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Fourth Quarter 2015 Groundwater Monitoring Report NuStar Andover Quail Crossing Andover, Kansas

Prepared for:
NuStar Pipeline Operating Partnership L.P.

April 28, 2016
1641-08

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GROUNDWATER MONITORING REPORT

Fourth Quarter 2015

NuStar Pipeline Operating Partnership L.P.

Quail Crossing Neighborhood

Andover, Kansas

Site Name and Location:	Quail Crossing Neighborhood Site	
	West Mountain and North Colt Court	
	Andover, Kansas	
Owner (Contact):	NuStar Pipeline Operating Partnership L.P.	
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1.0 Introduction and Site Background

This groundwater monitoring report was prepared by Apex Companies, LLC (Apex) on behalf of NuStar Pipeline Operating Partnership L.P. (NuStar) as part of the continuing response to a gasoline release from a NuStar refined-petroleum pipeline. The activities outlined herein were performed in accordance with the Consent Agreement and Final Order (CAFO) dated May 10, 2013 and in coordination with the Kansas Department of Health and Environment (KDHE) and the Quail Crossing Neighborhood Association. This report summarizes the activities conducted from October 1 through December 31, 2015, as well as an additional irrigation well resampling event on January 13, 2016 (see Section 2.5).

1.1 Background

The pipeline release was discovered in June 2012 after separate-phase hydrocarbons (SPH) were detected in an irrigation well at 2006 N Colt Court, in the Quail Crossing Neighborhood (the Neighborhood) of

Andover, Kansas (the Site; Figure 1). As shown on Figure 2, the NuStar pipeline release location was approximately 80 feet north of the affected irrigation well. Upon the discovery of SPH in the irrigation well, NuStar immediately mobilized to the Site and implemented initial response and abatement activities including repairs to the pipeline, soil excavation, deactivation of the irrigation well at 2006 N Colt Court, and removal of SPH from the well.

1.2 Pipeline and Site History

Land use at the Site and surrounding areas is residential. As shown on Figure 2, a stormwater retention pond is located near the Site, approximately 250 feet south of the NuStar pipeline. The pipeline is constructed of 8-inch-diameter carbon steel and is used to transport liquefied petroleum products. The pipeline was installed to an approximate depth of 3 feet below ground surface (bgs) in agricultural land in 1959. The pipeline remained in agricultural and/or undeveloped land until the late 1990s when development of the Quail Crossing Neighborhood began. As part of the Neighborhood development, the pipeline depth was increased to approximately 6 feet bgs by re-excavating and backfilling with native material. An approximately 100-foot-wide pipeline easement was created along the pipeline pathway for safety purposes during Neighborhood development. The pipeline easement limits development activities near the pipeline. The pipeline location and associated easement boundaries are shown on Figure 2.

1.3 Activity Summary

Following the initial response activities, NuStar has performed interim remedial actions and investigations. These have included:

- A Comprehensive Investigation (CI);
- Implementation of a comprehensive groundwater monitoring and SPH removal program;
- A soil vapor extraction (SVE) pilot test to address petroleum hydrocarbons in the vadose zone soil;
- Additional soil characterization following the CI to better assess lateral and vertical extent of impacted soil in support of soil excavation planning;
- A groundwater treatment pilot test; and
- A soil excavation.

The following paragraphs describe each of these activities.

Soil and groundwater data were collected from 24 soil borings, 16 monitoring wells, and select irrigation wells as part of the CI. Information obtained during the CI indicated that residual gasoline constituents are present in soil in a limited area in the vicinity of the pipeline release location.

To address the observed dissolved- and separate-phase hydrocarbons, a SPH removal program was initiated in June 2013 and a quarterly groundwater monitoring program was initiated in August 2013. The current KDHE-approved groundwater monitoring program consists of: (1) monthly gauging of water levels in monitoring wells MW-1 through MW-19; (2) quarterly collection and analysis of groundwater samples from monitoring wells MW-1 through MW-19; and (3) quarterly collection and analysis of groundwater monitoring samples from selected irrigation wells. The groundwater monitoring programs for monitoring wells and irrigation wells are presented in Tables 1 and 2, respectively.

The SPH program initially consisted of weekly SPH removal and gauging events; a vacuum truck was used to extract groundwater and SPH, if present, from the irrigation well at 2006 N Colt Court during the period June 2013 through January 7, 2015. A modified SPH removal program was approved by KDHE on January 9, 2015 and implemented starting on January 14, 2015. The modified SPH removal program is described in Section 2.2.

To evaluate the feasibility of SVE technology for mitigating subsurface petroleum hydrocarbons, NuStar performed an SVE pilot test in December 2013 in accordance with the KDHE-approved *Soil Vapor Extraction Pilot Test Work Plan* (Apex, 2013). An evaluation of the SVE pilot test results indicated SVE to be a likely candidate for effective remedial technology on Site. Accordingly, NuStar presented the results of the pilot test and a conceptual SVE system design at a Neighborhood meeting on February 17, 2014. Following the meeting, NuStar submitted the *Soil Vapor Extraction Evaluation and Proposed Soil Investigation Report* in March 2014 (Apex, 2014b). NuStar modified the conceptual design of the SVE system to reflect Neighborhood feedback. Despite proposed modifications to the conceptual SVE design, neighborhood representatives cited a number of reasons for not accepting SVE as a viable mitigation option, including concerns about noise, emissions, and aesthetics.

NuStar implemented a soil investigation in the vicinity of the pipeline release in April 2014 to further refine the extent of gasoline in soil and evaluate the potential for implementing other remedial alternatives that may be acceptable to the Neighborhood. Analytical data from that soil investigation were presented in the *Soil Investigation Report and Proposed Soil Excavation Work Plan* (Apex, 2014c), which was approved by KDHE on August 8, 2014. The work plan portion of the report described proposed excavation methods along with a general excavation design for removing vadose-zone soil affected by petroleum constituents. KDHE approved the work plan and requested a detailed excavation construction plan to documents specific methods and materials for the planned excavation. In addition to the standard permit requirement for this type of project, the City of Andover required preparation of detailed survey documents and engineering designs as a condition of permitting the planned excavation. Once the City of Andover regulatory process was completed and the design plan approved, the *Soil Excavation Work Plan* was submitted to and approved by KDHE in August 2015. The *Soil Excavation Work Plan* was implemented during the fourth quarter 2015; and oxygen release compound (ORC) was introduced at the base of the excavation. On

January 7, 2016, the *Soil Excavation Results Report* (Apex, 2016) was submitted to KDHE; the Report provides a detailed description of the excavation activities.

To evaluate a remedial technology that may be appropriate for treating groundwater at the Site, the *Revised Groundwater Pilot Test Work Plan* (Apex, 2015a) was developed and submitted in January 2015. After evaluating several groundwater technologies, the Work Plan proposed a pilot test to evaluate enhanced aerobic bioremediation using oxygen release compounds (ORC) via injection to the subsurface. KDHE approved the Work Plan on January 26, 2015; ORC injections were performed and pilot test monitoring wells installed during the period of March 10 through 20, 2015. The methods and initial results of the groundwater pilot test were reported in the *Interim Groundwater Pilot Test Implementation Report*, which was submitted to KDHE on August 26, 2015 (Apex, 2015c). Bi-monthly groundwater monitoring of wells associated with the pilot test is ongoing and will continue through February 2016.

Since the release was discovered, NuStar has coordinated with property owners within the investigation area to deactivate irrigation wells (ten as of the date of this report), reconfigure the associated irrigation systems to receive municipal water, and reimburse affected property owners for municipal water fees. Irrigation wells were selected for deactivation based on their location within the investigation area, groundwater quality, the potential that pumping on the wells could influence groundwater conditions, and/or well owner concerns. Irrigation wells that have been deactivated are listed in Table 2 and locations are shown on Figure 2. It is noted that the irrigation wells have not been permanently decommissioned; therefore, the well owners will have the option of reactivating the wells at a later date. In addition, it is noted that seven Neighborhood irrigation wells were not deactivated because the homeowners wished to maintain use of the well (2007 N Mountain Court and 2009 N Mountain Court) or the wells are located outside the investigation area (1009 W Mountain, 1211 W Quail Crossing Court, 1910 W Quail Crossing Court, HOA-1, and HOA-2). One irrigation well was reactivated on October 1, 2015 (2028 N Ruger Circle).

2.0 Fourth Quarter 2015 Groundwater Monitoring

Fourth quarter 2015 groundwater and SPH monitoring activities consisted of monthly groundwater gauging and measurement of stormwater pond stage; monthly SPH gauging of the irrigation well at 2006 N Colt Court; and sampling of 16 monitoring wells, five pilot test wells, and 17 irrigation wells for chemical analyses. The groundwater monitoring program is listed on Table 1 and addresses for the irrigation wells sampled are listed on Table 2.

2.1 Groundwater and Stormwater Pond Elevations

Depth to water was measured at each monitoring well location and at the irrigation well at 2006 N Colt Court on October 20, November 24, and December 14, 2015. Groundwater levels were measured to the nearest 0.01 foot using an electronic water interface probe. Stormwater pond elevation

was measured using a staff gauge permanently installed in the pond. Groundwater elevation and stormwater pond surface elevation data are listed in Table 3. The groundwater elevations that were measured on December 14, 2015 are shown on Figure 3. Copies of field data sheets are included in Appendix A. Historical groundwater and stormwater retention pond elevations for the period August 2013 through December 14, 2015 are tabulated in Appendix B.

During the fourth quarter 2015 monitoring event, groundwater levels at the Site ranged between approximately 16 and 36 feet bgs (equivalent to 1,315 and 1,333 feet above mean sea level [MSL]). Groundwater levels increased an average of 0.32 foot relative to the third quarter 2015 groundwater monitoring event conducted in September 2015.

The elevation of the stormwater pond surface ranged from 1344.50 to 1344.75 feet MSL between September and December 2015. During the fourth quarter 2015 monitoring event, the surface elevation of the stormwater retention pond was 1344.75 feet MSL. The stormwater pond surface elevation was 0.25 foot higher compared to the third quarter 2015 monitoring event (September 2015).

As shown on Figure 3, the groundwater elevations recorded during the fourth quarter 2015 event exhibited a pattern similar to previous monitoring events at the Site. That is, groundwater elevations were highest in the vicinity of the stormwater retention pond and decreased with distance from the pond. The observed pattern is likely the result of localized groundwater recharge from the stormwater retention pond. The localized recharge results in radial flow of groundwater away from the pond. However, with increasing distance from the pond, groundwater exhibits a more easterly flow component and flatter gradient, consistent with regional patterns (O'Connor et al., 1982). The groundwater elevation at monitoring well MW-2 was inconsistent with groundwater elevations at surrounding wells; accordingly, the elevation at MW-2 was not used for contouring. The exclusion of the groundwater elevation measurement at well MW-2 does not change the interpretation of groundwater flow direction and the radial flow of groundwater away from the pond. Future groundwater elevation measurements at well MW-2 will be used to confirm groundwater flow direction and gradients.

2.2 SPH Occurrence

Consistent with the KDHE-approved *Proposed SPH Removal Modification Plan*, an SPH skimmer was installed in the irrigation well at 2006 N Colt Court on February 9, 2015, and gauging and SPH skimmer operations and maintenance (O&M) events have been performed monthly since that time to evaluate the effectiveness of the SPH skimmer in the irrigation well.

The irrigation well at 2006 N Colt Court was gauged for the presence of SPH and to measure depth to water on October 20, November 24, and December 14, 2015. SPH were not detected during these gauging events. Accordingly, SPH removal activities were not necessary during the fourth quarter 2015 monitoring period, and a groundwater sample was collected from the irrigation well during the December monitoring

event. Groundwater elevation data, SPH thicknesses, and the estimated volume of SPH removed from the irrigation well at 2006 N Colt Court for 2015 are listed in Table 4. As shown in Table 4, SPH have not been observed in the irrigation well since February 2015. Historical data are included in Appendix B.

SPH have not been observed in any monitoring and pilot test wells at the Site, including well MW-1, which is located 30 feet from the irrigation well. With the exception of the irrigation well at 2006 N Colt Court, SPH have not been observed in any irrigation wells at the Site.

2.3 Fourth Quarter 2015 Groundwater Monitoring Event Scope

The fourth quarter 2015 groundwater monitoring event conducted during the week of December 14, 2015 included the following activities:

- Gauged wells MW-1 through MW-19 and SVE-1 through SVE-4.
- Collected groundwater samples from wells MW-1 through MW-19, SVE-2, and SVE-4.
- Collected groundwater samples from irrigation wells at 16 properties, as shown on Table 2.

On January 13, 2016, an additional groundwater sample was collected from monitoring well MW-10; this well was resampled due to apparent anomalous December 2015 laboratory results for benzene. The results of the December 2015 and January 2016 sampling events are presented herein.

Groundwater samples were collected from monitoring and pilot test wells using low-flow sampling techniques. Prior to sampling, each monitoring well was purged using a peristaltic pump while water quality parameters (pH, temperature, specific conductance, dissolved oxygen, and oxidation-reduction potential [ORP]) were recorded (Table 5). The groundwater sample from SVE-2 was collected using a disposable bailer because insufficient water was present in that well to collect a sample using low flow techniques. Groundwater samples were collected from irrigation wells using disposable bailers. The groundwater analytical data for monitoring wells are presented in Section 2.4; and analytical data for irrigation wells are presented in Section 2.5.

2.4 Monitoring and Pilot Test Well Analytical Program and Results

Monitoring and pilot test well groundwater samples were submitted to ESC Laboratory Sciences (ESC), a Kansas-accredited analytical laboratory, for the following analyses: gasoline-range organics (GRO) by Method IOWA OA-1 and volatile organic compounds (VOCs) by U.S. Environmental Protection Agency (EPA) Method SW846 8260B. During the December 2015 sampling event, KDHE staff collected split samples from monitoring wells MW-1, MW-3, and MW-12; those samples were submitted for the same analyses to Pace Analytical Services, a Kansas-accredited analytical laboratory. Table 6 presents dissolved-phase petroleum constituent data for groundwater samples from monitoring wells between January 2014 and January 2016. Figures 4 through 7 present analytical data for the fourth quarter 2015

monitoring event. The KDHE split sample results are included in Table 6 and Figures 4 through 7. Copies of the laboratory reports and a quality assurance/quality control (QA/QC) results summary are included in Appendix C. The monitoring well groundwater data are discussed below.

On January 13, 2016, monitoring well MW-10 was resampled due to apparent anomalous benzene concentrations for the December 2015 analytical results. In general, the January 2016 analytical results were consistent with the December 2015 results. With the exception of benzene in the December 2015 samples and GRO in the January 2016 sample, no constituents were detected at concentrations above the corresponding KDHE Tier 2 RBSV. Quarterly groundwater sampling of well MW-10 is ongoing and the data from future monitoring events will continue to be evaluated.

Groundwater monitoring conducted since 2013 supports that the extent of dissolved phase hydrocarbon exceeding KDHE Tier 2 RBSVs is stable. Petroleum constituents were not detected or were detected at concentrations lower than KDHE Tier 2 RBSVs in 13 of 16 monitoring wells sampled (MW-2, MW-4 through MW-9, and MW-11 through MW-16). Excluding the apparently anomalous results for well MW-10 presented herein, benzene concentrations in wells during the December 2015 monitoring event were detected above KDHE Tier 2 RBSVs in samples from just two monitoring wells (MW-1 and MW-3). For comparison, during the 2013 sampling events, groundwater samples collected from seven monitoring wells, MW-1 through MW-5, MW-9, and MW-10 contained benzene concentrations above KDHE Tier 2 RBSVs.

To evaluate laboratory precision, the results of the KDHE split samples from wells MW-1, MW-3, and MW-12 were compared to the corresponding primary samples. This comparison is expressed by the relative percent difference (RPD) between the primary and split samples. The results for KDHE split samples were generally consistent with the primary samples: petroleum constituents were not detected in the primary and split sample collected from well MW-12; and petroleum constituents were detected above KDHE Tier 2 RBSVs in the primary and split samples from monitoring wells MW-1 and MW-3. With the exception of GRO in wells MW-1 and MW-3, petroleum constituents were within acceptable RPD limits; accordingly, the GRO data for wells MW-1 and MW-3 are flagged with a lower case 'j' to identify the results as estimated values.

Analytical results from groundwater samples collected from wells MW-17 through MW-19, which were installed in the vicinity of the release location in March 2015 as part of the groundwater pilot test, indicated that constituents in those wells were present at the lowest concentrations observed in 2015. Groundwater samples collected from pilot wells MW-18 and MW-19 contained only one constituent (benzene) that exceeded the corresponding KDHE Tier 2 RBSV. The groundwater sample collected from pilot test well MW-17 contained GRO, 1,3,5-trimethylbenzene, benzene, and naphthalene at concentrations above KDHE Tier 2 RBSVs, but were generally an order of magnitude lower than previously detected.

Groundwater samples were collected from pilot test wells SVE-2 and SVE-4 during the December 2015 sampling event. Pilot test wells SVE-2 and SVE-4 were installed as part of an SVE pilot test; the December 2015 groundwater samples were the first to be collected from these wells. Analytical results indicated that only one constituent (benzene) exceeded the corresponding KDHE Tier 2 RBSV in SVE-2; GRO, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene exceeded the corresponding KDHE Tier 2 RBSVs in SVE-4.

2.5 Irrigation Well Analytical Program and Results

As shown in Table 2, groundwater samples were collected from irrigation wells at 17 properties. KDHE staff collected split samples from irrigation well HOA-1; that sample was submitted to Pace Analytical Services. Irrigation well analytical data for the fourth quarter 2015 monitoring event are listed in Table 7 and shown on Figures 4 through 7. Copies of the laboratory reports are included in Appendix C. The irrigation well groundwater data are discussed below:

- During the fourth quarter 2015 groundwater monitoring event, dissolved-phase hydrocarbon constituents were not detected in 15 irrigation wells (Figure 4).
- The groundwater samples collected from two irrigation wells (2005 N Colt Court and 2006 N Colt Court) contained concentrations of dissolved-phase petroleum constituents that exceed the corresponding KDHE Tier 2 RBSVs.
    - The concentrations of GRO, benzene, 1,2,4-trimethylbenzene, and naphthalene (2.75, 0.109, 0.0672, and 0.0136 milligrams per liter (mg/L), respectively) in the irrigation well at 2005 N Colt Court exceeded the corresponding KDHE Tier 2 RBSVs; however these concentrations were lower than those detected in July 2013 (6.6, 0.47, 0.16, and 0.027 mg/L, respectively). As shown in Table 2, this irrigation well was deactivated in 2013, and the associated irrigation system was reconfigured to receive municipal water.
    - The concentrations of GRO, benzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, naphthalene, and toluene in the irrigation well at 2006 N Colt Court exceeded the corresponding KDHE Tier 2 RBSVs. Measureable SPH were generally present in this well during the period June 2012 through February 2015; however, SPH have not been observed in this well since February 2015. The December 2015 benzene concentration in the irrigation well at 2006 N Colt Court (1.74 mg/L) is on the lower end of the range observed during the period June 2012 through December 2015 (0.98 to 17 mg/L). As shown in Table 2, this irrigation well was deactivated in 2012 and the irrigation system was reconfigured to receive municipal water.

2.6 Groundwater Monitoring Program – Proposed Modifications

Proposed modifications to the groundwater monitoring program for monitoring and pilot test wells are shown in Table 8; and proposed modifications to the groundwater monitoring program for irrigation wells are shown in Table 9. In summary, the requested modifications are:

- Include analyses for low-range hydrocarbon (LRH) and mid-range hydrocarbon (MRH) analyses by EPA Method 8015D. As previously discussed with KDHE, this request is consistent with recent changes in KDHE Policy # BER-041 *Total Petroleum Hydrocarbons (TPH) and Light Non-Aqueous Phase Liquid (LNAPL) Characterization, Remediation and Management.* In the first quarter 2016, water samples will be analyzed for GRO by Method OA-1; GRO analysis will be discontinued after that event.
- Initiate quarterly groundwater sampling at pilot test well SVE-3. Pilot test well SVE-3 is adjacent to monitoring well MW-3 and is screened at a shallower interval (*i.e.* well MW-3 is screened 40 to 60 feet bgs and well SVE-3 is screened 20 to 30 feet bgs). Groundwater monitoring at well SVE-3 will provide additional information regarding the vertical distribution of dissolved-phase hydrocarbons at the Site.
- Replace the monthly gauging schedule and SPH monitoring/recovery program with a quarterly schedule. Since the discovery of the release in 2012, SPH have been present in only one well (irrigation well at 2006 N Colt Court) and SPH have not been present in that well since February 2015. Groundwater elevations and flow direction is well documented at the Site. The quarterly gauging schedule will be sufficient to obtain groundwater elevations and flow direction information and monitor SPH occurrence, if any, in wells at the Site.

3.0 Status Report

Work Completed – Fourth Quarter 2015:

The following activities were performed during the fourth quarter 2015:

- NuStar implemented the *Soil Excavation Work Plan* in October 2015.
- The expanded groundwater monitoring program as shown in Table 1 was implemented during the fourth quarter 2015 comprehensive groundwater monitoring event.

Work Planned – First Quarter 2016:

- Performance of the first quarter 2016 comprehensive groundwater monitoring event and groundwater pilot test sampling will be conducted in March. Water samples will be analyzed for GRO, LRH, and MRH.

- A soil excavation results report will be submitted to KDHE.
- The proposed modifications to the groundwater monitoring program presented herein will be implemented upon approval by KDHE.

4.0 References

Apex Companies, LLC (Apex), 2013. *Soil Vapor Extraction Pilot Test Work Plan. Quail Crossing Neighborhood, Andover, Kansas.* November 15, 2013.

Apex, 2014a. *Comprehensive Investigation Report. Quail Crossing Neighborhood, Andover, Kansas.* April 30, 2014.

Apex, 2014b. *Soil Vapor Extraction Evaluation and Soil Investigation Report. Quail Crossing Neighborhood, Andover, Kansas.* March 28, 2014.

Apex, 2014c. *Soil Investigation Report and Proposed Soil Excavation Work Plan. Quail Crossing Neighborhood, Andover, Kansas.* July 17, 2014.

Apex, 2015a. *Revised Groundwater Pilot Test Work Plan. Quail Crossing Neighborhood, Andover, Kansas.* January 26, 2015.

Apex, 2015b. *Soil Excavation Report. Quail Crossing Neighborhood, Andover, Kansas.* August 19, 2015.

Apex, 2015c. *Interim Groundwater Pilot Test Implementation Report. Quail Crossing Neighborhood, Andover, Kansas.* August 26, 2015.

Apex, 2015d. *Second Quarter 2015 Groundwater Monitoring Report. Quail Crossing Neighborhood, Andover, Kansas.* September 11, 2015.

O'Connor, Howard G., Chaffee, Pamela, and Link, Martha, 1982. *Geohydrology of Southwestern Butler County, Kansas: A Preliminary Report.* Kansas Geological Survey Open File Report 82-2. May 1982.

Table 1
Groundwater Monitoring Program – Monitoring and Pilot Test Wells
Andover Colt Court Release Site
Andover, Kansas

Well ID	Gauging	GRO	VOCs
MW-1	M	Q	Q
MW-2	M	Q	Q
MW-3	M	Q	Q
MW-4	M	Q	Q
MW-5	M	Q	Q
MW-6	M	Q	Q
MW-7	M	Q	Q
MW-8	M	Q	Q
MW-9	M	Q	Q
MW-10	M	Q	Q
MW-11	M	Q	Q
MW-12	M	Q	Q
MW-13	M	Q	Q
MW-14	M	Q	Q
MW-15	M	Q	Q
MW-16	M	Q	Q
MW-17	M	Q	Q
MW-18	M	Q	Q
MW-19	M	Q	Q
SVE-1	M	--	--
SVE-2	M	Q	Q
SVE-3	M	--	--
SVE-4	M	Q	Q

Notes:

1. GRO = Gasoline-range organics quantified by IOWA OA-1.
2. VOCs = Volatile organic compounds; benzene, toluene, ethylbenzene, xylenes [BTEX], 1,2-dicholoethane, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-butylbenzene, and n-propylbenzene by U.S. Environmental Protection Agency Method 8260B.
3. M = Performed monthly.
4. Q = Performed quarterly.
5. Monitoring wells will not be sampled if SPH are present.

Table 2
Groundwater Monitoring Program – Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Well Location	Well Status	GRO	VOCs
2001 N Colt Ct	Currently in Use	Q	Q
2002 N Colt Ct	Deactivated	Q	Q
2004 N Colt Ct	Deactivated	Q	Q
2005 N Colt Ct	Deactivated	Q	Q
2006 N Colt Ct	Deactivated	Q	Q
HOA-1	Currently in Use	Q	Q
2007 N Colt Ct	Deactivated	Q	Q
2019 N Ruger Cir	Deactivated	Q	Q
2020 N Ruger Cir	Deactivated	Q	Q
2028 N Ruger Cir	Currently in Use	Q	Q
2032 N Ruger Cir	Deactivated	Q	Q
2021 N Ruger Ct	Deactivated	Q	Q
2025 N Ruger Ct	Currently in Use	Q	Q
1009 W Mountain	Currently in Use	Q	Q
2007 N Mountain Ct	Currently in Use	Q	Q
2009 N Mountain Ct	Currently in Use	Q	Q
1211 W Quail Crossing Ct	Currently in Use	Q	Q

Notes:

1. GRO = Gasoline-Range Organics quantified by IOWA OA-1.
2. VOCs = Volatile organic compounds; benzene, toluene, ethylbenzene, xylenes [BTEX], 1,2-dicholoethane, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-butylbenzene, and n-propylbenzene by U.S. Environmental Protection Agency Method 8260B.
3. Deactivation includes plumbing the irrigation system to the municipal water system. The irrigation well is not permanently decommissioned.
4. Q = Performed quarterly.
5. Well locations are shown on Figure 2.

Table 3
Groundwater Gauging Data – Monitoring and Pilot Test Wells
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-1	1/7/2015					31.75	--	--	1320.38
	1/14/2015					31.44	--	--	1320.69
	1/20/2015					31.45	--	--	1320.68
	1/28/2015					31.42	--	--	1320.71
	2/4/2015					31.44	--	--	1320.69
	2/9/2015					31.62	--	--	1320.51
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/20/2015	4.0	1352.13	35.0	20-35	31.38	--	--	1320.75
	3/25/2015					NM	--	--	NM
	4/20/2015					31.39	--	--	1320.74
	6/10/2015					31.23	--	--	1320.90
	6/15/2015					31.31	--	--	1320.82
	7/22/2015					31.29	--	--	1320.84
	8/20/2015					31.35	--	--	1320.78
	9/14/2015					31.35	--	--	1320.78
	10/20/2015					31.32	--	--	1320.81
	11/24/2015					31.35	--	--	1320.78
	12/14/2015					31.21	--	--	1320.92
MW-2	1/7/2015					NM	--	--	NM
	1/14/2015					32.90	--	--	1320.27
	1/20/2015					32.93	--	--	1320.24
	1/28/2015					32.89	--	--	1320.28
	2/4/2015					32.92	--	--	1320.25
	2/9/2015					33.15	--	--	1320.02
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1353.17	44.0	29-44	32.87	--	--	1320.30
	3/25/2015					NM	--	--	NM
	4/20/2015					36.43	--	--	1316.74
	6/10/2015					NM	--	--	NM
	6/15/2015					34.83	--	--	1318.34
	7/22/2015					35.13	--	--	1318.04
	8/20/2015					36.21	--	--	1316.96
	9/14/2015					35.87	--	--	1317.30
	10/20/2015					36.23	--	--	1316.94
	11/24/2015					35.81	--	--	1317.36
	12/14/2015					34.08	--	--	1319.09
MW-3	1/7/2015					NM	--	--	NM
	1/14/2015					41.35	--	--	1309.12
	1/20/2015					41.36	--	--	1309.11
	1/28/2015					42.22	--	--	1308.25
	2/4/2015					41.12	--	--	1309.35
	2/9/2015					40.60	--	--	1309.87
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1350.47	60.0	40-60	41.02	--	--	1309.45
	3/25/2015					NM	--	--	NM
	4/20/2015					45.61	--	--	1304.86
	6/10/2015					NM	--	--	NM
	6/15/2015					38.21	--	--	1312.26
	7/22/2015					39.69	--	--	1310.78
	8/20/2015					44.40	--	--	1306.07
	9/14/2015					43.33	--	--	1307.14
	10/20/2015					45.10	--	--	1305.37
	11/24/2015					39.69	--	--	1310.78
	12/14/2015					35.42	--	--	1315.05

Please refer to notes at end of table.

Table 3
Groundwater Gauging Data – Monitoring and Pilot Test Wells
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-4	1/7/2015					NM	--	--	NM
	1/14/2015					31.52	--	--	1319.21
	1/20/2015					31.55	--	--	1319.18
	1/28/2015					31.66	--	--	1319.07
	2/4/2015					31.70	--	--	1319.03
	2/9/2015					31.75	--	--	1318.98
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1350.73	41.0	26-41	31.22	--	--	1319.51
	3/25/2015					NM	--	--	NM
	4/20/2015					34.10	--	--	1316.63
	6/10/2015					29.28	--	--	1321.45
	6/15/2015					29.02	--	--	1321.71
	7/22/2015					29.55	--	--	1321.18
	8/20/2015					29.65	--	--	1321.08
	9/14/2015					29.60	--	--	1321.13
	10/20/2015					30.31	--	--	1320.42
	11/24/2015					30.37	--	--	1320.36
	12/14/2015					29.69	--	--	1321.04
MW-5	1/7/2015					NM	--	--	NM
	1/14/2015					20.56	--	--	1332.21
	1/20/2015					20.55	--	--	1332.22
	1/28/2015					20.58	--	--	1332.19
	2/4/2015					20.69	--	--	1332.08
	2/9/2015					20.58	--	--	1332.19
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1352.77	30.0	15-30	20.80	--	--	1331.97
	3/25/2015					NM	--	--	NM
	4/20/2015					21.01	--	--	1331.76
	6/10/2015					19.44	--	--	1333.33
	6/15/2015					19.60	--	--	1333.17
	7/22/2015					19.82	--	--	1332.95
	8/20/2015					19.97	--	--	1332.80
	9/14/2015					20.06	--	--	1332.71
	10/20/2015					20.24	--	--	1332.53
	11/24/2015					20.40	--	--	1332.37
	12/14/2015					19.82	--	--	1332.95
MW-6	1/7/2015					NM	--	--	NM
	1/14/2015					22.59	--	--	1327.17
	1/20/2015					22.45	--	--	1327.31
	1/28/2015					22.54	--	--	1327.22
	2/4/2015					22.59	--	--	1327.17
	2/9/2015					22.77	--	--	1326.99
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1349.76	41.0	26-41	22.62	--	--	1327.14
	3/25/2015					NM	--	--	NM
	4/20/2015					23.05	--	--	1326.71
	6/10/2015					NM	--	--	NM
	6/15/2015					20.45	--	--	1329.31
	7/22/2015					20.66	--	--	1329.10
	8/20/2015					20.73	--	--	1329.03
	9/14/2015					20.48	--	--	1329.28
	10/20/2015					21.11	--	--	1328.65
	11/24/2015					22.17	--	--	1327.59
	12/14/2015					20.57	--	--	1329.19

Please refer to notes at end of table.

Table 3
Groundwater Gauging Data – Monitoring and Pilot Test Wells
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-7	1/7/2015					NM	--	--	NM
	1/14/2015					16.49	--	--	1332.49
	1/20/2015					16.55	--	--	1332.43
	1/28/2015					16.56	--	--	1332.42
	2/4/2015					16.56	--	--	1332.42
	2/9/2015					16.58	--	--	1332.40
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1348.98	24.0	9-24	16.63	--	--	1332.35
	3/25/2015					NM	--	--	NM
	4/20/2015					16.10	--	--	1332.88
	6/10/2015					NM	--	--	'NM
	6/15/2015					14.91	--	--	1334.07
	7/22/2015					15.61	--	--	1333.37
	8/20/2015					15.70	--	--	1333.28
	9/14/2015					15.55	--	--	1333.43
	10/20/2015					16.07	--	--	1332.91
	11/24/2015					16.29	--	--	1332.69
	12/14/2015					15.56	--	--	1333.42
MW-8	1/7/2015					NM	--	--	NM
	1/14/2015					21.64	--	--	1331.74
	1/20/2015					21.70	--	--	1331.68
	1/28/2015					21.72	--	--	1331.66
	2/4/2015					21.92	--	--	1331.46
	2/9/2015					21.88	--	--	1331.50
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1353.38	30.0	15-30	21.96	--	--	1331.42
	3/25/2015					NM	--	--	NM
	4/20/2015					22.25	--	--	1331.13
	6/10/2015					NM	--	--	'NM
	6/15/2015					19.93	--	--	1333.45
	7/22/2015					20.20	--	--	1333.18
	8/20/2015					20.64	--	--	1332.74
	9/14/2015					20.68	--	--	1332.70
	10/20/2015					21.08	--	--	1332.30
	11/24/2015					21.61	--	--	1331.77
	12/14/2015					20.41	--	--	1332.97
MW-9	1/7/2015					NM	--	--	NM
	1/14/2015					NM	--	--	NM
	1/20/2015					NM	--	--	NM
	1/28/2015					31.81	--	--	1317.67
	2/4/2015					31.90	--	--	1317.58
	2/9/2015					31.78	--	--	1317.70
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1349.48	34.0	19-34	31.59	--	--	1317.89
	3/25/2015					NM	--	--	NM
	4/20/2015					33.25	--	--	1316.23
	6/10/2015					NM	--	--	'NM
	6/15/2015					29.83	--	--	1319.65
	7/22/2015					28.87	--	--	1320.61
	8/20/2015					28.41	--	--	1321.07
	9/14/2015					30.24	--	--	1319.24
	10/20/2015					31.07	--	--	1318.41
	11/24/2015					30.87	--	--	1318.61
	12/14/2015					29.22	--	--	1320.26

Please refer to notes at end of table.

Table 3
Groundwater Gauging Data – Monitoring and Pilot Test Wells
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-10	1/7/2015					NM	--	--	NM
	1/14/2015					28.45	--	--	1320.34
	1/20/2015					28.42	--	--	1320.37
	1/28/2015					28.44	--	--	1320.35
	2/4/2015					28.49	--	--	1320.30
	2/9/2015					28.54	--	--	1320.25
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015					28.42	--	--	1320.37
	3/25/2015	2.0	1348.79	34.0	19-34	NM	--	--	NM
	4/20/2015					28.53	--	--	1320.26
	6/10/2015					NM	--	--	NM
	6/15/2015					28.30	--	--	1320.49
	7/22/2015					29.56	--	--	1319.23
	8/20/2015					30.49	--	--	1318.30
	9/14/2015					28.40	--	--	1320.39
	10/20/2015					28.39	--	--	1320.40
	11/24/2015					28.40	--	--	1320.39
	12/14/2015					28.36	--	--	1320.43
	1/13/2016					27.04	--	--	1321.75
MW-11	1/7/2015					NM	--	--	NM
	1/14/2015					28.88	--	--	1322.46
	1/20/2015					28.88	--	--	1322.46
	1/28/2015					28.97	--	--	1322.37
	2/4/2015					28.94	--	--	1322.40
	2/9/2015					29.26	--	--	1322.08
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/19/2015	2.0	1351.34	42.0	22-42	29.84	--	--	1321.50
	3/25/2015					NM	--	--	NM
	4/20/2015					30.39	--	--	1320.95
	6/10/2015					NM	--	--	NM
	6/15/2015					28.31	--	--	1323.03
	7/22/2015					28.66	--	--	1322.68
	8/20/2015					28.73	--	--	1322.61
	9/14/2015					28.82	--	--	1322.52
	10/20/2015					28.62	--	--	1322.72
	11/24/2015					28.76	--	--	1322.58
	12/14/2015					28.64	--	--	1322.70
MW-12	1/7/2015					NM	--	--	NM
	1/14/2015					NM	--	--	NM
	1/20/2015					31.04	--	--	1318.70
	1/28/2015					31.05	--	--	1318.69
	2/4/2015					31.07	--	--	1318.67
	2/9/2015					31.06	--	--	1318.68
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1349.74	43.0	23-43	30.95	--	--	1318.79
	3/25/2015					NM	--	--	NM
	4/20/2015					31.09	--	--	1318.65
	6/10/2015					NM	--	--	NM
	6/15/2015					30.86	--	--	1318.88
	7/22/2015					30.98	--	--	1318.76
	8/20/2015					31.08	--	--	1318.66
	9/14/2015					31.09	--	--	1318.65
	10/20/2015					31.09	--	--	1318.65
	11/24/2015					31.09	--	--	1318.65
	12/14/2015					30.51	--	--	1319.23

Please refer to notes at end of table.

Table 3
Groundwater Gauging Data – Monitoring and Pilot Test Wells
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-13	1/7/2015					NM	--	--	NM
	1/14/2015					33.06	--	--	1321.52
	1/20/2015					32.93	--	--	1321.65
	1/28/2015					32.85	--	--	1321.73
	2/4/2015					33.07	--	--	1321.51
	2/9/2015					32.81	--	--	1321.77
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1354.58	45.0	25-45	33.16	--	--	1321.42
	3/25/2015					NM	--	--	NM
	4/20/2015					33.34	--	--	1321.24
	6/10/2015					NM	--	--	NM
	6/15/2015					31.94	--	--	1322.64
	7/22/2015					31.77	--	--	1322.81
	8/20/2015					31.56	--	--	1323.02
	9/14/2015					31.41	--	--	1323.17
	10/20/2015					31.83	--	--	1322.75
	11/24/2015					32.18	--	--	1322.40
	12/14/2015					31.98	--	--	1322.60
MW-14	1/7/2015					NM	--	--	NM
	1/14/2015					33.51	--	--	1321.48
	1/20/2015					33.59	--	--	1321.40
	1/28/2015					33.65	--	--	1321.34
	2/4/2015					33.88	--	--	1321.11
	2/9/2015					34.00	--	--	1320.99
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1354.99	45.0	25-45	33.94	--	--	1321.05
	3/25/2015					NM	--	--	NM
	4/20/2015					34.93	--	--	1320.06
	6/10/2015					NM	--	--	NM
	6/15/2015					31.70	--	--	1323.29
	7/22/2015					31.62	--	--	1323.37
	8/20/2015					31.55	--	--	1323.44
	9/14/2015					31.38	--	--	1323.61
	10/20/2015					31.92	--	--	1323.07
	11/24/2015					32.20	--	--	1322.79
	12/14/2015					31.74	--	--	1323.25
MW-15	1/7/2015					NM	--	--	NM
	1/14/2015					NM	--	--	NM
	1/20/2015					34.93	--	--	1316.86
	1/28/2015					34.98	--	--	1316.81
	2/4/2015					35.12	--	--	1316.67
	2/9/2015					35.02	--	--	1316.77
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1351.79	45.0	25-45	35.04	--	--	1316.75
	3/25/2015					NM	--	--	NM
	4/20/2015					36.50	--	--	1315.29
	6/10/2015					NM	--	--	NM
	6/15/2015					32.34	--	--	1319.45
	7/22/2015					32.94	--	--	1318.85
	8/20/2015					33.48	--	--	1318.31
	9/14/2015					33.05	--	--	1318.74
	10/20/2015					33.63	--	--	1318.16
	11/24/2015					33.33	--	--	1318.46
	12/14/2015					31.47	--	--	1320.32

Please refer to notes at end of table.

Table 3
Groundwater Gauging Data – Monitoring and Pilot Test Wells
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-16	1/7/2015					NM	--	--	NM
	1/14/2015					NM	--	--	NM
	1/20/2015					30.71	--	--	1321.42
	1/28/2015					20.13	--	--	1332.00
	2/4/2015					30.76	--	--	1321.37
	2/9/2015					31.09	--	--	1321.04
	2/18/2015					NM	--	--	NM
	2/25/2015					NM	--	--	NM
	3/4/2015					NM	--	--	NM
	3/11/2015					NM	--	--	NM
	3/18/2015	2.0	1352.13	45.0	25-45	31.80	--	--	1320.33
	3/25/2015					NM	--	--	NM
	4/20/2015					33.03	--	--	1319.10
	6/10/2015					NM	--	--	NM
	6/15/2015					29.48	--	--	1322.65
	7/22/2015					29.13	--	--	1323.00
	8/20/2015					28.65	--	--	1323.48
	9/14/2015					28.49	--	--	1323.64
	10/20/2015					28.90	--	--	1323.23
	11/24/2015					29.15	--	--	1322.98
	12/14/2015					27.88	--	--	1324.25
MW-17	3/18/2015					NM	--	--	NM
	4/20/2015					33.91	--	--	1317.78
	6/10/2015					31.15	--	--	1320.54
	6/15/2015					31.28	--	--	1320.41
	7/22/2015					NM	--	--	NM
	8/20/2015	2.0	1351.69	42	27-42	31.19	--	--	1320.50
	9/14/2015					30.99	--	--	1320.70
	10/20/2015					32.57	--	--	1319.12
	11/24/2015					32.65	--	--	1319.04
	12/14/2015					32.00	--	--	1319.69
MW-18	3/18/2015					27.93	--	--	1323.18
	4/20/2015					33.51	--	--	1317.60
	6/10/2015					30.50	--	--	1320.61
	6/15/2015		1351.11			30.64	--	--	1320.47
	7/22/2015	2.0		42	27-42	30.84	--	--	1320.27
	8/20/2015					30.81	--	--	1320.30
	9/14/2015					30.53	--	--	1320.58
MW-18	11/24/2015		1351.04			30.99	--	--	1320.05
	12/14/2015					30.96	--	--	1320.08
MW-19	3/18/2015					35.19	--	--	1315.94
	4/20/2015					33.70	--	--	1317.43
	6/10/2015					30.24	--	--	1320.89
	6/15/2015		1351.13			30.60	--	--	1320.53
	7/22/2015	2.0		42	27-42	30.58	--	--	1320.55
	8/20/2015					30.65	--	--	1320.48
	9/14/2015					30.59	--	--	1320.54
MW-19	11/24/2015		1351.00			31.00	--	--	1320.00
	12/14/2015					31.06	--	--	1319.94
SVE-1	10/20/2015					NM	--	--	NM
	11/24/2015	2.0	1350.23	30	20-30	27.05	--	--	1324.08
	12/14/2015					26.11			1325.02
SVE-2	10/20/2015					NM	--	--	NM
	11/24/2015	2.0	1350.21	30	15-30	28.17	--	--	1322.96
	12/14/2015					26.95	--	--	1324.18
SVE-3	10/20/2015					NM	--	--	NM
	11/24/2015	2.0	1351.82	30	20-30	29.36	--	--	1321.77
	12/14/2015					29.25	--	--	1321.88

Please refer to notes at end of table.

Table 3
Groundwater Gauging Data – Monitoring and Pilot Test Wells
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
SVE-4	10/20/2015	2.0	1350.31	30	20-30	NM	--	--	NM
	11/24/2015					28.55	--	--	1322.58
	12/14/2015					29.04	--	--	1322.09
Stormwater Pond (Pond Stage [feet MSL])	1/7/2015	NA	NA	NA	NA	NA	NA	NA	NM
	1/14/2015								NM
	1/20/2015								1344.00
	1/28/2015								1343.80
	2/4/2015								1344.15
	2/9/2015								1344.10
	2/18/2015								NM
	2/25/2015								NM
	3/4/2015								NM
	3/11/2015								NM
	3/18/2015								1343.60
	3/25/2015								NM
	4/20/2015								1344.75
	6/10/2015								1344.50
	6/15/2015								1344.75
	7/22/2015								1344.50
	8/20/2015								1344.75
	9/14/2015								1344.50
	10/22/2015								1344.75
	11/24/2015								1344.50
	12/14/2015								1344.75

Notes:

1. feet MSL = Feet above mean sea level (NAVD88).
2. -- = No SPH
3. NM = Not measured.
4. Pond elevation is measured directly from a staff gauge in the pond (in 0.25-foot increments). The top of the staff gauge is 1347.59 feet above mean sea level.
5. NA = Not applicable.
6. Monitoring wells MW-18 and MW-19 were resurveyed on November 24, 2015.

Table 4
Separate- and Dissolved-Phase Recovery Data – 2015
Andover Colt Court Release Site
Andover, Kansas

Date	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	Product Thickness (feet)	Minimum SPH Recovered (gallons)	Total Fluids Recovered (SPH and Water; gallons)	SPH Thickness After Removal Event	Fluid Removal Technology
1/7/2015	46.87	46.78	0.09	0.2	50.0	0.01	Mobile vacuum truck
1/14/2015	46.32	46.29	0.03	0.0	0.0	0.03	None
1/20/2015	46.27	--	--	0.0	0.0	0.00	None
1/28/2015	47.34	47.27	0.07	0.0	0.0	0.07	None
2/4/2015	45.92	45.84	0.08	0.0	0.0	0.08	None
2/9/2015	45.59	45.55	0.04	0.1	50.0	0.01	Mobile vacuum truck
3/18/2015	45.55	--	--	0.3	0.3	0.00	SPH Skimmer
6/10/2015	45.43	--	--	0.0	0.0	0.00	SPH Skimmer
6/15/2015	42.38	--	--	0.0	0.0	0.00	SPH Skimmer
7/22/2015	47.66	--	--	0.0	0.0	0.00	SPH Skimmer
8/20/2015	46.98	--	--	0.0	0.0	0.00	SPH Skimmer
9/14/2015	49.56	--	--	0.0	0.0	0.00	SPH Skimmer
10/20/2015	47.56	--	--	0.0	0.0	0.00	SPH Skimmer
11/24/2015	48.66	--	--	0.0	0.0	0.00	SPH Skimmer
12/14/2015	46.98	--	--	0.0	0.0	0.00	SPH Skimmer
			Total Fluids Recovered	**0.6**	**100**		

Notes:

1. SPH = Separate-phase hydrocarbons.
2. The SPH volume removed using vacuum technology was calculated by measuring the SPH thicknesses in the well before and after each event and estimating the volume of SPH in the corresponding gravel pack interval.
3. -- = No SPH.

Table 5
Groundwater Parameters
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH	ORP
MW-1	1/30/2014	15.79	0.00	1,060	7.25	-52
	4/9/2014	19.22	5.52	979	6.98	-130
	7/23/2014	19.98	5.35	1,251	7.49	-110
	10/29/2014	15.81	3.21	1,369	6.97	-60
	2/12/2015	11.33	1.43	1,250	6.77	-57
	6/16/2015	16.50	0.95	1,311	7.01	-52
	8/20/2015	17.22	0.88	1,348	6.98	-77
	9/15/2015	17.67	4.39	1,365	6.94	-51
	12/16/2015	13.26	0.19	1,453	6.90	-154
MW-2	1/30/2014	15.50	0.00	843	6.22	99
	4/8/2014	15.29	4.05	752	6.77	7
	7/22/2014	21.74	4.79	852	4.79	55
	10/30/2014	19.07	4.87	813	7.21	130
	2/10/2015	14.90	3.16	816	5.77	129
	6/16/2015	18.89	2.75	805	7.28	40
	9/16/2015	18.92	2.66	715	6.87	129
	12/15/2015	16.45	2.96	797	7.20	73
MW-3	1/30/2014	11.91	0.00	853	4.05	18
	4/8/2014	17.25	8.41	740	6.96	-11
	7/24/2014	25.79	2.89	971	7.18	-95
	10/30/2014	18.47	0.96	901	7.07	-236
	2/10/2015	16.27	0.93	940	6.68	-85
	6/17/2015	18.87	0.46	947	7.04	-83
	9/15/2015	19.61	0.89	852	6.82	-110
	12/15/2015	15.44	0.20	925	6.98	-119
MW-4	1/30/2014	14.01	2.78	1,130	5.46	158
	4/9/2014	14.99	2.54	968	6.95	132
	7/24/2014	20.53	0.57	1,135	7.24	-9
	10/30/2014	16.98	0.54	1,083	7.03	-146
	2/10/2015	16.62	1.07	1,044	6.54	-48
	6/16/2015	19.74	3.82	1,101	7.24	26
	8/20/2015	19.86	3.95	1,136	6.98	43
	9/16/2015	20.16	7.34	1,044	7.28	74
	12/15/2015	16.75	4.60	1,011	7.14	76
MW-5	1/30/2014	15.57	0.00	1,300	6.96	57
	4/8/2014	15.99	1.09	1,190	6.92	189
	7/23/2014	20.70	2.28	1,458	7.17	64
	10/29/2014	19.39	0.49	1,453	6.98	127
	2/10/2015	15.98	1.38	1,444	6.47	93
	6/16/2015	17.90	1.49	1,429	6.96	149
	8/20/2015	18.95	1.51	1,464	7.23	0
	9/16/2015	19.17	1.63	1,310	6.94	107
	12/15/2015	15.34	1.88	1,420	7.00	107

Please refer to notes at end of table.

