2015 Semiannual Groundwater Monitoring Report

Prepared for

Owens Corning
Anderson, South Carolina

July 30, 2015

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147297-100-002

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
EISOP/QAM	Environmental Investigations Standard Operating Procedures and Quality Assurance Manual
EB	equipment blank
ft	feet or foot
gpm	gallons per minute
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
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 2015 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 30, 2015
Date

Section 1

Introduction

This 2015 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 2015 quarterly groundwater monitoring events and the May 2015 semiannual residential well monitoring event. The Consent Order requires that Owens Corning perform annual groundwater monitoring, and in 2005, the 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 23 and 26, 2015, and May 4 and 7, 2015, respectively. This Section provides an overview of the quarterly and residential well sampling activities and includes detailed 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 35 wells during each of the quarterly monitoring events and 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) 2015 monitoring events. Well construction information is provided in Table 3.

Based on the monitoring well measurements from February 2015, groundwater levels in the overburden aquifer ranged from 4.96 (MW-11) to 23.50 (TW-46) ft below top of casing (btoc) and from 775.26 to 793.08 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 0.07 ft above the top of the casing (MW-38 Zone 2) to 50.25 ft btoc (MW-39 Zone 3) and from 771.25 to 755.95 ft in elevation (NAVD88). In May 2015, the groundwater levels in the overburden aquifer ranged from 5.11 (MW-11) to 23.56 (TW-46) ft btoc and from 775.11 to 793.02 ft in elevation (NAVD88). Measurements from wells in the bedrock aquifer exhibit hydraulic heads ranging from 0.11 ft above top of casing (MW-38 Zone 2) to 49.58 ft btoc (MW-39 Zone 3) and from 771.29 to 756.62 ft in elevation (NAVD88). The variation in head in the bedrock aquifer is highly dependent on both the elevation and fractures present in the wells' screened interval.

Based on the February 2015 data, groundwater onsite 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 2015 data, calculated horizontal gradients are as follows: 0.0157 feet/foot (ft/ft) in the overburden (calculated between MW-21 and MW-23); 0.0147ft/ft in the bedrock aquifer in the 699 to 740 feet (NAVD88) zone (calculated between MW-27 and MW-41 Zone 1); 0.0243 ft/ft in the bedrock aquifer in the 632 to 699 feet (NAVD88) zone (calculated between MW-15 and MW-22); 0.0117 ft/ft in the bedrock aquifer in the 574 to 630 feet (NAVD88) zone (calculated between MW-19 and MW-41 Zone 2); 0.0098 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: a downward gradient of 0.0293 ft/ft across the overburden/bedrock aquifer (calculated between MW-12 and MW-19); and an upward gradient of 0.0156 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 29.3 gallons per minute (gpm). Additional information regarding the interim corrective measures system was reported in the *Q1 2015 –Interim Corrective Measures Performance Monitoring Report* that was submitted to the U.S. EPA and SCDHEC in June 2015. At some point the second extraction well, EW-2, may be used depending on the performance of extraction well EW-1.

Based on the May 2015 data, groundwater flow in the overburden aquifer was consistent with previous sampling events flowing towards the fracture zones associated with Betsy Creek, giving an east-northeasterly gradient. The overburden aquifer was unaffected by the active pumping of extraction well EW-1 as a surface casing was installed. Groundwater flow in the bedrock aquifer generally follows the same east-northeasterly gradient along the Betsy Creek fracture zones. 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 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 one of the groundwater extraction wells (EW-1) for the 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 23 and May 4, 2015, 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 new or dedicated polyethylene 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

During the May 2015 quarterly sampling event, 11 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 335 Elrod 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 such as 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 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 the February and May sampling event. 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 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 2015 quarterly groundwater events and the May 2015 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 2015 sampling event, groundwater samples were collected from 11 residential wells.

The February and May 2015 groundwater analytical results are summarized in Tables 4 and 5, respectively. The May 2015 residential well analytical results are summarized in Table 6. Historical groundwater analytical data can be found in previous reports submitted to U.S. EPA and summaries of this information can be found in Appendix C of this report. Laboratory analytical reports that include method detection limits and quality assurance/quality control (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 2015 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 2015, the concentration of 1,1-DCE in well MW-15 and MW-22 showed slight increases over the first two quarterly monitoring events. In MW-15, the 1,1-DCE concentration was 130 micrograms per liter (µg/L) in February and 160 µg/L in May. In well MW-22, the concentration was 250 µg/L in February and 290 µg/L in May (Tables 4 and 5).

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 2015. In Zone 3, the 1,1-DCE concentration was 190 µg/L in February and 250 µg/L in May. In Zone 4, the concentration was 180 µg/L in February and 280 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 February and May 2015, the 1,1-DCE concentration in MW-37 Zone 1 and Zone 2 showed slight increases. In Zone 1, the 1,1-DCE concentration increased from 65 µg/L in February to 100 µg/L in May. Concentrations of 1,1-DCE in Zone 2 increased from 160 µg/L in February to 200 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 2 were below the RL in both sampling events. In MW-38 Zone 1, 1,1-DCE was above the MCL at 7.1 µg/L during the February sampling event, however during the May sampling event, it was below the RL. 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 53 µg/L in February and 77 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 increased (110 µg/L and 170 µg/L), Zone 2 concentrations were 130 µg/L and 150 µg/L, and Zone 3 concentrations were 24 µg/L and 32 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 during the February and May monitoring events. Carbon tetrachloride in MW-37 Zone 2, was non-detect in the February sampling event, however, was detected and exceeded the MCL during the May sampling event. The maximum detected concentration of carbon tetrachloride in bedrock wells was in MW-22 at 24 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 2015 were conducted at the Owens Corning Site in February and May 2015, respectively. Samples were collected from 12 bedrock wells during the February and May events and from 11 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 Northeast Area bedrock wells MW-15, MW-22, MW-29R, MW-37 and MW-41 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 77 µg/L in May 2015.
- The 1,1-DCE concentration in bedrock well MW-41 Zone 2 has decreased from 530 µg/L in November 2010 to 150 µg/L in May 2015.
- During the February and May monitoring events, no VOCs were detected above MCLs in groundwater collected from the bedrock wells, MW-36, MW-39, MW-42, and MW-43. Apart from a 1,1-DCE concentration of 7.1 µg/L in MW-38 Zone 1 during the February 2015 sampling event, no VOCs were detected above the MCLs in MW-38. 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 2015, followed by the annual monitoring event in November 2015.

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, 2015. 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
MW-41
MW-36
MW-35
MW-44
TW-40
EW-1
MW-29R
TW-41
TW-42
MW-14
MW-26
MW-15
TW-43
MW-3
TW-44
MW-25
MW-21
EW-2
MW-13
MW-11
MW-38
P2
MW-16
MW-24
MW-22
MW-34
MW-23
MW-4
MW-19
MW-37
MW-20
MW-12
Alloy
MW-31
MW-27
TW-46
TW-45
MW-30
P1
MW-2
MW-18
MW-17
MW-32
MW-7
MW-39
MW-9
MW-28
MW-10
MW-5
MW-6
MW-1
MW-8

0 600 1,200
Approximate Scale in Feet

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

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 Ponds

Figure 1

Site Map

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/20/2015
SCALE:	AS SHOWN
DRAWN BY:	GS4
CHECKED BY:	TCB
PROJECT #:	147297

Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 1 - Site Map.mxd

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N

MW-14
780.09

MW-26
777.54

TW-42
762.03

MW-12
775.11

MW-3
778.71

TW-43
762.17

MW-11
775.26

MW-25
766.72

MW-21
764.34

MW-13
774.12

MW-23
798.95

MW-4
777.53

TW-46
793.08

800
795
790
785
780
775
770
765

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 23, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	05/13/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297

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N

MW-41
Zone 1
729.58

MW-29R Zone 1
769.64

TW-40
772.65

EW-1

TW-44
776.40

TW-41
762.74

MW-15
755.72

MW-22
772.19

MW-16
758.56

EW-2

P2
774.12

Alloy
776.71

MW-27
789.11

MW-39
Zone 1
790.59

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 3

Bedrock Aquifer
Zone 699 to 740 Feet NAVD88
Potentiometric Surface Map
February 23, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	07/21/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297

Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 3 - Bedrock Potentiometric Map - Zone 699 to 740 - February 2015.mxd

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N

MW-36 Zone 1
774.62

MW-36 Zone 2
774.23

TW-40
772.65

EW-1

MW-29R Zone 2
775.40

EW-2

MW-22
772.19

MW-15
755.72

P2
774.12

MW-6
802.80

MW-42
Zone 1
748.44

790
795
800
785
780
775
770
765
760
755
750
745
740
735
730
725

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 4

Bedrock Aquifer
Zone 632 to 699 Feet NAVD88
Potentiometric Surface Map
February 23, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	04/28/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297

Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 4 - Bedrock Potentiometric Map - Zone 632 to 699 - February 2015.mxd

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Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 5 - Bedrock Potentiometric Map - Zone 574 to 630 - February 2015.mxd

N

MW-43
Zone 1
713.25

MW-42
Zone 2
740.82

MW-41
Zone 2
732.41

MW-36
Zone 3
768.66

MW-35
732.82

MW-29R
Zone 4
753.02

EW-1

MW-29R
Zone 3
759.91

EW-2

MW-19
771.15

MW-37
Zone 1
749.48

MW-39
Zone 2
770.75

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 5

Bedrock Aquifer
Zone 574 to 630 Feet NAVD88
Potentiometric Surface Map
February 23, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	04/28/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297

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Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 6 - Bedrock Potentiometric Map - Zone 430 to 530 - February 2015.mxd

N

MW-43
Zone 3
717.32

MW-42
Zone 3
752.05

MW-41
Zone 3
724.66

MW-36
Zone 5
761.19

MW-44
732.14

EW-1

EW-2

MW-37
Zone 3
748.57

MW-39
Zone 3
755.95

720
725
730
735
740
745
750
755
760

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

- 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 6

Bedrock Aquifer
Zone 430 to 530 Feet NAVD88
Potentiometric Surface Map
February 23, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	04/27/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297

Accessed By: BSTEELE at 05/13/2015 13:15

N

MW-14
781.15

MW-26
778.40

TW-42
764.18

MW-12
775.05

MW-3
779.43

TW-43
764.45

MW-11
775.11

MW-25
766.30

MW-21
763.75

MW-13
774.09

MW-23
799.65

MW-4
777.62

TW-46
793.02

800
795
790
785
780
775
770
765

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 7

Overburden / Saprolite Potentiometric Surface Map May 4, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	05/13/2015
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	147297

Path: R:\Projects\Owens_Corning\Anderson_SiteMapDocs\Semiannual 2015\Figure 7 - Overburden PotentiometricMap - May 2015.mxd

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Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 8 - Bedrock Potentiometric Map - Zone 699 to 740 - May 2015.mxd

N

MW-41
Zone 1
729.64

MW-29R Zone 1
769.80

TW-40
774.55

EW-1

TW-44
776.95

TW-41
763.70

MW-15
755.80

MW-22
772.22

MW-16
758.71

EW-2

P2
774.17

Alloy
776.56

MW-27
789.71

MW-39
Zone 1
792.10

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 4, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	05/13/2015
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	147297

Accessed By: BSTEELE at 05/13/2015 13:49

N

MW-36 Zone 1
776.15

MW-36 Zone 2
775.72

TW-40
774.55

EW-1

MW-29R Zone 2
776.77

MW-22
772.22

MW-15
755.80

EW-2

P2
774.17

MW-42
Zone 1
749.54

MW-6
803.57

800
795
790
785
780
775
770
765
760
755
750
745
740
735
730
725

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 4, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	05/13/2015
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	147297

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N

MW-43
Zone 1
713.06

MW-42
Zone 2
746.14

MW-41
Zone 2
732.86

MW-36
Zone 3
769.89

MW-35
733.16

MW-29R Zone 4
754.74

MW-29R Zone 3
760.02

EW-1

EW-2

MW-19
771.10

MW-37
Zone 1
749.59

MW-39
Zone 2
771.87

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 4, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	05/13/2015
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Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 11 - Bedrock Potentiometric Map - Zone 430 to 530 - May 2015.mxd

N

MW-43
Zone 3
716.48

MW-42
Zone 3
751.89

MW-41
Zone 3
719.58

MW-36
Zone 5
762.88

MW-44
733.62

EW-1

EW-2

MW-37
Zone 3
745.60

MW-39
Zone 3
756.62

720
725
730
735
740
745
750
755
760

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

- 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 11

Bedrock Aquifer
Zone 430 to 530 Feet NAVD88
Potentiometric Surface Map
May 4, 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

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Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 12 - Residential Well Locations - May 2015.mxd

N

0 600 1,200

Approximate Scale in Feet

LEGEND

- Well Sampled Semiannually
- Well Previously Sampled
- Not in Service
- Well Observed
- Owens Corning Facility Boundary
- Additional Owens Corning Properties
- Abandoned Sludge Lagoon
- Backwash Storage Ponds
- 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 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:

Owens Corning

DATE:	07/20/2015
SCALE:	AS SHOWN
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Path: R:\Projects\Owens_Corning\Anderson_SiteMapDocs\Semiannual 2015\Figure 13 - Bedrock 11DCE Isoconcentration Map - Zone 699 to 740 - Feb 2015.mxd

N

MW-41
Zone 1
110

1
10
100

MW-15
130

MW-22
250

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, AeroGRID, IGN, 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 13

Bedrock Aquifer
Zone 699 to 740 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
February 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	07/21/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297

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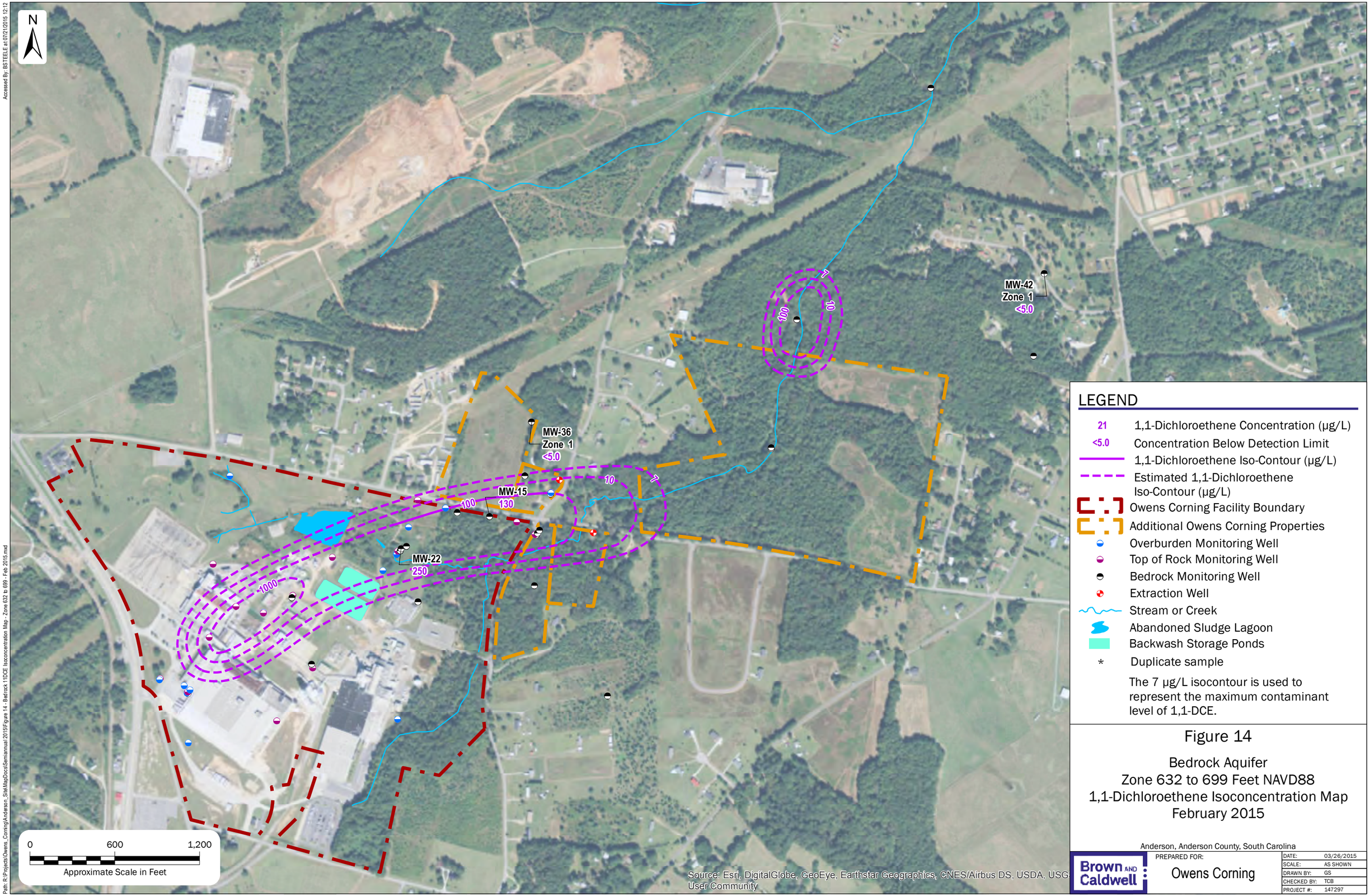
Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 14 - Bedrock 11DCE Isoconcentration Map - Zone 632 to 699 - Feb 2015.mxd



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

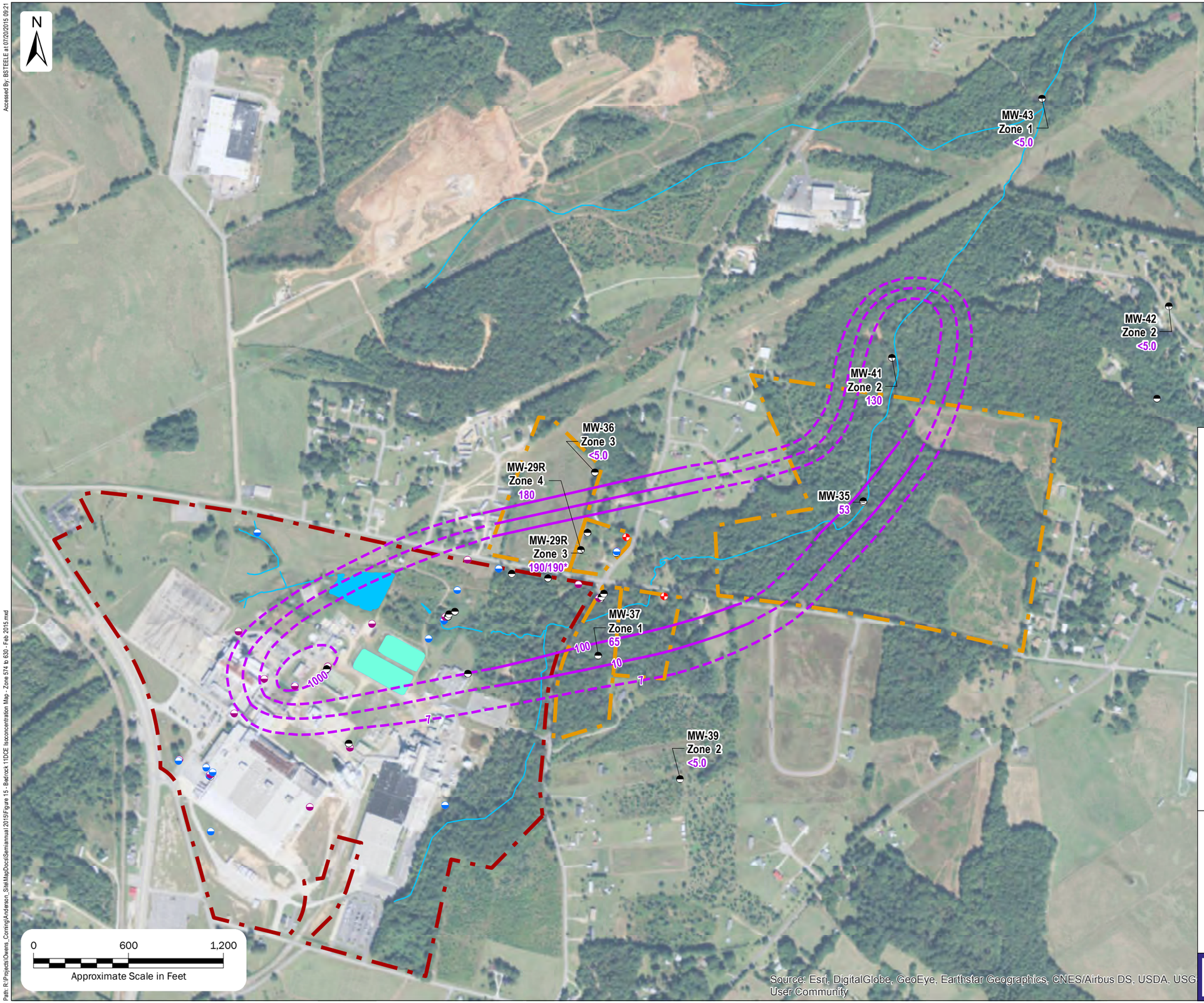
Bedrock Aquifer
Zone 632 to 699 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
February 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	03/26/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297



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 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/20/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297

N

MW-43
Zone 3
<5.0

MW-41
Zone 3
24

MW-42
Zone 3
<5.0

MW-36
Zone 5
<5.0

MW-44
<5.0

MW-37
Zone 3
<5.0

MW-39
Zone 3
<5.0

10
100
7
1000

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, 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 16

Bedrock Aquifer
Zone 430 to 530 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
February 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	07/21/2015
SCALE:	AS SHOWN
DRAWN BY:	GS
CHECKED BY:	TCB
PROJECT #:	147297

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Path: R:\Projects\Owens_Corning\Anderson_SiteMapDocs\Semiannual 2015\Figure 17 - Bedrock 11DCE Isoconcentration Map - Zone 699 to 740 - May 2015.mxd

N

MW-41
Zone 1
170

1
10
100

MW-15
160

MW-22
290

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, USG
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 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR:
Owens Corning

DATE:	07/07/2015
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	147297

Accessed By: BSTEELE at 07/07/2015 10:42

Path: R:\Projects\Owens_Corning\Anderson_Site\MapDocs\Semiannual 2015\Figure 18 - Bedrock 11DCE Isoconcentration Map - May 2015 - Zone 632 to 699.mxd

N

MW-36
Zone 1
<5.0

MW-15
160

MW-22
290

MW-42
Zone 1
<5.0

1000
100
10
1

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 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/07/2015
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	147297

N

MW-43
Zone 1
<5.0

MW-42
Zone 2
<5.0

MW-41
Zone 2
150

100

MW-36
Zone 3
<5.0

MW-35
77

MW-29R
Zone 4
280/270*

MW-29R
Zone 3
250

MW-37
Zone 1
100/96*

1000

100

10

7

MW-39
Zone 2
<5.0

0 600 1,200
Approximate Scale in Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USG
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 19

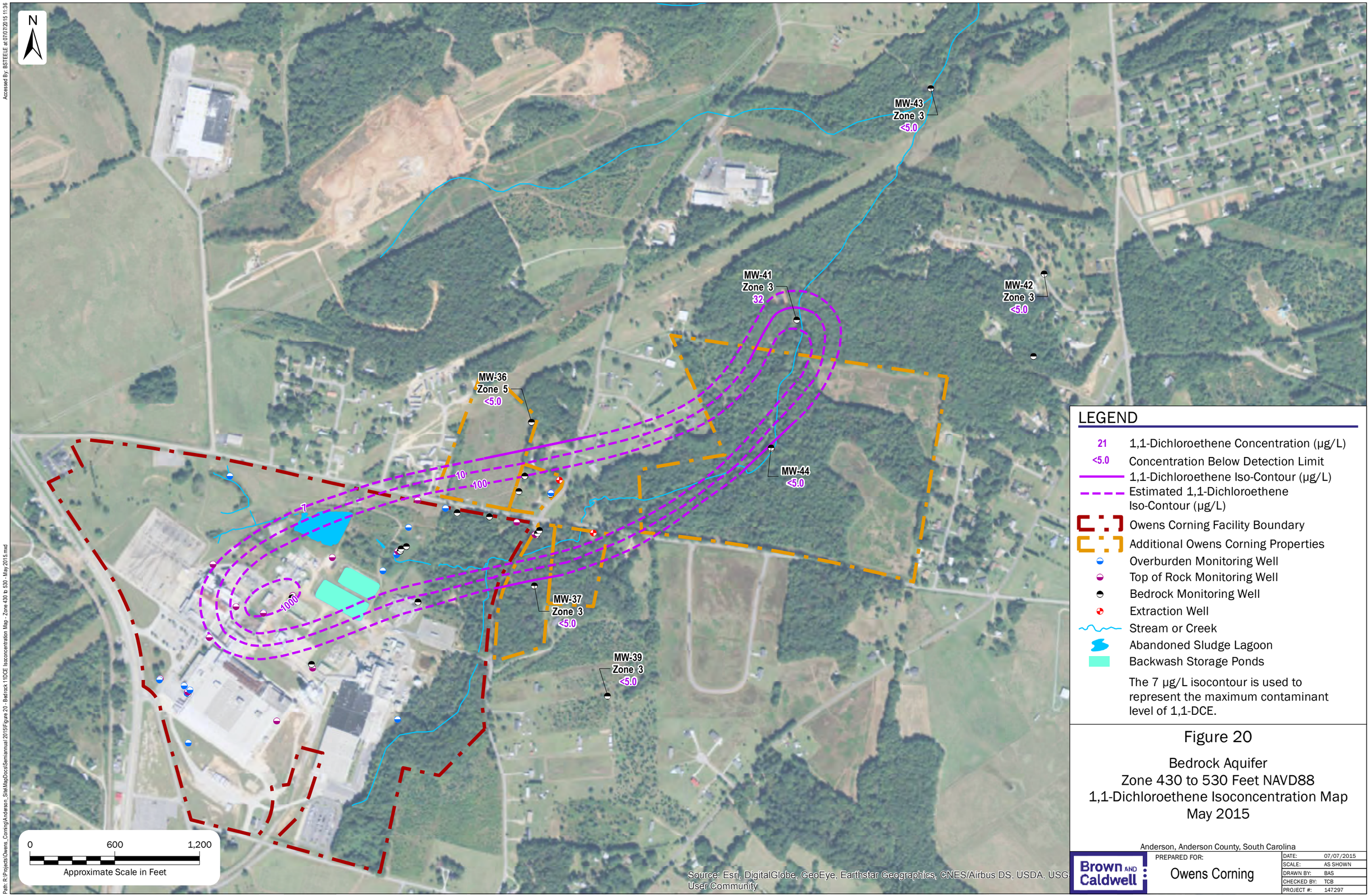
Bedrock Aquifer
Zone 574 to 630 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
May 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/20/2015
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	147297



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 20

Bedrock Aquifer
Zone 430 to 530 Feet NAVD88
1,1-Dichloroethene Isoconcentration Map
May 2015

