanthrene	**0.56**	ug/L	0.48	1	08/16/17 08:40	08/23/17 04:49	85-01-8	1e
Pyrene	**0.10**	ug/L	0.095	1	08/16/17 08:40	08/23/17 04:49	129-00-0	1e
Surrogates								
2-Fluorobiphenyl (S)	78	%	39-114	1	08/16/17 08:40	08/23/17 04:49	321-60-8	
Terphenyl-d14 (S)	79	%	43-117	1	08/16/17 08:40	08/23/17 04:49	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**1880**	ug/L	50.0	50		08/17/17 21:01	71-43-2	
Ethylbenzene	**362**	ug/L	50.0	50		08/17/17 21:01	100-41-4	
Toluene	ND	ug/L	50.0	50		08/17/17 21:01	108-88-3	
Xylene (Total)	ND	ug/L	150	50		08/17/17 21:01	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	50		08/17/17 21:01	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-113	50		08/17/17 21:01	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-114	50		08/17/17 21:01	17060-07-0	
Preservation pH	**1.0**		1.0	50		08/17/17 21:01		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.0093**	mg/L	0.0050	1		08/23/17 15:03	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 ONEGAS
Pace Project No.: 60250818

Sample: ABMW-11/GW1 **Lab ID: 60250818022** Collected: 08/10/17 16:16 Received: 08/12/17 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	08/21/17 11:15	08/21/17 18:57	7440-38-2	
Barium	**85.1**	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:57	7440-39-3	
Cadmium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:57	7440-43-9	
Chromium	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:57	7440-47-3	
Lead	ND	ug/L	5.0	1	08/21/17 11:15	08/21/17 18:57	7439-92-1	
Selenium	ND	ug/L	15.0	1	08/21/17 11:15	08/21/17 18:57	7782-49-2	
Silver	ND	ug/L	7.0	1	08/21/17 11:15	08/21/17 18:57	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	08/22/17 17:00	08/23/17 12:06	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**0.16**	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	83-32-9	1e
Acenaphthylene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	208-96-8	1e
Anthracene	**0.15**	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	120-12-7	1e
Benzo(a)anthracene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	56-55-3	1e
Benzo(a)pyrene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	50-32-8	1e
Benzo(b)fluoranthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	205-99-2	1e
Benzo(g,h,i)perylene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	191-24-2	1e
Benzo(k)fluoranthene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	207-08-9	1e
Chrysene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	218-01-9	1e
Dibenz(a,h)anthracene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	53-70-3	1e
Fluoranthene	ND	ug/L	0.48	1	08/16/17 08:40	08/23/17 05:09	206-44-0	1e
Fluorene	**0.25**	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	86-73-7	1e
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	193-39-5	1e
Naphthalene	**9.6**	ug/L	0.48	1	08/16/17 08:40	08/23/17 05:09	91-20-3	1e
Phenanthrene	**0.65**	ug/L	0.48	1	08/16/17 08:40	08/23/17 05:09	85-01-8	1e
Pyrene	**0.21**	ug/L	0.095	1	08/16/17 08:40	08/23/17 05:09	129-00-0	1e
Surrogates								
2-Fluorobiphenyl (S)	79	%	39-114	1	08/16/17 08:40	08/23/17 05:09	321-60-8	
Terphenyl-d14 (S)	85	%	43-117	1	08/16/17 08:40	08/23/17 05:09	1718-51-0	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		08/17/17 21:16	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		08/17/17 21:16	100-41-4	
Toluene	ND	ug/L	1.0	1		08/17/17 21:16	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		08/17/17 21:16	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		08/17/17 21:16	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-113	1		08/17/17 21:16	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-114	1		08/17/17 21:16	17060-07-0	
Preservation pH	**1.0**		1.0	1		08/17/17 21:16		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		08/23/17 15:07	57-12-5	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 490992 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury

Associated Lab Samples: 60250818001, 60250818003, 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009, 60250818010, 60250818011, 60250818012, 60250818013, 60250818014, 60250818015, 60250818016, 60250818017, 60250818018, 60250818019, 60250818020, 60250818021

METHOD BLANK: 2009787 | Matrix: Water

Associated Lab Samples: 60250818001, 60250818003, 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009, 60250818010, 60250818011, 60250818012, 60250818013, 60250818014, 60250818015, 60250818016, 60250818017, 60250818018, 60250818019, 60250818020, 60250818021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	08/23/17 10:43	

LABORATORY CONTROL SAMPLE: 2009788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2009789 2009790

Parameter	Units	60250818001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	5.0	5.0	99	101	75-125	2	20	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 490993 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 60250818022

METHOD BLANK: 2009793 | Matrix: Water
Associated Lab Samples: 60250818022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	08/23/17 11:44	

LABORATORY CONTROL SAMPLE: 2009794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.2	84	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2009795 2009796

Parameter	Units	60250818022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	5.1	5.4	102	109	75-125	6	20	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 490679 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 60250818001, 60250818003, 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009, 60250818010, 60250818011, 60250818012

METHOD BLANK: 2008669 | Matrix: Water
Associated Lab Samples: 60250818001, 60250818003, 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009, 60250818010, 60250818011, 60250818012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	08/22/17 12:16	
Barium	ug/L	ND	5.0	08/21/17 17:43	
Cadmium	ug/L	ND	5.0	08/21/17 17:43	
Chromium	ug/L	ND	5.0	08/21/17 17:43	
Lead	ug/L	ND	5.0	08/21/17 17:43	
Selenium	ug/L	ND	15.0	08/21/17 17:43	
Silver	ug/L	ND	7.0	08/21/17 17:43	

LABORATORY CONTROL SAMPLE: 2008670

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	965	96	80-120	
Barium	ug/L	1000	1010	101	80-120	
Cadmium	ug/L	1000	1000	100	80-120	
Chromium	ug/L	1000	1030	103	80-120	
Lead	ug/L	1000	1040	104	80-120	
Selenium	ug/L	1000	1040	104	80-120	
Silver	ug/L	500	510	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2008671 2008672

Parameter	Units	60250818001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	983	1010	98	101	75-125	3	20	
Barium	ug/L	96.3	1000	1000	1090	1110	99	101	75-125	2	20	
Cadmium	ug/L	ND	1000	1000	992	1010	99	101	75-125	2	20	
Chromium	ug/L	ND	1000	1000	1020	1030	101	103	75-125	2	20	
Lead	ug/L	ND	1000	1000	977	995	98	99	75-125	2	20	
Selenium	ug/L	ND	1000	1000	1040	1060	104	106	75-125	2	27	
Silver	ug/L	ND	500	500	510	521	102	104	75-125	2	20	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 490680 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 60250818013, 60250818014, 60250818015, 60250818016, 60250818017, 60250818018, 60250818019, 60250818020, 60250818021, 60250818022

METHOD BLANK: 2008676 | Matrix: Water
Associated Lab Samples: 60250818013, 60250818014, 60250818015, 60250818016, 60250818017, 60250818018, 60250818019, 60250818020, 60250818021, 60250818022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	08/21/17 18:26	
Barium	ug/L	ND	5.0	08/21/17 18:26	
Cadmium	ug/L	ND	5.0	08/21/17 18:26	
Chromium	ug/L	ND	5.0	08/21/17 18:26	
Lead	ug/L	ND	5.0	08/21/17 18:26	
Selenium	ug/L	ND	15.0	08/21/17 18:26	
Silver	ug/L	ND	7.0	08/21/17 18:26	

LABORATORY CONTROL SAMPLE: 2008677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	945	94	80-120	
Barium	ug/L	1000	980	98	80-120	
Cadmium	ug/L	1000	972	97	80-120	
Chromium	ug/L	1000	1020	102	80-120	
Lead	ug/L	1000	1010	101	80-120	
Selenium	ug/L	1000	1010	101	80-120	
Silver	ug/L	500	502	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2008678 2008679

Parameter	Units	60250818013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	972	999	97	100	75-125	3	20	
Barium	ug/L	210	1000	1000	1180	1220	97	101	75-125	3	20	
Cadmium	ug/L	ND	1000	1000	982	1010	98	101	75-125	3	20	
Chromium	ug/L	ND	1000	1000	1010	1040	101	104	75-125	3	20	
Lead	ug/L	ND	1000	1000	965	991	97	99	75-125	3	20	
Selenium	ug/L	ND	1000	1000	1020	1050	102	105	75-125	2	27	
Silver	ug/L	ND	500	500	508	524	101	105	75-125	3	20	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 489974 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60250818001, 60250818002, 60250818003

METHOD BLANK: 2005679 | Matrix: Water
Associated Lab Samples: 60250818001, 60250818002, 60250818003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	08/16/17 00:14	
Ethylbenzene	ug/L	ND	1.0	08/16/17 00:14	
Toluene	ug/L	ND	1.0	08/16/17 00:14	
Xylene (Total)	ug/L	ND	3.0	08/16/17 00:14	
1,2-Dichloroethane-d4 (S)	%	105	80-114	08/16/17 00:14	
4-Bromofluorobenzene (S)	%	108	80-113	08/16/17 00:14	
Toluene-d8 (S)	%	98	80-108	08/16/17 00:14	

LABORATORY CONTROL SAMPLE: 2005680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.7	98	82-115	
Ethylbenzene	ug/L	20	20.1	101	83-112	
Toluene	ug/L	20	19.1	95	78-113	
Xylene (Total)	ug/L	60	61.2	102	83-114	
1,2-Dichloroethane-d4 (S)	%			104	80-114	
4-Bromofluorobenzene (S)	%			106	80-113	
Toluene-d8 (S)	%			99	80-108	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 489977 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009, 60250818010, 60250818011, 60250818012, 60250818013, 60250818014, 60250818015, 60250818016, 60250818017

METHOD BLANK: 2005693 | Matrix: Water
Associated Lab Samples: 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009, 60250818010, 60250818011, 60250818012, 60250818013, 60250818014, 60250818015, 60250818016, 60250818017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	08/16/17 06:00	
Ethylbenzene	ug/L	ND	1.0	08/16/17 06:00	
Toluene	ug/L	ND	1.0	08/16/17 06:00	
Xylene (Total)	ug/L	ND	3.0	08/16/17 06:00	
1,2-Dichloroethane-d4 (S)	%	105	80-114	08/16/17 06:00	
4-Bromofluorobenzene (S)	%	106	80-113	08/16/17 06:00	
Toluene-d8 (S)	%	98	80-108	08/16/17 06:00	

LABORATORY CONTROL SAMPLE: 2005694

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.2	101	82-115	
Ethylbenzene	ug/L	20	20.2	101	83-112	
Toluene	ug/L	20	19.2	96	78-113	
Xylene (Total)	ug/L	60	58.2	97	83-114	
1,2-Dichloroethane-d4 (S)	%			104	80-114	
4-Bromofluorobenzene (S)	%			105	80-113	
Toluene-d8 (S)	%			98	80-108	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 490383 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60250818018, 60250818019, 60250818020, 60250818021, 60250818022

METHOD BLANK: 2007410 | Matrix: Water
Associated Lab Samples: 60250818018, 60250818019, 60250818020, 60250818021, 60250818022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	08/17/17 19:30	
Ethylbenzene	ug/L	ND	1.0	08/17/17 19:30	
Toluene	ug/L	ND	1.0	08/17/17 19:30	
Xylene (Total)	ug/L	ND	3.0	08/17/17 19:30	
1,2-Dichloroethane-d4 (S)	%	106	80-114	08/17/17 19:30	
4-Bromofluorobenzene (S)	%	108	80-113	08/17/17 19:30	
Toluene-d8 (S)	%	98	80-108	08/17/17 19:30	

LABORATORY CONTROL SAMPLE: 2007411

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.8	94	82-115	
Ethylbenzene	ug/L	20	18.8	94	83-112	
Toluene	ug/L	20	18.0	90	78-113	
Xylene (Total)	ug/L	60	57.5	96	83-114	
1,2-Dichloroethane-d4 (S)	%			104	80-114	
4-Bromofluorobenzene (S)	%			106	80-113	
Toluene-d8 (S)	%			99	80-108	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 489780 | Analysis Method: EPA 8270C by SIM
QC Batch Method: EPA 3510C | Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 60250818001, 60250818003, 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009, 60250818010, 60250818011, 60250818012, 60250818013, 60250818014, 60250818015, 60250818016

METHOD BLANK: 2005036 | Matrix: Water
Associated Lab Samples: 60250818001, 60250818003, 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009, 60250818010, 60250818011, 60250818012, 60250818013, 60250818014, 60250818015, 60250818016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	08/15/17 15:28	
Acenaphthylene	ug/L	ND	0.10	08/15/17 15:28	
Anthracene	ug/L	ND	0.10	08/15/17 15:28	
Benzo(a)anthracene	ug/L	ND	0.10	08/15/17 15:28	
Benzo(a)pyrene	ug/L	ND	0.10	08/15/17 15:28	
Benzo(b)fluoranthene	ug/L	ND	0.10	08/15/17 15:28	
Benzo(g,h,i)perylene	ug/L	ND	0.10	08/15/17 15:28	
Benzo(k)fluoranthene	ug/L	ND	0.10	08/15/17 15:28	
Chrysene	ug/L	ND	0.10	08/15/17 15:28	
Dibenz(a,h)anthracene	ug/L	ND	0.10	08/15/17 15:28	
Fluoranthene	ug/L	ND	0.50	08/15/17 15:28	
Fluorene	ug/L	ND	0.10	08/15/17 15:28	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	08/15/17 15:28	
Naphthalene	ug/L	ND	0.50	08/15/17 15:28	
Phenanthrene	ug/L	ND	0.50	08/15/17 15:28	
Pyrene	ug/L	ND	0.10	08/15/17 15:28	
2-Fluorobiphenyl (S)	%	72	39-114	08/15/17 15:28	
Terphenyl-d14 (S)	%	92	43-117	08/15/17 15:28	

LABORATORY CONTROL SAMPLE: 2005037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.7	77	52-118	
Acenaphthylene	ug/L	10	7.2	72	54-124	
Anthracene	ug/L	10	7.1	71	59-121	
Benzo(a)anthracene	ug/L	10	7.3	73	63-126	
Benzo(a)pyrene	ug/L	10	7.8	78	63-127	
Benzo(b)fluoranthene	ug/L	10	8.1	81	59-127	
Benzo(g,h,i)perylene	ug/L	10	6.9	69	56-128	
Benzo(k)fluoranthene	ug/L	10	6.9	69	56-125	
Chrysene	ug/L	10	6.6	66	60-119	
Dibenz(a,h)anthracene	ug/L	10	7.5	75	54-142	
Fluoranthene	ug/L	10	7.5	75	68-133	
Fluorene	ug/L	10	7.4	74	56-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	7.6	76	60-136	
Naphthalene	ug/L	10	7.2	72	50-119	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

LABORATORY CONTROL SAMPLE: 2005037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	10	7.4	74	54-116	
Pyrene	ug/L	10	7.4	74	51-117	
2-Fluorobiphenyl (S)	%			69	39-114	
Terphenyl-d14 (S)	%			73	43-117	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 490006 | Analysis Method: EPA 8270C by SIM
QC Batch Method: EPA 3510C | Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 60250818017, 60250818018, 60250818019, 60250818020, 60250818021, 60250818022

METHOD BLANK: 2005800 | Matrix: Water
Associated Lab Samples: 60250818017, 60250818018, 60250818019, 60250818020, 60250818021, 60250818022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	08/23/17 00:29	
Acenaphthylene	ug/L	ND	0.10	08/23/17 00:29	
Anthracene	ug/L	ND	0.10	08/23/17 00:29	
Benzo(a)anthracene	ug/L	ND	0.10	08/23/17 00:29	
Benzo(a)pyrene	ug/L	ND	0.10	08/23/17 00:29	
Benzo(b)fluoranthene	ug/L	ND	0.10	08/23/17 00:29	
Benzo(g,h,i)perylene	ug/L	ND	0.10	08/23/17 00:29	
Benzo(k)fluoranthene	ug/L	ND	0.10	08/23/17 00:29	
Chrysene	ug/L	ND	0.10	08/23/17 00:29	
Dibenz(a,h)anthracene	ug/L	ND	0.10	08/23/17 00:29	
Fluoranthene	ug/L	ND	0.50	08/23/17 00:29	
Fluorene	ug/L	ND	0.10	08/23/17 00:29	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	08/23/17 00:29	
Naphthalene	ug/L	ND	0.50	08/23/17 00:29	
Phenanthrene	ug/L	ND	0.50	08/23/17 00:29	
Pyrene	ug/L	ND	0.10	08/23/17 00:29	
2-Fluorobiphenyl (S)	%	87	39-114	08/23/17 00:29	
Terphenyl-d14 (S)	%	89	43-117	08/23/17 00:29	

LABORATORY CONTROL SAMPLE: 2005801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.4	74	52-118	
Acenaphthylene	ug/L	10	8.4	84	54-124	
Anthracene	ug/L	10	8.6	86	59-121	
Benzo(a)anthracene	ug/L	10	11.2	112	63-126	
Benzo(a)pyrene	ug/L	10	9.5	95	63-127	
Benzo(b)fluoranthene	ug/L	10	9.3	93	59-127	
Benzo(g,h,i)perylene	ug/L	10	9.9	99	56-128	
Benzo(k)fluoranthene	ug/L	10	6.6	66	56-125	
Chrysene	ug/L	10	7.4	74	60-119	
Dibenz(a,h)anthracene	ug/L	10	10.4	104	54-142	
Fluoranthene	ug/L	10	9.1	91	68-133	
Fluorene	ug/L	10	7.6	76	56-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	10.9	109	60-136	
Naphthalene	ug/L	10	7.6	76	50-119	
Phenanthrene	ug/L	10	8.6	86	54-116	
Pyrene	ug/L	10	8.2	82	51-117	
2-Fluorobiphenyl (S)	%			73	39-114	
Terphenyl-d14 (S)	%			76	43-117	

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REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 489990 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60250818001, 60250818003, 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009

METHOD BLANK: 2005773 | Matrix: Water
Associated Lab Samples: 60250818001, 60250818003, 60250818004, 60250818005, 60250818006, 60250818007, 60250818008, 60250818009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	08/17/17 15:21	

LABORATORY CONTROL SAMPLE: 2005774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.087	87	69-126	

MATRIX SPIKE SAMPLE: 2005775

Parameter	Units	60250524001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.061	60	61-126	M1

SAMPLE DUPLICATE: 2005776

Parameter	Units	60250553004 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	0.0053	0.0056	6	46	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 490794 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60250818010, 60250818011, 60250818012, 60250818013, 60250818014, 60250818015, 60250818016

METHOD BLANK: 2009089 | Matrix: Water
Associated Lab Samples: 60250818010, 60250818011, 60250818012, 60250818013, 60250818014, 60250818015, 60250818016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	08/22/17 14:53	

LABORATORY CONTROL SAMPLE: 2009090

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.088	88	69-126	

MATRIX SPIKE SAMPLE: 2009091

Parameter	Units	60251256001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.078	75	61-126	

SAMPLE DUPLICATE: 2009092

Parameter	Units	60250977001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	<0.0016	ND		46	

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QUALITY CONTROL DATA

Project: 96323 ONEGAS
Pace Project No.: 60250818

QC Batch: 491004 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60250818017, 60250818018, 60250818019, 60250818020, 60250818021, 60250818022

METHOD BLANK: 2009837 | Matrix: Water
Associated Lab Samples: 60250818017, 60250818018, 60250818019, 60250818020, 60250818021, 60250818022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	08/23/17 14:57	

LABORATORY CONTROL SAMPLE: 2009838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.088	88	69-126	

MATRIX SPIKE SAMPLE: 2009839

Parameter	Units	60250818017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.095	93	61-126	

SAMPLE DUPLICATE: 2009840

Parameter	Units	60250794001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	.003J		46	

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QUALIFIERS

Project: 96323 ONEGAS
Pace Project No.: 60250818

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 489974

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 489977

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 490006

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 490383

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60250818001	**ABMW-7/GW1**	EPA 3010	490679	EPA 6010	490757
60250818003	**ABMW-8/6W1**	EPA 3010	490679	EPA 6010	490757
60250818004	**ABMW-8D/6W1**	EPA 3010	490679	EPA 6010	490757
60250818005	**ABMW-5/GW1**	EPA 3010	490679	EPA 6010	490757
60250818006	**ABMW-5D/GW1**	EPA 3010	490679	EPA 6010	490757
60250818007	**ABMW-18D/GW1**	EPA 3010	490679	EPA 6010	490757
60250818008	**DUP-1/GW1**	EPA 3010	490679	EPA 6010	490757
60250818009	**ABMW-9/GW1**	EPA 3010	490679	EPA 6010	490757
60250818010	**ABMW-9D/GW1**	EPA 3010	490679	EPA 6010	490757
60250818011	**RB-1**	EPA 3010	490679	EPA 6010	490757
60250818012	**ABMW-10/GW1**	EPA 3010	490679	EPA 6010	490757
60250818013	**ABMW-12S/GW1**	EPA 3010	490680	EPA 6010	490760
60250818014	**ABMW-12D/GW1**	EPA 3010	490680	EPA 6010	490760
60250818015	**RB-2**	EPA 3010	490680	EPA 6010	490760
60250818016	**ABMW-13D/GW1**	EPA 3010	490680	EPA 6010	490760
60250818017	**ABMW-13S/GW1**	EPA 3010	490680	EPA 6010	490760
60250818018	**ABMW-15S/GW1**	EPA 3010	490680	EPA 6010	490760
60250818019	**DUP-2/GW1**	EPA 3010	490680	EPA 6010	490760
60250818020	**ABMW-15D/GW1**	EPA 3010	490680	EPA 6010	490760
60250818021	**ABMW-16D/GW1**	EPA 3010	490680	EPA 6010	490760
60250818022	**ABMW-11/GW1**	EPA 3010	490680	EPA 6010	490760
60250818001	**ABMW-7/GW1**	EPA 7470	490992	EPA 7470	491077
60250818003	**ABMW-8/6W1**	EPA 7470	490992	EPA 7470	491077
60250818004	**ABMW-8D/6W1**	EPA 7470	490992	EPA 7470	491077
60250818005	**ABMW-5/GW1**	EPA 7470	490992	EPA 7470	491077
60250818006	**ABMW-5D/GW1**	EPA 7470	490992	EPA 7470	491077
60250818007	**ABMW-18D/GW1**	EPA 7470	490992	EPA 7470	491077
60250818008	**DUP-1/GW1**	EPA 7470	490992	EPA 7470	491077
60250818009	**ABMW-9/GW1**	EPA 7470	490992	EPA 7470	491077
60250818010	**ABMW-9D/GW1**	EPA 7470	490992	EPA 7470	491077
60250818011	**RB-1**	EPA 7470	490992	EPA 7470	491077
60250818012	**ABMW-10/GW1**	EPA 7470	490992	EPA 7470	491077
60250818013	**ABMW-12S/GW1**	EPA 7470	490992	EPA 7470	491077
60250818014	**ABMW-12D/GW1**	EPA 7470	490992	EPA 7470	491077
60250818015	**RB-2**	EPA 7470	490992	EPA 7470	491077
60250818016	**ABMW-13D/GW1**	EPA 7470	490992	EPA 7470	491077
60250818017	**ABMW-13S/GW1**	EPA 7470	490992	EPA 7470	491077
60250818018	**ABMW-15S/GW1**	EPA 7470	490992	EPA 7470	491077
60250818019	**DUP-2/GW1**	EPA 7470	490992	EPA 7470	491077
60250818020	**ABMW-15D/GW1**	EPA 7470	490992	EPA 7470	491077
60250818021	**ABMW-16D/GW1**	EPA 7470	490992	EPA 7470	491077
60250818022	**ABMW-11/GW1**	EPA 7470	490993	EPA 7470	491078
60250818001	**ABMW-7/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818003	**ABMW-8/6W1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818004	**ABMW-8D/6W1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818005	**ABMW-5/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818006	**ABMW-5D/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60250818007	**ABMW-18D/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818008	**DUP-1/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818009	**ABMW-9/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818010	**ABMW-9D/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818011	**RB-1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818012	**ABMW-10/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818013	**ABMW-12S/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818014	**ABMW-12D/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818015	**RB-2**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818016	**ABMW-13D/GW1**	EPA 3510C	489780	EPA 8270C by SIM	489922
60250818017	**ABMW-13S/GW1**	EPA 3510C	490006	EPA 8270C by SIM	490396
60250818018	**ABMW-15S/GW1**	EPA 3510C	490006	EPA 8270C by SIM	490396
60250818019	**DUP-2/GW1**	EPA 3510C	490006	EPA 8270C by SIM	490396
60250818020	**ABMW-15D/GW1**	EPA 3510C	490006	EPA 8270C by SIM	490396
60250818021	**ABMW-16D/GW1**	EPA 3510C	490006	EPA 8270C by SIM	490396
60250818022	**ABMW-11/GW1**	EPA 3510C	490006	EPA 8270C by SIM	490396
60250818001	**ABMW-7/GW1**	EPA 8260	489974		
60250818002	**TB-080817**	EPA 8260	489974		
60250818003	**ABMW-8/6W1**	EPA 8260	489974		
60250818004	**ABMW-8D/6W1**	EPA 8260	489977		
60250818005	**ABMW-5/GW1**	EPA 8260	489977		
60250818006	**ABMW-5D/GW1**	EPA 8260	489977		
60250818007	**ABMW-18D/GW1**	EPA 8260	489977		
60250818008	**DUP-1/GW1**	EPA 8260	489977		
60250818009	**ABMW-9/GW1**	EPA 8260	489977		
60250818010	**ABMW-9D/GW1**	EPA 8260	489977		
60250818011	**RB-1**	EPA 8260	489977		
60250818012	**ABMW-10/GW1**	EPA 8260	489977		
60250818013	**ABMW-12S/GW1**	EPA 8260	489977		
60250818014	**ABMW-12D/GW1**	EPA 8260	489977		
60250818015	**RB-2**	EPA 8260	489977		
60250818016	**ABMW-13D/GW1**	EPA 8260	489977		
60250818017	**ABMW-13S/GW1**	EPA 8260	489977		
60250818018	**ABMW-15S/GW1**	EPA 8260	490383		
60250818019	**DUP-2/GW1**	EPA 8260	490383		
60250818020	**ABMW-15D/GW1**	EPA 8260	490383		
60250818021	**ABMW-16D/GW1**	EPA 8260	490383		
60250818022	**ABMW-11/GW1**	EPA 8260	490383		
60250818001	**ABMW-7/GW1**	SM 4500-CN-E	489990		
60250818003	**ABMW-8/6W1**	SM 4500-CN-E	489990		
60250818004	**ABMW-8D/6W1**	SM 4500-CN-E	489990		
60250818005	**ABMW-5/GW1**	SM 4500-CN-E	489990		
60250818006	**ABMW-5D/GW1**	SM 4500-CN-E	489990		
60250818007	**ABMW-18D/GW1**	SM 4500-CN-E	489990		
60250818008	**DUP-1/GW1**	SM 4500-CN-E	489990		
60250818009	**ABMW-9/GW1**	SM 4500-CN-E	489990		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 96323 ONEGAS
Pace Project No.: 60250818

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60250818010	**ABMW-9D/GW1**	SM 4500-CN-E	490794		
60250818011	**RB-1**	SM 4500-CN-E	490794		
60250818012	**ABMW-10/GW1**	SM 4500-CN-E	490794		
60250818013	**ABMW-12S/GW1**	SM 4500-CN-E	490794		
60250818014	**ABMW-12D/GW1**	SM 4500-CN-E	490794		
60250818015	**RB-2**	SM 4500-CN-E	490794		
60250818016	**ABMW-13D/GW1**	SM 4500-CN-E	490794		
60250818017	**ABMW-13S/GW1**	SM 4500-CN-E	491004		
60250818018	**ABMW-15S/GW1**	SM 4500-CN-E	491004		
60250818019	**DUP-2/GW1**	SM 4500-CN-E	491004		
60250818020	**ABMW-15D/GW1**	SM 4500-CN-E	491004		
60250818021	**ABMW-16D/GW1**	SM 4500-CN-E	491004		
60250818022	**ABMW-11/GW1**	SM 4500-CN-E	491004		

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Sample Condition Upon Receipt

WO# : 60250818

60250818

Client Name: B:M

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☐ No ☑

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF 0.0 T-266 / CF +0.3 T-239 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): **As-read** 1.0/2.7 **Corr. Factor** CF 0.0 CF +0.3 **Corrected** 1.0/2.7 2.5/1.9/1.3

Temperature should be above freezing to 6°C 2.5/1.9/1.3

Date and initials of person examining contents: AS 1.3 PV 8/12/17

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☑Yes ☐No ☐N/A	PV 8/12/17
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☐Yes ☐No ☐N/A	
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	3 of 3 DGGH with HS.
Headspace in VOA vials (>6mm):	☑Yes ☐No ☐N/A	ABMW-5D/GW1
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	↓ 180 ↓
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 8/14/17

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

2014857

Section A Required Client Information:

Company:	Burns & McDonnell
Address:	9300 Ward Parkway KCMO 64114
Email To:	
Phone:	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Brian Hoye
Copy To:	Kevin White
Purchase Order No.:	
Project Name:	OneGas
Project Number:	96323

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	BTEX	RCRA Metals	Total Cyanide	PAHs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ABMW-7/GW1	WT				8-8	0833		7	2		1	3	1					Y	Y	Y	Y	3DG9H 2AG4U 1BP3N20 1BP3C125	001
2	TB-080817	WT				8-8	0800		1				1						Y	Y	Y	Y	1DG9H	002
3	ABMW-8/GW1	WT				8-8	1203		7	2		1	3	1					Y	Y	Y	Y		003
4	ABMW-8D/GW1	WT				8-8	1300		7	2		1	3	1					Y	Y	Y	Y		004
5	ABMW-5/GW1	WT				8-8	1458		7	2		1	3	1					Y	Y	Y	Y		005
6	ABMW-5D/GW1	WT				8-8	1609		7	2		1	3	1					Y	Y	Y	Y		006
7	ABMW-18D/GW1	WT				8-8	1734		7	2		1	3	1					Y	Y	Y	Y		007
8	DUP-1/GW1	WT				8-9	0000		7	2		1	3	1					Y	Y	Y	Y		008
9	ABMW-9/GW1	WT				8-9	0820		7	2		1	3	1					Y	Y	Y	Y		009
10	ABMW-9D/GW1	WT				8-9	0935		7	2		1	3	1					Y	Y	Y	Y		010
11	RB-1	WT				8-9	0955		7	2		1	3	1					Y	Y	Y	Y		011
12	ABMW-10/GW1	WT				8-9	1133		7	2		1	3	1					Y	Y	Y	Y		012

60250818

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature]	8-12-17		[signature]	8/12	0920

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1.0	X	N	Y
2.7			
2.5			
1.9			
1.3			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joshua Bragg

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 08/12/17

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days

F-ALL-Q-020rev.07, 15-May-2007

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

2014856

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Burns & McDonnell	Report To: Brian Hoye	Attention:
Address: 9300 Ward Parkway Kansas City, MO 64114	Copy To: Kevin White	Company Name:
		Address:
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: ~~963~~ OneGas	Pace Project Manager:
Requested Due Date/TAT:	Project Number: 96323	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	BTEX	RCRA Metals	Total Cyanide	PAHs			Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
13	ABMW-12S/GW1	WT				8-9	1433		7	2		1	3	1					Y	Y	Y	Y	3DG9H	2AG4U		1BP3N20 1BP3C125 013
14	ABMW-12D/GW1	WT				8-9	1609		7	2		1	3	1					Y	Y	Y	Y				014
15	RB-2	WT				8-9	1648		7	2		1	3	1					Y	Y	Y	Y				015
16	ABMW-13D/GW1	WT				8-9	1753		7	2		1	3	1					Y	Y	Y	Y				016
17	ABMW-13S/GW1	WT				8-10	0813		7	2		1	3	1					Y	Y	Y	Y				017
18	ABMW-15S/GW1	WT				8-10	0913		7	2		1	3	1					Y	Y	Y	Y				018
19	DUP-2/GW1	WT				8-10	0000		7	2		1	3	1					Y	Y	Y	Y				019
20	ABMW-15D/GW1	WT				8-10	1034		7	2		1	3	1					Y	Y	Y	Y				020
21	ABMW-16D/GW1	WT				8-10	1242		7	2		1	3	1					Y	Y	Y	Y				021
22	ABMW-1V/GW1	WT				8-10	1616		7	2		1	3	1					Y	Y	Y	Y				022
23	MMW-4/GW1	WT				8-11	1605		7	2		1	3	1					Y	Y	Y	Y				023
12																										

60250818

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature]	8-12-17		[signature]	8/12	0920

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1.0	X	N	X
2.7			
1.9			
2.5			
1.3			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joshua Bragg

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 08/12/17

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days

F-ALL-Q-020rev.07, 15-May-2007

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Sample Condition Upon Receipt

WO# : 60246986
60246986

Client Name: B & M

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☐ No ☑

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-239 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): **As-read** 0.4/0.2/0.6 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 0.6/0.4/0.8

Date and initials of person examining contents: BB 6/21/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	11 S collected @ 1820
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: W	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/21/17

BURNS & McDONNELL℠ **Request for Chemical Analysis and Chain of Custody Record**

1 of 2

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170620A
Lab. Reference No. or Episode No.: 60246986

Project Number: 96323
Client Name: ONEGAS - Kansas City

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Matrix: Liquid	Matrix: Solid	Matrix: Gas	Number of Containers	Analysis: BTEX (8260)	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide	Remarks	
–	KCMW-12S	GW01	–	–	–	–	6/19/17	1650	X	3DG9H	2AG4U	7	X	X	X	X	BP3N 2.0 BP3C 10.0	001
–	KCMW-12D	GW01	–	–	–	–	6/19/17	1750	X			7	X	X	X	X		002
–	KCMW-4	GW01	–	–	–	–	6/19/17	1910	X			7	X	X	X	X		003
–	KCMW-4	ERB	–	–	–	–	6/19/17	1930	X			7	X	X	X	X	Rinsate	004
–	KCMW-7S	GW01	–	–	–	–	6/20/17	0825	X			7	X	X	X	X		005
–	KCMW-1	GW01	–	–	–	–	6/20/17	0945	X	9DG9H	6AG4U	7	X	X	X	X	3BP3N 3BP3C 10.0 MS/MSD Parent	006
–	KCMW-1	GW01 MS/MSD	–	–	–	–	6/20/17	0945	X	–		14	X	X	X	X	MS/MSD	–
–	KCMW-8S	GW01	–	–	–	–	6/20/17	1120	X			7	X	X	X	X		007
–	KCMW-10	GW01	–	–	–	–	6/20/17	1235	X	3DG9H	2AG4U	7	X	X	X	X	BP3N 2.0 BP3C 10.0	008
–	KCMW-2	GW01	–	–	–	–	6/20/17	1345	X			7	X	X	X	X		009
–	KCMW-3	GW01	–	–	–	–	6/20/17	1535	X			7	X	X	X	X		010
–	KCMW-11D	GW01	–	–	–	–	6/20/17	1750	X			7	X	X	X	X		011
–	KCMW-11S	GW01	–	–	–	–	6/20/17		X			7	X	X	X	X		012
–	KCDUP-1	GW01	–	–	–	–	6/20/17	–	X			7	X	X	X	X	Blind Dup	013
–	KCDUP-2	GW01	–	–	–	–	6/20/17	–	X			7	X	X	X	X	Blind Dup	014

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/21/17 0715

Relinquished By (signature): Date/Time 6/21/17 0714

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 0.6/0.4/0.8

Relinquished By (signature): 2. Date/Time

Relinquished By (signature): Date/Time

Laboratory Comments:

082416 Form WCD-KC1

BURNS McDONNELL℠ **Request for Chemical Analysis and Chain of Custody Record**

2 of 2

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170620A
Lab. Reference No. or Episode No.: 60246986

Project Number: 96323
Client Name: ONEGAS - Kansas City

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type			Number of Containers	Analysis						Remarks
Group or SWMU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas		8260 - BTEX						
—	Trip Blank	20170620A TB01	—	—	—	—	—	—	X			2	X						20694 015

6-20-17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/21/17, 0715

Relinquished By (signature): 6/21/17 Date/Time 0714

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 6.6/0.4/0.8

Relinquished By (signature): 2. Date/Time

Relinquished By (signature): Date/Time

Laboratory Comments:

082416 Form WCD-KC1

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 05, 2017

Brian Hoye
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Dear Brian Hoye:
Enclosed are the analytical results for sample(s) received by the laboratory on June 21, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angie Brown for
Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

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Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60246986001	**KCMW -12S/GW01**	Water	06/19/17 16:50	06/21/17 07:14
60246986002	**KCMW -12D/GW01**	Water	06/19/17 17:50	06/21/17 07:14
60246986003	**KCMW -4/GW01**	Water	06/19/17 19:10	06/21/17 07:14
60246986004	**KCMW -4/ERB**	Water	06/19/17 19:30	06/21/17 07:14
60246986005	**KCMW -7S/GW01**	Water	06/20/17 08:25	06/21/17 07:14
60246986006	**KCMW -1/GW01**	Water	06/20/17 09:45	06/21/17 07:14
60246986007	**KCMW -8S/GW01**	Water	06/20/17 11:20	06/21/17 07:14
60246986008	**KCMW -10/GW01**	Water	06/20/17 12:35	06/21/17 07:14
60246986009	**KCMW -2/GW01**	Water	06/20/17 13:45	06/21/17 07:14
60246986010	**KCMW -3/GW01**	Water	06/20/17 15:35	06/21/17 07:14
60246986011	**KCMW -11D/GW01**	Water	06/20/17 17:50	06/21/17 07:14
60246986012	**KCMW -11S/GW01**	Water	06/20/17 18:20	06/21/17 07:14
60246986013	**KCDUP-1/GW01**	Water	06/20/17 08:00	06/21/17 07:14
60246986014	**KCDUP-2/GW01**	Water	06/20/17 08:00	06/21/17 07:14
60246986015	**TRIPBLANK/TB01**	Water	06/19/17 16:50	06/21/17 07:14

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(913)599-5665

SAMPLE ANALYTE COUNT

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60246986001	**KCMW -12S/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986002	**KCMW -12D/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986003	**KCMW -4/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986004	**KCMW -4/ERB**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986005	**KCMW -7S/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986006	**KCMW -1/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986007	**KCMW -8S/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986008	**KCMW -10/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986009	**KCMW -2/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	PGH	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986010	**KCMW -3/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986011	**KCMW -11D/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986012	**KCMW -11S/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986013	**KCDUP-1/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986014	**KCDUP-2/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	JMC1	1	PASI-K
60246986015	**TRIPBLANK/TB01**	EPA 8260/OA1	PGH	8	PASI-K

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -12S/GW01 **Lab ID: 60246986001** Collected: 06/19/17 16:50 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**29.0**	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:11	7440-38-2	
Barium	**170**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:11	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:11	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:11	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:11	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:11	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:11	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:27	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 17:34	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	193-39-5	
Naphthalene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 17:34	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 17:34	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 17:34	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	88	%	39-114	1	06/22/17 00:00	06/26/17 17:34	321-60-8	
Terphenyl-d14 (S)	98	%	43-117	1	06/22/17 00:00	06/26/17 17:34	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 04:35	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 04:35	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 04:35	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 04:35	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-120	1		06/29/17 04:35	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		06/29/17 04:35	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120	1		06/29/17 04:35	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 04:35		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.0050**	mg/L	0.0050	1		07/03/17 16:24	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -12D/GW01 **Lab ID: 60246986002** Collected: 06/19/17 17:50 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:13	7440-38-2	
Barium	**514**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:13	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:13	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:13	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:13	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:13	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:13	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:29	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	83-32-9	
Acenaphthylene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	208-96-8	
Anthracene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	207-08-9	
Chrysene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	53-70-3	
Fluoranthene	ND	ug/L	0.45	1	06/22/17 00:00	06/26/17 17:54	206-44-0	
Fluorene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	193-39-5	
Naphthalene	ND	ug/L	0.45	1	06/22/17 00:00	06/26/17 17:54	91-20-3	
Phenanthrene	ND	ug/L	0.45	1	06/22/17 00:00	06/26/17 17:54	85-01-8	
Pyrene	ND	ug/L	0.091	1	06/22/17 00:00	06/26/17 17:54	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	90	%	39-114	1	06/22/17 00:00	06/26/17 17:54	321-60-8	
Terphenyl-d14 (S)	98	%	43-117	1	06/22/17 00:00	06/26/17 17:54	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 04:49	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 04:49	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 04:49	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 04:49	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-120	1		06/29/17 04:49	2037-26-5	
4-Bromofluorobenzene (S)	95	%	80-120	1		06/29/17 04:49	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		06/29/17 04:49	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 04:49		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.028**	mg/L	0.0050	1		07/03/17 16:25	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -4/GW01 **Lab ID: 60246986003** Collected: 06/19/17 19:10 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:15	7440-38-2	
Barium	**106**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:15	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:15	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:15	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:15	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:15	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:15	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:32	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:14	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	193-39-5	
Naphthalene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:14	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:14	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:14	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	39-114	1	06/22/17 00:00	06/26/17 18:14	321-60-8	
Terphenyl-d14 (S)	95	%	43-117	1	06/22/17 00:00	06/26/17 18:14	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 05:03	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 05:03	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 05:03	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 05:03	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-120	1		06/29/17 05:03	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		06/29/17 05:03	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120	1		06/29/17 05:03	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 05:03		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/03/17 16:28	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -4/ERB **Lab ID: 60246986004** Collected: 06/19/17 19:30 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:17	7440-38-2	
Barium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:17	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:17	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:17	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:17	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:17	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:17	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:34	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:34	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	193-39-5	
Naphthalene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:34	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:34	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:34	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	85	%	39-114	1	06/22/17 00:00	06/26/17 18:34	321-60-8	
Terphenyl-d14 (S)	93	%	43-117	1	06/22/17 00:00	06/26/17 18:34	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 05:17	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 05:17	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 05:17	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 05:17	1330-20-7	
Surrogates								
Toluene-d8 (S)	101	%	80-120	1		06/29/17 05:17	2037-26-5	
4-Bromofluorobenzene (S)	95	%	80-120	1		06/29/17 05:17	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		06/29/17 05:17	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 05:17		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/03/17 16:29	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -7S/GW01 **Lab ID: 60246986005** Collected: 06/20/17 08:25 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:20	7440-38-2	
Barium	**79.2**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:20	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:20	7440-43-9	
Chromium	**10.4**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:20	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:20	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:20	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:20	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:36	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:54	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	193-39-5	
Naphthalene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:54	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 18:54	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 18:54	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	39-114	1	06/22/17 00:00	06/26/17 18:54	321-60-8	
Terphenyl-d14 (S)	89	%	43-117	1	06/22/17 00:00	06/26/17 18:54	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 05:32	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 05:32	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 05:32	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 05:32	1330-20-7	
Surrogates								
Toluene-d8 (S)	101	%	80-120	1		06/29/17 05:32	2037-26-5	
4-Bromofluorobenzene (S)	95	%	80-120	1		06/29/17 05:32	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		06/29/17 05:32	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 05:32		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/03/17 16:30	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -1/GW01 **Lab ID: 60246986006** Collected: 06/20/17 09:45 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 09:52	7440-38-2	
Barium	**67.8**	ug/L	5.0	1	06/27/17 16:45	06/28/17 09:52	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 09:52	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 09:52	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 09:52	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 09:52	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 09:52	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:38	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	208-96-8	
Anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 19:14	206-44-0	
Fluorene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	193-39-5	
Naphthalene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 19:14	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 19:14	85-01-8	
Pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 19:14	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	85	%	39-114	1	06/22/17 00:00	06/26/17 19:14	321-60-8	
Terphenyl-d14 (S)	95	%	43-117	1	06/22/17 00:00	06/26/17 19:14	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 05:46	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 05:46	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 05:46	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 05:46	1330-20-7	LS
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		06/29/17 05:46	2037-26-5	
4-Bromofluorobenzene (S)	92	%	80-120	1		06/29/17 05:46	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120	1		06/29/17 05:46	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 05:46		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/03/17 16:30	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -8S/GW01 **Lab ID: 60246986007** Collected: 06/20/17 11:20 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:22	7440-38-2	
Barium	**94.5**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:22	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:22	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:22	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:22	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:22	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:22	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:49	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	208-96-8	
Anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 20:14	206-44-0	
Fluorene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	193-39-5	
Naphthalene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 20:14	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 20:14	85-01-8	
Pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:14	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	39-114	1	06/22/17 00:00	06/26/17 20:14	321-60-8	
Terphenyl-d14 (S)	85	%	43-117	1	06/22/17 00:00	06/26/17 20:14	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 06:28	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 06:28	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 06:28	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 06:28	1330-20-7	
Surrogates								
Toluene-d8 (S)	96	%	80-120	1		06/29/17 06:28	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		06/29/17 06:28	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120	1		06/29/17 06:28	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 06:28		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/03/17 16:33	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -10/GW01 **Lab ID: 60246986008** Collected: 06/20/17 12:35 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:24	7440-38-2	
Barium	**103**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:24	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:24	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:24	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:24	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:24	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:24	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:51	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	208-96-8	
Anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 20:34	206-44-0	
Fluorene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	193-39-5	
Naphthalene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 20:34	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	06/22/17 00:00	06/26/17 20:34	85-01-8	
Pyrene	ND	ug/L	0.11	1	06/22/17 00:00	06/26/17 20:34	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	39-114	1	06/22/17 00:00	06/26/17 20:34	321-60-8	
Terphenyl-d14 (S)	89	%	43-117	1	06/22/17 00:00	06/26/17 20:34	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 06:42	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 06:42	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 06:42	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 06:42	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-120	1		06/29/17 06:42	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		06/29/17 06:42	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		06/29/17 06:42	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 06:42		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.0051**	mg/L	0.0050	1		07/03/17 16:34	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -2/GW01 **Lab ID: 60246986009** Collected: 06/20/17 13:45 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:26	7440-38-2	
Barium	**119**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:26	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:26	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:26	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:26	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:26	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:26	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:54	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 20:54	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	193-39-5	
Naphthalene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 20:54	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 20:54	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 20:54	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	82	%	39-114	1	06/22/17 00:00	06/26/17 20:54	321-60-8	
Terphenyl-d14 (S)	91	%	43-117	1	06/22/17 00:00	06/26/17 20:54	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 06:56	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 06:56	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 06:56	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 06:56	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-120	1		06/29/17 06:56	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		06/29/17 06:56	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		06/29/17 06:56	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 06:56		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.016**	mg/L	0.0050	1		07/03/17 16:34	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -3/GW01 **Lab ID: 60246986010** Collected: 06/20/17 15:35 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**77.4**	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:28	7440-38-2	
Barium	**475**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:28	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:28	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:28	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:28	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:28	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:28	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:56	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**1.2**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	83-32-9	
Acenaphthylene	**0.50**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	208-96-8	
Anthracene	**0.38**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	120-12-7	
Benzo(a)anthracene	**0.19**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	56-55-3	
Benzo(a)pyrene	**0.30**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	50-32-8	
Benzo(b)fluoranthene	**0.17**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	205-99-2	1e
Benzo(g,h,i)perylene	**0.21**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	191-24-2	
Benzo(k)fluoranthene	**0.12**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	207-08-9	
Chrysene	**0.21**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	06/22/17 00:00	06/27/17 15:05	206-44-0	
Fluorene	**1.7**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.17**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	193-39-5	
Naphthalene	**0.70**	ug/L	0.56	1	06/22/17 00:00	06/27/17 15:05	91-20-3	
Phenanthrene	**2.7**	ug/L	0.56	1	06/22/17 00:00	06/27/17 15:05	85-01-8	
Pyrene	**0.70**	ug/L	0.11	1	06/22/17 00:00	06/27/17 15:05	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	71	%	39-114	1	06/22/17 00:00	06/27/17 15:05	321-60-8	
Terphenyl-d14 (S)	75	%	43-117	1	06/22/17 00:00	06/27/17 15:05	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**4.9**	ug/L	1.0	1		06/29/17 19:11	71-43-2	
Toluene	**1.9**	ug/L	1.0	1		06/29/17 19:11	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 19:11	100-41-4	
Xylene (Total)	**5.0**	ug/L	3.0	1		06/29/17 19:11	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-120	1		06/29/17 19:11	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120	1		06/29/17 19:11	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		06/29/17 19:11	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 19:11		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/03/17 16:37	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -11D/GW01 **Lab ID: 60246986011** Collected: 06/20/17 17:50 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**24.4**	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:31	7440-38-2	
Barium	**260**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:31	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:31	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:31	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:31	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:31	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:31	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 11:58	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**19.4**	ug/L	10.0	100	06/22/17 00:00	06/27/17 15:25	83-32-9	
Acenaphthylene	**0.63**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	208-96-8	
Anthracene	**0.64**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 21:34	206-44-0	
Fluorene	**10.7**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	193-39-5	
Naphthalene	**1200**	ug/L	50.0	100	06/22/17 00:00	06/27/17 15:25	91-20-3	
Phenanthrene	**3.9**	ug/L	0.50	1	06/22/17 00:00	06/26/17 21:34	85-01-8	
Pyrene	**0.36**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:34	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	39-114	1	06/22/17 00:00	06/26/17 21:34	321-60-8	
Terphenyl-d14 (S)	85	%	43-117	1	06/22/17 00:00	06/26/17 21:34	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**8540**	ug/L	50.0	50		06/29/17 19:26	71-43-2	
Toluene	ND	ug/L	50.0	50		06/29/17 19:26	108-88-3	
Ethylbenzene	**498**	ug/L	50.0	50		06/29/17 19:26	100-41-4	
Xylene (Total)	**288**	ug/L	150	50		06/29/17 19:26	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-120	50		06/29/17 19:26	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120	50		06/29/17 19:26	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120	50		06/29/17 19:26	17060-07-0	
Preservation pH	**1.0**		0.10	50		06/29/17 19:26		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/03/17 16:37	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCMW -11S/GW01 **Lab ID: 60246986012** Collected: 06/20/17 18:20 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:37	7440-38-2	
Barium	**159**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:37	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:37	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:37	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:37	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:37	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:37	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 12:00	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**5.6**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	83-32-9	
Acenaphthylene	**48.4**	ug/L	5.0	50	06/22/17 00:00	06/27/17 15:45	208-96-8	
Anthracene	**3.4**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	120-12-7	
Benzo(a)anthracene	**0.28**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	50-32-8	
Benzo(b)fluoranthene	**0.11**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	205-99-2	2e
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	207-08-9	
Chrysene	**0.31**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	53-70-3	
Fluoranthene	ND	ug/L	25.0	50	06/22/17 00:00	06/27/17 15:45	206-44-0	
Fluorene	**6.2**	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 21:54	193-39-5	
Naphthalene	**498**	ug/L	25.0	50	06/22/17 00:00	06/27/17 15:45	91-20-3	
Phenanthrene	**115**	ug/L	25.0	50	06/22/17 00:00	06/27/17 15:45	85-01-8	
Pyrene	**22.1**	ug/L	5.0	50	06/22/17 00:00	06/27/17 15:45	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	76	%	39-114	1	06/22/17 00:00	06/26/17 21:54	321-60-8	
Terphenyl-d14 (S)	76	%	43-117	1	06/22/17 00:00	06/26/17 21:54	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**6.7**	ug/L	5.0	5		06/29/17 19:42	71-43-2	
Toluene	**5.4**	ug/L	5.0	5		06/29/17 19:42	108-88-3	
Ethylbenzene	ND	ug/L	5.0	5		06/29/17 19:42	100-41-4	
Xylene (Total)	ND	ug/L	15.0	5		06/29/17 19:42	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-120	5		06/29/17 19:42	2037-26-5	D3
4-Bromofluorobenzene (S)	104	%	80-120	5		06/29/17 19:42	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120	5		06/29/17 19:42	17060-07-0	
Preservation pH	**1.0**		0.10	5		06/29/17 19:42		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.013**	mg/L	0.0050	1		07/04/17 13:28	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCDUP-1/GW01 **Lab ID: 60246986013** Collected: 06/20/17 08:00 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:39	7440-38-2	
Barium	**104**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:39	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:39	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:39	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:39	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:39	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:39	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 12:02	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 22:14	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	193-39-5	
Naphthalene	**1.4**	ug/L	0.50	1	06/22/17 00:00	06/26/17 22:14	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/22/17 00:00	06/26/17 22:14	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/22/17 00:00	06/26/17 22:14	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	81	%	39-114	1	06/22/17 00:00	06/26/17 22:14	321-60-8	
Terphenyl-d14 (S)	90	%	43-117	1	06/22/17 00:00	06/26/17 22:14	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 19:57	71-43-2	
Toluene	ND	ug/L	1.0	1		06/29/17 19:57	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 19:57	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 19:57	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-120	1		06/29/17 19:57	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		06/29/17 19:57	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120	1		06/29/17 19:57	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 19:57		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.11**	mg/L	0.0050	1		07/04/17 13:29	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: KCDUP-2/GW01 **Lab ID: 60246986014** Collected: 06/20/17 08:00 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**77.1**	ug/L	10.0	1	06/27/17 16:45	06/28/17 10:42	7440-38-2	
Barium	**479**	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:42	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:42	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:42	7440-47-3	
Lead	ND	ug/L	5.0	1	06/27/17 16:45	06/28/17 10:42	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/27/17 16:45	06/28/17 10:42	7782-49-2	
Silver	ND	ug/L	7.0	1	06/27/17 16:45	06/28/17 10:42	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	06/28/17 16:32	06/29/17 12:05	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**1.2**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	83-32-9	
Acenaphthylene	**0.48**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	208-96-8	
Anthracene	**0.38**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	120-12-7	
Benzo(a)anthracene	**0.16**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	56-55-3	
Benzo(a)pyrene	**0.26**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	50-32-8	
Benzo(b)fluoranthene	**0.20**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	205-99-2	2e
Benzo(g,h,i)perylene	**0.19**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	207-08-9	
Chrysene	**0.18**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/22/17 00:00	06/27/17 16:05	206-44-0	
Fluorene	**1.6**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.14**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	193-39-5	
Naphthalene	**0.77**	ug/L	0.50	1	06/22/17 00:00	06/27/17 16:05	91-20-3	
Phenanthrene	**2.5**	ug/L	0.50	1	06/22/17 00:00	06/27/17 16:05	85-01-8	
Pyrene	**0.64**	ug/L	0.10	1	06/22/17 00:00	06/27/17 16:05	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	76	%	39-114	1	06/22/17 00:00	06/27/17 16:05	321-60-8	
Terphenyl-d14 (S)	79	%	43-117	1	06/22/17 00:00	06/27/17 16:05	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**4.7**	ug/L	1.0	1		06/29/17 20:12	71-43-2	
Toluene	**1.8**	ug/L	1.0	1		06/29/17 20:12	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 20:12	100-41-4	
Xylene (Total)	**5.5**	ug/L	3.0	1		06/29/17 20:12	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-120	1		06/29/17 20:12	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120	1		06/29/17 20:12	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120	1		06/29/17 20:12	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 20:12		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/03/17 16:43	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Sample: TRIPBLANK/TB01 **Lab ID: 60246986015** Collected: 06/19/17 16:50 Received: 06/21/17 07:14 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/29/17 08:21	71-43-2	L1
Toluene	ND	ug/L	1.0	1		06/29/17 08:21	108-88-3	L1
Ethylbenzene	ND	ug/L	1.0	1		06/29/17 08:21	100-41-4	L1
Xylene (Total)	ND	ug/L	3.0	1		06/29/17 08:21	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-120	1		06/29/17 08:21	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		06/29/17 08:21	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		06/29/17 08:21	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/29/17 08:21		