Table 5
Groundwater Parameters
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH	ORP
MW- 6	1/30/2014	15.54	0.63	986	7.11	146
	4/9/2014	16.58	9.16	797	7.00	201
	7/24/2014	19.56	5.64	1,303	7.27	17
	10/29/2014	18.08	4.29	1,137	7.09	160
	2/11/2015	13.07	4.06	893	6.91	100
	6/17/2015	17.60	3.88	1,280	7.15	15
	9/15/2015	18.01	1.29	431	7.13	-34
	10/22/2015	16.60	5.71	1,171	7.22	333
	12/16/2015	14.00	1.71	336	7.26	148
MW-7	1/30/2014	16.13	0.00	667	7.21	-37
	4/9/2014	15.78	9.43	566	7.08	23
	7/24/2014	18.24	0.66	740	7.38	-11
	10/29/2014	17.47	0.22	754	7.25	-33
	2/11/2015	15.25	0.80	662	6.93	18
	6/17/2015	17.16	0.60	868	7.27	-31
	9/15/2015	18.00	0.37	671	7.12	-32
	10/22/2015	16.99	0.42	769	7.32	-12
	12/16/2015	15.47	7.16	865	0.70	-163
MW-8	1/30/2014	16.94	1.56	1,120	7.00	109
	4/8/2014	16.42	9.18	976	6.80	170
	7/22/2014	19.71	4.88	1,156	7.27	70
	10/29/2014	20.01	3.92	1,051	7.19	138
	2/10/2015	16.90	2.66	1,178	6.44	100
	6/17/2015	19.26	3.16	1,209	7.18	110
	9/16/2015	19.29	3.47	1,033	6.97	131
	12/15/2015	16.59	3.12	1,138	7.13	91
MW-9	1/30/2014	12.13	0.00	760	4.50	8
	4/8/2014	16.65	4.05	725	7.07	192
	7/24/2014	23.24	3.59	1,080	7.11	48
	10/30/2014	16.72	5.61	977	7.08	98
	2/11/2015	15.06	3.13	884	7.05	91
	6/16/2015	19.40	0.67	1,247	7.16	61
	9/15/2015	20.43	0.98	990	6.83	43
	10/22/2015	17.86	1.40	1,043	7.11	136
	12/15/2015	16.73	4.35	1,259	7.17	54
MW-10	1/30/2014	14.31	0.00	1,340	4.90	-44
	4/8/2014	17.01	0.18	982	6.79	-105
	8/1/2014	21.23	9.61	1,236	7.59	77
	10/29/2014	19.71	1.80	1,302	6.90	88
	2/11/2015	13.84	1.67	984	6.88	99
	6/16/2015	19.13	0.55	1,439	7.28	47
	9/15/2015	21.36	1.48	1,348	6.84	56
	10/22/2015	17.55	0.51	1,262	7.01	154
	12/15/2015	16.80	0.67	1,431	6.81	75
	1/13/2016	16.64	0.36	1,445	6.87	68

Please refer to notes at end of table.

Table 5
Groundwater Parameters
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH	ORP
MW-11	1/30/2014	16.22	6.91	1,320	6.54	185
	4/8/2014	16.61	6.09	1,140	7.05	199
	7/23/2014	20.17	2.45	1,438	7.24	100
	10/30/2014	18.55	4.02	1,404	7.11	91
	2/10/2015	16.66	4.01	1,314	6.61	72
	6/17/2015	18.94	1.78	1,463	7.12	120
	9/16/2015	20.67	3.16	1,339	6.92	93
	12/15/2015	16.71	2.20	1,452	6.95	81
MW-12	1/30/2014	14.13	0.00	927	5.44	66
	4/9/2014	19.96	8.58	774	7.01	30
	7/22/2014	24.34	0.85	1,067	7.11	-5
	10/29/2014	18.73	0.63	967	7.13	-67
	2/12/2015	15.09	1.11	906	6.78	45
	6/16/2015	20.24	2.43	1,014	7.15	50
	9/15/2015	20.60	5.65	946	6.90	92
	10/22/2015	17.63	4.28	953	7.26	362
	12/16/2015	16.34	0.70	979	7.07	133
MW-13	1/30/2014	15.00	6.53	774	7.04	158
	4/8/2014	15.35	7.03	674	6.93	109
	7/22/2014	23.53	8.10	790	7.31	76
	10/29/2014	19.97	6.70	767	7.19	135
	2/10/2015	15.74	4.85	759	6.25	110
	6/17/2015	18.95	5.22	673	7.27	102
	9/16/2015	18.88	6.52	659	7.20	86
	12/15/2015	15.57	6.26	487	7.59	79
MW-14	1/30/2014	15.31	3.53	724	7.00	183
	4/9/2014	18.75	5.62	608	7.06	181
	7/22/2014	22.63	4.81	683	7.32	66
	10/29/2014	17.09	5.49	703	7.29	101
	2/12/2015	14.50	4.17	687	6.73	94
	6/17/2015	18.90	3.42	698	7.20	97
	9/16/2015	20.70	3.89	587	7.14	82
	12/15/2015	15.63	3.42	649	7.19	85
MW-15	1/30/2014	12.24	0.00	732	5.65	218
	4/8/2014	15.84	9.96	653	6.93	180
	7/23/2014	18.11	4.78	734	7.31	92
	10/29/2014	20.21	4.49	728	7.16	147
	2/10/2015	16.94	3.79	732	6.56	75
	6/17/2015	18.85	3.58	744	7.08	113
	9/16/2015	19.45	7.93	652	7.40	61
	10/22/2015	17.66	6.26	710	7.49	332
	12/15/2016	15.84	4.04	624	7.19	81

Please refer to notes at end of table.

Table 5
Groundwater Parameters
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	pH	ORP
MW-16	1/30/2014	12.34	2.39	929	5.79	191
	4/8/2014	15.65	8.32	713	6.91	181
	7/23/2014	21.58	4.60	981	7.28	87
	10/29/2014	20.13	4.36	972	7.09	156
	2/10/2015	16.70	3.25	924	6.73	97
	6/17/2015	20.30	3.66	889	7.16	120
	9/16/2015	18.79	5.00	771	7.11	83
	12/15/2015	15.94	4.42	642	7.34	77
MW-17	3/20/2015	18.15	0.61	1057	6.81	42
	4/20/2015	16.87	0.83	1,012	6.70	-46
	6/16/2015	17.43	0.92	1,047	7.00	-10
	8/20/2015	17.79	0.67	1,067	7.18	-98
	9/15/2015	17.65	0.38	1,121	6.93	-198
	12/15/2015	14.55	0.42	922	6.96	-113
MW-18	3/20/2015	17.43	0.68	990	6.89	-13
	4/20/2015	17.38	0.79	880	6.17	62
	6/16/2015	18.90	0.93	899	7.12	-18
	8/20/2015	19.36	0.97	924	6.59	-57
	9/15/2015	20.55	6.54	912	7.46	-80
	12/15/2015	17.06	0.98	879	7.04	8
MW-19	3/20/2015	17.83	1.57	905	7.09	50
	4/20/2015	17.11	1.36	841	6.62	-61
	6/16/2015	18.83	0.49	827	7.25	-82
	8/20/2015	18.76	0.70	813	8.50	-53
	9/15/2015	24.37	3.70	859	7.30	-53
	12/15/2015	17.15	2.05	810	7.14	28
SVE-2	12/16/2015	13.43	0.55	1533	6.86	-8
SVE-4	12/16/2015	--	--	--	--	--

Notes:

1. °C = Degrees Celsius.
2. mg/L = Milligrams per liter.
3. ORP = Oxidation-reduction potential.
4. Specific Conductivity was documented as µS/cm (millisiemens per centimeter) on the field sampling sheets. The value is reported in this table as microsiemens/centimeter.
5. -- = Insufficient groundwater present; parameters not measured.

Table 6
Groundwater Analytical Results – Monitoring and Pilot Test Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5-Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-1	1/30/2014	44	1.0	<0.025	0.30	<0.05	3.1	0.45	1.4	0.045	3.5	0.076	0.29	0.030	0.14	1.6	9.3	5.2
	4/9/2014	20	0.49	<0.010	0.18	<0.020	1.1	<0.01	0.2	0.011	–	0.023	0.069	0.018	0.016	–	3.1	2.5
	7/23/2014	49	0.39	<0.001	0.11	0.023	3.1	0.059	0.61	0.011	2.2	<0.010	0.044	<0.010	0.019	1.2	6.4	3.4
	10/29/2014	45	0.47	<0.010	0.19	<0.020	5.0	0.051	0.50	<0.010	3.4	0.015	0.043	<0.010	<0.010	2.2	12	5.5
	2/12/2015	5.8	<0.010	<0.010	<0.010	<0.020	0.26	<0.010	0.077	<0.010	0.64	0.016	0.022	<0.010	<0.010	0.36	0.99	0.99
	6/16/2015	140	0.32	<0.010	0.30	<0.020	5.2	0.12	0.47	0.011	5.3	<0.010	0.11	<0.010	0.012	2.8	11	8.1
	9/15/2015	67	0.61	<0.001	0.26	0.032	1.3	0.14	0.42	0.0095	–	0.019	0.065	0.017	0.020	–	2.4	4.4
	12/16/2015	38.3 j	0.51	<0.01	0.16	<0.10	5.7	0.113	1.26	0.0219	–	0.0138	0.0944	<0.01	0.046	–	7.81	4.91
KDHE Split	12/16/2015	21.2 j	0.73	<0.025	0.22	<0.25	5.6	0.18	1.4	0.025	–	0.016 J	0.11 J	0.015 J	0.066	–	8.2	5.5
MW-2	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/22/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	0.11	0.0085	<0.001	0.0030	<0.002	0.0034	0.0038	0.018	<0.001	0.010	0.0013	0.0024	<0.001	0.0014	0.0097	0.0095	0.020
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
Duplicate	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	0.089	<0.001	<0.001	<0.001	<0.002	0.0013	<0.001	<0.001	<0.001	0.0052	<0.001	<0.001	<0.001	<0.001	0.0026	0.0089	0.0078
	9/16/2015	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-3	1/28/2014	2.8	0.038	<0.001	<0.001	0.0069	0.76	0.072	0.07	0.0062	0.0098	0.0061	0.0081	<0.001	0.0079	<0.001	0.0081	0.011
	4/8/2014	3.0	0.048	<0.005	0.010	<0.01	0.64	<0.005	0.058	0.0061	–	0.0075	0.014	<0.005	0.011	–	0.1	0.053
	7/24/2014	9.8	0.16	<0.010	0.037	<0.020	1.8	0.081	0.51	<0.010	0.32	<0.010	0.028	<0.010	0.023	0.51	1.6	0.83
	10/30/2014	6.1	0.12	<0.010	0.025	<0.020	1.1	0.085	0.36	<0.010	0.17	0.019	0.029	<0.010	0.018	0.18	0.15	0.35
	2/10/2015	7.9	0.19	<0.010	0.047	<0.020	1.4	0.15	0.52	0.014	0.41	0.034	0.054	<0.010	0.032	0.32	0.93	0.73
	6/17/2015	21	0.46	<0.005	0.11	<0.01	1.6	0.016	0.95	0.030	0.92	0.029	0.10	0.031	0.078	0.57	1.5	1.5
	9/15/2015	11	0.28	<0.005	0.054	<0.01	1.2	0.19	0.65	0.023	–	0.020	0.039	<0.005	0.057	–	0.045	0.27
Duplicate	9/15/2015	11	0.089	<0.005	0.079	<0.01	0.98	0.23	0.77	0.032	–	0.031	0.086	0.012	0.070	–	0.048	0.37
	12/16/2015	4.75 j	0.241	<0.005	0.0317	<0.05	0.85	0.151	0.643	0.026	–	0.0215	0.054	<0.005	0.061	–	<0.025	<0.015
KDHE Split	12/16/2015	6.9 j	0.30	<0.025	0.039	<0.25	0.95	0.24	0.68	0.026	–	0.026	0.060 J	0.0057 J	0.067	–	0.049	<0.075

Please refer to notes at end of table.

Table 6
Groundwater Analytical Results – Monitoring and Pilot Test Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5-Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-4	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	2.5	0.054	<0.001	0.027	0.0043	0.23	0.070	0.15	0.0039	–	0.0071	0.016	0.0022	0.0084	–	0.2	0.14
	7/24/2014	0.75	0.047	<0.001	0.017	<0.002	0.11	0.022	0.049	0.0029	0.043	0.0027	0.0092	<0.001	0.0070	0.028	0.015	0.070
Duplicate	7/24/2014	0.79	0.054	<0.001	0.019	<0.002	0.11	0.025	0.057	0.0033	0.050	0.0031	0.0098	0.0017	0.0080	0.032	0.017	0.083
	10/30/2014	4.8	0.20	<0.001	0.089	<0.002	0.49	0.097	0.40	0.014	0.20	0.017	0.062	0.0078	0.039	0.24	0.33	0.44
	2/10/2015	1.6	0.12	<0.001	0.058	<0.002	0.17	0.052	0.12	0.0042	0.022	0.0092	0.019	0.0058	0.0077	0.081	0.042	0.10
	6/16/2015	0.14	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	0.0013	<0.001	0.0046	<0.001	<0.001	<0.001	<0.001	0.003	0.0059	0.0077
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-5	1/30/2014	0.61	0.038	0.0012	0.011	<0.002	0.05	0.018	0.034	0.0022	0.041	0.0017	0.0086	<0.001	0.0046	0.033	0.009	0.075
	4/8/2014	0.35 j	0.0051 j	<0.001	0.0013 j	0.0021 j	0.025 j	<0.001	0.0018 j	0.0021 j	–	0.0015 j	0.0085 j	<0.001	<0.001	–	0.0024 j	0.041 j
Duplicate	4/8/2014	0.52 j	0.012 j	<0.001	0.0035 j	0.0033 j	0.037 j	<0.001	0.0058 j	0.003 j	–	0.0019 j	0.013 j	0.001	0.0014 j	–	0.0061 j	0.06 j
	7/23/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	0.0014	<0.001	<0.001	<0.001	<0.001	<0.003
Duplicate	7/23/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	0.0013	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	<0.050	<0.001	<0.001	<0.001	<0.002	0.0018	<0.001	<0.001	<0.001	0.0048	<0.001	<0.001	<0.001	<0.001	0.0027	0.010	0.0075
	2/10/2015	0.27	0.0092	<0.001	0.0024	<0.002	0.040	0.016	0.0071	0.0020	0.0068	0.0030	0.0069	0.0016	0.0021	0.011	0.0092	0.018
	6/16/2015	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/16/2015	<0.050	<0.001	<0.001	<0.001	<0.002	0.0024	<0.001	<0.001	<0.001	–	<0.001	0.0021	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-6	1/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0031	<0.001	0.0032	<0.001	0.0027	<0.001	<0.001	<0.001	<0.001	0.0031	0.0083	0.0059
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0028	<0.001	<0.001	<0.001	<0.001	0.0014	0.0052	0.0042
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
Duplicate	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	0.24	0.0017	<0.001	<0.001	<0.002	0.0022	<0.001	0.0022	<0.001	–	<0.001	0.0020	<0.001	<0.001	–	0.0076	0.010
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003

Please refer to notes at end of table.

Table 6
Groundwater Analytical Results – Monitoring and Pilot Test Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5-Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-7	1/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.003
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0024	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	0.089	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	0.11	0.0027	<0.001	<0.001	<0.002	0.0029	<0.001	0.0031	<0.001	–	<0.001	**0.0024**	<0.001	<0.001	–	0.0088	0.014
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-8	1/30/2014	0.16	0.0026	<0.001	0.001	<0.002	0.0030	<0.001	0.0049	<0.001	0.013	<0.001	**0.0041**	<0.001	<0.001	0.0056	0.020	0.018
Duplicate	1/30/2014	0.15	0.0031	<0.001	0.001	<0.002	0.0038	<0.001	0.0056	0.0011	0.014	<0.001	**0.0040**	<0.001	<0.001	0.0064	0.025	0.021
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/22/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0014	<0.001	<0.001	<0.001	0.0041	<0.001	<0.001	<0.001	<0.001	0.0024	0.0082	0.0065
Duplicate	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0013	<0.001	<0.001	<0.001	0.0041	<0.001	<0.001	<0.001	<0.001	0.0021	0.0081	0.0063
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0017	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-9	1/28/2014	0.058	<0.001	<0.001	<0.001	<0.002	0.0046	0.0015	<0.001	<0.001	<0.002	<0.001	**0.0033**	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
Duplicate	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0017	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0034	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0026	<0.003
Duplicate	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0053	<0.003
	9/15/2015	<0.05	0.0016	<0.001	<0.001	<0.002	0.0019	<0.001	0.0031	<0.001	–	<0.001	**0.0021**	<0.001	<0.001	–	0.0022	0.0043
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003

Please refer to notes at end of table.

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Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5-Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-10	1/28/2014	1.1	**0.12**	<0.001	0.039	0.0023	**0.026**	0.0081	0.036	0.0049	0.073	0.0036	**0.014**	0.0064	0.015	0.05	0.048	0.12
	4/8/2014	**8.8**	**0.56**	<0.005	**0.23**	<0.01	**0.12**	<0.005	0.11	0.011	–	0.026	**0.035**	<0.005	<0.005	–	0.3	1.1
	8/1/2014	0.091	<0.001	<0.001	<0.001	0.0066	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	0.066	<0.001	<0.001	<0.001	<0.002	0.0021	<0.001	<0.001	<0.001	0.0058	<0.001	<0.001	<0.001	<0.001	0.0034	0.013	0.0092
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	0.35	<0.001	<0.001	<0.001	0.0029	0.0024	0.0032	<0.001	<0.001	0.0040	0.0045	<0.001	<0.001	<0.001	0.0021	0.0068	0.0062
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	0.0014	<0.001	–	<0.001	**0.0019**	<0.001	<0.001	–	0.0016	<0.003
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	0.212	<0.001	<0.001	<0.001	<0.01	**0.00819**	0.0336	<0.001	<0.001	–	0.00514	<0.005	<0.001	<0.001	–	<0.005	0.00577
	1/13/2016	**0.836**	<0.005	<0.005	<0.005	<0.05	<0.005	0.0505	<0.005	<0.005	–	0.00987	<0.025	<0.005	<0.005	–	<0.0250	<0.015
MW-11	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	0.25	**0.016**	<0.001	0.0058	<0.02	**0.012**	0.0078	0.038	0.0011	0.021	0.0014	**0.0059**	<0.001	0.0024	0.023	0.023	0.044
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	0.0010	<0.001	<0.002	<0.001	**0.0034**	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0032	<0.003
Duplicate	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0035	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-12	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/9/2014	0.081	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/22/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	0.12	0.0011	<0.001	<0.001	<0.002	**0.0050**	<0.001	0.0017	<0.001	0.010	<0.001	<0.001	<0.001	<0.001	0.0063	0.027	0.016
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0054	<0.001	<0.001	<0.001	<0.001	0.0029	0.0064	0.0083
	6/16/2015	0.061	<0.001	<0.001	<0.001	<0.002	0.0014	<0.001	0.0013	<0.001	0.0058	<0.001	<0.001	<0.001	<0.001	0.0028	0.011	0.0086
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	**0.0018**	<0.001	<0.001	–	0.0013	<0.003
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
KDHE Split	12/16/2015	<0.50	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.01	<0.001	<0.001	–	<0.001	<0.003

Please refer to notes at end of table.

Table 6
Groundwater Analytical Results – Monitoring and Pilot Test Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5-Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-13	1/30/2014	0.072	0.0014	<0.001	<0.001	<0.002	0.0011	<0.001	0.0024	<0.001	0.0063	<0.001	**0.0038**	<0.001	<0.001	0.0026	0.0083	0.0089
	4/8/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/22/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	0.056	<0.001	<0.001	<0.001	<0.002	0.0028	<0.001	0.0011	<0.001	0.0065	<0.001	<0.001	<0.001	<0.001	0.0040	0.015	0.011
	2/10/2015	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0019	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
Duplicate	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-14	1/30/2014	<0.05	0.0011	<0.001	<0.001	<0.002	<0.001	<0.001	0.0016	<0.001	0.0043	<0.001	<0.001	<0.001	<0.001	0.0017	0.0059	0.0061
	4/9/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/22/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	**0.54**	0.0029	<0.001	0.0013	<0.002	**0.021**	<0.001	0.0049	<0.001	0.036	<0.001	<0.001	<0.001	<0.001	0.022	0.10	0.058
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-15	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0026	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0012	<0.001	<0.001	<0.001	0.0030	<0.001	<0.001	<0.001	<0.001	0.0018	0.0072	0.0048
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0043	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	**0.0018**	<0.001	<0.001	–	0.0018	<0.003
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003

Please refer to notes at end of table.

Table 6
Groundwater Analytical Results – Monitoring and Pilot Test Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5-Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-16	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
Duplicate	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0026	<0.001	<0.001	<0.001	<0.001	0.0014	0.0050	0.0040
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0029	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-17	6/16/2015	**95**	**0.19**	<0.001	**0.31**	0.044	**2.0**	0.37	**1.5**	0.044	3.4	0.038	**0.14**	0.015	0.10	1.8	**6.8**	5.2
	9/15/2015	13	**0.45**	<0.001	**0.11**	0.0061	**0.71**	0.23	0.59	0.026	–	0.031	**0.068**	<0.001	0.061	–	0.46	1.0
	12/16/2015	**2.24**	**0.052**	<0.001	0.00125	<0.01	**0.27**	0.08	0.153	0.00807	–	0.0142	**0.0125**	<0.001	0.014	–	0.0619	0.1
MW-18	6/16/2015	**6.3**	**0.021**	<0.001	0.021	<0.002	**0.26**	0.036	0.12	0.0041	0.24	0.0035	**0.015**	0.0016	0.0089	0.17	0.59	0.41
	9/15/2015	3.0	**0.069**	<0.001	0.019	<0.002	**0.26**	0.036	0.12	0.0040	–	0.0036	**0.019**	<0.001	0.0089	–	0.090	0.29
Duplicate	9/15/2015	3.2	**0.023**	<0.001	0.017	<0.002	**0.25**	0.037	0.11	0.0043	–	0.0041	**0.022**	0.0018	0.0090	–	0.097	0.28
	12/15/2015	<0.10	<0.001 j	<0.001	<0.001	<0.01	**0.00929 j**	0.00178 j	0.00446 j	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
Duplicate	12/15/2015	<0.10	0.00154 j	<0.001	<0.001	<0.01	**0.0177 j**	0.00382 j	0.00771 j	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
MW-19	6/16/2015	**0.99 j**	**0.024 j**	<0.001	0.0074	<0.002	**0.11**	0.013	0.045	0.0015	0.16	<0.001	**0.0029 j**	<0.001	0.0031	0.068	0.30	0.23
Duplicate	6/16/2015	**2.5 j**	0.0071 j	<0.001	0.0062	<0.002	**0.11**	0.012	0.046	0.0016	0.13	<0.001	**0.0051 j**	<0.001	0.0027	0.067	0.30	0.19
	9/15/2015	**1.4**	**0.020**	<0.001	0.0051	0.0044	**0.11**	0.016	0.037	0.0015	–	0.0016	**0.0034**	<0.001	0.0030	–	0.15	0.16
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	**0.00545**	0.00105	0.00169	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
SVE-2	12/16/2015	<0.10	0.00651	<0.001	0.00176	<0.01	**0.00637**	0.00132	0.00812	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	0.0192	0.252
SVE-4	12/16/2015	**15.5**	**1.01**	<0.005	**0.951**	<0.05	<0.005	0.0596	0.343	<0.005	–	0.0753	**0.198**	0.144	0.470	–	<0.025	0.466
KDHE Tier 2 Values		**0.5**	**0.00844**	**0.005**	**0.044**	**4.92**	**0.005**	**7.02**	**0.7**	**0.45**	**NE**	**NE**	**0.00111**	**0.169**	**0.66**	**NE**	**1**	**10**

Notes:

1. GRO = Gasoline-range organics quantified by IOWA OA-1.
2. Volatile organic compounds by U.S. Environmental Protection Agency (EPA) Method 8260B.
3. mg/L (ppm) = Milligrams per liter (parts per million).
4. **Bold** indicates detected concentration above the KDHE screening value.
5. < = Not detected above the method reporting limit (MRL).
6. j (lower case) = Estimated concentration. The relative percent difference between the primary and duplicate sample concentrations is greater than 30 percent (see Appendix C for details).
7. J (upper case) = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit (see Appendix C for details).
8. – = Not analyzed.
9. NE = A KDHE Tier 2 Risk Based Screening Value has not been established.
10. KDHE Split = Sample at time of collection was split with KDHE and analyzed independently.
11. Duplicate = Field Duplicate Sample.

Table 7
Groundwater Analytical Results – Irrigation Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Well Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
2001 N Colt Ct	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
2004 N Colt Ct	6/16/2015	0.056	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
2005 N Colt Ct	1/31/2014	**3.7**	**0.13**	0.0041	0.029	<0.002	**0.15**	0.07	0.17	0.0057	0.26	0.01	**0.017**	0.0034	0.018	0.14	0.33	0.40
	4/10/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/23/2014	0.39	**0.018**	<0.001	0.0039	<0.002	**0.027**	0.011	0.023	<0.001	0.025	0.0019	**0.0025**	<0.001	0.0022	0.019	0.043	0.044
	10/30/2014	**2.2**	**0.077**	<0.001	0.0094	<0.002	**0.23**	0.055	0.19	0.0043	0.078	0.0091	**0.017**	0.0013	0.014	0.043	0.21	0.12
	2/12/2015	**1.4**	**0.039**	<0.001	0.0091	<0.002	**0.059**	0.022	0.041	0.0013	0.053	0.0039	**0.0045**	<0.001	0.0044	0.034	0.11	0.088
	6/16/2015	**2.3**	**0.012**	<0.001	0.013	<0.002	**0.066**	0.027	0.066	0.0027	0.081	0.0039	**0.0095**	<0.001	0.0069	0.087	0.18	0.17
	9/14/2015	**4.9**	**0.082**	<0.001	0.020	<0.002	**0.18**	0.053	0.15	0.0038	–	0.010	**0.013**	<0.001	0.012	–	0.68	0.34
Duplicate	9/14/2015	**5.2**	**0.090**	<0.001	0.022	<0.002	**0.20**	0.051	0.17	0.0044	–	0.0090	**0.013**	<0.001	0.013	–	0.70	0.38
	12/15/2015	**2.75**	**0.0672**	<0.001	0.0169	<0.01	**0.109**	0.0284	0.127	0.00317	–	0.00434	**0.0136**	<0.001	0.00952	–	0.418	0.28
2002 N Colt Ct	1/31/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.0010		<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
HOA-1	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
Duplicate	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	0.076	0.0018	<0.001	<0.001	<0.002	**0.011**	0.0019	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0067	<0.001	0.0067
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
Duplicate	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
KDHE Split	12/16/2015	<0.50	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.01	<0.001	<0.001	–	<0.001	<0.003

Please refer to notes at end of table.

Table 7
Groundwater Analytical Results – Irrigation Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Well Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
HOA-2	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
2006 N Colt Ct	4/10/2014	**23**	**0.75**	<0.005	**0.28**	0.026	**0.98**	0.16	0.36	0.016	--	0.038	**0.076**	<0.005	0.048	--	**2**	2.1
	6/16/2015	**140**	**1.8**	<0.025	**0.55**	<0.05	**2.1**	0.42	**2.2**	0.073	6.0	0.063	**0.19**	0.046	0.24	3.0	**9.9**	9.0
	9/15/2015	**29**	**0.82**	<0.005	**0.21**	<0.01	**1.1**	0.28	**1.2**	0.039	--	0.055	**0.12**	<0.005	0.100	--	**1.7**	2.8
	12/16/2015	**39.6**	**1.12**	<0.025	**0.278**	<0.25	**1.74**	0.151	**1.48**	0.0419	--	0.039	**0.201**	<0.025	0.111	--	**3.39**	4.71
2007 N Colt Ct	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	0.40	**0.025**	<0.001	<0.001	<0.002	**0.052**	0.019	0.027	<0.001	0.023	0.0018	**0.0039**	<0.001	0.0025	0.0025	0.022	0.025
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2019 N Ruger Cir	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.050	<0.001	<0.001	<0.001	0.0032	0.0048	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	0.17	0.0018	<0.001	<0.001	<0.002	**0.069**	0.0051	<0.001	<0.001	--	<0.001	**0.0016**	<0.001	<0.001	0.0048	0.002	0.0055
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	0.12	<0.001	<0.001	<0.001	<0.002	**0.053**	0.0054	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	**0.0050**	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2020 N Ruger Cir	2/20/2014	0.075	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	0.38	<0.001	<0.001	<0.001	0.16	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	0.059	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
Duplicate	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table 7
Groundwater Analytical Results – Irrigation Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Well Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
2028 N Ruger Cir	1/30/2014	<0.05	<0.001	<0.001	<0.001	0.015	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
Duplicate	4/10/2014	0.066	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
Duplicate	7/23/2014	<0.05	<0.001	<0.001	<0.001	0.0037	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
Duplicate	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2032 N Ruger Cir	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.03
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.03
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2021 N Ruger Ct	1/29/2014	<0.05	<0.001	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table 7
Groundwater Analytical Results – Irrigation Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Well Location	Sample Date	GRO	1,2,4-Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
2025 N Ruger Ct	1/31/2014	<0.050	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030
	4/10/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
1009 W Mountain	1/31/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
2007 N Mountain Ct	1/31/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/23/2014	<0.05	<0.0010	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.0010	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.0010	<0.001	<0.001	0.014	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.0010	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0012	0.0013	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003
2009 N Mountain Ct	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	–	<0.001	<0.005	<0.001	<0.001	–	<0.005	<0.003

Please refer to notes at end of table.

Table 7
Groundwater Analytical Results – Irrigation Wells – GRO and VOCs
Andover Colt Court Release Site
Andover, Kansas

Well Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
1211 W Quail Crossing Ct	1/31/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
Duplicate	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
Duplicate	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
1910 N Quail Crossing	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
KDHE Tier 2 Values		**0.5**	**0.00844**	**0.005**	**0.044**	**4.92**	**0.005**	**7.02**	**0.7**	**0.45**	**NE**	**NE**	**0.00111**	**0.169**	**0.66**	**NE**	**1**	**10**

Notes:

1. GRO = Gasoline-range organics quantified by IOWA OA-1.
2. Volatile organic compounds by U.S. Environmental Protection Agency (EPA) Method 8260B.
3. mg/L (ppm) = Milligrams per liter (parts per million).
4. **Bold** indicates detected concentration above the KDHE screening value.
5. < = Not detected above the method reporting limit (MRL).
6. -- = Not analyzed.
7. NE = A KDHE Tier 2 Risk Based Screening Value has not been established.
8. KDHE Tier 2 Screening Values from the *Risk-Based Standards for Kansas, 5th Edition*, October 2010.
9. Well locations are shown on Figure 2.
10. NS = No sample collected.
11. KDHE Split = Sample at time of collection was split with KDHE and analyzed independently.
12. Duplicate = Field Duplicate Sample

Table 8
Groundwater Monitoring Program – Monitoring and Pilot Test Wells – Proposed Modifications
Andover Colt Court Release Site
Andover, Kansas

Well ID	Gauging	LRH and MRH	VOCs
MW-1	Q	Q	Q
MW-2	Q	Q	Q
MW-3	Q	Q	Q
MW-4	Q	Q	Q
MW-5	Q	Q	Q
MW-6	Q	Q	Q
MW-7	Q	Q	Q
MW-8	Q	Q	Q
MW-9	Q	Q	Q
MW-10	Q	Q	Q
MW-11	Q	Q	Q
MW-12	Q	Q	Q
MW-13	Q	Q	Q
MW-14	Q	Q	Q
MW-15	Q	Q	Q
MW-16	Q	Q	Q
MW-17	Q	Q	Q
MW-18	Q	Q	Q
MW-19	Q	Q	Q
SVE-1	Q	–	–
SVE-2	Q	Q	Q
SVE-3	Q	Q	Q
SVE-4	Q	Q	Q

Notes:

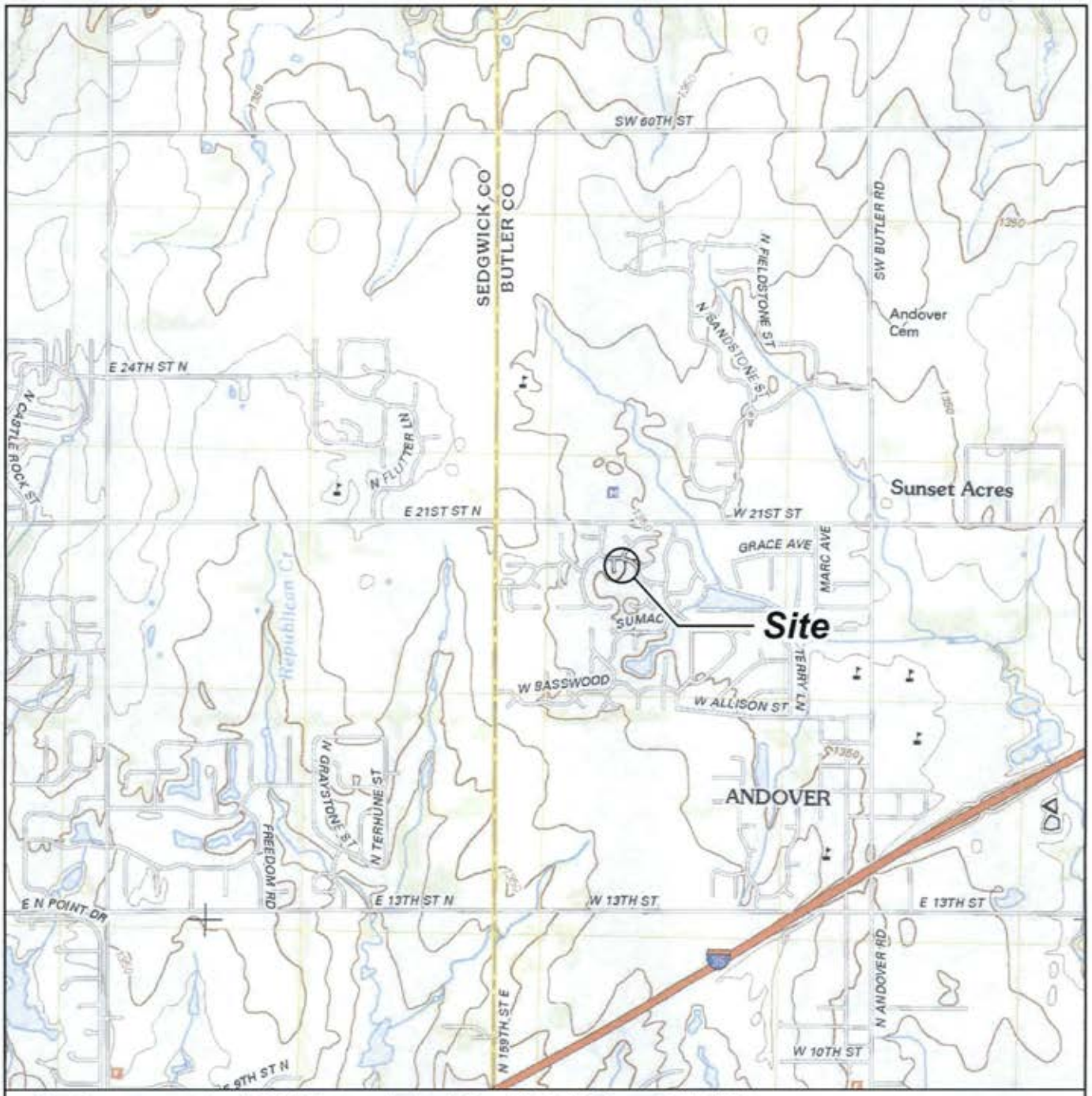
1. LRH = Low-range hydrocarbons by EPA Method 8015D.
2. MRH = Mid-range hydrocarbons by EPA Method 8015D.
3. VOCs = Volatile organic compounds; benzene, toluene, ethylbenzene, xylenes [BTEX], 1,2-dicholoethane, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-butylbenzene, and n-propylbenzene by U.S. Environmental Protection Agency Method 8260B.
4. Q = Performed quarterly.
5. Monitoring wells will not be sampled if SPH are present.

Table 9
Groundwater Monitoring Program – Irrigation Wells – Proposed Modifications
Andover Colt Court Release Site
Andover, Kansas

Well Location	LRH and MRH	VOCs
2001 N Colt Ct	Q	Q
2002 N Colt Ct	Q	Q
2004 N Colt Ct	Q	Q
2005 N Colt Ct	Q	Q
2006 N Colt Ct	Q	Q
HOA-1	Q	Q
2007 N Colt Ct	Q	Q
2019 N Ruger Cir	Q	Q
2020 N Ruger Cir	Q	Q
2028 N Ruger Cir	Q	Q
2032 N Ruger Cir	Q	Q
2021 N Ruger Ct	Q	Q
2025 N Ruger Ct	Q	Q
1009 W Mountain	Q	Q
2007 N Mountain Ct	Q	Q
2009 N Mountain Ct	Q	Q
1211 W Quail Crossing Ct	Q	Q

Notes:

1. LRH = Low-range hydrocarbons by EPA Method 8015D.
2. MRH = Mid-range hydrocarbons by EPA Method 8015D.
3. VOCs = Volatile organic compounds; benzene, toluene, ethylbenzene, [BTEX], 1,2-dicholoethane, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-butylbenzene, and n-propylbenzene by U.S. Environmental Protection Agency Method 8260B.
4. Q = Performed quarterly.
5. Well locations are shown on Figure 2.
6. Irrigation wells will not be sampled if SPH are present.



Note: Base map prepared from USGS 7.5-minute quadrangles of Andover, KS, dated 2012 as provided by USGS.gov.

0 2,000 4,000

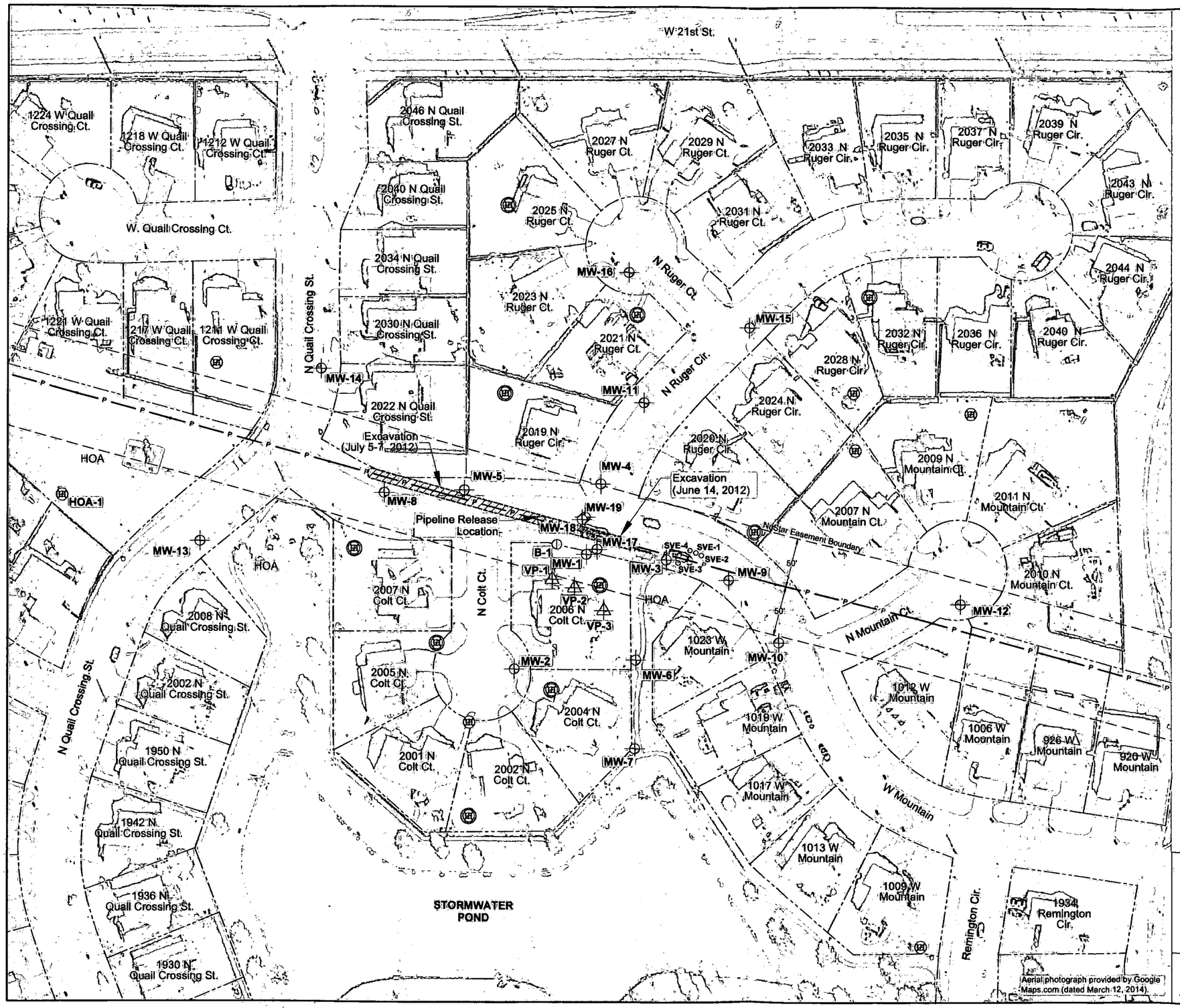
Approximate Scale in Feet

N

Site Location Map

Fourth Quarter 2015 Groundwater Monitoring Report
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

APEX Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number	1641-08	Figure
	February 2016		1



N

Legend:

- MW-1 — Monitoring Well Location
- Irrigation Well; Deactivated Well = ○
- VP-1 — Soil Vapor Monitoring Point
- B-1 — Boring Location
- SVE-1 — Soil Vapor Extraction Pilot Test Well
- Property Line
- Pipeline
- Pipeline Easement Boundary
- HOA — Lot Owned by Quail Crossing Homeowner's Association
- Excavation Area

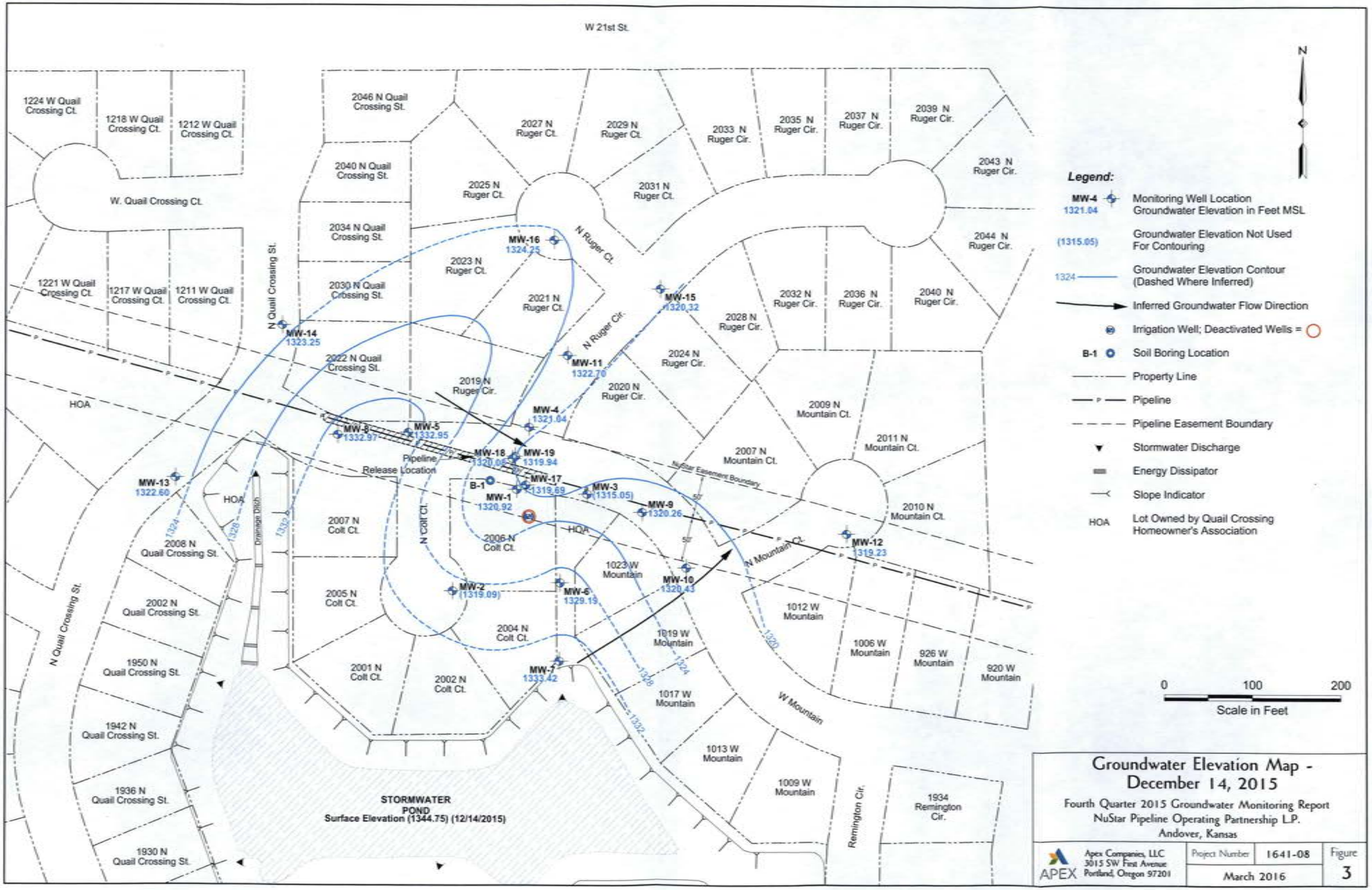
0 100 200

Scale in Feet

Site Plan and Sampling Location Map

Fourth Quarter 2015 Groundwater Monitoring Report
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

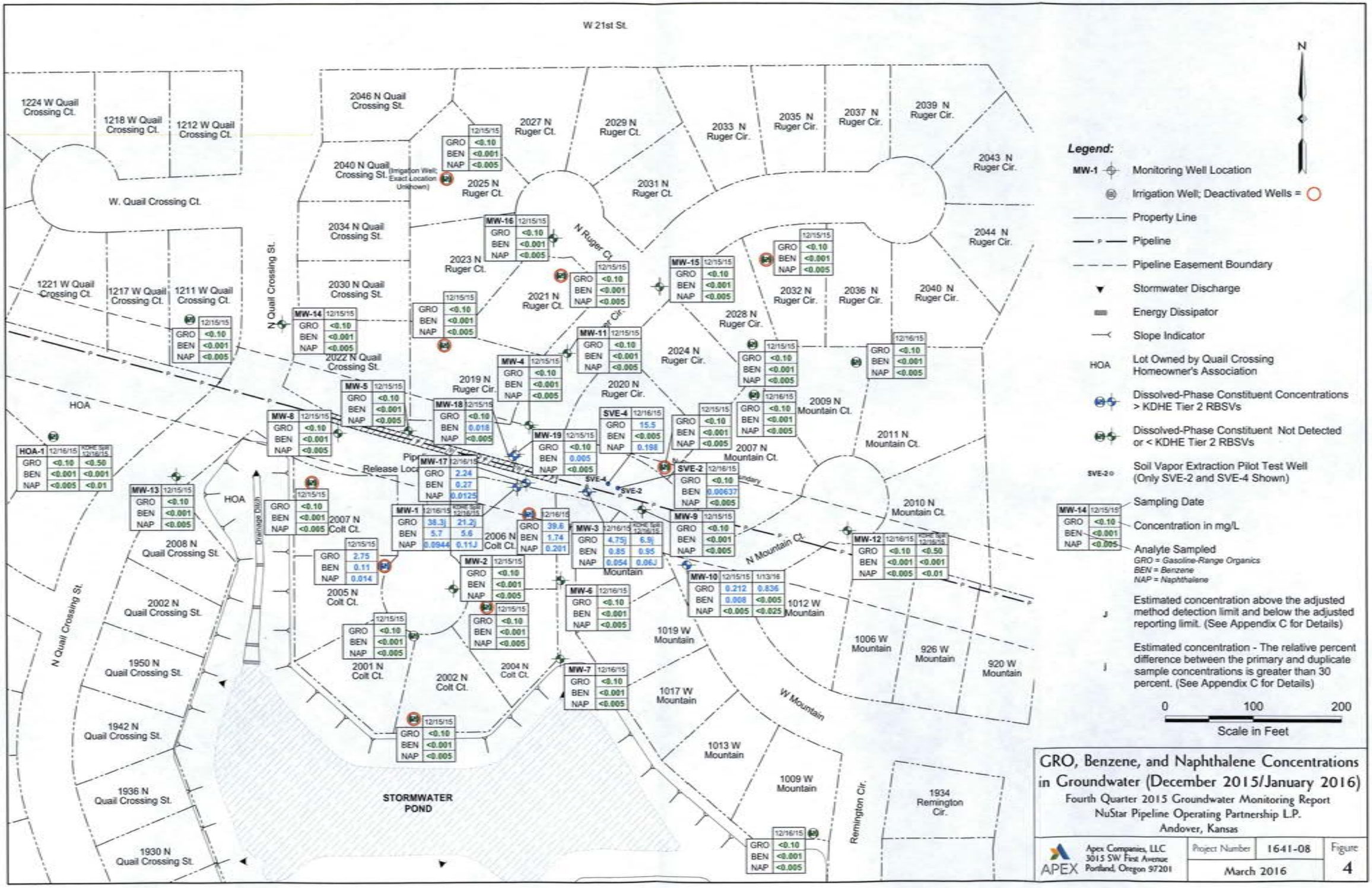
APEX — Apex Companies, LLC, 3015 SW First Avenue, Portland, Oregon 97201	Project Number	1641-08	Figure
	March 2016		2



Groundwater Elevation Map - December 14, 2015

Fourth Quarter 2015 Groundwater Monitoring Report
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