Anderson, Anderson County, South Carolina

Brown AND Caldwell

PREPARED FOR: Owens Corning

DATE:	07/07/2015
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	147297

Table 1. Quarterly Sampling Groundwater Elevation Data – February 23, 2015 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) 2/23/2015	Static Water Elevation, (ft NAVD88) 2/23/2015
MW-3	13-28	O	795.61	796.76	18.05	778.71
MW-4	14.7-29.7	O	796.72	798.38	20.85	777.53
MW-6	123.6-133.6	BR	819.82	819.69	16.89	802.80
MW-11	6.0-16.0	O	778.32	780.22	4.96	775.26
MW-12	23-33	O	778.42	780.95	5.84	775.11
MW-13	67-72	TOR	779.20	782.22	8.10	774.12
MW-14	69.2-74.2	TOR	796.39	798.45	18.36	780.09
MW-15	69.5-99.5	BR	777.11	779.45	23.73	755.72
MW-16	49-59	BR	768.14	770.37	11.81	758.56
MW-19	154-169	BR	779.69	781.81	10.66	771.15
MW-21	6.5-16.5	TOR	768.63	771.15	6.81	764.34
MW-22	78-116	BR	780.45	782.65	10.46	772.19
MW-23	83-93	TOR	808.97	811.47	12.52	798.95
MW-25	40-50	TOR	774.40	776.71	9.99	766.72
MW-26	56.7-66.7	O	790.40	793.09	15.55	777.54
MW-27	69-99	BR	808.93	811.13	22.02	789.11
MW-29R Zone 1	56.7-69.8	BR	784.90	787.03	17.39	769.64
MW-29R Zone 2	127.3-139.5	BR	784.90	787.03	11.63	775.40
MW-29R Zone 3	154.5-169.6	BR	784.90	787.03	27.12	759.91
MW-29R Zone 4	177.6-202.2	BR	784.90	787.03	34.01	753.02
MW-35[a]	152-162	BR	740.90	743.73	10.91	732.82
MW-36 Zone 1	99.1-116	BR	783.00	785.63	11.01	774.62
MW-36 Zone 2	139.5-150.7	BR	783.00	785.63	11.40	774.23
MW-36 Zone 3	180.2-192.7	BR	783.00	785.63	16.97	768.66
MW-36 Zone 4	225.6-239.2	BR	783.00	785.63	19.11	766.52
MW-36 Zone 5	269.9-275	BR	783.00	785.63	24.44	761.19
MW-37 Zone 1	185-195	BR	780.20	782.92	33.44	749.48
MW-37 Zone 2	222-232	BR	780.20	782.84	29.09	753.75
MW-37 Zone 3	257-272	BR	780.20	782.79	34.22	748.57
MW-38 Zone 1	415-430	BR	768.10	771.23	13.11	758.12
MW-38 Zone 2[a,b]	479.6-499.6	BR	768.10	771.18	-0.07	771.25
MW-39 Zone 1	95-105	BR	804.10	806.20	15.61	790.59
MW-39 Zone 2	195-215	BR	804.10	806.20	35.45	770.75
MW-39 Zone 3	280-300	BR	804.10	806.20	50.25	755.95
MW-41 Zone 1	17-32	BR	733.40	736.56	6.98	729.58
MW-41 Zone 2[a]	109-129	BR	733.40	736.79	4.38	732.41
MW-41 Zone 3	279-299	BR	733.40	736.77	12.11	724.66
MW-42 Zone 1	114-129	BR	785.50	785.44	37.00	748.44
MW-42 Zone 2	202-222	BR	785.50	785.42	44.60	740.82
MW-42 Zone 3	265-285	BR	785.50	785.40	33.35	752.05
MW-43 Zone 1	91.8 - 111.8	BR	716.15	719.19	5.94	713.25
MW-43 Zone 2	149.57 - 179.57	BR	716.15	719.20	3.71	715.49
MW-43 Zone 3	261.8 - 281.8	BR	716.15	719.17	1.85	717.32
MW-44	280-300	BR	741.00	743.95	11.81	732.14
P1	24.5-39.5	BR	813.10	815.42	21.09	794.33
P2	53-115	BR	783.93	785.65	11.53	774.12
Alloy	56-61	BR	789.56	791.69	14.98	776.71
TW-40	84-94	BR	785.81	788.63	15.98	772.65
TW-41	50.3-55.3	BR	775.50	778.84	16.10	762.74
TW-42	21-26	TOR	775.86	778.09	16.06	762.03
TW-43	8.6-18.6	O	775.82	778.15	15.98	762.17
TW-44	64-74	BR	782.68	785.52	9.12	776.40
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	23.50	793.08

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 4, 2015 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) 5/4/2015	Static Water Elevation, (ft NAVD88) 5/4/2015
MW-3	13-28	O	795.61	796.76	17.33	779.43
MW-4	14.7-29.7	O	796.72	798.38	20.76	777.62
MW-6	123.6-133.6	BR	819.82	819.69	16.12	803.57
MW-11	6.0-16.0	O	778.32	780.22	5.11	775.11
MW-12	23-33	O	778.42	780.95	5.90	775.05
MW-13	67-72	TOR	779.20	782.22	8.13	774.09
MW-14	69.2-74.2	TOR	796.39	798.45	17.30	781.15
MW-15	69.5-99.5	BR	777.11	779.45	23.65	755.80
MW-16	49-59	BR	768.14	770.37	11.66	758.71
MW-19	154-169	BR	779.69	781.81	10.71	771.10
MW-21	6.5-16.5	TOR	768.63	771.15	7.40	763.75
MW-22	78-116	BR	780.45	782.65	10.43	772.22
MW-23	83-93	TOR	808.97	811.47	11.82	799.65
MW-25	40-50	TOR	774.40	776.71	10.41	766.30
MW-26	56.7-66.7	O	790.40	793.09	14.69	778.40
MW-27	69-99	BR	808.93	811.13	21.42	789.71
MW-29R Zone 1	56.7-69.8	BR	784.90	787.03	17.23	769.80
MW-29R Zone 2	127.3-139.5	BR	784.90	787.03	10.26	776.77
MW-29R Zone 3	154.5-169.6	BR	784.90	787.03	27.01	760.02
MW-29R Zone 4	177.6-202.2	BR	784.90	787.03	32.29	754.74
MW-35[a]	152-162	BR	740.90	743.73	10.57	733.16
MW-36 Zone 1	99.1-116	BR	783.00	785.63	9.48	776.15
MW-36 Zone 2	139.5-150.7	BR	783.00	785.63	9.91	775.72
MW-36 Zone 3	180.2-192.7	BR	783.00	785.63	15.74	769.89
MW-36 Zone 4	225.6-239.2	BR	783.00	785.63	18.46	767.17
MW-36 Zone 5	269.9-275	BR	783.00	785.63	22.75	762.88
MW-37 Zone 1	185-195	BR	780.20	782.92	33.33	749.59
MW-37 Zone 2	222-232	BR	780.20	782.84	29.11	753.73
MW-37 Zone 3	257-272	BR	780.20	782.79	37.19	745.60
MW-38 Zone 1	415-430	BR	768.10	771.23	15.79	755.44
MW-38 Zone 2[a,b]	479.6-499.6	BR	768.10	771.18	-0.11	771.29
MW-39 Zone 1	95-105	BR	804.10	806.20	14.10	792.10
MW-39 Zone 2	195-215	BR	804.10	806.20	34.33	771.87
MW-39 Zone 3	280-300	BR	804.10	806.20	49.58	756.62
MW-41 Zone 1	17-32	BR	733.40	736.56	6.92	729.64
MW-41 Zone 2[a]	109-129	BR	733.40	736.79	3.93	732.86
MW-41 Zone 3	279-299	BR	733.40	736.77	17.19	719.58
MW-42 Zone 1	114-129	BR	785.50	785.44	35.90	749.54
MW-42 Zone 2	202-222	BR	785.50	785.42	39.28	746.14
MW-42 Zone 3	265-285	BR	785.50	785.40	33.51	751.89
MW-43 Zone 1	91.8 - 111.8	BR	716.15	719.19	6.13	713.06
MW-43 Zone 2	149.57 - 179.57	BR	716.15	719.20	3.73	715.47
MW-43 Zone 3	261.8 - 281.8	BR	716.15	719.17	2.68	716.49
MW-44	280-300	BR	741.00	743.95	10.33	733.62
P1	24.5-39.5	BR	813.10	815.42	20.49	794.93
P2	53-115	BR	783.93	785.65	11.48	774.17
Alloy	56-61	BR	789.56	791.69	15.13	776.56
TW-40	84-94	BR	785.81	788.63	14.08	774.55
TW-41	50.3-55.3	BR	775.50	778.84	15.14	763.70
TW-42	21-26	TOR	775.86	778.09	13.91	764.18
TW-43	8.6-18.6	O	775.82	778.15	13.70	764.45
TW-44	64-74	BR	782.68	785.52	8.57	776.95
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	23.56	793.02

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 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 2015
Owens Corning - Anderson, SC

Sample ID	MCL (ug/L)	MW-15	MW-22	MW-29R Zone 3	15055-Dup[1]	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	15056-Dup[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	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		2/24/15	2/23/15	2/24/15	2/24/15	2/24/15	2/23/15	2/24/15	2/24/15	2/24/15	2/25/15	2/25/15	2/25/15	2/24/15	2/25/15	2/24/15	2/24/15	2/24/15	2/24/15	2/26/15	2/26/15	2/25/15	2/23/15	2/23/15	2/23/15	2/25/15	2/25/15	2/25/15	2/23/15
Screened Interval (ft)		69.5-99.5	78-116	154.5-169.6	154.5-169.6	177.6-202.2	152-162	99.1-116	180.2-192.7	269.9-275	185-195	222-232	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	< 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	< 5.0
1,1-Dichloroethane	-	< 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	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	7	**130**	**250**	**190**	**190**	**180**	**53**	< 5.0	< 5.0	< 5.0	**65**	**160**	**160**	< 5.0	**7.1**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**110**	**130**	**24**	< 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	< 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	< 5.0
Benzene	5	< 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	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride	5	< 5.0	**14**	**8.8**	**8.8**	**7.5**	< 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	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform[3]	80	< 5.0	7.2	7.0	7.1	7.1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5.9	5.9	< 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
cis-1,2-Dichloroethene	70	< 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	< 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	< 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	< 5.0
Methylene chloride	5	< 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	< 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	< 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	< 5.0
Toluene	1,000	< 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	< 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	< 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	< 5.0
Trichloroethene	5	< 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	< 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	< 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	< 2.0
Xylenes, total	10,000	< 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	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Field Parameters																													
pH (s.u.)	-	6.67	5.47	5.63	NA	5.56	9.41	6.06	7.15	7.52	7.51	9.35	NA	7.33	7.66	7.79	6.56	7.38	7.11	7.43	7.86	8.86	10.33	7.69	7.98	6.91	8.00	7.49	9.40
Temperature (degrees C)	-	16.13	17.74	15.11	NA	14.91	15.86	13.98	7.22	8.67	11.38	14.08	NA	12.96	11.45	9.71	13.57	14.61	15.75	13.27	12.40	9.55	17.28	15.19	15.65	16.50	14.13	9.30	16.03
Specific Conductance (uS/cm)	-	0.193	0.137	0.163	NA	0.147	0.203	0.103	1.395	2.821	0.627	0.155	NA	0.408	0.594	0.176	0.104	0.465	0.254	0.196	0.225	0.369	0.174	0.591	0.195	0.118	0.201	0.334	0.212
Eh (mV)	-	153.6	141.7	111.9	NA	128.6	37.9	87.2	-6.3	29.4	-118.8	-67.4	NA	-90.8	-146.0	-90.4	133.0	-77.3	-111.2	64.9	-123.0	-34.4	22.1	-113.8	-150.8	156.9	-71.9	-44.4	37.6
Dissolved Oxygen (mg/L)	-	1.26	4.98	7.11	NA	3.62	0.80	6.61	6.02	8.34	3.16	1.34	NA	10.24	3.48	3.12	10.05	1.96	3.13	6.43	1.40	5.71	3.93	3.63	2.04	4.27	2.60	4.14	0.95
Turbidity (NTU)	-	0.33	1.08	0.45	NA	0.46	0.46	1.03	698	<1000	0.71	0.11	NA	0.75	0.14	1.21	0.26	1.78	3.11	0.74	0.34	54.80	0.00	7.71	1.16	1.03	0.49	0.65	0.6

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
NA - not applicable
s.u. - standard units
[1] 15055-Dup was collected from MW-29R Zone 3.
[2] 15056-Dup was collected from MW-37 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 2015
Owens Corning - Anderson, SC

Sample ID	MCL	MW-15	MW-22	MW-29R Zone 3	MW-29R Zone 4	15125-Dup[1]	MW-35	MW-36 Zone 1	MW-36 Zone 3	MW-36 Zone 5	MW-37 Zone 1	15126-Dup[2]	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	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		5/5/15	5/4/15	5/5/15	5/5/15	5/5/15	5/4/15	5/5/15	5/5/15	5/5/15	5/6/15	5/6/15	5/6/15	5/5/15	5/6/15	5/5/15	5/5/15	5/5/15	5/5/15	5/6/15	5/6/15	5/7/15	5/4/15	5/4/15	5/4/15	5/6/15	5/6/15	5/6/15	5/4/15
Screened Interval (ft)	(ug/L)	69.5-99.5	78-116	154.5-169.6	177.6-202.2	177.6-202.2	152-162	99.1-116	180.2-192.7	269.9-275	185-195	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	<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	<5.0
1,1-Dichloroethane	-	<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	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7	**160**	**290**	**250**	**280**	**270**	**77**	<5.0	<5.0	<5.0	**100**	**96**	**200**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**170**	**150**	**32**	<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	<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	<5.0
Benzene	5	<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	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	5	<5.0	**24**	**17**	**15**	**14**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.0**	<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	7.3	6.4	7.2	6.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.6	<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	<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	<5.0
Ethylbenzene	700	<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	<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	<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	<5.0
Tetrachloroethene	5	<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	<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	<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	<5.0
trans-1,2-Dichloroethene	100	<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	<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	<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	<5.0
Vinyl chloride	2	<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	<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	<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	<5.0
Field Parameters																													
pH (s.u.)	-	6.58	5.44	5.60	5.57	NA	9.53	6.06	7.09	7.43	7.54	NA	10.23	7.38	7.77	7.92	6.10	7.12	7.18	7.03	7.56	8.41	9.63	7.08	7.30	7.17	8.13	7.59	9.17
Temperature (degrees C)	-	17.41	18.37	17.89	18.19	NA	16.57	17.60	18.09	18.96	17.41	NA	16.44	22.06	17.04	17.86	16.80	18.57	23.27	17.33	19.99	16.70	19.04	19.79	18.86	21.43	17.80	19.01	16.86
Specific Conductance (uS/cm)	-	0.195	0.139	0.171	0.153	NA	0.251	0.107	1.387	2.977	0.799	NA	0.603	0.586	0.694	0.182	0.265	0.660	0.432	0.409	0.404	0.538	0.449	0.870	0.371	0.134	0.209	0.342	0.218
Eh (mV)	-	-69.1	0.2	-100.5	-105.6	NA	-19.8	-42.1	-74.6	-87.6	24.3	NA	112.8	15.8	-142.2	-138.7	125.1	47.8	24.5	48.5	24.7	89.0	3.3	29.2	3.3	-79.5	-78.1	-69.8	27.6
Dissolved Oxygen (mg/L)	-	1.67	0.94	0.65	0.46	NA	6.85	1.82	0.92	0.54	0.38	NA	0.22	0.26	0.67	0.20	2.44	0.34	0.29	0.54	0.20	0.26	1.36	0.33	0.26	0.52	1.48	0.93	7.60
Turbidity (NTU)	-	0.00	0.00	0.00	0.00	NA	0.00	0.00	29.60	<1000	0.51	NA	0.99	0.79	0.00	0.00	0.04	1.69	1.46	0.85	0.55	34.20	0.87	1.38	5.74	0.94	1.95	1.29	0.54

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
NA - not applicable
s.u. - standard units

[1] 15125-Dup was collected from MW-29R-Zone 4.

[2] 15126-Dup was collected from MW-37-Zone 1.

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

Bold VOC results indicate concentration above the MCL.

Table 6. Residential Well Analytical Results - May 2015 Owens Corning - Anderson, SC												
Sample ID	MCL (ug/L)	628 Airline Road	412 Kaye Drive	117 Faye Drive	311 Kaye Drive	303 Kaye Drive	200 Kaye Drive	119 Cloverhill Drive	115 Elrod Road	721 Clinkscales Road	200 Friendship Lane	408 Clinkscales Road
Sample Date		5/4/15	5/4/15	5/4/15	5/4/15	5/4/15	5/4/15	5/4/15	5/4/15	5/4/15	5/4/15	5/4/15
Volatile Organic Compounds												
1,1,1-Trichloroethane	200	<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	<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	<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	<5.0	<5.0	<5.0
Benzene	5	<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	<5.0	<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	<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	<5.0	<5.0	<5.0
Ethylbenzene	700	<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	<5.0	<5.0	<5.0
Tetrachloroethene	5	<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	<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	<5.0	<5.0	<5.0
Trichloroethene	5	<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	<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	<5.0	<5.0	<5.0
Field Parameters												
pH (s.u.)	-	6.48	6.26	7.29	7.04	5.98	6.38	5.72	5.97	6.00	6.26	6.85
Temperature (degrees C)	-	17.35	19.83	18.17	17.57	20.27	17.96	17.43	17.47	19.15	18.13	18.75
Specific Conductance (uS/cm)	-	0.068	0.046	0.270	0.230	0.131	0.086	0.045	0.039	0.065	0.147	0.067
Eh (mV)	-	76.7	88.1	71.9	65.6	93.8	75.2	69.8	49.7	-0.3	-34.7	-46.4
Dissolved Oxygen (mg/L)	-	2.20	1.95	1.42	1.85	2.04	1.91	2.04	2.15	2.12	1.62	2.31
Turbidity (NTU)	-	0.33	2.54	0.35	0.05	0.01	0.62	0.35	0.55	0.29	4.42	0.25

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
NA - not applicable
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 2015

Appendix A: Groundwater Sampling Field Data Sheets

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-15

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Slate

Project Location: Anderson, South Carolina Weather: 30° Snow

2. WELL DATA

Date Measured: 2-25-15 Time: Am 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: 23.73 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: 75.77 feet Well Volume: 12.65 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: 2-24-15 Time: 0800

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) 2 hours well volumes or Stability gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0805	2.0	6.78	15.95	.202	178.8	1.37	2.08	26.16	
0810	4.0	6.75	16.24	.196	176.5	1.34	1.40	27.03	
0815	6.0	6.70	16.20	.194	167.6	1.27	1.26	27.56	
0820	9.0	6.69	16.08	.194	162.4	1.25	0.47	28.14	
0825	12.0	6.66	16.14	.193	157.1	1.19	0.36	28.86	

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: 1509S-MW-15 Sample Date: 2-24-15 Sample Time: 0830 # of Containers: 3

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-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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0830	15.0	6.67	16.13	.193	153.6	1.26	0.33	29.43	
				0830	Sample				
				pH, Spec Cond, DO					
				1 well vol.					

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-22

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern: On-Site

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~55° Cloudy

2. WELL DATA

Date Measured: 2-23-15 Time: AM 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: 10.46 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: 105.54 feet Well Volume: 275.45 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: 2-23-15 Time: 1520

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): 2 hours well volumes or Stability gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 2 gal/min

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

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
1525	3.5	5.58	17.74	.138	107.7	5.77	7.19	10.71	
1530	7.0	5.50	17.74	.137	119.7	5.40	6.97	10.71	
1535	10.5	5.48	17.75	.137	129.5	5.14	4.88	10.71	
1540	14.0	5.48	17.74	.138	133.6	5.08	2.04	10.71	
1545	17.5	5.47	17.74	.137	138.3	5.03	1.46	10.71	
1550	20.0	5.47	17.74	.137	141.7	4.98	1.08		

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: 150224-MW-22 Sample Date: 2-23-15 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-22

3. PURGE DATA (continued from page ____)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		

Purge data continued on next sheet? ☐

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

Page ____ of ____

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: SKeln

Project Location: Anderson, South Carolina Weather: ~35° overcast

2. WELL DATA

Date Measured: 2-23-15 Time: AM Temporary Well: ☐Yes ☐No

Casing Diameter: 2" inches

Screen Diameter: 6" inches

Sampling Inteval: 154.5-169.6 feet

Depth to Static Water: 6929 Dg

Depth to Product: feet

Length of Water Column: 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: 2-24-15 Time: 1215

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 lines well volumes or Stab 0.1.4 gallons

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

Equipment Model(s)
1. YSI
2. MP50
3. LaMotte
4.

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
1220	.1	5.79	14.97	.172	85.1	8.70	1.53	6929	2 GPM, 40 PSI
1225	.2	5.71	14.97	.172	91.3	7.61	1.18	6929	
1230	.3	5.68	14.93	.170	96.2	6.86	0.94	6929	
1235	.4	5.64	14.96	.167	101.6	6.62	0.73	6929	
1240	.5	5.64	15.09	.166	104.6	6.88	0.68	6929	

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: 15055-MW-29R-Z3 Sample Date: 2-24-15 Sample Time: # of Containers: 2

Duplicate Sample Collected? ☑ Yes ☐ No ID: 15055-DUP # 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-29R Zone 3-Waterloo

3. PURGE DATA (continued from page ____)

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
1245	.6	5.63	15.08	.164	108.1	7.08	0.00	6929	
1250	.7	5.63	15.12	.163	109.9	7.07	0.24	6929	
1255	.8	5.63	15.11	.163	111.9	7.11	0.45	6929	
				1255	sample				

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 4-Waterloo

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skale

Project Location: Anderson, South Carolina Weather: ~30° overcast

2. WELL DATA

Date Measured: 1-23-15 Time: AM Temporary Well: ☐Yes ☑No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 177.6-202.2 feet

Depth to Static Water: 6320 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: 2-24-15 Time: 1300

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): 2 hours well volumes or Stability gallons

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

Equipment Model(s)
1. YSI
2. MP50
3. LaMotte
4.

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
1310	.1	6.01	14.61	.139	114.3	4.80	1.38	(632)	
1315	.2	5.62	14.67	.147	115.6	3.36	1.17	6321	
1320	.3	5.60	14.85	.147	117.7	3.56	1.46	6321	
1325	.4	5.59	15.02	.147	121.4	3.58	0.76	6321	
1330	.5	5.58	15.03	.146	125.1	3.62	0.51	6321	
1335	.6	5.56	14.91	.147	128.6	3.62	0.46		

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: ISOSS-MW-29R-24 Sample Date: 2-24-15 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: MW-29R Zone 4-Waterloo

3. PURGE DATA (continued from page ____)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±3°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? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: 55 cloudy

2. WELL DATA

Date Measured: 2-23-15 Time: PM 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~~ 10.91 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: 35 151.09 feet Well Volume: 25.23 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: 2-23-15 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): 2 hours well volumes or Stability gallons

Was well purged dry? ☐ Yes ☑ No Pumping Rate: 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1405	2.5	9.76	15.64	.286	50.9	1.86	15.67	17.56	
1410	5.0	9.76	15.67	.293	51.2	1.43	5.94	23.11	
1415	7.5	9.43	15.74	.222	51.0	.97	0.61	27.16	
1420	10.0	9.48	15.78	.208	47.9	.75	0.43	32.56	9.47 plt
1425	12.5	9.48	15.89	.206	49.6	1.29	0.59	34.76	

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: 1504-MW-35 Sample Date: 2-23-15 Sample Time: 1440 # 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-35

3. PURGE DATA (continued from page \ )

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
1430	15.0	9.44	15.84	.204	43.4	.81	0.78	38.98	
1435	17.5	9.41	15.85	.203	38.3	.80	0.56	41.43	
1440	20.0	9.41	15.86	.203	37.9	.80	0.46	43.29	
				1440	Sample				
				pH, Spec Cond, DO					

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: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~35° overcast

2. WELL DATA

Date Measured: 2-24-15 Time: AM Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 99.1-116 feet

Depth to Static Water: 62.17 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: 2-24-15 Time: 1050

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): 2 hours well volumes or Stability gallons

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

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

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
1055	.1	6.19	13.23	.098	6.3	10.24	45.0	6215	1 CPM, 20 PSI
1105	.2	6.10	13.60	.093	31.7	10.07	1.98	6215	
1115	.3	6.07	13.69	.099	48.1	10.60	1.61	6215	
1125	.4	6.08	13.64	.103	62.0	10.46	.47	6215	
1135	.5	6.06	13.80	.103	72.0	6.65	.41	6215	air bubble

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: 1505S-MW-36-Z1 Sample Date: 2-24-15 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-36 Zone 1-Waterloo

3. PURGE DATA (continued from page ____)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±3°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
1145	.6	6.06	13.94	.103	78.9	6.67	1.46	6215	
1155	.8	6.09	13.98	.103	87.2	6.61	1.03	6215	
				1155	sample				
				pH, Spec Cond, DO, temp					

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~30° Overcast

2. WELL DATA

Date Measured: 2-23-15 Time: AM Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 180.2-192.7 feet

Depth to Static Water: 6999.1 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: 2-24-15 Time: 1020

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:

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

Volume to Purge (minimum): 2 hours 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.

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
1025	.1	7.29	8.50	1.489	26.1	4.61	1594	6991	
1035	.2	7.15	9.20	1399	-2.1	4.49	698	8248	
1045	.25	7.15	7.22	1.395	-6.3	6.02	—	—	
			DRY	At	1050				

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: 1SOSS-MW-36-25 Sample Date: 2-24-15 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

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

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 3-Waterloo

3. PURGE DATA (continued from page ____)

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? ☐

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

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 5-Waterloo

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~30° Overcast

2. WELL DATA

Date Measured: 2-24-15 Time: AM Temporary Well: ☐Yes ☑No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Intervall: 269.9-275 feet

Depth to Static Water: 6098 feet

Depth to Product: feet

Length of Water Column: feet

Length of water column calculation:
(8843.2-Current Dg reading)*0.03897)*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")
= [7.49 gal - 0.85 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: 2-24-15 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:

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

Volume to Purge (minimum) 2 hours 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.

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
0950	.1	7.57	10.78	2.801	50.4	15.70	<1000	6741	1 GPM
1000	.2	8.43	8.80	2.791	34.0	6.84	<1000	6953	pH=7.54
1010	.25	7.52	8.81	2.812	29.2	8.47	<1000	7878	
1020	.27	7.52	8.67	2.821	29.4	8.34	<1000	7932	
1030		unable to get PSI high enough to purge at 1020							

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: 1505-mw-36-275 Sample Date: 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

00 very light water very bubbly water very cloudy. Milky sort of color.

