January 6, 2015

Ms. Pamela Green
Kansas Department of Health and Environment
Bureau of Environmental Remediation
1000 SW Jackson Street, Suite 410
Topeka, Kansas 66612

Re: Proposed SPH Removal Modification
Quail Crossing Neighborhood
Andover, Kansas
1641-06

Dear Ms. Green:

This Separate-Phase Hydrocarbon (SPH) Removal Work Plan (Work Plan) was prepared on behalf of NuStar Pipeline Operating Partnership L.P. (NuStar) as part of a continuing response to the release of gasoline from a pipeline in the Quail Crossing Neighborhood (the Neighborhood) in Andover, Kansas. The area in the vicinity of the release, or the Site, is shown in Attachment A (Figures 1 and 2). This Work Plan was prepared in accordance with the Consent Agreement and Final Order (CAFO) dated May 10, 2013, and project discussions between NuStar and the Kansas Department of Health and Environment (KDHE) on December 17, 2014.

## BACKGROUND

The pipeline release was discovered in June 2012 after SPH were detected in the irrigation well at 2006 N Colt Court, Andover, Kansas (the Irrigation Well). The NuStar pipeline release location was approximately 80 feet north of the affected irrigation well. Upon notification of the discovery of SPH in the irrigation well, NuStar immediately mobilized to the Site and implemented several initial response and abatement activities, including repairs to the pipeline, deactivation of the Irrigation Well, and removal of SPH from the Irrigation Well via hand bailing with a disposable bailer.

Following the initial response activities, NuStar: (1) performed a number of interim remedial measures (IRMs); (2) planned and implemented a Comprehensive Investigation (CI), which included installation of 16 monitoring wells; (3) performed additional investigation to refine the understanding of petroleum constituents in vadose-zone soil; (4) designed and implemented a soil vapor extraction pilot test; and (5) implemented an ongoing groundwater monitoring program. These activities are described in detail in reports previously prepared by Apex (2014a, b, c, d, e, f, and g).

Since installation, the 16 monitoring wells have been gauged weekly for the presence of SPH and to measure depth to water. Well locations are shown in Attachment A and groundwater elevations are shown in Attachment B. SPH have not been observed in any monitoring 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 other irrigation wells at the Site. Additionally, SPH were not encountered during installation of 13 borings in the vicinity of the release. Based on data collected from monitoring wells, irrigation wells, and 13 temporary borings (installed during the vadose zone soil evaluation), SPH are limited to the vicinity of the Irrigation Well at 2006 Colt Court.

### *Current SPH Removal Program*

As shown in Attachment B, SPH have been removed from the Irrigation Well since June 2012. During the period June 2012 through June 2013, SPH were removed manually with a hand bailer during 27 events and with a

combination vacuum truck/hand bailer during three events. Since June 2013, a vacuum truck has been used to extract SPH from the Irrigation Well: (1) on a weekly frequency from June 2013 to May 13, 2014; (2) twice a week from May 20 through October 2014; and (3) on a weekly frequency in November 2014. During each vacuum event:

- The Irrigation Well is gauged and the thickness of SPH, if present, is measured using an electronic water interface probe. SPH gauging is performed at the start and completion of each removal event.
- A vacuum truck, capable of generating vacuum equivalent to 100 inches of water, is used to extract groundwater and SPH, if present, from the Irrigation Well and to induce a vacuum in the surrounding formation. Vacuum is induced for approximately two hours, through flexible hosing that is secured to the well head. Extracted SPH and water are contained in a tank located on the truck. Extracted vapor is discharged through a temporary stack (comprised of a vertically installed 15-foot-length 4-inch-diameter PVC pipe).
- Extracted water and SPH, if any, are treated and disposed of at the Custom Wastewater Facility in Wichita, Kansas.

In June 2013, when vacuum extraction was initiated, the SPH thickness in the Irrigation Well was approximately 0.81 foot. During the period August through mid-October 2013, measurable SPH were not present in the Irrigation Well. SPH were generally present during the period mid-October 2013 to November 2014, and ranged from no SPH to 0.32 foot; increased SPH thickness appears to correspond to decreased water levels during that period. Since November 2014, SPH thicknesses have been in the range of 0.10 foot, and vacuum extraction frequency has been reduced to one event per week. SPH thicknesses and SPH recovery data for the period June 2013 through November 2014 are presented in Attachment A (Figure 3) and Attachment B (Table B-3).