APEX Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number	1641-08	Figure
	March 2016		3

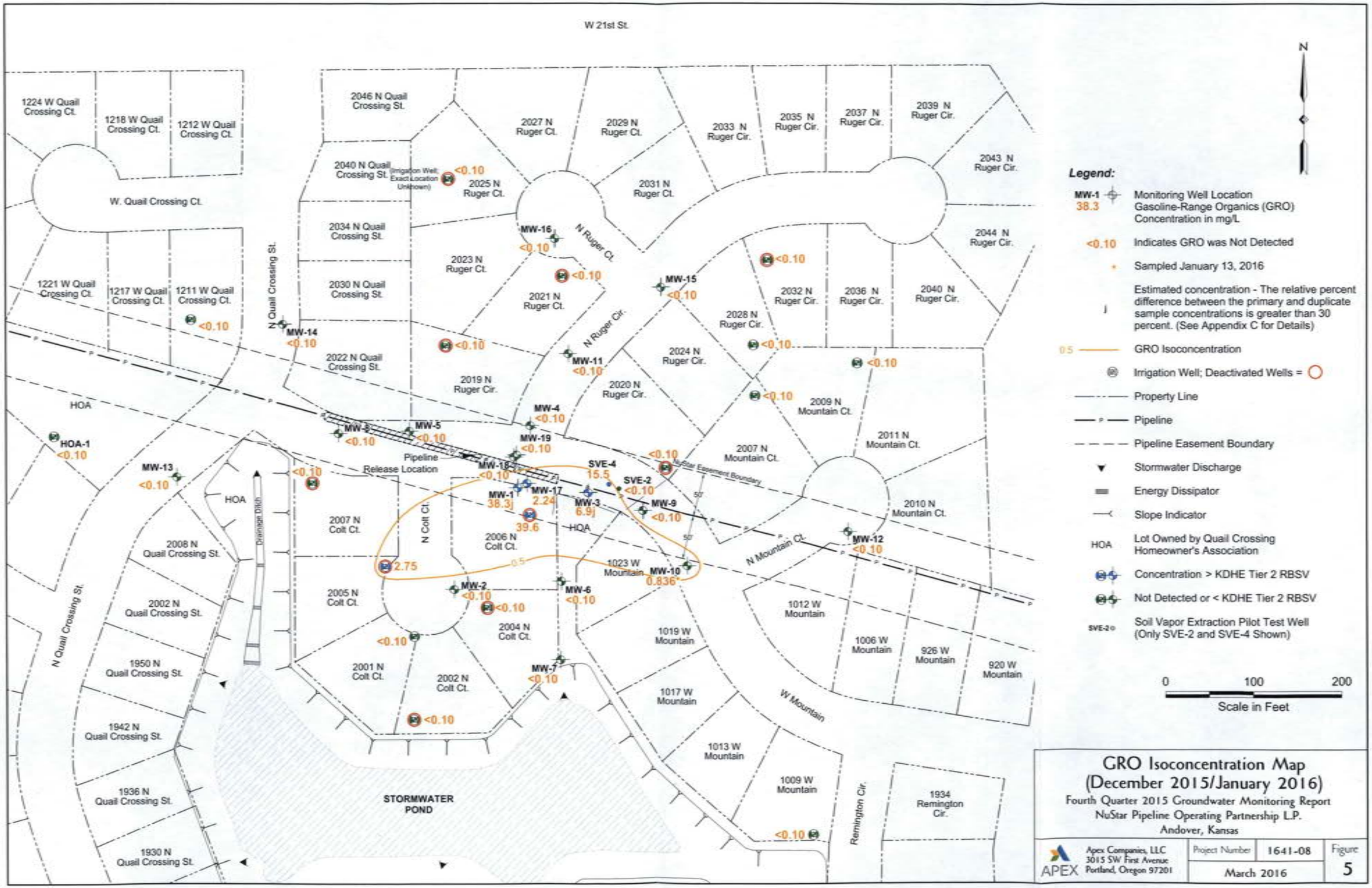


GRO, Benzene, and Naphthalene Concentrations in Groundwater (December 2015/January 2016)

Fourth Quarter 2015 Groundwater Monitoring Report
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

APEX — Apex Companies, LLC, 3015 SW First Avenue, Portland, Oregon 97201

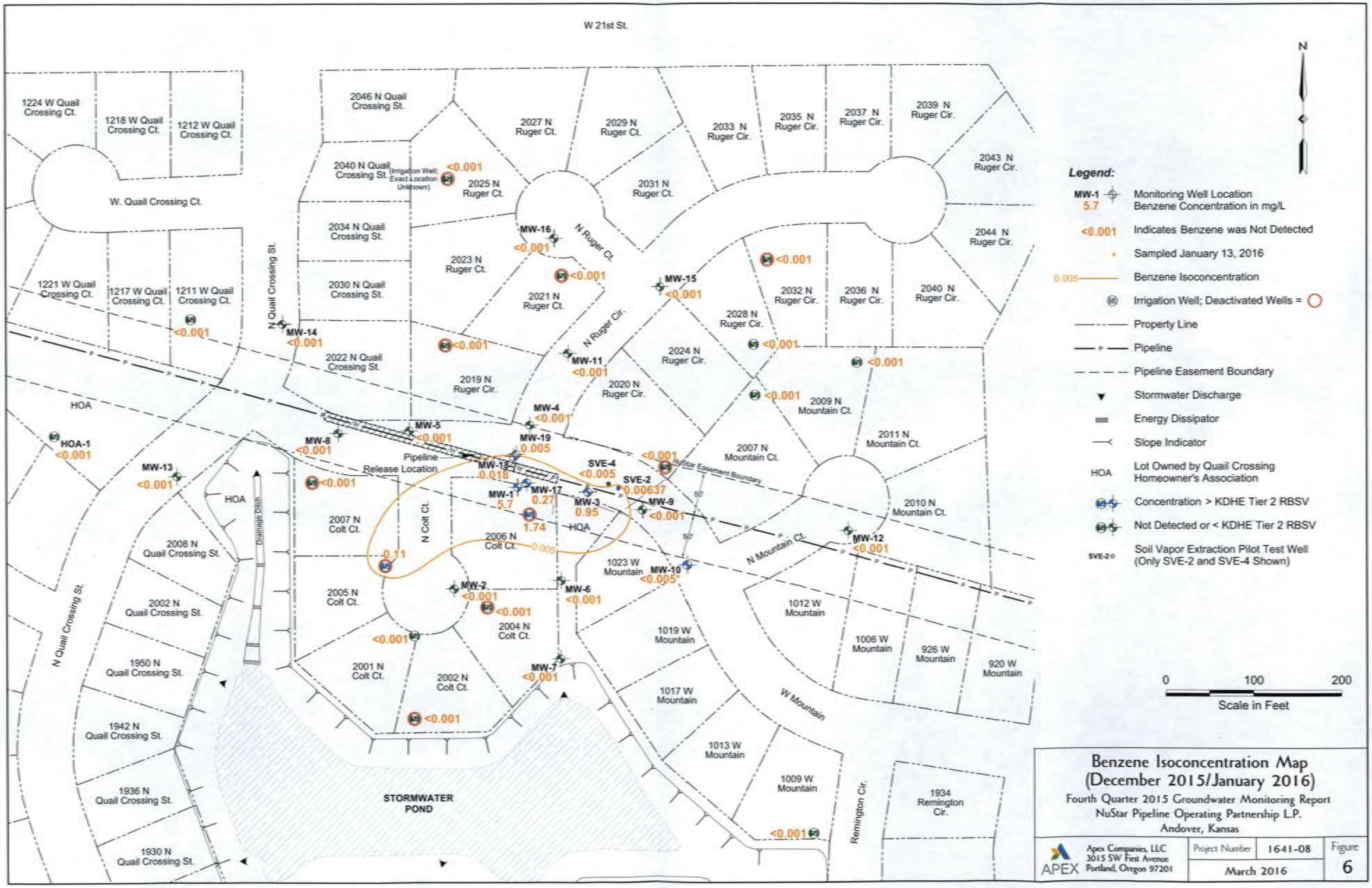
Project Number	1641-08	Figure
March 2016		4



GRO Isoconcentration Map (December 2015/January 2016)

Fourth Quarter 2015 Groundwater Monitoring Report
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

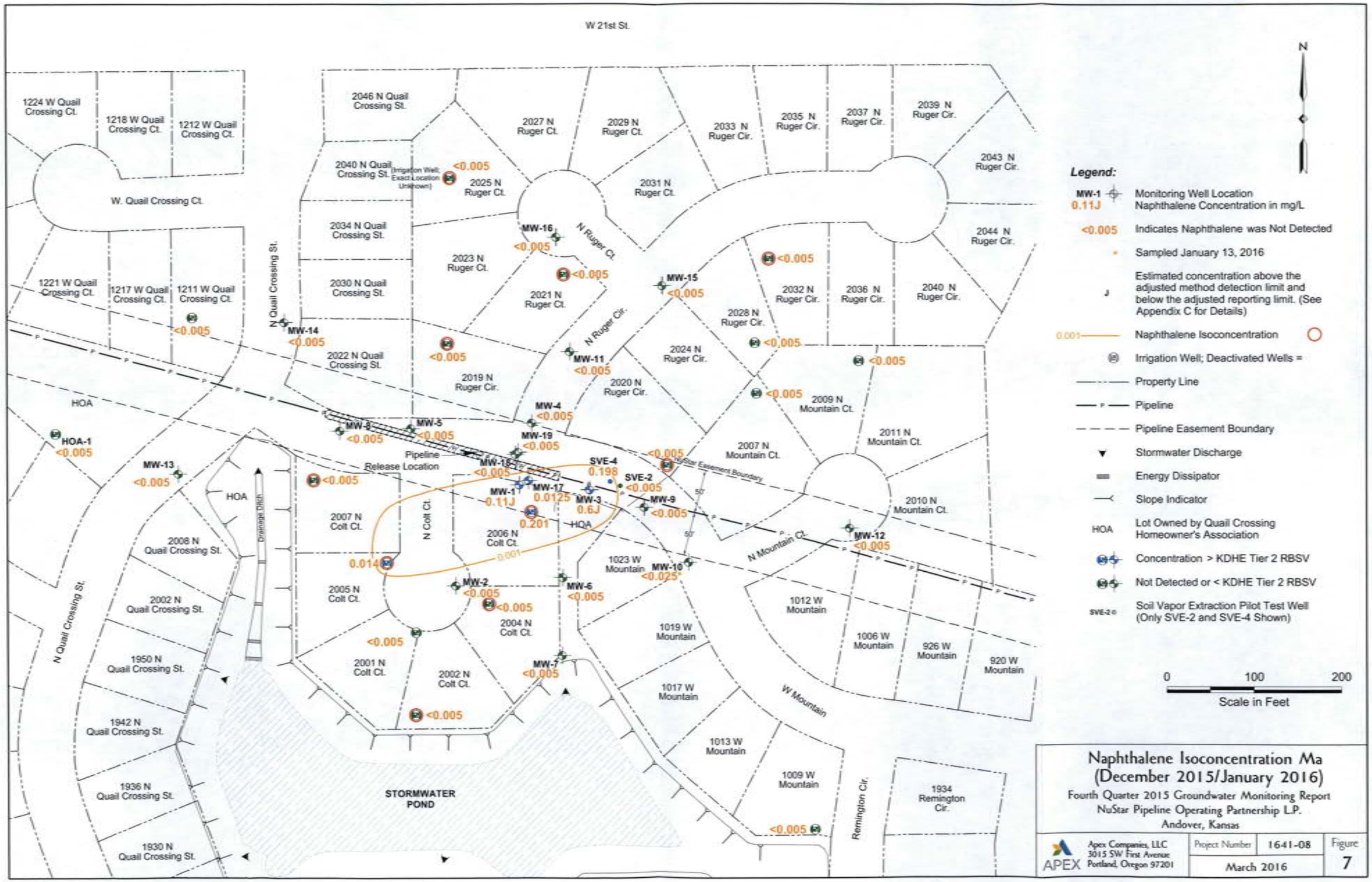
APEX Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number	1641-08	Figure
	March 2016		5



Benzene Isoconcentration Map (December 2015/January 2016)

Fourth Quarter 2015 Groundwater Monitoring Report
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

APEX Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number	1641-08	Figure
	March 2016		6



Naphthalene Isoconcentration Ma
(December 2015/January 2016)

Fourth Quarter 2015 Groundwater Monitoring Report
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

APEX	Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number 1641-08 March 2016	Figure 7

Appendix A

Field Data Sheets

WELL GAGING DATA SHEET

APEX

		Job Number:	320001641-08
Client:	Nusiar	Date:	12/14/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 40's	Time In/Out:	—

WATER LEVEL DATA

Well I.D.	Time	Depth to Free Product (feet)	Depth to Water (feet)	Depth to Well Bottom (feet)	Product Thickness (feet)	Water Column Height (feet)	Notes/Other Remarks
MW-1	1558	NP	31.21	NA	NA		
MW-2	1548		34.08				
MW-3	1605		35.42				
MW-4	1603		29.69				
MW-5	1555		19.82				
MW-6	1546		20.57				
MW-7	1545		15.56				
MW-8	1555		20.41				
MW-9	1542		29.22				
MW-10	1541		28.36				
MW-11	1532		28.64				
MW-12	1538		30.51				
MW-13	1551		31.98				
MW-14	1552		31.74				
MW-15	1535		31.47				
MW-16	1534		27.88				
MW-17	1559		32.00				
MW-18	1600		30.96				
MW-19	1602		31.06				
Pond	1545	—	1344.75	—	—		
SKIMMER			39.34				Approx. 1/3 full of water, sheen on product. Sampled with bailer
SVE-4			28.55	29.64			
SVE-2			26.83	28.97			

1340

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-1	Job Number:	320001641-08
Client:	Nustar	Date:	12/10/15
Project:	QC GWM	Sampler:	MLB
Weather:	Sunny/30's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	4"	Water Height	
Depth to Water:		Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	1.0' from bottom	Comments
Sampling Method:	Grab	Tubing Type:	LDPE	

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1108	.300	.300	31.23	.200	6.98	13.27	1507	1.35	-95.6	—	cl dark gray
1111	.600	.900	31.46	.200	6.91	13.30	1504	0.42	-129.9	—	cl
1114	.450	1.350	31.50	.150	6.91	13.36	1497	0.37	-149.0	—	cl
1117	.450	1.800	31.54	.150	6.90	13.28	1477	0.21	-152.7	—	cl
1120	.450	2.250	31.60	.150	6.90	13.26	1453	0.19	-153.5	—	cl

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-1	Sampling Flow Rate	.200	Analytical Laboratory:	ESC	
Sample Time:	1124	Final Depth to Water:	32.15	Did Well Dewater?	No	
# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
7	T.O.C.	MNA (ESC)	yes no	—	—	—
5 VOA	HCl	GRO/VOC	yes no	—	—	—
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

Split samples with KPHE

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-2	Job Number:	32000164.1.08
Client:	Nustar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 40's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	34.08	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	35.5	Comments	
Sampling Method:	Grab	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1541	100	100	34.02	100	7.62	16.62	0.789	6.00	64.6	—	SC
1544	300	400	34.15	100	7.27	16.45	0.801	3.19	71.0	—	SC
1547	300	700	34.29	100	7.19	16.46	0.794	3.12	72.6	—	SC
1550	450	1150	34.50	150	7.20	16.45	0.797	2.96	73.1	—	SC

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-2	Sampling Flow Rate	150	Analytical Laboratory:	ESC	
Sample Time:	1552	Final Depth to Water:	34.60	Did Well Dewater?	No	
# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40 mL	HCl	VOC	yes (no)	/	/	/
2x40 mL	⊥	TPH	yes (no)	/	/	/
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-3	Job Number:	32000164I-08
Client:	Nustar	Date:	12/16/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 30s	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	35.42	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	36.5
Sampling Method:	Grab	Tubing Type:	LDPE

Comments

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1032	150	150	35.39	150	7.41	13.26	785	1.60	-36.0	—	C
1035	450	~~150~~ 600	35.48	150	7.10	14.47	834	0.43	-67.6	—	C
1038	450	1050	35.50	150	7.04	14.74	880	0.30	-78.1	—	C
1041	600	1650	35.48	200	7.02	14.92	895	0.26	-92.0	—	C
1044	600	2250	35.48	200	7.00	14.98	907	0.25	-104.1	—	C
1047	900	3150	35.51	300	6.99	15.33	918	0.23	-112.5	—	C
1050	900	4050	35.51	300	6.98	15.44	925	0.20	-119.4	—	C
1053											

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-3	Sampling Flow Rate		Analytical Laboratory:	ESC
Sample Time:	1052	Final Depth to Water:	35.40	Did Well Dewater?	NO

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40 mL	HCl	VOC	yes (no)	/	/	/
2x40 mL	⊥	TPH	yes (no)	/	/	/
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-4	Job Number:	320001641-08
Client:	NuStar	Date:	12/15/15
Project:	QC GWM	Sampler:	JA/LB
Weather:	Sunny 50's	Time In/Out:	

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	29.69	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	31.69	Comments	
Sampling Method:	Grab	Tubing Type:	HDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<- Stabilization Criteria
1224	150	150	29.91	150	7.55	17.06	1023	5.59	61.9	—	SC
1227	450	600	30.19	150	7.23	16.80	1011	4.62	70.2	—	SC
1230	450	1050	30.35	150	7.15	16.83	1010	4.61	73.8	—	SC
1233	450	1500	30.51	150	7.14	16.75	1011	4.60	75.5	—	

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-4	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	1235	Final Depth to Water:	30.81	Did Well Dewater?	No

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40mL	HCL	VOC	yes (no)	—	—	—
2x40mL	⊥	TPH	yes (no)	—	—	—
			yes no			
See	COC	—	yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-5	Job Number:	32000/641-08
Client:	NuStar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 40's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	19.82	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	22 ft btoc	Comments	
Sampling Method:	Grab	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
0750	150	150	19.91	150	6.77	12.03	1.299	1.93	116.3	—	C
0753	450	600	20.01	150	6.93	14.66	1379	1.14	113.3	—	C
0756	450	1050	20.12	150	6.98	15.08	1391	1.43	110.3	—	C
0759	450	1500	20.16	150	7.00	15.24	1.411	1.89	108.0	—	C
0802	450	1950	20.18	150	7.00	15.34	1420	1.88	106.0	—	C

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-5	Sampling Flow Rate	150	Analytical Laboratory:	ESC
Sample Time:	0803	Final Depth to Water:	20.15	Did Well Dewater?	NO

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
500 mL	None	Diss Met	yes (no)			
2x40mL	HCL	Methane	yes (no)			
125 mL	H_2SO_4	NH_3	yes (no)			
250	None	Nitrate/Alk/CO_2	yes (no)			
250	None	Sulfate	yes (no)			
500	HNO_3	Total Met	yes (no)			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-6	Job Number:	32000164l-08
Client:	Nustar	Date:	12/16/15
Project:	GR GWM	Sampler:	TA/LB
Weather:	Sunny 30's	Time In/Out:	

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	20.57	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Peristaltic	Pump Intake Depth:	23.5 ft btoc
Sampling Method:	Grab	Tubing Type:	LDPE

Comments

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
0830	200	200	21.45	200	7.76	12.89	374	2.39	147.3	—	C
0833	600	800	21.90	200	7.46	14.57	358	1.05	148.4	—	C
0836	450	1250	22.34	150	7.37	14.55	345	1.35	147.8	—	C
0839	300	1550	22.61	100	7.32	14.07	338	1.61	148.2	—	C
0842	300	1850	22.95	100	7.27	14.04	337	1.63	148.3	—	C
0845	300	2150	23.23	100	7.26	14.00	336	1.71	148.0	—	C

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-6	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	0846	Final Depth to Water:	23.45	Did Well Dewater?	NO

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40mL	HCL	VOC	yes (no)	/	/	/
2x40mL	↓	TPH	yes (no)			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-7	Job Number:	32000164 1-08
Client:	NuStar	Date:	12/16/15
Project:	QC GWM	Sampler:	TR/LB
Weather:	Sunny 30's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	15.56	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NK	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Peristaltic	Pump Intake Depth:	17.0ft btoc
Sampling Method:	Grab	Tubing Type:	LDPE

Comments

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
0800	100	100	15.78	100	6.65	12.52	795	0.73	185.0	—	C
0803	450	550	15.85	150	7.00	13.01	816	0.51	175.5	—	C
0806	450	1000	15.90	150	7.12	13.73	837	0.43	171.4	—	C
0809	600	1600	15.97	200	7.15	14.74	846	0.55	168.6	—	C
0812	600	2200	16.04	200	7.16	15.13	853	0.57	166.3	—	C
0815	600	2800	16.10	200	7.15	15.33	865	0.80	164.7	—	C
0818	600	3400	16.16	200	7.16	15.47	868	0.70	163.1	—	C

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-7	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	0820	Final Depth to Water:	16.12	Did Well Dewater?	NO

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40 mL	HCl	VOC	yes (no)	/	/	/
2x40 mL	⊥	TPH	yes (no)	/	/	/
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

15091320

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-8	Job Number:	32000-1641-08
Client:	Nustar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 40's	Time In/Out:	

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	20.41	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NAE	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	22.5 ft btoc
Sampling Method:	Grab	Tubing Type:	LDPE

Comments

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<- Stabilization Criteria
0825	200	200	20.52	200	7.54	15.10	1057	4.10	91.1	—	SC
0828	600	800	20.74	200	7.42	15.77	1060	3.66	91.4	—	SC
0831	600	1400	20.80	200	7.26	16.28	1067	3.54	92.6	—	SC
0834	600	2000	20.80	200	7.18	16.67	1095	3.38	92.6	—	SC
0837	600	2600	20.82	200	7.15	16.56	1121	3.21	91.9	—	SC
0840	600	3200	20.82	200	7.13	16.59	1138	3.12	90.9	—	SC

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-8	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	0845	Final Depth to Water:	20.76	Did Well Dewater?	NO

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
See	COC		yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-9	Job Number:	320001641-08
Client:	Nustar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 50's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	29.22	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	37.5 ftbtoc	Comments	
Sampling Method:	Grab	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1429	125	125	29.24	125	7.34	16.87	1.262	2.50	43.5	—	CL
1432	375	500	29.40	125	7.08	16.76	1.279	3.25	48.8	—	CL
1435	375	875	29.45	125	7.13	16.72	1.269	4.33	50.3	—	CL
1438	375	1200	29.50	125	7.16	16.71	1.262	4.47	52.0	—	CL
1441	375	1575	29.60	125	7.17	16.73	1.259	4.35	53.7	—	CL

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-9	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	1442	Final Depth to Water:	29.61	Did Well Dewater?	No

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40	HCL	VOC	yes (no)			
2x40	L	TPH	yes (no)			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-10	Job Number:	32000164 1-08
Client:	Nustar	Date:	12/15/15
Project:	GC GWM	Sampler:	TA/LB
Weather:	Sunny 50's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	28.36	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	31.0 ft btoc	Comments	
Sampling Method:	Grab	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1511	150	150	28.53	150	7.41	16.78	1464	2.20	74.4	—	AC
1514	450	600	28.72	150	6.94	16.75	1461	0.84	78.8	—	AC
1517	450	1050	28.89	150	6.86	16.80	1.451	0.89	78.0	—	AC
1520	450	1500	29.11	150	6.81	16.80	1444	0.74	77.0	—	AC
1523	45	1950	29.36	150	6.81	16.80	1431	0.67	74.8	—	AC

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-10	Sampling Flow Rate	150	Analytical Laboratory:	ESC
Sample Time:	1525	Final Depth to Water:	29.57	Did Well Dewater?	NO

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40 mL	HCl	VOC	yes (no)			
2x40 mL	⊥	TPH	yes (no)			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-11	Job Number:	3C001641-08
Client:	NuStar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 50's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	28.~~42~~64	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	30.5 ft btoc
Sampling Method:	Grab	Tubing Type:	LDPE

Comments

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1157	200	200	28.58	200	7.45	16.59	1355	6.00	75.8	—	CL
1200	600	800	28.98	200	7.03	16.60	1451	2.42	82.2	—	CL
1205	600	2400	29.40	200	6.96	16.74	1452	2.25	81.5	—	CL
1206	450	2850	29.58	150	6.95	16.71	1452	2.20	80.5	—	CL

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-11	Sampling Flow Rate	150	Analytical Laboratory:	ESC
Sample Time:	1208	Final Depth to Water:	29.66	Did Well Dewater?	No

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40mL	HCL	VOC	yes (no)	/	/	/
2x40mL	↓	TPH	yes (no)	/	/	/
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-12	Job Number:	32000164.1-08
Client:	Nustar	Date:	12/16/15
Project:	QC GWM	Sampler:	CB/TA
Weather:	Sunny 80's	Time In/Out:	

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	30.51	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	33.50	Comments
Sampling Method:	Grab	Tubing Type:	LDPE	

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
0956	200	200	30.45	200	7.30	14.10	910	4.09	147.8	—	SC
0959	600	800	30.50	200	7.17	15.49	960	1.05	146.1	—	SC
1002	600	1400	30.50	200	7.11	15.95	975	0.65	142.7	—	SC
1005	600	2000	30.50	200	7.09	16.18	977	0.76	139.4	—	SC
1008	600	2600	30.50	200	7.07	16.56	977	0.95	135.9	—	SC
1011	600	3200	30.50	200	7.07	16.34	979	0.70	133.2	—	SC

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-12	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	1012	Final Depth to Water:	30.45	Did Well Dewater?	No

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40 mL	HCL	VOC	yes (no)	/	/	/
2x40 mL	⊥	TPH	yes (no)	/	/	/
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

KDHE Split

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-13	Job Number:	32001641-08
Client:	Nustar	Date:	12/15/15
Project:	QC GWM	Sampler:	CBITA
Weather:	Sunny 40's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	~~31.02~~ 31.98	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	35.00 ft btoc
Sampling Method:	Grab	Tubing Type:	

Comments

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
0913	200	200	32.03	200	7.88	14.36	493	6.11	74.0	—	Cl
0916	600	800	32.40	200	7.69	15.29	489	5.83	76.0	—	Cl
0919	600	1400	32.60	200	7.61	15.40	489	6.16	77.6	—	CL
0922	600	2000	32.85	200	7.59	15.57	487	6.26	79.4	—	CL

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-13	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	0922	Final Depth to Water:	32.81	Did Well Dewater?	NO

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40mL	HCL	VOC	yes (no)	—	—	Dup-1
2x40mL	⊥	TPH	yes (no)	—	—	Dup-1
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-14	Job Number:	32000164
Client:	NuStar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 40's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	31.74	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	34 ft btoc
Sampling Method:	Grab	Tubing Type:	HDPE

Comments

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
0948	200	200	31.80	200	7.68	12.99	631	6.70	84.5	—	CL
0951	450	650	32.20	150	7.33	15.50	654	3.77	85.3	—	CL
0954	450	1100	32.49	150	7.24	15.33	643	3.61	86.6	—	CL
0957	450	1550	32.74	150	7.21	15.46	644	3.41	85.9	—	CL
1000	450	2000	32.90	150	7.19	15.63	649	3.42	85.3	—	CL

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-14	Sampling Flow Rate	150	Analytical Laboratory:	ESC
Sample Time:	1003	Final Depth to Water:	33.07	Did Well Dewater?	No

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
See	COC		yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-15	Job Number:	32000641
Client:	Nustar	Date:	12/15/16
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 40's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	31.47	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	33.5 ft btoc
Sampling Method:	Grab	Tubing Type:	LDPE

Comments

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1028	150	150	31.62	150	7.52	14.99	615	4.35	77.7	—	SC
1031	450	600	31.82	150	7.28	15.76	620	4.04	80.1	—	SC
1034	450	1050	31.92	150	7.21	15.82	624	4.00	81.0	—	SC
1037	450	1500	32.07	150	7.19	15.84	624	4.09	81.3	—	SC

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-15	Sampling Flow Rate	150	Analytical Laboratory:	ESC
Sample Time:	1040	Final Depth to Water:	32.00	Did Well Dewater?	No

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x 40 mL	HCL	VOC	yes (no)	—	—	—
2x 40 mL	↓	TPH	yes (no)	—	—	—
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

0

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-16	Job Number:	32000/6494-08
Client:	NuStar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 40's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	27.88	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	32'	Comments	
Sampling Method:	Grav	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1107	200	200	28.22	200	7.90	15.51	525	6.20	66.4	—	CL
1110	600	800	28.66	200	7.71	16.06	537	4.97	69.4	—	CL
1113	600	1400	29.47	200	7.61	16.28	542	4.92	70.8	—	CL
1116	450	1850	29.74	150	7.55	16.31	552	4.80	71.8	—	CL
1119	450	1300	29.95	150	7.50	16.37	565	4.79	72.5	—	CL
1122	450	2750	30.35	150	7.47	16.43	581	4.75	73.5	—	CL
1125	450	3200	30.65	150	7.40	16.28	620	4.65	75.1	—	CL
1128	450	3650	30.75	150	7.32	16.36	636	4.35	76.2	—	CL
1131	~~450~~ 300	3950	30.70	150	7.34	15.94	642	4.42	72.1	—	CL

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-16	Sampling Flow Rate	150	Analytical Laboratory:	ESC	
Sample Time:	1132	Final Depth to Water:	30.80	Did Well Dewater?	No	
# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
3x40 mL	HCL	VOC	yes (no)	—	—	—
2x40 mL	↓	TPH	yes (no)	—	—	—
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-17	Job Number:	32007/641-08
Client:	Nalco	Date:	12-16-15
Project:	Anderson QC	Sampler:	TA/LB
Weather:	Sunny	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	32.00	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	~~34'~~ 35'	Comments	
Sampling Method:	Same	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1240	150	150	32.11	150	7.22	13.76	941	1.73	-81.0	—	SC
1243	450	600	32.46	150	7.04	14.16	960	0.62	-98.3	—	SC
1246	450	1050	32.85	150	6.99	14.52	944	0.47	-108.3	—	SC
1249	450	1500	33.09	150	6.96	14.55	922	0.42	-113.1	—	SC

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-17	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	1250	Final Depth to Water:	34.91	Did Well Dewater?	No

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

SEE COC

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-18	Job Number:	32000164108
Client:	Nustar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 50's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	30.96	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	33 ft btoc
Sampling Method:	Grab	Tubing Type:	LDPE

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1300	125	125	31.00	125	7.32	17.25	876	3.00	38.6	—	SC
1303	300	425	31.21	100	7.08	17.01	874	0.59	19.1	—	SC
1306	300	725	31.40	100	7.05	17.04	876	0.76	10.2	—	SC
1309	300	1025	31.59	100	7.04	17.06	879	0.98	8.0	—	SC

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-18	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	1310	Final Depth to Water:	33.45	Did Well Dewater?	NO

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			Dup-3
			yes no			
See	COC		yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-19	Job Number:	320001641-08
Client:	NuStar	Date:	12/15/15
Project:	QC GWM	Sampler:	TA/LB
Weather:	Sunny 50's	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	31.06	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bladder	Pump Intake Depth:	33' ftbtoc	Comments	
Sampling Method:	Grab	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1349	150	150	30.93	150	7.72	18.02	818	4.40	2.8	—	CL
1352	450	600	31.18	150	7.68	17.10	808	1.96	25.7	—	CL
1355	300	900	31.35	100	7.18	17.03	809	1.98	29.4	—	CL
1358	300	1200	31.50	100	7.15	17.12	809	2.12	30.0	—	CL
1401	300	1500	31.63	100	7.14	17.15	810	2.05	28.4	—	CL

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-19	Sampling Flow Rate	200	Analytical Laboratory:	ESC
Sample Time:	1403	Final Depth to Water:	32.89	Did Well Dewater?	N

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
See	COC		yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	SVE-2	Job Number:	32000164.1-08
Client:	Nustar	Date:	12/16/15
Project:	~~RP~~ QC GWM	Sampler:	TA/LB
Weather:	Sunny 30s	Time In/Out:	—

WELL DATA

Well Depth:		Well Diameter:	2"	Water Height	
Depth to Water:	26.83	Screened Interval:		x Multiplier	
Water Column Length:		Depth to Free Product:	NA	x Casing Volumes	
Purge Volume:		Free Product Thickness:	NA	= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Peristaltic	Pump Intake Depth:	28.97ft (1ft from bottom)	Comments
Sampling Method:	Grab	Tubing Type:	LDPE	

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1331	150	150	26.40	150	7.28	13.80	1512	1.70	-41.1	—	CL
1334	450	600	26.68	150	6.99	14.51	1534	0.88	-26.0	—	CL
1337	300	900	26.87	100	6.91	13.60	1547	0.70	-16.4	—	CL
1340	300	1200	26.98	100	6.88	13.45	1538	0.65	-11.4	—	SC
1343	300	1500	27.09	100	6.86	13.43	1533	0.55	-8.0	—	SC

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	SVE-2	Sampling Flow Rate	150	Analytical Laboratory:	ESC		
Sample Time:	1345	Final Depth to Water:	27.25	Did Well Dewater?	NO		
# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID	
3x40	HCL	VOC	yes (no)	/	/	/	
2x40	L	TPH	yes (no)	/			
			yes no				
			yes no				
			yes no				
			yes no				

COMMENTS

SVE-4
1405

WELL MONITORING DATA SHEET

APEX

Well I.D.	SVE-4	Job Number:	320001641-08
Client:	Nuster	Date:	12-16-15
Project:	Andover QC GWM	Sampler:	TA / LB
Weather:	Sunny, 30's	Time In/Out:	–

WELL DATA

Well Depth:	29.64	Well Diameter:	2"	Water Height	
Depth to Water:	28.55	Screened Interval:		x Multiplier	
Water Column Length:	1.09	Depth to Free Product:		x Casing Volumes	
Purge Volume:	0.75 gal	Free Product Thickness:		= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Bailer	Pump Intake Depth:	N/A	Comments	
Sampling Method:	Bailer	Tubing Type:	N/A		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	SVE-4	Sampling Flow Rate	N/A	Analytical Laboratory:	ECS
Sample Time:	1405	Final Depth to Water:	29.14	Did Well Dewater?	Yes

# Containers/Type	Preservative	Analysis/Method	Field Filtered		Filter Size	MS/MSD	Duplicate ID
5 VOA	HCl	GRO/VOCs	yes	no			
			yes	no			
			yes	no			
			yes	no			
			yes	no			
			yes	no			

COMMENTS

- Purged dry and allowed to recharge prior to sample.
- Gray, odorous purge water - sheen in bucket

Apex Companies, LLC- Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Stalter
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID #: ANDOVER QUAIL CROSSING

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 3

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

LAB #:
Table #:
Acctnum: ASHCREPOR
Template: T107888
Prelogin: P534310
TSR: 358 - Jarred Willis
PB: 12-3-15
Shipped Via: FedEx Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl-BK							Rem./Contaminant	Sample # (lab only)
MW-1	Grab	GW	33'	12/16/15	1124	5	X	X									
MW-2		GW	35.5	12/15/15	1552	5	X	X									
MW-3		GW	36.5	12/16/15	1052	5	X	X									
MW-4		GW	31.0	12/15/15	1235	5	X	X									
MW-5		GW	21.0	12/15/15	0803	5	X	X									
MW-6		GW	23.5	12/16/15	0846	5	X	X									
MW-7		GW	17.0	12/16/15	0820	5	X	X									
MW-8		GW	22.5	12/15/15	0845	5	X	X									
MW-9		GW	31.5	12/15/15	1442	5	X	X									
MW-10		GW	31.0	12/15/15	1525	5	X	X									

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
[signature]	12-16-15	1630	[signature]		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	COC Seal Intact: ___Y ___N ___NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	pH Checked: NCF:

Apex Companies, LLC- Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID #: ANDOVER QUAIL CROSSING

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 2 of 3

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L#

Table #

Acctnum: ASHCREPOR

Template: T107888

Prelogin: P534310

TSR: 350 - Jarred Willis

PB: 2-5-16

Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl-BLK							Rem./Contaminant	Sample # (lab only)
MW-11	Grab	GW	30.5	12/15/15	1208	5	X	X									
MW-12		GW	33.0	12/16/15	1012	5	X	X									
MW-13		GW	33.0	12/15/15	0922	5	X	X									
MW-14		GW	34.0	12/15/15	1003	5	X	X									
MW-15		GW	33.5	12/15/15	1040	5	X	X									
MW-16		GW	31.0	12/15/15	1124	5	X	X									
MW-17		GW	35.0	12/16/15	1250	5	X	X									
MW-18		GW	33.0	12/15/15	1310	5	X	X									
MW-19		GW	33.0	12/15/15	1403	5	X	X									
SVE-2		GW	28.97	12/16/15	1345	5	X	X									

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by : (Signature)	Date: 12-16-15	Time: 1630	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:

Condition: (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Apex Companies, LLC- Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID #: ANDOVER QUAIL CROSSING

P.O. #:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Chain of Custody Page 3 of 3

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L#:
Table #:
Acctnum: ASHCREPOR
Template: T107888
Prelogin: P534310
TSR: 358 - Jarred Willis
PB: 2-3-16
Shipped Via: FedEx Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl Blk						Rem./Contaminant	Sample # (lab only)
SVE-4	Grab	GW	79.64	12/16/15	1405	5	X	X								
DUP-1	Grab	GW	—	12/15/15	—	5	X	X								
DUP-2	Grab	GW	—	12/15/15	—	5	X	X								
~~DUP-3~~	~~—~~	~~GW~~	~~—~~	~~—~~	~~—~~	~~5~~	~~X~~	~~X~~								
		GW				5	X	X								
TRIP BLANK		GW				1			X							

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
	12-16-15	1630			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	COC Seal Intact: Y N NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	pH Checked: NCF:

Apex Companies, LLC- Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID #: ANDOVER QUAIL CROSSING

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L#:
Table #:
Acctnum: ASHCREPOR
Template: T107890
Prelogin: P534322
TSR: 358 - Jarred Willis
PB: 12-4-15
Shipped Via: FedEX Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Diss Metals - Fe 500mlHDPE-NoPres	Methane RSK175 40mlAmb HCl	NH3 125mlHDPE-H2SO4	NITRATE* / ALK / CO2 250mlHDPE-NoPres	Sulfate / Ortho Phos 250mlHDPE-NoPres	Total Metals- K 500mlHDPE-HNO3					Rem./Contaminant	Sample # (lab only)
MW-1	Grab	GW	33.0	12/16/15	1124	7	X	X	X	X	X	X						
MW-4		GW	31.0	12/15/15	1235	7	X	X	X	X	X	X						
MW-5		GW	21.0	12/15/15	0803	7	X	X	X	X	X	X						
MW-17		GW	35.0	12/16/15	1250	7	X	X	X	X	X	X						
MW-18		GW	33.0	12/15/15	1310	7	X	X	X	X	X	X						
MW-19		GW	33.0	12/15/15	1403	7	X	X	X	X	X	X						
DUP - 2		GW	—	12/15/15	—	7	X	X	X	X	X	X						
		~~GW~~				~~7~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~						

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks: NITRATE HAS 48HR HOLD TIME

pH _____ Temp _____
Flow _____ Other _____

Hold #:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
	12-16-15	1830		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:

Condition: (labuse only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

WELL GAGING DATA SHEET

APEX

		Job Number:	32000164I-08
Client:	Nuster	Date:	11-24-15
Project:	Andover Q.C.	Sampler:	TA
Weather:	Sunny	Time In/Out:	

WATER LEVEL DATA

Well I.D.	Time	Depth to Free Product (feet)	Depth to Water (feet)	Depth to Well Bottom (feet)	Product Thickness (feet)	Water Column Height (feet)	Notes/Other Remarks
MW-2	1014	—	35.81	—	—		
MW-5	1017	—	20.40	—	—		
MW-8	1019	—	21.61	—	—		
MW-14	1021	—	32.20	—	—		
MW-13	1025	—	32.18	—	—		
MW-15	1028	—	33.33	—	—		
MW-16	1030	—	29.15	—	—		
MW-11	1032	—	28.76	—	—		
MW-4	1034	—	30.37	—	—		
MW-12	1039	—	31.09	—	—		
MW-10	1042	—	28.40	—	—		
MW-9	1044	—	30.87	—	—		
MW-3	1053	—	39.69	—	—		
E road SVE-	1100	—	28.17	—	—		
C road SVE-	1058	—	27.05	—	—		
W road SVE-	1056	—	28.55	—	—		
grass SVE-	1055	—	29.36	—	—		
Pond	1048	—	1344.5 asl	—	—		
MW-7	1049	—	16.29	—	—		
MW-6	1051	—	22.17	—	—		
MW-19	1105	—	31.00	—	—		
MW-18	1107	—	30.99	—	—		
MW-3	1110	—	31.35	—	—		
MW-17	1112	—	32.65	—	—		

TA
11-24-15

~~2007 N Colt Ct~~

Table 3
PID Screening Results
2007 N Colt Court
Andover, Kansas

Sample Date	Sample Time	VOC Concentration (ppm)					
		Property Perimeter	Main Floor	Garage	Basement	Basement Utility Room	Sump
11/24/2015	9:00 a.m.	0.0	0.2	0.0	0.0	0.0	0.0
11/24/2015	10:30 a.m.	Air Purifier Installed and Started Operating					
	12:30 p.m.						
	4:00 p.m.						

Notes.

1. ppm = parts per million
2. The Property Perimeter, Main Floor, Garage, Basement, and Basement Utility Room PID measurements were collected in the breathing space (approximatley 5 feet above ground surface). For the Sump location, the PID measurements were collected approximately 6 inches below the floor suface.
3. -- = measurement was not collected.
4. * = The garage door was open during this measurement.

Appendix B

Historical Groundwater Elevations and SPH Removal Data

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
	8/8/2013					24.64	–	–	1327.49
	8/13/2013					24.36	–	–	1327.77
	8/21/2013					23.79	–	–	1328.34
	8/28/2013					25.21	–	–	1326.92
	9/5/2013					27.19	–	–	1324.94
	9/11/2013					25.93	–	–	1326.20
	9/17/2013					25.92	–	–	1326.21
	9/23/2013					28.49	–	–	1323.64
	9/30/2013					23.00	–	–	1329.13
	10/10/2013					25.28	–	–	1326.85
	10/17/2013					26.21	–	–	1325.92
	10/23/2013					23.55	–	–	1328.58
	10/31/2013					24.28	–	–	1327.85
	11/6/2013					NM	–	–	NM
	11/13/2013					23.04	–	–	1329.09
	11/20/2013					22.84	–	–	1329.29
	11/26/2013					24.88	–	–	1327.25
	12/3/2013					30.19	–	–	1321.94
	12/11/2013					31.12	–	–	1321.01
	12/19/2013					31.38	–	–	1320.75
	12/27/2013					31.50	–	–	1320.63
	1/3/2014					NM	–	–	NM
	1/10/2014					31.41	–	–	1320.72
MW-1	1/16/2014	4.0	1352.13	35.0	20-35	31.01	–	–	1321.12
	1/21/2014					31.31	–	–	1320.82
	1/27/2014					30.78	–	–	1321.35
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					31.75	–	–	1320.38
	2/26/2014					31.70	–	–	1320.43
	3/4/2014					31.62	–	–	1320.51
	3/13/2014					31.44	–	–	1320.69
	3/18/2014					31.41	–	–	1320.72
	3/27/2014					31.55	–	–	1320.58
	4/3/2014					31.69	–	–	1320.44
	4/7/2014					31.44	–	–	1320.69
	4/17/2014					31.44	–	–	1320.69
	4/22/2014					31.45	–	–	1320.68
	4/29/2014					31.80	–	–	1320.33
	5/8/2014					31.75	–	–	1320.38
	5/13/2014					31.49	–	–	1320.64
	5/20/2014					31.50	–	–	1320.63
	5/29/2014					30.49	–	–	1321.64
	6/3/2014					31.64	–	–	1320.49
	6/10/2014					31.65	–	–	1320.48
	6/18/2014					31.50	–	–	1320.63
	6/24/2014					31.15	–	–	1320.98

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-1 (cont.)	7/1/2014	4.0	1352.13	35.0	20-35	31.66	–	–	1320.47
	7/10/2014					31.79	–	–	1320.34
	7/15/2014					31.82	–	–	1320.31
	7/22/2014					31.31	–	–	1320.82
	7/31/2014					31.65	–	–	1320.48
	8/5/2014					31.78	–	–	1320.35
	8/14/2014					31.73	–	–	1320.40
	8/20/2014					31.68	–	–	1320.45
	8/26/2014					31.79	–	–	1320.34
	9/3/2014					31.79	–	–	1320.34
	9/10/2014					31.71	–	–	1320.42
	9/17/2014					31.72	–	–	1320.41
	9/24/2014					31.75	–	–	1320.38
	10/1/2014					31.65	–	–	1320.48
	10/8/2014					31.89	–	–	1320.24
	10/16/2014					29.99	–	–	1322.14
	10/21/2014					31.35	–	–	1320.78
	10/28/2014					31.39	–	–	1320.74
	11/4/2014					31.72	–	–	1320.41
	11/11/2014					31.71	–	–	1320.42
	11/18/2014					31.71	–	–	1320.42
	11/25/2014					31.44	–	–	1320.69
	12/3/2014					31.67	–	–	1320.46
	12/9/2014					31.48	–	–	1320.65
	12/17/2014					31.77	–	–	1320.36
	12/23/2014					31.81	–	–	1320.32
	12/31/2014					31.44	–	–	1320.69
	1/7/2015					31.75	–	–	1320.38
	1/14/2015					31.44	–	–	1320.69
	1/20/2015					31.45	–	–	1320.68
	1/28/2015					31.42	–	–	1320.71
	2/4/2015					31.44	–	–	1320.69
	2/9/2015					31.62	–	–	1320.51
	3/20/2015					31.38	–	–	1320.75
	4/20/2015					31.39	–	–	1320.74
	5/22/2015					31.20	–	–	1320.93
	6/10/2015					31.23	–	–	1320.90
	6/15/2015					31.31	–	–	1320.82
	7/22/2015					31.29	–	–	1320.84
	8/20/2015					31.35	–	–	1320.78
	9/14/2015					31.35	–	–	1320.78
	10/20/2015					31.32	–	–	1320.81
	11/24/2015					31.35	–	–	1320.78
	12/14/2015					31.21	–	–	1320.92
MW-2	8/8/2013	2.0	1353.17	44	29-44	31.93	–	–	1321.24
	8/13/2013					31.27	–	–	1321.90
	8/21/2013					30.85	–	–	1322.32
	8/28/2013					31.45	–	–	1321.72
	9/5/2013					31.45	–	–	1321.72
	9/11/2013					32.18	–	–	1320.99
	9/17/2013					32.10	–	–	1321.07
	9/23/2013					31.66	–	–	1321.51
	9/30/2013					32.55	–	–	1320.62

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
	10/10/2013					29.11	–	–	1324.06
	10/17/2013					31.91	–	–	1321.26
	10/23/2013					32.47	–	–	1320.70
	10/31/2013					32.19	–	–	1320.98
	11/6/2013					31.46	–	–	1321.71
	11/13/2013					31.96	–	–	1321.21
	11/20/2013					31.19	–	–	1321.98
	11/26/2013					31.38	–	–	1321.79
	12/3/2013					30.94	–	–	1322.23
	12/11/2013					NM	–	–	NM
	12/19/2013					31.45	–	–	1321.72
	12/27/2013					NM	–	–	NM
	1/3/2014					NM	–	–	NM
	1/10/2014					NM	–	–	NM
	1/16/2014					31.21	–	–	1321.96
	1/21/2014					31.49	–	–	1321.68
	1/27/2014					31.90	–	–	1321.27
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					32.06	–	–	1321.11
	2/26/2014					31.96	–	–	1321.21
	3/4/2014					32.41	–	–	1320.76
	3/13/2014					32.09	–	–	1321.08
MW-2 (cont.)	3/18/2014	2.0	1353.17	44	29-44	31.86	–	–	1321.31
	3/27/2014					32.09	–	–	1321.08
	4/3/2014					32.16	–	–	1321.01
	4/7/2014					32.53	–	–	1320.64
	4/17/2014					32.73	–	–	1320.44
	4/22/2014					32.99	–	–	1320.18
	4/29/2014					33.08	–	–	1320.09
	5/8/2014					33.06	–	–	1320.11
	5/13/2014					33.90	–	–	1319.27
	5/20/2014					33.77	–	–	1319.40
	5/29/2014					33.15	–	–	1320.02
	6/3/2014					33.64	–	–	1319.53
	6/10/2014					33.00	–	–	1320.17
	6/18/2014					32.56	–	–	1320.61
	6/24/2014					31.89	–	–	1321.28
	7/1/2014					32.31	–	–	1320.86
	7/10/2014					31.60	–	–	1321.57
	7/15/2014					31.86	–	–	1321.31
	7/22/2014					32.41	–	–	1320.76
	7/31/2014					31.91	–	–	1321.26
	8/5/2014					32.25	–	–	1320.92
	8/14/2014					32.88	–	–	1320.29
	8/20/2014					32.54	–	–	1320.63
	8/26/2014					33.00	–	–	1320.17