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QUALITY CONTROL DATA

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

QC Batch: 483137 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

METHOD BLANK: 1979096 | Matrix: Water
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	06/29/17 11:14	

LABORATORY CONTROL SAMPLE: 1979097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.2	84	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1979098 1979099

Parameter	Units	60246986006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.2	4.4	85	88	75-125	4	20	

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QUALITY CONTROL DATA

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

QC Batch: 482851 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

METHOD BLANK: 1978035 | Matrix: Water
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	06/28/17 09:48	
Barium	ug/L	ND	5.0	06/28/17 09:48	
Cadmium	ug/L	ND	5.0	06/28/17 09:48	
Chromium	ug/L	ND	5.0	06/28/17 09:48	
Lead	ug/L	ND	5.0	06/28/17 09:48	
Selenium	ug/L	ND	15.0	06/28/17 09:48	
Silver	ug/L	ND	7.0	06/28/17 09:48	

LABORATORY CONTROL SAMPLE: 1978036

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	967	97	80-120	
Barium	ug/L	1000	1020	102	80-120	
Cadmium	ug/L	1000	1010	101	80-120	
Chromium	ug/L	1000	1010	101	80-120	
Lead	ug/L	1000	1030	103	80-120	
Selenium	ug/L	1000	1030	103	80-120	
Silver	ug/L	500	505	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978037 1978038

Parameter	Units	60246986006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	1010	1000	100	100	75-125	0	20	
Barium	ug/L	67.8	1000	1000	1090	1090	102	102	75-125	0	20	
Cadmium	ug/L	ND	1000	1000	1030	1020	103	102	75-125	0	20	
Chromium	ug/L	ND	1000	1000	1010	997	101	100	75-125	1	20	
Lead	ug/L	ND	1000	1000	990	982	99	98	75-125	1	20	
Selenium	ug/L	ND	1000	1000	1040	1040	104	103	75-125	1	27	
Silver	ug/L	ND	500	500	515	512	103	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

QC Batch: 483032 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986015

METHOD BLANK: 1978661 | Matrix: Water
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/29/17 04:21	
Ethylbenzene	ug/L	ND	1.0	06/29/17 04:21	
Toluene	ug/L	ND	1.0	06/29/17 04:21	
Xylene (Total)	ug/L	ND	3.0	06/29/17 04:21	
1,2-Dichloroethane-d4 (S)	%	101	80-120	06/29/17 04:21	
4-Bromofluorobenzene (S)	%	93	80-120	06/29/17 04:21	
Toluene-d8 (S)	%	101	80-120	06/29/17 04:21	

LABORATORY CONTROL SAMPLE: 1978662

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	23.1	116	82-115	L1
Ethylbenzene	ug/L	20	24.5	123	83-112	L1
Toluene	ug/L	20	23.4	117	78-113	L1
Xylene (Total)	ug/L	60	72.5	121	83-114	LS
1,2-Dichloroethane-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978663 1978664

Parameter	Units	60246986006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	23.6	23.8	118	119	55-145	1	18	
Ethylbenzene	ug/L	ND	20	20	24.6	24.3	123	122	45-152	1	11	
Toluene	ug/L	ND	20	20	23.6	23.3	118	117	52-144	1	12	
Xylene (Total)	ug/L	ND	60	60	75.0	74.7	125	124	54-146	0	12	
1,2-Dichloroethane-d4 (S)	%						101	97	80-120			
4-Bromofluorobenzene (S)	%						92	91	80-120			
Toluene-d8 (S)	%						99	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

QC Batch: 483376 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

METHOD BLANK: 1980127 | Matrix: Water
Associated Lab Samples: 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/29/17 16:40	
Ethylbenzene	ug/L	ND	1.0	06/29/17 16:40	
Toluene	ug/L	ND	1.0	06/29/17 16:40	
Xylene (Total)	ug/L	ND	3.0	06/29/17 16:40	
1,2-Dichloroethane-d4 (S)	%	99	80-120	06/29/17 16:40	
4-Bromofluorobenzene (S)	%	102	80-120	06/29/17 16:40	
Toluene-d8 (S)	%	97	80-120	06/29/17 16:40	

LABORATORY CONTROL SAMPLE: 1980128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.9	95	82-115	
Ethylbenzene	ug/L	20	19.0	95	83-112	
Toluene	ug/L	20	19.5	97	78-113	
Xylene (Total)	ug/L	60	57.2	95	83-114	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

QC Batch: 482118 | Analysis Method: EPA 8270C by SIM
QC Batch Method: EPA 3510C | Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

METHOD BLANK: 1974773 | Matrix: Water
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	06/26/17 16:55	
Acenaphthylene	ug/L	ND	0.10	06/26/17 16:55	
Anthracene	ug/L	ND	0.10	06/26/17 16:55	
Benzo(a)anthracene	ug/L	ND	0.10	06/26/17 16:55	
Benzo(a)pyrene	ug/L	ND	0.10	06/26/17 16:55	
Benzo(b)fluoranthene	ug/L	ND	0.10	06/26/17 16:55	
Benzo(g,h,i)perylene	ug/L	ND	0.10	06/26/17 16:55	
Benzo(k)fluoranthene	ug/L	ND	0.10	06/26/17 16:55	
Chrysene	ug/L	ND	0.10	06/26/17 16:55	
Dibenz(a,h)anthracene	ug/L	ND	0.10	06/26/17 16:55	
Fluoranthene	ug/L	ND	0.50	06/26/17 16:55	
Fluorene	ug/L	ND	0.10	06/26/17 16:55	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	06/26/17 16:55	
Naphthalene	ug/L	ND	0.50	06/26/17 16:55	
Phenanthrene	ug/L	ND	0.50	06/26/17 16:55	
Pyrene	ug/L	ND	0.10	06/26/17 16:55	
2-Fluorobiphenyl (S)	%	84	39-114	06/26/17 16:55	
Terphenyl-d14 (S)	%	105	43-117	06/26/17 16:55	

LABORATORY CONTROL SAMPLE: 1974774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	8.0	80	52-118	
Acenaphthylene	ug/L	10	8.5	85	54-124	
Anthracene	ug/L	10	8.9	89	59-121	
Benzo(a)anthracene	ug/L	10	8.8	88	63-126	
Benzo(a)pyrene	ug/L	10	9.3	93	63-127	
Benzo(b)fluoranthene	ug/L	10	8.3	83	59-127	
Benzo(g,h,i)perylene	ug/L	10	7.9	79	56-128	
Benzo(k)fluoranthene	ug/L	10	8.8	88	56-125	
Chrysene	ug/L	10	8.3	83	60-119	
Dibenz(a,h)anthracene	ug/L	10	7.5	75	54-142	
Fluoranthene	ug/L	10	9.2	92	68-133	
Fluorene	ug/L	10	8.4	84	56-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.2	82	60-136	
Naphthalene	ug/L	10	7.9	79	50-119	
Phenanthrene	ug/L	10	8.0	80	54-116	
Pyrene	ug/L	10	8.3	83	51-117	

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QUALITY CONTROL DATA

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

LABORATORY CONTROL SAMPLE: 1974774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%			85	39-114	
Terphenyl-d14 (S)	%			86	43-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1974775 1974776

Parameter	Units	60246986006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	11.1	11.1	8.8	8.6	79	77	24-137	2	27	
Acenaphthylene	ug/L	ND	11.1	11.1	9.1	9.1	82	82	32-149	1	27	
Anthracene	ug/L	ND	11.1	11.1	9.4	9.3	85	84	40-140	1	25	
Benzo(a)anthracene	ug/L	ND	11.1	11.1	9.0	9.0	81	81	50-147	0	26	
Benzo(a)pyrene	ug/L	ND	11.1	11.1	10.1	9.9	91	89	51-135	2	25	
Benzo(b)fluoranthene	ug/L	ND	11.1	11.1	9.0	9.0	81	81	47-133	0	29	1e
Benzo(g,h,i)perylene	ug/L	ND	11.1	11.1	8.8	8.5	79	77	49-132	3	31	
Benzo(k)fluoranthene	ug/L	ND	11.1	11.1	9.9	9.6	89	86	48-116	4	24	
Chrysene	ug/L	ND	11.1	11.1	8.8	8.7	79	79	51-110	1	23	
Dibenz(a,h)anthracene	ug/L	ND	11.1	11.1	9.5	9.3	86	84	43-148	2	38	
Fluoranthene	ug/L	ND	11.1	11.1	9.3	9.5	84	86	54-142	2	26	
Fluorene	ug/L	ND	11.1	11.1	8.9	8.9	80	80	25-146	0	26	
Indeno(1,2,3-cd)pyrene	ug/L	ND	11.1	11.1	9.7	9.4	87	85	43-148	3	35	
Naphthalene	ug/L	ND	11.1	11.1	8.7	8.6	78	78	33-127	1	26	
Phenanthrene	ug/L	ND	11.1	11.1	8.4	8.4	75	75	51-115	0	23	
Pyrene	ug/L	ND	11.1	11.1	9.4	8.9	84	80	28-131	5	26	
2-Fluorobiphenyl (S)	%						84	84	39-114			
Terphenyl-d14 (S)	%						90	85	43-117			

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QUALITY CONTROL DATA

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

QC Batch: 483148 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

METHOD BLANK: 1979163 | Matrix: Water
Associated Lab Samples: 60246986001, 60246986002, 60246986003, 60246986004, 60246986005, 60246986006, 60246986007, 60246986008, 60246986009, 60246986010, 60246986011, 60246986012, 60246986013, 60246986014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/03/17 16:17	

LABORATORY CONTROL SAMPLE: 1979164

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.096	96	69-126	

MATRIX SPIKE SAMPLE: 1979165

Parameter	Units	60246986006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.081	76	61-126	

SAMPLE DUPLICATE: 1979166

Parameter	Units	60246986011 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	0.0063		46	

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QUALIFIERS

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 483376

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	The methods baseline separation for isomers pairs in the Initial Calibration or Continuing Calibration Verification (CCV) was less than the expected 50% valley to baseline. No further action was taken for this method variation. The two compounds are still being reported as individual isomers and not a combined total, since there is separation between the two isomers.
2e	The methods baseline separation for isomers pairs in the Initial Calibration or Continuing Calibration Verification (CCV) was less than the expected 50% valley to baseline. This sample had a combination of both isomers, due to sample matrix the isomers did not have sufficient separation to call as both benzo(b) and benzo (k) Flouranthene. Therefore the combination is being reported as benzo(b)flouranthene, due to the environmental impact of this compound.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
LS	Analyte recovery in the laboratory control sample (LCS) was outside QC limits for one or more of the constituent analytes used in the calculated result.

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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60246986001	**KCMW -12S/GW01**	EPA 3010	482851	EPA 6010	482927
60246986002	**KCMW -12D/GW01**	EPA 3010	482851	EPA 6010	482927
60246986003	**KCMW -4/GW01**	EPA 3010	482851	EPA 6010	482927
60246986004	**KCMW -4/ERB**	EPA 3010	482851	EPA 6010	482927
60246986005	**KCMW -7S/GW01**	EPA 3010	482851	EPA 6010	482927
60246986006	**KCMW -1/GW01**	EPA 3010	482851	EPA 6010	482927
60246986007	**KCMW -8S/GW01**	EPA 3010	482851	EPA 6010	482927
60246986008	**KCMW -10/GW01**	EPA 3010	482851	EPA 6010	482927
60246986009	**KCMW -2/GW01**	EPA 3010	482851	EPA 6010	482927
60246986010	**KCMW -3/GW01**	EPA 3010	482851	EPA 6010	482927
60246986011	**KCMW -11D/GW01**	EPA 3010	482851	EPA 6010	482927
60246986012	**KCMW -11S/GW01**	EPA 3010	482851	EPA 6010	482927
60246986013	**KCDUP-1/GW01**	EPA 3010	482851	EPA 6010	482927
60246986014	**KCDUP-2/GW01**	EPA 3010	482851	EPA 6010	482927
60246986001	**KCMW -12S/GW01**	EPA 7470	483137	EPA 7470	483218
60246986002	**KCMW -12D/GW01**	EPA 7470	483137	EPA 7470	483218
60246986003	**KCMW -4/GW01**	EPA 7470	483137	EPA 7470	483218
60246986004	**KCMW -4/ERB**	EPA 7470	483137	EPA 7470	483218
60246986005	**KCMW -7S/GW01**	EPA 7470	483137	EPA 7470	483218
60246986006	**KCMW -1/GW01**	EPA 7470	483137	EPA 7470	483218
60246986007	**KCMW -8S/GW01**	EPA 7470	483137	EPA 7470	483218
60246986008	**KCMW -10/GW01**	EPA 7470	483137	EPA 7470	483218
60246986009	**KCMW -2/GW01**	EPA 7470	483137	EPA 7470	483218
60246986010	**KCMW -3/GW01**	EPA 7470	483137	EPA 7470	483218
60246986011	**KCMW -11D/GW01**	EPA 7470	483137	EPA 7470	483218
60246986012	**KCMW -11S/GW01**	EPA 7470	483137	EPA 7470	483218
60246986013	**KCDUP-1/GW01**	EPA 7470	483137	EPA 7470	483218
60246986014	**KCDUP-2/GW01**	EPA 7470	483137	EPA 7470	483218
60246986001	**KCMW -12S/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986002	**KCMW -12D/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986003	**KCMW -4/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986004	**KCMW -4/ERB**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986005	**KCMW -7S/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986006	**KCMW -1/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986007	**KCMW -8S/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986008	**KCMW -10/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986009	**KCMW -2/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986010	**KCMW -3/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986011	**KCMW -11D/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986012	**KCMW -11S/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986013	**KCDUP-1/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986014	**KCDUP-2/GW01**	EPA 3510C	482118	EPA 8270C by SIM	482642
60246986001	**KCMW -12S/GW01**	EPA 8260/OA1	483032		
60246986002	**KCMW -12D/GW01**	EPA 8260/OA1	483032		
60246986003	**KCMW -4/GW01**	EPA 8260/OA1	483032		
60246986004	**KCMW -4/ERB**	EPA 8260/OA1	483032		
60246986005	**KCMW -7S/GW01**	EPA 8260/OA1	483032		

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OneGas-Kansas City 96323
Pace Project No.: 60246986

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60246986006	**KCMW -1/GW01**	EPA 8260/OA1	483032		
60246986007	**KCMW -8S/GW01**	EPA 8260/OA1	483032		
60246986008	**KCMW -10/GW01**	EPA 8260/OA1	483032		
60246986009	**KCMW -2/GW01**	EPA 8260/OA1	483032		
60246986010	**KCMW -3/GW01**	EPA 8260/OA1	483376		
60246986011	**KCMW -11D/GW01**	EPA 8260/OA1	483376		
60246986012	**KCMW -11S/GW01**	EPA 8260/OA1	483376		
60246986013	**KCDUP-1/GW01**	EPA 8260/OA1	483376		
60246986014	**KCDUP-2/GW01**	EPA 8260/OA1	483376		
60246986015	**TRIPBLANK/TB01**	EPA 8260/OA1	483032		
60246986001	**KCMW -12S/GW01**	SM 4500-CN-E	483148		
60246986002	**KCMW -12D/GW01**	SM 4500-CN-E	483148		
60246986003	**KCMW -4/GW01**	SM 4500-CN-E	483148		
60246986004	**KCMW -4/ERB**	SM 4500-CN-E	483148		
60246986005	**KCMW -7S/GW01**	SM 4500-CN-E	483148		
60246986006	**KCMW -1/GW01**	SM 4500-CN-E	483148		
60246986007	**KCMW -8S/GW01**	SM 4500-CN-E	483148		
60246986008	**KCMW -10/GW01**	SM 4500-CN-E	483148		
60246986009	**KCMW -2/GW01**	SM 4500-CN-E	483148		
60246986010	**KCMW -3/GW01**	SM 4500-CN-E	483148		
60246986011	**KCMW -11D/GW01**	SM 4500-CN-E	483148		
60246986012	**KCMW -11S/GW01**	SM 4500-CN-E	483148		
60246986013	**KCDUP-1/GW01**	SM 4500-CN-E	483148		
60246986014	**KCDUP-2/GW01**	SM 4500-CN-E	483148		

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Sample Condition Upon Receipt

WO# : 60246986
60246986

Client Name: B & M

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☐ No ☑

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-239 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): **As-read** 0.4/0.2/0.6 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 0.6/0.4/0.8

Date and initials of person examining contents: BB 6/21/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	11 S collected @ 1820
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: W	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/21/17

BURNS McDONNELL — **Request for Chemical Analysis and Chain of Custody Record**

1 of 2

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170620A
Lab. Reference No. or Episode No.: 60246986

Project Number: 96323
Client Name: ONEGAS - Kansas City

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type: Matrix: Liquid	Sample Type: Matrix: Solid	Sample Type: Matrix: Gas	Number of Containers	Analysis: BTEX (8260)	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide	Analysis:	Analysis:	Remarks	
—	KCMW-12S	GW01	—	—	—	—	6/19/17	1650	X	3DG9H	2AG4U	7	X	X	X	X	BP3N 7.0	BP3C 10.0		001
—	KCMW-12D	GW01	—	—	—	—	6/19/17	1750	X			7	X	X	X	X				002
—	KCMW-4	GW01	—	—	—	—	6/19/17	1910	X			7	X	X	X	X				003
—	KCMW-4	ERB	—	—	—	—	6/19/17	1930	X			7	X	X	X	X			Rinsate	004
—	KCMW-7S	GW01	—	—	—	—	6/20/17	0825	X			7	X	X	X	X				005
—	KCMW-1	GW01	—	—	—	—	6/20/17	0945	X	9DG9H	6AG4U	14	X	X	X	X	3BP3N	3BP3C 10.0	MS/MSD Parent	006
—	KCMW-1	GW01 MS/MSD	—	—	—	—	6/20/17	0945	X	—		14	X	X	X	X	—		MS/MSD	—
—	KCMW-8S	GW01	—	—	—	—	6/20/17	1120	X			7	X	X	X	X				007
—	KCMW-10	GW01	—	—	—	—	6/20/17	1235	X	3DG9H	2AG4U	7	X	X	X	X	BP3N 7.0	BP3C 10.0		008
—	KCMW-2	GW01	—	—	—	—	6/20/17	1345	X			7	X	X	X	X				009
—	KCMW-3	GW01	—	—	—	—	6/20/17	1535	X			7	X	X	X	X				010
—	KCMW-11D	GW01	—	—	—	—	6/20/17	1750	X			7	X	X	X	X				011
—	KCMW-11S	GW01	—	—	—	—	6/20/17		X			7	X	X	X	X				012
—	KCDUP-1	GW01	—	—	—	—	6/20/17	—	X			7	X	X	X	X			Blind Dup	013
—	KCDUP-2	GW01	—	—	—	—	6/20/17	—	X			7	X	X	X	X			Blind Dup	014

Sampler (signature): J. Bryant

Relinquished By (signature): Date/Time 6/21/17 10:15

Relinquished By (signature): Date/Time

Sampler (signature):

Relinquished By (signature): Date/Time 6/21/17 0714

Relinquished By (signature): Date/Time

Special Instructions:

Ice Present in Container: Yes ☑ No ☐

Laboratory Comments:

Temperature Upon Receipt: 0.6 / 0.4 / 0.8

082416 Form WCD-KC1

BURNS McDONNELL Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170620A
Lab. Reference No. or Episode No.: 60246986

Project Number: 96323

Client Name: ONEGAS - Kansas City

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type / Matrix: Liquid	Sample Type / Matrix: Solid	Sample Type / Matrix: Gas	Number of Containers	Analysis: 8260 - BTEX	Remarks
—	Trip Blank	20170620A TB01	—	—	—	—	—	—	X			2	X	20694

6-20-17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. — Date/Time 6/21/17, 0715

Relinquished By (signature): — Date/Time 6/21/17 0714

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt: 0.6/0.4/0.8

Relinquished By (signature): 2. — Date/Time

Relinquished By (signature): — Date/Time

Laboratory Comments:

082416 Form WCD-KC1

9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ACKNOWLEDGMENT

Samples Submitted By: BURNS & MCDONNELL
Client Project ID: OneGas-Kansas City 96323
Client PO#:

Pace Project Manager: Alice Spiller
Phone (913)563-1409
alice.spiller@pacelabs.com
Pace Analytical Project ID: 60246986
Samples Received: June 21, 2017 07:14 AM
Estimated Completion: July 03, 2017

CC: Brian Hoye
Client Specified QC Sample(s): KCMW -1/GW01

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
KCMW -12S/GW01	60246986001	Water	06/19/17 16:50	4500CNE Cyanide, Total 6010 ICP Metals Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
KCMW -12D/GW01	60246986002	Water	06/19/17 17:50	4500CNE Cyanide, Total 6010 ICP Metals Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
KCMW -4/GW01	60246986003	Water	06/19/17 19:10	4500CNE Cyanide, Total 6010 ICP Metals Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
KCMW -4/ERB	60246986004	Water	06/19/17 19:30	4500CNE Cyanide, Total 6010 ICP Metals Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
KCMW -7S/GW01	60246986005	Water	06/20/17 08:25	4500CNE Cyanide, Total 6010 ICP Metals Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
KCMW -1/GW01	60246986006	Water	06/20/17 09:45	4500CNE Cyanide, Total 6010 ICP Metals Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
KCMW -8S/GW01	60246986007	Water	06/20/17 11:20	4500CNE Cyanide, Total 6010 ICP Metals

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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(913)599-5665

SAMPLE ACKNOWLEDGMENT

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
KCMW -10/GW01	60246986008	Water	06/20/17 12:35	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
KCMW -2/GW01	60246986009	Water	06/20/17 13:45	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
KCMW -3/GW01	60246986010	Water	06/20/17 15:35	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
KCMW -11D/GW01	60246986011	Water	06/20/17 17:50	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
KCMW -11S/GW01	60246986012	Water	06/20/17 18:20	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
KCDUP-1/GW01	60246986013	Water	06/20/17 08:00	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
KCDUP-2/GW01	60246986014	Water	06/20/17 08:00	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TRIPBLANK/TB01	60246986015	Water	06/19/17 16:50	8260/OA1 Volatile Organics

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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(913)599-5665

SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
KCMW -12S/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -12D/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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(913)599-5665

SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -4/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -4/ERB	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -7S/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
KCMW -1/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -8S/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -10/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -2/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -3/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
KCMW -11D/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCMW -11S/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCDUP-1/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
KCDUP-2/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
TRIPBLANK/TB01	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	

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Sample Condition Upon Receipt

WO#: 60247235
60247235

Client Name: Burns & McDonnell

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☐ No ☑ 6/23

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T-266 (CF +2.9) / T-239 (CF +0.2) **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 2.0/2.2 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 2.2/2.4

Date and initials of person examining contents: BB 6/23/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: LT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/26/17

BURNS & McDONNELL Request for Chemical Analysis and Chain of Custody Record

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170622A
Lab. Reference No. or Episode No.: 60247235

Project Number: 96323
Client Name: ONEGAS - Atchison

Sample Number: Group or SWMU Name	Sample Point	Sample Designator	Sample Event: Round	Year	Sample Depth (in feet): From	To	Sample Collected: Date	Time	Sample Type: Matrix: Liquid	Solid	Gas	Number of Containers	Analysis: BTEX	PAHs	Metals	Cyanide			Remarks	
–	AT-Rinsate	–	–	–	–	–	6/21/17	1115	X			7	X	X	X	X	2AGLU	3DG9H	BP3N 2o BP3C 10.0	001
–	ATMW-6	GW01	–	–	–	–	6/21/17	1230	X			7	X	X	X	X				002
–	ATMW-1	GW01	–	–	–	–	6/21/17	1355	X			7	X	X	X	X		6 AGLU	9DG9H 3BP3N 3BP3C	003
–	ATMW-1	GW01/MS/MSD	–	–	–	–	6/21/17	1355	X			14	X	X	X	X			BB 6/23/17	–
–	ATMW-3	GW01	–	–	–	–	6/21/17	1545	X			7	X	X	X	X		2AGLU	3DG9H BP3N 2o BP3C 10.0	004
–	ATMW-4	GW01	–	–	–	–	6/21/17	1735	X			7	X	X	X	X				005
–	ATMW-5	GW01	–	–	–	–	6/22/17	0825	X			7	X	X	X	X				006
–	ATMW-2	GW01	–	–	–	–	6/22/17	0945	X			7	X	X	X	X				007
–	ATMW-9	GW01	–	–	–	–	6/22/17	1100	X			7	X	X	X	X				008
–	ATDUP-1	GW01	–	–	–	–	6/22/17	–	X			7	X	X	X	X				009
–	Trip Blank-20170622/TB01		–	–	–	–	–	–	X			2	X						2DG9H	010

6-22-17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/22/17, 1255

Relinquished By (signature): Date/Time 6/22/17 1255

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 2.2 / 2.4

Relinquished By (signature): 2. Date/Time

Relinquished By (signature): Date/Time

Laboratory Comments:

082416 Form WCD-KC1

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 07, 2017

Brian Hoye
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Dear Brian Hoye:
Enclosed are the analytical results for sample(s) received by the laboratory on June 22, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heather Wilson for
Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

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CERTIFICATIONS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

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SAMPLE SUMMARY

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60247235001	**AT-RINSATE**	Water	06/21/17 11:15	06/22/17 12:55
60247235002	**ATMW-6**	Water	06/21/17 12:30	06/22/17 12:55
60247235003	**ATMW-1**	Water	06/21/17 13:55	06/22/17 12:55
60247235004	**ATMW-3**	Water	06/21/17 15:45	06/22/17 12:55
60247235005	**ATMW-4**	Water	06/21/17 17:35	06/22/17 12:55
60247235006	**ATMW-5**	Water	06/22/17 08:25	06/22/17 12:55
60247235007	**ATMW-2**	Water	06/22/17 09:45	06/22/17 12:55
60247235008	**ATMW-9**	Water	06/22/17 11:00	06/22/17 12:55
60247235009	**ATDUP-1**	Water	06/22/17 08:00	06/22/17 12:55
60247235010	**TRIP BLANK-20170622**	Water	06/21/17 11:15	06/22/17 12:55

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SAMPLE ANALYTE COUNT

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60247235001	**AT-RINSATE**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235002	**ATMW-6**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235003	**ATMW-1**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235004	**ATMW-3**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235005	**ATMW-4**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235006	**ATMW-5**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235007	**ATMW-2**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235008	**ATMW-9**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235009	**ATDUP-1**	EPA 6010	JGP	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	9	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247235010	**TRIP BLANK-20170622**	EPA 8260/OA1	EAG	9	PASI-K

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: AT-RINSATE **Lab ID: 60247235001** Collected: 06/21/17 11:15 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:00	7440-38-2	
Barium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:00	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:00	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:00	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:00	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:00	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:00	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 09:47	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	208-96-8	
Anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	06/28/17 00:00	07/05/17 16:31	206-44-0	
Fluorene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	193-39-5	
Naphthalene	ND	ug/L	0.56	1	06/28/17 00:00	07/05/17 16:31	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	06/28/17 00:00	07/05/17 16:31	85-01-8	
Pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:31	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	78	%	39-114	1	06/28/17 00:00	07/05/17 16:31	321-60-8	
Terphenyl-d14 (S)	89	%	43-117	1	06/28/17 00:00	07/05/17 16:31	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/01/17 03:53	71-43-2	
Toluene	ND	ug/L	1.0	1		07/01/17 03:53	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/01/17 03:53	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 03:53	1330-20-7	
Naphthalene	ND	ug/L	1.1	1		07/01/17 03:53	91-20-3	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		07/01/17 03:53	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120	1		07/01/17 03:53	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	80-120	1		07/01/17 03:53	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 03:53		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/05/17 16:38	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: ATMW-6 **Lab ID: 60247235002** Collected: 06/21/17 12:30 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:02	7440-38-2	
Barium	**64.4**	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:02	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:02	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:02	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:02	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:02	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:02	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 09:50	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	208-96-8	
Anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	53-70-3	
Fluoranthene	ND	ug/L	0.53	1	06/28/17 00:00	07/05/17 16:50	206-44-0	
Fluorene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	193-39-5	
Naphthalene	**5.4**	ug/L	0.53	1	06/28/17 00:00	07/05/17 16:50	91-20-3	
Phenanthrene	ND	ug/L	0.53	1	06/28/17 00:00	07/05/17 16:50	85-01-8	
Pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 16:50	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	81	%	39-114	1	06/28/17 00:00	07/05/17 16:50	321-60-8	
Terphenyl-d14 (S)	91	%	43-117	1	06/28/17 00:00	07/05/17 16:50	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**4.1**	ug/L	1.0	1		07/01/17 04:07	71-43-2	
Toluene	ND	ug/L	1.0	1		07/01/17 04:07	108-88-3	
Ethylbenzene	**1.5**	ug/L	1.0	1		07/01/17 04:07	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 04:07	1330-20-7	
Naphthalene	**6.1**	ug/L	1.1	1		07/01/17 04:07	91-20-3	
Surrogates								
Toluene-d8 (S)	104	%	80-120	1		07/01/17 04:07	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		07/01/17 04:07	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		07/01/17 04:07	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 04:07		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.040**	mg/L	0.0050	1		07/05/17 17:49	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: ATMW-1 **Lab ID: 60247235003** Collected: 06/21/17 13:55 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:04	7440-38-2	
Barium	**124**	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:04	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:04	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:04	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:04	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:04	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:04	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 09:52	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	83-32-9	R1
Acenaphthylene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	208-96-8	R1
Anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	120-12-7	R1
Benzo(a)anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	56-55-3	R1
Benzo(a)pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	50-32-8	R1
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	205-99-2	R1
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	191-24-2	R1
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	207-08-9	R1
Chrysene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	218-01-9	R1
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/28/17 00:00	07/05/17 17:10	206-44-0	R1
Fluorene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	86-73-7	R1
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	193-39-5	
Naphthalene	**3.0**	ug/L	0.50	1	06/28/17 00:00	07/05/17 17:10	91-20-3	R1
Phenanthrene	ND	ug/L	0.50	1	06/28/17 00:00	07/05/17 17:10	85-01-8	R1
Pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 17:10	129-00-0	R1
Surrogates								
2-Fluorobiphenyl (S)	78	%	39-114	1	06/28/17 00:00	07/05/17 17:10	321-60-8	
Terphenyl-d14 (S)	88	%	43-117	1	06/28/17 00:00	07/05/17 17:10	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**2.8**	ug/L	1.0	1		07/01/17 04:21	71-43-2	
Toluene	ND	ug/L	1.0	1		07/01/17 04:21	108-88-3	
Ethylbenzene	**1.2**	ug/L	1.0	1		07/01/17 04:21	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 04:21	1330-20-7	
Naphthalene	**4.5**	ug/L	1.1	1		07/01/17 04:21	91-20-3	
Surrogates								
Toluene-d8 (S)	89	%	80-120	1		07/01/17 04:21	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		07/01/17 04:21	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		07/01/17 04:21	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 04:21		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/05/17 17:50	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: ATMW-3 **Lab ID: 60247235004** Collected: 06/21/17 15:45 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:16	7440-38-2	
Barium	**72.5**	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:16	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:16	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:16	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:16	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:16	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:16	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 10:03	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/28/17 00:00	07/05/17 18:09	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	193-39-5	
Naphthalene	**3.0**	ug/L	0.50	1	06/28/17 00:00	07/05/17 18:09	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/28/17 00:00	07/05/17 18:09	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:09	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	77	%	39-114	1	06/28/17 00:00	07/05/17 18:09	321-60-8	
Terphenyl-d14 (S)	90	%	43-117	1	06/28/17 00:00	07/05/17 18:09	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**2.6**	ug/L	1.0	1		07/01/17 05:03	71-43-2	
Toluene	ND	ug/L	1.0	1		07/01/17 05:03	108-88-3	
Ethylbenzene	**1.2**	ug/L	1.0	1		07/01/17 05:03	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 05:03	1330-20-7	
Naphthalene	**5.4**	ug/L	1.1	1		07/01/17 05:03	91-20-3	
Surrogates								
Toluene-d8 (S)	105	%	80-120	1		07/01/17 05:03	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120	1		07/01/17 05:03	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	80-120	1		07/01/17 05:03	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 05:03		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.017**	mg/L	0.0050	1		07/05/17 17:51	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: ATMW-4 **Lab ID: 60247235005** Collected: 06/21/17 17:35 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**10.4**	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:18	7440-38-2	
Barium	**84.9**	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:18	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:18	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:18	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:18	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:18	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:18	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 10:05	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/28/17 00:00	07/05/17 18:29	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	193-39-5	
Naphthalene	**2.1**	ug/L	0.50	1	06/28/17 00:00	07/05/17 18:29	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/28/17 00:00	07/05/17 18:29	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/28/17 00:00	07/05/17 18:29	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	77	%	39-114	1	06/28/17 00:00	07/05/17 18:29	321-60-8	
Terphenyl-d14 (S)	90	%	43-117	1	06/28/17 00:00	07/05/17 18:29	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**1.3**	ug/L	1.0	1		07/01/17 06:14	71-43-2	
Toluene	ND	ug/L	1.0	1		07/01/17 06:14	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/01/17 06:14	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 06:14	1330-20-7	
Naphthalene	**2.5**	ug/L	1.1	1		07/01/17 06:14	91-20-3	
Surrogates								
Toluene-d8 (S)	105	%	80-120	1		07/01/17 06:14	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		07/01/17 06:14	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		07/01/17 06:14	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 06:14		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/05/17 17:54	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: ATMW-5 **Lab ID: 60247235006** Collected: 06/22/17 08:25 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**179**	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:20	7440-38-2	
Barium	**613**	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:20	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:20	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:20	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:20	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:20	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:20	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 10:07	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**3.4**	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	208-96-8	
Anthracene	**0.47**	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	53-70-3	
Fluoranthene	**0.53**	ug/L	0.53	1	06/28/17 00:00	07/05/17 18:49	206-44-0	
Fluorene	**2.8**	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	193-39-5	
Naphthalene	**38.6**	ug/L	2.6	5	06/28/17 00:00	07/05/17 20:08	91-20-3	
Phenanthrene	**1.5**	ug/L	0.53	1	06/28/17 00:00	07/05/17 18:49	85-01-8	
Pyrene	**0.34**	ug/L	0.11	1	06/28/17 00:00	07/05/17 18:49	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	77	%	39-114	1	06/28/17 00:00	07/05/17 18:49	321-60-8	
Terphenyl-d14 (S)	81	%	43-117	1	06/28/17 00:00	07/05/17 18:49	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**112**	ug/L	1.0	1		07/01/17 06:42	71-43-2	
Toluene	**1.8**	ug/L	1.0	1		07/01/17 06:42	108-88-3	
Ethylbenzene	**9.2**	ug/L	1.0	1		07/01/17 06:42	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 06:42	1330-20-7	
Naphthalene	**73.4**	ug/L	1.1	1		07/01/17 06:42	91-20-3	
Surrogates								
Toluene-d8 (S)	105	%	80-120	1		07/01/17 06:42	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		07/01/17 06:42	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	80-120	1		07/01/17 06:42	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 06:42		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.032**	mg/L	0.0050	1		07/05/17 18:11	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: ATMW-2 **Lab ID: 60247235007** Collected: 06/22/17 09:45 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**212**	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:23	7440-38-2	
Barium	**769**	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:23	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:23	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:23	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:23	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:23	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:23	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 10:09	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	83-32-9	
Acenaphthylene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	208-96-8	
Anthracene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	207-08-9	
Chrysene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	53-70-3	
Fluoranthene	ND	ug/L	0.62	1	06/28/17 00:00	07/05/17 19:09	206-44-0	
Fluorene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	193-39-5	
Naphthalene	**1.5**	ug/L	0.62	1	06/28/17 00:00	07/05/17 19:09	91-20-3	
Phenanthrene	ND	ug/L	0.62	1	06/28/17 00:00	07/05/17 19:09	85-01-8	
Pyrene	ND	ug/L	0.12	1	06/28/17 00:00	07/05/17 19:09	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	78	%	39-114	1	06/28/17 00:00	07/05/17 19:09	321-60-8	
Terphenyl-d14 (S)	90	%	43-117	1	06/28/17 00:00	07/05/17 19:09	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**1.6**	ug/L	1.0	1		07/01/17 06:56	71-43-2	
Toluene	ND	ug/L	1.0	1		07/01/17 06:56	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/01/17 06:56	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 06:56	1330-20-7	
Naphthalene	**5.4**	ug/L	1.1	1		07/01/17 06:56	91-20-3	
Surrogates								
Toluene-d8 (S)	105	%	80-120	1		07/01/17 06:56	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		07/01/17 06:56	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120	1		07/01/17 06:56	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 06:56		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/05/17 18:12	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: ATMW-9 **Lab ID: 60247235008** Collected: 06/22/17 11:00 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**42.6**	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:25	7440-38-2	
Barium	**287**	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:25	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:25	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:25	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:25	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:25	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:25	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 10:12	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**3.6**	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	83-32-9	
Acenaphthylene	**1.5**	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	208-96-8	
Anthracene	**0.24**	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	53-70-3	
Fluoranthene	ND	ug/L	0.53	1	06/28/17 00:00	07/05/17 19:28	206-44-0	
Fluorene	**0.66**	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	193-39-5	
Naphthalene	**53.4**	ug/L	2.6	5	06/28/17 00:00	07/05/17 20:27	91-20-3	
Phenanthrene	ND	ug/L	0.53	1	06/28/17 00:00	07/05/17 19:28	85-01-8	
Pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:28	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	71	%	39-114	1	06/28/17 00:00	07/05/17 19:28	321-60-8	
Terphenyl-d14 (S)	78	%	43-117	1	06/28/17 00:00	07/05/17 19:28	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**317**	ug/L	10.0	10		07/01/17 07:10	71-43-2	
Toluene	ND	ug/L	10.0	10		07/01/17 07:10	108-88-3	
Ethylbenzene	ND	ug/L	10.0	10		07/01/17 07:10	100-41-4	
Xylene (Total)	ND	ug/L	30.0	10		07/01/17 07:10	1330-20-7	
Naphthalene	**122**	ug/L	11.0	10		07/01/17 07:10	91-20-3	
Surrogates								
Toluene-d8 (S)	104	%	80-120	10		07/01/17 07:10	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	10		07/01/17 07:10	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120	10		07/01/17 07:10	17060-07-0	
Preservation pH	**1.0**		0.10	10		07/01/17 07:10		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.044**	mg/L	0.0050	1		07/05/17 18:12	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: ATDUP-1 **Lab ID: 60247235009** Collected: 06/22/17 08:00 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**175**	ug/L	10.0	1	06/28/17 16:50	06/29/17 13:27	7440-38-2	
Barium	**601**	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:27	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:27	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:27	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 16:50	06/29/17 13:27	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 16:50	06/29/17 13:27	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 16:50	06/29/17 13:27	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/05/17 15:52	07/06/17 10:14	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**4.1**	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	208-96-8	
Anthracene	**0.51**	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	53-70-3	
Fluoranthene	**0.55**	ug/L	0.53	1	06/28/17 00:00	07/05/17 19:48	206-44-0	
Fluorene	**2.7**	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	193-39-5	
Naphthalene	**38.1**	ug/L	2.6	5	06/28/17 00:00	07/05/17 20:47	91-20-3	
Phenanthrene	**1.5**	ug/L	0.53	1	06/28/17 00:00	07/05/17 19:48	85-01-8	
Pyrene	**0.36**	ug/L	0.11	1	06/28/17 00:00	07/05/17 19:48	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	79	%	39-114	1	06/28/17 00:00	07/05/17 19:48	321-60-8	
Terphenyl-d14 (S)	89	%	43-117	1	06/28/17 00:00	07/05/17 19:48	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**110**	ug/L	1.0	1		07/01/17 07:25	71-43-2	
Toluene	**2.0**	ug/L	1.0	1		07/01/17 07:25	108-88-3	
Ethylbenzene	**8.9**	ug/L	1.0	1		07/01/17 07:25	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 07:25	1330-20-7	
Naphthalene	**72.5**	ug/L	1.1	1		07/01/17 07:25	91-20-3	
Surrogates								
Toluene-d8 (S)	105	%	80-120	1		07/01/17 07:25	2037-26-5	
4-Bromofluorobenzene (S)	96	%	80-120	1		07/01/17 07:25	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	80-120	1		07/01/17 07:25	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 07:25		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.035**	mg/L	0.0050	1		07/05/17 18:15	57-12-5	

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ANALYTICAL RESULTS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Sample: TRIP BLANK-20170622 **Lab ID: 60247235010** Collected: 06/21/17 11:15 Received: 06/22/17 12:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/01/17 06:28	71-43-2	
Toluene	ND	ug/L	1.0	1		07/01/17 06:28	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/01/17 06:28	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 06:28	1330-20-7	
Naphthalene	ND	ug/L	1.1	1		07/01/17 06:28	91-20-3	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		07/01/17 06:28	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120	1		07/01/17 06:28	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		07/01/17 06:28	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 06:28		

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QUALITY CONTROL DATA

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

QC Batch: 484005 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 60247235001, 60247235002, 60247235003, 60247235004, 60247235005, 60247235006, 60247235007, 60247235008, 60247235009

METHOD BLANK: 1982712 | Matrix: Water
Associated Lab Samples: 60247235001, 60247235002, 60247235003, 60247235004, 60247235005, 60247235006, 60247235007, 60247235008, 60247235009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/06/17 09:36	

LABORATORY CONTROL SAMPLE: 1982713

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.8	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1982714 1982715

Parameter	Units	60247235003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.8	4.6	95	93	75-125	3	20	

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QUALITY CONTROL DATA

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

QC Batch: 483114 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 60247235001, 60247235002, 60247235003, 60247235004, 60247235005, 60247235006, 60247235007, 60247235008, 60247235009

METHOD BLANK: 1978968 | Matrix: Water
Associated Lab Samples: 60247235001, 60247235002, 60247235003, 60247235004, 60247235005, 60247235006, 60247235007, 60247235008, 60247235009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	06/29/17 12:44	
Barium	ug/L	ND	5.0	06/29/17 12:44	
Cadmium	ug/L	ND	5.0	06/29/17 12:44	
Chromium	ug/L	ND	5.0	06/29/17 12:44	
Lead	ug/L	ND	5.0	06/29/17 12:44	
Selenium	ug/L	ND	15.0	06/29/17 12:44	
Silver	ug/L	ND	7.0	06/29/17 12:44	

LABORATORY CONTROL SAMPLE: 1978969

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	937	94	80-120	
Barium	ug/L	1000	990	99	80-120	
Cadmium	ug/L	1000	976	98	80-120	
Chromium	ug/L	1000	976	98	80-120	
Lead	ug/L	1000	971	97	80-120	
Selenium	ug/L	1000	980	98	80-120	
Silver	ug/L	500	498	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978970 1978971

Parameter	Units	60247235003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	977	979	97	97	75-125	0	20	
Barium	ug/L	124	1000	1000	1120	1110	99	99	75-125	0	20	
Cadmium	ug/L	ND	1000	1000	988	990	99	99	75-125	0	20	
Chromium	ug/L	ND	1000	1000	972	964	97	96	75-125	1	20	
Lead	ug/L	ND	1000	1000	940	944	94	94	75-125	0	20	
Selenium	ug/L	ND	1000	1000	1000	1000	99	99	75-125	0	27	
Silver	ug/L	ND	500	500	501	498	100	100	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

QC Batch: 483476 Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247235001, 60247235002, 60247235003, 60247235004

METHOD BLANK: 1980511 Matrix: Water
Associated Lab Samples: 60247235001, 60247235002, 60247235003, 60247235004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/30/17 23:52	
Ethylbenzene	ug/L	ND	1.0	06/30/17 23:52	
Naphthalene	ug/L	ND	1.1	06/30/17 23:52	
Toluene	ug/L	ND	1.0	06/30/17 23:52	
Xylene (Total)	ug/L	ND	3.0	06/30/17 23:52	
1,2-Dichloroethane-d4 (S)	%	93	80-120	06/30/17 23:52	
4-Bromofluorobenzene (S)	%	100	80-120	06/30/17 23:52	
Toluene-d8 (S)	%	104	80-120	06/30/17 23:52	

LABORATORY CONTROL SAMPLE: 1980512

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.1	91	82-115	
Ethylbenzene	ug/L	20	19.4	97	83-112	
Naphthalene	ug/L	20	20.6	103	67-118	
Toluene	ug/L	20	18.8	94	78-113	
Xylene (Total)	ug/L	60	56.7	94	83-114	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1980513 1980514

Parameter	Units	60247235003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	2.8	20	20	21.8	21.4	95	93	55-145	2	18	
Ethylbenzene	ug/L	1.2	20	20	21.2	20.9	100	98	45-152	1	11	
Naphthalene	ug/L	4.5	20	20	22.9	24.3	92	99	27-155	6	41	
Toluene	ug/L	ND	20	20	19.9	19.3	99	96	52-144	3	12	
Xylene (Total)	ug/L	ND	60	60	59.4	58.6	99	98	54-146	1	12	
1,2-Dichloroethane-d4 (S)	%						93	93	80-120			
4-Bromofluorobenzene (S)	%						96	97	80-120			
Toluene-d8 (S)	%						103	105	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

QC Batch: 483524 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247235005, 60247235006, 60247235007, 60247235008, 60247235009, 60247235010

METHOD BLANK: 1980727 | Matrix: Water
Associated Lab Samples: 60247235005, 60247235006, 60247235007, 60247235008, 60247235009, 60247235010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/01/17 06:00	
Ethylbenzene	ug/L	ND	1.0	07/01/17 06:00	
Naphthalene	ug/L	ND	1.1	07/01/17 06:00	
Toluene	ug/L	ND	1.0	07/01/17 06:00	
Xylene (Total)	ug/L	ND	3.0	07/01/17 06:00	
1,2-Dichloroethane-d4 (S)	%	94	80-120	07/01/17 06:00	
4-Bromofluorobenzene (S)	%	99	80-120	07/01/17 06:00	
Toluene-d8 (S)	%	103	80-120	07/01/17 06:00	