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 5-Waterloo

3. PURGE DATA (continued from page ____)

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? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 1

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: RH

Project Location: Anderson, South Carolina Weather: Over cast 32

2. WELL DATA

Date Measured: 2-23-15 Time: 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: 33.44 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: 161.56 feet Well Volume: 6.62 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: 2-25-15 Time:

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. YSI
2. WLM
3. MP-50
4. Turb Meter

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
1350	0.0	7.55	12.55	.622	-132	2.61	0.59	35.1	
1400	0.2	7.51	13.58	.628	-159.1	1.57	0.81	39.65	
1410	0.5	7.52	13.04	.626	-155.1	1.73	0.79	44.08	
1420	0.75	7.53	13.50	.627	-152.9	1.77	0.61	47.82	
1430	1.00	7.52	13.07	.626	-148.1	2.06	0.64	51.85	

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: 68.1 Field Filtered? ☐Yes ☑No

Sample ID: 15058-MW-37Z1 Sample Date: 2-25-15 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-37 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1440	1.25	7.52	12.90	.625	-141	2.16	0.6	55.4	
1450	1.5	7.52	12.62	.625	-136	2.35	0.44	57.5	
1500	1.75	7.51	12.82	.625	-129.3	2.51	0.74	59.5	
1510	2.00	7.51	12.79	.625	-127.2	2.55	0.75	62.34	
1520	2.20	7.52	12.57	.626	-121.2	2.96	1.22	64.1	
1530	2.30	7.52	11.77	.626	-115.2	3.30	0.85	65.7	
1540	2.40	7.51	11.63	.626	-116.5	3.21	0.87	66.4	
1550	2.50	7.51	11.39	.627	-118.8	3.16	0.71	68.1	

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-37 Zone 2

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: RH

Project Location: Anderson, South Carolina Weather: Overcast / 32°

2. WELL DATA

Date Measured: 2-23-15 Time: 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: 29.09 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: 202.91 feet Well Volume: 8.31 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: 2-25-15 Time: 1200

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. YSI
2. MP-50
3. WLM
4. Tank meter

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
1200	0.0	9.04	12.95	.155	-70	2.51	0.23	29.5	
1210	0.1	9.13	13.25	.154	-74.3	1.63	0.22	29.8	
1220	0.4	9.15	13.84	.153	-72	1.52	0.07	29.6	
1230	0.8	9.22	13.87	.153	-71.1	1.30	0.17	29.6	
1240	1.2	9.20	14.05	.153	-67.3	1.42	0.31	29.6	

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: 29.6 Field Filtered? ☐Yes ☑No

Sample ID: 15056-MW-3722 Sample Date: 2-25-15 Sample Time: 1310 # of Containers: 2

Duplicate Sample Collected? ☑Yes ☐No ID: 15056-DUP # 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-37 Zone 2

3. PURGE DATA (continued from page ____)

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
1250	1.5	9.29	14.09	0.153	-67.0	1.40	0.14	29.6	
1300	1.75	9.35	14.07	0.155	-67.4	1.34	0.11	29.6	

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-37 Zone 3

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: RA

Project Location: Anderson, South Carolina Weather: snow/31°

2. WELL DATA

Date Measured: 2-23-15 Time: 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: 34.22 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: 237.8 feet Well Volume: 9.74 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: 2-24-14 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): well volumes or gallons

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

Equipment Model(s)
1. YSI
2. WLM
3. Tank Meter
4. MP-50

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
1435	0.0	7.41	12.77	.400	-100	10.29	0.54	35.85	
1445	0.2	7.36	13.65	.411	-130.5	9.33	0.50	41.0	
1455	0.4	7.37	13.82	.396	-125.1	9.28	0.78	44.62	
1505	0.5	7.36	12.97	.403	-118.5	10.16	0.63	46.65	
1515	0.6	7.33	13.07	.399	-110.7	10.09	0.50	50.15	

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: 57.2 Field Filtered? ☐Yes ☑No

Sample ID: 15055-mw3723 Sample Date: 2-24-15 Sample Time: 1555 # 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-37 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1525	0.65	7.34	12.94	.415	-100.1	10.21	0.60	51.95	
1535	0.75	7.32	12.97	.410	-96.3	10.24	0.67	54.9	
1545	0.85	7.33	12.96	.408	-90.8	10.24	0.75	57.1	

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: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: RK

Project Location: Anderson, South Carolina Weather: overcast 1.32"

2. WELL DATA

Date Measured: 2-23-15 Time: — 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: 13.11 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: 416.89 feet Well Volume: 17.09 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: 2-25-15 Time: 0850

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. YSI
2. WLM
3. MP-50
4. Tank Motion

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
0850	0.0	7.41	10.44	.700	-12.4	5.30	0.37	12.15	
0900	0.2	7.86	11.42	.618	-169.7	1.97	0.40	16.15	
0910	0.3	7.91	10.61	.615	-193.8	1.86	0.54	19.83	
0920	0.5	7.92	11.95	0.615	-204.4	1.63	0.90	24.75	
0930	0.6	7.93	12.99	0.615	-212.4	1.46	0.74	28.6	

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: 50.0 Field Filtered? ☐ Yes ☑ No

Sample ID: 15056-MW-38Z1 Sample Date: 2-25-14 Sample Time: 1050 # of Containers: 2

Duplicate Sample Collected? ☑ Yes ☐ No ID: 15056-DUP1 # 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-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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0940	0.75	7.90	12.65	.613	-209	1.60	1.44	~~33.7~~	33.7
0950	1.0	7.82	11.88	.607	-194	2.15	2.34	~~36.6~~	36.5
1000	1.20	7.79	11.44	.605	-185	2.37	2.86	38.6	
1010	1.30	7.76	11.57	.603	-175	2.60	1.39	42.0	
1020	1.40	7.73	11.39	.599	-165	2.92	1.52	44.3	
1030	1.50	7.70	11.43	.597	-159.0	3.16	2.09	46.2	
1040	1.60	7.68	10.77	.597	-152	3.38	0.32	47.5	
1050	1.75	7.66	11.45	.594	-146	3.48	0.14	50.0	

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: 147297 Task Number: 100-xxx Area of Concern:
Client: Owens Corning Personnel: SI/G/C
Project Location: Anderson, South Carolina Weather: ~35° overcast

2. WELL DATA

Date Measured: 2-23-15 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: 499.6 feet From: ☑ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:
Depth to Static Water: 1.07 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: 2-24-15 Time: 1415

Equipment Model(s)
1. YSI
2. LaMotte
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): 2 hours 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1420	.6	7.69	11.04	.177	-39.9	5.86	1.17	artesian	
1430	1.5	7.78	11.12	.176	-65.3	4.36	1.01	"	
1440	2.0	7.79	10.71	.176	-74.8	3.73	1.04	"	
1450	2.5	7.79	10.37	.175	-80.3	3.28	0.98	"	
1600	3.0	7.78	10.20	.176	-83.8	3.18	0.85	"	

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: 15055-MW-38-Z2 Sample Date: 2-24-15 Sample Time: 1520 # of Containers: 3

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 2

3. PURGE DATA (continued from page ____)

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
1510	3.3	7.80	9.99	.176	-89.7	3.08	1.30	artesian	
1520	3.6	7.79	9.71	.176	-90.4	3.12	1.21	"	
				1520	sample				

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-39 Zone 1

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: RH

Project Location: Anderson, South Carolina Weather: Snow (31

2. WELL DATA

Date Measured: 2-23-15 Time: — 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: 15.61 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: 89.39 feet Well Volume: 3.66 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: 2-24-15 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 gallons

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

Equipment Model(s)
1. YSI
2. Wiim
3. Turb Meter
4. MP-50

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
0935	0.0	6.14 pH	12.67	0.081	137.9	10.60	0.71	15.9	
0945	0.20	6.14	12.91	0.075	161.9	10.89	0.23	15.9	
0955	0.40	6.17	13.09	0.096	154.4	10.44	0.49	15.95	
1005	0.60	6.28	12.85	0.099	144.7	10.73	0.24	16.0	
1015	0.80	6.41	13.17	0.102	138.4	10.31	0.07	16.03	

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: 16.05 Field Filtered? ☐ Yes ☑ No

Sample ID: 15055-mw-3921 Sample Date: 2-24-15 Sample Time: 1035 # 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

3. PURGE DATA (continued from page ____)

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
1025	1.0	6.51	13.38	.104	135.5	10.05	0.04	16.04	
1035	1.25	6.56	13.57	.104	133.0	10.05	0.26	16.05	

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-39 Zone 2

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: RH

Project Location: Anderson, South Carolina Weather: Snow / 31

2. WELL DATA

Date Measured: 2-23-15 Time: — 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: 35.45 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: 174.55 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: 2-24-15 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 gallons

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

Equipment Model(s)

1. YSI
2. WLM
3. MP-50
4. Tank Meter

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
1120	0.0	7.33	14.65	.463	-88.6	2.37	0.85	40.0	
1130	0.3	7.37	14.74	.467	-89.4	1.93	1.32	44.95	
1140	0.5	7.38	14.67	.465	-84.5	1.85	1.61	48.00	
1150	0.7	7.38	14.61	.465	-77.3	1.96	1.78	50.13	

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: 50.15 Field Filtered? ☐ Yes ☑ No

Sample ID: 15055-MW-3922 Sample Date: 2-24-15 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.

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 2

3. PURGE DATA (continued from page ____)

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? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 3

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: AH

Project Location: Anderson, South Carolina Weather: Snow 31

2. WELL DATA

Date Measured: 2-23-15 Time: — 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: 50.25 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: 249.75 feet Well Volume: 10.24 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: 2-24-15 Time: 1230

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. YSI
2. WLM
3. Tub MoTor
4. MP-50

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
1230	0.0	7.22	14.70	.277	-112.6	4.23	1.09	55.2	
1240	0.25	7.13	15.46	.257	-138.2	2.17	0.54	57.8	
1250	0.40	7.12	15.44	.257	-130.6	2.46	1.10	61.5	
1300	0.50	7.10	15.81	.255	-121.1	2.70	2.85	64.3	
1310	0.60	7.11	15.75	.254	-116.2	3.13	3.11	65.7	

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:

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: 66.0 Field Filtered? ☐Yes ☑No

Sample ID: 15055-MW-3923 Sample Date: 2-24-15 Sample Time: 1920 # of Containers: 2

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

Equipment Blank Collected? ☑Yes ☐No ID: 15055-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-39 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 ±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? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 1

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: 35° Sunny

2. WELL DATA

Date Measured: 2-23-15 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: 6.98 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: 2-26-15 Time: 0810

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): 2 hours well volumes or Stability gallons

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

Equipment Model(s)
1. YSI
2. LaMotte
3. 408 Pump
4.

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
0815	.1	7.50	12.84	.206	74.7	5.39	6.99	6.71	
0820	.2	7.62	13.12	.205	77.8	5.62	3.09	6.71	
0835	.5	7.57	13.11	.205	79.9	5.84	2.40	(6.7)	
0845	.7	7.56	13.12	.205	79.8	5.33	1.81	7.00	
0855	1.0	7.55	13.08	.205	77.6	5.99	1.63	7.00	

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: 15057-MW-41-B1 Sample Date: 2-26-15 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

Increase in WL due to displacement

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 ____)

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
0905	1.2	7.52	13.28	.203	75.8	6.00	1.36	7.07	
0915	1.4	7.51	13.19	.202	74.0	6.75	1.01	7.07	
0925	1.6	7.49	13.23	.201	72.2	6.42	0.91	7.07	
0935	1.8	7.47	13.22	.198	68.4	6.47	1.04	7.07	
0945	2.0	7.46	13.32	.198	68.2	6.46	1.11	7.07	
0955	2.2	7.46	13.22	.198	67.0	6.20	0.91	7.07	
1005	2.4	7.42	13.30	.196	65.3	6.42	0.86	7.07	
1015	3.0	7.43	13.27	.196	64.9	6.43	0.74	7.07	
				2 hour limit					
				1015 sample					

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 2

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: AH

Project Location: Anderson, South Carolina Weather: Clear, 36°

2. WELL DATA

Date Measured: 2-23-14 Time: 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: 4.38 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: 124.62 feet Well Volume: 5.10 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: 2-26-14 Time: 0820

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. YSI
2. WLM
3. MP-50
4. Tank Meter

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
0820	0.0	6.53	10.10	.233	296	8.62	0.98	4.05	
0830	0.5	7.75	12.06	.225	-97	6.69	11.57	4.08	
0840	0.75	7.86	12.10	.225	-109	6.44	4.52	4.09	
0850	1.00	7.87	12.19	.225	-115	6.21	1.62	4.09	
0900	1.30	7.87	12.61	.225	-112	2.35	0.98	4.09	

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: 15057-MW-41Z2 Sample Date: 2-26-14 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-41 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0910	1.5	7.86	12.58	.225	-123	1.49	0.82	4.09	
0920	1.75	7.86	12.54	.226	-123	1.42	0.63	4.09	
0930	2.00	7.86	12.40	.225	-123	1.40	0.94	4.09	

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 3

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: 240° overcast

2. WELL DATA

Date Measured: 2-23-15 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: 12.11 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: 286.89 feet Well Volume: 11.76 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: 2-25-15 Time: 1415

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): 2 hours well volumes or stabilized gallons

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

Equipment Model(s)
1. YSI
2. 408 Pump
3. LaMotte
4.

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
1420	.1	9.11	12.67	.368	-12.4	3.44	83.4		
1430	.2	9.09	12.68	.367	-26.5	3.44	71.1	21.23	
1440	.3	9.04	11.90	.369	-33.1	3.90	56.1	25.18	
1450	.4	8.98	11.23	.369	-37.6	4.39	31.4	28.70	
1500	.5	8.93	10.41	.366	-39.0	4.86	50.2	33.46	increased PSI

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: 150526-MW-41-ZONE3 Sample Date: 2-25-15 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

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 1)

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
1510	.6	9.00	11.92	.370	-48.7	4.49	48.4	37.11	slowed pump
1520	.7	8.93	10.66	.370	-45.8	4.99	34.3	39.65	
1530	.8	8.86	10.60	.370	-42.1	5.64	48.6	41.66	
1540	.9	~~8.86~~	9.75	.370	-39.5	6.07	52.8	43.08	ph 8.83
1550	1.0	8.96	10.87	.369	-45.0	5.03	42.7	46.93	increase psi
1600	1.1	8.91	10.65	.369	-42.0	5.24	50.3	48.50	
1610	1.2	8.87	10.06	.369	-38.0	5.55	~~37.9~~	50.51	48.4 turb.
1620	1.3	8.86	9.55	.369	-34.4	5.71	54.8	52.54	
				2 hour	limit				
				1620	sample				

Purge data continued on next sheet? ☐

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 1

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Reid Hobbs

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

2. WELL DATA

Date Measured: 2-23-15 Time: 1000 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: 37' 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 feet Well Volume: 3.77 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: 2-23-15 Time: 1040

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. YSI
2. Turb meter
3. MP-50
4. WLM

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
1055	0	9.79	14.84	0.154	87.5	8.24	2.45	37.4	
1105	0.25	10.17	15.88	0.152	50.6	4.60	1.04	37.5	
1115	0.40	10.26	16.92	0.157	28.8	3.65	0.14	37.6	
1125	0.50	10.27	17.16	0.160	21.0	3.62	0.13	37.6	
1135	0.60	10.26	17.18	0.163	13.1	4.05	0.25	37.7	

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:

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: 37.7 Field Filtered? ☐ Yes ☑ No

Sample ID: 15054-MW-42Zone1 Sample Date: 2-23-15 Sample Time: 1145 # 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-42 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1145	1.0	10.39	17.28	0.174	22.1	3.93	0.00	37.7	

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: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel:

Project Location: Anderson, South Carolina Weather:

2. WELL DATA

Date Measured: 02-23-15 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: 222 feet From: ☑Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: ~~446~~ 446 feet From: ☑Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Product: 446 feet From: ☐Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Length of Water Column: ~~177~~ 177.9 feet Well Volume: 1.27 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: 02-23-15 Time: ~~1225~~ 1315

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 22 gallons

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

Equipment Model(s)
1. WLM
2. YSI
3. Turb Meter
4. MP-50

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
~~1225~~	0.0								
1310	0.00	7.81	15.03	0.593	-98.0	5.10	0.73	92.4	
1320	0.45	7.67	15.98	0.604	-127.4	2.60	0.89	98.0	
1330	0.70	7.66	15.73	0.600	128.7	2.91	5.82	68.6	
1340	0.85	7.67	15.30	0.594	129.0	3.40	1.06	66.4	

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: 66.4 Field Filtered? ☐Yes ☑No

Sample ID: 15054-MW42-Zone2 Sample Date: 2-23-15 Sample Time: 1400 # 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 2

3. PURGE DATA (continued from page ____)

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
1350	0.95	7.69	15.14	0.591	-113.8	3.63	7.71	68.3	

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 3

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Reid Hobby

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

2. WELL DATA

Date Measured: 2-23-15 Time: 1430 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: 83.35 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: 256.65 feet — Well Volume: 10.31 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: 2-23-15 Time: ~~1440~~ 1500

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 30.93 gallons

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

Equipment Model(s): 1. WLM 2. YSI 3. Turb Meter 4. MP-50

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
1500	0.0	8.25	15.92	0.206	-101.7	6.30	1.17	34.5	
1510	0.2	7.96	15.77	0.195	-146.5	2.32	0.26	38.3	
1520	0.4	7.97	15.70	0.195	-152.4	2.13	0.09	40.9	
1530	0.6	7.98	15.67	0.195	-152.0	2.14	1.68	42.5	
1540	0.7	7.98	15.65	0.195	-150.8	2.04	1.16	44.7	

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:

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: 44.7 Field Filtered? ☐ Yes ☑ No

Sample ID: 1505-4-mw42 zone3 Sample Date: 2-23-15 Sample Time: 1545 # of Containers: 2

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

Equipment Blank Collected? ☑ Yes ☐ No ID: 1505-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-42 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 ±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? ☐

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

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 1

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: SKala

Project Location: Anderson, South Carolina Weather: ~30° overcast

2. WELL DATA

Date Measured: 2-23-15 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: 112.5 feet From: ☑Top of Well Casing (TOC) ☐Top of Protective Casing ☐Other:

Depth to Static Water: 5.94 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: 106.56 feet Well Volume: 4.37 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: 2-25-15 Time: 0815

Equipment Model(s)

1. YSI
2. LaMotte
3. 408
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): 2 hours 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0820	.1	6.94	12.33	.122	175.1	~~175.1~~	0.90	6.14	DO= 4.10
0830	.2	6.97	13.02	.119	168.9	4.14	1.11	6.14	2 GPM, 30 PSI
0840	.3	6.96	13.17	.119	166.3	3.92	1.65	6.14	
0850	.4	6.95	13.32	.119	163.4	4.35	1.34	6.14	
0900	.5	6.94	13.40	.119	161.5	4.18	1.37	6.14	

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: 15056-MW-43-21 Sample Date: 2-25-15 Sample Time: 0930 # of Containers: 3

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.

MH

Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0910	.6	6.94	13.46	.119	159.8	4.22	1.18	6.14	
0920	.7	6.91	13.43	.119	158.3	4.21	1.79	6.14	
0930	.8	6.91	13.50	.116	156.9	4.27	1.03	6.14	
				0930	sample				

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-43 Zone 2

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~35° overcast

2. WELL DATA

Date Measured: 2-23-15 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: 18.40 feet From: ☑ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Static Water: 3.71 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: 14.69 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: 2-25-15 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): 2 hours 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. 408

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
1000	.2	7.56	13.06	.204	1.0	2.36	.34	5.18	
1010	.4	7.64	13.52	.203	-49.8	2.33	.65	5.19	
1020	.6	7.75	13.73	.201	-56.2	2.30	.79	6.11	
1030	.8	7.87	13.94	.201	-59.5	2.37		6.11	
1040	1.0	7.90	14.05	.201	-64.3	2.67	.64	6.11	

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: 150526-MW-43-Z2 Sample Date: 2-25-15 Sample Time: 1110 # 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 ____)

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
1050	1.2	7.95	14.02	.200	-68.0	2.61	0.47	6.11	
1100	1.4	8.00	14.02	.201	-71.2	2.60	0.69	6.11	
1110	1.6	8.00	14.13	.201	-71.9	2.60	0.49	6.11	
				1110	sample				

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: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~35° overcast

2. WELL DATA

Date Measured: 2-25-15 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: 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: 280.65 feet Well Volume: 11.50 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: 2-25-15 Time: 11:30

Equipment Model(s)

1. YSI
2. LaMotte
3. 408 pump
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): 2 well volumes or Stabil. 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
1135	.1	7.68	12.68	.332	-57.6	3.06	1.51	10.91	
1145	.2	7.66	12.89	.333	-79.3	2.79	.75	15.68	
1155	.3	7.61	12.96	.333	-82.4	3.05	0.99	20.54	slower pump
1205	.4	7.51	11.48	.333	-73.6	3.44	0.79	25.11	
1215	.45	7.51	10.91	.333	-68.3	3.70	0.98	27.29	

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: 15056-MW43-Z3 Sample Date: 2-25-15 Sample Time: 1315 # of Containers: 2

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

Equipment Blank Collected? ☑Yes ☐No ID: 15056-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-43 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1225	.5	7.52	10.38	.334	-63.5	3.83	0.57	27.41	
1235	.55	7.53	10.50	.333	-60.8	3.79	1.05	28.12	
1245	.60	7.51	10.04	.334	-56.0	4.04	0.68	30.03	
1255	.65	7.50	9.69	.333	-51.6	4.13	0.49	30.68	
1305	.70	7.50	9.32	.334	-47.0	4.14	0.12	31.39	
1315	.75	7.49	9.30	.334	-44.4	4.14	0.65	32.35	
				@1315	sample				

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-44

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: 55° overcast

2. WELL DATA

Date Measured: 2-23-15 Time: PM 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: 11.81 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: 288.19 feet Well Volume: 48.12 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: 2-23-15 Time: 1315

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): 2 hours well volumes or Stability gallons

Was well purged dry? ☐ Yes ☑ No Pumping Rate: 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1320	2.5	9.33	15.73	.209	173.4	1.21	0.69	11.93	
1325	5.0	9.36	15.85	.211	142.8	1.03	0.96	12.04	
1330	7.5	9.38	15.93	.211	102.1	0.97	0.42	12.17	
1335	10.0	9.41	15.98	.212	53.5	0.97	0.84	12.33	
1340	12.5	9.40	16.03	.212	37.6	0.95	0.61	12.54	

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: 15054-MW-44 Sample Date: 2-23-15 Sample Time: 1340 # 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

Stability

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

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel:

Project Location: Anderson, South Carolina Weather: ~70° Sunny

2. WELL DATA

Date Measured: 5/4/15 Time: Am 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: 23.65 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: 5/5/15 Time: 0830

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): 2 hours well volumes or Stability gallons

Was well purged dry? ☐ Yes ☐ No Pumping Rate: 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0835	3.0	6.50	17.29	.201	-2.5	2.51	3.41	23.91	
0840	5.0	6.56	17.32	.198	-17.9	2.04	0.49	28.86	
0845	8.0	6.57	17.36	.198	-37.1	1.65	0.00	28.61	
0850	10.0	6.58	17.39	.197	-57.1	1.64	0.00	28.72	
0855	12.0	6.58	17.41	.195	-69.1	1.67	6.00	29.08	

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: 15125-MW15 Sample Date: 5/5/15 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

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: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: Hot Sunny

2. WELL DATA

Date Measured: 5/4/15 Time: 4pm 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: 10.43 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: 5/4/15 Time: 1435

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. GeoSub

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

3. LaMotte

Volume to Purge (minimum): 2 hours well volumes or ~~3 casing~~ stability gallons

4.

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
1440	4.0	5.49	18.39	.139	-8.2	1.04	0.51	10.51	
1445	8.0	5.46	18.45	.139	-6.7	1.17	0.39	10.51	
1450	12.0	5.45	18.36	.139	-4.4	0.97	0.60	10.51	
1455	16.0	5.44	18.46	.139	-2.1	0.95	0.00	10.51	
1500	20.0	5.44	18.37	.139	0.2	0.94	0.00	10.51	

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: BD24-MW22 Sample Date: 5/4/15 Sample Time: 1500 # 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-29R Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~80° Sunny

2. WELL DATA

Date Measured: 5/4/15 Time: Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Inteval: 154.5-169.6 feet

Depth to Static Water: 6927 Dg

Depth to Product: feet

Length of Water Column: 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: 5-5-15 Time: 1105

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): 2 hours 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.

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
1110	.5	5.75	17.85	.167	-74.3	0.49	1.54	6927	
1115	.75	5.62	17.86	.175	-86.0	0.64	1.07	6927	
1120	1.0	5.61	17.82	.174	-93.2	0.61	1.01	6927	
1125	1.25	5.60	17.85	.171	-97.5	0.60	0.45	6927	
1130	1.50	5.60	17.89	.171	-100.5	0.65	0.00	6927	

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: 15125-MW-29R-Z3 Sample Date: 5-5-15 Sample Time: 1130 # 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

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

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 4-Waterloo

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: SKala

Project Location: Anderson, South Carolina Weather: ~80°

2. WELL DATA

Date Measured: 5/4/15 Time: AM Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 177.6-202.2 feet

Depth to Static Water: 6293 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: 5/5/15 Time: 1190

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): 2 hours 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.

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
1145	.25	5.75	18.08	.149	-115.6	0.39	0.97	6295	
1150	.50	5.58	18.15	.154	-111.1	0.46	0.26	6295	
1155	.75	5.57	18.12	.154	-114.2	0.46	0.10	6295	
1200	1.00	5.57	18.13	.153	-111.2	0.47	0.00	6295	
1205	1.25	5.57	18.19	.153	-105.6	0.46	0.00	6295	

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: 15125-MW-29R-24 Sample Date: 5/5/15 Sample Time: 1205 # of Containers: 2

Duplicate Sample Collected? ☑ Yes ☐ No ID: 15125-DUP # 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

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

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: SJG/C

Project Location: Anderson, South Carolina Weather: ~60°

2. WELL DATA

Date Measured: 5/4/15 Time: Am 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~~ 10.57 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: 5/4/15 Time: 1305

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.

Volume to Purge (minimum): 3 hours well volumes or Stability gallons

4.

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
1310	3.5	9.80	16.36	.251	31.1	8.16	2.67	19.87	
1315	6.0	9.82	16.49	.251	28.3	7.96	2.53	19.99	
1320	9.0	9.80	16.47	.252	25.0	7.80	1.53	21.03	
1325	12.0	9.52	16.55	.252	-2.0	6.82	1.74	21.46	
1330	15.0	9.51	16.58	.251	-9.1	6.80	1.11	22.30	

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: 15124-MW-35 Sample Date: 5/4/15 Sample Time: 1335 # of Containers: 2

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

Equipment Blank Collected? ☑ Yes ☐ No ID: 15124-EB # of Containers: 2

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

pump at ~ 155 ft

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-35

3. PURGE DATA (continued from page ____)

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
1335	18.0	9.53	16.52	.251	-19.8	6.85	0.00	22.52	
				1335	sample				
				pH, temp, spec cond, DO					

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-36 Zone 1-Waterloo

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: MJ

Project Location: Anderson, South Carolina Weather: ~70° Sunny

2. WELL DATA

Date Measured: 5/4/15 Time: Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Interval: 99.1-116 feet

Depth to Static Water: 6175.9 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: 5/5/15 Time: 0950

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): 2 hours well volumes or Stability gallons

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

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

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
0955	.3	6.12	17.56	.108	-31.6	1.40	4.96	6179	
1005	.8	6.08	17.58	.108	-30.0	1.65	1.41	6179	
1015	1.5	6.07	17.63	.107	-30.7	2.13	1.11	6179	
1025	2.0	6.07	17.62	.107	-36.5	1.87	1.03	6179	
1035	2.5	6.06	17.62	.107	-40.5	1.87	0.00	6179	
1045	3.0	6.06	17.60	.107	-42.1	1.87	0.00		

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: IS125-mw-36-31 Sample Date: 5/5/15 Sample Time: 1045 # 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: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skale

Project Location: Anderson, South Carolina Weather: ~70° Sunny

2. WELL DATA

Date Measured: 5/4/15 Time: 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: 5/5/15 Time: 0930

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:

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

Volume to Purge (minimum): 2 hours well volumes or Stability gallons

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

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

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
0925	.2	7.09	17.29	1.381	-109.0	1.23	11.91	6892	
0935	.3	7.09	17.75	1.385	-91.4	.91	29.60	8435	
0945	.6	7.09	18.09	1.387	-74.6	.92	—	—	
				DRY at 0945					

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: Sample Date: 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

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

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 5-Waterloo

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~85° Sunny

2. WELL DATA

Date Measured: 5/4/15 Time: AM Temporary Well: ☐Yes ☐No

Casing Diameter: 2 inches

Screen Diameter: 6 inches

Sampling Intervall: 269.9-275 feet

Depth to Static Water: 6070 feet

Depth to Product: feet

Length of Water Column: feet

Length of water column calculation:
(8843.2-Current Dg reading)*0.03897)*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")
= [7.49 gal - 0.85 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: 5/5/15 Time: 0950

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:

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

Volume to Purge (minimum): 2 hours well volumes or Stability gallons

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

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

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
0950			NO	Flow,	see	field	book		
1225	—	—	Start	purge,	water	flowing	now	—	murky, high turb
1230	.2	7.42	17.56	2.964	-114.5	0.86	<1000	7889	
1240	.3	7.41	18.53	2.973	-122.5	0.64	<1000	7889	
1250	.4	7.43	18.96	2.977	-87.6	0.54	—	—	

stop, not high enough PSI.

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: 1512s-mw-36-25 Sample Date: 5/5/15 Sample Time: 1300 # 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

Sample: 1512s-mw-36-25, time = 1300

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 1

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. Whetstone

Project Location: Anderson, South Carolina Weather: Sunny, Clear

2. WELL DATA

Date Measured: _____ Time: _____ 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: _____ 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:

29.55 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: 05/06/2015 Time: 1035

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. QED MicroPurge
2. YSI 556
3. LaMotte 2020e
4. Heron Skinny Dipper

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
1040	0	8.65	17.42	0.813	-33.0	1.18	1.09	32.91	
1045	0.2	8.01	17.09	0.808	-1.6	0.62	0.84	36.44	
1050	0.35	7.75	17.10	0.806	12.0	0.52	0.73	39.70	
1055	0.5	7.66	17.15	0.803	16.7	0.45	0.91	42.33	
1100	0.7	7.59	17.42	0.801	19.6	0.41	0.78	44.82	

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: _____ Field Filtered? ☐ Yes ☐ No

Sample ID: 15126-MW-37-ZONE1 Sample Date: 05062015 Sample Time: 1115 # of Containers: 2

Duplicate Sample Collected? ☑ Yes ☐ No ID: 15126-DUP # 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-37 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1105	0.9	7.57	17.36	0.800	21.4	0.40	0.63	47.21	
1110	1.1	7.54	17.41	0.799	24.3	0.38	0.51	49.84	

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-37 Zone 2

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. Whetstone

Project Location: Anderson, South Carolina Weather: Sunny, Clear

2. WELL DATA

Date Measured: _____ Time: _____ 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:

30.93 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: 05/06/2015 Time: 0916

Equipment Model(s)

1. QED MicroPurge
2. YSI 556 MPS
3. LaMotte 2020e
4. Heron Skinny Dipper

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
0920	0	7.55	16.27	0.479	124.7	1.14	29.30	2.04	
0925	0.15	9.32	16.30	0.392	115.8	0.50	1.72	29.29	
0930	0.3	9.89	16.36	0.467	121.7	0.37	1.14	29.29	
0935	0.5	10.14	16.32	0.565	120.6	0.29	0.66	29.29	
0940	0.7	10.19	16.29	0.592	117.4	0.25	0.93	29.30	

SPED UP →

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: 15126-MW-37-Zone 2 Sample Date: 05062015 Sample Time: 0955 # 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

3. PURGE DATA (continued from page 1)

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
0945	0.9	10.21	16.29	0.599	115.4	0.23	1.34	29.31	
0950	1.1	10.23	16.44	0.603	112.8	0.22	0.99	29.30	

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-37 Zone 3

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200.001 Area of Concern:

Client: Owens Corning Personnel: K. WHETSTONE

Project Location: Anderson, South Carolina Weather: SUNNY, CLEAR

2. WELL DATA

Date Measured: _____ Time: _____ 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:

33.01 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: 05/05/2015 Time: 1440

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. QED MICROPURGE
2. YSI 556
3. LAMOTTE 2020e
4. HERON SKINNY DIPPER

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
1450	0	7.60	20.22	0.588	-12.6	0.83	1.57	36.31	
1455	0.15	7.06	20.00	0.588	28.5	0.31	1.21	40.39	
1500	0.3	6.97	20.75	0.585	36.6	0.25	0.77	42.79	
1505	0.45	7.08	21.01	0.585	29.7	0.23	0.81	45.12	
1510	0.6	7.17	21.36	0.586	23.2	0.22	0.96	47.74	

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: 15125-MW-37-20150505 Sample Date: 05052015 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.