## PROPOSED CHANGES

The SPH removal program implemented to date has been effective for removing SPH from the subsurface; however, based on the limited extent and mobility of SPH, modifications to the SPH removal program are warranted. Proposed modifications to the SPH recovery program are described below.

To assess the accumulation rate of SPH in the Irrigation Well, SPH thickness will be gauged on a weekly basis for four weeks. Vacuum extraction events will not be performed during this period. At the end of the four-week evaluation period, a vacuum extraction event will be performed to remove SPH from the well. Immediately following the vacuum event, an appropriately sized passive SPH skimmer will be installed in the Irrigation Well. Following installation of the passive skimmer, the passive skimmer will be emptied and adjusted approximately every four to six weeks. Concurrent with the passive skimmer operations and maintenance events, liquid- and vapor-phase constituents, and residual SPH, if any, will be removed using mobile vacuum equipment. The vacuum events will be performed consistent with the ongoing vacuum recovery methods. The operations and maintenance schedule may be modified, in coordination with KDHE, based on SPH recovery rates.

The proposed modifications are expected to be effective for removing SPH from the subsurface in the vicinity of the Irrigation Well. Passive skimming equipment is a proven remedial technology that has been successfully used at many sites throughout the U.S. (U.S. EPA, 1996). Based on SPH gauging data collected to date, we anticipate that a Hydro-Skimmer™ Model #402, 3.5-inch-diameter, 2.1-gallon collection capacity) have sufficient capacity and will be appropriate for deployment in the Irrigation Well. Specifications for the proposed skimmer are included in Attachment C.

*Reporting and Schedule*

The work described herein will be implemented within approximately 14 days of KDHE's approval of this Work Plan, barring delays beyond the control of NuStar. Results of the SPH recoverability evaluation and modifications to the SPH removal program will be presented in forthcoming quarterly groundwater monitoring reports.

If you have any questions or would like to discuss this further, please contact the undersigned at (503) 924-4704.

Sincerely,

Sam Jackson
Associate Engineer

Chris Breemer, R.G.
Principal Geologist

## REFERENCES

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

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

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

Apex, 2014c. *First Quarter 2014 Groundwater Monitoring Report*. *Quail Crossing Neighborhood, Andover, Kansas.* May 2, 2014.

Apex, 2014d. *Second Quarter 2014 Groundwater Monitoring Report*. *Quail Crossing Neighborhood, Andover, Kansas.* July 9, 2014.

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

Apex, 2014f. *Third Quarter 2014 Groundwater Monitoring Report*. *Quail Crossing Neighborhood, Andover, Kansas.* October 20, 2014.

Apex, 2014g. *Groundwater Pilot Test Work Plan. Quail Crossing Neighborhood, Andover, Kansas.* November 12, 2014.