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-2 (cont.)	9/3/2014	2.0	1353.17	44	29-44	32.96	–	–	1320.21
	9/10/2014					32.70	–	–	1320.47
	9/17/2014					32.58	–	–	1320.59
	9/24/2014					33.38	–	–	1319.79
	10/1/2014					32.78	–	–	1320.39
	10/8/2014					32.81	–	–	1320.36
	10/16/2014					33.04	–	–	1320.13
	10/21/2014					33.07	–	–	1320.10
	10/28/2014					33.06	–	–	1320.11
	11/4/2014					33.48	–	–	1319.69
	11/11/2014					33.07	–	–	1320.10
	11/25/2014					32.88	–	–	1320.29
	12/3/2014					33.39	–	–	1319.78
	12/9/2014					33.25	–	–	1319.92
	12/17/2014					33.24	–	–	1319.93
	12/23/2014					33.10	–	–	1320.07
	12/31/2014					32.87	–	–	1320.30
	1/7/2015					NM	–	–	NM
	1/14/2015					32.90	–	–	1320.27
	1/20/2015					32.93	–	–	1320.24
	1/28/2015					32.89	–	–	1320.28
	2/4/2015					32.92	–	–	1320.25
	2/9/2015					33.15	–	–	1320.02
	3/18/2015					32.87	–	–	1320.30
	4/20/2015					36.43	–	–	1316.74
	5/22/2015					35.23	–	–	1317.94
	6/15/2015					34.83	–	–	1318.34
	7/22/2015					35.13	–	–	-35.13
	8/20/2015					36.21	–	–	-36.21
	9/14/2015					35.87	–	–	-35.87
	10/20/2015					36.23	–	–	-36.23
	11/24/2015					35.81	–	–	-35.81
	12/14/2015					34.08	–	–	-34.08
MW-3	8/8/2013	2.0	1350.47	60	40-60	36.94	–	–	1313.53
	8/13/2013					34.71	–	–	1315.76
	8/21/2013					33.30	–	–	1317.17
	8/28/2013					39.26	–	–	1311.21
	9/5/2013					42.54	–	–	1307.93
	9/11/2013					45.19	–	–	1305.28
	9/17/2013					43.52	–	–	1306.95
	9/23/2013					43.34	–	–	1307.13
	9/30/2013					43.40	–	–	1307.07
	10/10/2013					43.18	–	–	1307.29
	10/17/2013					41.23	–	–	1309.24
	10/23/2013					41.43	–	–	1309.04
	10/31/2013					41.58	–	–	1308.89
	11/6/2013					41.19	–	–	1309.28
	11/13/2013					35.98	–	–	1314.49
	11/20/2013					35.27	–	–	1315.20
	11/26/2013					34.56	–	–	1315.91
	12/3/2013					33.77	–	–	1316.70
	12/11/2013					34.04	–	–	1316.43
	12/19/2013					33.72	–	–	1316.75
	12/27/2013					33.89	–	–	1316.58

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
	1/3/2014					NM	–	–	NM
	1/10/2014					33.47	–	–	1317.00
	1/16/2014					33.68	–	–	1316.79
	1/21/2014					33.84	–	–	1316.63
	1/27/2014					34.04	–	–	1316.43
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					34.00	–	–	1316.47
	2/26/2014					34.24	–	–	1316.23
	3/4/2014					34.36	–	–	1316.11
	3/13/2014					34.42	–	–	1316.05
	3/18/2014					34.35	–	–	1316.12
	3/27/2014					34.68	–	–	1315.79
	4/3/2014					35.39	–	–	1315.08
	4/7/2014					36.20	–	–	1314.27
	4/17/2014					37.95	–	–	1312.52
	4/22/2014					39.94	–	–	1310.53
	4/29/2014					41.00	–	–	1309.47
	5/8/2014					45.96	–	–	1304.51
	5/13/2014					47.00	–	–	1303.47
	5/20/2014					49.95	–	–	1300.52
	5/29/2014					47.07	–	–	1303.40
	6/3/2014					47.89	–	–	1302.58
MW-3 (cont.)	6/10/2014	2.0	1350.47	60	40-60	44.14	–	–	1306.33
	6/18/2014					42.60	–	–	1307.87
	6/24/2014					41.62	–	–	1308.85
	7/1/2014					39.58	–	–	1310.89
	7/10/2014					40.35	–	–	1310.12
	7/15/2014					42.02	–	–	1308.45
	7/22/2014					42.80	–	–	1307.67
	7/31/2014					43.14	–	–	1307.33
	8/5/2014					47.55	–	–	1302.92
	8/14/2014					45.85	–	–	1304.62
	8/20/2014					49.15	–	–	1301.32
	8/26/2014					51.32	–	–	1299.15
	9/3/2014					51.10	–	–	1299.37
	9/10/2014					51.71	–	–	1298.76
	9/17/2014					51.84	–	–	1298.63
	9/24/2014					52.93	–	–	1297.54
	10/1/2014					53.93	–	–	1296.54
	10/8/2014					53.91	–	–	1296.56
	10/16/2014					50.41	–	–	1300.06
	10/21/2014					51.06	–	–	1299.41
	10/28/2014					50.29	–	–	1300.18
	11/4/2014					51.00	–	–	1299.47
	11/11/2014					49.17	–	–	1301.30
	11/25/2014					45.30	–	–	1305.17

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-3 (cont.)	12/3/2014	2.0	1350.47	60	40-60	44.10	–	–	1306.37
	12/9/2014					43.67	–	–	1306.80
	12/17/2014					42.83	–	–	1307.64
	12/23/2014					47.12	–	–	1303.35
	12/31/2014					29.37	–	–	1321.10
	1/7/2015					NM	–	–	NM
	1/14/2015					41.35	–	–	1309.12
	1/20/2015					41.36	–	–	1309.11
	1/28/2015					42.22	–	–	1308.25
	2/4/2015					41.12	–	–	1309.35
	2/9/2015					40.60	–	–	1309.87
	3/18/2015					41.02	–	–	1309.45
	4/20/2015					45.61	–	–	1304.86
	5/22/2015					40.21	–	–	1310.26
	6/15/2015					38.21	–	–	1312.26
	7/22/2015					39.69	–	–	-39.69
	8/20/2015					44.40	–	–	-44.40
	9/14/2015					43.33	–	–	-43.33
	10/20/2015					45.10	–	–	-45.10
	11/24/2015					39.69	–	–	-39.69
	12/14/2015					35.42	–	–	-35.42
MW-4	8/8/2013	2.0	1350.73	41	26-41	28.89	–	–	1321.84
	8/13/2013					28.85	–	–	1321.88
	8/21/2013					28.18	–	–	1322.55
	8/28/2013					28.56	–	–	1322.17
	9/5/2013					29.16	–	–	1321.57
	9/11/2013					29.55	–	–	1321.18
	9/17/2013					30.06	–	–	1320.67
	9/23/2013					30.32	–	–	1320.41
	9/30/2013					30.11	–	–	1320.62
	10/10/2013					30.45	–	–	1320.28
	10/17/2013					30.43	–	–	1320.30
	10/23/2013					30.36	–	–	1320.37
	10/31/2013					30.14	–	–	1320.59
	11/6/2013					29.78	–	–	1320.95
	11/13/2013					30.21	–	–	1320.52
	11/20/2013					29.81	–	–	1320.92
	11/26/2013					30.34	–	–	1320.39
	12/3/2013					30.64	–	–	1320.09
	12/11/2013					30.19	–	–	1320.54
	12/19/2013					30.47	–	–	1320.26
	12/27/2013					30.43	–	–	1320.30
	1/3/2014					NM	–	–	NM
	1/10/2014					29.44	–	–	1321.29
	1/16/2014					29.38	–	–	1321.35
	1/21/2014					29.53	–	–	1321.20
	1/27/2014					30.36	–	–	1320.37
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					30.61	–	–	1320.12
	2/26/2014					31.56	–	–	1319.17
	3/4/2014					30.54	–	–	1320.19
	3/13/2014					30.56	–	–	1320.17
	3/18/2014					30.80	–	–	1319.93
	3/27/2014					30.72	–	–	1320.01

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
	4/3/2014					30.49	–	–	1320.24
	4/7/2014					30.53	–	–	1320.20
	4/17/2014					30.54	–	–	1320.19
	4/22/2014					31.02	–	–	1319.71
	4/29/2014					31.25	–	–	1319.48
	5/8/2014					31.59	–	–	1319.14
	5/13/2014					31.30	–	–	1319.43
	5/20/2014					31.73	–	–	1319.00
	5/29/2014					31.63	–	–	1319.10
	6/3/2014					32.68	–	–	1318.05
	6/10/2014					32.52	–	–	1318.21
	6/18/2014					31.71	–	–	1319.02
	6/24/2014					30.73	–	–	1320.00
	7/1/2014					30.60	–	–	1320.13
	7/10/2014					30.39	–	–	1320.34
	7/15/2014					30.56	–	–	1320.17
	7/22/2014					30.34	–	–	1320.39
	7/31/2014					30.52	–	–	1320.21
	8/5/2014					30.69	–	–	1320.04
	8/14/2014					30.61	–	–	1320.12
	8/20/2014					30.81	–	–	1319.92
	8/26/2014					30.73	–	–	1320.00
	9/3/2014					30.91	–	–	1319.82
	9/10/2014					30.82	–	–	1319.91
	9/17/2014					30.91	–	–	1319.82
	9/24/2014					29.98	–	–	1320.75
	10/1/2014					31.26	–	–	1319.47
MW-4 (cont.)	10/8/2014	2.0	1350.73	41	26-41	31.29	–	–	1319.44
	10/16/2014					31.20	–	–	1319.53
	10/21/2014					31.11	–	–	1319.62
	10/28/2014					30.94	–	–	1319.79
	11/4/2014					31.13	–	–	1319.60
	11/11/2014					31.03	–	–	1319.70
	11/25/2014					31.35	–	–	1319.38
	12/3/2014					31.41	–	–	1319.32
	12/9/2014					31.43	–	–	1319.30
	12/17/2014					31.44	–	–	1319.29
	12/23/2014					31.52	–	–	1319.21
	12/31/2014					31.71	–	–	1319.02
	1/7/2015					NM	–	–	NM
	1/14/2015					31.52	–	–	1319.21
	1/20/2015					31.55	–	–	1319.18
	1/28/2015					31.66	–	–	1319.07
	2/4/2015					31.70	–	–	1319.03
	2/9/2015					31.75	–	–	1318.98
	3/18/2015					31.22	–	–	1319.51
	4/20/2015					34.10	–	–	1316.63
	5/22/2015					31.25	–	–	1319.48
	6/10/2015					29.28	–	–	1321.45
	6/15/2015					29.02	–	–	1321.71
	7/22/2015					29.55	–	–	-29.55
	8/20/2015					29.65	–	–	-29.65
	9/14/2015					29.60	–	–	-29.60
	10/20/2015					30.31	–	–	-30.31
	11/24/2015					30.37	–	–	-30.37
	12/14/2015					29.69	–	–	-29.69

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
	8/8/2013					19.61	–	–	1333.16
	8/13/2013					19.39	–	–	1333.38
	8/21/2013					19.66	–	–	1333.11
	8/28/2013					20.02	–	–	1332.75
	9/5/2013					20.54	–	–	1332.23
	9/11/2013					20.81	–	–	1331.96
	9/17/2013					21.03	–	–	1331.74
	9/23/2013					21.00	–	–	1331.77
	9/30/2013					21.17	–	–	1331.60
	10/10/2013					21.45	–	–	1331.32
	10/17/2013					21.18	–	–	1331.59
	10/23/2013					21.20	–	–	1331.57
	10/31/2013					21.19	–	–	1331.58
	11/6/2013					20.91	–	–	1331.86
	11/13/2013					20.79	–	–	1331.98
	11/20/2013					20.18	–	–	1332.59
	11/26/2013					21.29	–	–	1331.48
	12/3/2013					20.84	–	–	1331.93
	12/11/2013					20.96	–	–	1331.81
	12/19/2013					20.54	–	–	1332.23
	12/27/2013					20.82	–	–	1331.95
	1/3/2014					NM	–	–	NM
	1/10/2014					20.19	–	–	1332.58
	1/16/2014					20.90	–	–	1331.87
MW-5	1/21/2014	2.0	1352.77	30	15-30	21.04	–	–	1331.73
	1/27/2014					20.84	–	–	1331.93
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					21.23	–	–	1331.54
	2/26/2014					21.02	–	–	1331.75
	3/4/2014					21.05	–	–	1331.72
	3/13/2014					20.98	–	–	1331.79
	3/18/2014					20.86	–	–	1331.91
	3/27/2014					20.97	–	–	1331.80
	4/3/2014					21.70	–	–	1331.07
	4/7/2014					21.05	–	–	1331.72
	4/17/2014					21.10	–	–	1331.67
	4/22/2014					21.30	–	–	1331.47
	4/29/2014					21.15	–	–	1331.62
	5/8/2014					21.33	–	–	1331.44
	5/13/2014					21.17	–	–	1331.60
	5/20/2014					21.48	–	–	1331.29
	5/29/2014					21.41	–	–	1331.36
	6/3/2014					21.16	–	–	1331.61
	6/10/2014					20.65	–	–	1332.12
	6/18/2014					20.30	–	–	1332.47
	6/24/2014					19.96	–	–	1332.81
	7/1/2014					19.74	–	–	1333.03
	7/10/2014					19.91	–	–	1332.86

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW- 5 (cont.)	7/15/2014	2.0	1352.77	30	15-30	20.10	–	–	1332.67
	7/22/2014					20.04	–	–	1332.73
	7/31/2014					20.26	–	–	1332.51
	8/5/2014					20.29	–	–	1332.48
	8/14/2014					20.23	–	–	1332.54
	8/20/2014					20.24	–	–	1332.53
	8/26/2014					20.37	–	–	1332.40
	9/3/2014					20.44	–	–	1332.33
	9/10/2014					20.43	–	–	1332.34
	9/17/2014					20.54	–	–	1332.23
	9/24/2014					20.66	–	–	1332.11
	10/1/2014					20.59	–	–	1332.18
	10/8/2014					20.58	–	–	1332.19
	10/16/2014					20.39	–	–	1332.38
	10/21/2014					22.90	–	–	1329.87
	10/28/2014					20.14	–	–	1332.63
	11/4/2014					20.33	–	–	1332.44
	11/11/2014					20.39	–	–	1332.38
	11/25/2014					20.44	–	–	1332.33
	12/3/2014					20.59	–	–	1332.18
	12/9/2014					20.78	–	–	1331.99
	12/17/2014					20.68	–	–	1332.09
	12/23/2014					20.60	–	–	1332.17
	12/31/2014					20.61	–	–	1332.16
	1/7/2015					NM	–	–	NM
	1/14/2015					20.56	–	–	1332.21
	1/20/2015					20.55	–	–	1332.22
	1/28/2015					20.58	–	–	1332.19
	2/4/2015					20.69	–	–	1332.08
	2/9/2015					20.58	–	–	1332.19
	3/18/2015					20.80	–	–	1331.97
	4/20/2015					21.01	–	–	1331.76
	5/22/2015					20.25	–	–	1332.52
	6/10/2015					19.44	–	–	1333.33
	6/15/2015					19.60	–	–	1333.17
	7/22/2015					19.82	–	–	-19.82
	8/20/2015					19.97	–	–	-19.97
	9/14/2015					20.06	–	–	-20.06
	10/20/2015					20.24	–	–	-20.24
	11/24/2015					20.4	–	–	-20.40
	12/14/2015					19.82	–	–	-19.82
MW-6	8/8/2013	2.0	1349.76	41	26-41	15.67	–	–	1334.09
	8/13/2013					18.34	–	–	1331.42
	8/21/2013					17.40	–	–	1332.36
	8/28/2013					17.95	–	–	1331.81
	9/5/2013					18.32	–	–	1331.44
	9/11/2013					18.21	–	–	1331.55
	9/17/2013					18.44	–	–	1331.32
	9/23/2013					18.30	–	–	1331.46
	9/30/2013					18.69	–	–	1331.07
	10/10/2013					18.84	–	–	1330.92
	10/17/2013					18.76	–	–	1331.00
	10/23/2013					18.69	–	–	1331.07
	10/31/2013					18.57	–	–	1331.19
	11/6/2013					18.01	–	–	1331.75
	11/13/2013					19.42	–	–	1330.34

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
	11/20/2013					19.02	–	–	1330.74
	11/26/2013					19.84	–	–	1329.92
	12/3/2013					19.63	–	–	1330.13
	12/11/2013					20.45	–	–	1329.31
	12/19/2013					21.21	–	–	1328.55
	12/27/2013					21.67	–	–	1328.09
	1/3/2014					NM	–	–	NM
	1/10/2014					21.51	–	–	1328.25
	1/16/2014					21.48	–	–	1328.28
	1/21/2014					21.84	–	–	1327.92
	1/27/2014					22.26	–	–	1327.50
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					22.00	–	–	1327.76
	2/26/2014					22.32	–	–	1327.44
	3/4/2014					22.06	–	–	1327.70
	3/13/2014					22.30	–	–	1327.46
	3/18/2014					22.14	–	–	1327.62
	3/27/2014					21.89	–	–	1327.87
	4/3/2014					21.92	–	–	1327.84
	4/7/2014					22.37	–	–	1327.39
	4/17/2014					22.33	–	–	1327.43
	4/22/2014					22.41	–	–	1327.35
	4/29/2014					22.16	–	–	1327.60
	5/8/2014					22.02	–	–	1327.74
MW-6 (cont.	5/13/2014	2.0	1349.76	41	26-41	21.95	–	–	1327.81
	5/20/2014					22.46	–	–	1327.30
	5/29/2014					22.32	–	–	1327.44
	6/3/2014					22.09	–	–	1327.67
	6/10/2014					21.00	–	–	1328.76
	6/18/2014					20.54	–	–	1329.22
	6/24/2014					19.89	–	–	1329.87
	7/1/2014					19.46	–	–	1330.30
	7/10/2014					19.82	–	–	1329.94
	7/15/2014					19.86	–	–	1329.90
	7/22/2014					19.88	–	–	1329.88
	7/31/2014					20.00	–	–	1329.76
	8/5/2014					20.28	–	–	1329.48
	8/14/2014					20.42	–	–	1329.34
	8/20/2014					20.56	–	–	1329.20
	8/26/2014					20.72	–	–	1329.04
	9/3/2014					20.98	–	–	1328.78
	9/10/2014					21.02	–	–	1328.74
	9/17/2014					21.49	–	–	1328.27
	9/24/2014					21.50	–	–	1328.26
	10/1/2014					21.57	–	–	1328.19
	10/8/2014					21.59	–	–	1328.17
	10/16/2014					20.74	–	–	1329.02
	10/21/2014					20.66	–	–	1329.10
	10/28/2014					20.79	–	–	1328.97
	11/4/2014					21.21	–	–	1328.55

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-6 (cont.	11/11/2014	2.0	1349.76	41	26-41	21.68	–	–	1328.08
	11/25/2014					21.93	–	–	1327.83
	12/3/2014					22.06	–	–	1327.70
	12/9/2014					22.32	–	–	1327.44
	12/17/2014					22.20	–	–	1327.56
	12/23/2014					21.96	–	–	1327.80
	12/31/2014					20.61	–	–	1329.15
	1/7/2015					NM	–	–	NM
	1/14/2015					22.59	–	–	1327.17
	1/20/2015					22.45	–	–	1327.31
	1/28/2015					22.54	–	–	1327.22
	2/4/2015					22.59	–	–	1327.17
	2/9/2015					22.77	–	–	1326.99
	3/18/2015					22.62	–	–	1327.14
	4/20/2015					23.05	–	–	1326.71
	5/22/2015					22.25	–	–	1327.51
	6/15/2015					20.45	–	–	1329.31
	7/22/2015					20.66	–	–	-20.66
	8/20/2015					20.73	–	–	-20.73
	9/14/2015					20.48	–	–	-20.48
	10/20/2015					21.11	–	–	-21.11
	11/24/2015					22.17	–	–	-22.17
	12/14/2015					20.57	–	–	-20.57
MW-7	8/8/2013	2.0	1348.98	24	9-24	13.32	–	–	1335.66
	8/13/2013					13.68	–	–	1335.30
	8/21/2013					14.03	–	–	1334.95
	8/28/2013					14.76	–	–	1334.22
	9/5/2013					15.44	–	–	1333.54
	9/11/2013					15.66	–	–	1333.32
	9/17/2013					15.78	–	–	1333.20
	9/23/2013					15.54	–	–	1333.44
	9/30/2013					15.39	–	–	1333.59
	10/10/2013					15.65	–	–	1333.33
	10/17/2013					15.68	–	–	1333.30
	10/23/2013					15.64	–	–	1333.34
	10/31/2013					15.66	–	–	1333.32
	11/6/2013					15.11	–	–	1333.87
	11/13/2013					15.21	–	–	1333.77
	11/20/2013					15.62	–	–	1333.36
	11/26/2013					15.89	–	–	1333.09
	12/3/2013					16.03	–	–	1332.95
	12/11/2013					16.45	–	–	1332.53
	12/19/2013					16.41	–	–	1332.57
	12/27/2013					16.59	–	–	1332.39
	1/3/2014					NM	–	–	NM
	1/10/2014					16.47	–	–	1332.51
	1/16/2014					16.45	–	–	1332.53
	1/21/2014					16.66	–	–	1332.32
	1/27/2014					16.68	–	–	1332.30
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					16.61	–	–	1332.37
	2/26/2014					16.64	–	–	1332.34
	3/4/2014					16.65	–	–	1332.33
	3/13/2014					16.73	–	–	1332.25

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-7 (cont.)	3/18/2014	2.0	1348.98	24	9-24	16.68	–	–	1332.30
	3/27/2014					16.56	–	–	1332.42
	4/3/2014					16.64	–	–	1332.34
	4/7/2014					16.60	–	–	1332.38
	4/17/2014					16.66	–	–	1332.32
	4/22/2014					16.70	–	–	1332.28
	4/29/2014					16.70	–	–	1332.28
	5/8/2014					16.95	–	–	1332.03
	5/13/2014					16.80	–	–	1332.18
	5/20/2014					15.69	–	–	1333.29
	5/29/2014					17.44	–	–	1331.54
	6/3/2014					16.13	–	–	1332.85
	6/10/2014					14.85	–	–	1334.13
	6/18/2014					15.52	–	–	1333.46
	6/24/2014					14.78	–	–	1334.20
	7/1/2014					14.74	–	–	1334.24
	7/10/2014					15.10	–	–	1333.88
	7/15/2014					15.31	–	–	1333.67
	7/22/2014					15.39	–	–	1333.59
	7/31/2014					15.72	–	–	1333.26
	8/5/2014					15.82	–	–	1333.16
	8/14/2014					15.59	–	–	1333.39
	8/20/2014					15.73	–	–	1333.25
	8/26/2014					15.90	–	–	1333.08
	9/3/2014					15.99	–	–	1332.99
	9/10/2014					16.03	–	–	1332.95
	9/17/2014					16.14	–	–	1332.84
	9/24/2014					16.24	–	–	1332.74
	10/1/2014					16.16	–	–	1332.82
	10/8/2014					16.17	–	–	1332.81
	10/16/2014					15.50	–	–	1333.48
	10/21/2014					15.65	–	–	1333.33
	10/28/2014					15.64	–	–	1333.34
	11/4/2014					16.02	–	–	1332.96
	11/11/2014					16.04	–	–	1332.94
	11/25/2014					16.37	–	–	1332.61
	12/3/2014					16.46	–	–	1332.52
	12/9/2014					16.54	–	–	1332.44
	12/17/2014					16.52	–	–	1332.46
	12/23/2014					16.41	–	–	1332.57
	12/31/2014					16.48	–	–	1332.50
	1/7/2015					NM	–	–	NM
	1/14/2015					16.49	–	–	1332.49
	1/20/2015					16.55	–	–	1332.43
	1/28/2015					16.56	–	–	1332.42
	2/4/2015					16.56	–	–	1332.42
	2/9/2015					16.58	–	–	1332.40
	3/18/2015					16.63	–	–	1332.35
	4/20/2015					16.10	–	–	1332.88
	5/22/2015					15.23	–	–	1333.75
	6/15/2015					14.91	–	–	1334.07
	7/22/2015					15.61	–	–	-15.61
	8/20/2015					15.70	–	–	-15.70
	9/14/2015					15.55	–	–	-15.55
	10/20/2015					16.07	–	–	-16.07
	11/24/2015					16.29	–	–	-16.29
	12/14/2015					15.56	–	–	-15.56

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
	8/8/2013					18.62	–	–	1334.76
	8/13/2013					18.13	–	–	1335.25
	8/21/2013					18.32	–	–	1335.06
	8/28/2013					19.21	–	–	1334.17
	9/5/2013					20.00	–	–	1333.38
	9/11/2013					20.35	–	–	1333.03
	9/17/2013					20.54	–	–	1332.84
	9/23/2013					20.59	–	–	1332.79
	9/30/2013					20.70	–	–	1332.68
	10/10/2013					20.82	–	–	1332.56
	10/17/2013					20.92	–	–	1332.46
	10/23/2013					20.85	–	–	1332.53
	10/31/2013					20.89	–	–	1332.49
	11/6/2013					19.21	–	–	1334.17
	11/13/2013					19.38	–	–	1334.00
	11/20/2013					18.86	–	–	1334.52
	11/26/2013					20.30	–	–	1333.08
	12/3/2013					20.54	–	–	1332.84
	12/11/2013					21.09	–	–	1332.29
	12/19/2013					21.11	–	–	1332.27
	12/27/2013					21.54	–	–	1331.84
	1/3/2014					NM	–	–	NM
	1/10/2014					21.24	–	–	1332.14
MW-8	1/16/2014	2.0	1353.38	30	15-30	21.70	–	–	1331.68
	1/21/2014					21.80	–	–	1331.58
	1/27/2014					21.88	–	–	1331.50
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					22.15	–	–	1331.23
	2/26/2014					21.46	–	–	1331.92
	3/4/2014					21.84	–	–	1331.54
	3/13/2014					21.90	–	–	1331.48
	3/18/2014					21.70	–	–	1331.68
	3/27/2014					21.79	–	–	1331.59
	4/3/2014					21.95	–	–	1331.43
	4/7/2014					22.06	–	–	1331.32
	4/17/2014					22.29	–	–	1331.09
	4/22/2014					22.26	–	–	1331.12
	4/29/2014					22.20	–	–	1331.18
	5/8/2014					22.23	–	–	1331.15
	5/13/2014					22.42	–	–	1330.96
	5/20/2014					22.27	–	–	1331.11
	5/29/2014					22.43	–	–	1330.95
	6/3/2014					22.32	–	–	1331.06
	6/10/2014					21.73	–	–	1331.65
	6/18/2014					20.64	–	–	1332.74
	6/24/2014					20.00	–	–	1333.38

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-8 (cont.)	7/1/2014	2.0	1353.38	30	15-30	20.22	–	–	1333.16
	7/10/2014					20.24	–	–	1333.14
	7/15/2014					20.47	–	–	1332.91
	7/22/2014					20.64	–	–	1332.74
	7/31/2014					20.89	–	–	1332.49
	8/5/2014					20.96	–	–	1332.42
	8/14/2014					21.09	–	–	1332.29
	8/20/2014					21.06	–	–	1332.32
	8/26/2014					21.24	–	–	1332.14
	9/3/2014					21.36	–	–	1332.02
	9/10/2014					21.44	–	–	1331.94
	9/17/2014					21.56	–	–	1331.82
	9/24/2014					21.69	–	–	1331.69
	10/1/2014					21.65	–	–	1331.73
	10/8/2014					21.70	–	–	1331.68
	10/16/2014					21.53	–	–	1331.85
	10/21/2014					21.32	–	–	1332.06
	10/28/2014					20.98	–	–	1332.40
	11/4/2014					21.09	–	–	1332.29
	11/11/2014					21.09	–	–	1332.29
	11/25/2014					21.21	–	–	1332.17
	12/3/2014					21.48	–	–	1331.90
	12/9/2014					21.69	–	–	1331.69
	12/17/2014					21.74	–	–	1331.64
	12/23/2014					21.61	–	–	1331.77
	12/31/2014					21.73	–	–	1331.65
	1/7/2015					NM	–	–	NM
	1/14/2015					21.64	–	–	1331.74
	1/20/2015					21.70	–	–	1331.68
	1/28/2015					21.72	–	–	1331.66
	2/4/2015					21.92	–	–	1331.46
	2/9/2015					21.88	–	–	1331.50
	3/18/2015					21.96	–	–	1331.42
	4/20/2015					22.25	–	–	1331.13
	5/22/2015					20.93	–	–	1332.45
	6/15/2015					19.93	–	–	1333.45
	7/22/2015					20.20	–	–	-20.20
	8/20/2015					20.64	–	–	-20.64
	9/14/2015					20.68	–	–	-20.68
	10/20/2015					21.08	–	–	-21.08
	11/24/2015					21.61	–	–	-21.61
	12/14/2015					20.41	–	–	-20.41
MW-9	8/8/2013	2.0	1349.48	34	19-34	28.61	–	–	1320.87
	8/13/2013					27.58	–	–	1321.90
	8/21/2013					27.52	–	–	1321.96
	8/28/2013					27.60	–	–	1321.88
	9/5/2013					28.28	–	–	1321.20
	9/11/2013					30.57	–	–	1318.91
	9/17/2013					30.05	–	–	1319.43
	9/23/2013					30.25	–	–	1319.23
	9/30/2013					30.45	–	–	1319.03
	10/10/2013					30.76	–	–	1318.72
	10/17/2013					30.69	–	–	1318.79
	10/23/2013					30.73	–	–	1318.75
	10/31/2013					30.11	–	–	1319.37
	11/6/2013					30.03	–	–	1319.45
	11/13/2013					29.54	–	–	1319.94

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-9 (cont.)	11/20/2013	2.0	1349.48	34	19-34	28.66	–	–	1320.82
	11/26/2013					28.67	–	–	1320.81
	12/3/2013					28.40	–	–	1321.08
	12/11/2013					28.55	–	–	1320.93
	12/19/2013					28.55	–	–	1320.93
	12/27/2013					NM	–	–	NM
	1/3/2014					NM	–	–	NM
	1/10/2014					28.65	–	–	1320.83
	1/16/2014					28.75	–	–	1320.73
	1/21/2014					28.91	–	–	1320.57
	1/27/2014					28.93	–	–	1320.55
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					29.09	–	–	1320.39
	2/26/2014					29.16	–	–	1320.32
	3/4/2014					NM	–	–	NM
	3/13/2014					29.31	–	–	1320.17
	3/18/2014					29.17	–	–	1320.31
	3/27/2014					28.59	–	–	1320.89
	4/3/2014					30.00	–	–	1319.48
	4/7/2014					30.25	–	–	1319.23
	4/17/2014					30.81	–	–	1318.67
	4/22/2014					31.06	–	–	1318.42
	4/29/2014					31.50	–	–	1317.98
	5/8/2014					31.81	–	–	1317.67
	5/13/2014					32.96	–	–	1316.52
	5/20/2014					33.39	–	–	1316.09
	5/29/2014					33.56	–	–	1315.92
	6/3/2014					33.61	–	–	1315.87
	6/10/2014					32.83	–	–	1316.65
	6/18/2014					31.25	–	–	1318.23
	6/24/2014					30.60	–	–	1318.88
	7/1/2014					30.14	–	–	1319.34
	7/10/2014					30.21	–	–	1319.27
	7/15/2014					30.46	–	–	1319.02
	7/22/2014					30.56	–	–	1318.92
	7/31/2014					NM	–	–	NM
	8/5/2014					NM	–	–	NM
	8/14/2014					31.44	–	–	1318.04
	8/20/2014					NM	–	–	NM
	8/26/2014					NM	–	–	NM
	9/3/2014					NM	–	–	NM
	9/10/2014					32.21	–	–	NM
	9/17/2014					NM	–	–	NM
	9/24/2014					32.98	–	–	1316.50
	10/1/2014					32.50	–	–	1316.98
	10/8/2014					32.52	–	–	1316.96
	10/16/2014					32.24	–	–	1317.24
	10/21/2014					NM	–	–	#VALUE!
	10/28/2014					31.87	–	–	1317.61

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
	11/4/2014					32.09	–	–	1317.39
	11/11/2014					31.84	–	–	1317.64
	11/25/2014					32.01	–	–	1317.47
	12/3/2014					32.18	–	–	1317.30
	12/9/2014					31.97	–	–	1317.51
	12/17/2014					32.04	–	–	1317.44
	12/23/2014					31.96	–	–	1317.52
	12/31/2014					31.11	–	–	1318.37
	1/7/2015					NM	–	–	NM
	1/14/2015					NM	–	–	NM
	1/20/2015					NM	–	–	NM
MW-9 (cont.)	1/28/2015	2.0	1349.48	34	19-34	31.81	–	–	1317.67
	2/4/2015					31.90	–	–	1317.58
	2/9/2015					31.78	–	–	1317.70
	3/18/2015					31.59	–	–	1317.89
	4/20/2015					33.25	–	–	1316.23
	5/22/2015					31.55	–	–	1317.93
	6/15/2015					29.83	–	–	1319.65
	7/22/2015					28.87	–	–	-28.87
	8/20/2015					28.41	–	–	-28.41
	9/14/2015					30.24	–	–	-30.24
	10/20/2015					31.07	–	–	-31.07
	11/24/2015					30.87	–	–	-30.87
	12/14/2015					29.22	–	–	-29.22
	8/8/2013					26.72	–	–	1322.07
	8/13/2013					25.39	–	–	1323.40
	8/21/2013					24.94	–	–	1323.85
	8/28/2013					25.94	–	–	1322.85
	9/5/2013					28.21	–	–	1320.58
	9/11/2013					28.42	–	–	1320.37
	9/17/2013					28.49	–	–	1320.30
	9/23/2013					28.46	–	–	1320.33
	9/30/2013					28.32	–	–	1320.47
	10/10/2013					28.30	–	–	1320.49
	10/17/2013					28.45	–	–	1320.34
	10/23/2013					28.33	–	–	1320.46
	10/31/2013					28.40	–	–	1320.39
	11/6/2013					27.87	–	–	1320.92
	11/13/2013					28.25	–	–	1320.54
	11/20/2013					27.53	–	–	1321.26
MW-10	11/26/2013	2.0	1348.79	34	19-34	27.30	–	–	1321.49
	12/3/2013					26.81	–	–	1321.98
	12/11/2013					27.14	–	–	1321.65
	12/19/2013					27.10	–	–	1321.69
	12/27/2013					27.42	–	–	1321.37
	1/3/2014					NM	–	–	NM
	1/10/2014					27.35	–	–	1321.44
	1/16/2014					27.51	–	–	1321.28
	1/21/2014					27.77	–	–	1321.02
	1/27/2014					27.47	–	–	1321.32
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					27.53	–	–	1321.26
	2/26/2014					27.58	–	–	1321.21
	3/4/2014					27.66	–	–	1321.13
	3/13/2014					27.78	–	–	1321.01
	3/18/2014					27.65	–	–	1321.14

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-10 (cont.)	3/27/2014	2.0	1348.79	34	19-34	28.12	–	–	1320.67
	4/3/2014					28.36	–	–	1320.43
	4/7/2014					28.43	–	–	1320.36
	4/17/2014					28.41	–	–	1320.38
	4/22/2014					28.48	–	–	1320.31
	4/29/2014					28.50	–	–	1320.29
	5/8/2014					29.01	–	–	1319.78
	5/13/2014					29.08	–	–	1319.71
	5/20/2014					29.21	–	–	1319.58
	5/29/2014					28.95	–	–	1319.84
	6/3/2014					28.46	–	–	1320.33
	6/10/2014					28.25	–	–	1320.54
	6/18/2014					27.25	–	–	1321.54
	6/24/2014					NM	–	–	NM
	7/1/2014					28.44	–	–	1320.35
	7/10/2014					28.28	–	–	1320.51
	7/15/2014					28.32	–	–	1320.47
	7/22/2014					28.28	–	–	1320.51
	7/31/2014					28.50	–	–	1320.29
	8/5/2014					28.47	–	–	1320.32
	8/14/2014					28.41	–	–	1320.38
	8/20/2014					28.40	–	–	1320.39
	8/26/2014					28.44	–	–	1320.35
	9/3/2014					29.46	–	–	1319.33
	9/10/2014					28.44	–	–	1320.35
	9/17/2014					28.46	–	–	1320.33
	9/24/2014					28.47	–	–	1320.32
	10/1/2014					28.45	–	–	1320.34
	10/8/2014					28.44	–	–	1320.35
	10/16/2014					28.39	–	–	1320.40
	10/21/2014					28.45	–	–	1320.34
	10/28/2014					28.42	–	–	1320.37
	11/4/2014					28.46	–	–	1320.33
	11/11/2014					28.52	–	–	1320.27
	11/25/2014					28.65	–	–	1320.14
	12/3/2014					28.69	–	–	1320.10
	12/9/2014					28.65	–	–	1320.14
	12/17/2014					28.61	–	–	1320.18
	12/23/2014					NM	–	–	NM
	12/31/2014					29.36	–	–	1319.43
	1/7/2015					NM	–	–	NM
	1/14/2015					28.45	–	–	1320.34
	1/20/2015					28.42	–	–	1320.37
	1/28/2015					28.44	–	–	1320.35
	2/4/2015					28.49	–	–	1320.30
	2/9/2015					28.54	–	–	1320.25
	3/18/2015					28.42	–	–	1320.37
	4/20/2015					28.53	–	–	1320.26
	5/22/2015					28.27	–	–	1320.52
	6/15/2015					28.30	–	–	1320.49
	7/22/2015					29.56	–	–	-29.56
	8/20/2015					30.49	–	–	-30.49
	9/14/2015					28.40	–	–	-28.40
	10/20/2015					28.39	–	–	-28.39
	11/24/2015					28.40	–	–	-28.40
	12/14/2015					28.36	–	–	-28.36

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-11	9/30/2013	2.0	1351.34	42	22-42	29.03	–	–	1322.31
	10/10/2013					28.08	–	–	1323.26
	10/17/2013					28.26	–	–	1323.08
	10/23/2013					29.36	–	–	1321.98
	10/31/2013					28.92	–	–	1322.42
	11/6/2013					28.14	–	–	1323.20
	11/13/2013					28.16	–	–	1323.18
	11/20/2013					27.70	–	–	1323.64
	11/26/2013					28.03	–	–	1323.31
	12/3/2013					28.03	–	–	1323.31
	12/11/2013					28.54	–	–	1322.80
	12/19/2013					28.53	–	–	1322.81
	12/27/2013					28.80	–	–	1322.54
	1/3/2014					NM	–	–	NM
	1/10/2014					29.60	–	–	1321.74
	1/16/2014					28.89	–	–	1322.45
	1/21/2014					28.99	–	–	1322.35
	1/27/2014					28.91	–	–	1322.43
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					28.52	–	–	1322.82
	2/26/2014					28.71	–	–	1322.63
	3/4/2014					28.61	–	–	1322.73
	3/13/2014					28.77	–	–	1322.57
	3/18/2014					28.51	–	–	1322.83
	3/27/2014					28.68	–	–	1322.66
	4/3/2014					28.77	–	–	1322.57
	4/7/2014					28.75	–	–	1322.59
	4/17/2014					28.79	–	–	1322.55
	4/22/2014					28.92	–	–	1322.42
	4/29/2014					28.90	–	–	1322.44
	5/8/2014					29.84	–	–	1321.50
	5/13/2014					29.91	–	–	1321.43
	5/20/2014					28.52	–	–	1322.82
	5/29/2014					30.09	–	–	1321.25
	6/3/2014					29.34	–	–	1322.00
	6/10/2014					28.71	–	–	1322.63
	6/18/2014					28.44	–	–	1322.90
	6/24/2014					28.09	–	–	1323.25
	7/1/2014					27.76	–	–	1323.58
	7/10/2014					27.85	–	–	1323.49
	7/15/2014					29.83	–	–	1321.51
	7/22/2014					28.13	–	–	1323.21
	7/31/2014					28.49	–	–	1322.85
	8/5/2014					28.49	–	–	1322.85
	8/14/2014					28.46	–	–	1322.88
	8/20/2014					28.54	–	–	1322.80
	8/26/2014					28.53	–	–	1322.81
	9/3/2014					28.60	–	–	1322.74
	9/10/2014					28.65	–	–	1322.69

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (Inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-11 (cont.)	9/17/2014	2.0	1351.34	42	22-42	28.69	–	–	1322.65
	9/24/2014					23.69	–	–	1327.65
	10/1/2014					28.58	–	–	1322.76
	10/8/2014					28.62	–	–	1322.72
	10/16/2014					28.59	–	–	1322.75
	10/21/2014					28.65	–	–	1322.69
	10/28/2014					29.75	–	–	1321.59
	11/4/2014					28.57	–	–	1322.77
	11/11/2014					28.70	–	–	1322.64
	11/25/2014					28.93	–	–	1322.41
	12/3/2014					29.00	–	–	1322.34
	12/9/2014					28.94	–	–	1322.40
	12/17/2014					28.93	–	–	1322.41
	12/23/2014					28.96	–	–	1322.38
	12/31/2014					29.03	–	–	1322.31
	1/7/2015					NM	–	–	NM
	1/14/2015					28.88	–	–	1322.46
	1/20/2015					28.88	–	–	1322.46
	1/28/2015					28.97	–	–	1322.37
	2/4/2015					28.94	–	–	1322.40
	2/9/2015					29.26	–	–	1322.08
	3/19/2015					29.84	–	–	1321.50
	4/20/2015					30.39	–	–	1320.95
	5/22/2015					29.88	–	–	1320.59
	6/15/2015					28.31	–	–	1323.03
	7/22/2015					28.66	–	–	-28.66
	8/20/2015					28.73	–	–	-28.73
	9/14/2015					28.82	–	–	-28.82
	10/20/2015					28.62	–	–	-28.62
	11/24/2015					28.76	–	–	-28.76
	12/14/2015					28.64	–	–	-28.64
MW-12	9/30/2013	2.0	1349.74	43	23-43	30.15	–	–	1319.59
	10/10/2013					30.55	–	–	1319.19
	10/17/2013					30.49	–	–	1319.25
	10/23/2013					30.40	–	–	1319.34
	10/31/2013					30.45	–	–	1319.29
	11/6/2013					29.91	–	–	1319.83
	11/13/2013					29.32	–	–	1320.42
	11/20/2013					28.16	–	–	1321.58
	11/26/2013					27.91	–	–	1321.83
	12/3/2013					27.41	–	–	1322.33
	12/11/2013					27.83	–	–	1321.91
	12/19/2013					27.74	–	–	1322.00
	12/27/2013					NM	–	–	NM
	1/3/2014					NM	–	–	NM
	1/10/2014					28.25	–	–	1321.49
	1/16/2014					28.28	–	–	1321.46
	1/21/2014					28.61	–	–	1321.13
	1/27/2014					28.40	–	–	1321.34
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					28.46	–	–	1321.28
	2/26/2014					28.49	–	–	1321.25
	3/4/2014					NM	–	–	NM
	3/13/2014					28.77	–	–	1320.97
	3/18/2014					28.70	–	–	1321.04
	3/27/2014					29.25	–	–	1320.49

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-12 (cont.)	4/3/2014	2.0	1349.74	43	23-43	29.70	–	–	1320.04
	4/7/2014					29.83	–	–	1319.91
	4/17/2014					30.45	–	–	1319.29
	4/22/2014					30.85	–	–	1318.89
	4/29/2014					31.10	–	–	1318.64
	5/8/2014					31.29	–	–	1318.45
	5/13/2014					31.21	–	–	1318.53
	5/20/2014					31.13	–	–	1318.61
	5/29/2014					31.16	–	–	1318.58
	6/3/2014					31.14	–	–	1318.60
	6/10/2014					31.15	–	–	1318.59
	6/18/2014					31.01	–	–	1318.73
	6/24/2014					30.79	–	–	1318.95
	7/1/2014					30.42	–	–	1319.32
	7/10/2014					30.48	–	–	1319.26
	7/15/2014					30.75	–	–	1318.99
	7/22/2014					30.72	–	–	1319.02
	7/31/2014					31.07	–	–	1318.67
	8/5/2014					31.15	–	–	1318.59
	8/14/2014					31.07	–	–	1318.67
	8/20/2014					31.01	–	–	1318.73
	8/26/2014					31.12	–	–	1318.62
	9/3/2014					31.12	–	–	1318.62
	9/10/2014					31.12	–	–	1318.62
	9/17/2014					31.12	–	–	1318.62
	9/24/2014					31.11	–	–	1318.63
	10/1/2014					31.05	–	–	1318.69
	10/8/2014					31.08	–	–	1318.66
	10/16/2014					31.05	–	–	1318.69
	10/21/2014					31.09	–	–	1318.65
	10/28/2014					31.09	–	–	1318.65
	11/4/2014					31.06	–	–	1318.68
	11/11/2014					31.12	–	–	1318.62
	11/25/2014					31.10	–	–	1318.64
	12/3/2014					31.05	–	–	1318.69
	12/9/2014					31.12	–	–	1318.62
	12/17/2014					31.11	–	–	1318.63
	12/23/2014					31.06	–	–	1318.68
	12/31/2014					31.11	–	–	1318.63
	1/7/2015					NM	–	–	NM
	1/14/2015					NM	–	–	NM
	1/20/2015					31.04	–	–	1318.70
	1/28/2015					31.05	–	–	1318.69
	2/4/2015					31.07	–	–	1318.67
	2/9/2015					31.06	–	–	1318.68
	3/18/2015					30.95	–	–	1318.79
	4/20/2015					31.09	–	–	1318.65
	5/22/2015					30.33	–	–	1319.41
	6/15/2015					30.86	–	–	1318.88
	7/22/2015					30.98	–	–	-30.98
	8/20/2015					31.08	–	–	-31.08
	9/14/2015					31.09	–	–	-31.09
	10/20/2015					31.09	–	–	-31.09
	11/24/2015					31.09	–	–	-31.09
	12/14/2015					30.51	–	–	-30.51

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-13	9/30/2013	2.0	1354.58	45	25-45	31.25	–	–	1323.33
	10/10/2013					31.59	–	–	1322.99
	10/17/2013					31.74	–	–	1322.84
	10/23/2013					31.70	–	–	1322.88
	10/31/2013					31.72	–	–	1322.86
	11/6/2013					31.61	–	–	1322.97
	11/13/2013					31.70	–	–	1322.88
	11/20/2013					30.84	–	–	1323.74
	11/26/2013					31.30	–	–	1323.28
	12/3/2013					31.02	–	–	1323.56
	12/11/2013					31.26	–	–	1323.32
	12/19/2013					31.16	–	–	1323.42
	12/27/2013					31.48	–	–	1323.10
	1/3/2014					NM	–	–	NM
	1/10/2014					31.22	–	–	1323.36
	1/16/2014					32.70	–	–	1321.88
	1/21/2014					31.94	–	–	1322.64
	1/27/2014					31.98	–	–	1322.60
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					31.92	–	–	1322.66
	2/26/2014					32.10	–	–	1322.48
	3/4/2014					32.05	–	–	1322.53
	3/13/2014					32.25	–	–	1322.33
	3/18/2014					32.05	–	–	1322.53
	3/27/2014					32.16	–	–	1322.42
	4/3/2014					32.41	–	–	1322.17
	4/7/2014					32.35	–	–	1322.23
	4/17/2014					32.38	–	–	1322.20
	4/22/2014					32.70	–	–	1321.88
	4/29/2014					32.91	–	–	1321.67
	5/8/2014					33.03	–	–	1321.55
	5/13/2014					32.95	–	–	1321.63
	5/20/2014					33.39	–	–	1321.19
	5/29/2014					33.34	–	–	1321.24
	6/3/2014					33.45	–	–	1321.13
	6/10/2014					33.50	–	–	1321.08
	6/18/2014					33.44	–	–	1321.14
	6/24/2014					33.16	–	–	1321.42
	7/1/2014					32.90	–	–	1321.68
	7/10/2014					32.75	–	–	1321.83
	7/15/2014					32.99	–	–	1321.59
	7/22/2014					32.46	–	–	1322.12
	7/31/2014					32.47	–	–	1322.11
	8/5/2014					32.40	–	–	1322.18
	8/14/2014					32.33	–	–	1322.25
	8/20/2014					32.35	–	–	1322.23
	8/26/2014					31.26	–	–	1323.32
	9/3/2014					32.39	–	–	1322.19
	9/10/2014					32.46	–	–	1322.12