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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1515	0.75	7.26	21.58	0.585	18.3	0.23	0.83	50.10	
1520	0.9	7.32	22.09	0.584	15.7	0.24	0.80	52.31	
1525	1.05	7.37	22.08	0.583	15.0	0.25	0.72	53.89	
1530	1.2	7.38	22.06	0.586	15.8	0.26	0.79	55.05	

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 1

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~70° Sunny

2. WELL DATA

Date Measured: 5/4/15 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: 430 feet From: ☑ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 16.79 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: 5/6/15 Time: 0830

Equipment Model(s)

1. YSI
2. MP-50
3. LaMotte
4. YOS pump

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): 2 hours 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0835	.2	7.54	16.08	.834	-191.5	2.70	1.94	18.39	
0845	~~.5~~ .5	7.92	16.13	.821	-193.9	0.73	0.89	19.71	
0855	1.0	7.96	16.22	.808	-184.7	0.48	0.43	20.22	
0905	1.4	7.96	16.27	.751	-183.0	0.46	0.83	20.96	
0915	1.6	7.86	16.32	.711	-158.9	0.63	0.62	21.41	

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: S126mw38-Z1 Sample Date: 5/6/15 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0925	1.7	7.81	16.48	.704	-150.2	.68	0.00	22.89	slowed pump
0935	1.8	7.78	16.70	.700	-144.6	.69	0.00	23.75	
0945	2.0	7.77	16.74	6.95	-142.9	.69	0.00	24.52	
0955	2.2	7.77	17.04	.694	-142.2	.67	0.00	25.03	
				0955 Sample					
				pH, Spec Cond, DO, temp					

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: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Stala

Project Location: Anderson, South Carolina Weather: ~95° Sunny

2. WELL DATA

Date Measured: 5/4/15 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: 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: ~~500~~ 499.7 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: 5/5/15 Time: 1340

Purge Method: ☐ Bailer, Size: artesian ☐ 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): 2 hours well volumes or Stability gallons

Was well purged dry? ☐ Yes ☑ No Pumping Rate: 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1345	1.0	7.78	16.99	.183	-138.9	0.40	0.26	artesian	
1355	1.5	7.88	17.63	.183	-135.3	0.30	0.00	"	
1405	2.0	7.89	17.84	.183	-127.1	.27	0.00	"	
1415	2.5	7.90	17.91	.183	-134.4	.24	0.00	"	
1425	3.0	7.92	17.68	.182	-146.9	.21	0.00	"	

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: Field Filtered? ☐ Yes ☐ No

Sample ID: BDS-MW38-20150505 Sample Date: 5/5/15 Sample Time: 1445 # of Containers: 3

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 2

3. PURGE DATA (continued from page ____)

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
1435	4.0	7.91	18.09	.182	-142.2	.20	0.00	artesian	
1445	4.5	7.92	17.86	.182	-138.7	.20	0.00	"	
				1445 Sample					

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-39 Zone 1

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. Whetstone

Project Location: Anderson, South Carolina Weather: Sunny / Clear

2. WELL DATA

Date Measured: _____ Time: _____ 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: _____ 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): _____

13.99

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: 05052015 Time: 0900

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. QED MicroPurge
2. YSI 556 MPS
3. LaMotte 2020e
4. Heron Skinny Dipper

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
0905	0	5.98	16.77	0.431	127.6	2.42	0.84	14.36	
0910	0.2	5.95	16.55	0.242	124.7	2.09	0.46	14.38	
0915	0.35	5.80	16.58	0.247	131.7	2.04	0.27	14.39	
0920	0.5	5.78	16.56	0.249	132.8	2.07	0.10	14.41	
0925	0.7	5.80	16.61	0.253	132.4	2.22	0.08	14.42	

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: 15125-MW-39-Zone1 Sample Date: 05052015 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-39 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0930	0.9	5.85	16.71	0.256	131.4	2.30	0.08	14.43	
0935	1.0	5.94	16.76	0.261	129.5	2.38	0.03	14.45	
0940	1.2	6.02	16.75	0.263	127.0	2.43	0.05	14.47	
0945	1.3	6.10	16.80	0.265	125.1	2.44	0.04	14.5	

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 2

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. Whetstone

Project Location: Anderson, South Carolina Weather: Sunny / Clear

2. WELL DATA

Date Measured: _____ Time: _____ 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: _____ 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): _____

30.38

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: 05/05/15 Time: 1029

Equipment Model(s)

1. QED MicroPurge
2. YSI 556 MPS
3. LaMotte 2020e
4. Heron Skinny Dipper

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
1032		7.29	18.16	0.656	6.6	0.74	3.06	33.54	
1037		7.09	18.19	0.654	31.9	0.32	2.42	37.12	
1042		7.04	18.27	0.654	39.4	0.29	1.61	40.99	
1047		7.04	18.14	0.657	43.9	0.29	1.53	44.23	
1052		7.08	18.34	0.659	47.4	0.32	1.72	47.55	
1057		7.12	18.57	0.660	47.8	0.34	1.69		

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: 15125-MW-39-ZONE2 Sample Date: 05052015 Sample Time: 1100 # 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 3

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. WHETSTONE

Project Location: Anderson, South Carolina Weather: SUNNY, CLEAR

2. WELL DATA

Date Measured: _____ Time: _____ 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: _____ 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: 05/05/2015 Time: 1145

Equipment Model(s)

1. QED MICROPURGE
2. YSI 556
3. LAMOTTE 2020e
4. HERON SKINNY DIPPER

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

46.52 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
1152	0	7.55	20.82	0.445	4.9	0.88	2.86	50.07	
1157	0.15	7.16	20.76	0.445	23.0	0.47	2.23	52.22	
1202	0.3	6.86	20.68	0.442	42.0	0.32	2.05	54.01	
1207	0.5	6.85	21.09	0.441	42.6	0.29	1.70	55.67	
1212	0.65	6.90	21.67	0.439	39.8	0.28	1.51	57.11	

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: 15125-MW-39-Zone3 Sample Date: 05052015 Sample Time: 1235 # of Containers: 2

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

Equipment Blank Collected? ☑ Yes ☐ No ID: 15125-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-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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1217	0.8	7.03	21.93	0.437	33.5	0.28	1.55	58.43	
1222	0.95	7.10	22.54	0.435	29.5	0.27	1.81	59.10	
1227	1.1	7.15	22.99	0.434	26.8	0.28	1.46	59.98	
1232	1.25	7.18	23.27	0.432	24.5	0.29			

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-41 Zone 1

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. Whetstone

Project Location: Anderson, South Carolina Weather: Sunny / Clear

2. WELL DATA

Date Measured: Time: 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: ~~120~~ 38 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: 05/06/2015 Time: 1412

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. QED MicroPurge
2. YSI 556 MPS
3. LaMotte 2020e
4. Heron Skinny Dipper

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
1415	0	8.27	19.37	0.355	-23.8	2.30	6.49	6.80	
1420	0.25	7.37	17.85	0.384	26.1	0.80	3.71	6.81	
1425	0.5	7.07	17.76	0.392	42.7	0.69	1.99	6.81	
1430	0.75	7.03	17.97	0.398	46.3	0.61	0.93	6.82	
1435	1.0	7.04	17.24	0.407	47.9	0.57	1.02	6.82	
1440	1.25	7.03	17.33	0.409	48.5	0.54	0.85	6.82	

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: Field Filtered? ☐ Yes ☐ No

Sample ID: 15126-MW-41-Zone1 Sample Date: 05062015 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

Live wasp nest inside metal casing

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-41 Zone 2

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. WHETSTONE

Project Location: Anderson, South Carolina Weather: SUNNY, CLEAR

2. WELL DATA

Date Measured: _____ Time: _____ 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: _____ 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: 05062015 Time: 1320

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. QED MICROPURGE
2. YSI 556 MPS
3. LAMOTTE 2020e
4. HERON SKINNY DIPPER

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
1325		8.10	18.78	0.395	-31.1	1.20	8.41	3.68	
1330		7.59	18.95	0.395	8.0	0.24	3.08	3.69	
1335		7.52	19.08	0.397	17.2	0.21	1.17	3.69	
1340		7.52	18.73	0.399	21.4	0.21	1.32	3.70	
1345		7.48	19.49	0.402	26.1	0.21	0.84	3.68	
1350		7.56	19.99	0.404	24.7	0.20	0.55	3.69	

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: 15126-MW-41-ZONE 2 Sample Date: 05062015 Sample Time: 1400 # 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

BALL VALVE HAD TO BE REMOVED 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-41 Zone 3

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. Whetstone

Project Location: Anderson, South Carolina Weather: Sunny, Clear

2. WELL DATA

Date Measured: _____ Time: _____ 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: _____ 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:

11.32 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: 05/07/15 Time: 0915

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. QED MicroPurge
2. YSI 556 MPS
3. LaMotte 2020e
4. Heron Skinny Dipper

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
0920	0	8.41	16.06	0.533	101.6	0.47	40.2	17.65	
0930	0.3	8.37	16.16	0.535	96.1	0.27	39.8	25.34	
0940	0.7	8.40	16.27	0.537	92.0	0.27	38.9	31.71	
0950	1.0	8.41	16.70	0.538	89.0	0.26	34.2	38.29	

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: 15127-MW-41-ZONE3 Sample Date: 05072015 Sample Time: 1100 # 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

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. Whetstone

Project Location: Anderson, South Carolina Weather: Sunny, Clear

2. WELL DATA

Date Measured: 5/04/2015 Time: 1105 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: 35.90 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: 93.10 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: 5/04/2015 Time: 1430

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. QED MicroPurge
2. YSI 556 MPS
3. LaMotte 2020e
4. Heron Skinny Dipper

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
1435	0	9.40	22.81	0.334	-64.2	3.60	3.96	35.55	
1440	0.15	9.96	20.10	0.417	-37.0	1.77	1.52	36.17	
1445	0.35	9.68	19.18	0.443	-7.1	1.53	0.40	36.28	
1450	0.6	9.57	18.91	0.448	0.5	1.46	0.46	36.29	
1455	0.85	9.53	18.93	0.450	6.8	1.39	0.57	36.29	

SPED UP TO .5 DISCHARGE

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: 15124-MW-42-ZONE1 Sample Date: 05042015 Sample Time: 1505 # 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 2)

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
1500	1.1	9.63	19.04	0.449	3.3	1.36	0.87		

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-42 Zone 2

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. Whetstone

Project Location: Anderson, South Carolina Weather: Sunny, Clear

2. WELL DATA

Date Measured: 5/04/2015 Time: 1105 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: 39.28 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: 182.72 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: 5/04/2015 Time: 1315

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. QED MicroPurge
2. YSI 556 MPS
3. LaMotte 2020e
4. Heron Skinny Dipper

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
1319	0	7.79	19.85	0.905	-35.0	1.34	2.66		
1324	0.15	7.23	20.15	0.891	7.9	0.43	3.93		
1330	0.3	7.12	20.22	0.885	15.9	0.34	2.53		
1335	0.45	7.11	20.27	0.884	16.9	0.32	2.50		
1341	0.6	6.98	18.90	0.881	29.3	0.33	1.74		

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: 15124-MW-42-Zone 2 Sample Date: 05042015 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-42 Zone 2

3. PURGE DATA (continued from page 2)

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
1345	0.75	6.97	18.96	0.878	30.5	0.33	1.54		
1350	0.9	6.99	19.20	0.875	30.6	0.34	1.35		
1355	1.0	7.09	19.86	0.869	25.5	0.34	1.42		
1400	1.1	7.08	19.79	0.870	29.2	0.33	1.38		

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-42 Zone 3

1. PROJECT INFORMATION

Project Number: 145492 Task Number: 200-xxx Area of Concern:

Client: Owens Corning Personnel: K. WHETSTONE

Project Location: Anderson, South Carolina Weather: SUNNY, CLEAR

2. WELL DATA

Date Measured: 5/4/2015 Time: 1110 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: 33.51 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: 251.49 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: 5/4/2015 Time: 1140

Equipment Model(s)

1. QED MICROPURGE
2. YSI 556 MPS
3. LAMOTTE 2020e
4. HERON SKINNY DIPPER

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
1149	0	5.90	18.73	0.368	73.1	3.71	4.28	34.22	
1154	0.125	6.60	18.70	0.361	33.7	1.37	1.70	35.75	
1159	0.25	6.71	18.59	0.363	33.7	0.91	1.06	37.64	
1204	0.4	6.79	18.49	0.363	31.5	0.61	0.87	39.81	
1209	0.5	6.88	18.30	0.364	28.1	0.44	2.12	41.76	

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: 15124-MW-42-ZONE3 Sample Date: 05042015 Sample Time: 1245 # 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 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 ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1216	0.65	6.94	18.27	0.367	24.4	0.36	0.38	43.72	
1220	0.75	6.98	18.28	0.371	22.5	0.33	2.93	45.88	
1226	0.9	7.14	18.57	0.368	16.4	0.29	14.1	47.92	SHOOK FLOWTHRU
1231	1.05	7.21	18.65	0.372	14.0	0.29	8.85	50.03	
1236	1.25	7.24	18.73	0.372	11.2	0.28	11.2	52.76	
1242	1.4	7.30	18.86	0.371	3.3	0.26	5.74		

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-43 Zone 1

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel:

Project Location: Anderson, South Carolina Weather: ~90° sunny

2. WELL DATA

Date Measured: 5/14/15 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: feet From: ☑ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Static Water: 6.13 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: 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: 5/6/15 Time: 1330

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): 2 hours well volumes or Stability gallons

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

Equipment Model(s)
1. YSI
2. LaMotte
3. 408 pump
4.

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
1335	.2	7.64	18.03	.141	-38.3	2.06	2.59	6.52	pump issue
1345	.4	7.47	20.03	.136	-41.6	0.98	2.31	6.52	
1355	.6	7.59	21.52	.138	-32.8	2.12	4.81	6.52	
1405	.8	7.27	21.53	.134	-52.3	0.79	4.01	6.52	
1415	1.0	7.23	21.57	.1134	-60.5	.64	3.67	6.52	

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:

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: 1526-mw-43-E1 Sample Date: 5/6/15 Sample Time: 1455 # of Containers: 2

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

Equipment Blank Collected? ☐ Yes ☐ No ID: 1526-EB # of Containers: 2

Geochemical Analyses

Ferrous Iron: mg/L

DO: mg/L

Nitrate: mg/L

Sulfate: mg/L

Alkalinity: mg/L

5. COMMENTS

EB at 1510

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

3. PURGE DATA (continued from page ____)

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
1425	1.2	7.22	22.03	.134	-64.3	.65	2.11	6.52	
1435	1.4	7.18	21.96	.133	-67.6	0.59	1.08	6.52	
1445	1.6	7.18	22.08	.133	-71.1	0.55	1.95	6.52	
1455	1.8	7.17	21.43	.134	-79.5	0.52	0.94	6.52	
				1455					
				sample pH, DO, spec Cond.					

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: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Stala

Project Location: Anderson, South Carolina Weather: 85° Sunny

2. WELL DATA

Date Measured: 5/4/15 Time: 4m 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: 5.7 feet From: ☑ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐

Depth to Static Water: 3.73 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: 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: 5/6/15 Time: 1200

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): 2 hours well volumes or stability gallons

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

Equipment Model(s)
1. YSI
2. LaMotte
3. 408 pump
4.

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
1205	.2	7.72	17.29	.214	-51.7	1.24	2.32	8.09	
1215	.4	7.89	17.32	.212	-125.7	1.29	1.15	8.09	
1225	.6	8.02	17.64	.210	-107.0	1.39	1.72	8.19	
1235	.8	8.08	17.43	.210	-96.7	1.55	1.43	8.19	
1245	1.0	8.12	17.48	.209	-91.7	1.63	1.05	8.19	

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: 1506-MW-43-S2 Sample Date: 5/6/15 Sample Time: 1315 # 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 2

3. PURGE DATA (continued from page ____)

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
1255	1.2	8.14	17.79	.210	-89.2	1.42	0.98	8.19	
1305	1.4	8.12	17.89	.209	-82.1	1.48	0.54	8.19	
1315	1.6	8.13	17.80	.209	-78.1	1.48	1.95	8.19	
				1315 sample pH, Spec Cond, DO.					

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-43 Zone 3

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern:

Client: Owens Corning Personnel: Skala

Project Location: Anderson, South Carolina Weather: ~80° sunny

2. WELL DATA

Date Measured: 5/4/15 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: feet From: ☑ Top of Well Casing (TOC) ☐ Top of Protective Casing ☐ Other:

Depth to Static Water: 26.8 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: 5/6/15 Time: 1020

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): 2 hours well volumes or stability gallons

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

Equipment Model(s)
1. 408 pump
2. YSI
3. LaMotte
4.

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
1025	.2	7.72	16.84	.337	-159.6	.34	8.61	15.91	2 GPM, 22/8
1035	.4	7.69	16.99	.337	-155.2	.34	1.23	18.76	
1045	.6	7.63	17.32	.338	-128.4	.42	2.82	21.49	
1055	.8	7.61	17.35	.339	-107.7	.65	2.54	22.51	
1105	1.0	7.60	17.57	.341	-94.8	.70	1.86	24.11	

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: ISDG-MW-43-Z3 Sample Date: 5/6/15 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 3

3. PURGE DATA (continued from page ____)

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
1115	1.2	7.60	17.68	.340	-85.4	.79	1.07	26.02	
1125	1.4	7.60	18.15	.341	-76.9	.99	0.85	27.41	
1135	1.6	7.60	18.54	.341	-72.1	.93	1.33	28.89	
1145	1.8	7.59	19.01	.342	-69.8	.93	1.29	30.13	
				1145 sample					

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-~~[illegible]~~ 4Y

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern: ______

Client: Owens Corning Personnel: [illegible]

Project Location: Anderson, South Carolina Weather: ~80° Sunny

2. WELL DATA

Date Measured: 5/4/15 Time: Am 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: 10.33 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: 289.67 feet Well Volume: 48.37 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: 5/4/15 Time: 1220

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): 2 hours well volumes or Stability gallons

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

Equipment Model(s)

1. YSI
2. GeoSub
3. LaMotte
4. ______

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
1225	3.0	9.02	16.52	.218	79.1	7.48	6.13	13.33	
1230	6.0	9.10	16.64	.218	57.0	7.35	1.28	13.33	
1235	9.0	9.15	16.73	.218	37.7	7.60	1.25	13.33	
1240	12.0	9.17	16.77	.218	29.9	7.60	0.71	13.33	
1245	15.0	9.17	16.86	.218	27.6	7.60	0.54	13.33	

Sample 1245

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: 1S124-MW-4Y Sample Date: 5/4/15 Sample Time: 1245 # 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: MJW

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 311 KAYE DR

1. PROJECT INFORMATION

Project Number:_____ Task Number:_____ Area of Concern:_____

Client:_____ Personnel: SKALA / WHETSTONE

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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 05/04/2015 Time: 1713

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 556

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

2. LAMOTTE 2020WE

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
1715	5.0	7.04	1757	0.230	65.6	1.85	0.05		

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: 15124-311 KAYE DR Sample Date: 05042015 Sample Time: 1718 # 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 051812 - sej)

Signature

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 303 KAYE DRIVE

1. PROJECT INFORMATION

Project Number:_____ Task Number:_____ Area of Concern:_____

Client:_____ Personnel: SKALA / WHETSTONE

Project Location:_____ Weather: SUNNY / CLEAR

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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 05/04/2015 Time: 1706

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. YSI 556
2. LA MOTTE 2020WE
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
1708	5.0	5.98	20.27	0.131	93.8	2.04	-0.01		

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: 15124-303 KAYE DR Sample Date: 05042015 Sample Time: 1710 # 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 051812 - sej)

Signature

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 119 CLOVERHILL DR

1. PROJECT INFORMATION

Project Number:_____ Task Number:_____ 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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 05/04/2015 Time: 1650

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. YSI 556
2. LaMotte 2020we
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
1652	5.0	5.72	17.43	0.045	69.8	2.04	0.35		

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: 15124.119 Cloverhill Dr Sample Date: 05042015 Sample Time: 1655 # 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:_____ Task Number:_____ Area of Concern:_____

Client:_____ Personnel: SKALA / WHETSTONE

Project Location:_____ Weather: SUNNY / CLEAR

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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 05/04/2015 Time: 1700

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
1703	5.0	6.38	17.96	0.086	75.2	1.91	0.62		

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: 15124-200 KAYE DR Sample Date: 05042015 Sample Time: 1705 # 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

UNDER FALSE ROCK IN REAR

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

FORM GW-2 (Rev 051812 - sej)

Signature

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 115 ELROD RD

1. PROJECT INFORMATION

Project Number:_____ Task Number:_____ 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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 05/04/2015 Time: 1640

Equipment Model(s)

1. YSI 556
2. LaMotte 2020we
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
1642	5.0	5.97	17.47	0.039	49.7	2.15	0.55		

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: 15124-115 ELROD RD Sample Date: 05042015 Sample Time: 1645 # 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: 721 CLINKSCALES RD

1. PROJECT INFORMATION

Project Number:_____ Task Number:_____ 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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 05/04/2015 Time: 1629

Equipment Model(s)

1. YSI 556 MPS
2. LA MOTTE 2020WE
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
1631	5.0	6.00	19.15	0.065	-0.3	2.12	0.29		

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: 15124-721 CLINKSCALES RD Sample Date: 05042015 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: 200 FRIENDSHIP LANE

1. PROJECT INFORMATION

Project Number:_____ Task Number:_____ 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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 05/04/2015 Time: 1620

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. YSI 556
2. LaMotte 2020we
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
1622	5.0	6.26	18.13	0.147	-34.7	1.62	4.42		

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: 1524-200 FRIENDSHIP LN Sample Date: 05042015 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.

FORM GW-2 (Rev 051812 - sej)

Signature

Brown AND Caldwell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 408 Clinkscales Rd

1. PROJECT INFORMATION

Project Number:_____ Task Number:_____ 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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 5/04/2015 Time: 1605

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. YSI 556 MPS
2. LA MOTTE 2020 WE
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
1608		6.85	18.75	0.067	-46.4	2.31	0.25		

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: 15124-408 CLINKSCALES RD Sample Date: 05042015 Sample Time: 1610 # 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 Rd

1. PROJECT INFORMATION

Project Number:_____ Task Number:_____ Area of Concern: WELLS DOES NOT FUNCTION

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 = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

✗Date Purged: _____ Time: _____

Equipment Model(s)

1. YSI
2. LaMotte
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
	5.0							—	
	OUT			OF		ORDER			

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:_____ ✗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

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~~ 412 KAYE DR

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: ~~X~~ inches Type: ❑ PVC ❑ Stainless ❑ Galv. Steel ❑ Teflon® ❑ Other:

Screen Diameter: ~~X~~ 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: 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: 05/04/2015 Time: 1726

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 ❑

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
1728	5.0	6.26	19.83	0.046	88.1	1.95	2.54		

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: 1524-42 KAYE DR Sample Date: 05042015 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

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 2~~ 117 FAYE DR

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: 4 inches Type: ❑ PVC ❑ Stainless ❑ Galv. Steel ❑ Teflon® ❑ Other:

Screen Diameter: 4 inches Type: ❑ PVC ❑ Stainless ❑ Galv. Steel ❑ Teflon® ❑ Other:

Total Depth of Well: 22.2 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: 05/04/2015 Time: 1733

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. YSI 556
2. LaMotte 2020we
3.
4.

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
1735	5.0	7.29	18.17	0.270	71.9	1.42	0.35		

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: 15124-117FAYEDR Sample Date: 05042015 Sample Time: 1738 # 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~~ 628 AIRLINE RD

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: ~~X~~ inches Type: ❑ PVC ❑ Stainless ❑ Galv. Steel ❑ Teflon® ❑ Other:

Screen Diameter: ~~X~~ 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: 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: 05/04/2015 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: gal/min

Equipment Model(s)

1. YSI 556
2. LAMOTTE 2020WE
3.
4.

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
1743	5.0	6.48	17.35	0.068	76.7	2.20	0.33		

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: 15124-628 AIRLINE RD Sample Date: 05042015 Sample Time: 1745 # 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

1303 Clarkscales Rd.

WELL ID: ~~MW-37 Zone 2~~

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: 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: 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
				Out of order					

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: 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

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 1~~ ~~605 Cloverdale Rd~~ 335 ELROD Rd

1. PROJECT INFORMATION

Project Number: 147297 Task Number: 100-xxx Area of Concern: MOTOR BROKEN

Client: Owens Corning Personnel:

Project Location: Anderson, South Carolina Weather:

2. WELL DATA

Date Measured: _____ Time: _____ 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: 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 ❑

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
		OUT OF ORDER							

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: 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

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

Brown AND Caldwell

LABORATORY DATA VERIFICATION FORM

1. PROJECT INFORMATION

Today's Date: 3-20-15

Project Number: 147297.100 Project Name/Client: Owens Corning

Project Manager: T. Berryman Sampled By: G. Skala

Laboratory: AES Order No.: 1502L26

2. SAMPLE INFORMATION

Purpose of sampling: Quarterly Sampling

Total number of samples: 33

☐ Groundwater: 28 ☐ Soil: _____ ☐ Soil Gas: _____ ☐ Trip Blank: 2

☐ Surface water: _____ ☐ Sediment: _____ ☐ Other: _____ ☐ Field Blank: _____

☐ Drinking water: _____ ☐ Air: _____ ☐ Other: _____ ☐ Equip Blank: 3

Analyses requested: Site specific VOCs

Method detection limits (MDLs) or reporting limits (RLs) requested: _____

Duplicates: 15055-DUP and 15056-DUP

3. DATA VERIFICATION

Check yes or no. Refer to applicable Data Verification Guidelines to determine appropriate action.

☑ Yes ☐ No ☐ NA **Was the Chain of Custody intact?**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Were custody seals intact on samples bottles and/or coolers as necessary?**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Were cooler temperatures within the acceptable range of 0-6°C?**

If no: Notes: 3.4

☑ Yes ☐ No ☐ NA **Were samples physically and chemically preserved properly (i.e. no bubbles in VOC vials)**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Was the case narrative of the analytical report free of any quality issues, discrepancies, etc.?**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Were all samples labeled, analyzed, and reported correctly? (no samples held, no wrong analyses, etc.)**

If no: If within holding time, call lab immediately. Notes: _____

☑ Yes ☐ No ☐ NA **Were all samples analyzed within holding time?**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Were appropriate analytes reported?**

If no: Notes: _____

☐ Yes ☐ No ☑ NA **Were soil and/or sediment concentrations reported appropriately? (DW vs WW)**

If no: Call lab immediately to verify. Notes: _____

☐ Yes ☐ No ☐ NA **If analyzed for the following parameters, was the following true for all analytes?**

- ☐ Yes ☐ No ☑ NA Total metals ≥ Dissolved metals
- ☐ Yes ☐ No ☑ NA TKN > Organic nitrogen
- ☐ Yes ☐ No ☑ NA TKN > Ammonia (NH_3)
- ☐ Yes ☐ No ☑ NA COD > TOC
- ☐ Yes ☐ No ☑ NA COD > BOD

If no: Report to project manager and contact lab's QA/QC manager if needed. Notes: _____

☑ Yes ☐ No ☐ NA **Were method detection limits (MDL), reporting limits (RLs), and/or dilution factors appropriate?**

If no: Report to project manager and contact lab if needed. Notes: _____

☑ Yes ☐ No ☐ NA **Were surrogate % recoveries within the acceptable range of LCL ≤ x ≤ UCL?**

If no: Notes: _____

☐ Yes ☑ No ☐ NA **Were target analytes detected in any field, equipment, and/or laboratory blanks?**

If yes: Notes: _____

Brown AND Caldwell

LABORATORY DATA VERIFICATION FORM

☐ Yes ☐ No ☑ NA **Were any target analytes detected below practical quantitation limits (PQLs)?**

If yes: Notes: _____

☑ Yes ☐ No ☐ NA **Were any sample duplicates collected?**

If yes: Notes: Comment No. 1

☐ Yes ☑ No ☐ NA **Were any laboratory duplicates reported for project samples?**

If yes: Notes: _____

☑ Yes ☐ No ☐ NA **Were any matrix spikes reported for project samples?**

If yes: Notes: No issues to report

☑ Yes ☐ No ☐ NA **Were any laboratory control samples reported?**

If yes: Notes: No issues to report

☐ Yes ☑ No ☐ NA **Were calibration standards reported?**

If yes: Notes: _____

4. COMMENTS & SUMMARY OF ACTIONS TAKEN (Attach additional pages if necessary)

Comment No. 1: Sample 15055-DUP is a field duplicate of sample 15055-MW-29R-Z3 and sample 15056-DUP is a field duplicate of sample 15056-MW-37-Z2. Refer to the attached sheet for a detailed duplicate comparison and calculated relative percent differences (RPDs). All calculated RPDs are within acceptable limits. No further actions required.