LABORATORY CONTROL SAMPLE: 1980728

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.4	92	82-115	
Ethylbenzene	ug/L	20	18.8	94	83-112	
Naphthalene	ug/L	20	19.1	95	67-118	
Toluene	ug/L	20	18.1	91	78-113	
Xylene (Total)	ug/L	60	55.0	92	83-114	
1,2-Dichloroethane-d4 (S)	%			94	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

QC Batch: 482933 | Analysis Method: EPA 8270C by SIM
QC Batch Method: EPA 3510C | Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 60247235001, 60247235002, 60247235003, 60247235004, 60247235005, 60247235006, 60247235007, 60247235008, 60247235009

METHOD BLANK: 1978348 | Matrix: Water
Associated Lab Samples: 60247235001, 60247235002, 60247235003, 60247235004, 60247235005, 60247235006, 60247235007, 60247235008, 60247235009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	07/05/17 14:12	
Acenaphthylene	ug/L	ND	0.10	07/05/17 14:12	
Anthracene	ug/L	ND	0.10	07/05/17 14:12	
Benzo(a)anthracene	ug/L	ND	0.10	07/05/17 14:12	
Benzo(a)pyrene	ug/L	ND	0.10	07/05/17 14:12	
Benzo(b)fluoranthene	ug/L	ND	0.10	07/05/17 14:12	
Benzo(g,h,i)perylene	ug/L	ND	0.10	07/05/17 14:12	
Benzo(k)fluoranthene	ug/L	ND	0.10	07/05/17 14:12	
Chrysene	ug/L	ND	0.10	07/05/17 14:12	
Dibenz(a,h)anthracene	ug/L	ND	0.10	07/05/17 14:12	
Fluoranthene	ug/L	ND	0.50	07/05/17 14:12	
Fluorene	ug/L	ND	0.10	07/05/17 14:12	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	07/05/17 14:12	
Naphthalene	ug/L	ND	0.50	07/05/17 14:12	
Phenanthrene	ug/L	ND	0.50	07/05/17 14:12	
Pyrene	ug/L	ND	0.10	07/05/17 14:12	
2-Fluorobiphenyl (S)	%	85	39-114	07/05/17 14:12	
Terphenyl-d14 (S)	%	98	43-117	07/05/17 14:12	

LABORATORY CONTROL SAMPLE: 1978349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	8.2	82	52-118	
Acenaphthylene	ug/L	10	8.4	84	54-124	
Anthracene	ug/L	10	8.3	83	59-121	
Benzo(a)anthracene	ug/L	10	8.5	85	63-126	
Benzo(a)pyrene	ug/L	10	8.6	86	63-127	
Benzo(b)fluoranthene	ug/L	10	7.8	78	59-127	
Benzo(g,h,i)perylene	ug/L	10	8.0	80	56-128	
Benzo(k)fluoranthene	ug/L	10	8.4	84	56-125	
Chrysene	ug/L	10	8.1	81	60-119	
Dibenz(a,h)anthracene	ug/L	10	8.4	84	54-142	
Fluoranthene	ug/L	10	8.7	87	68-133	
Fluorene	ug/L	10	8.5	85	56-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.4	84	60-136	
Naphthalene	ug/L	10	8.1	81	50-119	
Phenanthrene	ug/L	10	8.1	81	54-116	
Pyrene	ug/L	10	7.9	79	51-117	

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QUALITY CONTROL DATA

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

LABORATORY CONTROL SAMPLE: 1978349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%			85	39-114	
Terphenyl-d14 (S)	%			80	43-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978350 1978351

Parameter	Units	60247235003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	12.5	10.5	9.8	7.2	78	69	24-137	30	27	R1
Acenaphthylene	ug/L	ND	12.5	10.5	10.2	7.5	81	72	32-149	30	27	R1
Anthracene	ug/L	ND	12.5	10.5	10.2	7.5	82	71	40-140	31	25	R1
Benzo(a)anthracene	ug/L	ND	12.5	10.5	10.1	7.5	81	71	50-147	30	26	R1
Benzo(a)pyrene	ug/L	ND	12.5	10.5	10.6	7.7	85	73	51-135	32	25	R1
Benzo(b)fluoranthene	ug/L	ND	12.5	10.5	10.0	7.2	80	69	47-133	33	29	1e,R1
Benzo(g,h,i)perylene	ug/L	ND	12.5	10.5	10.2	7.4	82	70	49-132	32	31	R1
Benzo(k)fluoranthene	ug/L	ND	12.5	10.5	10.4	7.6	83	73	48-116	30	24	R1
Chrysene	ug/L	ND	12.5	10.5	9.9	7.1	79	68	51-110	32	23	R1
Dibenz(a,h)anthracene	ug/L	ND	12.5	10.5	11.7	7.9	93	76	43-148	38	38	
Fluoranthene	ug/L	ND	12.5	10.5	10.4	7.6	83	72	54-142	31	26	R1
Fluorene	ug/L	ND	12.5	10.5	10.1	7.5	81	72	25-146	29	26	R1
Indeno(1,2,3-cd)pyrene	ug/L	ND	12.5	10.5	11.2	7.9	89	75	43-148	34	35	
Naphthalene	ug/L	3.0	12.5	10.5	13.2	10.1	82	68	33-127	27	26	R1
Phenanthrene	ug/L	ND	12.5	10.5	9.8	7.2	78	68	51-115	30	23	R1
Pyrene	ug/L	ND	12.5	10.5	10	7.5	80	71	28-131	29	26	R1
2-Fluorobiphenyl (S)	%						77	65	39-114			
Terphenyl-d14 (S)	%						78	68	43-117			

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QUALITY CONTROL DATA

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

QC Batch: 483894
QC Batch Method: SM 4500-CN-E
Associated Lab Samples: 60247235001

Analysis Method: SM 4500-CN-E
Analysis Description: 4500CNE Cyanide, Total

METHOD BLANK: 1982337
Matrix: Water
Associated Lab Samples: 60247235001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/05/17 16:15	

LABORATORY CONTROL SAMPLE: 1982338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.092	92	69-126	

MATRIX SPIKE SAMPLE: 1982340

Parameter	Units	60247320001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.010	.1	0.097	86	61-126	

SAMPLE DUPLICATE: 1982339

Parameter	Units	60247562002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	.0027J		46	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

QC Batch: 483897 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60247235002, 60247235003, 60247235004, 60247235005, 60247235006, 60247235007, 60247235008, 60247235009

METHOD BLANK: 1982341 | Matrix: Water
Associated Lab Samples: 60247235002, 60247235003, 60247235004, 60247235005, 60247235006, 60247235007, 60247235008, 60247235009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/05/17 17:46	

LABORATORY CONTROL SAMPLE: 1982342

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.093	93	69-126	

MATRIX SPIKE SAMPLE: 1982343

Parameter	Units	60247235003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.11	109	61-126	

SAMPLE DUPLICATE: 1982344

Parameter	Units	60247235008 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	0.044	0.042	5	46	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 483524

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	The methods baseline separation for isomers pairs in the Initial Calibration or Continuing Calibration Verification (CCV) was less than the expected 50% valley to baseline. No further action was taken for this method variation. The two compounds are still being reported as individual isomers and not a combined total, since there is separation between the two isomers.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60247235001	**AT-RINSATE**	EPA 3010	483114	EPA 6010	483162
60247235002	**ATMW-6**	EPA 3010	483114	EPA 6010	483162
60247235003	**ATMW-1**	EPA 3010	483114	EPA 6010	483162
60247235004	**ATMW-3**	EPA 3010	483114	EPA 6010	483162
60247235005	**ATMW-4**	EPA 3010	483114	EPA 6010	483162
60247235006	**ATMW-5**	EPA 3010	483114	EPA 6010	483162
60247235007	**ATMW-2**	EPA 3010	483114	EPA 6010	483162
60247235008	**ATMW-9**	EPA 3010	483114	EPA 6010	483162
60247235009	**ATDUP-1**	EPA 3010	483114	EPA 6010	483162
60247235001	**AT-RINSATE**	EPA 7470	484005	EPA 7470	484092
60247235002	**ATMW-6**	EPA 7470	484005	EPA 7470	484092
60247235003	**ATMW-1**	EPA 7470	484005	EPA 7470	484092
60247235004	**ATMW-3**	EPA 7470	484005	EPA 7470	484092
60247235005	**ATMW-4**	EPA 7470	484005	EPA 7470	484092
60247235006	**ATMW-5**	EPA 7470	484005	EPA 7470	484092
60247235007	**ATMW-2**	EPA 7470	484005	EPA 7470	484092
60247235008	**ATMW-9**	EPA 7470	484005	EPA 7470	484092
60247235009	**ATDUP-1**	EPA 7470	484005	EPA 7470	484092
60247235001	**AT-RINSATE**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235002	**ATMW-6**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235003	**ATMW-1**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235004	**ATMW-3**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235005	**ATMW-4**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235006	**ATMW-5**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235007	**ATMW-2**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235008	**ATMW-9**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235009	**ATDUP-1**	EPA 3510C	482933	EPA 8270C by SIM	483871
60247235001	**AT-RINSATE**	EPA 8260/OA1	483476		
60247235002	**ATMW-6**	EPA 8260/OA1	483476		
60247235003	**ATMW-1**	EPA 8260/OA1	483476		
60247235004	**ATMW-3**	EPA 8260/OA1	483476		
60247235005	**ATMW-4**	EPA 8260/OA1	483524		
60247235006	**ATMW-5**	EPA 8260/OA1	483524		
60247235007	**ATMW-2**	EPA 8260/OA1	483524		
60247235008	**ATMW-9**	EPA 8260/OA1	483524		
60247235009	**ATDUP-1**	EPA 8260/OA1	483524		
60247235010	**TRIP BLANK-20170622**	EPA 8260/OA1	483524		
60247235001	**AT-RINSATE**	SM 4500-CN-E	483894		
60247235002	**ATMW-6**	SM 4500-CN-E	483897		
60247235003	**ATMW-1**	SM 4500-CN-E	483897		
60247235004	**ATMW-3**	SM 4500-CN-E	483897		
60247235005	**ATMW-4**	SM 4500-CN-E	483897		
60247235006	**ATMW-5**	SM 4500-CN-E	483897		
60247235007	**ATMW-2**	SM 4500-CN-E	483897		
60247235008	**ATMW-9**	SM 4500-CN-E	483897		
60247235009	**ATDUP-1**	SM 4500-CN-E	483897		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OneGas-ATCHISON 96323
Pace Project No.: 60247235

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch

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Sample Condition Upon Receipt

WO#: 60247235
60247235

Client Name: Burns & McDonnell

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☐ No ☑ 6/23

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T-266 (CF +2.9) / T-239 (CF +0.2) **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 2.0/2.2 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 2.2/2.4

Date and initials of person examining contents: BB 6/23/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: LT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/26/17

BURNS McDONNELL Request for Chemical Analysis and Chain of Custody Record

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170622A
Lab. Reference No. or Episode No.: 60247235

Project Number: 96323
Client Name: ONEGAS - Atchison

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type: Matrix: Liquid	Sample Type: Matrix: Solid	Sample Type: Matrix: Gas	Number of Containers	Analysis: BTEX	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide	Remarks	
–	AT-Rinsate	–	–	–	–	–	6/21/17	1115	X			7	X	X	X	X	2AGLU 3DG9H BP3N 2 BP3C 10.0	01
–	ATMW-6	GW01	–	–	–	–	6/21/17	1230	X			7	X	X	X	X		02
–	ATMW-1	GW01	–	–	–	–	6/21/17	1355	X			7	X	X	X	X	6 AGLU 9DG9H 3BP3N 3BP3C	03
–	ATMW-1	GW01/MS/MSD	–	–	–	–	6/21/17	1355	X			14	X	X	X	X	BB 6/23/17	–
–	ATMW-3	GW01	–	–	–	–	6/21/17	1545	X			7	X	X	X	X	2AGLU 3DG9H BP3N 2 BP3C 10.0	04
–	ATMW-4	GW01	–	–	–	–	6/21/17	1735	X			7	X	X	X	X		05
–	ATMW-5	GW01	–	–	–	–	6/22/17	0825	X			7	X	X	X	X		06
–	ATMW-2	GW01	–	–	–	–	6/22/17	0945	X			7	X	X	X	X		07
–	ATMW-9	GW01	–	–	–	–	6/22/17	1100	X			7	X	X	X	X		08
–	ATDUP-1	GW01	–	–	–	–	6/22/17	–	X			7	X	X	X	X		09
–	Trip Blank-20170622/TB01		–	–	–	–	–	–	X			2	X				2DG9H	010

6-22-17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): Date/Time 6/22/17, 1255

Relinquished By (signature): Date/Time 6/22/17 1255

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 2.2 / 2.4

Relinquished By (signature): Date/Time

Relinquished By (signature): Date/Time

Laboratory Comments:

082416 Form WCD-KC1

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(913)599-5665

SAMPLE ACKNOWLEDGMENT

Samples Submitted By: BURNS & MCDONNELL
Client Project ID: OneGas-ATCHISON 96323
Client PO#:

Pace Project Manager: Alice Spiller
Phone (913)563-1409
alice.spiller@pacelabs.com
Pace Analytical Project ID: 60247235
Samples Received: June 22, 2017 12:55 PM
Estimated Completion: July 07, 2017

CC: Brian Hoye
Client Specified QC Sample(s): ATMW-1

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
AT-RINSATE	60247235001	Water	06/21/17 11:15	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
ATMW-6	60247235002	Water	06/21/17 12:30	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
ATMW-1	60247235003	Water	06/21/17 13:55	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
ATMW-3	60247235004	Water	06/21/17 15:45	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
ATMW-4	60247235005	Water	06/21/17 17:35	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
ATMW-5	60247235006	Water	06/22/17 08:25	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
ATMW-2	60247235007	Water	06/22/17 09:45	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
ATMW-9	60247235008	Water	06/22/17 11:00	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
ATDUP-1	60247235009	Water	06/22/17 08:00	4500CNE Cyanide, Total 7470 Mercury 8260/OA1 Volatile Organics EPA 8270 PAH by SIM Water
TRIP BLANK-20170622	60247235010	Water	06/21/17 11:15	8260/OA1 Volatile Organics

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
AT-RINSATE	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
ATMW-6	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
ATMW-1	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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Lenexa, KS 66219
(913)599-5665

SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
ATMW-3	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
ATMW-4	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
ATMW-5	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
ATMW-2	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
ATMW-9	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
ATDUP-1	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
TRIP BLANK-20170622	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Naphthalene	1.1	ug/L
		Preservation pH	0.1	

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60247320

60247320

Client Name: BEM

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☑ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☑ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-239 **Type of Ice:** Wet Blue None

BB 6/24/17

Date and initials of person examining contents:

Cooler Temperature (°C): As-read 2.8 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 3.0

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/26/17

BURNS & McDONNELL℠ **Request for Chemical Analysis and Chain of Custody Record**

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170623A
Lab. Reference No. or Episode No.: 60247320

Project Number: 96326
Client Name: ONEGAS - Topeka, KS

Sample Type

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Matrix: Liquid	Matrix: Solid	Matrix: Gas	Number of Containers	Analysis: ~~BTEX~~	Analysis: BTEX	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide	Remarks	
—	TPMW-4	GW01	—	—	—	—	6/22/17	1610	X	(3BP3C 10.0)	(BP3N 2.0)	7	X	X	X	X	6AG4U	MS/MSD Parent 9DG9H	001
—	TPMW-4	GW01 MS/MSD	—	—	—	—	6/22/17	1610	X	—	—	14	X	X	X	X	—	MS/MSD Set —	
—	TPMW-1	GW01	—	—	—	—	6/23/17	0835	X	BP3C 10.0	BP3N 2.0	7	X	X	X	X	2AG4U	3DG9H	002
—	TPMW-2	GW01	—	—	—	—	6/23/17	0940	X			7	X	X	X	X			003
—	TPMW-3	GW01	—	—	—	—	6/23/17	1045	X			7	X	X	X	X			004
—	TPMW-3	ERB	—	—	—	—	6/23/17	1110	X			7	X	X	X	X		Rinsate	005
—	TPDUP-1	GW01	—	—	—	—	6/23/17	—	X			7	X	X	X	X		Blind dup	006
—	Trip Blank 20170623A	TB01	—	—	—	—	—	—	X			2	X				2DG9H	Trip Blank	007

6-23-17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/23/17, 1355

Relinquished By (signature): 6-23-17 1623 Date/Time

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 3.0

Relinquished By (signature): 2. Date/Time 6-23-17 1355

Relinquished By (signature): 6/23/17 Date/Time 2135

Laboratory Comments:

082416 Form WCD-KC1

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 06, 2017

Brian Hoye
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Dear Brian Hoye:
Enclosed are the analytical results for sample(s) received by the laboratory on June 23, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heather Wilson for
Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

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CERTIFICATIONS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

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SAMPLE SUMMARY

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60247320001	**TPMW-4/GW01**	Water	06/22/17 16:10	06/23/17 21:35
60247320002	**TPMW-1/GW01**	Water	06/23/17 08:35	06/23/17 21:35
60247320003	**TPMW-2/GW01**	Water	06/23/17 09:40	06/23/17 21:35
60247320004	**TPMW-3/GW01**	Water	06/23/17 10:45	06/23/17 21:35
60247320005	**TPMW-3/ERB**	Water	06/23/17 11:10	06/23/17 21:35
60247320006	**TPDUP-1/GW01**	Water	06/23/17 08:00	06/23/17 21:35
60247320007	**TRIP BLANK 20170623A/TB01**	Water	06/22/17 16:10	06/23/17 21:35

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SAMPLE ANALYTE COUNT

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60247320001	**TPMW-4/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247320002	**TPMW-1/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247320003	**TPMW-2/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247320004	**TPMW-3/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247320005	**TPMW-3/ERB**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247320006	**TPDUP-1/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	EAG	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247320007	**TRIP BLANK 20170623A/TB01**	EPA 8260/OA1	EAG	8	PASI-K

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ANALYTICAL RESULTS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Sample: TPMW-4/GW01 **Lab ID: 60247320001** Collected: 06/22/17 16:10 Received: 06/23/17 21:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 17:10	06/30/17 11:41	7440-38-2	
Barium	**120**	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:41	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:41	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:41	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:41	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 17:10	06/30/17 11:41	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 17:10	06/30/17 11:41	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/03/17 14:32	07/05/17 09:18	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**0.20**	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	83-32-9	
Acenaphthylene	**0.18**	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 16:57	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	193-39-5	
Naphthalene	**0.58**	ug/L	0.50	1	06/29/17 00:00	06/30/17 16:57	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 16:57	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 16:57	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	39-114	1	06/29/17 00:00	06/30/17 16:57	321-60-8	
Terphenyl-d14 (S)	95	%	43-117	1	06/29/17 00:00	06/30/17 16:57	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/30/17 19:37	71-43-2	
Toluene	ND	ug/L	1.0	1		06/30/17 19:37	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/30/17 19:37	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		06/30/17 19:37	1330-20-7	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		06/30/17 19:37	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		06/30/17 19:37	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120	1		06/30/17 19:37	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/30/17 19:37		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.010**	mg/L	0.0050	1		07/05/17 16:29	57-12-5	

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ANALYTICAL RESULTS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Sample: TPMW-1/GW01 **Lab ID: 60247320002** Collected: 06/23/17 08:35 Received: 06/23/17 21:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 17:10	06/30/17 11:48	7440-38-2	
Barium	**113**	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:48	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:48	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:48	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:48	7439-92-1	
Selenium	**16.4**	ug/L	15.0	1	06/28/17 17:10	06/30/17 11:48	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 17:10	06/30/17 11:48	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/03/17 14:32	07/05/17 09:24	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 17:57	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	193-39-5	
Naphthalene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 17:57	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 17:57	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 17:57	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	77	%	39-114	1	06/29/17 00:00	06/30/17 17:57	321-60-8	
Terphenyl-d14 (S)	81	%	43-117	1	06/29/17 00:00	06/30/17 17:57	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/01/17 23:26	71-43-2	
Toluene	ND	ug/L	1.0	1		07/01/17 23:26	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/01/17 23:26	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/01/17 23:26	1330-20-7	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		07/01/17 23:26	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120	1		07/01/17 23:26	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120	1		07/01/17 23:26	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/01/17 23:26		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.016**	mg/L	0.0050	1		07/05/17 16:32	57-12-5	

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ANALYTICAL RESULTS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Sample: TPMW-2/GW01 **Lab ID: 60247320003** Collected: 06/23/17 09:40 Received: 06/23/17 21:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 17:10	06/30/17 11:50	7440-38-2	
Barium	**95.8**	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:50	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:50	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:50	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:50	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 17:10	06/30/17 11:50	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 17:10	06/30/17 11:50	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/03/17 14:32	07/05/17 09:26	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 18:17	206-44-0	
Fluorene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	193-39-5	
Naphthalene	**0.62**	ug/L	0.50	1	06/29/17 00:00	06/30/17 18:17	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 18:17	85-01-8	
Pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:17	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	80	%	39-114	1	06/29/17 00:00	06/30/17 18:17	321-60-8	
Terphenyl-d14 (S)	86	%	43-117	1	06/29/17 00:00	06/30/17 18:17	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/30/17 20:33	71-43-2	
Toluene	ND	ug/L	1.0	1		06/30/17 20:33	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/30/17 20:33	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		06/30/17 20:33	1330-20-7	
Surrogates								
Toluene-d8 (S)	105	%	80-120	1		06/30/17 20:33	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		06/30/17 20:33	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		06/30/17 20:33	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/30/17 20:33		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/05/17 16:32	57-12-5	

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ANALYTICAL RESULTS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Sample: TPMW-3/GW01 **Lab ID: 60247320004** Collected: 06/23/17 10:45 Received: 06/23/17 21:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 17:10	06/30/17 11:53	7440-38-2	
Barium	**195**	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:53	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:53	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:53	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:53	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 17:10	06/30/17 11:53	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 17:10	06/30/17 11:53	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/03/17 14:32	07/05/17 09:29	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**1.6**	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	83-32-9	
Acenaphthylene	**5.9**	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	208-96-8	
Anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	207-08-9	
Chrysene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	53-70-3	
Fluoranthene	**0.51**	ug/L	0.50	1	06/29/17 00:00	06/30/17 18:37	206-44-0	
Fluorene	**0.59**	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	193-39-5	
Naphthalene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 18:37	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	06/29/17 00:00	06/30/17 18:37	85-01-8	
Pyrene	**0.53**	ug/L	0.10	1	06/29/17 00:00	06/30/17 18:37	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	39-114	1	06/29/17 00:00	06/30/17 18:37	321-60-8	
Terphenyl-d14 (S)	86	%	43-117	1	06/29/17 00:00	06/30/17 18:37	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/30/17 20:48	71-43-2	
Toluene	ND	ug/L	1.0	1		06/30/17 20:48	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/30/17 20:48	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		06/30/17 20:48	1330-20-7	
Surrogates								
Toluene-d8 (S)	105	%	80-120	1		06/30/17 20:48	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		06/30/17 20:48	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120	1		06/30/17 20:48	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/30/17 20:48		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/05/17 16:33	57-12-5	

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ANALYTICAL RESULTS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Sample: TPMW-3/ERB **Lab ID: 60247320005** Collected: 06/23/17 11:10 Received: 06/23/17 21:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 17:10	06/30/17 11:59	7440-38-2	
Barium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:59	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:59	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:59	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 11:59	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 17:10	06/30/17 11:59	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 17:10	06/30/17 11:59	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/03/17 14:32	07/05/17 09:31	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	208-96-8	
Anthracene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	53-70-3	
Fluoranthene	ND	ug/L	0.53	1	06/29/17 00:00	06/30/17 18:57	206-44-0	
Fluorene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	193-39-5	
Naphthalene	ND	ug/L	0.53	1	06/29/17 00:00	06/30/17 18:57	91-20-3	
Phenanthrene	ND	ug/L	0.53	1	06/29/17 00:00	06/30/17 18:57	85-01-8	
Pyrene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 18:57	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	39-114	1	06/29/17 00:00	06/30/17 18:57	321-60-8	
Terphenyl-d14 (S)	88	%	43-117	1	06/29/17 00:00	06/30/17 18:57	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/30/17 21:02	71-43-2	
Toluene	ND	ug/L	1.0	1		06/30/17 21:02	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/30/17 21:02	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		06/30/17 21:02	1330-20-7	
Surrogates								
Toluene-d8 (S)	106	%	80-120	1		06/30/17 21:02	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		06/30/17 21:02	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120	1		06/30/17 21:02	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/30/17 21:02		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/05/17 16:34	57-12-5	

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ANALYTICAL RESULTS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Sample: TPDUP-1/GW01 **Lab ID: 60247320006** Collected: 06/23/17 08:00 Received: 06/23/17 21:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	06/28/17 17:10	06/30/17 12:02	7440-38-2	
Barium	**96.1**	ug/L	5.0	1	06/28/17 17:10	06/30/17 12:02	7440-39-3	
Cadmium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 12:02	7440-43-9	
Chromium	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 12:02	7440-47-3	
Lead	ND	ug/L	5.0	1	06/28/17 17:10	06/30/17 12:02	7439-92-1	
Selenium	ND	ug/L	15.0	1	06/28/17 17:10	06/30/17 12:02	7782-49-2	
Silver	ND	ug/L	7.0	1	06/28/17 17:10	06/30/17 12:02	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/03/17 14:32	07/05/17 09:37	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	208-96-8	
Anthracene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	207-08-9	
Chrysene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	06/29/17 00:00	06/30/17 19:17	206-44-0	
Fluorene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	193-39-5	
Naphthalene	ND	ug/L	0.56	1	06/29/17 00:00	06/30/17 19:17	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	06/29/17 00:00	06/30/17 19:17	85-01-8	
Pyrene	ND	ug/L	0.11	1	06/29/17 00:00	06/30/17 19:17	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	70	%	39-114	1	06/29/17 00:00	06/30/17 19:17	321-60-8	
Terphenyl-d14 (S)	76	%	43-117	1	06/29/17 00:00	06/30/17 19:17	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/30/17 21:16	71-43-2	
Toluene	ND	ug/L	1.0	1		06/30/17 21:16	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/30/17 21:16	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		06/30/17 21:16	1330-20-7	
Surrogates								
Toluene-d8 (S)	104	%	80-120	1		06/30/17 21:16	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		06/30/17 21:16	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120	1		06/30/17 21:16	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/30/17 21:16		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/05/17 16:37	57-12-5	

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ANALYTICAL RESULTS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Sample: TRIP BLANK 20170623A/TB01 **Lab ID: 60247320007** Collected: 06/22/17 16:10 Received: 06/23/17 21:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		06/30/17 21:30	71-43-2	
Toluene	ND	ug/L	1.0	1		06/30/17 21:30	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		06/30/17 21:30	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		06/30/17 21:30	1330-20-7	
Surrogates								
Toluene-d8 (S)	105	%	80-120	1		06/30/17 21:30	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		06/30/17 21:30	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120	1		06/30/17 21:30	17060-07-0	
Preservation pH	**1.0**		0.10	1		06/30/17 21:30		

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QUALITY CONTROL DATA

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

QC Batch: 483815 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 60247320001, 60247320002, 60247320003, 60247320004, 60247320005, 60247320006

METHOD BLANK: 1982117 | Matrix: Water
Associated Lab Samples: 60247320001, 60247320002, 60247320003, 60247320004, 60247320005, 60247320006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/05/17 09:11	

LABORATORY CONTROL SAMPLE: 1982118

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.7	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1982119 1982120

Parameter	Units	60247320001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.9	4.9	98	97	75-125	0	20	

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QUALITY CONTROL DATA

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

QC Batch: 483152 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 60247320001, 60247320002, 60247320003, 60247320004, 60247320005, 60247320006

METHOD BLANK: 1979176 | Matrix: Water
Associated Lab Samples: 60247320001, 60247320002, 60247320003, 60247320004, 60247320005, 60247320006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	06/30/17 11:37	
Barium	ug/L	ND	5.0	06/30/17 11:37	
Cadmium	ug/L	ND	5.0	06/30/17 11:37	
Chromium	ug/L	ND	5.0	06/30/17 11:37	
Lead	ug/L	ND	5.0	06/30/17 11:37	
Selenium	ug/L	ND	15.0	06/30/17 11:37	
Silver	ug/L	ND	7.0	06/30/17 11:37	

LABORATORY CONTROL SAMPLE: 1979177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	937	94	80-120	
Barium	ug/L	1000	1000	100	80-120	
Cadmium	ug/L	1000	980	98	80-120	
Chromium	ug/L	1000	992	99	80-120	
Lead	ug/L	1000	1010	101	80-120	
Selenium	ug/L	1000	998	100	80-120	
Silver	ug/L	500	495	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1979178 1979179

Parameter	Units	60247320001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	985	988	98	98	75-125	0	20	
Barium	ug/L	120	1000	1000	1120	1120	100	100	75-125	0	20	
Cadmium	ug/L	ND	1000	1000	1000	999	100	100	75-125	0	20	
Chromium	ug/L	ND	1000	1000	976	974	98	97	75-125	0	20	
Lead	ug/L	ND	1000	1000	954	948	95	95	75-125	1	20	
Selenium	ug/L	ND	1000	1000	1040	1030	103	103	75-125	1	27	
Silver	ug/L	ND	500	500	504	502	101	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

QC Batch: 483474 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247320001, 60247320003, 60247320004, 60247320005, 60247320006, 60247320007

METHOD BLANK: 1980502 | Matrix: Water
Associated Lab Samples: 60247320001, 60247320003, 60247320004, 60247320005, 60247320006, 60247320007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/30/17 17:58	
Ethylbenzene	ug/L	ND	1.0	06/30/17 17:58	
Toluene	ug/L	ND	1.0	06/30/17 17:58	
Xylene (Total)	ug/L	ND	3.0	06/30/17 17:58	
1,2-Dichloroethane-d4 (S)	%	94	80-120	06/30/17 17:58	
4-Bromofluorobenzene (S)	%	96	80-120	06/30/17 17:58	
Toluene-d8 (S)	%	102	80-120	06/30/17 17:58	

LABORATORY CONTROL SAMPLE: 1980503

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.4	97	82-115	
Ethylbenzene	ug/L	20	19.8	99	83-112	
Toluene	ug/L	20	19.5	98	78-113	
Xylene (Total)	ug/L	60	59.1	98	83-114	
1,2-Dichloroethane-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1980504 1980505

Parameter	Units	60247320001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	20.2	20.5	98	100	55-145	2	18	
Ethylbenzene	ug/L	ND	20	20	20.7	21.3	102	105	45-152	3	11	
Toluene	ug/L	ND	20	20	20.3	20.6	101	102	52-144	1	12	
Xylene (Total)	ug/L	ND	60	60	59.9	60.6	100	101	54-146	1	12	
1,2-Dichloroethane-d4 (S)	%						94	96	80-120			
4-Bromofluorobenzene (S)	%						95	95	80-120			
Toluene-d8 (S)	%						103	103	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

QC Batch: 483646
QC Batch Method: EPA 8260/OA1
Analysis Method: EPA 8260/OA1
Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247320002

METHOD BLANK: 1981678
Matrix: Water
Associated Lab Samples: 60247320002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/01/17 22:10	
Ethylbenzene	ug/L	ND	1.0	07/01/17 22:10	
Toluene	ug/L	ND	1.0	07/01/17 22:10	
Xylene (Total)	ug/L	ND	3.0	07/01/17 22:10	
1,2-Dichloroethane-d4 (S)	%	99	80-120	07/01/17 22:10	
4-Bromofluorobenzene (S)	%	105	80-120	07/01/17 22:10	
Toluene-d8 (S)	%	100	80-120	07/01/17 22:10	

LABORATORY CONTROL SAMPLE: 1981679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.4	97	82-115	
Ethylbenzene	ug/L	20	18.2	91	83-112	
Toluene	ug/L	20	18.9	95	78-113	
Xylene (Total)	ug/L	60	55.6	93	83-114	
1,2-Dichloroethane-d4 (S)	%			96	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

QC Batch: 483197 | Analysis Method: EPA 8270C by SIM
QC Batch Method: EPA 3510C | Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 60247320001, 60247320002, 60247320003, 60247320004, 60247320005, 60247320006

METHOD BLANK: 1979408 | Matrix: Water
Associated Lab Samples: 60247320001, 60247320002, 60247320003, 60247320004, 60247320005, 60247320006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	06/30/17 11:56	
Acenaphthylene	ug/L	ND	0.10	06/30/17 11:56	
Anthracene	ug/L	ND	0.10	06/30/17 11:56	
Benzo(a)anthracene	ug/L	ND	0.10	06/30/17 11:56	
Benzo(a)pyrene	ug/L	ND	0.10	06/30/17 11:56	
Benzo(b)fluoranthene	ug/L	ND	0.10	06/30/17 11:56	
Benzo(g,h,i)perylene	ug/L	ND	0.10	06/30/17 11:56	
Benzo(k)fluoranthene	ug/L	ND	0.10	06/30/17 11:56	
Chrysene	ug/L	ND	0.10	06/30/17 11:56	
Dibenz(a,h)anthracene	ug/L	ND	0.10	06/30/17 11:56	
Fluoranthene	ug/L	ND	0.50	06/30/17 11:56	
Fluorene	ug/L	ND	0.10	06/30/17 11:56	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	06/30/17 11:56	
Naphthalene	ug/L	ND	0.50	06/30/17 11:56	
Phenanthrene	ug/L	ND	0.50	06/30/17 11:56	
Pyrene	ug/L	ND	0.10	06/30/17 11:56	
2-Fluorobiphenyl (S)	%	85	39-114	06/30/17 11:56	
Terphenyl-d14 (S)	%	91	43-117	06/30/17 11:56	

LABORATORY CONTROL SAMPLE: 1979409

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.8	78	52-118	
Acenaphthylene	ug/L	10	8.5	85	54-124	
Anthracene	ug/L	10	8.6	86	59-121	
Benzo(a)anthracene	ug/L	10	9.0	90	63-126	
Benzo(a)pyrene	ug/L	10	8.8	88	63-127	
Benzo(b)fluoranthene	ug/L	10	8.5	85	59-127	
Benzo(g,h,i)perylene	ug/L	10	5.9	59	56-128	
Benzo(k)fluoranthene	ug/L	10	7.6	76	56-125	
Chrysene	ug/L	10	7.7	77	60-119	
Dibenz(a,h)anthracene	ug/L	10	7.0	70	54-142	
Fluoranthene	ug/L	10	9.2	92	68-133	
Fluorene	ug/L	10	8.2	82	56-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.6	86	60-136	
Naphthalene	ug/L	10	7.6	76	50-119	
Phenanthrene	ug/L	10	8.3	83	54-116	
Pyrene	ug/L	10	6.8	68	51-117	
2-Fluorobiphenyl (S)	%			80	39-114	
Terphenyl-d14 (S)	%			77	43-117	

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QUALITY CONTROL DATA

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1979410 1979411

Parameter	Units	60247320001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	0.20	10	10	8.6	7.0	84	68	24-137	20	27	
Acenaphthylene	ug/L	0.18	10	10	9.3	7.7	91	75	32-149	19	27	
Anthracene	ug/L	ND	10	10	9.0	7.8	90	78	40-140	15	25	
Benzo(a)anthracene	ug/L	ND	10	10	9.6	8.7	96	87	50-147	10	26	
Benzo(a)pyrene	ug/L	ND	10	10	9.9	8.7	99	87	51-135	13	25	
Benzo(b)fluoranthene	ug/L	ND	10	10	8.4	7.7	84	77	47-133	9	29	
Benzo(g,h,i)perylene	ug/L	ND	10	10	9.7	8.0	97	80	49-132	20	31	
Benzo(k)fluoranthene	ug/L	ND	10	10	8.4	7.4	84	74	48-116	13	24	
Chrysene	ug/L	ND	10	10	8.1	7.2	81	72	51-110	12	23	
Dibenz(a,h)anthracene	ug/L	ND	10	10	11.8	9.5	118	95	43-148	22	38	
Fluoranthene	ug/L	ND	10	10	9.8	8.8	98	88	54-142	10	26	
Fluorene	ug/L	ND	10	10	8.7	7.3	87	73	25-146	17	26	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10	10	11.1	9.1	111	91	43-148	20	35	
Naphthalene	ug/L	0.58	10	10	8.6	6.9	80	64	33-127	21	26	
Phenanthrene	ug/L	ND	10	10	8.6	7.4	86	74	51-115	15	23	
Pyrene	ug/L	ND	10	10	6.8	6.2	68	62	28-131	9	26	
2-Fluorobiphenyl (S)	%						83	66	39-114			
Terphenyl-d14 (S)	%						75	69	43-117			

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QUALITY CONTROL DATA

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

QC Batch: 483894 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60247320001, 60247320002, 60247320003, 60247320004, 60247320005, 60247320006

METHOD BLANK: 1982337 | Matrix: Water
Associated Lab Samples: 60247320001, 60247320002, 60247320003, 60247320004, 60247320005, 60247320006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/05/17 16:15	

LABORATORY CONTROL SAMPLE: 1982338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.092	92	69-126	

MATRIX SPIKE SAMPLE: 1982340

Parameter	Units	60247320001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.010	.1	0.097	86	61-126	

SAMPLE DUPLICATE: 1982339

Parameter	Units	60247562002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	.0027J		46	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 483646

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: ONEGAS - Topeka, KS 96326
Pace Project No.: 60247320

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60247320001	**TPMW-4/GW01**	EPA 3010	483152	EPA 6010	483169
60247320002	**TPMW-1/GW01**	EPA 3010	483152	EPA 6010	483169
60247320003	**TPMW-2/GW01**	EPA 3010	483152	EPA 6010	483169
60247320004	**TPMW-3/GW01**	EPA 3010	483152	EPA 6010	483169
60247320005	**TPMW-3/ERB**	EPA 3010	483152	EPA 6010	483169
60247320006	**TPDUP-1/GW01**	EPA 3010	483152	EPA 6010	483169
60247320001	**TPMW-4/GW01**	EPA 7470	483815	EPA 7470	483843
60247320002	**TPMW-1/GW01**	EPA 7470	483815	EPA 7470	483843
60247320003	**TPMW-2/GW01**	EPA 7470	483815	EPA 7470	483843
60247320004	**TPMW-3/GW01**	EPA 7470	483815	EPA 7470	483843
60247320005	**TPMW-3/ERB**	EPA 7470	483815	EPA 7470	483843
60247320006	**TPDUP-1/GW01**	EPA 7470	483815	EPA 7470	483843
60247320001	**TPMW-4/GW01**	EPA 3510C	483197	EPA 8270C by SIM	483490
60247320002	**TPMW-1/GW01**	EPA 3510C	483197	EPA 8270C by SIM	483490
60247320003	**TPMW-2/GW01**	EPA 3510C	483197	EPA 8270C by SIM	483490
60247320004	**TPMW-3/GW01**	EPA 3510C	483197	EPA 8270C by SIM	483490
60247320005	**TPMW-3/ERB**	EPA 3510C	483197	EPA 8270C by SIM	483490
60247320006	**TPDUP-1/GW01**	EPA 3510C	483197	EPA 8270C by SIM	483490
60247320001	**TPMW-4/GW01**	EPA 8260/OA1	483474		
60247320002	**TPMW-1/GW01**	EPA 8260/OA1	483646		
60247320003	**TPMW-2/GW01**	EPA 8260/OA1	483474		
60247320004	**TPMW-3/GW01**	EPA 8260/OA1	483474		
60247320005	**TPMW-3/ERB**	EPA 8260/OA1	483474		
60247320006	**TPDUP-1/GW01**	EPA 8260/OA1	483474		
60247320007	**TRIP BLANK 20170623A/TB01**	EPA 8260/OA1	483474		
60247320001	**TPMW-4/GW01**	SM 4500-CN-E	483894		
60247320002	**TPMW-1/GW01**	SM 4500-CN-E	483894		
60247320003	**TPMW-2/GW01**	SM 4500-CN-E	483894		
60247320004	**TPMW-3/GW01**	SM 4500-CN-E	483894		
60247320005	**TPMW-3/ERB**	SM 4500-CN-E	483894		
60247320006	**TPDUP-1/GW01**	SM 4500-CN-E	483894		

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Sample Condition Upon Receipt

WO# : 60247320

60247320

Client Name: BEM

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☑ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☑ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-239 **Type of Ice:** Wet Blue None

BB 6/24/17

Cooler Temperature (°C): **As-read** 2.8 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 3.0

Date and initials of person examining contents:

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/26/17

BURNS & McDONNELL℠ **Request for Chemical Analysis and Chain of Custody Record**

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170623A
Lab. Reference No. or Episode No.: 60247320

Project Number: 96326
Client Name: ONEGAS - Topeka, KS

Sample Type

Sample Number: Group or SWMU Name	Sample Point	Sample Designator	Sample Event: Round	Year	Sample Depth (in feet): From	To	Sample Collected: Date	Time	Matrix: Liquid	Solid	Gas	Number of Containers	Analysis: ~~BTEX~~	PAHs	Metals	Cyanide	Remarks	
—	TPMW-4	GW01	—	—	—	—	6/22/17	1610	X	(3BP3C 10.0)	(BP3N 2.0)	7	X	X	X	X	6AG4U	MS/MSD Parent 9DG9H	001
—	TPMW-4	GW01 MS/MSD	—	—	—	—	6/22/17	1610	X	—	—	14	X	X	X	X	—	MS/MSD Set —	
—	TPMW-1	GW01	—	—	—	—	6/23/17	0835	X	BP3C 10.0	BP3N 2.0	7	X	X	X	X	2AG4U	3DG9H	002
—	TPMW-2	GW01	—	—	—	—	6/23/17	0940	X			7	X	X	X	X			003
—	TPMW-3	GW01	—	—	—	—	6/23/17	1045	X			7	X	X	X	X			004
—	TPMW-3	ERB	—	—	—	—	6/23/17	1110	X			7	X	X	X	X		Rinsate	005
—	TPDUP-1	GW01	—	—	—	—	6/23/17	—	X			7	X	X	X	X		Blind dup	006
—	Trip Blank 20170623A	TB01	—	—	—	—	—	—	X			2	X				2DG9H	Trip Blank	007

6-23-17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/23/17, 1355

Relinquished By (signature): 6-23-17 1623 Date/Time

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 3.0

Relinquished By (signature): 2. Date/Time 6-23-17 1355

Relinquished By (signature): 6/23/17 Date/Time 2135

Laboratory Comments:

082416 Form WCD-KC1

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SAMPLE ACKNOWLEDGMENT

Samples Submitted By: BURNS & MCDONNELL
Client Project ID: ONEGAS - Topeka, KS 96326
Client PO#:

Pace Project Manager: Alice Spiller
Phone (913)563-1409
alice.spiller@pacelabs.com
Pace Analytical Project ID: 60247320
Samples Received: June 23, 2017 09:35 PM
Estimated Completion: July 06, 2017

CC: Brian Hoye
Client Specified QC Sample(s): TPMW-4/GW01

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
TPMW-4/GW01	60247320001	Water	06/22/17 16:10	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TPMW-1/GW01	60247320002	Water	06/23/17 08:35	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TPMW-2/GW01	60247320003	Water	06/23/17 09:40	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TPMW-3/GW01	60247320004	Water	06/23/17 10:45	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TPMW-3/ERB	60247320005	Water	06/23/17 11:10	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TPDUP-1/GW01	60247320006	Water	06/23/17 08:00	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TRIP BLANK 20170623A/TB01	60247320007	Water	06/22/17 16:10	8260/OA1 Volatile Organics

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
TPMW-4/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
TPMW-1/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
TPMW-2/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
TPMW-3/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
TPMW-3/ERB	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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Lenexa, KS 66219
(913)599-5665

SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
TPDUP-1/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
TRIP BLANK 20170623A/TB01	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO#: 60247554

60247554

Client Name: Burns & McD

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☑ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-239 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 1.8 **Corr. Factor** CF +2.9 / CF +0.2 **Corrected** 2.0

Date and initials of person examining contents: 06/28/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/29/17

BURNS & McDONNELL℠ **Request for Chemical Analysis and Chain of Custody Record**

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170627A
Lab. Reference No. or Episode No.: 60247554

Project Number: 96323
Client Name: ONEGAS - Salina, KS

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type: Matrix: Liquid	Sample Type: Matrix: Solid	Sample Type: Matrix: Gas	Number of Containers	Analysis: BTEX	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide		Remarks	
–	SLMW-1	GW01	–	–	–	–	6/27/17	0915	X			7	X	X	X	X	6(AGHU) 9(DGAH) 3(BP3N)[1.5] 3(BP3C)[12]	MS/MSD Parent	001
–	SLMW-1	GW01MS/MSD	–	–	–	–	6/27/17	0915 ~~1030~~	X			14	X	X	X	X		MS/MSD	
–	SLMW-2	GW01	–	–	–	–	6/27/17	1030	X			7	X	X	X	X	2(AGHU) 3(DGAH) BP3N[1.5] BP3C[12]		002
–	SLMW-3	GW01	–	–	–	–	6/27/17	1135	X			7	X	X	X	X			003
–	SLMW-3	ERB	–	–	–	–	6/27/17	1155	X			7	X	X	X	X		Rinsate	004
–	SLDUP-1	GW01	–	–	–	–	6/27/17	–	X			7	X	X	X	X		Blind Dup	005
–	TripBlank-20170627A	/TB01	–	–	–	–	–	–	X			2	X				2(DGAH)	Trip Blank	006

6/27/17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/27/17, 1245

Relinquished By (signature): Date/Time 6-27-17 1549

Ice Present in Container: Yes ✓ No ☐

Temperature Upon Receipt: 2.0°C

Relinquished By (signature): 2. Date/Time 6-27-17 1245

Relinquished By (signature): Received by PAS1 Date/Time 6/27/17 2140

Laboratory Comments:

082416 Form WCD-KC1

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 12, 2017

Brian Hoye
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Dear Brian Hoye:
Enclosed are the analytical results for sample(s) received by the laboratory on June 27, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller

Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

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CERTIFICATIONS

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

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SAMPLE SUMMARY

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60247554001	**SLMW-1/GW01**	Water	06/27/17 09:15	06/27/17 21:40
60247554002	**SLMW-2/GW01**	Water	06/27/17 10:30	06/27/17 21:40
60247554003	**SLMW-3/GW01**	Water	06/27/17 11:35	06/27/17 21:40
60247554004	**SLMW-3/ERB**	Water	06/27/17 11:55	06/27/17 21:40
60247554005	**SLDUP-1/GW01**	Water	06/27/17 08:00	06/27/17 21:40
60247554006	**TRIPBLANK-20170627A/TB01**	Water	06/27/17 09:15	06/27/17 21:40

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SAMPLE ANALYTE COUNT

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60247554001	**SLMW-1/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247554002	**SLMW-2/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247554003	**SLMW-3/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247554004	**SLMW-3/ERB**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247554005	**SLDUP-1/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247554006	**TRIPBLANK-20170627A/TB01**	EPA 8260/OA1	JTK	8	PASI-K

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ANALYTICAL RESULTS

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Sample: SLMW-1/GW01 **Lab ID: 60247554001** Collected: 06/27/17 09:15 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/03/17 11:30	07/05/17 16:21	7440-38-2	
Barium	**120**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:21	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:21	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:21	7440-47-3	
Lead	**7.4**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:21	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 16:21	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 16:21	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:00	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	208-96-8	
Anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	207-08-9	
Chrysene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	218-01-9	
Dibenz(a,h)anthracene	**0.16**	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 00:38	206-44-0	
Fluorene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	193-39-5	
Naphthalene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 00:38	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 00:38	85-01-8	
Pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 00:38	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	75	%	39-114	1	07/03/17 00:00	07/11/17 00:38	321-60-8	
Terphenyl-d14 (S)	79	%	43-117	1	07/03/17 00:00	07/11/17 00:38	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 05:00	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 05:00	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 05:00	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 05:00	1330-20-7	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		07/02/17 05:00	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120	1		07/02/17 05:00	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120	1		07/02/17 05:00	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 05:00		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.038**	mg/L	0.0050	1		07/07/17 14:36	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Sample: SLMW-2/GW01 **Lab ID: 60247554002** Collected: 06/27/17 10:30 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/03/17 11:30	07/05/17 16:31	7440-38-2	
Barium	**109**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:31	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:31	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:31	7440-47-3	
Lead	**8.0**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:31	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 16:31	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 16:31	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:03	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**14.2**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	83-32-9	
Acenaphthylene	**24.9**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	208-96-8	
Anthracene	**0.46**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	120-12-7	
Benzo(a)anthracene	**0.52**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	56-55-3	
Benzo(a)pyrene	**0.44**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	50-32-8	
Benzo(b)fluoranthene	**0.39**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	205-99-2	1e
Benzo(g,h,i)perylene	**0.30**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	207-08-9	
Chrysene	**0.59**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	53-70-3	
Fluoranthene	**3.6**	ug/L	1.0	2	07/03/17 00:00	07/11/17 17:38	206-44-0	
Fluorene	**7.3**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.25**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	193-39-5	
Naphthalene	**2.7**	ug/L	1.0	2	07/03/17 00:00	07/11/17 17:38	91-20-3	
Phenanthrene	**2.5**	ug/L	1.0	2	07/03/17 00:00	07/11/17 17:38	85-01-8	
Pyrene	**4.6**	ug/L	0.20	2	07/03/17 00:00	07/11/17 17:38	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	71	%	39-114	2	07/03/17 00:00	07/11/17 17:38	321-60-8	
Terphenyl-d14 (S)	73	%	43-117	2	07/03/17 00:00	07/11/17 17:38	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**3.3**	ug/L	1.0	1		07/02/17 05:45	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 05:45	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 05:45	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 05:45	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-120	1		07/02/17 05:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/02/17 05:45	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		07/02/17 05:45	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 05:45		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.058**	mg/L	0.0050	1		07/07/17 14:40	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Sample: SLMW-3/GW01 **Lab ID: 60247554003** Collected: 06/27/17 11:35 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**20.4**	ug/L	10.0	1	07/03/17 11:30	07/05/17 16:35	7440-38-2	
Barium	**450**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:35	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:35	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:35	7440-47-3	
Lead	**11.2**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:35	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 16:35	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 16:35	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:05	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**0.16**	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	83-32-9	
Acenaphthylene	**0.22**	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 17:58	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 17:58	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 17:58	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 17:58	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	77	%	39-114	1	07/03/17 00:00	07/11/17 17:58	321-60-8	
Terphenyl-d14 (S)	77	%	43-117	1	07/03/17 00:00	07/11/17 17:58	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 06:00	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 06:00	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 06:00	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 06:00	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-120	1		07/02/17 06:00	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/02/17 06:00	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120	1		07/02/17 06:00	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 06:00		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.032**	mg/L	0.0050	1		07/07/17 14:40	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Sample: SLMW-3/ERB **Lab ID: 60247554004** Collected: 06/27/17 11:55 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/03/17 11:30	07/05/17 16:39	7440-38-2	
Barium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:39	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:39	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:39	7440-47-3	
Lead	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:39	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 16:39	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 16:39	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:07	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	208-96-8	
Anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	207-08-9	
Chrysene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 18:18	206-44-0	
Fluorene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	193-39-5	
Naphthalene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 18:18	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 18:18	85-01-8	
Pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:18	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	75	%	39-114	1	07/03/17 00:00	07/11/17 18:18	321-60-8	
Terphenyl-d14 (S)	79	%	43-117	1	07/03/17 00:00	07/11/17 18:18	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 06:16	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 06:16	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 06:16	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 06:16	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-120	1		07/02/17 06:16	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120	1		07/02/17 06:16	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		07/02/17 06:16	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 06:16		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/07/17 14:41	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Sample: SLDUP-1/GW01 **Lab ID: 60247554005** Collected: 06/27/17 08:00 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/03/17 11:30	07/05/17 16:42	7440-38-2	
Barium	**111**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:42	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:42	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:42	7440-47-3	
Lead	**8.6**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:42	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 16:42	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 16:42	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:09	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**15.9**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	83-32-9	
Acenaphthylene	**21.4**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	208-96-8	
Anthracene	**0.37**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	120-12-7	
Benzo(a)anthracene	**0.39**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	56-55-3	
Benzo(a)pyrene	**0.24**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	50-32-8	
Benzo(b)fluoranthene	**0.22**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	205-99-2	1e
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	207-08-9	
Chrysene	**0.46**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	53-70-3	
Fluoranthene	**3.8**	ug/L	0.56	1	07/03/17 00:00	07/11/17 18:38	206-44-0	
Fluorene	**7.9**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	193-39-5	
Naphthalene	**2.8**	ug/L	0.56	1	07/03/17 00:00	07/11/17 18:38	91-20-3	
Phenanthrene	**2.8**	ug/L	0.56	1	07/03/17 00:00	07/11/17 18:38	85-01-8	
Pyrene	**4.8**	ug/L	0.11	1	07/03/17 00:00	07/11/17 18:38	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	75	%	39-114	1	07/03/17 00:00	07/11/17 18:38	321-60-8	
Terphenyl-d14 (S)	82	%	43-117	1	07/03/17 00:00	07/11/17 18:38	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	**3.4**	ug/L	1.0	1		07/02/17 06:31	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 06:31	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 06:31	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 06:31	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-120	1		07/02/17 06:31	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120	1		07/02/17 06:31	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120	1		07/02/17 06:31	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 06:31		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.065**	mg/L	0.0050	1		07/07/17 14:42	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Sample: TRIPBLANK-20170627A/TB01 **Lab ID: 60247554006** Collected: 06/27/17 09:15 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 06:46	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 06:46	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 06:46	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 06:46	1330-20-7	
Surrogates								
Toluene-d8 (S)	104	%	80-120	1		07/02/17 06:46	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-120	1		07/02/17 06:46	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120	1		07/02/17 06:46	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 06:46		

