2016 Semiannual Groundwater Monitoring Report

Prepared for

Owens Corning
Anderson, South Carolina

July 28, 2016

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148917-100-002

Brown AND Caldwell

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List of Abbreviations

1,1-DCA	1,1-dichloroethane
1,2-DCA	1,2-dichloroethane
1,1-DCE	1,1-dichloroethene
1,1,1-TCA	1,1,1-trichloroethane
AES	Analytical Environmental Services, Inc.
bgs	below ground surface
btoc	below top of casing
cis-1,2-DCE	cis-1,2-dichloroethene
COC	constituent of concern
DO	dissolved oxygen
EB	equipment blank
ft	feet or foot
gpm	gallons per minute
ICM	Interim Corrective Measures
µg/L	micrograms per liter
MCL	maximum contaminant level
NAVD88	North American Vertical Datum of 1988
ORP	oxidation-reduction potential
PCE	tetrachloroethene
QA/QC	quality assurance/quality control
RCRA	Resource Recovery and Conservation Act
RFI	RCRA Facility Investigation
RL	reporting limit
SCDHEC	South Carolina Department of Health and Environmental Control
SESDPROC	Science and Ecosystem Support Division Groundwater Sampling Procedure
SWMU	Solid Waste Management Unit
SOP	standard operating procedure
TCE	trichloroethene
trans-1,2-DCE	trans-1,2-dichloroethene
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compound
Waterloo	Solinst Waterloo Multilevel Groundwater Monitoring System

Professional Geologist Certification

The 2016 Semiannual Groundwater Monitoring Report has been prepared under the direction and supervision of a qualified, State of South Carolina licensed, Professional Geologist. Mr. Reinhard Ruhmke, P.G., of Brown and Caldwell was responsible for the overall preparation of the report.

Reinhard Ruhmke, P.G.
Managing Geologist
South Carolina Professional Geologist #2469

July 28, 2016
Date

Section 1

Introduction

This 2016 Semiannual Groundwater Monitoring Report (Report) was prepared by Brown and Caldwell on behalf of the Owens Corning Anderson (Owens Corning), South Carolina facility for submittal to the United States Environmental Protection Agency (U.S. EPA) in accordance with the October 1989 Consent Order (89-34-R) with the U.S. EPA under Section 3008(h) of the Resource Recovery and Conservation Act (RCRA). This Report summarizes the February and May 2016 quarterly groundwater monitoring events and the May 2016 semiannual residential well monitoring event. The Consent Order requires that Owens Corning perform annual groundwater monitoring, and in 2005, the U.S. EPA required that quarterly groundwater monitoring be conducted for select bedrock wells (MW-15, MW-22, and MW-29R) located in the Northeast Area. Since that time, additional bedrock monitoring wells (MW-35, MW-36, MW-37, MW-38, MW-39, MW-41, MW-42, MW-43 and MW-44) have been installed and were included in the two quarterly monitoring events reported herein. In 2009, U.S. EPA required Owens Corning to conduct semiannual monitoring of select residential wells located northeast of the Site.

Section 1 of this Report presents an introduction and Section 2 summarizes the well sampling activities, procedures and analytical methods and includes detailed information on Site hydrogeology and aquifer characteristics. Section 3 provides and discusses the analytical results and Section 4 provides conclusions. Appendices to this document contain the groundwater sampling field forms, laboratory analytical reports and historical groundwater data.

The Owens Corning facility is situated on approximately 160 acres of land located at 4837 Highway 81 South in Starr, South Carolina within Anderson County (Site). As shown on Figure 1, the property is bounded to the west by Highway 81 South, True Temper Road to the north, Keys Street to the east, and Harry Drive to the south. Over time Owens Corning has acquired additional properties located adjacent to or near the northeast corner of the original plant property. These properties are also shown on Figure 1 and include the northwest and southeastern corners of the intersection of Keys Street and True Temper Road, and the former Hall Property located to the north of True Temper Road and along Betsy Creek. The facility is located approximately 4 miles south of the town of Anderson.

The facility began its composite systems business operations in 1951 and since then has engaged in the production of glass fiber reinforcements and similar materials for composite systems. Historical manufacturing processes involved a variety of chemicals, including acids and solvents, some of which were inadvertently released to the environment and resulted in significant Site investigation work that has been reported to the U.S. EPA and the South Carolina Department of Health and Environmental Control (SCDHEC).

Section 2

Groundwater Assessment

Brown and Caldwell personnel performed the first and second quarter groundwater monitoring events between February 22 and 24, 2016, and May 9 and 12, 2016, respectively. The semiannual residential well sampling event was also conducted on May 12, 2016. This Section provides an overview of the quarterly monitoring activities and semiannual residential well sampling activities and includes information on Site hydrogeology and aquifer characteristics, groundwater sampling locations, sampling procedures and analytical methods.

2.1 Subsurface Geology

The Owens Corning Site is located within the Inner Piedmont Belt of the Piedmont Geologic Physiographic Province that is characterized by moderate to high-grade metamorphic rocks of Precambrian to early Paleozoic age. The bedrock in the vicinity of the Site is granitic gneiss which is overlain by overburden comprised of clay and silt soil, and saprolite. The saprolite exhibits some structural characteristics of the parent rock material such as foliation and fracturing. The thickness of the soil and saprolite unit beneath the Site ranges from approximately 5 to 100 feet (ft). The primary lineaments and fracture zones beneath the Site trend in a northeast and southwest orientation (LeGrand and Furcron, 1956). A more detailed description of the subsurface geology beneath the Site can be found in the *Supplemental RCRA Facility Investigation (RFI) Report* (Brown and Caldwell, 2009), which was prepared by Brown and Caldwell on behalf of Owens Corning for submittal to the U.S. EPA.

2.2 Aquifer Characteristics

At the Site, groundwater is present in both the overburden/saprolite unit and the bedrock unit. Water level measurements were collected from 34 and 35 wells during the February and May 2016 quarterly monitoring events, respectively. The water levels for both events are provided in Tables 1 and 2, respectively. Refer to Figure 1 (Site Map) to identify well locations. The water level measurements were used to calculate groundwater elevations and prepare potentiometric maps for the overburden and bedrock aquifers for the February (Figures 2 through 6) and May (Figures 7 through 11) 2016 monitoring events. Well construction information is provided in Table 3.

Based on the monitoring well measurements from February 2016, groundwater levels in the overburden aquifer ranged from 3.90 (MW-11) to 21.90 (TW-46) feet (ft) below top of casing (btoc) and from 776.32 to 794.68 ft in elevation [North American Vertical Datum of 1988 (NAVD88)]. Measurements from the same time period taken from wells in the bedrock aquifer exhibit heads ranging from 0.05 ft above the top of the casing (MW-38 Zone 2) to 48.50 ft btoc (MW-39 Zone 3) and from 771.23 to 757.70 ft in elevation (NAVD88). In May 2016, the groundwater levels in the overburden aquifer ranged from 5.17 (MW-11) to 22.97 (TW-46) ft btoc and from 775.05 to 793.61 ft in elevation (NAVD88). Measurements from wells in the bedrock aquifer exhibit hydraulic heads ranging from 0.50 ft above top of casing (MW-38 Zone 2) to 50.41 ft btoc (MW-39 Zone 3) and from 771.68 to 755.79 ft in elevation (NAVD88). The variation in head in the bedrock aquifer is highly dependent on both the elevation and the presence of bedrock fractures relative to the wells' screened interval.

Based on the February 2016 data, onsite groundwater in both the overburden and bedrock aquifers flows toward the fracture zones associated with Betsy Creek, giving an east-northeasterly gradient. This is

consistent with the historical groundwater flow direction with the exception that groundwater from solid waste management unit (SWMU)-9 was previously shown flowing more to the north than the northeast. Measurements from the bedrock aquifer wells offsite indicate that flow direction continues to align with Betsy Creek as the stream turns toward the north-northeast in the area of MW-35. The magnitude of the horizontal gradient onsite varies depending on the aquifer and fracture zone. Based on the May 2016 data, calculated horizontal gradients are as follows: 0.0159 feet/foot (ft/ft) in the overburden (calculated between MW-21 and MW-23); 0.0148ft/ft in the bedrock aquifer in the 699 to 740 feet (NAVD88) zone (calculated between MW-27 and MW-41 Zone 1); 0.0246 ft/ft in the bedrock aquifer in the 632 to 699 feet (NAVD88) zone (calculated between MW-15 and MW-22); 0.0115 ft/ft in the bedrock aquifer in the 574 to 630 feet (NAVD88) zone (calculated between MW-19 and MW-41 Zone 2); 0.0109 ft/ft in the and bedrock aquifer in the 430 to 530 feet (NAVD88) zone (calculated between MW-37 Zone 3 and MW-41 Zone 3). The following vertical gradients were also observed during the May 2016 event: a downward gradient of 0.0325 ft/ft across the overburden/bedrock aquifer (calculated between MW-12 and MW-19); and an upward gradient of 0.0174 ft/ft at the intersection of Keys Street and True Temper Road across the overburden/bedrock aquifer (calculated between MW-21 and MW-38 Zone 2).

The interim corrective measures bedrock hydraulic containment system started up on November 3, 2011. The system currently pumps groundwater from one (EW-1) of two bedrock extraction wells. EW-1 is located approximately 250 ft north of the intersection between Keys Street and True Temper Road (Figure 1) and has total depth of 450 ft below ground surface (bgs). The pump intake is at 425 ft bgs and currently withdraws groundwater at a rate of approximately 29.4 gallons per minute (gpm). Additional information regarding the interim corrective measures system was reported in the *Q1 2016 –Interim Corrective Measures Performance Monitoring Report* that was submitted to the U.S. EPA and SCDHEC in May 2016. At some point the second extraction well, EW-2, may be used depending on the performance of extraction well EW-1. The overburden aquifer was unaffected by the active pumping of extraction well EW-1 as a surface casing was installed. However, due to the pumping associated with the hydraulic containment system, varying amounts of drawdown were observed in bedrock wells in the vicinity of EW-1. The amount of drawdown is dependent on the interconnectivity between the fracture system in the bedrock zone in which the wells are screened and the fracture system in the open borehole extraction well, EW-1. The distribution of drawdown within the bedrock system was used to aid in developing the bedrock groundwater potentiometric surfaces presented on Figures 3 through 6 and 8 through 11.

2.3 Groundwater Monitoring Wells

The quarterly groundwater monitoring program includes 12 bedrock monitoring wells (MW-15, MW-22, MW-29R, MW-35, MW-36, MW-37, MW-38, MW-39, MW-41, MW-42, MW-43, and MW-44) and is sufficient to monitor for any changes in the plume. As previously discussed, MW-33 has been removed from the quarterly and annual groundwater monitoring program because it was converted to groundwater extraction well EW-1 for the interim corrective measures (ICM) hydraulic containment system and MW-34 is no longer operational and therefore, is not part of the quarterly and annual groundwater monitoring program. Refer to Table 3 for the well construction details and monitoring frequency of each of the wells, and Figure 1 for the well locations. Multiple water-bearing zones were gauged and sampled in bedrock wells MW-29R, MW-36, MW-37, MW-38, MW-39, MW-41, MW-42 and MW-43 (Tables 1 and 2).

2.4 Groundwater Sampling Procedures

On February 22 and May 9, 2016, depth to groundwater measurements were collected from the 12 bedrock monitoring wells of which eight have multiple water bearing zones. Water levels were also measured in monitoring wells: MW-3, MW-4, MW-6, MW-11 through MW-14, MW-16, MW-19, MW-21, MW-23, MW-25, MW-26, MW-27, P1, P2, Alloy, TW-40, TW-41, TW-42, TW-43, TW-44, and TW-46. The water level meter was decontaminated between wells with an Alconox® solution and rinsed with distilled water.

Sampling procedures were performed in the same manner as the previous monitoring events. Prior to collecting groundwater samples from the wells, the wells were purged using a low-flow submersible electric pump and/or bladder pump. The Solinst Waterloo Multilevel Groundwater Monitoring System (Waterloo) monitoring zones were purged and sampled using their dedicated compressed air driven stainless steel double valve pumps. Groundwater was pumped at an approximate rate of 0.25 gpm through dedicated Teflon-lined tubing equipped with a field-calibrated, in-line YSI® 556 meter to measure field parameters: pH, temperature, specific conductance, oxidation-reduction potential (ORP), and dissolved oxygen (DO). Turbidity was measured using a HF® Scientific DRT-15CE turbidity meter. Purging was considered complete when at least three of the field parameters had stabilized. Groundwater samples were collected when pH, temperature and specific conductance had stabilized as defined in U.S. EPA's Science and Ecosystem Support Division Groundwater Sampling Procedure (SESDPROC-301-R3), March 2013. Groundwater sampling field data sheets documenting the purging activities are included as Appendix A.

Groundwater samples were collected from the wells using the same low-flow pump that was used for purging. The pump was decontaminated between sample locations using an Alconox® solution and rinsed with distilled water. The groundwater samples were labeled, containerized, documented, placed into a cooler containing ice and chilled to approximately 4 degrees Celsius (temperatures verified by laboratory and are reported in the laboratory analytical report in Appendix B). Clean sample containers were provided by the analytical laboratory. Monitoring wells were sampled from least contaminated to most contaminated, based on previous groundwater monitoring data, to minimize the potential for carryover and cross-contamination between wells.

2.5 Residential Well Sampling Procedures

The semiannual residential well sampling event was conducted concurrently with the May 2016 quarterly sampling event. A total of 8 residential wells were sampled (Figure 12). The residential wells were sampled in accordance with methods described in U.S. EPA's Field Branches Quality System and Technical Procedures. The residential wells located at 134 Friendship Lane, 311 Kaye Drive, 115 Elrod Road, 335 Elrod Road, 408 Clinkscales Road, 1303 Clinkscales Road and 605 Clinkscales Road were not sampled due to inoperable pumps. Wells that pumped into a holding tank were purged of at least one tank volume (generally 15 to 20 gallons) prior to sampling. After purging, the samples were collected at a low flow rate from the spigot connected to the holding tank. Wells that did not utilize a holding tank were also purged of approximately 15 to 20 gallons and sampled directly from the well head. Water quality parameters pH, conductivity, temperature, DO, ORP, and turbidity were measured during purging and recorded on groundwater sampling forms which are included in Appendix A. The groundwater samples were labeled, containerized, documented, placed into a cooler containing ice and chilled to about 4 degrees Celsius (temperatures verified by laboratory and are reported in the laboratory analytical report in Appendix B).

Once the analytical data were validated (Section 2.7), a letter documenting the results for each well owner was prepared and mailed to each well owner by Brown and Caldwell.

2.6 Analytical Procedures

Groundwater and residential well samples were submitted to Analytical Environmental Services, Inc. (AES) of Atlanta, Georgia for analysis of the focused list of volatile organic compounds (VOCs) using U.S. EPA Method 8260B. The focused list of VOCs included tetrachloroethene (PCE); trichloroethene (TCE); 1,1,1-trichloroethane (1,1,1-TCA); 1,1-dichloroethane (1,1-DCA); 1,2-dichloroethane (1,2-DCA); 1,1-dichloroethene (1,1-DCE); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); vinyl chloride; carbon tetrachloride; chloroform; methylene chloride; benzene; toluene; ethylbenzene and xylenes.

2.7 Quality Assurance/Quality Control

The groundwater sampling was performed in accordance with U.S. EPA's Groundwater Sampling Standard Operating Procedure (SOP) (SESDPROC-301-R3), March 2013. To assess the quality of the sampling program, duplicate samples were collected (approximately one sample for every 20 samples) and analyzed for the focused list of VOCs. Two duplicate samples were collected during both the February and May sampling events. An evaluation of the analytical results for the duplicate samples showed that the reported constituents and concentrations were similar. Three equipment blanks (EBs) were collected during both the February and May sampling to determine the efficacy of non-dedicated equipment decontamination activities. The EB samples were obtained by collecting distilled water passed through or over decontaminated equipment. Trip blanks, provided by AES, were in all coolers and were submitted for analysis with the groundwater samples. The EB and trip blank samples were analyzed for the same constituents as the groundwater samples. No detections were found in any of the EB or trip blank samples. The analytical reports for these samples are provided in Appendix B.

Following laboratory analysis, data validation was performed by BC to ensure that the generated data were of acceptable quality such that appropriate decisions could be made. Data validation included a quality control review of the field and laboratory generated data and intended to answer questions such as:

- Were field procedures, including sample collection, handling and storage properly followed?
- Do the reported data include all requested analytical results for all samples collected?
- Were the correct analytical methods used and reported?
- Are there any anomalous results?
- Were results for quality assurance/quality control (QA/QC) samples acceptable?

Validation for the groundwater data was performed and included a review of field notes, sample holding times, blank contamination, spike recoveries, and duplicate precision; it also included qualifying the data, if problems were found. According to the data validation process, all groundwater data are usable. Estimated values are identified in data tables by the appropriate qualifiers.

Section 3

Analytical Results

The following section includes the results for the February and May 2016 quarterly groundwater events and the May 2016 semiannual residential well monitoring event. The quarterly events included collecting groundwater samples from nine bedrock wells located on the northeast portion of the Owens Corning property (including MW-15, MW-22, MW-29R, MW-35, MW-36, MW-37, MW-38, MW-39 and MW-44), and three offsite bedrock wells (MW-41, MW-42 and MW-43). During the May 2016 sampling event, groundwater samples were collected from eight residential wells.

The February and May 2016 groundwater analytical results are summarized in Tables 4 and 5, respectively. The May 2016 residential well analytical results are summarized in Table 6. Historical groundwater analytical data can be found in previous reports submitted to U.S. EPA. Laboratory analytical reports that include method detection limits and QA/QC information are provided in Appendix B.

Based on historical and recent Site monitoring data, 1,1-DCE is the primary constituents detected in groundwater. One analytical parameter, 1,1-DCE, was selected for presentation on isoconcentration contour maps for the February and May events as shown on Figures 13 through 20. This analyte was selected because it is the most prevalent and widespread analyte detected in the bedrock wells.

3.1 Groundwater Analytical Results

To understand the distribution of 1,1-DCE, isoconcentration maps were created for multiple vertical intervals within the fractured bedrock. The projected distribution of 1,1-DCE over the vertical intervals from 699 ft to 740 ft, 632 ft to 699 ft, 574 ft to 630 ft, and 430 ft to 530 ft (NAVD88) for the February and May 2016 events are presented on Figures 13 through 16 and Figures 17 through 20, respectively. Assuming that 1,1-DCE entered the top of bedrock near SWMU-9, the axis of the plume, consistent with the groundwater flow direction and local bedrock fracture patterns as identified in the Bedrock Geologic Map of the Little Mountain Area Anderson South Quadrangle (Soricelli et al., 2003) is oriented to the north-northeast. Refer to the *Supplemental RCRA Facility Investigation Report* (Brown and Caldwell, 2009) for a more detailed review of these figures.

In February and May 2016, the concentration of 1,1-DCE in well MW-15 showed a slight increase over the first two quarterly monitoring events from 160 micrograms per liter (µg/L) in February to 180 µg/L in May.

Concentrations of 1,1-DCE in well MW-29R Zone 3 and Zone 4 showed increases over the first two quarterly monitoring events conducted in 2016. In Zone 3, the 1,1-DCE concentration was 140 µg/L in February and 240 µg/L in May. In Zone 4, the concentration was 130 µg/L in February and 220 µg/L in May. Farther downgradient (north) of MW-29R, 1,1-DCE has not been detected in groundwater above maximum contaminant levels (MCLs) in any of the three MW-36 zones during the quarterly monitoring events since it was installed in 2008. During the May 2016 sampling event, MW-36 Zone 5 was not sampled due to an insufficient amount of water in the zone.

During February and May 2016, the 1,1-DCE concentration in MW-37 Zone 1 showed a slight decrease while Zone 2 showed slight increases. In Zone 1, the 1,1-DCE concentration decreased from 96 µg/L in February to 73 µg/L in May. Concentrations of 1,1-DCE in Zone 2 increased from 160 µg/L in February to 290 µg/L in May. The 1,1-DCE concentration in MW-37 Zone 3 was below the laboratory reporting limit (RL) in both February and May sampling events. Bedrock well MW-38 is comprised of a cluster of two wells to isolate

Zone 1 and Zone 2. MW-38 Zone 1 and 2 were below the RL in both sampling events. Bedrock well MW-39 was installed during the summer of 2010, southeast of MW-37, to laterally delineate 1,1-DCE. No VOCs, including 1,1-DCE, were detected above laboratory RLs during the February and May monitoring events in groundwater collected from MW-39 (Tables 4 and 5). Accordingly, delineation of the south edge of the plume is complete; this has been the case since MW-39 was installed in 2010.

MW-35, located northeast of the intersection of True Temper Road and Keys Streets, showed a slight increase in 1,1-DCE concentrations, with 45 µg/L in February and 50 µg/L in May. Bedrock wells MW-41 and MW-42 were installed during the summer of 2010 to delineate 1,1-DCE in the Northeast Area and added to the monitoring program. Both wells consist of nested wells, such that three independent zones could be sampled. For MW-41, the 1,1-DCE concentrations from February to May in Zone 1 decreased (150 µg/L and 130 µg/L), Zone 2 concentrations were 180 µg/L and 190 µg/L, and Zone 3 concentrations were 20 µg/L and 17 µg/L. Bedrock wells MW-42 and MW-43 are currently the farthest wells from the Site in the northeast direction. MW-42 is located northeast of MW-35 and MW-43 is located due north of MW-35. During the February and May monitoring events, no VOCs were detected above MCLs in groundwater collected from these two wells. Therefore, the plume has been delineated to the northeast; this has been the case since MW-43 was installed in 2011.

The only other constituent of concern (COC) detected above its MCL of 5 µg/L in the bedrock wells was carbon tetrachloride. This COC has been detected previously and was detected in MW-22, MW-29R Zones 3 and 4, and MW-37 Zone 2 during the February and May monitoring events. The maximum detected concentration of carbon tetrachloride in bedrock wells was in MW-22 at 22 µg/L in May. No other parameters from the focused list of VOCs were detected above MCLs in the bedrock well samples.

3.2 Residential Well Analytical Results

None of the parameters from the focused list of VOCs were detected above RLs in the residential well samples. All residential well analytical results are included in Table 6. Locations of the residential wells are provided on Figure 12, with the corresponding well location map ID's provided in Table 7. Laboratory analytical reports that include method detection limits and QA/QC information are provided in Appendix B.

Section 4

Summary and Conclusions

The first and second quarterly groundwater monitoring events for 2016 were conducted at the Owens Corning Site in February and May 2016, respectively. Samples were collected from 12 bedrock wells during the February and May events and from 8 residential wells during the May event. The samples were analyzed for the focused list of VOCs. Multiple water-bearing zones were sampled in bedrock wells MW-29R, MW-36, MW-37, MW-38, MW-39, MW-41, MW-42 and MW-43.

The following conclusions were developed based on the data collected during the quarterly monitoring events summarized in this report:

- Based on historical and recent Site monitoring data 1,1-DCE and 1,1,1-TCA are the primary constituents in groundwater, though 1,1-DCE is the primary constituent that persists beyond SWMU-9 and the Site property boundary. Additionally, 1,1-DCE is only found within the bedrock aquifer and not the overburden aquifer beyond the Site property boundary. 1,1,1-TCA was not detected in any of the sampled wells.
- Concentration data obtained from the downgradient Northeast Area bedrock wells reveal that the 1,1-DCE plume in this area has been relatively stable since early 2010.
- In bedrock well MW-35, the 1,1-DCE concentration decreased from 580 µg/L in August 2010 to 50 µg/L in May 2016.
- The 1,1-DCE concentration in bedrock well MW-41 Zone 2 has decreased from 530 µg/L in November 2010 to 190 µg/L in May 2016.
- During the February and May monitoring events, no VOCs were detected above MCLs in groundwater collected from the bedrock wells, MW-36, MW-38, MW-39, MW-42, and MW-43. Monitoring well MW-42 and MW-43 are the farthest monitoring wells located to the north-northeast, and monitoring well MW-39 is the farthest to the southeast. The absence of Site COCs in these wells indicates that delineation remains intact.
- The only other VOC detected in bedrock groundwater samples above its MCL was carbon tetrachloride. Concentrations have generally been below 25 µg/L since early 2010, with the exception of MW-22 where the concentration was 31 µg/L in February 2013. Carbon tetrachloride is being captured by the bedrock hydraulic containment system and it is effectively removed from the groundwater during treatment and prior to discharge into Betsy Creek.
- The 1,1-DCE plume has been delineated and is relatively stable. Since startup of the ICM system in November 2011, significant reduction has occurred in the 1,1-DCE concentrations in the Northeast Area, specifically in wells MW-35 and MW-41 Zone 2.

The next quarterly monitoring event is planned for August 2016, followed by the annual monitoring event and the semiannual residential well sampling event in November 2016.

Section 5

Limitations

This document was prepared solely for Owens Corning in accordance with professional standards at the time the services were performed and in accordance with the contract between Owens Corning and Brown and Caldwell dated January 30, 2016. This document is governed by the specific scope of work authorized by Owens Corning; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by Owens Corning and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

Section 6

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N

MW-43
MW-42
Betsy Creek
MW-41
Keys Street
MW-36
TW-40
MW-35
MW-44
EW-1
TW-43
MW-29R
TW-41
TW-42
MW-14
MW-26
MW-3
TW-44
MW-25
MW-21
EW-2
MW-34
MW-38
MW-15
MW-16
MW-37
MW-13
MW-11
MW-22
P2
MW-12
MW-19
MW-24
MW-4
MW-27
MW-20
Alloy
Effluent
MW-23
MW-31
TW-46
TW-45
MW-30
MW-8
True Temper Road
Highway 81 South
MW-2
MW-9
MW-32
MW-7
SWMU-9
MW-18
MW-28
MW-6
MW-1
MW-10
MW-17
P1
MW-5
MW-39
Harry Drive

0 600 1,200
Approximate Scale in Feet

LEGEND

- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Pond

Figure 1

Site Map

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/19/2016
SCALE:	AS SHOWN
DRAWN BY:	JPL
CHECKED BY:	TCB
PROJECT #:	148917

Path: R:\Projects\Owens_Corning\Anderson_SiteMapDocs\Semiannual 2016\Figure 1 - Site Map.mxd

Accessed By: BSTEELE at 04/25/2016 10:13

Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2016\Figure 2 - Overburden Potentiometric Map - February 2016.mxd

N

MW-3
781.06

MW-14
783.05

MW-25
767.21

TW-42
764.29

TW-43
764.45

MW-13
775.42

MW-26
780.09

MW-21
764.45

MW-23
801.02

MW-12
775.25

MW-11
776.32

MW-4
779.18

TW-46
794.68

SWMU-9

800
795
790
785
780
775
770
765
760
715

0 600 1,200
Approximate Scale in Feet

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

Figure 2

Overburden / Saprolite Potentiometric Surface Map February 22, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	04/25/2016
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	148917

Accessed By: BSTEELE at 04/25/2016 15:59

N

MW-41
Zone 1
729.81

TW-40
775.88

MW-29R Zone 1
772.05

TW-44
778.62

TW-41
764.84

EW-1

EW-2

MW-15
757.00

P2
775.45

MW-22
773.50

MW-27
791.43

Alloy
777.99

MW-39
Zone 1
793.20

SWMU-9

730 735 740 745 750 755 760 765 770 775 780 785 790 795

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Community

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Potential Capture Zone
- Owens Corning Property Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

Figure 3

Bedrock Aquifer
Zone 699 to 740 Feet NAVD88
Potentiometric Surface Map
February 22, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	04/25/2016
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	148917

Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2016\Figure 3 - Bedrock 699-740 Potentiometric Map - Feb 2016.mxd

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N

MW-42
Zone 1
750.24

MW-36
Zone 2
778.37

MW-36
Zone 1
778.33

TW-40
775.88

EW-1

MW-29R
Zone 2
778.76

EW-2

MW-15
757.00

MW-22
773.50

P2
775.45

MW-6
805.39

SWMU-9

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Community

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Potential Capture Zone
- Owens Corning Property Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

Figure 4

Bedrock Aquifer
Zone 632 to 699 Feet NAVD88
Potentiometric Surface Map
February 22, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	04/25/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148917

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N

MW-43
Zone 1
712.95

MW-42
Zone 2
754.17

MW-41
Zone 2
733.87

MW-36
Zone 3
772.18

MW-29R
Zone 3
761.51

EW-1

MW-35
734.13

MW-29R
Zone 4
755.74

EW-2

MW-19
772.41

MW-37
Zone 1
750.72

MW-39
Zone 2
772.70

SWMU-9

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Community

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Potential Capture Zone
- Owens Corning Property Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

Figure 5

Bedrock Aquifer
Zone 574-630 Feet NAVD88
Potentiometric Surface Map
February 22, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	04/25/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148917

Accessed By: JLAUER at 07/19/2016 14:59

N

MW-43
Zone 3
718.67

MW-42
Zone 3
753.55

MW-41 Zone 3
714.37*

MW-44
734.70

EW-1

EW-2

MW-37
Zone 3
751.29

MW-39
Zone 3
757.70

SWMU-9

Keys Street

True Temper Road

Highway 81 South

Harry Drive

720 725 730 735 740 745 750 760

0 600 1,200
Approximate Scale in Feet

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Groundwater Elevation Contour (Ft NAVD88)
- Potential Capture Zone
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Pond
- * Groundwater depth not indicative of actual groundwater elevation at well location

Figure 6

Bedrock Aquifer
430 to 530 Feet NAVD88
Potentiometric Surface Map
February 22, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	07/19/2016
SCALE:	AS SHOWN
DRAWN BY:	JPL
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N