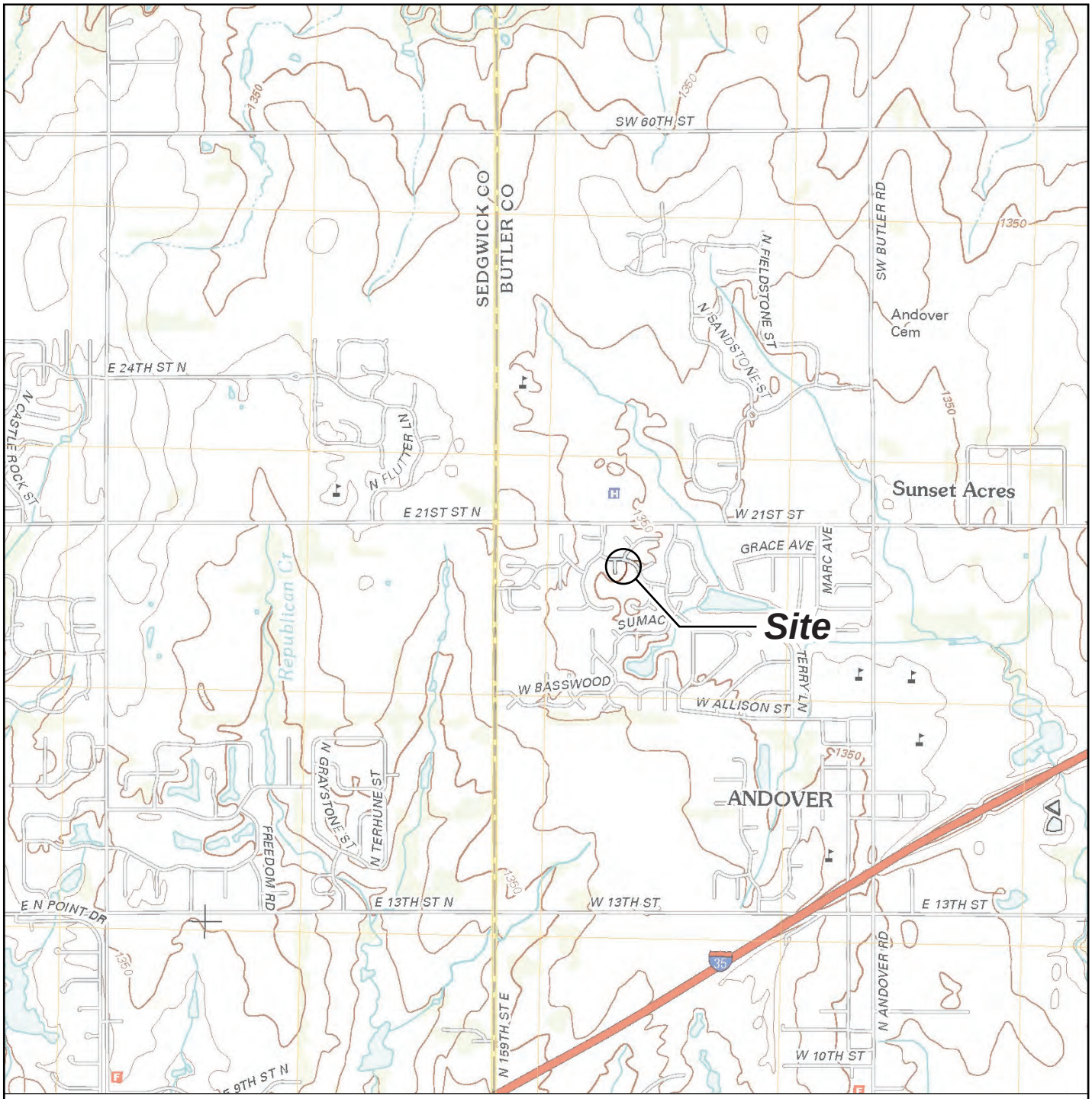
United States Environmental Protection Agency (U.S. EPA), 2003. How To Effectively Recover Free Product At Leaking Underground Storage Tank Sites: A Guide For State Regulators *(EPA 510-R-96-001)*.

## ATTACHMENTS

A Figures
B Tables
C Passive SPH Skimmer Specifications

# *Attachment A*

## Figures




***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

*KANSAS*

N

# Site Location Map

Revised SPH Recovery Plan
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

| | | | |
|---|---|---|---|
| APEX Apex Companies, LLC<br>3015 SW First Avenue<br>Portland, Oregon 97201 | Project Number | 1641-06 | Figure |
| | December 2014 | | 1 |

N

***Legend:***

- **MW-1** Monitoring Well Location
- Irrigation Well
- **B-1** Boring Location
- Property Line
- Pipeline
- Pipeline Easement Boundary
- HOA Lot Owned by Quail Crossing Homeowner's Association
- Deactivated Irrigation Well
- Excavation Area