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QUALITY CONTROL DATA

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

QC Batch: 484419 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005

METHOD BLANK: 1984210 Matrix: Water
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/10/17 17:56	

LABORATORY CONTROL SAMPLE: 1984211

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.9	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1984212 1984213

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.9	4.8	97	97	75-125	1	20	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

QC Batch: 483651 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005

METHOD BLANK: 1981692 | Matrix: Water
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	07/05/17 16:13	
Barium	ug/L	ND	5.0	07/05/17 16:13	
Cadmium	ug/L	ND	5.0	07/05/17 16:13	
Chromium	ug/L	ND	5.0	07/05/17 16:13	
Lead	ug/L	ND	5.0	07/05/17 16:13	
Selenium	ug/L	ND	15.0	07/05/17 16:13	
Silver	ug/L	ND	7.0	07/05/17 16:13	

LABORATORY CONTROL SAMPLE: 1981693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	935	94	80-120	
Barium	ug/L	1000	915	91	80-120	
Cadmium	ug/L	1000	954	95	80-120	
Chromium	ug/L	1000	915	92	80-120	
Lead	ug/L	1000	982	98	80-120	
Selenium	ug/L	1000	984	98	80-120	
Silver	ug/L	500	459	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981694 1981695

Parameter	Units	60247554001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	956	979	95	98	75-125	2	20	
Barium	ug/L	120	1000	1000	1030	1050	91	93	75-125	2	20	
Cadmium	ug/L	ND	1000	1000	945	965	95	96	75-125	2	20	
Chromium	ug/L	ND	1000	1000	902	927	90	93	75-125	3	20	
Lead	ug/L	7.4	1000	1000	931	954	92	95	75-125	2	20	
Selenium	ug/L	ND	1000	1000	972	992	97	99	75-125	2	27	
Silver	ug/L	ND	500	500	462	469	92	94	75-125	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981696 1981697

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	999	990	99	98	75-125	1	20	
Barium	ug/L	114	1000	1000	1050	1060	94	95	75-125	1	20	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981696 1981697

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/L	ND	1000	1000	974	969	97	97	75-125	0	20	
Chromium	ug/L	ND	1000	1000	936	934	93	93	75-125	0	20	
Lead	ug/L	11.5	1000	1000	965	957	95	95	75-125	1	20	
Selenium	ug/L	ND	1000	1000	1000	998	100	99	75-125	1	27	
Silver	ug/L	ND	500	500	472	472	94	94	75-125	0	20	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

QC Batch: 483647 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005, 60247554006

METHOD BLANK: 1981680 | Matrix: Water
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005, 60247554006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/02/17 04:14	
Ethylbenzene	ug/L	ND	1.0	07/02/17 04:14	
Toluene	ug/L	ND	1.0	07/02/17 04:14	
Xylene (Total)	ug/L	ND	3.0	07/02/17 04:14	
1,2-Dichloroethane-d4 (S)	%	100	80-120	07/02/17 04:14	
4-Bromofluorobenzene (S)	%	103	80-120	07/02/17 04:14	
Toluene-d8 (S)	%	102	80-120	07/02/17 04:14	

LABORATORY CONTROL SAMPLE: 1981681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.9	90	82-115	
Ethylbenzene	ug/L	20	18.5	92	83-112	
Toluene	ug/L	20	18.8	94	78-113	
Xylene (Total)	ug/L	60	56.3	94	83-114	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981682 1981683

Parameter	Units	60247554001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	19.6	19.2	98	96	55-145	2	18	
Ethylbenzene	ug/L	ND	20	20	19.9	19.8	99	99	45-152	0	11	
Toluene	ug/L	ND	20	20	20.2	18.6	101	93	52-144	8	12	
Xylene (Total)	ug/L	ND	60	60	59.9	58.1	100	97	54-146	3	12	
1,2-Dichloroethane-d4 (S)	%						97	98	80-120			
4-Bromofluorobenzene (S)	%						99	96	80-120			
Toluene-d8 (S)	%						104	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981684 1981685

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	20.1	19.6	100	98	55-145	3	18	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981684 1981685

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethylbenzene	ug/L	ND	20	20	19.8	18.7	99	93	45-152	6	11	
Toluene	ug/L	ND	20	20	20.4	18.9	102	95	52-144	7	12	
Xylene (Total)	ug/L	ND	60	60	60.3	55.8	101	93	54-146	8	12	
1,2-Dichloroethane-d4 (S)	%						96	99	80-120			
4-Bromofluorobenzene (S)	%						102	102	80-120			
Toluene-d8 (S)	%						101	99	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

QC Batch: 483685 | Analysis Method: EPA 8270C by SIM
QC Batch Method: EPA 3510C | Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005

METHOD BLANK: 1981804 | Matrix: Water
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	07/10/17 23:58	
Acenaphthylene	ug/L	ND	0.10	07/10/17 23:58	
Anthracene	ug/L	ND	0.10	07/10/17 23:58	
Benzo(a)anthracene	ug/L	ND	0.10	07/10/17 23:58	
Benzo(a)pyrene	ug/L	ND	0.10	07/10/17 23:58	
Benzo(b)fluoranthene	ug/L	ND	0.10	07/10/17 23:58	
Benzo(g,h,i)perylene	ug/L	ND	0.10	07/10/17 23:58	
Benzo(k)fluoranthene	ug/L	ND	0.10	07/10/17 23:58	
Chrysene	ug/L	ND	0.10	07/10/17 23:58	
Dibenz(a,h)anthracene	ug/L	ND	0.10	07/10/17 23:58	
Fluoranthene	ug/L	ND	0.50	07/10/17 23:58	
Fluorene	ug/L	ND	0.10	07/10/17 23:58	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	07/10/17 23:58	
Naphthalene	ug/L	ND	0.50	07/10/17 23:58	
Phenanthrene	ug/L	ND	0.50	07/10/17 23:58	
Pyrene	ug/L	ND	0.10	07/10/17 23:58	
2-Fluorobiphenyl (S)	%	81	39-114	07/10/17 23:58	
Terphenyl-d14 (S)	%	84	43-117	07/10/17 23:58	

LABORATORY CONTROL SAMPLE: 1981805

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.9	79	52-118	
Acenaphthylene	ug/L	10	7.8	78	54-124	
Anthracene	ug/L	10	8.4	84	59-121	
Benzo(a)anthracene	ug/L	10	8.5	85	63-126	
Benzo(a)pyrene	ug/L	10	8.8	88	63-127	
Benzo(b)fluoranthene	ug/L	10	8.7	87	59-127	
Benzo(g,h,i)perylene	ug/L	10	8.1	81	56-128	
Benzo(k)fluoranthene	ug/L	10	8.0	80	56-125	
Chrysene	ug/L	10	7.9	79	60-119	
Dibenz(a,h)anthracene	ug/L	10	8.9	89	54-142	
Fluoranthene	ug/L	10	9.0	90	68-133	
Fluorene	ug/L	10	7.8	78	56-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	9.1	91	60-136	
Naphthalene	ug/L	10	7.4	74	50-119	
Phenanthrene	ug/L	10	8.1	81	54-116	
Pyrene	ug/L	10	7.4	74	51-117	
2-Fluorobiphenyl (S)	%			110	39-114	
Terphenyl-d14 (S)	%			75	43-117	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981806 1981807

Parameter	Units	60247554001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	11.1	11.1	9.6	8.2	86	74	24-137	15	27	
Acenaphthylene	ug/L	ND	11.1	11.1	9.3	8.3	84	74	32-149	12	27	
Anthracene	ug/L	ND	11.1	11.1	9.8	9.3	88	83	40-140	5	25	
Benzo(a)anthracene	ug/L	ND	11.1	11.1	9.5	9.0	85	81	50-147	5	26	
Benzo(a)pyrene	ug/L	ND	11.1	11.1	9.6	9.7	87	87	51-135	0	25	
Benzo(b)fluoranthene	ug/L	ND	11.1	11.1	10	9.5	90	85	47-133	5	29	1e
Benzo(g,h,i)perylene	ug/L	ND	11.1	11.1	9.1	9.0	81	80	49-132	1	31	
Benzo(k)fluoranthene	ug/L	ND	11.1	11.1	8.3	7.7	75	70	48-116	7	24	
Chrysene	ug/L	ND	11.1	11.1	8.8	8.2	79	74	51-110	7	23	
Dibenz(a,h)anthracene	ug/L	0.16	11.1	11.1	9.8	10.4	87	92	43-148	5	38	
Fluoranthene	ug/L	ND	11.1	11.1	10.3	9.9	92	89	54-142	3	26	
Fluorene	ug/L	ND	11.1	11.1	9.2	8.4	83	75	25-146	10	26	
Indeno(1,2,3-cd)pyrene	ug/L	ND	11.1	11.1	10.2	10.4	91	93	43-148	2	35	
Naphthalene	ug/L	ND	11.1	11.1	9.2	7.6	81	67	33-127	19	26	
Phenanthrene	ug/L	ND	11.1	11.1	9.3	8.8	83	78	51-115	6	23	
Pyrene	ug/L	ND	11.1	11.1	8.3	7.4	75	67	28-131	11	26	
2-Fluorobiphenyl (S)	%						80	71	39-114			
Terphenyl-d14 (S)	%						71	64	43-117			

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QUALITY CONTROL DATA

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

QC Batch: 484039 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005

METHOD BLANK: 1982780 | Matrix: Water
Associated Lab Samples: 60247554001, 60247554002, 60247554003, 60247554004, 60247554005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/07/17 14:16	

LABORATORY CONTROL SAMPLE: 1982781

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.092	92	69-126	

MATRIX SPIKE SAMPLE: 1982782

Parameter	Units	60247554001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.038	.1	0.13	91	61-126	

MATRIX SPIKE SAMPLE: 1982783

Parameter	Units	60247555001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.096	96	61-126	

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QUALIFIERS

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 483647

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	The methods baseline separation for isomers pairs in the Initial Calibration or Continuing Calibration Verification (CCV) was less than the expected 50% valley to baseline. No further action was taken for this method variation. The two compounds are still being reported as individual isomers and not a combined total, since there is separation between the two isomers.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 96323 OneGas - Salina, KS
Pace Project No.: 60247554

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60247554001	**SLMW-1/GW01**	EPA 3010	483651	EPA 6010	483796
60247554002	**SLMW-2/GW01**	EPA 3010	483651	EPA 6010	483796
60247554003	**SLMW-3/GW01**	EPA 3010	483651	EPA 6010	483796
60247554004	**SLMW-3/ERB**	EPA 3010	483651	EPA 6010	483796
60247554005	**SLDUP-1/GW01**	EPA 3010	483651	EPA 6010	483796
60247554001	**SLMW-1/GW01**	EPA 7470	484419	EPA 7470	484458
60247554002	**SLMW-2/GW01**	EPA 7470	484419	EPA 7470	484458
60247554003	**SLMW-3/GW01**	EPA 7470	484419	EPA 7470	484458
60247554004	**SLMW-3/ERB**	EPA 7470	484419	EPA 7470	484458
60247554005	**SLDUP-1/GW01**	EPA 7470	484419	EPA 7470	484458
60247554001	**SLMW-1/GW01**	EPA 3510C	483685	EPA 8270C by SIM	484677
60247554002	**SLMW-2/GW01**	EPA 3510C	483685	EPA 8270C by SIM	484677
60247554003	**SLMW-3/GW01**	EPA 3510C	483685	EPA 8270C by SIM	484677
60247554004	**SLMW-3/ERB**	EPA 3510C	483685	EPA 8270C by SIM	484677
60247554005	**SLDUP-1/GW01**	EPA 3510C	483685	EPA 8270C by SIM	484677
60247554001	**SLMW-1/GW01**	EPA 8260/OA1	483647		
60247554002	**SLMW-2/GW01**	EPA 8260/OA1	483647		
60247554003	**SLMW-3/GW01**	EPA 8260/OA1	483647		
60247554004	**SLMW-3/ERB**	EPA 8260/OA1	483647		
60247554005	**SLDUP-1/GW01**	EPA 8260/OA1	483647		
60247554006	**TRIPBLANK-20170627A/TB01**	EPA 8260/OA1	483647		
60247554001	**SLMW-1/GW01**	SM 4500-CN-E	484039		
60247554002	**SLMW-2/GW01**	SM 4500-CN-E	484039		
60247554003	**SLMW-3/GW01**	SM 4500-CN-E	484039		
60247554004	**SLMW-3/ERB**	SM 4500-CN-E	484039		
60247554005	**SLDUP-1/GW01**	SM 4500-CN-E	484039		

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Sample Condition Upon Receipt

WO#: 60247554

60247554

Client Name: Burns & McD

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☑ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-239 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 1.8 **Corr. Factor** CF +2.9 / CF +0.2 **Corrected** 2.0

Date and initials of person examining contents: 06/28/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/29/17

BURNS & McDONNELL℠ **Request for Chemical Analysis and Chain of Custody Record**

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170627A
Lab. Reference No. or Episode No.: 60247554

Project Number: 96323
Client Name: ONEGAS - Salina, KS

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type: Matrix: Liquid	Sample Type: Matrix: Solid	Sample Type: Matrix: Gas	Number of Containers	Analysis: BTEX	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide		Remarks	
–	SLMW-1	GW01	–	–	–	–	6/27/17	0915	X			7	X	X	X	X	6(AG4U) 9(DG4H) 3(BP3N) 3(BP3C)	MS/MSD Parent	001
–	SLMW-1	GW01 MS/MSD	–	–	–	–	6/27/17	0915 ~~1030~~	X			14	X	X	X	X		MS/MSD	
–	SLMW-2	GW01	–	–	–	–	6/27/17	1030	X			7	X	X	X	X	2(AG4U) 3(DG4H) BP3N BP3C		002
–	SLMW-3	GW01	–	–	–	–	6/27/17	1135	X			7	X	X	X	X			003
–	SLMW-3	ERB	–	–	–	–	6/27/17	1155	X			7	X	X	X	X		Rinsate	004
–	SLDUP-1	GW01	–	–	–	–	6/27/17	–	X			7	X	X	X	X		Blind Dup	005
–	TripBlank-20170627A	/TB01	–	–	–	–	–	–	X			2	X				2(DG4H)	Trip Blank	006

6/27/17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/27/17, 1245

Relinquished By (signature): Date/Time 6-27-17 1549

Ice Present in Container: Yes ✓ No ☐

Temperature Upon Receipt: 2.0°C

Relinquished By (signature): 2. Date/Time 6-27-17 1245

Relinquished By (signature): Received by PAS1 Date/Time 6/27/17 2140

Laboratory Comments:

082416 Form WCD-KC1

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SAMPLE ACKNOWLEDGMENT

Samples Submitted By: BURNS & MCDONNELL
Client Project ID: 96323 OneGas - Salina, KS
Client PO#:

Pace Project Manager: Alice Spiller
Phone (913)563-1409
alice.spiller@pacelabs.com
Pace Analytical Project ID: 60247554
Samples Received: June 27, 2017 09:40 PM
Estimated Completion: July 11, 2017

CC: Brian Hoye
Client Specified QC Sample(s): SLMW-1/GW01

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
SLMW-1/GW01	60247554001	Water	06/27/17 09:15	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
SLMW-2/GW01	60247554002	Water	06/27/17 10:30	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
SLMW-3/GW01	60247554003	Water	06/27/17 11:35	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
SLMW-3/ERB	60247554004	Water	06/27/17 11:55	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
SLDUP-1/GW01	60247554005	Water	06/27/17 08:00	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TRIPBLANK-20170627A/TB01	60247554006	Water	06/27/17 09:15	8260/OA1 Volatile Organics

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
SLMW-1/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
SLMW-2/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
SLMW-3/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
SLMW-3/ERB	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
SLDUP-1/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
TRIPBLANK-20170627A/TB01	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60247555

60247555

Client Name: Burns & McD

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☑ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T-266 (CF +2.9) / T-239 (CF +0.2) **Type of Ice:** Wet Blue None

Cooler Temperature (°C): **As-read** 2.2 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 2.4

Date and initials of person examining contents: 06/28/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/29/17

BURNS & McDONNELL Request for Chemical Analysis and Chain of Custody Record

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170626A
Lab. Reference No. or Episode No.: 60247955

Project Number: 96323
Client Name: ONEGAS - Concordia, KS

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type: Matrix: Liquid	Sample Type: Matrix: Solid	Sample Type: Matrix: Gas	Number of Containers	Analysis: BTEX	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide	Remarks
–	CMW-04	GW01	–	–	–	–	6/26/17	1245	X			7	X	X	X	X	6(AG4U) 9(DG9H) 3(BP3N)[1.5] 3(BP3C)[1.2] MS/MSD Parent 01
–	CMW-04	GW01 MS/MSD	–	–	–	–	6/26/17	1245	X			14	X	X	X	X	– MS/MSD
–	CMW03	GW01	–	–	–	–	6/26/17	1420	X			7	X	X	X	X	2(AG4U) 3(DG9H) BP3N[1.5] BP3C[1.2] 002
–	CMW-02	GW01	–	–	–	–	6/26/17	1630	X			7	X	X	X	X	003
–	CMW-05	GW01	–	–	–	–	6/26/17	1735	X			7	X	X	X	X	004
–	CDUP-1	GW01	–	–	–	–	6/26/17	–	X			7	X	X	X	X	Blind Dup 005
–	TripBlank-20170626A	/TB01	–	–	–	–	–	–	X			2	X				2(DG9H) Trip Blank 006
–	CMW-05	ERB	–	–	–	–	6/26/17	1755	X			7	X	X	X	X	Rinsate 007

6/26/17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/27/17, 1245

Relinquished By (signature): Date/Time 6-27-17 1549

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 2.4°c

Relinquished By (signature): 2. Date/Time 6-27-17 1245

Relinquished By (signature): Received by PAS1 Date/Time 6/27/17 2140

Laboratory Comments:

082416 Form WCD-KC1

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 11, 2017

Brian Hoye
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Dear Brian Hoye:
Enclosed are the analytical results for sample(s) received by the laboratory on June 27, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller

Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

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CERTIFICATIONS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

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SAMPLE SUMMARY

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60247555001	**CMW-04/GW01**	Water	06/26/17 12:45	06/27/17 21:40
60247555002	**CMW-03/GW01**	Water	06/26/17 14:20	06/27/17 21:40
60247555003	**CMW-02/GW01**	Water	06/26/17 16:30	06/27/17 21:40
60247555004	**CMW-05/GW01**	Water	06/26/17 17:35	06/27/17 21:40
60247555005	**CDUP-1/GW01**	Water	06/26/17 08:00	06/27/17 21:40
60247555006	**TRIP BLANK-20170626A/TB01**	Water	06/26/17 12:45	06/27/17 21:40
60247555007	**CMW-05/ERB**	Water	06/26/17 17:55	06/27/17 21:40

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SAMPLE ANALYTE COUNT

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60247555001	**CMW-04/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247555002	**CMW-03/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247555003	**CMW-02/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247555004	**CMW-05/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247555005	**CDUP-1/GW01**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247555006	**TRIP BLANK-20170626A/TB01**	EPA 8260/OA1	JTK	8	PASI-K
60247555007	**CMW-05/ERB**	EPA 6010	TDS	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K

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ANALYTICAL RESULTS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Sample: CMW-04/GW01 **Lab ID: 60247555001** Collected: 06/26/17 12:45 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/03/17 11:30	07/05/17 16:46	7440-38-2	
Barium	**114**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:46	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:46	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:46	7440-47-3	
Lead	**11.5**	ug/L	5.0	1	07/03/17 11:30	07/05/17 16:46	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 16:46	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 16:46	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:11	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 07:09	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 07:09	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 07:09	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 07:09	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	64	%	39-114	1	07/01/17 00:00	07/11/17 07:09	321-60-8	
Terphenyl-d14 (S)	74	%	43-117	1	07/01/17 00:00	07/11/17 07:09	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 07:01	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 07:01	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 07:01	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 07:01	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-120	1		07/02/17 07:01	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-120	1		07/02/17 07:01	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120	1		07/02/17 07:01	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 07:01		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/07/17 14:44	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Sample: CMW-03/GW01 **Lab ID: 60247555002** Collected: 06/26/17 14:20 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/03/17 11:30	07/05/17 17:04	7440-38-2	
Barium	**239**	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:04	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:04	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:04	7440-47-3	
Lead	**12.4**	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:04	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 17:04	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 17:04	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:22	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:09	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:09	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:09	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:09	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	81	%	39-114	1	07/01/17 00:00	07/11/17 08:09	321-60-8	
Terphenyl-d14 (S)	76	%	43-117	1	07/01/17 00:00	07/11/17 08:09	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 07:46	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 07:46	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 07:46	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 07:46	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-120	1		07/02/17 07:46	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120	1		07/02/17 07:46	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		07/02/17 07:46	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 07:46		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/07/17 14:48	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Sample: CMW-02/GW01 **Lab ID: 60247555003** Collected: 06/26/17 16:30 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**13.2**	ug/L	10.0	1	07/03/17 11:30	07/05/17 17:08	7440-38-2	
Barium	**116**	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:08	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:08	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:08	7440-47-3	
Lead	**11.5**	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:08	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 17:08	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 17:08	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:25	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:29	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:29	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:29	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:29	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	90	%	39-114	1	07/01/17 00:00	07/11/17 08:29	321-60-8	
Terphenyl-d14 (S)	85	%	43-117	1	07/01/17 00:00	07/11/17 08:29	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 08:02	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 08:02	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 08:02	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 08:02	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-120	1		07/02/17 08:02	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/02/17 08:02	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120	1		07/02/17 08:02	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 08:02		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/07/17 14:53	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Sample: CMW-05/GW01 **Lab ID: 60247555004** Collected: 06/26/17 17:35 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**20.6**	ug/L	10.0	1	07/03/17 11:30	07/05/17 17:11	7440-38-2	
Barium	**439**	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:11	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:11	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:11	7440-47-3	
Lead	**10.9**	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:11	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 17:11	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 17:11	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:27	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:49	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:49	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 08:49	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 08:49	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	79	%	39-114	1	07/01/17 00:00	07/11/17 08:49	321-60-8	
Terphenyl-d14 (S)	82	%	43-117	1	07/01/17 00:00	07/11/17 08:49	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 08:17	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 08:17	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 08:17	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 08:17	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-120	1		07/02/17 08:17	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120	1		07/02/17 08:17	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		07/02/17 08:17	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 08:17		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	**0.0094**	mg/L	0.0050	1		07/07/17 14:54	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Sample: CDUP-1/GW01 **Lab ID: 60247555005** Collected: 06/26/17 08:00 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	**10.6**	ug/L	10.0	1	07/03/17 11:30	07/05/17 17:15	7440-38-2	
Barium	**116**	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:15	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:15	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:15	7440-47-3	
Lead	**12.0**	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:15	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 17:15	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 17:15	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:29	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 09:09	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 09:09	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 09:09	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:09	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	91	%	39-114	1	07/01/17 00:00	07/11/17 09:09	321-60-8	
Terphenyl-d14 (S)	85	%	43-117	1	07/01/17 00:00	07/11/17 09:09	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 08:32	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 08:32	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 08:32	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 08:32	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-120	1		07/02/17 08:32	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-120	1		07/02/17 08:32	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120	1		07/02/17 08:32	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 08:32		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/07/17 14:54	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Sample: TRIP BLANK-20170626A/TB01 **Lab ID: 60247555006** Collected: 06/26/17 12:45 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 08:47	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 08:47	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 08:47	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 08:47	1330-20-7	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		07/02/17 08:47	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-120	1		07/02/17 08:47	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		07/02/17 08:47	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 08:47		

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ANALYTICAL RESULTS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Sample: CMW-05/ERB **Lab ID: 60247555007** Collected: 06/26/17 17:55 Received: 06/27/17 21:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/03/17 11:30	07/05/17 17:19	7440-38-2	
Barium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:19	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:19	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:19	7440-47-3	
Lead	ND	ug/L	5.0	1	07/03/17 11:30	07/05/17 17:19	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/03/17 11:30	07/05/17 17:19	7782-49-2	
Silver	ND	ug/L	7.0	1	07/03/17 11:30	07/05/17 17:19	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/07/17 16:23	07/10/17 18:31	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 09:29	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 09:29	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/01/17 00:00	07/11/17 09:29	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/01/17 00:00	07/11/17 09:29	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	75	%	39-114	1	07/01/17 00:00	07/11/17 09:29	321-60-8	
Terphenyl-d14 (S)	80	%	43-117	1	07/01/17 00:00	07/11/17 09:29	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 09:02	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 09:02	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 09:02	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 09:02	1330-20-7	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		07/02/17 09:02	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/02/17 09:02	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120	1		07/02/17 09:02	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 09:02		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/07/17 14:57	57-12-5	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

QC Batch: 484419 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 60247555001, 60247555002, 60247555003, 60247555004, 60247555005, 60247555007

METHOD BLANK: 1984210 Matrix: Water
Associated Lab Samples: 60247555001, 60247555002, 60247555003, 60247555004, 60247555005, 60247555007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/10/17 17:56	

LABORATORY CONTROL SAMPLE: 1984211

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.9	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1984212 1984213

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.9	4.8	97	97	75-125	1	20	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

QC Batch: 483651 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 60247555001, 60247555002, 60247555003, 60247555004, 60247555005, 60247555007

METHOD BLANK: 1981692 | Matrix: Water
Associated Lab Samples: 60247555001, 60247555002, 60247555003, 60247555004, 60247555005, 60247555007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	07/05/17 16:13	
Barium	ug/L	ND	5.0	07/05/17 16:13	
Cadmium	ug/L	ND	5.0	07/05/17 16:13	
Chromium	ug/L	ND	5.0	07/05/17 16:13	
Lead	ug/L	ND	5.0	07/05/17 16:13	
Selenium	ug/L	ND	15.0	07/05/17 16:13	
Silver	ug/L	ND	7.0	07/05/17 16:13	

LABORATORY CONTROL SAMPLE: 1981693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	935	94	80-120	
Barium	ug/L	1000	915	91	80-120	
Cadmium	ug/L	1000	954	95	80-120	
Chromium	ug/L	1000	915	92	80-120	
Lead	ug/L	1000	982	98	80-120	
Selenium	ug/L	1000	984	98	80-120	
Silver	ug/L	500	459	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981694 1981695

Parameter	Units	60247554001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	956	979	95	98	75-125	2	20	
Barium	ug/L	120	1000	1000	1030	1050	91	93	75-125	2	20	
Cadmium	ug/L	ND	1000	1000	945	965	95	96	75-125	2	20	
Chromium	ug/L	ND	1000	1000	902	927	90	93	75-125	3	20	
Lead	ug/L	7.4	1000	1000	931	954	92	95	75-125	2	20	
Selenium	ug/L	ND	1000	1000	972	992	97	99	75-125	2	27	
Silver	ug/L	ND	500	500	462	469	92	94	75-125	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981696 1981697

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	999	990	99	98	75-125	1	20	
Barium	ug/L	114	1000	1000	1050	1060	94	95	75-125	1	20	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981696 1981697

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	ug/L	ND	1000	1000	974	969	97	97	75-125	0	20	
Chromium	ug/L	ND	1000	1000	936	934	93	93	75-125	0	20	
Lead	ug/L	11.5	1000	1000	965	957	95	95	75-125	1	20	
Selenium	ug/L	ND	1000	1000	1000	998	100	99	75-125	1	27	
Silver	ug/L	ND	500	500	472	472	94	94	75-125	0	20	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

QC Batch: 483647 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247555001, 60247555002, 60247555003, 60247555004, 60247555005, 60247555006, 60247555007

METHOD BLANK: 1981680 | Matrix: Water
Associated Lab Samples: 60247555001, 60247555002, 60247555003, 60247555004, 60247555005, 60247555006, 60247555007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/02/17 04:14	
Ethylbenzene	ug/L	ND	1.0	07/02/17 04:14	
Toluene	ug/L	ND	1.0	07/02/17 04:14	
Xylene (Total)	ug/L	ND	3.0	07/02/17 04:14	
1,2-Dichloroethane-d4 (S)	%	100	80-120	07/02/17 04:14	
4-Bromofluorobenzene (S)	%	103	80-120	07/02/17 04:14	
Toluene-d8 (S)	%	102	80-120	07/02/17 04:14	

LABORATORY CONTROL SAMPLE: 1981681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.9	90	82-115	
Ethylbenzene	ug/L	20	18.5	92	83-112	
Toluene	ug/L	20	18.8	94	78-113	
Xylene (Total)	ug/L	60	56.3	94	83-114	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981682 1981683

Parameter	Units	60247554001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	19.6	19.2	98	96	55-145	2	18	
Ethylbenzene	ug/L	ND	20	20	19.9	19.8	99	99	45-152	0	11	
Toluene	ug/L	ND	20	20	20.2	18.6	101	93	52-144	8	12	
Xylene (Total)	ug/L	ND	60	60	59.9	58.1	100	97	54-146	3	12	
1,2-Dichloroethane-d4 (S)	%						97	98	80-120			
4-Bromofluorobenzene (S)	%						99	96	80-120			
Toluene-d8 (S)	%						104	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981684 1981685

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	20.1	19.6	100	98	55-145	3	18	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981684 1981685

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethylbenzene	ug/L	ND	20	20	19.8	18.7	99	93	45-152	6	11	
Toluene	ug/L	ND	20	20	20.4	18.9	102	95	52-144	7	12	
Xylene (Total)	ug/L	ND	60	60	60.3	55.8	101	93	54-146	8	12	
1,2-Dichloroethane-d4 (S)	%						96	99	80-120			
4-Bromofluorobenzene (S)	%						102	102	80-120			
Toluene-d8 (S)	%						101	99	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

QC Batch: 483419 | Analysis Method: EPA 8270C by SIM
QC Batch Method: EPA 3510C | Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 60247555001, 60247555002, 60247555003, 60247555004, 60247555005, 60247555007

METHOD BLANK: 1982187 | Matrix: Water
Associated Lab Samples: 60247555001, 60247555002, 60247555003, 60247555004, 60247555005, 60247555007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	07/11/17 06:29	
Acenaphthylene	ug/L	ND	0.10	07/11/17 06:29	
Anthracene	ug/L	ND	0.10	07/11/17 06:29	
Benzo(a)anthracene	ug/L	ND	0.10	07/11/17 06:29	
Benzo(a)pyrene	ug/L	ND	0.10	07/11/17 06:29	
Benzo(b)fluoranthene	ug/L	ND	0.10	07/11/17 06:29	
Benzo(g,h,i)perylene	ug/L	ND	0.10	07/11/17 06:29	
Benzo(k)fluoranthene	ug/L	ND	0.10	07/11/17 06:29	
Chrysene	ug/L	ND	0.10	07/11/17 06:29	
Dibenz(a,h)anthracene	ug/L	ND	0.10	07/11/17 06:29	
Fluoranthene	ug/L	ND	0.50	07/11/17 06:29	
Fluorene	ug/L	ND	0.10	07/11/17 06:29	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	07/11/17 06:29	
Naphthalene	ug/L	ND	0.50	07/11/17 06:29	
Phenanthrene	ug/L	ND	0.50	07/11/17 06:29	
Pyrene	ug/L	ND	0.10	07/11/17 06:29	
2-Fluorobiphenyl (S)	%	88	39-114	07/11/17 06:29	
Terphenyl-d14 (S)	%	79	43-117	07/11/17 06:29	

LABORATORY CONTROL SAMPLE: 1980290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.7	77	52-118	
Acenaphthylene	ug/L	10	7.7	77	54-124	
Anthracene	ug/L	10	8.0	80	59-121	
Benzo(a)anthracene	ug/L	10	7.8	78	63-126	
Benzo(a)pyrene	ug/L	10	8.2	82	63-127	
Benzo(b)fluoranthene	ug/L	10	8.0	80	59-127	
Benzo(g,h,i)perylene	ug/L	10	8.6	86	56-128	
Benzo(k)fluoranthene	ug/L	10	6.7	67	56-125	
Chrysene	ug/L	10	7.5	75	60-119	
Dibenz(a,h)anthracene	ug/L	10	9.0	90	54-142	
Fluoranthene	ug/L	10	8.6	86	68-133	
Fluorene	ug/L	10	7.7	77	56-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	9.3	93	60-136	
Naphthalene	ug/L	10	7.4	74	50-119	
Phenanthrene	ug/L	10	7.8	78	54-116	
Pyrene	ug/L	10	6.4	64	51-117	
2-Fluorobiphenyl (S)	%			74	39-114	
Terphenyl-d14 (S)	%			61	43-117	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1980291 1980292

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	10	10	7.4	8.1	74	81	24-137	8	27	
Acenaphthylene	ug/L	ND	10	10	7.4	8.1	74	81	32-149	9	27	
Anthracene	ug/L	ND	10	10	8.1	8.7	81	87	40-140	7	25	
Benzo(a)anthracene	ug/L	ND	10	10	8.1	8.5	81	85	50-147	5	26	
Benzo(a)pyrene	ug/L	ND	10	10	8.3	8.4	83	84	51-135	1	25	
Benzo(b)fluoranthene	ug/L	ND	10	10	8.2	8.2	82	82	47-133	0	29	1e
Benzo(g,h,i)perylene	ug/L	ND	10	10	8.7	8.8	87	88	49-132	2	31	
Benzo(k)fluoranthene	ug/L	ND	10	10	6.6	7.5	66	75	48-116	12	24	
Chrysene	ug/L	ND	10	10	7.5	7.9	75	79	51-110	5	23	
Dibenz(a,h)anthracene	ug/L	ND	10	10	9.0	9.2	90	92	43-148	3	38	
Fluoranthene	ug/L	ND	10	10	8.7	9.3	87	92	54-142	6	26	
Fluorene	ug/L	ND	10	10	7.7	8.3	77	83	25-146	7	26	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10	10	9.3	9.5	93	95	43-148	3	35	
Naphthalene	ug/L	ND	10	10	6.8	7.6	66	74	33-127	12	26	
Phenanthrene	ug/L	ND	10	10	7.8	8.4	77	82	51-115	7	23	
Pyrene	ug/L	ND	10	10	7.0	7.5	70	75	28-131	6	26	
2-Fluorobiphenyl (S)	%						69	78	39-114			
Terphenyl-d14 (S)	%						68	72	43-117			

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

QC Batch: 484039 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60247555001

METHOD BLANK: 1982780 | Matrix: Water
Associated Lab Samples: 60247555001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/07/17 14:16	

LABORATORY CONTROL SAMPLE: 1982781

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.092	92	69-126	

MATRIX SPIKE SAMPLE: 1982782

Parameter	Units	60247554001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.038	.1	0.13	91	61-126	

MATRIX SPIKE SAMPLE: 1982783

Parameter	Units	60247555001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.096	96	61-126	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

QC Batch: 484040 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60247555002, 60247555003, 60247555004, 60247555005, 60247555007

METHOD BLANK: 1982784 | Matrix: Water
Associated Lab Samples: 60247555002, 60247555003, 60247555004, 60247555005, 60247555007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/07/17 14:45	

LABORATORY CONTROL SAMPLE: 1982785

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.095	95	69-126	

MATRIX SPIKE SAMPLE: 1982786

Parameter	Units	60247555002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.096	95	61-126	

SAMPLE DUPLICATE: 1982787

Parameter	Units	60247555003 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	ND		46	

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QUALIFIERS

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 483647

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	The methods baseline separation for isomers pairs in the Initial Calibration or Continuing Calibration Verification (CCV) was less than the expected 50% valley to baseline. No further action was taken for this method variation. The two compounds are still being reported as individual isomers and not a combined total, since there is separation between the two isomers.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 96323 OneGas - Concordia, KS
Pace Project No.: 60247555

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60247555001	**CMW-04/GW01**	EPA 3010	483651	EPA 6010	483796
60247555002	**CMW-03/GW01**	EPA 3010	483651	EPA 6010	483796
60247555003	**CMW-02/GW01**	EPA 3010	483651	EPA 6010	483796
60247555004	**CMW-05/GW01**	EPA 3010	483651	EPA 6010	483796
60247555005	**CDUP-1/GW01**	EPA 3010	483651	EPA 6010	483796
60247555007	**CMW-05/ERB**	EPA 3010	483651	EPA 6010	483796
60247555001	**CMW-04/GW01**	EPA 7470	484419	EPA 7470	484458
60247555002	**CMW-03/GW01**	EPA 7470	484419	EPA 7470	484458
60247555003	**CMW-02/GW01**	EPA 7470	484419	EPA 7470	484458
60247555004	**CMW-05/GW01**	EPA 7470	484419	EPA 7470	484458
60247555005	**CDUP-1/GW01**	EPA 7470	484419	EPA 7470	484458
60247555007	**CMW-05/ERB**	EPA 7470	484419	EPA 7470	484458
60247555001	**CMW-04/GW01**	EPA 3510C	483419	EPA 8270C by SIM	484680
60247555002	**CMW-03/GW01**	EPA 3510C	483419	EPA 8270C by SIM	484680
60247555003	**CMW-02/GW01**	EPA 3510C	483419	EPA 8270C by SIM	484680
60247555004	**CMW-05/GW01**	EPA 3510C	483419	EPA 8270C by SIM	484680
60247555005	**CDUP-1/GW01**	EPA 3510C	483419	EPA 8270C by SIM	484680
60247555007	**CMW-05/ERB**	EPA 3510C	483419	EPA 8270C by SIM	484680
60247555001	**CMW-04/GW01**	EPA 8260/OA1	483647		
60247555002	**CMW-03/GW01**	EPA 8260/OA1	483647		
60247555003	**CMW-02/GW01**	EPA 8260/OA1	483647		
60247555004	**CMW-05/GW01**	EPA 8260/OA1	483647		
60247555005	**CDUP-1/GW01**	EPA 8260/OA1	483647		
60247555006	**TRIP BLANK-20170626A/TB01**	EPA 8260/OA1	483647		
60247555007	**CMW-05/ERB**	EPA 8260/OA1	483647		
60247555001	**CMW-04/GW01**	SM 4500-CN-E	484039		
60247555002	**CMW-03/GW01**	SM 4500-CN-E	484040		
60247555003	**CMW-02/GW01**	SM 4500-CN-E	484040		
60247555004	**CMW-05/GW01**	SM 4500-CN-E	484040		
60247555005	**CDUP-1/GW01**	SM 4500-CN-E	484040		
60247555007	**CMW-05/ERB**	SM 4500-CN-E	484040		

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Sample Condition Upon Receipt

WO# : 60247555

60247555

Client Name: Burns & McD

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☑ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T-266 (CF +2.9) / T-239 (CF +0.2) **Type of Ice:** Wet Blue None

Cooler Temperature (°C): **As-read** 2.2 **Corr. Factor** CF +2.9 / CF +0.2 **Corrected** 2.4

Date and initials of person examining contents: 06/28/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/29/17

BURNS & McDONNELL Request for Chemical Analysis and Chain of Custody Record

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170626A
Lab. Reference No. or Episode No.: 60247955

Project Number: 96323
Client Name: ONEGAS - Concordia, KS

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Matrix: Liquid	Matrix: Solid	Matrix: Gas	Number of Containers	Analysis: BTEX	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide		Remarks	
–	CMW-04	GW01	–	–	–	–	6/26/17	1245	X			7	X	X	X	X	6(AG4U)	9(DG9H) 3(BP3N)[1.5] 3(BP3C)[1.2] MS/MSD Parent	01
–	CMW-04	GW01 MS/MSD	–	–	–	–	6/26/17	1245	X			14	X	X	X	X	–	MS/MSD	
–	CMW03	GW01	–	–	–	–	6/26/17	1420	X			7	X	X	X	X	2(AG4U)	3(DG9H) BP3N[1.5] BP3C[1.2]	02
–	CMW-02	GW01	–	–	–	–	6/26/17	1630	X			7	X	X	X	X			03
–	CMW-05	GW01	–	–	–	–	6/26/17	1735	X			7	X	X	X	X			04
–	CDUP-1	GW01	–	–	–	–	6/26/17	–	X			7	X	X	X	X		Blind Dup	05
–	TripBlank-20170626A	/TB01	–	–	–	–	–	–	X			2	X				2(DG9H)	Trip Blank	06
–	CMW-05	ERB	–	–	–	–	6/26/17	1755	X			7	X	X	X	X		Rinsate	07

6/26/17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time: 6/27/17, 1245

Relinquished By (signature): Pace Date/Time: 6-27-17 1549

Ice Present in Container: Yes ☑ No ☐

Temperature Upon Receipt: 2.4°c

Relinquished By (signature): 2. Date/Time: 6-27-17 1245

Relinquished By (signature): Received by PAS1 Date/Time: 6/27/17 2140

Laboratory Comments:

082416 Form WCD-KC1

9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ACKNOWLEDGMENT

Samples Submitted By: BURNS & MCDONNELL
Client Project ID: 96323 OneGas - Concordia, KS
Client PO#: 122245

Pace Project Manager: Alice Spiller
Phone (913)563-1409
alice.spiller@pacelabs.com
Pace Analytical Project ID: 60247555
Samples Received: June 27, 2017 09:40 PM
Estimated Completion: July 11, 2017

CC: Brian Hoye
Client Specified QC Sample(s): CMW-04/GW01

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
CMW-04/GW01	60247555001	Water	06/26/17 12:45	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
CMW-03/GW01	60247555002	Water	06/26/17 14:20	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
CMW-02/GW01	60247555003	Water	06/26/17 16:30	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
CMW-05/GW01	60247555004	Water	06/26/17 17:35	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
CDUP-1/GW01	60247555005	Water	06/26/17 08:00	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TRIP BLANK-20170626A/TB01	60247555006	Water	06/26/17 12:45	8260/OA1 Volatile Organics
CMW-05/ERB	60247555007	Water	06/26/17 17:55	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
CMW-04/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
CMW-03/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

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SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
CMW-02/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
CMW-05/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

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Lenexa, KS 66219
(913)599-5665

SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
CDUP-1/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ACKNOWLEDGMENT

Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
TRIP BLANK-20170626A/TB01	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
CMW-05/ERB	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, LLC.