Sarah E Jones

Signature of Data Verifier

LABORATORY DATA VERIFICATION

Sample Duplicate Comparison

PROJECT INFORMATION

Project Number:	147297.1	**Project Name:**	Owens Corning	**Task/Purpose of Sampling:**	Quarterly Sampling
Project Manager:	T. Berryman	**Client:**	Owens Corning		
Laboratory:	AES	**Data Report:**	1502L26		

DUPLICATE INFORMATION

Parent Sample ID:	15055-MW-29R-Z3	**Date/Time:**	2/24/15 1255	**Matrix:**	Groundwater
Duplicate Sample ID:	15055-DUP	**Date/Time:**	2/24/15 xxxx	**Matrix:**	Groundwater

Analytes (Units)	Analytical Results[a]		Relative Percent Difference (RPD) Comparison		Reporting Limit (RL) Comparison (If Needed)					Actions Required
	15055-MW-29R-Z3	15055-DUP	RPD	Inorg: RPD > 20%? Org: RPD > 30%?	15055-MW-29R-Z3		15055-DUP		Either Sample Conc. ≥ 2X RLs?	
					RL	2x RL	RL	2x RL		
1,1-Dichloroethene (ug/L)	190	190	0%	NO						No further action required.
Chloroform	7	7.1	1%	NO						No further action required.
Carbon tetrachloride	8.8	8.8	0%	NO						No further action required.

DUPLICATE INFORMATION

Parent Sample ID:	15056-MW-37-Z2	**Date/Time:**	2/25/15 1310	**Matrix:**	Groundwater
Duplicate Sample ID:	15056-DUP	**Date/Time:**	2/25/15 xxxx	**Matrix:**	Groundwater

Analytes (Units)	Analytical Results[a]		Relative Percent Difference (RPD) Comparison		Reporting Limit (RL) Comparison (If Needed)					Actions Required
	15056-MW-37-Z2	15056-DUP	RPD	Inorg: RPD > 20%? Org: RPD > 30%?	15056-MW-37-Z2		15056-DUP		Either Sample Conc. ≥ 2X RLs?	
					RL	2x RL	RL	2x RL		
1,1-Dichloroethene (ug/L)	160	160	0%	NO						No further action required.
Chloroform	5.9	5.9	0%	NO						No further action required.

[a] Results in red text and italics were below reporting limits. Values are reporting limits for comparison purposes only.

Relative Percent Difference (RPD) is a quantitative indicator of quality assurance and quality control (QA/QC) for repeated measurements (i.e. duplicates) where the outcome is expected to be the same. It is calculated using the following equation:

$$RPD = \left| \frac{x_1 - x_2}{(x_1 + x_2)/2} \right| \times 100$$

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 05, 2015

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: 1502L26

Analytical Environmental Services, Inc. received 33 samples on 2/26/2015 1:30:00 PM 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:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-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 09/01/15.

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.

Tara Esbeck

Tara Esbeck
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: 1502L26

Date: 2-23-15 Page 1 of 2

COMPANY: Brown + Caldwell
ADDRESS: 990 Hammond Dr, Ste 400 Atlanta, Ga 30328
PHONE:
FAX:
SAMPLED BY: George Ayala, Reid Hobby
SIGNATURE: M Ayala

ANALYSIS REQUESTED: VOCs *

PRESERVATION (See codes): HI

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)	VOCs * (HI)	REMARKS	No # of Containers
1	15059-MW-41	2-23-15	1340	X		GW	X		2
2	15054-MW-35	2-23-15	1440	X		GW	X		↓
3	15054-MW-22	2-23-15	1550	X		GW	X		
4	15054-MW-42-Z1	2-23-15	1155	X		GW	X		
5	15054-MW-42-Z2	2-23-15	1400	X		GW	X		
6	15054-MW-42-Z3	2-23-15	1545	X		GW	X		
7	15054-EB	2-23-15	1550	X		W	X		
8	15055-MW-15	2-24-15	0830	X		GW	X		
9	15055-MW-36-Z1	2-24-15	1155	X		GW	↓		
10	15055-MW-36-Z3	2-24-15	1540	X		↓			
11	15055-MW-36-Z5	2-24-15	1600	X					
12	15055-MW-29R-Z3	2-24-15	1255	X					
13	15055-MW-29R-Z4	2-24-15	1335	X				1335 sample time	
14	15055-DUP	2-24-15	1200	X		↓	↓		↓

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: M Ayala	1330 2-26-15	1: Cataya Reeves	2/26/15 1:30
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: Owens-Corning
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: TBerryman@brwncald.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers

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:
OC - Site Specific VOCs only
MW-42 was written as "Zone", corresponds to "Z" on chain.

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: 1502L26

Date: _____ Page 2 of 3

COMPANY: Brown & Caldwell
ADDRESS: 990 Hammond Dr, Ste 400 Atlanta, Ga 30328
PHONE:
FAX:
SAMPLED BY: Slata, Hobbs
SIGNATURE: M Slata IV

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOCs *	PRESERVATION (See codes) HCl	REMARKS	No # of Containers
1	15055-MW-38-Z2	2-24-15	1520	X		GW	X			2
2	15055-MW-39-Z1	2-24-15	1035	X		GW				
3	15055-MW-39-Z2	2-24-15	1200	X		GW				
4	15055-MW-39-Z3	2-24-15	1320	X		GW				
5	15055-EB	2-24-15	1330	X		W				
6	15055-MW-37-Z3	2-24-15	1555	X		GW				
7	15056-MW-43-Z1	2-25-15	0930	X		GW				
8	15056-MW-43-Z2	2-25-15	1110	X		GW				
9	15056-MW-43-Z3	2-25-15	1315	X		GW				
10	15056-~~MW-4~~ EB	2-25-15	1330	X		~~GW~~ W			15056-EB, Water	
11	15056-MW-41-Z3	2-25-15	1620	X		GW			"Z3"	
12	15056-MW-38-Z1	2-25-15	1050	X		GW				
13	15056-MW-37-~~Z1~~ Z2	2-25-15	1310	X		GW				
14	15056-MW-37-~~Z2~~ Z1	2-25-15	1550	X		GW				

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: M Slata IV	1330 2-26-15	1: Latoya Reeves	2/26/15 1:39
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: Owens-Corning
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: TBerryman@brwncald.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers

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: OC Site Specific VOCs only

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: 1502L26

Date: _____ Page 3 of 3

COMPANY: Brown & Caldwell
ADDRESS: 990 Hammond Dr Ste 400 Atlanta, Ga 30328
PHONE:
FAX:
SAMPLED BY: Skala, Hobby
SIGNATURE: M Skala TH

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOCs*	HT	No # of Containers	REMARKS
1	15056-DUP	2-26-15	1200	X		GW	X		2	
2	15057-MW-41-Z1	2-26-15	1015	X		GW	X			
3	15057-MW-41-Z2	2-26-15	0930	X		GW	X			
4	Trip blanks	—	—	X		W	X			
5	Trip blanks	—	—	X		W	X			
6										
7										
8										
9										
10										
11										
12										
13										
14										

ANALYSIS REQUESTED

PRESERVATION (See codes)

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: M Skala TH	2-26-15 1330	1: Latoya Reeves	2/26/15 1:32p
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: Owens Corning
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: TBerryman@brwncald.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers

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:
Owens-Corning Site Specific VOCs ONLY

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 MAOE.

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 **Date:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15054-MW-44
Project Name:	Owens Corning	**Collection Date:**	2/23/2015 1:40:00 PM
Lab ID:	1502L26-001	**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	203817	1	03/02/2015 15:31	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 15:31	GK
Surr: 4-Bromofluorobenzene	96.1	70.6-123		%REC	203817	1	03/02/2015 15:31	GK
Surr: Dibromofluoromethane	97.1	78.7-124		%REC	203817	1	03/02/2015 15:31	GK
Surr: Toluene-d8	100	81.3-120		%REC	203817	1	03/02/2015 15:31	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15054-MW-35
Project Name:	Owens Corning	**Collection Date:**	2/23/2015 2:40:00 PM
Lab ID:	1502L26-002	**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	203817	1	03/02/2015 14:02	GK
1,1-Dichloroethene	53	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 14:02	GK
Surr: 4-Bromofluorobenzene	95.6	70.6-123		%REC	203817	1	03/02/2015 14:02	GK
Surr: Dibromofluoromethane	96.2	78.7-124		%REC	203817	1	03/02/2015 14:02	GK
Surr: Toluene-d8	99.7	81.3-120		%REC	203817	1	03/02/2015 14:02	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15054-MW-22
Project Name:	Owens Corning	**Collection Date:**	2/23/2015 3:50:00 PM
Lab ID:	1502L26-003	**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	203817	1	03/03/2015 18:51	GK
1,1-Dichloroethene	250	50		ug/L	203817	10	03/04/2015 14:08	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Chloroform	7.2	5.0		ug/L	203817	1	03/03/2015 18:51	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Carbon tetrachloride	14	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Benzene	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Toluene	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/03/2015 18:51	GK
Surr: 4-Bromofluorobenzene	93.5	70.6-123		%REC	203817	10	03/04/2015 14:08	GK
Surr: 4-Bromofluorobenzene	95.8	70.6-123		%REC	203817	1	03/03/2015 18:51	GK
Surr: Dibromofluoromethane	96.7	78.7-124		%REC	203817	1	03/03/2015 18:51	GK
Surr: Dibromofluoromethane	97.2	78.7-124		%REC	203817	10	03/04/2015 14:08	GK
Surr: Toluene-d8	99.2	81.3-120		%REC	203817	1	03/03/2015 18:51	GK
Surr: Toluene-d8	98.9	81.3-120		%REC	203817	10	03/04/2015 14:08	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15054-MW-42-Z1
Project Name:	Owens Corning	**Collection Date:**	2/23/2015 11:55:00 AM
Lab ID:	1502L26-004	**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	203817	1	03/02/2015 16:02	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 16:02	GK
Surr: 4-Bromofluorobenzene	96.5	70.6-123		%REC	203817	1	03/02/2015 16:02	GK
Surr: Dibromofluoromethane	97.3	78.7-124		%REC	203817	1	03/02/2015 16:02	GK
Surr: Toluene-d8	98.8	81.3-120		%REC	203817	1	03/02/2015 16:02	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15054-MW-42-Z2
Project Name:	Owens Corning	**Collection Date:**	2/23/2015 2:00:00 PM
Lab ID:	1502L26-005	**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	203817	1	03/02/2015 16:31	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 16:31	GK
Surr: 4-Bromofluorobenzene	96.6	70.6-123		%REC	203817	1	03/02/2015 16:31	GK
Surr: Dibromofluoromethane	101	78.7-124		%REC	203817	1	03/02/2015 16:31	GK
Surr: Toluene-d8	100	81.3-120		%REC	203817	1	03/02/2015 16:31	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15054-MW-42-Z3
Project Name:	Owens Corning	**Collection Date:**	2/23/2015 3:45:00 PM
Lab ID:	1502L26-006	**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	203817	1	03/02/2015 17:03	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 17:03	GK
Surr: 4-Bromofluorobenzene	95.9	70.6-123		%REC	203817	1	03/02/2015 17:03	GK
Surr: Dibromofluoromethane	97	78.7-124		%REC	203817	1	03/02/2015 17:03	GK
Surr: Toluene-d8	100	81.3-120		%REC	203817	1	03/02/2015 17:03	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15054-EB
Project Name:	Owens Corning	**Collection Date:**	2/23/2015 3:50:00 PM
Lab ID:	1502L26-007	**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	203817	1	03/02/2015 13:00	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 13:00	GK
Surr: 4-Bromofluorobenzene	95.7	70.6-123		%REC	203817	1	03/02/2015 13:00	GK
Surr: Dibromofluoromethane	95.2	78.7-124		%REC	203817	1	03/02/2015 13:00	GK
Surr: Toluene-d8	98.5	81.3-120		%REC	203817	1	03/02/2015 13:00	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-15
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 8:30:00 AM
Lab ID:	1502L26-008	**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	203817	1	03/02/2015 17:34	GK
1,1-Dichloroethene	130	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 17:34	GK
Surr: 4-Bromofluorobenzene	94.8	70.6-123		%REC	203817	1	03/02/2015 17:34	GK
Surr: Dibromofluoromethane	96.4	78.7-124		%REC	203817	1	03/02/2015 17:34	GK
Surr: Toluene-d8	98.9	81.3-120		%REC	203817	1	03/02/2015 17:34	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-36-Z1
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 11:55:00 AM
Lab ID:	1502L26-009	**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	203817	1	03/02/2015 18:05	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 18:05	GK
Surr: 4-Bromofluorobenzene	95.8	70.6-123		%REC	203817	1	03/02/2015 18:05	GK
Surr: Dibromofluoromethane	96.9	78.7-124		%REC	203817	1	03/02/2015 18:05	GK
Surr: Toluene-d8	100	81.3-120		%REC	203817	1	03/02/2015 18:05	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-36-Z3
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 3:40:00 PM
Lab ID:	1502L26-010	**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	203817	1	03/02/2015 18:37	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 18:37	GK
Surr: 4-Bromofluorobenzene	95.1	70.6-123		%REC	203817	1	03/02/2015 18:37	GK
Surr: Dibromofluoromethane	97.4	78.7-124		%REC	203817	1	03/02/2015 18:37	GK
Surr: Toluene-d8	101	81.3-120		%REC	203817	1	03/02/2015 18:37	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-36-Z5
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 4:00:00 PM
Lab ID:	1502L26-011	**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	203817	1	03/02/2015 19:08	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 19:08	GK
Surr: 4-Bromofluorobenzene	95.9	70.6-123		%REC	203817	1	03/02/2015 19:08	GK
Surr: Dibromofluoromethane	96.5	78.7-124		%REC	203817	1	03/02/2015 19:08	GK
Surr: Toluene-d8	98.8	81.3-120		%REC	203817	1	03/02/2015 19:08	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-29R-Z3
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 12:55:00 PM
Lab ID:	1502L26-012	**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	203817	1	03/03/2015 19:22	GK
1,1-Dichloroethene	190	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Chloroform	7.0	5.0		ug/L	203817	1	03/03/2015 19:22	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Carbon tetrachloride	8.8	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Benzene	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Toluene	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/03/2015 19:22	GK
Surr: 4-Bromofluorobenzene	94.5	70.6-123		%REC	203817	1	03/03/2015 19:22	GK
Surr: Dibromofluoromethane	97.1	78.7-124		%REC	203817	1	03/03/2015 19:22	GK
Surr: Toluene-d8	100	81.3-120		%REC	203817	1	03/03/2015 19:22	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-29R-Z4
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 1:35:00 PM
Lab ID:	1502L26-013	**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	203817	1	03/03/2015 19:54	GK
1,1-Dichloroethene	180	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Chloroform	7.1	5.0		ug/L	203817	1	03/03/2015 19:54	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Carbon tetrachloride	7.5	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Benzene	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Toluene	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/03/2015 19:54	GK
Surr: 4-Bromofluorobenzene	94.1	70.6-123		%REC	203817	1	03/03/2015 19:54	GK
Surr: Dibromofluoromethane	98.2	78.7-124		%REC	203817	1	03/03/2015 19:54	GK
Surr: Toluene-d8	102	81.3-120		%REC	203817	1	03/03/2015 19:54	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-DUP
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 12:00:00 PM
Lab ID:	1502L26-014	**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	203817	1	03/03/2015 18:20	GK
1,1-Dichloroethene	190	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Chloroform	7.1	5.0		ug/L	203817	1	03/03/2015 18:20	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Carbon tetrachloride	8.8	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Benzene	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Toluene	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/03/2015 18:20	GK
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	203817	1	03/03/2015 18:20	GK
Surr: Dibromofluoromethane	97	78.7-124		%REC	203817	1	03/03/2015 18:20	GK
Surr: Toluene-d8	98.9	81.3-120		%REC	203817	1	03/03/2015 18:20	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-38-Z2
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 3:20:00 PM
Lab ID:	1502L26-015	**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	203817	1	03/02/2015 19:39	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 19:39	GK
Surr: 4-Bromofluorobenzene	96	70.6-123		%REC	203817	1	03/02/2015 19:39	GK
Surr: Dibromofluoromethane	96.9	78.7-124		%REC	203817	1	03/02/2015 19:39	GK
Surr: Toluene-d8	98.3	81.3-120		%REC	203817	1	03/02/2015 19:39	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-39-Z1
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 10:35:00 AM
Lab ID:	1502L26-016	**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	203817	1	03/04/2015 12:09	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Benzene	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Toluene	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/04/2015 12:09	GK
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	203817	1	03/04/2015 12:09	GK
Surr: Dibromofluoromethane	97.4	78.7-124		%REC	203817	1	03/04/2015 12:09	GK
Surr: Toluene-d8	101	81.3-120		%REC	203817	1	03/04/2015 12:09	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-39-Z2
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 12:00:00 PM
Lab ID:	1502L26-017	**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	203817	1	03/04/2015 12:38	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Benzene	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Toluene	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/04/2015 12:38	GK
Surr: 4-Bromofluorobenzene	95.7	70.6-123		%REC	203817	1	03/04/2015 12:38	GK
Surr: Dibromofluoromethane	98.2	78.7-124		%REC	203817	1	03/04/2015 12:38	GK
Surr: Toluene-d8	99.3	81.3-120		%REC	203817	1	03/04/2015 12:38	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-39-Z3
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 1:20:00 PM
Lab ID:	1502L26-018	**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	203817	1	03/04/2015 13:09	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Benzene	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Toluene	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/04/2015 13:09	GK
Surr: 4-Bromofluorobenzene	95.8	70.6-123		%REC	203817	1	03/04/2015 13:09	GK
Surr: Dibromofluoromethane	98.5	78.7-124		%REC	203817	1	03/04/2015 13:09	GK
Surr: Toluene-d8	101	81.3-120		%REC	203817	1	03/04/2015 13:09	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-EB
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 1:30:00 PM
Lab ID:	1502L26-019	**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	203817	1	03/02/2015 13:31	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Benzene	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Toluene	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/02/2015 13:31	GK
Surr: 4-Bromofluorobenzene	96.3	70.6-123		%REC	203817	1	03/02/2015 13:31	GK
Surr: Dibromofluoromethane	95.8	78.7-124		%REC	203817	1	03/02/2015 13:31	GK
Surr: Toluene-d8	99.1	81.3-120		%REC	203817	1	03/02/2015 13:31	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15055-MW-37-Z3
Project Name:	Owens Corning	**Collection Date:**	2/24/2015 3:55:00 PM
Lab ID:	1502L26-020	**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	203817	1	03/04/2015 13:39	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Methylene chloride	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Chloroform	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Carbon tetrachloride	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Benzene	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Trichloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Toluene	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Tetrachloroethene	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Ethylbenzene	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Xylenes, Total	BRL	5.0		ug/L	203817	1	03/04/2015 13:39	GK
Surr: 4-Bromofluorobenzene	93.8	70.6-123		%REC	203817	1	03/04/2015 13:39	GK
Surr: Dibromofluoromethane	98.3	78.7-124		%REC	203817	1	03/04/2015 13:39	GK
Surr: Toluene-d8	101	81.3-120		%REC	203817	1	03/04/2015 13:39	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-MW-43-Z1
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 9:30:00 AM
Lab ID:	1502L26-021	**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	203775	1	02/27/2015 17:33	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Chloroform	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Benzene	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Toluene	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	02/27/2015 17:33	GK
Surr: 4-Bromofluorobenzene	97.6	70.6-123		%REC	203775	1	02/27/2015 17:33	GK
Surr: Dibromofluoromethane	97	78.7-124		%REC	203775	1	02/27/2015 17:33	GK
Surr: Toluene-d8	100	81.3-120		%REC	203775	1	02/27/2015 17:33	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-MW-43-Z2
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 11:10:00 AM
Lab ID:	1502L26-022	**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	203775	1	02/27/2015 16:01	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Chloroform	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Benzene	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Toluene	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	02/27/2015 16:01	GK
Surr: 4-Bromofluorobenzene	97	70.6-123		%REC	203775	1	02/27/2015 16:01	GK
Surr: Dibromofluoromethane	95	78.7-124		%REC	203775	1	02/27/2015 16:01	GK
Surr: Toluene-d8	99.8	81.3-120		%REC	203775	1	02/27/2015 16:01	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-MW-43-Z3
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 1:15:00 PM
Lab ID:	1502L26-023	**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	203775	1	02/27/2015 18:04	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Chloroform	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Benzene	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Toluene	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	02/27/2015 18:04	GK
Surr: 4-Bromofluorobenzene	96.9	70.6-123		%REC	203775	1	02/27/2015 18:04	GK
Surr: Dibromofluoromethane	97.1	78.7-124		%REC	203775	1	02/27/2015 18:04	GK
Surr: Toluene-d8	99.9	81.3-120		%REC	203775	1	02/27/2015 18:04	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-EB
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 1:30:00 PM
Lab ID:	1502L26-024	**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	203775	1	02/27/2015 15:29	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Chloroform	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Benzene	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Toluene	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	02/27/2015 15:29	GK
Surr: 4-Bromofluorobenzene	96.6	70.6-123		%REC	203775	1	02/27/2015 15:29	GK
Surr: Dibromofluoromethane	96.7	78.7-124		%REC	203775	1	02/27/2015 15:29	GK
Surr: Toluene-d8	100	81.3-120		%REC	203775	1	02/27/2015 15:29	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-MW-41-Z3
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 4:20:00 PM
Lab ID:	1502L26-025	**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	203775	1	02/27/2015 18:35	GK
1,1-Dichloroethene	24	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Chloroform	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Benzene	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Toluene	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	02/27/2015 18:35	GK
Surr: 4-Bromofluorobenzene	97.1	70.6-123		%REC	203775	1	02/27/2015 18:35	GK
Surr: Dibromofluoromethane	96.8	78.7-124		%REC	203775	1	02/27/2015 18:35	GK
Surr: Toluene-d8	101	81.3-120		%REC	203775	1	02/27/2015 18:35	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-MW-38-Z1
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 10:50:00 AM
Lab ID:	1502L26-026	**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	203775	1	02/27/2015 19:07	GK
1,1-Dichloroethene	7.1	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Chloroform	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Benzene	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Toluene	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	02/27/2015 19:07	GK
Surr: 4-Bromofluorobenzene	97.3	70.6-123		%REC	203775	1	02/27/2015 19:07	GK
Surr: Dibromofluoromethane	96.5	78.7-124		%REC	203775	1	02/27/2015 19:07	GK
Surr: Toluene-d8	100	81.3-120		%REC	203775	1	02/27/2015 19:07	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-MW-37-Z2
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 1:10:00 PM
Lab ID:	1502L26-027	**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	203775	1	03/03/2015 15:49	GK
1,1-Dichloroethene	160	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Chloroform	5.9	5.0		ug/L	203775	1	03/03/2015 15:49	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Benzene	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Toluene	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	03/03/2015 15:49	GK
Surr: 4-Bromofluorobenzene	96.9	70.6-123		%REC	203775	1	03/03/2015 15:49	GK
Surr: Dibromofluoromethane	97.6	78.7-124		%REC	203775	1	03/03/2015 15:49	GK
Surr: Toluene-d8	101	81.3-120		%REC	203775	1	03/03/2015 15:49	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-MW-37-Z1
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 3:50:00 AM
Lab ID:	1502L26-028	**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	203775	1	03/03/2015 16:17	GK
1,1-Dichloroethene	65	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Chloroform	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Benzene	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Toluene	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	03/03/2015 16:17	GK
Surr: 4-Bromofluorobenzene	96.9	70.6-123		%REC	203775	1	03/03/2015 16:17	GK
Surr: Dibromofluoromethane	96.5	78.7-124		%REC	203775	1	03/03/2015 16:17	GK
Surr: Toluene-d8	100	81.3-120		%REC	203775	1	03/03/2015 16:17	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15056-DUP
Project Name:	Owens Corning	**Collection Date:**	2/25/2015 12:00:00 PM
Lab ID:	1502L26-029	**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	203775	1	03/03/2015 16:46	GK
1,1-Dichloroethene	160	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Chloroform	5.9	5.0		ug/L	203775	1	03/03/2015 16:46	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Benzene	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Toluene	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	03/03/2015 16:46	GK
Surr: 4-Bromofluorobenzene	96.3	70.6-123		%REC	203775	1	03/03/2015 16:46	GK
Surr: Dibromofluoromethane	98.8	78.7-124		%REC	203775	1	03/03/2015 16:46	GK
Surr: Toluene-d8	102	81.3-120		%REC	203775	1	03/03/2015 16:46	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15057-MW-41-Z1
Project Name:	Owens Corning	**Collection Date:**	2/26/2015 10:15:00 AM
Lab ID:	1502L26-030	**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	203775	1	03/03/2015 17:17	GK
1,1-Dichloroethene	110	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Chloroform	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Benzene	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Toluene	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	03/03/2015 17:17	GK
Surr: 4-Bromofluorobenzene	95.5	70.6-123		%REC	203775	1	03/03/2015 17:17	GK
Surr: Dibromofluoromethane	97.2	78.7-124		%REC	203775	1	03/03/2015 17:17	GK
Surr: Toluene-d8	99.9	81.3-120		%REC	203775	1	03/03/2015 17:17	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15057-MW-41-Z2
Project Name:	Owens Corning	**Collection Date:**	2/26/2015 9:30:00 AM
Lab ID:	1502L26-031	**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	203775	1	03/03/2015 17:49	GK
1,1-Dichloroethene	130	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Chloroform	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Benzene	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Toluene	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	03/03/2015 17:49	GK
Surr: 4-Bromofluorobenzene	94.9	70.6-123		%REC	203775	1	03/03/2015 17:49	GK
Surr: Dibromofluoromethane	97.3	78.7-124		%REC	203775	1	03/03/2015 17:49	GK
Surr: Toluene-d8	99.6	81.3-120		%REC	203775	1	03/03/2015 17:49	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	TRIP BLANKS
Project Name:	Owens Corning	**Collection Date:**	2/26/2015
Lab ID:	1502L26-032	**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	203775	1	02/27/2015 14:27	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Chloroform	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Benzene	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Toluene	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	02/27/2015 14:27	GK
Surr: 4-Bromofluorobenzene	96.8	70.6-123		%REC	203775	1	02/27/2015 14:27	GK
Surr: Dibromofluoromethane	95.6	78.7-124		%REC	203775	1	02/27/2015 14:27	GK
Surr: Toluene-d8	97.9	81.3-120		%REC	203775	1	02/27/2015 14:27	GK

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:** 5-Mar-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	TRIP BLANKS
Project Name:	Owens Corning	**Collection Date:**	2/26/2015
Lab ID:	1502L26-033	**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	203775	1	02/27/2015 14:58	GK
1,1-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Methylene chloride	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
1,1-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Chloroform	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Carbon tetrachloride	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Benzene	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
1,2-Dichloroethane	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Trichloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Toluene	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Tetrachloroethene	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Ethylbenzene	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Xylenes, Total	BRL	5.0		ug/L	203775	1	02/27/2015 14:58	GK
Surr: 4-Bromofluorobenzene	96.3	70.6-123		%REC	203775	1	02/27/2015 14:58	GK
Surr: Dibromofluoromethane	95.4	78.7-124		%REC	203775	1	02/27/2015 14:58	GK
Surr: Toluene-d8	99.4	81.3-120		%REC	203775	1	02/27/2015 14:58	GK

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 1502L26

Checklist completed by Katie Forum 2/26/15
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 3.4°C 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.