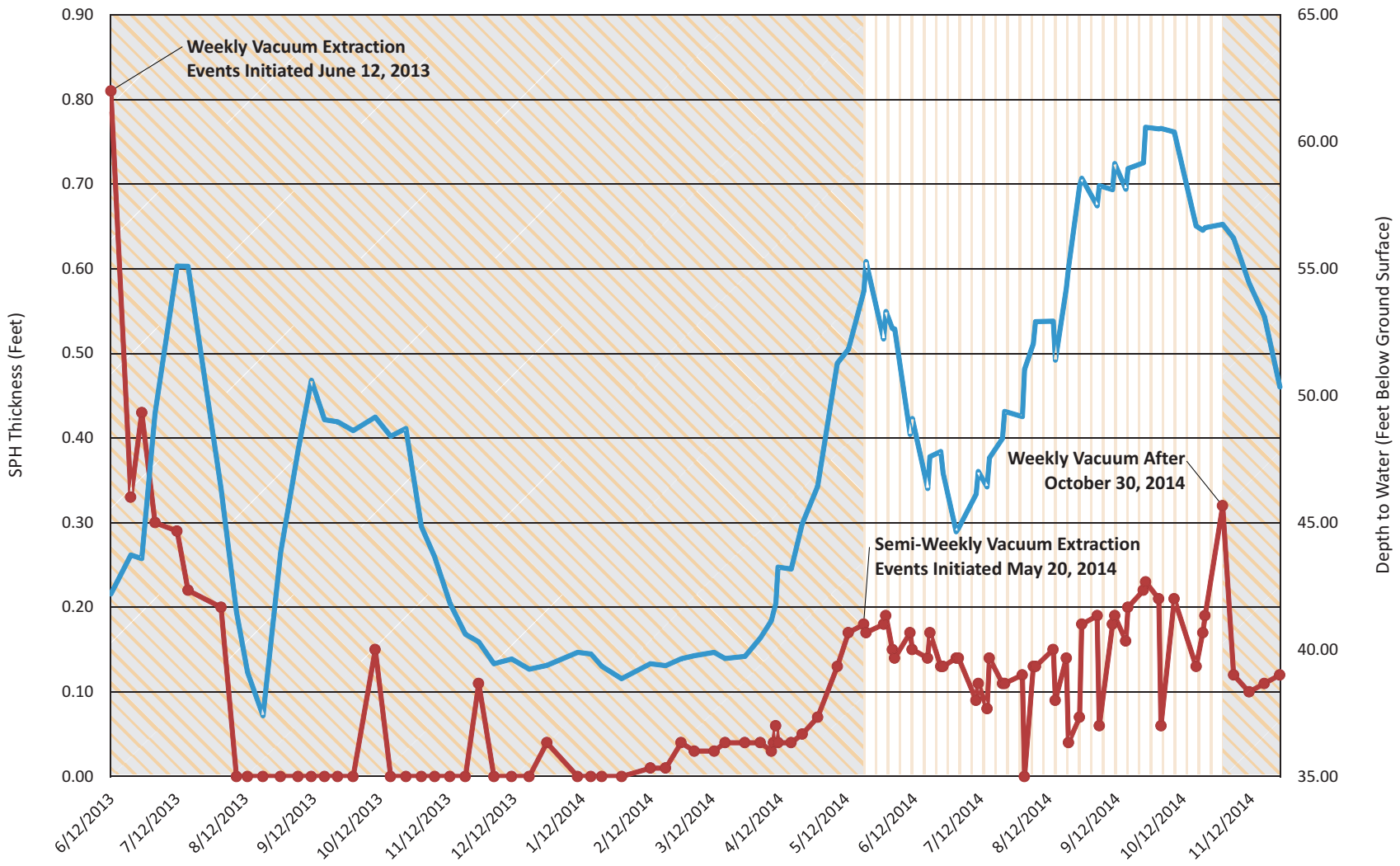
0 100 200

Scale in Feet

# Site Plan and Sample Location Map

Revised SPH Recovery Plan
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

| | | | |
|---|---|---|---|
| APEX Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201 | Project Number | 1641-06 | Figure |
| | December 2014 | | 2 |




***Legend:***

SPH Thickness (Feet)

Depth to Water (Feet Below Ground Surface)

# SPH and Depth to Water In Irrigation Well

Revised SPH Recovery Plan
NuStar Pipeline Operating Partnership L.P.
Andover, Kansas

| | | | |
|---|---|---|---|
| APEX Apex Companies, LLC<br>3015 SW First Avenue<br>Portland, Oregon 97201 | Project Number | 1641-06 | Figure |
| | December 2014 | | 3 |

# *Attachment B*

## Tables

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 | 8/8/2013 | 4.0 | 1352.13 | 35.0 | 20-35 | 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 |
| | 1/16/2014 | | | | | 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 |
| | 7/1/2014 | | | | | 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 |

*Please refer to notes at end of table.*

Table B-1
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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 | 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 |
| | 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 |
| | 3/18/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 32.88 | -- | -- | 1320.29 |
| | 8/20/2014 | | | | | 32.54 | -- | -- | 1320.63 |
| | 8/26/2014 | | | | | 33.00 | -- | -- | 1320.17 |
| | 9/3/2014 | | | | | 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 |

*Please refer to notes at end of table.*

Table B-1
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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 | 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 |
| | 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 |
| | 6/10/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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-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 |
| | 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 |
| | 8/14/2015 | | | | | 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 |