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60247642

60247642

Client Name: Burns & Mc

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-289 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 1.6 1.2 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 1.4 1.8

Date and initials of person examining contents: 06/29/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix:	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/29/17

BURNS & McDONNELL — **Request for Chemical Analysis and Chain of Custody Record**

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170628A
Lab. Reference No. or Episode No.: 60247642

Project Number: 96323

Client Name: ONEGAS - Hutchinson, KS

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Sample Type: Matrix: Liquid	Sample Type: Matrix: Solid	Sample Type: Matrix: Gas	Number of Containers	Analysis: BTEX	Analysis: PAHs	Analysis: Metals	Analysis: Cyanide	Remarks	
—	HMW-2	GW01	—	—	—	—	6/28/17	1620	X			7	X	X	X	X	9(0.6gH) 3(0.6gSN)[1] 3(0.6gSG)[2] 6(0.6gH) MS/MSD Parent	001
—	HMW-2	GW01MS/MSD	—	—	—	—	6/28/17	1620	X			14	X	X	X	X	MS/MSD	—
—	HMW-15	GW01	—	—	—	—	6/28/17	0900	X			7	X	X	X	X	3(0.6gH) 3(0.6gSN)[1] 6(0.6gSG)[2] 2(0.6gH)	002
—	HMW-10	GW01	—	—	—	—	6/28/17	0945	X			7	X	X	X	X		003
—	HMW-5S	GW01	—	—	—	—	6/28/17	1045	X			7	X	X	X	X		004
—	HMW-5D	GW01	—	—	—	—	6/28/17	1140	X			7	X	X	X	X		005
—	HMW-4D	GW01	—	—	—	—	6/28/17	1240	X			7	X	X	X	X		006
—	HMW-4S	GW01	—	—	—	—	6/28/17	1325	X			7	X	X	X	X		007
—	HMW-4S	ERB	—	—	—	—	6/28/17	1345	X			7	X	X	X	X	Rinsate	008
—	HDup-1	GW01	—	—	—	—	6/28/17	—	X			7	X	X	X	X	Blind dup	009
—	Trip Blank-20170628A	TB01	—	—	—	—	—	—	X			2	X			3(0.6gH)	Trip Blank	010

6-28-17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time: 6/28/17, 1550

Relinquished By (signature): Pace Date/Time: 6-28-17 1620

Relinquished By (signature): 2. Pace Date/Time: 6-28-17 1550

Relinquished By (signature): Received by PKS Date/Time: 6/28/17 2150

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt: 1.4°C 1.8°C

Laboratory Comments:

082416 Form WCD-KC1

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 12, 2017

Brian Hoye
Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

RE: Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Dear Brian Hoye:
Enclosed are the analytical results for sample(s) received by the laboratory on June 28, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller

Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

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CERTIFICATIONS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

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SAMPLE SUMMARY

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60247642001	**HMW-2/GW01**	Water	06/27/17 16:20	06/28/17 21:50
60247642002	**HMW-1S/GW01**	Water	06/28/17 09:00	06/28/17 21:50
60247642003	**HMW-1D/GW01**	Water	06/28/17 09:45	06/28/17 21:50
60247642004	**HMW-5S/GW01**	Water	06/28/17 10:45	06/28/17 21:50
60247642005	**HMW-5D/GW01**	Water	06/28/17 11:40	06/28/17 21:50
60247642006	**HMW-4D/GW01**	Water	06/28/17 12:40	06/28/17 21:50
60247642007	**HMW-4S/GW01**	Water	06/28/17 13:25	06/28/17 21:50
60247642008	**HMW-4S/ERB**	Water	06/28/17 13:45	06/28/17 21:50
60247642009	**HDUP-1/GW01**	Water	06/28/17 08:00	06/28/17 21:50
60247642010	**TRIP BLANK-20170628A/TB01**	Water	06/27/17 16:20	06/28/17 21:50

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SAMPLE ANALYTE COUNT

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60247642001	**HMW-2/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642002	**HMW-1S/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642003	**HMW-1D/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642004	**HMW-5S/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642005	**HMW-5D/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642006	**HMW-4D/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642007	**HMW-4S/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642008	**HMW-4S/ERB**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642009	**HDUP-1/GW01**	EPA 6010	SMW	7	PASI-K
		EPA 7470	JRS	1	PASI-K
		EPA 8270C by SIM	NAW	18	PASI-K
		EPA 8260/OA1	JTK	8	PASI-K
		SM 4500-CN-E	AGO	1	PASI-K
60247642010	**TRIP BLANK-20170628A/TB01**	EPA 8260/OA1	JTK	8	PASI-K

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HMW-2/GW01 **Lab ID: 60247642001** Collected: 06/27/17 16:20 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 17:44	7440-38-2	
Barium	**97.3**	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:44	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:44	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:44	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:44	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 17:44	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 17:44	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 09:53	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	208-96-8	
Anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	207-08-9	
Chrysene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 19:38	206-44-0	
Fluorene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	193-39-5	
Naphthalene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 19:38	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 19:38	85-01-8	
Pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 19:38	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	84	%	39-114	1	07/03/17 00:00	07/11/17 19:38	321-60-8	
Terphenyl-d14 (S)	84	%	43-117	1	07/03/17 00:00	07/11/17 19:38	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/07/17 22:40	71-43-2	
Toluene	ND	ug/L	1.0	1		07/07/17 22:40	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/07/17 22:40	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/07/17 22:40	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-120	1		07/07/17 22:40	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/07/17 22:40	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120	1		07/07/17 22:40	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/07/17 22:40		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:24	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HMW-1S/GW01 **Lab ID: 60247642002** Collected: 06/28/17 09:00 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 17:51	7440-38-2	
Barium	**124**	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:51	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:51	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:51	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:51	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 17:51	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 17:51	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 09:59	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 20:39	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 20:39	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 20:39	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:39	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	85	%	39-114	1	07/03/17 00:00	07/11/17 20:39	321-60-8	
Terphenyl-d14 (S)	84	%	43-117	1	07/03/17 00:00	07/11/17 20:39	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 09:17	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 09:17	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 09:17	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 09:17	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-120	1		07/02/17 09:17	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120	1		07/02/17 09:17	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120	1		07/02/17 09:17	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 09:17		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:11	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HMW-1D/GW01 **Lab ID: 60247642003** Collected: 06/28/17 09:45 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 17:53	7440-38-2	
Barium	**50.0**	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:53	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:53	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:53	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:53	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 17:53	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 17:53	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 10:02	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 20:59	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 20:59	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 20:59	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 20:59	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	88	%	39-114	1	07/03/17 00:00	07/11/17 20:59	321-60-8	
Terphenyl-d14 (S)	84	%	43-117	1	07/03/17 00:00	07/11/17 20:59	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 09:33	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 09:33	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 09:33	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 09:33	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-120	1		07/02/17 09:33	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/02/17 09:33	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120	1		07/02/17 09:33	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 09:33		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:15	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HMW-5S/GW01 **Lab ID: 60247642004** Collected: 06/28/17 10:45 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 17:55	7440-38-2	
Barium	**106**	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:55	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:55	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:55	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:55	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 17:55	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 17:55	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 10:04	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:19	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:19	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:19	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:19	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	92	%	39-114	1	07/03/17 00:00	07/11/17 21:19	321-60-8	
Terphenyl-d14 (S)	95	%	43-117	1	07/03/17 00:00	07/11/17 21:19	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 09:48	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 09:48	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 09:48	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 09:48	1330-20-7	
Surrogates								
Toluene-d8 (S)	103	%	80-120	1		07/02/17 09:48	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/02/17 09:48	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120	1		07/02/17 09:48	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 09:48		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:16	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HMW-5D/GW01 **Lab ID: 60247642005** Collected: 06/28/17 11:40 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 17:58	7440-38-2	
Barium	**54.4**	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:58	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:58	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:58	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 17:58	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 17:58	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 17:58	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 10:06	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:39	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:39	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:39	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:39	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	39-114	1	07/03/17 00:00	07/11/17 21:39	321-60-8	
Terphenyl-d14 (S)	80	%	43-117	1	07/03/17 00:00	07/11/17 21:39	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 10:03	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 10:03	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 10:03	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 10:03	1330-20-7	
Surrogates								
Toluene-d8 (S)	104	%	80-120	1		07/02/17 10:03	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120	1		07/02/17 10:03	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120	1		07/02/17 10:03	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 10:03		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:16	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HMW-4D/GW01 **Lab ID: 60247642006** Collected: 06/28/17 12:40 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 18:00	7440-38-2	
Barium	**53.0**	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:00	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:00	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:00	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:00	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 18:00	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 18:00	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 10:08	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	53-70-3	
Fluoranthene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:58	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:58	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/03/17 00:00	07/11/17 21:58	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 21:58	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	92	%	39-114	1	07/03/17 00:00	07/11/17 21:58	321-60-8	
Terphenyl-d14 (S)	87	%	43-117	1	07/03/17 00:00	07/11/17 21:58	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/02/17 10:19	71-43-2	
Toluene	ND	ug/L	1.0	1		07/02/17 10:19	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/02/17 10:19	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/02/17 10:19	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-120	1		07/02/17 10:19	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120	1		07/02/17 10:19	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120	1		07/02/17 10:19	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/02/17 10:19		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:17	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HMW-4S/GW01 **Lab ID: 60247642007** Collected: 06/28/17 13:25 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 18:07	7440-38-2	
Barium	**429**	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:07	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:07	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:07	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:07	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 18:07	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 18:07	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 10:10	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	**33.5**	ug/L	0.50	5	07/03/17 00:00	07/12/17 13:09	83-32-9	
Acenaphthylene	**2.4**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	208-96-8	
Anthracene	**0.96**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	120-12-7	
Benzo(a)anthracene	**0.58**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	56-55-3	
Benzo(a)pyrene	**1.1**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	50-32-8	
Benzo(b)fluoranthene	**1.2**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	205-99-2	2e
Benzo(g,h,i)perylene	**0.64**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	207-08-9	
Chrysene	**0.67**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	218-01-9	
Dibenz(a,h)anthracene	**0.16**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	53-70-3	
Fluoranthene	**1.1**	ug/L	0.50	1	07/03/17 00:00	07/11/17 22:18	206-44-0	
Fluorene	**7.2**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.55**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	193-39-5	
Naphthalene	**29.7**	ug/L	2.5	5	07/03/17 00:00	07/12/17 13:09	91-20-3	
Phenanthrene	**0.63**	ug/L	0.50	1	07/03/17 00:00	07/11/17 22:18	85-01-8	
Pyrene	**2.0**	ug/L	0.10	1	07/03/17 00:00	07/11/17 22:18	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	71	%	39-114	1	07/03/17 00:00	07/11/17 22:18	321-60-8	
Terphenyl-d14 (S)	67	%	43-117	1	07/03/17 00:00	07/11/17 22:18	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/07/17 23:25	71-43-2	
Toluene	ND	ug/L	1.0	1		07/07/17 23:25	108-88-3	
Ethylbenzene	**5.4**	ug/L	1.0	1		07/07/17 23:25	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/07/17 23:25	1330-20-7	
Surrogates								
Toluene-d8 (S)	101	%	80-120	1		07/07/17 23:25	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/07/17 23:25	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120	1		07/07/17 23:25	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/07/17 23:25		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:19	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HMW-4S/ERB **Lab ID: 60247642008** Collected: 06/28/17 13:45 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 18:10	7440-38-2	
Barium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:10	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:10	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:10	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:10	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 18:10	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 18:10	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 10:21	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	208-96-8	
Anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	207-08-9	
Chrysene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 22:38	206-44-0	
Fluorene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	193-39-5	
Naphthalene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 22:38	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 22:38	85-01-8	
Pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:38	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	92	%	39-114	1	07/03/17 00:00	07/11/17 22:38	321-60-8	
Terphenyl-d14 (S)	86	%	43-117	1	07/03/17 00:00	07/11/17 22:38	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/07/17 23:40	71-43-2	
Toluene	ND	ug/L	1.0	1		07/07/17 23:40	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/07/17 23:40	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/07/17 23:40	1330-20-7	
Surrogates								
Toluene-d8 (S)	104	%	80-120	1		07/07/17 23:40	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120	1		07/07/17 23:40	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120	1		07/07/17 23:40	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/07/17 23:40		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:20	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: HDUP-1/GW01 **Lab ID: 60247642009** Collected: 06/28/17 08:00 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic	ND	ug/L	10.0	1	07/06/17 10:40	07/06/17 18:12	7440-38-2	
Barium	**54.3**	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:12	7440-39-3	
Cadmium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:12	7440-43-9	
Chromium	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:12	7440-47-3	
Lead	ND	ug/L	5.0	1	07/06/17 10:40	07/06/17 18:12	7439-92-1	
Selenium	ND	ug/L	15.0	1	07/06/17 10:40	07/06/17 18:12	7782-49-2	
Silver	ND	ug/L	7.0	1	07/06/17 10:40	07/06/17 18:12	7440-22-4	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	07/10/17 12:47	07/11/17 10:23	7439-97-6	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	83-32-9	
Acenaphthylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	208-96-8	
Anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	207-08-9	
Chrysene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	53-70-3	
Fluoranthene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 22:58	206-44-0	
Fluorene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	193-39-5	
Naphthalene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 22:58	91-20-3	
Phenanthrene	ND	ug/L	0.56	1	07/03/17 00:00	07/11/17 22:58	85-01-8	
Pyrene	ND	ug/L	0.11	1	07/03/17 00:00	07/11/17 22:58	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	83	%	39-114	1	07/03/17 00:00	07/11/17 22:58	321-60-8	
Terphenyl-d14 (S)	86	%	43-117	1	07/03/17 00:00	07/11/17 22:58	1718-51-0	
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/07/17 23:55	71-43-2	
Toluene	ND	ug/L	1.0	1		07/07/17 23:55	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/07/17 23:55	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/07/17 23:55	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-120	1		07/07/17 23:55	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120	1		07/07/17 23:55	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120	1		07/07/17 23:55	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/07/17 23:55		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		07/08/17 12:28	57-12-5	

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ANALYTICAL RESULTS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Sample: TRIP BLANK-20170628A/TB01 **Lab ID: 60247642010** Collected: 06/27/17 16:20 Received: 06/28/17 21:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1							
Benzene	ND	ug/L	1.0	1		07/08/17 01:57	71-43-2	
Toluene	ND	ug/L	1.0	1		07/08/17 01:57	108-88-3	
Ethylbenzene	ND	ug/L	1.0	1		07/08/17 01:57	100-41-4	
Xylene (Total)	ND	ug/L	3.0	1		07/08/17 01:57	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-120	1		07/08/17 01:57	2037-26-5	
4-Bromofluorobenzene (S)	108	%	80-120	1		07/08/17 01:57	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120	1		07/08/17 01:57	17060-07-0	
Preservation pH	**1.0**		0.10	1		07/08/17 01:57		

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

QC Batch: 484461 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 60247642001, 60247642002, 60247642003, 60247642004, 60247642005, 60247642006, 60247642007, 60247642008, 60247642009

METHOD BLANK: 1984313 | Matrix: Water
Associated Lab Samples: 60247642001, 60247642002, 60247642003, 60247642004, 60247642005, 60247642006, 60247642007, 60247642008, 60247642009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/11/17 09:44	

LABORATORY CONTROL SAMPLE: 1984314

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.8	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1984315 1984316

Parameter	Units	60247642001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.9	4.7	98	95	75-125	4	20	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

QC Batch: 484081 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET
Associated Lab Samples: 60247642001, 60247642002, 60247642003, 60247642004, 60247642005, 60247642006, 60247642007, 60247642008, 60247642009

METHOD BLANK: 1982985 | Matrix: Water
Associated Lab Samples: 60247642001, 60247642002, 60247642003, 60247642004, 60247642005, 60247642006, 60247642007, 60247642008, 60247642009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	10.0	07/06/17 17:40	
Barium	ug/L	ND	5.0	07/06/17 17:40	
Cadmium	ug/L	ND	5.0	07/06/17 17:40	
Chromium	ug/L	ND	5.0	07/06/17 17:40	
Lead	ug/L	ND	5.0	07/06/17 17:40	
Selenium	ug/L	ND	15.0	07/06/17 17:40	
Silver	ug/L	ND	7.0	07/06/17 17:40	

LABORATORY CONTROL SAMPLE: 1982986

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	1000	956	96	80-120	
Barium	ug/L	1000	1010	101	80-120	
Cadmium	ug/L	1000	992	99	80-120	
Chromium	ug/L	1000	1010	101	80-120	
Lead	ug/L	1000	1020	102	80-120	
Selenium	ug/L	1000	1030	103	80-120	
Silver	ug/L	500	499	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1982987 1982988

Parameter	Units	60247642001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	ND	1000	1000	997	994	100	99	75-125	0	20	
Barium	ug/L	97.3	1000	1000	1100	1110	101	101	75-125	0	20	
Cadmium	ug/L	ND	1000	1000	1010	1010	101	101	75-125	0	20	
Chromium	ug/L	ND	1000	1000	991	997	99	100	75-125	1	20	
Lead	ug/L	ND	1000	1000	989	996	99	99	75-125	1	20	
Selenium	ug/L	ND	1000	1000	1040	1040	104	104	75-125	0	27	
Silver	ug/L	ND	500	500	503	504	101	101	75-125	0	20	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

QC Batch: 483647 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247642002, 60247642003, 60247642004, 60247642005, 60247642006

METHOD BLANK: 1981680 | Matrix: Water
Associated Lab Samples: 60247642002, 60247642003, 60247642004, 60247642005, 60247642006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/02/17 04:14	
Ethylbenzene	ug/L	ND	1.0	07/02/17 04:14	
Toluene	ug/L	ND	1.0	07/02/17 04:14	
Xylene (Total)	ug/L	ND	3.0	07/02/17 04:14	
1,2-Dichloroethane-d4 (S)	%	100	80-120	07/02/17 04:14	
4-Bromofluorobenzene (S)	%	103	80-120	07/02/17 04:14	
Toluene-d8 (S)	%	102	80-120	07/02/17 04:14	

LABORATORY CONTROL SAMPLE: 1981681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.9	90	82-115	
Ethylbenzene	ug/L	20	18.5	92	83-112	
Toluene	ug/L	20	18.8	94	78-113	
Xylene (Total)	ug/L	60	56.3	94	83-114	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981682 1981683

Parameter	Units	60247554001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	19.6	19.2	98	96	55-145	2	18	
Ethylbenzene	ug/L	ND	20	20	19.9	19.8	99	99	45-152	0	11	
Toluene	ug/L	ND	20	20	20.2	18.6	101	93	52-144	8	12	
Xylene (Total)	ug/L	ND	60	60	59.9	58.1	100	97	54-146	3	12	
1,2-Dichloroethane-d4 (S)	%						97	98	80-120			
4-Bromofluorobenzene (S)	%						99	96	80-120			
Toluene-d8 (S)	%						104	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981684 1981685

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	20.1	19.6	100	98	55-145	3	18	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981684 1981685

Parameter	Units	60247555001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethylbenzene	ug/L	ND	20	20	19.8	18.7	99	93	45-152	6	11	
Toluene	ug/L	ND	20	20	20.4	18.9	102	95	52-144	7	12	
Xylene (Total)	ug/L	ND	60	60	60.3	55.8	101	93	54-146	8	12	
1,2-Dichloroethane-d4 (S)	%						96	99	80-120			
4-Bromofluorobenzene (S)	%						102	102	80-120			
Toluene-d8 (S)	%						101	99	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

QC Batch: 484443 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247642001, 60247642007, 60247642008, 60247642009

METHOD BLANK: 1984270 | Matrix: Water
Associated Lab Samples: 60247642001, 60247642007, 60247642008, 60247642009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/07/17 19:54	
Ethylbenzene	ug/L	ND	1.0	07/07/17 19:54	
Toluene	ug/L	ND	1.0	07/07/17 19:54	
Xylene (Total)	ug/L	ND	3.0	07/07/17 19:54	
1,2-Dichloroethane-d4 (S)	%	97	80-120	07/07/17 19:54	
4-Bromofluorobenzene (S)	%	106	80-120	07/07/17 19:54	
Toluene-d8 (S)	%	102	80-120	07/07/17 19:54	

LABORATORY CONTROL SAMPLE: 1984271

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.4	97	82-115	
Ethylbenzene	ug/L	20	19.0	95	83-112	
Toluene	ug/L	20	19.1	95	78-113	
Xylene (Total)	ug/L	60	54.0	90	83-114	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1984272 1984273

Parameter	Units	60247642001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	20.5	19.6	102	98	55-145	4	18	
Ethylbenzene	ug/L	ND	20	20	19.2	19.4	96	97	45-152	1	11	
Toluene	ug/L	ND	20	20	20.5	19.4	102	97	52-144	6	12	
Xylene (Total)	ug/L	ND	60	60	55.7	54.6	93	91	54-146	2	12	
1,2-Dichloroethane-d4 (S)	%						101	97	80-120			
4-Bromofluorobenzene (S)	%						99	99	80-120			
Toluene-d8 (S)	%						100	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

QC Batch: 484455 | Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 | Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60247642010

METHOD BLANK: 1984284 | Matrix: Water
Associated Lab Samples: 60247642010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/08/17 01:41	
Ethylbenzene	ug/L	ND	1.0	07/08/17 01:41	
Toluene	ug/L	ND	1.0	07/08/17 01:41	
Xylene (Total)	ug/L	ND	3.0	07/08/17 01:41	
1,2-Dichloroethane-d4 (S)	%	101	80-120	07/08/17 01:41	
4-Bromofluorobenzene (S)	%	103	80-120	07/08/17 01:41	
Toluene-d8 (S)	%	99	80-120	07/08/17 01:41	

LABORATORY CONTROL SAMPLE: 1984285

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.2	96	82-115	
Ethylbenzene	ug/L	20	18.8	94	83-112	
Toluene	ug/L	20	19.3	96	78-113	
Xylene (Total)	ug/L	60	54.6	91	83-114	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

QC Batch: 483686 | Analysis Method: EPA 8270C by SIM
QC Batch Method: EPA 3510C | Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 60247642001, 60247642002, 60247642003, 60247642004, 60247642005, 60247642006, 60247642007, 60247642008, 60247642009

METHOD BLANK: 1981808 | Matrix: Water
Associated Lab Samples: 60247642001, 60247642002, 60247642003, 60247642004, 60247642005, 60247642006, 60247642007, 60247642008, 60247642009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	07/11/17 18:58	
Acenaphthylene	ug/L	ND	0.10	07/11/17 18:58	
Anthracene	ug/L	ND	0.10	07/11/17 18:58	
Benzo(a)anthracene	ug/L	ND	0.10	07/11/17 18:58	
Benzo(a)pyrene	ug/L	ND	0.10	07/11/17 18:58	
Benzo(b)fluoranthene	ug/L	ND	0.10	07/11/17 18:58	
Benzo(g,h,i)perylene	ug/L	ND	0.10	07/11/17 18:58	
Benzo(k)fluoranthene	ug/L	ND	0.10	07/11/17 18:58	
Chrysene	ug/L	ND	0.10	07/11/17 18:58	
Dibenz(a,h)anthracene	ug/L	ND	0.10	07/11/17 18:58	
Fluoranthene	ug/L	ND	0.50	07/11/17 18:58	
Fluorene	ug/L	ND	0.10	07/11/17 18:58	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	07/11/17 18:58	
Naphthalene	ug/L	ND	0.50	07/11/17 18:58	
Phenanthrene	ug/L	ND	0.50	07/11/17 18:58	
Pyrene	ug/L	ND	0.10	07/11/17 18:58	
2-Fluorobiphenyl (S)	%	84	39-114	07/11/17 18:58	
Terphenyl-d14 (S)	%	85	43-117	07/11/17 18:58	

LABORATORY CONTROL SAMPLE: 1981809

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	8.5	85	52-118	
Acenaphthylene	ug/L	10	8.6	86	54-124	
Anthracene	ug/L	10	9.0	90	59-121	
Benzo(a)anthracene	ug/L	10	8.7	87	63-126	
Benzo(a)pyrene	ug/L	10	9.2	92	63-127	
Benzo(b)fluoranthene	ug/L	10	8.7	87	59-127	
Benzo(g,h,i)perylene	ug/L	10	8.6	86	56-128	
Benzo(k)fluoranthene	ug/L	10	7.8	78	56-125	
Chrysene	ug/L	10	8.0	80	60-119	
Dibenz(a,h)anthracene	ug/L	10	9.8	98	54-142	
Fluoranthene	ug/L	10	9.5	95	68-133	
Fluorene	ug/L	10	8.5	85	56-120	
Indeno(1,2,3-cd)pyrene	ug/L	10	9.9	99	60-136	
Naphthalene	ug/L	10	8.1	81	50-119	
Phenanthrene	ug/L	10	8.6	86	54-116	
Pyrene	ug/L	10	7.4	74	51-117	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

LABORATORY CONTROL SAMPLE: 1981809

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%			83	39-114	
Terphenyl-d14 (S)	%			72	43-117	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1981810 1981811

Parameter	Units	60247642001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	11.1	10	9.3	8.9	84	89	24-137	4	27	
Acenaphthylene	ug/L	ND	11.1	10	9.4	9.2	85	92	32-149	2	27	
Anthracene	ug/L	ND	11.1	10	9.5	9.2	85	92	40-140	4	25	
Benzo(a)anthracene	ug/L	ND	11.1	10	9.2	8.7	83	87	50-147	5	26	
Benzo(a)pyrene	ug/L	ND	11.1	10	9.4	9.4	84	94	51-135	0	25	
Benzo(b)fluoranthene	ug/L	ND	11.1	10	9.4	9.1	84	91	47-133	3	29	1e
Benzo(g,h,i)perylene	ug/L	ND	11.1	10	8.8	9.1	79	91	49-132	3	31	
Benzo(k)fluoranthene	ug/L	ND	11.1	10	8.1	7.4	73	74	48-116	9	24	
Chrysene	ug/L	ND	11.1	10	8.4	8.2	76	82	51-110	3	23	
Dibenz(a,h)anthracene	ug/L	ND	11.1	10	9.6	10.6	87	106	43-148	9	38	
Fluoranthene	ug/L	ND	11.1	10	9.8	9.4	88	94	54-142	4	26	
Fluorene	ug/L	ND	11.1	10	9.1	9.0	82	90	25-146	2	26	
Indeno(1,2,3-cd)pyrene	ug/L	ND	11.1	10	9.9	10.5	89	105	43-148	6	35	
Naphthalene	ug/L	ND	11.1	10	9.1	8.7	80	86	33-127	4	26	
Phenanthrene	ug/L	ND	11.1	10	9.1	8.7	81	86	51-115	4	23	
Pyrene	ug/L	ND	11.1	10	8.0	7.7	72	77	28-131	4	26	
2-Fluorobiphenyl (S)	%						80	86	39-114			
Terphenyl-d14 (S)	%						69	73	43-117			

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

QC Batch: 484408 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60247642002, 60247642003, 60247642004, 60247642005, 60247642006, 60247642007, 60247642008

METHOD BLANK: 1984159 | Matrix: Water
Associated Lab Samples: 60247642002, 60247642003, 60247642004, 60247642005, 60247642006, 60247642007, 60247642008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/08/17 11:51	

LABORATORY CONTROL SAMPLE: 1984160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.097	97	69-126	

MATRIX SPIKE SAMPLE: 1984161

Parameter	Units	60247577001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.094	92	61-126	

SAMPLE DUPLICATE: 1984162

Parameter	Units	60247559003 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	ND	.0028J		46	

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QUALITY CONTROL DATA

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

QC Batch: 484409 | Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E | Analysis Description: 4500CNE Cyanide, Total
Associated Lab Samples: 60247642001, 60247642009

METHOD BLANK: 1984180 | Matrix: Water
Associated Lab Samples: 60247642001, 60247642009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	07/08/17 12:21	

LABORATORY CONTROL SAMPLE: 1984181

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.098	98	69-126	

MATRIX SPIKE SAMPLE: 1984182

Parameter	Units	60247642001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.078	76	61-126	

SAMPLE DUPLICATE: 1984183

Parameter	Units	60247639002 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	0.018	0.026	36	46	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 483647

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 484455

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e The methods baseline separation for isomers pairs in the Initial Calibration or Continuing Calibration Verification (CCV) was less than the expected 50% valley to baseline. No further action was taken for this method variation. The two compounds are still being reported as individual isomers and not a combined total, since there is separation between the two isomers.

2e The methods baseline separation for isomers pairs in the Initial Calibration or Continuing Calibration Verification (CCV) was less than the expected 50% valley to baseline. This sample had a combination of both isomers, due to sample matrix the isomers did not have sufficient separation to call as both benzo(b) and benzo (k) Flouranthene. Therefore the combination is being reported as benzo(b)flouranthene, due to the environmental impact of this compound.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60247642001	**HMW-2/GW01**	EPA 3010	484081	EPA 6010	484233
60247642002	**HMW-1S/GW01**	EPA 3010	484081	EPA 6010	484233
60247642003	**HMW-1D/GW01**	EPA 3010	484081	EPA 6010	484233
60247642004	**HMW-5S/GW01**	EPA 3010	484081	EPA 6010	484233
60247642005	**HMW-5D/GW01**	EPA 3010	484081	EPA 6010	484233
60247642006	**HMW-4D/GW01**	EPA 3010	484081	EPA 6010	484233
60247642007	**HMW-4S/GW01**	EPA 3010	484081	EPA 6010	484233
60247642008	**HMW-4S/ERB**	EPA 3010	484081	EPA 6010	484233
60247642009	**HDUP-1/GW01**	EPA 3010	484081	EPA 6010	484233
60247642001	**HMW-2/GW01**	EPA 7470	484461	EPA 7470	484643
60247642002	**HMW-1S/GW01**	EPA 7470	484461	EPA 7470	484643
60247642003	**HMW-1D/GW01**	EPA 7470	484461	EPA 7470	484643
60247642004	**HMW-5S/GW01**	EPA 7470	484461	EPA 7470	484643
60247642005	**HMW-5D/GW01**	EPA 7470	484461	EPA 7470	484643
60247642006	**HMW-4D/GW01**	EPA 7470	484461	EPA 7470	484643
60247642007	**HMW-4S/GW01**	EPA 7470	484461	EPA 7470	484643
60247642008	**HMW-4S/ERB**	EPA 7470	484461	EPA 7470	484643
60247642009	**HDUP-1/GW01**	EPA 7470	484461	EPA 7470	484643
60247642001	**HMW-2/GW01**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642002	**HMW-1S/GW01**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642003	**HMW-1D/GW01**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642004	**HMW-5S/GW01**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642005	**HMW-5D/GW01**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642006	**HMW-4D/GW01**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642007	**HMW-4S/GW01**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642008	**HMW-4S/ERB**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642009	**HDUP-1/GW01**	EPA 3510C	483686	EPA 8270C by SIM	484888
60247642001	**HMW-2/GW01**	EPA 8260/OA1	484443		
60247642002	**HMW-1S/GW01**	EPA 8260/OA1	483647		
60247642003	**HMW-1D/GW01**	EPA 8260/OA1	483647		
60247642004	**HMW-5S/GW01**	EPA 8260/OA1	483647		
60247642005	**HMW-5D/GW01**	EPA 8260/OA1	483647		
60247642006	**HMW-4D/GW01**	EPA 8260/OA1	483647		
60247642007	**HMW-4S/GW01**	EPA 8260/OA1	484443		
60247642008	**HMW-4S/ERB**	EPA 8260/OA1	484443		
60247642009	**HDUP-1/GW01**	EPA 8260/OA1	484443		
60247642010	**TRIP BLANK-20170628A/TB01**	EPA 8260/OA1	484455		
60247642001	**HMW-2/GW01**	SM 4500-CN-E	484409		
60247642002	**HMW-1S/GW01**	SM 4500-CN-E	484408		
60247642003	**HMW-1D/GW01**	SM 4500-CN-E	484408		
60247642004	**HMW-5S/GW01**	SM 4500-CN-E	484408		
60247642005	**HMW-5D/GW01**	SM 4500-CN-E	484408		
60247642006	**HMW-4D/GW01**	SM 4500-CN-E	484408		
60247642007	**HMW-4S/GW01**	SM 4500-CN-E	484408		
60247642008	**HMW-4S/ERB**	SM 4500-CN-E	484408		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 96323 OneGas - Hutchinson, KS
Pace Project No.: 60247642

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60247642009	**HDUP-1/GW01**	SM 4500-CN-E	484409		

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Sample Condition Upon Receipt

WO# : 60247642

60247642

Client Name: Burns & Mc

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-289 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): As-read 1.6 1.2 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 1.4 1.8

Date and initials of person examining contents: 6/29/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix:	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☑Yes ☐No ☐N/A	
Cyanide water sample checks: ☐N/A		
Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 06/29/17

BURNS & McDONNELL — **Request for Chemical Analysis and Chain of Custody Record**

1 of 1

Burns & McDonnell Engineering
9400 Ward Parkway
Kansas City, Missouri 64114
Phone: (816) 333-9400 Fax: (816) 822-3494

Attention: Brian Hoye

Laboratory: Pace Analytical
Address: 9608 Loiret Blvd
City/State/Zip: Lenexa, KS 66219
Telephone: (913) 563-1408

Document Control No: 20170628A
Lab. Reference No. or Episode No.: 60247602

Project Number: 96323

Client Name: ONEGAS - Hutchinson, KS

Sample Number: Group or SWMU Name	Sample Point	Sample Designator	Sample Event: Round	Year	Sample Depth (in feet): From	To	Sample Collected: Date	Time	Sample Type: Matrix: Liquid	Solid	Gas	Number of Containers	Analysis: BTEX	PAHs	Metals	Cyanide			Remarks	
—	HMW-2	GW01	—	—	—	—	6/28/17	1620	X			7	X	X	X	X	9(0.4H)	3(0.5N)[1] 3(0.5Na)[2] 6(0.4H)	MS/MSD Parent	001
—	HMW-2	GW01MS/MSD	—	—	—	—	6/28/17	1620	X			14	X	X	X	X			MS/MSD	—
—	HMW-1S	GW01	—	—	—	—	6/28/17	0900	X			7	X	X	X	X	3(0.4H)	3(0.5N)[1] 6(0.5Na)[2] 2(0.4H)		002
—	HMW-1D	GW01	—	—	—	—	6/28/17	0945	X			7	X	X	X	X				003
—	HMW-5S	GW01	—	—	—	—	6/28/17	1045	X			7	X	X	X	X				004
—	HMW-5D	GW01	—	—	—	—	6/28/17	1140	X			7	X	X	X	X				005
—	HMW-4D	GW01	—	—	—	—	6/28/17	1240	X			7	X	X	X	X				006
—	HMW-4S	GW01	—	—	—	—	6/28/17	1325	X			7	X	X	X	X				007
—	HMW-4S	ERB	—	—	—	—	6/28/17	1345	X			7	X	X	X	X			Rinsate	008
—	HDup-1	GW01	—	—	—	—	6/28/17	—	X			7	X	X	X	X			Blind dup	009
—	Trip Blank-20170628A	TB01	—	—	—	—	—	—	X			2	X			3(0.4H)			Trip Blank	010

6-28-17

Sampler (signature): J. Bryant

Sampler (signature):

Special Instructions:

Relinquished By (signature): 1. Date/Time 6/28/17, 1550

Relinquished By (signature): Pace Date/Time 6-28-17 1620

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt: 1.4°C 1.8°C

Relinquished By (signature): 2. Pace Date/Time 6-28-17 1550

~~Relinquished By (signature):~~ Received by PKS Date/Time 6/28/17 2150

Laboratory Comments:

082416 Form WCD-KC1

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(913)599-5665

SAMPLE ACKNOWLEDGMENT

Samples Submitted By: BURNS & MCDONNELL
Client Project ID: 96323 OneGas - Hutchinson, KS
Client PO#: 122245

Pace Project Manager: Alice Spiller
Phone (913)563-1409
alice.spiller@pacelabs.com
Pace Analytical Project ID: 60247642
Samples Received: June 28, 2017 09:50 PM
Estimated Completion: July 12, 2017

CC: Brian Hoye
Client Specified QC Sample(s): HMW-2/GW01

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
HMW-2/GW01	60247642001	Water	06/27/17 16:20	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
HMW-1S/GW01	60247642002	Water	06/28/17 09:00	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
HMW-1D/GW01	60247642003	Water	06/28/17 09:45	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
HMW-5S/GW01	60247642004	Water	06/28/17 10:45	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
HMW-5D/GW01	60247642005	Water	06/28/17 11:40	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
HMW-4D/GW01	60247642006	Water	06/28/17 12:40	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
HMW-4S/GW01	60247642007	Water	06/28/17 13:25	4500CNE Cyanide, Total
				6010 ICP Metals

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Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
HMW-4S/ERB	60247642008	Water	06/28/17 13:45	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
HDUP-1/GW01	60247642009	Water	06/28/17 08:00	4500CNE Cyanide, Total
				6010 ICP Metals
				Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver
				7470 Mercury
				8260/OA1 Volatile Organics
				EPA 8270 PAH by SIM Water
TRIP BLANK-20170628A/TB01	60247642010	Water	06/27/17 16:20	8260/OA1 Volatile Organics

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
HMW-2/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
HMW-1S/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
HMW-1D/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
HMW-5S/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
HMW-5D/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
HMW-4D/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
HMW-4S/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
HMW-4S/ERB	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
HDUP-1/GW01	4500CNE Cyanide, Total	Cyanide	0.005	mg/L
	6010 MET ICP	Arsenic	10	ug/L
		Barium	5	ug/L
		Cadmium	5	ug/L
		Chromium	5	ug/L
		Lead	5	ug/L
		Selenium	15	ug/L
		Silver	7	ug/L
	7470 Mercury	Mercury	0.2	ug/L
	8260/OA1 UST, Water	Benzene	1	ug/L

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Analyte List

Customer Sample ID	Method	Compound	Reporting Limit	Units
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	
	8270 MSSV PAH by SIM	Naphthalene	0.5	ug/L
		Acenaphthylene	0.1	ug/L
		Acenaphthene	0.1	ug/L
		Fluorene	0.1	ug/L
		Phenanthrene	0.5	ug/L
		Anthracene	0.1	ug/L
		Fluoranthene	0.5	ug/L
		Pyrene	0.1	ug/L
		Benzo(a)anthracene	0.1	ug/L
		Chrysene	0.1	ug/L
		Benzo(a)pyrene	0.1	ug/L
		Benzo(b)fluoranthene	0.1	ug/L
		Indeno(1,2,3-cd)pyrene	0.1	ug/L
		Dibenz(a,h)anthracene	0.1	ug/L
		Benzo(g,h,i)perylene	0.1	ug/L
		Benzo(k)fluoranthene	0.1	ug/L
TRIP BLANK-20170628A/TB01	8260/OA1 UST, Water	Benzene	1	ug/L
		Toluene	1	ug/L
		Ethylbenzene	1	ug/L
		Xylene (Total)	3	ug/L
		Preservation pH	0.1	

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ATTACHMENT 4

Table 1-2
Groundwater Analytical Results - June 2015
Abilene, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ABILENE - ABMW-1S	ABILENE - ABMW-1D	ABILENE - ABMW-2
BTEX						
Benzene	ug/L	5	5	**28,500**	**17,500**	**580**
Ethylbenzene	ug/L	700	700	**2,220**	**3,820**	**374**
Toluene	ug/L	1,000	1,000	50 U	100 U	5 U
Xylene (Total)	ug/L	10,000	10,000	**533**	**1,480**	**147**
PAHs						
Acenaphthene	ug/L	253	521	**29.7**	**30.7**	**3.4**
Acenaphthylene	ug/L	NA	NA	**6.8**	**5.7**	**1.1**
Anthracene	ug/L	1,150	25,00	**7.6**	**6.1**	0.48 U
Benzo(a)anthracene	ug/L	0.223	0.75	1 U	1 U	0.48 U
Benzo(a)pyrene	ug/L	0.2	0.2	1 U	1 U	0.48 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	1 U	1 U	0.48 U
Benzo(g,h,i)perylene	ug/L	NA	NA	1 U	1 U	0.48 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	1 U	1 U	0.48 U
Chrysene	ug/L	22.3	75	1 U	1 U	0.48 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	1 U	1 U	0.48 U
Fluoranthene	ug/L	255	1370	**4.9 B**	**2.8 B**	0.48 U
Fluorene	ug/L	162	341	**23.9**	**23.7**	**2.1**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	1 U	1 U	0.48 U
Naphthalene	ug/L	1.11	2.11	**2,530**	**3,030**	**326**
Phenanthrene	ug/L	NA	NA	**32.6**	**28.1**	2.4 U
Pyrene	ug/L	202	1090	**6.6**	**3.5**	0.48 U
Inorganics						
Arsenic	ug/L	10	10	**91.2**	**289**	10 U
Barium	ug/L	2,000	2,000	**896**	**437**	**307**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	**8.3**	5 U	5 U
Lead	ug/L	15	15	**9.5**	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	**0.011**	**0.017**	0.005 U

Notes:

B - analyte was detected in the associated method blank.

BTEX - benzene, toluene, ethylbenzene, xylene

M1 - matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 1-2
Groundwater Analytical Results - June 2015
Abilene, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ABILENE - ABMW-3S	ABILENE - ABMW-3D	ABILENE - ABMW-4	ABILENE - ABW-401 Duplicate of ABMW-4
BTEX							
Benzene	ug/L	5	5	1 U	**7,860**	**16.1**	**17.8**
Ethylbenzene	ug/L	700	700	1 U	**1,060**	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	**52.2**	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	NA*	**407**	3 U	3 U
PAHs							
Acenaphthene	ug/L	253	521	**1.4**	**33.8**	**17.5**	**16.9**
Acenaphthylene	ug/L	NA	NA	**1.2**	**31.2**	**16.2**	**15.1**
Anthracene	ug/L	1,150	25,00	**0.30**	**10.8**	**10.1**	**9.8**
Benzo(a)anthracene	ug/L	0.223	0.75	0.095 U	2 U	**0.57**	**0.57**
Benzo(a)pyrene	ug/L	0.2	0.2	0.095 U	2 U	**0.15**	**0.14**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.095 U	2 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.095 U	2 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.095 U	2 U	0.1 U	0.1 U
Chrysene	ug/L	22.3	75	0.095 U	2 U	**0.57**	**0.47**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.095 U	2 U	0.1 U	0.1 U
Fluoranthene	ug/L	255	1370	**0.23 B**	**4.0 B**	**7.5**	**7.3**
Fluorene	ug/L	162	341	**0.34**	**35.0**	**5.4**	**5.3**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.095 U	2 U	0.1 U	0.1 U
Naphthalene	ug/L	1.11	2.11	0.48 U	**4,940**	**0.83**	**1.0**
Phenanthrene	ug/L	NA	NA	**0.81**	**47.6**	**15.1**	**14.5**
Pyrene	ug/L	202	1090	**0.16**	**4.8**	**9.9**	**9.6**
Inorganics							
Arsenic	ug/L	10	10	10 U	**151**	**12.6**	**15.3**
Barium	ug/L	2,000	2,000	**173**	**817**	**423**	**433**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U, M1	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	**0.0067**	0.005 U	0.005 U

Notes:

B - analyte was detected in the associated method blank.

BTEX - benzene, toluene, ethylbenzene, xylene

M1 - matrix spike recovery exceeded QC limits. Batch accepted based on laboratc

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 1-2
Groundwater Analytical Results - June 2015
Abilene, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ABILENE - ABMW-5	ABILENE - ABMW-6	ABILENE - ABIDW-1
BTEX						
Benzene	ug/L	5	5	**690**	**65.4**	**8,190**
Ethylbenzene	ug/L	700	700	**164**	**68.5**	**1,040**
Toluene	ug/L	1,000	1,000	10 U	1 U	**140**
Xylene (Total)	ug/L	10,000	10,000	NA*	**28.2**	**388**
PAHs						
Acenaphthene	ug/L	253	521	**17.2**	**2.3**	**14.1**
Acenaphthylene	ug/L	NA	NA	**3.4**	1 U	**6.8**
Anthracene	ug/L	1,150	25,00	**0.58**	1 U	**2.8**
Benzo(a)anthracene	ug/L	0.223	0.75	0.1 U	1 U	**0.20**
Benzo(a)pyrene	ug/L	0.2	0.2	0.1 U	1 U	0.095 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.1 U	1 U	0.095 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.1 U	1 U	0.095 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.1 U	1 U	0.095 U
Chrysene	ug/L	22.3	75	0.1 U	1 U	**0.20**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.1 U	1 U	0.095 U
Fluoranthene	ug/L	255	1370	**0.78 B**	1 U	**2.1**
Fluorene	ug/L	162	341	**6.8**	**1.2**	**11.5**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.1 U	1 U	0.095 U
Naphthalene	ug/L	1.11	2.11	**183**	**109**	**1,240**
Phenanthrene	ug/L	NA	NA	**2.4**	5.0U	**14.2**
Pyrene	ug/L	202	1090	**0.80**	1.0U	**2.4**
Inorganics						
Arsenic	ug/L	10	10	**136**	**10.0**	**119**
Barium	ug/L	2,000	2,000	**378**	**96.1**	**689**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U
Lead	ug/L	15	15	**8.0**	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	**0.012**

Notes:

B - analyte was detected in the associated method blank.

BTEX - benzene, toluene, ethylbenzene, xylene

M1 - matrix spike recovery exceeded QC limits. Batch accepted based on laboratc

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

TABLE 2
COMPARISON OF GROUNDWATER DATA TO TIER 2 SCREENING VALUES
CONCORDIA MGP SITE

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	CMW-01 (8/07) CMW-01 08/29/07 Investigation Shallow	CMW-01 (6/09) CMW-01 06/09/09 Investigation Shallow	CMW-01 (10/09) CMW-01 10/26/09 Investigation Shallow	CMW-01 (10/10) CMW-01 10/26/10 Investigation Shallow	CMW-02 (8/07) CMW-02 08/29/07 Investigation Shallow
VOCs (mg/L)								
Benzene	71-43-2	0.005	0.005	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Toluene	108-88-3	1	1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Ethylbenzene	100-41-4	0.7	0.7	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Xylenes	1330-20-7	10	10	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
PAHs (mg/L)								
Acenaphthene	83-32-9	0.253	0.521	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Acenaphthylene	208-96-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Anthracene	120-12-7	1.15	2.5	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	218-01-9	0.0223	0.075	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluorene	86-73-7	0.162	0.341	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	91-20-3	0.00111	0.00211	0.0011	< 0.00010	< 0.0010	< 0.0010	< 0.00010
Phenanthrene	85-01-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Pyrene	129-00-0	0.202	1.09	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Metals (mg/L)								
Arsenic, Total	7440-38-2	0.01	0.01	< 0.020	< 0.020	< 0.020	< 0.01	**0.027 /R/N**
Barium, Total	7440-39-3	2	2	0.20	0.21	0.2	0.21	0.16
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	< 0.0050	0.0078	0.0057	< 0.1	< 0.0050
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Silver, Total	7440-22-4	0.0779	0.508	< 0.010	< 0.010	**0.19 /R/N**	< 0.01	< 0.010
Cyanide (mg/L)								
Cyanide (total)	57-12-5	0.2	0.2	< 0.0050	< 0.0050 J	< 0.0050	< 0.0050	< 0.0050
Criteria Exceeded in Sample						/R/N		/R/N

Abbreviations used in comparisons:

J - Estimated value

R - Data point was rejected.

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

TABLE 2
COMPARISON OF GROUNDWATER DATA TO TIER 2 SCREENING VALUES
CONCORDIA MGP SITE

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	CMW-02 (6/09) CMW-02 06/09/09 Investigation Shallow	CMW-02 (6/09) CMW-02 06/09/09 Duplicate Shallow	CMW-02 (10/09) CMW-02 10/26/09 Investigation Shallow	CMW-02 (10/09) CMW-02 10/26/09 Duplicate Shallow	CMW-02 (10/10) CMW-02 10/26/10 Investigation Shallow	CMW-02 (10/10) CMW-02 10/26/10 Duplicate Shallow
VOCs (mg/L)									
Benzene	71-43-2	0.005	0.005	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Toluene	108-88-3	1	1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Ethylbenzene	100-41-4	0.7	0.7	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Xylenes	1330-20-7	10	10	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030
PAHs (mg/L)									
Acenaphthene	83-32-9	0.253	0.521	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Acenaphthylene	208-96-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Anthracene	120-12-7	1.15	2.5	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	218-01-9	0.0223	0.075	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluorene	86-73-7	0.162	0.341	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	91-20-3	0.00111	0.00211	< 0.00010	< 0.00010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Phenanthrene	85-01-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Pyrene	129-00-0	0.202	1.09	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Metals (mg/L)									
Arsenic, Total	7440-38-2	0.01	0.01	< 0.020	**0.02 /R/N**	< 0.020	< 0.020	0.0081	0.008
Barium, Total	7440-39-3	2	2	0.14	0.14	0.2	0.2	0.22	0.22
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	0.009	0.0097	< 0.0050	0.0055	< 0.0050	< 0.0050
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Silver, Total	7440-22-4	0.0779	0.508	< 0.010 R	< 0.010 R	< 0.010	< 0.010	< 0.010	< 0.010
Cyanide (mg/L)									
Cyanide (total)	57-12-5	0.2	0.2	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Criteria Exceeded in Sample					/R/N				

Abbreviations used in comparisons:

J - Estimated value

R - Data point was rejected.

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

TABLE 2
COMPARISON OF GROUNDWATER DATA TO TIER 2 SCREENING VALUES
CONCORDIA MGP SITE

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	CMW-02 (05/13) CMW-02 05/22/13 Investigation Shallow	CMW-03 (8/07) CMW-03 08/29/07 Investigation Shallow	CMW-03 (6/09) CMW-03 06/09/09 Investigation Shallow	CMW-03 (10/09) CMW-03 10/26/09 Investigation Shallow	CMW-03 (10/10) CMW-03 10/26/10 Investigation Shallow	CMW-03 (05/13) CMW-03 05/22/13 Investigation Shallow
VOCs (mg/L)									
Benzene	71-43-2	0.005	0.005	NS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	NS
Toluene	108-88-3	1	1	NS	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NS
Ethylbenzene	100-41-4	0.7	0.7	NS	< 0.0010	< 0.0010	< 0.0010	< 0.0010	NS
Xylenes	1330-20-7	10	10	NS	< 0.0030	< 0.0030	< 0.0030	< 0.0030	NS
PAHs (mg/L)									
Acenaphthene	83-32-9	0.253	0.521	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Acenaphthylene	208-96-8	NA	NA	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Anthracene	120-12-7	1.15	2.5	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Benzo(a)anthracene	56-55-3	0.000223	0.00075	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Benzo(a)pyrene	50-32-8	0.0002	0.0002	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Benzo(g,h,i)perylene	191-24-2	NA	NA	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Chrysene	218-01-9	0.0223	0.075	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Fluoranthene	206-44-0	0.255	1.37	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Fluorene	86-73-7	0.162	0.341	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Naphthalene	91-20-3	0.00111	0.00211	NS	< 0.00010	< 0.00010	< 0.0010	< 0.0010	NS
Phenanthrene	85-01-8	NA	NA	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Pyrene	129-00-0	0.202	1.09	NS	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS
Metals (mg/L)									
Arsenic, Total	7440-38-2	0.01	0.01	0.011	**0.049 /R/N**	< 0.020	< 0.020	0.0098	0.011
Barium, Total	7440-39-3	2	2	NS	1.7	0.24	0.22	0.24	NS
Cadmium, Total	7440-43-9	0.005	0.005	NS	**0.032 /R/N**	< 0.0050	< 0.0050	< 0.0050	NS
Chromium, Total	18540-29-9	0.1	0.1	NS	**0.17 /R/N**	< 0.010	< 0.010	< 0.010	NS
Lead, Total	7439-92-1	0.015	0.015	NS	**0.074 /R/N**	0.013	0.0094	< 0.0050	NS
Mercury, Total	7439-97-6	0.002	0.002	NS	< 0.00020	< 0.00020	< 0.00020	< 0.00020	NS
Selenium, Total	7782-49-2	0.05	0.05	NS	< 0.020	< 0.020	< 0.020	< 0.020	NS
Silver, Total	7440-22-4	0.0779	0.508	NS	< 0.010	< 0.010	< 0.010	< 0.010	NS
Cyanide (mg/L)									
Cyanide (total)	57-12-5	0.2	0.2	NS	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NS
Criteria Exceeded in Sample					/R/N				

Abbreviations used in comparisons:

J - Estimated value

R - Data point was rejected.

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

TABLE 2
COMPARISON OF GROUNDWATER DATA TO TIER 2 SCREENING VALUES
CONCORDIA MGP SITE

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	CMW-04 (8/07) CMW-04 08/29/07 Investigation Shallow	CMW-04 (6/09) CMW-04 06/09/09 Investigation Shallow	CMW-04 (10/09) CMW-04 10/26/09 Investigation Shallow	CMW-04 (10/10) CMW-04 10/26/10 Investigation Shallow	CMW-04 (05/13) CMW-04 05/22/13 Investigation Shallow	CMW-05 (8/07) CMW-05 08/29/07 Investigation Shallow
VOCs (mg/L)									
Benzene	71-43-2	0.005	0.005	< 0.0010	< 0.0010	< 0.0010	< 0.0010	NS	< 0.0010
Toluene	108-88-3	1	1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NS	< 0.0050
Ethylbenzene	100-41-4	0.7	0.7	< 0.0010	< 0.0010	< 0.0010	< 0.0010	NS	< 0.0010
Xylenes	1330-20-7	10	10	< 0.0030	< 0.0030	< 0.0030	< 0.0030	NS	< 0.0030
PAHs (mg/L)									
Acenaphthene	83-32-9	0.253	0.521	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Acenaphthylene	208-96-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Anthracene	120-12-7	1.15	2.5	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Chrysene	218-01-9	0.0223	0.075	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Fluorene	86-73-7	0.162	0.341	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Naphthalene	91-20-3	0.00111	0.00211	0.00093	< 0.00010	< 0.0010	< 0.0010	NS	< 0.00010
Phenanthrene	85-01-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	< 0.00010
Pyrene	129-00-0	0.202	1.09	< 0.00010	< 0.00010	< 0.00010	< 0.00010	NS	0.00019
Metals (mg/L)									
Arsenic, Total	7440-38-2	0.01	0.01	**0.021 /R/N**	< 0.020	< 0.020	0.0087	0.0093	**0.025 /R/N**
Barium, Total	7440-39-3	2	2	0.12	0.084	0.11	0.11	NS	0.40
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NS	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	< 0.010	< 0.010	< 0.010	< 0.010	NS	< 0.010
Lead, Total	7439-92-1	0.015	0.015	< 0.0050	**0.023 /R/N**	0.0067	< 0.0050	NS	< 0.0050
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	NS	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	< 0.020	< 0.020	< 0.020	< 0.020	NS	< 0.020
Silver, Total	7440-22-4	0.0779	0.508	< 0.010	< 0.010	< 0.010	< 0.010	NS	< 0.010
Cyanide (mg/L)									
Cyanide (total)	57-12-5	0.2	0.2	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NS	0.0072
Criteria Exceeded in Sample				/R/N	/R/N				/R/N

Abbreviations used in comparisons:

J - Estimated value

R - Data point was rejected.

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

TABLE 2
COMPARISON OF GROUNDWATER DATA TO TIER 2 SCREENING VALUES
CONCORDIA MGP SITE

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	CMW-05 (6/09) CMW-05 06/09/09 Investigation Shallow	CMW-05 (10/09) CMW-05 10/26/09 Investigation Shallow	CMW-05 (10/10) CMW-05 10/26/10 Investigation Shallow	CMW-05 (05/13) CMW-05 05/22/13 Investigation Shallow	CMW-05 (05/13) CMW-05 05/22/13 Duplicate Shallow
VOCs (mg/L)								
Benzene	71-43-2	0.005	0.005	< 0.0010	< 0.0010	< 0.0010	NS	NS
Toluene	108-88-3	1	1	< 0.0050	< 0.0050	< 0.0050	NS	NS
Ethylbenzene	100-41-4	0.7	0.7	< 0.0010	< 0.0010	< 0.0010	NS	NS
Xylenes	1330-20-7	10	10	< 0.0030	< 0.0030	< 0.0030	NS	NS
PAHs (mg/L)								
Acenaphthene	83-32-9	0.253	0.521	< 0.00010	< 0.00010	< 0.00010	NS	NS
Acenaphthylene	208-96-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	NS	NS
Anthracene	120-12-7	1.15	2.5	< 0.00010	< 0.00010	< 0.00010	NS	NS
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.00010	< 0.00010	< 0.00010	NS	NS
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.00010	< 0.00010	< 0.00010	NS	NS
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00010	< 0.00010	< 0.00010	NS	NS
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.00010	< 0.00010	< 0.00010	NS	NS
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.00010	< 0.00010	< 0.00010	NS	NS
Chrysene	218-01-9	0.0223	0.075	< 0.00010	< 0.00010	< 0.00010	NS	NS
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00010	< 0.00010	< 0.00010	NS	NS
Fluoranthene	206-44-0	0.255	1.37	< 0.00010	< 0.00010	< 0.00010	NS	NS
Fluorene	86-73-7	0.162	0.341	< 0.00010	< 0.00010	< 0.00010	NS	NS
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.00010	< 0.00010	< 0.00010	NS	NS
Naphthalene	91-20-3	0.00111	0.00211	< 0.00010	< 0.0010	< 0.0010	NS	NS
Phenanthrene	85-01-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	NS	NS
Pyrene	129-00-0	0.202	1.09	0.00018	0.00025	0.00021	NS	NS
Metals (mg/L)								
Arsenic, Total	7440-38-2	0.01	0.01	**0.035 /R/N**	**0.023 /R/N**	**0.021 /R/N**	**0.045 /R/N**	**0.039 /R/N**
Barium, Total	7440-39-3	2	2	0.35	0.35	0.036	NS	NS
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	< 0.0050	< 0.0050	NS	NS
Chromium, Total	18540-29-9	0.1	0.1	< 0.010	< 0.010	< 0.010	NS	NS
Lead, Total	7439-92-1	0.015	0.015	0.013	0.008	< 0.0050	NS	NS
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	NS	NS
Selenium, Total	7782-49-2	0.05	0.05	< 0.020	< 0.020	< 0.020	NS	NS
Silver, Total	7440-22-4	0.0779	0.508	< 0.010	< 0.010	< 0.010	NS	NS
Cyanide (mg/L)								
Cyanide (total)	57-12-5	0.2	0.2	0.0068	0.016	0.0099	NS	NS
Criteria Exceeded in Sample				/R/N	/R/N	/R/N	/R/N	/R/N

Abbreviations used in comparisons:

J - Estimated value

R - Data point was rejected.

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 1.0
Groundwater Analytical Data

Monitoring Well	Date	Total BTEX	Benzene (0.2)	Toluene (0.2)	Ethylbenzene (0.2)	Xylenes (0.2)	1,2-DCA (0.2)	Naphthalene (0.5)	MtBE (1.0)	TBA (10)	EDB (1.0)	TPH-GRO (500)	TPH-DRO (400)	EPA Test Method
RSK Levels - Non-Residential*			5	1000	700	10000	5	9	20	79	.005	500	720	
RSK Levels - Residential*			5	1000	700	10000	5	3	20	43	.005	500	500	
MW-1	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(0.10)	ND	NA	NA	ND(500)	ND(400)	8260/OA-1/8270 SIM/OA-2
MW-2	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(0.10)	ND	NA	NA	ND(500)	ND(400)	8260/OA-1/8270 SIM/OA-2
MW-8	07/09/08	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	05/08/09	FP	FP(0.30')	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-9	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND	ND	NA	NA	ND(500)	15800.0	8260/OA-1/8270 SIM/OA-2
FMW-1S	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(0.10)	ND	NA	NA	ND(500)	ND(400)	8260/OA-1/8270 SIM/OA-2
FMW-1D	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(0.11)	ND	NA	NA	ND(500)	ND(400)	8260/OA-1/8270 SIM/OA-2
FMW-2	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(0.10)	ND	NA	NA	ND(500)	ND(400)	8260/OA-1/8270 SIM/OA-2
FMW-3	07/09/08	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
	05/08/09	FP	FP(0.40')	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
FMW-4S	07/09/08	45.3	2.6	ND(1)	36.6	6.1	ND(1)	140.0	ND	ND	ND	ND(500)	940.0	NA
	05/08/09	137.8	6.4	ND(1)	102.0	29.4	ND(1)	506.0	ND	NA	NA	750.0	1600.0	8260/OA-1/8270 SIM/OA-2
FMW-4D	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(0.10)	ND	NA	NA	ND(500)	ND(400)	8260/OA-1/8270 SIM/OA-2
FMW-5S	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(0.10)	ND	NA	NA	ND(500)	ND(400)	8260/OA-1/8270 SIM/OA-2
FMW-5D	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	ND	ND(1)	ND(500)	ND(400)	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(0.10)	ND	NA	NA	ND(500)	ND(400)	8260/OA-1/8270 SIM/OA-2
Trip Blank	07/09/08	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	NA	ND(1)	NA	NA	NA
	05/08/09	ND	ND(1)	ND(1)	ND(1)	ND(3)	ND(1)	ND(10)	ND	NA	NA	NA	NA	5030B/8260

All concentrations in µg/l. ND = Not Detected. FP = Free Product.

NA = Not Analyzed. () = Detection Limits.

* Values represent the risk levels for groundwater pathway, given in the KDHE Tier 2 Risk-Based Summary Table, 4th Edition, June 2007.

Data for 07/09/08 event is taken from a report by ER&M provided by KDHE.

Table 1.1
Groundwater Analytical Data
Polycyclic Aromatic Hydrocarbons
(EPA Method 8270 SIM)

Monitoring Well No.	Date	Acenaphthene (0.10)	Acenaphthylene (0.10)	Anthracene (0.10)	Benzo(a)anthracene (0.10)	Benzo(a)pyrene (0.10)	Benzo(b)fluoranthene (0.10)	Benzo(g,h,i)perylene (0.10)	Chrysene (0.10)	Dibenz(a,h)anthracene (0.10)	Fluoranthene (0.10)	Fluorene (0.10)	Indeno(1,2,3-cd)pyrene (0.10)	Phenanthrene (0.10)	Pyrene (0.10)
RSK Levels - Non-Residential*		*490*	*NA*	*2300*	*0.40*	*0.20*	*0.30*	*NA*	*40*	*0.01*	*890*	*280*	*0.20*	*NA*	*720*
RSK Levels - Residential*		*130*	*NA*	*620*	*0.10*	*0.20*	*0.09*	*NA*	*10*	*0.004*	*180*	*70*	*0.06*	*NA*	*140*
MW-1	05/08/09	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)
MW-2	05/08/09	ND	ND	ND	ND	0.13	0.24	ND	0.14	ND	0.12	ND	ND	ND	0.18
MW-8	05/08/09	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
MW-9	05/08/09	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	0.53	0.55	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	0.64
FMW-1S	05/08/09	ND	ND	ND	ND	0.11	0.22	ND	0.12	ND	0.12	ND	ND	ND	0.15
FMW-1D	05/08/09	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)
FMW-2	05/08/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FMW-3	05/08/09	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP
FMW-4S	05/08/09	94.5	34.5	6.90	54.6	77.8	91.2	46.2	65.8	10.2	43.7	27.8	33.9	11.0	155.0
FMW-4D	05/08/09	ND	0.24	ND	0.38	0.70	0.87	0.40	0.41	ND	0.23	ND	0.30	ND	1.3
FMW-5S	05/08/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FMW-5D	05/08/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

All concentrations in µg/l. ND = Not Detected. FP = Free Product. () = Detection Limits. NA = Not Available.

* Values represent the risk levels for groundwater pathway, given in the KDHE Tier 2 Risk-Based Summary Table, 4th Edition, June 2007.

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-1 (06/99) MW-1 06/30/99 Investigation Shallow	MW-1 (12/99) MW-1 12/22/99 Investigation Shallow	MW-1 (01/04) MW-1 01/12/04 Investigation Shallow	MW-1 (04/04) MW-1 04/16/04 Investigation Shallow	MW-1 (06/04) MW-1 6/29/2004 Investigation Shallow	MW-1 (10/04) MW-1 10/29/2004 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	< 0.005	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.005	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.005	< 0.005	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0018	< 0.0019	< 0.0001	< 0.0001	< 0.005	< 0.001
1-Methylnaphthalene	90-12-0			< 0.0001	< 0.0001	< 0.0003	< 0.0001
2-Methylnaphthalene	91-57-6			< 0.0001	< 0.0001	< 0.0003	< 0.0001
Acenaphthylene	208-96-8	< 0.0023	< 0.0024	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0018	< 0.0019	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.00021	< 0.00022	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.00064	< 0.00067	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.00066	< 0.00069	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.00021	< 0.00022	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.00027	< 0.00028	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.00015	< 0.000014	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.00015	< 0.00016	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.000018	< 0.000019	< 0.0001	< 0.0001	< 0.0001	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.000017	< 0.000018	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.000023	< 0.000024	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.000043	< 0.000045	< 0.0001	< 0.0001	< 0.0001	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.00003	< 0.000032	< 0.0001	< 0.0001	< 0.0001	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.000076	< 0.00008	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.085	< 0.085		0.015	< 0.01	0.011
Barium	7440-39-3	0.0761	0.506		0.072	0.072	0.062
Cadmium	7440-43-9	< 0.005	0.0116		< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.007	0.0292		< 0.01	0.015	< 0.01
Iron	7439-89-6						
Lead	7439-92-1	< 0.05	< 0.05		< 0.005	0.007	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002		< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.1	< 0.1		< 0.01	0.032	0.019
Silver	7440-22-4	< 0.007	< 0.007		< 0.005	< 0.005	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5	< 0.01					

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-1 (01/05) MW-1 1/6/2005 Investigation Shallow	MW-1 (05/05) MW-1 5/24/2005 Investigation Shallow	MW-1 (07/05) MW-1 07/25/2005 Investigation Shallow	MW-1 (12/05) MW-1 12/17/2005 Investigation Shallow	MW-2 (06/99) MW-2 06/30/99 Investigation Deep	MW-2 (12/99) MW-2 12/22/99 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.002
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	0.0016	< 0.005	< 0.002
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.005	< 0.005
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0001	< 0.0001	0.0012	< 0.0001	< 0.0018	< 0.0019
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001	< 0.0001			
2-Methylnaphthalene	91-57-6	< 0.0001	< 0.0001	< 0.0001			
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0023	< 0.0024
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0018	< 0.0019
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00021	< 0.00022
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00064	< 0.00067
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00066	< 0.00069
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00021	< 0.00022
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00027	< 0.00028
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00015	0.000019
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00015	< 0.00016
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.000018	< 0.000019
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.000017	< 0.000018
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.000023	0.000027
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.000043	< 0.000045
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00003	< 0.000032
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.000076	< 0.00008
Metals (mg/L)							
Arsenic	7440-38-2	< 0.02	< 0.02	0.087	< 0.02	< 0.085	< 0.085
Barium	7440-39-3	0.061	0.069	0.064	0.059	0.0839	0.601
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0086
Chromium	18540-29-9	< 0.01	< 0.01	0.025	< 0.01	0.0169	0.163
Iron	7439-89-6						
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.05
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.02	0.027	0.036	0.022	< 0.1	< 0.1
Silver	7440-22-4	< 0.01	< 0.01	< 0.01	< 0.01	< 0.007	< 0.007
Cyanide (mg/L)							
Cyanide (total)	57-12-5					< 0.01	

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-2 (01/04) MW-2 01/12/04 Investigation Deep	MW-2 (04/04) MW-2 04/17/04 Investigation Deep	MW-2 (06/04) MW-2 6/29/2004 Investigation Deep	MW-2 (10/04) MW-2 10/30/2004 Investigation Deep	MW-2 (01/05) MW-2 1/6/2005 Investigation Deep	MW-2 (05/05) MW-2 5/24/2005 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0001	0.0037	< 0.005	0.00014	< 0.0001	< 0.0001
1-Methylnaphthalene	90-12-0	< 0.0001	0.00035	< 0.0003	< 0.0001	< 0.0001	< 0.0001
2-Methylnaphthalene	91-57-6	< 0.0001	0.00039	< 0.0003	< 0.0001	< 0.0001	< 0.0001
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.0001	< 0.0001	< 0.0001	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0001	< 0.0001	< 0.0001	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.0001	< 0.0001	< 0.0001	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2		0.011	< 0.01	< 0.01	< 0.02	< 0.02
Barium	7440-39-3		0.22	0.13	0.15	0.12	0.14
Cadmium	7440-43-9		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Iron	7439-89-6						
Lead	7439-92-1		< 0.005	0.0089	< 0.005	< 0.005	< 0.005
Mercury	7439-97-6		< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2		< 0.01	< 0.01	< 0.01	< 0.02	< 0.02
Silver	7440-22-4		< 0.005	< 0.005	< 0.005	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-2 (07/05) MW-2 07/25/2005 Investigation Deep	MW-2 (12/05) MW-2 12/18/2005 Investigation Deep	MW-2 (12/05) Dup MW-2 12/18/2005 Duplicate Deep	MW-3S (12/99) MW-3S 12/21/99 Investigation Shallow	MW-3S (01/04) MW-3S 01/13/04 Investigation Shallow	MW-3S (04/04) MW-3S 04/16/04 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.002	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.005	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	0.00026	0.00088	< 0.0001	< 0.019	0.00052	< 0.0001
1-Methylnaphthalene	90-12-0	< 0.0001				< 0.0001	0.0002
2-Methylnaphthalene	91-57-6	< 0.0001				< 0.0001	< 0.0001
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.025	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.019	< 0.0001	0.0018
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	0.0086	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0069	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0071	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	0.0043	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	0.0051	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	0.0026	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	0.0067	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	0.0067	< 0.0001	< 0.0001
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	0.00032	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.00025	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00046	< 0.0001	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00032	< 0.0001	< 0.0001
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.00082	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.02	< 0.02	< 0.02	< 0.085		0.013
Barium	7440-39-3	0.16	0.24	0.25	0.244		0.17
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005
Chromium	18540-29-9	0.014	< 0.01	< 0.01	< 0.007		< 0.01
Iron	7439-89-6				< 0.04		
Lead	7439-92-1	0.0084	< 0.005	< 0.005	< 0.05		< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002		< 0.0002
Selenium	7782-49-2	< 0.02	0.021	< 0.02	< 0.1		< 0.01
Silver	7440-22-4	< 0.01	< 0.01	< 0.01	< 0.007		< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5				< 0.01		

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-3S (06/04) MW-3S 6/29/2004 Investigation Shallow	MW-3S (06/04) Dup MW-3S 6/29/2004 Duplicate Shallow	MW-3S (10/04) MW-3S 10/29/2004 Investigation Shallow	MW-3S (01/05) MW-3S 1/7/2005 Investigation Shallow	MW-3S (01/05) Dup MW-3S 1/7/2005 Duplicate Shallow	MW-3S (05/05) MW-3S 5/24/2005 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.005	< 0.005	< 0.001	< 0.0001	< 0.0001	< 0.0001
1-Methylnaphthalene	90-12-0	< 0.0003	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
2-Methylnaphthalene	91-57-6	< 0.0003	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	0.0013	0.0013	0.0013	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	0.0036	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00011
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.0001	< 0.0001	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0001	< 0.0001	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.0001	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02
Barium	7440-39-3	0.18	0.18	0.21	0.22	0.23	0.23
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	< 0.01	0.013	< 0.01	< 0.01	< 0.01
Iron	7439-89-6						
Lead	7439-92-1	0.013	0.012	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-3S (05/05) Dup MW-3S 5/24/2005 Duplicate Shallow	MW-3S (07/05) MW-3S 07/25/2005 Investigation Shallow	MW-3S (12/05) MW-3S 12/18/2005 Investigation Shallow	MW-3 (07/99) MW-3 07/01/99 Investigation Deep	MW-3 (12/99) MW-3 12/22/99 Investigation Deep	MW-3 (01/04) MW-3 01/14/04 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	0.025	0.028	0.022
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	0.0029	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.005	0.0032	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	0.0093	0.012	0.0092
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0001	< 0.0001	< 0.0001	< 0.018	< 0.018	0.0047
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001				0.032
2-Methylnaphthalene	91-57-6	< 0.0001	< 0.0001				0.022
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.023	< 0.023	< 0.0001
Acenaphthene	83-32-9	0.001	0.00062	0.0014	< 0.018	< 0.018	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	0.0027	0.007	0.0088	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	0.013	0.031	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0066	0.0072	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	0.0036	0.014	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	0.004	0.02	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	0.00076	0.0048	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0015	0.0044	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00018	0.003	< 0.0001
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.00017	0.0017	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	0.00044	0.0058	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00043	0.00072	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.0003	0.0043	< 0.0001
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.00076	0.0038	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.02	< 0.02	< 0.02	0.116	0.0896	
Barium	7440-39-3	0.24	0.23	0.24	0.495	1.57	
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	0.0178	
Chromium	18540-29-9	< 0.01	0.022	0.014	< 0.007	0.0669	
Iron	7439-89-6						
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	< 0.05	0.0657	
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Selenium	7782-49-2	< 0.02	< 0.02	< 0.02	< 0.1	< 0.1	
Silver	7440-22-4	< 0.01	< 0.01	< 0.01	< 0.007	< 0.007	
Cyanide (mg/L)							
Cyanide (total)	57-12-5				< 0.01		

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-3 (04/04) MW-3 04/17/04 Investigation Deep	MW-3 (06/04) MW-3 06/30/04 Investigation Deep	MW-3 (10/04) MW-3 10/29/2004 Investigation Deep	MW-3 (10/04) Dup MW-3 10/29/2004 Duplicate Deep	MW-3 (01/05) MW-3 1/6/2005 Investigation Deep	MW-3 (05/05) MW-3 5/24/2005 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	0.016	0.017	0.022	0.021	0.019	0.018
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	0.0066	0.0081	0.0069	0.0068	0.008	0.0087
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.002	< 0.0009	< 0.001	< 0.001	< 0.0001	< 0.0001
1-Methylnaphthalene	90-12-0	0.015	0.015	0.021	0.018	0.025	0.023
2-Methylnaphthalene	91-57-6	0.014	0.017	0.019	0.017	0.021	0.014
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	0.0052	0.0046	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0071	0.0056
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.0001	< 0.0001	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0001	< 0.0001	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.0001	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	0.12	0.096	0.12	0.13	0.11	0.1
Barium	7440-39-3	0.46	0.45	0.42	0.42	0.42	0.42
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	< 0.01	0.043	0.045	< 0.01	< 0.01
Iron	7439-89-6						
Lead	7439-92-1	< 0.005	0.014	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02
Silver	7440-22-4	< 0.005	0.0063	< 0.005	0.0094	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-3 (07/05) MW-3 07/25/2005 Investigation Deep	MW-3 (12/05) MW-3 12/17/2005 Investigation Deep	MW-3 (12/05) Dup MW-3 12/17/2005 Duplicate Deep	MW-3 (6/09) MW-3 06/04/2009 Investigation Deep	MW-4 (07/99) MW-4 07/01/99 Investigation Deep	MW-4 (12/99) MW-4 12/22/99 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	0.017	0.016	0.016	0.012	< 0.005	< 0.002
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.005	< 0.002
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.0010	< 0.005	< 0.002
Xylenes	1330-20-7	0.0074	0.0073	0.0073	0.0068	< 0.005	< 0.005
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0001	< 0.0001	0.0046	< 0.00010	< 0.0018	< 0.002
1-Methylnaphthalene	90-12-0	0.026			NA		
2-Methylnaphthalene	91-57-6	0.021			NA		
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.0023	< 0.0026
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	0.0016	< 0.0018	< 0.002
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	0.0018	< 0.00021	< 0.00023
Phenanthrene	85-01-8	0.0068	0.01	0.0077	< 0.00010	< 0.00064	< 0.00071
Anthracene	120-12-7	< 0.0001	0.0018	0.00077	0.0053	< 0.00066	< 0.00073
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.00021	< 0.00023
Pyrene	129-00-0	< 0.0001	0.004	< 0.0001	0.0012	< 0.00027	< 0.0003
Benzo(a)anthracene	56-55-3	< 0.0001	0.00018	< 0.0001	< 0.00010	< 0.00015	< 0.000014
Chrysene	218-01-9	< 0.0001	0.00014	< 0.0001	< 0.00010	< 0.00015	< 0.00017
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00010	< 0.000018	< 0.00002
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.000017	< 0.000019
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.000023	< 0.000026
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00010	< 0.000043	< 0.000048
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00010	< 0.00003	< 0.000033
Benzo(g,h,i)perylene	191-24-2	< 0.0001	0.00013	< 0.0001	< 0.00010	< 0.000076	< 0.000084
Metals (mg/L)							
Arsenic	7440-38-2	0.12	0.12	0.12	0.074	< 0.085	< 0.085
Barium	7440-39-3	0.43	0.43	0.44	0.47	0.073	0.101
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.005	< 0.005
Chromium	18540-29-9	0.018	0.047	0.045	< 0.010	< 0.007	0.0145
Iron	7439-89-6				NA		
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.05	< 0.05
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.00020	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.02	0.02	< 0.02	< 0.020	< 0.1	< 0.1
Silver	7440-22-4	< 0.01	< 0.01	< 0.01	< 0.010	< 0.007	< 0.007
Cyanide (mg/L)							
Cyanide (total)	57-12-5				< 0.0050	< 0.01	

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-4 (06/04) MW-4 07/01/04 Investigation Deep	MW-4 (10/04) MW-4 10/31/2004 Investigation Deep	MW-4 (01/05) MW-4 1/7/2005 Investigation Deep	MW-4 (05/05) MW-4 5/24/2005 Investigation Deep	MW-4 (07/05) MW-4 07/25/2005 Investigation Deep	MW-4 (12/05) MW-4 12/18/2005 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0004	< 0.001	< 0.0001	< 0.0001	0.00016	< 0.0001
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
2-Methylnaphthalene	91-57-6	0.00039	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.0001	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0001	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.02
Barium	7440-39-3	0.09	0.15	0.26	0.26	0.26	0.22
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	0.013	< 0.01	< 0.01	< 0.01	0.017	< 0.01
Iron	7439-89-6						
Lead	7439-92-1	0.01	< 0.005	< 0.005	< 0.005	0.0078	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.01	0.026	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-5 (07/99) MW-5 07/01/99 Investigation Deep	MW-5 (07/99) Dup MW-5 07/01/99 Duplicate Deep	MW-5 (12/99) MW-5 12/21/99 Investigation Deep	MW-5 (01/04) MW-5 01/13/04 Investigation Deep	MW-5 (01/04) Dup MW-5 01/13/04 Duplicate Deep	MW-5 (04/04) MW-5 04/16/04 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.005	< 0.005	< 0.002	< 0.001	0.0016	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.005	< 0.005	< 0.002	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.005	< 0.005	< 0.005	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.009	< 0.009	< 0.0019	< 0.0001	0.0019	0.0008
1-Methylnaphthalene	90-12-0				< 0.0001	0.0014	0.0014
2-Methylnaphthalene	91-57-6				< 0.0001	0.00024	< 0.0001
Acenaphthylene	208-96-8	< 0.012	< 0.012	< 0.0025	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.009	< 0.009	< 0.0019	< 0.0001	0.00049	< 0.0001
Fluorene	86-73-7	< 0.001	< 0.001	0.0011	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0032	< 0.0032	< 0.00069	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0033	< 0.0033	< 0.00071	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.001	< 0.001	0.00035	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0014	< 0.0014	< 0.00029	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	0.000066	0.000076	0.00016	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.00075	< 0.00075	< 0.00016	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.000019	< 0.0001	< 0.0001	< 0.0001
Benzo(k)fluoranthene	207-08-9	< 0.000085	< 0.000085	< 0.000018	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.00012	< 0.00012	< 0.000025	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00022	< 0.00022	< 0.000046	< 0.0001	< 0.0001	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	< 0.00015	< 0.00015	< 0.000032	< 0.0001	< 0.0001	< 0.0001
Benzo(g,h,i)perylene	191-24-2	< 0.00038	< 0.00038	< 0.000082	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.085	< 0.085	< 0.085			0.081
Barium	7440-39-3	0.271	0.263	0.233			0.22
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005			< 0.005
Chromium	18540-29-9	< 0.007	< 0.007	< 0.007			< 0.01
Iron	7439-89-6						
Lead	7439-92-1	< 0.05	< 0.05	< 0.05			< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002			< 0.0002
Selenium	7782-49-2	< 0.1	< 0.1	< 0.1			< 0.01
Silver	7440-22-4	< 0.007	< 0.007	< 0.007			< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5	< 0.01	< 0.01				

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-5 (06/04) MW-5 07/01/04 Investigation Deep	MW-5 (10/04) MW-5 10/30/2004 Investigation Deep	MW-5 (01/05) MW-5 01/07/2005 Investigation Deep	MW-5 (05/05) MW-5 5/24/2005 Investigation Deep	MW-5 (07/05) MW-5 07/25/2005 Investigation Deep	MW-5 (12/05) MW-5 12/18/2005 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0004	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
2-Methylnaphthalene	91-57-6	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.0001	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0001	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	0.079	0.06	0.063	0.087	0.085	0.06
Barium	7440-39-3	0.23	0.25	0.23	0.26	0.24	0.24
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	0.024	< 0.01	< 0.01	0.014	< 0.01
Iron	7439-89-6						
Lead	7439-92-1	0.012	< 0.005	< 0.005	< 0.005	0.0077	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-6S (07/99) MW-6S 07/01/99 Investigation Shallow	MW-6S (12/99) MW-6S 12/20/99 Investigation Shallow	MW-6S (12/99) Dup MW-6S 12/20/99 Duplicate Shallow	MW-6S (01/04) MW-6S 01/13/04 Investigation Shallow	MW-6S (04/04) MW-6S 04/17/04 Investigation Shallow	MW-6S (6/04) MW-6S 07/01/04 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	< 0.005	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.002	< 0.002	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.005	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.005	< 0.005	< 0.005	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0018	< 0.0018	< 0.0018	< 0.0001	< 0.002	< 0.0001
1-Methylnaphthalene	90-12-0				< 0.0001	< 0.0002	< 0.0001
2-Methylnaphthalene	91-57-6				< 0.0001	< 0.0002	< 0.0001
Acenaphthylene	208-96-8	< 0.0023	< 0.0023	< 0.0023	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0018	< 0.0018	< 0.0018	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.00021	< 0.00021	< 0.00021	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.00064	< 0.00065	< 0.00064	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.00066	< 0.00067	< 0.00066	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.00021	< 0.00021	< 0.00021	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.00027	< 0.00028	< 0.00027	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.00015	< 0.000013	< 0.000013	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.00015	< 0.00015	< 0.00015	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.000018	< 0.000018	< 0.000018	< 0.0001	< 0.0001	< 0.0001
Benzo(k)fluoranthene	207-08-9	< 0.000017	< 0.000017	< 0.000017	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.000023	< 0.000023	< 0.000023	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.000043	< 0.000044	< 0.000043	< 0.0001	< 0.0001	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	< 0.00003	< 0.000031	< 0.00003	< 0.0001	< 0.0001	< 0.0001
Benzo(g,h,i)perylene	191-24-2	< 0.000076	< 0.000078	< 0.000076	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.085	< 0.085	< 0.085		0.018	< 0.01
Barium	7440-39-3	0.158	0.175	0.138		0.12	0.13
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005
Chromium	18540-29-9	< 0.007	< 0.007	< 0.007		< 0.01	< 0.01
Iron	7439-89-6	< 0.04	0.045	< 0.04			
Lead	7439-92-1	< 0.05	< 0.05	< 0.05		< 0.005	0.01
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.1	< 0.1	< 0.1		< 0.01	< 0.01
Silver	7440-22-4	< 0.007	< 0.007	< 0.007		< 0.005	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5	< 0.01	< 0.01	< 0.01			

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-6S (10/04) MW-6S 10/30/2004 Investigation Shallow	MW-6S (01/05) MW-6S 01/07/2005 Investigation Shallow	MW-6S (05/05) MW-6S 5/25/2005 Investigation Shallow	MW-6S (07/05) MW-6S 07/26/2005 Investigation Shallow	MW-6S (12/05) MW-6S 12/19/2005 Investigation Shallow	MW-6S (12/05) Dup MW-6S 12/19/2005 Duplicate Shallow
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.001	< 0.0001	< 0.0001	0.001	0.00058	< 0.0001
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001		
2-Methylnaphthalene	91-57-6	< 0.0001	< 0.0001	< 0.0001	< 0.0001		
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	0.01	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Barium	7440-39-3	0.15	0.12	0.12	0.12	0.11	0.11
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	< 0.01	< 0.01	0.017	< 0.01	< 0.01
Iron	7439-89-6						
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	0.008	< 0.005	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	0.0086	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-6 (07/99) MW-6 07/01/99 Investigation Intermediate	MW-6 (12/99) MW-6 12/20/99 Investigation Intermediate	MW-6 (01/04) MW-6 01/13/04 Investigation Intermediate	MW-6 (04/04) MW-6 04/17/04 Investigation Intermediate	MW-6 (06/04) MW-6 07/01/04 Investigation Intermediate	MW-6 (10/04) MW-6 10/30/2004 Investigation Intermediate
VOCs (mg/L)							
Benzene	71-43-2	0.019	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.005	< 0.002	0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	0.0061	< 0.005	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.18	0.0095	0.00047	< 0.002	0.00016	0.0002
1-Methylnaphthalene	90-12-0			0.00021	< 0.0002	< 0.0001	< 0.0001
2-Methylnaphthalene	91-57-6			0.00015	< 0.0002	< 0.0001	< 0.0001
Acenaphthylene	208-96-8	< 0.23	< 0.024	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.18	0.0061	0.00045	< 0.0001	0.00028	0.00024
Fluorene	86-73-7	0.03	0.0036	0.0008	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	0.12	0.011	0.003	0.0012	0.00097	0.0018
Anthracene	120-12-7	< 0.066	< 0.0068	0.0013	0.00051	< 0.0001	0.00062
Fluoranthene	206-44-0	0.024	0.0042	0.0035	< 0.0001	0.00081	0.001
Pyrene	129-00-0	0.042	0.006	0.0042	0.002	0.0011	0.00068
Benzo(a)anthracene	56-55-3	0.025	0.0022	0.00086	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.015	0.0023	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	0.0066	0.0017	0.0016	< 0.0001	< 0.0001	< 0.00009
Benzo(k)fluoranthene	207-08-9	0.0029	0.00078	0.00058	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	0.011	0.0025	0.00088	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0043	< 0.00044	0.00037	< 0.0001	< 0.0001	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.003	0.00075	< 0.0001	< 0.0001	< 0.0001	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0076	< 0.00078	0.00091	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.085	< 0.085		0.021	0.021	0.016
Barium	7440-39-3	3.32	0.562		0.3	0.58	0.48
Cadmium	7440-43-9	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	0.107	< 0.007		< 0.01	< 0.01	0.038
Iron	7439-89-6						
Lead	7439-92-1	0.0999	< 0.05		< 0.005	0.013	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002		< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.1	< 0.1		< 0.01	< 0.01	< 0.01
Silver	7440-22-4	< 0.007	< 0.007		< 0.005	< 0.005	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5	< 0.01					

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-6 (10/04) Dup MW-6 10/30/2004 Duplicate Intermediate	MW-6 (01/05) MW-6 01/07/2005 Investigation Intermediate	MW-6 (05/05) MW-6 5/25/2005 Investigation Intermediate	MW-6 (07/05) MW-6 07/26/2005 Investigation Intermediate	MW-6 (07/05) Dup MW-6 07/26/2005 Duplicate Intermediate	MW-6 (12/05) MW-6 12/19/2005 Investigation Intermediate
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	0.00018	0.00013	0.00016	0.00019	0.00028	0.00012
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001	0.00014	< 0.0001	< 0.0001	
2-Methylnaphthalene	91-57-6	< 0.0001	< 0.0001	< 0.0001	0.00045	< 0.0001	
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	0.00028	0.00032	0.00015	< 0.0001	< 0.0001	0.00024
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	0.002	< 0.0001	0.00061	0.00074	0.00047	< 0.0001
Anthracene	120-12-7	0.00075	0.00031	0.0002	0.00095	0.00077	< 0.0001
Fluoranthene	206-44-0	0.00064	0.00074	0.0004	< 0.0001	0.0006	0.00074
Pyrene	129-00-0	0.0004	0.0014	0.00046	0.0014	0.0011	0.00097
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	0.00012	< 0.0001	0.00032	0.0003
Chrysene	218-01-9	< 0.0001	0.00042	0.0001	0.00044	0.00022	0.00018
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00025	0.00026
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	0.000063	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00015
Metals (mg/L)							
Arsenic	7440-38-2	0.012	< 0.02	0.04	0.047	0.064	< 0.02
Barium	7440-39-3	0.48	0.72	0.48	0.32	0.3	0.38
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	0.038	0.016	< 0.01	0.023	0.023	< 0.01
Iron	7439-89-6						
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-6D (07/99) MW-6D 07/01/99 Investigation Deep	MW-6D (12/99) MW-6D 12/20/99 Investigation Deep	MW-6D (01/04) MW-6D 01/13/04 Investigation Deep	MW-6D (04/04) MW-6D 04/17/04 Investigation Deep	MW-6D (06/04) MW-6D 07/01/04 Investigation Deep	MW-6D (6/04) Dup MW-6D 07/01/04 Duplicate Deep
VOCs (mg/L)							
Benzene	71-43-2	0.08	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	0.018	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	0.14	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	0.26	< 0.005	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.095	0.019	0.0017	< 0.002	< 0.0001	0.00031
1-Methylnaphthalene	90-12-0			< 0.0001	< 0.0002	< 0.0001	< 0.0001
2-Methylnaphthalene	91-57-6			0.00023	< 0.0002	< 0.0001	< 0.0002
Acenaphthylene	208-96-8	< 0.12	< 0.023	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.095	< 0.018	0.00013	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	0.021	0.015	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.034	0.034	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.035	0.0072	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.011	0.0095	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.014	0.018	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0079	0.0047	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0079	0.0066	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00095	0.0043	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(k)fluoranthene	207-08-9	< 0.00089	0.0016	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0012	0.0058	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0023	< 0.00043	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	< 0.0016	0.0055	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(g,h,i)perylene	191-24-2	< 0.004	0.0022	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.085	< 0.085		0.025	< 0.01	< 0.01
Barium	7440-39-3	0.135	0.113		0.073	0.068	0.072
Cadmium	7440-43-9	< 0.005	< 0.005		< 0.005	0.0079	0.0073
Chromium	18540-29-9	< 0.007	0.00862		< 0.01	0.01	0.011
Iron	7439-89-6						
Lead	7439-92-1	< 0.05	< 0.05		< 0.005	0.0084	0.01
Mercury	7439-97-6	< 0.0002	< 0.0002		< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.1	< 0.1		< 0.01	< 0.01	< 0.01
Silver	7440-22-4	< 0.007	< 0.007		< 0.005	< 0.005	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5	< 0.01					

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-6D (10/04) MW-6D 10/30/2004 Investigation Deep	MW-6D (01/05) MW-6D 01/07/2005 Investigation Deep	MW-6D (05/05) MW-6D 5/25/2005 Investigation Deep	MW-6D (05/05) Dup MW-6D 5/25/2005 Duplicate Deep	MW-6D (07/05) MW-6D 07/26/2005 Investigation Deep	MW-6D (12/05) MW-6D 12/19/2005 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	0.0013	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.001	< 0.0001	< 0.0001	< 0.0001	0.00011	0.00025
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
2-Methylnaphthalene	91-57-6	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.01	< 0.02	< 0.02	0.022	0.049	< 0.02
Barium	7440-39-3	0.08	0.067	0.093	0.093	0.065	0.062
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	< 0.01	< 0.01	< 0.01	0.024	< 0.01
Iron	7439-89-6						
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	0.02	< 0.02	< 0.02	0.023	< 0.02
Silver	7440-22-4	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-7S (07/99) MW-7S 07/01/99 Investigation Shallow	MW-7S (07/99) Dup MW-7S 07/01/99 Duplicate Shallow	MW-7S (12/99) MW-7S 12/22/99 Investigation Shallow	MW-7S (07/05) MW-7S 07/27/2005 Investigation Shallow	MW-8S (06/99) MW-8S 06/30/99 Investigation Shallow	MW-8S (06/99) Dup MW-8S 06/30/99 Duplicate Shallow
VOCs (mg/L)							
Benzene	71-43-2	< 0.005	< 0.005	< 0.002	0.0014	< 0.005	< 0.005
Toluene	108-88-3	< 0.005	< 0.005	< 0.002	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.005	< 0.005	< 0.002	< 0.001	< 0.005	< 0.005
Xylenes	1330-20-7	< 0.005	< 0.005	< 0.005	< 0.003	< 0.005	< 0.005
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0018	< 0.0018	< 0.002	0.0018	< 0.0018	< 0.0018
1-Methylnaphthalene	90-12-0				0.00024		
2-Methylnaphthalene	91-57-6				0.00012		
Acenaphthylene	208-96-8	< 0.0023	< 0.0023	< 0.0025	< 0.0001	< 0.0023	< 0.0023
Acenaphthene	83-32-9	< 0.0018	< 0.0018	< 0.002	< 0.0001	0.0068	0.0034
Fluorene	86-73-7	< 0.00021	< 0.00021	< 0.00023	< 0.0001	0.00094	0.00078
Phenanthrene	85-01-8	< 0.00064	< 0.00064	< 0.0007	< 0.0001	< 0.00064	< 0.00064
Anthracene	120-12-7	< 0.00066	< 0.00066	< 0.00073	< 0.0001	< 0.00066	< 0.00066
Fluoranthene	206-44-0	< 0.00021	< 0.00021	< 0.00023	< 0.0001	< 0.00021	< 0.00021
Pyrene	129-00-0	< 0.00027	< 0.00027	< 0.0003	< 0.0001	< 0.00027	< 0.00027
Benzo(a)anthracene	56-55-3	< 0.00015	< 0.00015	< 0.000014	< 0.0001	< 0.00015	< 0.00015
Chrysene	218-01-9	< 0.00015	< 0.00015	< 0.00016	< 0.0001	< 0.00015	< 0.00015
Benzo(b)fluoranthene	205-99-2	< 0.000018	< 0.000018	< 0.00002	< 0.00009	< 0.000018	< 0.000018
Benzo(k)fluoranthene	207-08-9	< 0.000017	< 0.000017	< 0.000019	< 0.0001	< 0.000017	< 0.000017
Benzo(a)pyrene	50-32-8	< 0.000023	< 0.000023	< 0.000025	< 0.0001	< 0.000023	< 0.000023
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.000043	< 0.000043	< 0.000047	< 0.00006	< 0.000043	< 0.000043
Dibenzo(a,h)anthracene	53-70-3	< 0.00003	< 0.00003	< 0.000033	< 0.00005	< 0.00003	< 0.00003
Benzo(g,h,i)perylene	191-24-2	< 0.000076	< 0.000076	< 0.000084	< 0.0001	< 0.000076	< 0.000076
Metals (mg/L)							
Arsenic	7440-38-2	< 0.085	< 0.085	< 0.085	0.061	< 0.085	< 0.085
Barium	7440-39-3	0.0714	< 0.004	2.37	0.082	0.24	0.197
Cadmium	7440-43-9	< 0.005	< 0.005	0.0389	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	0.00814	< 0.007	0.314	0.023	0.00947	< 0.007
Iron	7439-89-6	< 0.04		< 0.04			
Lead	7439-92-1	< 0.05	< 0.05	0.283	0.007	< 0.05	< 0.05
Mercury	7439-97-6	< 0.0002	< 0.0002	0.000723	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.1	< 0.1	< 0.1	< 0.02	< 0.1	< 0.1
Silver	7440-22-4	< 0.007	< 0.007	< 0.007	< 0.01	< 0.007	< 0.007
Cyanide (mg/L)							
Cyanide (total)	57-12-5	< 0.01	< 0.01	0.013		< 0.01	0.016

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
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Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-8S (12/99) MW-8S 12/21/99 Investigation Shallow	MW-8S (01/04) MW-8S 01/14/04 Investigation Shallow	MW-8S (04/04) MW-8S 04/18/04 Investigation Shallow	MW-8S (06/04) MW-8S 06/30/04 Investigation Shallow	MW-8S (10/04) MW-8S 10/31/2004 Investigation Shallow	MW-8S (01/05) MW-8S 01/08/2005 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.005	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0018	0.013	< 0.002	0.0039	0.0011	0.0015
1-Methylnaphthalene	90-12-0		0.00038	< 0.0002	< 0.0002	< 0.0001	< 0.0001
2-Methylnaphthalene	91-57-6		0.0016	< 0.0002	< 0.0002	< 0.0001	< 0.0001
Acenaphthylene	208-96-8	< 0.0023	< 0.0003	0.0018	0.0016	0.0023	0.0026
Acenaphthene	83-32-9	0.0094	0.0048	0.0018	0.0025	0.0026	0.0031
Fluorene	86-73-7	0.00021	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.00064	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.00066	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	0.00027	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.00027	0.00068	< 0.0001	< 0.0001	0.00016	0.00012
Benzo(a)anthracene	56-55-3	< 0.000013	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.00015	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.000018	< 0.0003	< 0.0001	< 0.0001	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.000017	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.000023	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.000043	< 0.0003	< 0.0001	< 0.0001	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.00003	< 0.0003	< 0.0001	< 0.0001	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.000076	< 0.0003	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.085		0.088	0.072	0.1	0.084
Barium	7440-39-3	0.143		0.15	0.13	0.13	0.12
Cadmium	7440-43-9	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.007		< 0.01	< 0.01	0.049	< 0.01
Iron	7439-89-6	< 0.04					
Lead	7439-92-1	< 0.05		< 0.005	0.016	< 0.005	< 0.005
Mercury	7439-97-6	< 0.0002		< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.1		0.014	< 0.01	< 0.01	< 0.02
Silver	7440-22-4	< 0.007		< 0.005	< 0.005	0.006	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5	0.049					

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
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Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-8S (05/05) MW-8S 5/26/2005 Investigation Shallow	MW-8S (07/05) MW-8S 07/26/2005 Investigation Shallow	MW-8S (12/05) MW-8S 12/18/2005 Investigation Shallow	MW-8S (6/09) MW-8S 06/04/2009 Investigation Shallow	MW-8D (06/99) MW-8D 06/30/99 Investigation Deep	MW-8D (12/99) MW-8D 12/21/99 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.0010	0.36	0.76
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.0050	0.58	0.71
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.0010	0.33	0.44
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.0030	0.41	0.38
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0001	0.00018	0.00025	< 0.00010	0.52	1.2
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001		NA		
2-Methylnaphthalene	91-57-6	< 0.0001	< 0.0001		NA		
Acenaphthylene	208-96-8	0.0016	0.0016	< 0.0001	0.00042	< 0.12	< 0.024
Acenaphthene	83-32-9	0.0018	0.0018	0.001	0.00055	< 0.09	< 0.019
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.00010	0.033	0.023
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.032	0.016
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.033	0.0021
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.01	0.0016
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.014	< 0.0029
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.0075	< 0.00014
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.0075	< 0.0016
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00010	< 0.0009	< 0.00019
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.00085	< 0.00018
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.0012	< 0.00024
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00010	< 0.0022	< 0.00046
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00010	< 0.0015	< 0.00032
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.00010	< 0.0038	< 0.00081
Metals (mg/L)							
Arsenic	7440-38-2	0.079	0.083	0.093	0.031	< 0.085	< 0.085
Barium	7440-39-3	0.27	0.13	0.12	0.086	0.558	0.58
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.005	0.00726
Chromium	18540-29-9	0.014	0.021	< 0.01	< 0.010	< 0.007	< 0.007
Iron	7439-89-6				NA		7.19
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	< 0.0050	< 0.05	< 0.05
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.00020	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.02	< 0.02	< 0.02	< 0.020	< 0.1	< 0.1
Silver	7440-22-4	< 0.01	< 0.01	< 0.01	< 0.010	< 0.007	< 0.007
Cyanide (mg/L)							
Cyanide (total)	57-12-5				0.016	0.124	0.115

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
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Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-8D (01/04) MW-8D 01/14/04 Investigation Deep	MW-8D (01/04) Dup MW-8D 01/14/04 Duplicate Deep	MW-8D (04/04) MW-8D 04/18/04 Investigation Deep	MW-8D (06/04) MW-8D 06/30/04 Investigation Deep	MW-8D (10/04) MW-8D 10/31/2004 Investigation Deep	MW-8D (10/04) Dup MW-8D 10/31/2004 Duplicate Deep
VOCs (mg/L)							
Benzene	71-43-2	1.9	1.5	1.2	1	1.4	1.2
Toluene	108-88-3	2.2	1.8	< 2.5	1.3	2.1	1.6
Ethylbenzene	100-41-4	1.5	1.3	1.6	1.1	1.5	1.3
Xylenes	1330-20-7	1.6	1.6	1.5	1.2	1.6	1.2
PAHs (mg/L)							
Naphthalene	91-20-3	0.33	0.32	2.7	0.023	1.9	1.4
1-Methylnaphthalene	90-12-0	0.24	0.22	0.29	0.14	0.18	0.13
2-Methylnaphthalene	91-57-6	0.2	0.18	0.34	0.22	0.23	0.17
Acenaphthylene	208-96-8	0.14	0.096		0.059	< 0.0001	< 0.0001
Acenaphthene	83-32-9	0.063	0.074	0.047	0.026	0.023	0.026
Fluorene	86-73-7	0.17	0.12	< 0.0001	0.038	0.023	0.037
Phenanthrene	85-01-8	0.14	0.082	< 0.0001	0.026	0.025	0.025
Anthracene	120-12-7	0.024	0.013	0.0037	0.0052	< 0.0001	0.0042
Fluoranthene	206-44-0	0.034	0.017	0.0044	0.0067	< 0.0001	< 0.0001
Pyrene	129-00-0	0.043	0.022	< 0.0001	0.015	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	0.014	0.0041	< 0.0001	0.00041	< 0.0001	< 0.0001
Chrysene	218-01-9	0.017	0.0046	< 0.0001	0.0012	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	0.026	0.0085	< 0.0001	0.0034	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	0.0092	0.0027	< 0.0001	0.00045	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	0.014	0.0041	< 0.0001	0.00023	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	0.0056	< 0.0001	< 0.0001	< 0.0001	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	0.0013	< 0.0001	< 0.0001	0.00016	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	0.016	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2			0.015	0.021	0.03	0.013
Barium	7440-39-3			0.72	0.71	0.76	0.69
Cadmium	7440-43-9			< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9			< 0.01	< 0.01	0.096	0.086
Iron	7439-89-6						
Lead	7439-92-1			< 0.005	0.019	< 0.005	< 0.005
Mercury	7439-97-6			< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2			0.019	< 0.01	< 0.01	< 0.01
Silver	7440-22-4			0.012	< 0.005	0.0088	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
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Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-8D (01/05) MW-8D 01/08/2005 Investigation Deep	MW-8D (01/05) Dup MW-8D 01/08/2005 Duplicate Deep	MW-8D (05/05) MW-8D 5/26/2005 Investigation Deep	MW-8D (05/05) Dup MW-8D 5/26/2005 Duplicate Deep	MW-8D (07/05) MW-8D 07/25/2005 Investigation Deep	MW-8D (07/05) Dup MW-8D 07/25/2005 Duplicate Deep
VOCs (mg/L)							
Benzene	71-43-2	0.25	0.31	1.1	1	0.84	0.9
Toluene	108-88-3	0.44	0.52	< 2.5	1.2	< 1.2	< 1.2
Ethylbenzene	100-41-4	0.34	0.4	1	0.92	0.56	0.55
Xylenes	1330-20-7	0.48	0.55	< 1.5	1	< 0.75	< 0.75
PAHs (mg/L)							
Naphthalene	91-20-3	1.9	2	1	1.5	1.2	1.7
1-Methylnaphthalene	90-12-0	0.19	0.18	0.14	0.19	0.14	0.22
2-Methylnaphthalene	91-57-6	0.28	0.29	0.15	0.21	0.15	0.23
Acenaphthylene	208-96-8	0.063	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	0.032	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	0.03	0.038	< 0.0001	< 0.0001
Phenanthrene	85-01-8	0.029	0.03	0.02	0.024	0.018	0.025
Anthracene	120-12-7	0.005	0.0048	0.0039	0.0044	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.02	< 0.02	0.027	0.022	0.026	< 0.02
Barium	7440-39-3	0.71	0.71	0.74	0.72	0.68	0.71
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.017
Iron	7439-89-6						
Lead	7439-92-1	< 0.005	< 0.05	< 0.005	< 0.005	0.0058	0.0062
Mercury	7439-97-6	0.003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-8D (12/05) MW-8D 12/17/2005 Investigation Deep	MW-8D (6/09) MW-8D 06/04/2009 Investigation Deep	MW-10 (12/99) MW-10 12/22/99 Investigation Shallow	MW-10 (01/04) MW-10 01/12/04 Investigation Shallow	MW-10 (04/04) MW-10 04/17/04 Investigation Shallow	MW-10 (06/04) MW-10 6/29/2004 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	0.97	1.5	< 0.002	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	1.2	1.6	< 0.002	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	1.2	1.8	< 0.002	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	1.2	1.8	< 0.005	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.0001	0.77	< 0.0018	0.00071	< 0.002	< 0.005
1-Methylnaphthalene	90-12-0		NA		< 0.0001	< 0.0002	< 0.0003
2-Methylnaphthalene	91-57-6		NA		0.00011	< 0.0002	< 0.0003
Acenaphthylene	208-96-8	0.035	< 0.00010	< 0.0023	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	0.055	< 0.0018	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	0.04	0.074	< 0.00021	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	0.027	0.012	< 0.00064	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	0.0038	0.015	< 0.00066	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	0.00076	0.0023	< 0.00021	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	0.0034	< 0.00027	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.00010	< 0.000013	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.00010	< 0.00015	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00010	< 0.000018	< 0.0001	< 0.0001	< 0.0001
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.00010	< 0.000017	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.00010	< 0.000023	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00010	< 0.000043	< 0.0001	< 0.0001	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00010	< 0.00003	< 0.0001	< 0.0001	< 0.0001
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.00010	< 0.000076	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.02	< 0.020	< 0.085		0.014	< 0.01
Barium	7440-39-3	0.62	0.53	1.36		0.14	0.12
Cadmium	7440-43-9	0.005	< 0.0050	0.0404		< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	< 0.010	0.114		< 0.01	< 0.01
Iron	7439-89-6		NA				
Lead	7439-92-1	< 0.005	< 0.0050	0.108		< 0.005	0.0099
Mercury	7439-97-6	< 0.0002	< 0.00020	0.000202		< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.02	< 0.020	< 0.1		< 0.01	0.016
Silver	7440-22-4	< 0.01	< 0.010	< 0.007		< 0.005	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5		0.046				