\\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
Workorder: 1502L26

ANALYTICAL QC SUMMARY REPORT

BatchID: 203775

Sample ID: **MB-203775** Client ID: Units: **ug/L** Prep Date: **02/27/2015** Run No: **286630**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **203775** Analysis Date: **02/27/2015** Seq No: **6085610**

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	48.27	0	50.00		96.5	70.6	123				
Surr: Dibromofluoromethane	48.34	0	50.00		96.7	78.7	124				
Surr: Toluene-d8	49.31	0	50.00		98.6	81.3	120				

Sample ID: **LCS-203775** Client ID: Units: **ug/L** Prep Date: **02/27/2015** Run No: **286630**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **203775** Analysis Date: **02/27/2015** Seq No: **6085791**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	45.98	5.0	50.00		92.0	64.2	137				
Benzene	45.97	5.0	50.00		91.9	72.8	128				
Toluene	45.76	5.0	50.00		91.5	74.9	127				

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: 1502L26

ANALYTICAL QC SUMMARY REPORT

BatchID: 203775

Sample ID: **LCS-203775**	Client ID:		Units: **ug/L**	Prep Date: **02/27/2015**	Run No: **286630**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **203775**	Analysis Date: **02/27/2015**	Seq No: **6085791**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Trichloroethene	45.42	5.0	50.00		90.8	70.5	134				
Surr: 4-Bromofluorobenzene	48.97	0	50.00		97.9	70.6	123				
Surr: Dibromofluoromethane	47.78	0	50.00		95.6	78.7	124				
Surr: Toluene-d8	49.16	0	50.00		98.3	81.3	120				

Sample ID: **1502L26-022AMS**	Client ID: **15056-MW-43-Z2**		Units: **ug/L**	Prep Date: **02/27/2015**	Run No: **286630**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **203775**	Analysis Date: **02/27/2015**	Seq No: **6086515**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	44.99	5.0	50.00		90.0	60.5	156				
Benzene	46.73	5.0	50.00		93.5	70	135				
Toluene	46.90	5.0	50.00		93.8	70.5	137				
Trichloroethene	45.63	5.0	50.00		91.3	71.8	139				
Surr: 4-Bromofluorobenzene	48.55	0	50.00		97.1	70.6	123				
Surr: Dibromofluoromethane	47.92	0	50.00		95.8	78.7	124				
Surr: Toluene-d8	50.18	0	50.00		100	81.3	120				

Sample ID: **1502L26-022AMSD**	Client ID: **15056-MW-43-Z2**		Units: **ug/L**	Prep Date: **02/27/2015**	Run No: **286630**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **203775**	Analysis Date: **02/27/2015**	Seq No: **6086516**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	44.06	5.0	50.00		88.1	60.5	156	44.99	2.09	20	
Benzene	45.05	5.0	50.00		90.1	70	135	46.73	3.66	20	
Toluene	45.24	5.0	50.00		90.5	70.5	137	46.90	3.60	20	
Trichloroethene	44.19	5.0	50.00		88.4	71.8	139	45.63	3.21	20	
Surr: 4-Bromofluorobenzene	47.87	0	50.00		95.7	70.6	123	48.55	0	0	
Surr: Dibromofluoromethane	47.55	0	50.00		95.1	78.7	124	47.92	0	0	
Surr: Toluene-d8	49.74	0	50.00		99.5	81.3	120	50.18	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: 1502L26

ANALYTICAL QC SUMMARY REPORT

BatchID: 203817

Sample ID: **MB-203817** Client ID: Units: **ug/L** Prep Date: **03/02/2015** Run No: **286697**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **203817** Analysis Date: **03/02/2015** Seq No: **6086626**

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	47.66	0	50.00		95.3	70.6	123				
Surr: Dibromofluoromethane	48.41	0	50.00		96.8	78.7	124				
Surr: Toluene-d8	49.15	0	50.00		98.3	81.3	120				

Sample ID: **LCS-203817** Client ID: Units: **ug/L** Prep Date: **03/02/2015** Run No: **286697**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **203817** Analysis Date: **03/02/2015** Seq No: **6086625**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	47.16	5.0	50.00		94.3	64.2	137				
Benzene	47.48	5.0	50.00		95.0	72.8	128				
Toluene	47.74	5.0	50.00		95.5	74.9	127				
Trichloroethene	48.16	5.0	50.00		96.3	70.5	134				

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: 1502L26

ANALYTICAL QC SUMMARY REPORT

BatchID: 203817

Sample ID: **LCS-203817** Client ID: Units: **ug/L** Prep Date: **03/02/2015** Run No: **286697**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **203817** Analysis Date: **03/02/2015** Seq No: **6086625**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	48.28	0	50.00		96.6	70.6	123				
Surr: Dibromofluoromethane	48.71	0	50.00		97.4	78.7	124				
Surr: Toluene-d8	49.24	0	50.00		98.5	81.3	120				

Sample ID: **1502L26-002AMS** Client ID: **15054-MW-35** Units: **ug/L** Prep Date: **03/02/2015** Run No: **286697**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **203817** Analysis Date: **03/02/2015** Seq No: **6087486**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	98.42	5.0	50.00	53.14	90.6	60.5	156				
Benzene	48.23	5.0	50.00		96.5	70	135				
Toluene	48.12	5.0	50.00		96.2	70.5	137				
Trichloroethene	47.59	5.0	50.00		95.2	71.8	139				
Surr: 4-Bromofluorobenzene	47.39	0	50.00		94.8	70.6	123				
Surr: Dibromofluoromethane	48.23	0	50.00		96.5	78.7	124				
Surr: Toluene-d8	49.91	0	50.00		99.8	81.3	120				

Sample ID: **1502L26-002AMSD** Client ID: **15054-MW-35** Units: **ug/L** Prep Date: **03/02/2015** Run No: **286697**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **203817** Analysis Date: **03/02/2015** Seq No: **6087554**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	97.30	5.0	50.00	53.14	88.3	60.5	156	98.42	1.14	20	
Benzene	47.41	5.0	50.00		94.8	70	135	48.23	1.71	20	
Toluene	47.25	5.0	50.00		94.5	70.5	137	48.12	1.82	20	
Trichloroethene	47.40	5.0	50.00		94.8	71.8	139	47.59	0.400	20	
Surr: 4-Bromofluorobenzene	47.78	0	50.00		95.6	70.6	123	47.39	0	0	
Surr: Dibromofluoromethane	48.08	0	50.00		96.2	78.7	124	48.23	0	0	
Surr: Toluene-d8	49.63	0	50.00		99.3	81.3	120	49.91	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		

Brown AND Caldwell

LABORATORY DATA VERIFICATION FORM

1. PROJECT INFORMATION

Today's Date: 5/21/15

Project Number: 147297-100-002 Project Name/Client: Owens Corning

Project Manager: T. Berryman Sampled By: G. Skala et al.

Laboratory: AES Order No.: 1505640

2. SAMPLE INFORMATION

Purpose of sampling: Quarterly groundwater sampling

Total number of samples: 43

☐ Groundwater: 39 ☐ Soil: _____ ☐ Soil Gas: _____ ☐ Trip Blank: 1

☐ Surface water: _____ ☐ Sediment: _____ ☐ Other: _____ ☐ Field Blank: _____

☐ Drinking water: _____ ☐ Air: _____ ☐ Other: _____ ☐ Equip Blank: 3

Analyses requested: Site specific VOCs

Method detection limits (MDLs) or reporting limits (RLs) requested: NA

Duplicates: 15125-Dup = 15125-MW-29R Z4 and 15126-Dup = 15126-MW-37 Z1

3. DATA VERIFICATION

Check yes or no. Refer to applicable Data Verification Guidelines to determine appropriate action.

☑ Yes ☐ No ☐ NA **Was the Chain of Custody intact?**

If no: Notes: Refer to Comment No. 1

☑ Yes ☐ No ☐ NA **Were custody seals intact on samples bottles and/or coolers as necessary?**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Were cooler temperatures within the acceptable range of 0-6°C?**

If no: Notes: 3.1 and 3.9

☑ Yes ☐ No ☐ NA **Were samples physically and chemically preserved properly (i.e. no bubbles in VOC vials)**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Was the case narrative of the analytical report free of any quality issues, discrepancies, etc.?**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Were all samples labeled, analyzed, and reported correctly? (no samples held, no wrong analyses, etc.)**

If no: If within holding time, call lab immediately. Notes: _____

☑ Yes ☐ No ☐ NA **Were all samples analyzed within holding time?**

If no: Notes: _____

☑ Yes ☐ No ☐ NA **Were appropriate analytes reported?**

If no: Notes: _____

☐ Yes ☐ No ☑ NA **Were soil and/or sediment concentrations reported appropriately? (DW vs WW)**

If no: Call lab immediately to verify. Notes: _____

☐ Yes ☐ No ☑ NA **If analyzed for the following parameters, was the following true for all analytes?**

- ☐ Yes ☐ No ☑ NA Total metals ≥ Dissolved metals
- ☐ Yes ☐ No ☑ NA TKN > Organic nitrogen
- ☐ Yes ☐ No ☑ NA TKN > Ammonia (NH_3)
- ☐ Yes ☐ No ☑ NA COD > TOC
- ☐ Yes ☐ No ☑ NA COD > BOD

If no: Report to project manager and contact lab's QA/QC manager if needed. Notes: _____

☑ Yes ☐ No ☐ NA **Were method detection limits (MDL), reporting limits (RLs), and/or dilution factors appropriate?**

If no: Report to project manager and contact lab if needed. Notes: _____

☑ Yes ☐ No ☐ NA **Were surrogate % recoveries within the acceptable range of LCL ≤ x ≤ UCL?**

If no: Notes: _____

☐ Yes ☑ No ☐ NA **Were target analytes detected in any field, equipment, and/or laboratory blanks?**

If yes: Notes: _____

Brown AND Caldwell

LABORATORY DATA VERIFICATION FORM

☐ Yes ☐ No ☑ NA **Were any target analytes detected below practical quantitation limits (PQLs)?**

If yes: Notes: _____

☑ Yes ☐ No ☐ NA **Were any sample duplicates collected?**

If yes: Notes: Refer to Comment No. 2

☐ Yes ☑ No ☐ NA **Were any laboratory duplicates reported for project samples?**

If yes: Notes: _____

☑ Yes ☐ No ☐ NA **Were any matrix spikes reported for project samples?**

If yes: Notes: No issues to report

☑ Yes ☐ No ☐ NA **Were any laboratory control samples reported?**

If yes: Notes: No issues to report

☐ Yes ☑ No ☐ NA **Were calibration standards reported?**

If yes: Notes: _____

4. COMMENTS & SUMMARY OF ACTIONS TAKEN (Attach additional pages if necessary)

Comment No. 1: Only page 1 of 4 of the chain of custody was included in the analytical report. Action required: Contact the laboratory for a revised report with all pages of the chain included.

Comment No. 2: Two field duplicates were collected. Refer to the attached sheet for a detailed duplicate comparison and calculated relative percent differences (RPDs). All RPDs were within acceptable control limits. No further actions required.

Sarah E Jones

Signature of Data Verifier

(Rev 3/14/13 - SEJ)

LABORATORY DATA VERIFICATION

Sample Duplicate Comparison

PROJECT INFORMATION

Project Number: 147297-100-002 **Project Name:** Owens Corning **Task/Purpose of Sampling:** Quarterly Sampling
Project Manager: T. Berryman **Client:** Owens Corning
Laboratory: AES **Data Report:** 1505640

DUPLICATE INFORMATION

Parent Sample ID: 15125-MW-29R Zone 4 **Date/Time:** 5/5/15 1205 **Matrix:** Groundwater
Duplicate Sample ID: 15125-Dup **Date/Time:** 5/5/15 1200 **Matrix:** Groundwater

Analytes (Units)	Analytical Results[a]		Relative Percent Difference (RPD) Comparison		Reporting Limit (RL) Comparison (If Needed)					Actions Required
	15125-MW-29R Zone 4	15125-Dup	RPD	Inorg: RPD > 20%? Org: RPD > 30%?	15125-MW-29R Zone 4 RL	15125-MW-29R Zone 4 2x RL	15125-Dup RL	15125-Dup 2x RL	Either Sample Conc. ≥ 2X RLs?	
1,1-dichloroethene (ug/L)	280	270	4%	NO						No further action required.
Chloroform	7.2	6.5	10%	NO						No further action required.
Carbon tetrachloride	15	14	7%	NO						No further action required.

DUPLICATE INFORMATION

Parent Sample ID: 15126-MW-37 Zone 1 **Date/Time:** 5/6/15 1115 **Matrix:** Groundwater
Duplicate Sample ID: 15126-Dup **Date/Time:** 5/6/15 1200 **Matrix:** Groundwater

Analytes (Units)	Analytical Results[a]		Relative Percent Difference (RPD) Comparison		Reporting Limit (RL) Comparison (If Needed)					Actions Required
	15126-MW-37 Zone 1	15126-Dup	RPD	Inorg: RPD > 20%? Org: RPD > 30%?	15126-MW-37 Zone 1 RL	15126-MW-37 Zone 1 2x RL	15126-Dup RL	15126-Dup 2x RL	Either Sample Conc. ≥ 2X RLs?	
1,1-dichloroethene (ug/L)	100	96	4%	NO						No further action required.

[a] Results in red text and italics were below reporting limits. Values are reporting limits for comparison purposes only.

Relative Percent Difference (RPD) is a quantitative indicator of quality assurance and quality control (QA/QC) for repeated measurements (i.e. duplicates) where the outcome is expected to be the same. It is calculated using the following equation:

$$RPD = \left| \frac{x_1 - x_2}{(x_1 + x_2)/2} \right| \times 100$$

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 13, 2015

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: 1505640

Analytical Environmental Services, Inc. received 43 samples on 5/7/2015 1:00:00 PM 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:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-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 09/01/15.

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.

Tara Esbeck

Tara Esbeck
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: 1505640
Date:
Page 1 of 4

COMPANY: Brown + Caldwell
ADDRESS: 990 Hammond Dr, Ste 400 Atlanta, Ga 30328
PHONE:
FAX:
SAMPLED BY: Skala, Whetstone
SIGNATURE: M Skala III

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

ANALYSIS REQUESTED: VOCs
PRESERVATION (See codes): HCl

#	SAMPLE ID	DATE	TIME	Grab	Composite	Matrix (See codes)	VOCs (HCl)	REMARKS	No # of Containers
X	15124-MW-44	5/4/15	1245	X		GW	X		2
X	15124-MW-35	5/4/15	1335	↓		GW	↓		↓
X	15124-EB	5/4/15	1350			W			
X	15124-MW-22	5/4/15	1500			GW			
X	15125-MW-15	5/5/15	0855			GW			
X	15125-MW-36-Z1	5/5/15	1045			GW			
X	15125-MW-36-Z3	5/5/15	1220			GW			
X	15125-MW-29R-Z3	5/5/15	1130			GW			
X	15125-MW-29R-Z4	5/5/15	1205			GW			
X	15125-DUP	5/5/15	1200			GW			
X	15126-MW-38-Z1	5/6/15	0955			GW			
X	15125-MW-38-Z2	5/5/15	1445			GW		Sample date = 5/5/15	
X	15125-MW-36-Z5	05/5/15	1300			GW			
X	15126-MW-43-Z3	5/6/15	1145	↓		GW	↓		↓

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: M Skala III	5-7-15 1300	1: LaToya Reeves	5/7/15 1p
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: Owens-Corning
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: TBerryman@brwncald.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers

Turnaround Time Request
- Ø Standard 5 Business Days
- O 2 Business Day Rush
- O Next Business Day Rush
- O Same Day Rush (auth req.)
- O Other

STATE PROGRAM (if any):
E-mail? (Y)/N; Fax? Y/N
DATA PACKAGE: I (II) III IV

SPECIAL INSTRUCTIONS/COMMENTS:
Owens Corning Site specific VOCs Only. Use sample 15125-MW-36-Z5 Vial w/o air bubble.

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

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Work Order: 1505640

Page 2 of 4

CHAIN OF CUSTODY

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

Date:

COMPANY: Brown + Caldwell

ADDRESS: 990 Hammond Dr, Ste 400 Atlanta, Ga

PHONE:

FAX:

SAMPLED BY: Skala, Whetstone

SIGNATURE:

ANALYSIS REQUESTED: VOCs

PRESERVATION (See codes): HI

Visit our website **www.aesatlanta.com** to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	DATE	TIME	Grab	Composite	Matrix (See codes)	VOCs (HI)	REMARKS	No # of Containers
1	15124 - 408 CLINKSCALES RD	05042015	1610	X		GW	X		2
2	15124 - 200 FRIENDSHIP LN	05042015	1625	X		GW	X		
3	15124 - 721 CLINKSCALES RD	05042015	1635	X		GW	X		
4	15124 - 115 ELROD RD	05042015	1645	X		GW	X		
5	15124 - 119 CLOVERHILL DR	05042015	1655	X		GW	X		
6	15124 - 200 KAYE DR	05042015	1705	X		GW	X		
7	15124 - 303 KAYE DR	05042015	1710	X		GW	X		
8	15124 - 311 KAYE DR	05042015	1718	X		GW	X		
9	15124 - 412 KAYE DR	05042015	1730	X		GW	X		
10	15124 - 117 FAYE DR	05042015	1738	X		GW	X		
11	15124 - 628 AIRLINE RD	05042015	1745	X		GW	X		
12									
13									
14									

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: M Skala III	5-7-15 1300	1: Catoya Reeves	5/7/15
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS: Owens-Corning Site Spec. for VOCs only

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Owens-Corning
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: TBerryman@browncald.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers

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

IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. 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

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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: 1505640

Date: _____ Page 3 of 4

COMPANY: Brown & Caldwell
ADDRESS: 990 Hammond Dr, Ste 400 Atlanta, Ga 30328
PHONE:
FAX:
SAMPLED BY: George Mirala, Whetstone
SIGNATURE: M Mirala IV

ANALYSIS REQUESTED: VOCs

PRESERVATION (See codes): HT

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)	REMARKS	No # of Containers
1	15126-MW-43-Z2	5/6/15	1315	X		GW		2
2	15126-MW-43-Z1	5/6/15	1455	X		GW		
3	15126-EB	5/6/15	1510	X		GW		
4	15124-MW-43-Zone 3	5/4/15	1245	X		GW		
5	15124-MW-42-Zone 2	5/4/15	1405	X		GW		
6	15124-MW-42-Zone 1	5/4/15	1505	X		GW		
7	15125-MW-39-Zone 1	5/5/15	0950	X		GW		
8	15125-MW-39-Zone 2	5/5/15	1100	X		GW		
9	15125-MW-39-Zone 3	5/5/15	1235	X		GW		
10	15125-EB	5/5/15	1305	X		W		
11	~~15126-MW-37-Zone 3~~ See Remarks	5/5/15	1540	X		GW	IN=15125-MW-37-Zone3	
12	15126-MW-37-Zone 2	5/6/15	0955	X		GW		
13	15126-DUP	5/6/15	1200	X		GW		
14	15126-MW-37-Zone 1	5/6/15	1115	X		GW		

RELINQUISHED BY / DATE/TIME
1: M Mirala IV 5-7-15 1300
2:
3:

RECEIVED BY / DATE/TIME
1:
2: Latoya Reeves 5/7/15
3:

PROJECT INFORMATION
PROJECT NAME: Owens-Corning
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: TBerryman@brwncald.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers:

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: Owens-Corning Site-specific VOCs only

SHIPMENT METHOD
OUT / / VIA:
IN: CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER_____ VIA:

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.

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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 Bisulfite/Methanol + ice O = Other (specify) NA = None

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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: 1505640

Date: _____ Page 4 of 4

COMPANY: Brown + Caldwell

ADDRESS: 990 Hammond Dr, Ste 400 Atlanta, Ga 30328

PHONE:

FAX:

SAMPLED BY: Skala, Whetstone

SIGNATURE: M Skala TH

ANALYSIS REQUESTED

VOCs

PRESERVATION (See codes)

HH

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)	PRESERVATION	REMARKS	No # of Containers
1	15126-MW-41-Zone 2	5/6/15	1400	X		GW	X		2
2	15126-MW-41-Zone 1	5/6/15	1445	X		GW	X		1
3	15127-MW-41-Zone 3	5/7/15	1100	X		GW	X		1
4	Trip blanks	—	—	X		W	X		
5	Trip blanks	—	—	X		W	X		↓
6									
7									
8									
9									
10									
11									
12									
13									
14									

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: M Skala TH	5-7-15 13:00	1: Latoya Reeves 5/7/15 1p	
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Owens-Corning

PROJECT #:

SITE ADDRESS:

SEND REPORT TO: TBerryman@brwncald.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 6

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: Owens-Corning Site specific VOCs only

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.
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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

Analytical Environmental Services, Inc **Date:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-MW-44
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 12:45:00 PM
Lab ID:	1505640-001	**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	207164	1	05/08/2015 17:12	TH
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Methylene chloride	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Benzene	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Toluene	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/08/2015 17:12	TH
Surr: 4-Bromofluorobenzene	85.9	70.6-123		%REC	207164	1	05/08/2015 17:12	TH
Surr: Dibromofluoromethane	109	78.7-124		%REC	207164	1	05/08/2015 17:12	TH
Surr: Toluene-d8	93.7	81.3-120		%REC	207164	1	05/08/2015 17:12	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-MW-35
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 1:35:00 PM
Lab ID:	1505640-002	**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	207164	1	05/08/2015 17:37	TH
1,1-Dichloroethene	77	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Methylene chloride	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Benzene	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Toluene	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/08/2015 17:37	TH
Surr: 4-Bromofluorobenzene	86.1	70.6-123		%REC	207164	1	05/08/2015 17:37	TH
Surr: Dibromofluoromethane	110	78.7-124		%REC	207164	1	05/08/2015 17:37	TH
Surr: Toluene-d8	96.7	81.3-120		%REC	207164	1	05/08/2015 17:37	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-EB
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 1:50:00 PM
Lab ID:	1505640-003	**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	207164	1	05/08/2015 15:27	TH
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Methylene chloride	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Benzene	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Toluene	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/08/2015 15:27	TH
Surr: 4-Bromofluorobenzene	85.1	70.6-123		%REC	207164	1	05/08/2015 15:27	TH
Surr: Dibromofluoromethane	107	78.7-124		%REC	207164	1	05/08/2015 15:27	TH
Surr: Toluene-d8	94.4	81.3-120		%REC	207164	1	05/08/2015 15:27	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-MW-22
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 3:00:00 PM
Lab ID:	1505640-004	**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	207164	1	05/08/2015 18:58	TH
1,1-Dichloroethene	290	50		ug/L	207164	10	05/11/2015 13:44	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Chloroform	7.3	5.0		ug/L	207164	1	05/08/2015 18:58	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Carbon tetrachloride	24	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Benzene	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Toluene	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/08/2015 18:58	TH
Surr: 4-Bromofluorobenzene	84	70.6-123		%REC	207164	1	05/08/2015 18:58	TH
Surr: 4-Bromofluorobenzene	89.6	70.6-123		%REC	207164	10	05/11/2015 13:44	NP
Surr: Dibromofluoromethane	94	78.7-124		%REC	207164	10	05/11/2015 13:44	NP
Surr: Dibromofluoromethane	112	78.7-124		%REC	207164	1	05/08/2015 18:58	TH
Surr: Toluene-d8	91.8	81.3-120		%REC	207164	10	05/11/2015 13:44	NP
Surr: Toluene-d8	98.4	81.3-120		%REC	207164	1	05/08/2015 18:58	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-15
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 8:55:00 AM
Lab ID:	1505640-005	**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	207164	1	05/08/2015 19:23	TH
1,1-Dichloroethene	160	5.0		ug/L	207164	1	05/12/2015 10:06	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Benzene	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Toluene	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/08/2015 19:23	TH
Surr: 4-Bromofluorobenzene	82.7	70.6-123		%REC	207164	1	05/08/2015 19:23	TH
Surr: 4-Bromofluorobenzene	91.1	70.6-123		%REC	207164	1	05/12/2015 10:06	NP
Surr: Dibromofluoromethane	93.2	78.7-124		%REC	207164	1	05/12/2015 10:06	NP
Surr: Dibromofluoromethane	115	78.7-124		%REC	207164	1	05/08/2015 19:23	TH
Surr: Toluene-d8	94.4	81.3-120		%REC	207164	1	05/12/2015 10:06	NP
Surr: Toluene-d8	99.6	81.3-120		%REC	207164	1	05/08/2015 19:23	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-36-Z1
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 10:45:00 AM
Lab ID:	1505640-006	**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	207164	1	05/08/2015 19:48	TH
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Methylene chloride	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Benzene	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Toluene	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/08/2015 19:48	TH
Surr: 4-Bromofluorobenzene	83.7	70.6-123		%REC	207164	1	05/08/2015 19:48	TH
Surr: Dibromofluoromethane	116	78.7-124		%REC	207164	1	05/08/2015 19:48	TH
Surr: Toluene-d8	99.9	81.3-120		%REC	207164	1	05/08/2015 19:48	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-36-Z3
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 12:20:00 PM
Lab ID:	1505640-007	**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	207164	1	05/08/2015 20:12	TH
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Methylene chloride	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Benzene	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Toluene	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/08/2015 20:12	TH
Surr: 4-Bromofluorobenzene	86.2	70.6-123		%REC	207164	1	05/08/2015 20:12	TH
Surr: Dibromofluoromethane	116	78.7-124		%REC	207164	1	05/08/2015 20:12	TH
Surr: Toluene-d8	102	81.3-120		%REC	207164	1	05/08/2015 20:12	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-29R-Z3
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 11:30:00 AM
Lab ID:	1505640-008	**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	207164	1	05/09/2015 16:33	TH
1,1-Dichloroethene	250	50		ug/L	207164	10	05/11/2015 14:37	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Chloroform	6.4	5.0		ug/L	207164	1	05/09/2015 16:33	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Carbon tetrachloride	17	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Benzene	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Toluene	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/09/2015 16:33	TH
Surr: 4-Bromofluorobenzene	85.6	70.6-123		%REC	207164	1	05/09/2015 16:33	TH
Surr: 4-Bromofluorobenzene	91.9	70.6-123		%REC	207164	10	05/11/2015 14:37	NP
Surr: Dibromofluoromethane	90.6	78.7-124		%REC	207164	10	05/11/2015 14:37	NP
Surr: Dibromofluoromethane	110	78.7-124		%REC	207164	1	05/09/2015 16:33	TH
Surr: Toluene-d8	93.5	81.3-120		%REC	207164	10	05/11/2015 14:37	NP
Surr: Toluene-d8	94.2	81.3-120		%REC	207164	1	05/09/2015 16:33	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-29R-Z4
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 12:05:00 PM
Lab ID:	1505640-009	**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	207164	1	05/09/2015 16:58	TH
1,1-Dichloroethene	280	50		ug/L	207164	10	05/11/2015 15:04	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Chloroform	7.2	5.0		ug/L	207164	1	05/09/2015 16:58	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Carbon tetrachloride	15	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Benzene	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Toluene	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/09/2015 16:58	TH
Surr: 4-Bromofluorobenzene	86.1	70.6-123		%REC	207164	1	05/09/2015 16:58	TH
Surr: 4-Bromofluorobenzene	90.8	70.6-123		%REC	207164	10	05/11/2015 15:04	NP
Surr: Dibromofluoromethane	89.9	78.7-124		%REC	207164	10	05/11/2015 15:04	NP
Surr: Dibromofluoromethane	109	78.7-124		%REC	207164	1	05/09/2015 16:58	TH
Surr: Toluene-d8	93.4	81.3-120		%REC	207164	1	05/09/2015 16:58	TH
Surr: Toluene-d8	93.2	81.3-120		%REC	207164	10	05/11/2015 15:04	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-DUP
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 12:00:00 PM
Lab ID:	1505640-010	**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	207164	1	05/09/2015 17:23	TH
1,1-Dichloroethene	270	50		ug/L	207164	10	05/11/2015 15:31	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Chloroform	6.5	5.0		ug/L	207164	1	05/09/2015 17:23	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Carbon tetrachloride	14	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Benzene	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Toluene	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/09/2015 17:23	TH
Surr: 4-Bromofluorobenzene	86.6	70.6-123		%REC	207164	1	05/09/2015 17:23	TH
Surr: 4-Bromofluorobenzene	91.1	70.6-123		%REC	207164	10	05/11/2015 15:31	NP
Surr: Dibromofluoromethane	87.7	78.7-124		%REC	207164	10	05/11/2015 15:31	NP
Surr: Dibromofluoromethane	111	78.7-124		%REC	207164	1	05/09/2015 17:23	TH
Surr: Toluene-d8	92.9	81.3-120		%REC	207164	10	05/11/2015 15:31	NP
Surr: Toluene-d8	94.2	81.3-120		%REC	207164	1	05/09/2015 17:23	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-MW-38-Z1
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 9:55:00 AM
Lab ID:	1505640-011	**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	207164	1	05/11/2015 16:51	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Chloroform	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Benzene	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Trichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Toluene	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/11/2015 16:51	NP
Surr: 4-Bromofluorobenzene	94	70.6-123		%REC	207164	1	05/11/2015 16:51	NP
Surr: Dibromofluoromethane	95.2	78.7-124		%REC	207164	1	05/11/2015 16:51	NP
Surr: Toluene-d8	94.8	81.3-120		%REC	207164	1	05/11/2015 16:51	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-38-Z2
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 2:45:00 PM
Lab ID:	1505640-012	**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	207164	1	05/09/2015 17:47	TH
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Methylene chloride	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Benzene	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Toluene	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/09/2015 17:47	TH
Surr: 4-Bromofluorobenzene	87.5	70.6-123		%REC	207164	1	05/09/2015 17:47	TH
Surr: Dibromofluoromethane	106	78.7-124		%REC	207164	1	05/09/2015 17:47	TH
Surr: Toluene-d8	95.4	81.3-120		%REC	207164	1	05/09/2015 17:47	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-36-Z5
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 1:00:00 PM
Lab ID:	1505640-013	**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	207164	1	05/11/2015 17:18	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Chloroform	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Benzene	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Trichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Toluene	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/11/2015 17:18	NP
Surr: 4-Bromofluorobenzene	90.5	70.6-123		%REC	207164	1	05/11/2015 17:18	NP
Surr: Dibromofluoromethane	96.3	78.7-124		%REC	207164	1	05/11/2015 17:18	NP
Surr: Toluene-d8	93.8	81.3-120		%REC	207164	1	05/11/2015 17:18	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-MW-43-Z3
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 11:45:00 AM
Lab ID:	1505640-014	**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	207164	1	05/09/2015 18:12	TH
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Methylene chloride	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Benzene	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Toluene	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/09/2015 18:12	TH
Surr: 4-Bromofluorobenzene	87.1	70.6-123		%REC	207164	1	05/09/2015 18:12	TH
Surr: Dibromofluoromethane	111	78.7-124		%REC	207164	1	05/09/2015 18:12	TH
Surr: Toluene-d8	97.6	81.3-120		%REC	207164	1	05/09/2015 18:12	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-408 CLINKSCALES RD
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 4:10:00 PM
Lab ID:	1505640-015	**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	207164	1	05/09/2015 18:36	TH
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Methylene chloride	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Chloroform	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Benzene	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Trichloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Toluene	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/09/2015 18:36	TH
Surr: 4-Bromofluorobenzene	88.2	70.6-123		%REC	207164	1	05/09/2015 18:36	TH
Surr: Dibromofluoromethane	111	78.7-124		%REC	207164	1	05/09/2015 18:36	TH
Surr: Toluene-d8	98.6	81.3-120		%REC	207164	1	05/09/2015 18:36	TH