*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 | 8/8/2013 | 2.0 | 1352.77 | 30 | 15-30 | 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 |
| | 1/21/2014 | | | | | 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 |
| | 7/15/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 | 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 |
| | 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 |
| | 5/13/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 | 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 |
| | 3/18/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 | 8/8/2013 | 2.0 | 1353.38 | 30 | 15-30 | 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 |
| | 1/16/2014 | | | | | 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 |
| | 7/1/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 | 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 |
| | 11/20/2013 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 | 8/8/2013 | 2.0 | 1348.79 | 34 | 19-34 | 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 |
| | 11/26/2013 | | | | | 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 |
| | 3/27/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 |
| | 8/14/2015 | | | | | 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 |
| | 9/17/2014 | | | | | 28.69 | -- | -- | 1322.65 |
| | 9/24/2014 | | | | | 23.69 | -- | -- | 1327.65 |

*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 | 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 |
| | 4/3/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 |
| | 8/14/2015 | | | | | 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 |
| | 9/17/2014 | | | | | 32.42 | -- | -- | 1322.16 |
| | 9/24/2014 | | | | | 32.51 | -- | -- | 1322.07 |

*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 | 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 |
| | 4/3/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 |
| | 8/14/2015 | | | | | 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 |
| | 9/17/2014 | | | | | 34.98 | -- | -- | 1316.81 |
| | 9/24/2014 | | | | | 35.29 | -- | -- | 1316.50 |

*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 | 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 |
| | 4/3/2014 | | | | | 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 |
| | 8/14/2015 | | | | | 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 |

*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 | 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 |
| | 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 |
| | 8/14/2015 | | | | | | -- | -- | 1344.50 |
| | 8/20/2014 | | | | | | -- | -- | 1344.50 |
| | 8/26/2014 | | | | | | -- | -- | 1344.25 |
| | 9/3/2014 | | | | | | -- | -- | 1344.50 |
| | 9/10/2014 | | | | | | -- | -- | 1344.25 |
| | 9/17/2014 | | | | | | -- | -- | 1344.00 |
| | 9/24/2014 | | | | | | -- | -- | 1344.00 |

*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.

Table B-2
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-3
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through November 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-3
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through November 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-3
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through November 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-3
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through November 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 | 60.39 | 60.18 | 0.21 | 0.3 | 25.0 | 0.1 | Mobile vacuum truck |
| 10/8/2014 | 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-3
Separate- and Dissolved-Phase Recovery Data - 2006 N. Colt Court
June 2013 through November 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 |
| | | | Total Fluids Recovered | 31 | 2360 | | |

*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.

# *Attachment C*

## Passive SPH Skimmer Specifications

# Hydro-Skimmer™

# GEOTECHNICAL SERVICES

THE EQUIPMENT SOURCE SINCE 1984

# Operational Instructions

# For

# Hydro-Skimmer

# U.S. Patent No. 5,322,388

REV 1-2011

**Geotechnical Services**
**2852 Walnut Ave., #E-1**
**Tustin, CA 92780**
**Phone: (714)832-5610**
**Fax: (714)832-8766**
**Toll Free: (800)524-9111**

# Hydro-Skimmer™

The Hydro-Skimmer passive recovery device is a patented one piece counterbalanced skimmer used to recover light floating hydrocarbons down to a sheen. The Hydro-Skimmer was designed to provide faster servicing of the hydrophobic element, higher product recovery rates, larger collection volumes which extend the time between servicing, greater ability to operate in wells with large water table fluctuations (entire device follows the water/product interface) or wells with little water. The Hydro-Skimmer design offers a specially designed chamber which prevents hydrostatic forces from forcing water through the hydrophobic element. This vent chamber also has replaced the requirement for an external vent tube. Our skimmers contain no contaminating glues of any kind.

**Features:**

- No power source required: uses canister collection method
- Hydrophobic skimming element: 10 inch recovery zone, recovers down to a sheen
- One piece counterbalance design: no moving parts, tracks water/product interface up to 48”
- Internal vent chamber prevents hydrostatic forces from forcing water through skimmer element, eliminates external vent tube
- Choice of skimmer housing material: clear or opaque
- 30 Day warranty for manufacture defects. (excluding hydrophobic element)

**Specifications:**

| ***Well Diameter*** | ***Model #*** | ***Collection Capacity*** | ***Overall Length*** | ***Actual Diameter*** | ***Minimum Water Depth*** | ***Dry Weight*** |
|---|---|---|---|---|---|---|
| 2” | 200 | .072 gal | 34” | 1.66” | 22” | 2 lbs |
| 2” | 201 | .261 gal | 66” | 1.66” | 51” | 5 lbs |
| 2” | 202 | .430 gal | 96” | 1.66” | 80” | 8 lbs |
| 4” | 400 | .428 gal | 36” | 3.50” | 20” | 5 lbs |
| 4” | 401 | 1.147 gal | 64” | 3.50” | 46” | 16 lbs |
| 4” | 402 | 2.157 gal | 96” | 3.50” | 80” | 24 lbs |

Note: Please add a “C” after the model number to designate clear housing.