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-10 (10/04) MW-10 10/29/2004 Investigation Shallow	MW-10 (05/05) MW-10 5/24/2005 Investigation Shallow	MW-10 (07/05) MW-10 07/25/2005 Investigation Shallow	MW-10 (12/05) MW-10 12/17/2005 Investigation Shallow
VOCs (mg/L)					
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)					
Naphthalene	91-20-3	< 0.001	< 0.0001	< 0.0001	< 0.0001
1-Methylnaphthalene	90-12-0	< 0.0001	< 0.0001	< 0.0001	
2-Methylnaphthalene	91-57-6	< 0.0001	< 0.0001	< 0.0001	
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)					
Arsenic	7440-38-2	0.016	< 0.02	0.039	< 0.02
Barium	7440-39-3	0.12	0.13	0.12	0.11
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	< 0.01	0.017	< 0.01
Iron	7439-89-6				
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	< 0.005	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)					
Cyanide (total)	57-12-5				

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-11S (12/99) MW-11S 12/21/99 Investigation Shallow	MW-11S (01/04) MW-11S 01/14/04 Investigation Shallow	MW-11S (04/04) MW-11S 04/17/04 Investigation Shallow	MW-11S (06/04) MW-11S 06/30/04 Investigation Shallow	MW-11S (06/04) Dup MW-11S 06/30/04 Duplicate Shallow	MW-11S (10/04) MW-11S 10/30/2004 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	0.11	0.022	0.043	0.022	0.024	0.053
Toluene	108-88-3	0.0021	< 0.005	< 0.005	0.0057	0.006	< 0.005
Ethylbenzene	100-41-4	0.06	0.0023	0.0042	0.0028	0.0031	0.002
Xylenes	1330-20-7	0.056	0.0034	0.0053	0.0064	0.007	0.0048
PAHs (mg/L)							
Naphthalene	91-20-3	1.2	0.037	0.13	0.25	0.13	0.22
Acenaphthylene	208-96-8	< 0.23	0.019	0.0021	0.023	0.023	0.034
Acenaphthene	83-32-9	< 0.18	0.004	0.004	0.0043	0.0042	0.0052
Fluorene	86-73-7	0.019	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0069
Phenanthrene	85-01-8	0.034	0.04	0.041	0.056	0.045	0.054
Anthracene	120-12-7	< 0.066	0.0015	< 0.0001	0.0023	0.002	< 0.0001
Fluoranthene	206-44-0	< 0.021	0.011	0.0078	0.015	0.014	0.01
Pyrene	129-00-0	< 0.027	0.0087	0.0075	0.012	0.0094	0.0071
Benzo(a)anthracene	56-55-3	< 0.0013	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.015	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.0018	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0017	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0023	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0043	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.003	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0076	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	< 0.085		0.032	< 0.01	< 0.01	0.015
Barium	7440-39-3	0.143		0.16	0.18	0.17	0.18
Cadmium	7440-43-9	0.00656		< 0.005	0.0097	0.0099	< 0.005
Chromium	18540-29-9	< 0.007		< 0.01	0.017	0.016	< 0.01
Iron	7439-89-6	< 0.04					
Lead	7439-92-1	< 0.05		< 0.005	0.011	0.013	< 0.005
Mercury	7439-97-6	< 0.0002		< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.1		< 0.01	< 0.01	< 0.01	< 0.01
Silver	7440-22-4	< 0.007		< 0.005	< 0.005	< 0.005	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5	0.169					

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-11S (01/05) MW-11S 01/08/2005 Investigation Shallow	MW-11S (01/05) Dup MW-11S 01/08/2005 Duplicate Shallow	MW-11S (05/05) MW-11S 5/25/2005 Investigation Shallow	MW-11S (07/05) MW-11S 07/26/2005 Investigation Shallow	MW-11S (12/05) MW-11S 12/17/2005 Investigation Shallow	MW-11S (6/09) MW-11S 06/04/2009 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	0.023	0.018	0.021	0.02	0.023	0.031
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.039
Ethylbenzene	100-41-4	0.0016	0.0014	0.0014	0.0022	0.0016	0.011
Xylenes	1330-20-7	0.0038	< 0.003	< 0.003	0.0067	0.0041	0.036
PAHs (mg/L)							
Naphthalene	91-20-3	0.27	0.32	0.21	0.35	< 0.0001	0.71
Acenaphthylene	208-96-8	0.042	0.058	< 0.0001	0.039	0.067	0.092
Acenaphthene	83-32-9	< 0.0001	0.0063	< 0.0001	< 0.0001	< 0.0001	NA
Fluorene	86-73-7	< 0.0001	< 0.0001	0.0051	< 0.0001	0.01	NA
Phenanthrene	85-01-8	0.049	0.06	0.068	0.06	0.093	0.16
Anthracene	120-12-7	0.0014	0.0016	0.0018	0.0016	0.0017	0.0064
Fluoranthene	206-44-0	0.011	0.012	0.01	0.0073	0.0056	0.013
Pyrene	129-00-0	0.0054	0.0063	0.0065	0.0052	0.0082	0.013
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	0.00014	< 0.0001	< 0.0001	< 0.00010
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00010
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00010
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00010
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00010
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00010
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00010
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00010
Metals (mg/L)							
Arsenic	7440-38-2	< 0.02	< 0.02	< 0.02	0.051	< 0.02	< 0.020
Barium	7440-39-3	0.19	0.21	0.2	0.19	0.2	0.15
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0050
Chromium	18540-29-9	< 0.01	< 0.01	< 0.01	0.044	< 0.01	< 0.010
Iron	7439-89-6						NA
Lead	7439-92-1	0.018	0.017	0.014	< 0.005	0.0089	< 0.0050
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00020
Selenium	7782-49-2	< 0.02	< 0.02	0.19	0.086	0.02	< 0.14
Silver	7440-22-4	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010
Cyanide (mg/L)							
Cyanide (total)	57-12-5						< 0.0050

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-11SD (6/09) MW-11SD 06/04/2009 Duplicate Shallow	MW-11D (12/99) MW-11D 12/21/99 Investigation Deep	MW-11D (12/99) Dup MW-11D 12/21/99 Duplicate Deep	MW-11D (01/04) MW-11D 01/14/04 Investigation Deep	MW-11D (04/04) MW-11D 04/18/04 Investigation Deep	MW-11D (04/04) Dup MW-11D 04/18/04 Duplicate Deep
VOCs (mg/L)							
Benzene	71-43-2	0.031	12	14	9.6	9.7	11
Toluene	108-88-3	0.04	< 0.2	< 0.1	< 2.5	< 25	< 25
Ethylbenzene	100-41-4	0.012	0.78	0.97	1.2	< 5	< 5
Xylenes	1330-20-7	0.037	0.57	0.9	< 1.5	< 15	< 15
PAHs (mg/L)							
Naphthalene	91-20-3	0.82	4.7	4.9	0.25	0.08	
Acenaphthylene	208-96-8	0.12	< 0.23	< 0.23	0.032	< 0.0001	
Acenaphthene	83-32-9	NA	0.28	0.31	0.065	0.03	
Fluorene	86-73-7	NA	0.19	0.24	0.062	0.016	
Phenanthrene	85-01-8	0.17	0.31	0.36	0.095	0.0096	
Anthracene	120-12-7	0.0063	0.084	0.093	0.022	0.0018	
Fluoranthene	206-44-0	0.012	0.057	0.078	0.026	< 0.0001	
Pyrene	129-00-0	0.012	0.11	0.12	0.021	0.0025	
Benzo(a)anthracene	56-55-3	0.00019	0.032	0.043	0.0052	< 0.0001	
Chrysene	218-01-9	< 0.00010	0.029	0.036	0.0062	< 0.0001	
Benzo(b)fluoranthene	205-99-2	< 0.00010	0.022	0.026	0.014	< 0.0001	
Benzo(k)fluoranthene	207-08-9	< 0.00010	0.0071	0.0093	0.004	< 0.0001	
Benzo(a)pyrene	50-32-8	< 0.00010	0.021	0.026	0.0051	< 0.0001	
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00010	< 0.0043	< 0.0043	0.0018	< 0.0001	
Dibenzo(a,h)anthracene	53-70-3	< 0.00010	< 0.003	0.0089	0.00044	< 0.0001	
Benzo(g,h,i)perylene	191-24-2	< 0.00010	< 0.0076	< 0.0076	< 0.0001	< 0.0001	
Metals (mg/L)							
Arsenic	7440-38-2	< 0.020	< 0.085	< 0.085		0.027	0.028
Barium	7440-39-3	0.15	1.39	1.61		0.28	0.39
Cadmium	7440-43-9	< 0.0050	0.0169	0.0202		< 0.005	< 0.005
Chromium	18540-29-9	< 0.010	0.0792	0.11		< 0.01	< 0.01
Iron	7439-89-6	NA	0.0676	0.128			
Lead	7439-92-1	< 0.0050	0.105	0.113		< 0.005	< 0.005
Mercury	7439-97-6	< 0.00020	< 0.0002	< 0.0002		< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.15	< 0.1	< 0.1		< 0.01	< 0.01
Silver	7440-22-4	< 0.010	< 0.007	< 0.007		< 0.005	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5	< 0.0050	0.033	0.024			

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-11D (06/04) MW-11D 06/30/04 Investigation Deep	MW-11D (10/04) MW-11D 10/31/2004 Investigation Deep	MW-11D (01/05) MW-11D 01/08/2005 Investigation Deep	MW-11D (05/05) MW-11D 5/26/2005 Investigation Deep	MW-11D (07/05) MW-11D 07/27/2005 Investigation Deep	MW-11D (07/05) Dup MW-11D 07/27/2005 Duplicate Deep
VOCs (mg/L)							
Benzene	71-43-2	14	15	8.8	2	7.7	7
Toluene	108-88-3	< 1.2	< 0.5	< 0.5	< 0.1	< 0.5	< 1.2
Ethylbenzene	100-41-4	1.3	1.1	0.44	0.062	0.29	< 0.25
Xylenes	1330-20-7	0.83	0.5	0.48	0.095	< 0.3	< 0.75
PAHs (mg/L)							
Naphthalene	91-20-3	1	1.4	1.5	0.99	0.62	0.59
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	0.031	0.042	0.04	0.033	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	0.025	< 0.0001	0.017	0.012	< 0.0001
Phenanthrene	85-01-8	0.0047	0.018	0.015	0.012	0.0076	0.0086
Anthracene	120-12-7	0.0086	0.0033	0.0027	0.0024	0.0022	0.0025
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	0.015	< 0.0001	< 0.0001	< 0.0001	0.0019	0.0018
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	0.0003	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	0.00036	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0001	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	0.00016	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2	0.014	0.015	< 0.02	0.021	< 0.02	< 0.02
Barium	7440-39-3	0.4	0.39	0.36	0.37	0.17	0.17
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	< 0.01	0.019	< 0.01	< 0.01	0.012	0.012
Iron	7439-89-6						
Lead	7439-92-1	0.015	< 0.005	< 0.005	< 0.005	0.0092	0.01
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.01	< 0.02	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-11D (12/05) MW-11D 12/18/2005 Investigation Deep	MW-11D (6/09) MW-11D 06/05/2009 Investigation Deep	MW-12S (12/99) MW-12S 12/22/99 Investigation Shallow	MW-12S (01/04) MW-12S 01/14/04 Investigation Shallow	MW-12S (04/04) MW-12S 04/16/04 Investigation Shallow	MW-12S (06/04) MW-12S 6/29/2004 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	1.1	10	< 0.002	0.11	< 0.001	< 0.001
Toluene	108-88-3	< 0.25	< 0.050	< 0.002	0.13	< 0.005	< 0.005
Ethylbenzene	100-41-4	0.054	0.73	< 0.002	0.089	< 0.001	< 0.001
Xylenes	1330-20-7	< 0.15	0.51	< 0.005	0.096	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	0.96	0.76	< 0.0018	0.0061	< 0.0001	
Acenaphthylene	208-96-8	< 0.0001	< 0.00010	< 0.0023	< 0.0001	< 0.0001	
Acenaphthene	83-32-9	0.044	0.012	< 0.0018	< 0.0001	< 0.0001	
Fluorene	86-73-7	0.018	0.011	< 0.00021	< 0.0001	< 0.0001	
Phenanthrene	85-01-8	0.0078	0.0033	< 0.00064	< 0.0001	< 0.0001	
Anthracene	120-12-7	0.0016	0.005	< 0.00066	< 0.0001	< 0.0001	
Fluoranthene	206-44-0	< 0.0001	0.00064	< 0.00021	< 0.0001	< 0.0001	
Pyrene	129-00-0	< 0.0001	0.00094	< 0.00027	< 0.0001	< 0.0001	
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.00010	< 0.000013	< 0.0001	< 0.0001	
Chrysene	218-01-9	< 0.0001	< 0.00010	< 0.00015	< 0.0001	< 0.0001	
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00010	< 0.000018	< 0.0001	< 0.0001	
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.00010	< 0.000017	< 0.0001	< 0.0001	
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.00010	< 0.000023	< 0.0001	< 0.0001	
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00010	< 0.000043	< 0.0001	< 0.0001	
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00010	< 0.00003	< 0.0001	< 0.0001	
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.00010	< 0.000076	< 0.0001	< 0.0001	
Metals (mg/L)							
Arsenic	7440-38-2	< 0.02	< 0.020	< 0.085		0.049	0.026
Barium	7440-39-3	0.25	0.26	0.175		0.11	0.12
Cadmium	7440-43-9	< 0.005	< 0.0050	< 0.005		< 0.005	< 0.005
Chromium	18540-29-9	0.017	< 0.010	0.0132		< 0.01	< 0.01
Iron	7439-89-6		NA	< 0.04			
Lead	7439-92-1	< 0.005	< 0.0050	< 0.05		< 0.005	0.012
Mercury	7439-97-6	< 0.0002	< 0.00020	< 0.0002		< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.02	< 0.020	< 0.1		< 0.01	< 0.01
Silver	7440-22-4	< 0.01	< 0.010	< 0.007		< 0.005	< 0.005
Cyanide (mg/L)							
Cyanide (total)	57-12-5		0.0098	< 0.01			

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-12S (10/04) MW-12S 10/31/2004 Investigation Shallow	MW-12S (01/05) MW-12S 01/08/2005 Investigation Shallow	MW-12S (05/05) MW-12S 5/26/2005 Investigation Shallow	MW-12S (07/05) MW-12S 07/27/2005 Investigation Shallow	MW-12S (12/05) MW-12S 12/19/2005 Investigation Shallow	MW-12D (12/99) MW-12D 12/22/99 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
Ethylbenzene	100-41-4	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002
Xylenes	1330-20-7	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.005
PAHs (mg/L)							
Naphthalene	91-20-3	< 0.001	0.00026	< 0.0001	< 0.0001	0.00056	< 0.0018
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0023
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0018
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00021
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00064
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00066
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00021
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00027
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.000013
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00015
Benzo(b)fluoranthene	205-99-2	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.000018
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.000017
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.000023
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.000043
Dibenzo(a,h)anthracene	53-70-3	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00003
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.000076
Metals (mg/L)							
Arsenic	7440-38-2	0.048	0.038	0.04	0.036	0.034	< 0.085
Barium	7440-39-3	0.19	0.14	0.13	0.12	0.14	0.771
Cadmium	7440-43-9	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0105
Chromium	18540-29-9	0.012	< 0.01	< 0.01	0.014	< 0.01	0.0371
Iron	7439-89-6						< 0.04
Lead	7439-92-1	< 0.005	< 0.005	< 0.005	0.011	< 0.005	< 0.05
Mercury	7439-97-6	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	< 0.01	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1
Silver	7440-22-4	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.007
Cyanide (mg/L)							
Cyanide (total)	57-12-5						< 0.01

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-12D (01/04) MW-12D 01/14/04 Investigation Deep	MW-12D (04/04) MW-12D 04/16/04 Investigation Deep	MW-12D (06/04) MW-12D 6/29/2004 Investigation Deep	MW-12D (10/04) MW-12D 10/31/2004 Investigation Deep	MW-12D (01/05) MW-12D 01/08/2005 Investigation Deep	MW-12D (05/05) MW-12D 5/26/2005 Investigation Deep
VOCs (mg/L)							
Benzene	71-43-2	0.0017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	0.0017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	0.009	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)							
Naphthalene	91-20-3	0.0015	< 0.0001	< 0.005	0.0011	< 0.0001	< 0.0004
Acenaphthylene	208-96-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthene	83-32-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Phenanthrene	85-01-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	< 0.0001	< 0.0001	< 0.0001	< 0.00009	< 0.00009	< 0.00009
Benzo(k)fluoranthene	207-08-9	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	< 0.0001	< 0.0001	< 0.0001	< 0.00006	< 0.00006	< 0.00006
Dibenzo(a,h)anthracene	53-70-3	< 0.0001	< 0.0001	< 0.0001	< 0.00005	< 0.00005	< 0.00005
Benzo(g,h,i)perylene	191-24-2	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)							
Arsenic	7440-38-2		0.017	< 0.01	< 0.01	< 0.02	< 0.02
Barium	7440-39-3		0.54	0.53	0.52	0.5	0.52
Cadmium	7440-43-9		< 0.005	0.0054	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9		< 0.01	< 0.01	0.05	< 0.01	< 0.01
Iron	7439-89-6						
Lead	7439-92-1		< 0.005	0.017	< 0.005	< 0.005	< 0.005
Mercury	7439-97-6		< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2		< 0.01	< 0.01	< 0.01	< 0.2	< 0.02
Silver	7440-22-4		< 0.005	< 0.005	0.014	< 0.01	< 0.01
Cyanide (mg/L)							
Cyanide (total)	57-12-5						

NA = Not Analyzed
NR = Not Reported

Table 1
Groundwater Data
Kansas City MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	MW-12D (07/05) MW-12D 07/27/2005 Investigation Deep		MW-12D (12/05) MW-12D 12/19/2005 Investigation Deep	
VOCs (mg/L)					
Benzene	71-43-2	<	0.001	<	0.001
Toluene	108-88-3	<	0.005	<	0.005
Ethylbenzene	100-41-4	<	0.001	<	0.001
Xylenes	1330-20-7	<	0.003	<	0.003
PAHs (mg/L)					
Naphthalene	91-20-3		0.00015	<	0.0001
Acenaphthylene	208-96-8	<	0.0001	<	0.0001
Acenaphthene	83-32-9	<	0.0001	<	0.0001
Fluorene	86-73-7	<	0.0001	<	0.0001
Phenanthrene	85-01-8	<	0.0001	<	0.0001
Anthracene	120-12-7	<	0.0001	<	0.0001
Fluoranthene	206-44-0	<	0.0001	<	0.0001
Pyrene	129-00-0	<	0.0001	<	0.0001
Benzo(a)anthracene	56-55-3	<	0.0001	<	0.0001
Chrysene	218-01-9	<	0.0001	<	0.0001
Benzo(b)fluoranthene	205-99-2	<	0.00009	<	0.00009
Benzo(k)fluoranthene	207-08-9	<	0.0001	<	0.0001
Benzo(a)pyrene	50-32-8	<	0.0001	<	0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	<	0.00006	<	0.00006
Dibenzo(a,h)anthracene	53-70-3	<	0.00005	<	0.00005
Benzo(g,h,i)perylene	191-24-2	<	0.0001	<	0.0001
Metals (mg/L)					
Arsenic	7440-38-2		0.038	<	0.02
Barium	7440-39-3		0.5		0.5
Cadmium	7440-43-9	<	0.005	<	0.005
Chromium	18540-29-9		0.024		0.05
Iron	7439-89-6				
Lead	7439-92-1	<	0.005	<	0.005
Mercury	7439-97-6	<	0.0002	<	0.0002
Selenium	7782-49-2	<	0.02		0.032
Silver	7440-22-4	<	0.01	<	0.01
Cyanide (mg/L)					
Cyanide (total)	57-12-5				

NA = Not Analyzed
NR = Not Reported

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Manhattan MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	MMW-01 (8/04) MMW-01 08/26/04 Investigation Shallow	MMW-01 (8/07) MMW-01 08/27/07 Investigation Shallow	MMW-01 (7/08) MMW-01 07/10/08 Investigation Shallow	MMW-01 (6/09) MMW-01 06/11/09 Investigation Shallow	MMW-01 (10/09) MMW-01 10/28/09 Investigation Shallow
VOCs (mg/L)								
Benzene	71-43-2	0.005	0.005	< 0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Toluene	108-88-3	1	1	< 0.00050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Ethylbenzene	100-41-4	0.7	0.7	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Xylenes	1330-20-7	10	10	< 0.0015	< 0.0030	< 0.0030	< 0.0030	< 0.0030
PAHs (mg/L)								
Acenaphthene	83-32-9	0.253	0.521	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Acenaphthylene	208-96-8	NA	NA	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Anthracene	120-12-7	1.15	2.5	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	218-01-9	0.0223	0.075	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluorene	86-73-7	0.162	0.341	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	91-20-3	0.00111	0.00211	< 0.0010	0.00049	< 0.00010	< 0.00010	< 0.0010
Phenanthrene	85-01-8	NA	NA	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Pyrene	129-00-0	0.202	1.09	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Metals (mg/L)								
Arsenic, Total	7440-38-2	0.01	0.01	**0.055 /R/N**	< 0.020	0.0041	< 0.020	< 0.020
Barium, Total	7440-39-3	2	2	0.79	0.20	0.17	0.16	0.18
Cadmium, Total	7440-43-9	0.005	0.005	**0.01 /R/N**	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	0.056	< 0.010	< 0.010	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	**0.064 /R/N**	< 0.0050	< 0.0050	< 0.0050	0.0069
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	0.017	< 0.020	< 0.020	< 0.020	< 0.020
Silver, Total	7440-22-4	0.0779	0.508	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Cyanide (mg/L)								
Cyanide (total)	57-12-5	0.2	0.2	< 0.0045	< 0.0050	< 0.0050	< 0.0050 J	< 0.0050
Criteria Exceeded in Sample				/R/N				

Abbreviations used in comparisons:

J - Estimated value

J- - Estimated value, biased low.

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Manhattan MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	MMW-02 (8/04) MMW-02 08/26/04 Investigation Shallow	MMW-02 (8/07) MMW-02 08/27/07 Investigation Shallow	MMW-02 (7/08) MMW-02 07/10/08 Investigation Shallow	MMW-02D (7/08) MMW-02 07/10/08 Duplicate Shallow
VOCs (mg/L)							
Benzene	71-43-2	0.005	0.005	**0.96 /R/N**	NA	**2.0 /R/N**	**1.8 /R/N**
Toluene	108-88-3	1	1	**2.2 /R/N**	NA	0.64	0.63
Ethylbenzene	100-41-4	0.7	0.7	**2.4 /R/N**	NA	**2.0 /R/N**	**2 /R/N**
Xylenes	1330-20-7	10	10	2.4	NA	2.3	1.6
PAHs (mg/L)							
Acenaphthene	83-32-9	0.253	0.521	< 0.20	NA	0.035	< 0.010
Acenaphthylene	208-96-8	NA	NA	< 0.20	NA	< 0.0050	0.34
Anthracene	120-12-7	1.15	2.5	< 0.20	NA	< 0.0050	0.0220
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.20	NA	< 0.0050	< 0.010
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.20	NA	< 0.0050	< 0.010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.20	NA	< 0.0050	< 0.010
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.20	NA	< 0.0050	< 0.010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.20	NA	< 0.0050	< 0.010
Chrysene	218-01-9	0.0223	0.075	< 0.20	NA	< 0.0050	< 0.010
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.20	NA	< 0.0050	< 0.010
Fluoranthene	206-44-0	0.255	1.37	< 0.20	NA	< 0.0050	< 0.010
Fluorene	86-73-7	0.162	0.341	< 0.20	NA	0.036	< 0.010
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.20	NA	< 0.0050	< 0.010
Naphthalene	91-20-3	0.00111	0.00211	**8.2 /R/N**	NA	**2.2 /R/N**	**6.4 /R/N**
Phenanthrene	85-01-8	NA	NA	< 0.20	NA	0.0092	< 0.010
Pyrene	129-00-0	0.202	1.09	< 0.20	NA	< 0.0050	< 0.010
Metals (mg/L)							
Arsenic, Total	7440-38-2	0.01	0.01	**0.23 /R/N**	NA	0.001	0.0011
Barium, Total	7440-39-3	2	2	**4 /R/N**	NA	1.50	1.50
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	NA	**0.011 /R/N**	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	**0.18 /R/N**	NA	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	**0.20 /R/N**	NA	0.0089	< 0.0050
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	NA	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	**0.11 /R/N**	NA	< 0.020	< 0.020
Silver, Total	7440-22-4	0.0779	0.508	< 0.0050	NA	< 0.010	< 0.010
Cyanide (mg/L)							
Cyanide (total)	57-12-5	0.2	0.2	0.06	NA	0.069	0.074
Criteria Exceeded in Sample				/R/N		/R/N	/R/N

Abbreviations used in comparisons:
J - Estimated value
J- - Estimated value, biased low.
/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway
/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Manhattan MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	MMW-03 (8/04) MMW-03 08/26/04 Investigation Shallow	MMW-03 (8/07) MMW-03 (8/07) 08/27/07 Investigation Shallow	MMW-03 (7/08) MMW-03 07/10/08 Investigation Shallow	MMW-03 (6/09) MMW-03 (6/09) 06/11/09 Investigation Shallow	MMW-03 (10/09) MMW-03 10/28/09 Investigation Shallow
VOCs (mg/L)								
Benzene	71-43-2	0.005	0.005	0.0021	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Toluene	108-88-3	1	1	< 0.00050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Ethylbenzene	100-41-4	0.7	0.7	< 0.0050	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Xylenes	1330-20-7	10	10	< 0.0015	< 0.0030	< 0.0030	< 0.0030	< 0.0030
PAHs (mg/L)								
Acenaphthene	83-32-9	0.253	0.521	< 0.0010	0.0052	0.0076	0.0067	0.0093
Acenaphthylene	208-96-8	NA	NA	< 0.0010	0.0044	0.007	0.0058	0.0084
Anthracene	120-12-7	1.15	2.5	< 0.0010	< 0.00010	0.0003	< 0.00010	< 0.00010
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.0010	0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	218-01-9	0.0223	0.075	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluorene	86-73-7	0.162	0.341	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	91-20-3	0.00111	0.00211	< 0.0010	< 0.00010	0.00052	< 0.00010	< 0.0010
Phenanthrene	85-01-8	NA	NA	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Pyrene	129-00-0	0.202	1.09	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Metals (mg/L)								
Arsenic, Total	7440-38-2	0.01	0.01	**0.34 /R/N**	**0.030 /R/N**	**0.023 /R/N**	< 0.020	< 0.020
Barium, Total	7440-39-3	2	2	**5 /R/N**	0.94	0.83	0.87	0.91
Cadmium, Total	7440-43-9	0.005	0.005	**0.07 /R/N**	< 0.0050	**0.0057 /R/N**	< 0.0050	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	**0.61 /R/N**	0.018	< 0.010	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	**0.52 /R/N**	< 0.0050	0.0075	< 0.0050	**0.017 /R/N**
Mercury, Total	7439-97-6	0.002	0.002	0.0015	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	**0.085 /R/N**	< 0.020	< 0.020	< 0.020	< 0.040
Silver, Total	7440-22-4	0.0779	0.508	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010
Cyanide (mg/L)								
Cyanide (total)	57-12-5	0.2	0.2	**0.27 /R/N**	**0.41 /R/N**	**0.39 /R/N**	**0.4 J- /R/N**	**0.48 /R/N, J**
Criteria Exceeded in Sample				/R/N	/R/N	/R/N	/R/N	/R/N

Abbreviations used in comparisons:
J - Estimated value
J- - Estimated value, biased low.
/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway
/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Manhattan MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	MMW-04 (6/09) MMW-04 06/11/09 Investigation Shallow	MMW-04 (10/09) MMW-04 10/28/09 Investigation Shallow	MMW-05 (6/09) MMW-05 06/11/09 Investigation Shallow	MMW-05 (10/09) MMW-05 10/28/09 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	0.005	0.005	**0.67 /R/N**	**0.47 /R/N**	0.0044	**0.031 /R/N**
Toluene	108-88-3	1	1	**3.7 /R/N**	**2.1 /R/N**	< 0.0050	< 0.005
Ethylbenzene	100-41-4	0.7	0.7	**1.3 /R/N**	**0.84 /R/N**	< 0.0010	0.0016
Xylenes	1330-20-7	10	10	3	1.6	< 0.0030	0.005
PAHs (mg/L)							
Acenaphthene	83-32-9	0.253	0.521	< 0.00010	< 0.00010	0.0056	0.0077
Acenaphthylene	208-96-8	NA	NA	0.56	< 0.00010	< 0.00010	< 0.00010
Anthracene	120-12-7	1.15	2.5	< 0.00010	0.0067	< 0.00010	< 0.00010
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	218-01-9	0.0223	0.075	0.00013	< 0.00010	< 0.00010	< 0.00010
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	0.0017	0.0046	< 0.00010	< 0.00010
Fluorene	86-73-7	0.162	0.341	< 0.00010	< 0.00010	< 0.00010	0.0015
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	91-20-3	0.00111	0.00211	**4.2 /R/N**	**2.4 /R/N**	0.00061	< 0.0010
Phenanthrene	85-01-8	NA	NA	< 0.00010	0.025	< 0.00010	< 0.00010
Pyrene	129-00-0	0.202	1.09	0.0049	0.003	< 0.00010	< 0.00010
Metals (mg/L)							
Arsenic, Total	7440-38-2	0.01	0.01	< 0.020	< 0.020	< 0.020	< 0.020
Barium, Total	7440-39-3	2	2	0.6	0.61	0.78	0.72
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	< 0.010	< 0.010	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	< 0.0050	0.0084	< 0.0050	0.013
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	< 0.020	< 0.020	< 0.020	< 0.020
Silver, Total	7440-22-4	0.0779	0.508	< 0.010	< 0.010	< 0.010	< 0.010
Cyanide (mg/L)							
Cyanide (total)	57-12-5	0.2	0.2	0.0057	0.01 J	0.05	0.064 J
Criteria Exceeded in Sample				/R/N	/R/N		/R/N

Abbreviations used in comparisons:
J - Estimated value
J- - Estimated value, biased low.
/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway
/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Salina MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	SLMW-1 (8/05) SLMW-1 08/25/05 Investigation Shallow	SLMW-1 (8/07) SLMW-1 08/28/07 Investigation Shallow	SLMW-1 (6/09) SLMW-1 06/10/09 Investigation Shallow	SLMW-1 (10/09) SLMW-1 10/26/09 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	0.005	0.005	**0.053 /R/N**	< 0.0010	< 0.0010	< 0.0010
Toluene	108-88-3	1	1	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Ethylbenzene	100-41-4	0.7	0.7	0.0096	< 0.0010	< 0.0010	< 0.0010
Xylenes	1330-20-7	10	10	0.0082	< 0.0030	< 0.0030	< 0.0030
PAHs (mg/L)							
Acenaphthene	83-32-9	0.253	0.521	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Acenaphthylene	208-96-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Anthracene	120-12-7	1.15	2.5	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.00010	< 0.00010	< 0.00010	< 0.00010 UJ
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00010	< 0.00010	< 0.00010	< 0.00010 UJ
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	218-01-9	0.0223	0.075	< 0.00010	< 0.00010	< 0.00010	< 0.00010 UJ
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	< 0.00010	< 0.00010	< 0.00010	< 0.00010 UJ
Fluorene	86-73-7	0.162	0.341	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	91-20-3	0.00111	0.00211	0.00010	0.00077	< 0.00010	< 0.0010 UJ
Phenanthrene	85-01-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Pyrene	129-00-0	0.202	1.09	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Metals (mg/L)							
Arsenic, Total	7440-38-2	0.01	0.01	< 0.020	**0.025 /R/N**	**0.048 /R/N**	< 0.020
Barium, Total	7440-39-3	2	2	0.084	0.11	0.22	0.15
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	< 0.010	< 0.010	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	< 0.0050	< 0.0050	0.014	0.0068
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	0.033	< 0.020	< 0.020	< 0.020
Silver, Total	7440-22-4	0.0779	0.508	0.011	< 0.010	< 0.010	< 0.010
Cyanide (mg/L)							
Cyanide (total)	57-12-5	0.2	0.2	0.068	0.071	0.043 J-	0.064
Criteria Exceeded in Sample				/R/N	/R/N	/R/N	

Abbreviations used in comparisons:

J- - Qualified as estimated, biased low, during QC evaluation

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Salina MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	SLMW-2 (8/05) SLMW-2 08/25/05 Investigation Shallow	SLMW-2 (8/07) SLMW-2 08/28/07 Investigation Shallow	SLMW-2 (6/09) SLMW-2 06/20/09 Investigation Shallow	SLMW-2 (10/09) SLMW-2 10/27/09 Investigation Shallow
VOCs (mg/L)							
Benzene	71-43-2	0.005	0.005	**0.96 /R/N**	0.0011	**0.006 /R/N**	**0.0055 /R/N**
Toluene	108-88-3	1	1	< 0.50	< 0.0050	0.01	< 0.0050
Ethylbenzene	100-41-4	0.7	0.7	0.24	< 0.0010	0.039	0.0072
Xylenes	1330-20-7	10	10	0.25	< 0.0030	0.038	0.012
PAHs (mg/L)							
Acenaphthene	83-32-9	0.253	0.521	0.015	0.011	0.057	0.045 J
Acenaphthylene	208-96-8	NA	NA	0.043	0.012	0.13	0.09 J
Anthracene	120-12-7	1.15	2.5	0.0070	0.0049	0.012	0.0028 J
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.00010	**0.00024 /R**	< 0.0001	**0.0023 /R/N, J**
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.00010	**0.00027 /R/N**	**0.0006 /R/N**	**0.0018 /R/N, J**
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00010	0.00012	**0.00031 /R/N**	**0.00085 /R/N, J**
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.00010	0.00021	0.00031	0.0011 J
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.00010	< 0.00010	0.00018	0.00036 J
Chrysene	218-01-9	0.0223	0.075	< 0.00010	0.00043	0.00084	0.0018 J
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00010	< 0.00010	< 0.0001	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	0.0058	0.0045	0.0079	0.011 J
Fluorene	86-73-7	0.162	0.341	0.059	0.022	0.073	0.034 J
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.00010	0.00015	**0.00026 /R/N**	**0.0008 /R/N**
Naphthalene	91-20-3	0.00111	0.00211	**0.14 /R/N**	**0.0056 /R**	**0.092 /R/N**	**0.0025 /R/N, J**
Phenanthrene	85-01-8	NA	NA	0.044	0.011	0.062	0.026 J
Pyrene	129-00-0	0.202	1.09	0.0076	0.0066	0.01	0.013 J
Metals (mg/L)							
Arsenic, Total	7440-38-2	0.01	0.01	**0.023 /R/N**	**0.038 /R/N**	**0.068 /R/N**	**0.16 /R/N**
Barium, Total	7440-39-3	2	2	0.40	0.32	0.14	0.098
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	< 0.010	< 0.010	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	< 0.0050	< 0.0050	**0.017 /R/N**	0.011
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	< 0.020	< 0.020	< 0.020	< 0.040
Silver, Total	7440-22-4	0.0779	0.508	< 0.010	< 0.010	< 0.010	< 0.010
Cyanide (mg/L)							
Cyanide (total)	57-12-5	0.2	0.2	0.14	0.19	0.12 J-	0.13 J
Criteria Exceeded in Sample				/R/N	/R/N	/R/N	/R/N

Abbreviations used in comparisons:
J- - Qualified as estimated, biased low, during QC evaluation
/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway
/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Salina MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type Screen Depth CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	SLMW-3 (8/05) SLMW-3 08/25/05 Investigation Shallow	SLMW-3 (8/05) SLMW-3 08/25/05 Duplicate Shallow	SLMW-3 (8/07) SLMW-3 08/28/07 Investigation Shallow	SLMW-3 (8/07) SLMW-3 08/28/07 Duplicate Shallow	SLMW-3 (6/09) SLMW-3 06/10/09 Investigation Shallow	SLMW-3 (10/09) SLMW-3 10/26/09 Investigation Shallow
VOCs (mg/L)									
Benzene	71-43-2	0.005	0.005	**0.22 /R/N**	**0.087 /R/N**	0.0018	0.0015	< 0.0010	0.0022
Toluene	108-88-3	1	1	< 0.050	< 0.25	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Ethylbenzene	100-41-4	0.7	0.7	0.048	0.063	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Xylenes	1330-20-7	10	10	0.048	0.14	< 0.0030	< 0.0030	< 0.0030	< 0.0030
PAHs (mg/L)									
Acenaphthene	83-32-9	0.253	0.521	< 0.00010	< 0.00010	< 0.00010	0.00035	0.00018	0.00024
Acenaphthylene	208-96-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Anthracene	120-12-7	1.15	2.5	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010 UJ
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010 UJ
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	218-01-9	0.0223	0.075	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010 UJ
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	206-44-0	0.255	1.37	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010 UJ
Fluorene	86-73-7	0.162	0.341	< 0.00010	< 0.00010	< 0.00010	< 0.00010	0.00024	0.0004
Indeno(1,2,3-cd)pyrene	193-39-5	0.000117	0.000392	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	91-20-3	0.00111	0.00211	0.00070	0.00093	0.00062	**0.0017 /R**	0.00032	**0.0012 /R, J**
Phenanthrene	85-01-8	NA	NA	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Pyrene	129-00-0	0.202	1.09	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Metals (mg/L)									
Arsenic, Total	7440-38-2	0.01	0.01	< 0.020	**0.028 /R/N**	**0.046 /R/N**	**0.046 /R/N**	**0.02 /R/N**	< 0.020
Barium, Total	7440-39-3	2	2	0.50	0.45	0.39	0.39	0.36	0.4
Cadmium, Total	7440-43-9	0.005	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chromium, Total	18540-29-9	0.1	0.1	0.025	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead, Total	7439-92-1	0.015	0.015	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.013	0.0059
Mercury, Total	7439-97-6	0.002	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Selenium, Total	7782-49-2	0.05	0.05	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Silver, Total	7440-22-4	0.0779	0.508	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010 R
Cyanide (mg/L)									
Cyanide (total)	57-12-5	0.2	0.2	0.010	< 0.0045	0.0057	0.017	< 0.0050	0.034 J
Criteria Exceeded in Sample				/R/N	/R/N	/R/N	/R/N	/R/N	

Abbreviations used in comparisons:

J- - Qualified as estimated, biased low, during QC evaluation

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Topeka MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	TP-MW-1 (12/2004) TP-MW-1 12/1/2004 Combined	TP-MW-1 (1/2005) TP-MW-1 1/10/2005 Investigation	TP-MW-1 (5/2005) TP-MW-1 5/27/2005 Investigation	TP-MW-1 (7/2005) TP-MW-1 07/28/2005 Investigation	TP-MW-1 (12/2005) TP-MW-1 12/16/2005 Combined	TP-MW-1 (10/27/10) TP-MW-1 10/27/2010 Investigation	TP-MW-1 (5/24/11) TP-MW-1 05/24/2011 Investigation
VOCs (mg/L)										
Benzene	71-43-2	0.005	0.005	< 0.0005	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	1	1	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	0.7	0.7	0.00052	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	10	10	< 0.0015	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)										
Acenaphthene	83-32-9	0.253	0.521	< 0.001	0.00028	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthylene	208-96-8	NA	NA	0.0016	0.0026	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	1.15	2.5	< 0.001	0.00036	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.001	< 0.0001	< 0.00009	< 0.00009	< 0.00009	< 0.0001	< 0.0001
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	0.0223	0.075	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.001	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.0001	< 0.0001
Fluoranthene	206-44-0	0.255	1.37	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	0.162	0.341	< 0.001	0.0035	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	0.000117	0.000392	< 0.001	< 0.0001	< 0.00006	< 0.00006	< 0.00006	< 0.0001	< 0.0001
Naphthalene	91-20-3	0.00111	0.00211	< 0.001	0.00022	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001
Phenanthrene	85-01-8	NA	NA	< 0.001	0.0025	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	0.202	1.09	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)										
Arsenic	7440-38-2	0.01	0.01	**0.012 /R/N**	NA	< 0.02	< 0.02	< 0.02	0.0012	< 0.001
Barium	7440-39-3	2	2	0.115	NA	0.088	0.1	0.105	0.056	0.081
Cadmium	7440-43-9	0.005	0.005	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	0.1	0.1	0.012	NA	< 0.01	< 0.0099	< 0.01	< 0.01	< 0.01
Lead	7439-92-1	0.015	0.015	< 0.005	NA	< 0.005	**0.09 /R/N**	< 0.005	< 0.025	< 0.005
Mercury	7439-97-6	0.002	0.002	< 0.0002	NA	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	0.05	0.05	0.03	NA	0.022	< 0.02	< 0.02	< 0.02	0.03
Silver	7440-22-4	0.0779	0.508	< 0.005	NA	< 0.01	< 0.0099	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)										
Cyanide (total)	57-12-5	0.2	0.2	0.015	NA	< 0.0045			0.0062	0.01
Criteria Exceeded in Sample				/R/N			/R/N			

Abbreviations used in comparisons:

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Topeka MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	TP-MW-2 (12/2004) TP-MW-2 12/1/2004 Investigation	TP-MW-2 (1/2005) TP-MW-2 1/10/2005 Investigation	TP-MW-2 (5/2005) TP-MW-2 5/27/2005 Investigation	TP-MW-2 (7/2005) TP-MW-2 07/28/2005 Investigation	TP-MW-2 (12/2005) TP-MW-2 12/16/2005 Investigation	TP-MW-2 (10/ 27/2010) TP-MW-2 10/27/2010 Investigation	TP-MW-2 (5/24/2011) TP-MW-2 05/24/2011 Investigation
VOCs (mg/L)										
Benzene	71-43-2	0.005	0.005	< 0.0005	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	1	1	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	0.7	0.7	< 0.0005	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	10	10	< 0.0015	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)										
Acenaphthene	83-32-9	0.253	0.521	< 0.001	0.00014	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthylene	208-96-8	NA	NA	< 0.001	0.0012	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	1.15	2.5	< 0.001	0.00024	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.001	< 0.0001	< 0.00009	< 0.00009	< 0.00009	< 0.0001	< 0.0001
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	0.0223	0.075	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.001	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.0001	< 0.0001
Fluoranthene	206-44-0	0.255	1.37	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Fluorene	86-73-7	0.162	0.341	< 0.001	0.0018	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	0.000117	0.000392	< 0.001	< 0.0001	< 0.00006	< 0.00006	< 0.00006	< 0.0001	< 0.0001
Naphthalene	91-20-3	0.00111	0.00211	< 0.001	0.00011	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.001
Phenanthrene	85-01-8	NA	NA	< 0.001	0.0016	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	0.202	1.09	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Metals (mg/L)										
Arsenic	7440-38-2	0.01	0.01	< 0.01	NA	**0.03 /R/N**	< 0.02	< 0.02	0.0075	0.0057
Barium	7440-39-3	2	2	0.097	NA	0.084	0.083	0.076	0.084	0.076
Cadmium	7440-43-9	0.005	0.005	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	0.1	0.1	< 0.01	NA	< 0.01	< 0.0099	< 0.01	< 0.01	< 0.01
Lead	7439-92-1	0.015	0.015	< 0.005	NA	< 0.005	**0.089 /R/N**	< 0.005	< 0.025	< 0.005
Mercury	7439-97-6	0.002	0.002	< 0.0002	NA	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	0.05	0.05	0.045	NA	< 0.02	< 0.02	< 0.02	0.021	0.032
Silver	7440-22-4	0.0779	0.508	< 0.005	NA	< 0.01	< 0.0099	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)										
Cyanide (total)	57-12-5	0.2	0.2	0.013	NA	< 0.0045			0.006	< 0.005
Criteria Exceeded in Sample						/R/N	/R/N			

Abbreviations used in comparisons:

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Topeka MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	TP-MW-3 (12/2004) TP-MW-3 12/1/2004 Investigation	TP-MW-3 (1/2005) TP-MW-3 1/10/2005 Investigation	TP-MW-3 (5/2005) TP-MW-3 5/27/2005 Combined	TP-MW-3 (7/2005) TP-MW-3 07/28/2005 Combined	TP-MW-3 (12/2005) TP-MW-3 12/16/2005 Investigation	TP-MW-3 (5/2013) TP-MW-3 05/23/2013 Investigation
VOCs (mg/L)									
Benzene	71-43-2	0.005	0.005	**0.0097 /R/N**	NA	< 0.001	**0.00665 /R/N**	< 0.001	0.015
Toluene	108-88-3	1	1	< 0.025	NA	< 0.005	0.00565	< 0.005	< 0.005
Ethylbenzene	100-41-4	0.7	0.7	0.087	NA	0.009	0.0296	0.031	0.037
Xylenes	1330-20-7	10	10	0.1	NA	0.025	0.115	0.04	0.12
PAHs (mg/L)									
Acenaphthene	83-32-9	0.253	0.521	0.018	0.016	< 0.0001	< 0.0001	0.012	0.07
Acenaphthylene	208-96-8	NA	NA	0.082	0.14	0.029	0.07	0.084	0.15
Anthracene	120-12-7	1.15	2.5	0.0096	0.012	0.00605	0.0094	0.0067	0.011
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.001	**0.00038 /R**	**0.00051 /R**	0.00018	0.00017	0.00035
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00005
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.001	< 0.0001	0.00014	< 0.00009	< 0.00009	< 0.00005
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00005
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00005
Chrysene	218-01-9	0.0223	0.075	< 0.001	0.00032	0.00093	0.00038	< 0.0001	< 0.00026
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.001	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Fluoranthene	206-44-0	0.255	1.37	0.0051	0.009	0.00425	0.006	0.0038	0.0085
Fluorene	86-73-7	0.162	0.341	0.04	0.096	< 0.0001	< 0.0001	0.031	0.042
Indeno(1,2,3-c,d)pyrene	193-39-5	0.000117	0.000392	< 0.001	< 0.0001	< 0.00006	< 0.00006	< 0.00006	< 0.00005
Naphthalene	91-20-3	0.00111	0.00211	**0.028 /R/N**	**0.012 /R/N**	**0.0051 /R/N**	**0.0485 /R/N**	**0.0025 /R/N**	**0.22 /R/N**
Phenanthrene	85-01-8	NA	NA	0.044	0.071	0.0104	0.04	0.042	0.083
Pyrene	129-00-0	0.202	1.09	0.006	0.0075	0.00505	0.0076	0.0077	0.0098
Metals (mg/L)									
Arsenic	7440-38-2	0.01	0.01	**0.021 /R/N**	NA	< 0.02	< 0.02	< 0.02	0.0020
Barium	7440-39-3	2	2	0.29	NA	0.365	0.21	0.078	0.30
Cadmium	7440-43-9	0.005	0.005	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	0.1	0.1	0.012	NA	0.0105	< 0.0099	< 0.01	< 0.01
Lead	7439-92-1	0.015	0.015	< 0.005	NA	**0.0155 /R/N**	**0.062 /R/N**	< 0.005	0.0050
Mercury	7439-97-6	0.002	0.002	< 0.0002	NA	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	0.05	0.05	0.011	NA	< 0.02	< 0.02	< 0.02	0.028
Silver	7440-22-4	0.0779	0.508	< 0.005	NA	< 0.01	< 0.0099	< 0.01	< 0.01
Cyanide (mg/L)									
Cyanide (total)	57-12-5	0.2	0.2	< 0.0045	NA	< 0.0045			0.0057
Criteria Exceeded in Sample				/R/N	/R	/R/N	/R/N	/R	/R

Abbreviations used in comparisons:

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 2
Comparison of Groundwater Data to Tier 2 Screening Values
Topeka MGP Site
ONEOK

Chemical	Sample Name Sample Location Date Collected Sample Type CAS No.	Residential Tier 2 Screening Value for the Groundwater Use Pathway R	Non-Residential Tier 2 Screening Value for the Groundwater Use Pathway N	TP-MW-4 (7/2005) TP-MW-4 07/28/2005 Investigation	TP-MW-4 (12/2005) TP-MW-4 12/16/2005 Investigation	TP-MW-4 (10/27/2010) TP-MW-4 10/27/2010 Investigation	TP-MW-4 (5/24/2011) TP-MW-4 05/24/2011 Investigation	TP-MW-4 (5/24/2011) Dup TP-MW-4 05/24/2011 Duplicate
VOCs (mg/L)								
Benzene	71-43-2	0.005	0.005	< 0.001	0.0022	< 0.001	< 0.001	< 0.001
Toluene	108-88-3	1	1	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	100-41-4	0.7	0.7	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	1330-20-7	10	10	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
PAHs (mg/L)								
Acenaphthene	83-32-9	0.253	0.521	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Acenaphthylene	208-96-8	NA	NA	0.0008	0.0084	< 0.0001	< 0.0001	< 0.0001
Anthracene	120-12-7	1.15	2.5	< 0.0001	0.00031	0.00013	0.00059	0.0006
Benzo(a)anthracene	56-55-3	0.000223	0.00075	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(a)pyrene	50-32-8	0.0002	0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(b)fluoranthene	205-99-2	0.00016	0.000537	< 0.00009	< 0.00009	< 0.0001	< 0.0001	< 0.0001
Benzo(g,h,i)perylene	191-24-2	NA	NA	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Benzo(k)fluoranthene	207-08-9	0.00162	0.00543	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chrysene	218-01-9	0.0223	0.075	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Dibenzo(a,h)anthracene	53-70-3	0.00000805	0.000027	< 0.00005	< 0.00005	< 0.0001	< 0.0001	< 0.0001
Fluoranthene	206-44-0	0.255	1.37	< 0.0001	0.0006	0.00025	0.00061	0.00065
Fluorene	86-73-7	0.162	0.341	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Indeno(1,2,3-c,d)pyrene	193-39-5	0.000117	0.000392	< 0.00006	< 0.00006	< 0.0001	< 0.0001	< 0.0001
Naphthalene	91-20-3	0.00111	0.00211	0.00025	< 0.0001	< 0.001	< 0.001	< 0.001
Phenanthrene	85-01-8	NA	NA	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pyrene	129-00-0	0.202	1.09	< 0.0001	0.00047	0.00024	0.00067	0.0007
Metals (mg/L)								
Arsenic	7440-38-2	0.01	0.01	< 0.02	< 0.02	0.0017	< 0.001	< 0.001
Barium	7440-39-3	2	2	0.16	0.11	0.11	0.11	0.11
Cadmium	7440-43-9	0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	18540-29-9	0.1	0.1	< 0.0099	< 0.01	< 0.01	< 0.01	< 0.01
Lead	7439-92-1	0.015	0.015	**0.13 /R/N**	< 0.005	< 0.025	< 0.005	< 0.005
Mercury	7439-97-6	0.002	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Selenium	7782-49-2	0.05	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Silver	7440-22-4	0.0779	0.508	< 0.0099	< 0.01	< 0.01	< 0.01	< 0.01
Cyanide (mg/L)								
Cyanide (total)	57-12-5	0.2	0.2			< 0.005	0.024	0.024
Criteria Exceeded in Sample				/R/N				