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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-200 FRIENDSHIP LN
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 4:25:00 PM
Lab ID:	1505640-016	**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	207164	1	05/11/2015 17:44	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Chloroform	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Benzene	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Trichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Toluene	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/11/2015 17:44	NP
Surr: 4-Bromofluorobenzene	92.3	70.6-123		%REC	207164	1	05/11/2015 17:44	NP
Surr: Dibromofluoromethane	96.2	78.7-124		%REC	207164	1	05/11/2015 17:44	NP
Surr: Toluene-d8	94.3	81.3-120		%REC	207164	1	05/11/2015 17:44	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-721 CLINKSCALES RD
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 4:35:00 PM
Lab ID:	1505640-017	**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	207164	1	05/11/2015 18:11	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Chloroform	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Benzene	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Trichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Toluene	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/11/2015 18:11	NP
Surr: 4-Bromofluorobenzene	92	70.6-123		%REC	207164	1	05/11/2015 18:11	NP
Surr: Dibromofluoromethane	95.3	78.7-124		%REC	207164	1	05/11/2015 18:11	NP
Surr: Toluene-d8	94.9	81.3-120		%REC	207164	1	05/11/2015 18:11	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-115 ELROD RD
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 4:45:00 PM
Lab ID:	1505640-018	**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	207164	1	05/11/2015 18:38	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Chloroform	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Benzene	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Trichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Toluene	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/11/2015 18:38	NP
Surr: 4-Bromofluorobenzene	92.1	70.6-123		%REC	207164	1	05/11/2015 18:38	NP
Surr: Dibromofluoromethane	95.2	78.7-124		%REC	207164	1	05/11/2015 18:38	NP
Surr: Toluene-d8	95.7	81.3-120		%REC	207164	1	05/11/2015 18:38	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-119 CLOVERHILL DR
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 4:55:00 PM
Lab ID:	1505640-019	**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	207164	1	05/11/2015 19:04	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Chloroform	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Benzene	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Trichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Toluene	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/11/2015 19:04	NP
Surr: 4-Bromofluorobenzene	88.5	70.6-123		%REC	207164	1	05/11/2015 19:04	NP
Surr: Dibromofluoromethane	95.9	78.7-124		%REC	207164	1	05/11/2015 19:04	NP
Surr: Toluene-d8	93.4	81.3-120		%REC	207164	1	05/11/2015 19:04	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-200 KAYE DR
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 5:05:00 PM
Lab ID:	1505640-020	**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	207164	1	05/11/2015 19:31	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Methylene chloride	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Chloroform	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Carbon tetrachloride	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Benzene	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Trichloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Toluene	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Tetrachloroethene	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Ethylbenzene	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Xylenes, Total	BRL	5.0		ug/L	207164	1	05/11/2015 19:31	NP
Surr: 4-Bromofluorobenzene	89.9	70.6-123		%REC	207164	1	05/11/2015 19:31	NP
Surr: Dibromofluoromethane	94.1	78.7-124		%REC	207164	1	05/11/2015 19:31	NP
Surr: Toluene-d8	93.8	81.3-120		%REC	207164	1	05/11/2015 19:31	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-303 KAYE DR
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 5:10:00 PM
Lab ID:	1505640-021	**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	207195	1	05/09/2015 17:27	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 17:27	NP
Surr: 4-Bromofluorobenzene	87.9	70.6-123		%REC	207195	1	05/09/2015 17:27	NP
Surr: Dibromofluoromethane	101	78.7-124		%REC	207195	1	05/09/2015 17:27	NP
Surr: Toluene-d8	95.7	81.3-120		%REC	207195	1	05/09/2015 17:27	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-311 KAYE DR
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 5:18:00 PM
Lab ID:	1505640-022	**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	207195	1	05/09/2015 18:33	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 18:33	NP
Surr: 4-Bromofluorobenzene	87.3	70.6-123		%REC	207195	1	05/09/2015 18:33	NP
Surr: Dibromofluoromethane	101	78.7-124		%REC	207195	1	05/09/2015 18:33	NP
Surr: Toluene-d8	94.9	81.3-120		%REC	207195	1	05/09/2015 18:33	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-412 KAYE DR
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 5:30:00 PM
Lab ID:	1505640-023	**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	207195	1	05/09/2015 18:56	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 18:56	NP
Surr: 4-Bromofluorobenzene	88.1	70.6-123		%REC	207195	1	05/09/2015 18:56	NP
Surr: Dibromofluoromethane	100	78.7-124		%REC	207195	1	05/09/2015 18:56	NP
Surr: Toluene-d8	93.9	81.3-120		%REC	207195	1	05/09/2015 18:56	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-117 FAYE DR
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 5:38:00 PM
Lab ID:	1505640-024	**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	207195	1	05/09/2015 19:18	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 19:18	NP
Surr: 4-Bromofluorobenzene	89.1	70.6-123		%REC	207195	1	05/09/2015 19:18	NP
Surr: Dibromofluoromethane	101	78.7-124		%REC	207195	1	05/09/2015 19:18	NP
Surr: Toluene-d8	95.2	81.3-120		%REC	207195	1	05/09/2015 19:18	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-628 AIRLINE DR
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 5:45:00 PM
Lab ID:	1505640-025	**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	207195	1	05/09/2015 19:41	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 19:41	NP
Surr: 4-Bromofluorobenzene	87.5	70.6-123		%REC	207195	1	05/09/2015 19:41	NP
Surr: Dibromofluoromethane	102	78.7-124		%REC	207195	1	05/09/2015 19:41	NP
Surr: Toluene-d8	96.8	81.3-120		%REC	207195	1	05/09/2015 19:41	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-MW-43-Z2
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 1:15:00 PM
Lab ID:	1505640-026	**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	207195	1	05/09/2015 20:03	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 20:03	NP
Surr: 4-Bromofluorobenzene	87.3	70.6-123		%REC	207195	1	05/09/2015 20:03	NP
Surr: Dibromofluoromethane	102	78.7-124		%REC	207195	1	05/09/2015 20:03	NP
Surr: Toluene-d8	96.4	81.3-120		%REC	207195	1	05/09/2015 20:03	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-MW-43-Z1
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 2:55:00 PM
Lab ID:	1505640-027	**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	207195	1	05/09/2015 20:25	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 20:25	NP
Surr: 4-Bromofluorobenzene	87	70.6-123		%REC	207195	1	05/09/2015 20:25	NP
Surr: Dibromofluoromethane	103	78.7-124		%REC	207195	1	05/09/2015 20:25	NP
Surr: Toluene-d8	95.9	81.3-120		%REC	207195	1	05/09/2015 20:25	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-EB
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 3:10:00 PM
Lab ID:	1505640-028	**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	207195	1	05/09/2015 17:04	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 17:04	NP
Surr: 4-Bromofluorobenzene	89.3	70.6-123		%REC	207195	1	05/09/2015 17:04	NP
Surr: Dibromofluoromethane	104	78.7-124		%REC	207195	1	05/09/2015 17:04	NP
Surr: Toluene-d8	97	81.3-120		%REC	207195	1	05/09/2015 17:04	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-MW-42-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 12:45:00 PM
Lab ID:	1505640-029	**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	207195	1	05/09/2015 20:48	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 20:48	NP
Surr: 4-Bromofluorobenzene	88.8	70.6-123		%REC	207195	1	05/09/2015 20:48	NP
Surr: Dibromofluoromethane	102	78.7-124		%REC	207195	1	05/09/2015 20:48	NP
Surr: Toluene-d8	94.2	81.3-120		%REC	207195	1	05/09/2015 20:48	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-MW-42-ZONE 2
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 2:05:00 PM
Lab ID:	1505640-030	**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	207195	1	05/09/2015 21:11	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 21:11	NP
Surr: 4-Bromofluorobenzene	88.6	70.6-123		%REC	207195	1	05/09/2015 21:11	NP
Surr: Dibromofluoromethane	104	78.7-124		%REC	207195	1	05/09/2015 21:11	NP
Surr: Toluene-d8	95.6	81.3-120		%REC	207195	1	05/09/2015 21:11	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15124-MW-42-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/4/2015 3:05:00 PM
Lab ID:	1505640-031	**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	207195	1	05/09/2015 21:33	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 21:33	NP
Surr: 4-Bromofluorobenzene	86.8	70.6-123		%REC	207195	1	05/09/2015 21:33	NP
Surr: Dibromofluoromethane	104	78.7-124		%REC	207195	1	05/09/2015 21:33	NP
Surr: Toluene-d8	96.1	81.3-120		%REC	207195	1	05/09/2015 21:33	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-39-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 9:50:00 AM
Lab ID:	1505640-032	**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	207195	1	05/09/2015 21:55	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 21:55	NP
Surr: 4-Bromofluorobenzene	88.9	70.6-123		%REC	207195	1	05/09/2015 21:55	NP
Surr: Dibromofluoromethane	104	78.7-124		%REC	207195	1	05/09/2015 21:55	NP
Surr: Toluene-d8	97.3	81.3-120		%REC	207195	1	05/09/2015 21:55	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-39-ZONE 2
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 11:00:00 AM
Lab ID:	1505640-033	**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	207195	1	05/09/2015 22:18	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 22:18	NP
Surr: 4-Bromofluorobenzene	88	70.6-123		%REC	207195	1	05/09/2015 22:18	NP
Surr: Dibromofluoromethane	101	78.7-124		%REC	207195	1	05/09/2015 22:18	NP
Surr: Toluene-d8	95.2	81.3-120		%REC	207195	1	05/09/2015 22:18	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-39-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 12:35:00 PM
Lab ID:	1505640-034	**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	207195	1	05/09/2015 22:40	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 22:40	NP
Surr: 4-Bromofluorobenzene	87.1	70.6-123		%REC	207195	1	05/09/2015 22:40	NP
Surr: Dibromofluoromethane	103	78.7-124		%REC	207195	1	05/09/2015 22:40	NP
Surr: Toluene-d8	96	81.3-120		%REC	207195	1	05/09/2015 22:40	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-EB
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 1:05:00 PM
Lab ID:	1505640-035	**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	207195	1	05/09/2015 23:03	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 23:03	NP
Surr: 4-Bromofluorobenzene	85.1	70.6-123		%REC	207195	1	05/09/2015 23:03	NP
Surr: Dibromofluoromethane	104	78.7-124		%REC	207195	1	05/09/2015 23:03	NP
Surr: Toluene-d8	96.8	81.3-120		%REC	207195	1	05/09/2015 23:03	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15125-MW-37-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/5/2015 3:40:00 PM
Lab ID:	1505640-036	**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	207195	1	05/09/2015 23:25	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 23:25	NP
Surr: 4-Bromofluorobenzene	87.4	70.6-123		%REC	207195	1	05/09/2015 23:25	NP
Surr: Dibromofluoromethane	103	78.7-124		%REC	207195	1	05/09/2015 23:25	NP
Surr: Toluene-d8	97.1	81.3-120		%REC	207195	1	05/09/2015 23:25	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-MW-37-ZONE 2
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 9:55:00 AM
Lab ID:	1505640-037	**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	207195	1	05/09/2015 23:47	NP
1,1-Dichloroethene	200	50		ug/L	207195	10	05/11/2015 11:28	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Chloroform	5.6	5.0		ug/L	207195	1	05/09/2015 23:47	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Carbon tetrachloride	6.0	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Benzene	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Toluene	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/09/2015 23:47	NP
Surr: 4-Bromofluorobenzene	88.2	70.6-123		%REC	207195	1	05/09/2015 23:47	NP
Surr: 4-Bromofluorobenzene	89.7	70.6-123		%REC	207195	10	05/11/2015 11:28	NP
Surr: Dibromofluoromethane	97.8	78.7-124		%REC	207195	10	05/11/2015 11:28	NP
Surr: Dibromofluoromethane	101	78.7-124		%REC	207195	1	05/09/2015 23:47	NP
Surr: Toluene-d8	94.2	81.3-120		%REC	207195	1	05/09/2015 23:47	NP
Surr: Toluene-d8	94.6	81.3-120		%REC	207195	10	05/11/2015 11:28	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-DUP
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 12:00:00 PM
Lab ID:	1505640-038	**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	207195	1	05/10/2015 00:10	NP
1,1-Dichloroethene	96	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Benzene	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Toluene	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/10/2015 00:10	NP
Surr: 4-Bromofluorobenzene	85.8	70.6-123		%REC	207195	1	05/10/2015 00:10	NP
Surr: Dibromofluoromethane	105	78.7-124		%REC	207195	1	05/10/2015 00:10	NP
Surr: Toluene-d8	95.4	81.3-120		%REC	207195	1	05/10/2015 00:10	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-MW-37-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 11:15:00 AM
Lab ID:	1505640-039	**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	207195	1	05/10/2015 00:32	NP
1,1-Dichloroethene	100	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Benzene	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Toluene	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/10/2015 00:32	NP
Surr: 4-Bromofluorobenzene	87.4	70.6-123		%REC	207195	1	05/10/2015 00:32	NP
Surr: Dibromofluoromethane	107	78.7-124		%REC	207195	1	05/10/2015 00:32	NP
Surr: Toluene-d8	97.9	81.3-120		%REC	207195	1	05/10/2015 00:32	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-MW-41-ZONE 2
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 2:00:00 PM
Lab ID:	1505640-040	**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	207195	1	05/10/2015 00:54	NP
1,1-Dichloroethene	150	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Methylene chloride	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Chloroform	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Carbon tetrachloride	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Benzene	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Trichloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Toluene	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Tetrachloroethene	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Ethylbenzene	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Xylenes, Total	BRL	5.0		ug/L	207195	1	05/10/2015 00:54	NP
Surr: 4-Bromofluorobenzene	87.1	70.6-123		%REC	207195	1	05/10/2015 00:54	NP
Surr: Dibromofluoromethane	105	78.7-124		%REC	207195	1	05/10/2015 00:54	NP
Surr: Toluene-d8	97.7	81.3-120		%REC	207195	1	05/10/2015 00:54	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15126-MW-41-ZONE 1
Project Name:	Owens Corning	**Collection Date:**	5/6/2015 2:45:00 PM
Lab ID:	1505640-041	**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	207055	1	05/10/2015 01:17	NP
1,1-Dichloroethene	170	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Methylene chloride	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Chloroform	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Carbon tetrachloride	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Benzene	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Trichloroethene	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Toluene	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Tetrachloroethene	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Ethylbenzene	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Xylenes, Total	BRL	5.0		ug/L	207055	1	05/10/2015 01:17	NP
Surr: 4-Bromofluorobenzene	86.1	70.6-123		%REC	207055	1	05/10/2015 01:17	NP
Surr: Dibromofluoromethane	104	78.7-124		%REC	207055	1	05/10/2015 01:17	NP
Surr: Toluene-d8	95.8	81.3-120		%REC	207055	1	05/10/2015 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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	15127-MW-41-ZONE 3
Project Name:	Owens Corning	**Collection Date:**	5/7/2015 11:00:00 AM
Lab ID:	1505640-042	**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	207055	1	05/10/2015 01:40	NP
1,1-Dichloroethene	32	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Methylene chloride	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Chloroform	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Carbon tetrachloride	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Benzene	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Trichloroethene	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Toluene	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Tetrachloroethene	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Ethylbenzene	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Xylenes, Total	BRL	5.0		ug/L	207055	1	05/10/2015 01:40	NP
Surr: 4-Bromofluorobenzene	86.6	70.6-123		%REC	207055	1	05/10/2015 01:40	NP
Surr: Dibromofluoromethane	105	78.7-124		%REC	207055	1	05/10/2015 01:40	NP
Surr: Toluene-d8	96.2	81.3-120		%REC	207055	1	05/10/2015 01:40	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:** 13-May-15

Client:	BROWN AND CALDWELL	**Client Sample ID:**	TRIP BLANK
Project Name:	Owens Corning	**Collection Date:**	5/7/2015
Lab ID:	1505640-043	**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	207055	1	05/09/2015 16:42	NP
1,1-Dichloroethene	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Methylene chloride	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
1,1-Dichloroethane	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Chloroform	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Carbon tetrachloride	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Benzene	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
1,2-Dichloroethane	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Trichloroethene	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Toluene	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Tetrachloroethene	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Ethylbenzene	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Xylenes, Total	BRL	5.0		ug/L	207055	1	05/09/2015 16:42	NP
Surr: 4-Bromofluorobenzene	89.1	70.6-123		%REC	207055	1	05/09/2015 16:42	NP
Surr: Dibromofluoromethane	100	78.7-124		%REC	207055	1	05/09/2015 16:42	NP
Surr: Toluene-d8	94	81.3-120		%REC	207055	1	05/09/2015 16:42	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.

Sample/Cooler Receipt Checklist

Client Brown & Caldwell Work Order Number 1505640

Checklist completed by Miriam Lamar 05/07/2015
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°C Cooler #2 3.9°C 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: 1505640

ANALYTICAL QC SUMMARY REPORT

BatchID: 207055

Sample ID: **MB-207055**	Client ID:		Units: **ug/L**	Prep Date: **05/07/2015**	Run No: **291311**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **207055**	Analysis Date: **05/07/2015**	Seq No: **6198168**

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	47.86	0	50.00		95.7	70.6	123				
Surr: Dibromofluoromethane	50.65	0	50.00		101	78.7	124				
Surr: Toluene-d8	48.64	0	50.00		97.3	81.3	120				

Sample ID: **LCS-207055**	Client ID:		Units: **ug/L**	Prep Date: **05/07/2015**	Run No: **291311**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **207055**	Analysis Date: **05/07/2015**	Seq No: **6198387**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	66.03	5.0	50.00		132	64.2	137				
Benzene	53.83	5.0	50.00		108	72.8	128				
Toluene	53.66	5.0	50.00		107	74.9	127				

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: 1505640

ANALYTICAL QC SUMMARY REPORT

BatchID: 207055

Sample ID: **LCS-207055** Client ID: Units: **ug/L** Prep Date: **05/07/2015** Run No: **291311**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207055** Analysis Date: **05/07/2015** Seq No: **6198387**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Trichloroethene	53.59	5.0	50.00		107	70.5	134				
Surr: 4-Bromofluorobenzene	46.51	0	50.00		93.0	70.6	123				
Surr: Dibromofluoromethane	50.85	0	50.00		102	78.7	124				
Surr: Toluene-d8	48.76	0	50.00		97.5	81.3	120				

Sample ID: **1505120-001AMS** Client ID: Units: **ug/L** Prep Date: **05/07/2015** Run No: **291311**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207055** Analysis Date: **05/07/2015** Seq No: **6198631**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	704700	50000	500000		141	60.5	156				
Benzene	564000	50000	500000		113	70	135				
Toluene	567700	50000	500000		114	70.5	137				
Trichloroethene	552600	50000	500000		111	71.8	139				
Surr: 4-Bromofluorobenzene	462200	0	500000		92.4	70.6	123				
Surr: Dibromofluoromethane	510500	0	500000		102	78.7	124				
Surr: Toluene-d8	496000	0	500000		99.2	81.3	120				

Sample ID: **1505544-005AMS** Client ID: Units: **ug/L** Prep Date: **05/07/2015** Run No: **291470**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207055** Analysis Date: **05/08/2015** Seq No: **6202654**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	629.2	50	500.0		126	60.5	156				
Benzene	448.9	50	500.0		89.8	70	135				
Toluene	473.5	50	500.0		94.7	70.5	137				
Trichloroethene	560.5	50	500.0	43.30	103	71.8	139				
Surr: 4-Bromofluorobenzene	428.6	0	500.0		85.7	70.6	123				
Surr: Dibromofluoromethane	534.7	0	500.0		107	78.7	124				
Surr: Toluene-d8	472.7	0	500.0		94.5	81.3	120				

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: 1505640

ANALYTICAL QC SUMMARY REPORT

BatchID: 207055

Sample ID: **1505120-001AMSD**	Client ID:		Units: **ug/L**	Prep Date: **05/07/2015**	Run No: **291311**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **207055**	Analysis Date: **05/07/2015**	Seq No: **6198854**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	710300	50000	500000		142	60.5	156	704700	0.792	20	
Benzene	561100	50000	500000		112	70	135	564000	0.516	20	
Toluene	558800	50000	500000		112	70.5	137	567700	1.58	20	
Trichloroethene	546700	50000	500000		109	71.8	139	552600	1.07	20	
Surr: 4-Bromofluorobenzene	456900	0	500000		91.4	70.6	123	462200	0	0	
Surr: Dibromofluoromethane	505600	0	500000		101	78.7	124	510500	0	0	
Surr: Toluene-d8	495500	0	500000		99.1	81.3	120	496000	0	0	

Sample ID: **1505544-005AMSD**	Client ID:		Units: **ug/L**	Prep Date: **05/07/2015**	Run No: **291470**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **207055**	Analysis Date: **05/08/2015**	Seq No: **6202655**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	622.4	50	500.0		124	60.5	156	629.2	1.09	20	
Benzene	445.5	50	500.0		89.1	70	135	448.9	0.760	20	
Toluene	481.5	50	500.0		96.3	70.5	137	473.5	1.68	20	
Trichloroethene	563.7	50	500.0	43.30	104	71.8	139	560.5	0.569	20	
Surr: 4-Bromofluorobenzene	428.2	0	500.0		85.6	70.6	123	428.6	0	0	
Surr: Dibromofluoromethane	555.1	0	500.0		111	78.7	124	534.7	0	0	
Surr: Toluene-d8	485.1	0	500.0		97.0	81.3	120	472.7	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: 1505640

ANALYTICAL QC SUMMARY REPORT

BatchID: 207164

Sample ID: **MB-207164** Client ID: Units: **ug/L** Prep Date: **05/08/2015** Run No: **291470**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207164** Analysis Date: **05/08/2015** Seq No: **6202646**

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	43.01	0	50.00		86.0	70.6	123				
Surr: Dibromofluoromethane	55.04	0	50.00		110	78.7	124				
Surr: Toluene-d8	48.60	0	50.00		97.2	81.3	120				

Sample ID: **LCS-207164** Client ID: Units: **ug/L** Prep Date: **05/08/2015** Run No: **291470**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207164** Analysis Date: **05/08/2015** Seq No: **6202645**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	62.50	5.0	50.00		125	64.2	137				
Benzene	45.09	5.0	50.00		90.2	72.8	128				
Toluene	47.64	5.0	50.00		95.3	74.9	127				
Trichloroethene	52.58	5.0	50.00		105	70.5	134				

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: 1505640

ANALYTICAL QC SUMMARY REPORT

BatchID: 207164

Sample ID: **LCS-207164** Client ID: Units: **ug/L** Prep Date: **05/08/2015** Run No: **291470**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207164** Analysis Date: **05/08/2015** Seq No: **6202645**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	43.34	0	50.00		86.7	70.6	123				
Surr: Dibromofluoromethane	52.73	0	50.00		105	78.7	124				
Surr: Toluene-d8	47.09	0	50.00		94.2	81.3	120				

Sample ID: **1505640-006AMS** Client ID: **15125-MW-36-Z1** Units: **ug/L** Prep Date: **05/08/2015** Run No: **291534**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207164** Analysis Date: **05/11/2015** Seq No: **6203857**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	48.02	5.0	50.00		96.0	60.5	156				
Benzene	49.24	5.0	50.00		98.5	70	135				
Toluene	50.72	5.0	50.00		101	70.5	137				
Trichloroethene	51.63	5.0	50.00		103	71.8	139				
Surr: 4-Bromofluorobenzene	46.07	0	50.00		92.1	70.6	123				
Surr: Dibromofluoromethane	45.70	0	50.00		91.4	78.7	124				
Surr: Toluene-d8	46.50	0	50.00		93.0	81.3	120				

Sample ID: **1505640-006AMSD** Client ID: **15125-MW-36-Z1** Units: **ug/L** Prep Date: **05/08/2015** Run No: **291534**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207164** Analysis Date: **05/11/2015** Seq No: **6203858**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	45.05	5.0	50.00		90.1	60.5	156	48.02	6.38	20	
Benzene	47.84	5.0	50.00		95.7	70	135	49.24	2.88	20	
Toluene	49.47	5.0	50.00		98.9	70.5	137	50.72	2.50	20	
Trichloroethene	50.41	5.0	50.00		101	71.8	139	51.63	2.39	20	
Surr: 4-Bromofluorobenzene	46.39	0	50.00		92.8	70.6	123	46.07	0	0	
Surr: Dibromofluoromethane	45.78	0	50.00		91.6	78.7	124	45.70	0	0	
Surr: Toluene-d8	46.31	0	50.00		92.6	81.3	120	46.50	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: 1505640

ANALYTICAL QC SUMMARY REPORT

BatchID: 207195

Sample ID: **MB-207195** Client ID: Units: **ug/L** Prep Date: **05/09/2015** Run No: **291467**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207195** Analysis Date: **05/09/2015** Seq No: **6202568**

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	44.04	0	50.00		88.1	70.6	123				
Surr: Dibromofluoromethane	49.71	0	50.00		99.4	78.7	124				
Surr: Toluene-d8	47.46	0	50.00		94.9	81.3	120				

Sample ID: **LCS-207195** Client ID: Units: **ug/L** Prep Date: **05/09/2015** Run No: **291467**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **207195** Analysis Date: **05/09/2015** Seq No: **6202567**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	46.20	5.0	50.00		92.4	64.2	137				
Benzene	41.75	5.0	50.00		83.5	72.8	128				
Toluene	41.68	5.0	50.00		83.4	74.9	127				
Trichloroethene	41.12	5.0	50.00		82.2	70.5	134				

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: 1505640

ANALYTICAL QC SUMMARY REPORT

BatchID: 207195

Sample ID: **LCS-207195**	Client ID:		Units: **ug/L**	Prep Date: **05/09/2015**	Run No: **291467**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **207195**	Analysis Date: **05/09/2015**	Seq No: **6202567**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	44.14	0	50.00		88.3	70.6	123				
Surr: Dibromofluoromethane	49.76	0	50.00		99.5	78.7	124				
Surr: Toluene-d8	46.91	0	50.00		93.8	81.3	120				

Sample ID: **1505640-021AMS**	Client ID: **15124-303 KAYE DR**		Units: **ug/L**	Prep Date: **05/09/2015**	Run No: **291467**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **207195**	Analysis Date: **05/09/2015**	Seq No: **6202572**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	45.63	5.0	50.00		91.3	60.5	156				
Benzene	41.26	5.0	50.00		82.5	70	135				
Toluene	42.11	5.0	50.00		84.2	70.5	137				
Trichloroethene	40.74	5.0	50.00		81.5	71.8	139				
Surr: 4-Bromofluorobenzene	43.74	0	50.00		87.5	70.6	123				
Surr: Dibromofluoromethane	50.29	0	50.00		101	78.7	124				
Surr: Toluene-d8	47.79	0	50.00		95.6	81.3	120				

Sample ID: **1505640-021AMSD**	Client ID: **15124-303 KAYE DR**		Units: **ug/L**	Prep Date: **05/09/2015**	Run No: **291467**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **207195**	Analysis Date: **05/09/2015**	Seq No: **6202573**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	44.17	5.0	50.00		88.3	60.5	156	45.63	3.25	20	
Benzene	40.16	5.0	50.00		80.3	70	135	41.26	2.70	20	
Toluene	40.33	5.0	50.00		80.7	70.5	137	42.11	4.32	20	
Trichloroethene	39.41	5.0	50.00		78.8	71.8	139	40.74	3.32	20	
Surr: 4-Bromofluorobenzene	43.90	0	50.00		87.8	70.6	123	43.74	0	0	
Surr: Dibromofluoromethane	48.97	0	50.00		97.9	78.7	124	50.29	0	0	
Surr: Toluene-d8	46.93	0	50.00		93.9	81.3	120	47.79	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		

Appendix C: Historical Groundwater Data

(Excerpted from the *2005 Annual Groundwater and Surface Water Monitoring Report*, ARCADIS G&M, Inc., 2006)

Historical Groundwater Analytical Results Owens Corning - Anderson, SC										
Sample ID	MW-1									
Sample Date	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)										
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (ug/L)										
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	190	51.8	160	60	50	49	39	39	NA	NA
Beryllium	0.46	ND	ND	ND	ND	ND	ND	ND	NA	NA
Chromium	ND	ND	3.1	2	2	ND	ND	ND	NA	NA
Lead	ND	ND	2.1	ND	ND	ND	ND	ND	NA	NA
Nickel	ND	ND	ND	1	7	ND	ND	ND	NA	NA
Fluoride	ND	ND	46.9	500	ND	ND	250	ND	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical results are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC										
Sample ID	MW-2									
Sample Date	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)										
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (ug/L)										
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	330	64.8	130	40	40	41	90	52	NA	NA
Beryllium	1.1	ND	ND	ND	ND	ND	ND	ND	NA	NA
Chromium	11	ND	3.4	1	1	ND	35	ND	NA	NA
Lead	ND	2.2	ND	ND	ND	ND	5.5	ND	NA	NA
Nickel	ND	ND	ND	1.0	ND	ND	27	ND	NA	NA
Fluoride	ND	ND	78.5	600	ND	ND	240	ND	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC														
Sample ID	MW-3													
Sample Date	Nov-90	Aug-91	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)														
Tetrachloroethene	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND
Metals (ug/L)														
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
Barium	ND	130	310	172	160	100	160	110	210	69	NA	NA	NA	NA
Beryllium	ND	2.7	1.4	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	28	16	3.3	5.1	ND	5	ND	ND	ND	NA	NA	NA	NA
Lead	ND	26	77	10.2	5.4	ND	9	5.2	13	ND	NA	ND	NA	NA
Nickel	ND	13	ND	28	ND	ND	10	ND	ND	ND	NA	NA	NA	NA
Fluoride	NA	ND	NA	ND	38.9	200	ND	ND	ND	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC														
Sample ID	MW-4													
Sample Date	Nov-90	Aug-91	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)														
Tetrachloroethene	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	170	ND	ND
Vinyl Chloride	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND
Chloroform	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	14	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)														
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
Barium	200	570	790	475	300	100	200	260	130	140	NA	NA	NA	NA
Beryllium	ND	3.9	4.4	2.5	1.7	ND	1	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	22	40	14.8	8.3	1	7	ND	ND	ND	NA	NA	NA	NA
Lead	ND	ND	38	12.1	3.3	ND	4	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	13	18	11.8	7.7	4	8	ND	ND	ND	NA	NA	NA	NA
Fluoride	NA	ND	NA	170	230	200	300	200	300	260	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC														
Sample ID	MW-5													
Sample Date	Nov-90	Aug-91	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)														
Tetrachloroethene	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)														
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
Barium	390	220	240	174	160	100	130	89	140	140	NA	NA	NA	NA
Beryllium	ND	1.0	1.0	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	16	10	4.3	2.3	ND	4	ND	ND	ND	NA	NA	NA	NA
Lead	ND	ND	30	8.5	3.2	ND	8	ND	ND	ND	NA	NA	NA	NA
Nickel	ND	7.1	ND	3.7	ND	1	3	ND	ND	ND	NA	NA	NA	NA
Fluoride	NA	ND	NA	ND	31.4	200	ND	ND	170	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-6											
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.4
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	46	ND	ND	ND	ND	ND	ND	ND	ND	2.6	2.8
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	ND	NA	NA	ND	ND	NA	NA	ND	NA	ND	NA	NA
Barium	46	40.1	38.7	40	40	42	40	37	NA	NA	NA	NA
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	5.6	4	2	1	ND	11	ND	NA	NA	NA	NA
Lead	1.2	4.1	2.6	ND	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	2.7	ND	2.0	2.0	ND	ND	ND	NA	NA	NA	NA
Fluoride	ND	ND	120	200	100	ND	270	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC																	
Sample ID	MW-7																
Sample Date	Nov-90	Aug-91	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Jun-03	Dec-03	Apr-04	Jul-04	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)																	
Tetrachloroethene	NA	ND	NA	ND	40	ND	ND	23	ND	ND	ND	ND	ND	ND	ND	ND	4.5
Trichloroethene	NA	ND	ND	ND	62	ND	ND	26.6	ND	ND	ND	ND	ND	ND	ND	ND	3.2
1,1-Dichloroethene	NA	13,000	3,600	31,000	24,000	14,000	2,900	14,000	27,600	30,100	45,000	1,600	4,400	6,200	3,200	1,000	1,700
Vinyl Chloride	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	NA	ND	ND	ND	22	ND	ND	11.8	ND	ND	ND	ND	ND	ND	ND	ND	3.3J
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	NA	35,000	9,000	55,000	58,000	28,000	8,200	24,600	36,500	36,000	76,000	18,000	9,100	13,000	8,300	3,800	5,500
1,2-Dichloroethane	NA	ND	ND	ND	32	ND	ND	17.1	ND	ND	ND	ND	NA	ND	ND	ND	ND
Benzene	NA	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND
Metals (ug/L)																	
Arsenic	400	NA	2.50	16.6	ND	ND	ND	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA
Barium	470	170	530	327	620	100	70	220	190	170	NA	NA	NA	NA	NA	NA	NA
Beryllium	70	41	6.5	20.5	25	20	3	24	27	25	NA	NA	NA	NA	NA	NA	NA
Chromium	27	19	25	11.3	23.2	10	6	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Lead	65	ND	43	17.4	27.1	ND	ND	ND	ND	ND	NA	NA	ND	NA	NA	NA	NA
Nickel	290	320	59	166	174	90	10	120	160	170	NA	NA	NA	NA	NA	NA	NA
Fluoride	6400	21,800	100,000	44,900	1,000,000	300,000	45,000	1,700,000	722,000	1,780,000	NA	1,500	NA	280	570	NA	NA

ug/L -Micrograms per liter
NA -Not Analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-9											
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	74	41	1	ND	ND	ND	ND	ND	ND	ND	5.7	2.2
Vinyl Chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	70	1	ND	ND	ND	ND	ND	ND	ND	4.7	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (ug/L)												
Arsenic	ND	NA	NA	6.5	ND	NA	NA	ND	NA	ND	NA	NA
Barium	960	959	74.5	50	70	70	110	68	NA	NA	NA	NA
Beryllium	0.55	4.8	1.4	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	61	86.1	4.4	1	4	ND	91	ND	NA	NA	NA	NA
Lead	20	19	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	49	84.9	7.3	3	5	24	81	ND	NA	NA	NA	NA
Fluoride	21,000	2,060	1,640	600	800	500	42,600	2,700	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not Analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC											
Sample ID	MW-10										
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04
Volatile Organic Compounds (ug/L)											
Tetrachloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	0.94	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Metals (ug/L)											
Arsenic	ND	NA	NA	ND	ND	NA	NA	ND	NA	ND	NA
Barium	4,800	36.4	38	40	30	56	61	36	NA	NA	NA
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Chromium	ND	1.6	ND	1	1	ND	44	ND	NA	NA	NA
Lead	ND	ND	ND	ND	ND	ND	11	ND	NA	ND	NA
Nickel	ND	ND	ND	ND	2	ND	39	ND	NA	NA	NA
Fluoride	ND	ND	61.3	200	ND	ND	220	ND	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC														
Sample ID	MW-11													
Sample Date	Nov-90	Aug-91	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)														
Tetrachloroethene	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	NA	ND	ND	1.2
1,1-Dichloroethene	43	62	94	19	45	230	600	190	204	335	630	ND	360	280
Vinyl Chloride	NA	ND	NA	NA	6	ND	ND	ND	10.7	21.6	ND	ND	17	33
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	31	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	27.3	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	NA	ND	4
Benzene	ND	7	6	ND	2	ND	ND	ND	ND	0.82	ND	NA	ND	ND
Metals (ug/L)														
Arsenic	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	ND	NA	NA
Barium	1,100	930	1,800	438	840	400	260	250	210	150	NA	NA	NA	NA
Beryllium	ND	6	12	ND	1.5	ND	ND	ND	NA	NA	NA	NA	NA	NA
Chromium	25	31	8	10	12.2	8	10	ND	NA	NA	NA	NA	NA	NA
Lead	ND	ND	41	3.9	3.5	2	3	ND	NA	NA	NA	ND	NA	NA
Nickel	ND	44	60	37.4	41.2	40	20	29	26	NA	NA	NA	NA	NA
Fluoride	NA	ND	NA	120	180	500	200	130	170	250	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC														
Sample ID	MW-12													
Sample Date	Nov-90	Aug-91	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)														
Tetrachloroethene	NA	ND	NA	ND	2	7	ND	ND	ND	1.9	ND	ND	ND	1.9
Trichloroethene	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	1.2
1,1-Dichloroethene	680	460	310	250	260	180	120	284	338	383	350	ND	160	180
Vinyl Chloride	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	28	26	23	16	19	13	7.2	17.7	14.8	13.5	13	ND	8	15
Chloroform	ND	ND	ND	ND	10	ND	5	11.4	12.3	12	14	ND	10	14
Methylene chloride	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	25	ND	11	ND	3	ND	ND	ND	9.2	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	4	6.5	ND	ND	ND	ND	ND	NA	2.4	2.9
Benzene	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)														
Arsenic	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA
Barium	ND	140	170	150	600	100	130	220	170	190	NA	NA	NA	NA
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
Chromium	38	560	160	67.8	77.1	20	100	120	46	790	NA	NA	NA	NA
Lead	ND	ND	1.9	ND	ND	ND	ND	ND	NA	NA	NA	ND	NA	NA
Nickel	110	1,600	71	52.8	29.7	10	90	34	54	450	NA	NA	NA	NA
Fluoride	NA	ND	NA	ND	48.5	400	ND	ND	3,400	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-13											
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	NA	ND	4	8.4	ND	ND	ND	ND	ND	ND	ND	2.1
Trichloroethene	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	1.3
1,1-Dichloroethene	430	310	410	280	170	324	455	475	410	220	200	180
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	29	28	37	28	9.1	23.3	23	20	ND	14	14	17
Chloroform	ND	ND	13	16	6.8	13.2	15	13.9	ND	12	11	14
Methylene chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	15	ND	4	ND	9.3	ND	ND	ND	ND	ND	ND	3.9
1,2-Dichloroethane	ND	ND	6	9.3	ND	5.5	5.7	ND	ND	NA	ND	3
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
Barium	140	93.1	100	100	100	110	110	110	NA	NA	NA	NA
Beryllium	0.37	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	8.6	ND	ND	2	2	MD	ND	ND	NA	NA	NA	NA
Lead	2.6	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	ND	ND	2	2	60	ND	ND	NA	NA	NA	NA
Fluoride	ND	ND	41.9	300	300	ND	440	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-14											
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	ND	NA	NA	ND	ND	NA	NA	ND	NA	ND	NA	NA
Barium	110	34.6	36.6	50	40	67	49	44	NA	NA	NA	NA
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	ND	ND	1	1	MD	ND	ND	NA	NA	NA	NA
Lead	12	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	ND	ND	1	1	ND	ND	ND	NA	NA	NA	NA
Fluoride	NA	100	180	200	200	ND	380	170	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-15											
Sample Date	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	ND	ND	2	7.3	ND	ND	ND	ND	ND	ND	1.6	ND
Trichloroethene	NA	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	2.5	320	230	99	83	230	354	322	360	140	290	44
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	1.9	ND	8	5.3	ND	8.1	8	6.9	ND	ND	ND	ND
Methylene chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	4	5.5	ND	ND	ND	ND	ND	NA	2.5	1.1
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	2	3.3	NA	ND	3	NA	NA	ND	NA	ND	NA	NA
Barium	100	ND	75.7	70	70	72	78	78	NA	NA	NA	NA
Beryllium	1	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	1.2	ND	2	2	ND	ND	ND	NA	NA	NA	NA
Lead	15	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	1.9	ND	1	1	22	ND	ND	NA	NA	NA	NA
Fluoride	NA	130	140	300	300	ND	300	110	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-16											
Sample Date	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	17.4	3.6	ND	ND	ND	NA	NA	ND	NA	ND	NA	NA
Barium	1,300	163	180	80	50	78	54	65	NA	NA	NA	NA
Beryllium	2.5	ND	1.4	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	21	6.4	5.5	3	3	MD	20	ND	NA	NA	NA	NA
Lead	79	8.6	11.6	1	1	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	3.1	ND	2	2	ND	20	ND	NA	NA	NA	NA
Fluoride	NA	ND	130	200	200	170	210	210	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-17											
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND
Vinyl Chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	ND	NA	NA	ND	ND	NA	NA	ND	NA	ND	NA	NA
Barium	130	200	700	100	90	260	150	170	NA	NA	NA	NA
Beryllium	ND	ND	1.5	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	7.1	3.9	3.6	1	ND	ND	ND	ND	NA	NA	NA	NA
Lead	1.9	4.9	ND	ND	ND	7	ND	ND	NA	ND	NA	NA
Nickel	ND	3.9	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Fluoride	ND	ND	36	200	ND	ND	180	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC											
Sample ID	MW-18										
Sample Date	Aug-93	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)											
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)											
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
Barium	370	170	200	90	120	100	91	NA	NA	NA	NA
Beryllium	1	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	11	3.1	6	ND	ND	ND	ND	NA	NA	NA	NA
Lead	ND	3.3	6	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	ND	5	1	ND	ND	ND	NA	NA	NA	NA
Fluoride	ND	32.5	200	ND	ND	210	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-19											
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	ND	ND	3	ND	ND	ND	ND	4.6	ND	ND	2.5	1.5
Trichloroethene	NA	ND	2	ND	ND	ND	ND	2.3	ND	ND	ND	ND
1,1-Dichloroethene	160	240	270	190	81	279	257	256	240	160	160	86
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	7	5.2	ND	5.9	7.1	6.2	ND	ND	4.4	2.9
Methylene chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	6	6.1	ND	5.1	6.8	5.7	ND	NA	4.4	2.9
Benzene	ND	ND	ND	13	21	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
Barium	3,200	40.4	20.5	30	30	ND	ND	ND	NA	NA	NA	NA
Beryllium	3.6	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	7.8	1.3	ND	2	2	ND	ND	ND	NA	NA	NA	NA
Lead	119	2.5	ND	ND	3	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	ND	ND	2	2	ND	ND	ND	NA	NA	NA	NA
Fluoride	450	170	180	300	200	110	300	140	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-20											
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	NA	3	ND	ND	ND	ND	5.3	5	ND	ND	ND	1.8
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND
1,1-Dichloroethene	9.6	7	10	ND	ND	74.4	113	126	22	ND	25	44
Vinyl Chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1.6	ND	3	ND	ND	22.6	35.7	37.7	7.3	ND	5.9	16
Chloroform	17	ND	9	11	6.3	26.9	29.3	26.7	36	ND	20	43
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	6	ND	ND	ND	5.3	8.1	7.6	ND	NA	1.3	3
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
Barium	98	51.7	420	50	40	120	69	76	NA	NA	NA	NA
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	3.5	5.9	3	4	ND	ND	ND	NA	NA	NA	NA
Lead	1.5	ND	2.3	ND	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	15	3.8	5.6	2	2	ND	ND	ND	NA	NA	NA	NA
Fluoride	ND	ND	63.9	100	ND	1,600	110	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-21											
Sample Date	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	ND	NA	NA	ND	ND	NA	NA	ND	NA	ND	NA	NA
Barium	1,200	661	280	100	100	130	250	82	NA	NA	NA	NA
Beryllium	3.3	2.2	1.8	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	9.5	4	2.8	1	1	ND	ND	ND	NA	NA	NA	NA
Lead	75	31.7	6.7	ND	ND	ND	5.8	ND	NA	ND	NA	NA
Nickel	ND	5.4	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Fluoride	NA	ND	44.9	100	ND	ND	180	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC											
Sample ID	MW-22										
Sample Date	Aug-93	Dec-95	Dec-96	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)											
Tetrachloroethene	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	1.5
Trichloroethene	NA	ND	2	ND	ND	ND	ND	ND	ND	ND	1
1,1-Dichloroethene	300	400	520	630	545	586	566	480	300	310	300
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	18	30	40	21	24.2	24.8	21.9	ND	12	14	19
Chloroform	ND	ND	11	12	11.4	12.9	12.7	ND	10	11	13
Methylene chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	5	ND	5	5.7	4.7	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)											
Arsenic	ND	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
Barium	89	78.6	81.9	80	92	100	96	NA	NA	NA	NA
Beryllium	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	1.3	ND	ND	ND	ND	ND	NA	NA	NA	NA
Lead	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Fluoride	ND	ND	38.3	ND	ND	ND	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC											
Sample ID	MW-24										
Sample Date	Sep-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04
Volatile Organic Compounds (ug/L)											
Tetrachloroethene	NA	ND	1	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	23	32	24	34	37	20.3	47.5	67.4	69	ND	1
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	4.6	6	5	6.2	8.7	ND	6.6	6.6	8.1	ND	ND
Chloroform	12	12	14	15	21	17.9	20.1	21.1	26	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6
1,2-Dichloroethane	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
Metals (ug/L)											
Arsenic	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA
Barium	190	162	570	100	140	160	160	140	NA	NA	NA
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Chromium	9	ND	1.3	1	1	ND	ND	ND	NA	NA	NA
Lead	16	ND	2.6	ND	ND	ND	ND	ND	NA	ND	NA
Nickel	ND	3.2	ND	2	2	ND	ND	ND	NA	NA	NA
Fluoride	ND	ND	43.5	200	ND	ND	ND	ND	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-25											
Sample Date	Aug-93	Dec-95	Dec-96	Dec-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	ND	NA	NA	ND	NA	NA	NA	ND	NA	ND	NA	NA
Barium	580	115	100	80	80	97	110	110	NA	NA	NA	NA
Beryllium	1.4	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	8.2	ND	ND	2	1	ND	ND	ND	NA	NA	NA	NA
Lead	27	ND	ND	ND	ND	ND	ND	ND	NA	11	NA	NA
Nickel	ND	1.3	35.1	2	2	ND	ND	ND	NA	NA	NA	NA
Fluoride	NA	ND	ND	100	ND	ND	ND	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	MW-26											
Sample Date	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA
Barium	1,100	780	1,000	900	640	680	1,200	830	NA	NA	NA	NA
Beryllium	2.9	2.7	2.3	3.0	3	ND	ND	ND	NA	NA	NA	NA
Chromium	61	33.2	24.7	90	40	38	140	50	NA	NA	NA	NA
Lead	43	17.3	8.8	20	10	16	26	14	ND	NA	NA	NA
Nickel	47	67.2	51	100	50	98	180	99	NA	NA	NA	NA
Fluoride	NA	150	140	100	100	ND	ND	100	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC											
Sample ID	MW-27										
Sample Date	Sep-93	Dec-95	Dec-96	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)											
Tetrachloroethene	11	ND	8	ND	5.3	5.8	5.7	ND	4.9	2.5	3.1
Trichloroethene	NA	ND	4	ND	ND	ND	2.9	ND	23	1.3	2
1,1-Dichloroethene	350	130	210	46	101	126	150	120	180	74	130
Vinyl Chloride	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	77	6	55	12	34.6	41.2	43	34	2.2	15	19
Chloroform	17	10	25	23	22.4	25.7	26.8	29	15	26	13
Methylene chloride	NA	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND
1,2-Dichloroethane	13	ND	9	ND	7.4	9.8	8.8	6.9	ND	3.5	4.4
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)											
Arsenic	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA
Barium	57	82.9	55.6	50	66	79	78	NA	NA	NA	NA
Beryllium	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ND	2.6	1.3	1	ND	ND	ND	NA	NA	NA	NA
Lead	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
Nickel	ND	1.8	53.9	2	ND	ND	ND	NA	NA	NA	NA
Fluoride	ND	100	ND	ND	ND	140	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC					
Sample ID	MW-28				
Sample Date	Apr-04	May-04	Jul-04	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)					
Tetrachloroethene	ND	ND	ND	ND	38
Trichloroethene	ND	ND	ND	ND	53
1,1-Dichloroethene	160,000	25,000	39,000	24,000	35,000
Vinyl Chloride	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	96,000	31,000	49,000	61,000	91,000
1,2-Dichloroethane	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Metals (ug/L)					
Arsenic	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA
Fluoride	3,800	1,800	330	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results		
Sample ID	MW-29R	
Sample Date	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)		
Tetrachloroethene	ND	ND
Trichloroethene	ND	ND
1,1-Dichloroethene	290	95
Vinyl Chloride	ND	ND
Carbon tetrachloride	12	3.4
Chloroform	11	3.3
Methylene chloride	ND	ND
1,1,1-Trichloroethane	ND	ND
1,2-Dichloroethane	ND	ND
Benzene	ND	ND
Metals (ug/L)		
Arsenic	NA	NA
Barium	NA	NA
Beryllium	NA	NA
Chromium	NA	NA
Lead	NA	NA
Nickel	NA	NA
Fluoride	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC						
Sample ID	TW-40					
Sample Date	Oct-01	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)						
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1.6	4.6	ND	ND	ND	2.7
Vinyl Chloride	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND
Chloroform	11.3	2.6	ND	ND	ND	ND
Methylene chloride	1.1	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	NA	ND	ND
Metals (ug/L)						
Arsenic	NA	ND	NA	ND	NA	NA
Barium	130	NA	NA	NA	NA	NA
Beryllium	ND	NA	NA	NA	NA	NA
Chromium	11	NA	NA	NA	NA	NA
Lead	6.4	NA	NA	11	NA	NA
Nickel	NA	NA	NA	NA	NA	ND
Fluoride	120	NA	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC						
Sample ID	TW-41					
Sample Date	Oct-01	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)						
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
Methylene chloride	2.1	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	NA	ND	ND
Metals (ug/L)						
Arsenic	NA	ND	NA	ND	NA	NA
Barium	680	NA	NA	NA	NA	NA
Beryllium	ND	NA	NA	NA	NA	NA
Chromium	45	NA	NA	NA	NA	NA
Lead	16	NA	NA	ND	NA	NA
Nickel	37	NA	NA	ND	NA	NA
Fluoride	500	NA	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC				
Sample ID	TW-42			
Sample Date	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)				
Tetrachloroethene	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND
1,1-Dichloroethene	ND	1.9	ND	ND
Vinyl Chloride	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND
Chloroform	ND	36	ND	ND
Methylene chloride	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND
Benzene	ND	ND	ND	ND
Metals (ug/L)				
Arsenic	NA	ND	NA	NA
Barium	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA
Chromium	NA	NA	NA	NA
Lead	NA	ND	NA	NA
Nickel	NA	NA	NA	NA
Fluoride	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC						
Sample ID	TW-43					
Sample Date	Nov-01	Oct-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)						
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	1.6	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	NA	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND
Metals (ug/L)						
Arsenic	NA	NA	NA	ND	NA	NA
Barium	NA	1,800	NA	NA	NA	NA
Beryllium	NA	4.1	NA	NA	NA	NA
Chromium	NA	23	NA	NA	NA	NA
Lead	NA	80	NA	NA	NA	NA
Nickel	NA	ND	NA	NA	NA	NA
Fluoride	NA	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC						
Sample ID	TW-44					
Sample Date	Oct-01	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)						
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
Methylene chloride	1.8	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	NA	ND	ND
Metals (ug/L)						
Arsenic	NA	ND	NA	ND	NA	NA
Barium	120	NA	NA	NA	NA	NA
Beryllium	ND	NA	NA	NA	NA	NA
Chromium	ND	NA	NA	NA	NA	NA
Lead	21	NA	NA	10	NA	NA
Nickel	NA	NA	NA	NA	NA	NA
Fluoride	ND	NA	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC						
Sample ID	TW-45					
Sample Date	Oct-01	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)						
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	9.1	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	2.8	ND
Chloroform	9.3	5.6	9.4	ND	33	ND
Methylene chloride	ND	2.8	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	NA	ND	NA
Benzene	ND	ND	ND	NA	ND	NA
Metals (ug/L)						
Arsenic	NA	NA	NA	ND	NA	ND
Barium	NA	220	NA	NA	NA	NA
Beryllium	NA	ND	NA	NA	NA	NA
Chromium	NA	ND	NA	NA	NA	NA
Lead	NA	21	NA	NA	NA	NA
Nickel	NA	60	NA	ND	NA	ND
Fluoride	NA	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC						
Sample ID	TW-46					
Sample Date	Oct-01	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)						
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	4.6	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	2.1	1.6	ND	ND	ND	ND
Chloroform	40.6	51	100	85	56	34
Methylene chloride	2.3	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	NA	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND
Metals (ug/L)						
Arsenic	NA	ND	NA	ND	NA	NA
Barium	77	NA	NA	NA	NA	NA
Beryllium	ND	NA	NA	NA	NA	NA
Chromium	ND	NA	NA	NA	NA	NA
Lead	ND	NA	NA	ND	NA	NA
Nickel	ND	NA	NA	NA	NA	ND
Fluoride	ND	NA	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC												
Sample ID	ALLOY											
Sample Date	Aug-93	Dec-95	Dec-96	Nov-97	Dec-98	Dec-99	Dec-00	Nov-01	Dec-02	Dec-03	Dec-04	Nov-05
Volatile Organic Compounds (ug/L)												
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1.2	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Metals (ug/L)												
Arsenic	ND	NA	NA	NA	NA	NA	ND	NA	NA	ND	NA	NA
Barium	1,100	216	160	50	40	88	65	77	NA	NA	NA	NA
Beryllium	3.1	1.1	1.7	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	22	4	3.6	3	2	ND	ND	ND	NA	NA	NA	NA
Lead	190	34	25.9	6	6	7.8	5.5	5.2	ND	NA	NA	NA
Nickel	28	5.6	ND	3	3	ND	ND	ND	NA	NA	NA	NA
Fluoride	370	ND	88.8	100	100	ND	230	ND	NA	NA	NA	NA

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.

Historical Groundwater Analytical Results Owens Corning - Anderson, SC				
Sample ID	GLADDEN			
Sample Date	Sep-93	Dec-96	Nov-97	Dec-98
Volatile Organic Compounds (ug/L)				
Tetrachloroethene	ND	ND	ND	ND
Trichloroethene	NA	ND	ND	ND
1,1-Dichloroethene	3.2	2	ND	ND
Vinyl Chloride	NA	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND
Methylene chloride	NA	ND	ND	9.7
1,1,1-Trichloroethane	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND
Benzene	ND	ND	ND	ND
Metals (ug/L)				
Arsenic	NA	NA	NA	NA
Barium	41.0	43.4	200	40
Beryllium	ND	ND	ND	ND
Chromium	ND	ND	2	1
Lead	1.6	6.8	ND	ND
Nickel	ND	ND	1	1
Fluoride	ND	49.3	200	ND

ug/L - Micrograms per liter
NA - Not analyzed
ND - Non-detect, reporting limits were not given in report.
Analytical data are from Arcadis reports.