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-13 (cont.)	9/17/2014	2.0	1354.58	45	25-45	32.42	–	–	1322.16
	9/24/2014					32.51	–	–	1322.07
	10/1/2014					32.79	–	–	1321.79
	10/8/2014					32.77	–	–	1321.81
	10/16/2014					33.00	–	–	1321.58
	10/21/2014					32.70	–	–	1321.88
	10/28/2014					32.83	–	–	1321.75
	11/4/2014					32.71	–	–	1321.87
	11/11/2014					32.60	–	–	1321.98
	11/25/2014					32.65	–	–	1321.93
	12/3/2014					32.88	–	–	1321.70
	12/9/2014					32.76	–	–	1321.82
	12/17/2014					32.95	–	–	1321.63
	12/23/2014					32.94	–	–	1321.64
	12/31/2014					32.97	–	–	1321.61
	1/7/2015					NM	–	–	NM
	1/14/2015					33.06	–	–	1321.52
	1/20/2015					32.93	–	–	1321.65
	1/28/2015					32.85	–	–	1321.73
	2/4/2015					33.07	–	–	1321.51
	2/9/2015					32.81	–	–	1321.77
	3/18/2015					33.16	–	–	1321.42
	4/20/2015					33.34	–	–	1321.24
	5/22/2015					32.56	–	–	1322.02
	6/15/2015					31.94	–	–	1322.64
	7/22/2015					31.77	–	–	-31.77
	8/20/2015					31.56	–	–	-31.56
	9/14/2015					31.41	–	–	-31.41
	10/20/2015					31.83	–	–	-31.83
	11/24/2015					32.18	–	–	-32.18
	12/14/2015					31.98	–	–	-31.98
MW-14	9/30/2013	2.0	1354.99	45	25-45	31.59	–	–	1323.40
	10/10/2013					31.53	–	–	1323.46
	10/17/2013					31.71	–	–	1323.28
	10/23/2013					31.74	–	–	1323.25
	10/31/2013					31.76	–	–	1323.23
	11/6/2013					NM	–	–	NM
	11/13/2013					31.48	–	–	1323.51
	11/20/2013					30.51	–	–	1324.48
	11/26/2013					31.47	–	–	1323.52
	12/3/2013					31.42	–	–	1323.57
	12/11/2013					31.73	–	–	1323.26
	12/19/2013					31.74	–	–	1323.25
	12/27/2013					31.95	–	–	1323.04
	1/3/2014					NM	–	–	NM
	1/10/2014					31.47	–	–	1323.52
	1/16/2014					32.23	–	–	1322.76
	1/21/2014					32.35	–	–	1322.64
	1/27/2014					32.40	–	–	1322.59
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					32.58	–	–	1322.41
	2/26/2014					32.71	–	–	1322.28
	3/4/2014					32.75	–	–	1322.24
	3/13/2014					32.83	–	–	1322.16
	3/18/2014					32.70	–	–	1322.29
	3/27/2014					32.79	–	–	1322.20

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-14 (cont.)	4/3/2014	2.0	1354.99	45	25-45	32.95	–	–	1322.04
	4/7/2014					33.11	–	–	1321.88
	4/17/2014					33.56	–	–	1321.43
	4/22/2014					33.82	–	–	1321.17
	4/29/2014					NM	–	–	NM
	5/8/2014					34.85	–	–	1320.14
	5/13/2014					35.20	–	–	1319.79
	5/20/2014					34.95	–	–	1320.04
	5/29/2014					34.50	–	–	1320.49
	6/3/2014					34.55	–	–	1320.44
	6/10/2014					33.69	–	–	1321.30
	6/18/2014					33.20	–	–	1321.79
	6/24/2014					32.07	–	–	1322.92
	7/1/2014					31.96	–	–	1323.03
	7/10/2014					31.84	–	–	1323.15
	7/15/2014					31.85	–	–	1323.14
	7/22/2014					31.88	–	–	1323.11
	7/31/2014					31.94	–	–	1323.05
	8/5/2014					32.01	–	–	1322.98
	8/14/2014					32.04	–	–	1322.95
	8/20/2014					32.01	–	–	1322.98
	8/26/2014					32.15	–	–	1322.84
	9/3/2014					32.19	–	–	1322.80
	9/10/2014					32.30	–	–	1322.69
	9/17/2014					32.38	–	–	1322.61
	9/24/2014					32.52	–	–	1322.47
	10/1/2014					32.49	–	–	1322.50
	10/8/2014					32.51	–	–	1322.48
	10/16/2014					32.40	–	–	1322.59
	10/21/2014					NM	–	–	–
	10/29/2014					32.28	–	–	1322.71
	11/4/2014					32.29	–	–	1322.70
	11/11/2014					32.36	–	–	1322.63
	11/25/2014					32.53	–	–	1322.46
	12/3/2014					32.84	–	–	1322.15
	12/9/2014					33.08	–	–	1321.91
	12/17/2014					33.33	–	–	1321.66
	12/23/2014					33.33	–	–	1321.66
	12/31/2014					33.51	–	–	1321.48
	1/7/2015					NM	–	–	NM
	1/14/2015					33.51	–	–	1321.48
	1/20/2015					33.59	–	–	1321.40
	1/28/2015					33.65	–	–	1321.34
	2/4/2015					33.88	–	–	1321.11
	2/9/2015					34.00	–	–	1320.99
	3/18/2015					33.94	–	–	1321.05
	4/20/2015					34.93	–	–	1320.06
	5/22/2015					33.53	–	–	1321.46
	6/15/2015					31.70	–	–	1323.29
	7/22/2015					31.62	–	–	-31.62
	8/20/2015					31.55	–	–	-31.55
	9/14/2015					31.38	–	–	-31.38
	10/20/2015					31.92	–	–	-31.92
	11/24/2015					32.20	–	–	-32.20
	12/14/2015					31.74	–	–	-31.74

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-15	9/30/2013	2.0	1351.79	45	25-45	32.64	–	–	1319.15
	10/10/2013					32.75	–	–	1319.04
	10/17/2013					32.93	–	–	1318.86
	10/23/2013					32.84	–	–	1318.95
	10/31/2013					32.77	–	–	1319.02
	11/6/2013					32.23	–	–	1319.56
	11/13/2013					31.72	–	–	1320.07
	11/20/2013					30.80	–	–	1320.99
	11/26/2013					30.96	–	–	1320.83
	12/3/2013					30.63	–	–	1321.16
	12/11/2013					30.93	–	–	1320.86
	12/19/2013					31.75	–	–	1320.04
	12/27/2013					31.05	–	–	1320.74
	1/3/2014					NM	–	–	NM
	1/10/2014					31.10	–	–	1320.69
	1/16/2014					31.30	–	–	1320.49
	1/21/2014					31.61	–	–	1320.18
	1/27/2014					31.61	–	–	1320.18
	2/5/2014					NM	–	–	NM
	2/12/2014					NM	–	–	NM
	2/19/2014					31.82	–	–	1319.97
	2/26/2014					32.03	–	–	1319.76
	3/4/2014					32.10	–	–	1319.69
	3/13/2014					37.20	–	–	1314.59
	3/18/2014					37.00	–	–	1314.79
	3/27/2014					32.29	–	–	1319.50
	4/3/2014					32.60	–	–	1319.19
	4/7/2014					32.89	–	–	1318.90
	4/17/2014					33.69	–	–	1318.10
	4/22/2014					34.24	–	–	1317.55
	4/29/2014					34.95	–	–	1316.84
	5/8/2014					35.85	–	–	1315.94
	5/13/2014					35.89	–	–	1315.90
	5/20/2014					38.63	–	–	1313.16
	5/29/2014					36.85	–	–	1314.94
	6/3/2014					NM	–	–	NM
	6/10/2014					NM	–	–	NM
	6/18/2014					35.10	–	–	1316.69
	6/24/2014					34.65	–	–	1317.14
	7/1/2014					33.78	–	–	1318.01
	7/10/2014					33.35	–	–	1318.44
	7/15/2014					33.40	–	–	1318.39
	7/22/2014					33.29	–	–	1318.50
	7/31/2014					33.89	–	–	1317.90
	8/5/2014					34.04	–	–	1317.75
	8/14/2014					34.19	–	–	1317.60
	8/20/2014					34.28	–	–	1317.51
	8/26/2014					34.44	–	–	1317.35
	9/3/2014					34.65	–	–	1317.14
	9/10/2014					34.79	–	–	1317.00

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-15 (cont.)	9/17/2014	2.0	1351.79	45	25-45	34.98	--	--	1316.81
	9/24/2014					35.29	--	--	1316.50
	10/1/2014					35.51	--	--	1316.28
	10/8/2014					35.53	--	--	1316.26
	10/16/2014					35.61	--	--	1316.18
	10/21/2014					35.41	--	--	1316.38
	10/28/2014					35.16	--	--	1316.63
	11/4/2014					35.07	--	--	1316.72
	11/11/2014					35.02	--	--	1316.77
	11/25/2014					30.11	--	--	1321.68
	12/3/2014					35.37	--	--	1316.42
	12/9/2014					35.42	--	--	1316.37
	12/17/2014					NM	--	--	NM
	12/23/2014					35.13	--	--	1316.66
	12/31/2014					30.59	--	--	1321.20
	1/7/2015					NM	--	--	NM
	1/14/2015					NM	--	--	NM
	1/20/2015					34.93	--	--	1316.86
	1/28/2015					34.98	--	--	1316.81
	2/4/2015					35.12	--	--	1316.67
	2/9/2015					35.02	--	--	1316.77
	3/18/2015					35.04	--	--	1316.75
	4/20/2015					36.50	--	--	1315.29
	5/22/2015					34.53	--	--	1317.26
	6/15/2015					32.34	--	--	1319.45
	7/22/2015					32.94	--	--	1317.79
	8/20/2015					33.48	--	--	1317.25
	9/14/2015					33.05	--	--	1317.68
	10/20/2015					33.63	--	--	1317.10
	11/24/2015					33.33	--	--	1317.40
	12/14/2015					31.47	--	--	1319.26
MW-16	9/30/2013	2.0	1352.13	45	25-45	31.60	--	--	1320.53
	10/10/2013					30.76	--	--	1321.37
	10/17/2013					30.79	--	--	1321.34
	10/23/2013					30.78	--	--	1321.35
	10/31/2013					30.80	--	--	1321.33
	11/6/2013					30.33	--	--	1321.80
	11/13/2013					30.01	--	--	1322.12
	11/20/2013					29.63	--	--	1322.50
	11/26/2013					29.71	--	--	1322.42
	12/3/2013					29.52	--	--	1322.61
	12/11/2013					29.71	--	--	1322.42
	12/19/2013					28.51	--	--	1323.62
	12/27/2013					29.97	--	--	1322.16
	1/3/2014					NM	--	--	NM
	1/10/2014					29.91	--	--	1322.22
	1/16/2014					29.70	--	--	1322.43
	1/21/2014					29.89	--	--	1322.24
	1/27/2014					29.60	--	--	1322.53
	2/5/2014					NM	--	--	NM
	2/12/2014					NM	--	--	NM
	2/19/2014					29.41	--	--	1322.72
	2/26/2014					29.68	--	--	1322.45
	3/4/2014					NM	--	--	NM
	3/13/2014					28.71	--	--	1323.42
	3/18/2014					29.50	--	--	1322.63
	3/27/2014					29.62	--	--	1322.51

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-16 (cont.)	4/3/2014	2.0	1352.13	45	25-45	29.86	–	–	1322.27
	4/7/2014					30.05	–	–	1322.08
	4/17/2014					30.84	–	–	1321.29
	4/22/2014					30.95	–	–	1321.18
	4/29/2014					31.30	–	–	1320.83
	5/8/2014					31.81	–	–	1320.32
	5/13/2014					31.84	–	–	1320.29
	5/20/2014					32.91	–	–	1319.22
	5/29/2014					32.81	–	–	1319.32
	6/3/2014					32.44	–	–	1319.69
	6/10/2014					NM	–	–	NM
	6/18/2014					31.31	–	–	1320.82
	6/24/2014					29.93	–	–	1322.20
	7/1/2014					29.65	–	–	1322.48
	7/10/2014					28.95	–	–	1323.18
	7/15/2014					28.82	–	–	1323.31
	7/22/2014					28.78	–	–	1323.35
	7/31/2014					29.19	–	–	1322.94
	8/5/2014					29.20	–	–	1322.93
	8/14/2014					29.09	–	–	1323.04
	8/20/2014					29.21	–	–	1322.92
	8/26/2014					29.23	–	–	1322.90
	9/3/2014					29.38	–	–	1322.75
	9/10/2014					29.58	–	–	1322.55
	9/17/2014					29.71	–	–	1322.42
	9/24/2014					29.95	–	–	1322.18
	10/1/2014					30.04	–	–	1322.09
	10/8/2014					30.08	–	–	1322.05
	10/16/2014					30.04	–	–	1322.09
	10/21/2014					29.69	–	–	1322.44
	10/28/2014					29.69	–	–	1322.44
	11/4/2014					30.06	–	–	1322.07
	11/11/2014					30.21	–	–	1321.92
	11/25/2014					NM	–	–	–
	12/3/2014					30.16	–	–	1321.95
	12/9/2014					30.30	–	–	1321.83
	12/17/2014					30.47	–	–	1321.66
	12/23/2014					30.38	–	–	1321.75
	12/31/2014					30.56	–	–	1321.57
	1/7/2015					NM	–	–	NM
	1/14/2015					NM	–	–	NM
	1/20/2015					30.71	–	–	1321.42
	1/28/2015					20.13	–	–	1332.00
	2/4/2015					30.76	–	–	1321.37
	2/9/2015					31.09	–	–	1321.04
	3/18/2015					31.80	–	–	1320.33
	4/20/2015					33.03	–	–	1319.10
	5/22/2015					31.56	–	–	1320.57
	6/15/2015					29.48	–	–	1322.65
	7/22/2015					29.13	–	–	-29.13
	8/20/2015					28.65	–	–	-28.65
	9/14/2015					28.49	–	–	-28.49
	10/20/2015					28.90	–	–	-28.90
	11/24/2015					29.15	–	–	-29.15
	12/14/2015					27.88	–	–	-27.88

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
MW-17	3/18/2015		1351.69			NM	–	–	NM
	4/20/2015					33.91	–	–	1317.78
	5/22/2015					32.55	–	–	1319.14
	6/10/2015					31.15	–	–	1320.54
	6/15/2015					31.28	–	–	1320.41
	7/22/2015					NM	–	–	NM
	8/20/2015					31.19	–	–	1320.50
	9/14/2015					30.99	–	–	1320.70
	10/20/2015					32.57	–	–	1319.12
	11/24/2015					32.65	–	–	1319.04
	12/14/2015					32.00	–	–	1319.69
MW-18	3/18/2015	2.0	1351.11	42	27-42	27.93	–	–	1323.18
	4/20/2015					33.51	–	–	1317.60
	5/22/2015					31.54	–	–	1319.57
	6/10/2015					30.50	–	–	1320.61
	6/15/2015					30.64	–	–	1320.47
	7/22/2015					30.84	–	–	1320.27
	8/20/2015					30.81	–	–	1320.30
	9/14/2015					30.53	–	–	1320.58
MW-18	11/24/2015		1351.04			30.99	–	–	1320.05
	12/14/2015					30.96	–	–	1320.08
MW-19	3/18/2015	2.0	1351.13	42	27-42	35.19	–	–	1315.94
	4/20/2015					33.70	–	–	1317.43
	5/22/2015					31.67	–	–	1319.46
	6/10/2015					30.24	–	–	1320.89
	6/15/2015					30.60	–	–	1320.53
	7/22/2015					30.58	–	–	1320.55
	8/20/2015					30.65	–	–	1320.48
	9/14/2015					30.59	–	–	1320.54
MW-19	11/24/2015		1351.00			31.00	–	–	1320.00
	12/14/2015					31.06	–	–	1319.94
									Pond Stage (feet MSL)
Stormwater Pond	8/8/2013	NA	NA	NA	NA	NA	–	–	1344.75
	8/13/2013						–	–	1344.75
	8/21/2013						–	–	1344.50
	8/28/2013						–	–	1344.25
	9/5/2013						–	–	1344.25
	9/11/2013						–	–	1344.00
	9/17/2013						–	–	1344.00
	9/23/2013						–	–	1344.50
	10/3/2013						–	–	1344.50
	10/10/2013						–	–	1344.50
	10/17/2013						–	–	1344.00
	10/23/2013						–	–	1344.50
	10/31/2013						–	–	1345.00
	11/6/2013						–	–	1344.75
	11/13/2013						–	–	1344.50
	11/20/2013						–	–	1344.50
	11/26/2013						–	–	1344.25
	12/3/2013						–	–	1344.25
	12/11/2013						–	–	1344.75
	12/19/2013						–	–	1344.25
	12/27/2013						–	–	1344.25
	1/3/2014						–	–	NM
	1/10/2014						–	–	1344.00
	1/16/2014						–	–	1344.00
	1/21/2014						–	–	1344.00
	1/27/2014						–	–	NM

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
									Pond Stage (feet MSL)
Stormwater Pond (cont.)	2/5/2014						–	–	NM
	2/12/2014						–	–	NM
	2/19/2014						–	–	NM
	2/26/2014						–	–	1344.00
	3/4/2014						–	–	NM
	3/13/2014						–	–	1344.00
	3/18/2014						–	–	1344.00
	3/27/2014						–	–	1343.75
	4/3/2014						–	–	1344.00
	4/7/2014						–	–	1343.75
	4/17/2014						–	–	1343.50
	4/22/2014						–	–	1343.50
	4/29/2014						–	–	1345.00
	5/8/2014						–	–	Below gauge
	5/13/2014						–	–	Below gauge
	5/20/2014						–	–	Below gauge
	5/29/2014						–	–	1343.75
	6/3/2014						–	–	1344.50
	6/10/2014						–	–	1344.75
	6/18/2014						–	–	1344.50
	6/24/2014						–	–	1344.50
	7/1/2014						–	–	1344.60
	7/10/2014						–	–	1344.75
	7/15/2014						–	–	1344.50
	7/22/2014						–	–	1344.50
	7/31/2014						–	–	1344.50
	8/5/2014						–	–	1344.25
	8/14/2014						–	–	1344.50
	8/20/2014						–	–	1344.50
	8/26/2014						–	–	1344.25
	9/3/2014						–	–	1344.50
	9/10/2014	NA	NA	NA	NA	NA	–	–	1344.25
	9/17/2014						–	–	1344.00
	9/24/2014						–	–	1344.00
	10/1/2014						–	–	1344.00
	10/8/2014						–	–	1344.25
	10/16/2014						–	–	1344.50
	10/21/2014						–	–	1344.50
	10/28/2014						–	–	1344.50
	11/4/2014						–	–	1344.50
	11/11/2014						–	–	1344.25
	11/25/2014						–	–	1344.00
	12/3/2014						–	–	1344.00
	12/9/2014						–	–	1344.25
	12/17/2014						–	–	1344.25
	12/23/2014						–	–	1344.25
	12/23/2014						–	–	1344.25
	12/31/2014						–	–	1344.25
	1/7/2015						–	–	NM
	1/14/2015						–	–	NM
	1/20/2015						–	–	1344.00
	1/28/2015						–	–	1343.80
	2/4/2015						–	–	1344.15
	2/9/2015						–	–	1344.10
	3/18/2015						–	–	1343.60

Please refer to notes at end of table.

Table B-1
Groundwater Gauging Data
Andover Colt Court Release Site
Andover, Kansas

Well ID	Measurement Date	Casing Diameter (inches)	Top of Casing Elevation (feet)[1]	Total Depth (feet bgs)	Screen Interval (feet bgs)	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)
Stormwater Pond (cont.)	4/20/2015	NA	NA	NA	NA	NA	--	--	1344.75
	5/22/2015						--	--	1344.50
	6/10/2015						--	--	1344.50
	6/15/2015						--	--	1344.75
	7/22/2015						--	--	1344.50
	8/20/2015						--	--	1344.75
	9/14/2015						--	--	1344.50
	10/22/2015						--	--	1344.75
	11/24/2015						--	--	1344.50
	12/14/2015						--	--	1344.75

Notes:

1. feet MSL = Feet above mean sea level (NAVD88).
2. bgs = below ground surface.
3. -- = No SPH
4. DRY = Well was dry.
5. Pond elevation is measured directly from a staff gauge in the pond (in 0.25-foot increments). The top of the staff gauge is 1347.59 feet above mean sea level.
6. NA = Not applicable.
7. NM = Not measured.
8. Monitoring wells MW-18 and MW-19 were resurveyed on November 24, 2015.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
Monitoring Wells																		
MW-1	8/9/2013	**120**	**0.86**	<0.05	**0.22**	<0.1	**9.1**	0.37	**1.9**	<0.05	6.3	0.1	**0.23**	<0.05	0.068	2.8	**26**	9.1
	10/24/2013	**39**	**0.69**	<0.010	**0.19**	0.050	**7.8**	0.26	**2.0**	0.031	4.9	0.043	**0.14**	0.011	0.084	2.2	**18**	7.1
	1/30/2014	**44**	**1.0**	<0.025	**0.30**	<0.05	**3.1**	0.45	**1.4**	0.045	3.5	0.076	**0.29**	0.030	0.14	1.6	**9.3**	5.2
	4/9/2014	**20**	**0.49**	<0.010	**0.18**	<0.020	**1.1**	<0.01	0.2	0.011	--	0.023	**0.069**	0.018	0.016	--	**3.1**	2.5
	7/23/2014	**49**	**0.39**	<0.001	**0.11**	0.023	**3.1**	0.059	0.61	0.011	2.2	<0.010	**0.044**	<0.010	0.019	1.2	**6.4**	3.4
	10/29/2014	**45**	**0.47**	<0.010	**0.19**	<0.020	**5.0**	0.051	0.50	<0.010	3.4	0.015	**0.043**	<0.010	<0.010	2.2	**12**	5.5
	2/12/2015	**5.8**	<0.010	<0.010	<0.010	<0.020	**0.26**	<0.010	0.077	<0.010	0.64	0.016	**0.022**	<0.010	<0.010	0.36	0.99	0.99
	6/16/2015	**140**	**0.32**	<0.010	**0.30**	<0.020	**5.2**	0.12	0.47	0.011	5.3	<0.010	**0.11**	<0.010	0.012	2.8	**11**	8.1
	9/15/2015	**67**	**0.61**	<0.001	**0.26**	0.032	**1.3**	0.14	0.42	0.0095	--	0.019	**0.065**	0.017	0.020	--	**2.4**	4.4
	12/16/2015	**38.3**	**0.51**	<0.01	**0.16**	<0.10	**5.7**	0.113	1.26	0.0219	--	0.0138	**0.0944**	<0.01	0.046	--	**7.81**	4.91
MW-2	8/8/2013	**2.3**	<0.005	<0.005	<0.005	0.13	**0.12**	0.099	<0.005	<0.005	0.017	0.02	<0.005	<0.005	<0.005	<0.005	0.027	0.021
DUP	8/8/2013	**2.2**	<0.005	<0.005	<0.005	0.13	**0.15**	0.11	<0.005	<0.005	0.021	0.021	<0.005	<0.005	<0.005	<0.005	0.031	0.026
	10/23/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/22/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	0.11	**0.0085**	<0.001	0.0030	<0.002	0.0034	0.0038	0.018	<0.001	0.010	0.0013	**0.0024**	<0.001	0.0014	0.0097	0.0095	0.020
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	0.089	<0.001	<0.001	<0.001	<0.002	0.0013	<0.001	<0.001	<0.001	0.0052	<0.001	<0.001	<0.001	<0.001	0.0026	0.0089	0.0078
	9/16/2015	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-3	8/9/2013	**6**	**0.054**	<0.005	0.010	0.016	**1.2**	0.070	0.12	<0.005	0.086	0.014	**0.011**	<0.005	0.0074	0.12	0.4	0.21
	10/24/2013	**1.7**	**0.075**	<0.001	0.012	0.0057	**1.1**	0.082	0.12	0.0061	0.065	0.011	**0.017**	0.010	0.010	0.011	0.051	0.077
DUP	10/24/2013	**2.0**	**0.073**	<0.001	0.012	0.0059	**1.1**	0.077	0.11	0.0058	0.063	0.011	**0.018**	0.001	0.010	0.011	0.051	0.075
	1/28/2014	**2.8**	**0.038**	<0.001	<0.001	0.0069	**0.76**	0.072	0.07	0.0062	0.0098	0.0061	**0.0081**	<0.001	0.0079	<0.001	0.0081	0.011
	4/8/2014	**3.0**	**0.048**	<0.005	0.010	<0.01	**0.64**	<0.005	0.058	0.0061	--	0.0075	**0.014**	<0.005	0.011	--	0.1	0.053
	7/24/2014	**9.8**	**0.16**	<0.010	0.037	<0.020	**1.8**	0.081	0.51	<0.010	0.32	<0.010	**0.028**	<0.010	0.023	0.51	**1.6**	0.83
	10/30/2014	**6.1**	**0.12**	<0.010	0.025	<0.020	**1.1**	0.085	0.36	<0.010	0.17	0.019	**0.029**	<0.010	0.018	0.18	0.15	0.35
	2/10/2015	**7.9**	**0.19**	<0.010	**0.047**	<0.020	**1.4**	0.15	0.52	0.014	0.41	0.034	**0.054**	<0.010	0.032	0.32	0.93	0.73
	6/17/2015	**21**	**0.46**	<0.005	**0.11**	<0.01	**1.6**	0.016	**0.95**	0.030	0.92	0.029	**0.10**	0.031	0.078	0.57	**1.5**	1.5
	9/15/2015	**11**	**0.28**	<0.005	**0.054**	<0.01	**1.2**	0.19	0.65	0.023	--	0.020	**0.039**	<0.005	0.057	--	0.045	0.27
DUP	9/15/2015	**11**	**0.089**	<0.005	**0.079**	<0.01	**0.98**	0.23	**0.77**	0.032	--	0.031	**0.086**	0.012	0.070	--	0.048	0.37
	12/16/2015	**5**	**0.241**	<0.005	**0.0317**	<0.05	**0.849**	0.151	**0.643**	0.026	--	0.0215	**0.054**	<0.005	0.061	--	<0.025	<0.015

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-4	8/8/2013	0.48	0.0013	<0.001	0.0013	<0.002	**0.035**	0.012	0.0075	0.0013	0.027	0.0027	**0.0027**	<0.001	0.0022	0.011	0.056	0.038
	10/23/2013	**1.0**	**0.0096**	<0.001	0.016	0.0046	**0.083**	0.050	0.017	<0.0010	0.0071	0.0085	**0.0036**	<0.001	0.0013	0.034	0.034	0.041
	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	**2.5**	**0.054**	<0.001	0.027	0.0043	**0.23**	0.070	0.15	0.0039	--	0.0071	**0.016**	0.0022	0.0084	--	0.2	0.14
	7/24/2014	**0.75**	**0.047**	<0.001	0.017	<0.002	**0.11**	0.022	0.049	0.0029	0.043	0.0027	**0.0092**	<0.001	0.0070	0.028	0.015	0.070
DUP	7/24/2014	**0.79**	**0.054**	<0.001	0.019	<0.002	**0.11**	0.025	0.057	0.0033	0.050	0.0031	**0.0098**	0.0017	0.0080	0.032	0.017	0.083
	10/30/2014	**4.8**	**0.20**	<0.001	**0.089**	<0.002	**0.49**	0.097	0.40	0.014	0.20	0.017	**0.062**	0.0078	0.039	0.24	0.33	0.44
	2/10/2015	**1.6**	**0.12**	<0.001	**0.058**	<0.002	**0.17**	0.052	0.12	0.0042	0.022	0.0092	**0.019**	0.0058	0.0077	0.081	0.042	0.10
	6/16/2015	0.14	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	0.0013	<0.001	0.0046	<0.001	<0.001	<0.001	<0.001	0.003	0.0059	0.0077
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-5	8/8/2013	**0.94**	**0.015**	<0.001	**0.15**	<0.002	**0.038**	0.24	0.002	0.0018	0.11	0.0046	**0.0084**	<0.001	0.0023	0.0068	0.05	0.17
	10/24/2013	**2.1**	**0.098**	<0.001	0.028	<0.002	**0.081**	0.039	0.063	0.0051	0.20	0.0075	**0.023**	0.0026	0.011	0.12	0.10	0.32
	1/30/2014	**0.61**	**0.038**	0.0012	0.011	<0.002	**0.05**	0.018	0.034	0.0022	0.041	0.0017	**0.0086**	<0.001	0.0046	0.033	0.009	0.075
	4/8/2014	0.35 j	0.0051 j	<0.001	0.0013 j	0.0021 j	**0.025 j**	<0.001	0.0018 j	0.0021 j	--	0.0015 j	**0.0085 j**	<0.001	<0.001	--	0.0024 j	0.041 j
DUP	4/8/2014	**0.52 j**	**0.012 j**	<0.001	0.0035 j	0.0033 j	**0.037 j**	<0.001	0.0058 j	0.003 j	--	0.0019 j	**0.013 j**	0.001	0.0014 j	--	0.0061 j	0.06 j
	7/23/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	**0.0014**	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	7/23/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	**0.0013**	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	<0.050	<0.001	<0.001	<0.001	<0.002	0.0018	<0.001	<0.001	<0.001	0.0048	<0.001	<0.001	<0.001	<0.001	0.0027	0.010	0.0075
	2/10/2015	0.27	**0.0092**	<0.001	0.0024	<0.002	**0.040**	0.016	0.0071	0.0020	0.0068	0.0030	**0.0069**	0.0016	0.0021	0.011	0.0092	0.018
	6/16/2015	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/16/2015	<0.050	<0.001	<0.001	<0.001	<0.002	0.0024	<0.001	<0.001	<0.001	--	<0.001	**0.0021**	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-6	8/9/2013	<0.05	<0.001	<0.001	<0.001	0.0029	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.0026**	<0.001	<0.001	<0.001	<0.001	<0.003
	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0031	<0.001	0.0032	<0.001	0.0027	<0.001	<0.001	<0.001	<0.001	0.0031	0.0083	0.0059
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0028	<0.001	<0.001	<0.001	<0.001	0.0014	0.0052	0.0042
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	0.24	0.0017	<0.001	<0.001	<0.002	0.0022	<0.001	0.0022	<0.001	--	<0.001	**0.0020**	<0.001	<0.001	--	0.0076	0.010
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-7	8/9/2013	<0.05	<0.001	<0.001	<0.001	<0.002	0.0012	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.003
	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.003
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0024	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	0.089	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	0.11	0.0027	<0.001	<0.001	<0.002	0.0029	<0.001	0.0031	<0.001	--	<0.001	**0.0024**	<0.001	<0.001	--	0.0088	0.014
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-8	8/8/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/30/2014	0.16	0.0026	<0.001	0.001	<0.002	0.0030	<0.001	0.0049	<0.001	0.013	<0.001	**0.0041**	<0.001	<0.001	0.0056	0.020	0.018
DUP	1/30/2014	0.15	0.0031	<0.001	0.001	<0.002	0.0038	<0.001	0.0056	0.0011	0.014	<0.001	**0.0040**	<0.001	<0.001	0.0064	0.025	0.021
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/22/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0014	<0.001	<0.001	<0.001	0.0041	<0.001	<0.001	<0.001	<0.001	0.0024	0.0082	0.0065
DUP	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0013	<0.001	<0.001	<0.001	0.0041	<0.001	<0.001	<0.001	<0.001	0.0021	0.0081	0.0063
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0017	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-9	8/9/2013	**36**	**0.82**	<0.001	**0.23**	0.23	**0.99**	0.21	0.65	0.025	2.8	0.048	**0.17**	0.014	0.068	1.3	**4.4**	4.1
	10/23/2013	0.054	<0.001	<0.001	<0.001	<0.002	0.0026	0.0011	<0.001	<0.001	<0.002	0.0025	**0.001**	<0.001	<0.001	<0.001	<0.001	<0.003
	11/25/2013	**0.57**	**0.022**	<0.010	0.013	0.004	**0.058**	0.017	0.0019	<0.001	0.019	0.0028	**0.0084**	<0.001	<0.001	0.018	0.005	0.037
	1/28/2014	0.058	<0.001	<0.001	<0.001	<0.002	0.0046	0.0015	<0.001	<0.001	<0.002	<0.001	**0.0033**	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
DUP	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0017	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0034	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0026	<0.003
DUP	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0053	<0.003
	9/15/2015	<0.05	0.0016	<0.001	<0.001	<0.002	0.0019	<0.001	0.0031	<0.001	--	<0.001	**0.0021**	<0.001	<0.001	--	0.0022	0.0043
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-10	8/9/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/23/2013	**2.6**	**0.033**	<0.001	0.029	0.014	**0.051**	0.069	0.0034	<0.001	0.27	0.021	**0.0013**	0.0014	<0.001	0.15	0.14	0.42
	11/25/2013	**3.7**	**0.22**	<0.001	**0.072**	0.019	**0.016**	0.081	0.027	0.0065	0.26	0.016	**0.023**	<0.001	0.025	0.12	0.048	0.38
	1/28/2014	**1.1**	**0.12**	<0.001	0.039	0.0023	**0.026**	0.0081	0.036	0.0049	0.073	0.0036	**0.014**	0.0064	0.015	0.05	0.048	0.12
	4/8/2014	**8.8**	**0.56**	<0.005	**0.23**	<0.01	**0.12**	<0.005	0.11	0.011	--	0.026	**0.035**	<0.005	<0.005	--	0.3	1.1
	8/1/2014	0.091	<0.001	<0.001	<0.001	0.0066	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	0.066	<0.001	<0.001	<0.001	<0.002	0.0021	<0.001	<0.001	<0.001	0.0058	<0.001	<0.001	<0.001	<0.001	0.0034	0.013	0.0092
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	0.35	<0.001	<0.001	<0.001	0.0029	0.0024	0.0032	<0.001	<0.001	0.0040	0.0045	<0.001	<0.001	<0.001	0.0021	0.0068	0.0062
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	0.0014	<0.001	--	<0.001	**0.0019**	<0.001	<0.001	--	0.0016	<0.003
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	0.212	<0.001	<0.001	<0.001	<0.01	**0.00819**	0.0336	<0.001	<0.001	--	0.00514	<0.005	<0.001	<0.001	--	<0.005	0.00577
MW-11	10/23/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	0.25	**0.016**	<0.001	0.0058	<0.02	**0.012**	0.0078	0.038	0.0011	0.021	0.0014	**0.0059**	<0.001	0.0024	0.023	0.023	0.044
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	0.0010	<0.001	<0.002	<0.001	**0.0034**	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0032	<0.003
DUP	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0035	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-12	10/23/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0026	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/9/2014	0.081	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/22/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	0.12	0.0011	<0.001	<0.001	<0.002	**0.0050**	<0.001	0.0017	<0.001	0.010	<0.001	<0.001	<0.001	<0.001	0.0063	0.027	0.016
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0054	<0.001	<0.001	<0.001	<0.001	0.0029	0.0064	0.0083
	6/16/2015	0.061	<0.001	<0.001	<0.001	<0.002	0.0014	<0.001	0.0013	<0.001	0.0058	<0.001	<0.001	<0.001	<0.001	0.0028	0.011	0.0086
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	**0.0018**	<0.001	<0.001	--	0.0013	<0.003
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-13	10/23/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0032	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/30/2014	0.072	0.0014	<0.001	<0.001	<0.002	0.0011	<0.001	0.0024	<0.001	0.0063	<0.001	**0.0038**	<0.001	<0.001	0.0026	0.0083	0.0089
	4/8/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/22/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	0.056	<0.001	<0.001	<0.001	<0.002	0.0028	<0.001	0.0011	<0.001	0.0065	<0.001	<0.001	<0.001	<0.001	0.0040	0.015	0.011
	2/10/2015	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0019	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
DUP	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-14	10/23/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/30/2014	<0.05	0.0011	<0.001	<0.001	<0.002	<0.001	<0.001	0.0016	<0.001	0.0043	<0.001	<0.001	<0.001	<0.001	0.0017	0.0059	0.0061
	4/9/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/22/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	**0.54**	0.0029	<0.001	0.0013	<0.002	**0.021**	<0.001	0.0049	<0.001	0.036	<0.001	<0.001	<0.001	<0.001	0.022	0.10	0.058
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-15	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0026	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0026	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	0.0012	<0.001	<0.001	<0.001	0.0030	<0.001	<0.001	<0.001	<0.001	0.0018	0.0072	0.0048
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0043	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	**0.0018**	<0.001	<0.001	--	0.0018	<0.003
	10/22/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
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Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
MW-16	10/23/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	0.0027	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	1/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/8/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0026	<0.001	<0.001	<0.001	<0.001	0.0014	0.0050	0.0040
	2/10/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0029	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-17	6/16/2015	**95**	**0.19**	<0.001	**0.31**	0.044	**2.0**	0.37	**1.5**	0.044	3.4	0.038	**0.14**	0.015	0.10	1.8	**6.8**	5.2
	9/15/2015	**13**	**0.45**	<0.001	**0.11**	0.0061	**0.71**	0.23	0.59	0.026	--	0.031	**0.068**	<0.001	0.061	--	0.46	1.0
	12/16/2015	**2.24**	**0.052**	<0.001	0.00125	<0.01	**0.27**	0.08	0.153	0.00807	--	0.0142	**0.0125**	<0.001	0.014	--	0.0619	0.1
MW-18	6/16/2015	**6.3**	**0.021**	<0.001	0.021	<0.002	**0.26**	0.036	0.12	0.0041	0.24	0.0035	**0.015**	0.0016	0.0089	0.17	0.59	0.41
	9/15/2015	**3.0**	**0.069**	<0.001	0.019	<0.002	**0.26**	0.036	0.12	0.0040	--	0.0036	**0.019**	<0.001	0.0089	--	0.090	0.29
DUP	9/15/2015	**3.2**	**0.023**	<0.001	0.017	<0.002	**0.25**	0.037	0.11	0.0043	--	0.0041	**0.022**	0.0018	0.0090	--	0.097	0.28
	12/15/2015	<0.10	<0.001 j	<0.001	<0.001	<0.01	**0.00929 j**	0.00178 j	0.00446 j	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
DUP	12/15/2015	<0.10	0.00154 j	<0.001	<0.001	<0.01	**0.0177 j**	0.00382 j	0.00771 j	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
MW-19	6/16/2015	**0.99 j**	**0.024 j**	<0.001	0.0074	<0.002	**0.11**	0.013	0.045	0.0015	0.16	<0.001	**0.0029 j**	<0.001	0.0031	0.068	0.30	0.23
DUP	6/16/2015	**2.5 j**	0.0071 j	<0.001	0.0062	<0.002	**0.11**	0.012	0.046	0.0016	0.13	<0.001	**0.0051 j**	<0.001	0.0027	0.067	0.30	0.19
	9/15/2015	**1.4**	**0.020**	<0.001	0.0051	0.0044	**0.11**	0.016	0.037	0.0015	--	0.0016	**0.0034**	<0.001	0.0030	--	0.15	0.16
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	**0.00545**	0.00105	0.00169	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
Irrigation Wells																		
2001 N Colt Ct	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2004 N Colt Ct	6/16/2015	0.056	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
Irrigation Wells																		
2005 N Colt Ct	7/26/2013	**6.6**	**0.16**	<0.005	**0.045**	0.019	**0.47**	0.09	0.13	<0.005	0.27	0.014	**0.027**	<0.005	0.013	0.17	0.34	0.44
	10/24/2013	**4.2**	**0.14**	<0.001	0.022	<0.002	**0.31**	0.073	0.19	0.0055	0.27	0.012	**0.023**	0.0039	0.017	0.15	0.35	0.42
	1/31/2014	**3.7**	**0.13**	0.0041	0.029	<0.002	**0.15**	0.07	0.17	0.0057	0.26	0.01	**0.017**	0.0034	0.018	0.14	0.33	0.40
	4/10/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/23/2014	0.39	**0.018**	<0.001	0.0039	<0.002	**0.027**	0.011	0.023	<0.001	0.025	0.0019	**0.0025**	<0.001	0.0022	0.019	0.043	0.044
	10/30/2014	**2.2**	**0.077**	<0.001	0.0094	<0.002	**0.23**	0.055	0.19	0.0043	0.078	0.0091	**0.017**	0.0013	0.014	0.043	0.21	0.12
	2/12/2015	**1.4**	**0.039**	<0.001	0.0091	<0.002	**0.059**	0.022	0.041	0.0013	0.053	0.0039	**0.0045**	<0.001	0.0044	0.034	0.11	0.088
	6/16/2015	**2.3**	**0.012**	<0.001	0.013	<0.002	**0.066**	0.027	0.066	0.0027	0.081	0.0039	**0.0095**	<0.001	0.0069	0.087	0.18	0.17
	9/14/2015	**4.9**	**0.082**	<0.001	0.020	<0.002	**0.18**	0.053	0.15	0.0038	--	0.010	**0.013**	<0.001	0.012	--	0.68	0.34
DUP	9/14/2015	**5.2**	**0.090**	<0.001	0.022	<0.002	**0.20**	0.051	0.17	0.0044	--	0.0090	**0.013**	<0.001	0.013	--	0.70	0.38
	12/15/2015	**2.75**	**0.0672**	<0.001	0.0169	<0.01	**0.109**	0.0284	0.127	0.00317	--	0.00434	**0.0136**	<0.001	0.00952	--	0.418	0.28
2002 N Colt Ct	7/26/2013	<0.05	<0.001	<0.001	<0.001	<0.002	0.0047	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.0010	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.0010	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/31/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.0010		<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
HOA-1	8/20/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/25/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	0.076	0.0018	<0.001	<0.001	<0.002	**0.011**	0.0019	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0067	<0.001	0.0067
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
DUP	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
HOA-2	10/31/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
2006 N Colt Ct	6/12/2012	--	--	<0.005	--	<0.0020	**17**	3.0	**14**	**0.64**	46	1.1	**5.2**	--	--	19	**91**	**65**
	4/10/2014	**23**	**0.75**	<0.005	**0.28**	0.026	**0.98**	0.16	0.36	0.016	--	0.038	**0.076**	<0.005	0.048	--	**2**	2.1
	6/16/2015	**140**	**1.8**	<0.025	**0.55**	<0.05	**2.1**	0.42	**2.2**	0.073	6.0	0.063	**0.19**	0.046	0.24	3.0	**9.9**	9.0
	9/15/2015	**29**	**0.82**	<0.005	**0.21**	<0.01	**1.1**	0.28	**1.2**	0.039	--	0.055	**0.12**	<0.005	0.100	--	**1.7**	2.8
	12/16/2015	**39.6**	**1.12**	<0.025	**0.278**	<0.25	**1.74**	0.151	**1.48**	0.0419	--	0.039	**0.201**	<0.025	0.111	--	**3.39**	4.71
2007 N Colt Ct	7/26/2013	**0.71**	**0.018**	<0.001	0.0061	<0.002	**0.14**	0.018	0.01	0.0014	0.025	0.002	**0.0052**	<0.001	0.002	0.024	0.045	0.048
	10/25/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/29/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/10/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	0.40	**0.025**	<0.001	<0.001	<0.002	**0.052**	0.019	0.027	<0.001	0.023	0.0018	**0.0039**	<0.001	0.0025	0.0025	0.022	0.025
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2019 N Ruger Cir	8/9/2013	0.42	<0.001	<0.001	<0.001	<0.002	**0.085**	0.026	0.0034	0.0013	0.0046	0.0035	**0.0021**	<0.001	0.0016	0.0034	0.017	0.0081
	10/25/2013	0.28	**0.015**	<0.001	<0.001	<0.002	**0.13**	0.0084	0.0062	<0.0010	<0.0020	0.0030	0.0010	<0.001	<0.001	<0.001	0.0011	<0.003
	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.050	<0.001	<0.001	<0.001	0.0032	0.0048	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	0.17	0.0018	<0.001	<0.001	<0.002	**0.069**	0.0051	<0.001	<0.001	--	<0.001	**0.0016**	<0.001	<0.001	0.0048	0.002	0.0055
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	0.12	<0.001	<0.001	<0.001	<0.002	**0.053**	0.0054	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	**0.0050**	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
2020 N Ruger Cir	7/26/2013	<0.05	<0.001	<0.001	<0.001	<0.002	0.0015	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/25/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/20/2014	0.075	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	0.38	<0.001	<0.001	<0.001	0.16	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	0.059	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/14/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2028 N Ruger Cir	8/20/2013	0.47	<0.001	<0.001	<0.001	<0.002	**0.011**	0.042	<0.001	<0.001	<0.002	0.0051	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/25/2013	<0.05	<0.001	<0.001	<0.001	0.015	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/30/2014	<0.05	<0.001	<0.001	<0.001	0.015	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
DUP	4/10/2014	0.066	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	7/23/2014	<0.05	<0.001	<0.001	<0.001	0.0037	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
DUP	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2032 N Ruger Cir	8/20/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/25/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.03
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.03
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
2021 N Ruger Ct	8/28/2013	<0.050	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030
	10/25/2013	<0.050	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030
	1/29/2014	<0.05	<0.001	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2025 N Ruger Ct	8/28/2013	<0.050	0.0028	<0.0010	0.0012	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030
	10/25/2013	<0.050	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030
	1/31/2014	<0.050	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0030
	4/10/2014	<0.050	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.0020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0030
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
1009 W Mountain	8/20/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/31/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

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Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
2007 N Mountain Ct	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/31/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.0010	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.0010	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.0010	<0.001	<0.001	0.014	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.0010	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.0012	0.0013	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
2009 N Mountain Ct	8/20/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/29/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/28/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/11/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/16/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/16/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003
1211 W Quail Crossing Ct	8/20/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/25/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	1/31/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
DUP	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/23/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	6/17/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
DUP	9/15/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	12/15/2015	<0.10	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.005	<0.001	<0.001	--	<0.005	<0.003

Please refer to notes at end of table.

Table B-2
Hisotroical Groundwater Analytical Results – Monitoring and Irrigation Wells
Andover Colt Court Release Site
Andover, Kansas

Sample Location	Sample Date	GRO	1,2,4 Trimethylbenzene	1,2 Dichloroethane	1,3,5- Trimethylbenzene	2-Butanone	Benzene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methylcyclohexane	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	Toluene	Total Xylenes
		Concentrations in mg/L (ppm)																
1910 N Quail Crossing	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/24/2013	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	4/10/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.003
	7/24/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	10/30/2014	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
	2/12/2015	<0.05	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003
KDHE Tier 2 Values		**0.5**	**0.00844**	**0.005**	**0.044**	**4.92**	**0.005**	**7.02**	**0.7**	**0.45**	**NE**	**NE**	**0.00111**	**0.169**	**0.66**	**NE**	**1**	**10**

Notes:

1. GRO = Gasoline-range organics quantified by IOWA OA-1.
2. Volatile organic compounds by U.S. Environmental Protection Agency (EPA) Method 8260B.
3. mg/L (ppm) = Milligrams per liter (parts per million).
4. **Bold** indicates detected concentration above the KDHE screening value.
5. < = Not detected above the method reporting limit (MRL).
6. -- = Not analyzed.
7. Duplicate = Field Duplicate Sample
8. NE = A KDHE Tier 2 Risk Based Screening Value has not been established.
9. KDHE Tier 2 Screening Values from the *Risk-Based Standards for Kansas, 5th Edition*, October 2010.
10. NS = No sample collected.
11. j = Estimated concentration. The relative percent difference between the primary and duplicate sample concentrations is greater than 30 percent (see Appendix C for details).
12. J = Estimated concentration above the adjusted method detection limit and below the adjusted reportling limit (see Appendix C for details).

10. -- = Not analyzed.

Table B-3
Separate- and Dissolved-Phase Recovery Data – 2006 N Colt Court
June 2012 through June 2013
Andover Colt Court Release Site
Andover, Kansas

Well	Date	Approximate SPH Recovered (gallons)	Total Fluids Recovered (SPH and Water)	Fluid Removal Technology
Irrigation Well - 2006 N Colt Court	6/14/2012	20	220	Mobile vacuum truck/hand bailer
	6/15/2012	20	220	Mobile vacuum truck/hand bailer
	6/28/2012	10	10	Hand bailer
	7/2/2012	10	10	Hand bailer
	7/3/2012	5	5	Hand bailer
	7/5/2012	8	8	Hand bailer
	7/5/2012	5	80	Mobile vacuum truck
	8/15/2012	15	15	Hand bailer
	8/20/2012	5	5	Hand bailer
	11/8/2012	15	15	Hand bailer
	11/15/2012	15	15	Hand bailer
	11/21/2012	15	15	Hand bailer
	11/30/2012	7	7	Hand bailer
	12/7/2012	4	8	Hand bailer
	12/14/2012	2	4	Hand bailer
	12/21/2012	2	4	Hand bailer
	12/28/2012	1.5	4	Hand bailer
	1/4/2013	1	2	Hand bailer
	1/17/2013	1.5	4	Hand bailer
	2/1/2013	2	4	Hand bailer
	2/13/2013	3	5	Hand bailer
	3/15/2013	10	11	Hand bailer
	3/20/2013	5	5	Hand bailer
	4/5/2013	8	9	Hand bailer
	4/12/2013	1	5	Hand bailer
	4/25/2013	4	6	Hand bailer
	5/10/2013	9	11	Hand bailer
	5/17/2013	4	5	Hand bailer
	5/21/2013	1	3	Hand bailer
	6/5/2013	1	3	Hand bailer
Total Fluids Recovered	–	**210**	**716**	–

Notes:

1. SPH = Separate-phase hydrocarbons.
2. The SPH volume removed using vacuum technology was calculated by measuring the SPH thicknesses in the well before and after each event and estimating the volume of SPH in the corresponding gravel pack interval.
3. The volume of SPH removed by hand bailing was measured.
4. NM = Not measured.