Abbreviations used in comparisons:

/R - Indicates an exceedance of the residential Tier 2 screening value for the groundwater use pathway

/N - Indicates an exceedance of the non-residential Tier 2 screening value for the groundwater use pathway

Table 3
Groundwater Analytical Results - June 2015
Supplemental Site Investigation
Atchison, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ATMW-01 / GW01	ATMW-02 / GW01	ATMW-03 / GW01	ATMW-04 / GW01	ATMW-05 / GW01
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	**183**
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	**19.8**
Toluene	ug/L	1,000	10,00	1 U	1 U	1 U	1 U	5 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	15 U
PAHs								
Acenaphthene	ug/L	253	521	0.091 U	0.091 U	0.091 U	0.091 U	**8.3**
Acenaphthylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	0.091 U	**0.24**
Anthracene	ug/L	1,150	2,500	0.091 U	0.091 U	0.091 U	0.091 U	**3.0**
Benzo(a)anthracene	ug/L	0.223	0.75	0.091 U	0.091 U	0.091 U	0.091 U	**0.83**
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	0.091 U	0.091 U	0.091 U	**0.21**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091 U	0.091 U	0.091 U	0.091 U	**0.20**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	0.091 U	0.091 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091 U	0.091 U	0.091 U	0.091 U	**0.28**
Chrysene	ug/L	22.3	75	0.091 U	0.091 U	0.091 U	0.091 U	**0.77**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091 U	0.091 U	0.091 U	0.091 U	0.091 U
Fluoranthene	ug/L	255	1,370	0.091 U	0.091 U	0.091 U	0.091 U	**6.8**
Fluorene	ug/L	162	341	0.091 U	0.091 U	0.091 U	0.091 U	**7.7**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091 U	0.091 U	0.091 U	0.091 U	0.091 U
Naphthalene	ug/L	1.11	2.11	0.45 U	0.45 U	0.45 U	0.45 U	**71.1**
Phenanthrene	ug/L	NA	NA	0.45 U	0.45 U	0.45 U	0.45 U	**13.4**
Pyrene	ug/L	202	1,090	0.091 U	0.091 U	0.091 U	0.091 U	**4.8**
Inorganics								
Arsenic	ug/L	10	10	10 U	**35.0**	10 U	**23.6**	**168**
Barium	ug/L	2,000	2,000	**135**	**242**	**66.1**	**176**	**535**
Cadmium	ug/L	5	5	5 U	5 U	**5.1**	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	**5.0**
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

Notes:
B - Analyte was detected in the associated method blank.
BTEX - benzene, toluene, ethylbenzene, xylene
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 3
Groundwater Analytical Results - June 2015
Supplemental Site Investigation
Atchison, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	DUP-1 / GW01 Duplicate of ATMW-05/GW01	ATMW-06 / GW01	ATMW-08 / GW01	ATMW-09 / GW01
BTEX							
Benzene	ug/L	5	5	**186**	1 U	1 U	**10.5**
Ethylbenzene	ug/L	700	700	**18.1**	1 U	1 U	1 U
Toluene	ug/L	1,000	10,00	10 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	30 U	3 U	3 U	3 U
PAHs							
Acenaphthene	ug/L	253	521	**6.3**	0.091 U	**0.10 B**	**0.82 B**
Acenaphthylene	ug/L	NA	NA	**0.20**	0.091 U	0.091 U	**0.20**
Anthracene	ug/L	1,150	2,500	**1.1**	0.091 U	0.091 U	**0.25 B**
Benzo(a)anthracene	ug/L	0.223	0.75	0.091 U	0.091 U	0.091 U	**0.21**
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	0.091 U	0.091 U	**0.15**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091 U	0.091 U	0.091 U	**0.13**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	0.091 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091 U	0.091 U	0.091 U	**0.12**
Chrysene	ug/L	22.3	75	0.091 U	0.091 U	0.091 U	**0.25 B**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091 U	0.091 U	0.091 U	0.091 U
Fluoranthene	ug/L	255	1,370	**1.0**	0.091 U	**0.20**	**0.72 B**
Fluorene	ug/L	162	341	**5.3**	0.091 U	0.091 U	**0.23 B**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091 U	0.091 U	0.091 U	0.091 U
Naphthalene	ug/L	1.11	2.11	**64.3**	0.45 U	**0.56 B**	**3.6**
Phenanthrene	ug/L	NA	NA	**3.7**	0.45 U	0.45 U	0.45 U
Pyrene	ug/L	202	1,090	**0.63**	0.091 U	**0.18 B**	**0.93** B
Inorganics							
Arsenic	ug/L	10	10	**162**	10 U	10 U	**23.1**
Barium	ug/L	2,000	2,000	**532**	**51.2**	**83.0**	**120**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U

Notes:
B - Analyte was detected in the associated method blank.
BTEX - benzene, toluene, ethylbenzene, xylene
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 1-2
Groundwater Analytical Results - July 2016
Atchison, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	ATCHISON - ATMW-01	ATCHISON - ATMW-02	ATCHISON - ATMW-03	ATCHISON - ATMW-04	ATCHISON - ATMW-05	ATCHISON - DUP-1 Duplicate of ATMW-05	ATCHISON - ATMW-06	ATCHISON - ATMW-07	ATCHISON - ATMW-09	ATCHISON - ATIDW-1
BTEX													
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	**60.5**	**60.6**	1 U	**1.1**	**488**	**3.9**
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	**4.3**	**4.3**	1 U	1 U	10 U	1 U
Toluene	ug/L	1,000	10,00	1 U	1 U	1 U	1 U	**1.0**	1 U	1 U	1 U	10 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	**25.4**	3 U
PAHs													
Acenaphthene	ug/L	253	521	0.10 U	0.10 U	0.10 U	0.10 U	**2.0**	**2.4**	0.10 U	**4.2**	0.11 U	**0.32**
Acenaphthylene	ug/L	NA	NA	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	**0.21**
Anthracene	ug/L	1,150	2,500	0.10 U	0.10 U	0.10 U	0.10 U	**0.54**	**0.56**	0.10 U	**0.41**	0.11 U	**0.19**
Benzo(a)anthracene	ug/L	0.223	0.75	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	**0.25**
Benzo(a)pyrene	ug/L	0.2	0.2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	**0.32**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	**0.42**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	**0.17**
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	0.10 U
Chrysene	ug/L	22.3	75	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	**0.31**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	0.10 U
Fluoranthene	ug/L	255	1,370	0.50 U	0.50 U	0.50 U	0.50 U	**0.62**	**0.70**	0.50 U	0.56 U	0.56 U	**0.59**
Fluorene	ug/L	162	341	0.10 U	0.10 U	0.10 U	0.10 U	**1.7**	**1.7**	0.10 U	**0.89**	0.11 U	**0.22**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.11 U	0.11 U	**0.14**
Naphthalene	ug/L	1.11	2.11	0.50 U	0.50 U	0.50 U	**0.64**	**25.8**	**24.9**	**0.64**	0.56 U	0.56 U	**0.63**
Phenanthrene	ug/L	NA	NA	0.50 U	0.50 U	0.50 U	**0.50**	**1.1**	**1.2**	0.50 U	**1.5**	0.56 U	**0.66**
Pyrene	ug/L	202	1,090	0.10 U	0.10 U	0.10 U	0.10 U	**0.35**	**0.44**	0.10 U	**0.27**	0.11 U	**0.70**
Inorganics													
Arsenic	ug/L	10	10	10 U	**120**	10 U	**18.4**	**205**	**201**	10 U	10 U	**23**	**37**
Barium	ug/L	2,000	2,000	**116**	**568**	**52.3**	**108**	**572**	**546**	**56.5**	**430**	**281**	**144**
Cadmium	ug/L	5	5	5 U	5 U	**5.3**	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5.6 U	5 U	**6**	**5.4**	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	**0.018**	0.005 U	**0.047**	**0.045**	**0.030**	0.005 U	**0.033**	**0.011**

Notes:
B - Analyte was detected in the associated method blank.
BTEX - benzene, toluene, ethylbenzene, xylene
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 2-2
Groundwater Analytical Results - June 2015
Concordia, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	CONCORDIA - CMW-02	CONCORDIA - CMW-102 Duplicate of CMW-02	CONCORDIA - CMW-03
BTEX						
Benzene	ug/L	5	5	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U
PAHs						
Acenaphthene	ug/L	253	521	0.1 U	0.095 U	0.1 U
Acenaphthylene	ug/L	NA	NA	0.1 U	0.095 U	0.1 U
Anthracene	ug/L	1,150	25,00	0.1 U	0.095 U	0.1 U
Benzo(a)anthracene	ug/L	0.223	0.75	0.1 U	0.095 U	0.1 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.1 U	0.095 U	0.1 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.1 U	0.095 U	0.1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.1 U	0.095 U	0.1 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.1 U	0.095 U	0.1 U
Chrysene	ug/L	22.3	75	0.1 U	0.095 U	0.1 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.1 U	0.095 U	0.1 U
Fluoranthene	ug/L	255	1370	**0.15 B**	**0.16 B**	**0.15 B**
Fluorene	ug/L	162	341	0.1 U	0.095 U	0.1 U
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.1 U	0.095 U	0.1 U
Naphthalene	ug/L	1.11	2.11	0.5 U	0.48 U	0.5 U
Phenanthrene	ug/L	NA	NA	0.5 U	0.48 U	0.5 U
Pyrene	ug/L	202	1090	0.1 U	0.095 U	0.1 U
Inorganics						
Arsenic	ug/L	10	10	**11.1**	10 U	**11.0**
Barium	ug/L	2,000	2,000	**136**	**132**	**262**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	0.005 U

Notes:
B - analyte was detected in the associated method blank.
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
PAH - polycyclic aromatic hydrocarbons
NA - not available
U - non-detect
ug/L - micrograms per liter

Table 2-2
Groundwater Analytical Results - June 2015
Concordia, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	CONCORDIA - CMW-04	CONCORDIA - CMW-05	CONCORDIA - CMIDW-1
BTEX						
Benzene	ug/L	5	5	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U
PAHs						
Acenaphthene	ug/L	253	521	**0.12**	0.1 U	**0.13**
Acenaphthylene	ug/L	NA	NA	0.1 U	0.1 U	0.1 U
Anthracene	ug/L	1,150	25,00	0.1 U	0.1 U	0.1 U
Benzo(a)anthracene	ug/L	0.223	0.75	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.1 U	0.1 U	0.1 U
Chrysene	ug/L	22.3	75	0.1 U	0.1 U	0.1 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.1 U	0.1 U	0.1 U
Fluoranthene	ug/L	255	1370	**0.17 B**	**0.20 B**	**0.18 B**
Fluorene	ug/L	162	341	0.1 U	0.1 U	0.1 U
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.1 U	0.1 U	0.1 U
Naphthalene	ug/L	1.11	2.11	0.5 U	**0.50**	0.5 U
Phenanthrene	ug/L	NA	NA	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	202	1090	0.1 U	**0.34**	**0.13**
Inorganics						
Arsenic	ug/L	10	10	10 U	**20.2**	10 U
Barium	ug/L	2,000	2,000	**116**	**341**	**153**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	**0.0096**	0.005 U

Notes:
B - analyte was detected in the associated method blank.
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
PAH - polycyclic aromatic hydrocarbons
NA - not available
U - non-detect
ug/L - micrograms per liter

Table 2-2
Groundwater Analytical Results - July 2016
Concordia, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	CONCORDIA - CMW-02		CONCORDIA - CMW-03		CONCORDIA - CMW-04		CONCORDIA - CMW-05		CONCORDIA - DUP-1 Duplicate of CMW-05		CONCORDIA - CMIDW-1	
BTEX															
Benzene	ug/L	5	5	1	U	1	U	1	U	**1.6**		**1.4**		1	U
Ethylbenzene	ug/L	700	700	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	ug/L	1,000	1,000	1	U	1	U	1	U	**1.1**		**1.0**		**47.5**	
Xylene (Total)	ug/L	10,000	10,000	3	U	3	U	3	U	3	U	3	U	3	U
PAHs															
Acenaphthene	ug/L	253	521	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	NA	NA	0.091	U	0.1	U	0.1	U	**0.19**		**0.21**		0.1	U
Anthracene	ug/L	1,150	25,00	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)anthracene	ug/L	0.223	0.75	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	0.2	0.2	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Chrysene	ug/L	22.3	75	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluoranthene	ug/L	255	1370	0.45	U	0.5	U	0.5	U	0.5	**U**	0.5	U	0.5	U
Fluorene	ug/L	162	341	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Naphthalene	ug/L	1.11	2.11	0.45	U	0.5	U	0.5	U	**0.82**		**0.92**		**1.3**	
Phenanthrene	ug/L	NA	NA	0.45	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	202	1090	0.091	U	**0.14**		0.1	U	0.1	**U**	**0.13**		**0.12**	
Inorganics															
Arsenic	ug/L	10	10	**11.1**		10	U	10	U	**21.5**		**22.6**		10	U
Barium	ug/L	2,000	2,000	**119**		**206**		**118**		**475**		**472**		**506**	
Cadmium	ug/L	5	5	5	U	5	U	5	U	5	U	5	U	5	U
Chromium	ug/L	100	100	5	U	5	U	5	U	5	U	5	U	5	U
Lead	ug/L	15	15	5	U	5	U	5	U	5	U	5	U	5	U
Selenium	ug/L	50	50	15	U	15	U	15	U	15	U	15	U	15	U
Silver	ug/L	77.9	508	7	U	7	U	7	U	7	U	7	U	7	U
Mercury	ug/L	2	2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cyanide	mg/L	0.2	0.2	5	U	0.005	U	0.005	U	**0.0065**		0.005	U	0.005	U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
PAH - polycyclic aromatic hydrocarbons
NA - not available
U - non-detect
ug/L - micrograms per liter

Table 3-2
Groundwater Analytical Results - June 2015
Hutchinson, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	HUTCHINSON - HMW-1S	HUTCHINSON - HMW-1D	HUTCHINSON - HMW-2	HUTCHINSON - HMW-4S	HUTCHINSON - HMW-401S Duplicate of HMW-4S
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	1.0U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	**37.0**	**32.6**
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	1.0U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	**17.7**	**16.5**
PAHs								
Acenaphthene	ug/L	253	521	0.091 U	0.091 U	**0.11**	**108**	**103**
Acenaphthylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	**6.4**	**7.1**
Anthracene	ug/L	1,150	25,00	0.091 U	0.091 U	0.091 U	**6.1**	**6.3**
Benzo(a)anthracene	ug/L	0.223	0.75	0.091 U	0.091 U	0.091 U	**1.2**	**1.5**
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	0.091 U	0.091 U	**2.1**	**2.9**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091 U	0.091 U	0.091 U	**0.97**	**1.4**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	**1.2**	**1.4**
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091 U	0.091 U	0.091 U	**1.5**	**1.6**
Chrysene	ug/L	22.3	75	0.091 U	0.091 U	0.091 U	**1.6**	**1.6**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091 U	0.091 U	0.091 U	**0.30**	**0.37**
Fluoranthene	ug/L	255	1370	0.091 U	**0.098**	**0.093**	**4.7**	**4.8**
Fluorene	ug/L	162	341	0.091 U	0.091 U	0.091 U	**40.7**	**31.1**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091 U	0.091 U	0.091 U	**0.77**	**1.1**
Naphthalene	ug/L	1.11	2.11	0.45 U	0.45 U	0.45 U	**114**	**116**
Phenanthrene	ug/L	NA	NA	0.45 U	0.45 U	0.45 U	**5.7**	**5.9**
Pyrene	ug/L	202	1090	0.091 U	0.091 U	0.091 U	**6.6**	**7.4**
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**150**	**53.0**	**103**	**310**	**296**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 3-2
Groundwater Analytical Results - June 2015
Hutchinson, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	HUTCHINSON - HMW-4D	HUTCHINSON - HMW-5S	HUTCHINSON - HMW-5D	HUTCHINSON - HIDW-1
BTEX							
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	**2.1**
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U
PAHs							
Acenaphthene	ug/L	253	521	**0.27**	**0.11**	**0.13**	**4.8**
Acenaphthylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	**0.36**
Anthracene	ug/L	1,150	25,00	0.091 U	0.091 U	0.091 U	**0.12**
Benzo(a)anthracene	ug/L	0.223	0.75	0.091 U	0.091 U	0.091 U	0.091 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	0.091 U	0.091 U	0.091 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091 U	0.091 U	0.091 U	0.091 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U	0.091 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091 U	0.091 U	0.091 U	0.091 U
Chrysene	ug/L	22.3	75	0.091 U	0.091 U	0.091 U	0.091 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091 U	0.091 U	0.091 U	0.091 U
Fluoranthene	ug/L	255	1370	**0.10**	0.091 U	0.091 U	**0.22**
Fluorene	ug/L	162	341	**0.11**	0.091 U	0.091 U	**1.6**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091 U	0.091 U	0.091 U	0.091 U
Naphthalene	ug/L	1.11	2.11	0.45 U	0.45 U	0.45 U	**4.8**
Phenanthrene	ug/L	NA	NA	0.45 U	0.45 U	0.45 U	0.45 U
Pyrene	ug/L	202	1090	0.091 U	0.091 U	0.091 U	**0.21**
Inorganics							
Arsenic	ug/L	10	10	10 U	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**76.1**	**125**	**156**	**145**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	0.005 U	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 3-2
Groundwater Analytical Results - July 2016
Hutchinson, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	HUTCHINSON - HMW-1S	HUTCHINSON - HMW-1D	HUTCHINSON - HMW-2S	HUTCHINSON - HMW-4S	HUTCHINSON - DUP-1 Duplicate of HMW-4S
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	**4.6**	**4.8**
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	**4.6**	**4.4**
PAHs								
Acenaphthene	ug/L	253	521	0.11 U	0.11 U	0.091 U	**39.1**	**57.6**
Acenaphthylene	ug/L	NA	NA	0.11 U	0.11 U	0.091 U	**6.0**	**16.7**
Anthracene	ug/L	1,150	25,00	0.11 U	0.11 U	0.091 U	**3.4**	**6.4**
Benzo(a)anthracene	ug/L	0.223	0.75	0.11 U	0.11 U	0.091 U	**5.0**	**14.4**
Benzo(a)pyrene	ug/L	0.2	0.2	0.11 U	0.11 U	0.091 U	**10.4**	**23.3**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.11 U	0.11 U	0.091 U	**11.9**	**28.2**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.11 U	0.11 U	0.091 U	**5.7**	**12.6**
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.11 U	0.11 U	0.091 U	0.10 U	0.10 U
Chrysene	ug/L	22.3	75	0.11 U	0.11 U	0.091 U	**6.5**	**17.1**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.11 U	0.11 U	0.091 U	**1.8**	**4.2**
Fluoranthene	ug/L	255	1370	0.56 U	0.56 U	0.45 U	**7.3**	**18.8**
Fluorene	ug/L	162	341	0.11 U	0.11 U	0.091 U	**14.3**	**19.1**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.11 U	0.11 U	0.091 U	**4.5**	**10.7**
Naphthalene	ug/L	1.11	2.11	0.56 U	**3.1**	0.45 U	**20.6**	**18.1**
Phenanthrene	ug/L	NA	NA	0.56 U	0.56 U	0.45 U	**2.0**	**2.4**
Pyrene	ug/L	202	1090	0.11 U	0.11 U	0.091 U	**12.1**	**29.7**
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**106**	**44.6**	**107**	**374**	**379**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 3-2
Groundwater Analytical Results - July 2016
Hutchinson, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	HUTCHINSON - HMW-4D	HUTCHINSON - HMW-5S	HUTCHINSON - HMW-5D	HUTCHINSON - HIDW-1
BTEX							
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	**1.1**
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U
PAHs							
Acenaphthene	ug/L	253	521	0.091 U	0.091 U	**1.1**	**2.1**
Acenaphthylene	ug/L	NA	NA	0.091 U	0.091 U	**0.33**	**0.60**
Anthracene	ug/L	1,150	25,00	0.091 U	0.091 U	**0.83**	**0.22**
Benzo(a)anthracene	ug/L	0.223	0.75	0.091 U	0.091 U	**0.38**	**0.48**
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	0.091 U	**0.22**	**0.91**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091 U	0.091 U	**0.28**	**1.1**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	0.091 U	0.1 U	**0.51**
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091 U	0.091 U	0.1 U	0.11 U
Chrysene	ug/L	22.3	75	0.091 U	0.091 U	**0.39**	**0.58**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091 U	0.091 U	0.1 U	**0.16**
Fluoranthene	ug/L	255	1370	0.45 U	0.45 U	**1.2**	**0.78**
Fluorene	ug/L	162	341	0.091 U	0.091 U	**0.92**	**0.69**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091 U	0.091 U	0.1 U	**0.39**
Naphthalene	ug/L	1.11	2.11	**0.46**	0.45 U	**10.4**	**0.8**
Phenanthrene	ug/L	NA	NA	0.45 U	0.45 U	**2.9**	0.56 U
Pyrene	ug/L	202	1090	0.091 U	0.091 U	**1.3**	**0.99**
Inorganics							
Arsenic	ug/L	10	10	10 U	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**51.9**	**117**	**46.5**	**81.4**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	0.005 U	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 4-2
Groundwater Analytical Results - June 2015
Kansas City, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	KCMW-8S	KCMW-8D	KCMW-801 Duplicate of KCMW-8D	KCMW-11S
BTEX							
Benzene	ug/L	5	5	1 U	**983**	**938**	**21.8**
Ethylbenzene	ug/L	700	700	1 U	**1,460**	**1,370**	**8.2**
Toluene	ug/L	1,000	1,000	1 U	**354**	**336**	**29.5**
Xylene (Total)	ug/L	10,000	10,000	3 U	**1,560**	**1,440**	**22.9**
PAHs							
Acenaphthene	ug/L	253	521	0.091 U	**68.6**	**71.2**	**2.4**
Acenaphthylene	ug/L	NA	NA	**0.13**	**65.2**	**64.3**	**34.5**
Anthracene	ug/L	1,150	25,00	0.091 U	**33.0**	**34.5**	**0.86**
Benzo(a)anthracene	ug/L	0.223	0.75	**0.14**	**72.6**	**78.5**	0.091 U
Benzo(a)pyrene	ug/L	0.2	0.2	**0.12**	**63.9**	**66.4**	0.091 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091 U	**34.4**	**39.8**	0.091 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	**23.6**	**24.9**	0.091 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091 U	**37.6**	**44.1**	0.091 U
Chrysene	ug/L	22.3	75	**0.14**	**80.8**	**96.3**	0.091 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091 U	9.1 U	**10.4**	0.091 U
Fluoranthene	ug/L	255	1370	**0.22**	**105**	**100**	**4.7**
Fluorene	ug/L	162	341	0.091 U	**53.5**	**52.5**	**2.3**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091 U	**17.9**	**17.8**	0.091 U
Naphthalene	ug/L	1.11	2.11	0.45 U	**2,400**	**2,230**	**541**
Phenanthrene	ug/L	NA	NA	0.45 U	**112**	**116**	**51.4**
Pyrene	ug/L	202	1090	**0.29**	**147**	**208**	**4.3**
Inorganics							
Arsenic	ug/L	10	10	10 U	**35.5**	**31.6**	10 U
Barium	ug/L	2,000	2,000	**87.8**	**653**	**670**	**135**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	**6.6**	**6.5**	5 U
Lead	ug/L	15	15	5 U	**7.3**	**7.4**	**15.0**
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	**0.0063**	**0.044**	0.005 U	**0.011**

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 4-2
Groundwater Analytical Results - June 2015
Kansas City, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	KCMW-11D	KCMW-3	Kansas City KCIDW1
BTEX						
Benzene	ug/L	5	5	**6,940**	**69.8**	**3,980**
Ethylbenzene	ug/L	700	700	**625**	**27.6**	**305**
Toluene	ug/L	1,000	1,000	**27.0**	10 U	50 U
Xylene (Total)	ug/L	10,000	10,000	**422**	30 U	**240**
PAHs						
Acenaphthene	ug/L	253	521	**32.6**	**2.8**	**21.7**
Acenaphthylene	ug/L	NA	NA	**7.5**	**3.1**	**9.4**
Anthracene	ug/L	1,150	25,00	**5.3**	**1.4**	**5.1**
Benzo(a)anthracene	ug/L	0.223	0.75	**2.7**	**1.6**	**5.8**
Benzo(a)pyrene	ug/L	0.2	0.2	**4.6**	**2.7**	**4.9**
Benzo(b)fluoranthene	ug/L	0.16	0.537	**2.1**	0.91 U	**2.3**
Benzo(g,h,i)perylene	ug/L	NA	NA	**2.7**	**1.9**	**2.0**
Benzo(k)fluoranthene	ug/L	1.62	5.43	**2.7**	**1.7**	**3.1**
Chrysene	ug/L	22.3	75	**4.0**	**2.1**	**7.3**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	**0.94**	0.91 U	0.91 U
Fluoranthene	ug/L	255	1370	**6.8**	**3.3**	**11.3**
Fluorene	ug/L	162	341	**14.1**	**2.4**	**14.4**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	**2.4**	**1.5**	**1.4**
Naphthalene	ug/L	1.11	2.11	**991**	**83.5**	**861**
Phenanthrene	ug/L	NA	NA	**19.5**	**8.1**	**30.1**
Pyrene	ug/L	202	1090	**12.1**	**6.0**	**16.5**
Inorganics						
Arsenic	ug/L	10	10	**27.9**	**96.0**	**12.5**
Barium	ug/L	2,000	2,000	**324**	**648**	**339**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	**10.8**	**11.3**	5 U
Lead	ug/L	15	15	**25.6**	**10.3**	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	**0.0059**	**0.044**	**0.020**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 4-3
Groundwater Analytical Results - July 2016
Kansas City, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	KANSAS CITY - KCMW-1	KANSAS CITY - DUP-2 Duplicate of KCMW-1	KANSAS CITY - KCMW-2	KANSAS CITY - KCMW-3	KANSAS CITY - KCMW-4
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	**7.0**	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	**1.8**	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	**4.8**	3 U
PAHs								
Acenaphthene	ug/L	253	521	0.10 U	**0.44**	0.13 U	**3.4**	0.10 U
Acenaphthylene	ug/L	NA	NA	0.10 U	**0.16**	0.13 U	**4.8**	0.10 U
Anthracene	ug/L	1,150	25,00	0.10 U	**0.71**	0.13 U	**4.0**	0.10 U
Benzo(a)anthracene	ug/L	0.223	0.75	0.10 U	**0.30**	0.13 U	**4.6**	0.10 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.10 U	**0.17**	0.13 U	**6.6**	0.10 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.10 U	0.11 U	0.13 U	**6.7**	0.10 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.10 U	0.11 U	0.13 U	**3.8**	0.10 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.10 U	0.11 U	0.13 U	0.13 U	0.10 U
Chrysene	ug/L	22.3	75	0.10 U	**0.30**	0.13 U	**5.3**	0.10 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.10 U	0.11 U	0.13 U	**0.59**	0.10 U
Fluoranthene	ug/L	255	1370	0.50 U	**0.96**	0.67 U	**11.9**	0.50 U
Fluorene	ug/L	162	341	0.10 U	**0.70**	0.13 U	**4.8**	0.10 U
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.10 U	0.11 U	0.13 U	**2.9**	0.10 U
Naphthalene	ug/L	1.11	2.11	**0.53**	**4.0**	**2.0**	**3.2**	0.50 U
Phenanthrene	ug/L	NA	NA	0.50 U	2.7 U	0.67 U	**18.2**	0.50 U
Pyrene	ug/L	202	1090	0.10 U	1.1 U	0.13 U	**11.8**	**0.10**
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	**90.0**	10 U
Barium	ug/L	2,000	2,000	**107**	**86.3**	**150**	**602**	**125**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	**12.6**	**19.0**	**5**
Lead	ug/L	15	15	5 U	5 U	5 U	**13.8**	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 4-3
Groundwater Analytical Results - July 2016
Kansas City, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	KANSAS CITY - KCMW-7	KANSAS CITY - DUP-1 Duplicate of KCMW-7	KANSAS CITY- KCMW-8S	KANSAS CITY - KCMW-8D	KANSAS CITY - KCMW-10
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	**352**	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	**1,270**	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	**130**	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	**1,190**	3 U
PAHs								
Acenaphthene	ug/L	253	521	0.13 U	0.13 U	**2.7**	**88.5**	0.13 U
Acenaphthylene	ug/L	NA	NA	0.13 U	0.13 U	**1.1**	**49.5**	0.13 U
Anthracene	ug/L	1,150	25,00	0.13 U	0.13 U	**3.3**	**24.8**	0.13 U
Benzo(a)anthracene	ug/L	0.223	0.75	0.13 U	0.13 U	**1.2**	**49.5**	0.13 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.13 U	0.13 U	**0.74**	**45.6**	0.13 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.13 U	0.13 U	**0.84**	**52.2**	0.13 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.13 U	0.13 U	**0.21**	**17.0**	0.13 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.13 U	0.13 U	0.10 U	0.11 U	0.13 U
Chrysene	ug/L	22.3	75	0.13 U	0.13 U	**1.2**	**60.3**	0.13 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.13 U	0.13 U	0.10 U	**8.8**	0.13 U
Fluoranthene	ug/L	255	1370	0.67 U	0.67 U	**3.6**	**65.8**	0.67 U
Fluorene	ug/L	162	341	0.13 U	0.13 U	**4.2**	**59.0**	0.13 U
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.13 U	0.13 U	**0.18**	**15.7**	0.13 U
Naphthalene	ug/L	1.11	2.11	**4.3**	0.67 U	**60.8**	**3,160**	**1.6**
Phenanthrene	ug/L	NA	NA	0.67 U	0.67 U	**11.3**	**73.9**	0.67 U
Pyrene	ug/L	202	1090	0.13 U	0.13 U	**4.3**	**83.5**	0.13 U
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	**12.7**	10 U
Barium	ug/L	2,000	2,000	**91.6**	**89**	**112**	**607**	**120**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	**9.2**	**8.9**	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	**0.064**	**0.026**	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 4-3
Groundwater Analytical Results - July 2016
Kansas City, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	KANSAS CITY - KCMW-11S	KANSAS CITY - KCMW-11D	KANSAS CITY - KCMW-12S	KANSAS CITY - KCMW-12D
BTEX							
Benzene	ug/L	5	5	**9.4**	**5,360**	1 U	1 U
Ethylbenzene	ug/L	700	700	**5.3**	**478**	1 U	1 U
Toluene	ug/L	1,000	1,000	**13.7**	50 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	**14.7**	**260**	3 U	3 U
PAHs							
Acenaphthene	ug/L	253	521	**15.5**	**20.9**	0.091 U	0.13 U
Acenaphthylene	ug/L	NA	NA	**93.9**	**3.3**	0.091 U	0.13 U
Anthracene	ug/L	1,150	25,00	**10.6**	**2.2**	0.091 U	0.13 U
Benzo(a)anthracene	ug/L	0.223	0.75	**2.4**	**2.2**	0.091 U	0.13 U
Benzo(a)pyrene	ug/L	0.2	0.2	**1.1**	**2.7**	0.091 U	0.13 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	**1.3**	**2.9**	0.091 U	0.13 U
Benzo(g,h,i)perylene	ug/L	NA	NA	**0.29**	**1.4**	0.091 U	0.13 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.11 U	0.10 U	0.091 U	0.13 U
Chrysene	ug/L	22.3	75	**2.3**	**2.6**	0.091 U	0.13 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.11 U	**0.53**	0.091 U	0.13 U
Fluoranthene	ug/L	255	1370	**33.1**	**4.7**	0.45 U	0.67 U
Fluorene	ug/L	162	341	**16.3**	**11.1**	0.091 U	0.13 U
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	**0.27**	**1.1**	0.091 U	0.13 U
Naphthalene	ug/L	1.11	2.11	**797**	**644**	0.45 U	**3.2**
Phenanthrene	ug/L	NA	NA	**198**	**4.9**	0.45 U	0.67 U
Pyrene	ug/L	202	1090	**36.6**	**5.3**	0.091 U	0.13 U
Inorganics							
Arsenic	ug/L	10	10	10 U	**15.5**	**33.4**	10 U
Barium	ug/L	2,000	2,000	**150**	**223**	**152**	**568**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	**11.6**	**8.4**	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	0.005 U	0.005 U	0.005 U

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 5-2
Groundwater Analytical Results - June 2015
Manhattan, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	MANHATTAN MMW-01	MANHATTAN MMW-03	MANHATTAN MMW-103 Duplicate of MMW-03
BTEX						
Benzene	ug/L	5	5	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U
PAHs						
Acenaphthene	ug/L	253	521	**0.33**	**7.0**	**6.5**
Acenaphthylene	ug/L	NA	NA	**0.22**	**4.2**	**3.8**
Anthracene	ug/L	1,150	25,00	0.091 U	**0.21**	**0.17**
Benzo(a)anthracene	ug/L	0.223	0.75	0.091 U	0.091 U	0.091 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	0.091 U	0.091 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091 U	0.091 U	0.091 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	0.091 U	0.091 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091 U	0.091 U	0.091 U
Chrysene	ug/L	22.3	75	0.091 U	0.091 U	0.091 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091 U	0.091 U	0.091 U
Fluoranthene	ug/L	255	1370	0.091 U	0.091 U	0.091 U
Fluorene	ug/L	162	341	**0.098**	**1.9**	**1.7**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091 U	0.091 U	0.0091 U
Naphthalene	ug/L	1.11	2.11	0.45 U	0.45 U	**0.60**
Phenanthrene	ug/L	NA	NA	0.45 U	0.45 U	0.45 U
Pyrene	ug/L	202	1090	0.091 U	0.091 U	0.091 U
Inorganics						
Arsenic	ug/L	10	10	10 U	**28.4**	**27.1**
Barium	ug/L	2,000	2,000	**186**	**885**	**830**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	**6.7**	**8.2**
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	**0.24**	**0.19**

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 5-2
Groundwater Analytical Results - June 2015
Manhattan, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	MANHATTAN MMW-04	MANHATTAN MIDW-1
BTEX					
Benzene	ug/L	5	5	**84.2**	**6.5**
Ethylbenzene	ug/L	700	700	**1,080**	**156**
Toluene	ug/L	1,000	1,000	**1,000**	**129**
Xylene (Total)	ug/L	10,000	10,000	**1,020**	**150**
PAHs					
Acenaphthene	ug/L	253	521	**107**	**16.3**
Acenaphthylene	ug/L	NA	NA	**31.7**	**4.8**
Anthracene	ug/L	1,150	25,00	**2.5**	**0.78**
Benzo(a)anthracene	ug/L	0.223	0.75	**0.31**	**0.58**
Benzo(a)pyrene	ug/L	0.2	0.2	**0.32**	**0.63**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.1 U	**0.26**
Benzo(g,h,i)perylene	ug/L	NA	NA	**0.15**	**0.29**
Benzo(k)fluoranthene	ug/L	1.62	5.43	**0.18**	**0.33**
Chrysene	ug/L	22.3	75	**0.29**	**0.52**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.1 U	0.19 U
Fluoranthene	ug/L	255	1370	**1.2**	**0.73**
Fluorene	ug/L	162	341	**30.0**	**5.4**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	**0.11**	**0.22**
Naphthalene	ug/L	1.11	2.11	**1,580**	**144**
Phenanthrene	ug/L	NA	NA	**24.6**	**4.7**
Pyrene	ug/L	202	1090	**1.9**	**1.1**
Inorganics					
Arsenic	ug/L	10	10	10 U	**12.7**
Barium	ug/L	2,000	2,000	**804**	**559**
Cadmium	ug/L	5	5	5 U	5 U
Chromium	ug/L	100	100	5 U	**6.5**
Lead	ug/L	15	15	5 U	**9.5**
Selenium	ug/L	50	50	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	**0.0085**	**0.078**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 5-2
Groundwater Analytical Results - July 2016
Manhattan, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	MANHATTAN - MMW-01	MANHATTAN - MMW-03	MANHATTAN - MMW-04	MANHATTAN - DUP-1 Duplicate of MMW-04	MANHATTAN - MIDW-1
BTEX								
Benzene	ug/L	5	5	1 U	1 U	**882**	**935**	**195**
Ethylbenzene	ug/L	700	700	1 U	1 U	**2,960**	**3,120**	**558**
Toluene	ug/L	1,000	1,000	1 U	1 U	**6,570**	**6,570**	**1,090**
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	**2,840**	**2,970**	**541**
PAHs								
Acenaphthene	ug/L	253	521	**2.3**	**5.4**	**76.8**	**78.2**	**20.8**
Acenaphthylene	ug/L	NA	NA	**1.1**	**3.4**	**119**	**120**	**30.3**
Anthracene	ug/L	1,150	25,00	**3.2**	**0.20**	**3.5**	**3.1**	1 U
Benzo(a)anthracene	ug/L	0.223	0.75	**1.4**	0.10 U	1 U	1 U	1 U
Benzo(a)pyrene	ug/L	0.2	0.2	**0.84**	0.10 U	1 U	1 U	1 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	**0.93**	0.10 U	1 U	1 U	1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	**0.27**	0.10 U	1 U	1 U	1 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.10 U	0.10 U	1 U	1 U	1 U
Chrysene	ug/L	22.3	75	**1.4**	0.10 U	1 U	1 U	1 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.10 U	0.10 U	1 U	1 U	1 U
Fluoranthene	ug/L	255	1370	**4.3**	0.50 U	5 U	5 U	5 U
Fluorene	ug/L	162	341	**3.9**	**2.1**	**34.8**	**35.1**	**9.4**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	**0.22**	0.10 U	1 U	1 U	1 U
Naphthalene	ug/L	1.11	2.11	**32.3**	**6.4**	**5,010**	**4,860**	**1180**
Phenanthrene	ug/L	NA	NA	**12.6**	0.50 U	**24.6**	**24.4**	**6.9**
Pyrene	ug/L	202	1090	**5.2**	0.10 U	**1.9**	**1.3**	1 U
Inorganics								
Arsenic	ug/L	10	10	10 U	**37.6**	10 U	10 U	**10 U**
Barium	ug/L	2,000	2,000	**169**	**1,020**	**1,140**	**1,110**	**589**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	**0.27**	**0.027**	**0.028**	**0.072**

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 6-2
Groundwater Analytical Results - June 2015
Salina, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	SALINA SLMW-1	SALINA SLMW-2	SALINA SLMW-3	SALINA SLMW-101 Duplicate of SLMW-3	SALINA SLIDW-1
BTEX								
Benzene	ug/L	5	5	1 U	**2.8**	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	3 U
PAHs								
Acenaphthene	ug/L	253	521	**1.0**	**20.8**	**0.14**	**0.16**	**4.8**
Acenaphthylene	ug/L	NA	NA	**1.3**	**22.8**	0.091 U	0.1 U	**6.4**
Anthracene	ug/L	1,150	25,00	0.091 U	**1.3**	0.091 U	0.1 U	**0.68**
Benzo(a)anthracene	ug/L	0.223	0.75	0.091 U	**2.1**	0.091 U	0.1 U	**1.1**
Benzo(a)pyrene	ug/L	0.2	0.2	0.091 U	**2.3**	0.091 U	0.1 U	**1.3**
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.091 U	**1.0**	0.091 U	0.1 U	**0.60**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.091 U	**1.4**	0.091 U	0.1 U	**0.74**
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.091 U	**1.3**	0.091 U	0.1 U	**0.71**
Chrysene	ug/L	22.3	75	0.091 U	**2.5**	0.091 U	0.1 U	**2.0**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.091 U	**0.23**	0.091 U	0.1 U	**0.13**
Fluoranthene	ug/L	255	1370	**0.12**	**8.1**	**0.25**	**0.45 B**	**3.4**
Fluorene	ug/L	162	341	**0.57**	**12.8**	**0.11**	**0.11**	**3.5**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.091 U	**0.85**	0.091 U	0.1 U	**0.44**
Naphthalene	ug/L	1.11	2.11	0.45 U	**0.78**	**1.1**	**1.2**	0.45 U
Phenanthrene	ug/L	NA	NA	0.45 U	**12.0**	0.45 U	0.5 U	**4.3**
Pyrene	ug/L	202	1090	**0.096**	**9.8**	**0.18**	**0.13**	**4.9**
Inorganics								
Arsenic	ug/L	10	10	**11.6**	**14.8**	**20.1**	**20.2**	**17.7**
Barium	ug/L	2,000	2,000	**144**	**138**	**581**	**575**	**225**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	**0.036**	**0.042**	**0.039**	**0.044**	**0.026**

Notes:

B - analyte was detected in the associated method blank.

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 6-2
Groundwater Analytical Results - July 2016
Salina, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	SALINA - SLMW-1	SALINA - SLMW-2	SALINA - DUP-1 Duplicate of SLMW-2	SALINA - SLMW-3	SALINA - SLIDW-1
BTEX								
Benzene	ug/L	5	5	1 U	**2.0**	**2.0**	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	**6.2**
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	3 U
PAHs								
Acenaphthene	ug/L	253	521	0.10 U	**22.2**	**19.5**	0.10 U	**2.9**
Acenaphthylene	ug/L	NA	NA	0.10 U	**19.0**	**18.2**	0.10 U	**2.8**
Anthracene	ug/L	1,150	25,00	0.10 U	**0.59**	**0.58**	0.10 U	**0.11**
Benzo(a)anthracene	ug/L	0.223	0.75	0.10 U	**0.49**	**0.39**	0.10 U	**0.13**
Benzo(a)pyrene	ug/L	0.2	0.2	0.10 U	**0.42**	**0.32**	0.10 U	0.091 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.10 U	**0.47**	**0.35**	0.10 U	**0.11**
Benzo(g,h,i)perylene	ug/L	NA	NA	0.10 U	**0.26**	**0.23**	0.10 U	0.091 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.10 U	0.10 U	0.10 U	0.10 U	0.091 U
Chrysene	ug/L	22.3	75	0.10 U	**0.63**	**0.63**	0.10 U	**0.18**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.10 U	0.10 U	0.10 U	0.10 U	0.091 U
Fluoranthene	ug/L	255	1370	0.50 U	**3.6**	**3.4**	0.10 U	**0.64**
Fluorene	ug/L	162	341	0.10 U	**11.7**	**11.0**	0.10 U	**1.7**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.10 U	**0.16**	**0.14**	0.10 U	0.091 U
Naphthalene	ug/L	1.11	2.11	0.50 U	**0.96**	**0.90**	**0.79**	**0.61**
Phenanthrene	ug/L	NA	NA	0.50 U	**4.8**	**4.4**	0.50 U	**0.87**
Pyrene	ug/L	202	1090	0.10 U	**4.7**	**4.0**	0.10 U	**0.63**
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	**23.6**	10 U
Barium	ug/L	2,000	2,000	**125**	**127**	**122**	**448**	**228**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	**0.031**	**0.041**	**0.038**	**0.037**	**0.020**

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 7-2
Groundwater Analytical Results - June 2015
Topeka, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	TOPEKA TPMW-1	TOPEKA TPMW-101 Duplicate of TPMW-1	TOPEKA TPMW-2
BTEX						
Benzene	ug/L	5	5	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	**1.6**	**1.4**	1 U
Toluene	ug/L	1,000	1,000	**1.6**	**1.2**	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U
PAHs						
Acenaphthene	ug/L	253	521	**0.14**	**0.20**	**0.27**
Acenaphthylene	ug/L	NA	NA	**0.27**	**0.20**	**0.89**
Anthracene	ug/L	1,150	25,00	**0.12**	**0.15**	0.1 U
Benzo(a)anthracene	ug/L	0.223	0.75	**0.55**	**0.40**	0.1 U
Benzo(a)pyrene	ug/L	0.2	0.2	**0.85**	**0.66**	0.1 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	**0.75**	**0.61**	0.1 U
Benzo(g,h,i)perylene	ug/L	NA	NA	**0.73**	**0.54**	0.1 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	**0.78**	**0.59**	0.1 U
Chrysene	ug/L	22.3	75	**0.92**	**0.72**	0.1 U
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	**0.20**	**0.17**	0.1 U
Fluoranthene	ug/L	255	1370	**1.4**	**1.2**	**0.26**
Fluorene	ug/L	162	341	**0.11**	**0.24**	**0.27**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	**0.62**	**0.45**	0.1 U
Naphthalene	ug/L	1.11	2.11	**1.7**	**1.8**	**1.2**
Phenanthrene	ug/L	NA	NA	**0.79**	**1.0**	**0.53**
Pyrene	ug/L	202	1090	**1.2**	**1.1**	**0.18**
Inorganics						
Arsenic	ug/L	10	10	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**257**	**198**	**98.7**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	**10.6**	**8.7**	5 U
Lead	ug/L	15	15	**17.5**	**15.9**	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	**0.0085**	**0.0077**	0.005 U

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter

Table 7-2
Groundwater Analytical Results - June 2015
Topeka, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	TOPEKA TPMW-3	TOPEKA TPMW-4	TOPEKA TPIDW-1
BTEX						
Benzene	ug/L	5	5	1 U	1 U	**1.0**
Ethylbenzene	ug/L	700	700	**3.6**	1 U	**2.2**
Toluene	ug/L	1,000	1,000	1 U	1 U	**1.2**
Xylene (Total)	ug/L	10,000	10,000	**16.4**	3 U	3 U
PAHs						
Acenaphthene	ug/L	253	521	**5.9**	**0.11**	**0.60**
Acenaphthylene	ug/L	NA	NA	**21.0**	**0.10**	**0.75**
Anthracene	ug/L	1,150	25,00	**2.3**	0.1 U	**0.20**
Benzo(a)anthracene	ug/L	0.223	0.75	**0.62**	0.1 U	**0.17**
Benzo(a)pyrene	ug/L	0.2	0.2	**0.37**	0.1 U	**0.18**
Benzo(b)fluoranthene	ug/L	0.16	0.537	**0.20**	0.1 U	**0.12**
Benzo(g,h,i)perylene	ug/L	NA	NA	**0.21**	0.1 U	**0.13**
Benzo(k)fluoranthene	ug/L	1.62	5.43	**0.34**	0.1 U	**0.19**
Chrysene	ug/L	22.3	75	**1.3**	0.1 U	**0.49**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.095 U	0.1 U	0.095 U
Fluoranthene	ug/L	255	1370	**3.5**	**0.26**	**0.52**
Fluorene	ug/L	162	341	**8.4**	0.1 U	**0.45**
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	**0.16**	0.1 U	**0.10**
Naphthalene	ug/L	1.11	2.11	**2.5**	**0.83**	**0.52**
Phenanthrene	ug/L	NA	NA	**7.5**	0.5 U	0.48 U
Pyrene	ug/L	202	1090	**3.6**	**0.18**	**0.53**
Inorganics						
Arsenic	ug/L	10	10	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**167**	**190**	**164**
Cadmium	ug/L	5	5	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	**10.8**	**6.8**
Lead	ug/L	15	15	5 U	**13.0**	**9.1**
Selenium	ug/L	50	50	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	0.005 U	**0.040**	**0.012**

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene
mg/L - milligrams per liter
NA - not available
PAH - polycyclic aromatic hydrocarbons
U - non-detect
ug/L - micrograms per liter

Table 7-2
Groundwater Analytical Results - July 2016
Topeka, Kansas ONE Gas MGP Site

Parameter	Units	KS Tier 2 Residential Groundwater Pathway	KS Tier 2 Non-Residential Groundwater Pathway	TOPEKA - TPMW-2	TOPEKA -TPMW-3	TOPEKA - DUP-1 Duplicate of TPMW-3	TOPEKA - TPMW-4	TOPEKA - TPIDW-1
BTEX								
Benzene	ug/L	5	5	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	700	700	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	1,000	1,000	1 U	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	10,000	10,000	3 U	3 U	3 U	3 U	3 U
PAHs								
Acenaphthene	ug/L	253	521	0.095 U	0.095 U	0.095 U	**1.2**	**0.14**
Acenaphthylene	ug/L	NA	NA	0.095 U	**0.18**	**0.16**	**2.2**	**0.34**
Anthracene	ug/L	1,150	25,00	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Benzo(a)anthracene	ug/L	0.223	0.75	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Benzo(a)pyrene	ug/L	0.2	0.2	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Benzo(b)fluoranthene	ug/L	0.16	0.537	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Benzo(g,h,i)perylene	ug/L	NA	NA	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Benzo(k)fluoranthene	ug/L	1.62	5.43	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Chrysene	ug/L	22.3	75	0.095 U	**0.10**	0.095 U	0.095 U	**0.11**
Dibenz(a,h)anthracene	ug/L	0.00805	0.027	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Fluoranthene	ug/L	255	1370	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U
Fluorene	ug/L	162	341	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Indeno(1,2,3-cd)pyrene	ug/L	0.117	0.392	0.095 U	0.095 U	0.095 U	0.095 U	0.10 U
Naphthalene	ug/L	1.11	2.11	**1.0**	0.48 U	0.48 U	0.48 U	0.50 U
Phenanthrene	ug/L	NA	NA	0.48 U	0.48 U	0.48 U	0.48 U	0.50 U
Pyrene	ug/L	202	1090	0.095 U	**0.15**	**0.12**	0.48 U	**0.12**
Inorganics								
Arsenic	ug/L	10	10	10 U	10 U	10 U	10 U	10 U
Barium	ug/L	2,000	2,000	**104**	**184**	**185**	**60.2**	**83.6**
Cadmium	ug/L	5	5	5 U	5 U	5 U	5 U	5 U
Chromium	ug/L	100	100	5 U	5 U	5 U	5 U	5 U
Lead	ug/L	15	15	5 U	5 U	5 U	5 U	5 U
Selenium	ug/L	50	50	15 U	15 U	15 U	15 U	15 U
Silver	ug/L	77.9	508	7 U	7 U	7 U	7 U	7 U
Mercury	ug/L	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyanide	mg/L	0.2	0.2	**0.011**	0.005 U	0.005 U	**0.0098**	0.005 U

Notes:

BTEX - benzene, toluene, ethylbenzene, xylene

mg/L - milligrams per liter

NA - not available

PAH - polycyclic aromatic hydrocarbons

U - non-detect

ug/L - micrograms per liter