Highway 81 South

True Temper Road

Keys Street

Harry Drive

MW-14
780.83

MW-26
777.93

TW-42
763.33

TW-43
763.53

MW-11
775.05

MW-3
779.08

MW-25
765.65

MW-21
763.61

MW-13
774.16

MW-12
775.05

MW-23
800.05

MW-4
777.80

TW-46
793.61

800
795
790
785
780
775
770
765

0 600 1,200

Approximate Scale in Feet

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Estimated Groundwater Contour
- Groundwater Elevation Contour (Ft NAVD88)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Streams
- Abandoned Sludge Lagoon
- Backwash Storage Pond

Figure 7

Overburden / Saprolite Potentiometric Surface Map May 9, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/19/2016
SCALE:	AS SHOWN
DRAWN BY:	JPL
CHECKED BY:	TCB
PROJECT #:	148917

Path: R:\Projects\Owens_Corning\Anderson_SiteMapDocs\Semiannual 2016\Figure 7 - Overburden Potentiometric Map - May 2016.mxd

N

MW-41
Zone 1
729.70

TW-40
773.27

MW-29R Zone 1
769.88

EW-1

TW-44
776.41

TW-41
763.54

EW-2

P2
774.17

MW-15
755.79

MW-16
759.69

MW-22
772.24

MW-27
790.15

Alloy
776.79

MW-39
Zone 1
791.64

730 735 740 745 750 755 760 765 770 775 780 785 790 795

0 600 1,200
Approximate Scale in Feet

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Potential Capture Zone
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

Figure 8

Bedrock Aquifer
Zone 699 to 740 Feet NAVD88
Potentiometric Surface Map
May 9, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	05/24/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
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PROJECT #:	148 917

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Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual2016\Figure 9 - Bedrock Potentiometric Map - Zone 632 to 699 - May 2016.mxd

N

MW-36
Zone 2
775.79

MW-36
Zone 1
775.76

TW-40
773.27

MW-15
755.79

MW-29R
Zone 2
776.25

MW-22
772.24

P2
774.17

MW-6
805.13

MW-42
Zone 1
751.43

EW-1

EW-2

0 600 1,200
Approximate Scale in Feet

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Potential Capture Zone
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

Figure 9

Bedrock Aquifer
Zone 632 to 699 Feet NAVD88
Potentiometric Surface Map
May 9, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	05/24/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148917

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Path: R:\Projects\Owens_Corning\Anderson_Site\Mapping\Docs\Semiannual\2016\Figure 10 - Bedrock Potentiometric Map - Zone 574 to 630 - May 2016.mxd

N

MW-43
Zone 1
712.17

MW-42
Zone 2
753.96

MW-41
Zone 2
733.69

MW-36
Zone 3
770.15

MW-35
733.50

MW-29R
Zone 4
754.67

EW-1

MW-29R
Zone 3
760.42

EW-2

MW-19
771.16

MW-37
Zone 1
748.85

MW-39
Zone 2
770.94

710 715 720 725 730 735 740 745 750 755 760 765 770 775

0 600 1,200
Approximate Scale in Feet

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Potential Capture Zone
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

Figure 10

Bedrock Aquifer
Zone 574 to 630 Feet NAVD88
Potentiometric Surface Map
May 9, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	05/24/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148 917

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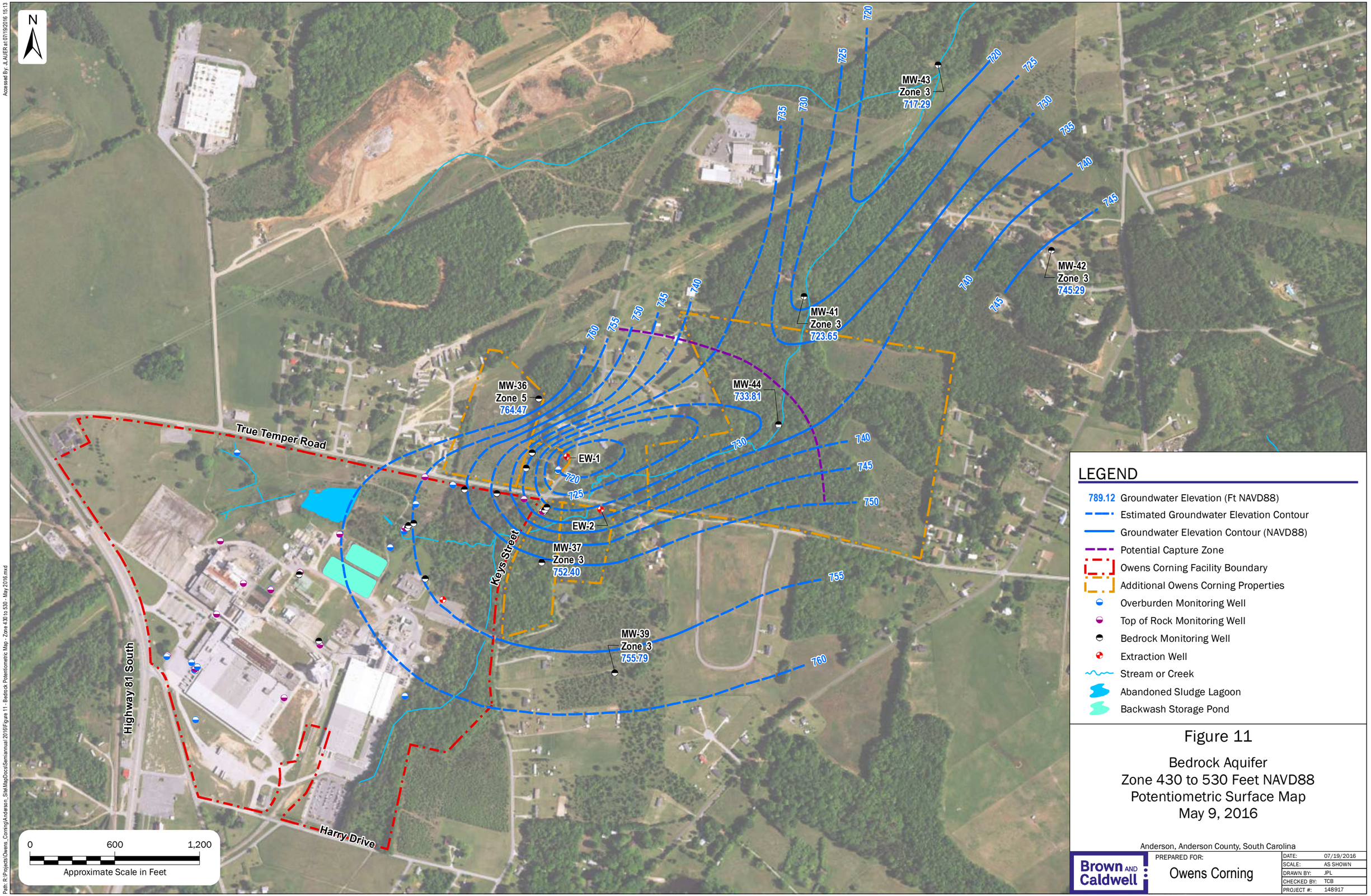

LEGEND

- 789.12 Groundwater Elevation (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Groundwater Elevation Contour (NAVD88)
- Potential Capture Zone
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Pond

Figure 11

Bedrock Aquifer
Zone 430 to 530 Feet NAVD88
Potentiometric Surface Map
May 9, 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	07/19/2016
SCALE:	AS SHOWN
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Path: R:\Projects\Owens_Corning\Anderson_SiteMapDocs\Semiannual 2016\Figure 11 - Bedrock Potentiometric Map - Zone 430 to 530 - May 2016.mxd

N

Highway 81

True Temper Road

Keys Street

Highway 81 South

Harry Drive

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

0 600 1,200

Approximate Scale in Feet

LEGEND

- Well Previously Sampled
- Well Sampled Semiannually
- Not in Service
- Well Observed
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Abandoned Sludge Lagoon
- Backwash Storage Pond
- Stream or Creek
- 77 — A Map ID that corresponds to Table 7 - Address of Identified Residential Wells.

Figure 12

Residential Well Sampling Location Map May 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/25/2016
SCALE:	AS SHOWN
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Path: R:\Projects\Owens_Corning\Anderson_SiteMapDocs\Semiannual 2016\Figure 12 - Residential Well Locations - May 2016.mxd

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Path: R:\Projects\Owens_Corning\Anderson_Site\Map\Docs\Semiannual 2016\Figure 13 - Bedrock 11DCE Isoconcentration Map - Zone 699 to 740 - Feb 2016.mxd

N

MW-41
Zone 1
150

7
10
100

MW-15
160/170*

10

MW-22
96

100

1000

SWMU-9

MW-39
Zone 1
<5.0

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Community

LEGEND

- 21 — 1,1-Dichloroethene Concentration (µg/L)
- <5.0 — Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds
- * Duplicate sample

The 7 µg/L isocontour is used to represent the maximum contaminant level of 1,1-DCE.

Figure 13

Bedrock Aquifer
Zone 699 to 740 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
February 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	04/25/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148917

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Path: R:\Projects\Owens_Corning\Anderson_Site\Map\Docs\Semiannual 2016\Figure 14 - Bedrock 11DCE Isoconcentration Map - Zone 632 to 699 - Feb 2016.mxd

N

MW-42
Zone 1
<5.0

MW-36
Zone 1
<5.0

MW-15
160/170*

MW-22
96

SWMU-9

1
100
10
100
10
1000

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Community

LEGEND

- 21 — 1,1-Dichloroethene Concentration (µg/L)
- <5.0 — Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds
- * Duplicate sample

The 7 µg/L isocontour is used to represent the maximum contaminant level of 1,1-DCE.

Figure 14

Bedrock Aquifer
Zone 632 to 699 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
February 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	04/25/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148917

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Path: R:\Projects\Owens_Corning\Anderson_Site\Map Docs\Semiannual 2016\Figure 15 - Bedrock 11DCE Isoconcentration Map - Zone 574 to 630 - Feb 2016.mxd

N

MW-43
Zone 1
<5.0

MW-42
Zone 2
<5.0

MW-41 Zone 2
180/180*

MW-36
Zone 3
<5.0

MW-29R
Zone 4
130

MW-29R
Zone 3
140

MW-35
45

MW-37
Zone 1
96

100

10

7

1000

7

SWMU-9

MW-39
Zone 2
<5.0

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

LEGEND

- 21 — 1,1-Dichloroethene Concentration (µg/L)
- <5.0 — Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds
- * Duplicate sample

The 7 µg/L isocontour is used to represent the maximum contaminant level of 1,1-DCE.

Figure 15

Bedrock Aquifer
Zone 574 to 630 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
February 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	04/25/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148917

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N

MW-43
Zone 3
<5.0

MW-41
Zone 3
20

MW-42
Zone 3
<5.0

MW-36
Zone 5
NS

Keys Street

MW-44
<5.0

True Temper Road

7

10

100

1000

MW-37
Zone 3
<5.0

MW-39
Zone 3
<5.0

Highway 81 South

Harry Drive

0 600 1,200
Approximate Scale in Feet

LEGEND

- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Streams
- Abandoned Sludge Lagoon
- Backwash Storage Pond
- * Duplicate sample

The 7 µg/L isocontour is used to represent the maximum contaminant level of 1,1-DCE.

Figure 16

Bedrock Aquifer
Zone 430 to 530 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
February 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	06/06/2016
SCALE:	AS SHOWN
DRAWN BY:	JPL
CHECKED BY:	TCB
PROJECT #:	148917

Path: R:\Projects\Owens_Corning\Anderson_SiteMapDocs\Semiannual 2016\Figure 16 - Bedrock 11DCE Isoconcentration Map - Zone 430 to 530 - Feb 2016.mxd

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Path: R:\Projects\Owens_Corning\Anderson_SiteWide\Docs\Semiannual 2016\Figure 17 - Bedrock 11DCE Isoconcentration Map - Zone 699 to 740 - May 2016.mxd

N

MW-41
Zone 1
130

100

10

7

MW-15
180

10

7

MW-22
300

100

1000

MW-39
Zone 1
<5.0

0 600 1,200

Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, User Community

LEGEND

- 21 — 1,1-Dichloroethene Concentration (µg/L)
- <5.0 — Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

The 7 µg/L isocontour is used to represent the maximum contaminant level of 1,1-DCE.

Figure 17

Bedrock Aquifer
Zone 699 to 740 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
May 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	06/06/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148 917

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Path: R:\Projects\Owens_Corning\Anderson_SiteMap\Docs\Semiannual 2016\Figure 18 - Bedrock 11DCE Isoconcentration Map - May 2016 - Zone 632 to 699.mxd

N

MW-42
Zone 1
<5.0

MW-36
Zone 1
<5.0

MW-15
180

MW-22
300

1
10
100
1000

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

LEGEND

- 21 — 1,1-Dichloroethene Concentration (µg/L)
- <5.0 — Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds

The 7 µg/L isocontour is used to represent the maximum contaminant level of 1,1-DCE.

Figure 18

Bedrock Aquifer
Zone 632 to 699 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
May 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	06/06/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148 917

N

MW-43
Zone 1
<5.0

MW-42
Zone 2
<5.0

MW-41 Zone 2
192/200*

MW-36
Zone 3
<5.0

MW-29R Zone 4
220/300*

MW-29R
Zone 3
240

MW-35
50

MW-37
Zone 1
73

1000

100

10

7

7

MW-39
Zone 2
<5.0

0 600 1,200
Approximate Scale in Feet

LEGEND

- 21 — 1,1-Dichloroethene Concentration (µg/L)
- <5.0 — Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Abandoned Sludge Lagoon
- Backwash Storage Ponds
- * Duplicate sample

The 7 µg/L isocontour is used to represent the maximum contaminant level of 1,1-DCE.

Figure 19

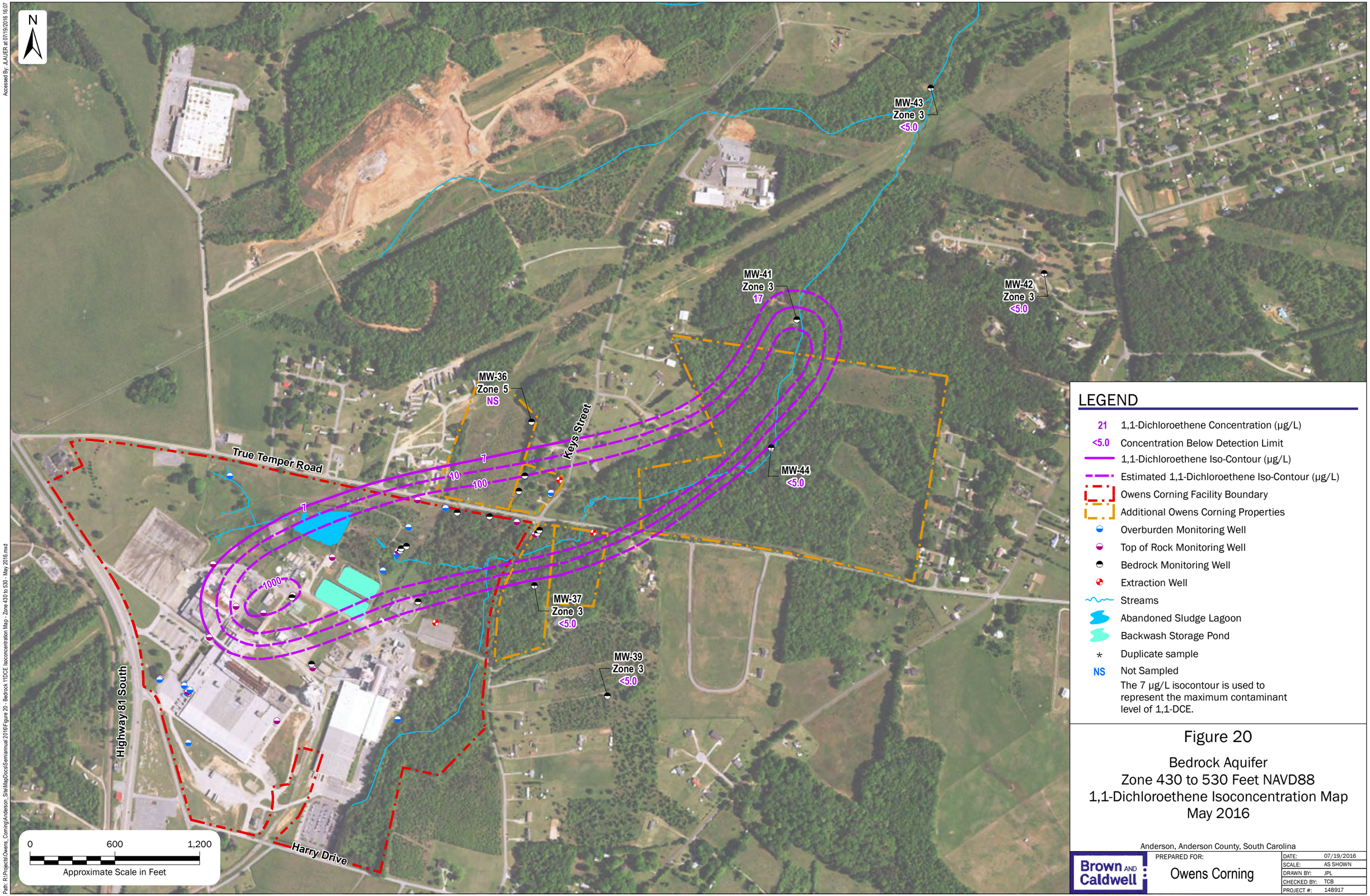
Bedrock Aquifer
Zone 574 to 630 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
May 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	06/06/2016
SCALE:	AS SHOWN
DRAWN BY:	GTG
CHECKED BY:	TCB
PROJECT #:	148917



LEGEND

- 21 — 1,1-Dichloroethene Concentration (µg/L)
- <5.0 — Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Streams
- Abandoned Sludge Lagoon
- Backwash Storage Pond
- * — Duplicate sample
- NS — Not Sampled

The 7 µg/L isocontour is used to represent the maximum contaminant level of 1,1-DCE.

Figure 20

Bedrock Aquifer
Zone 430 to 530 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
May 2016

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/19/2016
SCALE:	AS SHOWN
DRAWN BY:	JPL
CHECKED BY:	TCB
PROJECT #:	148917

Table 1. Quarterly Sampling Groundwater Elevation Data - February 22, 2016 Owens Corning - Anderson, SC						
Monitoring Well	Screen Interval (ft bgs)	Screened Interval Location	Surface Elevation (ft NAVD88)	TOC Elevation (ft NAVD88)	Static Depth to Water (ft Below TOC) 2/22/2016	Static Water Elevation, (ft NAVD88) 2/22/2016
MW-3	13-28	O	795.61	796.76	15.70	781.06
MW-4	14.7-29.7	O	796.72	798.38	19.20	779.18
MW-6	123.6-133.6	BR	819.82	819.69	14.30	805.39
MW-11	6.0-16.0	O	778.32	780.22	3.90	776.32
MW-12	23-33	O	778.42	780.95	5.70	775.25
MW-13	67-72	TOR	779.20	782.22	6.80	775.42
MW-14	69.2-74.2	TOR	796.39	798.45	15.40	783.05
MW-15	69.5-99.5	BR	777.11	779.45	22.45	757.00
MW-16	49-59	BR	768.14	770.37	NG	NG
MW-19	154-169	BR	779.69	781.81	9.40	772.41
MW-21	6.5-16.5	TOR	768.63	771.15	6.70	764.45
MW-22	78-116	BR	780.45	782.65	9.15	773.50
MW-23	83-93	TOR	808.97	811.47	10.45	801.02
MW-25	40-50	TOR	774.40	776.71	9.50	767.21
MW-26	56.7-66.7	O	790.40	793.09	13.00	780.09
MW-27	69-99	BR	808.93	811.13	19.70	791.43
MW-29R Zone 1	56.7-69.8	BR	784.90	787.03	14.98	772.05
MW-29R Zone 2	127.3-139.5	BR	784.90	787.03	8.27	778.76
MW-29R Zone 3	154.5-169.6	BR	784.90	787.03	25.52	761.51
MW-29R Zone 4	177.6-202.2	BR	784.90	787.03	31.29	755.74
MW-35[a]	152-162	BR	740.90	743.73	9.60	734.13
MW-36 Zone 1	99.1-116	BR	783.00	785.63	7.30	778.33
MW-36 Zone 2	139.5-150.7	BR	783.00	785.63	7.26	778.37
MW-36 Zone 3	180.2-192.7	BR	783.00	785.63	13.45	772.18
MW-36 Zone 4	225.6-239.2	BR	783.00	785.63	15.82	769.81
MW-36 Zone 5	269.9-275	BR	783.00	785.63	20.29	765.34
MW-37 Zone 1	185-195	BR	780.20	782.92	32.20	750.72
MW-37 Zone 2	222-232	BR	780.20	782.84	28.50	754.34
MW-37 Zone 3	257-272	BR	780.20	782.79	31.50	751.29
MW-38 Zone 1	415-430	BR	768.10	771.23	14.60	756.63
MW-38 Zone 2[a,b]	479.6-499.6	BR	768.10	771.18	-0.05	771.23
MW-39 Zone 1	95-105	BR	804.10	806.20	13.00	793.20
MW-39 Zone 2	195-215	BR	804.10	806.20	33.50	772.70
MW-39 Zone 3	280-300	BR	804.10	806.20	48.50	757.70
MW-41 Zone 1	17-32	BR	733.40	736.56	6.75	729.81
MW-41 Zone 2[a]	109-129	BR	733.40	736.79	2.92	733.87
MW-41 Zone 3	279-299	BR	733.40	736.77	22.40	714.37
MW-42 Zone 1	114-129	BR	785.50	785.44	35.20	750.24
MW-42 Zone 2	202-222	BR	785.50	785.42	31.25	754.17
MW-42 Zone 3	265-285	BR	785.50	785.40	31.85	753.55
MW-43 Zone 1	91.8 - 111.8	BR	716.15	719.19	6.24	712.95
MW-43 Zone 2	149.57 - 179.57	BR	716.15	719.20	3.53	715.67
MW-43 Zone 3	261.8 - 281.8	BR	716.15	719.17	0.50	718.67
MW-44	280-300	BR	741.00	743.95	9.25	734.70
P1	24.5-39.5	BR	813.10	815.42	19.00	796.42
P2	53-115	BR	783.93	785.65	10.20	775.45
Alloy	56-61	BR	789.56	791.69	13.70	777.99
TW-40	84-94	BR	785.81	788.63	12.75	775.88
TW-41	50.3-55.3	BR	775.50	778.84	14.00	764.84
TW-42	21-26	TOR	775.86	778.09	13.80	764.29
TW-43	8.6-18.6	O	775.82	778.15	13.70	764.45
TW-44	64-74	BR	782.68	785.52	6.90	778.62
TW-45[c]	18.8-28.8	O	816.70	816.76	NG	NG
TW-46	83.3-88.3	TOR	816.72	816.58	21.90	794.68

bgs - below ground surface

BR - bedrock

NG - not gauged

O - overburden

TOR - top of rock

TOC - top of casing

NAVD88 - North American Vertical Datum of 1988

ft bgs - feet below ground surface

[a] MW-35, MW-38 Zone 2, MW-41 Zone 2 TOC elevation has been adjusted by adding couplings and ball valve to surveyed elevation at top of casing.

[b] Static depth to water readings at artesian well (MW-38 Zone 2) were measured by using a ruler to measure the height of flow coming from the flow valve.

[c] Water level was not measured due to collapse of well.

Table 2. Quarterly Sampling Groundwater Elevation Data - May 9, 2016 Owens Corning - Anderson, SC						
Monitoring Well	Screen Interval (ft bgs)	Screened Interval Location	Surface Elevation (ft NAVD88)	TOC Elevation (ft NAVD88)	Static Depth to Water (ft Below TOC) 5/9/2016	Static Water Elevation, (ft NAVD88) 5/9/2016
MW-3	13-28	O	795.61	796.76	17.68	779.08
MW-4	14.7-29.7	O	796.72	798.38	20.58	777.80
MW-6	123.6-133.6	BR	819.82	819.69	14.56	805.13
MW-11	6.0-16.0	O	778.32	780.22	5.17	775.05
MW-12	23-33	O	778.42	780.95	5.90	775.05
MW-13	67-72	TOR	779.20	782.22	8.06	774.16
MW-14	69.2-74.2	TOR	796.39	798.45	17.62	780.83
MW-15	69.5-99.5	BR	777.11	779.45	23.66	755.79
MW-16	49-59	BR	768.14	770.37	10.68	759.69
MW-19	154-169	BR	779.69	781.81	10.65	771.16
MW-21	6.5-16.5	TOR	768.63	771.15	7.54	763.61
MW-22	78-116	BR	780.45	782.65	10.41	772.24
MW-23	83-93	TOR	808.97	811.47	11.42	800.05
MW-25	40-50	TOR	774.40	776.71	11.06	765.65
MW-26	56.7-66.7	O	790.40	793.09	15.16	777.93
MW-27	69-99	BR	808.93	811.13	20.98	790.15
MW-29R Zone 1	56.7-69.8	BR	784.90	787.03	17.15	769.88
MW-29R Zone 2	127.3-139.5	BR	784.90	787.03	10.78	776.25
MW-29R Zone 3	154.5-169.6	BR	784.90	787.03	26.61	760.42
MW-29R Zone 4	177.6-202.2	BR	784.90	787.03	32.36	754.67
MW-35[a]	152-162	BR	740.90	743.73	10.23	733.50
MW-36 Zone 1	99.1-116	BR	783.00	785.63	9.87	775.76
MW-36 Zone 2	139.5-150.7	BR	783.00	785.63	9.84	775.79
MW-36 Zone 3	180.2-192.7	BR	783.00	785.63	15.48	770.15
MW-36 Zone 4	225.6-239.2	BR	783.00	785.63	17.26	768.37
MW-36 Zone 5	269.9-275	BR	783.00	785.63	21.16	764.47
MW-37 Zone 1	185-195	BR	780.20	782.92	34.07	748.85
MW-37 Zone 2	222-232	BR	780.20	782.84	29.50	753.34
MW-37 Zone 3	257-272	BR	780.20	782.79	30.39	752.40
MW-38 Zone 1	415-430	BR	768.10	771.23	15.53	755.70
MW-38 Zone 2[a,b]	479.6-499.6	BR	768.10	771.18	-0.50	771.68
MW-39 Zone 1	95-105	BR	804.10	806.20	14.56	791.64
MW-39 Zone 2	195-215	BR	804.10	806.20	35.26	770.94
MW-39 Zone 3	280-300	BR	804.10	806.20	50.41	755.79
MW-41 Zone 1	17-32	BR	733.40	736.56	6.86	729.70
MW-41 Zone 2[a]	109-129	BR	733.40	736.79	3.10	733.69
MW-41 Zone 3	279-299	BR	733.40	736.77	13.12	723.65
MW-42 Zone 1	114-129	BR	785.50	785.44	34.01	751.43
MW-42 Zone 2	202-222	BR	785.50	785.42	31.46	753.96
MW-42 Zone 3	265-285	BR	785.50	785.40	40.11	745.29
MW-43 Zone 1	91.8 - 111.8	BR	716.15	719.19	7.02	712.17
MW-43 Zone 2	149.57 - 179.57	BR	716.15	719.20	4.59	714.61
MW-43 Zone 3	261.8 - 281.8	BR	716.15	719.17	1.88	717.29
MW-44	280-300	BR	741.00	743.95	10.14	733.81
P1	24.5-39.5	BR	813.10	815.42	19.46	795.96
P2	53-115	BR	783.93	785.65	11.48	774.17
Alloy	56-61	BR	789.56	791.69	14.90	776.79
TW-40	84-94	BR	785.81	788.63	15.36	773.27
TW-41	50.3-55.3	BR	775.50	778.84	15.30	763.54
TW-42	21-26	TOR	775.86	778.09	14.76	763.33
TW-43	8.6-18.6	O	775.82	778.15	14.62	763.53
TW-44	64-74	BR	782.68	785.52	9.11	776.41
TW-45[c]	18.8-28.8	O	816.70	816.76	NG	NG
TW-46	83.3-88.3	TOR	816.72	816.58	22.97	793.61

bgs - below ground surface

BR - bedrock

NG - not gauged

O - overburden

TOR - top of rock

TOC - top of casing

NAVD88 - North American Vertical Datum of 1988

ft bgs - feet below ground surface

[a] MW-35, MW-38 Zone 2, MW-41 Zone 2 TOC elevation has been adjusted by adding couplings and ball valve to surveyed elevation at top of casing.

elevation at top of casing.

[b] Static depth to water readings at artesian well (MW-38 Zone 2) were measured by using a ruler to measure the height of flow coming from the flow valve.

[c] Water level was not measured due to collapse of well.