Table B-4
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through December 2014
Andover Colt Court Release Site
Andover, Kansas

Date	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	Product Thickness (feet)	Minimum SPH Recovered (gallons)	Total Fluids Recovered (SPH and Water)	SPH Thickness After Removal Event	Fluid Removal Technology
6/12/2013	42.19	41.38	0.81	8.0	NM	0.00	Mobile vacuum truck and hand bailing
6/21/2013	43.73	43.40	0.33	0.8	NM	0.00	Mobile vacuum truck
6/26/2013	43.59	43.16	0.43	1.1	NM	0.00	Mobile vacuum truck
7/2/2013	49.31	49.01	0.30	0.8	NM	0.00	Mobile vacuum truck
7/12/2013	55.11	54.82	0.29	0.7	NM	0.00	Mobile vacuum truck
7/17/2013	55.10	54.88	0.22	0.5	NM	0.01	Mobile vacuum truck
8/1/2013	46.35	46.15	0.20	0.5	NM	0.01	Mobile vacuum truck
8/8/2013	41.49	--	0.00	0.0	NM	0.00	Mobile vacuum truck
8/13/2013	39.10	--	0.00	0.0	NM	0.00	Mobile vacuum truck
8/20/2013	37.40	--	0.00	0.0	NM	0.00	Mobile vacuum truck
8/28/2013	43.81	--	0.00	0.0	NM	0.0	Mobile vacuum truck
9/5/2013	47.86	--	0.00	0.0	NM	0.0	Mobile vacuum truck
9/11/2013	50.61	--	0.00	0.0	NM	0.0	Mobile vacuum truck
9/17/2013	49.06	--	0.00	0.0	NM	0.0	Mobile vacuum truck
9/23/2013	48.97	--	0.00	0.0	NM	0.0	Mobile vacuum truck
9/30/2013	48.63	--	0.00	0.0	NM	0.0	Mobile vacuum truck
10/10/2013	49.16	49.01	0.15	0.3	NM	0.0	Mobile vacuum truck
10/17/2013	48.40	--	0.00	0.0	NM	0.0	Mobile vacuum truck
10/24/2013	48.71	--	0.00	0.0	NM	0.0	Mobile vacuum truck
10/31/2013	44.86	--	0.00	0.0	NM	0.0	Mobile vacuum truck
11/6/2013	43.66	--	0.00	0.0	NM	0.0	Mobile vacuum truck
11/13/2013	41.82	--	0.00	0.0	NM	0.0	Mobile vacuum truck
11/20/2013	40.60	--	0.00	0.0	NM	0.0	Mobile vacuum truck
11/26/2013	40.30	40.19	0.11	0.3	NM	0.0	Mobile vacuum truck

Please refer to notes at end of table.

Table B-4
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through December 2014
Andover Colt Court Release Site
Andover, Kansas

Date	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	Product Thickness (feet)	Minimum SPH Recovered (gallons)	Total Fluids Recovered (SPH and Water)	SPH Thickness After Removal Event	Fluid Removal Technology
12/3/2013	39.44	sheen	0.00	0.0	NM	0.0	Mobile vacuum truck
12/11/2013	39.63	sheen	0.00	0.0	NM	0.0	Mobile vacuum truck
12/19/2013	39.23	--	0.00	0.0	NM	0.0	Mobile vacuum truck
12/27/2013	39.38	39.34	0.04	0.1	NM	0.0	Mobile vacuum truck
1/3/2014	NM	NM	NM	--	50.0	NM	Mobile vacuum truck
1/10/2014	39.89	--	0.00	0.0	50.0	0.0	Mobile vacuum truck
1/16/2014	39.83	--	0.00	0.0	50.0	0.0	Mobile vacuum truck
1/21/2014	39.34	--	0.00	0.0	75.0	0.0	Mobile vacuum truck
1/30/2014	38.85	--	0.00	0.0	50.0	0.0	Mobile vacuum truck
2/12/2014	39.44	39.43	0.01	0.0	100.0	0.0	Mobile vacuum truck
2/19/2014	39.37	39.36	0.01	0.0	75.0	0.0	Mobile vacuum truck
2/26/2014	39.64	39.60	0.04	0.1	100.0	0.0	Mobile vacuum truck
3/4/2014	39.76	39.73	0.03	0.1	75.0	0.0	Mobile vacuum truck
3/13/2014	39.89	39.86	0.03	0.1	100.0	0.0	Mobile vacuum truck
3/18/2014	39.65	39.61	0.04	0.1	50.0	0.0	Mobile vacuum truck
3/27/2014	39.73	39.69	0.04	0.1	100.0	0.0	Mobile vacuum truck
4/3/2014	40.46	40.42	0.04	0.1	50.0	0.0	Mobile vacuum truck
4/8/2014	41.14	41.11	0.03	0.1	50.0	0.0	Mobile vacuum truck
4/9/2014	41.47	41.43	0.04	0.1	50.0	0.0	Mobile vacuum truck
4/10/2014	41.82	41.76	0.06	0.2	50.0	0.0	Mobile vacuum truck
4/11/2014	43.25	43.21	0.04	0.1	50.0	0.0	Mobile vacuum truck
4/17/2014	43.17	43.13	0.04	0.1	25.0	0.0	Mobile vacuum truck
4/22/2014	44.95	44.90	0.05	0.1	25.0	0.0	Mobile vacuum truck
4/29/2014	46.43	46.36	0.07	0.2	25.0	0.0	Mobile vacuum truck

Please refer to notes at end of table.

Table B-4
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through December 2014
Andover Colt Court Release Site
Andover, Kansas

Date	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	Product Thickness (feet)	Minimum SPH Recovered (gallons)	Total Fluids Recovered (SPH and Water)	SPH Thickness After Removal Event	Fluid Removal Technology
5/8/2014	51.28	51.15	0.13	0.3	25.0	0.0	Mobile vacuum truck
5/13/2014	51.83	51.66	0.17	0.4	50.0	0.0	Mobile vacuum truck
5/20/2014	54.12	53.94	0.18	0.4	25.0	0.0	Mobile vacuum truck
5/21/2014	55.28	55.11	0.17	0.4	25.0	0.0	Mobile vacuum truck
5/29/2014	52.24	52.06	0.18	0.4	0.0	0.0	Mobile vacuum truck
5/30/2014	53.32	53.13	0.19	0.5	0.0	0.0	Mobile vacuum truck
6/2/2014	52.65	52.50	0.15	0.4	75.0	0.0	Mobile vacuum truck
6/3/2014	52.63	52.49	0.14	0.4	25.0	0.0	Mobile vacuum truck
6/10/2014	48.48	48.31	0.17	0.4	50.0	0.0	Mobile vacuum truck
6/11/2014	49.10	48.95	0.15	0.4	25.0	0.0	Mobile vacuum truck
6/18/2014	46.34	46.20	0.14	0.4	25.0	0.0	Mobile vacuum truck
6/19/2014	47.60	47.43	0.17	0.4	0.0	0.0	Mobile vacuum truck
6/24/2014	47.80	47.67	0.13	0.3	25.0	0.0	Mobile vacuum truck
6/25/2014	46.94	46.81	0.13	0.3	25.0	0.0	Mobile vacuum truck
7/1/2014	44.64	44.50	0.14	0.3	0.0	0.0	Mobile vacuum truck
7/2/2014	44.78	44.64	0.14	0.4	0.0	0.0	Mobile vacuum truck
7/10/2014	46.12	46.03	0.09	0.2	10.0	0.0	Mobile vacuum truck
7/11/2014	47.02	46.91	0.11	0.3	0.0	0.0	Mobile vacuum truck
7/15/2014	46.41	46.33	0.08	0.1	50.0	0.0	Mobile vacuum truck
7/16/2014	47.55	47.41	0.14	0.3	50.0	0.0	Mobile vacuum truck
7/22/2014	48.32	48.21	0.11	0.3	25.0	0.0	Mobile vacuum truck
7/23/2014	49.38	49.27	0.11	0.3	25.0	0.0	Mobile vacuum truck
7/31/2014	49.18	49.06	0.12	0.3	25.0	0.0	Mobile vacuum truck

Please refer to notes at end of table.

Table B-4
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through December 2014
Andover Colt Court Release Site
Andover, Kansas

Date	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	Product Thickness (feet)	Minimum SPH Recovered (gallons)	Total Fluids Recovered (SPH and Water)	SPH Thickness After Removal Event	Fluid Removal Technology
8/1/2014	51.04	--	0.00	0.0	25.0	0.0	Mobile vacuum truck
8/5/2014	52.05	51.92	0.13	0.1	25.0	0.1	Mobile vacuum truck
8/6/2014	52.92	52.79	0.13	0.3	25.0	sheen	Mobile vacuum truck
8/14/2015	52.94	52.79	0.15	0.2	25.0	0.1	Mobile vacuum truck
8/15/2014	51.40	51.31	0.09	0.2	25.0	0.0	Mobile vacuum truck
8/20/2014	54.23	54.09	0.14	0.3	25.0	0.0	Mobile vacuum truck
8/21/2014	55.02	54.98	0.04	0.1	0.0	0.0	Mobile vacuum truck
8/26/2014	58.27	58.20	0.07	0.1	25.0	0.0	Mobile vacuum truck
8/27/2014	58.57	58.39	0.18	0.4	25.0	0.0	Mobile vacuum truck
9/3/2014	57.48	57.29	0.19	0.4	25.0	0.0	Mobile vacuum truck
9/4/2014	58.28	58.22	0.06	0.2	25.0	0.0	Mobile vacuum truck
9/10/2014	58.12	57.94	0.18	0.4	0.0	0.0	Mobile vacuum truck
9/11/2014	59.15	58.96	0.19	0.4	0.0	0.0	Mobile vacuum truck
9/16/2014	58.14	57.98	0.16	0.4	0.0	0.0	Mobile vacuum truck
9/17/2014	58.95	58.75	0.20	0.5	25.0	0.0	Mobile vacuum truck
9/24/2014	59.17	58.95	0.22	0.5	0.0	sheen	Mobile vacuum truck
9/25/2014	60.58	60.35	0.23	0.6	0.0	0.0	Mobile vacuum truck
10/1/2014	60.51	60.30	0.21	0.4	25.0	0.1	Mobile vacuum truck
10/2/2014	60.53	60.47	0.06	0.2	25.0	0.0	Mobile vacuum truck
10/8/2014 (a.m.)	60.39	60.18	0.21	0.3	25.0	0.1	Mobile vacuum truck
10/8/2014 (p.m.)	60.24	60.12	0.12	0.2	25.0	0.1	Mobile vacuum truck
10/17/2014	--	--	--	--	25.0	--	Mobile vacuum truck

Please refer to notes at end of table.

Table B-4
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through December 2014
Andover Colt Court Release Site
Andover, Kansas

Date	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	Product Thickness (feet)	Minimum SPH Recovered (gallons)	Total Fluids Recovered (SPH and Water)	SPH Thickness After Removal Event	Fluid Removal Technology
10/18/2014	56.69	56.56	0.13	0.3	25.0	0.0	Mobile vacuum truck
10/21/2014	56.52	56.35	0.17	0.2	25.0	0.1	Mobile vacuum truck
10/22/2014	56.62	56.43	0.19	0.3	25.0	0.1	Mobile vacuum truck
10/30/2014	56.75	56.43	0.32	0.5	25.0	0.1	Mobile vacuum truck
11/4/2014	56.21	56.09	0.12	0.1	25.0	0.1	Mobile vacuum truck
11/11/2014	54.45	54.35	0.10	0.2	25.0	0.0	Mobile vacuum truck
11/18/2014	53.11	53.00	0.11	0.3	25.0	0.0	Mobile vacuum truck
11/25/2014	50.35	50.23	0.12	0.3	25.0	0.0	Mobile vacuum truck
12/3/2014	49.23	49.12	0.11	0.2	50.0	0.0	Mobile vacuum truck
12/3/2014	49.23	49.12	0.11	0.2	50.0	0.01	Mobile vacuum truck
12/9/2014	48.71	48.61	0.10	0.2	50.0	0.03	Mobile vacuum truck
12/17/2014	47.93	47.88	0.05	0.1	25.0	0.01	Mobile vacuum truck
12/23/2014	47.13	47.06	0.07	0.2	25.0	0.00	Mobile vacuum truck
12/31/2014	47.03	46.98	0.05	0.1	50.0	0.00	Mobile vacuum truck
1/7/2015	46.87	46.78	0.09	0.2	50.0	0.01	Mobile vacuum truck
1/14/2015	46.32	46.29	0.03	0.0	0.0	0.03	None
1/20/2015	46.27	–	0.00	0.0	0.0	0.00	None
1/28/2015	47.34	47.27	0.07	0.0	0.0	0.07	None
2/4/2015	45.92	45.84	0.08	0.0	0.0	0.08	None
2/9/2015	45.59	45.55	0.04	0.1	50.0	0.01	Mobile vacuum truck
3/18/2015	45.55	–	0.00	0.3	0.3	0.00	SPH Skimmer
4/20/2015	44.49	–	0.00	0.0	0.0	0.00	SPH Skimmer

Please refer to notes at end of table.

Table B-4
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through December 2014
Andover Colt Court Release Site
Andover, Kansas

Date	Depth to Groundwater (feet bgs)	Depth to SPH (feet)	Product Thickness (feet)	Minimum SPH Recovered (gallons)	Total Fluids Recovered (SPH and Water)	SPH Thickness After Removal Event	Fluid Removal Technology
5/22/2015	45.13	--	--	0.0	0.0	0.00	SPH Skimmer
6/10/2015	45.43	--	0.00	0.0	0.0	0.00	SPH Skimmer
6/16/2015	42.38	--	0.00	0.0	0.0	0.00	SPH Skimmer
			Total Fluids Recovered	32	2710		

Notes:

1. SPH = Separate-phase hydrocarbons.
2. The SPH volume removed using vacuum technology was calculated by measuring the SPH thicknesses in the well before and after each event and estimating the volume of SPH in the corresponding gravel pack interval.
3. NM = Not measured.
4. -- = No SPH.

Appendix C

Laboratory Analytical Report and QA/QC Report

Appendix C — Laboratory Analytical Reports and Quality Assurance/Quality Control Results Summary

1.0 Introduction

This appendix documents the results of a quality assurance (QA) review of the analytical data for groundwater samples that were collected during groundwater monitoring activities that were performed in December 2015 at the Quail Crossing neighborhood (the Neighborhood) in Andover, Kansas (Site).

The data reviewed herein include are representative of: (1) groundwater samples collected from monitoring wells; and (2) groundwater samples collected from Neighborhood irrigation wells. The groundwater samples collected were analyzed by ESC Lab Sciences of Mount Juliet, Tennessee.

The QA review outlines the applicable quality control criteria utilized during the data review process, as well as any deviations from those criteria. Examination and validation of the laboratory summary reports include:

- Analytical methods;
- Reporting limits;
- Detection limits and estimated concentrations;
- Sample holding times;
- Custody records and sample receipt;
- Spikes, blanks, and surrogates; and
- Duplicates.

The QA review did not include a review of calibration or raw data. Section 2.0 lists the analytical methods used in sample analysis. Section 3.0 defines the QA terms used in this report. Section 4.0 provides the QA results for each sampling event.

2.0 Analytical Methods

2.1 Groundwater Analyses

Chemical analyses performed on groundwater samples consisted of the following:

- Volatile petroleum hydrocarbons as gasoline (GRO) by IA OA-1; and
- 1,2,4-Trimethylbenzene, 1,2-dichloroethane, 1,3,5-trimethylbenzene, 2-butanone, cyclohexane, isopropylbenzene methylcyclohexane BTEX (benzene, toluene, ethylbenzene, total xylenes), naphthalene, n-butylbenzene, n-propylbenzene by U.S. Environmental Protection Agency (EPA) Method SW846 8260.

3.0 Quality Assurance Objectives and Review Procedures

The general QA objectives for this project were to develop and implement procedures for obtaining, evaluating, and confirming the usability of environmental data of a specified quality. To collect such information, analytical data must have an appropriate degree of accuracy and reproducibility, samples collected must be representative of actual field conditions, and samples must be collected and analyzed using unbroken chain-of-custody (COC) procedures.

Reporting limits and analytical results were compared to action levels for each parameter. Precision, accuracy, representativeness, completeness, and comparability parameters used to indicate data quality are defined below.

Reporting Limits. Method reporting limits (MRLs) are set by the laboratory and are based on instrumentation abilities, sample matrix, and suggested MRLs by the EPA or KDHE. In some cases, the MRLs are raised due to high concentrations of analytes in the samples or matrix interferences. MRLs are generally consistent with industry standards and below promulgated regulatory standards when possible.

Detection Limits and Estimated Concentrations. The method detection limit (MDL) is the lowest quantity of a substance that can be distinguished from the absence of that substance within a stated confidence limit. The MDL is estimated from the mean of the blank, the standard deviation of the blank and some confidence factor.

Holding Times. Holding times are the length of time a sample can be stored after collection and prior to analysis without significantly affecting the analytical results. Holding times vary by analyte, sample matrix, and analytical methodology.

Custody Records and Sample Receipt. COC refers to the document or paper trail showing the collection, custody, control, transfer, analysis, and disposition of physical materials. The sample receipt identifies the condition of samples upon arrival at the analytical laboratory.

Method Blanks. A method, or laboratory, blank is a sample prepared in the laboratory along with the field samples and analyzed for the same parameters at the same time. It is used to assess for laboratory introduced contamination.

Laboratory Control Sample. A laboratory control sample (LCS) is analyzed by the laboratory to assess the accuracy of the analytical equipment. The sample is prepared from an analyte-free matrix that is then spiked with known levels of the constituents of interest (i.e., a standard). The concentrations are measured and the results compared to the known spiked levels. This comparison is expressed as percent recovery.

Laboratory Control Sample Duplicate. A laboratory control sample duplicate [LCSD]) is prepared and analyzed along with the LCS. The LCS and LCSD data are compared to assess the precision of the analytical method (i.e., the relative percent difference [RPD]).

Matrix Spike Analyses. Matrix spike (MS) analyses are performed on samples submitted to the laboratory that are of the same matrix as the field sample. The MS sample is spiked with known levels of the constituents of interest and analyzed to assess the potential for matrix interference with recovery or detection of the constituents of interest and the accuracy of the determination. The spiked sample results are compared to the expected result (i.e., sample concentration plus spike amount) and reported as percent recovery.

Lab Duplicate. A laboratory duplicate is a second analysis of a QA/QC sample, which serves as an internal check on laboratory quality as well as potential variability of the sample matrix. The laboratory duplicate is analyzed and compared to the primary sample results to assess the precision of the analytical method. This comparison can be expressed by the RPD between the primary and duplicate samples.

Surrogate Recovery. Surrogates are organic compounds that are similar in chemical composition to the analytes of interest and spiked into environmental and batch QC samples prior to sample preparation and analysis. Surrogate recoveries for environmental samples are used to evaluate matrix interference on a sample-specific basis.

Field Duplicate. A field duplicate is a second field sample collected from a sampling location (e.g.., a well or soil core). Field duplicate samples serve as a check on laboratory quality as well as potential variability of the sample matrix. The field duplicate is analyzed and compared to the primary sample to assess the precision of the analytical method. This comparison can be expressed by the RPD between the original and duplicate samples.

Trip Blanks. A trip blank is a sample prepared in the laboratory that is shipped along with the sample bottles to the field, kept with the soil and groundwater samples during collection, and shipped back to the laboratory with the field samples. The trip blank is analyzed for constituents of interest, along with the primary samples, to assess if detected contaminants may have been the result of contamination of the samples during transport or storage.

Equipment Blank. An equipment blank is a sample collected in the field along with the primary samples and analyzed for the same parameters. Equipment blanks are collected by pouring deionized water over or through decontaminated equipment used to collect the samples, into laboratory supplied containers. The equipment blank is used to assess if field samples may have been affected by inadequate decontamination of field equipment.

Appendix C — Laboratory Analytical Reports and Quality Assurance/Quality Control Results Summary

4.0 QA/QC Review Results

4.1 Groundwater Lab Report L807489

The data reviewed includes groundwater samples collected from monitoring wells on December 15 and 16, 2015. Samples were analyzed for GRO and volatile organic compounds (VOCs) using the methods listed in Section 2.1.

Reporting Limits. MRLs were not elevated for samples. No data are flagged.

Detection Limits and Estimated Concentrations. MDLs and concentrations were not reported as estimates.

Holding Times. The samples were analyzed within applicable holding times.

Custody Records and Sample Receipt. The samples were received below the required temperature of 4°C and consistent with the accompanying COC.

Method Blanks. No compounds were detected in the method blanks. No data are flagged.

Laboratory Control Sample. Percent recoveries of the LCS were within control limits.

Laboratory Control Sample Duplicate. Percent recoveries of the LCSD were within control limits. LCS/LCSD RPDs were within control limits for reported constituents.

Matrix Spike Analyses. The RPD for the MS and MS duplicate (MSD) were within control limits.

Lab Duplicate. No lab duplicate was analyzed.

Surrogate Recovery. Surrogate recoveries were within control limits for samples.

Field Duplicate. Field duplicate samples were collected from monitoring wells MW-13 and MW-18.

- Constituents were not detected in the primary and duplicate samples collected from well MW-13.
- In MW-18, the following analytes exceeded RPD limits: 1,2,4 trimethylbenzene; benzene; cyclohexane; and ethylbenzene. Accordingly, those data are flagged to indicate that the constituent concentrations are estimated. Other constituents were not detected in the primary and duplicate sample. Where applicable, report figures present the higher estimated concentration.

Trip Blank. One trip blank was analyzed; no compounds were detected in the sample. No data are flagged.

Equipment Blank. No reusable equipment was utilized during this sampling event; therefore, an equipment blank was not collected.

Conclusion. In conclusion, the overall QA objectives have been met and the data are of adequate quality for use in this project.

4.2 Groundwater Lab Report L807488

The data reviewed includes groundwater samples collected from irrigation wells on December 15 and 16, 2015. Samples were analyzed for GRO and VOCs using the methods listed in Section 2.1.

Reporting Limits. MRLs were not elevated for samples. No data are flagged.

Detection Limits and Estimated Concentrations. MDLs and concentrations were not reported as estimates.

Holding Times. The samples were analyzed within applicable holding times.

Custody Records and Sample Receipt. The samples were received below the required temperature of 4°C and consistent with the accompanying COC.

Method Blanks. No compounds were detected in the method blanks. No data are flagged.

Laboratory Control Sample. Percent recoveries of the LCS were within control limits.

Laboratory Control Sample Duplicate. Percent recoveries of the LCSD were within control limits. LCS/LCSD RPDs were within control limits for reported constituents.

Matrix Spike Analyses. MS/MSD recoveries were within lab control limits.

Lab Duplicate. No lab duplicate was analyzed.

Surrogate Recovery. Surrogate recoveries were within control limits for samples.

Field Duplicates. A field duplicate was collected from the irrigation well at location HOA-1. Constituents were not detected in the primary and duplicate samples.

Trip Blank. One trip blank was analyzed; no compounds were detected in the trip blank. No data are flagged.

Equipment Blank. No reusable equipment was utilized during this sampling event; therefore, an equipment blank was not collected.

Conclusion. In conclusion, the overall QA objectives have been met and the data are of adequate quality for use in this project.

ESC LAB SCIENCES
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ANALYTICAL REPORT

December 30, 2015

myESC
REAL TIME DATA ACCESS

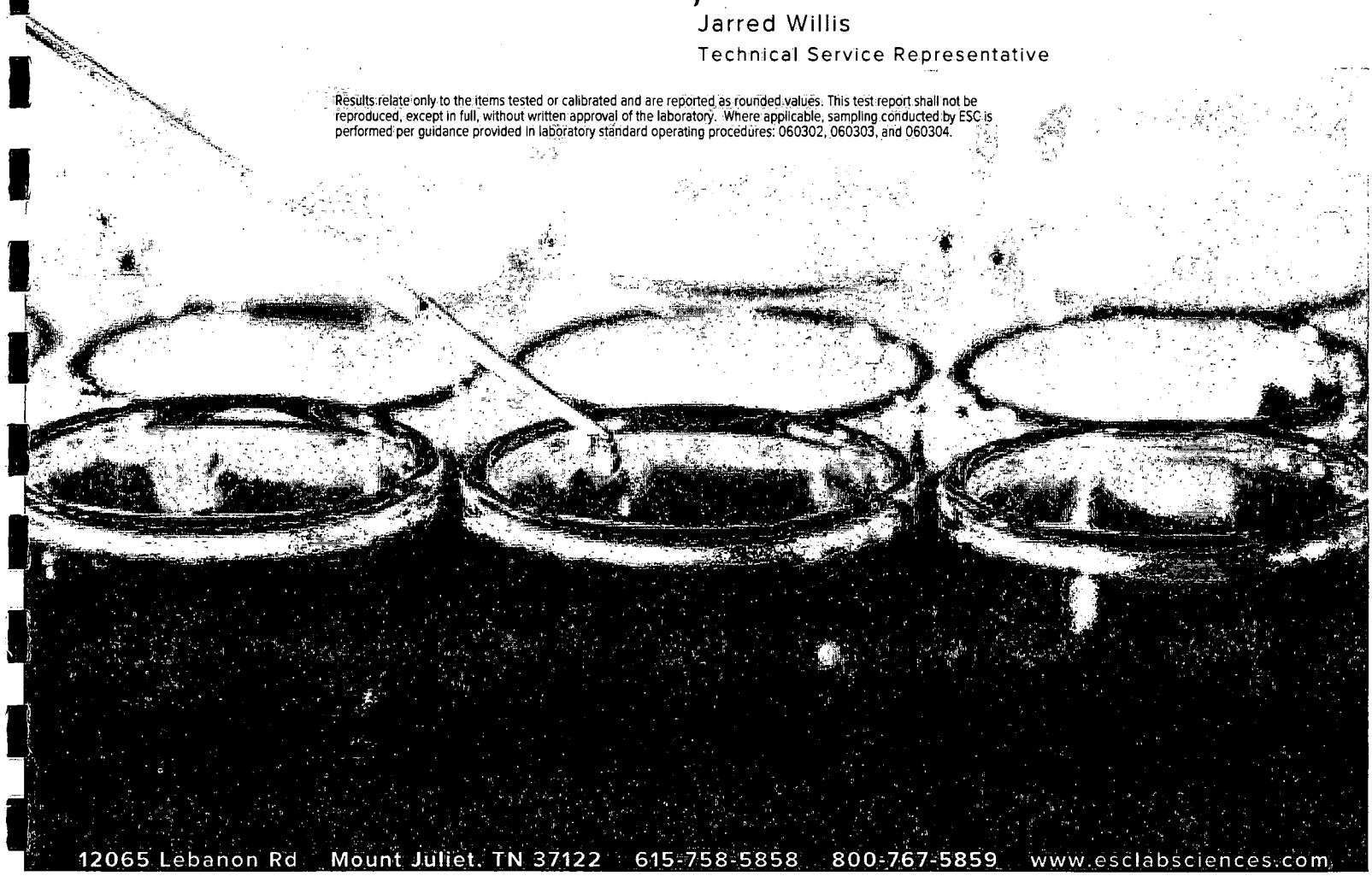
Apex Companies, LLC- Portland, OR

Sample Delivery Group:	L807488
Samples Received:	12/17/2015
Project Number:	E3CE-0065
Description:	Andover Release Site - 4Q2015 Quail Crossing GWM□□
Site:	ANDOVER QUAIL CROSSING
Report To:	Samuel Jackson 3015 SW First Avenue Portland, OR 97201-4707

Entire Report Reviewed By: Jarred Willis

Jarred Willis
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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1 Cp
2 Tc
3 Ss
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8 Al
9 Sc

2004 N COLT COURT L807488-01 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 16:25 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837050	1	12/22/15 08:46	12/22/15 08:46	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 08:07	12/25/15 08:07	BMB

2002 N COLT COURT L807488-02 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 16:15 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837050	1	12/22/15 09:08	12/22/15 09:08	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 08:31	12/25/15 08:31	BMB

2001 N COLT COURT L807488-03 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 16:20 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837050	1	12/22/15 09:29	12/22/15 09:29	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 08:56	12/25/15 08:56	BMB

2006 N COLT COURT L807488-04 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 09:15 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837050	10	12/22/15 09:50	12/22/15 09:50	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	25	12/25/15 09:20	12/25/15 09:20	BMB

2005 N COLT COURT L807488-05 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 16:10 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 16:24	12/20/15 16:24	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 09:44	12/25/15 09:44	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG837555	10	12/28/15 16:48	12/28/15 16:48	DWR

2007 N COLT COURT L807488-06 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 10:22 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 16:47	12/20/15 16:47	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 10:09	12/25/15 10:09	BMB

1211 W QUAIL CROSSING COURT L807488-07 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 10:05 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 17:10	12/20/15 17:10	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 10:33	12/25/15 10:33	BMB

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

2019 N RUGER CIRCLE L807488-08 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 08:30 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 17:33	12/20/15 17:33	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 10:57	12/25/15 10:57	BMB

2020 N RUGER CIRCLE L807488-09 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 12:05 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 17:56	12/20/15 17:56	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 11:22	12/25/15 11:22	BMB

2028 N RUGER CIRCLE L807488-10 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 10:35 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 18:18	12/20/15 18:18	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 11:46	12/25/15 11:46	BMB

2032 N RUGER CIRCLE L807488-11 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 10:50 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 18:41	12/20/15 18:41	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 12:10	12/25/15 12:10	BMB

2021 N RUGER COURT L807488-12 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 11:45 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 19:04	12/20/15 19:04	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 12:34	12/25/15 12:34	BMB

2025 N RUGER COURT L807488-13 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 11:15 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 19:27	12/20/15 19:27	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 12:59	12/25/15 12:59	BMB

2007 N MOUNTAIN COURT L807488-14 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 09:40 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 19:50	12/20/15 19:50	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 13:23	12/25/15 13:23	BMB

2009 N MOUNTAIN COURT L807488-15 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 09:30 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 20:12	12/20/15 20:12	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 13:47	12/25/15 13:47	BMB

1009 W MOUNTAIN L807488-16 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 14:00 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 20:35	12/20/15 20:35	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 14:11	12/25/15 14:11	BMB

HOA-1 L807488-17 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 11:46 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 20:58	12/20/15 20:58	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838908	1	12/29/15 20:41	12/29/15 20:41	DAH

DUP-3 L807488-18 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 00:00 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/20/15 21:21	12/20/15 21:21	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838908	1	12/29/15 21:04	12/29/15 21:04	DAH

TRIP BLANK L807488-19 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 00:00 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836776	1	12/25/15 07:43	12/25/15 07:43	BMB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis

Jarred Willis
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 08:46	WG837050
(S) a,a,a-Trifluorotoluene(FID)	*100*		*62.0-128*		*12/22/2015 08:46*	WG837050

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 08:07	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 08:07	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 08:07	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 08:07	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 08:07	WG836776
Toluene	ND		0.00500	1	12/25/2015 08:07	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 08:07	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 08:07	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 08:07	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 08:07	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 08:07	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 08:07	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 08:07	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 08:07	WG836776
(S) Toluene-d8	*105*		*90.0-115*		*12/25/2015 08:07*	WG836776
(S) Dibromofluoromethane	*106*		*79.0-121*		*12/25/2015 08:07*	WG836776
(S) 4-Bromofluorobenzene	*95.5*		*80.1-120*		*12/25/2015 08:07*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 09:08	WG837050
(S) α,α,α-Trifluorotoluene(FID)	*100*		*62.0-128*		*12/22/2015 09:08*	WG837050

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 08:31	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 08:31	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 08:31	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 08:31	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 08:31	WG836776
Toluene	ND		0.00500	1	12/25/2015 08:31	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 08:31	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 08:31	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 08:31	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 08:31	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 08:31	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 08:31	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 08:31	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 08:31	WG836776
(S) Toluene-d8	*105*		*90.0-115*		*12/25/2015 08:31*	WG836776
(S) Dibromofluoromethane	*108*		*79.0-121*		*12/25/2015 08:31*	WG836776
(S) 4-Bromofluorobenzene	*90.2*		*80.1-120*		*12/25/2015 08:31*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 09:29	WG837050
(S) a,a,a-Trifluorotoluene(FID)	*101*		*62.0-128*		*12/22/2015 09:29*	WG837050

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 08:56	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 08:56	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 08:56	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 08:56	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 08:56	WG836776
Toluene	ND		0.00500	1	12/25/2015 08:56	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 08:56	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 08:56	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 08:56	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 08:56	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 08:56	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 08:56	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 08:56	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 08:56	WG836776
(S) Toluene-d8	*106*		*90.0-115*		*12/25/2015 08:56*	WG836776
(S) Dibromofluoromethane	*109*		*79.0-121*		*12/25/2015 08:56*	WG836776
(S) 4-Bromofluorobenzene	*93.2*		*80.1-120*		*12/25/2015 08:56*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	39.6		1.00	10	12/22/2015 09:50	WG837050
(S) a,a,a-Trifluorotoluene(FID)	*95.1*		*62.0-128*		*12/22/2015 09:50*	WG837050

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	1.74		0.0250	25	12/25/2015 09:20	WG836776
Cyclohexane	0.151		0.0250	25	12/25/2015 09:20	WG836776
Ethylbenzene	1.48		0.0250	25	12/25/2015 09:20	WG836776
Isopropylbenzene	0.0419		0.0250	25	12/25/2015 09:20	WG836776
Methyl Cyclohexane	0.0390		0.0250	25	12/25/2015 09:20	WG836776
Toluene	3.39		0.125	25	12/25/2015 09:20	WG836776
Xylenes, Total	4.71		0.0750	25	12/25/2015 09:20	WG836776
Naphthalene	0.201		0.125	25	12/25/2015 09:20	WG836776
n-Butylbenzene	ND		0.0250	25	12/25/2015 09:20	WG836776
1,2-Dichloroethane	ND		0.0250	25	12/25/2015 09:20	WG836776
1,3,5-Trimethylbenzene	0.278		0.0250	25	12/25/2015 09:20	WG836776
1,2,4-Trimethylbenzene	1.12		0.0250	25	12/25/2015 09:20	WG836776
2-Butanone (MEK)	ND		0.250	25	12/25/2015 09:20	WG836776
n-Propylbenzene	0.111		0.0250	25	12/25/2015 09:20	WG836776
(S) Toluene-d8	*107*		*90.0-115*		*12/25/2015 09:20*	WG836776
(S) Dibromofluoromethane	*106*		*79.0-121*		*12/25/2015 09:20*	WG836776
(S) 4-Bromofluorobenzene	*95.8*		*80.1-120*		*12/25/2015 09:20*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	2.75		0.100	1	12/20/2015 16:24	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*96.7*		*62.0-128*		*12/20/2015 16:24*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.109		0.00100	1	12/25/2015 09:44	WG836776
Cyclohexane	0.0284		0.0100	10	12/28/2015 16:48	WG837555
Ethylbenzene	0.127		0.00100	1	12/25/2015 09:44	WG836776
Isopropylbenzene	0.00317		0.00100	1	12/25/2015 09:44	WG836776
Methyl Cyclohexane	0.00434		0.00100	1	12/25/2015 09:44	WG836776
Toluene	0.418		0.0500	10	12/28/2015 16:48	WG837555
Xylenes, Total	0.280		0.00300	1	12/25/2015 09:44	WG836776
Naphthalene	0.0136		0.00500	1	12/25/2015 09:44	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 09:44	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 09:44	WG836776
1,3,5-Trimethylbenzene	0.0169		0.00100	1	12/25/2015 09:44	WG836776
1,2,4-Trimethylbenzene	0.0672		0.00100	1	12/25/2015 09:44	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 09:44	WG836776
n-Propylbenzene	0.00952		0.00100	1	12/25/2015 09:44	WG836776
(S) Toluene-d8	*110*		*90.0-115*		*12/25/2015 09:44*	WG836776
(S) Dibromofluoromethane	*104*		*79.0-121*		*12/25/2015 09:44*	WG836776
(S) 4-Bromofluorobenzene	*94.4*		*80.1-120*		*12/25/2015 09:44*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 16:47	WG837126
(S) α,α,α-Trifluorotoluene(FID)	*99.6*		*62.0-128*		*12/20/2015 16:47*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 10:09	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 10:09	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 10:09	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 10:09	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 10:09	WG836776
Toluene	ND		0.00500	1	12/25/2015 10:09	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 10:09	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 10:09	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 10:09	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 10:09	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:09	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:09	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 10:09	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 10:09	WG836776
(S) Toluene-d8	*107*		*90.0-115*		*12/25/2015 10:09*	WG836776
(S) Dibromofluoromethane	*107*		*79.0-121*		*12/25/2015 10:09*	WG836776
(S) 4-Bromofluorobenzene	*95.7*		*80.1-120*		*12/25/2015 10:09*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 17:10	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.7*		*62.0-128*		*12/20/2015 17:10*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 10:33	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 10:33	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 10:33	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 10:33	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 10:33	WG836776
Toluene	ND		0.00500	1	12/25/2015 10:33	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 10:33	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 10:33	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 10:33	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 10:33	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:33	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:33	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 10:33	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 10:33	WG836776
(S) Toluene-d8	*108*		*90.0-115*		*12/25/2015 10:33*	WG836776
(S) Dibromofluoromethane	*107*		*79.0-121*		*12/25/2015 10:33*	WG836776
(S) 4-Bromofluorobenzene	*92.3*		*80.1-120*		*12/25/2015 10:33*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 17:33	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.7*		*62.0-128*		*12/20/2015 17:33*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 10:57	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 10:57	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 10:57	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 10:57	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 10:57	WG836776
Toluene	ND		0.00500	1	12/25/2015 10:57	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 10:57	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 10:57	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 10:57	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 10:57	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:57	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:57	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 10:57	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 10:57	WG836776
(S) Toluene-d8	*105*		*90.0-115*		*12/25/2015 10:57*	WG836776
(S) Dibromofluoromethane	*111*		*79.0-121*		*12/25/2015 10:57*	WG836776
(S) 4-Bromofluorobenzene	*91.8*		*80.1-120*		*12/25/2015 10:57*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 17:56	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.5*		*62.0-128*		*12/20/2015 17:56*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 11:22	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 11:22	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 11:22	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 11:22	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 11:22	WG836776
Toluene	ND		0.00500	1	12/25/2015 11:22	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 11:22	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 11:22	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 11:22	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 11:22	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 11:22	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 11:22	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 11:22	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 11:22	WG836776
(S) Toluene-d8	*105*		*90.0-115*		*12/25/2015 11:22*	WG836776
(S) Dibromofluoromethane	*109*		*79.0-121*		*12/25/2015 11:22*	WG836776
(S) 4-Bromofluorobenzene	*94.0*		*80.1-120*		*12/25/2015 11:22*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 18:18	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.8*		*62.0-128*		*12/20/2015 18:18*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 11:46	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 11:46	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 11:46	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 11:46	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 11:46	WG836776
Toluene	ND		0.00500	1	12/25/2015 11:46	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 11:46	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 11:46	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 11:46	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 11:46	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 11:46	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 11:46	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 11:46	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 11:46	WG836776
(S) Toluene-d8	*107*		*90.0-115*		*12/25/2015 11:46*	WG836776
(S) Dibromofluoromethane	*108*		*79.0-121*		*12/25/2015 11:46*	WG836776
(S) 4-Bromofluorobenzene	*91.7*		*80.1-120*		*12/25/2015 11:46*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 18:41	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.7*		*62.0-128*		*12/20/2015 18:41*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 12:10	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 12:10	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 12:10	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 12:10	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 12:10	WG836776
Toluene	ND		0.00500	1	12/25/2015 12:10	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 12:10	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 12:10	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 12:10	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 12:10	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 12:10	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 12:10	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 12:10	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 12:10	WG836776
(S) Toluene-d8	*105*		*90.0-115*		*12/25/2015 12:10*	WG836776
(S) Dibromofluoromethane	*109*		*79.0-121*		*12/25/2015 12:10*	WG836776
(S) 4-Bromofluorobenzene	*92.9*		*80.1-120*		*12/25/2015 12:10*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 19:04	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.8*		*62.0-128*		*12/20/2015 19:04*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 12:34	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 12:34	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 12:34	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 12:34	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 12:34	WG836776
Toluene	ND		0.00500	1	12/25/2015 12:34	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 12:34	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 12:34	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 12:34	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 12:34	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 12:34	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 12:34	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 12:34	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 12:34	WG836776
(S) Toluene-d8	*103*		*90.0-115*		*12/25/2015 12:34*	WG836776
(S) Dibromofluoromethane	*108*		*79.0-121*		*12/25/2015 12:34*	WG836776
(S) 4-Bromofluorobenzene	*92.0*		*80.1-120*		*12/25/2015 12:34*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 19:27	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.6*		*62.0-128*		*12/20/2015 19:27*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 12:59	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 12:59	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 12:59	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 12:59	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 12:59	WG836776
Toluene	ND		0.00500	1	12/25/2015 12:59	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 12:59	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 12:59	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 12:59	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 12:59	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 12:59	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 12:59	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 12:59	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 12:59	WG836776
(S) Toluene-d8	*107*		*90.0-115*		*12/25/2015 12:59*	WG836776
(S) Dibromofluoromethane	*110*		*79.0-121*		*12/25/2015 12:59*	WG836776
(S) 4-Bromofluorobenzene	*91.7*		*80.1-120*		*12/25/2015 12:59*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 19:50	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*100*		*62.0-128*		*12/20/2015 19:50*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 13:23	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 13:23	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 13:23	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 13:23	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 13:23	WG836776
Toluene	ND		0.00500	1	12/25/2015 13:23	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 13:23	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 13:23	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 13:23	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 13:23	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 13:23	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 13:23	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 13:23	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 13:23	WG836776
(S) Toluene-d8	*109*		*90.0-115*		*12/25/2015 13:23*	WG836776
(S) Dibromofluoromethane	*107*		*79.0-121*		*12/25/2015 13:23*	WG836776
(S) 4-Bromofluorobenzene	*91.7*		*80.1-120*		*12/25/2015 13:23*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 20:12	WG837126
(S) α,α,α-Trifluorotoluene(FID)	*100*		*62.0-128*		*12/20/2015 20:12*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 13:47	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 13:47	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 13:47	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 13:47	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 13:47	WG836776
Toluene	ND		0.00500	1	12/25/2015 13:47	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 13:47	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 13:47	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 13:47	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 13:47	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 13:47	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 13:47	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 13:47	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 13:47	WG836776
(S) Toluene-d8	*106*		*90.0-115*		*12/25/2015 13:47*	WG836776
(S) Dibromofluoromethane	*109*		*79.0-121*		*12/25/2015 13:47*	WG836776
(S) 4-Bromofluorobenzene	*91.9*		*80.1-120*		*12/25/2015 13:47*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 20:35	WG837126
(S) α,α,α-Trifluorotoluene(FID)	*100*		*62.0-128*		*12/20/2015 20:35*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 14:11	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 14:11	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 14:11	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 14:11	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 14:11	WG836776
Toluene	ND		0.00500	1	12/25/2015 14:11	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 14:11	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 14:11	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 14:11	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 14:11	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 14:11	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 14:11	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 14:11	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 14:11	WG836776
(S) Toluene-d8	*107*		*90.0-115*		*12/25/2015 14:11*	WG836776
(S) Dibromofluoromethane	*107*		*79.0-121*		*12/25/2015 14:11*	WG836776
(S) 4-Bromofluorobenzene	*93.4*		*80.1-120*		*12/25/2015 14:11*	WG836776

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 20:58	WG837126
(S) α,α,α-Trifluorotoluene(FID)	*99.7*		*62.0-128*		*12/20/2015 20:58*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/29/2015 20:41	WG838908
Cyclohexane	ND		0.00100	1	12/29/2015 20:41	WG838908
Ethylbenzene	ND		0.00100	1	12/29/2015 20:41	WG838908
Isopropylbenzene	ND		0.00100	1	12/29/2015 20:41	WG838908
Methyl Cyclohexane	ND		0.00100	1	12/29/2015 20:41	WG838908
Toluene	ND		0.00500	1	12/29/2015 20:41	WG838908
Xylenes, Total	ND		0.00300	1	12/29/2015 20:41	WG838908
Naphthalene	ND		0.00500	1	12/29/2015 20:41	WG838908
n-Butylbenzene	ND		0.00100	1	12/29/2015 20:41	WG838908
1,2-Dichloroethane	ND		0.00100	1	12/29/2015 20:41	WG838908
1,3,5-Trimethylbenzene	ND		0.00100	1	12/29/2015 20:41	WG838908
1,2,4-Trimethylbenzene	ND		0.00100	1	12/29/2015 20:41	WG838908
2-Butanone (MEK)	ND		0.0100	1	12/29/2015 20:41	WG838908
n-Propylbenzene	ND		0.00100	1	12/29/2015 20:41	WG838908
(S) Toluene-d8	*103*		*90.0-115*		*12/29/2015 20:41*	WG838908
(S) Dibromofluoromethane	*93.4*		*79.0-121*		*12/29/2015 20:41*	WG838908
(S) 4-Bromofluorobenzene	*106*		*80.1-120*		*12/29/2015 20:41*	WG838908

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/20/2015 21:21	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.8*		*52.0-128*		*12/20/2015 21:21*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/29/2015 21:04	WG838908
Cyclohexane	ND		0.00100	1	12/29/2015 21:04	WG838908
Ethylbenzene	ND		0.00100	1	12/29/2015 21:04	WG838908
Isopropylbenzene	ND		0.00100	1	12/29/2015 21:04	WG838908
Methyl Cyclohexane	ND		0.00100	1	12/29/2015 21:04	WG838908
Toluene	ND		0.00500	1	12/29/2015 21:04	WG838908
Xylenes, Total	ND		0.00300	1	12/29/2015 21:04	WG838908
Naphthalene	ND		0.00500	1	12/29/2015 21:04	WG838908
n-Butylbenzene	ND		0.00100	1	12/29/2015 21:04	WG838908
1,2-Dichloroethane	ND		0.00100	1	12/29/2015 21:04	WG838908
1,3,5-Trimethylbenzene	ND		0.00100	1	12/29/2015 21:04	WG838908
1,2,4-Trimethylbenzene	ND		0.00100	1	12/29/2015 21:04	WG838908
2-Butanone (MEK)	ND		0.0100	1	12/29/2015 21:04	WG838908
n-Propylbenzene	ND		0.00100	1	12/29/2015 21:04	WG838908
(S) Toluene-d8	*103*		*90.0-115*		*12/29/2015 21:04*	WG838908
(S) Dibromofluoromethane	*94.5*		*79.0-121*		*12/29/2015 21:04*	WG838908
(S) 4-Bromofluorobenzene	*104*		*80.1-120*		*12/29/2015 21:04*	WG838908

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 07:43	WG836776
Cyclohexane	ND		0.00100	1	12/25/2015 07:43	WG836776
Ethylbenzene	ND		0.00100	1	12/25/2015 07:43	WG836776
Isopropylbenzene	ND		0.00100	1	12/25/2015 07:43	WG836776
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 07:43	WG836776
Toluene	ND		0.00500	1	12/25/2015 07:43	WG836776
Xylenes, Total	ND		0.00300	1	12/25/2015 07:43	WG836776
Naphthalene	ND		0.00500	1	12/25/2015 07:43	WG836776
n-Butylbenzene	ND		0.00100	1	12/25/2015 07:43	WG836776
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 07:43	WG836776
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 07:43	WG836776
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 07:43	WG836776
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 07:43	WG836776
n-Propylbenzene	ND		0.00100	1	12/25/2015 07:43	WG836776
(S) Toluene-d8	*105*		*90.0-115*		*12/25/2015 07:43*	WG836776
(S) Dibromofluoromethane	*107*		*79.0-121*		*12/25/2015 07:43*	WG836776
(S) 4-Bromofluorobenzene	*95.6*		*80.1-120*		*12/25/2015 07:43*	WG836776

QUALITY CONTROL SUMMARY

L807488-01,02,03,04

Method Blank (MB)

(MB) 12/21/15 21:03

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
TPH (GC/FID) Low Fraction	ND		0.100
(S) a,a,a-Trifluorotoluene(FID)	*101*		*62.0-128*

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

(LCS) 12/21/15 20:01 • (LCSD) 12/21/15 20:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.76	4.84	86.5	88.0	67.0-132			1.70	20
(S) a,a,a-Trifluorotoluene(FID)				*101*	*100*	*62.0-128*				

L808078-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/21/15 22:14 • (MS) 12/22/15 02:02 • (MSD) 12/22/15 02:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	4.79	4.80	87.0	87.3	1	50.0-143			0.350	20
(S) a,a,a-Trifluorotoluene(FID)					*100*	*101*		*62.0-128*				

QUALITY CONTROL SUMMARY

L807488-05,06,07,08,09,10,11,12,13,14,15,16,17,18

Method Blank (MB)

(MB) 12/20/15 13:17

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
TPH (GC/FID) Low Fraction	ND		0.100
(S) a,a,a-Trifluorotoluene(FID)	*100*		*62.0-128*

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

(LCS) 12/20/15 12:31 • (LCSD) 12/20/15 14:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.38	6.50	116	118	67.0-132			1.87	20
(S) a,a,a-Trifluorotoluene(FID)				*99.5*	*99.0*	*62.0-128*				

L807531-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/20/15 16:02 • (MS) 12/20/15 14:53 • (MSD) 12/20/15 15:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	6.52	6.12	119	111	1	50.0-143			6.27	20
(S) a,a,a-Trifluorotoluene(FID)					*98.9*	*98.4*		*62.0-128*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) 12/25/15 05:52

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Benzene	ND		0.00100
n-Butylbenzene	ND		0.00100
Cyclohexane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
Ethylbenzene	ND		0.00100
Isopropylbenzene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methyl Cyclohexane	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Toluene	ND		0.00500
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*107*		*90.0-115*
(S) Dibromofluoromethane	*106*		*79.0-121*
(S) 4-Bromofluorobenzene	*95.6*		*80.1-120*