**RULES FOR SAFE OPERATION**

1. Slowly lower skimmer into well.
2. Do not squeeze or smash hydrophobic element.
3. Remove separator only when necessary.

# Hydro-Skimmer™

**Installation Procedure**

**Please refer to Figure 1 on page 4 for more detail.**

1. **Take placement measurements:**
   A. **Total well depth to top of well casing**
   B. **Depth to Water**
   C. **Depth to hydrocarbon product**
   **Taking the above measurements is important because when installing the Hydro-Skimmer, the displacement of water may create a false water table and cause the Hydro-Skimmer to be installed at an improper height, impeding collection.**

**1.2 Attach safety cord to eye bolt at top of Hydro-Skimmer.**

**1.3 Installation can be accomplished more easily with the use of an interface meter to determine that the water/hydrocarbon interface comes within three inches of the lower slotted area of the Hydro-Skimmer. If interface meter is not available, <u>SLOWLY</u> lower Hydro-Skimmer into well, allowing it to locate its own buoyancy.**

**1.4 Remove Hydro-Skimmer from well. The Hydro-Skimmer is preweighted to be buoyant with the water/hydrocarbon interface, ideally within three inches of the lower slotted area of the skimmer. If the Hydro-Skimmer is not resting in this position, the following conditions should be considered:**

A. **If the hydrocarbon thickness as measured in Step 1..1 exceeds 12", the Hydro-Skimmer will ride above the suggested level but will function properly as it will weight itself when collection of hydrocarbon product begins.**
B. **If the hydrocarbon product in in excess of 6", the Hydro-Skimmer will collect to capacity in approximately 1 hour, thus requiring the collection chamber to be emptied.**
C. **If water salinity does not allow the Hydro-Skimmer to rest within the recommended water/hydrocarbon area, galvanized washers (included in shipment) may need to be threaded onto the safety connector to weight the unit so that EFFECTIVE collection may take place.**

**1.5 After above adjustments have been made, reinsert the Hydro-Skimmer into well allowing 4" of slack in safety connector between the two eye bolts when the well cap is in its installed position.**

# Hydro-Skimmer™

**Installation Procedure Cont.**

**1.6 Removal and collection procedures:**

**A. Remove Hydro-Skimmer from well.**

**B. Hold unit upright over recommended hydrocarbon collection container and open valve at base, allowing product to drain into container.**

**C. Close valve and reinsert Hydro-Skimmer into well following installation procedures as outlined above.**

**1.7 Maintenance of skimmer element:**

**The Hydro-Skimmer is designed with a removable hydrophobic element, thus allowing it to be cleaned. Remove hydrophobic element only when necessary. Replacement elements are available if the element becomes damaged.**

**A. Remove upper vent chamber cap from Hydro-Skimmer. With your fingers, carefully pull up on the inner aluminum tube. This will disengage the hydrophobic element from an O-ring seal in the lower housing.**

**B. The element may be sprayed or immersed in any EPA approved hydrocarbon cleaning solution. If immersed in a solution, use a gentle rotation action to facilitate cleaning. DO NOT squeeze or mash on the plastic webbing area.**

**C. To re-install the hydrophobic element, place a non-hydrocarbon lubricant such as soap on the lower two inches of the aluminum tubing. Check bevel on lower edge of tubing to insure it is free of burrs that might cut O-ring in lower housing. Place element in Hydro-Skimmer and align with hole in lower housing. Gently push down on element (approximately one inch) until it is fully engaged in the lower housing. The element is held in place when the upper vent chamber cap is fully screwed onto the top of the Hydro-Skimmer.**

# Hydro-Skimmer™

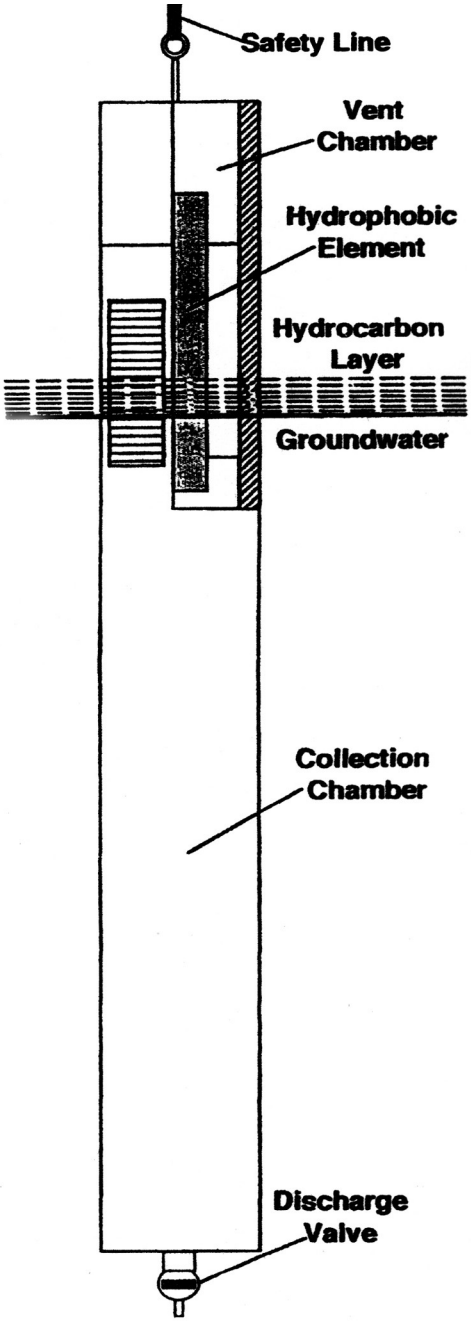
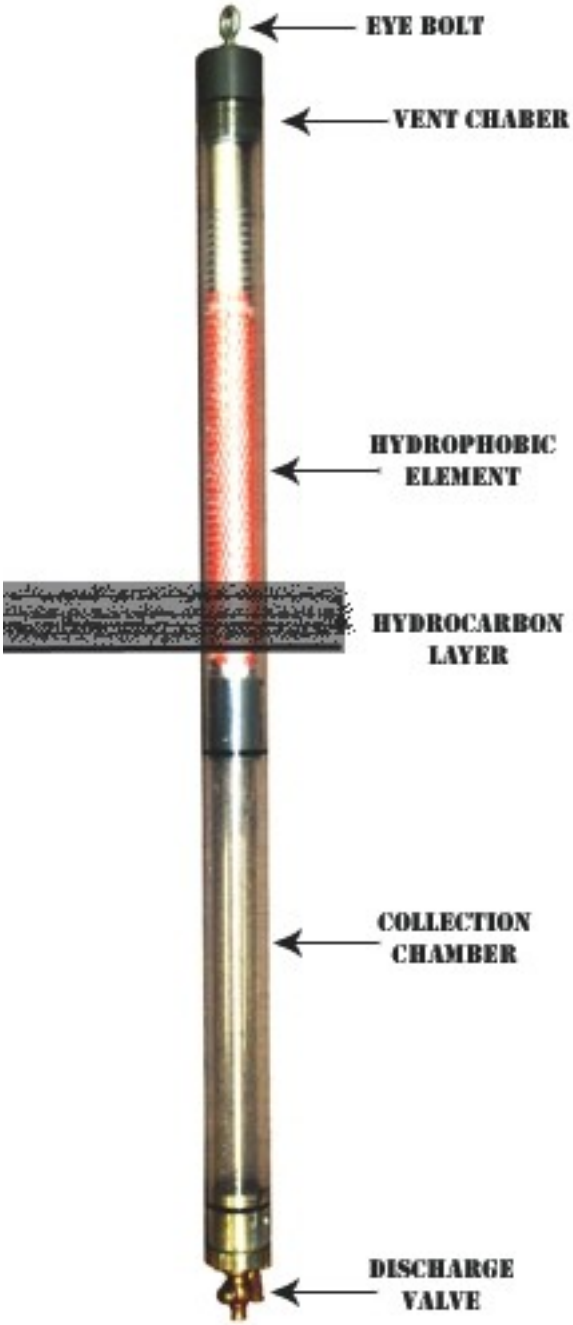



**Figure 1**

# Hydro-Skimmer™