Table 3. Well Construction Details
Owens Corning - Anderson, SC

Monitoring Well	Well Type	Monitoring Frequency	Date Installed	Screen Interval* (ft bgs)	Top of Screen Interval (ft NAVD88)	Bottom of Screen Interval (ft NAVD88)	Screened Interval Location	Depth to Rock (ft bgs)	Northing (ft - South Carolina State Plane NAD83)	Easting (ft - South Carolina State Plane NAD83)	Surface Elevation (ft NAVD88)	TOC Elevation (ft NAVD88)
MW-1	2" AG	Annually	02/22/93	55 - 65	769.27	759.27	O	>65	950361.45	1499402.43	824.27	826.62
MW-2	2" AG	Annually	02/24/93	56.7 - 66.7	763.56	753.56	TOR	66	950815.49	1499202.99	820.26	822.68
MW-3	2" AG	Annually	10/15/90	13 - 28	782.61	767.61	O	>31.5	951884.52	1500961.49	795.61	796.76
MW-4	2" AG	Annually	10/16/90	14.7 - 29.7	782.02	767.02	O	>33	951578.17	1500780.04	796.72	798.38
MW-5	2" AG	Annually	10/18/90	12.0 - 27.0	792.74	777.74	O	>30	950527.98	1500884.25	804.74	806.50
MW-6	2" F	Annually	03/16/93	123.6 - 133.6	696.22	686.22	BR	105	950709.08	1499400.62	819.82	819.69
MW-7	2" F	Annually	10/19/90	15.9 - 30.9	803.80	788.80	O	>36.5	950714.02	1499393.19	819.70	819.27
MW-8	2"AG	NM	10/16/90	5.5 - 20.5	793.79	778.79	O	>36.5	952247.16	1499696.61	799.29	801.56
MW-9	2" F	Annually	03/17/93	94 - 104	725.75	715.75	TOR	105	950720.70	1499398.33	819.75	819.41
MW-10	2" F	Annually	02/18/93	61.4 - 71.4	762.52	752.52	TOR	72	950516.57	1500028.94	823.92	823.65
MW-11	2" AG	Annually	09/11/85	6.0 - 16.0	772.32	762.32	O	>16	951694.26	1500875.42	778.32	780.22
MW-12	2" AG	Annually	09/11/85	23 - 33	755.42	745.42	O	>33	951692.46	1500878.27	778.42	780.95
MW-13	2" AG	Annually	03/10/93	67 - 72	712.20	707.20	TOR	61	951715.51	1500885.54	779.20	782.22
MW-14	2" AG	Annually	02/10/93	69.2 - 74.2	727.19	722.19	TOR	73	952076.49	1501026.29	796.39	798.45
MW-15	2" AG	Quarterly	08/08/93	69.5 - 99.5	707.61	677.61	BR	12	951960.13	1501534.65	777.11	779.45
MW-16	2" AG	Annually	08/05/93	49 - 59	719.14	709.14	BR	15	951830.99	1501866.46	768.14	770.37
MW-17	4" AG	Annually	02/18/93	24.1 - 39.1	789.56	774.56	TOR	39	950890.06	1500282.57	813.66	816.07
MW-18	2" AG	Annually	02/15/93	10.6 - 25.6	809.76	794.76	O	>30	950807.43	1499198.46	820.36	822.71
MW-19	2" AG	Annually	08/05/93	154 - 169	625.69	610.69	BR	72	951718.14	1500902.65	779.69	781.81
MW-20	2" AG	Annually	04/21/93	57 - 67	751.70	741.70	TOR	64	951403.36	1500142.14	808.70	810.95
MW-21	2" AG	Annually	04/23/93	6.5 - 16.5	762.13	752.13	TOR	16	951834.28	1501856.83	768.63	771.15
MW-22	8" AG	Quarterly	08/17/93	78 - 116	702.45	664.45	BR	51	951733.53	1500909.06	780.45	782.65
MW-23	2" AG	NM	06/04/93	83 - 93	725.97	715.97	TOR	93	951623.62	1499577.68	808.97	811.47
MW-24	2" F	Annually	06/04/93	62 - 72	734.50	724.50	TOR	75	951671.65	1500421.59	796.50	796.27
MW-25	2" AG	Annually	06/09/93	40 - 50	734.40	724.40	TOR	50	951920.70	1501727.14	774.40	776.71
MW-26	2" AG	Annually	06/10/93	56.7 - 66.7	733.70	723.70	O	>67.5	952020.02	1501223.27	790.40	793.09
MW-27	8" AG	Annually	08/11/93	69 - 99	739.93	709.93	BR	68.5	951386.97	1500135.48	808.93	811.13
MW-28	2" F	Annually	04/20/04	21 - 31	798.97	788.97	O	>31	950735.05	1499414.47	819.97	819.77
MW-29R Zone 1	Waterloo - T	Quarterly	11/06/08	56.7 - 69.8	728.20	715.10	BR	53	952139.28	1501742.31	784.90	787.03
MW-29R Zone 2	Waterloo - T	Quarterly	11/06/08	127.3 - 139.5	657.60	645.40	BR	53	952139.28	1501742.31	784.90	787.03
MW-29R Zone 3	Waterloo - P & T	Quarterly	11/06/08	154.5 - 169.6	630.40	615.30	BR	53	952139.28	1501742.31	784.90	787.03
MW-29R Zone 4	Waterloo - P & T	Quarterly	11/06/08	177.6 - 202.2	607.30	582.70	BR	53	952139.28	1501742.31	784.90	787.03
MW-30	2" F	Annually	04/13/06	103 - 113	716.50	706.50	TOR	113	951106.58	1499550.99	819.50	819.14
MW-31	2" F	Annually	04/12/06	80 - 90	738.20	728.20	TOR	90	951325.04	1499740.38	818.20	817.96
MW-32	2" F	Annually	04/18/06	25 - 35	794.68	784.68	O	>35	950765.22	1499373.24	819.68	819.40
MW-35	2" AG	Quarterly	10/02/08	152 - 162	588.90	578.90	BR	23	952440.05	1503528.88	740.90	743.73
MW-36 Zone 1	Waterloo - P & T	Quarterly	11/06/08	99.1 - 116	683.90	667.00	BR	84	952629.06	1501831.75	783.00	785.63
MW-36 Zone 2	Waterloo - T	Quarterly	11/06/08	139.5 - 150.7	643.50	632.30	BR	84	952629.06	1501831.75	783.00	785.63
MW-36 Zone 3	Waterloo - P & T	Quarterly	11/06/08	180.2 - 192.7	602.80	590.30	BR	84	952629.06	1501831.75	783.00	785.63
MW-36 Zone 4	Waterloo - T	Quarterly	11/06/08	225.6 - 239.2	557.40	543.80	BR	84	952629.06	1501831.75	783.00	785.63
MW-36 Zone 5	Waterloo - P & T	Quarterly	11/06/08	269.9 - 275	513.10	508.00	BR	84	952629.06	1501831.75	783.00	785.63
MW-37 Zone 1	1" AG	Quarterly	09/30/08	185 - 195	595.20	585.20	BR	87	951472.16	1501852.30	780.20	782.92
MW-37 Zone 2	1" AG	Quarterly	09/30/08	222 - 232	558.20	548.20	BR	87	951472.48	1501852.13	780.20	782.84
MW-37 Zone 3	1" AG	Quarterly	09/30/08	257 - 272	523.20	508.20	BR	87	951472.27	1501852.21	780.20	782.79
MW-38 Zone 1	1" AG	Quarterly	07/21/10	415 - 430	353.10	338.10	BR	8	951863.56	1501888.44	768.10	771.23
MW-38 Zone 2	1" AG	Quarterly	07/21/10	479.6 - 499.6	288.50	268.50	BR	8	951863.46	1501888.63	768.10	771.18
MW-39 Zone 1	1" AG	Quarterly	07/19/10	95 - 105	709.10	699.10	BR	80	950693.36	1502369.57	804.10	806.02
MW-39 Zone 2	1" AG	Quarterly	07/20/10	195 - 215	609.10	589.10	BR	80	950693.25	1502369.71	804.10	806.02
MW-39 Zone 3	1" AG	Quarterly	07/20/10	280 - 300	524.10	504.10	BR	80	950693.48	1502369.76	804.10	806.02
MW-41 Zone 1	1" AG	Quarterly	08/04/10	17 - 32	716.40	701.40	BR	8	953351.51	1503709.74	733.40	736.56
MW-41 Zone 2	1" AG	Quarterly	08/04/10	109 - 129	624.40	604.40	BR	8	953351.31	1503709.69	733.40	736.79
MW-41 Zone 3	1" AG	Quarterly	08/05/10	279 - 299	454.40	434.40	BR	8	953351.59	1503709.42	733.40	736.77
MW-42 Zone 1	1" F	Quarterly	07/23/11	114 - 129	671.50	656.50	BR	108	953676.64	1505460.98	785.50	785.44
MW-42 Zone 2	1" F	Quarterly	07/22/10	202 - 222	583.50	563.50	BR	108	953676.59	1505460.79	785.50	785.42
MW-42 Zone 3	1" F	Quarterly	07/22/10	265 - 285	520.50	500.50	BR	108	953676.51	1505460.71	785.50	785.40
MW-43 Zone 1	1" AG	Quarterly	06/07/11	92.5 - 112.5	623.65	603.65	BR	71	954986.94	1504658.26	716.15	719.19
MW-43 Zone 2	1" AG	Quarterly	06/07/11	150 - 180	566.15	536.15	BR	71	954987.00	1504658.04	716.15	719.20
MW-43 Zone 3	1" AG	Quarterly	06/06/11	262.5 - 282.5	453.65	433.65	BR	71	954987.15	1504658.24	716.15	719.17
MW-44	2" AG	Quarterly	01/04/13	280-300	461.00	441.00	BR	24	952447.10	1503528.34	741.00	743.95
EW-1	6" AG	NM	06/03/11	Open Hole (52 -445)	723.30	330.30	BR	52	952219.34	1502029.46	775.30	778.04
EW-2	6"	NM	06/06/11	Open Hole (9.5 - 295)	758.70	473.20	BR	8	951846.22	1502269.50	768.20	769.96
P1	2" AG	NM	02/22/93	24.5 - 39.5	788.60	773.60	BR	39	950917.56	1500275.17	813.10	815.42
P2	6" AG	NM	06/22/93	53 - 115	730.93	668.93	BR	45	951750.01	1500946.57	783.93	785.65
Alloy	2" AG	Annually	08/09/93	56 - 61	733.56	728.56	BR	56	951358.03	1501028.29	789.56	791.69
TW-40	2" AG	Annually	08/30/01	84 - 94	701.81	691.81	BR	30	952247.76	1501784.65	785.81	788.63
TW-41	2" AG	Annually	08/27/01	50.3 - 55.3	725.20	720.20	BR	25.5	952119.32	1501966.54	775.50	778.84
TW-42	1" AG	Annually	08/20/01	21 - 26	754.86	749.86	TOR	26	952131.39	1501972.00	775.86	778.09
TW-43	1" AG	Annually	08/21/01	8.6 - 18.6	767.22	757.22	O	>19	952127.92	1501969.26	775.82	778.15
TW-44	2" AG	Annually	08/31/01	64 - 74	718.68	708.68	BR	46	951988.65	1501305.71	782.68	785.52
TW-45	1" F	Annually	08/21/01	18.8 - 28.8	797.90	787.90	O	>29	951284.02	1499935.21	816.70	816.76
TW-46	2" F	Annually	09/05/01	83.3 - 88.3	733.42	728.42	TOR	88	951278.63	1499934.00	816.72	816.58

BR - bedrock
O - overburden
TOR - top of rock
ft bgs - feet below ground surface
TOC - top of casing
NM - not monitored
NAD83 - North American Datum of 1983
NAVD88 - North American Vertical Datum of 1988
T - transducer
P & T - pump and transducer
AG - above ground
F - flush mount
MW-35, MW-38 Zone 2, MW-41 Zone 2, TOC elevation has been adjusted by adding couplings and ball valve to surveyed elevation at top of casing.
*For Waterloo type wells the listed screen interval corresponds to each zone's sand pack.

Table 4. Quarterly Sampling Groundwater Analytical Results - February 2016
Owens Corning - Anderson, SC

Sample ID	MCL	MW-15	16053-Dup[1]	MW-22	MW-29R Zone 3	MW-29R Zone 4	MW-35	MW-36 Zone 1	MW-36 Zone 3	MW-36 Zone 5	MW-37 Zone 1	MW-37 Zone 2	MW-37 Zone 3	MW-38 Zone 1	MW-38 Zone 2	MW-39 Zone 1	MW-39 Zone 2	MW-39 Zone 3	MW-41 Zone 1	MW-41 Zone 2	16053-Dup-1[2]	MW-41 Zone 3	MW-42 Zone 1	MW-42 Zone 2	MW-42 Zone 3	MW-43 Zone 1	MW-43 Zone 2	MW-43 Zone 3	MW-44
Sample Date		2/22/16	2/22/16	2/23/16	2/23/16	2/23/16	2/22/16	2/23/16	2/23/16	2/24/15	2/24/16	2/24/16	2/24/16	2/23/16	2/23/16	2/23/16	2/23/16	2/23/16	2/22/16	2/22/16	2/22/16	2/22/16	2/24/16	2/24/16	2/24/16	2/22/16	2/22/16	2/22/16	2/22/16
Screened Interval (ft)	(ug/L)	69.5-99.5	69.5-99.5	78-116	154.5-169.6	177.6-202.2	152-162	99.1-116	180.2-192.7	269.9-275	185-195	222-232	257-272	415-430	479.6-499.6	95-105	195-215	280-300	17-32	109-129	109-129	279-299	114-129	202-222	265-285	92.5 - 112.5	150 - 180	262.5 - 282.5	280-300
Volatile Organic Compounds																													
1,1,1-Trichloroethane	200	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	7	**160**	**170**	**96**	**140**	**130**	**45**	< 5.0	< 5.0	NS	**96**	**160**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**150**	**180**	**180**	**20**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride	5	< 5.0	<5.0	**20**	**7.1**	**6.1**	< 5.0	< 5.0	< 5.0	NS	< 5.0	**6.1**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform[3]	80	< 5.0	< 5.0	6.6	5.9	5.7	< 5.0	< 5.0	< 5.0	NS	< 5.0	5.8	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
cis-1,2-Dichloroethene	70	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methylene chloride	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
trans-1,2-Dichloroethene	100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl chloride	2	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Xylenes, total	10,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Field Parameters																													
pH (s.u.)	-	6.97	NA	5.70	5.58	5.60	9.40	6.08	7.25	NS	7.78	6.36	7.96	7.81	8.14	8.55	7.83	8.18	7.53	7.90	NA	9.51	10.22	7.85	8.15	6.55	8.09	8.07	9.43
Temperature (degrees C)	-	17.22	NA	18.49	16.01	15.85	16.08	15.77	14.24	NS	15.80	15.68	17.05	12.90	14.20	15.82	13.09	14.01	15.69	15.57	NA	15.62	17.92	18.67	16.97	16.43	16.23	16.43	15.93
Specific Conductance (uS/cm)	-	0.207	NA	0.141	0.168	0.148	0.305	0.100	1.319	NS	0.588	0.229	0.403	2.248	0.179	0.110	0.453	0.282	0.206	0.220	NA	0.353	0.207	0.814	0.252	0.080	0.196	0.316	0.212
Eh (mV)	-	64.1	NA	52.9	187.9	191.4	42.4	195.6	-55.0	NS	-187.0	64.7	-167.9	-136.3	-144.0	0.0	-105.2	-118.3	-4.2	-113.9	NA	-89.2	70.7	-135.6	-143.0	81.8	-74.8	-93.3	28.3
Dissolved Oxygen (mg/L)	-	0.56	NA	4.64	7.96	7.63	0.60	4.94	9.92	NS	0.78	0.81	1.01	6.38	2.38	6.52	1.93	2.55	1.11	0.58	NA	1.41	4.51	1.73	2.17	4.45	9.22	1.35	0.77
Turbidity (NTU)	-	1.97	NA	5.33	0.42	0.80	6.60	0.32	<10	NS	2.19	1.76	2.02	10.94	1.19	1.20	9.17	6.39	9.13	6.28	NA	56.00	11.40	2.56	12.80	7.23	6.12	6.12	2.5

ft - feet
MCL - Maximum Contaminant Level
ug/L - micrograms per liter
mg/L - milligrams per liter
uS/cm - microsiemens per centimeter
mV - millivolts
NTU - nephelometric turbidity units
NS - not sampled due to insuffient water in zone.
s.u. - standard units
[1] 16053-Dup was collected from MW-15.
[2] 16053-Dup-1 was collected from MW-41 Zone 2.
[3] MCL listed for Chloroform is for Total Trihalomethanes.
Bold VOC results indicate concentration above the MCL.

Table 5. Quarterly Sampling Groundwater Analytical Results - May 2016
Owens Corning - Anderson, SC

Sample ID	MCL (ug/L)	MW-15	MW-22	MW-29R Zone 3	MW-29R Zone 4	16131-Dup-2[1]	MW-35	MW-36 Zone 1	MW-36 Zone 3	MW-36 Zone 5	MW-37 Zone 1	MW-37 Zone 2	MW-37 Zone 3	MW-38 Zone 1	MW-38 Zone 2	MW-39 Zone 1	MW-39 Zone 2	MW-39 Zone 3	MW-41 Zone 1	MW-41 Zone 2	16131-Dup-1[2]	MW-41 Zone 3	MW-42 Zone 1	MW-42 Zone 2	MW-42 Zone 3	MW-43 Zone 1	MW-43 Zone 2	MW-43 Zone 3	MW-44
Sample Date		5/10/16	5/10/16	5/10/16	5/10/16	5/10/16	5/9/16	5/10/16	5/10/16	-	5/11/16	5/11/16	5/11/16	5/10/16	5/11/16	5/11/16	5/11/16	5/11/16	5/10/16	5/10/16	5/10/16	5/10/16	5/11/16	5/11/16	5/11/16	5/9/16	5/9/16	5/9/16	5/10/16
Screened Interval (ft)		69.5-99.5	78-116	154.5-169.6	177.6-202.2	-	152-162	99.1-116	180.2-192.7	269.9-275	185-195	222-232	257-272	415-430	479.6-499.6	95-105	195-215	280-300	17-32	109-129	-	279-299	114-129	202-222	265-285	92.5 - 112.5	150 - 180	262.5 - 282.5	280-300
Volatile Organic Compounds																													
1,1,1-Trichloroethane	200	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	7	**180**	**300**	**240**	**220**	**300**	**50**	< 5.0	< 5.0	NS	**73**	**290**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**130**	**190**	**200**	**17**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride	5	< 5.0	**22**	**13**	**10**	**9.3**	< 5.0	< 5.0	< 5.0	NS	< 5.0	**12**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform[3]	80	< 5.0	8.2	8.1	7.9	7.9	< 5.0	< 5.0	< 5.0	NS	< 5.0	7.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
cis-1,2-Dichloroethene	70	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	700	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methylene chloride	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
trans-1,2-Dichloroethene	100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl chloride	2	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Xylenes, total	10,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Field Parameters																													
pH (s.u.)	-	6.17	4.99	5.33	5.39	NA	8.07	5.72	7.03	NS	7.64	6.15	7.64	7.59	7.44	5.71	7.72	7.88	7.47	7.82	NA	9.49	9.94	7.49	7.50	6.47	8.02	7.79	8.66
Temperature (degrees C)	-	17.53	18.14	16.76	17.70	NA	16.40	16.76	26.07	NS	16.77	15.54	16.67	21.11	17.90	17.69	27.89	29.15	15.52	15.74	NA	16.42	17.48	18.41	18.85	16.37	17.75	22.19	16.31
Specific Conductance (uS/cm)	-	0.193	0.132	0.166	0.143	NA	0.192	0.095	1.309	NS	0.557	0.212	0.402	2.022	0.177	0.087	0.444	0.290	0.188	0.215	NA	0.346	0.231	0.651	0.209	0.087	0.203	0.316	0.213
Eh (mV)	-	-436.7	-191.7	98.0	87.9	NA	-164.2	133.4	29.6	NS	-242.8	26.1	-100.5	-413.2	-269.3	-60.3	-458.7	-168.9	25.7	-13.6	NA	-37.2	-198.6	-336.8	-287.7	87.2	-38.9	-311.9	-439.6
Dissolved Oxygen (mg/L)	-	0.38	2.25	59.92	41.86	NA	0.79	67.13	50.59	NS	29.57	25.01	27.69	0.78	1.90	3.89	0.25	16.15	33.12	21.72	NA	70.53	2.99	0.81	0.88	44.63	10.82	10.41	0.35
Turbidity (NTU)	-	0.82	0.19	0.00	0.00	NA	1.53	0.00	<10	NS	8.04	2.72	1.15	177	0.00	1.19	27.8	16.3	0.00	1.02	NA	69.4	4.03	6.04	9.98	5.46	5.97	45.1	1.10

ft - feet
MCL - Maximum Contaminant Level
ug/L - micrograms per liter
mg/L - milligrams per liter
uS/cm - microsiemens per centimeter
mV - millivolts
NTU - nephelometric turbidity units
NS - not sampled due to insufficient water in zone.
s.u. - standard units
[1] 16131-Dup-2 was collected from MW-29R-Zone 4.
[2] 16131-Dup-1 was collected from MW-41 Zone 2.
[3] MCL listed for Chloroform is for Total Trihalomethanes.
Bold VOC results indicate concentration above the MCL.

Table 6. Residential Well Analytical Results - May 2016 Owens Corning - Anderson, SC									
Sample ID	MCL (ug/L)	628 Airline Road	412 Kaye Drive	117 Faye Drive	303 Kaye Drive	200 Kaye Drive	119 Cloverhill Drive	721 Clinkscales Road	200 Friendship Lane
Sample Date		5/12/16	5/12/16	5/12/16	5/12/16	5/12/16	5/12/16	5/12/16	5/12/16
Volatile Organic Compounds									
1,1,1-Trichloroethane	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform[1]	80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	70	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, total	10,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Field Parameters									
pH (s.u.)	-	5.51	6.28	7.03	6.18	6.33	6.15	6.47	6.27
Temperature (degrees C)	-	15.81	19.34	16.51	16.84	16.58	15.67	16.53	19.67
Specific Conductance (uS/cm)	-	0.080	0.041	0.268	0.144	0.076	0.035	0.036	0.071
Eh (mV)	-	155.6	97.2	124.3	95.1	133.4	123.5	129.6	134.5
Dissolved Oxygen (mg/L)	-	158.62	121.26	133.41	167.03	162.79	189.84	214.89	170.30
Turbidity (NTU)	-	1.29	4.14	2.32	3.04	0.00	1.46	0.00	3.21

MCL - Maximum Contaminant Level

ug/L - micrograms per liter

mg/L - milligrams per liter

uS/cm - microsiemens per centimeter

mV - millivolts

NTU - nephelometric turbidity units

NS- not sampled

s.u. - standard units

[1] MCL listed for Chloroform is for Total Trihalomethanes.

Bold VOC results indicate concentration above the MCL.

Table 7. Residential Well Location Map ID Owens Corning - Anderson, SC			
Map ID*	Location	Map ID*	Location
1	3715 Mabry Street	38	215 Elrod Road
2	634 Airline Road	39	115 Elrod Road
3	3735 Keys Street	40	119 Cloverhill Drive
4	1100 Airline Road	41	122 Kayle Drive
5	3721 Keys Street	42	138 Kayle Drive
6	4004 Keys Street	43	1802 Airline Road
7	605 Clinkscales Road	44	1303 Clinkscales Road
8	134 Friendship Lane	45	815 Airline Road
9	138 Friendship Lane	46	300 Jones Road
10	200 Friendship Lane	47	5104 Johnson Street
11	721 Clinkscales Road	48	104 Herbs Lane
12	711 Clinkscales Road	49	203 Travis Road
13	628 Airline Road	50	107 Jones Road
14	3731 Keys Street	51	303 Flat Rock Road
15	3713 Keys Street	52	4518 Keys Street
16	624 True Temper Road	53	4608 Keys Street
17	1501 Airline Road	54	4610 Keys Street
18	420 True Temper Road	55	5005 Johnson Street
19	408 Clinkscales Road	56	5009 Johnson Street
20	401 Clinkscales Road	57	5010 Johnson Street
21	4515 Keys Street	58	5014 Johnson Street
22	305 Harry Drive	59	5101 Johnson Street
23	150 Clinkscales Road	60	4906 Highway 81 South
24	943 Flat Rock Road	61	5305 Highway 81 South
25	325 Clinkscales Road	62	116 Young Road
26	322 Clinkscales Road	63	201 True Temper Road
27	321 Clinkscales Road	64	106 Pickens Circle
28	137 Knowlandwood Circle	65	110 Pickens Circle
29	412 Kaye Drive	66	123 Pickens Circle
30	413 Kaye Drive	67	127 Pickens Circle
31	311 Kaye Drive	68	131 Pickens Circle
32	117 Faye Drive	69	136 Pickens Circle
33	303 Kaye Drive	70	206 Wesley Court
34	End of Kaye Drive	71	104 Harry Drive
35	217 Kaye Drive	72	299 True Temper Road
36	200 Kaye Drive	73	119 True Temper Road
37	335 Elrod Road		

* Map ID corresponds to Figure 12 - Residential Well Sampling Location Map - May 2016

Appendix A: Groundwater Sampling Field Data Sheets

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-15

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Outside of Facility

Client: Owens Corning Personnel: JPL

Project Location: Anderson, South Carolina Weather: overcast 63°

2. WELL DATA

Date Measured: 2/22/16 Time: 1378 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 99.5 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 22.5 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 77 feet Well Volume: 12.86 gal Screened Interval (from GS): 69.5 - 99.5

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/22/16 Time: 1740

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or — gallons

Was well purged dry? ☒ Yes ☒ No Pumping Rate: .1-.25 gal/min

Equipment Model(s): 1. YSI 2. LaMotte 3. Geosub 4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1746	1.0	7.48	17.17	0.243	63.8	0.74	4.44	29.5	
1751	2.0	7.22	17.18	0.224	63.5	0.74	4.68	30.1	
1755	3.0	7.13	17.19	0.220	63.9	0.71	4.00	30.4	
1759	4.0	7.09	17.19	0.217	64.0	0.68	2.77	30.6	Slowed pump - Video Split
1805	5.25	7.00	17.21	0.209	64.2	0.59	2.24	30.9	

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 30.9 Field Filtered? ☐ Yes ☒ No

Sample ID: 16053-MW-15 Sample Date: 2/22/16 Sample Time: 1812 # of Containers: 2

Duplicate Sample Collected? ☒ Yes ☐ No ID: 16053-DUP # of Containers: 2

Equipment Blank Collected? ☒ Yes ☐ No ID: 16053-EB # of Containers: 2

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-15

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1809	6.0	6.97	17.87	0.207	64.1	0.56	1.97	30.9	

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-22

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Woods onsite

Client: Owens Corning Personnel: CTPL

Project Location: Anderson, South Carolina Weather: Overcast (50s)

2. WELL DATA

Date Measured: 2/23/16 Time: 0840 Temporary Well: ☐Yes ☒No

Casing Diameter: 8 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 8 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 116 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 9.15 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 106.85 feet Well Volume: 2.79 gal Screened Interval (from GS): 78-116

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/23/16 Time: 0845

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): 4th stable well volumes or — gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1-.25 gal/min

Equipment Model(s)
1. YSI
2. LaMotte
3. Monsoon
4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0859	1.0	5.92	18.41	.144	35.2	4.73	71000	10	
0905	2.0	5.67	18.57	.140	40.1	4.53	71000	9.8	
0909	3.25	5.68	18.51	.140	40.9	4.51	6.76	9.1	Slowed Pump
0915	4.25	5.66	18.60	.140	47.9	4.49	4.83	9.1	
0918	5.0	5.70	18.49	.141	52.9	4.64	5.33	9.1	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☒ No

Sample ID: 160054-MW-22 Sample Date: 2/23/16 Sample Time: 0920 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: # of Containers:

Equipment Blank Collected? ☐ Yes ☒ No ID: # of Containers:

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

purged 4 gallons before starting to take readings b/c turbidity was high → gritty grey turbidity for about 10 minutes

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: _____

Client: Owens Corning Personnel: GAGA

Project Location: Anderson, South Carolina Weather: OVERCAST, 60°F

2. WELL DATA

Date Measured: 2.23.16 Time: 0900 Temporary Well: ☐Yes ☒No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Inteval: 154.5-169.6 feet

Depth to Static Water: 6914.2 Dg

Depth to Product: — feet

Length of Water Column: 139.8 feet

Length of water column calculation:
(9094-Current Dg reading)*0.02775)*2.3108) = Length of water column (ft)

Well Vol. calculation:
1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of water in tubing(1/4")
= [22.18 gal - 2.52 gal] + (0.0102 gal/ft x length of water column

Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2.23.16 Time: 0920

Equipment Model(s)

1. MP-50
2. YSI
3. GEOFLOW
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1 gal/min Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0935	0.25	5.65	15.89	0.178	165.5	8.70	1.21	6913.4	
0940	0.5	5.63	15.95	0.176	171.5	8.49	0.76	6913.7	
0945	0.75	5.59	15.99	0.175	181.4	8.13	0.62	6913.5	
0950	1.0	5.58	16.02	0.172	185.4	7.98	0.56	6913.4	
0955	1.25	5.56	16.01	0.168	187.9	7.96	0.42	6913.4	

SAMPLED @ 1000

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☒ No

Sample ID: 16054-MW-29R-ZONE3 Sample Date: 2.23.16 Sample Time: 1000 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 4-Waterloo

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: OVERCAST 46°F

2. WELL DATA

Date Measured: 2.23.16 Time: 1005 Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 177.6-202.2 feet

Depth to Static Water: 62.80 feet

Depth to Product: feet

Length of Water Column: feet

Length of water column calculation:
(8932.8-Current Dg reading)*0.02724)*2.3108) = Length of water column (ft)

Well Vol. calculation:
1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of water intubing(1/4")
= [36.14 gal - 4.11 gal] + (0.0102 gal/ft x length of water column)

Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2.23.16 Time: 1010

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1-.25 gal/min

Equipment Model(s)
1. MP-50
2. YSI
3. GEOFLOW
4.

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1015	0.25	5.61	14.13	0.151	202.8	9.77	2.19	6279	
1020	0.5	5.63	15.02	0.150	188.3	2.34	0.98	6260	
1025	0.75	5.67	15.80	0.147	178.9	7.38	0.94	6268	
1030	1.0	5.70	15.81	0.146	177.2	7.35	0.94	6272	
1035	1.25	5.65	15.77	0.147	188.0	7.77	0.88	6274	

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 6270 Field Filtered? ☐ Yes ☒ No

Sample ID: 160324-MW-29R-ZONE4 Sample Date: 2.23.16 Sample Time: 1050 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers:

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers:

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

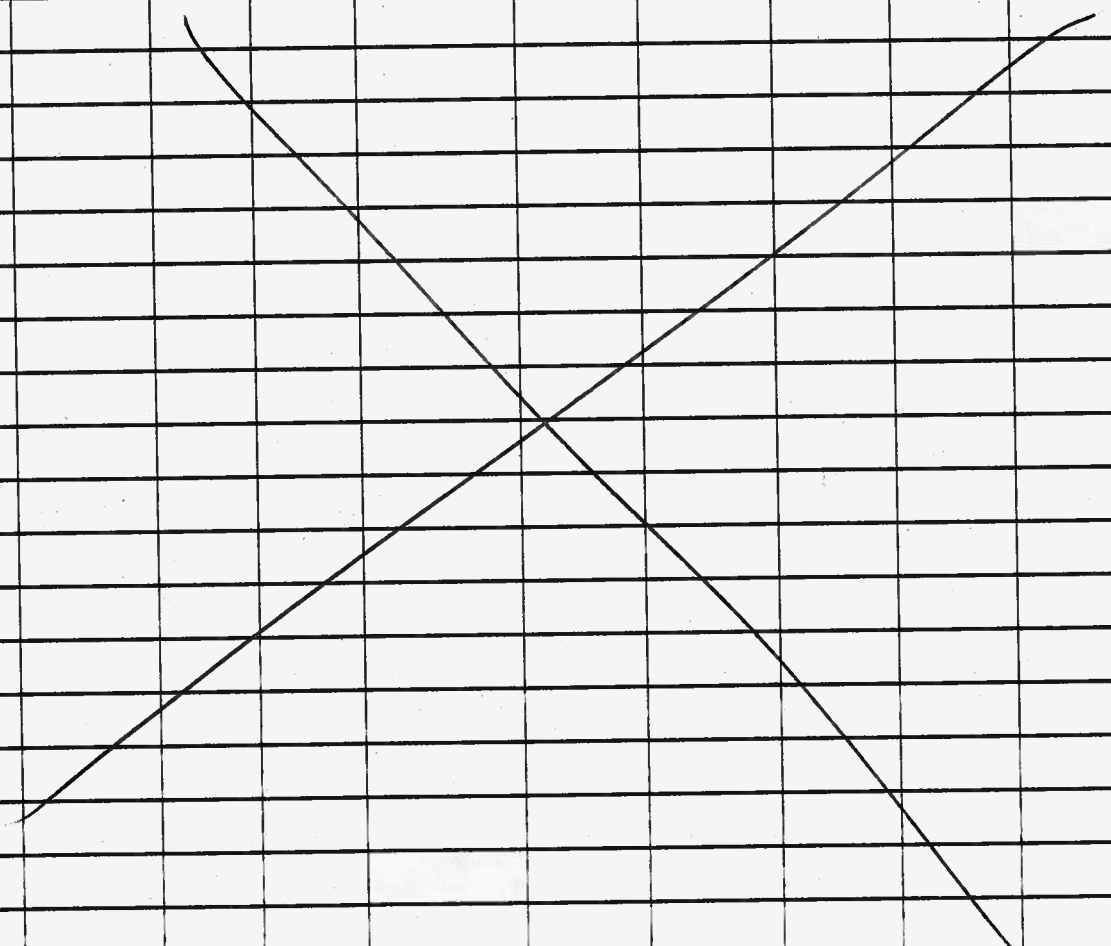
GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-29R Zone 4-Waterloo

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1040	1.5	5.60	15.86	0.148	190.4	7.63	0.85	6269	
1045	1.75	5.60	15.85	0.148	191.4	7.63	0.80	6270	
			SAMPLED @		1050				



Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Dohi Area

Client: Owens Corning Personnel: JPL

Project Location: Anderson, South Carolina Weather: overcast

2. WELL DATA

Date Measured: 2-22-16 Time: 1535 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 2 inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 162 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: artesian feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: 9.6 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 152.4 feet Well Volume: 25.5 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/22/16 Time: 1545

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): 4115 table well volumes or gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1-.25 gal/min Calibrated? ☒ Yes ☐

Equipment Model(s)
1. YSI
2. LaMotte
3. GeoSub
4.

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1607	1.0	9.99	15.86	0.253	85.8	1.09	66.8	10.1	
1621	2.0	9.82	16.09	0.348	63.9	0.96	54.8	12.1	
1626	3.0	9.84	16.12	0.330	56.8	0.78	31.3	13.0	
1631	4.0	9.48	16.14	0.331	47.1	0.59	10.2	13.6	
1634	4.5	9.47	16.11	0.318	46.3	0.57	10.45	13.0	

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 13.0 Field Filtered? ☐ Yes ☒ No

Sample ID: 160523-MW-35 Sample Date: 2/22/16 Sample Time: 1642 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Not artesian

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1636	5.0	9.45	16.08	0.313	45.0	0.56	10.03	13.0	
1640	6.0	9.40	16.08	0.305	42.4	0.60	6.60	13.0	

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 1-Waterloo

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: _____

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: OVERCAST, 48°F

2. WELL DATA

Date Measured: 2·23·16 Time: 1120 Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 99.1-116 feet

Depth to Static Water: ~~6128.2~~ 6127.5 Dg

Depth to Product: — feet

Length of Water Column: 100.9 feet

Length of water column calculation:
(8558.7-Current Dg reading)*0.01797)*2.3108) = Length of water column (ft)

Well Vol. calculation:
1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of tubing(1/4")
= [24.83 gal - 2.82 gal] + (0.0102 gal/ft x length of water column)

Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2·23·16 Time: 1125

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1 - .25 gal/min

Equipment Model(s)
1. GEOFLOW
2. YSI
3. MP-50
4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1130	0.2	6.10	15.72	0.099	190.8	4.87	0.32	6129.9	
1135	0.4	6.08	15.73	0.101	193.4	4.99	0.25	6132.1	
1140	0.6	6.08	15.77	0.100	195.6	4.94	0.32	6128.4	
			SAMPLED	@	1145				

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 6128.4 Field Filtered? ☐ Yes ☒ No

Sample ID: 160524-MW-36-Zone 1 Sample Date: 2·23·16 Sample Time: 1145 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel:

Project Location: Anderson, South Carolina Weather:

2. WELL DATA

Date Measured: 2-23-16 Time: 1405 Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 180.2-192.7 feet

Depth to Static Water: 6463.2 feet

Depth to Product: — feet

Length of Water Column: 169.4 feet

Length of water column calculation:
(9093.1-Current Dg reading)*0.02725)*2.3108) = Length of water column (ft)

Well Vol. calculation:
1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of water in tubing(1/4")
= [18.36 gal - 2.09 gal] + (0.0102 x length of water column)

Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2-23-16 Time: 1410

Equipment Model(s)

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

1. YSI

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other:

2. GROUNDFOS

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. MP-50

4.

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☒ Yes ☐ No Pumping Rate: gal/min

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1420	0.1	7.25	14.24	1.319	-55.0	9.92	410	7510.2	
		STOPPED	PUMPING	TO	LET	RECHARGE			

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☒ No

Sample ID: 16054-MW-36-ZONE 3 Sample Date: 2-23-16 Sample Time: 1600 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers:

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

WELL DRAWDOWN DURING PURGE LETTING RECHARGE TO SAMPLE. TOOK SAMPLE AFTER SOME RECHARGE. ENOUGH TO SAMPLE.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-2 (Rev 25.Sept.08 - sej)

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: OVERCAST, 55°F

2. WELL DATA

Date Measured: 2-24-16 Time: 0905 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 195 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 31.91 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 163.1 feet Well Volume: 6.7 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2-24-16 Time: 0935

Purge Method: ☐Bailer, Size: ☐Bladder Pump ☐2" Sub. Pump ☐4" Sub. Pump ☐Centrifugal Pump ☐Peristaltic Pump ☐Inertial Lift Pump ☐Other:

Materials: Pump/Bailer ☐Polyethylene ☒Stainless ☐PVC ☐Teflon® ☐Other: ☐Dedicated ☐Prepared Off-Site ☒Field-Cleaned ☐Disposable

Materials: Rope/Tubing ☐Polyethylene ☐Polypropylene ☒Teflon® ☐Nylon ☐Other: ☒Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐Yes ☒No Pumping Rate: .1-.25 gal/min

Equipment Model(s)
1. MP-50
2. SOLINST
3. YSI
4.

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0940	0.29	7.56	15.83	0.587	-171.8	1.09	3.04	37.7	
0945	0.75	7.74	15.86	0.587	-186.2	0.78	2.92	43.9	
0950	1.2	7.76	15.85	0.586	-186.3	0.85	2.51	51.7	
0955	1.5	7.78	15.80	0.588	-187.5	0.75	2.31	60.9	
1000	1.8	7.78	15.80	0.588	-187.0	0.78	2.19	65.2	

SAMPLED @ 1005

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐Bailer, Size: ☐Bladder Pump ☐2" Sub. Pump ☐4" Sub. Pump ☐Centrifugal Pump ☐Peristaltic Pump ☐Inertial Lift Pump ☐Other:

Materials: Pump/Bailer ☐Polyethylene ☒Stainless ☐PVC ☐Teflon® ☐Other: ☐Dedicated ☐Prepared Off-Site ☒Field-Cleaned ☐Disposable

Materials: Tubing/Rope ☐Polyethylene ☐Polypropylene ☒Teflon® ☐Nylon ☐Other: ☒Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Depth to Water at Time of Sampling: 65.2 Field Filtered? ☐Yes ☒No

Sample ID: 16055-MW-37-ZONE 1 Sample Date: 2-24-16 Sample Time: 1005 # of Containers: 2

Duplicate Sample Collected? ☐Yes ☒No ID: — # of Containers: —

Equipment Blank Collected? ☐Yes ☒No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel:

Project Location: Anderson, South Carolina Weather:

2. WELL DATA

Date Measured: 2-24-16 Time: 1330 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 232 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 27.61 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 204.4 feet Well Volume: ~~1 Zone~~ 8.3 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2-24-16 Time: 1400

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILIZE gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1 - .25 gal/min

Equipment Model(s)
1. YSI
2. MP-50
3. SOLINST
4. LAMOTTE 2020

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1405	0.5	10.20	16.58	0.284	-64.2	1.15	5.87	28.42	
1410	0.8	8.34	16.16	0.263	-3.9	0.36	4.21	28.55	
1415	1.2	7.07	16.06	0.257	18.0	0.79	3.27	28.67	
1420	1.6	6.55	16.01	0.242	24.6	0.83	2.92	28.52	
1425	2.0	6.50	16.00	0.235	40.7	0.91	2.64	28.31	

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☒ No

Sample ID: 16055-MW-37-ZONE2 Sample Date: 2-24-16 Sample Time: 1450 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☒ Yes ☐ No ID: 16055-EB # of Containers: 2

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1430	2.4	6.47	16.09	0.234	43.7	0.90	2.19	26.29	
1435	2.6	6.41	15.94	0.231	51.9	0.89	2.01	26.19	
1440	2.8	6.39	15.87	0.231	57.2	0.87	1.92	28.17	
1445	3.1	6.36	15.68	0.229	64.7	0.81	1.76	28.17	
			SAMPLED		@ 1450				

2-24-16

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel:

Project Location: Anderson, South Carolina Weather:

2. WELL DATA

Date Measured: 2-29-16 Time: 1035 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 272 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 30.34 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 241.6 feet Well Volume: 9.91 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2-24-16 Time: 1055

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1 - .25 gal/min

Equipment Model(s): 1. YSI 2. MP-50 3. SOLINST 4.

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1100	0.25	8.06	16.60	0.403	-157.9	1.16	14.0	28.4	
1105	0.5	8.02	16.80	0.402	-171.4	1.04	16.0	33.2	BLACK, FILLED WITH DIRT
1110	0.7	8.00	17.12	0.402	-171.5	1.11	12.1	39.9	
1115	0.9	7.98	17.04	0.403	-170.6	1.04	3.94	43.6	
1120	1.1	7.97	17.27	0.403	-169.9	1.03	2.14	47.9	

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 53.1 Field Filtered? ☐ Yes ☐ No

Sample ID: 160055-MW-37-Zone 3 Sample Date: 2-24-16 Sample Time: 1130 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1125	1.3	7.96	17.05	0.403	-167.9	1.01	2.02	53.1	
		SAMPLED @ 1130							

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: Novack

Project Location: Anderson, South Carolina Weather: Overcast / 60°F

2. WELL DATA

Date Measured: 2/23/16 Time: 09:18 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 430 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 15.5 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 414.5 feet Well Volume: 16.9 gal Screened Interval (from GS): 415 - 430

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/23/16 Time: 940

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min Calibrated? ☒ Yes ☐

Equipment Model(s)
1. [illegible] Solinst
2. YSI
3.
4.

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1000	0.50	7.85	12.26	1.858	-121.9	3.46	92.2	10.7	
1026	0.75	8.31	13.86	2.095	-75.3	1.57	>1000	22.1	Turbity, milky to gray-black
1039	1.25	8.35	14.00	2.097	-58.2	1.09	41.0	33.3	
1053	1.75	7.85	14.29	2.305	-123.8	7.77	46.8	49.8	
1104	2.00	7.83	14.12	2.291	-136.2	7.42	28.1	55.0	

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: Solinst

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☒ No

Sample ID: 1654-MW-38-Zone 1 Sample Date: 2-23-16 Sample Time: # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 1

3. PURGE DATA (continued from page ____)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1116	2.25	7.82	13.78	2.275	-139.8	6.98	15.8	59.2	
1128	2.50	7.81	13.48	2.265	-139.2	6.65	12.0	63.9	
1140	2.75	7.81	13.33	2.256	-137.5	6.37	12.31	64.8	
1145	2.85	7.81	13.12	2.255	-136.7	6.35	12.45	65.3	
1150	2.95	7.81	12.90	2.248	-136.3	6.38	10.94	65.9	

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Owens Intersection

Client: Owens Corning Personnel: JDL + CD.

Project Location: Anderson, South Carolina Weather: Overcast

2. WELL DATA

Date Measured: 2/23/16 Time: 1040 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 499.6 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: -.1 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☒ Other: Artesian

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: — feet Well Volume: ____ gal Screened Interval (from GS): ____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/23/16 Time: 1054

Purge Method: ☐ Bailer, Size: ____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: Artesian

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): till Stable well volumes or — gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: ~0.1 gal/min

Equipment Model(s): 1. YSI 2. LaMotte 3. ____ 4. ____

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1057	0.5	8.09	14.68	0.180	-110.2	3.97	0.79	-.1	
1103	1.0	8.10	14.77	0.181	-122.7	3.82	0.68	-.1	
1108	1.5	8.12	14.66	0.180	-131.0	2.74	0.78	-.1	
1115	2.0	8.12	14.45	0.179	-137.0	2.51	0.70	-.1	
1127	2.5	8.14	14.20	0.179	-144.0	2.38	1.19	-.1	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: Artesian

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: -.1 Field Filtered? ☐ Yes ☒ No

Sample ID: 16054-MW-38-22 Sample Date: 2/23/16 Sample Time: 1130 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

Well is Artesian

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Backyard of house

Client: Owens Corning Personnel: JPL + CN

Project Location: Anderson, South Carolina Weather: Overcast

2. WELL DATA

Date Measured: 2/23/16 Time: 1414 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 105 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 13.0 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 92.0 feet Well Volume: 3.77 gal Screened Interval (from GS): 95-105

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.489 gal/ft

3. PURGE DATA

Date Purged: 2/23/16 Time: 1513

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: #3

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 2.1 gal/min

Equipment Model(s): 1. YSI 2. LaMotte 3. Solinst 4. _____

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1522	1.0	8.36	15.79	.112	-33.1	6.71	1.62	14.6	
1530	2.0	8.53	15.87	.112	-16.3	6.53	0.83	14.4	
1539	3.0	8.57	15.86	.111	- 6.2	6.57	0.81	14.4	
1547	4.0	8.55	15.82	.110	0.04	6.52	1.2	14.4	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 14.4 Field Filtered? ☐ Yes ☒ No

Sample ID: 160054-MW-39Z1 Sample Date: 2/23/16 Sample Time: 1550 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: backyard

Client: Owens Corning Personnel: TPL + CN

Project Location: Anderson, South Carolina Weather: overcast

2. WELL DATA

Date Measured: 2/23/16 Time: 1600 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 215 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 33.5 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 181.5 feet Well Volume: 7.44 gal Screened Interval (from GS): 195-215

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/23/16 Time: 1602

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: QED

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): Until Stable well volumes or — gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: <.1 gal/min

Equipment Model(s)
1. YSI
2. LaMotte
3. Solinst
4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1616	0.5	7.96	14.08	0.454	-89.6	2.21	21.7	48.7	
1624	1.0	7.94	13.67	0.449	-99.6	2.09	12.0	53.7	
1642	1.5	7.99	13.57	0.476	-117.7	1.46	>1000	72.2	
1702	2.0	7.90	14.67	0.452	-106.6	1.60	48	78.0	
1712	2.25	7.87	14.40	0.452	-108.9	1.67	19.3	—	water level won't go down - Stop

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☒ No

Sample ID: 16044-MW-39-Z2 Sample Date: 2/23/16 Sample Time: 1748 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☒ Yes ☐ No ID: 16054-EB # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

Water very turbid at initial purge, cleared up after 5-10 minutes of purging

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ± 2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1718	2.5	7.85	13.98	0.453	-108.8	1.66	14.6	—	
1729	2.75	7.83	13.54	0.453	-107.0	1.86	15.0	—	
1737	3.0	7.83	13.09	0.453	-105.2	1.93	9.17	—	

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Backyard
Client: Owens Corning Personnel: JPL, CN, GG
Project Location: Anderson, South Carolina Weather: Overcast 47°F

2. WELL DATA

Date Measured: 2/23/16 Time: 1750 Temporary Well: ☐Yes ☒No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:
Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:
Total Depth of Well: 300 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:
Depth to Static Water: 48.5 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:
Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:
Length of Water Column: 251.5 feet Well Volume: 10.3 gal Screened Interval (from GS): 280-300

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/23/16 Time: 1755

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): Stable well volumes or — gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 0.1 gal/min

Equipment Model(s)
1. YSI
2. LaMotte
3. Solinst
4.

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1803	0.5	8.05	14.78	0.285	-110.3	2.33	7.34	45.7	
1811	1.0	8.23	14.57	0.281	-119.6	2.45	7.41	—	Water Meter Stuck
1821	1.5	8.23	14.23	0.280	-120.6	2.42	5.48	—	
1833	2.0	8.18	14.01	0.282	-118.3	2.55	6.39	—	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: — Field Filtered? ☐ Yes ☒ No

Sample ID: 160514-MW-39-23 Sample Date: 2/23/16 Sample Time: 1635 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L
DO: _____ mg/L
Nitrate: _____ mg/L
Sulfate: _____ mg/L
Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: _____

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: RAINING, 60°F

2. WELL DATA

Date Measured: 2-22-16 Time: 1500 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: 1 inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: ~~129~~ 32 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: 6.75 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: 25.25 feet Well Volume: 1.03 gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2-22-16 Time: 1515

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: _____ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1 gal/min

Equipment Model(s)
1. YSI
2. SOLINST
3. LAMOTTE
4. _____

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1520	0.25	7.54	15.37	0.206	12.3	1.96	9.84	6.79	
1525	0.50	7.45	15.70	0.202	5.5	1.82	16.2	6.79	
1530	0.75	7.50	15.66	0.204	4.7	1.59	15.1	6.79	
1535	1.0	7.50	15.69	0.204	2.5	1.49	12.32	6.79	
1540	1.25	7.50	15.69	0.205	-0.2	1.39	9.82	6.79	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: _____ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 6.79 Field Filtered? ☐ Yes ☐ No

Sample ID: 160053-MW-41-ZONE1 Sample Date: 2-22-16 Sample Time: 1555 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

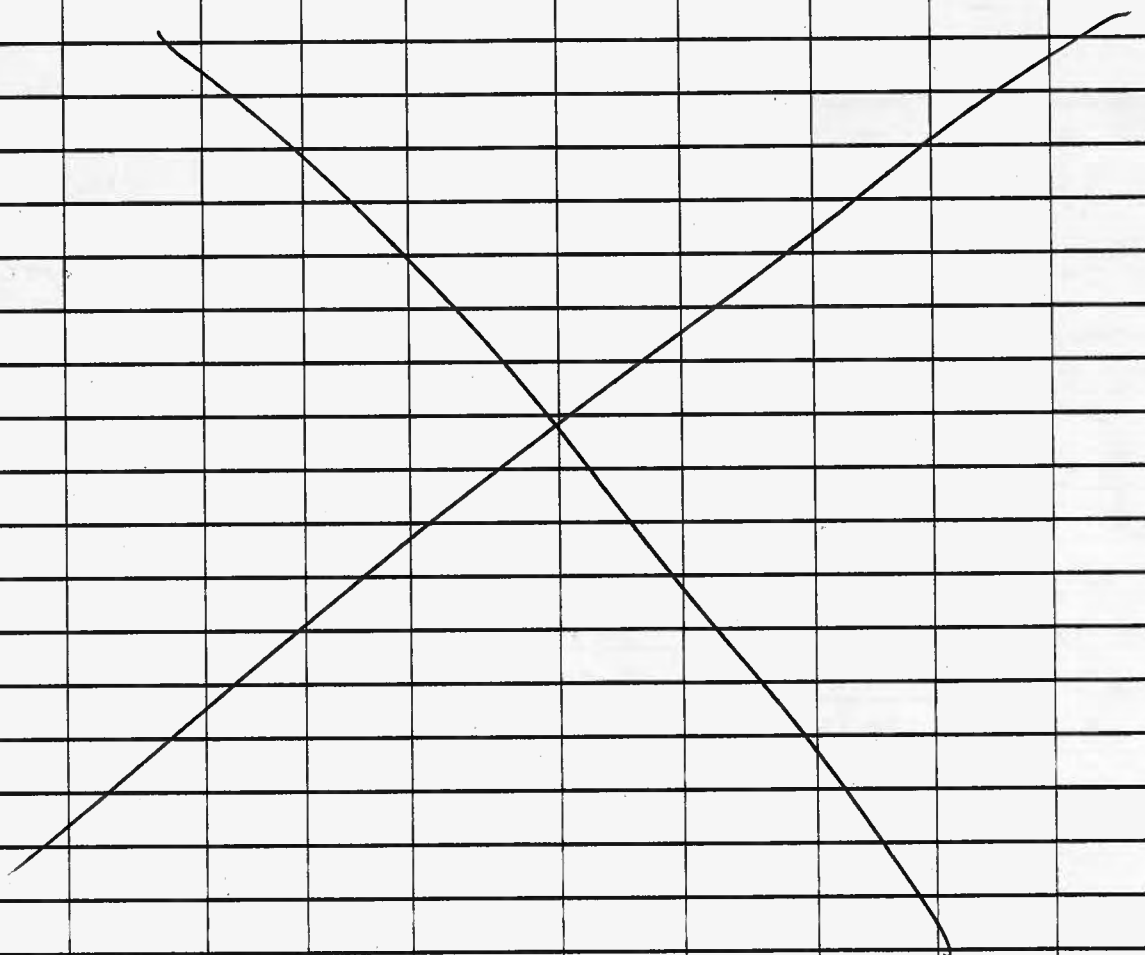
BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1345	1.75	7.52	15.68	0.207	-1.7	1.24	9.23	6.79	
1550	2.2	7.53	15.69	0.206	-4.2	1.11	9.13	6.79	
		SAMPLED	@		1555				



Purge data continued on next sheet? ☐

FORM GW-2 (Rev 25 Sept.08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: G G / CN

Project Location: Anderson, South Carolina Weather: Rainy 50°

2. WELL DATA

Date Measured: 02/22/16 Time: 1611 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 129 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 2.92 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 126.08 feet Well Volume: 5.169 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 02/22/16 Time: 1615

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILIZE gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1 - .25 gal/min

Equipment Model(s): 1. Solinst 2. YSI 3. LaMotte 4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1620	0.4	7.83	15.64	0.221	-100.4	1.02	20.0	2.99	
1625	0.75	7.90	15.64	0.219	-103.8	0.75	7.92	2.99	
1630	1.0	7.90	15.57	0.218	-109.6	0.64	7.01	2.99	
1635	1.3	7.90	15.57	0.220	-113.9	0.58	6.28	2.99	
			SAMPLED @ 1645						

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 2.99 Field Filtered? ☐ Yes ☐ No

Sample ID: 16053-MW-41-Zone 2 Sample Date: 2-22-16 Sample Time: 1645 # of Containers: 2

Duplicate Sample Collected? ☒ Yes ☐ No ID: 16053-Dup-1 # of Containers: 2

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: Gagat / Novack

Project Location: Anderson, South Carolina Weather: Overcast / 60°F

2. WELL DATA

Date Measured: 2-22-16 Time: 16:50 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 299 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 22.4 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 276.6 feet Well Volume: 11.34 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2-22-16 Time: 16:53

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: ~1 gal/min

Equipment Model(s): 1. SolinST 2. YSI 3. LaMotte 4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1705	0.25	9.45	15.72	0.354	-77.8	2.83	Overrange >1000	22.8	
1715	~~0.50~~	9.54	15.74	0.346	-78.3	1.36	786	24.6	
1725	0.75	9.55	15.78	0.348	-85.0	1.52	53	27.3	
1735	1.00	9.54	15.67	0.350	-86.8	1.72	71.2	35.78	
1748	1.30	9.52	15.68	0.352	-91.7	1.81	62.0	45.4	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: SolinST

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 52.48 Field Filtered? ☐ Yes ☒ No

Sample ID: 1603-MW-41-33 Sample Date: 02/22/16 Sample Time: 1810 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

High turbidity, but stabilized out and ~~Running~~ running out of daylight — took sample.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 3

3. PURGE DATA (continued from page ____)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1800	1.60	9.51	15.62	0.353	-89.2	1.41	56	52.48	

Purge data continued on next sheet? ☐

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Neighborhood

Client: Owens Corning Personnel: JPL + CD

Project Location: Anderson, South Carolina Weather: Sunny + wet

2. WELL DATA

Date Measured: 2/24/16 Time: 0926 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 ½ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 129 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 35.2 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 93.8 feet Well Volume: 3.85 gal Screened Interval (from GS): 14-129

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/24/16 Time: 0925

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stable gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: <.1 gal/min

Equipment Model(s): 1. YSI 2. LaMotte 3. Solinst 4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0928	0.5	11.29	17.38	.324	58.6	5.29	7.45	36.1	
0937	1.0	11.33	17.25	.280	25.2	4.91	42.4	36.6	
0943	1.5	11.14	17.39	.223	30.4	4.81	27.0	36.8	
0949	2.0	10.97	17.54	.205	37.2	4.63	52.5	35.9	
0955	2.5	10.80	17.54	.269	48.7	4.81	38.6	35.9	

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 36.0 Field Filtered? ☐ Yes ☒ No

Sample ID: 16055-MW-42-21 Sample Date: 2/24/16 Sample Time: 1030 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp. ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1002	3.0	10.64	17.87	0.246	46.7	4.68	32.6	36.0	
1009	3.5	10.32	17.68	0.238	55.5	4.77	17.8	36.0	
1016	4.0	10.30	17.79	0.220	61.9	4.57	16.7	36.0	
1024	4.5	10.28	17.91	0.212	70.6	4.53	13.2	36.0	
1029	5.0	10.22	17.92	0.207	70.7	4.51	11.4	36.0	

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Neighborhood

Client: Owens Corning Personnel: JPL + CN

Project Location: Anderson, South Carolina Weather: Sunny + 65

2. WELL DATA

Date Measured: 2/24/16 Time: 1035 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 222 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 31.26 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 191 feet Well Volume: 7.82 gal Screened Interval (from GS): 202-222

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/24/16 Time: 1045

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stable gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: <.1 gal/min

Equipment Model(s)
1. YSI
2. LaMotte
3. Solinst
4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1052	0.50	7.74	18.35	0.829	-114.8	2.12	27.1	34.2	
1100	1.00	7.85	18.41	0.815	-111.6	1.40	6.16	water meter stuck	
1111	1.50	7.86	18.69	0.813	-143.2	1.58	3.46	—	
1128	2.00	7.86	18.83	0.814	-129.7	1.73	2.92	—	
1141	2.50	7.85	18.67	0.814	-135.6	1.73	2.56	—	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: — Field Filtered? ☐ Yes ☒ No

Sample ID: 160225-MW-42-02 Sample Date: 2/24/16 Sample Time: 1145 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Neighborhood

Client: Owens Corning Personnel: JPL + CN

Project Location: Anderson, South Carolina Weather: Overcast + windy

2. WELL DATA

Date Measured: 2/24/16 Time: 1343 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 285 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 31.85 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 253 feet Well Volume: 10.37 gal Screened Interval (from GS): 265-285

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/24/16 Time: 1350

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stable gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: gal/min

Equipment Model(s)
1. YSI
2. LaMotte
3. Solinst
4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1402	0.5	8.16	17.76	0.250	-110.7	2.78	86.7	33.2	
1411	1.0	8.16	17.37	0.280	-144.6	2.08	20.2	—	water level meter stuck
1421	1.5	8.16	17.31	0.254	-150.1	2.14	13.5	—	" "
1438	2.0	8.16	17.10	0.252	-148.0	2.22	11.0	—	
1445	2.5	8.15	16.97	0.252	-143.0	2.17	12.8	—	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: — Field Filtered? ☐ Yes ☒ No

Sample ID: 160224-MW-42-23 Sample Date: 2/24/16 Sample Time: 1445 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Tubing is folded over for storage be careful when extracting for next sampling

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GG

Project Location: Anderson, South Carolina Weather: OVERCAST

2. WELL DATA

Date Measured: 2·22·16 Time: 0915 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 115 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 6.24 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 108.7 feet Well Volume: 4.46 gal Screened Interval (from GS): 92.5 - 112.5

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2·22·16 Time: 0945

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): ____ well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: ____ gal/min

Equipment Model(s): 1. YSI 2. SOLINST 3. LAMOTTE 4.

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > or ±3% or ±0.010 mS/cm	ORP > or ±10% or ±20 mV	DO > or ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0950	0.25	6.53	16.00	0.081	87.0	5.71	30.0	6.53	CLOUDY
0955	0.5	6.53	15.90	0.076	84.9	4.98	26.2	6.53	
1000	0.75	6.53	16.02	0.076	77.8	4.67	26.4	6.53	
1005	1.0	6.53	16.06	0.076	71.6	4.62	27.8	6.53	
1010	1.25	6.52	16.17	0.075	70.2	4.58	27.2	6.53	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 6.53 Field Filtered? ☐ Yes ☐ No

Sample ID: 16053-MW-43-ZONE1 Sample Date: 2·22·16 Sample Time: 1040 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: # of Containers:

Equipment Blank Collected? ☐ Yes ☒ No ID: # of Containers:

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > or ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1015	1.5	6.54	16.31	0.075	71.2	4.86	20.3	6.53	
1020	1.75	6.53	16.36	0.078	75.6	4.60	12.8	6.53	
1025	2.0	6.53	16.37	0.076	77.3	4.56	9.21	6.53	
1030	2.25	6.55	16.39	0.079	79.0	4.46	8.12	6.53	
1035	2.50	6.55	16.43	0.080	81.8	4.45	7.23	6.53	
		SAMPLED @ 1040							

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: ______

Client: Owens Corning Personnel: GG

Project Location: Anderson, South Carolina Weather: OVERCAST

2. WELL DATA

Date Measured: 2·22·16 Time: 1040 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐ Other: ______

~~Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐ Other:~~

Total Depth of Well: 180 feet From: ☒Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Static Water: 3.53 feet From: ☒Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Length of Water Column: 176.5 feet Well Volume: 7.23 gal Screened Interval (from GS): ______

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2·22·16 Time: 1045

Purge Method: ☐ Bailer, Size: ______ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ______

Materials: (Pump)/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ______ ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/(Tubing) ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ______ ☒Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: ______ gal/min

Equipment Model(s)

1. YSI
2. SOLINST
3. LAMOTTE
4. ______

Calibrated? ☒ Yes

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±0.010 mS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1050	0.25	7.98	16.13	0.192	-81.2	9.42	20.1	4.72	
1100	0.75	7.98	16.21	0.199	-88.9	9.56	19.8	5.05	
~~TUBING CLOGGED~~									GTG 2·22·16
1120	1.6	7.98	16.08	0.202	-90.7	9.35	12.1	5.51	
1125	1.25	7.97	16.13	0.201	-89.6	9.35	9.98	5.95	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ______ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ______

Materials: (Pump)/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ______ ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: (Tubing)/Rope ☒ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ______ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 6.91 Field Filtered? ☐ Yes ☐ No

Sample ID: 16053-MW-43-ZONE2 Sample Date: 2·22·16 Sample Time: 1145 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: ______

~~Geochemical Analyses~~

~~Ferrous Iron: ______ mg/L~~

~~DO: ______ mg/L~~

~~Nitrate: ______ mg/L~~

~~Sulfate: ______ mg/L~~

Alkalinity: ______ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-2 (Rev 25.Sept.08 - sej)

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1130	1.5	8.02	16.14	0.195	-83.2	9.33	8.72	6.05	
1135	1.75	8.08	16.26	0.196	-74.5	9.25	7.92	6.51	
1140	2.0	8.09	16.23	0.196	-74.8	9.22	6.12	6.91	
			SAMPLED	@		1145			

Purge data continued on next sheet? ☐

FORM GW-2 (Rev 25.Sept.08 sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: OVERCAST

2. WELL DATA

Date Measured: 2·22·16 Time: 1330 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 268 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Static Water: 0.5 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Length of Water Column: 281.5 feet Well Volume: 11.54 gal Screened Interval (from GS): 262 - 282

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2·22·16 Time: 1340

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min

Equipment Model(s): 1. YSI 2. SOLINST 3. LAMOTTE 4.

Calibrated? ☒Yes

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1345	0.3	8.08	16.36	0.324	-76.1	1.30	12.2	14.21	
1350	0.75	8.08	16.38	0.325	-79.0	1.31	9.31	21.38	
1355	1.0	8.08	16.43	0.319	-85.0	1.31	6.24	25.32	
1400	1.25	8.07	16.43	0.316	-93.3	1.35	6.12	31.9	
			SAMPLED	@		1405			

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 31.9 Field Filtered? ☐ Yes ☐ No

Sample ID: 16053-MW-43-ZONE3 Sample Date: 2·22·16 Sample Time: 1405 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: # of Containers:

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-44

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: Dohi Area
Client: Owens Corning Personnel: JPL + CN
Project Location: Anderson, South Carolina Weather: Rainy + 50s

2. WELL DATA

Date Measured: 2/22/16 Time: 1403 Temporary Well: ☐Yes ☒No

Casing Diameter: 2 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 2 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 300 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 9.25 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 290.75 feet Well Volume: 48.5 gal Screened Interval (from GS): 280-300

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 2/22/16 Time: 1435

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): till stable well volumes or ______ gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: .1-.25 gal/min

Equipment Model(s)
1. YSI
2. LaMotte
3. GeoSub
4.

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1432	1.0	9.13	16.05	.213	73	3.2	16.9	9.3	
1439	2.0	9.32	16.05	.214	50.8	1.38	10.35	10.0	
1443	3.0	9.4	16.12	.213	36.6	0.84	5.68	10.0	
1447	4.0	9.44	16.04	.211	32.5	.087	4.52	10.0	
1454	5.0	9.43	15.93	.212	28.3	0.77	2.54	10.0	

Purge data continued on next sheet? No

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☒ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 10.0 Field Filtered? ☐ Yes ☒ No

Sample ID: 16053-MW-44 Sample Date: 2/22/16 Sample Time: 1455 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses
Ferrous Iron: ______ mg/L
DO: ______ mg/L
Nitrate: ______ mg/L
Sulfate: ______ mg/L
Alkalinity: ______ mg/L

5. COMMENTS

monsoon does not reach bottom: extra tubing didn't make it to the bottom.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [signature]

FORM GW-2 (Rev 25.Sept.08 - sej)

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-15

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CN

Project Location: Anderson, South Carolina Weather: Sunny + 79°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1435 Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 2 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 99.5 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 23.66 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 75.84 feet Well Volume: 12.66 gal Screened Interval (from GS): 89.5-99.5

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/10/16 Time: 1120

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: — gal/min

Equipment Model(s)

1. Lamotte
2. YSI
3. Solinst
4. Monsoon

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su ✓	Temp ±2°C ✓	Spec. Cond. > of ±3% or ±0.010 mS/cm ✓	ORP > of ±10% or ±20 mV ✓	DO > of ±10% or ±0.2 mg/L ✓	Turbidity ≤ 10 NTU ✓	Water Level	Comments
1126	3.0	6.10	17.28	0.207	-302.4	0.41	6.47	31.03	Drawdown
1136	6.0	6.08	17.40	0.197	-348.1	0.38	2.74	32.50	—
1146	9.0	6.14	17.44	0.195	-403.3	0.39	1.81	32.60	—
1158	12.0	6.17	17.53	0.193	-436.7	0.38	0.82	33.10	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 33.15 Field Filtered? ☐ Yes ☒ No

Sample ID: 16131-mw-15 Sample Date: 5/10/16 Sample Time: 1205 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

—

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-22

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CN

Project Location: Anderson, South Carolina Weather: Sunny + 75°F

2. WELL DATA

Date Measured: 5/9 Time: 12 14 Temporary Well: ☐Yes ☒No

Casing Diameter: 8 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 8 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 116 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 10.41 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 105.59 feet Well Volume: 155.11 gal Screened Interval (from GS): 105 - 116

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/10/16 Time: 10 00

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: — gal/min

Equipment Model(s)

1. Lamotte
2. Solinst
3. Monsoon
4. YSI

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1007	3.0	5.08	18.22	0.133	-167.9	2.29	0.48	11.46	—
1012	6.0	5.03	18.21	0.133	-193.1	2.27	0.87	11.46	—
1020	9.0	5.00	18.15	0.133	-191.8	2.24	0.19	11.46	—
1025	12.0	4.99	18.14	0.132	-191.7	2.25	0.19	11.46	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 11.46 Field Filtered? ☐ Yes ☒ No

Sample ID: 16131-MW-22 Sample Date: 5/10/16 Sample Time: 1030 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

—

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: SUNNY, 85° F

2. WELL DATA

Date Measured: 5.10.16 Time: 1330 Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Inteval: 154.5-169.6 feet

Depth to Static Water: 6933 Dg

Depth to Product: — feet

Length of Water Column: 138.6 feet

Length of water column calculation:
(9094-Current Dg reading)*0.02775)*2.3108) = Length of water column (ft)
Well Vol. calculation:
1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of water in tubing(1/4")
= [22.18 gal - 2.52 gal] + (0.0102 gal/ft x length of water column

Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.10.16 Time: 1349

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: (Pump)/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/(Tubing) ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min

Equipment Model(s)
1. MP-50
2. YSI
3. LAMOTTE 2020
4. GEOFLOW

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1400	0.5	5.28	16.73	0.172	80.7	42.26	.09	6933	
1405	0.9	5.30	16.76	0.169	96.8	63.32	.04	6933	
1410	0.9	5.32	16.76	0.167	97.4	61.51	.01	6933	
1415	1.1	5.33	16.76	0.166	98.0	59.92	0.0	6933	
			SAMPLED @ 1420						

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: (Pump)/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: (Tubing)/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 6933 Field Filtered? ☐ Yes ☒ No

Sample ID: 16131-MW-29R-20163 Sample Date: 5.10.16 Sample Time: 1420 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 4-Waterloo

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: CAGAT

Project Location: Anderson, South Carolina Weather: SUNNY, 85°

2. WELL DATA

Date Measured: 5.10.16 Time: 1415 Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 177.6-202.2 feet

Depth to Static Water: 6300 feet

Depth to Product: — feet

Length of Water Column: 166 feet

Length of water column calculation:
(8932.8-Current Dg reading)*0.02724)*2.3108) = Length of water column (ft)

Well Vol. calculation:
1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of water intubing(1/4")
= [36.14 gal - 4.11 gal] + (0.0102 gal/ft x length of water column)

Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.10.16 Time: 1425

Equipment Model(s)
1. YSI
2. GEOLOGIN
3. MP-50
4. LAMOTTE 2020

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): well volumes or gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1435	0.2	5.79	17.35	0.138	69.7	42.49	0.7	6295	
1445	0.4	5.40	17.55	0.144	87.2	42.67	0.2	6300	
1450	0.6	5.42	17.32	0.144	85.6	41.90	0.0	6275	
1455	0.8	5.39	17.70	0.143	87.9	41.86	0.0	6290	
			SAMPLED @ 1500						

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 6290 Field Filtered? ☐ Yes ☒ No

Sample ID: 16131-MW-29R-ZONE4 Sample Date: 5.10.16 Sample Time: 1500 # of Containers: 2

Duplicate Sample Collected? ☒ Yes ☐ No ID: 16131-DUP-2 # of Containers: 2

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-2 (Rev 25 Sept 08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: ___

Client: Owens Corning Personnel: CN

Project Location: Anderson, South Carolina Weather: Cloudy + 75°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1709 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: ___

Screen Diameter: 2 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: ___

Total Depth of Well: 162 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: ___

Depth to Static Water: ~~artesian~~ 10.28 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: ___

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: ___

Length of Water Column: 151.72 feet Well Volume: 25.34 gal Screened Interval (from GS): 152-162

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/9/16 Time: 1740

Purge Method: ☐ Bailer, Size: ___ ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ___

Materials: (Pump)/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ___ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/(Tubing) ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ___ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: — gal/min

Equipment Model(s)
1. Grundfos, monsoon
2. YSI
3. Solinst
4. LaMotte

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1745	2.00	7.73	16.51	0.279	93.2	1.04	170	11.64	—
1750	2.50	8.26	16.01	0.244	29.2	1.14	47.1	13.4	—
1755	5.00	7.72	16.38	0.191	-38.8	0.85	11.3	16.35	—
1800	6.50	7.82	16.56	0.195	-130.4	0.84	10.4	16.45	—
1805	7.00	7.97	16.37	0.187	-191.2	0.85	4.52	15.8	—

~~1810~~

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ___ ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ___

Materials: (Pump)/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ___ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: (Tubing)/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ___ ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 15.80 Field Filtered? ☐ Yes ☒ No

Sample ID: 16130-MW-35 Sample Date: 5/9/16 Sample Time: 1815 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses (crossed out)

Ferrous Iron: ___ mg/L

DO: ___ mg/L

Nitrate: ___ mg/L

Sulfate: ___ mg/L

Alkalinity: ___ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [signature]

FORM GW-2 (Rev 25.Sept.08 - sej) 16130 HCl VOC

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1810	6.5	8.07	16.40	0.192	-164.2	0.79	1.53	15.80	—

Purge data continued on next sheet? ☐

FORM GW-2 (Rev 25.Sept.08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 1-Waterloo

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: SUNNY, 87°F

2. WELL DATA

Date Measured: 5·10·16 Time: 1515 Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 99.1-116 feet

Depth to Static Water: 6191 Dg

Depth to Product: feet

Length of Water Column: feet

Length of water column calculation:
(8558.7-Current Dg reading)*0.01797)*2.3108) = Length of water column (ft)
Well Vol. calculation:
1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of tubing(1/4")
= [24.83 gal - 2.82 gal] + (0.0102 gal/ft x length of water column)

Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5·10·16 Time: 1525

Equipment Model(s)

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

1. YSI

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

2. MP-50

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. GEOKON

4. LAMOTTE 2020

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1535	0.4	5.62	16.80	0.095	131.8	69.13	1.8	6128	
1545	0.8	5.59	16.82	0.095	137.0	67.54	0.7	6192	
1550	1.25	5.66	16.80	0.095	132.7	66.49	0.0	6134	
1555	1.5	5.71	16.77	0.096	131.2	67.56	0.0	6129	
1600	1.7	5.72	16.76	0.095	133.4	67.13	0.0	6140	

SAMPLED @ 1600

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 6140 Field Filtered? ☐ Yes ☒ No

Sample ID: ZONE 1 (16131-MW-36) Sample Date: 5·10·16 Sample Time: 1600 # of Containers:

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: SUNNY, 85 °F

2. WELL DATA

Date Measured: 5.10.16 Time: 1600 Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 180.2-192.7 feet

Depth to Static Water: feet

Depth to Product: feet

Length of Water Column: feet

Length of water column calculation:
(9093.1-Current Dg reading)*0.02725)*2.3108) = Length of water column (ft)

Well Vol. calculation:
1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of water in tubing(1/4")
= [18.36 gal - 2.09 gal] + (0.0102 x length of water column)

Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.10.16 Time: 1605

Equipment Model(s)

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☑ Other:

1. YSI

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other:

2. CHEMOTTE 2020

Materials: Rope/Tubing ☑ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☑ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. MP-50

4. GEOPUMP

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☑ Yes ☐ No Pumping Rate: gal/min

Calibrated? ☑Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1615	0.1	7.03	26.07	1.309	29.6	50.59	—	8501	
	WELL WENT DRY AFTER .1 GALLONS ENOUGH TO ONLY								
	GET 1 SET OF PARAMETERS, SAMPLED AFTER RECHARGE.								

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☑ Other:

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☑ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☑ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☑ No

Sample ID: 1615-MW-36-ZONE 3 Sample Date: 5.10.16 Sample Time: 1630 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☑ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☑ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-2 (Rev 25.Sept.08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: SUNNY, 79°F

2. WELL DATA

Date Measured: 5.11.16 Time: 1100 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 195 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 34.3 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: feet Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.11.16 Time: 1107

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min

Equipment Model(s)
1. YSI
2. LAMOTTE 2020
3. SOLINST
4. MP-50

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1115	0.7	7.49	15.96	0.551	-186.3	22.42	52.5	49.2	BLACK AT FIRST
1125	1.1	7.52	16.19	0.553	-219.6	21.03	16.8	64.2	
1135	1.6	7.66	16.08	0.550	-232.9	25.32	9.82	71.3	
1145	2.1	7.63	16.47	0.556	-242.4	29.93	8.91	80.5	
1155	2.8	7.64	16.77	0.557	-242.8	29.57	8.04	85.6	

SAMPLED @ 1200

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 85.6 Field Filtered? ☐ Yes ☐ No

Sample ID: 16132-MW-37-ZONE1 Sample Date: 5.11.16 Sample Time: 1200 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-2 (Rev 25.Sept.08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: CAGAT

Project Location: Anderson, South Carolina Weather: CLOUDY, 80°F

2. WELL DATA

Date Measured: 5·9·16 Time: AM Temporary Well: ☐Yes ☒No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 232 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: feet Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5·11·16 Time: 0955

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 0.05 gal/min

Equipment Model(s): 1. YSI 2. LAMOTTE 2020 3. MP-50 4. SOLINST

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1005	0.4	6.98	15.42	0.237	23.2	21.93	12.92	29.57	
1015	0.9	6.29	15.55	0.221	22.8	23.94	8.65	30.25	
1025	1.5	6.20	15.54	0.217	24.3	25.30	3.98	30.31	
1035	2.0	6.16	15.54	0.213	25.1	24.92	3.01	30.32	
1045	2.5	6.15	15.54	0.212	26.1	25.01	2.72	30.32	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 30.32 Field Filtered? ☐ Yes ☒ No

Sample ID: 16132-MW-37-ZONE2 Sample Date: 5·11·16 Sample Time: 1050 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GACAT

Project Location: Anderson, South Carolina Weather: Cloudy, 75°F

2. WELL DATA

Date Measured: 5.11.16 Time: 0825 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 272 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: feet Well Volume: gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.11.16 Time: 0845

Equipment Model(s)

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

1. YSI

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

2. LaMotte 2020

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. Solinst

4. MP-50

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 0.07 gal/min

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0855	0.4	7.15	15.56	0.397	-37.5	46.53	2.09	47.19	Black at first
0905	0.75	7.45	15.96	0.400	-66.9	27.98	1.92	54.92	
0910	0.9	7.53	16.10	0.400	-77.9	26.76	1.57	56.71	
0915	1.0	7.58	16.29	0.401	-87.9	29.88	1.22	60.92	
0920	1.1	7.63	16.52	0.401	-97.3	27.56	1.19	65.01	
0925	1.2	7.64	16.67	0.402	-100.5	29.69	1.15		Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 67.29 Field Filtered? ☐ Yes ☒ No

Sample ID: 16132-MW-37-Zone 3 Sample Date: 5.11.16 Sample Time: 0930 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CW

Project Location: Anderson, South Carolina Weather: Sunny +82°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1410 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 430 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 15.53 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 414.47 feet Well Volume: 16.99 gal Screened Interval (from GS): 420-430

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/10/16 Time: 1410

Equipment Model(s)

Purge Method: ☐ Bailer, Size: ☒Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒Other: MP-50

1. Lamotte

Materials: Pump/Bailer ☐ Polyethylene ☒Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

2. YSI

Materials: Rope/Tubing ☒Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. Solinst

4. MP-50

Volume to Purge (minimum): — well volumes or Stabilize gallons

Was well purged dry? ☐ Yes ☒No Pumping Rate: — gal/min

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1415	CW 0.25	7.39	19.13	1.932	-268.0	4.95	94.6	25.05	—
1425	0.50	7.42	18.81	2.095	-355.6	4.44	58.6	36.2	—
1435	1.00	7.34	18.73	2.147	-382.4	0.36	81.3	44.3	—
1445	1.25	7.43	19.43	2.106	-418.5	2.51	42.0	51.7	—
1455	1.50	7.53	20.17	2.105	-442.1	1.85	38.2	61.2	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☒Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☒Disposable

Materials: Tubing/Rope ☒Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 111.45 Field Filtered? ☐ Yes ☒ No

Sample ID: 16131-mw-38-31 Sample Date: 5/10/16 Sample Time: 1730 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

Turbid black water at start Purge. Turbidity will go > 10 NTU and is constant 150-170. Going to Sample @ 1730

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1505	1.75	7.59	20.30	2.098	-459.8	1.69	38.2	65.7	—
1515	2.00	7.62	20.53	2.096	-464.7	1.48	43.2	70.96	—
1525	2.25	7.70	21.51	2.094	-462.4	1.24	42.3	75.60	—
1535	2.45	7.71	20.95	2.093	-477.3	1.20	72.2	86.21	— Slowed pump
1545	2.50	7.62	20.39	2.081	-497.1	1.12	54.9	85.82	—
1555	2.75	7.71	20.85	2.088	-492.1	0.96	109.[illegible]	90.40	— turbidity
1605	3.00	7.80	23.44	2.061	-516.2	0.76	1495	95.20	— Jump??
1615	3.15	7.85	24.09	2.065	-510.9	0.70	172	95.27	—
1625	3.25	7.86	24.26	2.072	-503.9	0.53	54.1	97.29	—
1635	3.35	7.82	24.32	2.077	-479.9	0.45	158	98.38	—
~~[illegible]~~		~~CN~~		~~2.0~~					Clogged Pump, Pulled Re-Purge
1710	3.50	7.86	22.44	2.064	-385.7	1.05	150	105.20	—
1715	3.55	7.64	21.66	2.044	-386.1	0.82	138	107.31	—
1720	3.65	7.60	21.25	2.032	-404.7	0.78	142	110.92	—
1725	3.75	7.59	21.11	2.022	-412.2	0.78	177	111.45	Sample

CN

Purge data continued on next sheet? ☐

Signature

FORM GW-2 (Rev 25.Sept.08 - sej)

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CW

Project Location: Anderson, South Carolina Weather: Sunny + 73°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1411 Temporary Well: ☐Yes ☒No

Casing Diameter: 1 inches — Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches — Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 499.6 feet — From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: Artesian feet — From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet — From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: — feet — Well Volume: — gal — Screened Interval (from GS): —

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/11/16 Time: 1147

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒Other: Artesian

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stabilized gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: — gal/min

Equipment Model(s): 1. Lamotte 2. YSI 3. Solinst 4. —

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1150	0.50	7.11	16.95	0.172	-276.0	1.95	0.66	—	—
1155	1.00	6.97	17.34	0.172	-278.6	1.85	0.65	—	—
1200	1.35	7.12	17.96	0.172	-231.0	1.89	0.0	—	—
1205	1.60	7.36	17.79	0.172	-259.7	2.00	0.0	—	—
1210	2.00	7.44	17.90	0.172	-269.3	1.90	0.0	—	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒Other: —

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: Artesian Field Filtered? ☐ Yes ☒ No

Sample ID: 16132-MW-38-Z2 Sample Date: 5/11/16 Sample Time: 1215 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

—

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CN + GG

Project Location: Anderson, South Carolina Weather: Sunny + 83°F

2. WELL DATA

Date Measured: 5-11-16 Time: 1555 Temporary Well: ☐Yes ☒No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 105 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 14.1 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: — feet Well Volume: — gal Screened Interval (from GS): 95-105

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5-11-16 Time: 1600

Purge Method: ☐Bailer, Size: ☐Bladder Pump ☐2" Sub. Pump ☐4" Sub. Pump ☐Centrifugal Pump ☐Peristaltic Pump ☐Inertial Lift Pump ☒Other: mp-50

Materials: Pump/Bailer ☐Polyethylene ☒Stainless ☐PVC ☐Teflon® ☐Other: ☐Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Materials: Rope/Tubing ☒Polyethylene ☐Polypropylene ☐Teflon® ☐Nylon ☐Other: ☒Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐Yes ☒No Pumping Rate: — gal/min

Equipment Model(s): 1. Lamotte 2. YSI 3. mp-50 4. Solinst

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1605	0.25	5.72	17.86	0.087	-62.9	8.06	7.64	15.54	—
1610	0.50	5.56	17.88	0.086	-53.7	5.13	3.41	15.61	—
1615	0.75	5.66	17.80	0.087	-58.1	4.04	3.29	15.60	—
1620	1.00	5.71	17.69	0.087	-60.3	3.89	1.19	15.50	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐Bailer, Size: ☐Bladder Pump ☐2" Sub. Pump ☐4" Sub. Pump ☐Centrifugal Pump ☐Peristaltic Pump ☐Inertial Lift Pump ☒Other: mp-50

Materials: Pump/Bailer ☐Polyethylene ☒Stainless ☐PVC ☐Teflon® ☐Other: ☐Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Materials: Tubing/Rope ☒Polyethylene ☐Polypropylene ☐Teflon® ☐Nylon ☐Other: ☐Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Depth to Water at Time of Sampling: 15.50 Field Filtered? ☐Yes ☐No

Sample ID: 16132-mw-39-21 Sample Date: 5/11/16 Sample Time: 1625 # of Containers: 2

Duplicate Sample Collected? ☐Yes ☒No ID: — # of Containers: —

Equipment Blank Collected? ☐Yes ☒No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

—

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CN

Project Location: Anderson, South Carolina Weather: Sunny + 85°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1230 Temporary Well: ☐Yes ☒No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 215 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 35.26 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 179.74 feet Well Volume: 7.36 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/11/16 Time: 1335 Equipment Model(s)

Purge Method: ☐Bailer, Size: ☐Bladder Pump ☐2" Sub. Pump ☐4" Sub. Pump ☐Centrifugal Pump ☐Peristaltic Pump ☐Inertial Lift Pump ☒Other: MP-50

1. Lamotte

Materials: Pump/Bailer ☐Polyethylene ☒Stainless ☐PVC ☐Teflon® ☐Other: ☐Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

2. YSI

Materials: Rope/Tubing ☒Polyethylene ☐Polypropylene ☐Teflon® ☐Nylon ☐Other: ☒Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

3. Solinst

4. MP-50

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐Yes ☒No Pumping Rate: — gal/min Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1340	0.75	7.11	19.50	0.430	-289.5	0.98	101.2	37.51	—
1350	1.00	6.92	19.45	0.409	-310.3	0.33	100.0	58.12	—
1355	1.25	7.17	20.69	0.413	-330.3	0.31	60.1	63.16	—
1400	1.50	7.50	21.68	0.417	-358.2	0.28	43.0	68.47	—
1410	1.60	7.64	22.66	0.424	-383.3	0.27	34.6	73.8	—

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐Bailer, Size: ☐Bladder Pump ☐2" Sub. Pump ☐4" Sub. Pump ☐Centrifugal Pump ☐Peristaltic Pump ☐Inertial Lift Pump ☒Other:

Materials: Pump/Bailer ☐Polyethylene ☒Stainless ☐PVC ☐Teflon® ☐Other: ☐Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Materials: Tubing/Rope ☒Polyethylene ☐Polypropylene ☐Teflon® ☐Nylon ☐Other: ☒Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Depth to Water at Time of Sampling: 102.70 Field Filtered? ☐Yes ☒No

Sample ID: 16132-MW-39-Z2 Sample Date: 5/11/16 Sample Time: 1550 # of Containers: 7

Duplicate Sample Collected? ☐Yes ☒No ID: — # of Containers: —

Equipment Blank Collected? ☐Yes ☒No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

Turbidity settled @ 30-20 NTU after 2 hours, Sampled @ 1550.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1420	1.80	7.66	27.89	0.429	-391.6	0.25	32.4	78.71	—
1430	2.00	7.84	26.98	0.437	-394.5	0.27	29.2	80.16	—
1440	2.20	7.29	20.62	0.430	-381.7	0.25	30.1	86.23	—
1450	2.30	7.69	24.80	0.437	-426.9	0.23	28.7	90.40	—
1500	2.40	7.76	26.32	0.439	-432.7	0.23	27.2	93.36	—
1510	2.50	7.71	26.05	0.439	-413.9	0.25	26.9	96.72	—
1520	2.60	7.74	27.56	0.441	-423.7	0.25	27.1	99.13	—
1530	2.75	7.82	27.88	0.445	-454.2	0.23	26.3	100.96	—
1540	2.90	7.72	27.89	0.444	-458.7	0.25	27.8	102.70	—

Turbidity settled sample @ CAT.

Purge data continued on next sheet? ☐

Signature

FORM GW-2 (Rev 25.Sept.08 - sej)

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GACAT

Project Location: Anderson, South Carolina Weather: Sunny, 85°F

2. WELL DATA

Date Measured: 5-11-16 Time: 1330 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 300 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 53.7 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 246 feet Well Volume: 10.1 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5-11-16 Time: 1335

Equipment Model(s)

1. YSI
2. LAMOTTE 2020
3. MP-50
4. SOLINST

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1345	0.2	7.43	26.71	0.290	-80.0	45.26	57.9	58.2	
1255	0.4	8.10	23.13	0.284	-75.2	23.75	27.4	59.4	
1405	0.6	7.95	24.60	0.284	-55.0	18.43	22.1	66.4	
1415	0.8	8.03	26.04	0.285	-89.9	16.74	21.6	72.1	
1425	1.0	7.96	27.42	0.287	-118.5	15.55	19.0	76.9	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 93.1 Field Filtered? ☐ Yes ☒ No

Sample ID: 16132-MW-39-ZONE 3 Sample Date: 5-12-16 Sample Time: 1540 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-2 (Rev 25.Sept.08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0 010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0 2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1430	1.1	7.92	27.23	0.286	-144.1	16.66	19.2	80.2	
1435	1.2	7.92	27.19	0.287	-163.7	17.09	19.1	82.3	
1440	1.3	7.91	27.56	0.286	-169.3	16.13	19.3	85.5	
1445	1.4	7.94	27.25	0.289	-167.7	15.38	16.1	87.9	
1450	1.5	7.95	27.51	0.290	-173.4	14.97	16.9	87.9	
1455	1.6	7.94	27.68	0.291	-161.6	15.44	17.1	88.2	
1500	CLEANED YSI								
1515	2.0	7.91	28.19	0.288	-169.4	15.19	16.3	90.2	
1520	2.1	7.89	28.56	0.289	-161.3	15.23	16.1	90.8	
1525	2.2	7.89	28.97	0.290	-169.7	16.51	16.1	92.1	
1530	2.3	7.88	28.96	0.290	-169.4	16.92	16.8	92.7	
1535	2.4	7.88	29.15	0.290	-168.9	16.15	16.3	93.1	
		SAMPLED @ 1540							

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: SUNNY, 80°F

2. WELL DATA

Date Measured: 5.9.16 Time: AM Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: ~~129~~ 32 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 6.86 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 25.14 feet Well Volume: 1.03 gal Screened Interval (from GS): 17-32

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.10.16 Time: 1130

Equipment Model(s)

Purge Method: ☐Bailer, Size: ☐Bladder Pump ☐2" Sub. Pump ☐4" Sub. Pump ☐Centrifugal Pump ☐Peristaltic Pump ☐Inertial Lift Pump ☒Other: SOLINST

1. YSI

Materials: Pump/Bailer ☐Polyethylene ☒Stainless ☐PVC ☐Teflon® ☐Other: ☐Dedicated ☐Prepared Off-Site ☒Field-Cleaned ☐Disposable

2. SOLINST

Materials: Rope/Tubing ☐Polyethylene ☐Polypropylene ☒Teflon® ☐Nylon ☐Other: ☒Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

3. MP-50

4. LAMOTTE 2020

Volume to Purge (minimum): — well volumes or STABILIZE gallons

Was well purged dry? ☐Yes ☐No Pumping Rate: gal/min

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1135	0.4	7.82	16.18	0.190	26.9	40.62	0.98	6.85	
1140	0.7	7.60	15.99	0.190	30.1	32.78	0.12	6.85	
1145	1.0	7.50	15.52	0.188	34.1	32.91	0.0	6.85	
MW 1150	1.2	7.47	15.48	0.187	27.2	32.98	0.0	6.85	
1155	1.5	7.47	15.52	0.188	25.7	33.12	0.0	6.85	

SAMPLED @ 1200

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐Bailer, Size: ☐Bladder Pump ☐2" Sub. Pump ☐4" Sub. Pump ☐Centrifugal Pump ☐Peristaltic Pump ☐Inertial Lift Pump ☒Other: HYDRAPURGE

Materials: Pump/Bailer ☐Polyethylene ☒Stainless ☐PVC ☐Teflon® ☐Other: ☐Dedicated ☐Prepared Off-Site ☒Field-Cleaned ☐Disposable

Materials: Tubing/Rope ☐Polyethylene ☐Polypropylene ☒Teflon® ☐Nylon ☐Other: ☒Dedicated ☐Prepared Off-Site ☐Field-Cleaned ☐Disposable

Depth to Water at Time of Sampling: 6.85 Field Filtered? ☐Yes ☐No

Sample ID: 16131-MW-41-ZONE 1 Sample Date: 5.10.16 Sample Time: 1200 # of Containers: 2

Duplicate Sample Collected? ☐Yes ☒No ID: — # of Containers: —

Equipment Blank Collected? ☐Yes ☒No ID: # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GACAT

Project Location: Anderson, South Carolina Weather: SUNNY, 79°F

2. WELL DATA

Date Measured: 5·9·16 Time: AM Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 129 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 3.10 feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 125 feet Well Volume: 5.17 gal Screened Interval (from GS): 109-129

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5·10·16 Time: 1040

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: SOLINST

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min

Equipment Model(s)
1. MP-50
2. YSI
3. SOLINST
4. LAMOTTE 2020

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1050	0.5	7.74	15.20	0.217	-2.6	35.10	5.42	3.2	
1055	0.75	7.70	15.40	0.217	-2.8	33.57	3.46	3.2	
1100	1.0	7.81	15.53	0.216	-9.8	22.52	2.91	3.2	
1105	1.25	7.81	15.67	0.215	-11.2	20.79	1.75	3.2	
1110	1.5	7.82	15.74	0.215	-13.6	21.72	1.02	3.2	

SAMPLED @ 1115

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: SOLINST

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 3.2 Field Filtered? ☐ Yes ☐ No

Sample ID: 16131-MW-41-ZONE 2 Sample Date: 5·10·16 Sample Time: 1115 # of Containers: 2

Duplicate Sample Collected? ☒ Yes ☐ No ID: 16131-DUP-1 # of Containers: 2

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAGAT

Project Location: Anderson, South Carolina Weather: CLOUDY, 70°F

2. WELL DATA

Date Measured: 5.9.16 Time: AM Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 299 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 13.12 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 285 feet Well Volume: 11.72 gal Screened Interval (from GS): 280 - 300

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.10.16 Time: 0850

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: SOLINST

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: gal/min

Equipment Model(s)

1. YSI
2. SOLINST
3. MP-50
4. LAMOTTE 2020

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0900	0.4	9.44	14.95	0.343	-16.9	27.54	172	21.5	
0905	0.75	9.47	14.92	0.345	-9.8	18.34	158	36.6	
0915	1.1	9.41	15.14	0.342	-19.6	13.78	121	45.8	
0925	1.5	9.42	15.19	0.344	-23.6	14.02	78	55.2	
0935	1.75	9.44	15.35	0.345	-27.6	14.40	75	62.7	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: SOLINST

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 95.9 Field Filtered? ☐ Yes ☒ No

Sample ID: 16131-MW-41-ZONE 3 Sample Date: 5.10.16 Sample Time: 1020 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 3

3. PURGE DATA (continued from page ____)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0945	2.0	9.46	15.62	0.345	-29.5	15.08	70.6	68.8	
0955	2.25	9.48	15.94	0.344	-22.6	48.52	69.6	74.7	
1005	2.5	9.50	16.12	0.346	-29.2	46.47	68.4	81.8	
1015	2.75	9.49	16.42	0.346	-37.2	70.53	69.4	89.2	
		SAMPLED @		1020					

Purge data continued on next sheet? ☐

FORM GW-2 (Rev 25 Sept.08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CW

Project Location: Anderson, South Carolina Weather: Sunny + 67°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1615 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 129 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 34.01 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 94.99 feet Well Volume: 3.89 gal Screened Interval (from GS): 119-129

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/11/16 Time: 0835 Equipment Model(s)

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: mp-50

1. Lamotte

Materials: (Pump)/Bailer ☒ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

2. YSI

Materials: Rope/(Tubing) ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. mp-50

Volume to Purge (minimum): — well volumes or Stabilize gallons

4. Solinst

Was well purged dry? ☐ Yes ☒ No Pumping Rate: — gal/min Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su ✓	Temp ±2°C ✓	Spec. Cond. > of ±3% or ±0.010 mS/cm ✓	ORP > of ±10% or ±20 mV ✓	DO > of ±10% or ±0.2 mg/L ✓	Turbidity ≤ 10 NTU ✓	Water Level	Comments
0840	0.50	10.48	17.49	0.474	-204.6	3.26	14.4	35.29	—
0845	0.80	10.15	17.52	0.377	-187.7	3.13	11.8	35.51	—
0850	1.20	10.06	17.51	0.320	-189.2	3.10	8.44	35.45	—
0855	1.50	10.02	17.51	0.272	-195.1	3.01	5.58	35.45	—
0900	1.75	9.94	17.48	0.231	-198.6	2.99	4.03	35.45	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: (Pump)/Bailer ☒ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: (Tubing)/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 35.45 Field Filtered? ☐ Yes ☒ No

Sample ID: 16132-MW-42-Z1 Sample Date: 5/11/16 Sample Time: 0905 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

—

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-2 (Rev 25.Sept.08 - sej)

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CW

Project Location: Anderson, South Carolina Weather: Sunny + 68°F

2. WELL DATA

Date Measured: 5/9/16 Time: 0913 Temporary Well: ☐Yes ☒No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 222 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 31.46 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 190.54 feet Well Volume: 7.81 gal Screened Interval (from GS): 212-222

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/11/16 Time: 0925

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒Other: mp-50

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: — gal/min

Equipment Model(s)
1. Lamotte
2. YSI
3. mp-50
4. Solinst

Calibrated? ☒Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0925	0.50	7.71	17.91	0.671	-277	1.77	98.2	38.04	—
0930	0.75	7.41	17.86	0.663	-299.3	0.96	16.6	48.83	—
0935	1.00	7.42	17.96	0.652	-316.4	0.86	11.0	53.42	—
0940	1.25	7.45	18.04	0.650	-327.9	0.85	7.56	60.71	—
0945	1.50	7.49	18.41	0.651	-336.8	0.81	6.04	65.82	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 65.82 Field Filtered? ☐ Yes ☒ No

Sample ID: 16132-MW-42-22 Sample Date: 5/11/16 Sample Time: 0950 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

—

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CN

Project Location: Anderson, South Carolina Weather: Sunny + 70°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1635 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 285 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 46.11 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: 238.89 feet Well Volume: 10.04 gal Screened Interval (from GS): 275-285

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/11/16 Time: 1025

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: mp-50

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: — gal/min

Equipment Model(s): 1. YSI 2. Lamotte 3. mp-50 4. Solinst

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1030	0.25	7.14	18.71	0.232	-234.5	1.48	900	39.30	—
1035	0.50	7.22	18.61	0.229	-255.5	1.07	24.1	44.94	—
1040	0.75	7.35	18.67	0.216	-268.7	0.92	14.4	49.40	—
1045	1.00	7.43	18.74	0.209	-278.9	0.92	11.4	53.27	—
1050	1.25	7.50	18.85	0.207	-287.7	0.88	9.98	56.88	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 56.88 Field Filtered? ☐ Yes ☒ No

Sample ID: 1613-mw-42-R3 Sample Date: 5/11/16 Sample Time: 1055 # of Containers: 7

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

—

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

FORM GW-2 (Rev 25.Sept.08 - sej)

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 1

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: GAC, AT

Project Location: Anderson, South Carolina Weather: SUNNY, 80°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1215 Temporary Well: ☐Yes ☐No

Casing Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Screen Diameter: 1 inches Type: ☒PVC ☐Stainless ☐Galv. Steel ☐Teflon® ☐Other:

Total Depth of Well: 11.25 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐

Depth to Static Water: 7.02 feet From: ☒Top of Well Casing (TOC) ☐Top of Protective Casing ☐

Depth to Product: — feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐

Length of Water Column: 10.5 feet Well Volume: 4.32 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.9.16 Time: 1620

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: SOLINST

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or STABILITY gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 0.05 gal/min

Equipment Model(s)
1. YSI
2. MP-50
3. SOLINST
4. LAMOTTE 2020

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > or ±3% or ±0.010	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1630	0.7	7.08	17.41	0.086	63.5	51.74	14.1	7.15	
1640	1.5	6.73	17.13	0.087	50.54	50.98	12.0	7.20	
1650	2.0	6.54	16.60	0.086	85.7	46.77	6.26	7.20	
1700	2.3	6.49	16.43	0.087	87.2	45.72	6.01	7.20	
1710	2.7	6.47	16.37	0.087	87.2	44.63	5.46	7.20	

SAMPLED @ 1715

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: SOLINST

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 7.20 Field Filtered? ☐ Yes ☒ No

Sample ID: 16130-MW-43-ZONE1 Sample Date: 5.9.16 Sample Time: 1715 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: # of Containers:

Equipment Blank Collected? ☒ Yes ☒ No ID: 16130-EB # of Containers: 2

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-2 (Rev 25.Sept.08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 2

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: CACAT

Project Location: Anderson, South Carolina Weather: SUNNY, 80°F

2. WELL DATA

Date Measured: 5.9.16 Time: 1215 Temporary Well: ☐ Yes ☒ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 180 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Static Water: 4.59 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Length of Water Column: 175.4 feet Well Volume: 7.19 gal Screened Interval (from GS):

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5.9.16 Time: 1525

Equipment Model(s)

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: SOLINST

1. MP-60

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

2. SOLINST

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. YSI

Volume to Purge (minimum): — well volumes or STABILITY gallons

4. LAMOTTE 2020

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 0.06 gal/min

Calibrated? ☒ Yes

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1535	1.5	7.85	16.37	0.204	-63.3	17.05	10.91	9.1	
1545	2.5	8.02	17.03	0.204	-60.7	11.33	9.52	8.7	
1555	2.7	8.03	16.97	0.203	-54.4	11.47	8.61	8.5	
1605	3.0	8.04	17.60	0.203	-45.2	10.57	6.93	8.1	
1610	3.2	8.02	17.75	0.203	-38.9	10.82	5.97	8.1	

SAMPLED @ 1615

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: SOLINST

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 8.1 Field Filtered? ☐ Yes ☒ No

Sample ID: 1613O-MW-43-ZONE2 Sample Date: 5.9.16 Sample Time: 1615 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron:	mg/L
DO:	mg/L
Nitrate:	mg/L
Sulfate:	mg/L
Alkalinity:	mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-2 (Rev 25.Sept.08 - sej)

1 of 1

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 3

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: CJA, CAT

Project Location: Anderson, South Carolina Weather: CLOUDY

2. WELL DATA

Date Measured: 5/9/16 Time: 1210 Temporary Well: ☐ Yes ☐ No

Casing Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 1 inches Type: ☒ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 282.5 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Static Water: 1.85 feet From: ☒ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Product: feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Length of Water Column: 280 feet Well Volume: 11.5 gal Screened Interval (from GS): 262-282

Note. 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/9/16 Time: 1240 Equipment Model(s):

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): 3 well volumes or 3 gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: 0.103 gal/min

1. 2. Solinst 3. MP-50 4.

Calibrated? ☒ Yes

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1250	0.5	6.86	16.22	0.365	-80.6	13.61	52.3	12.18	
1300	1.0	7.58	16.21	0.322	-127.6	12.70	39.2	25.25	
1310	1.25	7.59	16.20	0.317	-134.2	12.94	39.4	35.78	
1315	1.5	7.55	16.44	0.317	-139.9	12.92	31.2	42.61	
1320	1.75	7.59	16.68	0.315	-206.2	12.99	29.7	48.52	

Purge data continued on next sheet? ☒

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: Solinst

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☒ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☒ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: 89.2 Field Filtered? ☐ Yes ☒ No

Sample ID: 1613-MW-43-20160509 Sample Date: 5/9/16 Sample Time: 1515 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

Note. Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > or ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1325	2.0	7.60	16.77	0.314	-226.6	12.61	29.1	53.5	
1330	2.25	7.61	16.96	0.314	-258.2	11.86	30.2	57.8	
1335	3.0	7.61	16.98	0.313	-259.3	11.63	41.8	61.4	
1340	3.2	7.61	16.89	0.314	-265.8	11.65	66.7	67.6	
1345	3.35	7.63	16.97	0.315	-276.1	11.16	67.8	69.4	
1350	3.4	7.65	17.58	0.315	-284.5	11.33	65.9	72.3	
1400	3.5	7.72	17.35	0.314	-292.4	11.31	60.1	75.8	
1410	3.6	7.70	18.11	0.314	-295.7	10.64	55.2	78.2	
1420	3.7	7.74	18.18	0.315	-296.5	10.68	47.3	79.9	
1430	3.8	7.77	19.33	0.315	-300.6	10.37	45.7	82.5	
1440	3.9	7.78	19.70	0.315	-306.9	10.28	46.5	85.7	
1450	4.0	7.78	21.03	0.316	-306.9	10.36	52.1	86.8	
1500	4.1	7.79	22.19	0.316	-311.9	10.41	45.1	89.2	

Purge data continued on next sheet? ☐

FORM GW-2 (Rev 25.Sept.08 - sej)

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-44

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-xxx Area of Concern: —

Client: Owens Corning Personnel: CW

Project Location: Anderson, South Carolina Weather: Cloudy + 68°F

2. WELL DATA

Date Measured: 5/9/16 Time: 1705 Temporary Well: ☐Yes ☒No

Casing Diameter: 2 inches Type: ☒PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Screen Diameter: 2 inches Type: ☒PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other:

Total Depth of Well: 300 feet From: ☒Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 10.14 feet From: ☒Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Product: — feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Length of Water Column: 289.86 feet Well Volume: 48.40 gal Screened Interval (from GS): 290-300

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/9/16 Time: 0825

Purge Method: ☐ Bailer, Size: ☐ Bladder Pump ☒ Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or Stability gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: — gal/min

Equipment Model(s)
1. Lamotte
2. Monsoon
3. Solinst
4. YSI

Calibrated? ☒ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±0.010 mS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0825	0.0	8.62	15.74	0.202	-231.6	4.08	~~10.44~~ 8.79	10.14	—
0831	2.0	8.13	16.06	0.207	-293.6	1.02	7.68	10.97	—
0838	4.0	8.36	16.19	0.208	-400.1	0.42	4.36	11.25	—
0844	6.0	8.55	16.26	0.210	-409.4	0.36	1.73	11.51	—
0851	8.0	8.66	16.31	0.213	-439.6	0.35	1.10	11.72	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: ☐ Bladder Pump ☒ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other:

Materials: Pump/Bailer ☐ Polyethylene ☒ Stainless ☐ PVC ☐ Teflon® ☐ Other: ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☒ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: ☒ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: Field Filtered? ☐ Yes ☒ No

Sample ID: 16131-MW-44 Sample Date: 5/10/16 Sample Time: 0855 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: ____ mg/L

DO: ____ mg/L

Nitrate: ____ mg/L

Sulfate: ____ mg/L

Alkalinity: ____ mg/L

5. COMMENTS

Monsoon line too short to reach bottom of well.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet

Signature

FORM GW-2 (Rev 25 Sept 08 - sej)

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 628 Airline Road

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 162-XXX Area of Concern: —

Client: Jones Corning Personnel: CN + GG + TB

Project Location: Anderson SC Weather: Sunny + 79°F

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/12/16 Time: 1200

Equipment Model(s)

1. YSI
2. _____
3. _____
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or — gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: — gal/min Calibrated? ☒ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1200	15	5.51	15.81	0.080	155.6	158.62	1.29	—	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☒ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: — Field Filtered? ☐ Yes ☐ No

Sample ID: 16133-Airline Road Sample Date: 5/12/16 Sample Time: 1203 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 200 Friendship Lane

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 160-XXX Area of Concern: _____

Client: _____ Personnel: _____

Project Location: _____ Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: _____ Time: _____

Equipment Model(s)

1. _____
2. _____
3. _____
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1300	11	6.27	19.67	.071	134.5	170.3	3.21		

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: 16133-Friendship Lane Sample Date: _____ Sample Time: 1300 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Equipment Blank Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

FORM GW-2 (Rev 11 March 10 - sa)

Signature

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 721 Clinkscales Road

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 144 - KKR Area of Concern: _____

Client: _____ Personnel: _____

Project Location: _____ Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: _____ Time: _____

Equipment Model(s)

1. _____
2. _____
3. _____
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1310	13.0	6.47	16.53	0.036	129.6	214.89	0.0	—	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: 1633 Clinkscales Road Sample Date: 5/12 Sample Time: 1310 # of Containers: _____

Duplicate Sample Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Equipment Blank Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 119 CLOVERHILL DRIVE

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern: _____

Client: Owens Corning Personnel: _____

Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/12/16 Time: 1336

Equipment Model(s)

1. YSI
2. _____
3. _____
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☒ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1336	15.0	6.15	15.67	0.035	123.5	189.84	1.46	—	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: — Field Filtered? ☐ Yes ☐ No

Sample ID: 16133-119 CLOVERHILL DRIVE Sample Date: 5/12/16 Sample Time: 1335 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Equipment Blank Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature _____

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 200 KAYE DRIVE

1. PROJECT INFORMATION

Project Number: 146917 Task Number: RW XXX Area of Concern: —

Client: — Personnel: CW-GG-TD

Project Location: — Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/12/16 Time: 1345 Equipment Model(s)

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

1. _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

2. _____

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. _____

4. _____

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1349	15.00	6.33	1658	0.076	133.4	162.79	0.0	—	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: 16133 - 200 KAYE DRIVE Sample Date: 5-12-16 Sample Time: 1347 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☑ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☑ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature _____

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 303 KAYE DRIVE

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 100-YFC Area of Concern: —

Client: — Personnel: CW - GG - TB

Project Location: — Weather: —

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8/12/16 Time: 1355

Equipment Model(s)

1. YSI
2. _____
3. _____
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): — well volumes or — gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1359	15.0	6.15	16.84	0.144	95.1	167.03	3.04	—	—

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☒ No

Sample ID: 19133 - 303 KAYE DRIVE Sample Date: 5-12-16 Sample Time: 1358 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☐ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☐ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 412 Kaye Drive

1. PROJECT INFORMATION

Project Number: 145417- Task Number: 111-444 Area of Concern: _____

Client: _____ Personnel: _____

Project Location: _____ Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/12/16 Time: 1416

Equipment Model(s)

1. YSI
2. _____
3. _____
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1417	15.00	6.28	19.34	0.041	97.2	121.26	4.14		

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: 1633-412 Kaye Drive Sample Date: 5/12/16 Sample Time: 1408 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☒ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☒ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet

Signature

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 117 FAYE DRIVE

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 160-444 Area of Concern: —

Client: — Personnel: — CP-GG-YB

Project Location: — Weather: —

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: _____ Time: 1420

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min

Equipment Model(s)
1. _____
2. _____
3. _____
4. _____

Calibrated? ☐ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1427	15.0	7.03	16.51	0.268	124.3	133.41	2.32	—	

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☒ No

Sample ID: 1433-117 FAYE DRIVE Sample Date: 5/12/16 Sample Time: 1425 # of Containers: 2

Duplicate Sample Collected? ☐ Yes ☑ No ID: — # of Containers: —

Equipment Blank Collected? ☐ Yes ☑ No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature _____

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 605 Clinkscales Road

1. PROJECT INFORMATION

Project Number: 148917 Task Number: 116-XXX Area of Concern: _____

Client: Users Personnel: _____

Project Location: _____ Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: _____ Time: _____ Equipment Model(s)

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

1. _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

2. _____

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

3. _____

4. _____

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: 16133-605 Clinkscales Road Sample Date: 5/17/16 Sample Time: _____ # of Containers: _____

Duplicate Sample Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Equipment Blank Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

John Davis new owner send letter to

WELL PUMP NOT WORKING

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 1303-CLINKSCALES ROAD

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern: _____

Client: Owens Corning Personnel: _____

Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches — Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches — Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet — From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet — From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet — From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet — Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: _____ Time: _____

Equipment Model(s)

1. _____
2. _____
3. _____
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: 16133-1303 CLINKSCALES ROAD Sample Date: _____ Sample Time: _____ # of Containers: _____

Duplicate Sample Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Equipment Blank Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

NEED TO VERIFY LOCATION. SAME AS 1365 CLINKSCALES ROAD?

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature _____

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 408 Clinkscales Road

1. PROJECT INFORMATION

Project Number: 148917 Task Number: IW-448 Area of Concern: _____

Client: _____ Personnel: _____

Project Location: _____ Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: ☐Yes ☐No

Casing Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Screen Diameter: _____ inches Type: ☐ PVC ☐ Stainless ☐ Galv. Steel ☐ Teflon® ☐ Other: _____

Total Depth of Well: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Static Water: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Depth to Product: _____ feet From: ☐ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other: _____

Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: _____ Time: _____

Equipment Model(s)

1. _____
2. _____
3. _____
4. _____

Purge Method: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Rope/Tubing ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Volume to Purge (minimum): _____ well volumes or _____ gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: _____ gal/min Calibrated? ☐ Yes ☐ No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments

Purge data continued on next sheet? ☐

4. SAMPLING DATA

Method(s): ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Sub. Pump ☐ 4" Sub. Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

Materials: Pump/Bailer ☐ Polyethylene ☐ Stainless ☐ PVC ☐ Teflon® ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Materials: Tubing/Rope ☐ Polyethylene ☐ Polypropylene ☐ Teflon® ☐ Nylon ☐ Other: _____ ☐ Dedicated ☐ Prepared Off-Site ☐ Field-Cleaned ☐ Disposable

Depth to Water at Time of Sampling: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: 16133-408-Clinkscales Road Sample Date: _____ Sample Time: _____ # of Containers: _____

Duplicate Sample Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Equipment Blank Collected? ☐ Yes ☐ No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

~~well is a well not begun~~

→ well on other side of cattle grate, to left, room for opening in fence.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature _____

Appendix B: Laboratory Analytical Reports

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 04, 2016

Tamara Berryman
BROWN AND CALDWELL
990 Hammond Drive
Atlanta GA 30328

TEL: (770) 673-3678
FAX: (770) 396-9495

RE: Owens Corning Quarterly

Dear Tamara Berryman: Order No: 1602M88

Analytical Environmental Services, Inc. received 32 samples on 2/25/2016 9:37:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/15-06/30/16.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1602M88

Date: 2-25-16 Page 1 of 3

COMPANY:	ADDRESS:
Brown + Caldwell	990 Hammond Dr Atlanta, GA 30328
PHONE:	FAX:
SAMPLED BY: Geoff Gikat / Chad Horace / Jackie Lauer	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	ANALYSIS REQUESTED: VOC's	PRESERVATION (See codes): H+I	REMARKS	No # of Containers
1	16053-MW-15	2.22.16	1812	X		GW	X	X		2
2	16054-MW-22	2.23.16	0920	X		GW	X	X		2
3	16054-MW-29R-Zone 3	2.23.16	1000	X		GW	X	X		2
4	16054-MW-29R-Zone 4	2.23.16	1050	X		GW	X	X		2
5	16053-MW-35	2.22.16	1642	X		GW	X	X		2
6	16054-MW-36-Zone 1	2.23.16	1145	X		GW	X	X		2
7	16054-MW-36-Zone 3	2.23.16	1600	X		GW	X	X		2
8	DG Rinsate 16055-MW-37-Zone 1	2.24.16	1005	X		GW	X	X		2
9	16055-MW-37-Zone 2	2.24.16	1450	X		GW	X	X		2
10	16055-MW-37-Zone 3	2.24.16	1130	X		GW	X	X		2
11	16054-MW-38-Zone 1	2.23.16	1155	X		GW	X	X		2
12	16054-MW-38-Z2	2.23.16	1130	X		GW	X	X		2
13	16054-MW-39-Z1	2.23.16	1550	X		GW	X	X		2
14	16054-MW-39-Z2	2.23.16	1742	X		GW	X	X		2

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	2-25-16 / 0937	1: Nayle	2-25-16 9:37am
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Owens Corning Quarterly
PROJECT #: 148917
SITE ADDRESS:
SEND REPORT TO: tberryman@brwncald.com
INVOICE TO: (IF DIFFERENT FROM ABOVE) tberryman@brwncald.com
QUOTE #: PO#:

RECEIPT
Total # of Containers: 28

Turnaround Time Request
- ⊕ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):
E-mail? (Y) / N; Fax? Y / (N)
DATA PACKAGE: I (II) III IV

SPECIAL INSTRUCTIONS/COMMENTS: Site Specific VOCs

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1002M88

Date: 2-25-16 Page 2 of 3

COMPANY:	ADDRESS
Brown + Caldwell	990 Hammond Dr. Atlanta, Ga 30328
PHONE:	FAX:
SAMPLED BY: Geoff Guyot/Chad Novacek/previous lander	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC's	REMARKS	No # of Containers
1	16054-MW-39-Z3	2.23.16	1835	X		GW	X		2
2	16053-MW-41-Zone 1	2.22.16	1555	X		GW	X		2
3	16053-mw-41-Zone 2	2-22-16	1645	X		Gw	X		2
4	16053-mw-41-Zone 3	2-22-16	1810	X		Gw	X		2
5	16055-mw-42-Z1	2-24-16	1030	X		Gw	X		2
6	16055-mw-42-Z2	2-24-16	1145	X		Gw	X		2
7	16055-mw-42-Z3	2-24-16	1445	X		Gw	X		2
8	16053-mw-43-Zone 1	2-22-16	1040	X		Gw	X		2
9	16053-mw-43-Zone 2	2-22-16	1145	X		Gw	X		2
10	16053-mw-43-Zone 3	2-22-16	1405	X		Gw	X		2
11	16053-mw-44	2-22-16	1455	X		Gw	X		2
12	16053-DUP	2-22-16	1200	X		Gw	X		2
13	16053-DUP-1	2-22-16	—	X		Gw	X		2
14	16053-EB	2-22-16	1200	X		Gw	X		2

PRESERVATION (See codes): H+I

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	2.25.16/0937	1: Nayle	2-25-16 0937
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Owen Corning Quarterly
PROJECT #: 148917
SITE ADDRESS:
SEND REPORT TO: tberryman@brwncald.com
INVOICE TO: (IF DIFFERENT FROM ABOVE) tberryman@brwncaldi.com
QUOTE #: PO#:

RECEIPT
Total # of Containers: 28

Turnaround Time Request
- (X) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush **(auth req.)**
- ( ) Other

STATE PROGRAM (if any):
E-mail? (Y) N; Fax? Y / (N)
DATA PACKAGE: I (II) III IV

SPECIAL INSTRUCTIONS/COMMENTS:
Site Specific
VOC's

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1602m88

Date: 2-25-16 Page 3 of 3

COMPANY	ADDRESS
BROWN + CALDWELL	990 HAMMOND DR ATLANTA, GA 30328
PHONE:	FAX:
SAMPLED BY: GEOFF GAGAT / CHAD NOVACK / JACKIE LAUB	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	ANALYSIS REQUESTED: VOC's	PRESERVATION (See codes): H+I	REMARKS	No # of Containers
1	16054-EB	2-23-16	1200	X		W	X			2
2	16055-EB	2-24-16	1200	X		W	X			2
3	TRIP BLANK	—	—			W	X			2
4	TRIP BLANK	—	—	X		W	X			2
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	2-25-16/0937	1:	2-25-16 0937
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: OWENS CORNING
PROJECT #: 148917
SITE ADDRESS: ANDERSON, SC
SEND REPORT TO: TBERRYMAN@BRWNCALD.COM
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 8

Turnaround Time Request
- (X) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? (Y) N; Fax? Y (N)
DATA PACKAGE: I (II) III IV

SPECIAL INSTRUCTIONS/COMMENTS: SITE SPECIFIC VOC's

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

1602n88

Owens Corning Site Specific VOC's

Groundwater, surface water, and residential well samples will be submitted to Analytical Environmental Services, Inc. (AES) of Atlanta, Georgia for analysis of the focused list of volatile organic compounds (VOCs) using U.S. EPA Method 8260B:

- tetrachloroethene (PCE)
- trichloroethene (TCE)
- 1,1,1-trichloroethane (1,1,1-TCA)
- 1,1-dichloroethane (1,1-DCA)
- 1,2-dichloroethane (1,2-DCA)
- 1,1-dichloroethene (1,1-DCE)
- cis-1,2-dichloroethene (cis-1,2-DCE)
- trans-1,2-dichloroethene (trans-1,2-DCE)
- vinyl chloride
- carbon tetrachloride
- chloroform
- methylene chloride
- benzene
- toluene
- ethylbenzene
- xylenes

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-15
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 6:12:00 PM
Lab ID:	1602M88-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/02/2016 22:16	NP
1,1-Dichloroethene	160	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Benzene	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Toluene	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/02/2016 22:16	NP
Surr: 4-Bromofluorobenzene	86.6	70.7-125		%REC	220607	1	03/02/2016 22:16	NP
Surr: Dibromofluoromethane	110	82.2-120		%REC	220607	1	03/02/2016 22:16	NP
Surr: Toluene-d8	102	81.8-120		%REC	220607	1	03/02/2016 22:16	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-22
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 9:20:00 AM
Lab ID:	1602M88-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/01/2016 12:25	JE
1,1-Dichloroethene	96	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Methylene chloride	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Chloroform	6.6	5.0		ug/L	220607	1	03/01/2016 12:25	JE
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Carbon tetrachloride	20	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Benzene	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Trichloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Toluene	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/01/2016 12:25	JE
Surr: 4-Bromofluorobenzene	101	70.7-125		%REC	220607	1	03/01/2016 12:25	JE
Surr: Dibromofluoromethane	97.3	82.2-120		%REC	220607	1	03/01/2016 12:25	JE
Surr: Toluene-d8	103	81.8-120		%REC	220607	1	03/01/2016 12:25	JE

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-29R-ZONE 3
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 10:00:00 AM
Lab ID:	1602M88-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/02/2016 22:43	NP
1,1-Dichloroethene	140	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Chloroform	5.9	5.0		ug/L	220607	1	03/02/2016 22:43	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Carbon tetrachloride	7.1	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Benzene	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Toluene	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/02/2016 22:43	NP
Surr: 4-Bromofluorobenzene	89.2	70.7-125		%REC	220607	1	03/02/2016 22:43	NP
Surr: Dibromofluoromethane	109	82.2-120		%REC	220607	1	03/02/2016 22:43	NP
Surr: Toluene-d8	101	81.8-120		%REC	220607	1	03/02/2016 22:43	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-29R-ZONE 4
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 10:50:00 AM
Lab ID:	1602M88-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/02/2016 23:37	NP
1,1-Dichloroethene	130	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Chloroform	5.7	5.0		ug/L	220607	1	03/02/2016 23:37	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Carbon tetrachloride	6.1	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Benzene	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Toluene	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/02/2016 23:37	NP
Surr: 4-Bromofluorobenzene	87.5	70.7-125		%REC	220607	1	03/02/2016 23:37	NP
Surr: Dibromofluoromethane	111	82.2-120		%REC	220607	1	03/02/2016 23:37	NP
Surr: Toluene-d8	102	81.8-120		%REC	220607	1	03/02/2016 23:37	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-35
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 4:42:00 PM
Lab ID:	1602M88-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 00:31	NP
1,1-Dichloroethene	45	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 00:31	NP
Surr: 4-Bromofluorobenzene	88.1	70.7-125		%REC	220607	1	03/03/2016 00:31	NP
Surr: Dibromofluoromethane	109	82.2-120		%REC	220607	1	03/03/2016 00:31	NP
Surr: Toluene-d8	102	81.8-120		%REC	220607	1	03/03/2016 00:31	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-36-ZONE 1
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 11:45:00 AM
Lab ID:	1602M88-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 00:58	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 00:58	NP
Surr: 4-Bromofluorobenzene	86.4	70.7-125		%REC	220607	1	03/03/2016 00:58	NP
Surr: Dibromofluoromethane	108	82.2-120		%REC	220607	1	03/03/2016 00:58	NP
Surr: Toluene-d8	101	81.8-120		%REC	220607	1	03/03/2016 00:58	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-36-ZONE 3
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 4:00:00 PM
Lab ID:	1602M88-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 01:25	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 01:25	NP
Surr: 4-Bromofluorobenzene	87.8	70.7-125		%REC	220607	1	03/03/2016 01:25	NP
Surr: Dibromofluoromethane	111	82.2-120		%REC	220607	1	03/03/2016 01:25	NP
Surr: Toluene-d8	101	81.8-120		%REC	220607	1	03/03/2016 01:25	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16055-MW-37-ZONE 1
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/24/2016 10:05:00 AM
Lab ID:	1602M88-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 01:52	NP
1,1-Dichloroethene	96	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 01:52	NP
Surr: 4-Bromofluorobenzene	87.1	70.7-125		%REC	220607	1	03/03/2016 01:52	NP
Surr: Dibromofluoromethane	109	82.2-120		%REC	220607	1	03/03/2016 01:52	NP
Surr: Toluene-d8	103	81.8-120		%REC	220607	1	03/03/2016 01:52	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16055-MW-37-ZONE 2
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/24/2016 2:50:00 PM
Lab ID:	1602M88-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 02:19	NP
1,1-Dichloroethene	160	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Chloroform	5.8	5.0		ug/L	220607	1	03/03/2016 02:19	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Carbon tetrachloride	6.1	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 02:19	NP
Surr: 4-Bromofluorobenzene	88.3	70.7-125		%REC	220607	1	03/03/2016 02:19	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	220607	1	03/03/2016 02:19	NP
Surr: Toluene-d8	101	81.8-120		%REC	220607	1	03/03/2016 02:19	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16055-MW-37-ZONE 3
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/24/2016 11:30:00 AM
Lab ID:	1602M88-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 03:13	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 03:13	NP
Surr: 4-Bromofluorobenzene	87.4	70.7-125		%REC	220607	1	03/03/2016 03:13	NP
Surr: Dibromofluoromethane	108	82.2-120		%REC	220607	1	03/03/2016 03:13	NP
Surr: Toluene-d8	98.2	81.8-120		%REC	220607	1	03/03/2016 03:13	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-38-ZONE 1
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 11:55:00 AM
Lab ID:	1602M88-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 03:40	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 03:40	NP
Surr: 4-Bromofluorobenzene	88.3	70.7-125		%REC	220607	1	03/03/2016 03:40	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	220607	1	03/03/2016 03:40	NP
Surr: Toluene-d8	104	81.8-120		%REC	220607	1	03/03/2016 03:40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-38-Z2
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 11:30:00 AM
Lab ID:	1602M88-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 04:07	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 04:07	NP
Surr: 4-Bromofluorobenzene	84.4	70.7-125		%REC	220607	1	03/03/2016 04:07	NP
Surr: Dibromofluoromethane	114	82.2-120		%REC	220607	1	03/03/2016 04:07	NP
Surr: Toluene-d8	103	81.8-120		%REC	220607	1	03/03/2016 04:07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-39-Z1
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 3:50:00 PM
Lab ID:	1602M88-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/01/2016 20:12	JE
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Methylene chloride	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Chloroform	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Benzene	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Trichloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Toluene	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/01/2016 20:12	JE
Surr: 4-Bromofluorobenzene	97.4	70.7-125		%REC	220607	1	03/01/2016 20:12	JE
Surr: Dibromofluoromethane	101	82.2-120		%REC	220607	1	03/01/2016 20:12	JE
Surr: Toluene-d8	106	81.8-120		%REC	220607	1	03/01/2016 20:12	JE

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-39-Z2
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 5:42:00 PM
Lab ID:	1602M88-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 04:34	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 04:34	NP
Surr: 4-Bromofluorobenzene	89.2	70.7-125		%REC	220607	1	03/03/2016 04:34	NP
Surr: Dibromofluoromethane	110	82.2-120		%REC	220607	1	03/03/2016 04:34	NP
Surr: Toluene-d8	103	81.8-120		%REC	220607	1	03/03/2016 04:34	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-MW-39-Z3
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 6:35:00 PM
Lab ID:	1602M88-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 05:01	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 05:01	NP
Surr: 4-Bromofluorobenzene	86.9	70.7-125		%REC	220607	1	03/03/2016 05:01	NP
Surr: Dibromofluoromethane	110	82.2-120		%REC	220607	1	03/03/2016 05:01	NP
Surr: Toluene-d8	99.8	81.8-120		%REC	220607	1	03/03/2016 05:01	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-41-ZONE 1
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 3:55:00 PM
Lab ID:	1602M88-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 05:28	NP
1,1-Dichloroethene	150	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 05:28	NP
Surr: 4-Bromofluorobenzene	88.7	70.7-125		%REC	220607	1	03/03/2016 05:28	NP
Surr: Dibromofluoromethane	111	82.2-120		%REC	220607	1	03/03/2016 05:28	NP
Surr: Toluene-d8	100	81.8-120		%REC	220607	1	03/03/2016 05:28	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-41-ZONE 2
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 4:45:00 PM
Lab ID:	1602M88-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 05:55	NP
1,1-Dichloroethene	180	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 05:55	NP
Surr: 4-Bromofluorobenzene	88.5	70.7-125		%REC	220607	1	03/03/2016 05:55	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	220607	1	03/03/2016 05:55	NP
Surr: Toluene-d8	102	81.8-120		%REC	220607	1	03/03/2016 05:55	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-41-ZONE 3
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 6:10:00 PM
Lab ID:	1602M88-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 06:22	NP
1,1-Dichloroethene	20	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 06:22	NP
Surr: 4-Bromofluorobenzene	86.9	70.7-125		%REC	220607	1	03/03/2016 06:22	NP
Surr: Dibromofluoromethane	113	82.2-120		%REC	220607	1	03/03/2016 06:22	NP
Surr: Toluene-d8	102	81.8-120		%REC	220607	1	03/03/2016 06:22	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16055-MW-42-Z1
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/24/2016 10:30:00 AM
Lab ID:	1602M88-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 06:49	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 06:49	NP
Surr: 4-Bromofluorobenzene	86.2	70.7-125		%REC	220607	1	03/03/2016 06:49	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	220607	1	03/03/2016 06:49	NP
Surr: Toluene-d8	99.8	81.8-120		%REC	220607	1	03/03/2016 06:49	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16055-MW-42-Z2
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/24/2016 11:45:00 AM
Lab ID:	1602M88-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220607	1	03/03/2016 07:17	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Methylene chloride	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Chloroform	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Carbon tetrachloride	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Benzene	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Trichloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Toluene	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Tetrachloroethene	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Ethylbenzene	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Xylenes, Total	BRL	5.0		ug/L	220607	1	03/03/2016 07:17	NP
Surr: 4-Bromofluorobenzene	88.9	70.7-125		%REC	220607	1	03/03/2016 07:17	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	220607	1	03/03/2016 07:17	NP
Surr: Toluene-d8	102	81.8-120		%REC	220607	1	03/03/2016 07:17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16055-MW-42-Z3
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/24/2016 2:45:00 PM
Lab ID:	1602M88-021	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 18:53	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 18:53	NP
Surr: 4-Bromofluorobenzene	90.5	70.7-125		%REC	220475	1	02/26/2016 18:53	NP
Surr: Dibromofluoromethane	106	82.2-120		%REC	220475	1	02/26/2016 18:53	NP
Surr: Toluene-d8	101	81.8-120		%REC	220475	1	02/26/2016 18:53	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-43-ZONE 1
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 10:40:00 AM
Lab ID:	1602M88-022	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 19:20	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 19:20	NP
Surr: 4-Bromofluorobenzene	89.4	70.7-125		%REC	220475	1	02/26/2016 19:20	NP
Surr: Dibromofluoromethane	105	82.2-120		%REC	220475	1	02/26/2016 19:20	NP
Surr: Toluene-d8	102	81.8-120		%REC	220475	1	02/26/2016 19:20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-43-ZONE 2
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 11:45:00 AM
Lab ID:	1602M88-023	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 19:47	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 19:47	NP
Surr: 4-Bromofluorobenzene	89	70.7-125		%REC	220475	1	02/26/2016 19:47	NP
Surr: Dibromofluoromethane	106	82.2-120		%REC	220475	1	02/26/2016 19:47	NP
Surr: Toluene-d8	97.8	81.8-120		%REC	220475	1	02/26/2016 19:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-43-ZONE 3
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 2:05:00 PM
Lab ID:	1602M88-024	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 20:14	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 20:14	NP
Surr: 4-Bromofluorobenzene	90.6	70.7-125		%REC	220475	1	02/26/2016 20:14	NP
Surr: Dibromofluoromethane	106	82.2-120		%REC	220475	1	02/26/2016 20:14	NP
Surr: Toluene-d8	99.3	81.8-120		%REC	220475	1	02/26/2016 20:14	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-MW-44
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 2:55:00 PM
Lab ID:	1602M88-025	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 20:41	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 20:41	NP
Surr: 4-Bromofluorobenzene	89.7	70.7-125		%REC	220475	1	02/26/2016 20:41	NP
Surr: Dibromofluoromethane	102	82.2-120		%REC	220475	1	02/26/2016 20:41	NP
Surr: Toluene-d8	96.8	81.8-120		%REC	220475	1	02/26/2016 20:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-DUP
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 12:00:00 PM
Lab ID:	1602M88-026	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 21:08	NP
1,1-Dichloroethene	170	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 21:08	NP
Surr: 4-Bromofluorobenzene	91	70.7-125		%REC	220475	1	02/26/2016 21:08	NP
Surr: Dibromofluoromethane	105	82.2-120		%REC	220475	1	02/26/2016 21:08	NP
Surr: Toluene-d8	101	81.8-120		%REC	220475	1	02/26/2016 21:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-DUP-1
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016
Lab ID:	1602M88-027	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 21:34	NP
1,1-Dichloroethene	180	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 21:34	NP
Surr: 4-Bromofluorobenzene	90.1	70.7-125		%REC	220475	1	02/26/2016 21:34	NP
Surr: Dibromofluoromethane	106	82.2-120		%REC	220475	1	02/26/2016 21:34	NP
Surr: Toluene-d8	101	81.8-120		%REC	220475	1	02/26/2016 21:34	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16053-EB
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/22/2016 12:00:00 PM
Lab ID:	1602M88-028	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 16:39	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 16:39	NP
Surr: 4-Bromofluorobenzene	87.8	70.7-125		%REC	220475	1	02/26/2016 16:39	NP
Surr: Dibromofluoromethane	107	82.2-120		%REC	220475	1	02/26/2016 16:39	NP
Surr: Toluene-d8	101	81.8-120		%REC	220475	1	02/26/2016 16:39	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16054-EB
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/23/2016 12:00:00 PM
Lab ID:	1602M88-029	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 17:06	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 17:06	NP
Surr: 4-Bromofluorobenzene	89.3	70.7-125		%REC	220475	1	02/26/2016 17:06	NP
Surr: Dibromofluoromethane	108	82.2-120		%REC	220475	1	02/26/2016 17:06	NP
Surr: Toluene-d8	101	81.8-120		%REC	220475	1	02/26/2016 17:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16055-EB
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/24/2016 12:00:00 PM
Lab ID:	1602M88-030	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 17:33	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 17:33	NP
Surr: 4-Bromofluorobenzene	92	70.7-125		%REC	220475	1	02/26/2016 17:33	NP
Surr: Dibromofluoromethane	103	82.2-120		%REC	220475	1	02/26/2016 17:33	NP
Surr: Toluene-d8	97.7	81.8-120		%REC	220475	1	02/26/2016 17:33	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	TRIP BLANK
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/25/2016
Lab ID:	1602M88-031	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 18:00	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 18:00	NP
Surr: 4-Bromofluorobenzene	92.4	70.7-125		%REC	220475	1	02/26/2016 18:00	NP
Surr: Dibromofluoromethane	107	82.2-120		%REC	220475	1	02/26/2016 18:00	NP
Surr: Toluene-d8	102	81.8-120		%REC	220475	1	02/26/2016 18:00	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 4-Mar-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	TRIP BLANK
Project Name:	Owens Corning Quarterly	**Collection Date:**	2/25/2016
Lab ID:	1602M88-032	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	220475	1	02/26/2016 18:27	NP
1,1-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Methylene chloride	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
1,1-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Chloroform	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Carbon tetrachloride	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Benzene	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
1,2-Dichloroethane	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Trichloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Toluene	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Tetrachloroethene	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Ethylbenzene	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Xylenes, Total	BRL	5.0		ug/L	220475	1	02/26/2016 18:27	NP
Surr: 4-Bromofluorobenzene	88.9	70.7-125		%REC	220475	1	02/26/2016 18:27	NP
Surr: Dibromofluoromethane	105	82.2-120		%REC	220475	1	02/26/2016 18:27	NP
Surr: Toluene-d8	101	81.8-120		%REC	220475	1	02/26/2016 18:27	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Brown+Caldwell Work Order Number 1602M88

Checklist completed by Paul Masadi 2/25/16
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes ✓ No __ Not Present __

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.1 Cooler #2 2.9 Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: BROWN AND CALDWELL
Project Name: Owens Corning Quarterly
Workorder: 1602M88

ANALYTICAL QC SUMMARY REPORT

BatchID: 220475

Sample ID: **MB-220475** Client ID: Units: **ug/L** Prep Date: **02/26/2016** Run No: **311302**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **220475** Analysis Date: **02/26/2016** Seq No: **6691036**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Benzene	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chloroform	BRL	5.0									
cis-1,2-Dichloroethene	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	44.66	0	50.00		89.3	70.7	125				
Surr: Dibromofluoromethane	52.83	0	50.00		106	82.2	120				
Surr: Toluene-d8	50.19	0	50.00		100	81.8	120				

Sample ID: **LCS-220475** Client ID: Units: **ug/L** Prep Date: **02/26/2016** Run No: **311302**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **220475** Analysis Date: **02/26/2016** Seq No: **6691035**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	50.76	5.0	50.00		102	65.3	137				
Benzene	45.22	5.0	50.00		90.4	74.9	123				
Toluene	49.10	5.0	50.00		98.2	75	124				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning Quarterly
Workorder: 1602M88

ANALYTICAL QC SUMMARY REPORT

BatchID: 220475

Sample ID: **LCS-220475**	Client ID:		Units: **ug/L**	Prep Date: **02/26/2016**	Run No: **311302**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **220475**	Analysis Date: **02/26/2016**	Seq No: **6691035**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Trichloroethene	54.96	5.0	50.00		110	73.1	128				
Surr: 4-Bromofluorobenzene	43.80	0	50.00		87.6	70.7	125				
Surr: Dibromofluoromethane	52.04	0	50.00		104	82.2	120				
Surr: Toluene-d8	49.82	0	50.00		99.6	81.8	120				

Sample ID: **1602M88-021AMS**	Client ID: **16055-MW-42-Z3**		Units: **ug/L**	Prep Date: **02/26/2016**	Run No: **311302**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **220475**	Analysis Date: **02/26/2016**	Seq No: **6691069**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	56.07	5.0	50.00		112	60	150				
Benzene	50.29	5.0	50.00		101	70.1	132				
Toluene	52.14	5.0	50.00		104	70.1	133				
Trichloroethene	57.48	5.0	50.00		115	70	136				
Surr: 4-Bromofluorobenzene	43.14	0	50.00		86.3	70.7	125				
Surr: Dibromofluoromethane	51.42	0	50.00		103	82.2	120				
Surr: Toluene-d8	49.51	0	50.00		99.0	81.8	120				

Sample ID: **1602M88-021AMSD**	Client ID: **16055-MW-42-Z3**		Units: **ug/L**	Prep Date: **02/26/2016**	Run No: **311302**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **220475**	Analysis Date: **02/26/2016**	Seq No: **6691070**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	58.92	5.0	50.00		118	60	150	56.07	4.96	17.7	
Benzene	49.99	5.0	50.00		100.0	70.1	132	50.29	0.598	20	
Toluene	53.09	5.0	50.00		106	70.1	133	52.14	1.81	20	
Trichloroethene	58.23	5.0	50.00		116	70	136	57.48	1.30	20	
Surr: 4-Bromofluorobenzene	43.86	0	50.00		87.7	70.7	125	43.14	0	0	
Surr: Dibromofluoromethane	51.80	0	50.00		104	82.2	120	51.42	0	0	
Surr: Toluene-d8	49.19	0	50.00		98.4	81.8	120	49.51	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning Quarterly
Workorder: 1602M88

ANALYTICAL QC SUMMARY REPORT

BatchID: 220607

Sample ID: **MB-220607** Client ID: Units: **ug/L** Prep Date: **03/01/2016** Run No: **311588**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **220607** Analysis Date: **03/01/2016** Seq No: **6695994**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Benzene	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chloroform	BRL	5.0									
cis-1,2-Dichloroethene	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	48.44	0	50.00		96.9	70.7	125				
Surr: Dibromofluoromethane	49.86	0	50.00		99.7	82.2	120				
Surr: Toluene-d8	51.42	0	50.00		103	81.8	120				

Sample ID: **LCS-220607** Client ID: Units: **ug/L** Prep Date: **03/01/2016** Run No: **311588**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **220607** Analysis Date: **03/01/2016** Seq No: **6695993**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	56.01	5.0	50.00		112	65.3	137				
Benzene	47.46	5.0	50.00		94.9	74.9	123				
Toluene	47.22	5.0	50.00		94.4	75	124				
Trichloroethene	44.37	5.0	50.00		88.7	73.1	128				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning Quarterly
Workorder: 1602M88

ANALYTICAL QC SUMMARY REPORT

BatchID: 220607

Sample ID: **LCS-220607** Client ID: Units: **ug/L** Prep Date: **03/01/2016** Run No: **311588**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **220607** Analysis Date: **03/01/2016** Seq No: **6695993**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	51.36	0	50.00		103	70.7	125				
Surr: Dibromofluoromethane	47.89	0	50.00		95.8	82.2	120				
Surr: Toluene-d8	51.73	0	50.00		103	81.8	120				

Sample ID: **1602M88-012AMS** Client ID: **16054-MW-38-Z2** Units: **ug/L** Prep Date: **03/01/2016** Run No: **311694**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **220607** Analysis Date: **03/03/2016** Seq No: **6700326**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	557.1	50	500.0		111	60	150				
Benzene	538.5	50	500.0		108	70.1	132				
Toluene	531.2	50	500.0		106	70.1	133				
Trichloroethene	527.4	50	500.0		105	70	136				
Surr: 4-Bromofluorobenzene	445.4	0	500.0		89.1	70.7	125				
Surr: Dibromofluoromethane	509.3	0	500.0		102	82.2	120				
Surr: Toluene-d8	481.9	0	500.0		96.4	81.8	120				

Sample ID: **1602M88-012AMSD** Client ID: **16054-MW-38-Z2** Units: **ug/L** Prep Date: **03/01/2016** Run No: **311694**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **220607** Analysis Date: **03/03/2016** Seq No: **6700327**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	559.5	50	500.0		112	60	150	557.1	0.430	17.7	
Benzene	533.9	50	500.0		107	70.1	132	538.5	0.858	20	
Toluene	523.6	50	500.0		105	70.1	133	531.2	1.44	20	
Trichloroethene	503.8	50	500.0		101	70	136	527.4	4.58	20	
Surr: 4-Bromofluorobenzene	453.3	0	500.0		90.7	70.7	125	445.4	0	0	
Surr: Dibromofluoromethane	503.4	0	500.0		101	82.2	120	509.3	0	0	
Surr: Toluene-d8	478.6	0	500.0		95.7	81.8	120	481.9	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 20, 2016

Tamara Berryman
BROWN AND CALDWELL
990 Hammond Drive
Atlanta GA 30328

TEL: (770) 673-3678
FAX: (770) 396-9495

RE: Owens Corning

Dear Tamara Berryman: Order No: 1605A95

Analytical Environmental Services, Inc. received 39 samples on 5/13/2016 9:35:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:
-South Carolina Certification number 98016003 for Clean Water Act and for Solid and Hazardous Waste, effective until 6/30/16.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1605A95

Date: 5-12-16 Page 1 of 3

COMPANY: Brown + Caldwell	ADDRESS: 990 Hammond Drive, Atlanta, GA 30328
PHONE:	FAX:
SAMPLED BY: Geoff Cracit & Chad Novack	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) HNI	VOC's	No # of Containers	REMARKS
1	16130-MW-43-Zone 3	5.9.16	1515	X		GW	X	X	2	
2	16130-MW-43-Zone 2	5.9.16	1615	X		GW	X	X	2	
3	16130-MW-43-Zone 1	5.9.16	1715	X		GW	X	X	2	
4	16131-MW-41-Zone 3	5.10.16	1020	X		GW	X	X	2	
5	16131-MW-41-Zone 2	5.10.16	1115	X		GW	X	X	2	
6	16131-MW-41-Zone 1	5.10.16	1200	X		GW	X	X	2	
7	16131-MW-29R-Zone 3	5.10.16	1420	X		GW	X	X	2	
8	16131-MW-29R-Zone 4	5.10.16	1500	X		GW	X	X	2	
9	16131-MW-36-Zone 1	5.10.16	1600	X		GW	X	X	2	
10	16131-MW-36-Zone 3	5.10.16	1630	X		GW	X	X	2	
11	16132-MW-37-Zone 3	5.11.16	0930	X		GW	X	X	2	
12	16132-MW-37-Zone 2	5.11.16	1050	X		GW	X	X	2	
13	16132-MW-37-Zone 1	5.11.16	1200	X		GW	X	X	2	
14	16131-DUP-1	5.10.16	0800	X		GW	X	X	2	

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	5.13.16/0935	1: Jessica Shilling	5/13/16 9:35 am
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS: Site specific VOC's

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Owens Corning
PROJECT #: 148917
SITE ADDRESS: Anderson, SC
SEND REPORT TO: TBERRYMAN@BROWNCALD.COM
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 78

Turnaround Time Request
- (X) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? (Y) / N; Fax? Y / (N)
DATA PACKAGE: I (II) III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1605A95

Date: 5.12.16 Page 2 of 3

COMPANY: BROWN + CALDWELL

ADDRESS: 990 HAMMOND DR ATLANTA, GA 30328

PHONE:

FAX:

SAMPLED BY: GEOFF GAGAT / CHAD NOVACK

SIGNATURE:

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC's	PRESERVATION (See codes) H+I	REMARKS	No. # of Containers
1	16130-MW-35	5.9.16	1815	X		GW	X	X		2
2	16131-MW-44	5.10.16	0855	X		GW	X	X		2
3	16131-MW-22	5.10.16	1030	X		GW	X	X		2
4	16131-MW-15	5.10.16	1205	X		GW	X	X		2
5	16131-MW-38-Z1	5.10.16	1730	X		GW	X	X		2
6	16132-MW-38-Z2	5.11.16	1215	X		GW	X	X		2
7	16132-MW-42-Z1	5.11.16	0905	X		GW	X	X		2
8	16132-MW-42-Z2	5.11.16	0950	X		GW	X	X		2
9	16132-MW-42-Z3	5.11.16	1055	X		GW	X	X		2
10	16132-MW-39-Z2	5.11.16	1550	X		GW	X	X		2
11	16132-MW-39-ZONE 1	5.11.16	1625	X		GW	X	X		2
12	16132-MW-39-ZONE 3	5.11.16	1540	X		GW	X	X		2
13										
14										

RELINQUISHED BY / DATE/TIME

1: 5.13.16/0935

2:

3:

RECEIVED BY / DATE/TIME

1: Jessica Shilley 5/13/16 9:35 am

2:

3:

SPECIAL INSTRUCTIONS/COMMENTS:

SITE SPECIFIC VOC'S

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER

GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: OWENS CORNING

PROJECT #: 148917

SITE ADDRESS: ANDERSON, SC

SEND REPORT TO: TBERRYMAN@BROWNCALD.COM

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #:_____ PO#:_____

RECEIPT

Total # of Containers: 78

Turnaround Time Request

- (X) Standard 5 Business Days
- ( ) 2 Business Day Rush
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- ( ) Same Day Rush (auth req.)
- ( ) Other _____

STATE PROGRAM (if any): _____

E-mail? (Y) N; Fax? Y (N)

DATA PACKAGE: I (II) III IV

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CHAIN OF CUSTODY

Work Order: 1605A95

Date: 5.12.16 Page 3 of 3

COMPANY: Brown + Caldwell

ADDRESS: 990 Hammond Drive, Atlanta, GA 30328

PHONE:

FAX:

SAMPLED BY: Geoff Gagat / Chad Novack

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC's	PRESERVATION (See codes) H+I	REMARKS	No. # of Containers
1	16131-DUP-2	5.10.16	1200	X		GW	X	X		2
2	16130-EB	5.9.16	1745	X		W	X	X		2
3	16131-EB	5.10.16	1745	X		W	X	X		2
4	16132-EB	5.11.16	1640	X		W	X	X		2
5	TRIP BLANK	—	—			W	X	X		2
6	16133-200 FRIENDSHIP LANE	5.12.16	1300	X		GW	X	X		2
7	16133-721 CLINKSCALES ROAD	5.12.16	1310	X		GW	X	X		2
8	16133-628 AIRLINE ROAD	5.12.16	1203	X		GW	X	X		2
9	~~16133-408 CLINKSCALES ROAD~~	~~5.12.16~~								
10	16133-412 KAYE DRIVE	5.12.16	1408	X		GW	X	X		2
11	16133-117 FAYE DRIVE	5.12.16	1425	X		GW	X	X		2
12	16133-303 KAYE DRIVE	5.12.16	1358	X		GW	X	X		2
13	16133-200 KAYE DRIVE	5.12.16	1347	X		GW	X	X		2
14	16133-119 CLOVERHILL DRIVE	5.12.16	1335	X		GW	X	X		2

ANALYSIS REQUESTED

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RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	5.13.16/0935	1: Jessica Ahilling	5/13/16 9:35 am
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Owens Corning

PROJECT #: 148917

SITE ADDRESS: Anderson, SC

SEND REPORT TO: TBerryman@Brwncald.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 78

Turnaround Time Request
- (X) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):

E-mail? (Y) / N; Fax? Y / (N)

DATA PACKAGE: I (II) III IV

SPECIAL INSTRUCTIONS/COMMENTS:

Site Specific VOC's

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER

GREYHOUND OTHER

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PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

1605A 95

Focused List of VOCs to be Analyzed

tetrachloroethene
trichloroethene
1,1,1-trichloroethane
1,1-dichloroethane(DCA)
1,2-DCA
1,1-dichloroethene(DCE)
cis-1,2-DCE
trans-1,2-DCE
vinyl chloride
carbon tetrachloride
chloroform
methylene chloride
benzene
ethylbenzene
toluene
xylene

Analytical Environmental Services, Inc

Date: 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16130-MW-43-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/9/2016 3:15:00 PM
Lab ID:	1605A95-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 19:25	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 19:25	NP
Surr: 4-Bromofluorobenzene	90.9	70.7-125		%REC	224104	1	05/16/2016 19:25	NP
Surr: Dibromofluoromethane	99.8	82.2-120		%REC	224104	1	05/16/2016 19:25	NP
Surr: Toluene-d8	97.1	81.8-120		%REC	224104	1	05/16/2016 19:25	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16130-MW-43-ZONE 2
Project Name:	Owens Corning	**Collection Date:**	5/9/2016 4:15:00 PM
Lab ID:	1605A95-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 20:36	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 20:36	NP
Surr: 4-Bromofluorobenzene	89.3	70.7-125		%REC	224104	1	05/16/2016 20:36	NP
Surr: Dibromofluoromethane	97.9	82.2-120		%REC	224104	1	05/16/2016 20:36	NP
Surr: Toluene-d8	97.2	81.8-120		%REC	224104	1	05/16/2016 20:36	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16130-MW-43-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/9/2016 5:15:00 PM
Lab ID:	1605A95-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 21:00	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 21:00	NP
Surr: 4-Bromofluorobenzene	89.5	70.7-125		%REC	224104	1	05/16/2016 21:00	NP
Surr: Dibromofluoromethane	101	82.2-120		%REC	224104	1	05/16/2016 21:00	NP
Surr: Toluene-d8	98.7	81.8-120		%REC	224104	1	05/16/2016 21:00	NP

Qualifiers:

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- BRL Below reporting limit
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- N Analyte not NELAC certified
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- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-41-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 10:20:00 AM
Lab ID:	1605A95-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 21:23	NP
1,1-Dichloroethene	17	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 21:23	NP
Surr: 4-Bromofluorobenzene	90.6	70.7-125		%REC	224104	1	05/16/2016 21:23	NP
Surr: Dibromofluoromethane	103	82.2-120		%REC	224104	1	05/16/2016 21:23	NP
Surr: Toluene-d8	100	81.8-120		%REC	224104	1	05/16/2016 21:23	NP

Qualifiers:

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- BRL Below reporting limit
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- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-41-ZONE 2
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 11:15:00 AM
Lab ID:	1605A95-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 21:46	NP
1,1-Dichloroethene	190	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 21:46	NP
Surr: 4-Bromofluorobenzene	91.6	70.7-125		%REC	224104	1	05/16/2016 21:46	NP
Surr: Dibromofluoromethane	100	82.2-120		%REC	224104	1	05/16/2016 21:46	NP
Surr: Toluene-d8	98.3	81.8-120		%REC	224104	1	05/16/2016 21:46	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-41-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 12:00:00 PM
Lab ID:	1605A95-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 22:09	NP
1,1-Dichloroethene	130	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 22:09	NP
Surr: 4-Bromofluorobenzene	88.9	70.7-125		%REC	224104	1	05/16/2016 22:09	NP
Surr: Dibromofluoromethane	105	82.2-120		%REC	224104	1	05/16/2016 22:09	NP
Surr: Toluene-d8	102	81.8-120		%REC	224104	1	05/16/2016 22:09	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-29R-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 2:20:00 PM
Lab ID:	1605A95-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 22:33	NP
1,1-Dichloroethene	240	50		ug/L	224104	10	05/17/2016 12:53	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Chloroform	8.1	5.0		ug/L	224104	1	05/16/2016 22:33	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Carbon tetrachloride	13	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 22:33	NP
Surr: 4-Bromofluorobenzene	88.7	70.7-125		%REC	224104	1	05/16/2016 22:33	NP
Surr: 4-Bromofluorobenzene	103	70.7-125		%REC	224104	10	05/17/2016 12:53	NP
Surr: Dibromofluoromethane	93.2	82.2-120		%REC	224104	10	05/17/2016 12:53	NP
Surr: Dibromofluoromethane	100	82.2-120		%REC	224104	1	05/16/2016 22:33	NP
Surr: Toluene-d8	95.4	81.8-120		%REC	224104	10	05/17/2016 12:53	NP
Surr: Toluene-d8	98.5	81.8-120		%REC	224104	1	05/16/2016 22:33	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-29R-ZONE 4
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 3:00:00 PM
Lab ID:	1605A95-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 22:56	NP
1,1-Dichloroethene	220	50		ug/L	224104	10	05/17/2016 13:17	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Chloroform	7.9	5.0		ug/L	224104	1	05/16/2016 22:56	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Carbon tetrachloride	10	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 22:56	NP
Surr: 4-Bromofluorobenzene	90.3	70.7-125		%REC	224104	1	05/16/2016 22:56	NP
Surr: 4-Bromofluorobenzene	101	70.7-125		%REC	224104	10	05/17/2016 13:17	NP
Surr: Dibromofluoromethane	94.1	82.2-120		%REC	224104	10	05/17/2016 13:17	NP
Surr: Dibromofluoromethane	101	82.2-120		%REC	224104	1	05/16/2016 22:56	NP
Surr: Toluene-d8	96	81.8-120		%REC	224104	10	05/17/2016 13:17	NP
Surr: Toluene-d8	99.2	81.8-120		%REC	224104	1	05/16/2016 22:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-36-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 4:00:00 PM
Lab ID:	1605A95-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 23:20	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 23:20	NP
Surr: 4-Bromofluorobenzene	87.7	70.7-125		%REC	224104	1	05/16/2016 23:20	NP
Surr: Dibromofluoromethane	101	82.2-120		%REC	224104	1	05/16/2016 23:20	NP
Surr: Toluene-d8	98.2	81.8-120		%REC	224104	1	05/16/2016 23:20	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-36-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 4:30:00 PM
Lab ID:	1605A95-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/16/2016 23:43	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Benzene	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Toluene	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/16/2016 23:43	NP
Surr: 4-Bromofluorobenzene	89.8	70.7-125		%REC	224104	1	05/16/2016 23:43	NP
Surr: Dibromofluoromethane	104	82.2-120		%REC	224104	1	05/16/2016 23:43	NP
Surr: Toluene-d8	99.5	81.8-120		%REC	224104	1	05/16/2016 23:43	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-37-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 9:30:00 AM
Lab ID:	1605A95-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 00:06	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 00:06	NP
Surr: 4-Bromofluorobenzene	87.1	70.7-125		%REC	224104	1	05/17/2016 00:06	NP
Surr: Dibromofluoromethane	99.2	82.2-120		%REC	224104	1	05/17/2016 00:06	NP
Surr: Toluene-d8	98.6	81.8-120		%REC	224104	1	05/17/2016 00:06	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-37-ZONE 2
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 10:50:00 AM
Lab ID:	1605A95-012	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 00:30	NP
1,1-Dichloroethene	290	50		ug/L	224104	10	05/17/2016 13:40	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Chloroform	7.9	5.0		ug/L	224104	1	05/17/2016 00:30	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Carbon tetrachloride	12	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 00:30	NP
Surr: 4-Bromofluorobenzene	98.5	70.7-125		%REC	224104	10	05/17/2016 13:40	NP
Surr: 4-Bromofluorobenzene	89.8	70.7-125		%REC	224104	1	05/17/2016 00:30	NP
Surr: Dibromofluoromethane	96.5	82.2-120		%REC	224104	10	05/17/2016 13:40	NP
Surr: Dibromofluoromethane	101	82.2-120		%REC	224104	1	05/17/2016 00:30	NP
Surr: Toluene-d8	96.5	81.8-120		%REC	224104	10	05/17/2016 13:40	NP
Surr: Toluene-d8	98.4	81.8-120		%REC	224104	1	05/17/2016 00:30	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-37-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 12:00:00 PM
Lab ID:	1605A95-013	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 00:53	NP
1,1-Dichloroethene	73	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 00:53	NP
Surr: 4-Bromofluorobenzene	87.1	70.7-125		%REC	224104	1	05/17/2016 00:53	NP
Surr: Dibromofluoromethane	103	82.2-120		%REC	224104	1	05/17/2016 00:53	NP
Surr: Toluene-d8	99	81.8-120		%REC	224104	1	05/17/2016 00:53	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-DUP-1
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 8:00:00 AM
Lab ID:	1605A95-014	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 01:17	NP
1,1-Dichloroethene	200	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 01:17	NP
Surr: 4-Bromofluorobenzene	86.7	70.7-125		%REC	224104	1	05/17/2016 01:17	NP
Surr: Dibromofluoromethane	97.9	82.2-120		%REC	224104	1	05/17/2016 01:17	NP
Surr: Toluene-d8	99.1	81.8-120		%REC	224104	1	05/17/2016 01:17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16130-MW-35
Project Name:	Owens Corning	**Collection Date:**	5/9/2016 6:15:00 PM
Lab ID:	1605A95-015	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 01:41	NP
1,1-Dichloroethene	50	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 01:41	NP
Surr: 4-Bromofluorobenzene	87.9	70.7-125		%REC	224104	1	05/17/2016 01:41	NP
Surr: Dibromofluoromethane	101	82.2-120		%REC	224104	1	05/17/2016 01:41	NP
Surr: Toluene-d8	99.5	81.8-120		%REC	224104	1	05/17/2016 01:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-44
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 8:55:00 AM
Lab ID:	1605A95-016	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 02:04	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 02:04	NP
Surr: 4-Bromofluorobenzene	91	70.7-125		%REC	224104	1	05/17/2016 02:04	NP
Surr: Dibromofluoromethane	103	82.2-120		%REC	224104	1	05/17/2016 02:04	NP
Surr: Toluene-d8	99	81.8-120		%REC	224104	1	05/17/2016 02:04	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-22
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 10:30:00 AM
Lab ID:	1605A95-017	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 02:27	NP
1,1-Dichloroethene	300	50		ug/L	224104	10	05/17/2016 14:03	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Chloroform	8.2	5.0		ug/L	224104	1	05/17/2016 02:27	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Carbon tetrachloride	22	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 02:27	NP
Surr: 4-Bromofluorobenzene	87.8	70.7-125		%REC	224104	1	05/17/2016 02:27	NP
Surr: 4-Bromofluorobenzene	96.5	70.7-125		%REC	224104	10	05/17/2016 14:03	NP
Surr: Dibromofluoromethane	95.6	82.2-120		%REC	224104	10	05/17/2016 14:03	NP
Surr: Dibromofluoromethane	102	82.2-120		%REC	224104	1	05/17/2016 02:27	NP
Surr: Toluene-d8	97.1	81.8-120		%REC	224104	10	05/17/2016 14:03	NP
Surr: Toluene-d8	100	81.8-120		%REC	224104	1	05/17/2016 02:27	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-15
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 12:05:00 PM
Lab ID:	1605A95-018	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 02:51	NP
1,1-Dichloroethene	180	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 02:51	NP
Surr: 4-Bromofluorobenzene	88	70.7-125		%REC	224104	1	05/17/2016 02:51	NP
Surr: Dibromofluoromethane	99.4	82.2-120		%REC	224104	1	05/17/2016 02:51	NP
Surr: Toluene-d8	97.8	81.8-120		%REC	224104	1	05/17/2016 02:51	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-MW-38-Z1
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 5:30:00 PM
Lab ID:	1605A95-019	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 03:15	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 03:15	NP
Surr: 4-Bromofluorobenzene	88.9	70.7-125		%REC	224104	1	05/17/2016 03:15	NP
Surr: Dibromofluoromethane	104	82.2-120		%REC	224104	1	05/17/2016 03:15	NP
Surr: Toluene-d8	99.8	81.8-120		%REC	224104	1	05/17/2016 03:15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-38-Z2
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 12:15:00 PM
Lab ID:	1605A95-020	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224104	1	05/17/2016 03:38	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Methylene chloride	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Chloroform	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Carbon tetrachloride	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Benzene	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Trichloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Toluene	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Tetrachloroethene	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Ethylbenzene	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Xylenes, Total	BRL	5.0		ug/L	224104	1	05/17/2016 03:38	NP
Surr: 4-Bromofluorobenzene	89.4	70.7-125		%REC	224104	1	05/17/2016 03:38	NP
Surr: Dibromofluoromethane	103	82.2-120		%REC	224104	1	05/17/2016 03:38	NP
Surr: Toluene-d8	101	81.8-120		%REC	224104	1	05/17/2016 03:38	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-42-Z1
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 9:05:00 AM
Lab ID:	1605A95-021	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/17/2016 23:24	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Benzene	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Toluene	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/17/2016 23:24	NP
Surr: 4-Bromofluorobenzene	80.9	70.7-125		%REC	224160	1	05/17/2016 23:24	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	224160	1	05/17/2016 23:24	NP
Surr: Toluene-d8	102	81.8-120		%REC	224160	1	05/17/2016 23:24	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-42-Z2
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 9:50:00 AM
Lab ID:	1605A95-022	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 00:45	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 00:45	NP
Surr: 4-Bromofluorobenzene	85.2	70.7-125		%REC	224160	1	05/18/2016 00:45	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	224160	1	05/18/2016 00:45	NP
Surr: Toluene-d8	104	81.8-120		%REC	224160	1	05/18/2016 00:45	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-42-Z3
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 10:55:00 AM
Lab ID:	1605A95-023	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 01:12	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 01:12	NP
Surr: 4-Bromofluorobenzene	85	70.7-125		%REC	224160	1	05/18/2016 01:12	NP
Surr: Dibromofluoromethane	109	82.2-120		%REC	224160	1	05/18/2016 01:12	NP
Surr: Toluene-d8	103	81.8-120		%REC	224160	1	05/18/2016 01:12	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-39-Z2
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 3:50:00 PM
Lab ID:	1605A95-024	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 01:39	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 01:39	NP
Surr: 4-Bromofluorobenzene	83.8	70.7-125		%REC	224160	1	05/18/2016 01:39	NP
Surr: Dibromofluoromethane	114	82.2-120		%REC	224160	1	05/18/2016 01:39	NP
Surr: Toluene-d8	106	81.8-120		%REC	224160	1	05/18/2016 01:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-39-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 4:25:00 PM
Lab ID:	1605A95-025	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 02:06	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 02:06	NP
Surr: 4-Bromofluorobenzene	86	70.7-125		%REC	224160	1	05/18/2016 02:06	NP
Surr: Dibromofluoromethane	113	82.2-120		%REC	224160	1	05/18/2016 02:06	NP
Surr: Toluene-d8	102	81.8-120		%REC	224160	1	05/18/2016 02:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-MW-39-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 3:40:00 PM
Lab ID:	1605A95-026	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 02:32	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 02:32	NP
Surr: 4-Bromofluorobenzene	83.6	70.7-125		%REC	224160	1	05/18/2016 02:32	NP
Surr: Dibromofluoromethane	110	82.2-120		%REC	224160	1	05/18/2016 02:32	NP
Surr: Toluene-d8	101	81.8-120		%REC	224160	1	05/18/2016 02:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-DUP-2
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 12:00:00 PM
Lab ID:	1605A95-027	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 02:59	NP
1,1-Dichloroethene	300	50		ug/L	224160	10	05/18/2016 16:16	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Chloroform	7.9	5.0		ug/L	224160	1	05/18/2016 02:59	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Carbon tetrachloride	9.3	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 02:59	NP
Surr: 4-Bromofluorobenzene	81.1	70.7-125		%REC	224160	1	05/18/2016 02:59	NP
Surr: 4-Bromofluorobenzene	88	70.7-125		%REC	224160	10	05/18/2016 16:16	NP
Surr: Dibromofluoromethane	115	82.2-120		%REC	224160	1	05/18/2016 02:59	NP
Surr: Dibromofluoromethane	117	82.2-120		%REC	224160	10	05/18/2016 16:16	NP
Surr: Toluene-d8	104	81.8-120		%REC	224160	1	05/18/2016 02:59	NP
Surr: Toluene-d8	106	81.8-120		%REC	224160	10	05/18/2016 16:16	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16130-EB
Project Name:	Owens Corning	**Collection Date:**	5/9/2016 5:45:00 PM
Lab ID:	1605A95-028	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/17/2016 22:04	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Benzene	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Toluene	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/17/2016 22:04	NP
Surr: 4-Bromofluorobenzene	82.2	70.7-125		%REC	224160	1	05/17/2016 22:04	NP
Surr: Dibromofluoromethane	109	82.2-120		%REC	224160	1	05/17/2016 22:04	NP
Surr: Toluene-d8	103	81.8-120		%REC	224160	1	05/17/2016 22:04	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16131-EB
Project Name:	Owens Corning	**Collection Date:**	5/10/2016 5:45:00 PM
Lab ID:	1605A95-029	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/17/2016 22:31	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Benzene	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Toluene	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/17/2016 22:31	NP
Surr: 4-Bromofluorobenzene	88.3	70.7-125		%REC	224160	1	05/17/2016 22:31	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	224160	1	05/17/2016 22:31	NP
Surr: Toluene-d8	102	81.8-120		%REC	224160	1	05/17/2016 22:31	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16132-EB
Project Name:	Owens Corning	**Collection Date:**	5/11/2016 4:40:00 PM
Lab ID:	1605A95-030	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/17/2016 22:58	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Benzene	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Toluene	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/17/2016 22:58	NP
Surr: 4-Bromofluorobenzene	86.2	70.7-125		%REC	224160	1	05/17/2016 22:58	NP
Surr: Dibromofluoromethane	114	82.2-120		%REC	224160	1	05/17/2016 22:58	NP
Surr: Toluene-d8	102	81.8-120		%REC	224160	1	05/17/2016 22:58	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	TRIP BLANK
Project Name:	Owens Corning	**Collection Date:**	5/13/2016
Lab ID:	1605A95-031	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/17/2016 21:37	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Benzene	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Toluene	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/17/2016 21:37	NP
Surr: 4-Bromofluorobenzene	89	70.7-125		%REC	224160	1	05/17/2016 21:37	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	224160	1	05/17/2016 21:37	NP
Surr: Toluene-d8	105	81.8-120		%REC	224160	1	05/17/2016 21:37	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16133-200 FRIENDSHIP LANE
Project Name:	Owens Corning	**Collection Date:**	5/12/2016 1:00:00 PM
Lab ID:	1605A95-032	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 03:25	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 03:25	NP
Surr: 4-Bromofluorobenzene	83	70.7-125		%REC	224160	1	05/18/2016 03:25	NP
Surr: Dibromofluoromethane	119	82.2-120		%REC	224160	1	05/18/2016 03:25	NP
Surr: Toluene-d8	108	81.8-120		%REC	224160	1	05/18/2016 03:25	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16133-721 CLINKSCALES ROA
Project Name:	Owens Corning	**Collection Date:**	5/12/2016 1:10:00 PM
Lab ID:	1605A95-033	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 03:52	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 03:52	NP
Surr: 4-Bromofluorobenzene	85	70.7-125		%REC	224160	1	05/18/2016 03:52	NP
Surr: Dibromofluoromethane	116	82.2-120		%REC	224160	1	05/18/2016 03:52	NP
Surr: Toluene-d8	103	81.8-120		%REC	224160	1	05/18/2016 03:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16133-628 AIRLINE ROAD
Project Name:	Owens Corning	**Collection Date:**	5/12/2016 12:03:00 PM
Lab ID:	1605A95-034	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 04:19	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 04:19	NP
Surr: 4-Bromofluorobenzene	85.4	70.7-125		%REC	224160	1	05/18/2016 04:19	NP
Surr: Dibromofluoromethane	114	82.2-120		%REC	224160	1	05/18/2016 04:19	NP
Surr: Toluene-d8	104	81.8-120		%REC	224160	1	05/18/2016 04:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16133-412 KAYE DRIVE
Project Name:	Owens Corning	**Collection Date:**	5/12/2016 2:08:00 PM
Lab ID:	1605A95-035	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 04:46	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 04:46	NP
Surr: 4-Bromofluorobenzene	84.6	70.7-125		%REC	224160	1	05/18/2016 04:46	NP
Surr: Dibromofluoromethane	117	82.2-120		%REC	224160	1	05/18/2016 04:46	NP
Surr: Toluene-d8	104	81.8-120		%REC	224160	1	05/18/2016 04:46	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16133-117 FAYE DRIVE
Project Name:	Owens Corning	**Collection Date:**	5/12/2016 2:25:00 PM
Lab ID:	1605A95-036	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 05:12	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 05:12	NP
Surr: 4-Bromofluorobenzene	84.1	70.7-125		%REC	224160	1	05/18/2016 05:12	NP
Surr: Dibromofluoromethane	118	82.2-120		%REC	224160	1	05/18/2016 05:12	NP
Surr: Toluene-d8	107	81.8-120		%REC	224160	1	05/18/2016 05:12	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16133-303 KAYE DRIVE
Project Name:	Owens Corning	**Collection Date:**	5/12/2016 1:58:00 PM
Lab ID:	1605A95-037	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 05:39	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 05:39	NP
Surr: 4-Bromofluorobenzene	85.8	70.7-125		%REC	224160	1	05/18/2016 05:39	NP
Surr: Dibromofluoromethane	114	82.2-120		%REC	224160	1	05/18/2016 05:39	NP
Surr: Toluene-d8	102	81.8-120		%REC	224160	1	05/18/2016 05:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16133-200 KAYE DRIVE
Project Name:	Owens Corning	**Collection Date:**	5/12/2016 1:47:00 PM
Lab ID:	1605A95-038	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 06:05	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 06:05	NP
Surr: 4-Bromofluorobenzene	84.5	70.7-125		%REC	224160	1	05/18/2016 06:05	NP
Surr: Dibromofluoromethane	118	82.2-120		%REC	224160	1	05/18/2016 06:05	NP
Surr: Toluene-d8	104	81.8-120		%REC	224160	1	05/18/2016 06:05	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 20-May-16

Client:	BROWN AND CALDWELL	**Client Sample ID:**	16133-119 CLOVERHILL DRIV
Project Name:	Owens Corning	**Collection Date:**	5/12/2016 1:35:00 PM
Lab ID:	1605A95-039	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				**(SW5030B)**				
Vinyl chloride	BRL	2.0		ug/L	224160	1	05/18/2016 06:32	NP
1,1-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Methylene chloride	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
1,1-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Chloroform	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Carbon tetrachloride	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Benzene	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
1,2-Dichloroethane	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Trichloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Toluene	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Tetrachloroethene	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Ethylbenzene	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Xylenes, Total	BRL	5.0		ug/L	224160	1	05/18/2016 06:32	NP
Surr: 4-Bromofluorobenzene	84.1	70.7-125		%REC	224160	1	05/18/2016 06:32	NP
Surr: Dibromofluoromethane	118	82.2-120		%REC	224160	1	05/18/2016 06:32	NP
Surr: Toluene-d8	106	81.8-120		%REC	224160	1	05/18/2016 06:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Brown + Caldwell Work Order Number 1605A95

Checklist completed by Paro Masoudi 5/13/16
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes ✓ No __ Not Present ✓ PM 5-13-16

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 4.9 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1605A95

ANALYTICAL QC SUMMARY REPORT

BatchID: 224104

Sample ID: **MB-224104** Client ID: Units: **ug/L** Prep Date: **05/16/2016** Run No: **316904**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224104** Analysis Date: **05/16/2016** Seq No: **6825560**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Benzene	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chloroform	BRL	5.0									
cis-1,2-Dichloroethene	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	44.42	0	50.00		88.8	70.7	125				
Surr: Dibromofluoromethane	50.29	0	50.00		101	82.2	120				
Surr: Toluene-d8	49.13	0	50.00		98.3	81.8	120				

Sample ID: **LCS-224104** Client ID: Units: **ug/L** Prep Date: **05/16/2016** Run No: **316904**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224104** Analysis Date: **05/16/2016** Seq No: **6825559**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	53.98	5.0	50.00		108	65.3	137				
Benzene	53.46	5.0	50.00		107	74.9	123				
Toluene	54.16	5.0	50.00		108	75	124				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1605A95

ANALYTICAL QC SUMMARY REPORT

BatchID: 224104

Sample ID: **LCS-224104**	Client ID:		Units: **ug/L**	Prep Date: **05/16/2016**	Run No: **316904**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **224104**	Analysis Date: **05/16/2016**	Seq No: **6825559**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Trichloroethene	51.51	5.0	50.00		103	73.1	128				
Surr: 4-Bromofluorobenzene	44.46	0	50.00		88.9	70.7	125				
Surr: Dibromofluoromethane	48.77	0	50.00		97.5	82.2	120				
Surr: Toluene-d8	48.51	0	50.00		97.0	81.8	120				

Sample ID: **1605A95-001AMS**	Client ID: **16130-MW-43-ZONE 3**		Units: **ug/L**	Prep Date: **05/16/2016**	Run No: **316904**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **224104**	Analysis Date: **05/16/2016**	Seq No: **6825566**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	54.06	5.0	50.00		108	60	150				
Benzene	53.99	5.0	50.00		108	70.1	132				
Toluene	55.21	5.0	50.00		110	70.1	133				
Trichloroethene	52.41	5.0	50.00		105	70	136				
Surr: 4-Bromofluorobenzene	45.54	0	50.00		91.1	70.7	125				
Surr: Dibromofluoromethane	50.68	0	50.00		101	82.2	120				
Surr: Toluene-d8	49.67	0	50.00		99.3	81.8	120				

Sample ID: **1605A95-001AMSD**	Client ID: **16130-MW-43-ZONE 3**		Units: **ug/L**	Prep Date: **05/16/2016**	Run No: **316904**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **224104**	Analysis Date: **05/16/2016**	Seq No: **6825567**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	53.52	5.0	50.00		107	60	150	54.06	1.00	17.7	
Benzene	50.63	5.0	50.00		101	70.1	132	53.99	6.42	20	
Toluene	51.17	5.0	50.00		102	70.1	133	55.21	7.60	20	
Trichloroethene	48.15	5.0	50.00		96.3	70	136	52.41	8.47	20	
Surr: 4-Bromofluorobenzene	44.66	0	50.00		89.3	70.7	125	45.54	0	0	
Surr: Dibromofluoromethane	48.55	0	50.00		97.1	82.2	120	50.68	0	0	
Surr: Toluene-d8	48.28	0	50.00		96.6	81.8	120	49.67	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1605A95

ANALYTICAL QC SUMMARY REPORT

BatchID: 224160

Sample ID: **MB-224160** Client ID: Units: **ug/L** Prep Date: **05/17/2016** Run No: **317016**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224160** Analysis Date: **05/17/2016** Seq No: **6828149**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Benzene	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chloroform	BRL	5.0									
cis-1,2-Dichloroethene	BRL	5.0									
Ethylbenzene	BRL	5.0									
Methylene chloride	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	42.93	0	50.00		85.9	70.7	125				
Surr: Dibromofluoromethane	54.21	0	50.00		108	82.2	120				
Surr: Toluene-d8	52.92	0	50.00		106	81.8	120				

Sample ID: **LCS-224160** Client ID: Units: **ug/L** Prep Date: **05/17/2016** Run No: **317016**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224160** Analysis Date: **05/17/2016** Seq No: **6828148**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	55.00	5.0	50.00		110	65.3	137				
Benzene	51.42	5.0	50.00		103	74.9	123				
Toluene	51.85	5.0	50.00		104	75	124				
Trichloroethene	49.91	5.0	50.00		99.8	73.1	128				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1605A95

ANALYTICAL QC SUMMARY REPORT

BatchID: 224160

Sample ID: **LCS-224160** Client ID: Units: **ug/L** Prep Date: **05/17/2016** Run No: **317016**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224160** Analysis Date: **05/17/2016** Seq No: **6828148**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	41.85	0	50.00		83.7	70.7	125				
Surr: Dibromofluoromethane	53.09	0	50.00		106	82.2	120				
Surr: Toluene-d8	51.69	0	50.00		103	81.8	120				

Sample ID: **1605A95-021AMS** Client ID: **16132-MW-42-Z1** Units: **ug/L** Prep Date: **05/17/2016** Run No: **317016**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224160** Analysis Date: **05/17/2016** Seq No: **6828155**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	59.74	5.0	50.00		119	60	150				
Benzene	54.70	5.0	50.00		109	70.1	132				
Toluene	54.40	5.0	50.00		109	70.1	133				
Trichloroethene	53.07	5.0	50.00		106	70	136				
Surr: 4-Bromofluorobenzene	41.47	0	50.00		82.9	70.7	125				
Surr: Dibromofluoromethane	54.35	0	50.00		109	82.2	120				
Surr: Toluene-d8	51.00	0	50.00		102	81.8	120				

Sample ID: **1605A95-021AMSD** Client ID: **16132-MW-42-Z1** Units: **ug/L** Prep Date: **05/17/2016** Run No: **317016**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224160** Analysis Date: **05/18/2016** Seq No: **6828156**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	62.07	5.0	50.00		124	60	150	59.74	3.83	17.7	
Benzene	53.60	5.0	50.00		107	70.1	132	54.70	2.03	20	
Toluene	52.74	5.0	50.00		105	70.1	133	54.40	3.10	20	
Trichloroethene	52.38	5.0	50.00		105	70	136	53.07	1.31	20	
Surr: 4-Bromofluorobenzene	42.31	0	50.00		84.6	70.7	125	41.47	0	0	
Surr: Dibromofluoromethane	53.53	0	50.00		107	82.2	120	54.35	0	0	
Surr: Toluene-d8	50.77	0	50.00		102	81.8	120	51.00	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		