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

(LCS) 12/25/15 03:26 • (LCSD) 12/25/15 03:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0214	0.0219	85.7	87.5	73.0-122			2.08	20
n-Butylbenzene	0.0250	0.0246	0.0240	98.3	96.1	75.9-134			2.17	20
1,2-Dichloroethane	0.0250	0.0226	0.0227	90.6	90.8	65.3-126			0.230	20
Ethylbenzene	0.0250	0.0216	0.0223	86.5	89.2	80.9-121			3.04	20
Isopropylbenzene	0.0250	0.0212	0.0220	84.8	88.1	81.6-124			3.89	20
2-Butanone (MEK)	0.125	0.115	0.118	92.3	94.6	46.4-155			2.54	20
Naphthalene	0.0250	0.0220	0.0206	88.0	82.4	69.7-134			6.60	20
n-Propylbenzene	0.0250	0.0222	0.0230	88.7	91.9	81.9-122			3.53	20
Toluene	0.0250	0.0220	0.0215	88.0	86.0	77.9-116			2.36	20
1,2,4-Trimethylbenzene	0.0250	0.0233	0.0221	93.4	88.4	79.0-122			5.49	20
1,3,5-Trimethylbenzene	0.0250	0.0219	0.0221	87.5	88.4	81.0-123			1.05	20
Xylenes, Total	0.0750	0.0629	0.0627	83.9	83.6	79.2-122			0.340	20
(S) Toluene-d8				*106*	*105*	*90.0-115*				

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

(LCS) 12/25/15 03:26 • (LCSD) 12/25/15 03:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane				*101*	*101*	*79.0-121*				
(S) 4-Bromofluorobenzene				*97.5*	*94.9*	*80.1-120*				

L807488-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/25/15 08:07 • (MS) 12/25/15 06:29 • (MSD) 12/25/15 06:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0220	0.0219	87.9	87.5	1	58.6-133			0.480	20
n-Butylbenzene	0.0250	ND	0.0261	0.0236	104	94.3	1	64.8-145			9.99	20
1,2-Dichloroethane	0.0250	ND	0.0246	0.0241	98.3	96.5	1	60.7-132			1.92	20
Ethylbenzene	0.0250	ND	0.0213	0.0210	85.2	84.0	1	62.7-136			1.46	20
Isopropylbenzene	0.0250	ND	0.0219	0.0210	87.6	84.1	1	67.4-136			4.06	20
2-Butanone (MEK)	0.125	ND	0.0849	0.0843	67.9	67.4	1	45.0-156			0.670	20.8
Naphthalene	0.0250	ND	0.0220	0.0207	87.9	82.7	1	61.8-143			6.09	20
n-Propylbenzene	0.0250	ND	0.0220	0.0224	88.0	89.4	1	63.2-139			1.65	20
Toluene	0.0250	ND	0.0215	0.0216	85.8	86.3	1	67.8-124			0.570	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0218	0.0218	87.3	87.3	1	60.5-137			0.0400	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0215	0.0216	86.1	86.3	1	67.9-134			0.170	20
Xylenes, Total	0.0750	ND	0.0623	0.0625	83.0	83.4	1	65.6-133			0.460	20
(S) Toluene-d8					*106*	*107*		*90.0-115*				
(S) Dibromofluoromethane					*106*	*107*		*79.0-121*				
(S) 4-Bromofluorobenzene					*94.3*	*97.3*		*80.1-120*				

QUALITY CONTROL SUMMARY

L807488-05

Method Blank (MB)

(MB) 12/28/15 14:39

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Cyclohexane	ND		0.00100
Toluene	ND		0.00500

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

(LCS) 12/28/15 13:21 • (LCSD) 12/28/15 13:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Toluene	0.0250	0.0256	0.0258	102	103	77.9-116			0.790	20

L807997-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/28/15 17:46 • (MS) 12/28/15 18:06 • (MSD) 12/28/15 18:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Toluene	0.0250	ND	0.0226	0.0236	90.3	94.5	1	67.8-124			4.48	20

Method Blank (MB)

(MB) 12/29/15 14:36

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Benzene	ND		0.00100
n-Butylbenzene	ND		0.00100
Cyclohexane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
Ethylbenzene	ND		0.00100
Isopropylbenzene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methyl Cyclohexane	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Toluene	ND		0.00500
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*102*		*90.0-115*
(S) Dibromofluoromethane	*95.8*		*79.0-121*
(S) 4-Bromofluorobenzene	*103*		*80.1-120*

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

(LCS) 12/29/15 12:43 • (LCSD) 12/29/15 13:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0231	0.0221	92.5	88.5	73.0-122			4.45	20
n-Butylbenzene	0.0250	0.0269	0.0258	107	103	75.9-134			4.18	20
1,2-Dichloroethane	0.0250	0.0250	0.0239	99.9	95.6	65.3-126			4.36	20
Ethylbenzene	0.0250	0.0267	0.0254	107	101	80.9-121			5.04	20
Isopropylbenzene	0.0250	0.0264	0.0251	106	100	81.6-124			5.01	20
2-Butanone (MEK)	0.125	0.127	0.117	101	93.3	46.4-155			8.24	20
Naphthalene	0.0250	0.0265	0.0254	106	101	69.7-134			4.46	20
n-Propylbenzene	0.0250	0.0269	0.0256	108	103	81.9-122			4.96	20
Toluene	0.0250	0.0249	0.0237	99.4	95.0	77.9-116			4.59	20
1,2,4-Trimethylbenzene	0.0250	0.0271	0.0260	108	104	79.0-122			3.96	20
1,3,5-Trimethylbenzene	0.0250	0.0281	0.0266	112	106	81.0-123			5.60	20
Xylenes, Total	0.0750	0.0806	0.0772	107	103	79.2-122			4.39	20
(S) Toluene-d8				*103*	*103*	*90.0-115*				

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

(LCS) 12/29/15 12:43 • (LCSD) 12/29/15 13:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane				*96.5*	*96.1*	*79.0-121*				
(S) 4-Bromofluorobenzene				*105*	*103*	*80.1-120*				

L807483-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/29/15 16:55 • (MS) 12/29/15 17:40 • (MSD) 12/29/15 18:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.000418	0.0183	0.0187	71.4	73.1	1	58.6-133			2.34	20
n-Butylbenzene	0.0250	ND	0.0206	0.0212	82.5	84.6	1	64.8-145			2.49	20
1,2-Dichloroethane	0.0250	ND	0.0204	0.0209	81.8	83.6	1	60.7-132			2.17	20
Ethylbenzene	0.0250	0.000194	0.0214	0.0219	85.0	86.7	1	62.7-136			1.94	20
Isopropylbenzene	0.0250	0.00144	0.0228	0.0230	85.4	86.3	1	67.4-136			0.960	20
2-Butanone (MEK)	0.125	ND	0.0768	0.0793	61.5	63.4	1	45.0-156			3.19	20.8
Naphthalene	0.0250	0.000969	0.0236	0.0246	90.7	94.5	1	61.8-143			3.93	20
n-Propylbenzene	0.0250	0.000546	0.0216	0.0222	84.4	86.4	1	63.2-139			2.29	20
Toluene	0.0250	ND	0.0197	0.0200	78.7	80.2	1	67.8-124			1.92	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0216	0.0220	86.6	88.1	1	60.5-137			1.80	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0221	0.0228	88.5	91.0	1	67.9-134			2.83	20
Xylenes, Total	0.0750	0.000494	0.0640	0.0650	84.6	86.0	1	65.6-133			1.65	20
(S) Toluene-d8					*102*	*102*		*90.0-115*				
(S) Dibromofluoromethane					*97.1*	*97.5*		*79.0-121*				
(S) 4-Bromofluorobenzene					*105*	*103*		*80.1-120*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [14]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

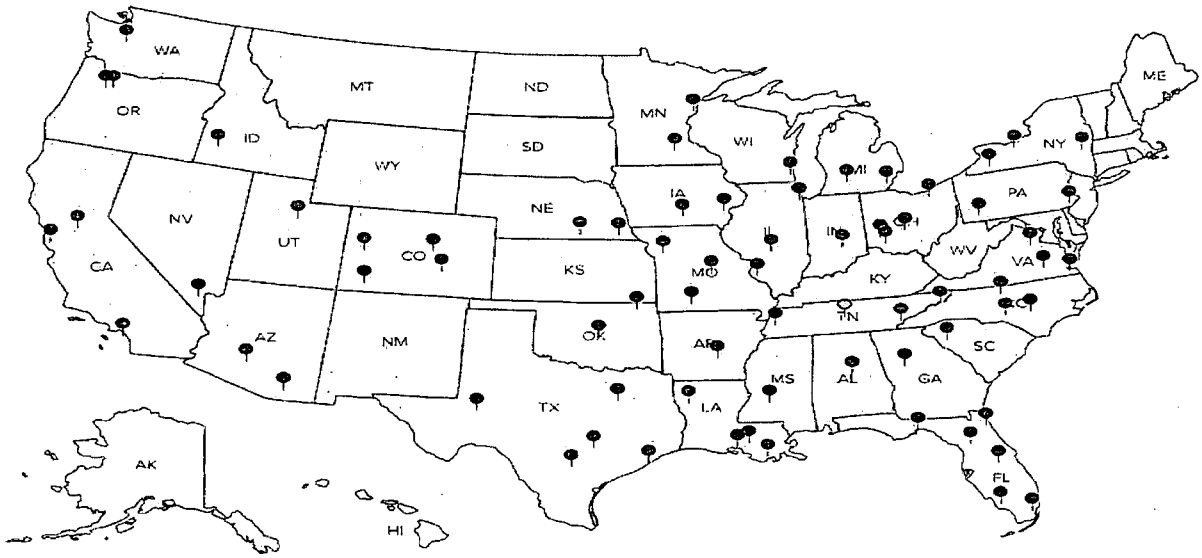
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Apex Companies, LLC- Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Tal Alfred

Site/Facility ID #: ANDOVER QUAIL CROSSING

P.O. #

Collected by (signature):

Immediately Packed on Ice. N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page 1 of 3

ESC LABS SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L807488
D121

Acctnum: ASHCREPOR
Template: T107889
Prelogin: P534311
TSR: 358 - Jarred Willis
PB: 12-3-15

Shipped Via: FedEx Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl-Blk							Rem./Contaminant	Sample # (lab only)
2004 N COLT COURT	Grab	GW	NA	12/15/15	1625	5	X	X									-01
2002 N COLT COURT		GW		12/15/15	1615	5	X	X									-02
2001 N COLT COURT		GW		12/15/15	1620	5	X	X									-03
2006 N COLT COURT		GW		12/16/15	0915	5	X	X									-04
2005 N COLT COURT		GW		12/15/15	1610	5	X	X									-05
2007 N COLT COURT		GW		12/15/15	1022	5	X	X									-06
1211 W QUAIL CROSSING		GW		12/15/15	1005	5	X	X									-07
2019 N RUGER CIRCLE		GW		12/15/15	0830	5	X	X									-08
2020 N RUGER CIRCLE		GW		12/15/15	1205	5	X	X									-09
2028 N RUGER CIRCLE		GW		12/15/15	1035	5	X	X									-10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	12-16-15	1630	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____

Temp: 3.2 °C Bottles Received: 90

Date: 12/17/15 Time: 9:10

Hold #

Condition: (lab use only) good

COC Seal Intact: ✓ Y ___ N ✓ NA

pH Checked: NCF: X

6529 7910 1820

Apex Companies, LLC- Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID #: ANDOVER QUAIL CROSSING

P.O. #

Collected by (signature):

Immediately Packed on Ice N___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO8015 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl-Blk	Rem./Contaminant	Sample # (lab only)
2032 N RUGER CIRCLE	Grab	GW	NA	12/15/15	1090	5	X	X			-11
2021 N RUGER COURT		GW		12/15/15	1145	5	X	X			-12
2025 N RUGER COURT		GW		12/15/15	1115	5	X	X			-13
2007 N MOUNTAIN COURT		GW		12/16/15	0940	5	X	X			-14
2009 N MOUNTAIN COURT		GW		12/16/15	0930	5	X	X			-15
1009 W MOUNTAIN		GW		12/16/15	1400	5	X	X			-16
HOA-1		GW		12/16/15	1140	5	X	X			-17
DUP-3		GW		12/16/15	—	5	X	X			-18
~~DUP-2~~		~~GW~~				~~5~~	~~X~~	~~X~~			
		~~GW~~				~~5~~	~~X~~	~~X~~			

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	12-16-15	1630	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ ___
Temp: 3.2 °C Bottles Received: 90
Date: 12/17/15 Time: 910

Hold #
Condition: (lab use only) GOOD
COC Seal Intact: ✓ Y ___N ___NA
pH Checked: NCF: X

Chain of Custody Page 2 of 2

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L807488
Table #:
Acctnum: ASHCREPOR
Template: T107889
Prelogin: P534311
TSR: 358 - Jarred Willis
PB: 12-31-15
Shipped Via: FedEX Ground

Apex Companies, LLC- Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:

Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID #: ANDOVER QUAIL CROSSING

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No ___Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl-Blk							Rem./Contaminant	Sample # (lab only)
TRIP BLANK	—	GW	—	—	—	1			X								
TRIP BLANK	—	GW	—	—	—	1			X								

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	12-16-15	1630	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ ____

Temp: 3.2 °C Bottles Received: 7 d

Date: 12/17/15 Time: 900

Chain of Custody Page 3 of 3

ESC LAB SCIENCES
YOUR SUPPLY CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L.# 6807

Table #

Acctnum: ASHCREPOR

Template: T107889

Prelogin: P534311

TSR: 358 - Jarred Willis

PB: 12.3.15

Shipped Via: FedEx Ground

Hold #

Condition: (lab use only) GOO

COC Seal Intact: ✓ Y ___ N ___ NA

pH Checked: ___ NCF: ___

Troy Dunlap

ESC Lab Sciences
Non-Conformance Form

Login #: L807488	Client: ASHCREPOR	Date: 12/17/15	Evaluated by: Ryan Jones

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.	X	Improper handling by carrier (FedEx / UPS / Couri
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc.		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
X	Broken container:		Chain of Custody is missing		Date/Time:
X	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Received one 40ml vial broken for 2009 N Mountain Court. Sufficient sample remains.

Client informed by:		Call		Email		Voice Mail		Date:	Time:
TSR Initials:	Client Contact:								

Login Instructions:

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

ESC LAB SCIENCES
YOUR LAB OF CHOICE

ANALYTICAL REPORT

December 31, 2015

myESC
REAL TIME DATA ACCESS

Apex Companies, LLC- Portland, OR

Sample Delivery Group:	L807489
Samples Received:	12/17/2015
Project Number:	E3CE-0065
Description:	Andover Release Site - 4Q2015 Quail Crossing GWM
Site:	ANDOVER QUAIL CROSSING
Report To:	Samuel Jackson 3015 SW First Avenue Portland, OR 97201-4707

Entire Report Reviewed By: Jarred Willis

Jarred Willis
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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MW-1 L807489-01 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 11:24 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	10	12/22/15 16:40	12/22/15 16:40	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	10	12/27/15 18:12	12/27/15 18:12	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG839037	100	12/30/15 08:00	12/30/15 08:00	DWR

MW-2 L807489-02 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 15:52 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 17:02	12/22/15 17:02	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 18:31	12/27/15 18:31	BMB

MW-3 L807489-03 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 10:52 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 17:25	12/22/15 17:25	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	5	12/27/15 18:50	12/27/15 18:50	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG839037	25	12/30/15 08:21	12/30/15 08:21	DWR

MW-4 L807489-04 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 12:35 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 17:47	12/22/15 17:47	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 19:10	12/27/15 19:10	BMB

MW-5 L807489-05 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 08:03 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 18:09	12/22/15 18:09	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 19:29	12/27/15 19:29	BMB

MW-6 L807489-06 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 08:46 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 18:32	12/22/15 18:32	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 19:48	12/27/15 19:48	BMB

MW-7 L807489-07 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 08:20 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 18:54	12/22/15 18:54	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 20:07	12/27/15 20:07	BMB

MW-8 L807489-08 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 08:45 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 19:17	12/22/15 19:17	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 20:27	12/27/15 20:27	BMB

MW-9 L807489-09 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 14:42 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 19:39	12/22/15 19:39	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 20:46	12/27/15 20:46	BMB

MW-10 L807489-10 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 15:25 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 20:01	12/22/15 20:01	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 21:05	12/27/15 21:05	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838908	5	12/29/15 15:02	12/29/15 15:02	JHH

MW-11 L807489-11 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 12:08 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 20:23	12/22/15 20:23	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 17:52	12/27/15 17:52	BMB

MW-12 L807489-12 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 10:12 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 20:46	12/22/15 20:46	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 21:24	12/27/15 21:24	BMB

MW-13 L807489-13 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 09:22 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 21:08	12/22/15 21:08	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 21:44	12/27/15 21:44	BMB

MW-14 L807489-14 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 10:03 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 21:30	12/22/15 21:30	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 22:03	12/27/15 22:03	BMB

MW-15 L807489-15 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 10:40 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 21:52	12/22/15 21:52	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 22:22	12/27/15 22:22	BMB

MW-16 L807489-16 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 11:32 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 22:14	12/22/15 22:14	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 22:41	12/27/15 22:41	BMB

MW-17 L807489-17 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 12:50 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 22:37	12/22/15 22:37	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 23:01	12/27/15 23:01	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838908	10	12/29/15 17:17	12/29/15 17:17	DAH

MW-18 L807489-18 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 13:10 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 22:59	12/22/15 22:59	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 23:20	12/27/15 23:20	BMB

MW-19 L807489-19 GW

Collected by: Ted Alfred | Collected date/time: 12/15/15 14:03 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 23:21	12/22/15 23:21	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 23:39	12/27/15 23:39	BMB

SVE-2 L807489-20 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 13:45 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837127	1	12/22/15 23:43	12/22/15 23:43	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836777	1	12/27/15 23:59	12/27/15 23:59	BMB

SVE-4 L807489-21 GW

Collected by: Ted Alfred | Collected date/time: 12/16/15 14:05 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	50	12/20/15 21:43	12/20/15 21:43	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838908	5	12/29/15 21:26	12/29/15 21:26	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG839188	20	12/30/15 14:43	12/30/15 14:43	ACG

DUP-1 L807489-22 GW

Collected by	Collected date/time	Received date/time
Ted Alfred	12/15/15 00:00	12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/21/15 00:14	12/21/15 00:14	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG837089	1	12/25/15 10:18	12/25/15 10:18	ACG

DUP-2 L807489-23 GW

Collected by	Collected date/time	Received date/time
Ted Alfred	12/15/15 00:00	12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG837126	1	12/21/15 00:37	12/21/15 00:37	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG837089	1	12/25/15 10:37	12/25/15 10:37	ACG

TRIP BLANK L807489-24 GW

Collected by	Collected date/time	Received date/time
Ted Alfred	12/16/15 00:00	12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG837089	1	12/25/15 06:07	12/25/15 06:07	ACG

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis

Jarred Willis
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	38.3		1.00	10	12/22/2015 16:40	WG837127
(S) a,a,a-Trifluorotoluene(FID)	*86.6*		*62.0-128*		*12/22/2015 16:40*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	5.68		0.100	100	12/30/2015 08:00	WG839037
Cyclohexane	0.113		0.0100	10	12/27/2015 18:12	WG836777
Ethylbenzene	1.26		0.0100	10	12/27/2015 18:12	WG836777
Isopropylbenzene	0.0219		0.0100	10	12/27/2015 18:12	WG836777
Methyl Cyclohexane	0.0138		0.0100	10	12/27/2015 18:12	WG836777
Toluene	7.81		0.500	100	12/30/2015 08:00	WG839037
Xylenes, Total	4.91		0.0300	10	12/27/2015 18:12	WG836777
Naphthalene	0.0944		0.0500	10	12/27/2015 18:12	WG836777
n-Butylbenzene	ND		0.0100	10	12/27/2015 18:12	WG836777
1,2-Dichloroethane	ND		0.0100	10	12/27/2015 18:12	WG836777
1,3,5-Trimethylbenzene	0.160		0.0100	10	12/27/2015 18:12	WG836777
1,2,4-Trimethylbenzene	0.508		0.0100	10	12/27/2015 18:12	WG836777
2-Butanone (MEK)	ND		0.100	10	12/27/2015 18:12	WG836777
n-Propylbenzene	0.0461		0.0100	10	12/27/2015 18:12	WG836777
(S) Toluene-d8	*103*		*90.0-115*		*12/27/2015 18:12*	WG836777
(S) Dibromofluoromethane	*103*		*79.0-121*		*12/27/2015 18:12*	WG836777
(S) 4-Bromofluorobenzene	*96.7*		*80.1-120*		*12/27/2015 18:12*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 17:02	WG837127
(S) a,a,a-Trifluorotoluene(FID)	*92.9*		*62.0-128*		*12/22/2015 17:02*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 18:31	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 18:31	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 18:31	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 18:31	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 18:31	WG836777
Toluene	ND		0.00500	1	12/27/2015 18:31	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 18:31	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 18:31	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 18:31	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 18:31	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 18:31	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 18:31	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 18:31	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 18:31	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 18:31*	WG836777
(S) Dibromofluoromethane	*100*		*79.0-121*		*12/27/2015 18:31*	WG836777
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/27/2015 18:31*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	4.75		0.100	1	12/22/2015 17:25	WG837127
(S) α,α,α-Trifluorotoluene(FID)	*90.4*		*62.0-128*		*12/22/2015 17:25*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.849		0.00500	5	12/27/2015 18:50	WG836777
Cyclohexane	0.151		0.0250	25	12/30/2015 08:21	WG839037
Ethylbenzene	0.643		0.00500	5	12/27/2015 18:50	WG836777
Isopropylbenzene	0.0255		0.00500	5	12/27/2015 18:50	WG836777
Methyl Cyclohexane	0.0215		0.00500	5	12/27/2015 18:50	WG836777
Toluene	ND		0.0250	5	12/27/2015 18:50	WG836777
Xylenes, Total	ND		0.0150	5	12/27/2015 18:50	WG836777
Naphthalene	0.0536		0.0250	5	12/27/2015 18:50	WG836777
n-Butylbenzene	ND		0.00500	5	12/27/2015 18:50	WG836777
1,2-Dichloroethane	ND		0.00500	5	12/27/2015 18:50	WG836777
1,3,5-Trimethylbenzene	0.0317		0.00500	5	12/27/2015 18:50	WG836777
1,2,4-Trimethylbenzene	0.241		0.00500	5	12/27/2015 18:50	WG836777
2-Butanone (MEK)	ND		0.0500	5	12/27/2015 18:50	WG836777
n-Propylbenzene	0.0605		0.00500	5	12/27/2015 18:50	WG836777
(S) Toluene-d8	*103*		*90.0-115*		*12/27/2015 18:50*	WG836777
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/27/2015 18:50*	WG836777
(S) 4-Bromofluorobenzene	*97.1*		*80.1-120*		*12/27/2015 18:50*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 17:47	WG837127
(S) α,α,α-Trifluorotoluene(FID)	*92.7*		*62.0-128*		*12/22/2015 17:47*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 19:10	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 19:10	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 19:10	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 19:10	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 19:10	WG836777
Toluene	ND		0.00500	1	12/27/2015 19:10	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 19:10	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 19:10	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 19:10	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 19:10	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 19:10	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 19:10	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 19:10	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 19:10	WG836777
(S) Toluene-d8	*101*		*90.0-115*		*12/27/2015 19:10*	WG836777
(S) Dibromofluoromethane	*100*		*79.0-121*		*12/27/2015 19:10*	WG836777
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/27/2015 19:10*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 18:09	WG837127
(S) a,a,a-Trifluorotoluene(FID)	*93.6*		*62.0-128*		*12/22/2015 18:09*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 19:29	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 19:29	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 19:29	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 19:29	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 19:29	WG836777
Toluene	ND		0.00500	1	12/27/2015 19:29	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 19:29	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 19:29	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 19:29	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 19:29	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 19:29	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 19:29	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 19:29	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 19:29	WG836777
(S) Toluene-d8	*101*		*90.0-115*		*12/27/2015 19:29*	WG836777
(S) Dibromofluoromethane	*99.2*		*79.0-121*		*12/27/2015 19:29*	WG836777
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/27/2015 19:29*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 18:32	WG837127
(S) α,α,α-Trifluorotoluene(FID)	*92.8*		*62.0-128*		*12/22/2015 18:32*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 19:48	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 19:48	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 19:48	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 19:48	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 19:48	WG836777
Toluene	ND		0.00500	1	12/27/2015 19:48	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 19:48	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 19:48	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 19:48	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 19:48	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 19:48	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 19:48	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 19:48	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 19:48	WG836777
(S) Toluene-d8	*101*		*90.0-115*		*12/27/2015 19:48*	WG836777
(S) Dibromofluoromethane	*102*		*79.0-121*		*12/27/2015 19:48*	WG836777
(S) 4-Bromofluorobenzene	*97.2*		*80.1-120*		*12/27/2015 19:48*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 18:54	WG837127
(S) a,a,a-Trifluorotoluene(FID)	*93.5*		*62.0-128*		*12/22/2015 18:54*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 20:07	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 20:07	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 20:07	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 20:07	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 20:07	WG836777
Toluene	ND		0.00500	1	12/27/2015 20:07	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 20:07	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 20:07	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 20:07	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 20:07	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 20:07	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 20:07	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 20:07	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 20:07	WG836777
(S) Toluene-d8	*101*		*90.0-115*		*12/27/2015 20:07*	WG836777
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/27/2015 20:07*	WG836777
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/27/2015 20:07*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 19:17	WG837127
(S)-a,a,a-Trifluorotoluene(FID)	*92.9*		*62.0-128*		*12/22/2015 19:17*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 20:27	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 20:27	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 20:27	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 20:27	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 20:27	WG836777
Toluene	ND		0.00500	1	12/27/2015 20:27	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 20:27	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 20:27	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 20:27	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 20:27	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 20:27	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 20:27	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 20:27	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 20:27	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 20:27*	WG836777
(S) Dibromofluoromethane	*100*		*79.0-121*		*12/27/2015 20:27*	WG836777
(S) 4-Bromofluorobenzene	*97.9*		*80.1-120*		*12/27/2015 20:27*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 19:39	WG837127
(S) o,o,o-Trifluorotoluene(FID)	*92.5*		*62.0-128*		*12/22/2015 19:39*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 20:46	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 20:46	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 20:46	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 20:46	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 20:46	WG836777
Toluene	ND		0.00500	1	12/27/2015 20:46	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 20:46	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 20:46	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 20:46	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 20:46	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 20:46	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 20:46	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 20:46	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 20:46	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 20:46*	WG836777
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/27/2015 20:46*	WG836777
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/27/2015 20:46*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.212		0.100	1	12/22/2015 20:01	WG837127
(S) a,a,a-Trifluorotoluene(FID)	*89.9*		*62.0-128*		*12/22/2015 20:01*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00819		0.00100	1	12/27/2015 21:05	WG836777
Cyclohexane	0.0336		0.00500	5	12/29/2015 15:02	WG838908
Ethylbenzene	ND		0.00100	1	12/27/2015 21:05	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 21:05	WG836777
Methyl Cyclohexane	0.00514		0.00100	1	12/27/2015 21:05	WG836777
Toluene	ND		0.00500	1	12/27/2015 21:05	WG836777
Xylenes, Total	0.00577		0.00300	1	12/27/2015 21:05	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 21:05	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 21:05	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 21:05	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 21:05	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 21:05	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 21:05	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 21:05	WG836777
(S) Toluene-d8	*103*		*90.0-115*		*12/27/2015 21:05*	WG836777
(S) Dibromofluoromethane	*100*		*79.0-121*		*12/27/2015 21:05*	WG836777
(S) 4-Bromofluorobenzene	*98.3*		*80.1-120*		*12/27/2015 21:05*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 20:23	WG837127
(S) a,a,a-Trifluorotoluene(FID)	*93.0*		*62.0-128*		*12/22/2015 20:23*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 17:52	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 17:52	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 17:52	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 17:52	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 17:52	WG836777
Toluene	ND		0.00500	1	12/27/2015 17:52	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 17:52	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 17:52	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 17:52	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 17:52	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 17:52	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 17:52	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 17:52	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 17:52	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 17:52*	WG836777
(S) Dibromofluoromethane	*99.9*		*79.0-121*		*12/27/2015 17:52*	WG836777
(S) 4-Bromofluorobenzene	*99.9*		*80.1-120*		*12/27/2015 17:52*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 20:46	WG837127
(S) a,a,a-Trifluorotoluene(FID)	*93.7*		*62.0-128*		*12/22/2015 20:46*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 21:24	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 21:24	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 21:24	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 21:24	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 21:24	WG836777
Toluene	ND		0.00500	1	12/27/2015 21:24	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 21:24	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 21:24	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 21:24	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 21:24	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 21:24	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 21:24	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 21:24	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 21:24	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 21:24*	WG836777
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/27/2015 21:24*	WG836777
(S) 4-Bromofluorobenzene	*97.3*		*80.1-120*		*12/27/2015 21:24*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 21:08	WG837127
(S) o,o,o-Trifluorotoluene(FID)	*93.3*		*62.0-128*		*12/22/2015 21:08*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 21:44	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 21:44	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 21:44	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 21:44	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 21:44	WG836777
Toluene	ND		0.00500	1	12/27/2015 21:44	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 21:44	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 21:44	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 21:44	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 21:44	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 21:44	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 21:44	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 21:44	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 21:44	WG836777
(S) Toluene-d8	*101*		*90.0-115*		*12/27/2015 21:44*	WG836777
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/27/2015 21:44*	WG836777
(S) 4-Bromofluorobenzene	*100*		*80.1-120*		*12/27/2015 21:44*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 21:30	WG837127
(S) α,α,α-Trifluorotoluene(FID)	*93.6*		*62.0-128*		*12/22/2015 21:30*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 22:03	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 22:03	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 22:03	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 22:03	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 22:03	WG836777
Toluene	ND		0.00500	1	12/27/2015 22:03	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 22:03	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 22:03	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 22:03	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 22:03	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 22:03	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 22:03	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 22:03	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 22:03	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 22:03*	WG836777
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/27/2015 22:03*	WG836777
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/27/2015 22:03*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 21:52	WG837127
(S) a;a,a-Trifluorotoluene(FID)	*92.9*		*62.0-128*		*12/22/2015 21:52*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 22:22	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 22:22	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 22:22	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 22:22	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 22:22	WG836777
Toluene	ND		0.00500	1	12/27/2015 22:22	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 22:22	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 22:22	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 22:22	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 22:22	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 22:22	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 22:22	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 22:22	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 22:22	WG836777
(S) Toluene-d8	*103*		*90.0-115*		*12/27/2015 22:22*	WG836777
(S) Dibromofluoromethane	*100*		*79.0-121*		*12/27/2015 22:22*	WG836777
(S) 4-Bromofluorobenzene	*98.9*		*80.1-120*		*12/27/2015 22:22*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 22:14	WG837127
(S) α,α,α-Trifluorotoluene(FID)	*93.8*		*62.0-128*		*12/22/2015 22:14*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/27/2015 22:41	WG836777
Cyclohexane	ND		0.00100	1	12/27/2015 22:41	WG836777
Ethylbenzene	ND		0.00100	1	12/27/2015 22:41	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 22:41	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 22:41	WG836777
Toluene	ND		0.00500	1	12/27/2015 22:41	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 22:41	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 22:41	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 22:41	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 22:41	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 22:41	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 22:41	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 22:41	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 22:41	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 22:41*	WG836777
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/27/2015 22:41*	WG836777
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/27/2015 22:41*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	2.24		0.100	1	12/22/2015 22:37	WG837127
(S) α,α,α-Trifluorotoluene(FID)	*94.2*		*62.0-128*		*12/22/2015 22:37*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.267		0.0100	10	12/29/2015 17:17	WG838908
Cyclohexane	0.0800		0.0100	10	12/29/2015 17:17	WG838908
Ethylbenzene	0.153		0.00100	1	12/27/2015 23:01	WG836777
Isopropylbenzene	0.00807		0.00100	1	12/27/2015 23:01	WG836777
Methyl Cyclohexane	0.0142		0.00100	1	12/27/2015 23:01	WG836777
Toluene	0.0619		0.00500	1	12/27/2015 23:01	WG836777
Xylenes, Total	0.0788		0.00300	1	12/27/2015 23:01	WG836777
Naphthalene	0.0125		0.00500	1	12/27/2015 23:01	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 23:01	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 23:01	WG836777
1,3,5-Trimethylbenzene	0.00125		0.00100	1	12/27/2015 23:01	WG836777
1,2,4-Trimethylbenzene	0.0520		0.00100	1	12/27/2015 23:01	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 23:01	WG836777
n-Propylbenzene	0.0137		0.00100	1	12/27/2015 23:01	WG836777
(S) Toluene-d8	*104*		*90.0-115*		*12/27/2015 23:01*	WG836777
(S) Dibromofluoromethane	*99.8*		*79.0-121*		*12/27/2015 23:01*	WG836777
(S) 4-Bromofluorobenzene	*99.2*		*80.1-120*		*12/27/2015 23:01*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 22:59	WG837127
(S) α,α,α-Trifluorotoluene(FID)	*93.0*		*62.0-128*		*12/22/2015 22:59*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00929		0.00100	1	12/27/2015 23:20	WG836777
Cyclohexane	0.00178		0.00100	1	12/27/2015 23:20	WG836777
Ethylbenzene	0.00446		0.00100	1	12/27/2015 23:20	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 23:20	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 23:20	WG836777
Toluene	ND		0.00500	1	12/27/2015 23:20	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 23:20	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 23:20	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 23:20	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 23:20	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 23:20	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 23:20	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 23:20	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 23:20	WG836777
(S) Toluene-d8	*101*		*90.0-115*		*12/27/2015 23:20*	WG836777
(S) Dibromofluoromethane	*100*		*79.0-121*		*12/27/2015 23:20*	WG836777
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/27/2015 23:20*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 23:21	WG837127
(S) a,a,a-Trifluorotoluene(FID)	*93.4*		*62.0-128*		*12/22/2015 23:21*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00545		0.00100	1	12/27/2015 23:39	WG836777
Cyclohexane	0.00105		0.00100	1	12/27/2015 23:39	WG836777
Ethylbenzene	0.00169		0.00100	1	12/27/2015 23:39	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 23:39	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 23:39	WG836777
Toluene	ND		0.00500	1	12/27/2015 23:39	WG836777
Xylenes, Total	ND		0.00300	1	12/27/2015 23:39	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 23:39	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 23:39	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 23:39	WG836777
1,3,5-Trimethylbenzene	ND		0.00100	1	12/27/2015 23:39	WG836777
1,2,4-Trimethylbenzene	ND		0.00100	1	12/27/2015 23:39	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 23:39	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 23:39	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 23:39*	WG836777
(S) Dibromofluoromethane	*99.0*		*79.0-121*		*12/27/2015 23:39*	WG836777
(S) 4-Bromofluorobenzene	*98.4*		*80.1-120*		*12/27/2015 23:39*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/22/2015 23:43	WG837127
(S) α,α,α-Trifluorotoluene(FID)	*93.5*		*62.0-128*		*12/22/2015 23:43*	WG837127

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.00637		0.00100	1	12/27/2015 23:59	WG836777
Cyclohexane	0.00132		0.00100	1	12/27/2015 23:59	WG836777
Ethylbenzene	0.00812		0.00100	1	12/27/2015 23:59	WG836777
Isopropylbenzene	ND		0.00100	1	12/27/2015 23:59	WG836777
Methyl Cyclohexane	ND		0.00100	1	12/27/2015 23:59	WG836777
Toluene	0.0192		0.00500	1	12/27/2015 23:59	WG836777
Xylenes, Total	0.0252		0.00300	1	12/27/2015 23:59	WG836777
Naphthalene	ND		0.00500	1	12/27/2015 23:59	WG836777
n-Butylbenzene	ND		0.00100	1	12/27/2015 23:59	WG836777
1,2-Dichloroethane	ND		0.00100	1	12/27/2015 23:59	WG836777
1,3,5-Trimethylbenzene	0.00176		0.00100	1	12/27/2015 23:59	WG836777
1,2,4-Trimethylbenzene	0.00651		0.00100	1	12/27/2015 23:59	WG836777
2-Butanone (MEK)	ND		0.0100	1	12/27/2015 23:59	WG836777
n-Propylbenzene	ND		0.00100	1	12/27/2015 23:59	WG836777
(S) Toluene-d8	*102*		*90.0-115*		*12/27/2015 23:59*	WG836777
(S) Dibromofluoromethane	*99.7*		*79.0-121*		*12/27/2015 23:59*	WG836777
(S) 4-Bromofluorobenzene	*99.8*		*80.1-120*		*12/27/2015 23:59*	WG836777

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	15.5		5.00	50	12/20/2015 21:43	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.3*		*62.0-128*		*12/20/2015 21:43*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00500	5	12/29/2015 21:26	WG838908
Cyclohexane	0.0596		0.0200	20	12/30/2015 14:43	WG839188
Ethylbenzene	0.343		0.00500	5	12/29/2015 21:26	WG838908
Isopropylbenzene	ND		0.00500	5	12/29/2015 21:26	WG838908
Methyl Cyclohexane	0.0753		0.0200	20	12/30/2015 14:43	WG839188
Toluene	ND		0.0250	5	12/29/2015 21:26	WG838908
Xylenes, Total	0.466		0.0150	5	12/29/2015 21:26	WG838908
Naphthalene	0.198		0.0250	5	12/29/2015 21:26	WG838908
n-Butylbenzene	0.144		0.00500	5	12/29/2015 21:26	WG838908
1,2-Dichloroethane	ND		0.00500	5	12/29/2015 21:26	WG838908
1,3,5-Trimethylbenzene	0.951		0.00500	5	12/29/2015 21:26	WG838908
1,2,4-Trimethylbenzene	1.01		0.0200	20	12/30/2015 14:43	WG839188
2-Butanone (MEK)	ND		0.0500	5	12/29/2015 21:26	WG838908
n-Propylbenzene	0.470		0.00500	5	12/29/2015 21:26	WG838908
(S) Toluene-d8	*100*		*90.0-115*		*12/29/2015 21:26*	WG838908
(S) Dibromofluoromethane	*92.7*		*79.0-121*		*12/29/2015 21:26*	WG838908
(S) 4-Bromofluorobenzene	*119*		*80.1-120*		*12/29/2015 21:26*	WG838908

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/21/2015 00:14	WG837126
(S) a,a,a-Trifluorotoluene(FID)	*99.7*		*62.0-128*		*12/21/2015 00:14*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 10:18	WG837089
Cyclohexane	ND		0.00100	1	12/25/2015 10:18	WG837089
Ethylbenzene	ND		0.00100	1	12/25/2015 10:18	WG837089
Isopropylbenzene	ND		0.00100	1	12/25/2015 10:18	WG837089
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 10:18	WG837089
Toluene	ND		0.00500	1	12/25/2015 10:18	WG837089
Xylenes, Total	ND		0.00300	1	12/25/2015 10:18	WG837089
Naphthalene	ND		0.00500	1	12/25/2015 10:18	WG837089
n-Butylbenzene	ND		0.00100	1	12/25/2015 10:18	WG837089
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 10:18	WG837089
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:18	WG837089
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:18	WG837089
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 10:18	WG837089
n-Propylbenzene	ND		0.00100	1	12/25/2015 10:18	WG837089
(S) Toluene-d8	*101*		*90.0-115*		*12/25/2015 10:18*	WG837089
(S) Dibromofluoromethane	*99.8*		*79.0-121*		*12/25/2015 10:18*	WG837089
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/25/2015 10:18*	WG837089

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	12/21/2015 00:37	WG837126
(S) α,α,α-Trifluorotoluene(FID)	*100*		*62.0-128*		*12/21/2015 00:37*	WG837126

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.0177		0.00100	1	12/25/2015 10:37	WG837089
Cyclohexane	0.00382		0.00100	1	12/25/2015 10:37	WG837089
Ethylbenzene	0.00771		0.00100	1	12/25/2015 10:37	WG837089
Isopropylbenzene	ND		0.00100	1	12/25/2015 10:37	WG837089
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 10:37	WG837089
Toluene	ND		0.00500	1	12/25/2015 10:37	WG837089
Xylenes, Total	ND		0.00300	1	12/25/2015 10:37	WG837089
Naphthalene	ND		0.00500	1	12/25/2015 10:37	WG837089
n-Butylbenzene	ND		0.00100	1	12/25/2015 10:37	WG837089
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 10:37	WG837089
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 10:37	WG837089
1,2,4-Trimethylbenzene	0.00154		0.00100	1	12/25/2015 10:37	WG837089
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 10:37	WG837089
n-Propylbenzene	ND		0.00100	1	12/25/2015 10:37	WG837089
(S) Toluene-d8	*103*		*90.0-115*		*12/25/2015 10:37*	WG837089
(S) Dibromofluoromethane	*99.8*		*79.0-121*		*12/25/2015 10:37*	WG837089
(S) 4-Bromofluorobenzene	*100*		*80.1-120*		*12/25/2015 10:37*	WG837089

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	12/25/2015 06:07	WG837089
Cyclohexane	ND		0.00100	1	12/25/2015 06:07	WG837089
Ethylbenzene	ND		0.00100	1	12/25/2015 06:07	WG837089
Isopropylbenzene	ND		0.00100	1	12/25/2015 06:07	WG837089
Methyl Cyclohexane	ND		0.00100	1	12/25/2015 06:07	WG837089
Toluene	ND		0.00500	1	12/25/2015 06:07	WG837089
Xylenes, Total	ND		0.00300	1	12/25/2015 06:07	WG837089
Naphthalene	ND		0.00500	1	12/25/2015 06:07	WG837089
n-Butylbenzene	ND		0.00100	1	12/25/2015 06:07	WG837089
1,2-Dichloroethane	ND		0.00100	1	12/25/2015 06:07	WG837089
1,3,5-Trimethylbenzene	ND		0.00100	1	12/25/2015 06:07	WG837089
1,2,4-Trimethylbenzene	ND		0.00100	1	12/25/2015 06:07	WG837089
2-Butanone (MEK)	ND		0.0100	1	12/25/2015 06:07	WG837089
n-Propylbenzene	ND		0.00100	1	12/25/2015 06:07	WG837089
(S) Toluene-d8	*102*		*90.0-115*		*12/25/2015 06:07*	WG837089
(S) Dibromofluoromethane	*100*		*79.0-121*		*12/25/2015 06:07*	WG837089
(S) 4-Bromofluorobenzene	*103*		*80.1-120*		*12/25/2015 06:07*	WG837089

QUALITY CONTROL SUMMARY

L807489-21,22,23

Method Blank (MB)

(MB) 12/20/15 13:17

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
TPH (GC/FID) Low Fraction	ND		0.100
(S)a,a,a-Trifluorotoluene(FID)	*100*		*62.0-128*

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

(LCS) 12/20/15 12:31 • (LCSD) 12/20/15 14:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.38	6.50	116	118	67.0-132			1.87	20
(S) a,a,a-Trifluorotoluene(FID)				*99.5*	*99.0*	*62.0-128*				

L807531-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/20/15 16:02 • (MS) 12/20/15 14:53 • (MSD) 12/20/15 15:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	6.52	6.12	119	111	1	50.0-143			6.27	20
(S) a,a,a-Trifluorotoluene(FID)					*98.9*	*98.4*		*62.0-128*				

QUALITY CONTROL SUMMARY

L807489-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) 12/22/15 16:17

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
TPH (GC/FID) Low Fraction	ND		0.100
(S) a,a,a-Trifluorotoluene(FID)	*93.1*		*62.0-128*

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

(LCS) 12/22/15 15:10 • (LCSD) 12/22/15 15:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.88	5.89	107	107	67.0-132			0.130	20
(S) a,a,a-Trifluorotoluene(FID)				*103*	*102*	*62.0-128*				

L807489-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/22/15 20:01 • (MS) 12/23/15 00:05 • (MSD) 12/23/15 00:28

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.212	5.95	7.27	104	128	1	50.0-143			19.9	20
(S) a,a,a-Trifluorotoluene(FID)					*102*	*105*		*62.0-128*				

QUALITY CONTROL SUMMARY

L807489-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) 12/27/15 16:21

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Benzene	ND		0.00100
n-Butylbenzene	ND		0.00100
Cyclohexane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
Ethylbenzene	ND		0.00100
Isopropylbenzene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methyl Cyclohexane	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Toluene	ND		0.00500
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*101*		*90.0-115*
(S) Dibromofluoromethane	*101*		*79.0-121*
(S) 4-Bromofluorobenzene	*98.3*		*80.1-120*

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

(LCS) 12/27/15 14:21 • (LCSD) 12/27/15 14:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0251	0.0248	100	99.2	73.0-122			1.08	20
n-Butylbenzene	0.0250	0.0285	0.0292	114	117	75.9-134			2.24	20
1,2-Dichloroethane	0.0250	0.0273	0.0272	109	109	65.3-126			0.290	20
Ethylbenzene	0.0250	0.0269	0.0270	108	108	80.9-121			0.230	20
Isopropylbenzene	0.0250	0.0265	0.0265	106	106	81.6-124			0.100	20
2-Butanone (MEK)	0.125	0.148	0.138	118	110	46.4-155			7.18	20
Naphthalene	0.0250	0.0244	0.0245	97.4	97.8	69.7-134			0.440	20
n-Propylbenzene	0.0250	0.0269	0.0269	107	108	81.9-122			0.190	20
Toluene	0.0250	0.0263	0.0261	105	104	77.9-116			0.840	20
1,2,4-Trimethylbenzene	0.0250	0.0263	0.0264	105	105	79.0-122			0.190	20
1,3,5-Trimethylbenzene	0.0250	0.0263	0.0263	105	105	81.0-123			0.000	20
Xylenes, Total	0.0750	0.0778	0.0788	104	105	79.2-122			1.23	20
(S) Toluene-d8				*102*	*102*	*90.0-115*				

QUALITY CONTROL SUMMARY

L807489-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

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

(LCS) 12/27/15 14:21 • (LCSD) 12/27/15 14:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane				*99.5*	*100*	*79.0-121*				
(S) 4-Bromofluorobenzene				*98.2*	*99.0*	*80.1-120*				

L807489-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/27/15 17:52 • (MS) 12/27/15 16:55 • (MSD) 12/27/15 17:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0189	0.0176	75.5	70.4	1	58.6-133			6.95	20
n-Butylbenzene	0.0250	ND	0.0276	0.0255	110	102	1	64.8-145			7.76	20
1,2-Dichloroethane	0.0250	ND	0.0225	0.0209	89.8	83.8	1	60.7-132			6.97	20
Ethylbenzene	0.0250	ND	0.0229	0.0223	91.7	89.0	1	62.7-136			2.98	20
Isopropylbenzene	0.0250	ND	0.0243	0.0240	97.3	96.1	1	67.4-136			1.25	20
2-Butanone (MEK)	0.125	ND	0.105	0.0954	83.8	76.4	1	45.0-156			9.28	20.8
Naphthalene	0.0250	0.000315	0.0249	0.0242	98.3	95.4	1	61.8-143			2.90	20
n-Propylbenzene	0.0250	ND	0.0249	0.0242	99.8	96.7	1	63.2-139			3.09	20
Toluene	0.0250	ND	0.0203	0.0197	81.1	78.6	1	67.8-124			3.05	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0245	0.0243	98.0	97.1	1	60.5-137			0.870	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0245	0.0237	98.0	94.7	1	67.9-134			3.43	20
Xylenes, Total	0.0750	0.000194	0.0684	0.0665	90.9	88.4	1	65.6-133			2.71	20
(S) Toluene-d8					*103*	*102*		*90.0-115*				
(S) Dibromofluoromethane					*99.5*	*98.2*		*79.0-121*				
(S) 4-Bromofluorobenzene					*99.0*	*102*		*80.1-120*				

QUALITY CONTROL SUMMARY

L807489-22,23,24

Method Blank (MB)

(MB) 12/25/15 04:50

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Benzene	ND		0.00100
n-Butylbenzene	ND		0.00100
Cyclohexane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
Ethylbenzene	ND		0.00100
Isopropylbenzene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methyl Cyclohexane	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Toluene	ND		0.00500
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*103*		*90.0-115*
(S) Dibromofluoromethane	*98.6*		*79.0-121*
(S) 4-Bromofluorobenzene	*104*		*80.1-120*

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

(LCS) 12/25/15 03:14 • (LCSD) 12/25/15 03:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0228	0.0213	91.0	85.3	73.0-122			6.49	20
n-Butylbenzene	0.0250	0.0263	0.0251	105	100	75.9-134			4.79	20
1,2-Dichloroethane	0.0250	0.0252	0.0236	101	94.4	65.3-126			6.56	20
Ethylbenzene	0.0250	0.0246	0.0238	98.6	95.0	80.9-121			3.68	20
Isopropylbenzene	0.0250	0.0248	0.0235	99.2	93.8	81.6-124			5.52	20
2-Butanone (MEK)	0.125	0.132	0.131	106	105	46.4-155			0.820	20
Naphthalene	0.0250	0.0215	0.0216	86.1	86.4	69.7-134			0.330	20
n-Propylbenzene	0.0250	0.0249	0.0237	99.4	94.8	81.9-122			4.81	20
Toluene	0.0250	0.0240	0.0227	96.2	90.6	77.9-116			5.94	20
1,2,4-Trimethylbenzene	0.0250	0.0245	0.0233	98.2	93.3	79.0-122			5.13	20
1,3,5-Trimethylbenzene	0.0250	0.0242	0.0232	96.7	92.7	81.0-123			4.16	20
Xylenes, Total	0.0750	0.0718	0.0685	95.7	91.4	79.2-122			4.63	20
(S) Toluene-d8				*104*	*103*	*90.0-115*				

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

(LCS) 12/25/15 03:14 • (LCSD) 12/25/15 03:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane				*100*	*100*	*79.0-121*				
(S) 4-Bromofluorobenzene				*103*	*102*	*80.1-120*				

L807409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/25/15 06:27 • (MS) 12/25/15 05:10 • (MSD) 12/25/15 05:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0221	0.0219	88.4	87.5	1	58.6-133			0.920	20
n-Butylbenzene	0.0250	ND	0.0255	0.0258	102	103	1	64.8-145			1.06	20
1,2-Dichloroethane	0.0250	ND	0.0242	0.0245	96.9	97.8	1	60.7-132			0.930	20
Ethylbenzene	0.0250	ND	0.0243	0.0246	97.2	98.3	1	62.7-136			1.13	20
Isopropylbenzene	0.0250	ND	0.0243	0.0245	97.3	98.2	1	67.4-136			0.860	20
2-Butanone (MEK)	0.125	ND	0.0943	0.0917	75.4	73.4	1	45.0-156			2.77	20.8
Naphthalene	0.0250	ND	0.0219	0.0227	87.4	90.8	1	61.8-143			3.76	20
n-Propylbenzene	0.0250	ND	0.0242	0.0243	96.9	97.3	1	63.2-139			0.440	20
Toluene	0.0250	ND	0.0230	0.0233	91.9	93.3	1	67.8-124			1.51	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0239	0.0246	95.6	98.4	1	60.5-137			2.88	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0239	0.0243	95.6	97.4	1	67.9-134			1.85	20
Xylenes, Total	0.0750	ND	0.0705	0.0702	94.0	93.6	1	65.6-133			0.340	20
(S) Toluene-d8					*103*	*103*		*90.0-115*				
(S) Dibromofluoromethane					*100*	*99.5*		*79.0-121*				
(S) 4-Bromofluorobenzene					*104*	*104*		*80.1-120*				

Method Blank (MB)

(MB) 12/29/15 14:36

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Benzene	ND		0.00100
n-Butylbenzene	ND		0.00100
Cyclohexane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
Ethylbenzene	ND		0.00100
Isopropylbenzene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Toluene	ND		0.00500
1,3,5-Trimethylbenzene	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*102*		*90.0-115*
(S) Dibromofluoromethane	*95.8*		*79.0-121*
(S) 4-Bromofluorobenzene	*103*		*80.1-120*

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

(LCS) 12/29/15 12:43 • (LCSD) 12/29/15 13:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0231	0.0221	92.5	88.5	73.0-122			4.45	20
n-Butylbenzene	0.0250	0.0269	0.0258	107	103	75.9-134			4.18	20
1,2-Dichloroethane	0.0250	0.0250	0.0239	99.9	95.6	65.3-126			4.36	20
Ethylbenzene	0.0250	0.0267	0.0254	107	101	80.9-121			5.04	20
Isopropylbenzene	0.0250	0.0264	0.0251	106	100	81.6-124			5.01	20
2-Butanone (MEK)	0.125	0.127	0.117	101	93.3	46.4-155			8.24	20
Naphthalene	0.0250	0.0265	0.0254	106	101	69.7-134			4.46	20
n-Propylbenzene	0.0250	0.0269	0.0256	108	103	81.9-122			4.96	20
Toluene	0.0250	0.0249	0.0237	99.4	95.0	77.9-116			4.59	20
1,3,5-Trimethylbenzene	0.0250	0.0281	0.0266	112	106	81.0-123			5.60	20
Xylenes, Total	0.0750	0.0806	0.0772	107	103	79.2-122			4.39	20
(S) Toluene-d8				*103*	*103*	*90.0-115*				
(S) Dibromofluoromethane				*96.5*	*96.1*	*79.0-121*				
(S) 4-Bromofluorobenzene				*105*	*103*	*80.1-120*				

L807483-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/29/15 16:55 • (MS) 12/29/15 17:40 • (MSD) 12/29/15 18:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.000418	0.0183	0.0187	71.4	73.1	1	58.6-133			2.34	20
n-Butylbenzene	0.0250	ND	0.0206	0.0212	82.5	84.6	1	64.8-145			2.49	20
1,2-Dichloroethane	0.0250	ND	0.0204	0.0209	81.8	83.6	1	60.7-132			2.17	20
Ethylbenzene	0.0250	0.000194	0.0214	0.0219	85.0	86.7	1	62.7-136			1.94	20
Isopropylbenzene	0.0250	0.00144	0.0228	0.0230	85.4	86.3	1	67.4-136			0.960	20
2-Butanone (MEK)	0.125	ND	0.0768	0.0793	61.5	63.4	1	45.0-156			3.19	20.8
Naphthalene	0.0250	0.000969	0.0236	0.0246	90.7	94.5	1	61.8-143			3.93	20
n-Propylbenzene	0.0250	0.000546	0.0216	0.0222	84.4	86.4	1	63.2-139			2.29	20
Toluene	0.0250	ND	0.0197	0.0200	78.7	80.2	1	67.8-124			1.92	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0221	0.0228	88.5	91.0	1	67.9-134			2.83	20
Xylenes, Total	0.0750	0.000494	0.0640	0.0650	84.6	86.0	1	65.6-133			1.65	20
(S) Toluene-d8					*102*	*102*		*90.0-115*				
(S) Dibromofluoromethane					*97.1*	*97.5*		*79.0-121*				
(S) 4-Bromofluorobenzene					*105*	*103*		*80.1-120*				

QUALITY CONTROL SUMMARY

L807489-01,03

Method Blank (MB)

(MB) 12/30/15 05:33

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Benzene	ND		0.00100
Cyclohexane	ND		0.00100
Toluene	ND		0.00500

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

(LCS) 12/30/15 03:48 • (LCSD) 12/30/15 04:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0270	0.0276	108	111	73.0-122			2.49	20
Toluene	0.0250	0.0253	0.0258	101	103	77.9-116			2.07	20

L808988-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/30/15 07:18 • (MS) 12/30/15 05:54 • (MSD) 12/30/15 06:15

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0258	0.0260	103	104	1	58.6-133			1.08	20
Toluene	0.0250	ND	0.0242	0.0245	96.9	98.1	1	67.8-124			1.22	20

Method Blank (MB)

(MB) 12/30/15 12:27

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Cyclohexane	ND		0.00100
Methyl Cyclohexane	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100

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

(LCS) 12/30/15 11:10 • (LCSD) 12/30/15 11:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,4-Trimethylbenzene	0.0250	0.0248	0.0251	99.3	100	79.0-122			1.24	20

GLOSSARY OF TERMS

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [14]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

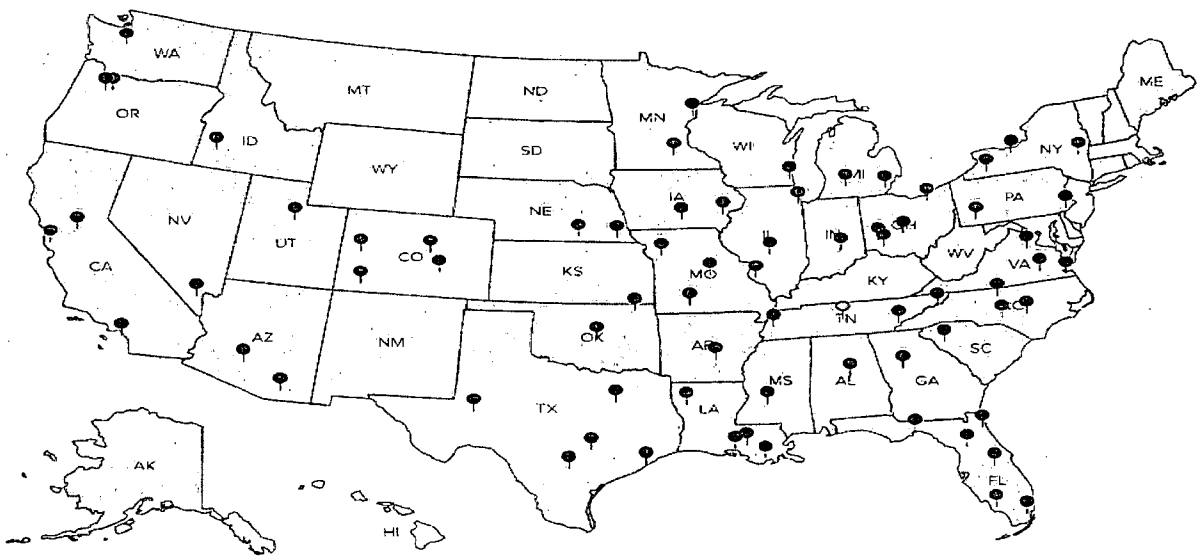
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Chain of Custody Page 1 of 3

ESC LAB SCIENCES

YOUR LAB OF CHOICE

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Phone: 615-758-5858
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L# 807.489

D122

Acctnum: ASHCREPOR
Template: T107888
Prelogin: P534310
TSR: 350 - Jared Willis
PB: 12-3-15

Shipped Via: FedEX Ground

Apex Companies, LLC- Portland, OR
3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project # E3CE-0065

Lab Project # ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID # ANDOVER QUAIL CROSSING

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl-Blk	Rem./Contaminant	Sample # (lab only)
MW-1	Grab	GW	35'	12/16/15	1124	5	X	X			01
MW-2		GW	35.5	12/15/15	1552	5	X	X			02
MW-3		GW	36.5	12/16/15	1052	5	X	X			03
MW-4		GW	31.0	12/15/15	1235	5	X	X			04
MW-5		GW	21.0	12/15/15	0803	5	X	X			05
MW-6		GW	23.5	12/16/15	0846	5	X	X			06
MW-7		GW	17.0	12/16/15	0820	5	X	X			07
MW-8		GW	22.5	12/15/15	0845	5	X	X			08
MW-9		GW	31.5	12/15/15	1442	5	X	X			09
MW-10		GW	31.0	12/15/15	1525	5	X	X			10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Hold #

Condition: (lab use only) OK

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	12-16-15	1650	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐

Temp: 3.2 °C Bottles Received: 3114

Date: 12/17/15 Time: 940

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF: X

6629 9101 8820

Chain of Custody Page 2 of 2

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Apex Companies, LLC- Portland, OR
3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson
Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros
City/State Collected:
Phone: 503-924-4704
Fax: 503-943-6357
Client Project # E3CE-0065
Lab Project # ASHCREPOR-NUANDQUAIL
Collected by (print): Ted Alfred
Site/Facility ID # ANDOVER QUAIL CROSSING
P.O. #
Collected by (signature):
Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%
Date Results Needed
Email? ___No X__Yes
FAX? ___No ___Yes
Immediately Packed on Ice N ___ Y X

L# 87487
Table #
Acctnum: ASHCREPOR
Template: T107888
Prelogin: P534310
TSR: 358 - Jarred Willis
PB: 12-3-15
Shipped Via: FedEX Ground

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl	V8260AP9 custom list 40mlAmb-HCl-Blk	Rem./Contaminant	Sample # (lab only)
MW-11	Grab	GW	30.5	12/15/15	1208	5	X	X			11
MW-12		GW	33.0	12/16/15	1012	5	X	X			12
MW-13		GW	33.0	12/15/15	0922	5	X	X			13
MW-14		GW	34.0	12/15/15	1003	5	X	X			14
MW-15		GW	33.5	12/15/15	1040	5	X	X			15
MW-16		GW	31.0	12/15/15	1122	5	X	X			16
MW-17		GW	35.0	12/16/15	1250	5	X	X			17
MW-18		GW	33.0	12/15/15	1310	5	X	X			18
MW-19		GW	33.0	12/15/15	1403	5	X	X			19
SVE-2		GW	28.97	12/16/15	1345	5	X	X			20

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #
Condition: (lab use only) ODD

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	12-16-15	1630	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐
Temp: 3.2 °C Bottles Received: 114
Date: 12/17/15 Time: 900

COC Seal Intact: ✓ Y N NA
pH Checked:
NCF: X

Chain of Custody Page 2 of 2

ESC LAB SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 307483

Table #

Acctnum: ASHCREPOR

Template: T107888

Prelogin: P534310

TSR: 358 - Jarred Willis

PB: 12-18

Shipped Via: FedEX Ground

Apex Companies, LLC- Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable- Cindi Joy Staller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; TAlfred@apexcos.com; TCochran@apexcos.com

Project Description: Andover Release Site - 4Q2015 Quail Cros

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID #: ANDOVER QUAIL CROSSING

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40ml Amb HCl	V8260AP9 custom list 40ml Amb-HCl	V8260AP9 custom list 40ml Amb-HCl-Blk	Rem./Contaminant	Sample # (lab only)
SVE-4	Grab	GW	29.64	12/16/15	1405	5	X	X			21
DUP-1	Grab	GW	—	12/15/15	—	5	X	X			22
DUP-2	Grab	GW	—	12/15/15	—	5	X	X			23
~~DUP-3~~	—	~~GW~~	—	—	—	~~5~~	~~X~~	~~X~~			
		GW				5	X	X			24
TRIP BLANK		GW				1			X		

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

Remarks:

pH ___ Temp ___
Flow ___ Other ___

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐

Temp: 3.2 °C Bottles Received: 43114

Hold #

Condition: (lab use only) GOOD

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF: X

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	12-16-15	1630	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Date: 12/17/15 Time: 9:16

Matt Shacklock

ESC Lab Sciences
Non-Conformance Form

Login #807489	Client: ASHCREPOR	Date:12/17/15	Evaluated by:Ryan

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
x	Broken container:		Chain of Custody is missing		Date/Time:
x	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: 2 vials for MW-12 received broken. 3 still remains

Client informed by:		Call		Email		Voice Mail		Date:	Time:
TSR Initials:	Client Contact:								

Login Instructions:

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Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

December 29, 2015

Daniel Newman
KDHE
1000 SW Jackson
Suite 410
Topeka, KS 66612

RE: Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Dear Daniel Newman:
Enclosed are the analytical results for sample(s) received by the laboratory on December 17, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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 M. Wilson

Heather Wilson
heather.wilson@pacelabs.com
Project Manager

Enclosures

cc: LINDA BENSON, KDHE
Teresa Hattan, KDHE

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

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

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SAMPLE SUMMARY

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60209777001	HOA-1	Water	12/16/15 11:46	12/17/15 10:10
60209777002	MW-1	Water	12/16/15 11:24	12/17/15 10:10
60209777003	MW-3	Water	12/16/15 10:52	12/17/15 10:10
60209777004	MW-12	Water	12/16/15 10:12	12/17/15 10:10
60209777005	TRIP BLANK	Water	12/16/15 10:12	12/17/15 10:10

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SAMPLE ANALYTE COUNT

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60209777001	HOA-1	EPA 5030B/8260	PGH	18
		EPA 8260/OA1	JDH	5
60209777002	MW-1	EPA 5030B/8260	PGH	18
		EPA 8260/OA1	JDH	5
60209777003	MW-3	EPA 5030B/8260	PGH	18
		EPA 8260/OA1	JDH	5
60209777004	MW-12	EPA 5030B/8260	PGH	18
		EPA 8260/OA1	EAG	5
60209777005	TRIP BLANK	EPA 5030B/8260	PGH	18
		EPA 8260/OA1	JDH	5

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ANALYTICAL RESULTS

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Sample: HOA-1 **Lab ID: 60209777001** Collected: 12/16/15 11:46 Received: 12/17/15 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	mg/L	0.0010	0.000060	1		12/24/15 05:04	71-43-2	
2-Butanone (MEK)	ND	mg/L	0.010	0.00059	1		12/24/15 05:04	78-93-3	
n-Butylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 05:04	104-51-8	
1,2-Dichloroethane	ND	mg/L	0.0010	0.00012	1		12/24/15 05:04	107-06-2	
Ethylbenzene	ND	mg/L	0.0010	0.00018	1		12/24/15 05:04	100-41-4	
Isopropylbenzene (Cumene)	ND	mg/L	0.0010	0.000070	1		12/24/15 05:04	98-82-8	
Naphthalene	ND	mg/L	0.010	0.00050	1		12/24/15 05:04	91-20-3	
n-Propylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 05:04	103-65-1	
Toluene	ND	mg/L	0.0010	0.00017	1		12/24/15 05:04	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/L	0.0010	0.000090	1		12/24/15 05:04	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 05:04	108-67-8	
Xylene (Total)	ND	mg/L	0.0030	0.00042	1		12/24/15 05:04	1330-20-7	
Cyclohexane	ND	mg/L	0.0010	0.00033	1		12/24/15 05:04	110-82-7	
Methylcyclohexane	ND	mg/L	0.0010	0.00033	1		12/24/15 05:04	108-87-2	
Surrogates									
4-Bromofluorobenzene (S)	111	%	80-120		1		12/24/15 05:04	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		12/24/15 05:04	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		12/24/15 05:04	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/24/15 05:04		
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1								
Gasoline Range Organics	ND	mg/L	0.50	0.10	1		12/24/15 19:55		
Surrogates									
Toluene-d8 (S)	99	%	80-120		1		12/24/15 19:55	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120		1		12/24/15 19:55	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	82-119		1		12/24/15 19:55	17060-07-0	
Preservation pH	**1.0**		0.10	0.10	1		12/24/15 19:55		

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ANALYTICAL RESULTS

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Sample: MW-1 **Lab ID: 60209777002** Collected: 12/16/15 11:24 Received: 12/17/15 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	**5.6**	mg/L	0.20	0.012	200		12/29/15 02:05	71-43-2	
2-Butanone (MEK)	ND	mg/L	0.25	0.015	25		12/24/15 05:33	78-93-3	
n-Butylbenzene	**0.015J**	mg/L	0.025	0.0025	25		12/24/15 05:33	104-51-8	
Cyclohexane	**0.18**	mg/L	0.025	0.0082	25		12/24/15 05:33	110-82-7	
1,2-Dichloroethane	ND	mg/L	0.025	0.0030	25		12/24/15 05:33	107-06-2	
Ethylbenzene	**1.4**	mg/L	0.025	0.0045	25		12/24/15 05:33	100-41-4	
Isopropylbenzene (Cumene)	**0.025**	mg/L	0.025	0.0018	25		12/24/15 05:33	98-82-8	
Methylcyclohexane	**0.016J**	mg/L	0.025	0.0082	25		12/24/15 05:33	108-87-2	
Naphthalene	**0.11J**	mg/L	0.25	0.012	25		12/24/15 05:33	91-20-3	
n-Propylbenzene	**0.066**	mg/L	0.025	0.0025	25		12/24/15 05:33	103-65-1	
Toluene	**8.2**	mg/L	0.20	0.034	200		12/29/15 02:05	108-88-3	
1,2,4-Trimethylbenzene	**0.73**	mg/L	0.025	0.0022	25		12/24/15 05:33	95-63-6	
1,3,5-Trimethylbenzene	**0.22**	mg/L	0.025	0.0025	25		12/24/15 05:33	108-67-8	
Xylene (Total)	**5.5**	mg/L	0.075	0.010	25		12/24/15 05:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	112	%	80-120		25		12/24/15 05:33	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		25		12/24/15 05:33	17060-07-0	
Toluene-d8 (S)	97	%	80-120		25		12/24/15 05:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	25		12/24/15 05:33		
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1								
Gasoline Range Organics	**21.2**	mg/L	0.50	0.10	1		12/24/15 20:09		E,P2
Surrogates									
Toluene-d8 (S)	95	%	80-120		1		12/24/15 20:09	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120		1		12/24/15 20:09	460-00-4	
1,2-Dichloroethane-d4 (S)	86	%	82-119		1		12/24/15 20:09	17060-07-0	
Preservation pH	**1.0**		0.10	0.10	1		12/24/15 20:09		

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ANALYTICAL RESULTS

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Sample: MW-3 **Lab ID: 60209777003** Collected: 12/16/15 10:52 Received: 12/17/15 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	**0.95**	mg/L	0.025	0.0015	25		12/24/15 05:48	71-43-2	
2-Butanone (MEK)	ND	mg/L	0.25	0.015	25		12/24/15 05:48	78-93-3	
n-Butylbenzene	**0.0057J**	mg/L	0.025	0.0025	25		12/24/15 05:48	104-51-8	
1,2-Dichloroethane	ND	mg/L	0.025	0.0030	25		12/24/15 05:48	107-06-2	
Ethylbenzene	**0.68**	mg/L	0.025	0.0045	25		12/24/15 05:48	100-41-4	
Isopropylbenzene (Cumene)	**0.026**	mg/L	0.025	0.0018	25		12/24/15 05:48	98-82-8	
Naphthalene	**0.060J**	mg/L	0.25	0.012	25		12/24/15 05:48	91-20-3	
n-Propylbenzene	**0.067**	mg/L	0.025	0.0025	25		12/24/15 05:48	103-65-1	
Toluene	**0.049**	mg/L	0.025	0.0042	25		12/24/15 05:48	108-88-3	
1,2,4-Trimethylbenzene	**0.30**	mg/L	0.025	0.0022	25		12/24/15 05:48	95-63-6	
1,3,5-Trimethylbenzene	**0.039**	mg/L	0.025	0.0025	25		12/24/15 05:48	108-67-8	
Xylene (Total)	ND	mg/L	0.075	0.010	25		12/24/15 05:48	1330-20-7	
Cyclohexane	**0.24**	mg/L	0.025	0.0082	25		12/24/15 05:48	110-82-7	
Methylcyclohexane	**0.026**	mg/L	0.025	0.0082	25		12/24/15 05:48	108-87-2	
Surrogates									
4-Bromofluorobenzene (S)	108	%	80-120		25		12/24/15 05:48	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		25		12/24/15 05:48	17060-07-0	
Toluene-d8 (S)	98	%	80-120		25		12/24/15 05:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	25		12/24/15 05:48		
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1								
Gasoline Range Organics	**6.9**	mg/L	0.50	0.10	1		12/24/15 20:22		
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		12/24/15 20:22	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120		1		12/24/15 20:22	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	82-119		1		12/24/15 20:22	17060-07-0	
Preservation pH	**1.0**		0.10	0.10	1		12/24/15 20:22		

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ANALYTICAL RESULTS

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Sample: MW-12 **Lab ID: 60209777004** Collected: 12/16/15 10:12 Received: 12/17/15 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	mg/L	0.0010	0.000060	1		12/24/15 05:19	71-43-2	
2-Butanone (MEK)	ND	mg/L	0.010	0.00059	1		12/24/15 05:19	78-93-3	
n-Butylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 05:19	104-51-8	
1,2-Dichloroethane	ND	mg/L	0.0010	0.00012	1		12/24/15 05:19	107-06-2	
Ethylbenzene	ND	mg/L	0.0010	0.00018	1		12/24/15 05:19	100-41-4	
Isopropylbenzene (Cumene)	ND	mg/L	0.0010	0.000070	1		12/24/15 05:19	98-82-8	
Naphthalene	ND	mg/L	0.010	0.00050	1		12/24/15 05:19	91-20-3	
n-Propylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 05:19	103-65-1	
Toluene	ND	mg/L	0.0010	0.00017	1		12/24/15 05:19	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/L	0.0010	0.000090	1		12/24/15 05:19	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 05:19	108-67-8	
Xylene (Total)	ND	mg/L	0.0030	0.00042	1		12/24/15 05:19	1330-20-7	
Cyclohexane	ND	mg/L	0.0010	0.00033	1		12/24/15 05:19	110-82-7	
Methylcyclohexane	ND	mg/L	0.0010	0.00033	1		12/24/15 05:19	108-87-2	
Surrogates									
4-Bromofluorobenzene (S)	108	%	80-120		1		12/24/15 05:19	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		12/24/15 05:19	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		12/24/15 05:19	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/24/15 05:19		
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1								
Gasoline Range Organics	ND	mg/L	0.50	0.10	1		12/29/15 00:12		
Surrogates									
Toluene-d8 (S)	101	%	80-120		1		12/29/15 00:12	2037-26-5	
4-Bromofluorobenzene (S)	93	%	80-120		1		12/29/15 00:12	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	82-119		1		12/29/15 00:12	17060-07-0	
Preservation pH	**1.0**		0.10	0.10	1		12/29/15 00:12		

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ANALYTICAL RESULTS

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Sample: TRIP BLANK **Lab ID: 60209777005** Collected: 12/16/15 10:12 Received: 12/17/15 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	mg/L	0.0010	0.000060	1		12/24/15 03:51	71-43-2	
2-Butanone (MEK)	ND	mg/L	0.010	0.00059	1		12/24/15 03:51	78-93-3	
n-Butylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 03:51	104-51-8	
1,2-Dichloroethane	ND	mg/L	0.0010	0.00012	1		12/24/15 03:51	107-06-2	
Ethylbenzene	ND	mg/L	0.0010	0.00018	1		12/24/15 03:51	100-41-4	
Isopropylbenzene (Cumene)	ND	mg/L	0.0010	0.000070	1		12/24/15 03:51	98-82-8	
Naphthalene	ND	mg/L	0.010	0.00050	1		12/24/15 03:51	91-20-3	
n-Propylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 03:51	103-65-1	
Toluene	ND	mg/L	0.0010	0.00017	1		12/24/15 03:51	108-88-3	
1,2,4-Trimethylbenzene	ND	mg/L	0.0010	0.000090	1		12/24/15 03:51	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/L	0.0010	0.00010	1		12/24/15 03:51	108-67-8	
Xylene (Total)	ND	mg/L	0.0030	0.00042	1		12/24/15 03:51	1330-20-7	
Cyclohexane	ND	mg/L	0.0010	0.00033	1		12/24/15 03:51	110-82-7	
Methylcyclohexane	ND	mg/L	0.0010	0.00033	1		12/24/15 03:51	108-87-2	
Surrogates									
4-Bromofluorobenzene (S)	114	%	80-120		1		12/24/15 03:51	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		12/24/15 03:51	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		12/24/15 03:51	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/24/15 03:51		
8260/OA1 UST, Water	Analytical Method: EPA 8260/OA1								
Gasoline Range Organics	ND	mg/L	0.50	0.10	1		12/24/15 19:41		
Surrogates									
Toluene-d8 (S)	98	%	80-120		1		12/24/15 19:41	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120		1		12/24/15 19:41	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	82-119		1		12/24/15 19:41	17060-07-0	
Preservation pH	**1.0**		0.10	0.10	1		12/24/15 19:41		

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QUALITY CONTROL DATA

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

QC Batch: MSV/73494 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60209777001, 60209777002, 60209777003, 60209777004, 60209777005

METHOD BLANK: 1689618 Matrix: Water
Associated Lab Samples: 60209777001, 60209777002, 60209777003, 60209777004, 60209777005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	mg/L	ND	0.0010	0.000090	12/24/15 03:23	
1,2-Dichloroethane	mg/L	ND	0.0010	0.00012	12/24/15 03:23	
1,3,5-Trimethylbenzene	mg/L	ND	0.0010	0.00010	12/24/15 03:23	
2-Butanone (MEK)	mg/L	ND	0.010	0.00059	12/24/15 03:23	
Benzene	mg/L	ND	0.0010	0.000060	12/24/15 03:23	
Cyclohexane	mg/L	ND	0.0010	0.00033	12/24/15 03:23	
Ethylbenzene	mg/L	ND	0.0010	0.00018	12/24/15 03:23	
Isopropylbenzene (Cumene)	mg/L	ND	0.0010	0.000070	12/24/15 03:23	
Methylcyclohexane	mg/L	ND	0.0010	0.00033	12/24/15 03:23	
n-Butylbenzene	mg/L	ND	0.0010	0.00010	12/24/15 03:23	
n-Propylbenzene	mg/L	ND	0.0010	0.00010	12/24/15 03:23	
Naphthalene	mg/L	ND	0.010	0.00050	12/24/15 03:23	
Toluene	mg/L	ND	0.0010	0.00017	12/24/15 03:23	
Xylene (Total)	mg/L	ND	0.0030	0.00042	12/24/15 03:23	
1,2-Dichloroethane-d4 (S)	%	107	80-120		12/24/15 03:23	
4-Bromofluorobenzene (S)	%	105	80-120		12/24/15 03:23	
Toluene-d8 (S)	%	94	80-120		12/24/15 03:23	

LABORATORY CONTROL SAMPLE: 1689619

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	mg/L	.02	0.020	100	80-120	
1,2-Dichloroethane	mg/L	.02	0.022	109	81-120	
1,3,5-Trimethylbenzene	mg/L	.02	0.020	102	80-120	
2-Butanone (MEK)	mg/L	.1	0.098	98	67-122	
Benzene	mg/L	.02	0.021	106	80-120	
Cyclohexane	mg/L	.02	0.020	101	80-133	
Ethylbenzene	mg/L	.02	0.019	96	80-120	
Isopropylbenzene (Cumene)	mg/L	.02	0.018	91	80-136	
Methylcyclohexane	mg/L	.02	0.021	105	66-130	
n-Butylbenzene	mg/L	.02	0.019	96	79-126	
n-Propylbenzene	mg/L	.02	0.020	99	80-120	
Naphthalene	mg/L	.02	0.019	96	73-128	
Toluene	mg/L	.02	0.019	97	80-120	
Xylene (Total)	mg/L	.06	0.056	93	80-120	
1,2-Dichloroethane-d4 (S)	%			107	80-120	
4-Bromofluorobenzene (S)	%			110	80-120	
Toluene-d8 (S)	%			97	80-120	

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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QUALITY CONTROL DATA

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

QC Batch: MSV/73521
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60209777002

METHOD BLANK: 1690713
Matrix: Water
Associated Lab Samples: 60209777002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	mg/L	ND	0.0010	0.000060	12/28/15 21:15	
Toluene	mg/L	ND	0.0010	0.00017	12/28/15 21:15	
1,2-Dichloroethane-d4 (S)	%	109	80-120		12/28/15 21:15	
4-Bromofluorobenzene (S)	%	109	80-120		12/28/15 21:15	
Toluene-d8 (S)	%	89	80-120		12/28/15 21:15	

LABORATORY CONTROL SAMPLE: 1690714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	mg/L	.02	0.022	111	80-120	
Toluene	mg/L	.02	0.018	92	80-120	
1,2-Dichloroethane-d4 (S)	%			108	80-120	
4-Bromofluorobenzene (S)	%			112	80-120	
Toluene-d8 (S)	%			89	80-120	

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QUALITY CONTROL DATA

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

QC Batch: MSV/73508 Analysis Method: EPA 8260/OA1
QC Batch Method: EPA 8260/OA1 Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60209777001, 60209777002, 60209777003, 60209777005

METHOD BLANK: 1690161 Matrix: Water
Associated Lab Samples: 60209777001, 60209777002, 60209777003, 60209777005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Gasoline Range Organics	mg/L	ND	0.50	0.10	12/24/15 17:10	
1,2-Dichloroethane-d4 (S)	%	102	82-119		12/24/15 17:10	
4-Bromofluorobenzene (S)	%	99	80-120		12/24/15 17:10	
Toluene-d8 (S)	%	99	80-120		12/24/15 17:10	

LABORATORY CONTROL SAMPLE: 1690162

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/L	4	4.0	100	61-120	
1,2-Dichloroethane-d4 (S)	%			102	82-119	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

QC Batch: MSV/73529
QC Batch Method: EPA 8260/OA1
Analysis Method: EPA 8260/OA1
Analysis Description: 8260/OA1 UST-WATER
Associated Lab Samples: 60209777004

METHOD BLANK: 1690774
Matrix: Water
Associated Lab Samples: 60209777004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Gasoline Range Organics	mg/L	ND	0.50	0.10	12/28/15 23:58	
1,2-Dichloroethane-d4 (S)	%	93	82-119		12/28/15 23:58	
4-Bromofluorobenzene (S)	%	91	80-120		12/28/15 23:58	
Toluene-d8 (S)	%	101	80-120		12/28/15 23:58	

LABORATORY CONTROL SAMPLE: 1690775

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/L	4	3.6	90	61-120	
1,2-Dichloroethane-d4 (S)	%			94	82-119	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			101	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

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.

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.

BATCH QUALIFIERS

Batch: MSV/73494

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/73508

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/73521

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/73529

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

P2 Re-extraction or re-analysis could not be performed due to insufficient sample amount.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NUSTAR PIPELINE RELEASE N ANDO
Pace Project No.: 60209777

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60209777001	**HOA-1**	EPA 5030B/8260	MSV/73494		
60209777002	**MW-1**	EPA 5030B/8260	MSV/73494		
60209777002	**MW-1**	EPA 5030B/8260	MSV/73521		
60209777003	**MW-3**	EPA 5030B/8260	MSV/73494		
60209777004	**MW-12**	EPA 5030B/8260	MSV/73494		
60209777005	**TRIP BLANK**	EPA 5030B/8260	MSV/73494		
60209777001	**HOA-1**	EPA 8260/OA1	MSV/73508		
60209777002	**MW-1**	EPA 8260/OA1	MSV/73508		
60209777003	**MW-3**	EPA 8260/OA1	MSV/73508		
60209777004	**MW-12**	EPA 8260/OA1	MSV/73529		
60209777005	**TRIP BLANK**	EPA 8260/OA1	MSV/73508		

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Sample Condition Upon Receipt

WO#: 60209777
60209777

HMW

Optional
Proj Due Date:
Proj Name:

Client Name: KDHE

Courier: FedEx ☐ UPS ☑ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: 1Z236E96 03 9140 7384 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 +0.8 T-239 / CF +0.7 T-262 **Type of Ice:** Wet Blue None (circle one) ☐ Samples received on ice, cooling process has begun.

Cooler Temperature: 0.5

Temperature should be above freezing to 6°C

Date and Initials of person examining contents: 12/17/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☑No ☐N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): covered		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:
Additional labels attached to 5035A vials in the field?	☐Yes ☐No ☑N/A	18.

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: Daniel Newman Date/Time: 12/17/15

Comments/ Resolution: Analyze trip blank? HMW 12/17/15

Project Manager Review: REVIEWED By hwilson at 2:55 pm, 12/17/15 Date:

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of 1

Section A — Required Client Information:

Company:	KDHE
Address:	1000 SW JACKSON, SUITE 410
	TOPEKA, KS 66612
Email To:	dnewman@kdheks.gov
Phone:	(785)296-0225 Fax:
Requested Due Date/TAT:	10 Day (Default)

Section B — Required Project Information:

Report To:	Daniel Newman
Copy To:	
Purchase Order No:	
Client Project ID:	NuStar Pipeline Release N. Andover
Project Number:	C2-008-72928

Section C — Invoice Information:

Attention:	TERESA HATTAN
Company Name:	KDHE
Address:	
Pace Quote Reference:	
Pace Project Manager:	Heather Wilson
Pace Profile #:	8442, 2

Regulatory Agency:

State / Location: Kansas

Requested Analysis Filtered (Y/N):

ITEM#	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): 8260 VOCs	OA1	Residual Chlorine (Y/N)	60209777
1	HOA-1	WT				12/16/15	1146		3				/					X	X		3LD(Lab) 001
2	MW-1	WT				12/16/15	1124		3				/					X	X		002
3	MW-3	WT				12/16/15	1052		3				/					X	X		003
4	MW-12	WT				12/16/15	1012		3				/					X	X		004
5	Trip Blank	WT							2				/								2LD(Lab) 005
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EVALUATE DOWN TO THE MDL	Steve Marcotte	12/16/15		Shipped UPS / RASI	12/17/15	1610	0.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Steve Marcotte

SIGNATURE of SAMPLER: Steve Marcotte DATE Signed: 12/16/15

ESC LAB SCIENCES
YOUR LAB OF CHOICE

ANALYTICAL REPORT

January 21, 2016

myESC
REAL TIME DATA ACCESS

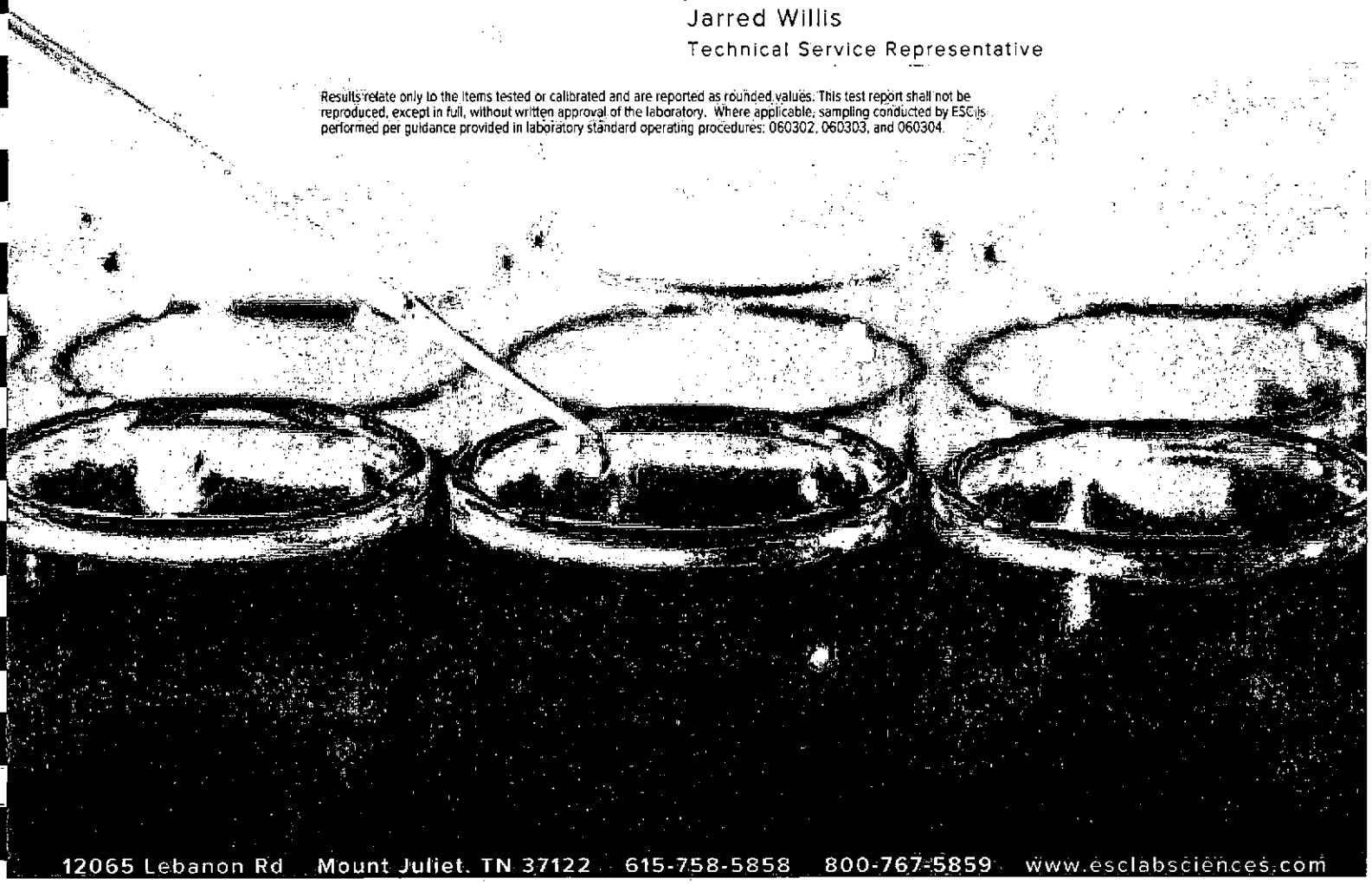
Apex Companies, LLC- Portland, OR

Sample Delivery Group:	L811995
Samples Received:	01/14/2016
Project Number:	E3CE-0065
Description:	Andover Release Site - Quail Crossing
Site:	ANDOVER QUAIL CROSSING
Report To:	Samuel Jackson 3015 SW First Avenue Portland, OR 97201-4707

Entire Report Reviewed By: Jarred Willis

Jarred Willis
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-10 L811995-01 GW	Collected by Ted Alfred	Collected date/time 01/13/16 15:20	Received date/time 01/14/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG843113	1	01/19/16 16:46	01/19/16 16:46	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG842607	5	01/16/16 03:36	01/16/16 03:36	JAH

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis

Jarred Willis
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.836		0.100	1	01/19/2016 16:46	WG843113
(S) a,a,a-Trifluorotoluene(FID)	*100*		*62.0-128*		*01/19/2016 16:46*	WG843113

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00500	5	01/16/2016 03:36	WG842607
Cyclohexane	0.0505		0.00500	5	01/16/2016 03:36	WG842607
Ethylbenzene	ND		0.00500	5	01/16/2016 03:36	WG842607
Isopropylbenzene	ND		0.00500	5	01/16/2016 03:36	WG842607
Methyl Cyclohexane	0.00987		0.00500	5	01/16/2016 03:36	WG842607
Toluene	ND		0.0250	5	01/16/2016 03:36	WG842607
Xylenes, Total	ND		0.0150	5	01/16/2016 03:36	WG842607
Naphthalene	ND		0.0250	5	01/16/2016 03:36	WG842607
n-Butylbenzene	ND		0.00500	5	01/16/2016 03:36	WG842607
1,2-Dichloroethane	ND		0.00500	5	01/16/2016 03:36	WG842607
1,3,5-Trimethylbenzene	ND		0.00500	5	01/16/2016 03:36	WG842607
1,2,4-Trimethylbenzene	ND		0.00500	5	01/16/2016 03:36	WG842607
2-Butanone (MEK)	ND	J3 J4	0.0500	5	01/16/2016 03:36	WG842607
n-Propylbenzene	ND		0.00500	5	01/16/2016 03:36	WG842607
(S) Toluene-d8	*103*		*90.0-115*		*01/16/2016 03:36*	WG842607
(S) Dibromofluoromethane	*99.8*		*79.0-121*		*01/16/2016 03:36*	WG842607
(S) 4-Bromofluorobenzene	*91.1*		*80.1-120*		*01/16/2016 03:36*	WG842607

Method Blank (MB)

(MB) 01/19/16 13:32

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
TPH (GC/FID) Low Fraction	ND		0.100
(S) a,a,a-Trifluorotoluene(FID)	*103*		*62.0-128*

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

(LCS) 01/19/16 12:28 • (LCSD) 01/19/16 12:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.19	6.14	112	112	67.0-132			0.780	20
(S) a,a,a-Trifluorotoluene(FID)				*105*	*105*	*62.0-128*				

L812366-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/19/16 18:12 • (MS) 01/19/16 18:33 • (MSD) 01/19/16 18:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.0200	5.98	5.99	108	108	1	50.0-143			0.170	20
(S) a,a,a-Trifluorotoluene(FID)					*105*	*104*		*62.0-128*				

Method Blank (MB)

(MB) 01/15/16 22:53

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Benzene	ND		0.00100
n-Butylbenzene	ND		0.00100
Cyclohexane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
Ethylbenzene	ND		0.00100
Isopropylbenzene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methyl Cyclohexane	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Toluene	ND		0.00500
1,2,4-Trimethylbenzene	ND		0.00100
Xylenes, Total	ND		0.00300
1,3,5-Trimethylbenzene	ND		0.00100
(S) Toluene-d8	*101*		*90.0-115*
(S) Dibromofluoromethane	*98.3*		*79.0-121*
(S) 4-Bromofluorobenzene	*91.8*		*80.1-120*

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

(LCS) 01/15/16 21:11 • (LCSD) 01/15/16 21:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0245	0.0248	98.1	99.2	73.0-122			1.08	20
n-Butylbenzene	0.0250	0.0267	0.0268	107	107	75.9-134			0.430	20
1,2-Dichloroethane	0.0250	0.0257	0.0270	103	108	65.3-126			4.67	20
Ethylbenzene	0.0250	0.0248	0.0249	99.2	99.8	80.9-121			0.570	20
Isopropylbenzene	0.0250	0.0248	0.0245	99.2	98.2	81.6-124			1.05	20
2-Butanone (MEK)	0.125	0.156	0.0479	125	38.3	46.4-155		J3 J4	106	20
Naphthalene	0.0250	0.0234	0.0258	93.7	103	69.7-134			9.79	20
n-Propylbenzene	0.0250	0.0252	0.0247	101	98.9	81.9-122			1.75	20
Toluene	0.0250	0.0244	0.0251	97.5	100	77.9-116			2.91	20
1,2,4-Trimethylbenzene	0.0250	0.0251	0.0249	100	99.5	79.0-122			0.820	20
1,3,5-Trimethylbenzene	0.0250	0.0251	0.0247	100	98.9	81.0-123			1.48	20
Xylenes, Total	0.0750	0.0724	0.0728	96.6	97.1	79.2-122			0.520	20
(S) Toluene-d8				*99.6*	*99.4*	*90.0-115*				

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

(LCS) 01/15/16 21:11 • (LCSD) 01/15/16 21:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) Dibromofluoromethane				*98.9*	*99.6*	*79.0-121*				
(S) 4-Bromofluorobenzene				*94.3*	*92.3*	*80.1-120*				

L812136-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 01/16/16 00:14 • (MS) 01/15/16 23:13 • (MSD) 01/15/16 23:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0212	0.0234	84.8	93.5	1	58.6-133			9.73	20
n-Butylbenzene	0.0250	ND	0.0235	0.0263	94.0	105	1	64.8-145			11.4	20
1,2-Dichloroethane	0.0250	ND	0.0231	0.0258	92.5	103	1	60.7-132			10.9	20
Ethylbenzene	0.0250	ND	0.0214	0.0233	85.8	93.3	1	62.7-136			8.41	20
Isopropylbenzene	0.0250	ND	0.0216	0.0232	86.5	92.7	1	67.4-136			6.95	20
2-Butanone (MEK)	0.125	0.000982	0.114	0.132	90.6	105	1	45.0-156			14.2	20.8
Naphthalene	0.0250	0.000332	0.0212	0.0241	83.3	95.0	1	61.8-143			12.8	20
n-Propylbenzene	0.0250	ND	0.0220	0.0239	87.8	95.4	1	63.2-139			8.33	20
Toluene	0.0250	ND	0.0218	0.0238	87.2	95.1	1	67.8-124			8.72	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0222	0.0242	88.9	97.0	1	60.5-137			8.68	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0218	0.0239	87.3	95.5	1	67.9-134			8.90	20
Xylenes, Total	0.0750	ND	0.0641	0.0702	85.4	93.6	1	65.6-133			9.16	20
(S) Toluene-d8					*102*	*102*		*90.0-115*				
(S) Dibromofluoromethane					*100*	*99.7*		*79.0-121*				
(S) 4-Bromofluorobenzene					*92.8*	*92.1*		*80.1-120*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [14]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

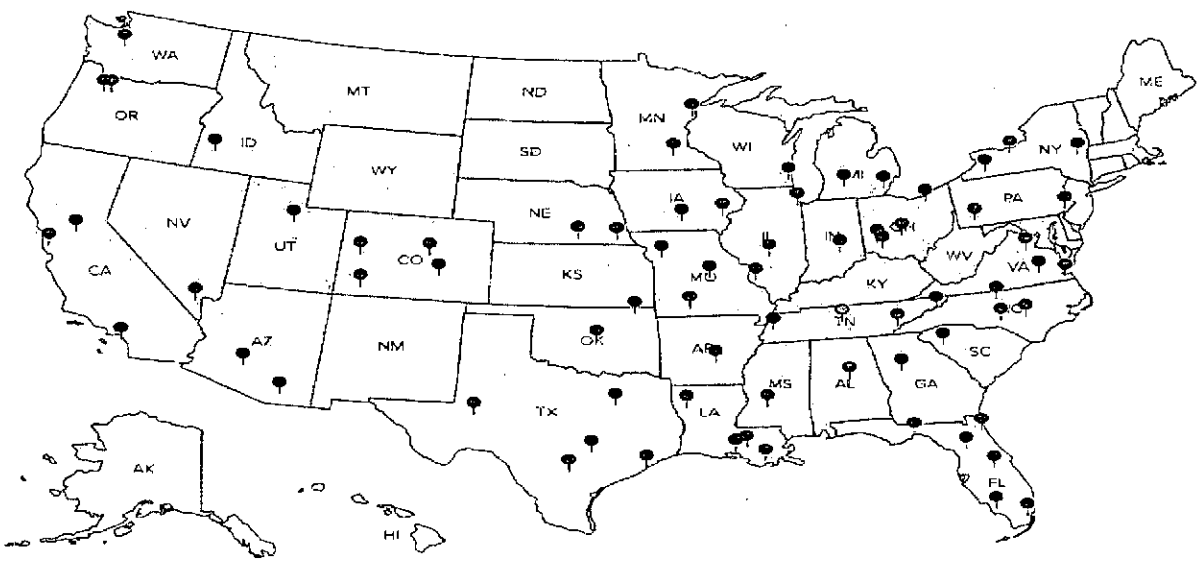
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:
Apex Companies, LLC-Portland, OR
3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable-Cindi Joystaller
3015 SW First Avenue
Portland, OR 97201-4707

Report to: Samuel Jackson

Email To: SJackson@apexcos.com; talfred@apexcos.com; tcrahan@apexcos.com

Project Description: Andover Release Site

City/State Collected:

Phone: 503-924-4704
Fax: 503-943-6357

Client Project #: E3CE-0065

Lab Project #: ASHCREPOR-NUANDQUAIL

Collected by (print): Ted Alfred

Site/Facility ID #: Andover Quail Crossing

P.O. #:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GRO 8015 40mLAmb-HCl	VOC 8260 APG Custom List 40mL Amb-HCl								Rem./Contaminant	Sample # (lab only)
MW-10	Grab	GW	30'	1-13-15	1520	5	X	X									01

Chain of Custody Page 1 of 1

ESC LABS SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 811995
1030

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

Remarks: 7821 6180 2391

pH ___ Temp ___
Flow ___ Other ___

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	1-13-15	1715	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
			Guy Dean

Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ ___

Temp: 2.1 °C Bottles Received: 500

Date: 1-13-15 Time: 0900

Hold #:

Condition: (lab use only) Toll

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF: