2009 ANNUAL GROUNDWATER AND SURFACE WATER MONITORING REPORT

Prepared for Owens Corning 4837 Highway 81 South Anderson, South Carolina January 2010

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Prepared for Owens Corning 4837 Highway 81 South Anderson, South Carolina January 29, 2010

BROWN AND CALDWELL

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PROFESSIONAL GEOLOGIST CERTIFICATION

The 2009 Annual Surface Water and 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.

Juhne

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

January 29, 2010 Date



2009 ANNUAL GROUNDWATER AND SURFACE WATER MONITORING REPORT

1. INTRODUCTION

This 2009 Annual Groundwater and Surface Water Monitoring Report was prepared by Brown and Caldwell (BC) on behalf of Owens Corning of Anderson, South Carolina for submittal to the U.S. Environmental Protection Agency (EPA). In 1989 Owens Corning entered into a Consent Order (89-34-R) with the EPA under Section 3008(h) of the Resource Recovery and Conservation Act (RCRA). The report summarizes the August 2009 quarterly groundwater monitoring and November 2009 annual surface water and groundwater monitoring events. The results for the February and May 2009 groundwater sampling events were reported in the *2009 Semiannual Groundwater Sampling Report* dated July 13, 2009. The Consent Order requires that Owens Corning perform annual groundwater monitoring and in 2005 EPA required that quarterly groundwater monitoring be conducted for select bedrock wells located in the northeast area.

This report fulfills the Consent Order requirements for submitting an Annual RCRA Facility Investigation Groundwater Report for 2009. Section 1 of this report presents an introduction. Section 2 summarizes the surface water and groundwater monitoring activities. Section 3 provides and discusses the analytical results and Section 4 provides conclusions. Appendices to this document contain the laboratory analytical reports, historical groundwater data and groundwater sampling field forms.

The plant is situated on 160 acres of land located at 4837 Highway 81 South in Starr, South Carolina within Anderson County. As shown in Figure 1 the property is bounded by Highway 81 South to the west, True Temper Road to the north, Keys Street to the east, and Harry Drive to the south. The plant is located approximately 4 miles south of the town of Anderson.

The plant 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 EPA and the South Carolina Department and Environmental Control (SCDHEC).

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2. GROUNDWATER AND SURFACE WATER ASSESSMENT

Brown and Caldwell personnel performed the third quarter groundwater monitoring event between August 10 and 14, 2009 and the annual groundwater monitoring event between November 16 and November 20, 2009. Section 2 provides an overview of these events and includes detailed information on site hydrogeology and aquifer characteristics, groundwater and surface water 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 ranges from approximately 5 to 100 feet. The primary lineaments and fracture zones at 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, January 2009), which was prepared by BC on behalf of Owens Corning of Anderson, South Carolina for submittal to the EPA.

2.2 Aquifer Characteristics

The depth to groundwater beneath the site ranges from artesian conditions in MW-35 to approximately 26 feet below ground surface (bgs) in MW-10 and is present in both the overburden and bedrock units beneath the site. Water level measurements were collected from 26 wells during the August monitoring event and from 47 wells during the November monitoring event as identified in Tables 2 and 3, respectively. Refer to Figure 1 to identify well locations .

The water level measurements were used to calculate groundwater elevations and prepare potentiometric maps for both the overburden and top of rock aquifer (Figures 2 and 3) and the bedrock aquifer (Figures 4 through 13). Water level data were not collected from MW-34 during the August event due to a fieldwork error, and the water level measurement from MW-34 (Zone 5) from the November event was not used to contour the bedrock potentiometric maps due to an inconsistent reading from the Waterloo equipment. The water level measurement from well MW-33 was not used to contour bedrock potentiometric maps since this well is an open hole that traverses several water-bearing zones. Ground surface and top of casing elevations, depth to water and groundwater elevations are provided on Table 1.

Groundwater in the overburden and top of rock aquifer flows to the east-northeast toward Betsy Creek, which appears to be a perennial stream. This is consistent with the historical groundwater flow direction with the exception that groundwater from SWMU-9 was previously shown flowing more to the north than northeast.

The average horizontal gradient across the site is approximately 0.013 foot per feet. In the vicinity of the manufacturing area, a slight downward vertical gradient of 0.009 foot per feet is present. The average horizontal gradient observed in the bedrock was estimated to be approximately 0.01 foot per feet.

Additional information can be found in the Supplemental RFI Report (Brown and Caldwell, January 2009).

2.3 Groundwater Monitoring Wells

The original quarterly groundwater monitoring program included seven bedrock monitoring wells (MW-15, MW-22, MW-29R, MW-33, MW-35, MW-36 and MW-37). MW-33 has since been removed from the quarterly and annual groundwater monitoring program because it will become the groundwater extraction well for the interim measures hydraulic containment system. The removal of this well from the monitoring program is of little consequence since there are several wells in the surrounding area that provide both hydraulic potential and concentration data that are used to model plume behavior.

The annual groundwater monitoring program includes the following 41 overburden, top of rock and bedrock monitoring wells as shown in Figure 1:

- Overburden Wells: MW-1, MW-3, MW-4, MW-5, MW-7, MW-9, MW-11, MW-12, MW-18, MW-26, MW-28, MW-32, TW-43 and TW-45
- Top of Rock Wells: MW-2, MW-10, MW-13, MW-14, MW-17, MW-20, MW-21, MW-24, MW-25, MW-30, MW-31, TW-42 and TW-46
- Bedrock Wells: Alloy, MW-6, MW-15, MW-16, MW-19, MW-22, MW-27, MW-29R, MW-35, MW-36, MW-37, TW-40, TW-41 and TW-44.

The locations of the wells are shown on Figure 1 and well construction details are provided in Table 1. Multiple water-bearing zones were sampled in bedrock wells MW-29R, MW-36 and MW-37 (Tables 2 and 3).

2.4 Surface Water Monitoring Locations

The surface water monitoring program consisted of collecting samples from 11 locations (SW-1, SW-3, SW-3A, SW-3B, SW-6, SW-10, SW-11, SW-12, SW-13, SW-14 and SW-15). The surface water samples were collected on November 18, 2009 and the locations are presented on Figure 1.

2.5 Groundwater and Surface Water Sampling Procedures

On August 11 and November 16, 2009, depth to groundwater data were collected from 26 and 47 monitoring wells, respectively. 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 quarterly and annual sampling events. Prior to collecting groundwater samples, the wells were purged using either a low-flow submersible electric pump or a peristaltic pump. The Waterloo system 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 gallon per minute (gpm) through new or dedicated polyethylene tubing equipped with a field-calibrated, in-line YSI® 556 meter to measure the following field parameters: pH, temperature, specific conductance, oxidation-reduction potential (ORP), and dissolved oxygen (DO). Turbidity was measured using a DRT® 15CE Turbidimeter. Purging was considered complete when at least three of the field parameters had stabilized. An attempt was made to obtain turbidity readings of less than 10 Nephelometric Turbidity Units (NTUs); however, this was not achieved for all wells. Groundwater sampling field data sheets documenting the purging activities are included as Appendix A.

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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 about 4 degrees Celsius (temperatures verified by laboratory and are reported in the Laboratory Analytical Report in Appendix B). 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.

During the August 2009 event groundwater samples were collected from monitoring well MW-33 from three discrete intervals, 245 to 255 feet bgs, 355 to 365 feet bgs and 395 to 410 feet bgs through a 10 or 15-foot packer assembly. Prior to collecting groundwater samples from the packer intervals, the intervals were purged for either two hours or until three volumes had been removed, whichever came first, using a low-flow submersible Grundfos electric pump. Groundwater was pumped through new polyethylene tubing equipped with a field-calibrated, in-line YSI® 556 meter to measure field parameters: pH, temperature, specific conductance, ORP, and DO. Turbidity was measured using a DRT® 15CE Turbidimeter. Groundwater samples were collected when pH, temperature and specific conductance had stabilized as defined in EPA's Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOP/QAM), November 2001 and Science and EPA's Ecosystem Support Division Groundwater Sampling Procedure (SESDPROC-301-RO), February 2007. Samples were not collected from this well during the November 2009 event.

Surface water samples were collected on November 18, 2009 by manually filling the sample containers with surface water using a precleaned, disposable 46-inch polyethylene dipper.

2.6 Analytical Parameters

Groundwater samples were submitted to Analytical Environmental Services (AES), Inc. of Atlanta, Georgia for the August event. The surface water and groundwater samples were submitted to Columbia Analytical Services (CAS), Inc. of Jacksonville, Florida for the November event. The samples were analyzed for the focused list of volatile organic compounds (VOCs) using 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-DCE; trans-1,2-DCE; vinyl chloride; carbon tetrachloride; chloroform; methylene chloride; benzene; toluene; ethylbenzene and xylenes.

2.7 Quality Assurance/Quality Control

The groundwater and surface water sampling was performed in accordance with EPA's Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (SOP/QAM), November 2001. 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. One duplicate sample was collected during the August sampling event and three were collected during the November event. The collection of duplicate samples was performed by splitting a sample into two sample containers. An evaluation of the analytical results for the duplicate sampling and five during the November sampling to determine the efficacy of non-dedicated equipment decontamination activities. The samples were obtained by collecting distilled water passed through or over decontaminated equipment. One trip blank was submitted with the groundwater samples in August, and two with the November samples. The equipment and trip blank samples were analyzed for the same constituents as the groundwater samples. No detections were reported in any of the blanks. The analytical reports are provided in Appendix B.



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3. GROUNDWATER ANALYTICAL RESULTS

The following section includes the results for the August 2009 quarterly groundwater and November 2009 annual surface water and groundwater monitoring events. The number of samples collected during the August event was limited to the seven EPA specified bedrock wells located on the northeast portion of the Owens Corning property and one offsite well (MW-35). For the November event samples were collected from 41 overburden, top of rock, and bedrock wells and 11 surface water locations. The August and November 2009 groundwater analytical results are summarized in Tables 4 and 5, respectively. The November 2009 surface water analytical results are summarized in Table 6. Historical groundwater analytical data can be found in previous reports submitted to EPA and summaries of this information can be found in Appendix C of this report. Analytical parameter, 1,1-DCE, was selected for presentation on isoconcentration contour maps for the August and November events as shown on Figures 15 through 22. This analyte was selected because it is the most prevalent and widespread analyte detected at the site. A concentration map for 1,1,1-TCA in the overburden, top of rock and bedrock wells was also prepared because it was the parent compound originally released at SWMU-9; it is presented as Figure 14 for the November 2009 event.

3.1 Overburden and Top of Rock Aquifer

Consistent with observations made during previous monitoring events, the highest VOC concentrations were detected in the overburden and top of rock aquifer in the vicinity of SWMU 9 where 1,1,1-TCA and 1,1-DCE are the primary VOC constituents. The highest 1,1,1-TCA and 1,1-DCE concentrations were measured in well MW-28 at 93,000 micrograms per liter (μ g/L) and 110,000 μ g/L, respectively. The 1,1,1-TCA concentrations in this well have fluctuated for years but have consistently been greater than 1 percent of the solubility limit (950,000 μ g/L), thus suggesting the potential presence of dense non-aqueous phase liquid (DNAPL).

Potentially significant concentrations of 1,1,1-TCA have also been detected in MW-7 where concentrations have trended upward from 17,000 μ g/L (2007) to 24,000 μ g/L (2008) to 30,000 μ g/L (2009). This too may be indicative of nearby DNAPL, which most likely would be in the form of residual stringers given the shallow depth of MW-7 and the absence of a confining clay layer. The only other detection of 1,1,1-TCA during the November event was in MW-32 (14 μ g/L). No other samples produced detections of 1,1,1-TCA above the laboratory reporting limit. The rapid disappearance of 1,1,1-TCA in groundwater is consistent with known transformation mechanisms, particularly aqueous hydrolysis which is a very fast reaction. Accordingly the presence of 1,1,1-TCA in the overburden groundwater downgradient of SWMU-9 is not expected.

Other VOCs that exceeded their MCLs in the overburden and top of rock wells were 1,2-DCA, carbon tetrachloride, PCE, TCE and vinyl chloride. Although there were no reported detections for 1,2-DCA, benzene, carbon tetrachloride, methylene chloride, TCE, and vinyl chloride in MW-7 or benzene, carbon tetrachloride, methylene chloride, and vinyl chloride in MW-28, these two samples required dilution during analysis by the analytical laboratory which resulted in reporting limits greater than MCLs.

Other contaminants detected above MCLs were 1,2-DCA in MW-13 (5.6 μ g/L), carbon tetrachloride in MW-12 (13 μ g/L) and MW-13 (25 μ g/L), and vinyl chloride in MW-11 (12 μ g/L). Samples from the shallow

aquifer wells (top of rock and overburden) located north and northeast of wells MW-12 and MW-13 were below the laboratory reporting limit (non-detect) for the entire focused list of VOCs.

3.2 Bedrock Aquifer

The overall 1,1-DCE bedrock plume for the August event is shown on Figure 8 and the 1,1-DCE bedrock plume for the November event was mapped across vertical intervals as shown in Figures 17 through 22. Assuming that 1,1-DCE entered the top of bedrock near SWMU-9, the axis of the plume, consistent with the groundwater flow direction, is projected to move to the north-northeast. Refer to the *Supplemental RCRA Facility Investigation Report* (Brown and Caldwell, January 2009) for a more detailed review of these figures.

Wells MW-29R and MW-36 were installed with the Waterloo system, and only the zones with the transducer and pump were sampled, and well MW-37 is a nested well (refer to Table 4 and 5). Well MW-29R Zone 3 and Zone 4 showed an increase in concentration over the first three quarters from 510 μ g/L to 640 μ g/L in Zone 3 and 470 μ g/L to 630 μ g/L in Zone 4 and then a decrease in the November event to 230 μ g/L and 320 μ g/L, respectively. As in 2008, 1,1,-DCE in MW-36, located farther north from MW-29R, was not detected above the MCL in all three zones during the four quarters of sampling in 2009. The 1,1-DCE concentration in Well MW-37, located on the southeastern edge of the plume, remained relatively stable over the past year with concentrations in Zone 1 ranging from 8.3 μ g/L in February to 20 μ g/L in November. The concentration of 1,1-DCE in MW-37 Zone 2 showed a decreasing trend over the past year from 370 μ g/L in February to 180 μ g/L in November. The 1,1-DCE concentration in MW-37 Zone 3 decreased from 11 μ g/L in February to below the MCL (7 μ g/L) in the August and November events. Well MW-33, located to the northeast of MW-29R, was only sampled in August and contained 1,1-DCE at 590 μ g/L in Zone 1, 530 μ g/L in Zone 2, and 190 μ g/L in Zone 3. Well MW-35, an artesian well located on the northeastern edge of the plume, showed a decreasing trend from 550 μ g/L in February to 340 μ g/L in November.

The only other contaminants detected above MCLs were carbon tetrachloride during the August event in MW-22, MW-29R Zones 3 and 4, and MW-33 Zones 1 through 3 at a maximum concentration of 33 μ g/L and during the November event in MW-22 and MW-29R Zone 3 at a maximum concentration of 24 μ g/L. Concentrations of 1,2-DCA were detected above the MCL during the November event in wells MW-19 and MW-22 at concentrations of 7.5 μ g/L and 5.6 μ g/L, respectively. No other parameters from the focused list of VOCs were detected above MCLs in the bedrock well samples.

1,1-DCE concentrations trends for three bedrock wells, MW-27, MW-35, and MW-37 (Zones 1, 2, and 3), were determined using the Mann-Kendall Test. This test is a non-parametric statistical test that is routinely used to identify trends in groundwater concentration data. Data utilized in the test included annual groundwater monitoring data from 2006 through 2009 for MW-27 and the 2009 quarterly groundwater monitoring data for MW-35 and MW-37, resulting in the use of four data points for each well and/or zone. The test can be run on data sets with as few as 4 data points. According to the test results at a 90 percent confidence level, 1,1-DCE concentrations in MW-27 and MW-37 Zone 1 show no trend, which indicates that concentrations are stable, whereas 1,1-DCE concentration test results for MW-35, MW-37 Zone 2, and MW-37 Zone 3 reveal a decreasing trend, which is consistent with a shrinking plume scenario. The identified trends for the northeast area wells are preliminary but are consistent with a shrinking plume scenario. If these trends continue then future concentrations at bedrock wells in the northeast area would be expected to decline further. Refer to Appendix D for Mann-Kendall Test results.

3.3 Surface Water Analytical Results

The VOCs detected above method reporting limits (MRLs) in surface water samples from Betsy Creek during the 2009 sampling event were 1,1-DCA, 1,1-DCE, 1,2-DCA, carbon tetrachloride, chloroform and vinyl chloride. Concentrations of 1,1-DCA, 1,2-DCA, carbon tetrachloride, chloroform and vinyl chloride were

only detected above the MRL in SW-3A. The 1,1-DCE concentrations ranged from 1.1 μ g/L at SW-3 to 290 μ g/L at SW-3A. Concentrations of 1,1-DCE increased at location SW-3A from 2008, when 1,1-DCE was detected at 84 μ g/L. Concentrations were all below the EPA Region IV Ecological Risk Assessment, Surface Water Screening Values. All surface water analytical results are included in Table 6.

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4. CONCLUSIONS

The quarterly and annual groundwater monitoring events were conducted at the Owens Corning site during August and November 2009, respectively. Samples were collected from seven bedrock wells during the August sampling event and from 42 wells and 11 surface water locations during the November event. The samples were analyzed for the focused list of VOCs. Multiple water-bearing zones were sampled in wells MW-29R, MW-33 (August only), MW-36 and MW-37. Historical information identified 1,1-DCE and 1,1,1-TCA as the primary constituents at the site. While 1,1-DCE continues to be widely detected at the site in both the overburden and top of rock aquifer and the bedrock aquifer, 1,1,1-TCA detections were limited to the SWMU-9 area.

The most significant contamination in the overburden and top of rock aquifer is in the vicinity of SWMU-9. Contaminants detected above their MCLs in the overburden and top of rock aquifer other than 1,1,-DCE and 1,1,1-TCA were 1,2-DCA, carbon tetrachloride, PCE, TCE and vinyl chloride. The plume of 1,1-DCE that originates in the vicinity of SWMU-9 travels downgradient towards the northeast and east towards Betsy Creek.

Historically, 1,1,1-TCA has been detected in the wells in the area between MW-20 and MW-13; however, it was not detected in this area during this event or the 2008 or 2007 sampling events. Carbon tetrachloride, however, continues to be a constant contaminant in this area. The 1,1-DCE and 1,1,1-TCA groundwater plumes appear to be relatively stable. The downgradient boundaries of these plumes appear to be monitored by wells MW-21 and MW-25, which were both non-detect.

The main contaminant in the bedrock aquifer is 1,1-DCE. Samples from northeast area bedrock wells MW-35 and MW-37 reveal a decreasing concentration trend over the past year and result in a preliminary conclusion that the observed trends are consistent with a shrinking plume scenario. Further monitoring is needed to provide additional data for this analysis as the current data set include the minimum number or data points (4). Additional VOCs detected in the bedrock wells above their MCL were 1,2-DCA and carbon tetrachloride.

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5. REFERENCES

Brown and Caldwell. 2009. Supplemental Resource Conservation and Recovery (RCRA) Facility Investigation (RFI) Report. Owens Corning – Starr Plant, Anderson, South Carolina.

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LeGrand, H.E. and A.S. Furcron. 1956. Geology and Groundwater Resources of Central-East Georgia. Georgia Geological Survey.

United States Environmental Protection Agency. 2001. Supplemental Guidance to RAGS: Region 4 Bulletins, Ecological Risk Assessment

Table 1 - Well Construction Details Owens Corning - Anderson, SC

Monitoring Well	Well Type	Date Installed	Screen Interval, feet BGS	Screened Interval Location	Depth to Rock, feet BGS	Northing (NAD83 South Carolina State Plane, Survey Feet)	Easting (NAD83 South Carolina State Plane, Survey Feet)	Surface Elevation, (NGPD88, Survey Feet amsl)	TOC Elevation, (NGPD88, Survey Feet amsl)
MW-1	2" AG	02/22/93	55-65	0	>65	950361.45	1499402.43	824.27	826.62
MW-2	2" AG	02/24/93	56.7-66.7	TOR	66	950815.49	1499202.99	820.26	822.68
MW-3	2" AG	10/15/90	13-28	0	>31.5	951884.52	1500961.49	795.61	796.76
MW-4	2" AG	10/16/90	14.7-29.7	0	>33	951578.17	1500780.04	796.72	798.38
MW-5	2" AG	10/18/90	12.0-27.0	0	>30	950527.98	1500884.25	804.74	806.50
MW-6	2" F	03/16/93	123.6-133.6	BR	105	950709.08	1499400.62	819.82	819.69
MW-7	2" F	10/19/90	15.9-30.9	0	>36.5	950714.02	1499393.19	819.70	819.27
MW-8	2"AG	10/16/90	5.5-20.5	0	>36.5	952247.16	1499696.61	799.29	801.56
MW-9	2" F	03/17/93	94-104	TOR	105	950720.70	1499398.33	819.75	819.41
MW-10	2" F	02/18/93	61.4-71.4	TOR	72	950516.57	1500028.94	823.92	823.65
MW-11	2" AG	09/11/85	6.0-16.0	0	>16	951694.26	1500875.42	778.32	780.22
MW-12	2" AG	09/11/85	23-33	0	>33	951692.46	1500878.27	778.42	780.95
MW-13	2" AG	03/10/93	67-72	TOR	61	951715.51	1500885.54	779.20	782.22
MW-14	2" AG	02/10/93	69.2-74.2	TOR	73	952076.49	1501026.29	796.39	798.45
MW-15	2" AG	08/08/93	69.5-99.5	BR	12	951960.13	1501534.65	777.11	779.45
MW-16	2" AG	08/05/93	49-59	BR	15	951830.99	1501866.46	768.14	770.37
MW-17	4" AG	02/18/93	24.1-39.1	TOR	39	950890.06	1500282.57	813.66	816.07
MW-18	2" AG	02/15/93	10.6-25.6	0	>30	950807.43	1499198.46	820.36	822.71
MW-19	2" AG	08/05/93	154-169	BR	72	951718.14	1500902.65	779.69	781.81
MW-20	2" AG	04/21/93	57-67	TOR	64	951403.36	1500142.14	808.70	810.95
MW-21	2" AG	04/23/93	6.5-16.5	TOR	16	951834.28	1501856.83	768.63	771.15
MW-22	8" AG	08/17/93	78-116	BR	51	951733.53	1500909.06	780.45	782.65
MW-23	2" AG	06/04/93	83-93	TOR	93	951623.62	1499577.68	808.97	811.47
MW-24	2" AG	06/04/93	61-71	TOR	75	951671.65	1500421.59	795.49	796.05
MW-25	2" AG	06/09/93	40-50	TOR	50	951920.70	1501727.14	774.40	776.71
MW-26	2" AG	06/10/93	56.7-66.7	0	>67.5	952020.02	1501223.27	790.40	793.09
MW-27	8" AG	08/11/93	69-99	BR	68.5	951386.97	1500135.48	808.93	811.13
MW-28	2" F	04/20/04	21-31	0	>31	950735.05	1499414.47	819.97	819.77
MW-29R Zone 1	Waterloo - T	11/06/08	56.7-69.8	BR	53	952139.28	1501742.31	784.90	787.03
MW-29R Zone 2	Waterloo - T	11/06/08	127.3-139.5	BR	53	952139.28	1501742.31	784.90	787.03
MW-29R Zone 3	Waterloo - P & T	11/06/08	154.5-169.6	BR	53	952139.28	1501742.31	784.90	787.03
MW-29R Zone 4	Waterloo - P & T	11/06/08	177.6-202.2	BR	53	952139.28	1501742.31	784.90	787.03
MW-30	2" F	04/13/06	103-113	TOR	113	951106.58	1499550.99	819.50	819.14
MW-31	2" F	04/12/06	80-90	TOR	90	951325.04	1499740.38	818.20	817.96
MW-32	2" F	04/18/06	25-35	0	>35	950765.22	1499373.24	819.68	819.40
MW-33 OLD	6" AG	04/18/06	open hole	Ŭ	. 55	700700122	100010121	015100	015110
MW-33	6" AG	10/09/08	open hole (~52 - 410)	BR	52	952219.23	1502029.66	775.30	777.99
MW-35	2" AG	10/02/08	152-162	BR	23	952440.05	1503528.88	740.90	743.73
MW-36 Zone 1	Waterloo - P & T	11/06/08	99.1-116	BR	84	952629.06	1501831.75	783.00	785.63
MW-36 Zone 2	Waterloo - T	11/06/08	139.5-150.7	BR	84	952629.06	1501831.75	783.00	785.63
MW-36 Zone 3	Waterloo - P & T	11/06/08	180.2-192.7	BR	84	952629.06	1501831.75	783.00	785.63
MW-36 Zone 4	Waterloo - T	11/06/08	225.6-239.2	BR	84	952629.06	1501831.75	783.00	785.63
MW-36 Zone 5	Waterloo - P & T	11/06/08	269.9-275	BR	84	952629.06	1501831.75	783.00	785.63
MW-37 Zone 1	1" AG	09/30/08	185-195	BR	87	951472.16	1501852.30	780.20	782.92
MW-37 Zone 2	1" AG	09/30/08	222-232	BR	87	951472.48	1501852.13	780.20	782.84
MW-37 Zone 3	1" AG	09/30/08	257-272	BR	87	951472.27	1501852.21	780.20	782.79
P2	6" AG	06/22/93	53-115	BR	45	951750.01	1500946.57	783.93	785.65
Alloy	2" AG	08/09/93	56-61	BR	56	951358.03	1501028.29	789.56	791.69
TW-40	2" AG	08/30/01	84-94	BR	30	952247.76	1501784.65	785.81	788.63
TW-41	2" AG	08/27/01	50.3-55.3	BR	25.5	952119.32	1501966.54	775.50	778.84
TW-42	1" AG	08/20/01	21-26	TOR	26	952131.39	1501972.00	775.86	778.09
TW-43	1" AG	08/21/01	8.6-18.6	0	>19	952127.92	1501969.26	775.82	778.15
TW-44	2" AG	08/31/01	64-74	BR	46	951988.65	1501305.71	782.68	785.52
TW-45	1" F	08/21/01	18.8-28.8	0	>29	951284.02	1499935.21	816.70	816.76
				~					

F - Flush Mount; AG - Above Ground; T - Transducer only; P & T - Pump and Transducer For Waterloo type wells the listed screen interval corresponds to each zones sand pack. BR - Bedrock; O - Overburden; TOR - Top of Rock

BGS - Below Ground Surface; TOC - Top of Casing amsl - Above Mean Sea Level

Table 2 - Quarterly Sampling Groundwater Elevation Data August 11, 2009 Owens Corning - Anderson, SC

Monitoring Well	Well Type	Screen Interval, feet BGS	Screened Interval Location	Surface Elevation, (NGPD88, Survey Feet amsl)	ToC Elevation, (NGPD88, Survey Feet amsl)	Waterloo Piezometer Reading, Dgs	Static Depth to Water, Feet Below TOC	Static Water Elevation, (NGPD88, Survey Feet amsl)
MW-3	2" AG	13-28	0	795.61	796.76	-	19.17	777.59
MW-4	2" AG	14.7-29.7	0	796.72	798.38	-	20.56	777.82
MW-11	2" AG	6.0-16.0	0	778.32	780.22	-	4.48	775.74
MW-12	2" AG	23-33	0	778.42	780.95	-	5.01	775.94
MW-13	2" AG	67-72	TOR	779.20	782.22	-	6.26	775.96
MW-14	2" AG	69.2-74.2	TOR	796.39	798.45	-	19.96	778.49
MW-15	2" AG	69.5-99.5	BR	777.11	779.45	-	11.16	768.29
MW-16	2" AG	49-59	BR	768.14	770.37	-	6.75	763.62
MW-19	2" AG	154-169	BR	779.69	781.81	-	6.57	775.24
MW-21	2" AG	6.5-16.5	TOR	768.63	771.15	-	8.31	762.84
MW-22	8" AG	78-116	BR	780.45	782.65	-	7.28	775.37
MW-23	2" AG	83-93	TOR	808.97	811.47	-	13.39	798.08
MW-25	2" AG	40-50	TOR	774.40	776.71	-	12.40	764.31
MW-26	2" AG	56.7-66.7	0	790.40	793.09	-	17.55	775.54
MW-29R Zone 1	Waterloo	56.7-69.8	BR	784.90	787.03	7321.00	19.84	767.19
MW-29R Zone 2	Waterloo	127.3-139.5	BR	784.90	787.03	5891.50	17.10	769.93
MW-29R Zone 3	Waterloo	154.5-169.6	BR	784.90	787.03	6743.30	17.76	769.27
MW-29R Zone 4	Waterloo	177.6-202.2	BR	784.90	787.03	6012.50	17.18	769.85
MW-33	6" AG	open hole (~52-410)	BR	775.30	777.99	-	NM	NM
MW-35	2" AG	152-162	BR	740.90	743.73	-	Artesian	Artesian
MW-36 Zone 1	Waterloo	99.1-116	BR	783.00	785.63	6279.40	15.35	770.28
MW-36 Zone 2	Waterloo	139.5-150.7	BR	783.00	785.63	7091.50	15.51	770.12
MW-36 Zone 3	Waterloo	180.2-192.7	BR	783.00	785.63	6427.20	17.13	768.50
MW-36 Zone 4	Waterloo	225.6-239.2	BR	783.00	785.63	5848.60	16.18	769.45
MW-36 Zone 5	Waterloo	269.9-275	BR	783.00	785.63	6028.80	20.56	765.07
MW-37 Zone 1	1" AG	185-195	BR	780.20	782.92	-	18.03	764.89
MW-37 Zone 2	1" AG	222-232	BR	780.20	782.84	-	15.14	767.70
MW-37 Zone 3	1" AG	257-272	BR	780.20	782.79	-	22.75	760.04
P2	6" AG	53-115	BR	783.93	785.65	-	10.00	775.65
Alloy	2" AG	56-61	BR	789.56	791.69	-	15.55	776.14
TW-40	2" AG	84-94	BR	785.81	788.63	-	18.52	770.11
TW-41	2" AG	50.3-55.3	BR	775.50	778.84	-	15.54	763.30
TW-42	1" AG	21-26	TOR	775.86	778.09	-	16.44	761.65
TW-43	1" AG	8.6-18.6	0	775.82	778.15	-	16.31	761.84
TW-44	2" AG	64-74	BR	782.68	785.52	-	11.65	773.87

F - Flush Mount; AG - Above Ground

For Waterloo type wells the listed screen interval corresponds to each zones sand pack, for the actual depth of the sampling port please see waterloo construction tables.

BR - Bedrock; O - Overburden; TOR - Top of Rock BGS - Below Ground Surface; TOC - Top of Casing

amsl - Above Mean Sea Level

Dgs - Digits

NM - Not measured

Table 3 - Annual Sampling Groundwater Elevation Data November 16, 2009 Owens Corning - Anderson, SC

Monitoring Well	Well Type	Screen Interval, feet BGS	Screened Interval Location	Surface Elevation, (NGPD88, Survey Feet amsl)	ToC Elevation, (NGPD88, Survey Feet amsl)	Waterloo Piezometer Reading, Dgs	Static Depth to Water, Feet Below TOC	Static Water Elevation, (NGPD88 Survey Feet amsl)
MW-1	2" AG	55-65	0	824.27	826.62	-	22.38	804.24
MW-2	2" AG	56.7-66.7	TOR	820.26	822.68	-	20.52	802.16
MW-3	2" AG	13-28	0	795.61	796.76	-	17.73	779.03
MW-4	2" AG	14.7-29.7	0	796.72	798.38	-	18.92	779.46
MW-5	2" AG	12.0-27.0	õ	804.74	806.50	-	17.12	789.38
MW-6	2" F	123.6-133.6	BR	819.82	819.69	_	17.24	802.45
MW-7	2" F	15.9-30.9	0	819.70	819.27	_	17.19	802.08
MW-8			0	799.29			1.31 ^A	800.25
	2"AG	5.5-20.5			801.56	-		
MW-9	2"AG	5.5-20.5	O	819.75	819.41	-	17.32	802.09
MW-10	2" F	61.4-71.4	TOR	823.92	823.65	-	26.21	797.44
MW-11	2" AG	6.0-16.0	0	778.32	780.22	-	2.81	777.41
MW-12	2" AG	23-33	O	778.42	780.95	-	3.46	777.49
MW-13	2" AG	67-72	TOR	779.20	782.22	-	4.67	777.55
MW-14	2" AG	69.2-74.2	TOR	796.39	798.45	-	18.92	779.53
MW-15	2" AG	69.5-99.5	BR	777.11	779.45	-	9.68	769.77
MW-16	2" AG	49-59	BR	768.14	770.37	-	5.25	765.12
MW-17	4" AG	24.1-39.1	TOR	813.66	816.07	-	22.24	793.83
MW-18	2" AG	10.6-25.6	0	820.36	822.71	-	20.63	802.08
MW-19	2" AG	154-169	BR	779.69	781.81	-	5.01	776.80
MW-20	2" AG	57-67	TOR	808.70	810.95	-	21.22	789.73
MW-21	2" AG	6.5-16.5	TOR	768.63	771.15	-	6.92	764.23
MW-22	8" AG	78-116	BR	780.45	782.65	-	5.72	776.93
MW-23	2" AG	83-93	TOR	808.97	811.47	-	13.03	798.44
MW-24	2" F	61-71	TOR	-	-	-	8.79 ^B	-
MW-25	2" AG	40-50	TOR	774.40	776.71	-	10.01	766.70
MW-26	2" AG	56.7-66.7	0	790.40	793.09	-	15.97	777.12
MW-27	8" AG	69-99	BR	808.93	811.13	-	21.36	789.77
MW-28	2" F	21-31	0	819.97	819.77	-	17.79	801.98
MW-29R Zone 1	Waterloo	56.7-69.8	BR	784.90	787.03	7279.6	18.21	768.82
MW-29R Zone 2	Waterloo	127.3-139.5	BR	784.90	787.03	5854.9	15.54	771.49
MW-29R Zone 3	Waterloo	154.5-169.6	BR	784.90	787.03	6717.7	16.12	770.91
MW-29R Zone 4	Waterloo	177.6-202.2	BR	784.90	787.03	5987.1	15.58	771.45
MW-30	2" F	103-113	TOR	819.50	819.14	5707.1	22.72	796.42
MW-31	2 F 2" F	80-90	TOR	819.50	817.96	-	24.05	793.91
	2 F 2" F					-		
MW-32 MW-33	6" AG	25-35	O BR	819.68	819.40	-	17.55	801.85
		open hole (~52-410)		775.30	777.99	-	14.81	763.18
MW-34 Zone 1	Waterloo	59.9-60.4	BR	768.10	770.06	7400.2	7.85	762.21
MW-34 Zone 2	Waterloo	114.4-114.9	BR	768.10	770.06	5832.9	4.81	765.25
MW-34 Zone 3	Waterloo	149.9-150.4	BR	768.10	770.06	7029.4	16.59	753.47
MW-34 Zone 4	Waterloo	174.4-174.9	BR	768.10	770.06	6810.9	16.70	753.36
MW-34 Zone 5	Waterloo	239.9-240.4	BR	768.10	770.06	7029.3	94.54	675.52
MW-35	2" AG	152-162	BR	740.90	743.73	-	Artesian	Artesian
MW-36 Zone 1	Waterloo	99.1-116	BR	783.00	785.63	6244.3	13.89	771.74
MW-36 Zone 2	Waterloo	139.5-150.7	BR	783.00	785.63	7067.5	14.02	771.61
MW-36 Zone 3	Waterloo	180.2-192.7	BR	783.00	785.63	6411.7	16.15	769.48
MW-36 Zone 4	Waterloo	225.6-239.2	BR	783.00	785.63	5841.1	15.70	769.93
MW-36 Zone 5	Waterloo	269.9-275	BR	783.00	785.63	6049.2	22.40	763.23
MW-37 Zone 1	1" AG	185-195	BR	780.20	782.92	-	16.73	766.19
MW-37 Zone 2	1" AG	222-232	BR	780.20	782.84	-	13.75	769.09
MW-37 Zone 3	1" AG	257-272	BR	780.20	782.79	-	17.87	764.92
P1	2" AG	24.5-39.5	TOR	813.10	815.42	-	21.68	793.74
P2	6" AG	53-115	BR	783.93	785.65	-	8.38	777.27
Alloy	2" AG	56-61	BR	789.56	791.69	-	13.97	777.72
TW-40	2" AG	84-94	BR	785.81	788.63	-	17.25	771.38
TW-41	2" AG	50.3-55.3	BR	775.50	778.84	-	14.73	764.11
TW-42	1" AG	21-26	TOR	775.86	778.09	-	13.49	764.60
TW-43	1" AG	8.6-18.6	0	775.82	778.15	-	13.37	764.78
TW-44	2" AG	64-74	BR	782.68	785.52	-	9.55	775.97
TW-45	1" F	18.8-28.8	0	816.70	816.76	_	24.4 ^A	792.36
1 11 13	2" F	83.3-88.3	TOR	816.70	816.58	-	24.4	792.43

F - Flush Mount; AG - Above Ground

For Waterloo type wells the listed screen interval corresponds to each zones sand pack, for the actual depth of the sampling port please see waterloo construction tables. BR - Bedrock; O - Overburden; TOR - Top of Rock

BGS - Below Ground Surface; TOC - Top of Casing

amsl - Above Mean Sea Level

NM - Not measured

^A - These wells show evidence of damage and may no longer present water levels corresponding to present conditions

^B - MW-24 was converted from an Above Ground completion to a Flush Mount Completion, the new TOC elevation has not been surveyed; Water Level measured on Nov 19, 2009

Table 4 - Quarterly Groundwater Analytical Results August 2009 Owens Corning - Anderson, SC

				Dup-A1*	MW-29R Zone	MW-29R Zone 4	MW-33 245-255'	MW-33 355-365'	MW-33 395-		MW-36 Zone	MW-36		MW-37 Zone		
Sample ID	4	MW-15	MW-22		3		(Zone 1)	(Zone 2)	410' (Zone 3)	MW-35	1	Zone 3	Zone 5	1	2	3
Sample Date		8/13/09	8/13/09	8/13/09	8/12/09	8/13/09	8/10/09	8/12/09	8/11/09	8/13/09	8/13/09	8/13/09	8/13/09	8/11/09	8/14/09	8/14/09
Screened Interval (ft)	MCL (ug/L)	69.5-99.5	78-116	222-232	154.5-169.6	177.6-202.2	Packer	Packer	Packer	152-162	99.1-116	180.2-192.7	269.9-275	185-195	222-232	257-272
Volatile Organic Compounds			1		1				1	1		1	1	1		
1,1,1-Trichloroethane	200	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	7	420	650	740	640	630	590	530	190	470	<5	<5	<5	5.5	200	6.8
1,2-Dichloroethane	5	<5	<5	5.2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benzene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	5	<5	30	33	25	22	19	6.8	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform ¹	80	<5	17	19	18	17	18	18	14	<5	<5	<5	<5	<5	14	<5
cis-1,2-Dichloroethene	70	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	1,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Xylenes, total	10,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Field Parameters																
pH (S.U.)	-	6.57	5.19	-	5.52	5.54	5.74	6.48	6.71	7.26	6.00	7.02	6.94	6.71	9.49	7.13
Temperature (degree C)	-	19.42	20.33	-	19.38	19.88	19.31	19.73	21.88	18.14	20.78	33.51	31.44	24.50	28.30	28.64
Specific Conductance (mS/cm)	-	0.202	0.112	-	0.126	0.134	0.221	0.210	0.226	0.319	0.109	1.220	1.740	0.199	0.168	0.212
Eh (mV)	-	83.0	184.0	-	253.0	188.0	103.0	-116.0	86.0	-160.0	252.0	41.0	-60.0	-72.0	-189.0	-100.0
Dissolved Oxygen (mg/L)	-	0.29	3.00	-	1.24	0.75	0.41	0.30	2.26	0.12	2.69	2.42	2.51	0.96	0.45	0.68
Turbidity (NTU)	-	0	0	-	0	0	0.17	22.4	27.5	0	0	0	1.1	12.2	1.3	1.38

*Duplicate sample collected from MW-22.

¹ MCL listed for Chloroform is for Total Trihalomethanes.

MCL - Maximum Contaminant Level

Bold VOC results indicates concentration above the MCL.

Table 5 - Annual Groundwater Analytical Results November 2009 Owens Corning - Anderson, SC

Sample ID		Alloy	DUP-111809 (Alloy)	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-24	DUP-111909 (MW_24)	MW-25
Sample Date		11/18/09	11/18/09	11/17/09	11/17/09	11/17/09	11/17/09	11/17/09	11/19/09	11/20/09	11/19/09	11/17/09	11/19/09	11/19/09	11/19/09	11/17/09	11/20/09	11/18/09	11/19/09	11/17/09	11/19/09	11/19/09	11/18/09	11/19/09	11/19/09	11/19/06	11/18/09
Screened Interval (ft)	MCL (ug/L)	56-61	56-61	55-65	56.7-66.7	13-28	14.7-29.7	12-27	123.6-133.6	15.9-30.9	5.5-20.5	61.4-71.4	6-16	23-33	67-72	69.2-74.2	69.5-99.5	49-59	24.1-39.1	10.6-25.6	154-169	57-67	6.5-16.5	78-116	61-71		40-50
Volatile Organic Compounds			1						1		1			1		1	1		1				1	1		-	
1,1,1-Trichloroethane	200	< 0.21	< 0.21	< 0.21	<0.21	<0.21	< 0.21	< 0.21	< 0.21	30,000	< 0.21	< 0.21	< 0.21	<0.21	<0.21	<0.21	< 0.21	<0.21	< 0.21	< 0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
1,1-Dichloroethane	-	< 0.56	< 0.56	<0.56	< 0.56	< 0.56	< 0.56	< 0.56	< 0.56	96 J	< 0.56	< 0.56	3.1	1.8	2.5	<0.56	1.9	< 0.56	< 0.56	< 0.56	3.1 J	< 0.56	< 0.56	2.7	0.66 J	< 0.56	< 0.56
1,1-Dichloroethene	7	2.2	2.2	<0.16	< 0.16	<0.16	< 0.16	< 0.16	< 0.16	60,000	< 0.16	< 0.16	190	300	490	< 0.16	320	< 0.16	0.46 J	<0.16	300 J	19	<0.16	540	85	85	<0.16
1,2-Dichloroethane	5	< 0.15	< 0.15	<0.15	< 0.15	<0.15	< 0.15	< 0.15	< 0.15	<15 ²	< 0.15	<0.15	1.4	3.5	5.6	< 0.15	2.9	<0.15	< 0.15	<0.15	7.5 J	0.66 J	<0.15	5.6	1.7	1.7	<0.15
Benzene	5	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	<52 ²	< 0.52	< 0.52	0.58 J	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
Carbon tetrachloride	5	< 0.18	< 0.18	<0.18	< 0.18	<0.18	< 0.18	< 0.18	< 0.18	<18 ²	< 0.18	< 0.18	< 0.18	13	25	< 0.18	<0.18	<0.18	< 0.18	<0.18	0.34 J	3.4	<0.18	24	<0.18	<0.18	<0.18
Chloroform ¹	80	<0.10	0.24 J	<0.10	< 0.10	<0.10	< 0.10	< 0.10	<0.10	<10	< 0.10	< 0.10	< 0.10	19	16	<0.10	<0.10	<0.10	< 0.10	<0.10	7.2 J	44	<0.10	14	19	18	<0.10
cis-1,2-Dichloroethene	70	< 0.12	< 0.12	< 0.12	<0.12	<0.12	< 0.12	< 0.12	< 0.12	<12	< 0.12	<0.12	< 0.12	<0.12	< 0.12	<0.12	< 0.12	< 0.12	<0.12	<0.12	<0.12	< 0.12	< 0.12	< 0.12	< 0.12	<0.12	<0.12
Ethylbenzene	700	< 0.10	< 0.10	<0.10	<0.10	<0.10	< 0.10	< 0.10	< 0.10	<10	< 0.10	< 0.10	< 0.10	<0.10	<0.10	<0.10	<0.10	< 0.10	<0.10	<0.10	< 0.10	< 0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	5	< 0.72	< 0.72	<0.72	< 0.72	<0.72	< 0.72	< 0.72	< 0.72	<72 ²	< 0.72	< 0.72	< 0.72	< 0.72	<0.72	< 0.72	<0.72	< 0.72	< 0.72	<0.72	< 0.72	< 0.72	< 0.72	< 0.72	<0.72	< 0.72	< 0.72
Tetrachloroethene	5	<0.22	< 0.22	<0.22	< 0.22	<0.22	< 0.22	<0.22	< 0.22	35 J	< 0.22	<0.22	< 0.22	1.2	1.6	< 0.22	0.62 J	<0.22	< 0.22	<0.22	3.3 J	<0.22	<0.22	1.3	<0.22	<0.22	<0.22
Toluene	1,000	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	130	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
trans-1,2-Dichloroethene	100	<0.13	< 0.13	<0.13	<0.13	<0.13	< 0.13	<0.13	< 0.13	<13	< 0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	< 0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
Trichloroethene	5	< 0.15	< 0.15	<0.15	< 0.15	<0.15	< 0.15	< 0.15	< 0.15	<15 ²	< 0.15	<0.15	< 0.15	0.36	1.4	< 0.15	0.74 J	< 0.15	< 0.15	<0.15	2.1 J	< 0.15	<0.15	1.1	< 0.15	<0.15	<0.15
Vinyl chloride	2	< 0.25	< 0.25	< 0.25	< 0.25	<0.25	< 0.25	< 0.25	< 0.25	<25 ²	< 0.25	< 0.25	12	<0.25	<0.25	< 0.25	< 0.25	<0.25	< 0.25	<0.25	<0.25	<0.25	<0.25	<0.25	< 0.25	<0.25	<0.25
Xylenes, total	10,000	< 0.32	<0.32 UJ	< 0.32	< 0.32	<0.32 UJ	< 0.32	< 0.32	< 0.32	<33	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	<0.32 UJ	<0.32 UJ	< 0.32
Field Parameters			1			1	1		1	1	1			1	1	1	1		1				1	1	1	1	
pH (S.U.)	-	6.25	6.25	5.40	6.08	4.51	6.84	4.46	6.88	4.36	6.29	5.19	6.78	5.50	5.25	6.32	6.75	7.72	4.61	4.49	7.20	5.08	5.13	5.39	5.60	5.60	5.04
Temperature (degree C)	-	19.08	19.08	18.35	19.48	18.29	18.92	19.03	19.13	21.39	19.72	20.16	18.22	18.70	18.89	18.67	16.00	17.38	20.04	20.66	18.55	20.40	19.02	18.62	20.54	20.54	17.30
Specific Conductance (mS/cm)	-	0.095	0.095	0.033	0.059	0.049	0.684	0.080	0.110	1.120	0.080	0.028	0.594	0.149	0.113	0.066	0.222	0.311	0.116	0.046	0.218	0.068	0.045	0.116	0.185	0.185	0.054
Eh (mV)	-	176.7	176.7	276.7	250.9	333.1	-13.5	575.2	276.2	204.6	262.0	293.4	-70.2	183.8	265.3	237.6	33.5	32.7	39.5	324.4	-67.6	33.0	286.5	218.6	-61.9	-61.9	315.4
Dissolved Oxygen (mg/L)	-	4.48	4.48	7.37	6.22	4.90	0.18	3.74	5.74	0.57	7.40	7.46	0.15	1.78	3.77	6.28	0.74	0.35	4.82	4.45	0.13	4.77	4.04	3.12	0.55	0.55	7.14
Turbidity (NTU)	-	9.15	9.15	8.24	7.54	0.77	2.46	2.35	0.04	4.11	8.70	9.12	2.03	9.45	0.25	7.29	1.98	8.97	8.39	4.53	0.01	4.92	2.37	0.76	6.54	6.54	9.85

MCL - Maximum Contaminant Level J - Estimated value less than the method reporting limit (MRL), but greater than or equal to the method detection limit (MDL). UJ - Nondetected with an estimated limit of detection

¹ MCL listed for Chloroform is for Total Trihalomethanes.

² Method Detection Limit is greater than the MCL Bold VOC results indicates concentration above the MCL.

Table 6 - Annual Surface Water Analytical Results November 2009 Owens Corning - Anderson, SC

Sample ID	_	Surface Water S	creening Values ¹	SW-1	SW-3	SW-3A	SW-3B	SW-6	SW-10	SW-11	SW-12	SW-13	SW-14	SW-15
Sample Date	MCL (ug/L)	Acute (ug/L)	Chronic (ug/L)	11/18/09	11/18/09	11/18/09	11/18/09	11/18/09	11/18/09	11/18/09	111/18/09	11/18/09	11/18/09	11/18/09
Volatile Organic Compounds														
1,1,1-Trichloroethane	200	-	-	< 0.21	< 0.21	<0.21	< 0.21	< 0.21	< 0.21	< 0.21	<0.21	<0.21	< 0.21	< 0.21
1,1-Dichloroethane	-	-	-	< 0.56	< 0.56	1.6	< 0.56	< 0.56	< 0.56	< 0.56	< 0.56	<0.56	< 0.56	< 0.56
1,1-Dichloroethene	7	3,030	303	7.8	1.1	290	1.1	5.3	2.9	7.7	7.5	< 0.16	5.1	6.8
1,2-Dichloroethane	5	11,800	2,000	< 0.15	< 0.15	1.9	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	<0.15	< 0.15
Benzene	5	-	-	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
Carbon tetrachloride	5	3,520	352	0.34 J	< 0.18	7.4	< 0.18	< 0.18	< 0.18	0.28 J	< 0.18	< 0.18	< 0.18	< 0.18
Chloroform ²	80	2,890	289	0.58 J	0.52 J	7.1	0.54 J	0.35 J	0.20 J	3.2	2.6	< 0.10	3.3	0.53 J
cis-1,2-Dichloroethene	70	-	-	< 0.12	< 0.12	< 0.12	<0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	<0.12
Ethylbenzene	700	-	-	< 0.10	< 0.10	<0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Methylene chloride	5	-	-	<0.72	< 0.72	< 0.72	< 0.72	<0.72	<0.72	< 0.72	<0.72	< 0.72	< 0.72	<0.72
Tetrachloroethene	5	528	84	<0.22	< 0.22	0.65 J	< 0.22	<0.22	<0.22	< 0.22	<0.22	< 0.22	<0.22	<0.22
Toluene	1000	-	-	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52	< 0.52
trans-1,2-Dichloroethene	100	-	-	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Trichloroethene	5	-	-	< 0.15	< 0.15	0.72 J	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Vinyl chloride	2	-	-	< 0.25	< 0.25	4.8	< 0.25	< 0.25	< 0.25	<0.25	<0.25	< 0.25	< 0.25	< 0.25
Xylenes, total	10000	-	-	< 0.32	<0.32 UJ	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32
Field Parameters													1	
pH (S.U.)	-	-	-	6.15	6.88	6.12	6.73	6.08	5.99	6.40	6.43	5.30	6.23	6.11
Temperature (degree C)	-	-	-	15.47	15.83	16.27	15.84	15.23	15.04	15.88	15.83	14.30	15.36	15.42
Specific Conductance (mS/cm)	-	-	-	0.182	0.217	0.283	0.24	0.169	0.620	0.289	0.238	0.044	0.185	0.178
Eh (mV)	-	-	-	34.8	23.3	-70.1	23.0	33.7	34.1	47.7	39.5	34.7	76.1	34.0
Dissolved Oxygen (mg/L)	-	-	-	7.33	7.94	1.18	7.62	7.56	8.23	7.66	7.71	4.06	7.56	7.15
Turbidity (NTU)	-	-	-	7.01	6.12	0.26	4.63	7.34	8.27	6.92	5.79	9.59	8.74	6.78

MCL - Maximum Contaminant Level

J - Estimated value less than the method reporting limit (MRL), but greater than or equal to the method detection limit (MDL).

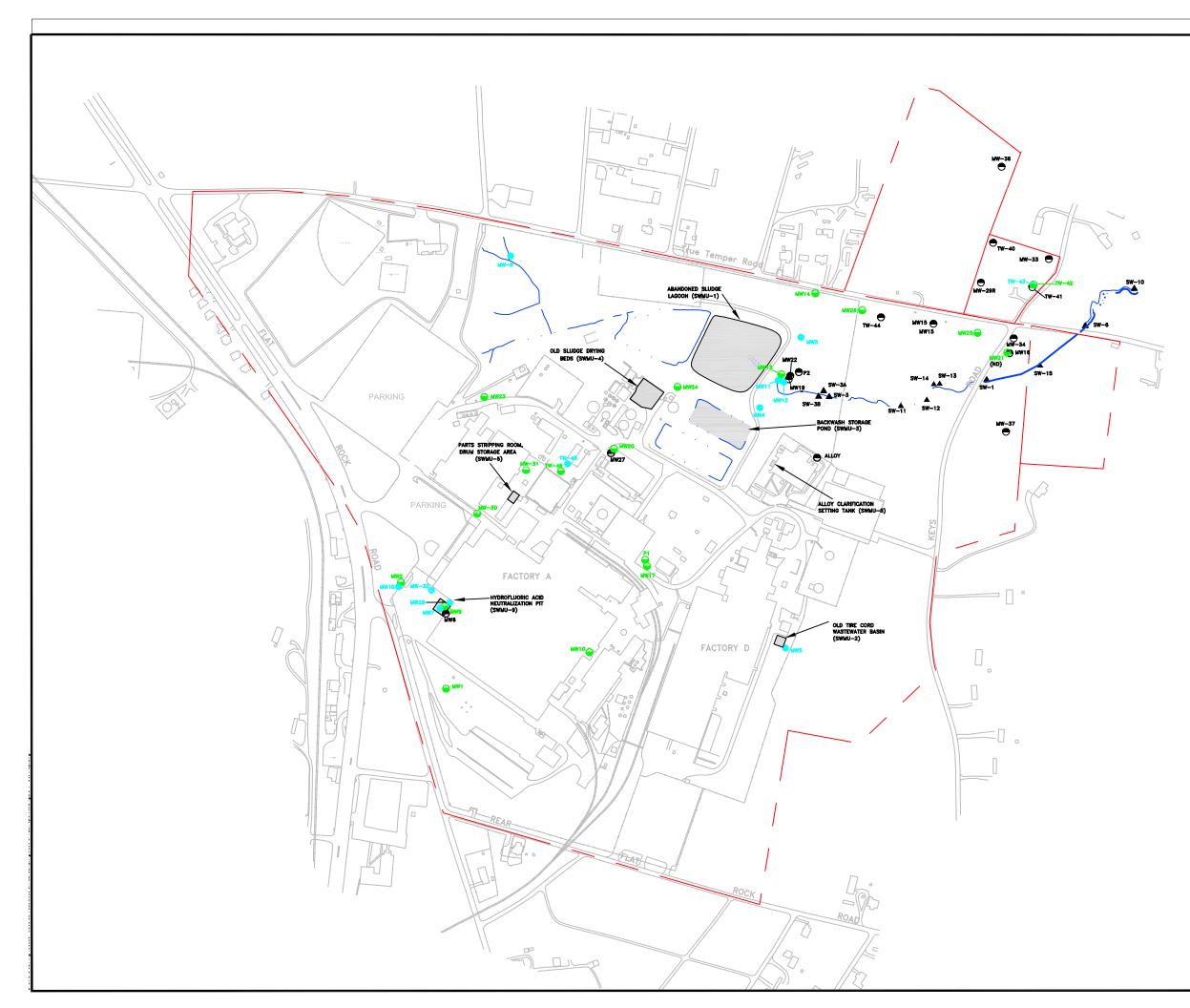
UJ - Nondetected with an estimated limit of detection

¹ Region IV Ecological Risk Assessment Bulletins - Supplement to RAGS

² MCL listed for Chloroform is for Total Trihalomethanes.

SW - Surface Water

Bold VOC results indicates concentration above the MCL.



SCALE IN FEET date of photography 1-27-1	97
FIGURE 1 SITE MAP OWENS CORNING ANDERSON, SOUTH CAR	OLINA
Prepared For: OWENS CORNING	DATE: 12/03/08
	SCALE: 1"=400'
BROWN AND CALDWELL	DRAWN BY: TCB PROJ. 135809

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---- PROPERTY BOUNDARY

BEDROCK WELLS

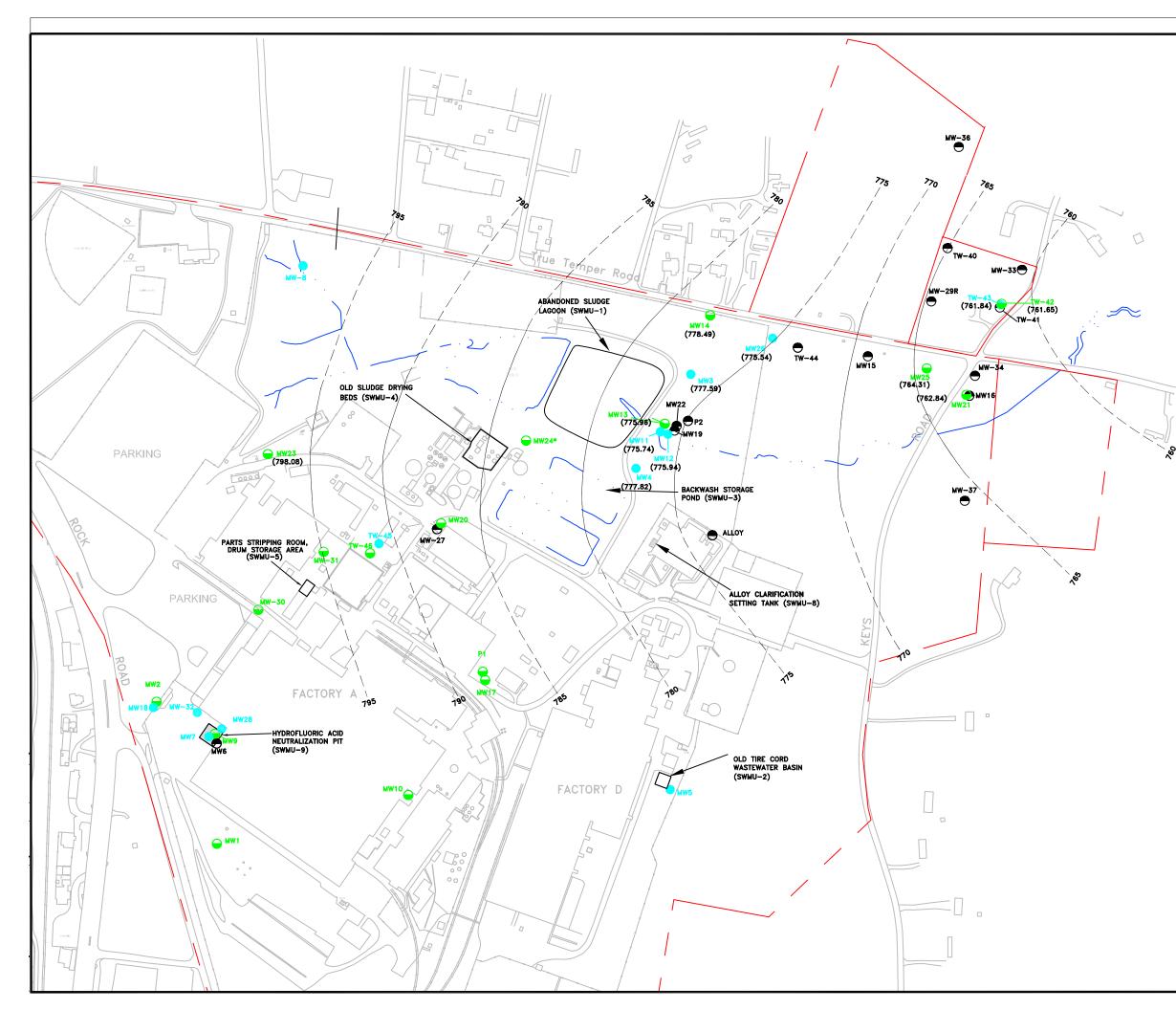
OVERBURDEN WELLS TOP OF ROCK WELLS

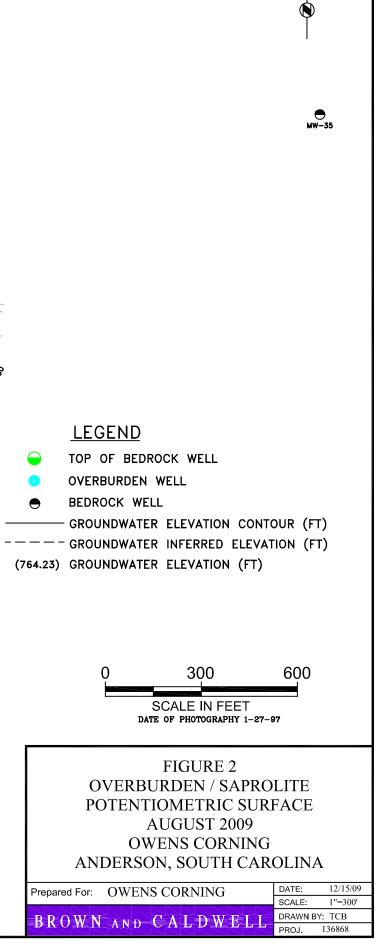
SURFACE WATER MONITORING LOCATION

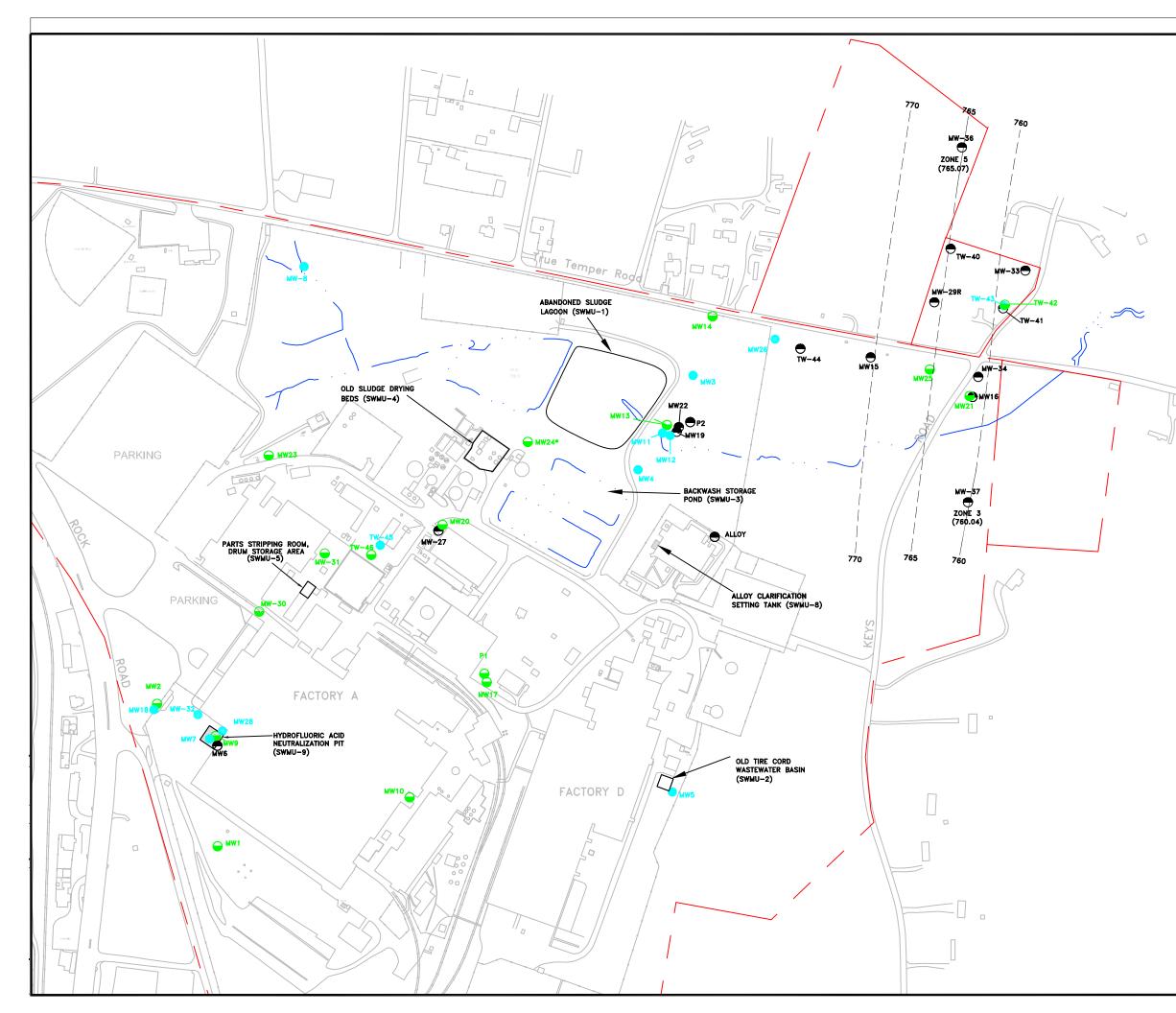
800

- <u>LEGEND</u>

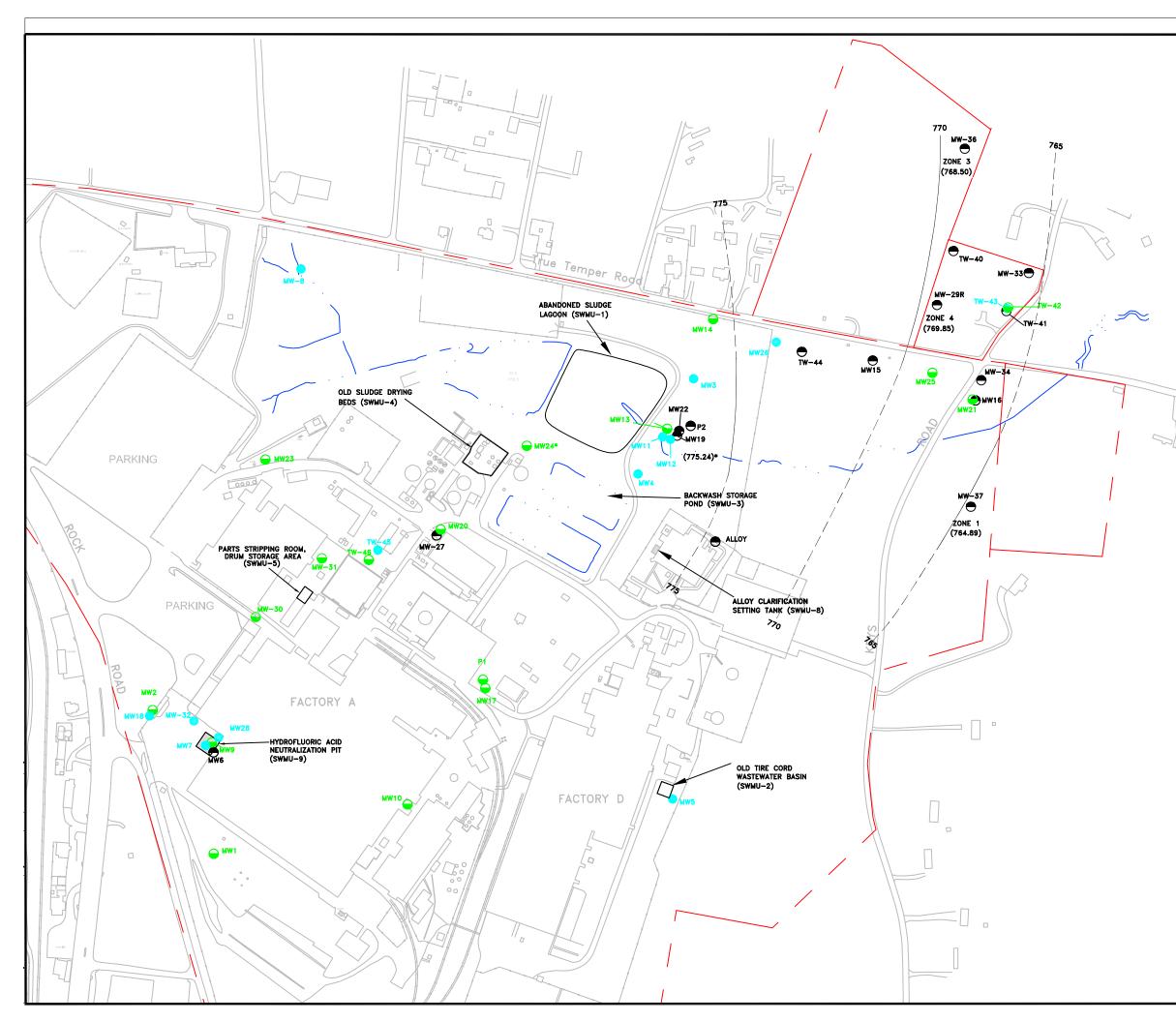
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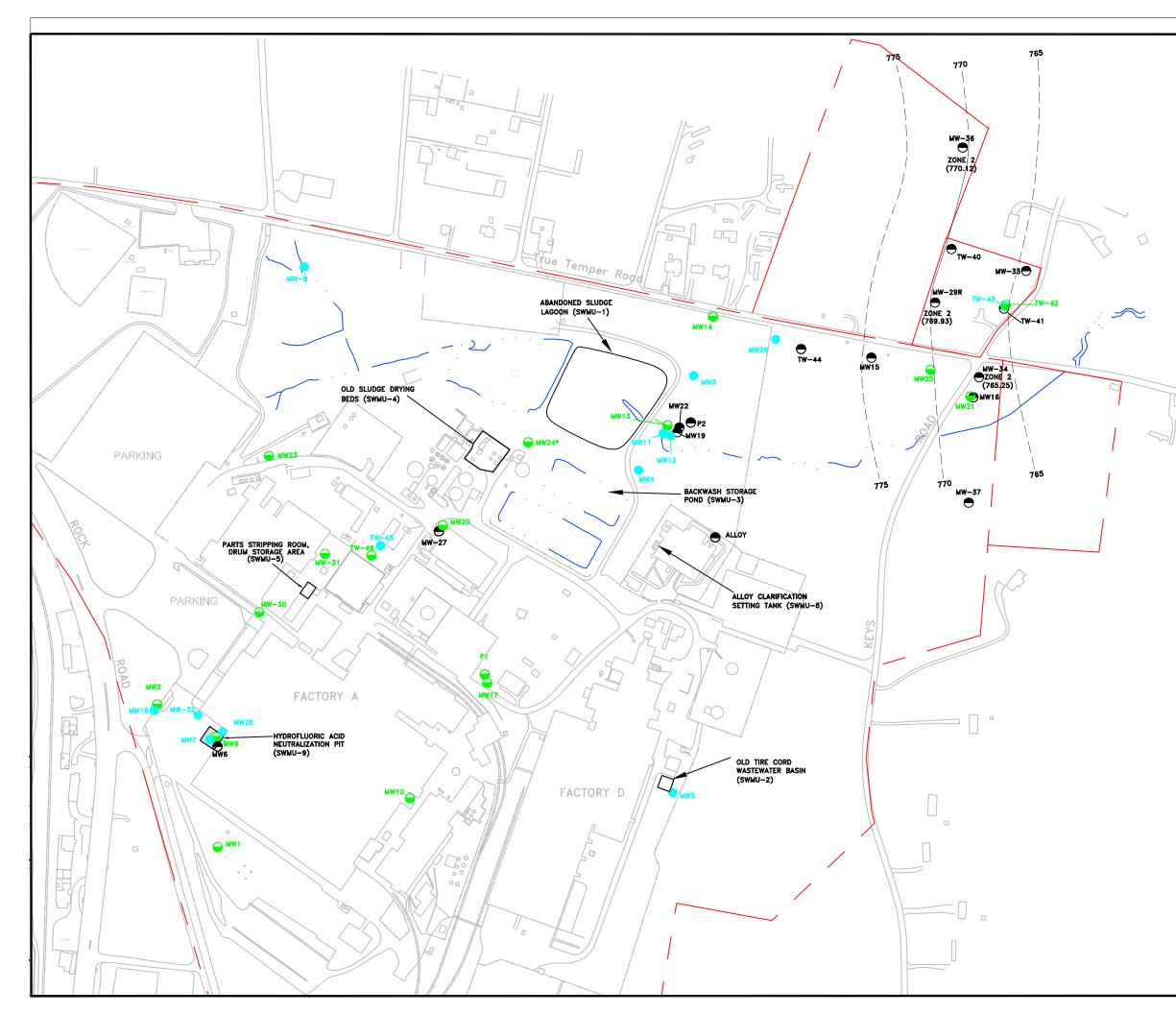




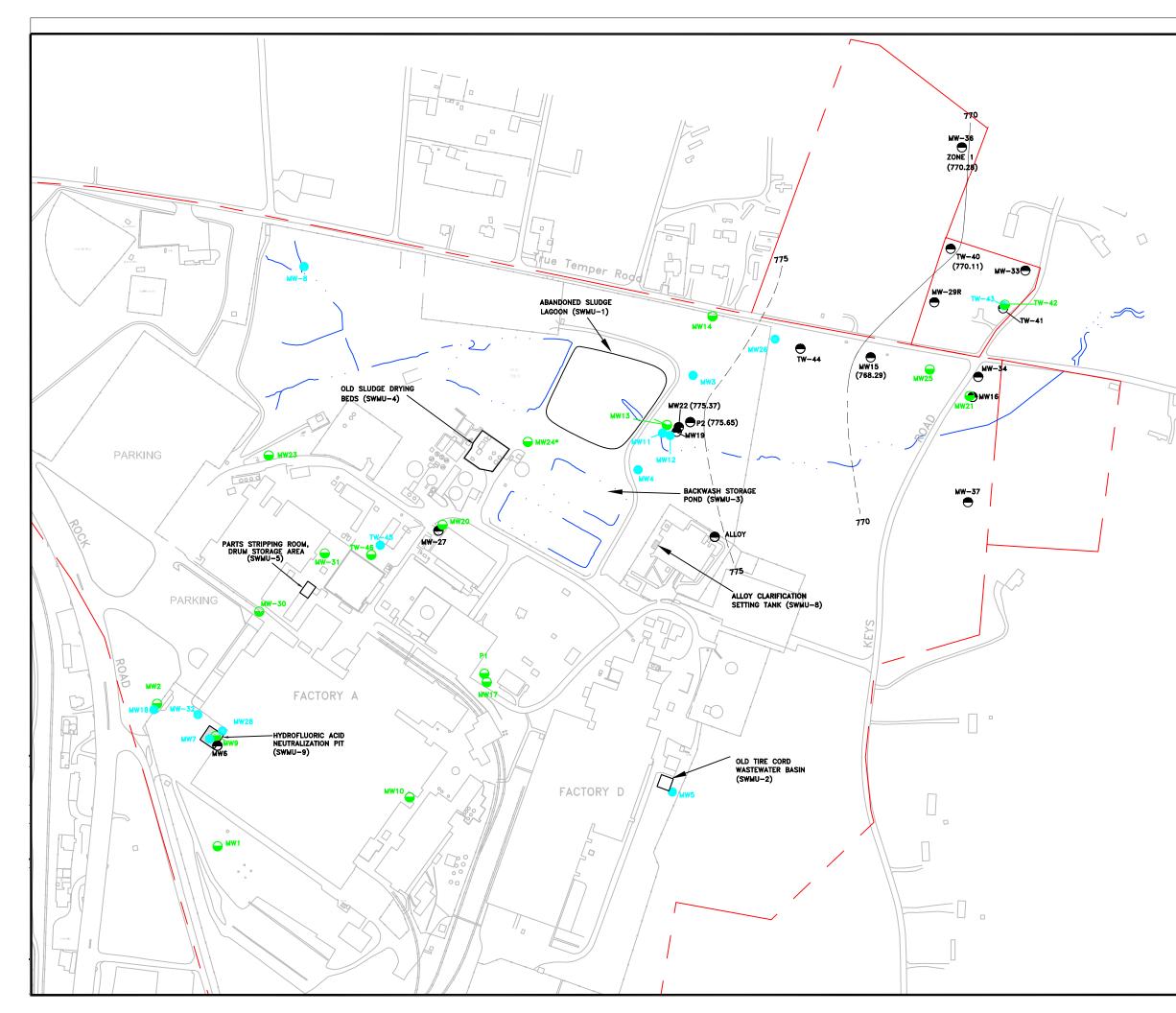
	LEGEND		
•		WELL	
(764.23)	GROUNDWATER		
		300 SCALE IN FEET	
BE	508- A	528 FEET AN AUGUST 2009	9
		'ENS CORNI 'N, SOUTH C	
Prepare B R (ed For: OWENS	C A L D W E	DATE: 12/15/09 SCALE: 1"=300" DRAWN BY: TCB PROJ. 136868



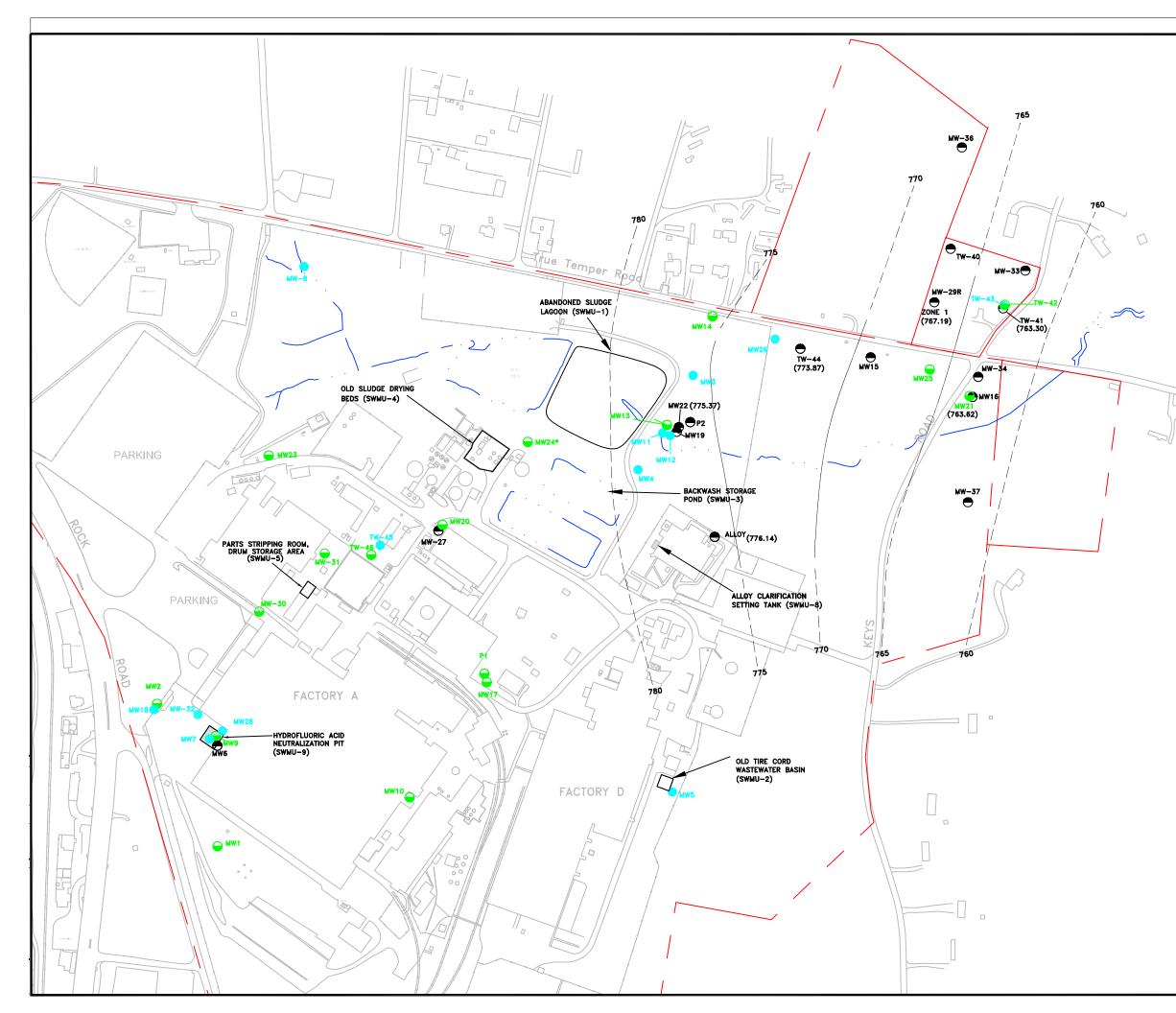
T	
	LEGEND ● TOP OF BEDROCK WELL ● OVERBURDEN WELL ● BEDROCK WELL ● GROUNDWATER ELEVATION CONTOUR (FT)
	———— GROUNDWATER INFERRED ELEVATION (FT) (764.23) GROUNDWATER ELEVATION (FT)
	*MW-19 is screened from 610 - 625 feet bmsl.
	0 300 600 SCALE IN FEET DATE OF PHOTOGRAPHY 1-27-97
	FIGURE 4 BEDROCK POTENTIOMETRIC SURFACE 574-608 FEET AMSL AUGUST 2009
	OWENS CORNING ANDERSON, SOUTH CAROLINA
	Prepared For: OWENS CORNING DATE: 12/15/09 SCALE: 1"=300' BROWN AND CALDWELL DRAWN BY: TCB PROJ. 136868



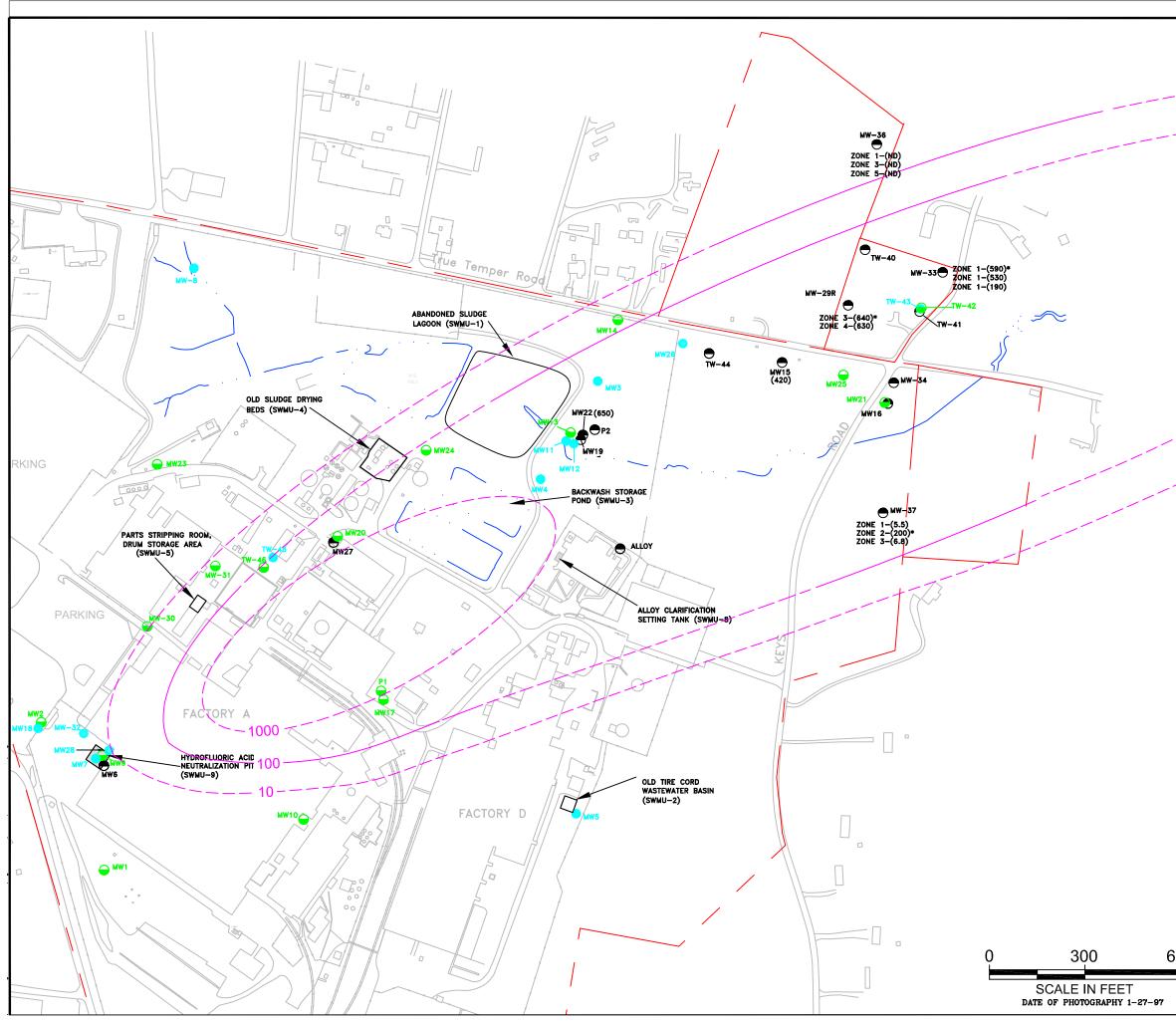
			● ₩₩-35
•	LEGEND TOP OF BEDRO OVERBURDEN BEDROCK WEL GROUNDWATER	WELL L ? ELEVATION C	
(764.23)	GROUNDWATER	R INFERRED EL R ELEVATION (1	
		300 SCALE IN FEE	
FIGURE 5 BEDROCK POTENTIOMETRIC SURFACE 632-660 FEET AMSL AUGUST 2009 OWENS CORNING ANDERSON, SOUTH CAROLINA			
Prepare B R (CORNING	DATE: 12/15/09 SCALE: 1"=300'



LEGEND TOP OF BEDROCK WELL OVERBURDEN WELL BEDROCK WELL GROUNDWATER ELEVATION CONTO GROUNDWATER INFERRED ELEVAT (764.23) GROUNDWATER ELEVATION (FT)	•
0 300 SCALE IN FEET DATE OF PHOTOGRAPHY 1-27-4	600
FIGURE 6 BEDROCK POTENTIOMETRIC 660-698 FEET AMSL AUGUST 2009 OWENS CORNING ANDERSON, SOUTH CAR	
Prepared For: OWENS CORNING	DATE: 12/15/09 SCALE: 1"=300'
BROWN AND CALDWELL	DRAWN BY: TCB PROJ. 136868



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LEGEND TOP OF BEDROCK WELL OVERBURDEN WELL BEDROCK WELL GROUNDWATER ELEVATION CONTOUR (FT)			
-——— GROUNDWATER INFERRED ELEVATION (FT) (764.23) GROUNDWATER ELEVATION (FT)			
0 300 600 SCALE IN FEET DATE OF PHOTOGRAPHY 1-27-97			
FIGURE 7 BEDROCK POTENTIOMETRIC SURFACE 700-742 FEET AMSL AUGUST 2009 OWENS CORNING			
ANDERSON, SOUTH CAROLINA Prepared For: OWENS CORNING DATE: 12/15/09 BROWN AND-CALDWELL DRAWN BY: TCB PROJ. 136868			



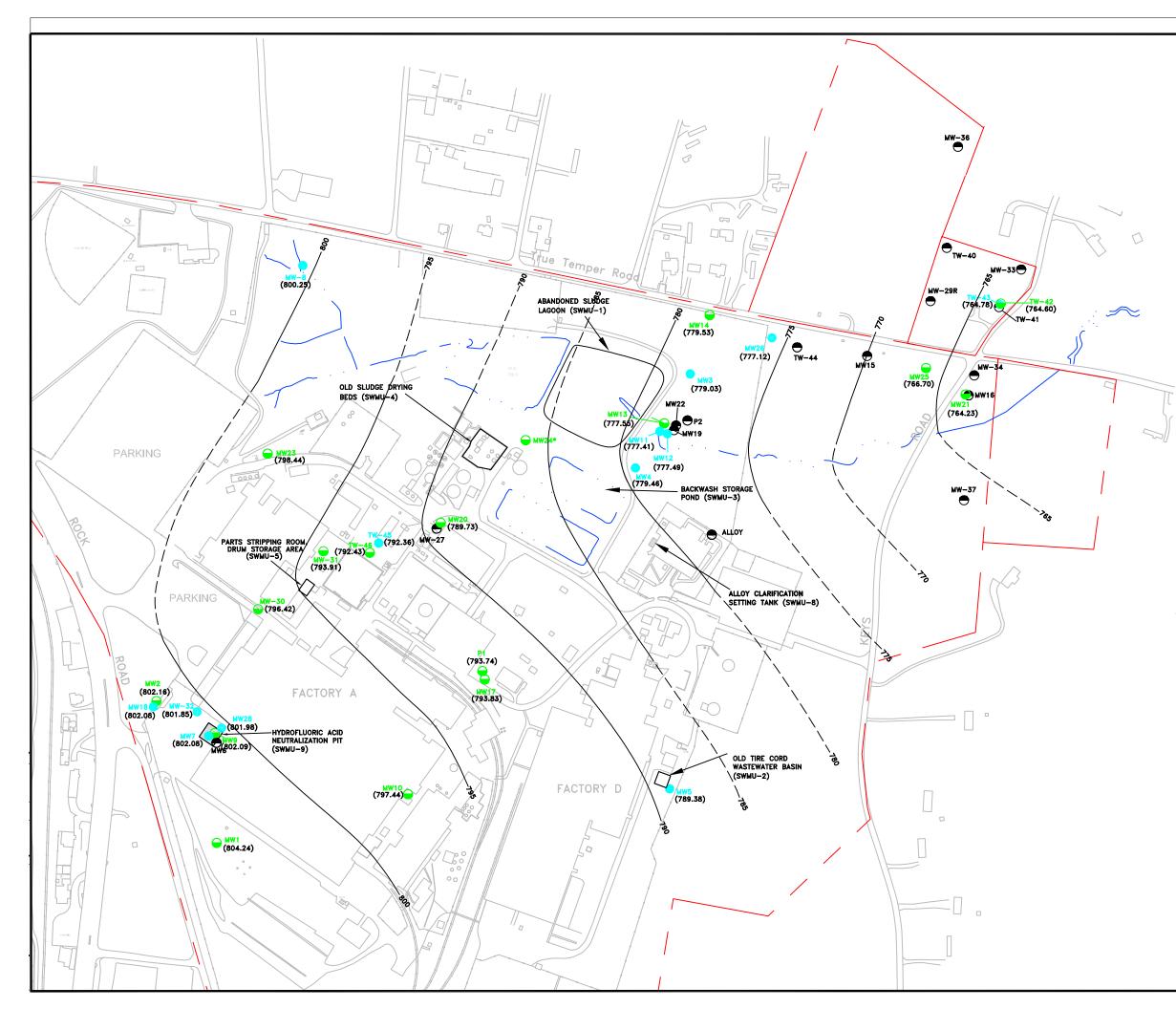
6	TOP OF BEDROCK WELL			
-				
	OVERBURDEN WELL			
0	NEW BEDROCK WELL			
€	BEDROCK WELL			
	- 1,1-DCE CONCENTRATION CONTOUR	2		
	INFERRED 1,1-DCE CONCENTRATION			
	NOT DETECTED			
	NOT SAMPLED			
(300) 1,1-DCE CONCENTRATION (ug/L)			
	HEST CONCENTRATION USED FROM VER RVALS FOR CONTOURING.			
	FIGURE 8			
	OVERALL 1,1-DCE ISOCONCE	NTRATION		
	MAP			
	BEDROCK AQUIFER			
	AUGUST 2009			
	OWENS CORNING			
n	ANDERSON, SOUTH CAR	OLINA		
0	Prepared For: OWENS CORNING	DATE: 8/27/09		
		SCALE: 1"=300'		
	D D O TU ST O T D TU D T	DRAWN BY BAS		

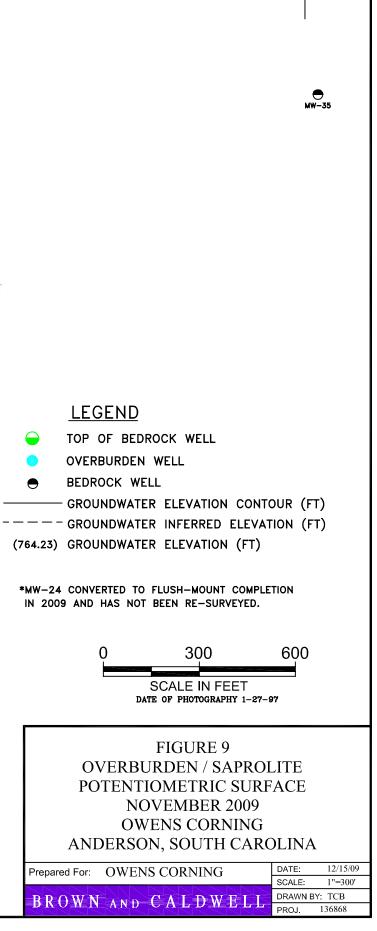
<u>LEGEND</u>

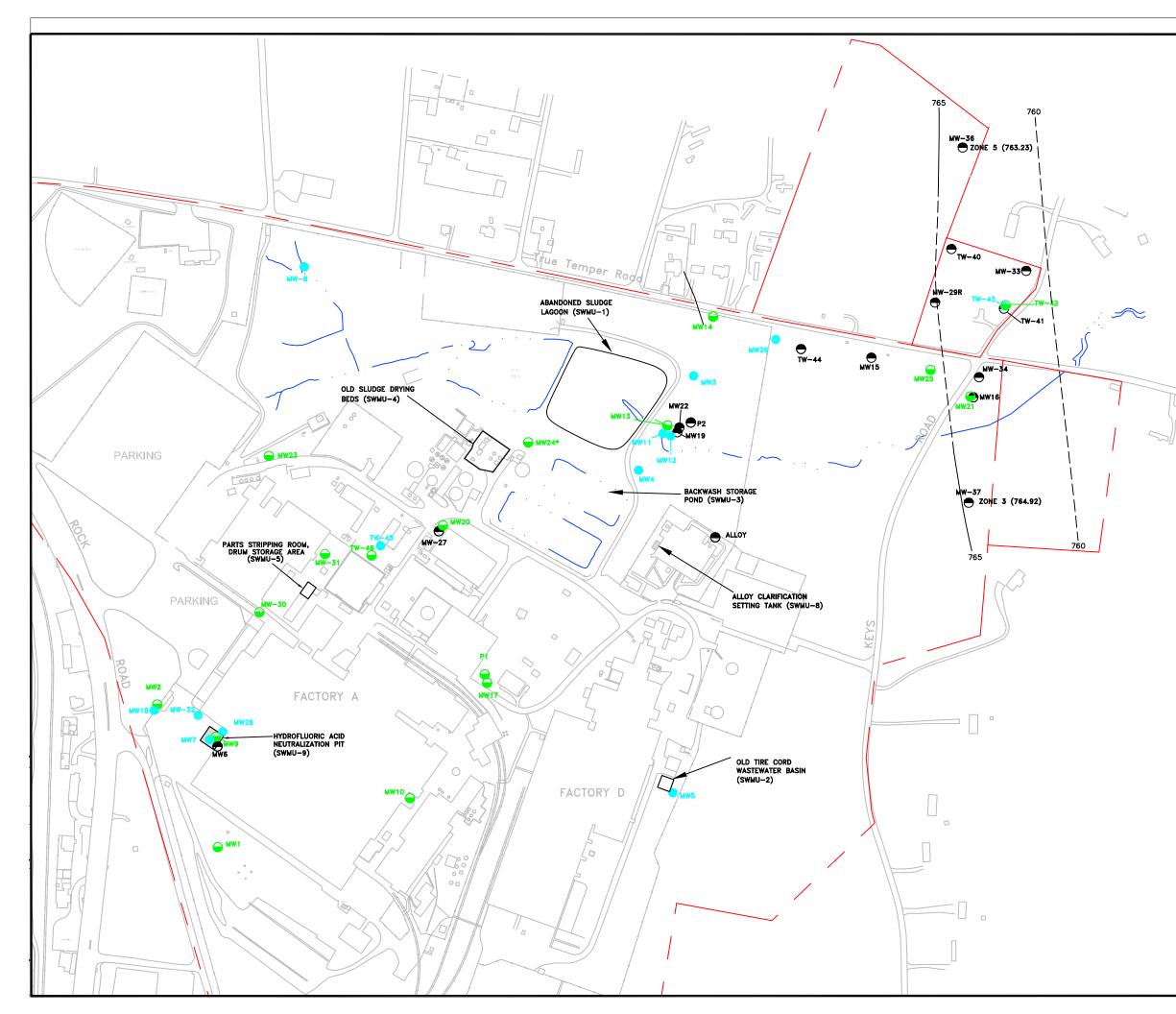
Θ MW-35 (470) 600

BROWN AND CALDWELL

PROJ. 136868



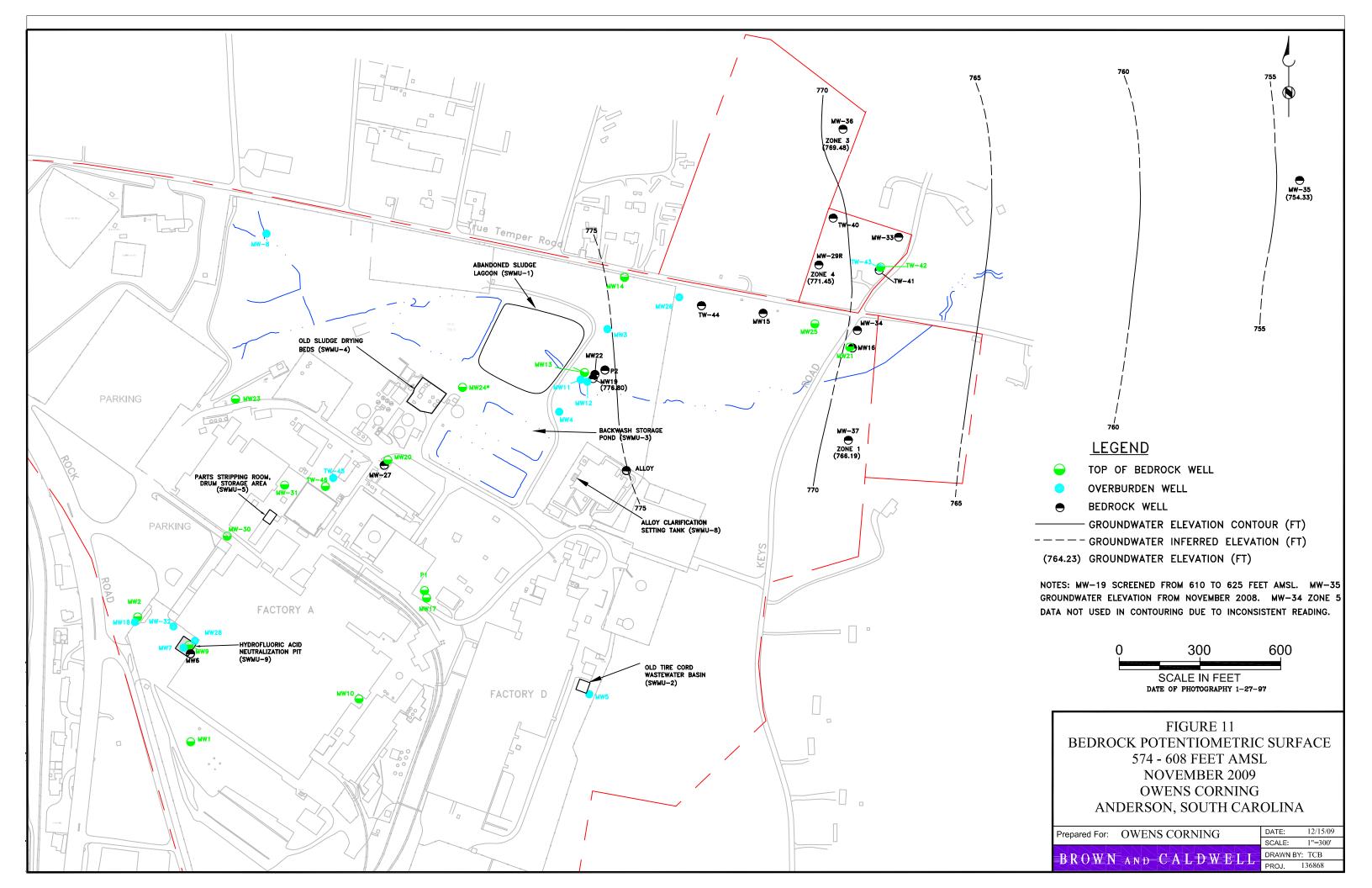


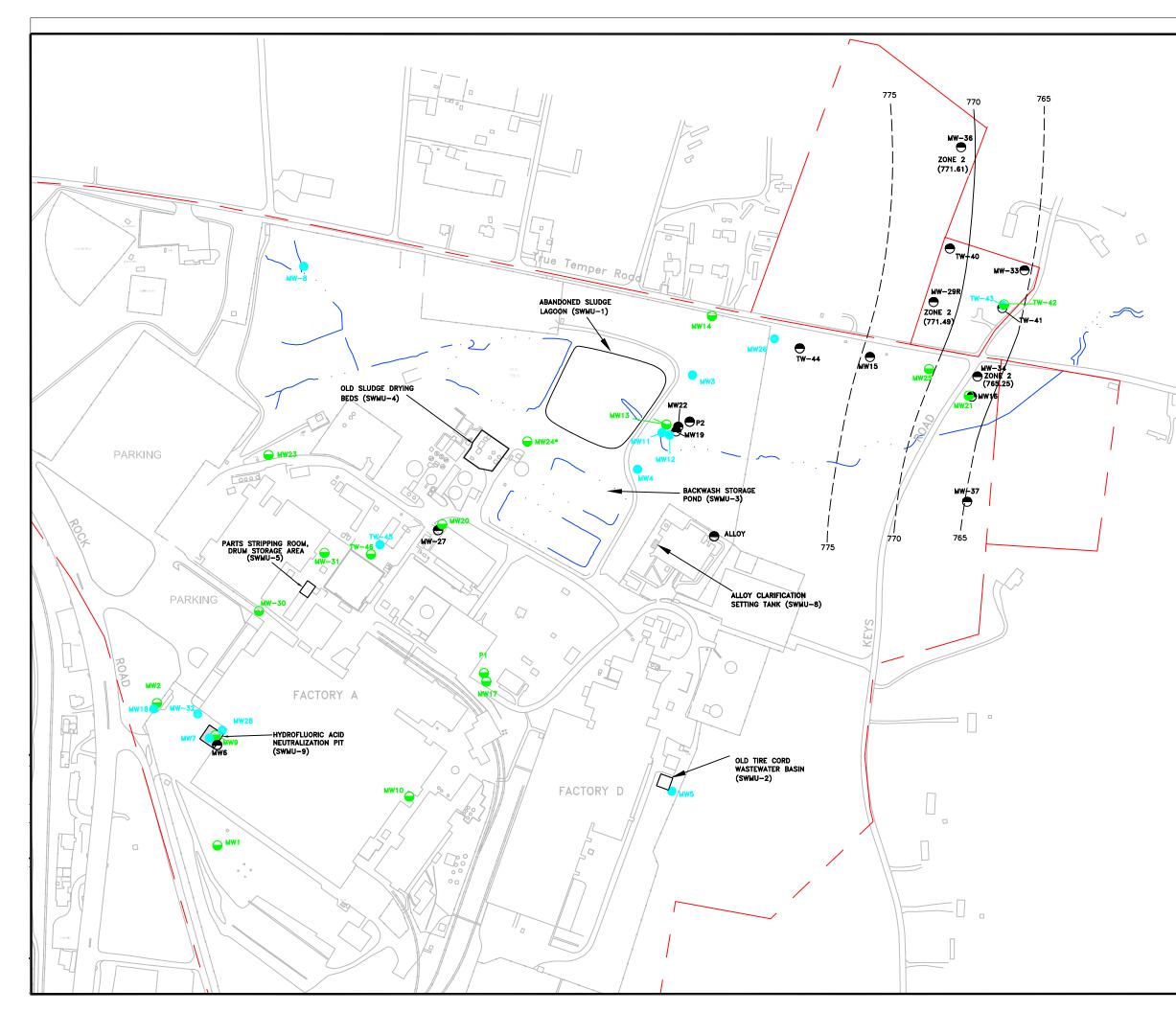


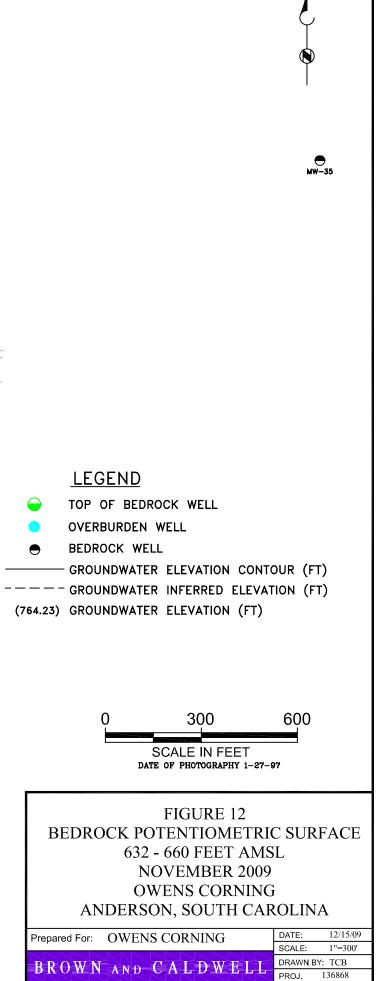
				● ₩₩-35
	LEGEN	ID		
•	OVERBURI BEDROCK	BEDROCK WELL DEN WELL WELL (ATER ELEVATIO	N CONT	DUR (FT)
	- GROUNDW 6) GROUNDW	ATER INFERRED ATER ELEVATIO) ELEVAT N (FT)	ION (FT)
	NSISTENT REAL			600
SCALE IN FEET date of photography 1-27-97 FIGURE 10				
		K POTENTIO 508 - 528 FEI NOVEMBI OWENS CO	ET AMS ER 2009 DRNING	SL) G
Prep		ERSON, SOU ⁷ Vens corninc		ROLINA DATE: 12/15/09 SCALE: 1"=300'
DD		CALDU	TTTT	DRAWN BY: TCB

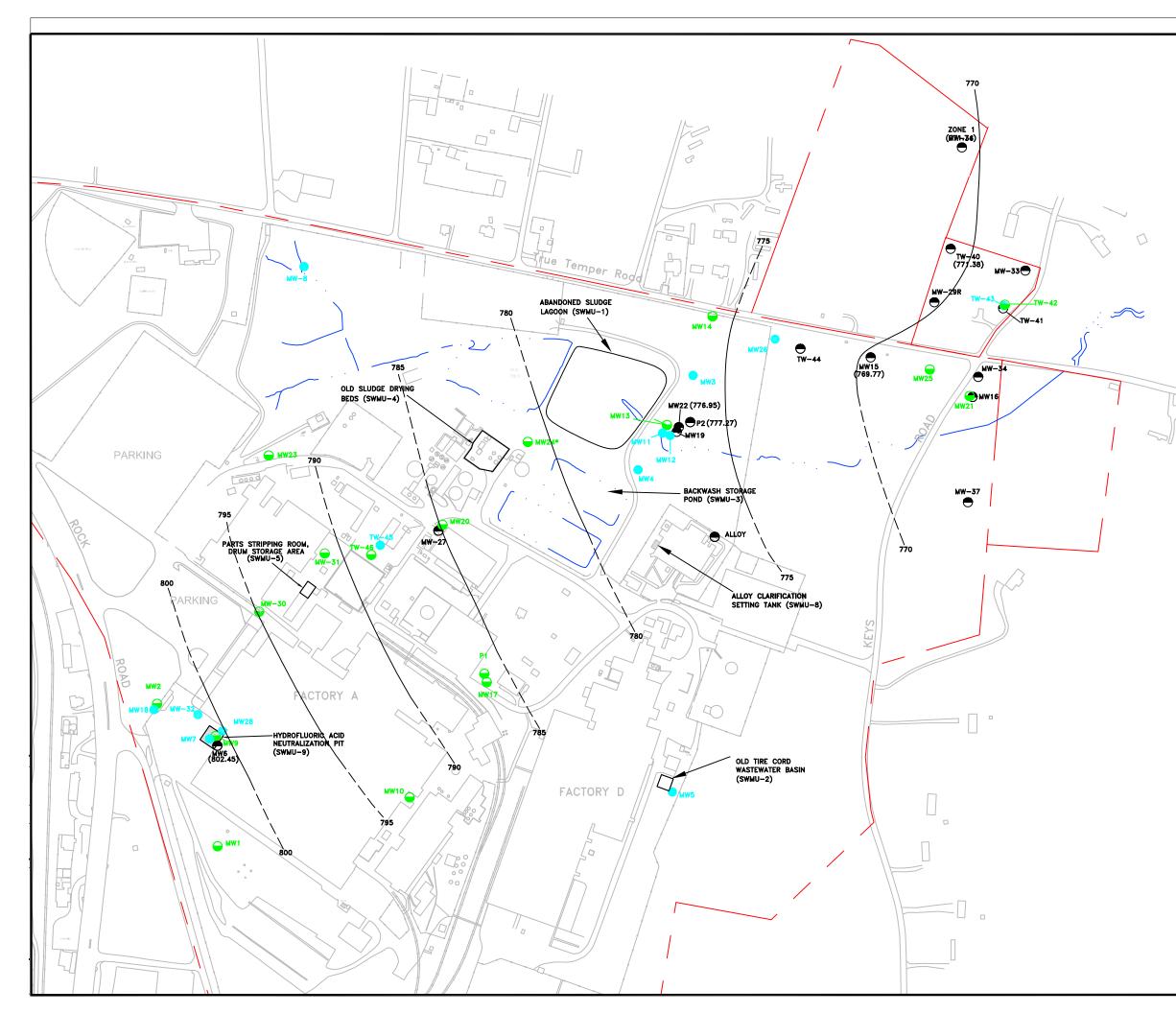
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BROWN AND	CALDWELL	DRAWN BY: TCB
DROWN AND	CALDWELL	PROJ. 136868

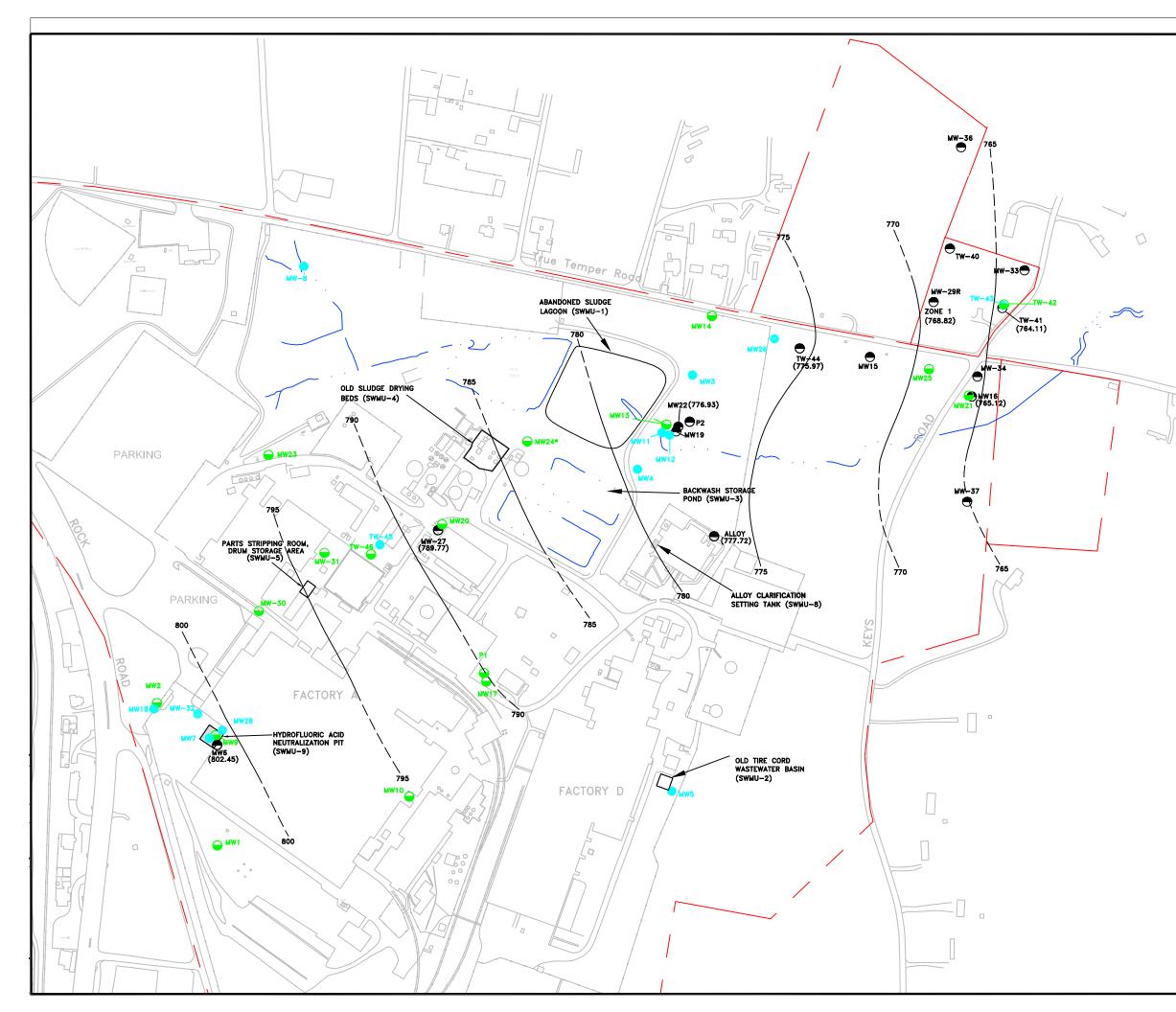




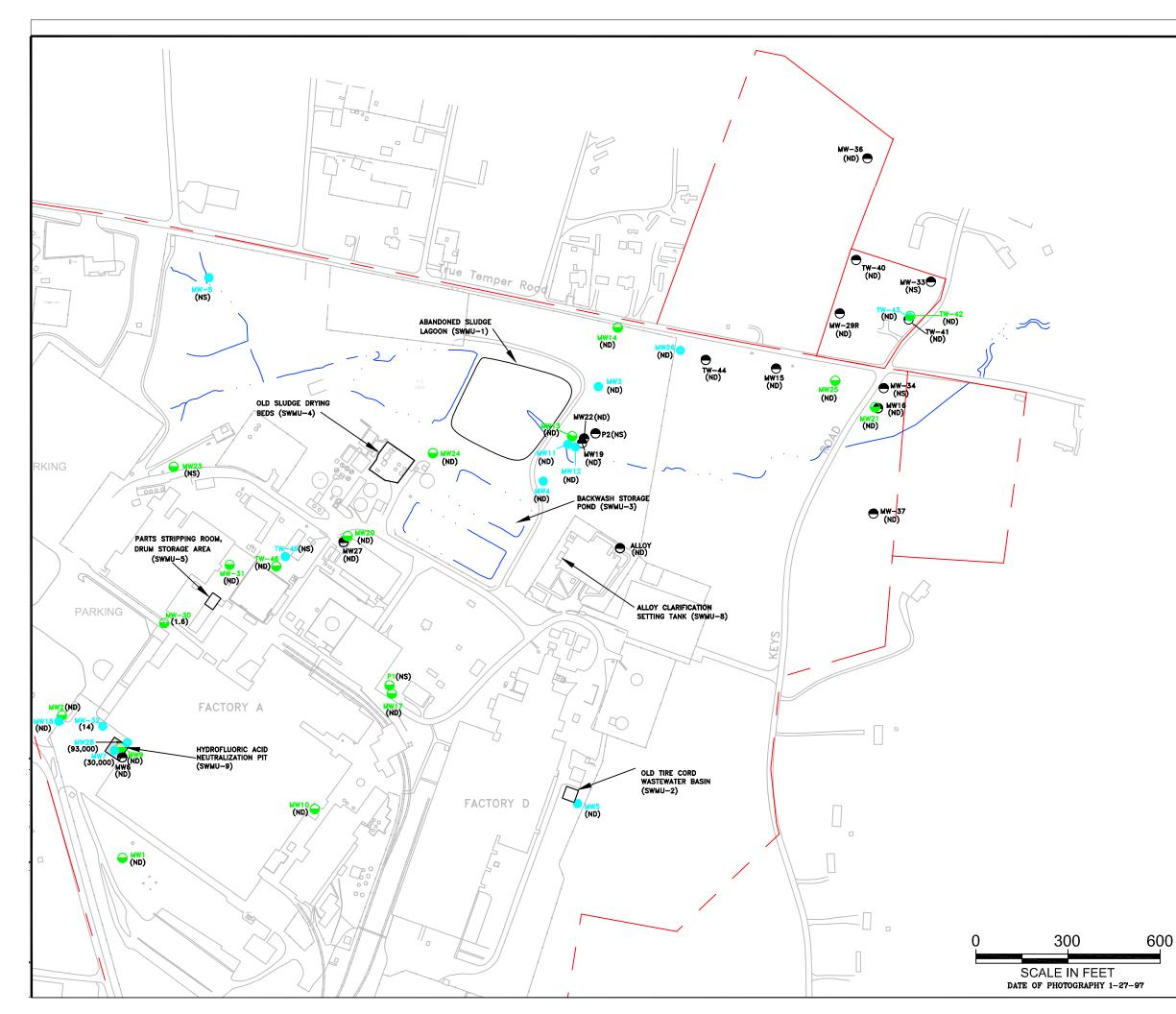




	LEGEND TOP OF BEDRO OVERBURDEN BEDROCK WEL GROUNDWATER	WELL L ? ELEVATION C	
	GROUNDWATER		
		300 SCALE IN FEE of photography	
FIGURE 13 BEDROCK POTENTIOMETRIC SURFACE 660 - 698 FEET AMSL NOVEMBER 2009 OWENS CORNING ANDERSON, SOUTH CAROLINA			
Prepare B R	ed For: OWENS	CORNING	DATE: 12/15/09 SCALE: 1"=300" DRAWN BY: TCB PROJ. 136868

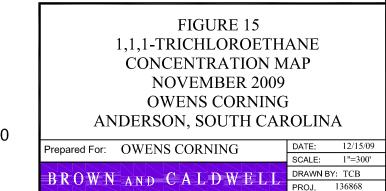


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ſ		
LEGEND TOP OF BEDROCK WELL OVERBURDEN WELL BEDROCK WELL GROUNDWATER ELEVATION CONTOUR (FT) 		
0 300 600 SCALE IN FEET DATE OF PHOTOGRAPHY 1-27-97		
FIGURE 14 BEDROCK POTENTIOMETRIC SURFACE 700 - 742 FEET AMSL NOVEMBER 2009 OWENS CORNING ANDERSON, SOUTH CAROLINA		
Prepared For: OWENS CORNING DATE: 12/15. SCALE: 1"=30		
BROWN AND CALDWELLL DRAWN BY: 1CB PROJ. 136868		





LEGEND TOP OF BEDROCK WELL OVERBURDEN WELL NEW BEDROCK WELL BEDROCK WELL BEDROCK WELL ND NOT DETECTED NS NOT SAMPLED (300) 1,1,1−TCA CONCENTRATION (ug/L)



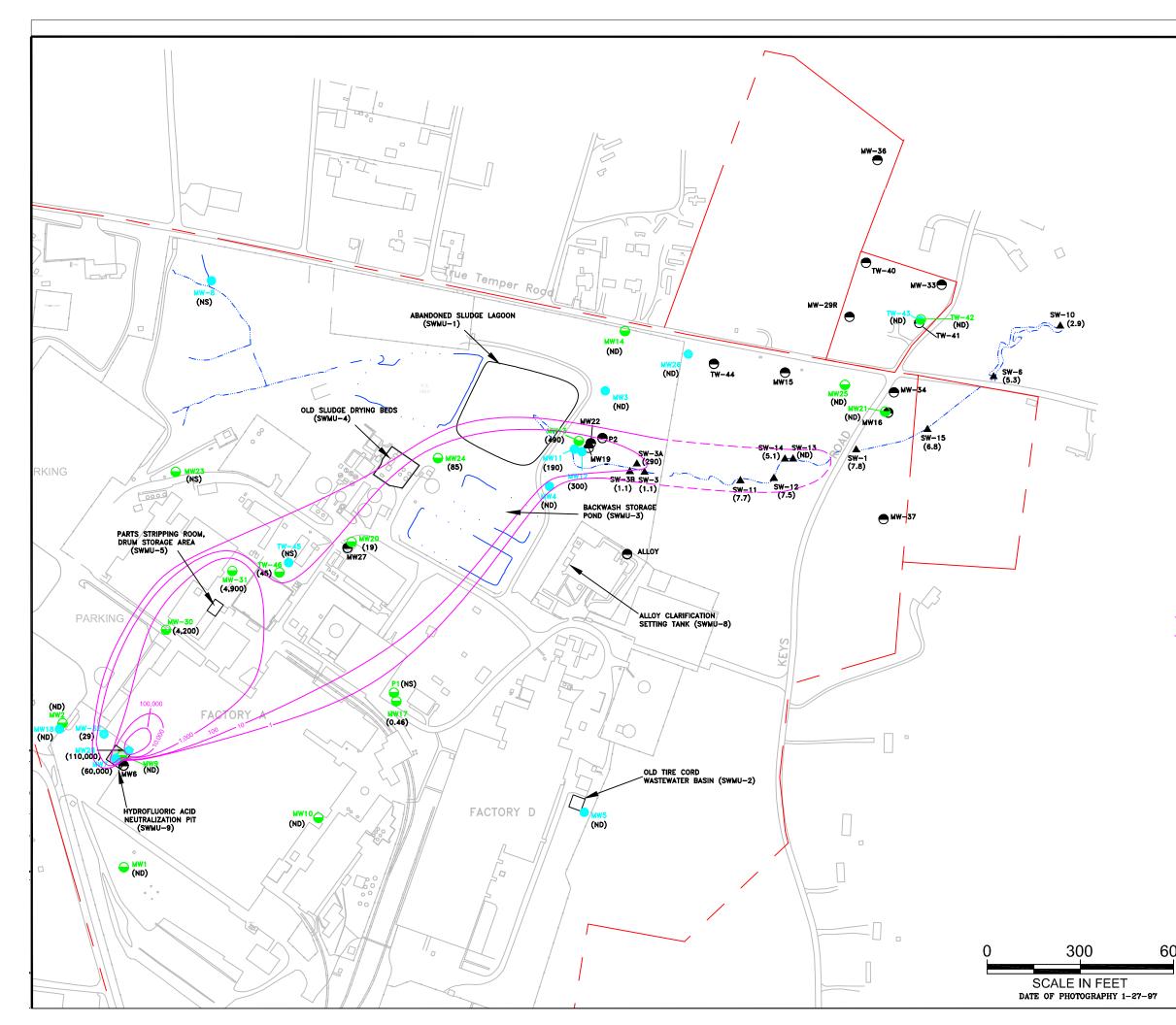
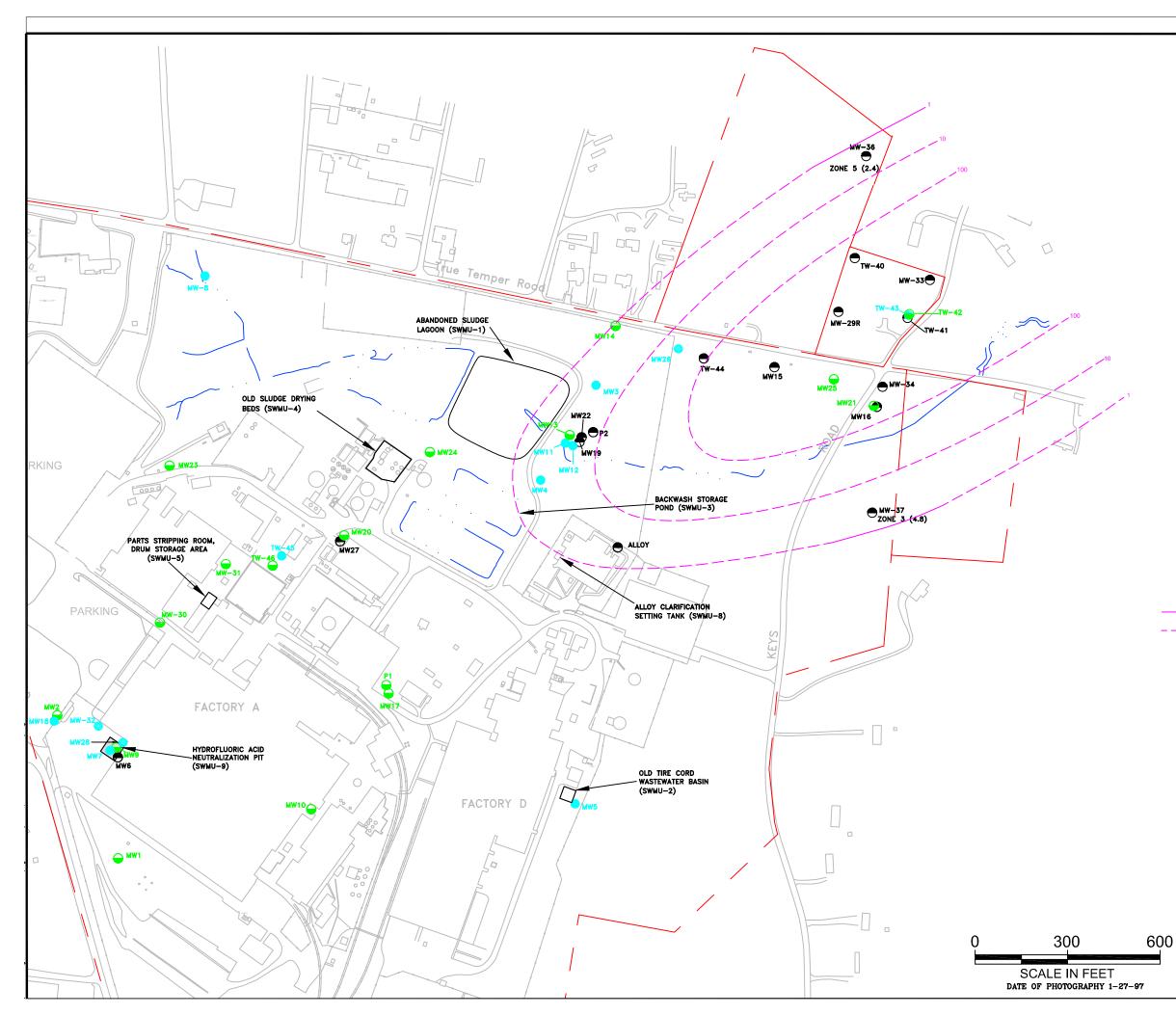


	FIGURE 16		
	1,1-DCE ISOCONCENTRATI	ON MA	ΑР
	OVERBURDEN/TOP OF BE	DROC	K
	NOVEMBER 2009		
OWENS CORNING			
0	ANDERSON, SOUTH CAR	OLINA	
U	Prepared For: OWENS CORNING	DATE:	12/30/09
		SCALE:	1"=300'
	BROWN AND CALDWELL		DRM
	DROWN AND CALDWELL	PROJ.	136868

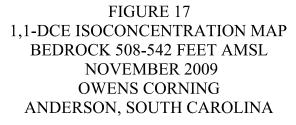
	LEGEND
$\overline{}$	TOP OF BEDROCK WELL
•	OVERBURDEN WELL
●	BEDROCK WELL
	SURFACE WATER SAMPLE LOCATION
	1,1-DCE CONCENTRATION CONTOUR
	INFERRED 1,1-DCE CONCENTRATION CONTOUR
ND	NOT DETECTED
NS	NOT SAMPLED
(300)	1,1-DCE CONCENTRATION (ug/L)

	LEGEND
$\overline{}$	TOP OF BEDROCK WELL
0	OVERBURDEN WELL
●	BEDROCK WELL
	SURFACE WATER SAMPLE LOCATION

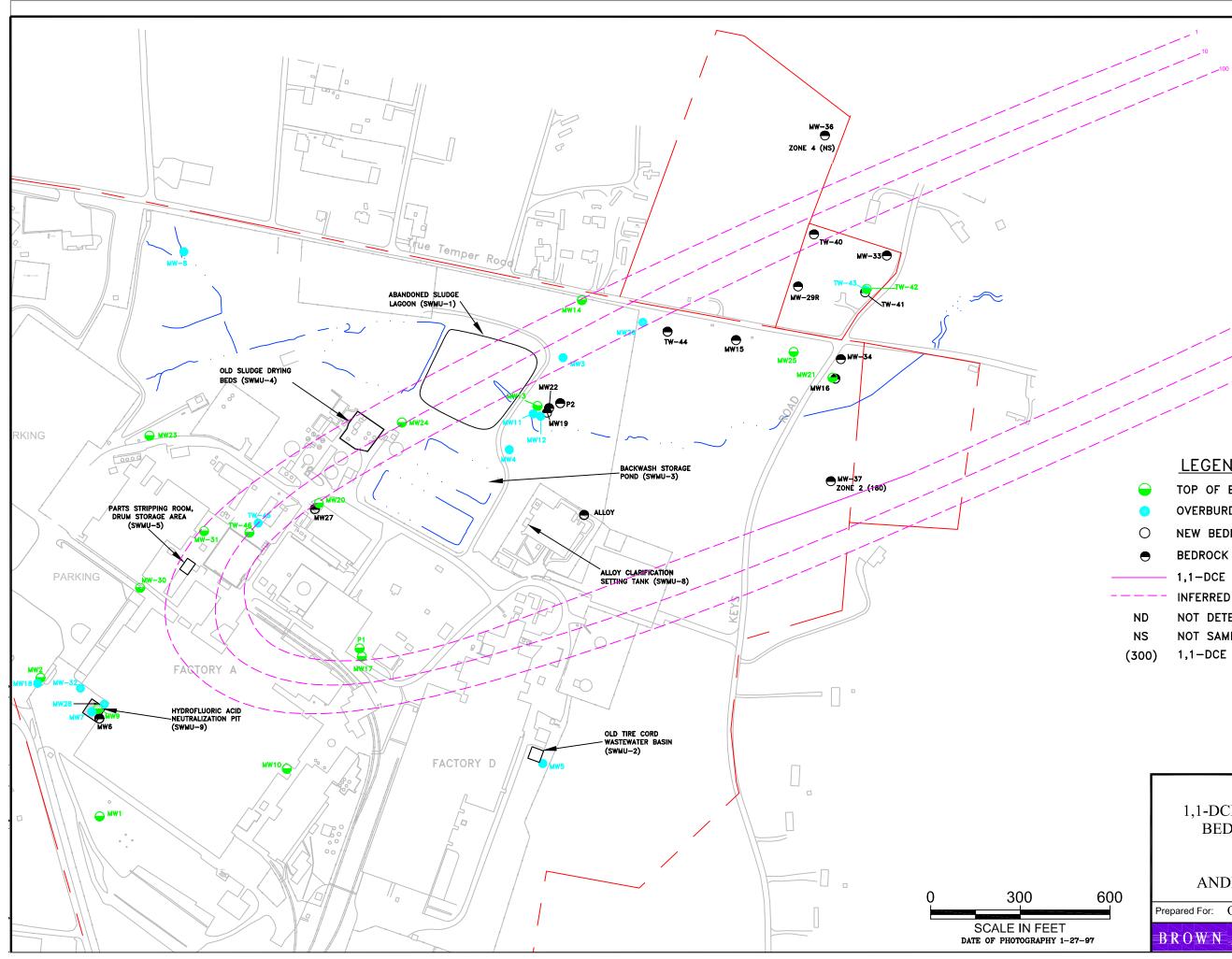
MW-35	
MW-33	



	LEGEND
$\overline{}$	TOP OF BEDROCK WELL
•	OVERBURDEN WELL
0	NEW BEDROCK WELL
●	BEDROCK WELL
	1,1-DCE CONCENTRATION CONTOUR
	INFERRED 1,1-DCE CONCENTRATION CONTOUR
ND	NOT DETECTED
NS	NOT SAMPLED
(300)	1,1-DCE CONCENTRATION (ug/L)



)			
	Prepared For: OWENS CORNING	DATE:	1/6/10
		SCALE:	1"=300'
	BPOWN AND CALDWELL	DRAWN BY:	DRM
	DROWN AND CALDWELL	PROJ. 1	36868

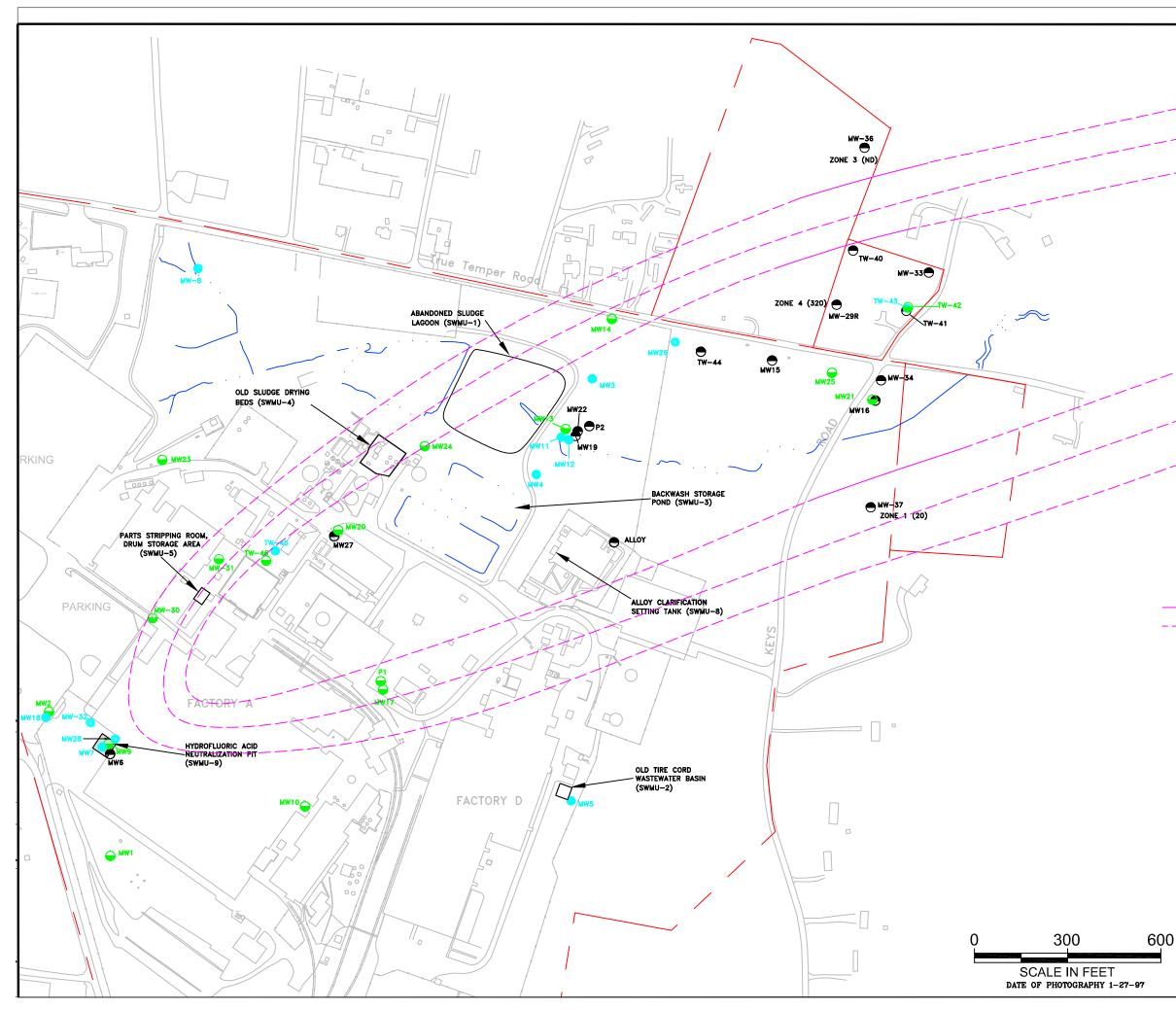


Ċ)
	MW-35

	LEGEND
$\overline{}$	TOP OF BEDROCK WELL
0	OVERBURDEN WELL
0	NEW BEDROCK WELL
€	BEDROCK WELL
	1,1-DCE CONCENTRATION CONTOUR
	INFERRED 1,1-DCE CONCENTRATION CONTOUR
ND	NOT DETECTED
NS	NOT SAMPLED
(300)	1,1-DCE CONCENTRATION (ug/L)

FIGURE 18 1,1-DCE ISOCONCENTRATION MAP BEDROCK 542-576 FEET AMSL NOVEMBER 2009 OWENS CORNING ANDERSON, SOUTH CAROLINA

, ,			
	Prepared For: OWENS CORNING	DATE:	1/6/10
		SCALE:	1"=300'
	BPOWN AND CALDWELL	DRAWN BY:	DRM
	DRUWN AND CALDW LLL	PROJ. 1	36868

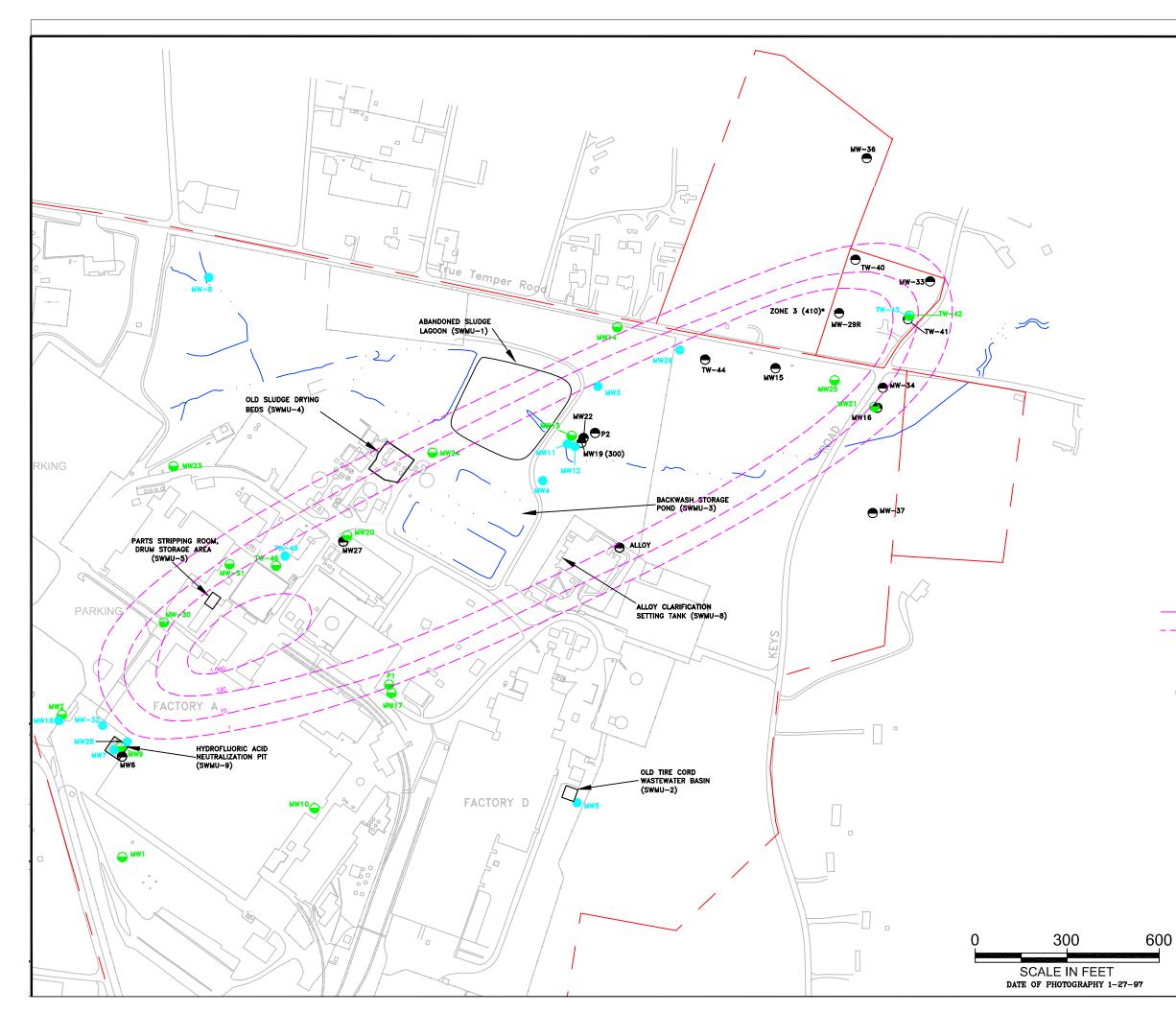


	LEGEND
$\overline{}$	TOP OF BEDROCK WELL
0	OVERBURDEN WELL
0	NEW BEDROCK WELL
●	BEDROCK WELL
	1,1-DCE CONCENTRATION CONTOUR
	INFERRED 1,1-DCE CONCENTRATION CONTOUR
ND	NOT DETECTED
NS	NOT SAMPLED
(300)	1,1-DCE CONCENTRATION (ug/L)
	FIGURE 19
	1,1-DCE ISOCONCENTRATION MAP
	BEDROCK 574-608 FEET AMSL
	NOVEMBER 2009

● MW-35 (340)

1,1-DCE ISOCONCENTRATION MAP BEDROCK 574-608 FEET AMSL NOVEMBER 2009 OWENS CORNING ANDERSON, SOUTH CAROLINA

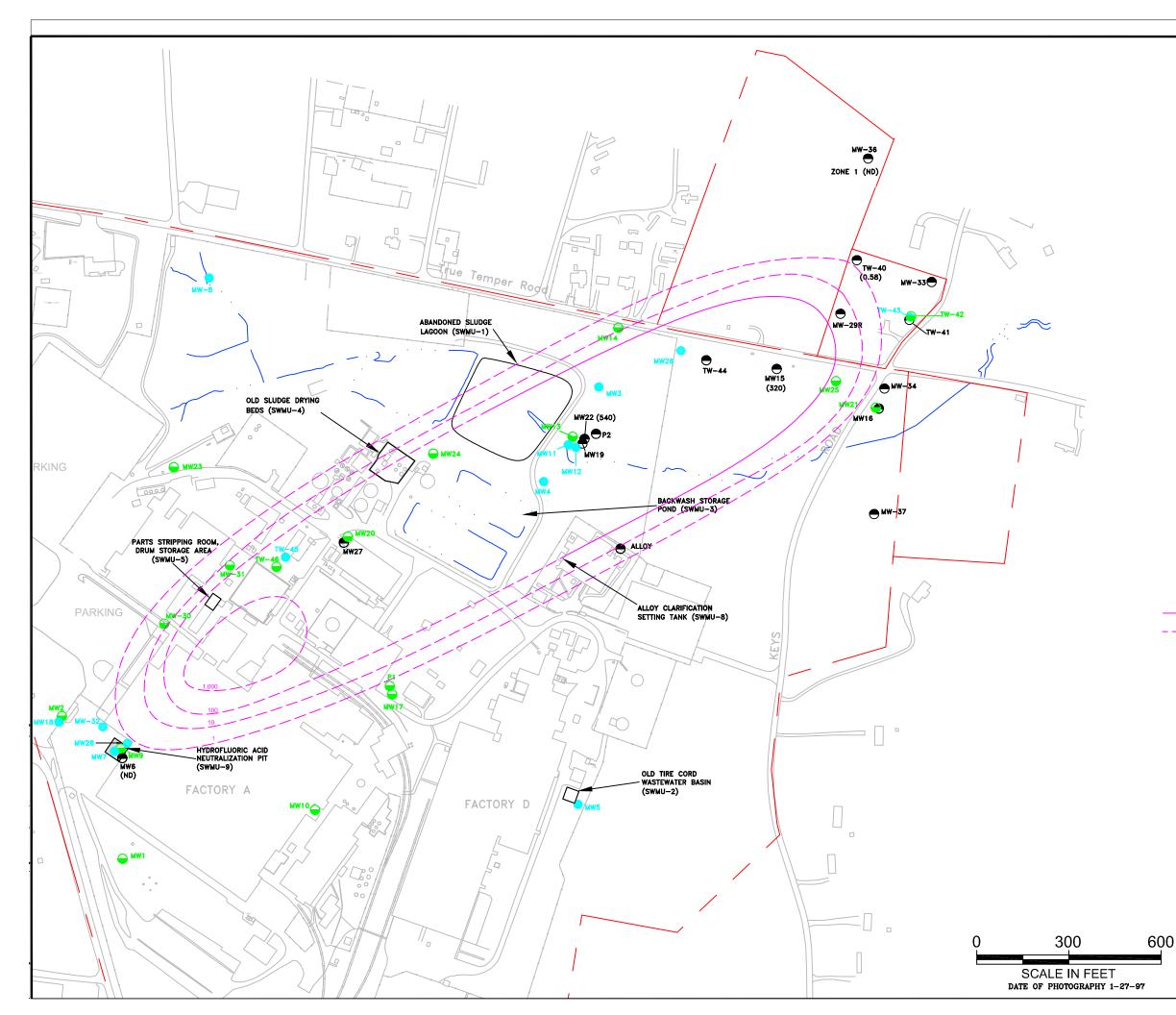
Prepared For: OWENS CORNING	DATE:	1/6/10
	SCALE:	1"=300'
BROWN AND CALDWELL	DRAWN BY	DRM
DROWN AND CALDWELL	PROJ.	136868



	LEGEND
$\overline{}$	TOP OF BEDROCK WELL
0	OVERBURDEN WELL
0	NEW BEDROCK WELL
€	BEDROCK WELL
	1,1-DCE CONCENTRATION CONTOUR
	INFERRED 1,1-DCE CONCENTRATION CONTOUR
ND	NOT DETECTED
NS	NOT SAMPLED
(300)	1,1-DCE CONCENTRATION (ug/L)
*DUPL ZONE	ICATE SAMPLE COLLECTED FROM MW-29R 3.
F	

FIGURE 20 1,1-DCE ISOCONCENTRATION MAP BEDROCK 610-632 FEET AMSL NOVEMBER 2009 OWENS CORNING ANDERSON, SOUTH CAROLINA

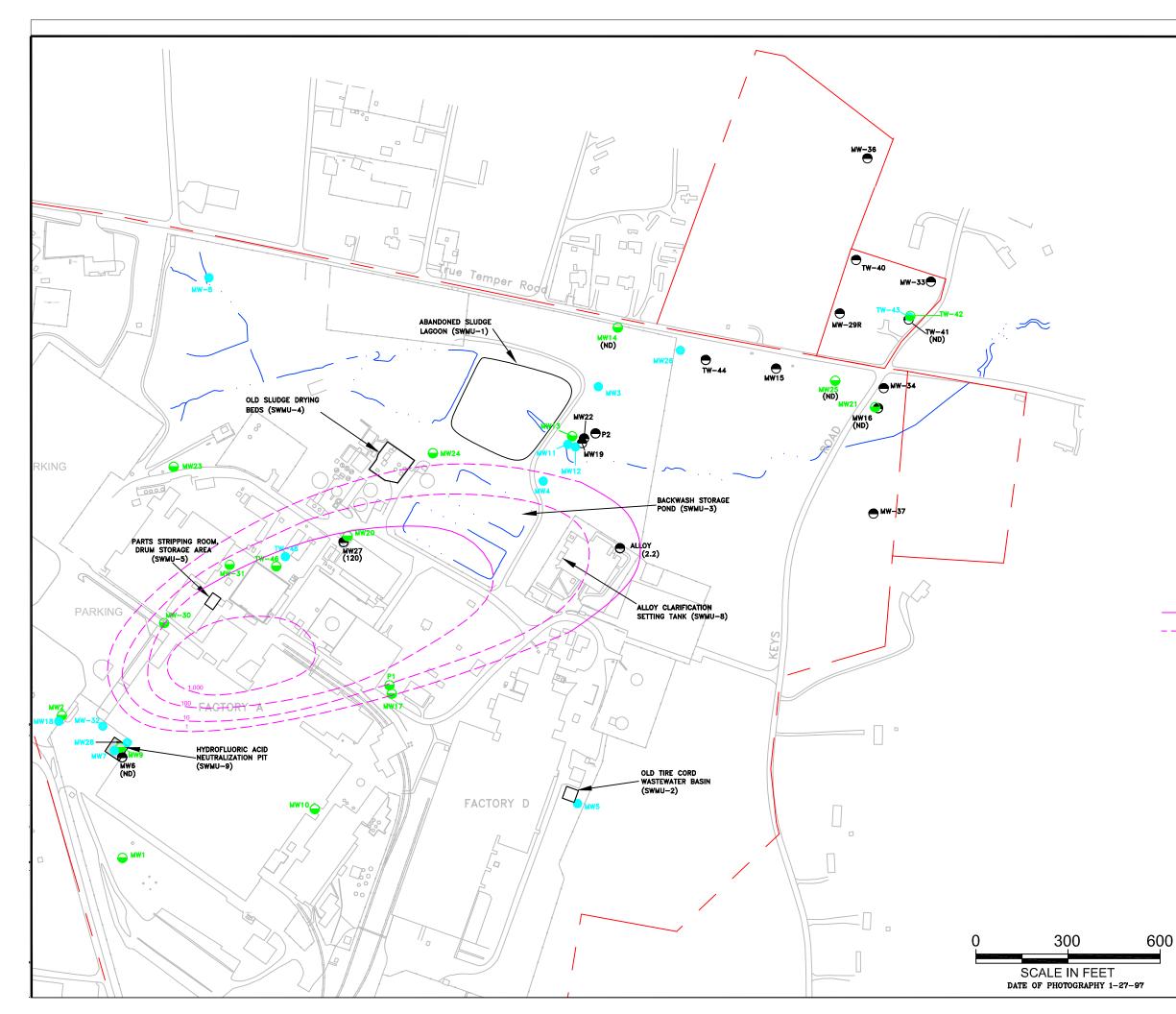
)			
	Prepared For: OWENS CORNING	DATE:	1/6/10
		SCALE:	1"=300'
	BPOWN AND CALDWELL	DRAWN BY	DRM
	DROWN AND CALDWLLL	PROJ.	36868



	LEGEND
$\overline{}$	TOP OF BEDROCK WELL
•	OVERBURDEN WELL
0	NEW BEDROCK WELL
€	BEDROCK WELL
	1,1-DCE CONCENTRATION CONTOUR
	INFERRED 1,1-DCE CONCENTRATION CONTOUR
ND	NOT DETECTED
NS	NOT SAMPLED
(300)	1,1-DCE CONCENTRATION (ug/L)

FIGURE 21 1,1-DCE ISOCONCENTRATION MAP BEDROCK 660-698 FEET AMSL NOVEMBER 2009 OWENS CORNING ANDERSON, SOUTH CAROLINA

)			
	Prepared For: OWENS CORNING	DATE:	1/6/10
		SCALE:	1"=300'
	BPOWN AND CALDWELL	DRAWN BY:	DRM
	DROWN AND CALDWILL	PROJ 1	36868



	LEGEND
$\overline{}$	TOP OF BEDROCK WELL
0	OVERBURDEN WELL
0	NEW BEDROCK WELL
€	BEDROCK WELL
	1,1-DCE CONCENTRATION CONTOUR
	INFERRED 1,1-DCE CONCENTRATION CONTOUR
ND	NOT DETECTED
NS	NOT SAMPLED
(300)	1,1-DCE CONCENTRATION (ug/L)
	MW-6 IS SCREENED FROM 686.22 TO FEET AMSL.
	FIGURE 22

1,1-DCE ISOCONCENTRATION MAP BEDROCK 700-742 FEET AMSL NOVEMBER 2009 OWENS CORNING ANDERSON, SOUTH CAROLINA

)			
	Prepared For: OWENS CORNING	DATE:	1/6/10
		SCALE:	1"=300'
	BPOWN AND CALDWELL	DRAWN BY:	DRM
	DROWN AND CALDWELL	PROJ. 1	36868

APPENDIX A: GROUNDWATER SAMPLING FIELD DATA SHEETS

BROWN AND CALDWELL

A

.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-22</u>

1 PROJ	ECT INF	ORMA ⁻	LON							
	Number: <u>136</u>			ber: 400.00)1	Area of Conc	ern:			
1	Owens Corn									
	ocation: And		outh Car	olina				Sunny	Clear	
2. WELL	DATA		Date Me	asured:	8/4/09	Time: P	M	Temp	orary Well: 🛛 Yes 🗖 No	
	Diameter:				•	s 🛛 Galv. Steel				
	Diameter:			Type: 💋 PV	C 🗆 Stainles	s 🛛 Galv. Steel	□ Teflon®	Other:		
Total De	pth of Well:	116	feet	From: 🗆 To	p of Well Casir	ig (TOC) 🛛 T	op of Protectiv	ve Casing 🔲	Other:	
Depth to	Static Water:_	7.28	feet	From: 🗹 To	p of Well Casir	ig (TOC) 🛛 T	op of Protectiv	ve Casing	Other:	
Depth to	Product:	-	feet	From: 🗆 To	op of Well Casir	ng (TOC) 🔲 T	op of Protectiv	ve Casing 🛛	Other:	
Length o	of Water Colum	nn: <u>168.7</u>)	feet			_ gal <i>2-in well = 0.16</i> :			GS): /ft 6-in well = 1.469 gal/ft	
3. PURC	GE DATA	_	Date Pu	rged: <u>لا</u>	13/09	Time: 📕	4 181	7	Equipment Model(s)	
Purge M	athed 🖸 Bai	iler, Size:		Bladder Pump	🛛 🗖 2" Sub. Pu	mp 🛛 4" Sub. 🗇 Other:	Pump		toriba - U-52	
Materiale	s: Pump/Bailer	D Polyet	iylene 🎽 Sta	inless 🛛 PVC	Teflon® 0	Other:		, /	Yonsoon Pump	
	·				-	ined 🛛 Disposion 🕞 Disposion		2. <u> </u>	kas Dubas	
	s: Rope/Tubing	[#] 🛛 Dedica	ted 🛛 Prep	ared Off-Site	Field-Cleane	d 🖉 Disposat	ple	3 /	Son pippe	
Volume	to Purge (minii		-					4	Calibrated?	
Was wel	l purged dry?	C Yes		· •	te:	· · · - · ·	Truck (altar)			
Time	Cum. Gallons Removed		Temp	Spec. Cond. > of ±3% or	+	DO > of ±10% or	Turbidity	Water Level	Comments	
	(gal)	±0.1 su	±2°C	±10 µS/cm	±20 mV	±0.2 mg/L	≤ 10 NTU			
+215	Purg	c					-			
1822	5	6.65	19.05	0.258	-63	1.04	0.0	7.23		
1827	10	5.21	20.36	0.112	173	2.97	0.0	7.24		
1832	15	5.20	20.35	0.112	180	2.99	0.0	7.26		
1837	20	5.19	20.33	0.12	184	3.00	0.0	7.26		
1840	Sample	e Colle	ited	1				Purge data	a continued on next sheet?	
4. SAMF	PLING ĎA	TA			_				nemical Analyses	
Method(•	C Peristalt	ic Pump 🛛 Inei	tial Lift Pump		Pump	Ferro	s Iron:ng/L	
Materials	s: Pump/Bailer	Dedicat		nless 🖸 PVC epared Off-Site			able	DO:	mg/L	
Materials	s: Tubing/Rope	Polyeth	viene 🔾 Poly	rpropylene 🔲 1 ared Off-Site 🛛	Feflon® 🖵 Nyle	on G Other:	e	Nitrate	a: mg/L	
Depth to	Water at Time					r yarDisposabi ? ⊡ Yes §i			\overline{X}	
Sample	1D: MW.22	Sample D	ate: 8/13	Sample 1		•	•	Sulfat	e: mg/L	
	e Sample Colle			10: Dup.	- IA C 12	* of Contair	ners:	Alkalir	nity: mg/L	
Equipme	ent Blank Colle	cted?	Yes 🖬 No	ID: EB-	123 e 19	20# of Contair	ners: 2	′		
5. COM	MENTS	Pue	into)	se o	~ 107.	Cr.				
		rump				<u>j • `</u>				
Note: Include	Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.									
	Tripmut									
FORM GW-	2 (Rev 25.Sept.	08 · sej)		~	1 .	-	Signature	/ / / /	()	

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-33 245-255</u>

f	JECT INF										
4			_ Task Num	nber: <u>400.0</u>	01	Area of Concern:					
	Owens Cor					Personnel: Weather:85°F Sunny Clear					
		derson, s	South Ca	rolina		_ Weather:		my ue	~		
	L DATA								porary Well: □Yes □No		
Casing [Diameter: <u>6-ir</u>	nch open h	<u>c</u> inches			ss 🛛 Galv. Stee					
1	Diameter: <u>Op</u>					ss 🛛 Galv. Stee					
1	epth of Well:		-						Other:		
7	Static Water:		_feet						Other:		
	of Water Colur	nn. 23.31	221.61		e:_51.70				GS):		
	(in 2" pac	ker pipe)					7 gal/ft 4-in w	ell = 0.667 gai	US) //ft 6-in well = 1.469 gal/ft		
3. PURC	GE DATA					_ Time:/			Equipment Model(s)		
Purge M	lethod: 🛛 Ba	ailer, Size: trifugal Pum	p 🖸 Perista	3 Bladder Pump Itic Pump 🖸 In	o 💢 2" Sub. Pi ertial Lift Pump	ump	Pump	1	Francis Pump		
Material	s: Pump/Baile	D Polyet	hylene 🗖 Sta	ainless 🗆 PVC	□ Teflon®	Other: aned Dispose		2	toriba U-52		
Material	s: Rope/Tubin	🖌 🖬 Polyeti	hylene 🗆 Po	lvpropylene 🖸	Teflon® D N	vlon 🗆 Other:		3 F	kron Dipper		
	to Purge (mini	Dedica				ed 🙀 Disposal	ble	0. <u> </u>	•••		
	Il purged dry?	unun). <u> </u>			ite:	+		4	Calibrated? XYes 🗆		
	Cum. Gallons	рН	Temp	Spec. Cond.	1	DO	Turbidity				
Time	Removed (gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	r > of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments		
1050	Stert	Pin	70		2			12.46	42		
1058	~10	19.6	19.62	0.162	215	2.45	15.1	12.26	H=5.43		
1108	~20	5.33	19.62	0.175	217	0.73	2.96	12.19			
1115	~30	5.33	19.61	0.179	216	0.69	1.51	12.17			
1121	-40	5.37	19.59	0.182	212	0.67	0.72	12.14			
			·						a continued on next sheet?		
4. SAMF	PLING DA							Greec	hemical Analyses		
Method(s	s): 🗆 Bai 🗆 Cent	ler, Size: rifugal Pump	Peristalt	Bladder Pump ic Pump 🛯 Inei	tial Lift Pump	mp 🛛 4" Sub. F 🗅 Other:	Yump	Ferro	Iron:ng/L		
Materials	: Pump/Bailer	 Polyeth Dedicat 		nless D PVC		I Other: ned □ Disposa		DO:	mg/L		
Materials	: Tubing/Rope	A Polyeth	ylene 🗆 Poly	propylene 🛛 1	reflon® 🛛 Nyl	on D Other:		Nitrate			
Depth to	Water at Time			-		d 🕱 Disposabl					
Sample I	D: MW-33-2	Sample D	ate: 8/10/	01 Sample 1	Time: 1805	# of Contair	hers:2	Sulfat	e: / mg/L		
	e Sample Colle				<u> </u>	# of Contain		Alkalir	nty:mg/L		
Equipme	nt Blank Colle	cted? 🗆 `	Yes 🕱 No	ID:		# of Contain	ers:		\setminus		
5. COM	MENTS	Well	vol. GI	culations	: bin i	spen hole	(10' Dac	her): 1.	469 54 = 10'= 1		
	Top of			ata H20				245	245) × 0.167 54		
		· •					12)	4	73.39		
Note: Include c	comments such a	as well condi	tion, odor, pre	esence of NAPL		s not on the field o	data sheet.	A	73.39		

BROWN AND CALDWELL

WELL ID: <u>MW-33 245-255</u>

	GE DATA Cum. Gallons	PH	Temp	Spec. Cond.	ORP	DO	Turbidit		
Time	Removed (gal)	±0.1 su	±2°C	· · · · · · · · · · · · · · · · · · ·		> of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1131	~55	19.53	19.53		200		0.45	12.11	pH= 5.49
1137	~65	5.71	20.36	0.115	205	5.1.85	2.52	12.11	
	Pump of	opped p	raping	wet h	terral h	as not	pone day	Pump me	y have overheated
1150	Began p	n ging a	m Pu	Mp Con	tuller	broken	gon to	neet 0	pu/ Pine
	to get	anot	her.						
1700	Starte	pungi	y agai	n w/ ne	w Gru	ralfos c	ontroller.	11.92'	
1710	~75	5.60	19.47	0.139	46	0.92	1.94	11.93'	
1718	~ 85	5.80	19.41	0.243	60	0.67	0.26	11.95	
1726	~95	5.80	19.44	0.240	¥ 0.57 -	0.57	0.05	1.96	ORP = 79
1734	~/05	5.78	19.41	0.232	91	0.51	0.0	11.77	
1741	~120	5.77	19.40	(). 230	93	0.50	0.0	11.98	
1748	~130	5.75	19.39	0.225	100	0.46	0.0	12.02	
1756	~140	5.73	19.30	6.221	103	0.42	0.07	12.15	
1800	~145	5.74	11.31	0.221	103	0.41	0.17	12.20	
1805	Pwg	e for	12h	rs. po	vametus	stab	,	lected	Sample
•									
						-			
	1								
			-						
						- 1			
		<u> </u>			·	!	Pu	irge data contin	nued on next sheet?
						8	-1	-/it	W/COL

B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-33 395-410</u>

			_ Task Nun	nber: <u>400.0</u>	01	Area of Concern:						
	Owens Cor			18		Personnel:						
Project	Location: An	derson,	South Ca	rolina		_Weather:	~95•F	-So Ha	the Cloudy, 1+			
2. WEL	L DATA		Date Me	easured: 🤰	3/11/09	_ Time: 📑	17	Ten	nporary Well: 🛛 Yes 💆			
Casing	Diameter: <u>6 ir</u>	nch open h	o inches	Туре: 🕅 Р\	/C 🗆 Stainles	s 🛛 Gaiv. Ste	el 🗆 Teflon®					
Screen	Diameter: o	oen hole in	ches	Туре: 🗅 Р\	C 🛛 Stainles	s 🛛 Galv. Ste	el 🛛 Teflon®	D Other:				
Total D	epth of Well:	410	_feet			ng (TOC)						
Depth t	o Static Water	15.71	_feet	From: 🗆 To	op of Well Casi	ng (TOC) 🛛 🗖	Top of Protect	ive Casing 🗴	Other: Top of 2"			
	o Product:		_feet				Top of Protect	tive Casing	Other:			
Length	of Water Colur	mn: 377.2	leet		\$5.38		Screened	Interval (fron	n GS):			
								-	al/ft 6-in well = 1.469 gal/f			
		ailer Size:	Date Pu		11/09	_Time:			Equipment Model(s			
Purge N	lethod: 🖬 Cer	trifugal Pur	p 🛛 Perista	Itic Pump D Ine	ertial Lift Pump	Imp	. Pump	1	snindfos pump			
Materia	s: Pump/Baile	_ D Polyet	hylene 🕱 Sta	ainless 🖸 PVC	Teflon® (Other:		2.	Horiba U-52			
Materia	s: Rope/Tubin	🖌 🎽 Polyet	hylene 🛛 Po	ivpropylene 🛈	Teflon® D N				Hean Disana			
	-	Dedica	ated 🖸 Prep	pared Off-Site	Field-Cleane	ed 🛛 🕱 Disposa	ble	3				
	to Purge (mini Il purged dry?	0.655.022.00			d)6.19 te:	•		4	Calibrated? X Yes			
vvas we	Cum. Gailons		Temp	Spec. Cond.		gal/min DO	Turbidity					
Time	Removed	±0.1 su	±2°C			> of ±10% or		Water Leve	el Comments			
1000	(gal)			±10 µS/cm	±20 mV	±0.2 mg/L	≤ 10 NTU					
1739	Start	Puro	ling					15.25				
1750	-20	6.81	20.46	0.267	29	0.50	308	20.2				
1804	-50	6.16	20.53		43	6.50	138	16.16				
1834	~80	6.49	21.42	0.222		1.42	97		Y Decrease in head			
1900	~90							15.82	in pump rate.			
1100	. 10	6.71	21.88	0.226	86	2.26	27.5	15.80	in pomp rate.			
4.0.4.4		—						Purge da	ta continued on next sheet?			
		IA ler, Size:	-	Bladder Burn				Geog	hemical Analyses			
Method(ifugal Pump	🛛 Peristalti	c Pump 📮 Iner	tial Lift Pump C		-ump	Ferro	ous ron:mg/t			
Materials	: Pump/Bailer	Polyeth	ylene 🞽 Stair ed 🛛 Pre	nless 🔲 PVC		Other: ed Disposi		DO:				
Materials	: Tubing/Rope	Polyeth	viene 🔾 Poly	propylene 🛛 T	eflon® 🗆 Nvid	on Other						
	Water at Time	Dedicat	ed 🛛 Prepa	ured Off-Site	Field-Cleaned	🙀 Disposabl		Nitrat	te: mg/			
Sample	D: <u>MW-33</u> -34	501 Sampli 1 5 - 410 Sample D	ny:		riela riltered	? 🖸 Yes 🖡	at No 7	Sulfat	te: / mg/l			
	Sample Colle				nite[Alkalj	nity:mg/L			
	nt Blank Collec	\sim			collected on	# of Contair		— 7	·			
					- */17/01 C	# of Contair	ners:	<u> </u>				
5 COM	/IENTS	Well										
	· packe	· interi	ral = (410-395) × 1.4	61 = 2	12.04	nal i	mil val - 80			
6												
6		= 10	(395-	15.71)	× 0.167	= 63	.34 .	<u></u>	well n1:85.			

WELL ID: <u>MW-33 395-410</u>

	SE DATA		nued from)				
Time	Cum. Gallons Removed		Temp	Spec. Cond. > of ±3% or	ORP > of ±10% or	DO > of ±10% or	Turbidity	Water Level	Comments
	(gal)	±0.1 su	±2°C	±10 µS/cm	±20 mV	±0.2 mg/L	STUNTU		Quin altred and
1945	Purgen	<u>zon</u>	e dy	Not	sure i	ros the	is hap	pered	Rote returned ; a trickle.
TTOO .	never	had	1 thi	s happ	oen ih	this	Zoni	befin	· · · · · · · · · · · · · · · · · · ·
1940	The	to to	ag n	12 insi	de pac	ke pij	pe. B	eyand	
	300'	(len	gth of	· wh	meter)	Lett	ing 20	ne re	harge
	and go	bing	to =	sample			<u> </u>		0
1935	Samp	le c	sllect	cd		-			
		·····				<u>`</u>			
		-				-		• With	
-									
							-		
	-								
					-				
								5	
			•						

BROWN AND CALDWELL

- 2 2 Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

1. PROJECT INFORMATION
Project Number: <u>136868</u> Task Number: <u>400.001</u> Area of Concern:
Client: <u>Owens Corning</u> Project Location: <u>Anderson, South Carolina</u> Weather: <u>80°F Sunny Clear</u>
2. WELL DATA Date Measured: <u>\$/11/01</u> Time: <u>0 \$35</u> Temporary Well: DYes Mo
Casing Diameter: <u>6 inch open ho</u> inches Type: XPVC I Stainless I Galv. Steel I Teflon® I Other:
Screen Diameter: <u>open hole in</u> ches Type: YPC Stainless Galv. Steel Teflon® Other:
Total Depth of Well: 410 feet From: I Top of Well Casing (TOC) Top of Protective Casing Other: Depth to Static Water: 3.8% feet From: I Top of Well Casing (TOC) Top of Protective Casing Other: 1op of Protective Casing
Depth to Product:
Length of Water Column: 44 feet Well Volume: 73.3 gal Screened Interval (from GS): 340.54 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: <u>8/11/09 + 5/12/64</u> Time: 0830 Equipment Model(s)
Bailer, Size: D Bladder Pump 🕱 2* Sub. Pump 🖸 4* Sub. Pump
Waterials. Fullip/Baller Dedicated Prepared Off-Site XField-Cleaned Disposable 2.
Materials: Rope/Tubing Polyethylene Polypropylene Teffon® Nylon Other:3. He so Dyper
Volume to Purge (minimum): <u>3</u> well volumes or <u>320.5</u> 214 6 gallons 4.
Was well purged dry? Ves Wes No Pumping Rate: gal/min Calibrated? Yes
Cum. Gallons pH Temp Spec. Cond. ORP DO Turbidity
TimeRemoved (gal) $\pm 0.1 \text{ su}$ $\pm 2^{\circ}$ C> of $\pm 3\% \text{ or}$ > of $\pm 10\% \text{ or}$ > of $\pm 10\% \text{ or}$ > of $\pm 10\% \text{ or}$ Water LevelComments(gal) $\pm 0.1 \text{ su}$ $\pm 2^{\circ}$ C $\pm 10 \ \mu\text{S/cm}$ $\pm 20 \ \text{mV}$ $\pm 0.2 \ \text{mg/L}$ $\leq 10 \ \text{NTU}$ Water LevelCommentsComments $\pm 10 \ \mu\text{S/cm}$ $\pm 20 \ \text{mV}$ $\pm 0.2 \ \text{mg/L}$ $\leq 10 \ \text{NTU}$ Water LevelComments
0835 Start Purging 11.42 st water, Lots of
0842 ~10 6.43 19.12 0.276 62 2.83 589 10.85 bubbles in flow through
1307 Start Purger again 14.80 Leak in Packer. Think
016 00 6.01 00.01 0.206 10 3.17 023 10.05
Purge data continued on next sheet?
4. SAMPLING DATA Anatheod(a): Bailer, Size: Bladder Pump 2 2" Sub. Pump 4" Sub. Pump
Method(s): Centrifugal Pump Deristaltic Pump Dinertial Lift Pump DOther: Ferrous Iron:
Materials: Pump/Bailer Dolyethylene 2 Stainless D PVC D Teflon® D Other: DO:mg/L
Materials: Tubing/Bone A Polyethylene D Polypropylene D Teflon® D Nylon D Other:
Depth to Water at Time of Sampling
Sample ID: MW - 33 - Sample Date: 9/12/69 Sample Time: 1335 # of Containers: 2 Sulfate: mg/L
Duplicate Sample Collected? Yes \$ No ID: # of Containers: Alkalinity: ng/L
Equipment Blank Collected? # Yes (A) No ID: # of Containers:
5. COMMENTS 6" preker internal = (365.355) × 1.469 = 14.69 and 1 + 1011 = 75.5
$\frac{6}{2''} p_{10} v_{01} = (355 - 2.88) \times 0.167 = 14.67 get well vol = 75.7$
A Pip Vol. = (555 - ar 10) * 0.16 +
TilMer
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WELL ID: <u>MW-33 355-365</u>

BROWN AND CALDWELL

3. PURC	E DATA	(contin	ued fror	n page	/)				· · · · · · · · · · · · · · · · · · ·	Ĩ
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.		DO	Turbidity	\A/		1
	(gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% o ±20 mV	r > of ±10% or _±0.2 mg/L	≤ 10 NTU	Water Leve	Comments	
1322	~40	6.35	20.54	0.192	44	1.00	106	15.55		
1353	~75	6.40	20.39	0.204	42	0.75	431	17.70	-	
	~90 g	$1 \rightarrow 1$	same	thing he	ppeny	that hap	pened (0 /0 .	ral, water	
	began	to fl	on tro	n top	of 2	pipe.	Abel +	Morella	not	
	Sure 1	My ho	ppcnie	· · · · · ·	king calls			out w		
	to do.	5	/		0	20	0			
	Jop pe	reker	had	large	leak. O	rdering	anothe	, com	ny back	
	toman	ow to	finis	h this	mterra			4 4	0	
•										
1130	Began	Dwg	hy ag	aih on	8/12/0	start	yec	90/ 10	noved WL= 14	/s. .4
	3 61	's = ;	214.69				5	15.74		
1150	~20	6.41	19.57	0.211	-66	0.44	252	17.84		
1211	~ 40	6.39	11.54	0.211	-91	0.34	92	17.68		
1222	~60	6.41	19.53	0,212	-99	0.32	187	17.55		
1243	~70	6.41	19.54	0.210	-102	0.31	52.7	16.96	* Punpate discharge rafe decrease of	
1304	~75	6.44	1962	0.209	-110	8.29	17.1	16.65	decrease in Had above pump.	
1320	~\$\$80	6.57	19.71	0.208	-121	0.30	17.1	16.48		
13 30	~82	6.48	19.73	0.210	- 116	0.30	22.4	16.42		
1335	Roged	for	2 h	<u>s, sa</u>	mole	collecte	d			6 7
					,					
								-		
		4 m								
								-		
->10										
				1			F	Purge data con	tinued on next sheet?	
	rila.	in g	~					This	ma	
ORM GW-	2 (Rev 25.Sept.0	08 - sej)	נג		2	2	Signature //	<u> </u>	· · J	

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GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-29R Zone 3-Waterloo</u>

	JECT INF										
					01						
	Owens Corr		_ Lask Nurr			Area of Cond	-	•			
			South Car	rolina		Personnel: DM Weather: ~70°F Overcast, 1+ drizela					
	L DATA							•			
	Diameter:	2 in	bale Mit		8/11/01	_ mne. <u>_ 12</u>	20 11	lemp	oorary Well: □Yes ¤ No		
	Diameter:		Len	gth of water c	olumn calcul	ation:					
	g Inteval:		14/-1	(9094-Curren I Vol. calculat		*0.02775)*2.31	108) = Lengt	h of water co	lumn (ft)		
	Static Water:								ol of water in tubing(1/4")		
•	Product:		-	-	[22.10 yai - 2	2.52 gal] + (0.0	1.54		er column		
•	of Water Colum	-	-	Well Volume	21.2	oal	Screened	nton/al /from	GS):		
Longard			leet	Note: 1-in well	= 0.041 gal/ft	gu, 2-in well = 0.16	7 gal/ft 4-in v	vell = 0.667 gal/	/ft 6-in well = 1.469 gal/ft		
3. PURO	GE DATA		Date Pu	rged: <u></u> \$/	12/09	_Time: _15	536		Equipment Model(s)		
Purge M	lethod: D Cen	iler, Size:	D Perista	Bladder Pump	D 2" Sub. Pr	ump 🗖 4" Sub. paiOther: Dea	Pump 1 P	me t. F	turiba U-52		
Matariak	s: Pump/Bailer					Ciner:			entry falive Reading		
		S. Dedica	ited D P	repared Off-Site	Field-Cle	aned 🛛 🖾 Dispos	sable	2	Calibrated? A yes		
Material	s: Rope/Tubing					ylon □ Other: ed □ Disposat		3	Blinst fump controlle		
Volume	to Purge (mini	mum):	well v	olumes or	· · · · · · · · · · · · · · · · · · ·	gallons		4. Hu	isky (7 gal Air Cong-		
Was we	I purged dry?	🛛 Yes	J₽ No	Pumping Ra	te:	gal/min			Calibrated? 🕱 Yes 🗆		
Time	Cum. Gallons Removed	ρН	Temp	Spec. Cond.		DO	Turbidity	Water Level	Comments		
Time	(gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% o ±20 mV	r > of ±10% or ±0.2 mg/L	≤ 10 NTU	Walei Levei	Comments		
(536	Start	Purge									
1550	1.5	5.66	19.49	0.126	193	1.36	0.0	6743.2	* steadily increasing store and rest		
1610	3	5.59	19.39	0.126	205	1.32	J. D	6744.0			
1625	5	5.58	19.41			1.28	0.0	6744.4			
1655	7.5	5.54	19.38		229	1.25	0.0	6744.0			
					·			Purge data	a continued on next sheet? 🏾 🕱		
4. SAMF	LING DA	TA						Geoch	nemical Analyses		
Method(s		er, Size:				mp 🛛 4" Sub. F Sol Other:		Ferror	us Iron:rig/L		
Materials	: Pump/Bailer			niess 🗆 PVC							
		A Dedicate		epared Off-Site		· ·	able	DO:	mg/L		
Materials	: Tubing/Rope			rpropylene 口T ared Off-Site			e	Nitrate	e: mg/L		
	Water at Time					d? 🗆 Yes 🌶		Sulfate	e:mg/L		
Sample I	D: MJ-2942 20	Sample Da	ate: <u>\$/12/0</u>	9 Sample T	Time: 1910	# of Contair	ners:				
Duplicate	Sample Colle	cted?	∕es ⊠d No	ID:		# of Contair	ners:	Alkalir 	lity: mg/L		
Equipme	nt Blank Coile	cted?	res 🕺 No	ID:		# of Contair	ners:	/	\rightarrow		
. COM	MENTS										
_			2								
ote: Include d	comments such a	is well condi	tion, odor, pre	esence of NAPL	, or other items	s not on the field o	data sheet.	1			
							-1/0	2-11	Ica		
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BROWN AND CALDWELL

WELL ID: <u>MW-29R Zone 3-Waterloo</u>

	Cum. Gallons	pН	Temp	n page <u>1</u> Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
1715	10	5.55	19.37	0.126	- (m 23)	1.28	0.0	6744.9	
1745	12.5	5.55	19.35	0.126	237	1.30	0.0	6745.5	set drive (vent @ 15 and 9 sec.
1805	.15	5.53	19.34	0.126	244	1.32	0.0	6745.5	
1835	18	5.53	19.35	0.126	248	1.29	0.0	6745.7	
1910				0.126	253	1.24	0.0	6745.5	
1915	Sampl	e Collec	ted						
						đr			
*									
			4						
									· <u>··········</u> ·························
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		Y							
						-			

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Signature

WELL ID: <u>MW-29R Zone 4-Waterloo</u>

1. PRO	JECT INF	ORMA	TION								٦
Project I	Number: <u>136</u>	6868	_ Task Num	ber: 400.00	01	Area of Cond	cern:				
	Owens Corr					•	DM				
Project l	Location: And	derson, S	South Car			_Weather:	-70°F	Scatter	d clouds		
2. WELI	L DATA		Date Me	easured:	8/11/09	_ Time: _ 7	M PM	Tem	porary Well: 🛛 Ye	s 🗆No	f
Casing [Diameter:	_2inc	hoe	gth of water c							1
Screen I	Diameter:(5inc	ches	8932.8-Curre	nt Dg reading	g)*0.02724)*2.(3108) = Len	gth of water of	column (ft)		
Samplin	g Interval: 17	7.6-202.2	toot	Vol. calculati		val(6") - vol of	waterloo ca	eina (2")]	ol of water intul		
Depth to	Static Water:	6012.5	feet	= =	[36.14 gal - 4	. 11 gal] + (0.0 1	102 gal/ft x I	ength of wate	er column)	olog(174-)	Í
Depth to	Product:		feet		32.0	03	1-87				
Length c	of Water Colun	nn: 183.8	feet	Well Volume		_ gal	Screened I	nterval (from	GS):		
	· · · · · · · · ·							vell = 0.667 gal	Vft 6-in well = 1.4	69 gal/ft	
3. PUR(•		Time: <u>0</u>		<u> </u>	Equipment N		
Purge M	lethod: 🖸 Ba		p 🛛 Perista	ltic Pump 🖸 Ine	ertial Lift Pump	ump □ 4" Sub. Mari Other:	licated pu	<u>ا</u> 1 م	Horiba U	-52	
Material	s: Pump/Bailer	Dedica	nylene 🗆 Sta ited 🗆 P	ainless 🛛 PVC repared Off-Site	Teflon® (Field-Clear	Other: aned Dispose	sable .	, 2. <u> </u>	Solinst Pu	np Control	1/e
Material	s: Rope/Tubing		nylene 🗆 Po	lypropylene 🛛	Teflon® D Ny	/lon D Other:		<u>з. С</u>	acoKon Wire	Readout	
Volume	to Purge (mini					ed 🖸 Disposat	e e	, H	hsky 17 ge	Ar Cam	J.
	Il purged dry?	• Yes	_		te:	-		4	Calibrated?		1
	Cum. Gallons	рН	Temp	Spec. Cond.		DO	Turbidity		-		1
Time	Removed (gal)	±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	Water Level	Comm	ents	
0725	Start	Purge							PSI = ~ 90 7	70	1
0755	2.5	6.58	19.04	0.291	101	0.63	0.0	6211.7			
0825	5	6.29	19.46	0.228	97	0.61	0.43	6211.3			
0810	7.5	6.15	19.54	0.205	119	0.73	0.75	6255.1	Drive = $13s$ Vout = 5.5		levie Ion d
0935	10	5.79	19.68	0.152	171	1.02	0.92	6274.6	D= 155 V= 95		repi
								Purge dat	a continued on nex	t sheet? 🎽	
4. SAMF	PLING DA							Geoc	hemical Analyse	<u>s</u>	
Method(s		ler, Size: rifugal Pump	Peristalt	Bladder Pump ic Pump 🛯 Iner	□ 2" Sub. Pun tial Lift Pump §	np □ 4" Sub. P ã Other: <u> De da</u>	ump	Ferroi	us Iron:	_mg/L	
Materials	s: Pump/Bailer	Polyethy VDedicate		nless D PVC epared Off-Site		Other: ned	able	DO:		mg/L	
Materials	s: Tubing/Rope		/lene 🛛 Poly	propylene 🖸 T ared Off-Site	eflon® 🛛 Nylo	on 🖸 Other:		Nitrate		mg/L	
Depth to	Water at Time	of Sampli	ng: 6379	4 39	Field Filtered		I No	Sulfat		mg/L	ľ
Sample I	D: MW- JAR 20	Sample Da	ate: 8/13/	09 Sample T	ime: 12 15	_ # of Contain	ners: 2	/		$\overline{\ }$	
Duplicate	e Sample Colle	ected? □ `	Yes 🖬 No	ID:	<u></u>	# of Contain	ers:	Alkalir	nity:	_\ng/L	
Equipme	nt Blank Colle	cted? 🗆 `	Yes 🖬 No	ID:	<u> </u>	# of Contain	ers:				1
5. COM	MENTS										1
	<u> </u>			·							

B R O W N AND C A L D W E L L

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B R O W N AND C A L D W E L L

WELL ID: <u>MW-29R Zone 4-Waterloo</u>

Time	Cum. Gallons		ued from						
lime		рН	Temp	Spec. Cond.	ORP	DO	Turbidity		<u></u>
	Removed (gal)	±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	Water Level	Comments
1010	12.5	5.63	19.84	0.138	186	0.83	0.07	6267.1	
1040	15	5.57	19.96	0.135	186	0.66	0.0	6267.7	
1110	17.5	5.55		0.134		0.66	0.0	6286.9	D= 20s V= 10s
1/30	20		20.09		<u></u>	0.67	0.0	6282.0	0.0
1155	22.5	5.54	19.81	0.135	188	0.77	0.0	6381.1	PSI to 80 D=23 V>11s
1210	201 23.5		19.88	0.134	188	0.75	0.0	6379.4	
		TB	said c	Kto.	sample	if pora	meters	cre sto	out 1 well vol.
,	36.14	3 4	nseat	ne rea	olgs.	Don't 1	rave to	perge	out (well vol.
1215	Sampl	e Coll	ected			· · · · · · · · · · · · · · · · · · ·			
	-								
		-							
					-				<u></u>
							_		· · · · · · · · · · · · · · · · · · ·
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Purge data continued on next sheet?

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GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: _____MW-36 Zone 1-Waterloo

1. PRO	JECT INF	ORMAI	ΓΙΟΝ						
Project N	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>)1	Area of Conc	ern:		
	Owens Corn					Personnel:			
	_ocation: <u>And</u>		outh Car	olina		-		Scatter	ed Clouds
2. WELI	L DATA		Date Me	asured:	8/11/09	Time:	м	Temp	orary Well: □Yes) ¥No
Casing [Diameter:	2inc	hes Lenc	ith of water o	olumn calcula	ation:			
Screen I	Diameter:	<u>6</u> inc	hes (8558.7-Curre	nt Dg reading	g)*0.01797)*2.:	3108) = Len	gth of water o	column (ft)
	g Interval: 9		teet	Vol. calculati 1 well vol. = [rval(6") - vol of	waterloo ca	sina (2")] + v	ol of tubing(1/4")
Depth to	Static Water:	6279.4	_Dg		[24.83 gal - 2.	.82 gal] + (0.01	102 gal/ft x l	ength of wate	
•	Product:		feet		22.01		0.963	5	
Length o	of Water Colum	nn: 94.65	feet		= 0.041 gal/ft		Screened I 7 gal/ft 4-in v	nterval (from vell = 0.667 gal/	GS): /ft 6-in well = 1.469 gal/ft
3. PUR	GE DATA		Date Pu	rged: %	13/07	Time: 13	15		Equipment Model(s)
Purge M	- 🖸 Bai	iler, Size:	0	Bladder Pump	2" Sub. Pu		Pump	1	turiba U-52
-		D Dahash			Teflon® C	other: <u>De</u> Dother:	MACONTER PU	r T	eokon Wire Reads
Material	s: Pump/Bailer	St Dedica	ted D Pr	epared Off-Site	Field-Clea	aned 🛛 Dispos	able		
Material	s: Rope/Tubing					/lon 🛛 Other: ed 🛛 Disposat	ble	3. <u></u>	short Pimp Contaile
Volume	to Purge (minir	•		olumes or	_	gallons		4. H	usky 17 gol Ar Com
Was we	Il purged dry?	🗆 Yes	X No	Pumping Ra	te:	gal/min			Calibrated? XYes 🗅
Time	Cum. Gallons	рН	Temp	Spec. Cond.	+	DO	Turbidity		0
Time	Removed (gal)	±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	Water Level	Comments
1315	Start	Pung	l						80 40 PS1 D=85 V=55
1330		6.04	20.77	0.112	255	2.80	0.17	6291.5	- -
1340	2	6.02	20.74	0.111	253	2.76	0.0	6289.9	
1350	3	6.01	20.4	0.110	251	2.75	0.0	\$290.1	
1400	4	6.00	20.63	0.109	251	2.73	6.0	6290.5	
								Purge data	a continued on next sheet? 🏾 🌋
1. SAMI	PLING DA	TA							nemical Analyses
Method(er, Size: ifugal Pump				np □ 4" Sub. F A Other: De		P Ferroi	Is Iron:ng/L
Materials	s: Pump/Bailer		/lene 🛛 Stai	nless 🛛 PVC	□ Tefton® □		·	DO:	mg/L
Material	s: Tubing/Rope				Гeflon® □ Nyle □ Field-Cleaned			Nitrate	a:mg/L
Deoth to	Water at Time		·			1? 🗆 Yes 🕽	-		
	1D: MW-36 20		· · · · · · · · · · · · · · · · · · ·	Sample 1				Sulfat	e: mg/L
	e Sample Colle		•					Alkalir	nity:mg/L
	ent Blank Colle							\equiv /	\mathbf{X}
	MENTS								
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPI	L, or other items	not on the field	data sheet.	Λ	
	· · · · ·					·		1.UN	M
ORM GW-	2 (Rev 25.Sept.)	08 - sej)				2	Signature	~ / /	1

BROWN AND CALDWELL

WELL ID: <u>MW-36 Zone 1-Waterloo</u>

3. PURC	GE DATA	(contin	ued fron	n page _)				
	Cum. Gallons	ρН	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±0.1 su	±2°C	±10 µS/cm	±20 mV	r > of ±10% o ±0.2 mg/L	r ≤ 10 NTU	Water Level	Comments
1410	5	5.98	20.67	0.109	253	2.70	0.0	6289.5	
1420	6	6.00	20.78	0.109	252	2.69 Colle	0.0	6290.5	
1425	Parar	refers	stal	<u>sle, s</u>	ample	Colle	esed		-
							T)		
				<u> </u>					
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									- <u> </u>
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			17						
		2							
					2				

Purge data continued on next sheet?

Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-36 Zone 3-Waterloo</u>

1. PROJECT INFORMATION	
Project Number: <u>136868</u> Task Number: <u>400.001</u>	
Client: Owens Corning	Personnel:DM Weather:85°FScattered_Clouds
Project Location: Anderson, South Carolina	
2. WELL DATA Date Measured: <u>8/11/01</u>	Time: PM Temporary Well: Yes No
Casing Diameter: 2inches Length of water column calcu	culation:
Screen Diameter: 6 inches (9093.1-Current Dg readi	ding)*0.02725)*2.3108) = Length of water column (ft)
Sampling Interval: <u>180.2-192.7</u> feet 1 well vol. = [vol sand in	nterval(6") - vol of waterloo casing (2")] + vol of water in tubing(1/4")
16.	- 2.09 gal] + (0.0102 x length of water column) . 27). 76
Depth to Product:feet Length of Water Column: 172.3 Feet Well Volume: 18.03	3
	S gal Screened Interval (from GS):
3. PURGE DATA Date Purged: 8/13/09	Time: 1430 Equipment Model(s)
Purge Method: Bailer, Size: Bladder Pump 2* Sub.	Pump 4" Sub, Pump H 1, 1/ m
	X Dedreated (sector Wire Read out
Other:	Charl P a Caller
Materials: Rope/Tubing Dolyethylene Dolypropylene Teffon® D	
Volume to Purge (minimum): well volumes or	gallons 4. <u>Husky 17 gal Air Corposer</u>
Was well purged dry? Ves No Pumping Rate:	gal/min Calibrated? YYes
Cum. Gallons pH Temp Spec. Cond. ORP Time Removed > of ±3% or > of ±10% or > of ±10% or > of ±10% or	DO Turbidity ar > of ±10% or Water Level Comments
(gal) ±0.1 su ±2°C ±10 µS/cm ±20 mV	±0.2 mg/L
1430 Stort Purge	50 PS1 D= 7.23 V: 45 V.95
1440 0.25 6.23 22.36 0.361 242	4.27 0.0 7872.5 1, the or
1450 0.35 6.60 26.10 0.741 225	5.76 0.0 8105.1 60 PSI No into bed produced so
1500 0.45 6.87 29.86 0.977 207	CLULI A A GARI 65 PSI have to share
1510 0.5 6.88 30.20 \$1.05 203	
1510 0.3 6.88 50.20 91.05 203	Purge data continued on next sheet?
4. SAMPLING DATA	Geochemical Analyses
Method(s): 🛛 Bailer, Size: 🗅 Bladder Pump 💷 2" Sub. F	Pump 🖸 4° Sub. Pump
Materials: 1 Unip/ Danei 🏟 Dedicated 🗆 Prepared Off-Site 🗆 Field-Cle	leaned Disposable DO: mg/L
Materials: Tubing/Rope Polyethylene Polypropylene Teflon® N General State Polypropylene Field-Clear	Nylon 🗆 Other: Mitrate: mg/L
	red? 🖬 Yes 🥦 No Sulfate: mg/L
Sample ID: <u>MW-36</u> ²⁴ Sample Date: <u>66609</u> Sample Time: <u>163</u>	
Duplicate Sample Collected? Yes No ID:	_ # of Containers: Alkalinity:mg/L
Equipment Blank Collected? Yes Vo ID:	_ # of Containers:
5. COMMENTS Zone Adom dry. Purge	C Minimal pressure and low
Drive + ter high read cycles.	······································
	items not on the field data shoot
Note: Include comments such as well condition, odor, presence of NAPL, or other its	
FORM CW 2 - (Device benefic of	
FORM GW-2 (Rev 25.Sept.08 - sej)	Signature /

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GROUNDWATER SAMPLING FIELD DATA SHEET

ELL ID: <u>MW-36 Zone 3-Waterloo</u>

3 PLIR	GE DATA	(contin	ued from	0.0200)				
0.1 0110	Cum. Gallons	pH	Temp	Spec. Cond.) 0RP	DO	Turbidity		
Time	Removed (gal)	±0.1 su	±2°C			> of ±10% or ±0.2 mg/L	and the second se	Water Level	Comments
1520	0.6		32.15	1.21	62	2.82	0.0	8799	80 751
1525	0.65		32.93		49	2.55	-	8841	
1530	0.7			1.22	41	2.42	0.0	8856	
1535			Collee	ted,	peram	leters St	1964,	lid not	
	nant	to	orge	dy.					
		8		<u> </u>			×		· · · · · · · · · · · · · · · · · · ·
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Purge data continued on next sheet?

WELL ID: <u>MW-36 Zone 5-Waterloo</u>

BROWN AND CALDWELL

1 PRO	ECT INF	OBWA.						···	
	Number: 136			ber: 400.00	01	Area of Conc	ern.		
-	<u>Dwens Corr</u>			· · · · ·		_ Personnel:	DM		
	ocation: And		outh Car				- 85°F	Scatter	ed Clouds
2. WELI	DATA		Date Me	asured: _	3/11/09	Time:	PM	Temp	oorary Well: 🚁es 🔊
Casing [Diameter:	inc	hes Long	th of water a		tion.			
Screen [Diameter:	<u>6</u> inc		of water co 8843.2-Curre		g)*0.03897)*2.	3108) = Len	gth of water	column (ft)
Samplin	g Intervall: <u>2</u>	69.9-275	toot	Vol. calculati		rval(6") - vol of	waterloo ca	$eing (2^n) + y$	ol of water in tubing(1/4")
Depth to	Static Water:	6028.8	feet			35 gal] + (0.010	02 x length o		
Depth to	Product:	<u> </u>	feet		9.2	2	2.58		
Length c	of Water Colum	nn: 253.	feet	Well Volume		gal	Screened I	nterval (from	GS):
					1 1			vell = 0.667 gal	/ft 6-in well = 1.469 gal/ft
3. PURC		ilor Sizo	Date Pu	U		_ Time: 13 Jmp © 14" Sub.			Equipment Model(s)
Purge M	ethod: 🖸 Cent	trifugal Pum	D D Peristal	tic Pump 🛈 Ine	ertial Lift Pump	Mother:	Pump	··	Honiba U-52
Material	s: Pump/Bailer	Dedica		inless D PVC		Contraction Other:	ahla	2	Acokon Line Rea Colinst Pump Cont
Materials	s: Rope/Tubing	, D Polyeth	nylene 🗆 Pol	ypropylene 🖸	Teflon® 🗆 Ny	/lon D Other:		3 5	dinst Rump Cont
		Dedica	•		-	ed 🛛 Disposat	ble		hsky 17 gal Arr G
	to Purge (minii I purged dry?	mum): D Yes		olumes or Pumping Ra		gallons gal/min		4	Calibrated? Sa Yes
vvas wei	Cum. Gallons	pH	Temp	Spec. Cond.	1	DO	Turbidity		· · · · · · · · · · · · · · · · · · ·
Time	Removed (gal)	±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	Water Level	Comments
·				210 00/011		10.2 mg/c			
1845	Start	Porg							70 851
1555	0,25	6.90	30.30	1.60	112	2.94	11.5	22711	D= 7.2 1 V= 6.1
1605	0.35	6.87	30.31	1.62	67	3.14	7.64	7274 7270	
1615	0.45	6.86		1.67	<u>67</u>	3.19	3.81		2 2
1010	0.10	0.00	20.21	1.01		5.11	5.0	7273 Purge dat	a continued on next sheet?
1 SAME	LING DA	TA	····						hemical Analyses
Method(s): 🗆 Bail	ler, Size:				mp 🔲 4" Sub. F	Pump		
				ic Pump ם Iner nless 🖸 PVC				Ferro	bs Iron:mg/L
Materials	s: Pump/Bailer	Dedicat				ned Disposa	able	DO:	mg/L
Materials	: Tubing/Rope			propylene 🖾 1 ared Off-Site			e	Nitrate	e: X mg/L
Depth to	Water at Time	of Sampli	ng: 731	5	Field Filtered	l? ⊡ Yes y		Sulfat	e: mg/L
Sample	D: MW.36 20	Sample D	ate: % 5	01 _Sample 1	rime: 1630	_ # of Contair	ners: <u>2</u>		
Duplicate	e Sample Colle	ected? 🗅	Yes 🞾 No	ID:	<u> </u>	# of Contair	ners:	Alkalii	hity: hg/L
Equipme	nt Blank Colle	cted? 🗆	Yes ¤ No	ID:		# of Contair	ners:	/	\sim
5. COM	MENTS	Zone	. trind	5 10 0	o dry.	Purge	0 mm	Hanny and	and the second
إس	low d	inve -	high	vent y	cycles.	- urge	<u>e</u> 1.114		
	-	-	Ø		J				
Vote: Include	comments such a	as well condi	tion, odor, pre	esence of NAPL	., or other items	not on the field	data sheet.		A .T
						_		/ail f	109
ORM GW-	2 (Rev 25.Sept.)	08 - sei)			-	γ	Signature /		· //

BROWN AND CALDWELL ELL ID: MW-36 Zone 5-Waterloo

3. PUR	GE DATA	(contin	ued fron	n page					
	Cum. Gallons	pН	Temp	Spec. Cond.		DO	Turbidity		
Time	Removed (gal)	±0.1 su	±2°C	±10 µS/cm	±20 mV	r > of ±10% or ±0.2 mg/L	STONIO	Water Level	Comments
1625	0.5	6.94	31.44	1.74	-60	2.51 Sample	1.10	7315	
1630	Poram	eters	(3.f	5) 5	table	sample	allec	ted	
				2					
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						5			
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Purge data continued on next sheet?

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GROUNDWATER SAMPLING FIELD DATA SHEET B R O W N AND C A L D W E L L

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WELL ID: MW-35

1. PRO	JECT INF	ORMA	ΓΙΟΝ				*				
Project I	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>)1	Area of Cond	cern:				
Client:_(Owens Corr	ning				Personnel:	DM				
Project I	_ocation: And	lerson, S	outh Car	olina		Weather:	-85°F	Scatte	ecd Clouds		
2. WELI	L DATA		Date Me	easured:	8/11/01	Time:	n	Temp	porary Well: 🛛 Yes 🆄 No		
	Diameter:					s 🛛 Galv. Stee			•		
Screen I	Diameter:	<u>2</u> inc	hes	Туре: 🎔РV	C 🛛 Stainles	s 🛛 Galv. Stee	I 🛛 Teflon®	Other:			
Total De	epth of Well:	162	feet	From: 🕱 To	p of Well Casir	ng (TOC) 🗔 T	op of Protectiv	ve Casing 🛛	Other:		
Depth to	Static Water:	artesian	feet	From: 🗆 To	p of Well Casir	ng (TOC) 🛛 T	op of Protectiv	ve Casing 🛛	Other:		
	Product:						Fop of Protecti	ve Casing	Other:		
Length o	of Water Colum	nn: 162	feet		27.05		Screened I	nterval (from	GS):		
	GE DATA							vell = 0.667 gal/	/ft 6-in well = 1.469 gal/ft		
	1 Ba					. Time: mp □ 4* Sub.		<u> </u>	Equipment Model(s)		
Purge M	lethod: 🛛 Cent	trifugal Pump	D Peristal	ltic Pump 🕒 Ine	rtial Lift Pump	🛛 Other:	415121	1	Horiba - U-52		
Material	s: Pump/Bailer	Dedica	iylene 🖬 Sta ted 🛛 🖓 Pi	ainless D PVC repared Off-Site	□ Teflon® □ Field-Clea	Cother: A	sable	2			
Material	s: Rope/Tubing		iylene 🖸 Pol	lypropylene	Teflon® 🗆 Ny	lon ⊒ Other: d ¥ Disposat		3			
Volume	to Purge (minii						Jie	4.			
	I purged dry?	□ Yes	1		te:	÷			Calibrated?		
	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity				
Time	Removed (gai)	±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	Water Level	Comments		
1657	Start	Ping	L								
1705	5	7.09	29.49	1.45	-96	1.73	0.0	-			
1710	10	7.35	17.90	0.316	-131	0.15	0.0	-			
1715	15	7.33	17.95	0.317	-182	0.14	0.0				
1720	20	7.28	18.10	0.320	-162	0.13	0.0	-			
								Purge data	a continued on next sheet? 🏾 🏏		
4. SAMF	PLING DA	ТА						Geoch	nemical Analyses		
Method(s): 🛛 Bail	er, Size: ifugal Pump	Peristalti	Bladder Pump c Pump 🔾 Iner	🖵 2" Sub. Pum tial Lift Pump 🖗	np 🛛 4" Sub. F Other:	oump	Ferrou	Iron: mg/L		
Materials	: Pump/Bailer	Polyethy		nless 🛛 PVC i epared Off-Site				DO:	mg/L		
Materials	: Tubing/Rope	M Polyethy	lene 🗆 Poly	propylene	eflon® 🗆 Nylo	on D Other:		Nitrate			
Depth to	Water at Time					I SKYDisposable ? □ Yes Sy			X		
								Sulfate	e:mg/L		
	Sample ID: <u>MW -35</u> Sample Date: <u>8 10 09</u> Sample Time: <u>9 1739</u> of Containers: <u>2</u> Duplicate Sample Collected? <u>Ves</u> No ID: <u># of Containers</u> Alkalinity: <u>Mg/L</u>										
Equipme	nt Blank Collec	cted? 🗆 Y	(es 🎽 No	ID:		# of Contain	ers:		/		
5. COM	MENTS										
			-								
Note: Include (comments such a	s well condit	ion, odor. pre	esence of NAPL	, or other items	not on the field o	data sheet.				

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

	GE DATA Cum. Gallons	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	1	
Time	Cum. Gallons Removed (gal)	рн ±0.1 su	±2°C	> of ±3% or	> of ±10% or	> of ±10% or	I Urbidity ≤ 10 NTU	Water Level	Comments
1725	1			±10 µS/cm	±20 mV	±0.2 mg/L	-		
	25 Sample	Tido	1011	0.217	-100	U·10	J. ()		
1730	Sample	Wile	etcol	paramet	vs sta	619			
	-								
			<u> </u>	-	1				
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Purge data continued on next sheet?

B R O W N AND C A L D W E L L

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GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-15

1. PRO		ORMA	TION						·
	Number: <u>136</u>			ber: <u>40</u> 0.00)1	Area of Cond	cern:		
-	Owens Corr					Personnel:	- · ·	- 1 Ab	
Project I	_ocation: <u>Anc</u>	lerson, S	outh Car	olina		Weather:	75°F	Sinny	(her
2. WEL	L DATA		Date Me	asured:	8/11/09	Time: P	M	Tem	oorary Well: 🛛 Yes 💋 No
Casing I	Diameter:	2inc	hes	Type: 对 PV	C 🗆 Stainles	s 🗆 Galv. Stee			•
Screen	Diameter:	2inc	hes	Туре: ФР	C G Stainles	s 🛛 Galv. Stee	I 🛛 Teflon®	Other:	
Total De	pth of Well:	99.5	feet	From: 🎽 To	p of Well Casi	ng (TOC) 🔲 1	op of Protectiv	ve Casing 🛛	Other:
Depth to	Static Water:	1).16	feet	From: 😝 To	p of Well Casir	ng (TOC) 🛛 🖬	op of Protectiv	ve Casing	Other:
1 .	Product:		feet			ng (TOC) 🗔 1	Top of Protectiv	ve Casing 🛛	Other:
Length o	of Water Colum	nn: 88.31	feet	Well Volume		_ gal		nterval (from	
								ell = 0.667 gal	/ft 6-in well = 1.469 gal/ft
			_			_Time: _/ ⁴ Imp □ 4" Sub.	-		Equipment Model(s)
Purge M	iethod: Cent	rifugal Pump	D Peristal	tic Pump 🖸 Ine	rtial Lift Pump	Other:		1	Monsoon Pump
Material	s: Pump/Bailer	Polyeth Dedica				Other: aned Dispose		2	Horiba U-52
Material	s: Rope/Tubing	Polyeth	iylene 🖸 Pol	ypropylene	Teflon® 🗆 Ny	ion 🖸 Other: d 🎽 Disposal		3	teron Dipper
Volume	to Purge (minii						51 2	4.	5 7
	I purged dry?	C Yes		Pumping Rai		gal/min			Calibrated? Yes
	Cum. Gallons	– pH	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
1130	Stert	Purg	0						
1935	2	6.86	19.51	0.218	105	0.49	4.30	16.14	
1940	3	1 62	19.58	0.216	103	0.54	2.33	15.92	
1945	4	(17	19.68		100		AIC	15 94	
	5	6.77		0.212	······ ·	0.52	0.()	12.78	
1950	3	6.69	19.65	0.207	98	0.39	0.6	16.28	
	PLING DA	ТЛ							a continued on next sheet?
4. SAW				Bladder Pump	2" Sub. Pun	np 🔲 4" Sub. F	omp		nemical Analyses
,				c Pump 🖸 Iner			•	Feriou	us Iron:/mg/L
	: Pump/Bailer	Dedicate	ed 🛈 Pre	nless 🗖 PVC 🛛	KField-Clear	ed 🛛 Disposa	able	DO:	mg/L
Materials	: Tubing/Rope	Dedicate	iene 🗆 Poly d 🗆 Prepa	propylene 🛛 T red Off-Site	eflon® 🗆 Nyio	on Other:		Nitrate	e: mg/L
Depth to	Water at Time					? 🗆 Yes 🦻		Sulfate	
	D: MU-15				ime: 202	• # of Contair	ners: 2		
	e Sample Colle					# of Contair	ners:	Alkalir	nity:
Equipme	nt Blank Collec	cted?	∕es ≱ No	ID:		# of Contair	ners:		
5. COM	MENTS	Pum	PIN	take c	\sim	10 ft b	tor.		
			1						
	_					5			
Note: Include	comments such a	s well condit	ion, odor, pre	esence of NAPL	, or other items	not on the field o	data sheet.	- 1-00	
						_		my in	100
FORM GW-	2 (Rev 25.Sept.C)8 - sej)			1	γ	Signature		· // · · · ·

B R O W N AND C A L D W E L L

WELL ID: <u>MW-15</u>

		(contin				D 2	Tout the		
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 r > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1955	5.75	6.62	19.66		95	0.28	0.0	15.83	
2000	6.5	6.59				0.26	0.0	16.52	· · · · · · · · · · ·
2005	7.25	6.58	19.50	0.202	87	0.24	0.0	16.68	
2010	8.25			0.202		0.26	0.0	16.90	
2015	9.25	6.57	19.42	0.202 red	83	0.29	0.0	16.95	
2020	Sam	phe (silee	ed					
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		a - deres standard ver de							
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Purge data continued on next sheet?

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B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-37 Zone 1</u>

1. PRO	JECT INF	ORMA	TION							1
Project I	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>	01	Area of Conc	cern:			
Client:	Owens Corr	ning					DM			
Project I	_ocation: <u>Anc</u>	lerson, S	outh Car	olina		Weather:	Overcas	1-7	SOF	
2. WEL	L DATA		Date Me	easured:	8/u/09		°m	Temp	oorary Well: 🛛 Yes 🖾 No	1
Casing I	Diameter:	1inc	hes	Туре: 🏹 РУ	C Stainles	s 🛛 Galv. Stee	I 🗆 Teflon®	Other:	<u></u>	
Screen	Diameter: <u>1</u>	inc	hes	Туре: % РV	C G Stainles	s 🛛 Galv. Stee	I 🛛 Teflon®	Other:		
1	epth of Well:		_	From: 🗭 To	op of Well Casir	ng (TOC) 🛛 T	Fop of Protecti	ve Casing 🛛	Other:	
Depth to	Static Water:	18.03	feet					-	Other:	
	Product:		feet			ng (TOC) 🔲 1	Top of Protecti	ve Casing	Other:	
Length	of Water Colum	nn: /76.7	feet	Well Volume		gal		nterval (from		
								vell = 0.667 gái	/ft 6-in well = 1.469 gal/ft	4
		iler. Size:	Date Pu			¶Time: mp □ 4" Sub.		<u> </u>	Equipment Model(s)	
Purge N	lethod: Cent	trifugal Pum	o 🛛 Peristal	ltic Pump 🗅 Ine	ertial Lift Pump	Other:		1	Hovi 6a - US2	
Material	s: Pump/Bailer	Polyetl Dedica				Other: aned Dispose		2	2ED Mizro Purge 1	perp
Material	s: Rope/Tubing		nylene 🛛 Po	lypropylene 🛛	Teflon® Q Ny	/lon D Other: ed P Disposat		<u>з</u> (25D Controller	
Volume	to Purge (mini			volumes or	• • •	allons	DIE		Hornil Hean Dipp	2
	Il purged dry?	🛛 Yes		Pumping Ra	•	gal/min		· ·	Calibrated? Jar Yes	
	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity			1
Time	Removed (gal)	±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	Water Level	Comments	
0853	Beyan	Purg	-1							
0964	Flow T	Trough	Full							1
0905	0.01	6.21	23.72	6.2	0	2.71	9.16	21.56	Sp Cond: 0.270	1
0910	0.03	6.56	23.83	0.264	-91	2.42	14.3	22.80]
0915	0.05	6.61	23.88	0.251	- 82	2.27	15.3	24.54		1
								Purge dat	a continued on next sheet?	
4. SAM	PLING DA							Geoc	hemical Analyses	
Method(G)'	ler, Size: rifugal Pump		Bladder Pump ic Pump 🗖 Iner		np □ 4" Sub. F ⊐ Other:	Pump	Ferro	s Iron: ŋ/g/L	
Material	s: Pump/Bailer	Polyeth Dedicat		inless D PVC		Other:	able	DO:	mg/L	
Material	s: Tubina/Rope	Polyeth	ylene 🛛 Poly	/propylene 🛛 1	Feflon® D Nyk	on Other:				
	. .	Dedicat	.			Disposabl		Nitrat	e: mg/L_	
	Water at Time	- -	······································			1? 如 Yes □ # of Contair	1	Sulfat	e: mg/L	
	e Sample Colle		•		nine. <u> </u>	# of Contair # of Contair		 Alkalir	nity: mg/L	
	ent Blank Colle	~			24 C 102	-		_ /		
5. COM		Havin			0.4.5.5	to purge	A I	elle 1	ente suren 1	
in ter	1 41	1 1		ntelle (t primp	TO purge		b not	side screened	
	wdown					VTT N	r grg	TO INO		
	comments such a	as well condi	tion, odor, pr	esence of NAPL	., or other items	not on the field	data sheet.			
							-	7-11	ncy	1
FORM GW	•2 (Rev 25.Sept.	08 - sej)		11 <u>-</u>	1 👷	-	Signature V	7 ./	1	6

B R O W N AND C A L D W E L L

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WELL ID: <u>MW-37 Zone 1</u>

3. PURC	E DATA	(contin	ued from	n page	_)		<u>;</u>		
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Commente
	(gal)	±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	Water Level	Comments
0920	0.07	6.68	23.96	0.233	-74	1.53	14.2	25.11	
0925	0.	6.68	24.00	0.228	-74	1.50	13.2	26.22	
0930	0.13	6.70	24.12	0.213	-74	1.11	13.0	26.90	
0935	0.17	6.70	24.22	0.208	-72	1.16	12.0	27.95	· · · · · · · · · · · · · · · · · · ·
0940	0.20	6.70	24.25	0.207	-72	1.16	12.5	29.24	· -
0945	0.25	6.71	24.34	0.204	-71	1.07	12.5	30.05	
0950	0.3	6.73		0.202	-69	0.92	13.0	30.98	
0955	0.35	6.71		0.199		0.96	12.2		
1000	3 of	<u>5 p</u>	crane	ters .	stable	. sar	ple a	dlect	ed
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Purge data continued on next sheet?

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Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: _____MW-37 Zone 2_____

1. PROJ	ECT INF	ORMA ⁻	ΓΙΟΝ						
•			Task Num	ber: <u>400.00</u>)1	Area of Conc	-		
	Owens Corn					Personnel:	~75·F	<u> </u>	
Project L	ocation: And	erson, S						0000	*57
2. WELL	DATA		Date Me	asured: <u></u>	11/09	_Time: P	1	Temp	oorary Well: 🛛 Yes 🕬 No
Casing D)iameter:	1inc	hes	Туре: 🖬 РV	C 🛛 Stainles	s 🛛 Galv. Steel	I 🖵 Teflon®	Other:	
Screen D	Diameter:	<u>1</u> inc				s 🛛 Galv. Steel			
	pth of Well:			,		-	op of Protectiv	e Casing	Other:
Depth to	Static Water:_	15.14'	feet	From: 🎔 To		•	·	•	Other:
-	Product:				•		op of Protectiv	e Casing	Other:
Length o	f Water Colum	nn: 216.3 °	feet	Well Volume		gal 2-in well = 0.16			GS): /ft 6-in well = 1.469 gal/ft
			Data Da		· · · · · · · · · · · · · · · · · · ·			en – 0.007 gan	Equipment Model(s)
		iler, Size:		/		_ TIME: Imp 4" Sub.			
Purge M		trifugal Pum	D Peristal	tic Pump 🔾 Ine	ertial Lift Pump	Other:			toriba U-52
Materials	s: Pump/Bailer	Polyeti Dedica				Other: Dispose		2. <u>(</u>	LE P Mirropurge P
Materials	s: Rope/Tubing					/lon Other:		3	26D Controller
Volume	to Purge (mini				A - 0	ed 🔊 Disposat gallons	DIE	a -	toon Dipor
	l purged dry?	U Yes		Pumping Ra		-		··	Calibrated?
	Cum. Gallons		Temp	Spec. Cond.	1	DO	Turbidity		
Time	Removed (gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	<pre>> of ±10% or ±0.2 mg/L</pre>	≤ 10 NTU	Water Level	Comments
1040	Began	Purg	د		-				
1055	Horibe	Fut]						
1100	0.1	8.53	25.57	0.168	-136	2.33	2.57	15.05	
1105	0.2	9.26	25.69	0.164	-158	1.75	2.57	15.10	
1110	0.25	9,31	25.79	0.164	-16	1.28	1.79	15.0%	
								Purge dat	a continued on next sheet?
4. SAMF	PLING DA	TA						Geoc	hemical Analyses
Method(ler, Size: rifugal Pump				mp 🛛 4" Sub. I 🗅 Other:		Ferro	uş Iron: mg/L
Materials	s: Pump/Bailer	D Polyeth	ylene 🕱 Stai	nless 🛛 PVC	C Teflon® C	Other:		DO:	mg/L
				pared Off-Site		ned 🛛 Dispos	able		
	s: Tubing/Rope	Dedica	ted 🔾 Prepa	ared Off-Site	Field-Cleane	d E Disposabl	le	Nitrat	e: mg/L
Depth to	Water at Time	e of Sampl	ing: 15.0		Field Filtered	d? 🗆 Yes 🕻	No .	Sulfat	te: / mg/L
						5_ # of Contai		Alkali	njity:mg/L
•	e Sample Colle					# of Contai		— /	
Equipme	ent Blank Colle	cted?	Yes OX NO) ID:		# of Contain	ners:	_ /)
5. COM	MENTS	Pum	o înta	ke c	~ 50 -	£4			
		<u> </u>	T						
		5							
Note: Include	comments such	as well cond	lition, odor, pr	esence of NAPI	L, or other item	s not on the field	data sheet.	7.10	Ant
							7,		v [v]
ORM GW-	2 (Rev 25.Sept.	.08 - sej)			1	2	Signature		11

BROWN AND CALDWELL

WELL ID: <u>MW-37 Zone 2</u>

3. PURC	E DATA	(contin	ued from	n page)				
	Cum. Gallons	ģΗ	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
1115	0.3	9.33	25.88	0.164	-162	1.22	1.86	15.09	
1120	0.35	9.37	26.08	0.165	-165	1.06	1.63	15.08	·
1125	0.375	9.39	26.24			0.90	1.58	15.08	
1130	0.4	9.41	26.37			0.81	1.47	15.08	
1135	0.45	9.43	26.52			0.74	1.36	/5.10	
1140	0.475	9.45	26.66		-178	0.69	1.58	15.08	
1145	0.5	9.47				0.63	1.27		
1150	0.55	9.49	26.98		-187	0.54	1.22	15.09	· · · ·
1155	0.6	9.49	27.07		-187	0.52	1.30	15.09	
1200	0.65	9.48				0.46	1.32		
1205	0.7	9,48			-188	0.45	1.88		
1210	0.75	9.49	28.30			0.45	1.30	15.09	
215	3 of	5 3	sta 512	, Sam	ple (d	llected			
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		_				-			
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						1			V.
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Purge data continued on next sheet?

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B R O W N AND C A L D W E L L

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GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-37 Zone 3</u>

					· · · · · ·			· · · · · · · · · · · · · · · · · · ·		1
	ECT INFO									
-	lumber: <u>136</u>	_	Task Numl	ber: <u>400.00</u>	1		ern:			1
Client: C	Owens Corn	ing				Personnel:	000	C. Ma	al (1, de	
Project L	ocation: And	-	and the same state of the same state of the		1. ··· · · · · · · · · · · · · · · · · ·	constate consta	100000000000000000000000000000000000000	Jarr	ed Clards	ļ
2. WELL	DATA		Date Me	asured:	8/11/01	Time: 🖊	4	Temp	orary Well: 🛛 Yes 🕅 o	
Casing D	Diameter:1	incinc	100	. ,		s 🛛 Galv. Steel				
Screen D	Diameter:	1inc	hes	Туре: 🎽 РУ	C 🗆 Stainles:	s 🔲 Galv. Steel	C Teflon®	Other:		
	pth of Well:	-		From: 🌹 To	p of Well Casin	ng (TOC) 🛛 T	op of Protectiv	ve Casing 🔲 🤇	Other:	
Depth to	Static Water:	12.75		From: 🌹 To	•	•	•	•	Other:	
• · · · ·	Product:		-				op of Protectiv	ve Casing	Other:	
Length o	f Water Colum	in: 22.75		Well Volume					GS):	
		249.2					1000	/e/i = 0.007 gai/	ft 6-in well = 1.469 gal/ft	4
3. PURC		ler, Size:				Time: <u>12</u>			Equipment Model(s)	
Purge M	ethod: Cent	rifugal Pump				Other:		1	Horiba U-52	1
Materials	s: Pump/Bailer	Polyetheral Polyetheral Dedica	ted DP	inless	Teflon® C	Other: aned Dispose	sable	2(LED Micropage	fung
Materials	s: Rope/Tubing	Polyeth	iylene 🗆 Pol	ypropylene	Teflon® 🗆 Ny	/lon D Other:		з. (2ED controller	
						ed 🏾 🕱 Disposat	ble		ton Diener	
S	to Purge (minii	mum): ロ Yes		olumes or Pumping Ra				4. <u></u> f	Calibrated? Yes	
Was wel	l purged dry? Cum. Gallons	pH	Temp	Spec. Cond.			Turbidity	T		1
Time	Removed		±2°C			> of ±10% or	≤ 10 NTU	Water Level	Comments	
	(gai)	±0.1 su	±2 0	±10 µS/cm	±20 mV	±0.2 mg/L	3 10 10 10			4
1235	Stark	Pur	qL_							
1245	Hur,2	n Ful	N ⁰					-		
1250	0.05	8.47	28.12	0,201	-117	1.38	2.02	26.85		
1305	0.1	8.18	27.97	0.203	-117	1.22	1.96	28.02		
1300	0.15	7.36	28.07	0.209	-109	0.72	2.0	28.34		
								Purge dat	a continued on next sheet?	-
4. SAMP	PLING DA	TA						Geoc	hemical Analyses	
Method(s): 🗆 Bai	ler, Size:	X	Bladder Pump	2" Sub. Put tial Lift Pump	mp 🛛 4" Sub. I	Pump	Ferro	xs Iron: mg/L	
Materials	s: Pump/Bailer	Polyeth	ylene 🗖 Stai	inless 🗆 PVC	C Teflon® C	Other:		DO:	mg/L	
				epared Off-Site ypropylene 🛛		ned 🛛 Dispos Ion 🗆 Other:	adie		$\langle \rangle$	
	s: Tubing/Rope	Dedicat	ted Prepa	ared Off-Site	Gild-Cleane	d 🎔 Disposab		Nitrat	e:mg/L	
Depth to	Water at Time ID: <u>Mい-3</u>	e of Sampl	ing: <u>31.4</u>	<u>49</u>	Field Filtered	d? ⊡ Yes ţ	SY No	Sulfat	e: mg/L	
1								 Alkalii	nity: ma/L	
1 .	e Sample Coll					# of Contai				
Equipme	ent Blank Colle	cted?	Yes M No	> ID:		# of Contai	ners:			J
5. COM	MENTS		Punp	intak	ر <i>د</i> م	150f				
			· (*							1
Note: Include	comments such	as well cond	lition, odor, pi	resence of NAP	L, or other item	s not on the field	data sheet.	- 11	TAIN	1
								all.	VICI	_
FORM GW-	-2 (Rev 25.Sept	.08 - sej)		_	1 .	2	Signature /		//	

BROWN AND CALDWELL

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WELL ID: <u>MW-37 Zone 3</u>

1	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO		1 10	
Time	Removed		±2°C		1	DO > of ±10% or		Water Level	Comments
	(gal)	±0.1 su		±10 µS/cm	±20 mV	±0.2 mg/L	SIUNIU		
13 205	0.2				-101	0.79	3.14	29.42	
1310	0.25	7.21	28.45	0.216	- 100	0.84	2.57	30.09	
315	0.3	7.14	28.75	0.217	-95	1.02	2.11	36-40	
1320	0.35	7.13	28.64	0.212	-100	0.68	1.38	31.49	
325	2 of					same	oke (a)	lecter	<u> </u>
		2	ſ		21.010	,7			
8							7		54
	T.								
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B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: Alloy

1 000									
				han 400 00	14	A			
	lumber: <u>136</u>		lask Num	ber: <u>400.00</u>		Personnel:		<u> </u>	- <u> </u>
Client:	<u>Dwens Corn</u>		outh Car	olina		Weathor:			Lt rain
					*				orary Well: OYes ONo
	Diameter:		•	Type: UPV	C U Stainles	s DrGalv, Steel			
Screen D	Diameter:	2 <u> </u>	nes –	Type: ErPV	C U Stainles	g (TOC)		U Other:	
	pth of Well:		• • •						2 6 F
	Static Water:					ig (TOC) 🖸 🖬 T			
	Product:								Other:
	of Water Colum	• •	• 	Note: 1-in well	= 0.041 gai/ft	2-in well = 0.16	7 gal/ft 4-in w	vell = 0.667 gal/	GŞ):
3. PURC	GE DATA	2,000	Date Pu	rged: //·/	8.09	Time: 08	10.		Equipment Model(s)
Purge M	ethod: 🖸 - Ba	iler, Size: trifugal Pump	Peristal	Bladder Pump Itic Pump 🗔 Ine	ertial Lift Pump	mp 🖸 4" Sub.	Pump	ി ^ന ി. <u>#</u> റ	m.d.pper
Material	s: Pump/Bailer	• 🗆 Polyeth	ylene CrSta ted □ P	ainless, D. PVC repared Off-Site	Teflon® C Brièld-Clea	ned Dispos	able	2. <u>M</u>	suson Pryp
	s: Rope/Tubin	Polyeth	ylène 🖸 Po		Teflon® C Ny	lon 1 Other: d S Disposat		.3. <u>D</u>	AT- 6526
Volume	to Purge (minu	mum): 3	well v	volumes or 2	3.54	gallons G .	ះ្ ំ ;	· 2X	St 556
	Il purged dry?	Yes			te:				Calibrated? Erves. 🗆
	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
0815	0.75	6.56	(9.00	0.095	141.5	3.64	91.7	16.32	
0820	2.0	6.37	1907	9.096	209.9	4.53	33.6	16.89	
0825	3.0	6.33	19.07	0.044	203.9	4.56	41.9	17.39	
0830	4.5	6.31	19.04	0.096	190.7	4.59	54.7	16.45'	
0835	6.0	6.33	18.97	0.097	185.5	4.57	58.2	15.48-	
······					. =			Purge dat	a continued on next sheet?
4. SAMI	PLING DA							Geoc	hemical Analyses
Method(mp 🔲 4" Sub. 1		Ferro	us fron: mg/L
Material	s: Rump/Bailer	Dedicat		inless 🖸 PVC epared Off-Site		I Other: ned 📮 Dispos	able	DO:	mg/L
Material	s Tubing/Rope			ypropylene 🔲 . ared Off-Site		on □ Other: d ⊡ Disposab	le	Nitrati	e: mg/L
Depth to	Water at Tim	e of Sampli	ng:		Field Filtered	d?⊡ Yes t	D No	Sulfat	te:mg/L
Sample	ID. Alloy	Sample D	ate:////	21 Sample	Time: 0435	_ # of Contai	ners:		
	e Sample Coll					# of Contai	ners: 3	Alkalii	nity:mg/L
Equipme	ent Blank Colle	ected?	Yes TN	D ID:	G	# of Contai			
5. COM	MENTS								
	_								U
Note: Include	comments such	as well cond	ition, odor, p	resence of NAP	L, or other item:	s not on the field	data sheet.		
		HC .					12	dla	
FORM GW	-2 (Rev 25.Sept	.08 - sei)			/ .		Signature		

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WELL ID:_____Alloy_____

	Cum. Gallons	рН	Temp	n page	ORP	DO	Turbidity	- C - C -		. (
Time ~•	Removed (gai),	.±0∙t şu	±2°C			> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	c	comments
8.40	7.0	6.29	1210-	0.095	187.4	4.58	48.4	16.52	2	
845	8.0	6.28	19.60	0.097	188.6	4.56	45.5	16.84		
1850	9.0	6.28	19.08	0.097	185.9	4.53	41.9	16.85		
0855	10.0	6.29	19.07	0.045	184.5	4.51	39.2	16.48		
2900	11.0	6.28	19.07	0.097	183.5	4.12	32.3	17.44	-	
0905	120	6.29	19.06	P.097	181.1	4.47	23.4	17.34	1-	
0910	13.0	6.26	19.07	0.097	181.9	4.50	19.2	12.5-	-	
0915.	120160	6.26	19.06	0. 246	180.1	4.49	14.1	7.46	-	
0920	17.0	6.26	19.97	0.096	181.1	4.51	11.4	17.18-	8	
7925	18.0	6.26	19.08	0.995	180.8	4.52	10.90	17.26	-	
0930	19.0.	8.25	19.08	0.095	1 72.7	4.40	9.15	17.78	/	
0935				(42), 4 (2), 63 -						
		10 00					5			
							2.	2.5		1
		6	1.00	N	· · ·	r (* • • •	1.0		C	
			- 20 kg	5 - Sec. 1	1.	ang an	h .		5. e	6 . ²
			*** 53 **		0.999	· · · · ·	- Gen 1	6		ζ.,
			N. N. S.	****				, 1 		
-	6	• ** • *• <u>*</u>	• •	1	7,97,47		с., т		<u>.</u>	····
	2		-			-	•			
				`						
			•				3-12-1		- 11	11 - 11 - 11 - 11 - 11 - 11 - 11 - 11
			·•	1,012 \. e.	Maria .	· · · · · · · · · · · · · · · · ·		·		na semană .
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Signature

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BROWN AND CALDWELL

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GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-1

1. PRO	IECT INFO	ORMAT	TION						
Project N	Number: <u>136</u>	868	Task Num	per: <u>400.00</u>	1	Area of Conc	ern:		<u></u>
	Owens Corn					Personnel:			
Project L	ocation: And	erson, S	outh Care	olina		Weather: <u>&</u>	losdy 1	v65°F	
2. WELI	DATA		Date Me	asured: <u>//</u>	16.09	Time: 🗛	<u>ر</u>	Temp	orary Well: 🛛 Yes 🕮 Mo
Casing [Diameter:	2inc	hes	Type: Type:	C 🛛 Stainless	s 🖸 Galv. Steel	Teflon®	Contraction Other:	<u> </u>
Screen I	Diameter:	2inc	hes	Type: PV	C 🛛 🗆 Stainless	s ' 🗆 Galv. Steel	□ Teflon®	D Other:	····
	pth of Well:			From: Into	p of Well Casin	g (TOC) 🚬 🗖 T	op of Protectiv	e Casing: 🗔	Other:
Depth to	Static Water:	22.38	feet	From:	p of Well Casin	ig (TOC) 🗖 T	op of Protectiv	e Casing 🛛	Other:
	Product:		feet		·		•	•	Other:
Length o	of Water Colum	n: 42.0	feet						GS):
						the second s		ell = 0.667 gal/	(ft 6-in well = 1.469 gal/ft
						Time:		·····	Equipment Model(s)
Purge M	lethod: G Bai							1. <u>1</u>	eron d'ppe
Material	s:Pump Bailer	Polyeth Dedica		inless 🛛 PVC epared Off-Site		DOther:	able	2. _	NT-1545
`∝ Material		G Polyeth	iylene 🗆 Pol	ypropylene 🛛	Teflon® 🛛 Ny	lon 🛛 Other:	<u> </u>	3. 🖊	Imson Pung
	to Purge (minii	r 🖵 Dedica				d G-Dispus ab	le		51-556
	to Purge (minii Il purged dry?	mum): <u> </u>			te:			4. <u> </u>	Calibrated? Pres
vvas we	Cum. Gallons	pH	Temp	Spec. Cond.		DO	Turbidity		_
Time	Removed (gal)	±0.1 su	±2°C			> of ±10% or	≲ 10 NTU	Water Level	Comments
1254	(3)	5.29	18.40	±10 µS/cm	±20 mV	±0.2 mg/L	193	25.29	Lt grey turbid inter
1259	2	5.39		0.031		7.43	125	24.86	
1304	3	5.30	18.46			7.05	61.5	25.45	
1309	4	5.28	18.41				108	25.88	
1314	5	5.37		6.032		7.38	53.2	25.68	
[]]]]			10.10	0.002	# 70.1		00.1		a continued on next sheet?
4. SAM	PLING DA	ТА						Geocl	nemical Analyses
Method(ler, Size:				np 🖸 4" Sub. F	Pump	Forro	us l y on: mg/L
				ic Pump 🖸 Iner nless 🖬 PVC	-			Feno	us lpon: mg/L
Material	s: Rump)Bailer	Dedicat	ed 🛛 Pre	epared Off-Site	-Field-Clear	ned 🖸 Disposa	able	DO:	mg/L
Material	s. Tubing Rope			/propylene 🖸 1 ared Off-Site			e	Nitrate	9: X mg/L
Depth to	Water at Time	e of Sampli	ng: 26.8	2.		? □ Yes €		Sulfat	e mg/L
Sample	ID: M& · 1	Sample D	ate: 11/17	01 Sample 1	Fime: 1905	# of Contair	ners: 3	/	/ (
Duplicat	e Sample Colle	ected? 🗆	Yes 🖬 No) ID:		# of Contair	ners:	Alkalir	nity: mg/L
Equipme	ent Blank Colle	cted?	Yes 🖬 No	D ID:		# of Contair	ners:		
5. COM	MENTS								
						-			
Note: Include	comments such a	as well cond	ition, odor, pr	esence of NAPI	, or other items	not on the field	data sheet.	511	
								alle	~

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6/BROWN AND CALDWELL

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GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-1</u>

3. PUR	GE DATA	(contin	ued fron	n page	_)	· · · · · · · · · · · · · · · · · · ·			
Time	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity	14/	
nme	Removed (gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	r > of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
1319	6	5.36	18.44	0.032	273.3	7.35	39.7	25.75	ň.
1324	7	5.37	18.42	0.032	272.8	7.29	35.1	25.84	5 B
1329	8	5.39	18.44	0.033	273.0	7.38	29.5	25.84	>
1334	9	5.32				7.03	4	26.4-	
1339	10	5.33	18.36			7.00			twb= 58.6 NTU
1344	11 .	5.39	18.40		274.5	\$ 7.59	76.6	26.45	
1349	12	5,33	18.31	6.032	277.3	7.10	20.3	26.80	54
1354		5.41				7.39	13.5	26.71-	
1359	14	1 1		6.033	276.7	7.37	8.24	26.82	÷
1405	Sample	Wee	fed						2
	•	•	-	12	225		2	2	ž
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			-						
			50 020 A					•	
				- 40					
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	1.0						e.		
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WELL ID: MW-2

	IECT INF					•			
Project N	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>					
	<u>Dwens Corr</u>					Personnel:			· · · · · · · · · · · · · · · · · · ·
Project L	ocation: And	<u>lerson, S</u>	outh Car	olina		Weather: <u>C</u>	houdy	NGSF	
2. WELL	DATA	241	Date Me	asurèd: <u>// (</u>	6.09.	Time? 4~		· ·i [†] emp	orary Well: ~ @Yes" BNo
Casing D	Diameter:	2 9 inc	hes 5	Type: . @PV	C 📮 Stainles	Galv Steel	🗆 Teflon®	Other:	• 6
	Diameter:					Galv. Steel			
Total De	pth of Well:	66.7	feet	From: To	p of Well Casin	g (TOC) 🛛 ³ Ť	op of Protectiv	ve Casing 🛍	
	Static Water:	_		From: To	p of Well Casin	g (ТОС) 🗆 Т	op of Protectiv	ve Casing 🔲 🤇	Other:
	Product:		feet	From: To	p of Well Casin	g (TOC) 🛛 T	op of Protectiv	ve Casing 🔲	Other:
	of Water Colun		feet	Well Volume	7.71	_ gal	Screened li	nterval (from	GS):
		-	·	Note: 1-in well	= 0.041 gal/ft	2-in well = 0.16	7 gal/ft 4-in w	/ell = 0.667 gal/	ft 6-in well = 1.469 gal/ft
3. PURC	GE DATA		Date Pu	rged: 1/./	2.09	Time: <u>///</u>	5		Equipment Model(s)
Purge M	lethod: ☐ Ba	iler, Size: trifugal Pumr	C	Bladder Pump	G 2 Sub. Pu	mp 🔲 4" Sub.	Pump	1. <u>//</u>	less dipper
	s. Pump/Bailer		vlene IL-Sta	inless 🛛 PVC	□ Teflon® □	3 Other:			487-556
				repared Off-Site lypropylene 🔲		ned 🖸 Dispos	able		
1	s: Rope/ubin	Dedica	ted 🛛 Prep	ared Off-Site	Field-Cleane	d 🖬 Dis posat	ple	3. 🖉	RT-GLE
Volume	to Purge (mini	mum): _ 7	well v	olumes or <u>2</u> .	3,17	gallons		4. 🦯	housan page
Was we	Il purged dry?	🗆 Yes	D No	Pumping Rat	te:				Calibrated? 2 Yes
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.		DO	Turbidity	Water Level	Comments
rime	(gal)	±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	Water Lever	Commente
1100	0.5	6.11	19.27	0. 261	261.4	6.03	441	22.78	• 1 11
1105	1.0	6.12	19.44	0.061	760.5	6.15	233-	22.40-	
1/10	2.0	6.09	17.93	0.060	255.1	6.11	36.3	24.15	•
1115	3.5	6.09	19.42	1.060	254.1	6.12	25.2	24.19	-
1120	5.0	6.08	19.45	0.060	2537	4.ZI	14.5	24.18-	
			_	I -				Purge data	a continued on next sheet?
4. SAM	PLING DA	TA						Geoch	nemical Analyses
Method(iler, Size:		Bladder Pump ic Pump 🖸 Iner		np 🛛 4" Sub. f	Pump	Ferro	us Iron: mg/L
-				inless 🗆 PVC					
Materials	Pump/Bailer	Dedicat	ed 🗆 Pr	epared Off-Site	ErField-Clear	ned 🛛 Dispos	able	DO:	mg/L
Materials	s: Tubing/Rop	e G Polyeth	ylene 🗆 Poly ed 🗆 Prep	ypropylene 🛛 1 ared Off-Site	retion® 🗆 Nyle	on 🛛 Other: i 🖬 Đisposabi	e	Nitrate	e: //mg/L
Depth to	Water at Tim	e of Sampli	ing:		Field Filtered	1? 🗆 Yes (No	Sulfat	e; / mg/L
Sample	10:MW-2	Sample D	ate: <u>1(•/</u> 7	Sample 1	Fime: 1/35	_ # of Contain	ners: 5	/	/
	e Sample Coll					# of Contain	ners:	Alķálir	nity: mg/L
Equipme	ent Blank Colle	ected? 🗆	Yes 🖵 No	D:		# of Contair	ners:		
5. COM	MENTS								
Note: Include	comments such	as well cond	ition, odor, pl	resence of NAPL	L, or other items	not on the field	data sheet.		
							2		\rightarrow

BROWN AND CALDWELL

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WELL ID: <u>MW-2</u>

	Cum. Gallons	рН	Temp	n page <u>/</u> Spec. Cond.	ORP	DO	Turbidity	- I.		
Time	Removed (gal)	-±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	Water Level	Co	mments
125	6.0	6.08	19.46	3-059	252:7	6.19	10.8	24.35	-	
130	7.0	Lop	19.48	0.059	250.9	(a. 22	7.54	24.30-	•	
135	(ity	say	h						
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Purge data continued on next sheet?

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BROWN AND CALDWELL

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BRÓWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-3</u>

	ECT INFO									
	Jumber: <u>136</u>			her: 100 00	11	Area of Cons	ern:			
	Dwens Corn					Personnel:				
	ocation: And	-				Weather:		attend c	loudas	
						10.11.01.01	• 2			
2. WELL				asured:	•	I IME:I			oorary Well: D	lYes MNO
	Diameter:2					Galv. Steel				
	Diameter: 2		•			g (TOC) 🗔 T				
	pth of Well:			•		g(TOC) цт g(TOC) цт				
	Static Water:_					g(TOC) ם T g(TOC) ם T	•			
	Product:			Well Volume		g(100) Li				
Length c	of Water Colum	in: 🚾 🕇	teet			_ gai 2-in well = 0.16			GS): /ft 6-in well =	
3. PURC	GE DATA		Date Pu	raed: 11 · 13	7.09	Time: 75	5		Equipme	nt Model(s)
Purge M	, 🖸 Bai	iler, Size:		Bladder Pump	🔄 2" Sub. Pu	mp 🖾 4* Sub.	Pump		tern di	Ine .
		D Debueth		tic Pump 🗆 Ine					DR7-150	-
Materials	s: Rump/Bailer	Dedica Dedica	ted DP	repared Off-Site	Preid-Clea	ned 🛛 Dispos				
	s: Rope/Tubing	👂 🗆 Dedica	ted 🛛 Prep	lypropylene	E Field-Cleane	d 🛛 🗗 Đišposat	ble		lens ma	-
Volume	to Purge (minir	mum):	3 well v	olumes or 💆	5.15	gallons		4. <u>/</u>	51 - 55	
Was we	I purged dry?	🛛 Yes	Ma No	Pumping Ra	te:	gal/min			Calibrated?	Part Yes 🖸
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.	+	DO	Turbidity	Water Level	Co	mments
Time	(gal)	±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			
0800	0.5	4.64	17.88	0.056	314.2	4.06	338	18.10	LA brown	turbid water
0805	2.0	4.61	18.18	0.051	317.6	4.42	26.9	18.23.	#Cleared	4
0810	3.5	4.56	18.27	0.050	320.2	4.66	7.92	18.18'		
0815	5	4.52	18.28	0.049	329.1	4.82	1.81	18.19		
0820	6.5	4.51	18.29	0.049	333.1	4.90	077	18.22		
0825		Collected	_					Purge dat	a continued or	next sheet?
4. SAM	PLING DA	TA						Geoc	hemical Ana	lyses
Method(ler, Size:		Bladder Pump lic Pump 🔾 Iner		•	Pump	Ferro	us Iron:	ma/L
	S. Burno/Bailer			inless 🛛 PVC						
Material	s-eumproalier	Dedical	ted DPr	epared Off-Site	Tield-Clear	ned 🛛 Dispos		DO:		mg/L
Material	s: Ubino Rope			ypropylene 🛛 🕽 ared Off-Site 🖣			le	Nitrat	e: /	mg/L
	Water at Time					? 🗆 Yes 🕽	•	Sulfat	te:	mg/L
	ID.MW.3	•					ners: 3	Alkali	oit <i>r</i>	ma/L
	e Sample Colle								y	my/L
Equipme	ent Blank Colle	cted?	Yes 🕊 No	D ID:		# of Contai	ners:			
5. COM	MENTS	- 8								
1										
Note: Include	comments such	as well cond	ition, odor, p	resence of NAP	L, or other items	not on the field	data sheet.			
							-		lan	<u> </u>
FORM GW	-2 (Rev 25.Sept.	08 - sej)		Page			Signature			

WELL ID: <u>MW-3</u>

	Cum. Gallons	pН	ued fron	Spec. Cond.	ORP	DO	Turbidity		2	
īme	Removed	*+0.1. su	<u>ک</u> ±2°,60	> of ±3% or ►10 µS/cm	> of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	≤ 10 NŢU	Water Level	C	comments
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B R O W N AND C A L D W E L L

BRÓWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-4</u>

1. PRO	JECT INF	ORMA	TION						5 20
Project	Number: <u>136</u>	6868	Task Num	nber: <u>400.00</u>	01	Area of Con	ern:		
Client:	Owens Corr	ning				Personnel:			
Project	Location: And	derson, S	South Ca	rolina		_Weather: <u>C</u>	lang a	160°F	
2. WEL	L DATA		Date Me	easured: <u>//</u>	-16-09	_ Time: _A	M	Temp	orary Well: 🛛 Yes 🖻 No
Casing	Diameter:	.2inc	ches	*		s 🛛 Galv. Stee		-	
Screen	Diameter:	<u>2</u> inc	ches	Туре: 🖅	C 🗆 Stainles	s 🗆 Galv. Stee	1 🛛 Teflon®	Other:	
Total De	pth of Well:	29.7	feet	From: Erto	op of Well Casi	ng (TOC) 🔲 1	op of Protectiv	ve Casing	Other:
	Static Water:			From: Def To	> op of Well Casi	ng (TOC) 🔲 1	op of Protectiv	ve Casing	Other:
	Product:		feet	From: 🗆 To	op of Well Casi	ng (TOC) 🔲 1	op of Protecti	ve Casing	Other:
1	of Water Colun		feet	Well Volume	. 1.8	gal	Screened I	nterval (from	GS):
Ĺ			-	Note: 1-in well	= 0.041 gal/ft	2-in well = 0.16			/ft 6-in well = 1.469 gal/ft
3. PUR	GE DATA			· · · · · · · · · · · · · · · · · · ·					Equipment Model(s)
Purge N	lethod: 🛛 Ba	iler, Size: trifugal Pum	p 🛛 Perista			ump		1. H	Con dipper
Material	s: Cump/Bailer	Polyeth	nylene 🖬 Sta	ainless 🗆 PVC	Teflon®	Other:			ron dipper
1		L Dedica				aned Dispo vlon DOther:		<u>د.</u> د	
1				Jareu On-Sile	C Fleiu-Clean	eu yeoisposai	ple		MT-IFCE
Volume	to Purge (mini	mum): <u>3</u>	well v	olumes or <u></u>	.4	gallons		4. <u> </u>	51-556
Was we	I purged dry?	Yes		Pumping Ra		1			Calibrated? DrYes
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.		DO	Turbidity	Water Level	Comments
	(gal)	±0.1 su	±2°C	> or ±3% or ±10 µS/cm	> of ±10% of ±20 mV	r > of ±10% or ±0.2 mg/L	≤ 10 NTU		Commente
855	0.50	7.00	18.61	0.433	358	0.71	162.7	19.55 -	
0900	1.00	6.93	18.92	0.772	26.4	0.26	56.3	19.9-	
0905	2.5	6.81	18.87	0.640	-7.2	0.22	14.5	20.12-	
0910	3.5	6.77	18.91	0.677	-7.8	azı	3.72	20.2-	
0915	4.5	6.84	18.92	0.684	-13.5	0.18	2.46	20.25	•
			7800					Purge data	a continued on next sheet?
4. SAM	PLING DA	TA						<u>Geoct</u>	nemical Analyses
Method(sir.	ler, Size: rifugal Pump				mp	•	Ferrou	us Iron: mg/L
Materials	: Pump Bailer			inless D PVC			<u></u>	DO:	ma//
1		U Dedicat		epared Off-Site vpropylene 🔲 1			adle		↓ mg/L
waterials	поре			ared Off-Site	Field-Cleane	d 😫 Disposabl		Nitrate	e: mg/L
	Water at Time	•	•			d? 🗆 Yes (Sulfat	e: mg/L
	D: <u>MW-4</u>	•			Fime: <u>422</u>	# of Contain		AlkaNir	mg/L
	e Sample Colle	. /	· /		9 6	# of Contain			······································
Equipme	nt Blank Colle	cted?				# of Contain	ners:		
5. COM	MENTS								· · · · · · · · · · · · · · · · · · ·
Note: Include	comments such a	as well condi	ition. odor, pr	esence of NAPL	, or other items	s not on the field	data sheet.		
									-

Signature

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WELL ID: <u>MW-4</u>

	Cum. Gallons	pH	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	#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	Water Level	Co	omments
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		2 · 1 · 2	** 5% ¹	263.87	6	1. 1. Sr. 1.	100		<u>,</u> + € - €,	17
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BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID:__<u>MW-5_</u>___

1. PROJECT INFORMATION	
Project Number: <u>136868</u> Task Number: <u>400.001</u>	Area of Concern:
Client: Owens Corning	Personnel: Br Om
Project Location: Anderson, South Carolina	Weather: NGOF, Cloudy 4 radia.
2. WELL DATA Date Measured: 11.16.05	
Casing Diameter: 2inches Type: Type: Type: Type:	ss 🛛 Galv. Steel 🗅 Teflon® 🔾 Other:
Screen Diameter: 2inches Type: YPVC D Stainles	s 🛛 Galv. Steel 🗅 Teflon® 🗅 Other:
Total Depth of Well: 27feet From: Top of Well Casi	ng (TOC)
Depth to Static Water: 19.12_feet From: Grop of Well Casi	ng (TOC)
Depth to Product:feet From: D Top of Well Casi	ng (TOC)
	gal Screened Interval (from GS):
	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:	Other:1. Here dipper
Materials: Rump/Bailer Delyethylene Stainless DPVC D Teflon® Dedicated Drepared Off-Site Deficit Cle	
Materials Bone Uning Polyethylene Delypropylene Defion® D N	vion Other: OPT-IJUE
Volume to Purge (minimum): well volumes or <u>4.94</u>	
Was well purged dry? Yes No Pumping Rate:	
Cum. Gallons pH Temp Spec. Cond. ORP	DO Turbidity
Time Removed (gai) ±0.1 su ±2°C > of ±3% or ±10 μS/cm > of ±10% o	r > of ±10% or ±0.2 mg/L ≤ 10 NTU Water Level Comments
1637 1.0 4.54 19.21 0.081 404.6	4.48 61.2 17.78-
1642 2.0 4.49 19.29 5.080 485.1	4.03 17.5 18.12=
1647 3.0 4.45 19.16 0.079 551.6	3.84 11.8 18.35-
1652 4.0 4.45 19.07 0.077 565.8	3.71 5.05 18.52-
1657 5.0 4.46 19.03 0.080 575.2	3.74 2.35 18.73
1700 Collected sande	Purge data continued on next sheet?
4. SAMPLING DATA	Geochemical Analyses
Method(s): Bailer, Size: Bladder Pump Bladder Pump 22 Sub. Pu Centrifugal Pump Peristaltic Pump Inertial Lift Pump	
Materials: Pump Bailer Delyethylene Stainless DPVC Teflon® D Dedicated Drepared Off-Site Field-Clea	
Materials: Tubipo/Rope Polyethylene Polypropylene Teflon® Ny	
	d urbisposable
Sample ID: MW-5 Sample Date: U-17 09 Sample Time: 1700	
Duplicate Sample Collected? Yes No ID:	# of Containers: A/kalinity: mg/L
Equipment Blank Collected? Yes ID:	# of Containers:
5. COMMENTS	
Note: Include comments such as well condition, odor, presence of NAPL, or other item	s not on the field data sheet.
	Fundlas
FORM GW-2 (Rev 25.Sept.08 - sej)	Creative
Portion GW-2 (nev 25.5epi.08 - sel) Page of _	



WELL ID: <u>MW-5</u>

	Cum. Gallons	рН	Temp	-Spec. Cond.	ORP	DO	Turbidity		
Time	Removed	±0.1 șu	±2°C	° > of ±3% or ¹±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
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					a Conservative approximation	•			
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5.5	8-11-5				1270	<u>}-</u>			
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		15, 14, 51 a.		2.1	5 . Yor	1.8.2.1	- 14 - 1 - 14 - 1		1. 1.6.4
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B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-6</u>

1. PRO	JECT INF	ORMA	TION						
Project	Number: <u>136</u>	6868	_ Task Nun	ber: <u>400.00</u>	01	Area of Cond	cern:		
Client:_	Owens Cori	ning				Personnel:	BS ON		· · · · · · · · · · · · · · · · · · ·
Project	Location: And	derson, S	South Ca	rolina		_Weather:	londy a	-607=	
2. WEL	L DATA	38. ₁₁ - 1	Date Me	easured: <u>[/</u>	.16.29	Time: A	μ		oorary Well: DYes 2010
Casing	Diameter:	<u>2</u> inc	ches	Type: P	/C 🛛 Stainles	s 🛛 Galv. Stee	I 🗆 Teflon®	Other:	<u>.</u>
Screen	Diameter:	<u>2</u> inc	ches · .	Туре: 🖵 Р	/C Stainles	s 🛛 Galv. Stee	I Teflon®	Other:	
Total De	epth of Well:	133.6	feet	From:	op of Well Casir	ng (TOC) 🔲 1	op of Protecti	ve Casing	Other:
Depth to	o Static Water:	17.24	feet	From:	op of Well Casir	ng (TOC) 🗖 ነ	Top of Protectiv	ve Casing	Other:
Depth to	o Product:		feet						Other:
Length	of Water Colun	nn: <u>[]6</u> ?	feet			gal			
						···		vell = 0.667 gal/	/ft 6-in well = 1.469 gal/ft
		iler. Size	Date Pu	rged: 4	Prof Sub Pr	_ Time: 🖸 🎖 Imp 🗖 4" Sub.			Equipment Model(s)
Purge N	lethod: Cen	trifugal Pum	p 🛛 Perista	Itic Pump 🛛 Ine	ertial Lift Pump	Other:		1. M	PASOD- Iver
Material	s: Purpp/Bailer	Dedica				Other:		2. 🌶	AT-ISCE
Material			nylene 🗆 Po	lypropylene 🛛	Teflon® D Ny	lon D Other:		3. /	51-556
	to Purge (mini					ed Disposal	ble		sa dipper
	to Purge (mini Il purged dry?	mum): <u>/</u> D Yes	1	Pumping Ra	-	gallons gal/min		4	Calibrated? • Yes
vvas we	Cum. Gallons	1	Temp	Spec. Cond.		garmin	Turbidity		
Time	Removed	±0.1 su	±2°C	· · · · · · · · · · · · · · · · · · ·	l	> of ±10% or		Water Level	Comments
	(gal)	10		±10 µS/cm		±0.2 mg/L			
0817	1.0		1939	0.115	278.4	4.92	6.57	19.75-	-
0822	2.5	7.08	19.40	0.112	276.7	5.22	1.95	20.24	• • •
0977	4.0	7.05	19.36	0./12	273.9	5.45	0.60	20.54	
0832	6.0	2.00	19.27	0.109	271.3	5.490	0.24	21.22	
0837	7.5	6.99	19.24	0.109	271.5	5.53	0.20	21.37	
			•					Purge dat	a continued on next sheet?
4. SAMF	PLING DA				/			Geoc	hemical Analyses
Method(€ 2" Sub. Pur tial Lift Pump	np 🛛 4" Sub. I ¬ Other:	Pump	Ferro	us Iron: mg/L
Materials		D Polyeth	ylene 🗄 Stai	nless		Other:			\
	<u> </u>	Dedicat			⊡-Fiel d-Clear Feflon® □ Nyla		able	DO:	mg/L
	Tubing/Rope	Dedicate	ed 🛛 Prepa	ared Off-Site	Field-Cleaned		le	Nitrate	e:mg/L
	Water at Time					l? 🗆 Yes i		Sulfat	e: / mg/L
	10: <u>My-4</u>							Alkałi	nity: mg/L
-	e Sample Colle								
Equipme	nt Blank Collec	cted?	Yes 🕼 No	ID:		# of Contai	ners:	/	
5. COM	MENTS								
			_						
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	, or other items	not on the field	data sheet.		
							_	E ?	2
FORM GW-	2 (Rev 25.Sept.0	08 - sej)		Page	¢ of	2	Signature		



WELL ID: <u>MW-6</u>

1	GE DATA Cum. Gallons	рH	Temp	n page	ORP	DO	Turbidity		
Time	Removed (gal)	±0.1 su	±2°C		> of ±10% or ±20.mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
842	9.0	6.96	19.21	0.1.09	271.1	5.66	0.04	21.65	
847		6.93	19.17	P.111	273.Y	5.67	0.19	22.00	
852	13.0	6.91	19.14	0.108	274.6	5.64	0.20	Z2.28	
857		688	19.13		276.2	5.74	0.04	22.34	
900	(0/16	rat	Sam	í				•	
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Sec.					-14		ļ		······
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		10 - 20-2 - 1	1919 - A.		8 -6 - 2** 16 - 10		-97,41 - 1,4	8 a. ""	
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Purge data continued on next sheet?

Page _____ of ____

BROWN AND CALDWELL WELL ID:

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-7</u>

1. PRO	JECT INF	ORMAT	ΓΙΟΝ							
	Number: <u>136</u>			ber: 400.00	01	Area of Cond	ern:			
	Owens Corr		-	•••••		Personnel:	c.Mine	> [J. M	radio in S	
Project	Location: And	lerson, S	outh Car	olina		Weather:	Sunny	605.		-
2. WEL	L DATA		Date Me	asured: _\	1/20/09	Time:	9:55	Temp	oorany Well: 🛛 Yes 💋 No	
Casing	Diameter:	2inc	hes	Туре: 🔊 РV	C Stainless	s 🛛 Galv. Stee	I 🛛 Teflon®	Other:		
Screen	Diameter:	2inc	hes	Туре: 🔊 РV	C 🗆 Stainless	s 🛛 Galv. Stee	I 🗆 Teflon®	Other:		
	epth of Well:;		feet	From: D To	p of Well Casin	g (TOC) 🗖 T	op of Protectiv	ve Casing	Other:	
Depth to	o Static Water:_	17.04	feet	From: 🙇 To	p of Well Casin	g (TOC) 🔲 1	op of Protectiv	ve Casing	Other:	
	o Product:	-	feet			ng (TOC) 🔲 1	op of Protectiv	ve Casing	Other:	
Length	of Water Colum	nn: <u>13 Øp</u> r	feet	Well Volume Note: 1-in well		_ gal <i>2-in well = 0.16</i>		nterval (from /ell = 0.667 gal/	GS): //t 6-in well = 1.469 gal/ft	
3. PUR	GE DATA					Time:		<u> </u>	Equipment Model(s)	
Purge M	fethod: 🖵 Bai	iler, Size: trifugal Pump	D Peristal	I Bladder Pump tic Pump 🗅 Ine	D 2" Sub. Pu ertial Lift Pump	mp □ 4" Sub. □ Other: <u>M</u> 0	Pump	1	\$1 556 MPS	_
Material	s: Purny/Bailer	Polyeth Dedicat	iylene Va Sta ted ⊡ Pi	inless DPVC epared Off-Site	Teflon® C	〕 Other: .ned □ Dispo:		2. <u>D</u>	rt-15ce Turbizi	inet.
Material	s: Rope/Tubing	Polyeth	iylene 🗆 Pol ted 🖸 Prec	ypropylene	Teflon® Nyl Field-Cleane	lon 🛛 Other: d 🗳 Disposal	ple	3		
Volume	to Purge (minir				. t.A.	gallons		4		_
Was we	Il purged dry?	Yes	🖳 No	Pumping Ra	te:	gal/min			Calibrated? Dar 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	
10:06	21	4.28	19.93	1.172	235.1	6.41	17.30	17.58	slightly bybrd	
10.11		4.36	20.56	1.16(227.0	1.04	28.7	17.66	~	
10:16		4.37	21.15	1.133	218.6	0.83	-	-	-	
10:21		4.37	a1.34	1.128	212.8	0.68	19.1	17.71	c leaving	
10:26	2.759	4.36	11.39	1.20	204.6	0.57	4.11	11.15	-	
	ــر						· · · · · · · · · · · · · · · · · · ·	Purge dat	a continued on next sheet?	
4. SAMI	PLING DA	TA						Geoc	hemical Analyses	
Method(D Peristalt	ic Pump 🗖 Inei	rtial Lift Pump	np □ 4" Sub. □ Other: №6 1⁄1		Ferro	us Iron: mg/L	
Material	s: Rump/Bailer	Polyethy	/iene 04 Stai ed ⊡Pre	nless 🗖 PVC epared Off-Site	□ Tefion® □ ↓ Field-Clear	Other: ned	abie	DO:	mg/L	
Material	s: Tubing/Rope	Polyethy	/lene 🗆 Poly ed 🖸 Prepa	rpropylene	Teflon® Nyk	on 🛛 Other: d 🕅 Disposab	le	Nitrat	e: mg/L	
•	Water at Time	•	ng: ירי	75	Field Filtered	l? 🗆 Yes	No	Sulfat	te:mg/L	
Sample	10: MW -7	Sample Da	ate: N 20	19 Sample	Time: 10-35	_ # of Contai	ners: <u>3</u>		•	
Duplicate	e Sample Colle	ected? D	Yes 🛛 No	ID:	9 7 -	# of Contai	ners: <u> </u>	Alkali	nity: mg/L	
Equipme	ent Blank Collec	cted? 🖵 🗅	Yes 🏟 No	ID:		# of Contai	ners:	<u> </u>		
5 COM	MENTS									5
	comments such a	e well condi	tion odor pr	esence of NAP	or other items	not on the field	data sheet			

of



WELL ID: MW-7

		Cum. Gallons	pН	. Temp	Spec. Cond.	ORP	DO	Turbidity		
	Time	Removed (gal)	.±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	Water Level	Comments
Γ	4		-	e- 2		24.100				
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Purge data continued on next sheet?

B R O W N AND C A L D W E L L

WELL ID: <u>MW-9</u>

1. PRO	JECT INF	ORMA	TION						
Project	Number: <u>136</u>	<u>868</u>	Task Num	ber: <u>400.00</u>	01	Area of Cond	ern:		
Client:	Owens Corr	ning				Personnel:	s DM	、	······································
Project	Location: And	derson, S	South Car	rolina		Weather:	loway	n lest	
2. WEL	L DATA	(a) a	Date Me						orary Well: Yes ANO
	Diameter:					s 🗆 Gálv: Stèe	• •		
Screen	Diameter:	<u>2</u> inc	hes			s 📮 Galy. Stee			
Total De	epth of Well:	104	feet	1	24	ng (TOC) נוֹם ד	14 1 4	*	200 0
Depth to	o Static Water:	14.12	feet			ад (ТЮС) • □ Т		-	• • • • • • • • • • • • • • • • • • •
	Product:		e.						Qther;
Length	of Water Colun	nn: <u>86.</u> 6	eet						GS): /ft 6-in well = 1.469 gal/ft
3. PUB	GE DATA		Date Pu						Equipment Model(s)
Purge N	lethod: D Ba	iler, Size:		Bladder Pump	Ar 2" Sub. Pu	mp 🔲 4" Sub.	Pump	M	sussa fus
ļ	s: Rump/Bailer					Other: Other:		•	RT-ISCE
		Dedica	ted 🛛 P	repared Off-Site	Field-Clea	ned Dispos	sable		
1	s: Rope Tubing	🚽 🗆 Dedica	ted 🛛 Prep	ared Off-Site	Field-Cleane	lon □ Other: d			ere dipper
Volume	to Purge (mini	mum): 🗾	well v	volumes or $\frac{\mathcal{G}}{\mathcal{G}}$	3.92	gallons		4. <u>X</u>	31-556
Was we	Il purged dry?	Yes	د	, ,	te:			,	Calibrated?
Time	Cum. Gailons Removed	рН	Temp	Spec. Cond.		DO > of ±10% or	Turbidity	Water Level	Comments
	(gal)	±0.1 su	±2°C	±10 µS/cm	±20 mV	±0.2 mg/L	≤ 10 NTU		
0940	0.5	6.62	19.94	0.088	285.7	6.73	470	20.48	
0945	1.0	6.54	20.13	6.091	285.7	6.09	447	21.93	
0950	1.75	6.44	19.85	0.086	285.3	6.18	190	24.27	· · · · · ·
0955	2.5	6.40	19.79	6.086	283.9	6.48	135	25.45	
1000	3.5	6.37	19.80	0.081	288.8	6.94	55.4	25.55	
						2.555		Purge data	a continued on next sheet?
4. SAM	PLING DA				,			Geoch	nemical Analyses
Method(s): 🛛 Bail 🗆 Centr	ler, Size: rifugal Pump	Peristalt	Bladder Pump ic Pump 🛛 Iner	Sub. Pun tial Lift Pump	np 🛛 4" Sub. F I Other:	Pump	Ferro	us Iron: mg/L
Material	: Pump/Bailer	Polyethy		nless D PVC	_	Other:	able	DO:	mg/L
Materials	s: Tubing/Rope	- Polyethy	/lene 🗆 Poly	•	reflon® 🗆 Nylo	on DOther:		Nitrate	e:mg/L
Depth to	Water at Time					I G-Ðispo sabl !? ⊡ Yes 0			
	10:M1-7							Sulfat	é: mg/L
	e Sample Colle							Aļkalir	nity: \ mg/L
Equipme	ent Blank Colle	cted? 🗆 `	Yes 🖵 No	D:		# of Contair	ners:		
5. COM	MENTS								
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	, or other items	not on the field	data sheet.		$\overline{}$
					,	a	$\int $	\geq	<u> </u>
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WELL ID: <u>MW-9</u>

	Cum. Gallons	pН	Тетр	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	∙±+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	Water Level	Con	mments
1005	5	6.30	19.80	0,082	276-2	7.24	39.6	25.23		
1010	6.25	6.31	19.78	0.080	267.4	7.37	20.3	25.16		
1015	7.25	6.28	19.81	0.079	265.2	7.38	13.3	24.81		
1020	8.25	6.29	19.72	0.080	2620	7.40	8.70	24.88		
1025	Sample	. Colle	esed							
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	2	3.2.4	15 32	1997 - 19 69 1997 - 1997 - 1997	1.100	- 10 - -			<u> </u>	
			1.199.94							
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Purge data continued on next sheet?



WELL ID: MW-10

1 000			TION						
	JECT INF								
	Number: <u>136</u>		_Task Num	ber: <u>400.00</u>	01				
	<u> Owens Cori</u>	-				Personnel:			· · · · ·
Project	_ocation: <u>An</u>	derson, S	South Car	rolina		Weather:	~ <u>55</u> F	Uvercas	t, It breeze
2. WEL	_ DATA		Date Me	easured: _\	11/16/09	Time:	rh	Temp	orary Well: 🛛 Yes 🗖 No
Casing	Diameter:	<u>2</u> inc	ches	Туре: 🗣 Р\	/C Stainles	s 🛛 Galv. Steel	□ Teflon®	Other:	······
Screen	Diameter:	<u>2</u> ino	ches	Туре: ष Р	/C Stainles	s 🛛 Galv. Steel	Teflon®	Other:	····
	pth of Well:	-	-	From: 🗳 To	op of Well Casir	ng (TOC) 🛛 T	op of Protectiv	e Casing	Other:
Depth to	Static Water:	26.21	feet	From: 🗣 To	op of Well Casir	ng (TOC) 🛛 T	op of Protectiv	e Casing 🔲	Other:
· ·	Product:		feet			ng (TOC) 🛛 T	op of Protectiv	e Casing	Other:
Length o	of Water Colun	nn: <u>45.</u> /4	feet	Well Volume Note: 1-in well		_ gal 2-in well = 0.16		•	GS): /ft 6-in well = 1.469 gal/ft
3. PUR	GE DATA					Time:			Equipment Model(s)
Purge N	ethod: □ Ba	ailer, Size: trifugal Pum	D D Peristal	Bladder Pump	ວ 🙀 2" Sub. Pu ertial Lift Pump	mp	Pump	1.	Ionsoon Pump
Material	s: (Pump/Bailer		hylene 🙇 Sta	ainless 🗆 PVC	□_Teflon® 0	DOther:		2	151.556
Material	s: Rope/Tubing	Nolveti	hylene 🗆 Po	lypropylene	Teflon® D Ny	lon 🛛 Other:		3.	RT-ISCE
	to Purge (mini					d 🙀 Disposat	ble		teron Dpper
	to Purge (mini I purged dry?	mum): D Yes		Pumping Ra		galions gal/min		4	Calibrated? Ves
	Cum. Gallons		Temp	Spec. Cond.	1	DO	Turbidity		•
Time	Removed (gal)	±0.1 su	±2°C			> of ±10% or ±0.2 mg/L	≲ 10 NTU	Water Level	Comments
1445	0.25	5.14	20.17	0.026	306.5	7.52	27.00	27.04	Twb=177 NT4
1450	1.0	5.02	20.24	0.026	308.9	7.39	419.8	27.65	
1455	2.0	5.06	20.18	0.026	Bosy	4.43	50.2	27.76'	
1500	3.0	5.07	20.15	0.027	299.9	7.46	29.2	27.85-	•
1505	4.5	5.19	20.16	0.028	293.4	7.46	9.12	27.50	
1510	(olle	tel .	sample					Purge dat	a continued on next sheet?
4. SAMF	PLING DA	TA						Geoc	nemical Analyses
Method(Peristalt	ic Pump 🗖 Inei	rtial Lift Pump	np 🔲 4" Sub. F] Other:	<u></u>	Ferror	us Iron: mg/L
Materials	: ump/Bailer	Polyeth Dedicat				Other: ned 🖸 Disposa		DO:	mg/L
Materials	Tubing/Bope				Teflon® 🛛 Nyl	on □ Other: I ਡ I Disposabl	ः e	Nitrate	e: mg/L
Depth to	Water at Time					? DI Yes J		Sulfat	e: mg/L
Sample	D: MW-10	Sample D	ate: 11/14/	Sample 1	Time: <u> \$10</u>	_ # of Contair	ners: 3	Sunat	
Duplicate	Sample Colle	ected? 🗆	Yes 😫 No	ID:		# of Contair	ners:	Alkalir	fity:mg/L
Equipme	nt Blank Colle	cted? 🗆	Yes 🖬 No	ID:		# of Contair	ners:		
5. COM	MENTS								· · · · ·
					· · · · · ·				
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	L, or other items	not on the field	data sheet.		
							12	22	5
FORM GW-	2 (Rev 25.Sept.)	08 - sej)		Page	of _	/	Signature		



WELL ID: <u>MW-10</u>

	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	. ±0.1 su		> of ±3% or •±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Co	mments
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						5				2
						3				
						2				
					Cr.			1.21		
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	د •		3.8			1995 C -	e a sul	NK., 7 		1.5
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	4.	6.4-2- - C. 10		4. 7 1.5 - 6 - 1			143 F			- 22
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Purge data continued on next sheet?

B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-11</u>

1. PROJECT INFORMATION
Project Number: <u>136868</u> Task Number: <u>400.001</u> Area of Concern:
Client: Owens Corning Personnel: \$5 DM
Project Location: Anderson, South Carolina Weather:
2. WELL DATA Date Measured: 11.16.02 Time: AM Temporary Well: DYes Broo
Casing Diameter: 2inches Type: 2 PVC Stainless Galv. Steel Teflon® Other:
Screen Diameter: inches Type: DPFVC Stainless Galv. Steel Teflon® Other:
Total Depth of Well: <u>16</u> feet From: Top of Well Casing (TOC) Top of Protective Casing Other:
Depth to Static Water: 2.81 feet From: Grop of Well Casing (TOC) Top of Protective Casing Other:
Depth to Product:feet From:
Length of Water Column: 13.19 feet Well Volume: 2.20 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: 1/-19-00 Time: 1057 Equipment Model(s)
Purge Method: Bailer, Size: Bladder Pump Dz Sub. Pump D 4" Sub. Pump 1. Monton function for the sub. Pump 1. Monton
Materiale: Pump/Bailer Delyethylene Destainless DPVC D Teflon® D Other:
Dedicated Disposable
Materials: Rope Tubing Polyethylene Polypropylene Teflon® Nylon Other:3.
Volume to Purge (minimum): 3 well volumes or 6.60 gallons $4.027 - 157E$
Was well purged dry? Ves No Pumping Rate: gal/min Calibrated?
Cum. Gallons pH Temp Spec. Cond. ORP DO Turbidity Time Removed > of +2% or > of +10% or > of +10
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
1/02 1.0 6.91 18.03 0.515 -16.6 0.30 20.7 3.55
1/07 2.0 6.85 18.08 0.556 -35.2 0.23 8.66 3.58-
1112 3.0 6.81 18.17 0. 582 -475 0.18 4.01 3.57
117-4.0 6.79 18.21 0.588 -60.0 0.17 1.81 3.58
1122 5.0 6.78 18.220.594 - 70.20.15 22.03 3.58-
1125 Collected Sample Purge data continued on next sheet?
4. SAMPLING DATA Geochemical Analyses
Method(s): Bailer, Size: Bladder Pump Bladder Pump Method(s): Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: Ferrous Iron: mg/L
Materials, Pump/Bailer Polyethylene Stainless PVC Tetlon® Other:
Dedicated Depared Off-Site Defield-Cleaned Defisposable
Depth to Water at Time of Sampling: Field Filtered? □ Yes □ No Sample ID: <u>MW-11</u> Sample Date <u>10.99</u> Sample Time: <u>125</u> # of Containers:3
Alkalinity: mg/l
Duplicate Sample Collected? Yes I Yes Yes I Yes Yes I Yes I Yes Yes I Yes I Yes I Yes I Yes
5. COMMENTS
Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet
FORM GV/-2 (Rev 25.Sept.08 - sei) Page of



WELL ID: MW-11

	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	±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	Water Level	Cor	mments
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Purge data continued on next sheet?

WELL ID: ________

B R O W N AND C A L D W E L L

1

1. PRO	JECT INF	ORMA	TION						
Project	Number: <u>136</u>	6868	_ Task Num	nber: <u>400.00</u>	01	Area of Con	cern:		
Client:	Owens Cor	ning						_	
Project	Location: And	derson, S	South Ca	rolina		Weather:	lovely ~	65-4=	
2. WEL	L DATA		Date Me	easured: //-	16-09	Time: A/	h 52.5	· Ťem	porary Well: DYes BNo
	Diameter:		12 C			s 🖾 Galy. Stee			
Screen	Diameter:	2in	ches	Туре: 🛛 РУ	/C 🖻 Stainles	s 🛛 Gaiv. Stee	el 🖵 Teflon®	Other:	E E E E
Total De	epth of Well:	33	feet	From: GT	op of Well Casi	ng (TOC) 📩 🖞	Top of Protectiv	ve Casing	Other:
Depth to	Static Water:	346	feet						
	Product:		· · · · · · · · · · · · · · · · · · ·						Other:
Length o	of Water Colum	nn (4959	feet	Welł Volume	<u>4.95</u>	_ gal.	Screened I	nterval (from	n GS): nl/ft 6-in well = 1.469 gal/ft
			- 2 - 13						
S. PUR		uler, Size:		rged: <u>[[•[</u>] Biedder Pump	9 - 9 9 2 - 2 - 2 - Sub. Pu	IIME:	Pumo 1	3 7	Equipment Model(s)
	lethod: 🗆 Ba								
Material	s: Pump Bailer	Polyeti	ited DP	ainless DPVC repared Off-Site	Teflon® C	□ Other: <u></u> ined □ Dispo	sable	• • 2. 🖍	coldin lupt 1
	s: Rope/Tubin								1.31 - 556
Volume	to Purge (mini						DIE		227-1566
	Il purged dry?	• Yes			te:	•		··· _ _	Calibrated?
	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm		> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Leve	Comments
1143	1.2	5.98	18.18	0.157	166.8	1.88	5.65	9.50	
1148	2.0	5.76	18.15	0.154	184.2	1.23	10.95	10.48-	-
1153	3.0	5.60	18.20	0.149	193.6	0.68	9.78	10.20	4
1157	3.25	5.56	18.30	0.149	190.7	0.48	9.15	9.90	
1203	4.0	5.64	18.39	0.154	172.6	0.68	140	10.00	Water became ver tubid suddents.
							`	Purge da	ta continued on next sheet?
4. SAMF	PLING DA							Geo	chemical Analyses
Method(s	s): 🛛 Bail	ler, Size: rifugal Pump	Peristalti	Bladder Pump ic Pump 🖸 Iner	Sub. Pur?" Sub. Pur tial Lift Pump	np 🛛 4" Sub. I D Other:	Pump	Ferro	ous Iron: mg/L
Materials	: Pump/Bailer	Polyethy	lene 🖬 Stai	niess 🗆 PVC	□ Teflon® □	Other:		DO:	mail
Materiale		Dedicat	/lene 🗆 Poly	propylene 🛛 T	efion® 🗆 Nyle	ned 🛛 Dispos	adie	-	mg/L
		Dedicate	ed 🛛 Prepa	ared Off-Site	Field-Cleaned	B Disposab		Nitra	te: // mg/L
	Water at Time					l? □ Yes 1		Sulfa	.te://mg/L
								 Alkal	mity: mg/L
	e Sample Colle Int Blank Collec					# of Contain		- 7	
					·	# of Contai			
5. COM	MENTS								
Note: Include (comments such a	is well condi	tion, odor, pr		or other items	not on the field	data sheet		
		•	, 0001, pre						
) (Day of Care	N		۰.	• •		<u></u>		
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WELL ID: MW-12

	GE DATA Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	±0,1 su	±2°Ç	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	с 	omments
1208	4.75	5.14	18.38	0.169	171.3	1.73	88.5	12.85	-	
1212	5.0	5:70	18.42	0.15%	171.0	1.38	169	13.00-		
1218	6.0	5.58	18.52	0.149	179.1	1.26	155	13.88	•	
1222	6.25	5.56	15.55	0.151	185.8	1.12	145	17.50	•	
1228	7.25	5.541	8.58	0.147	179.4	1.50	132	14.13 -		
1222	8.25	5.61	18.56	0151	1765	1.62	60.4	14.27	-	
1238	8.50	5.53	18:60	0.147	181.8.	1.63	31.5	14.22	-	
124.2.	\$ 8.71	5.67	18.58	0.158	172.3		17.7	14.52		
1248:	9.5A	5.50	18.70	0.147	183.8.	1.75	9.45	14.01		2
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Purge data continued on next sheet?

Page Z of Z

B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-13

1. PRO	JECT INF	ORMA	TION						
Project	Number: <u>136</u>	6868	_ Task Nun	nber: <u>400.00</u>	01	Area of Cond	cern:		
Client:	Owens Corr	ning				Personnel:	Bs on	· · · · · · · · · · · · · · · · · · ·	·
Project	Location: And	derson, S	South Ca	rolina		_Weather:_5	ing a	709=	
2. WEL	L DATA		Date M	easured: <u>4</u>	·16.09	Time: 🕂	٩	Temp	orary Well: □Yes □ No
Casing	Diameter:	<u>2</u> inc	ches	Туре: 🗆 РV	C D Stainles	s 🛛 Galv. Stee	I 🗆 Teflon®	Other:	
Screen	Diameter:	<u>2</u> inc	ches	Туре: 🗆 РV	C D Stainles	is 🛛 Galv. Stee	I 🗆 Teflon®	Other:	
Total De	epth of Well:	72	feet	From: D To	op of Well Casir	ng (TOC) 🔲 1	op of Protectiv	ve Casing 🛛 🔾	Other:
Depth to	o Static Water:	4.67	feet	From: 🗆 To	op of Well Casir	ng (TOC) 🛄 1	op of Protectiv	ve Casing 🛛 🔾	Other:
Depth to	o Product:	-	feet	From: D To	op of Well Casi	ng (TOC) 🛛 1	Fop of Protectiv	ve Casing 🛛	Other:
Length	of Water Colun	nn61.33	feet	Well Volume				nterval (from	
<u> </u>								vell = 0.667 gal/	ft 6-in well = 1.469 gal/ft
3. PUR	GE DATA			•					Equipment Model(s)
Purge M	lethod: G Ba	uler, Size: trifugal Pum	p D Perista	J Bladder Pump Itic Pump D Ine	ertial Lift Pump	ump 🔲 4" Sub.	Pump	17	mon Pinip
	s Pump Bailer	Polyetł	nylene 🔁 Sta	ainless 🗆 PVC	Teflon® 0	Other:			5-556
				repared Off-Site lypropylene		aned Dispon Ion Other:	sable	•	(7-15CE
1	s: Rope/ ubing	🗸 🗆 Dedica	ted 🖸 Prej	oared Off-Site	Field-Cleane	d A Disposal	ple		
Volume	to Purge (mini					gallons		4. <u> </u>	Calibrated? Pres
Was we	Il purged dry?	Yes		Pumping Rat	1	gal/min			
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.	ORP	DO > of ±10% or	Turbidity	Water Level	Comments
	(gal)	±0.1 su	±2°C	> or ±3% or ±10 µS/cm	≥ of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≲ 10 NTU		
1419	1.0	5.33	18.77	0.117	253.2	3.88	7.53	4.82 -	
1424	2.0	5.29	18.80	0.115	259.6	3.83	1.17	4.82-	-
1429	3.0	5.25	18.83	0.113	264.3	3.82	0.45	4.83-	
1434	5.0	5.27	18.84	0.116	265.1	3.80	0.22	4.80	
1439	6.0	5.25	18.89	0.(13	265.3	3.77	0.25	4.80-	
1445	(olle	fed .	sandi				-	Purge data	a continued on next sheet?
4. SAM	PLING DA	TA	/					Geoct	nemical Analyses
Method(Bladder Pump ic Pump 🗅 Iner		np □ 4" Sub. I ⊐ Other:	Pump	Ferrou	us Iron: mg/L
Materia	s: Pump Bailer	Polyethy Dedicate		intess D PVC		Other:	able	DO:	\ mg/L
Materials		-B-Polyethy	/lene Pol	∕propylene □T	efion® 🗆 Nyle	on D Other:		Nitrate	e:mg/L
Depth to	Water at Time		•			d •⊡ Di sposabl d? ⊡ Yes •			\mathbf{V}
•	1D:Mu-13		•					Sulfat	e: //mg/L
	e Sample Colle							Alkalir	nity: mg/L
	ent Blank Colle					# of Contail			
5. COM							· · · · · · · · · · · · · · · · · · ·		
			· · · · · · · · · · · ·						
								· · · · · · ·	
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	. or other items	not on the field	data sheet.		
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FORM GW-	2 (Rev 25.Sept.)	08 60)					Signature	L	

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WELL ID: MW-13

	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity		2
ime	Removed (gal)	≃⊉0.4 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
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Purge data continued on next sheet?

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-14</u>

1 000									
	JECT INF								
	Number: <u>136</u>		-						
	Owens Corr	-							
Project	Location: And	derson, S	South Car	olina		Weather:		-	
2. WEL	L DATA		Date Me	asured:	11/16/09	Time:	M	Ten	nporary Well: □Yes □No
Casing	Diameter:	<u>2</u> inc	ches	Type: CPV	C D Stainles	s 🛛 Galv. Stee	I Teflon®	Other:	
Screen	Diameter:	<u>2</u> inc	ches	Туре: 🖬 Р	C 🛛 Stainles	s 🛛 Galv. Stee	I Teflon®	Other:	
Total De	epth of Well:	74.2	feet	From: CT	p of Well Casin	ig (TOC) 🛛 T	Fop of Protecti	ve Casing	□ Other:
Depth to	Static Water:	18.92	feet	From: 🖬 To	op of Well Casin	ig (TOC) 🛛 T	Fop of Protectiv	ve Casing	Other:
Depth to	Product:	_	feet			ng (TOC) 🔲 1	Fop of Protecti	ve Casing (Other:
Length	of Water Colun	nn: 55.28	feet	Well Volume		gal		•	m GS):
								vell = 0.667 g	al/ft 6-in well = 1.469 gal/ft
3. PUR	GE DATA			-		Time: 15			Equipment Model(s)
Purge M						mp 🛛 4" Sub. 🗆 Other:		1	151-556
Material	s: www.Bailer	Polyeti Dedica				Other:		2.	BRT-ISLE
Motorial	a. Dana /E-thir			•		lined Dispo Ion DOther:			teon dippe
	s: Rope/Tubing	Dedica	ited D Prep	ared Off-Site	E Field-Cleane	d 🛛 🗗 Bisposal	ble		
	to Purge (mini					-		4. 🖌	Calibrated? Bres
Was we	Il purged dry?	Yes	r	Spec. Cond.	Ite:	gal/min DO	Turbiditu	<u> </u>	
Time	Cum. Gallons Removed	·	Temp	· · · · · · · · · · · · · · · · · · ·		> of ±10% or	Turbidity	Water Lev	el Comments
	(gal)	±0.1 su	±2°C	±10 µS/cm	±20 mV	±0.2 mg/L	≤ 10 NTU		
1549	1.0	6.33	18.59	0.071	258.0	6.35-	36.1	24.85	-
1554	2.0	6.35	18.61	0.068	250.6	6.38	18.6	26.00	
1559	3.0	630	18.62	0.064	242.11	6.73	18.0	25.91-	-
1604	5.0	6.32	18.67	0.066	237.6	6.28	7.29	29.11	
1605	Collect	.1	Sampl				2		
						1		Purge d	ata continued on next sheet?
4. SAMI	PLING DA	TA						Geo	chemical Analyses
Method(SI.	ler, Size:				np 🔲 4" Sub. I		Ferr	ous Iron: mg/L
Motorial	s: Rump/Bailer		_			Other: Other:			
Materias		U Dedicat		epared Off-Site			able	DO:	\mg/L
Material	s: Tebing/Rope			/propylene 🛛 🗎 ared Off-Site 🛛			le	Nitra	ate: mg/L
	Water at Time	•	•			l? ⊡ Yes (🗆 No	Sulf	ate:mg/L
Sample	1D:14	Sample D	ate:////7	01 Sample	rime: <u>[605</u>	_ # of Contai	ners: 3		/ 0
Duplicat	e Sample Colle	ected? 🗆	Yes 🖬 No	D ID:		# of Contai	ners:	Alka	llinity: mg/L
Equipme	ent Blank Colle	cted?	Yes 🖬 No	ID:		# of Contai	ners:		
5. COM	MENTS								
Note: Include	comments such a	as well condi	ition, odor, pr	esence of NAPL	., or other items	not on the field	data sheet.		
							1-	24	\leq
FORM GW-	2 (Rev 25.Sept.	08 - sej)			/		Signature		
				Page	of				



WELL ID: <u>MW-14</u>

	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity			
īme	Removed (gal)	±0.1 su	±2°C		> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Co	mments
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BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-15</u>

1 PBO	JECT INF	ORMA	TION				-				
	Number: <u>136</u>			ber: 400.00	01	Area of Cond	ern:				
	Owens Corr					_Personnel:	c. Mi		Meadow 3		
Project	Location: And	derson, S	South Car	rolina		_Weather:	SUNN		`		
2. WEL	L DATA	·	Date Me	easured: 11	20/00	Time: 👂	.30	Temr	orary Well: SyYes	s 🗆 No	
Casing	Diameter:	<u>2</u> inc	ches			s 🗆 Galv. Stee					
Screen	Diameter:	<u>2</u> inc	ches	Туре: 🗣 РМ	/C D Stainles	s 🛛 Galv. Stee	I 🗆 Teflon®	C Other:			
Totai De	epth of Well:	99.5	feet	From:	op of Well Casi	ng (TOC) 🛛 1	op of Protectiv	ve Casing	Other:		
Depth to	Static Water:	9.78	feet	From: 🖬 To	op of Well Casir	ng (TOC) 🖸 T	op of Protectiv	ve Casing 🛛	Other:		
	Product:		feet	From: D To	op of Well Casi	ng (TOC) 🔲 1	Fop of Protectiv	ve Casing	Other:		
Length	of Water Colun	nn: BV+V	feet	Weil Volume	··	gai		•	GS):		
								ell = 0.667 gal.	/ft 6-in well = 1.46		
	GE DATA	iler, Size:	г	Biadder Pump			9:35 Pump	,	<u>Equipment M</u> ۲ 556 556 5		
Purge N	iethod:	trifugal Pum	p 🛛 Perista	itic Pump 🛯 ine	ertial Lift Pump	Other: MOV	roon				
Material	s: Pump/Bailer	Polyeti Dedica				Other: aned Dispos		2. D	RT-ISCE	[Junia]	Me
Material	s: Rope/(ubin)					ylon 🛛 Other: ed ष Disposal		3			
Volume	to Purge (mini			volumes or		gailons		4			
	Il purged dry?	Yes	•	Pumping Ra		gal/min			Calibrated?	′es 🗅	
	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity			×.	
Time	Removed (gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm	1 m	r > of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comme	ents	
B:37		5.75	16.51	0.212	47.6	3.57	0.58	10.49	water cle	or	
8:42		6.60	16.58	0.222	31.3	1.24	-		~		
8:47		6.71	16.43	0.222	32.6	1.01	7.45	10.75	-		
8:52		6.75	16.25	0.223	33.6	0.88	~	<u> </u>			
8:57	1.259	6.75	10.00	0.222	33.5	0.74	1.98	16.74	-		
	J		<u>t</u>		•			Purge dat	a continued on nex	t sheet?	
4. SAM	PLING DA	TA						Geoc	hemical Analyse	<u>s</u>	
Method(ler, Size:				mp 🛛 4* Sub. I □ Other:		Ferro	us iron:	mg/L	
Material	s: Rump/Bailer	C Polyeth	ylene 👊 Sta	inless 🛛 PVC	C Tefion® C	Other:			-		
	\simeq			epared Off-Site ypropylene 🛛		•	able	DO:	·	mg/L	
Materials	s: Tubing/Rope	Dedical	ed D Prep	ared Off-Site			le	Nitrat	e:	mg/L	
Depth to	Water at Time			74	- 1	d? 🗆 Yes (5	Sulfat	e:	mg/L	
	·		ate: 11/20		Time: 1:0 //	# of Contai		 Alkali	nity:	mg/L	
	e Sample Colle ent Blank Colle					# of Contai	_			-	
						# of Contai					
5. COM	MENTS										
							,				
Note: Include	comments such a	as well cond	ition, odor, p	esence of NAP	L. or other item	s not on the field	data sheet				

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GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: _____MW-15_____

ζ.	Cum. Gallons	, pH	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Rémoved (gal)		±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
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Purge data continued on next sheet?

B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-16

Projec	t Number: <u>13</u>	5868	_ Task Nur	mber: <u>400.0</u>	01	Area of Con	cern:		
							_		
Projec	t Location: <u>An</u>	derson, s	South Ca	rolina		Weather:	lends .	ct min	
2. WEI	L DATA		Date M	easured: 💋	16.09	Time: 🖄	<u>^</u>	Tem	oorary Well: 🛛 Yes 🖻
Casing	Diameter:	<u>2</u> in				is 🛛 Galv. Ste		-	•
Screer	Diameter:	<u>2in</u>	ches	Type: 💁 Pr	C 🗆 Stainles	s 🛛 Galv. Ste	el 🛛 Teflon®	Other:	
Total [epth of Well:	59	_feet	From:	op of Well Casi	ng (TOC)	Top of Protect	ive Casing	Other:
Depth	to Static Water:	5.25	_feet	From: 🗗	op of Well Casi	ng (TOC) 🗖	Fop of Protect	ive Casing 🛛	Other:
Depth	to Product:		_feet					ive Casing 🛛	Other:
Length	of Water Colur	nn: <u>53.7</u>	feet			_ gal			GS):
								well = 0.667 gal	/ft 6-in well = 1.469 ga
		uler, Size:		urged: <u>//·/</u> Bladder Pump					Equipment Mode
Purge	Method: Cer	trifugal Purr	p 🛛 Perista	altic Pump 🗖 Ine	ertial Lift Pump	Other:		1. <u></u>	unrow digge
Materia	als: ump/Baile	r Dedica		ainless 🛛 PVC Prepared Off-Site				2. 🦯	norrow day
Materia	uls: Rope Tubin		hylene 🗆 Po	olypropylene	Teflon® D N	lon Other:		3. D	RT- (FCE
Volum	e to Purge (mini			pared Off-Site			ble		1-556
	ell purged dry?			_	te:	-			Calibrated?
	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
1259	0.50	7.99	17.22	0.311	29.7	0.47	11.0	7.02-	
1200°	2.75	7.82	16.89	0.311	41.2	0.50	9.16	7.55	
1309	1.0	7.72	17.3F	0.3/1	32.7	0.35	8.97	9.74-	
ISE!			ĺ						
1315	Collan	or 1	Ban	04					
	-un		0-10	<u>h</u>	1		I	Purge dat	a continued on next she
4. SAM	PLING DA	TA			N.				hemical Analyses
Method				I Bladder Pump tic Pump 🔲 Iner					us Iron: m
Materia	Is:(Purp)/Bailer			tic Pump 🖬 Inei inless 🖬 PVC					\m
	No.	Dedica		repared Off-Site			able	DO:	m
1	Is. Tubing Rope	Dedication	ed 🛛 Prep	ared Off-Site	Field-Cleaned	d E- Disposat	le	Nitrat	e: m
Depth t	o Water at Time	of Sampl	ing: 9,7	<u>4'</u>		l? □ Yes		Sulfat	ie: / m
	10: <u>MW-16</u>					_ # of Contai	ners: 3	 Alkali	
1 ·	te Sample Colle					# of Contai			nity: m
Equipm	ent Blank Colle	cted?	Yes P No	o ID:		# of Contai	ners:		
5. COM	MENTS	Purgo.	nate	has a	a light	yellow	fmt		
		P			0	0			
· · · · · · · · · · · · · · · · · · ·									

Page _____ of _____ Signature



WELL ID: <u>MW-16</u>

	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity			
"ime	Removed (gal)	±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	Water Level	Co	mments
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Purge data continued on next sheet?

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BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-17

1 PROJ	ECT INF		TION								
	lumber: 136	-		ber: 400.00)1	Area of Conc	ern:				
•	wens Corn		-			Personnel:	c. Minu	olJ.Me	abows		×:
	ocation: <u>And</u>	-	outh Car	olina		Weather: 0	vercenst,	609,6	03.		
2. WELL	DATA	1 inc	Date Me	asured:		Time: 109 s = Galv. Stee	Teflon®	D:55 Temp □ Other:	orary Well: [⊒Yes ≜ Ño	٦
-)iameter:					s 🛛 Galv. Stee					
	oth of Well:					ig (TOC) 🔲 T					
	Static Water:					ig (TOC) 🔲 T					
	Product:		feet	From: To	op of Well Casir	ng (TOC) 🔲 1	Top of Protecti	ve Casing	Other:		
	f Water Colum			Well Volume	11.27	_ gal	Screened I	nterval (from	GS):	-	
Longaroi						2-in well = 0.16				= 1.469 gal/ft]
3. PURG						Time: 11: mp 0 4" Sub.				ent Model(s)	
Purge Me	ethod: Storent	rifugal Pum	p 🛛 Peristal	tic Pump 🖸 Ine	ertial Lift Pump	Other: MO	nsoon	1	51 556 1	Ars Sorulation	4 7
Materials	: Furpp/Bailer	Polyeth		inless DPVC repared Off-Site		Other:	sable	2	KT-15CL	Turbidim	- and
Materials	: Rope/Tubing) D Polyeth	nylene 🗆 Pol	ypropylene	Teflon® D Ny	ion □ Other: d 0∎ Disposal		3			-
	o Purge (minir	num):			NA te: 200	gallons	nllmi	4	Calibrated?	😼 Yes 🗔	-
	purged dry? Cum. Gallons	pH	Temp	Spec. Cond.		gen/min /	Turbidity				-
Time	Removed (gal)	±0.1 su	±2°C	· · · · · · · · · · · · · · · · · · ·		> of ±10% or ±0.2 mg/L	+	Water Level	Co	omments	t.)
11:04	-	4.67	18.79	0.115	38.6	6.46	2.17	22.28	water c	clear 20	omlin
11:09		4.56	18.83	0.115	39.3	4.97	7.99	-	200 m	ulun	
11:14	4	4.62	19.30	0.115	40.D	4.87	9.58	22.31	-1	11	
11:19	1.59	4.61	20.04	0.116	39.5	4.82	8.39	22.43	•*	~1	
1								Purge dat	a continued o	n next sheet?	3
4. SAMP	LING DA	TA						Geoc	hemical Ana	alyses	
Method(s	s): 🖵 Bail	er, Size: ifugal Pump	Peristalt	Bladder Pump ic Pump 🗅 Ine	D 2" Sub. Pur rtial Lift Pump	np 🗆 4" Sub. Other:	Pump	Ferro	us Iron:	` mg/L	
Materials	: Pump/Bailer	0.0.1	ylene 🕿 Stai	nless D PVC epared Off-Site	Teflon®	Other:		DO:		mg/L	
Materials	: ubing/Rope	S-Polyeth	ylene 🗆 Poły	/propylene	Teflon® 🗆 Nyl			Nitrat	e:	 mg/L	2
Depth to	Water at Time					d? □ Yes *		Sulfat	· • ·	mg/L	
Sample II	D:MW-17	Sample D	ate: 11/11/	Sample	Time: LL:2	5 # of Contai	iners: 3				
Duplicate	Sample Colle	cted? D	Yes 🗆 No	D:	<u> </u>	# of Contai	iners:	Alkali	nity:	mg/L	
Equipmer	nt Blank Colle	cted?	Yes 🗆 No) ID:		# of Contai	iners:				
							· · · · · · · · · · · · · · · · · · ·				f
	MENITS										
5. COMN	MENTS						_				·
	MENTS										

Page _____ of _____



WELL ID: MW-17

	Qum. Gallons	₽ H	Temp	Spec. Cond.	ORP	DO -	Turbidity		e .
Time	Removed (gal)	±0.≬ \$u	¦±2℃	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Commer
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Purge data continued on next sheet?

Page _____ of ____

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-18</u>

1. PRO	JECT INF	ORMA	TION						
Project	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>)1				
Client:	Owens Corr	ning				Personnel:			•
Project	Location: And	lerson, S	South Ca	olina		Weather:	~60°F	Partly Class	dy
2. WEL	L DATA	ζ. Υ	Date Me	easured:	11/16/09	Time:	AA	· Temp	oratyWell: □Yes WNo
	Diameter: <u>•</u>			-		s □.Ģalv, Stee			
1	Diameter:	5 F		Type: 📕 PV	C 🗆 Stainles	ş 🛛 Galv. Stee	I 🗆 Teflon®	Other:	
4	epth of Well:	· · · · · · · · · · · · · · · · · · ·	1.	From: 🎽 To	p of Well Casir	ng (TOC) บำ	op of Protectiv	ve Casing 🔲	Other:
Depth to	Static Water:	20.63	feet .	From: 🔰 To	p of Wèll Casir	ng (ŦÒĊ) v 🗗 1	op-of Protectiv	ve Casing 🔲	Other:
	Product:		feet		~ •	ng (TOC) 📮 1	on of Protecti	ve Casing.	Other:
Length	of Water Colum	an: 4.97	feet	Well Volume Note: 1-in well		_ gal 2-in well = 0.16			GS): /ft 6-in well = 1.469 gal/ft
3. PUR	GE DATA		Date Pu	rged: l1	117/09	Time: 0	147		Equipment Model(s)
Purge N	lethod: D Cont	iler, Size:		Bladder Pump	💆 2" Sub. Pu	mp 🛛 4" Sub.	Pump		lonsoon Pump
÷	s: Pump/Bailer		nylene 🎽 Sta	ainless 🗆 PVC	□ Ţefion® □	Other:			51-556
	\bigcirc	Dedica	ited D P	repared Off-Site	Field-Clea	ned 🛛 Dispo	sable	2	
	s: Rope Tubing	D Dedica	ted 🖸 Prep	lypropylene	G Field-Cleane	d 🛛 Disposal	ble		DRT-15CE
Volume	to Purge (minii	mum):	3 well v	olumes or	2.49	gallons		4	Heron Dipper
Was we	Il purged dry?	O Yes	D No	Pumping Ra	te:	gal/min			Calibrated? X Yes
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
	(gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	±0.2 mg/L	≤ 10 NTU		Comments
0952	0.25	4.63	20.26	0.048	306.2	4.95	36.7	21.3-	
0957	0.50	4.58	20.06	0.047	\$12.6	4.76	21.8	21.15-	
1002	0.75	4.60	29.47	0.047	316.8	4.36	14.5	21.10-	
1007	1.0	4.54	20.50	1.047	317.3	4.78	12.04	21.2-	
1012	1.25	4.59	20.30	0.047	315.9	5.70	22.9	21.35	
·····				· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	Purge data	a continued on next sheet?
4. SAM	PLING DA	TA						Geoct	nemical Analyses
Method(Bladder Pump ic Pump 🗅 Iner			Pump	Ferro	us Iron:nd/L
Matoriale	Pump/Bailer		vlene 🖌 Stai	nless 🖸 PVC	🛛 Teflon® 🖸	Other:			
		Dedicat	ed 🖸 Pro	epared Off-Site	🎽 Field-Clear	ed 🛛 Dispos	able	DO:	mg/L
Materials		Polyethy Dedicate	yiene 🗆 Poly ed 🗀 Prepa	/propylene 🛛 T ared Off-Site 🖸	etion® 🛛 Nylo Field-Cleaned	on 🛛 Other: Disposabl	le	Nitrate	e: mg/L
	Water at Time	of Sampli	ng:		Field Filtered	? 🗆 Yes 🛔	No	Sulfat	e: mg/L
Sample	D: MW-18	Sample Da	ate: <u>11/19/</u>	9 Sample T	ime: <u>1035</u>	_ _ # of Contai	ners: <u>3</u>	/	
Duplicate	e Sample Colle	cted?	Yes 🖬 🛛 No	ID:		# of Contai	ners:	Alkalir	nity:mg/L
Equipme	ent Blank Collec	cted? 🗆 `	Yes 🎽 No	ID:		# of Contain	ners:		Ì
5. COMI	MENTS					· · · · · · · · · · · · · · · · · · ·			
	·_····				2				
									· · · · · · · · · · · · · · · · · · ·
Note: Include	comments such a	is well condi	tion, odor, pr	esence of NAPL	, or other items	not on the field	data sheet.		
								Lin	Ned
FORM GW-	2 (Rev 25.Sept.0	08 - sej)		Page	of	· · ·	Signature		10

B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-18</u>

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022 1.75 4.55 20.64 7.049 320.3 4.68 7.444 21.57 027 2.0 4.50 20.56 0.047 323.5 4.52 6.11 21.95 032 2.25 4.49 20.44 0.046 324.44 4.45 4.53 2.455 035 Collecter 34.44 0.046 324.44 4.45 4.53 2.455 035 Collecter 34.44 0.046 324.44 4.45 4.53 2.455 035 Collecter 34.44 0.046 324.44 4.55 4.53 2.455 035 Collecter 34.44 0.046 324.44 4.55 4.55 0.55 035 Collecter 34.45 0.046 324.44 4.55 0.55 0.55 035 Collecter 34.45 0.55 0.55 0.55 0.55 0.55 035 Collecter 34.55 0.55 0.55 0.55 0.55 0.55 037 1.55 0.55 0.55 0.55 0.55 0.55 0.55 037 1.55 0.55 0.55 0.55 0.55 0.55 0.55 037 <td>mments</td>	mments
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B R O W N AND C A L D W E L L

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-19</u>

1. PRO	JECT INF	ORMA	ΓΙΟΝ						
Project	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>)1	Area of Conc		~ /	
_	Owens Corr			_		Personnel:			
Project	Location: <u>Anc</u>	lerson, S	outh Car	olina		Weather:	~ 70°F	Scattered	Clards
2. WEL	L DATA	N	Date Me	asured: 🧾	1/16/09 -	Time: 4	N (8.6.1)	• Temp	orary Well: 🛛 Yes 🖬 No
Casing	Diameter:	<u>2</u> inc	hes	Туре: 👿 РУ	C 🖸 Stainles	s 🛛 Galv. Steel	□ Teflon®	Other:	17 10.5 × 2.3
Screen	Diameter:	<u>2</u> inc	hes	Туре: 🍹 РV	C 🛛 Stainles	Galv. Steel	□ Teflon®	Other:	
Total De	epth of Well:	169	feet	From: 🖬 To	p of Well Casir	g (TOC) 🛛 T	op of Protectiv	ve Casing	Other:
Depth to	Static Water:	5.01	feet	From: 🟹 To	op of Well Casir	g (TOC) 🛛 T	op of Protectiv	ve Casing	Other:
1	Product:		feet		· .	ig (TOC) 🛛 T	op of Protectiv	ve Casing	Other:
Length o	of Water Colum	111 <u>: 87.59</u> 1.69.9		Well Volume		-		•	GS): /ft6-in well = 1.469 gal/ft
	GE DATA					Time:		eii = 0.007 gai/	Equipment Model(s)
-	·		_		RIOLOUN DU		D	A	lonson Pump
Purge N	lethod: Cent	trifugal Pum	D Peristal	tic Pump 🖸 Ine	ertial Lift Pump	Other:		1. <u> </u>	151-07
Material	s; Pump/Bailer					DOther:		2	1)1-336
Material	s: Rope Tubin					lon		3	teron Dipper
Volume	to Purge (mini							4	DRT-15CE
1	Il purged dry?	🗆 Yes			te:	-			Calibrated? Xes 🗆
.	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity		Commonte
Time	Removed (gai)	±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	Water Level	Comments
1504	1.0	7.15	18.71	0.197	-84.3	0.29	0.04	5.90	
1509	2.0	7.20	18.64		-99.4	0.19	0.25	5.98	
1514	3.0	7.21	18.61	0.202	-99.7	0.16	0.30	6.02	
1519	4.5	7.24	18.60	0.207	-101.4	0.13	0.3	6.18	
1524	5.5	7.27	18.55	6.229	-78.6	0.12	0.05	6.14	· · · · · · · · · · · · · · · · · · ·
							-	Purge dat	a continued on next sheet?
4. SAM	PLING DA	TA	-					<u>Geoc</u>	hemical Analyses
Method(er, Size:			1 2" Sub. Pur tial Lift Pump	np 🔲 4" Sub. F	Pump	Ferro	us Iron: mg/L
Material	s: Pump/Bailer	. An	/lene 🙀 Stai	niess 🛛 PVC		Other:			\backslash
Watenas		Dedicat	_		-	ned 🏟 Disposi	able	DO:	mg/L
Materials	s Tubing/Rope				Teflon® 🗆 Nyli I Field-Cleaned		ie	Nitrat	e: mg/L
8	Water at Time				Field Filtered		No 🤧	Sulfat	ie: mg/L
Sample	ID: MJ-19	Sample D	ate: <u>11/19/0</u>	Sample	Гіте: 1535	_ # of Contai	ners: <u> </u>	Alkali	nitz:mg4_
•	e Sample Colle				· · · · · · · · · · · · · · · · · · ·	# of Contai			······································
Equipme	ent Blank Colle	cted?	res Ma No	ID:		# of Contai	ners:		
5. COM	MENTS	PUMP	ntake	0~16	13' btoc	(length	of fine	on Mon	useon = 125')
~						1			
Note: Include	comments such a	as well condi	tion, odor, pro	esence of NAPI	., or other items	not on the field	data sheet.	7 - 11 AA	1
	×. –			يغرب		-	X	<u>~~~~~</u>	1 mg
FORM GW-	2 (Rev 25.Sept.)	08 - sej)		Page	of	2	Signature	• /	U

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: <u>MW-19</u>

Time	Cum. Gallons	1 PL 3								
	Removed		1.1.1	 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	C	omments
5:29			18.55	1.0.218	-67:6	6.13	0.01	6.15		
535	Sample	6 Me	cold			. (P				9
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					105	2				
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	Mariane 4		F.3		40 P3 11 P		1			
	25-23		E.				Č4		3	
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	a noon			• <u>_2</u>				5**		
	-79.4				નો કે	ji)	2			
	2 170						5			
			in a	6.0	P. 1. P.	P* 51	9 Pm 8-1	240 BC		7
			16.6	61 6 61 6		<u>ن د د د د</u>	-		ting -	<u>ज</u> ुश्र त
		1	0.00		12 05		1	VA		<u></u>
		<u> 10.6</u>		2.5		2.0.00		1.046		<u> </u>
						100 A 44		10.1	- 1 	
			20.0	Territoria.	9 (01°	65 m 2	15.55		1	
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1		-				8				
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	= ADERE			10						

Purge data continued on next sheet?

Signature

Page _____ of ____



WELL ID: <u>MW-20</u>

1. PRO	JECT INF	ORMA	TION		_				
Project	Number: <u>13</u>	6868	_ Task Nur	nber: <u>400.0</u>	01	Area of Cond	cern:		
Client:	Owens Cor	ning				_ Personnel:			cadaws
Project	Location: An	derson, S	South Ca	rolina		_Weather:	Sunny	PUSK	= 603.
2. WEL	L DATA		Date M	easured: <u>1</u>	119 09	_Time:	7:20	Temp	oorary Well: 🛛 Yes 📢 No
Casing	Diameter:	<u>2in</u>	ches	Туре: 🗖 Р\	/C D Stainles	s 🛛 Galv. Stee	I Teflon®		
Screen	Diameter:	<u>2in</u>	ches	Type: ष P\	/C 🛛 Stainles	is 🛛 Galv. Stee	I 🗆 Teflon®	Other:	
Total D	epth of Well:	_67	_feet	From: 🗆 To	op of Well Casi	ng (TOC) 🛛 🛛	Fop of Protecti	ve Casing 🛛	Other:
Depth to	o Static Water:	21.20	_feet	From: 🖗 To	op of Well Casi	ng (TOC) 🔲 1	op of Protecti	ve Casing 🛛	Other:
	o Product:		_feet			ng (TOC) 🛛 🏾	Fop of Protecti	ve Casing 🛛	Other:
Length	of Water Colur	nn: 45.%	feet	Well Volume	e: 1.64	gal		nterval (from	
	GE DATA		Dete D		1 19 69			/eli = 0.667 gai	/ft 6-in well = 1.469 gal/ft
			Date Pu				11:25 Pump		Equipment Model(s)
	Aethod: 🗗 Ba						nsoon		51 556 MPS
Material	ls: Pump/Baile	r Dedica	nylene A St ated DP	ainless D PVC repared Off-Site	□ Teflon® 0 Field-Clea	Other: aned Dispose	sable	2.	rt-BCE Tubilin
Material	s: Rope/Tubin	g 🙀 Polyeti	hylene 🗆 Po		Teflon® D Ny	/ion D Other: ed 🗗 Disposat		3	
Volume	to Purge (mini			volumes or		aallons		4	
	Il purged dry?	Yes			te: 200 -	dop ~	lm,		Calibrated? 🎽 Yes 🛛
	Cum. Gallons	рН	Temp	Spec. Cond.	1	DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
1:36		6.00	19.89	0.067	28.5	4.92	1.51	21.24	200 mil mm
7:35	-	5.45	19.07	0.066	32.5	5.71	0.76	-	water clerv
11:40		5.13	20.09	0.066	32.1	4.87	0.61	21.26	400 mlmm
17:45	1.259	5.09	20.40	0.068	32.8	4.76	0.42	21.07	400 milm
17:50	0	5.08	20.40	().068	33.0	4.77	4.92	al. 28	
								Purge dat	a continued on next sheet?
4. SAMF	PLING DA	TA				31 U		Geoc	nemical Analyses
Method(s): Dail Balcenti	ler, Size: rifugal Pump		Bladder Pump	□ 2" Sub. Pur	np		Ferro	us Iron: mg/L
Materials	s: Fump/Bailer		vlene 🖬 Sta	inless D PVC epared Off-Site	Teflon®	Other:		DO:	mg/L
Materials	s: Tubing/Rope	Polyethy	/lene 🗆 Poly edi 🗆 Prep	ypropylene 🛛 1 ared Off-Site	Teflon® □ Nyle □ Field-Cleaned	on 🛛 Other: d 6- Disposabl	e	Nitrat	e: mg/L
Depth to	Water at Time				Field Filtered			Sulfat	<u>^</u>
Sample	10: MW-RO	Sample D	ate: 11 19	Sample 1	Гіте: 17:6				<u> </u>
Duplicate	e Sample Colle	ected? □	Yes 😿 No) ID:	~	# of Contair	ners:	Alkalii	nity: mg/L
Equipme	ent Blank Colle	cted? 🗆 `	Yes 🙀 No) ID:	~	# of Contair	ners:		
	MENTS								
								·	
ote: Include	comments such a	as well condi	tion, odor. pr	esence of NAPL	., or other items	not on the field	data sheet.		



WELL ID: <u>MW-20</u>

	Cum, Gallons	Hq	Temp	n page Spec. Cond.	ORP	DO	Turbidity			
Time	Cum, Gallons Removed (gal)	• ±0.1 su	. ' <u></u> ±2°C .	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	C	ommen
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Purge data continued on next sheet?



WELL ID: <u>MW-21</u>

1. PROJECT INFORMATION
Project Number: <u>136868</u> Task Number: <u>400.001</u> Area of Concern:
Client: Owens Corning Personnel: 2 1 PM
Project Location: Anderson, South Carolina Weather: Cloudy ~ 60 °F
2. WELL DATA Date Measured: 1.16.2 Time: 4
Casing Diameter: 2inches Type: VPVC 🗆 Stainless 🗆 Galv. Steel 🗆 Teilon® 🕀 Other:
Screen Diameter: 2inches Type: WPVC I Stainless I Galv. Steel I Teflon® I Other:
Total Depth of Well: <u>16.5</u> feet From: MA Top of Well Casing (TOC)
Depth to Static Water: 6.42_feet From: 4 Top of Well Casing (TOC) Top of Protective Casing Other:
Depth to Product:feet From:
Length of Water Column: 7.58 feet Well Volume: 1.60 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: 1/-18-09 Time: 329 Equipment Model(s) Burge Method: Bailer, Size: Bladder Pump 22" Sub. Pump 4" Sub. Pump
Purge Method:
Materials: Pump Bailer Polyethylene Stainless PVC Teflon® Other:2.
Materials: Bone/Lubing DPolyethylene DPolypropylene DTeflon® DNylon DOther: 3 DNT-ISCE
Volume to Purge (minimum): 3 well volumes or 4.80 gallons 4. <u>YS1 - r56</u>
Volume to Purge (minimum):
Cum. Gallons pH Temp Spec. Cond. ORP DO Turbidity
TimeRemoved (gal) $\pm 0.1 \text{ su}$ $\pm 2^{\circ}$ C> of $\pm 3\%$ or $\pm 10 \ \mu\text{S/cm}$ > of $\pm 10\%$ or $\pm 20 \ mV$ > of $\pm 10\%$ or
1334 1.0 5.25 18.87 0.046 268.9 4.35 125 7.06-
1339 2.5 5.18 18.96 0.046 279.4 4.28 15.5 7.09
1344 4 5.16 1894 0.045 2828 4.17 5.75 7.09
1349 5.5 5.16 19.02 0.045 283.9 4.11 3.65 7.09
1354 \$7 5.12 19.03 0.045 286.5 4.10 1.86 7.09
Purge data continued on next sheet?
4. SAMPLING DATA <u>Geochemical Analyses</u>
Method(s):
Materials Pump/Bailer Polyethylene @Stainless DPVC D Teflon® D Other:
U Dedicated U Prepared Off-Site UrField-Cleaned U Disposable DO.
Materials: Ubing Rope Polyethylene Polypropylene Teflon® Nylon Other: Nitrate: mg/L
Depth to Water at Time of Sampling: 1.09 Field Filtered? Yes -No Sulfate:mg/L
Sample ID: Mu-21 Sample Date: 10. 5. 34 Sample Time: 1400 # of Containers: Alkalinity: mg/L
Duplicate Sample Collected? U Yes & No ID: # of Containers:
Equipment Blank Collected? Yes Yo ID: # of Containers:
5. COMMENTS
5
Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.
1/2
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WELL ID: <u>MW-21</u>

	Cum. Gallons	ρН	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal) :	±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	Water Level	Cor	mments
1357	8	5.13	19.02	.0.045	286.5.	4.04	2.37	7.09		۲.,
1400	Sample	Collec	ted			10				
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Purge data continued on next sheet?

Page _____ of _____

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-22

	JECT INF								
				h	04				
	Number: <u>136</u>					Area of Conc Personnei:		10	7447
-	Owens Corr							-	<u></u>
	Location: And			-					
2. WEL	L DATA	8.	Date Me						oorary Well: □Yes G No
Casing	Diameter:	<u>8</u> inc	ches .			s 🗆 Galv. Stee			Part 1
Screen	Diameter:	<u>8</u> ino	ches	Type: Type:	C Q Stainles	s 🛛 Galv. Stee	I□Teflon®	C Other:	
	epth of Well:		-			• • •	•	•	Other:
Depth to	o Static Water:	5.32	feet	From: To	op of Well Casir	ng (TOC) 🗖 T	op of Protectiv	ve Casing 🛛	Other:
Depth to	o Product:		feet	From: To	op of Well Casi	ng (TOC) 🔲 T	op of Protectiv	ve Casing 🛛	Other:
Length	of Water Colun	nn: <u>((0.76</u>	feet		e:(= 0.041 gal/ft			nterval (from /ell = 0.667 gal	GS): /ft 6-in well = 1.469 gal/ft
3. PUR	GE DATA		Date Pu	rged: <u>((•(</u>	19.09	Time: _/5	55		Equipment Model(s)
			_				-	1 1	-4500 Pump
	s: Pump Bailer		nylene 🎵 Sta	inless 🛛 PVC	□ Teflon® □	Other:			451-556
	$\mathcal{O}_{\mathcal{O}}$	Dedica	ted D P	repared Off-Site	🛛 🎽 Field-Clea	ned 🛛 Dispos			1
Material	s: Rope Tubin				Teflon® 🗆 Ny 🗆 Field-Cleane	lon Other: d	ble		tron diffe
Volume	to Purge (mini	mum):	well v	olumes or		galions		4	PRT-/SCE
Was we	Il purged dry?	🗆 Yes	¥ N₀	Pumping Ra	te:	gal/min			Calibrated? 🌠 Yes ם
Time	Cum. Gallons Removed	⊳рН	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
	(gal)	±0.1 su	±2℃	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	vvaler Lever	Comments
1600	25845	5.56	18.69	0.125	158.9	1.85	10.4	5.84'	
1605	4	5.53	18.68	0.123	182.6	1.82	5.20	5.84'	
1610	6	5.49	18.65	0.123	191.3	2.18	2.16	5.84	
1615	8	5.44	18.63	0.118	204.8	2.65	1.39	5.84	
1620	10.5	5.44	18.60	0.117	206.6	2.99	2.35	5.84	
·				\$				Purge data	a continued on next sheet? 🛛 🍞
4. SAMF	PLING DA							Geocl	nemical Analyses
Method(s): Dentr	er, Size: ifugal Pump	D Peristalti	Bladder Pump c Pump 🖸 Iner	1 2" Sub. Pun tial Lift Pump	np 🗔 4" Sub. F DOther:	Pump	Ferrou	us Iron: mg/L
Materials	s: umpBailer	Polyethy Dedicate	/lene 🎽 Stail	nless Q PVC	Teflon®	Other: ed		DO:	mg/L
Materials		S Polyethy	/lene C Poly	propylene 🛛 T	eflon® 🗆 Nylo	on D Other:			
		Dedicate	ed 🛛 Prepa	red Off-Site	Field-Cleaned	🎽 Disposabl		Nitrate	e:mg/L
	Water at Time ID: MU-22					? 🗆 Yes 🎙		Sulfat	e: mg/L
			· ·					 Alkalir	nity: mg/L
	e Sample Colle Int Blank Collec					# of Contair			-
				·····		# of Contain			
5. COMI	MENTS							10- 11-	
3t.							· ·. · · · · · · · · · · · · · · · · ·		
Noto: Includ-			lion of				J_44		
NULE. INCIUDE	comments such a	s well condi	ion, oaor, pre	sence of NAPL	, or other items	not on the field (ata sneet.	. Pall	
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GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: _____MW-22___

	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	±0.1 Stu	±2°C		> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Con	nments
525	11.5	5.39	18.52	D.116	212.6	.3.07	1.27	5.81	Bi	
630	13.0	5.39		0.116	218.6	3.12	0.76	5.81		
635	Sample	Colle	eted							
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	-	2.00	$C \in \mathbb{C}^{n}$					313	112	
		$E_{\rm T} = E_{\rm eff}$		36.5	1168		Are ar	1	100	-4 R-
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Purge data continued on next sheet?

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

### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: <u>MW-24</u>

I. PRO	JECT INF	ORMA	TION						
Project	Number: <u>136</u>	868	_ Task Num	ber: <u>400.0</u>	01	Area of Conc	ern:		
	Owens Corr		<u></u>			Personnel:			
Project	Location: And	lerson, S	South Car	olina		_Weather:	pt. sun	ny,60	
2. WEL	L DATA		Date Me	easured: _	119/07	_ Time:	15: 05	Temp	orary Well: 🛛 Yes 🚱 No
Casing	Diameter:	2inc	ches	Туре: 🗆 Р	/C G Stainles	s 🛛 Galv. Stee	Teflon®	Other:	
Screen	Diameter:	<u>2</u> inc	ches	Туре: СР	/C C Stainles	s 🛛 Galv. Stee	C Teflon®	Other:	
	epth of Well:					-		-	Other:
Depth t	o Static Water:	8.17	_feet						Other:
	o Product:		-						Other:
Length	of Water Colun	nn:	_feet		e: 10.38	gal 		nterval (from ell = 0.667 aal/	GS):
3 PUB	GE DATA		Date Pu	rged: <u>II</u>			5:15		Equipment Model(s)
	🗆 Ba	iler, Size:		Bladder Pum	o 🗖 2" Šub. Pu	ump 🛛 4" Sub.	Pump	1 N	es 656 Mps
-	A Cerr				ertial Lift Pump	Other: Mov Other:			Rt-15 CE Turbidin
Materia	ls: Pump/Bailer	Dedica	ated DP	repared Off-Site	e 👽 Field-Clea	aned 🛛 Dispos		2.	
Materia	ls: Rope/Tubing				Field-Cleane	/lon  ☐ Other: ed  ♀ Disposat		3	
Volume	to Purge (mini	mum) <u>:</u> N	A well v	volumes or		gallons		4	
Was we	Il purged dry?	Yes	1	Pumping Ra	1	w gal/min			Calibrated? 🎾 Yes 🗖
Time	Cum. Gallons Removed	<u> </u>	Temp	Spec. Cond	ORP > of ±10% or	DO > of ±10% or	Turbidity	Water Level	Comments
	(gal)	±0.1 su	±2°C	±10 µS/cm	1 -	±0.2 mg/L	≤ 10 NTU		
15:23		5.55	20.46	6.18 5	-72.0	2.04	5.01	9.90	waterclew
15:28		5.01	20.04	0.185	-65.0	1.13	6.43		
15:33		5.53	20.45	0.184	-66.7	0.81	7.46	10.65	300 ml/mn.
15:38	0.50	5.60	20.35	0.184	-65.4	0.64	6.23	10.11	
15:43				0.183	-61.9	0.55	6.54	10-20	
								Purge dat	a continued on next sheet?
4. SAM	PLING DA	TA						<u>Geoc</u>	hemical Analyses
Method		ler, Size: rifugal Pump				mp 🛛 4" Sub. I 🗆 Other: <b>Mo</b>		Ferro	us Iron: mg/L
	s: Pump/Bailer	Dedicat	ted 🛄 Pr	epared Off-Site	□ Teflon® □ V Field-Clear	ned 🖸 Dispos	able	DO:	mg/L
Materia	s: Tubing/Rope	Polyeth	iylene □ Pol <u>y</u> ted □ Prep	ypropylene D ared Off-Site	Teflon® 🛛 Nyl	on Dother: d Disposab	e	Nitrat	e: mg/L
	Water at Time			20		d? 🗆 Yes 🕯		Sulfat	te: mg/L
	10: <u>MW - 24</u>						ners:	 Alkali	nity:mg/L
	te Sample Colle				241909	# of Contai			
Equipm	ent Blank Colle	cted?	Yes 🕅 No	o ID:		# of Contai	ners:		
5. COM	MENTS	repl	aced	J- p100	1, nec	ds to	be su	rveye	A
ini	Lint ul	m ( 1 1 1	100	· ····	C. AADI.			11.1	
	time plu	anti	10C IV	1 (maar	/ Writin	purgin	9 212	VTCL.	



WELL ID: _____MW-24 _____

	Cum. Gallons Removed	, pH	,Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	.±0.1 su	т., <del>4</del> 2°С	> of ±3% or ≠10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
-17			54 :	ð.	t c i p		-		
								500 5	
	-							-	
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	1	- 	<del></del>	<u></u>	3-61	م به د	41.45		
• - 47 - 4458).	- Aso - 0.000					ी से रेन्ट			
71.714	ar. 170 -	4 (	<u> 31 1</u>		** *			53.1	•. •. •
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		<u> </u>	.∕te	7540 M			4		h
	•			3	-~		**	24	
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	90		- <b>1</b>	.x				1	1.4. j.s. 1.4. j.s.
	2		Sec		2 5 12	9.04	<u>x</u>		8 II
			***		-		X		
		Na - 1	18 5 54	en ri	191		3.500		

Purge data continued on next sheet?  $\hfill\square$ 

Page _____ of _____

## **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: MW-25

II. PHO	JECT INF	ORMA	TION						
Project	Number: <u>136</u>	6868	_ Task Nun	nber: <u>400.0</u>	01	Area of Cond	cern:		
	Owens Cor					_Personnel:	-	m	
Project	Location: And	derson, S	South Ca	rolina		_Weather:(	cloudy	~ 60 °F	
2. WEL	L DATA	8	Date M	easured: .M	. 16.09	Time: 🛦	M	Temp	orary Well: DYes : DANO
	Diameter:					s; Drealy. Stee			
	Diameter:					s 🛛 Galv. Stee	- 1 (19.4)	r • *	
	epth of Well:	- Kaling - 172				ng (TOC) 🗀 1			
Depth t	o Static Water:	10.01	feet	From: 2 -	op of Well-Casi	ng (TÔC) ' 🖸 T	Fop of Protecti	ve Casing * 🗖 C	Dther:
Depth t	o Product:		feet	From:	op of Well Casi	ng (TOQ) 📜 🖓	Top of Protecti	ve Casing 🛛 (	Other:
Length	of Water Colur	nn: <u>39.9</u>	G_ _feet	Well Volume	6.67	- 98	Screened I	nterval (from (	GS):
				Note: 1-In wel	l = 0.041 gai/ft	2-in well = 0.16	7 gal/ft 4-in v	vell = 0.667 gal/l	ft 6-in well = 1.469 gal/ft
3. PUR		ailer sSize:	Date Pu	rged: <u>4.1</u>	F.01	Time: /47	Z <b>F</b>	<u> </u>	Equipment Model(s)
Purge N		trifugal Pum	p 🛛 Perista	itic Pump D Ini	ertial Lift Pump	Other:	Pump	1. <u>H</u> e	rom dipper
1. A. I	le: Pump/Bailer					∃ Other: aned □ Dispos			mean lings
Materia	Is: Rope/Kubing	Polyet	hylene 🖵 Po	lypropylene 🗅	Teflon® D Ny	lon Other:	54 11	2 V	51-556 %
	$\sim$		ated U Prep	bared Off-Site	L Field-Cleane	ed 🖬 Đisposat	ple		
	to Purge (mini	mum): □ Yes			ite:	-	an a		Calibrated? Dres D
Was we	Cum. Gallons	1	Temp	Spec. Cond.			Turbidity	1	
Time	Removed	±0.1 su	±2°C	· · · · · · · · · · · · · · · · · · ·		> of ±10% or		Water Level	Comments
	(gal)	±0.1 su	#2 0	±10 µS/cm	±20 mV	±0.2 mg/L	≤ 10 NTU		
1433	1.0	5.03	17.28	0.054	304.3	7.24	289	10.99	
1938	2.0	5.05	17.29	0.054	32.0	7.21	355	11.0'	
1443	3.0	5.05	17.31	0.052	307.3	7.20	224	11.09-	
1448	4.0	5.03	17.31	0.053	309.5	7.20	166	11.15	-
1453	5.0	5.04	17.28	0.053	310.7	7.20	110	11.14-	
		·						Purge data	continued on next sheet?
4. SAM	PLING DA	ТА						Geoch	emical Analyses
Method(						np		Ferrou	s Iron: mg/L
Material	st Pump/Bailer				C Teflon® C		· · ·		3 iioii iiig/L
	$\sim$	U Dedicat		•	Field-Clear		able	DO:	/ mg/L
Materials	s. Tubing/Rope	Dedicat	ed 🖸 Poly	vpropylene 🛄 1 ared Off-Site 🕻	「eflon® □ Nyk ] Field-Cleaned	on D Other: D Disposabl	e	Nitrate	: / mg/L
	Water at Time	of Sampli	ng: <u>l0.8</u>	5.	Field Filtered	l? □ Yes €	- No	Sulfate	mg/L
Sample	10:MW-25	Sample Da	ate: 11/18/	M_Sample 1	lime: 1545	- # of Contair	ners: S		
	e Sample Colle						ners:	Alkálin	ity mg/L
Equipme	ent Blank Colle	cted?	Yes No	ID:	·	# of Contair	ners:	/	
5. COM	MENTS								
				a 10					
			1.000						
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	., or other items	not on the field	data sheet.	· · · · · · · · · · · · · · · · · · ·	
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	., or other items	not on the field	data sheet.		>>



WELL ID: MW-25

	Cum. Gallons	рН	Temp	n page _/	ORP	DO	Turbidity		
Time	Removed (gal)	•±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	Water Level	Comments
158	6.0	5.03	17.30	0.054	311.4.	7.19	70.4	11.16-	
503	7.0	5.03	17.30	0.053	313.9		55.5	11.13-	
508	8.0	5.0Z	17:30	0.055	314.8	7.18	34.2	11.20-	
513	1.0		17.31	0.053	316.3	7.18		11.24	54.94 -
518	10	4.99	17.30	0.053	317.2	7.18	24.8	<u>h.30</u>	
523	11		17.31	0.055	8	7.18	18.7	11.34	• 
28	12		1	0.054		1	15.7	11.33-	
32	113-	9.98	17.31	0.054	318.9	7.18	14.7	11.32 -	4 4 - 13 0
-38.				0.054		7.15			tur6= 13.0
548		1		0.254		7.14	9.85	10:85	-T.
545	Samp	e (vi	lecteo		<u>я</u> «-	el.			51
		_							
								-	
			1-1-	A					5
		50 G - 12 12 G - 13	5.1.12	8	14 - 14 C		2. 2 ² . 3		en <u>an brên</u> De stêr se
		1994.0	10000	444 - 1 	5 <b>-</b>		e	- 19 - 19	<u> </u>
			14 m 1		3 (* * * * *	57.	1.1.1	Part C	
		1	4.14		K	*	100 m	100.00	
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							2 6		3 
					4. Y 5 4 1				
							•		

Purge data continued on next sheet?

Page 2 of 2

## **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: <u>MW-26</u>

1. PRO	JECT INF	ORMA	TION							
Project	Number: 13	5868	_ Task Nur	nber: <u>400.0</u>	01	Area of Cond	ern:			
	Owens Cor					-				
Project	Location: And	derson, S	South Ca	rolina		Weather:	train,	~ 40 *	F	
2. WEL	L DATA		Date M	easured: 🤐		the second se			oorary'Well: 🛛 Ye	s Gentio
Casing	Diameter:	2 <u>.</u> in	ches •	Туре: 🛉 🕵 Р	/C - D Stainles	s 🛛 Gàly. Stee	- Tellon®	0 Other:		• g = K = K
Screen	Diameter:	<u>2 ~</u> inc	ches	Type: GP	/C	s 🖾 Galv. Steel	☐ Tetion®	Other	<b>\</b> ,	( * Y) • · · · • •
	epth of Well:			From: T	op of Well Casir	ng (TOC) ⊂ u T	op of Protecti	ve Casing 🖸	Other:	
Depth to	o Static Water:	15.97	feet	From: To	op of Well Casir	ng (TÓC) 🗆 T	op of Protecti	ve Catsing	Other:	
Depth to	Product:		feet	From: ' 💭 To	op of Well Casi	ng (TỌC) , 🖬 T	op of Protecti	ve Casing 🛛	Other:	
Length	of Water Colun	nt: <u>507</u>	feet	Well Volume	<u>xy</u>	_gal••••	Screened I	nterval (from	GS): /ft 6-in well = 1.4	
3. PUR	GE DATA	1.92	Date Pu						- Equipment N	
Purge M	lethod: 🗆 Ba	iler, Size:		Blattder Pump	G 2 Sub Pu	mp 🖸 4" Sub.	Pump •	1.1. N	1 onson Pu	
	s: Rump/Bailer	D Polyet	nylene, E Sta	ainless D PVC	CI Teflon®	Other:	- S - J			<b></b>
	-			repared On-Site	e errielu-ciea	ned Libispos	able		51- 55+	
Material	s: Rope/Tubing	Dedica	ted DPres	lypropylene .	Teflon® D Ny Field-Cleane	lon, <b>D</b> ,Õţhér: d <b>G-D</b> isposab	le ···	· · 3. 🚺	NT- 15CE	ð.
Volume	to Půrge (mini							4. H	erm d. Ape	
	Il purged dry?	· 🗆 Yes			te:			•••	Calibrated?	
Time	Cum. Gallons	рН	Temp	Spec. Cond.		DO	Turbidity		_	
Time	Removed (gal)	±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	Water Level	Commo	ents
1637	0.75	6.41	17.93	0.062	286.4	5.10	383	17.95	•	
1642	1.50	6.39	18.09	0.060	2819	5.42	546	19.12	-	
1647	2.5	6.40	17.90	0.061	272.0	5.35	443	20.52	-	
1652	4.5	6.40	17.89	0.060	265.4	5.30	535	21.62		
1657	5.5	6.41	17.94	0.062	261.3	5.63	395	22.85		
								Purge data	a continued on nex	t sheet? 🎽
4. SAMF	PLING DA							Geocl	nemical Analyse	<u>s</u>
Method(s	s): D Baile	er, Size: ifugal Pump	Peristalti	Bladder Pump c Pump 🖸 iner	tial Lift Pump	np 🛛 4" Sub. P I Other:	ump	Ferro	us, Iron:	_mg/L
Materials	: Pump/Bailer	Polyethy	/lene 🖪 Stai	nless 🗆 PVC	🔾 Teflon® 🖸	Other:				_ 0
1		Dedicate		epared Off-Site			ble	DO:		_ mg/L
1 .		Dedicate	ed 🛛 Prepa	red Off-Site	Field-Cleaned	Disposable	•	Nitrate	e:	mg/L
	Water at Time					? 🗆 Yes 🖬		Sulfat	e: \	mg/L
	D: <u>MW-26</u>						ers:	 Alkalir		
	e Sample Colle							Aikaiji	nty. <u> </u>	_ mg/L
Equipme	nt Blank Collec	ted?	es Par No	ID:		# of Contain	ers:			
5. COM	MENTS	Rige	l fer	2 hrs	. Samj	le coller	ted wh	ing fur	$b_{1} = 127$	ZNT4
Note: Include c	comments such a	s well condit	ion, odor, pre	sence of NAPL	, or other items	not on the field a	ata sheet.			
		1994					2-	3		
FORM GW-2	2 (Rev 25.Sept.0	8 - sej)		Page	of	s	ignature			



WELL ID: MW-26

. PUR		(contin	6					1		
Time	Cum. Gallons Removed	pН	Temp	Spec. Cond.	ORP	DO > of ±10% or	Turbidity	Water Level	с	omments
Time	(gal)	.±0.1 sµ	±2℃	> of ±3% or [_±10 µS/cm	> of ±10% or ±20 mV	±0.2 mg/L	≤ 10 NTU			
707	6.0	6.44	17.61	.0.060	260.9	. 5.70	442	22.67		0
1707	7.0	667	17.88	0.061	244.0	6.25	43.1	24.45	t Mored	pomp inta
727	9.0	6.42	17.70	0.060	253.9	5.79	343	27.25	•	
1737	10.0	6.40	0		257.7	5.86	206	26.40		
1747	11	6-45	17.64	0.060	254.3	5.86	193	26.86		
1757	11.5	6.43	17.43	0.061	257.9	5.89	187	26.15	0	
1807	12.5	6.33	17.68	0.062	261.7.	.5.97	172	26.33	2	
1817	13.5	6.38	18.09	0.061	757.6	5.99	142	29.60		
1827	- 14.5	6.35	17.91	0.060	261.0	6.00	145	29.95		
1832	7 15:	6.38	17.87	0.060	256.7	5.85	127	29:60		
1835	Purge	1 for	21	ms, E	crane	le' sta	ble,	Sample	coll	effed
	<u> </u>		11				-	T	•	
		<u> </u>								5
	1			10 de 14 16 16 16 16 16 16 16 16 16 16 16 16 16	a ^{re l} e f	5 3 5 5 3	di sette de		· 12 •	
			1.		1.57	14.0		5. •€ 	\$ 505 12	1 1 C.
	7									
		<b>.</b>	3 . 3			14.11	94 - 1 A -		- 200 - 200	
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	*	2. . v	3 . 3	4 5 4 <u>.</u> 4 . 						
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							1 × ·			
		•								

Page 2 of 2

Signapore

WELL ID: <u>MW-27</u>

B R O W N AND C A L D W E L L

1. PRO	JECT INF	ORMA	TION							
Project	Number: <u>136</u>	5868	_ Task Nun	nber: <u>400.0</u>	01	Area of Cond	cern:			1
1 .	Owens Cori					_ Personnel:	c.Mino	[ J. Me	adows	
Project	Location: And	derson, S	South Ca	rolina		_Weather:	pt.sun	ny 6	03	
2. WEL	L DATA	1.1	Date M	easured: 11	119/09 -	. Timé: 👘	6,20.	Tem	porary Well: Ves ONo	1
Casing	Diameter:	200 100				s CrGalv. Stee	I 🛛 Teflan®	C tOther:	•	
Screen	Diameter:	<u>8</u> ino	ches	14		s 🛛 Galv. Stee		4 N 4		
Total De	epth of Well:	99	feet	From: To	op of Well Casi	ng (TOC) 🔲 T	op of Protecti	ve Casing 🛛	Other:	
Depth to	o Static Water:	21.40	feet	From: 🖪 To	op of Well Casi	ng (TOC) 🔲 🛛	op of Protecti	ve Casing	Other:	
Depth to	o Product:		feet		· ·		Fop of Protecti	ve Casing	Other:	
Length	of Water Colur	nn: 77.6	feet		<u>= 202.</u>			nterval (from		
								vell = 0.667 gai	l/ft 6-in well = 1.469 gal/ft	4
3. PUR				irged:			.6.30		Equipment Model(s)	
Purge N	lethod: 🛱 Cen	trifugal Pum	p 🖸 Perista	Itic Pump D Ine	ertial Lift Pump	ump 🖬 4" Sub. 🖾 Other: <u>M0</u>	nsoon		YSI 556 MPS	. ,
Material	s: Pump/Bailer	<ul> <li>Polyeti</li> <li>Dedica</li> </ul>		ainless		Other: aned Dispose	sable	2. <b>D</b>	RT-15CE TURBIN	imeta
Material	s: Rope/	Polyet	nyiene 🗆 Po	lypropylene	Teflon® D N	ylon 🖸 Other: ed 🗯 Disposat		3		
Volumë	to Purge (mini					gallons	bie	4		
	Il purged dry?	Yes		Pumping Ra		gal/min IV	ymin		Calibrated? Pres	
-	Cum. Gallons	рН	Temp	Spec. Cond.	1	DO	Turbidity			1
Time	Removed (gal)	±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	<pre>&gt; of ±10% or ±0.2 mg/L</pre>	≤ 10 NTU	Water Level	Comments	
16:35		6.17	20.27	0.131	21.3	5.88	1.36	21.42		]
110:40		6.44	a0.11	0.124	22.4	1.04	2.83	21.41	200mc/mn.	
16:45		0.63	19.74	0.123	23.0	0.93	2.23		-	
16:50		6.28	19.91	0.123	25.8	0.71	2.18	21.41	200 milmn:	
16:55	1.0 4	6.65	19.93	0.123	23.7	0.68	_	-	<u> </u>	
	J				1	L		Purge dat	a continued on next sheet?	4
4. SAMF	PLING DA	TA						Geoc	hemical Analyses	]
Method(	S) ²	ler, Size: rifugal Pump				mp 🛛 4" Sub. F		Ferro	us Iron: mg/L	
Materials	s: Pmp/Bailer	Polyeth	ylene 📽 Stai	inless D PVC	C Teflon® C	Other:		DO:	mg/L	
Materials	s: Tubing/Rope	Dedicat	/lene 🗆 Poly	epared Off-Site vpropylene	Fefion® 🖾 Nyl	on D Other:	adie			
	Water at Time	Dedicat	ed 🛛 Prepa	ared Off-Site	Field-Cleane	d 🍯 Disposabl		Nitrat	e:mg/L	
	ID: <u>MW - 27</u>					d? 🗆 Yes 👂		Sulfat	te:mg/L	
	e Sample Colle					# of Contair	_	Alkali	nity: mg/L	
	ent Blank Colle				-	# of Contain				
										ł
5. COMI	VIENTS									
	<u> </u>									ł
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	, or other items	s not on the field	data sheet.			
			31							1
						· · · · · ·				

Page _____ of _____



WELL ID: MW-27

Time 17:00 17:05	Cum, Gallons Rémoved (gal)	±0.1 su	, ±2°C	> of ±3% or .±10 µS/cm	> of ±10% or	> of ±10% or		Water Level	Comme
	1.59		19.80		±20 mV	±0.2 mg/L	≤ 10 NTU		
17:05	1.59		1. 1. 1. 20 20	0.123	26.3	0.60	2.67	21.41	200mc/n
	9	6.61	19.94	0.123	24.9	0.56		21.41	
						$-T_{\rm s}$			
						, P [*]			
								Bag	
					1A.			M7	
			1.800	1	5 . • pi	1.			
2912	143) <b>55</b> 4		Mirak						
1573	21-190						Z	-	
				*	ALA		<u>A</u> :		
			reta 1	N	1917 -		S.	-	
1.10-01									
							<u></u>		
	-	<u> </u>		25.0	1. 12 B	<b>1 1 1 1</b>	1. 1. 1.	*	
<u></u>	ann an is the	<u> 11</u>	1.54.5	1 11 1	1.5%		11.25	111.	
	•		÷ 🤆 •	<u></u>	- <del>c.(;</del>	6 Part		1.1	
	1	<u>+ 1- 1- 1</u>	34.0	-+-+C	25.3	6 81.	· ( 15)	en i	
				5	2.00	5,1,2	C. C. C.		
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			4		<u> </u>				-

Purge data continued on next sheet?

Page _____ of _____



WELL ID: MW-28

1. PROJECT INFORMATION	J				
Project Number: <u>136868</u> Task	Number: <u>400.001</u>	Area of Concer			
Client: Owens Corning					le adom 3
Project Location: Anderson, South	Carolina	_Weather:S	sunny	605	
2. WELL DATA	Measured: 11 20 09	_ Time:	201.	· Tempo	orary Well: 🛛 Yes 🎽 No
Casing Diameter: <u>2</u> inches	Type S & PVC D Stanles				
Screen Diameter: <u>2</u> inches	Type PVC D Stainler	ss 🛛 Galv. Steel	Teflon® D	Other:	
Total Depth of Well: 31 feet	From: D Top of Well Casi				1 an •
Depth to Static Water: 17. 13 feet	From: W Top of Well Casi	<b></b>			. X.
Depth to Product: feet	From: G Top of Well Cas	ing (TOC) 🖸 To	o of Protective (	Gasing 🗆 🕻	Other:
Length of Water Column: 13.07 feet	Well Volume: <b>2.1</b> Note: 1-in well = 0.041 gal/ft		Screened Inte	•	,
				- 0.007 ya/1	Equipment Model(s)
D Bailer Size:	Purged: <u>1170197</u> _ D Bladder Pump D 2" Sub. P		mo	Ve	51 556 Mps
Purge Method: 🖌 Centrifugal Pump	eristaltic Pump 🗅 Inertial Lift Pump	Other: Mins	pon_	··	
Materials: Pump/Bailer Dedicated	Stainless D PVC D Teflon® Prepared Off-Site V Field-Cle		ble	2. <b>PK</b>	t- 15 CE Jurbidi
Materials: Rope/Tubing Polyethylene	Polypropylene D Teflon® D N Prepared Off-Site D Field-Clean	ylon 🛛 Other:		3	· · · · · · · · · · · · · · · · · · ·
Volume to Purge (minimum):	•	•		4	
Was well purged dry? Ves R N		gal/min			Calibrated? 🎽 Yes 🛛
Cum. Gallons pH Ter	np Spec. Cond. ORP	DO	Turbidity		
Time Removed (gal) ±0.1 su ±2°	C > of ±3% or > of ±10% o ±10 µS/cm ±20 mV	r > of ±10% or ±0.2 mg/L	≤ 10 NTU	ater Level	Comments
11:27 5.04 21.2			15.6 10	7.47	water clean
11: 32 5.04 21.	1 1.21 160.7	1.04	-	-	~
1:37 4.93 22.	52 1.306 156.2	0.81 1	2.71	9.62	~
1:42 1 gal 4.72 22.	1.930 152.8			9.7	<u> </u>
11:47 4.62 22.	851.497 151.4	6.71			
			1	Purge data	continued on next sheet?
A. SAMPLING DATA				Geoch	emical Analyses
	Bladder Pump D 2" Sub. Pu			Ferrou	is fron: mg/L
	ristaltic Pump 🛛 Inertial Lift Pump Stainless 🗆 PVC 🖵 Teflon® 🕻				
Dedicated	Prepared Off-Site Tield-Clear	ned 🛛 Disposab	le	DO:	mg/L
Materials: (ubing/Rope A Polyethylene D Dedicated D	Prepared Off-Site Diffetion® Di Ny Prepared Off-Site Di Field-Cleane	ion U Other:		Nitrate	: mg/L
Depth to Water at Time of Sampling:		d? 🗆 Yes 💐	No	Sulfate	e: mg/L
Sample ID: MW - 2. Sample Date: 1	20 0 Sample Time: 12.13	# of Containe	ers: 3	 Alkalin	ity:mg/L
Duplicate Sample Collected?  Yes-b		# of Containe			mymy/∟
Equipment Blank Collected?  Ves	No D:	# of Containe	rs:		
5. COMMENTS					
Note: Include comments such as well condition, oo	or, presence of NAPL, or other item	is not on the field da	ata sheet.		
ORM GW-2 (Rev 25.Sept.08 - sej)		Si	gnature		

Page _____ of _____

**GROUNDWATER SAMPLING FIELD DATA SHEET** 

WELL ID: <u>MW-28</u>

0.1 0110	E DATA		. Temp		ORP	DO	Turbidity		
Time	- Demoved !	• ±0.1 su		> of ±3% or ±10 µS/cm		> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
11:52				1.70 5	152.9		19.870	>5.18	
11:57		4.33	99.86	1.801	152.3	0.03	`	11.78	
12:02	doul	4.25	23.00	1.912	150.0	0:54	2.19	20.27	
12:07	0	4.28	22.79	1.867	152.4	0,70		<i>aa.s6</i>	23/
12:12	3.500	4.29	22.70	1.906	154.4	0.65	1.58	20.65	
14		=		-				<u></u>	
			CA.	4	r* c 1	n			
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<u> </u>					( <b>*</b> )		ă		
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****			<del></del>		·• <u>•</u> ••			11.	• • • •
		1. 1. 1. 1.						2000 - 100 - 100 - 100 - 100 - 100	
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Purge data continued on next sheet?

Page _____ of ____

WELL ID: ____MW-29R Zone 3-Waterloo

1. PRO	JECT INF	ORMA'	TION							
Project	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>	01	Area of Cond	ern:			-
Client:	Owens Corr	ning				_Personnel:_	).Mcadan,	C.Mind		
Project	Location: And	derson, S	South Ca	rolina		_Weather:C	her sky;	~60F		
	L DATA					_Time:			orary Well:	□Yes SNo
Casing I Screen Samplin Depth to Depth to Length o <b>3. PURO</b> Purge M Material	Diameter: Diameter: g Inteval: <u>15</u> Static Water: Product: <b>2</b> of Water Colum <b>GE DATA</b> (ethod: Ba ceni s: Pump/Bailer s: Rope/Tubing	2inc 6inc 4.5-169.6 6717.7 	thes Leng feet Wel _Dg feet feet Date Pu  o  _ Perista ted  _ P ted  _ Pref	gth of water c (9094-Current I Vol. calculat 1 well vol. = [ Well Volume Note: 1-in well Bladder Pump Itic Pump D Ine ainless D PVC repared Off-Site	olumn calcula t Dg reading) ion: vol sand inte [22.18  gal - 2 22.18  gal -	ation: *0.02775)*2.31 rval(6") - vol of .52 gal] + (0.0 gal _2-in well = 0.16 TTime:0*4" ump4" Sub. Other: aned0*1 Disposation ed @Disposation	108) = Lengt waterloo ca 102 gal/ft x l Screened I 7 gal/ft 4-in v Pump Pump	th of water co asing (2")] + v ength of wate nterval (from well = 0.667 gal 1. $\underline{1}$ 2. $\underline{b}$	lumn (ft) ol of water er column GS): <u>154</u> /ft 6-in well Equipm SI 556	in tubing( $1/4$ ") 5 - 10.6 = 1.469 gal/tt ent Model(s) MPS Twbidime
	to Purge (mini					gallons		4	Calibrated?	XLYes 🗆
Was we	I purged dry?	D Yes		Pumping Ra	1	g <del>al/min</del> V	Turbidity	-	Calibrated?	
Time	Cum. Gallons Removed (gal)	рн ±0.1 su	Temp ±2°C	· ·	· · · · · · · · · · · · · · · · · · ·	r > of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	с	omments
11:07	-	6.23	18.29	0.122 Mister	33.3	69.0 y.	0.31	6719.4	water (	clear
11:12		5.88	18.31	0.126	31.9	4.68m1L 49.57.	0.94	6717.2	**	e t
11:17		5.65	18.46	0.128	32.7	2.85 Agil	1.47	6719.2	**	11
11:22	•	5.60	18.53	0.129	32.5	2.43 41-26.17.	1.71	6717.8	ĸ	٠.
11:27	0.75%	5.56	18.66	0.129	32.7	4.54 mg11 27.2 7.	1.61	G718.5	v*	4
-								Purge dat	a continued of	on next sheet?
4. SAMF	21.	er, Size:		•		mp 🔲 4" Sub. F	oump		hemical An us Iron:	-
Materials	: Pump/Bailer	Polyethy	/lene 📕 Stai	ic Pump 🗅 Iner	□ Teflon® □	Other:		DO:	us iron	mg/L
	: Tubing/Rope	Ju Dedicati				ned · 🖸 Disposi Ion 🛛 Other:	able			mg/L
	Water at Time	V Dedicate	ed LIPrepa	ared Off-Site	- Field-Cleane	d LI Disposabl		Nitrat	e:	mg/L
	MW - 29 R D: <u>2 en 1 3</u>		-			d?   Yes	2	Sulfat	e:	mg/L
	Sample Colle		-	-		# of Contair	-	Alkali	nity:	mg/L
	nt Blank Colled				-	# of Contair	-			
5. COM	MENTS							· · · · · · · · · · · · · · · · · · ·		
Note: Include d	comments such a	as well condi	tion, odor, pr	esence of NAPL	, or other items	s not on the field	data sheet.			

B R O W N AND C A L D W E L L

Page _____ of _____

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: <u>MW-29R Zone 3-Waterloo</u>

	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
2 ¹⁰			05103			E 3			е. Ц
			R. J						
- <u></u>	.म्								
29,0	5:556	5		<u> </u>			*: -		
inidw]	4081 TA	с 10		2	•		×		2. <b>-</b> 2
				- 24 -	24				
			- 48 - <u>1</u> 9	<b>N</b> • 2 ⁽²⁾	0 j		2.	1	
* e e.*.	154n -	11 e	8.5	and the second sec	6.4	1.51	· · · · ·	26.00	
,			11 4	-1/ps 20.3		يني في الم	16 3	***	1. 4 4 
		ist n	• • •	stat 30	-	<u>e ::</u>	<u></u>	2:0	<u> </u>
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-				Jipa Pas A L-FL		<u></u>			
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Purge data continued on next sheet?

Page _____ of _____

WELL ID: MW-29R Zone 4-Waterloo

	JECT INF									
					<b>1</b>					
	Number: <u>136</u> Owens Corr		Lask Nur					ows, c.	Uine	
_	Location: And		South Car	rolina		_ Personnel: Weather:	A			
2. WEL	L DATA		Date Me	easured:	1116 09	_Time:	10:0	<b>3</b> Temp	orary Well: 🛛	Yes QaNo
Casing	Diameter:	_2inc	ches Lenç	gth of water co	olumn calcula	ition:				
	Diameter: <u>6</u>		Mal			<b>;)*0.02724)*2.</b> ;	3108) = Len	gth of water o	olumn (ft)	
	ig Interval: <u>177</u>		_teet	l Vol. calculati 1 well vol. = [		val(6") - vol of	waterloo ca	using (2")] + v	ol of water int	ubing(1/4")
	Static Water:	-	teet by	= [	36.14 gal - 4.	.11 gal] + (0.0	102 gal/ft x l	ength of wate	r column)	-
	Product:		_feet		29.01					
Length o	of Water Colum	nn: 15>. 40	reet	Well Volume		gal 2-in well = 0.16	Screened I	nterval (from	GS): 177.**	· 202.2
	GE DATA		Data Du					vell = 0.007 gal		İ
i i	□ Ba	iler. Size:			•	_ Time: <b>[</b> ımp □ 4" Sub.			Equipment	
Purge M		trifugal Pum	p 🖸 Perista	ltic Pump 🗖 Ine	ertial Lift Pump	Dther:	,	•	<u>si 556 mi</u>	
Material	s: Pump/Bailer	Polyeti Dedica				D Other:		2. <b>Df</b>	T-15(E 7	<u><u>rurbidinet</u>pi</u>
Material	s: Rope/Tubing					lon D Other: d Disposat		3	2	
Volume	to Purge (minir	mum):	NA_well v	olumes or		gallons	<u>9</u> ]	4		2
Was we	Il purged dry?	C Yes	No No	Pumping Ra	te: <u>80</u>	<del>gal/min</del> w	illmin		Calibrated?	∃rYes 🗆
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.		DO	Turbidity		0	
nine	(gal)	±0.1 su	= ±2℃	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Com	ments
11:52		6.52	20.06	0184	30.4	4.02 -	0.53	6015.0	water cl	ear
11:57		6.43	19.86	0.217	28.0	a.57	0.38	5980.9	4ª (	h
12:02		6.41	19.94	0.234	28.8	2.18	0.39	59.2.3	4	*1
12:07		6.40	20.10	0.243	29.1	2.11	0.30	5981.1	41	6, II I
12:12	0.75gal	6.43	20.21	0.248	29.6	2.08	0.49	5998.2	61	٤,
				·				Purge dat	a continued on r	next sheet?
4. SAMF	PLING DA	ТА						Geoc	nemical Analy	ses
Method(	ST.	er, Size:		Bladder Pump ic Pump 🖵 Iner		np ⊡ 4" Sub. I PC0thor:	Pump	Ferro	us Iron:	mg/L
Materials	s: Pump/Bailer			inless D PVC				-	-	_ `
Materials	s. r unp/baller	<b>U</b> Dedicat		epared Off-Site			able	DO:		mg/L
	s: Tubing/Rope	Dedicat	ed 🗆 Prepa	/propylene D T ared Off-Site			le	Nitrat	e:	mg/L
Depth to	Water at Time	of Sampli	ng: <b>599</b>	18.2		l? 🗆 Yes 🖌		Sulfat	e:	mg/L
Sample	D: ZONE 4	Sample D	ate: 1116	9 Sample 1	Гіте: <b>12:15</b>	# of Contai	ners: 3			
Duplicate	e Sample Colle	cted? 🗆	Yes 🛍 No	D:	-	# of Contai	ners:	Alkalii	nity:	mg/L
Equipme	ent Blank Collec	cted?	Yes 🎾 No	) ID:		# of Contai	ners:			
5. COM	MENTS									

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

B R O W N AND C A L D W E L L



WELL ID: MW-29R Zone 4-Waterloo

	Cum. Gailons Removed	pH	Temp ,	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal) <	±0.1 su	+2°G	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
		<u>v</u>	en.		Pa st.				
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	.63.				A. 1. 198		h.	n si	
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-	1+ (	. 01.10	<u>88.0</u>		-1	ALEN ANE CON	diaster,		<u>, a:</u>
d	*1 *1	app.ª	6.35	12.5		nien	58-14	3 ji	.59
"	si <b>r</b>	5:9:2	· · · · ·	8:	8.82	1159.5	11:01	1 11)	Press
ا ه،	** 1	-169d	05.0	11-5	1.5%	ella a	<u></u>	caling .	
.,	·· (	6963	- p	\$2.4.4.	1.00	5.42 A	<u>i :</u>	· · · · · · · · · · · · · · · · · · ·	P.S. 5.1+1
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Purge data continued on next sheet?

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: <u>MW-30</u>

1. PROJECT INFORMATION	
Project Number: <u>136868</u> Task Number: <u>400.001</u>	
Client: Owens Corning	Personnel: BS & DM
Project Location: Anderson, South Carolina	Weather: Juny N DEB 42-1-
2. WELL DATA Date Measured: 1/- 16-09	Time: AM Temporary Well: DYes GMO
Casing Diameter: 2inches Type: PPVC Stainle	ess 🛛 Galv. Steel 🖵 Teilon® 🗆 Other:
	ess 🛛 Galv. Steel 🗆 Teflon® 🖵 Other:
Total Depth of Well: <u>113</u> feet From: D Top of Well Cas	sing (TOC) D Top of Protective Casing D Other
Depth to Static Water: 12.92 feet From: Top of Well Cat	sing (TOC) D' Top of Protective Casing DOther:
	sing (TOC) 🔲 Top of Protective Casing 🗆 Other
Length of Water Column 20. 79 feet Well Volume: 15.0	2 gal Screened Interval (from GS):
	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: 12 - 97	
Purge Method: Bailer, Size: Bladder Pump Ge Sub. I Centrifugal Pump D Peristaltic Pump D Inertial Lift Pump	
Materials: Rump/Bailer Dedicated Departed Off-Site	and Disposable
Matariala: Bana (Tubia) Polyethylene D Polypropylene D Teffon® D	Volon D'Other:
Volume to Purge (minimum): well volumes of	ned Disposable
Was well purged dry?	
Cum. Gallons pH Temp Spec. Cond. ORP	DO Turbidity
Time Removed To 1 su 3% > of ±8% or > of ±10%	or > of ±10% or 510 NTU Water Level Comments
	1 ±u,2,mg/L
0734 0.25 6.48 18.73 0.986 200.3	3.94. 91.2 24.13
0731 0.50.6.32 19.34 0.085. 706.6.	3.89 60.1 24.85
0744 0.75 6.32 19.32 0.085 202.9	3.73 43.7 25.0
0749 1.25 629 19.59 0.085 211.7	3.72 34.6 257-
0754 1.75 6.30 19.54 0.086 211.5	5.75 28.1 25.86
B Bailer Size:	
Metriod(s):	Other: Ferrous Iron: mg/L
Materials Pump/Bailer Polyethylene Stainless PVC Teflon® Dedicated Prepared Off-Site Field-Cle	
Materials: ubind/Rope Polyethylene Delypropylene Delenation Dedicated Prepared Off-Site Delenation	
	ad? D Ves B-No
Sample ID: MW - 3 Sample Date: 1/ 10.05 ample Time. 99 3	
Duplicate Sample Collected?  Yes  No ID:	# of Containers: Alkalinity: mg/L
Equipment Blank Collected? Yes I No ID: EB-11-29-	
610	
5. COMMENTS <u>sample</u> collected aft	er purged for 2 hrs, turb=17.0 Nr
Note: Include comments such as well condition, odor, presence of NAPL, or other iten	ns not on the field data sheet.
	132
FORM GW-2 (Rev 25.Sept.08 - sej)	Signature
Page of	



WELL ID: <u>MW-30</u>

Time	Cum. Gallons Removed	pH	Temp	-Spec. Cond. > of ±3% or	ORP > of ±10% or	DO > of ±10% or		Water Level		Comments
	(gal)	±0.1 su		10 ±3 % οι ±10 μS/cm	±20 mV	±0.2 mg/L	≤ 10 NTU	2		
0759	2.25	6.30	19.28	P. 086	2142			25.4-		
08-94	3.0	6.30	19.53	0.086	207.0	3.82		25.77		
0809	3,5-	6.27	19.62	0.086	202.2	383	249	25.95	-	
2814	4.5	6.28	19.63	0.017	205.3	3.83	22.3	26.10	-	
0819	5.25	6.Z6	19.65	0. 286	205.4	184	22.5	26.20	-	
0824	6.0	6.25	19.76	0.087	204.6	3.84		26.40		
0829	6.75	6.26	19.69	0.086	201.2.	.3.84	20.5	26.09		
0834	7.25.	6.24	19.82	0.087	197.6	3.87	21.5	26.40		
08.39	8.0	6.23	19.85	0.086	193.8	3.87	20.0	26.85	3	
0844	8.75:1	6.23	19.61	0.087	191.4	3.88	18.4	27.50	G.	
	19.25	6.22	19.75	0.086	205.4	3.63	65.4	27.86		
0854	10.75	6.22	19.69	0.087	211.1	3.96	55.9	27.94		
0859	11.75	6.21	19.76	0.088	206.5	4.05	42.3	28.07		
0904	12.0	6.22	19.67	6.086	297.1	3.99	34.9	27.95		
0909	13.75	6.22	19:73	0.088	190.4	3.99	30.8	27.90	5 e 5	3
0914	14.50	6.21	19.72	0.056	192.2	4.02	23.9	27.90	10 52 1 1 10 1	.3
0919	15.25	6.21	19.71	6.088	198.3	400	20.02	27.76	and a	i ji ji ka
2924	16.0	6.20	19.70	0.086	10 10 10	4.01	18.3	27.70	£	
0929	16.25	6.21	19.71	10 St. 10	196.4	403	17.0	27.40	ч. э.	
0935		1 for	21	rs. Do	rameto	s stabl		ple col	lete	/
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		242		•		(x.):	•			
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			e		-1956-1956 -	5.	<b>£</b>	-		
	j., i				1					

Purge data continued on next sheet?

Signature

Page 2_ of ____

# BROWN AND CALDWELL

WELL ID: MW-31

	JECT INF			100.0		. E					
			_ Task Num	nber: <u>400.0</u>	01	Area of Cor	<b>h</b>	5 14			
	<u>Dwens Cor</u>	-				_Personnel:_		ر س	o.E		
	ocation: An					Weather:					
2. WEL	_ DATA `			easured: (/		3750 • N 57				ry Well: 、 🗆	Yes Canto
Casing	Diameter:	2 inc	ches	• Type: • 🗗 P						·	6.
Screen	Diameter:	<u>2</u> inc	ches 🛶	A 104 A	VC D Stainles	•					
	pth of Well:	90	_feet		op of Well Casi		316 4				
	Static Water				rop of Well Casi Fop of Well Casi					_	السهاب
	Product:		1		ie: <u>(1, 2, 1,</u>	-					
Length	of Water Colu	m. 42	feet .	Note: 1-in we	il = 0.041 gai/ft	gai y = 2-in well = 0.1	167 gal/ft 4-in	well = 0.6	67 gal/ft	6-in well =	1.469 gai/ft
3. PUR	GE DATA	PT-C	Datë ['] Pi	urged: 1/	20.09	Time:	00 <b>0</b> 0~	Če.	e í	Equipmer	nt Model(s)
	lethod:	ailer, Size:	<u>3 \</u>	Bladder Pum altic Pump D In	ip Gre Gub P	ump-, Q,4" Sul	b. Parpp 02		Asi	·sois_	Ring
		ntniugai Pum	ip u Perista Inviente 😫 S	tainless D PVC Prepared Off-Sit	Col,Teffo∱®	□ ;Othen	<u> </u>	ນາ	: 45/	1.53	+6
								11.7			a.
Materia	s: Rope Tubir			olypropylene			able			7.8.150	
Volume	to Purge (mir	nimatn): 🛃	well	volumes or	) 1-OL	gallons				alibrated?	
Was we	Il purged dry?		1	Pumping-R		gạl/min		1.6	ᡨ᠊᠇᠇ᡝᢅ	allolaieu:	
Time	Cum. Gallon Removed		Temp	Spec. Cond	1.1.1	DO r > or ±10% (	Turbidity or ≤ 10 NTI		Level	Cor	nmente
	(gal)	±0.1 su	±2°C	±10,µS/cm	1000	±0.2 mg/L	≤ 10 NT				
1908	0.25	6.54	20.12	0.068	175.Z	3.00	471	25.	22,-	•	·• ·· ·· ·
1018	1.0	6.32	20.68	0.072	199.0	1.40	578	マネ	.25	<u>.</u>	5 i 456
1023	2.0	6.30	23.66	0.079	194.7	0.92	653	27	46-		
1925	6.0	0.28	20.69	0.087	168.1	1.12	702	27		ega	fo fak
1043	15	6.26	20.70	3.083	175.9	1.42	506	27.		- 5	•
10 1 5		FILO						Pu	rge data d	continued on	next sheet?
4. SAM	PLING D	ATA							Geoche	mical Ana	lyses
Method	(s): 🗆 B	Bailer, Size:		🗅 Bladder Pumj altic Pump 🗅 In					Ferrous	Iron:	mg/L
Materia	S. Pump/Baile	er D Poiyeti	hylene 🖬 St	tainless 🗆 PVC	C 🗆 Teflon® 🛛	Other:	<u> </u>		DO:	L	/ mg/L
				Prepared Off-Site						/	
Materia	Is: Ubing/Rop			epared Off-Site					Nitrate:	1/-	mg/L
	Water at Tin	•	•	0.09		ed? ⊡ Yes	-	3	Sulfate:	<u>/</u>	mg/L
	•	,		<u>2.9</u> Sample					Alkalinit	ty:	mg/L
				No ID: No ID:						V	
5. CON	IMENTS	Purgeo	for 2	hrs p	craneters	stuble .	collect	cd s	ample	when	۱
<u>+</u>	rbidity	= 13.5	> NTh	•							
Note: Includ		has well con	dition odor	presence of NA	PL, or other iten	ns not on the fie	eld data sheet		<b>,</b>	-	



WELL ID: _____ MW-31_____

	Cum. Gallons	pH.	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±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	Water Leve	Comments
1053	11.0	6.27	20 (gs	0.083	175:8.	1.75	198	27.18	-
1103	14.0	6.25	Z0.67	0.084	182.2	2.26	70.7	28.22	
1113	17.0	6.24	20.65	0.085	183.2	233	43.5	27.29	
1118	17.5	6.27	20.56	0.084	184.0	2,51	38.8	25.84	Began to take Curry 5 MIA
123	18.5	6.25	20.69	0.085	184.2	2.28	38.9	26.18	
1128	19.5	6.26	20.59	0.084	183.3	2.48	34.3	25.67	
1133	20.5	6.25	20 35	0.084	184.5	2.50	32.2	25.98	>
1138	21.5	.6.25	20.72	0.082	191.7	2.96	22.5	26.90	
1143.	22.0	6.24	20.69	0.083	190.1	2.79	16.2	26.88	
1148	23.0.	6.24	20.65	0.083	+691-	2.78	15.5	26:62	ORP= 191.1
1153	. 24.0	6.24	२०५५	0.084	192.7	2.70	16.7	\$ 26.22	
1158	25.0	6.23	20.72	0.082	192.8	2.85	14.3	26.50	
403	26.0	6.23	20.67	0.083	194.0	2.91	14.6	26.36	
1208	27.0	6.24	20.71	0.084	193.1	2.84	13.5.	26.40	
1210	Purged	for.	2 hs	, Dora	meters	stable,	collee	col. so	
			••• •••	ं अर्च क					1. 6. 7.
J- P				-					- 1999 - 1999 - 1999 - 1999
	**	27. B.S.			86 - 16 I				
						( ~ **	95° • 53.	osta kor	
	1								
3					Б. ж				4 C
			- ·	_		<b>FX</b>			
					64.9 <b>2</b> 9410	n - 103 ⁻ 2	23	2 	50 g 1
	1			5.45			S 1.		

Signature

Page _____ Cf ____

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: MW-32

Project	JECT INF Number: <u>136</u>			ber: 400 00	)1	Area of Conc	om:		
	Owens Corr			bei. <u>400.00</u>	<u></u>	Personnel:	C. Mino	[ J. Me	adiws
	Location: And	_	South Car	olina		Weather:			
					19109	Time 1	2.4.5	and the Terms	orary Well: DYes ANo
•	Diameter:								
Screen	Diameter:	2 inc	thes +		C 🖸 Stainles	s 🛛 Galv. Steel	G, Teflen® (	□ Other;	
.Totel De	oth of Well:	35	feet	From: 🗆 To	p of Well Casir	ng (TOC) D T	op of Protectiv	ିଟି - ି e_Casing 🔲	Oth <u>er:</u>
Deoth to	Diameter: opth of Well: Static Water:_	17.49	feet	From: To	p of Well Casir	па (тос) 🗖 Т	op of Protectiv	e Casing 🗖	Other:
Depth to	Product:	17.71	feet · · · I	From: 🗔 To	p of Well Casir	ා (ර්ලිද් ස්	op of Protectiv	e Casing	Other:
-	of Water Colum			Weil Volume	2.92	gal 🕽 🆻 🗞 🖉	Screened in	nterval (from	GS):
25	•			Note: 1-in well	= 0.041 gal/ft	2-in well = 0.16	7 gal/ft 4-ïn w	ell = 0.667 gal/	ft 6-in well = 1.469 gal/ft
3. PUR	GE DATA	- Cho.	Date Pu	rged: <u>Pitle</u>	1109·1 C -	Time:	275.0	<u><u> व व</u>न्हें है</u>	Equipment Model(s)
Purge N	lethod: 🛱 Cent	rifugal Pum	p D Peristal	i Bladder Pump tic Pomp	ertial Lift Pump	D Other: Mo	NS DOVE	17.¢ <u> </u>	1556 MP3 2:01
Material	s: (fum)/Bailer	Polyeti     Dedica	nylene 🙀 Sta	inless D PVC	Tefion® C	Other: aned Dispos		2. <b>DR</b>	T- ISCE Tubidime
Material	s: Rope/Tubing	) A Polyeti	nyiene 🗆 Pol		Tefion® 🗆 Ny	/ion D Other:		3.	
	to Purge (mining	Dedica				ed 🚺 Disposat	ble .	_,	· · ·
	to Purge (minir Il purged dry?	mum): <u>••</u> D Yes		Pumping Ra		-		4	Calibrated? 🏌 Yes 🛛
vvas we	Cum. Gallons		Temp	Spec. Cond.		DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
12:54		5.65	21.70	0.264	-78.4	6.83		17.69	slightly turbed
12:51		5.28	29.92	0.153	-68.5	1.22	81.5	-	600 millinin
13:04		5.44	22.27	0.179	-62.6	0.87	126.0	17.59	
13:09		5.46	22.45	0.201	-70.3	0.73	B2.1	19.66	
13:14	2.0gal	5.69	22.57	0.261	-83.B	0.56	64.9	17.75	600 milmi.
							••••		a continued on next sheet?
I. SAMI	PLING DA	TA	-					Geoc	hemical Analyses
Method(	s): 🖵 Bail	er, Size: ifugal Pump	Peristalt	Bladder Pump	□ 2" Sub. Pur tial Lift Pump〔	mp □ 4" Sub. f □ Other: <b>00</b>	oump	Ferro	us iron: mg/L
Material	s: Pump/Bailer	Polyeth	ylene 🗆 Stai	niess 🖾 PVC	Teflon®	Other:		-	•
		Dedicat     Dedicat		epared Off-Site /propylene 🛛 1			able	DO:	mg/L
	s: Tubing/Rope	Dedicat	ed 🛛 Prepa	ared Off-Site	Field-Cleaned	d 🛛 Disposabl		Nitrat	e: mg/L
•	Water at Time			.15		l? ⊡ Yes I	1	Sulfat	e: mg/L
•	ID: <u>MW-34</u>				Fime: 14:00			Alkali	nity: mg/L
•	e Sample Colle ent Blank Collec			- •	19 09	# of Contain			
						# of Contair			
	MENTS	SI	igut	sulfer	odor.	missi	ng bol-	t, thi	reads on
5. COM			U U	, V			· · ·		
5. COM		YAN	anno	le are	gone		0	•	

Page _____ of ____

### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: MW-32

	Gum. Gellons Removed	- рн •	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	±0,1 su	±2°Ç;,,	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
13:19		5.82		D.311		10.43	44.2		clearin
13:24		5.82	22.42	0.313	-87.1	0 : 40	29.7	17.74	-
13:29		5.80	22.39		-84.1	0:37	19.5	17.73	-
13:34	3.59	5.67	22.45	0.336	-70.3	0.34	17.6	Shirt	slightsulf
13:39		5.86	22.50	0.339	-67.2	0.31	13.10	17:279	
13:44		5.88	ña.55	0.338	-68:4	0.29	12.6	0.00	
13:49	4.75%	5.88	22.62	0.338	- 57.9	0.28	10.2	-	
13:54	M 6188%	5.91	22.68	0,337	-63.8	0.27	9.17	11.75	
utricine :	ज्यत्वे जिस्	:			م		×		•
					••				
					1		.7		
4	1	_					7		
	-								
hidderia	(Hereite)	S. 1 (3).		C-2 1	11 BP.	dist of		2.13	
	~			Crieta.	1-101-				(A)
				100-10-1 100-10-10	- 0°G		S. 1. 1		
		C	<u>.</u>	се. ,	S Are		No	1111	
	· · · ·	1.11	9. Par	21.1	18 V.		C. Marian		
		31:31		<del></del>		- k . ()	<u>Lj'ra</u>	<u>, 9</u>	
							-		<u></u>
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			3			*** #** ***	;		
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	et a grad	•			1.2.1	set o	21.52		

Purge data continued on next sheet?

Page _____ of ____

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: <u>MW-35</u>

1. PRO	JECT INF	ORMA [·]	TION								]
Project I	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>	01	Area of Cond	ern:				
Client:	Owens Corr	ning				_Personnel:		ro J.	Mcah	Elvo	
Project I	_ocation:Anc	lerson, S	South Car	olina		_Weather:(	clear,	603			
2. WEL	DATA		Date Me	easured:	11/17/09	_ Time:		Temp	orary Well:	⊡Yes <b>e</b> No	1
Casing I	Diameter:	2inc	ches	Туре: 🖵 Ру	C D Stainles	s 🛛 Galv. Stee	I 🗆 Teflon®	Other:			
Screen	Diameter:	2inc	ches	Туре: 🗗 Ри	C D Stainles	s 🛛 Galv. Stee	I C Teflon®	Other:			
Total De	pth of Well:	162	feet	From: 🗆 To	op of Well Casi	ng (TOC) 🛛 T	Fop of Protectiv	e Casing 🛛	Other:		
Depth to	Static Water:	_artesian	feet	From: 🗆 To	op of Well Casi	ng (TOC) 🔲 T	fop of Protectiv	e Casing	Other:		
Depth to	Product:		feet	From: 🗆 To	op of Well Casi	ng (TOC) 🔲 1	Fop of Protectiv	ve Casing	Other:		
Length o	of Water Colum	nn:	feet		ə:			nterval (from	,		
						2-in well = 0.16		ell = 0.667 gal/			4
		iler, Size:		-		_ Time: Jmp 🛛 4" Sub.	17:00 Pump			nent Model(s)	
Purge M	lethod: Cent	trifugal Pum	p 🛛 Perista	ltic Pump 🗖 Ine	ertial Lift Pump	Other:	tesian	0.201		MPS	
Material	s: Pump/Bailer	Polyeti Dedica				Cher:_ <b>A.V</b> aned Dispo:		2. <b>D</b>	<u>R1 - 15</u>	ice Turbid	mH
Material	s: Rope/Tubing		nylene 🗖 Po	iypropylene 🛛	Teflon® 🗆 N	ylon 🛛 Other:	<u>_</u>	3			
	to Purge (minii	U Dedica	• •		A 1 IN	ed 🖻 Disposat	ble	Α			
	ll purged dry?	ununn). <u>- r (</u> Ves		Pumping Ra		gallons gal/min		· · ·	Calibrated	? 🖸 Yes 🗆	١
	Cum. Gallons	· · · · · · · ·	Temp	Spec. Cond.	1	DO	Turbidity				
Time	Removed (gai)	±0.1 su	±2°C			r > of ±10% or	≤ 10 NTU	Water Level	C	Comments	
17:05	(gu)	7.73	18.53	±10 µS/cm		±0.2 mg/L	92.5	-	wate	x clean	
17:10	1.5	7.67	15.05		-141.3	0.48	5.8	~	•*	-)	1
17:15	2.0	7.66	1487	0.317	_146.1	0.35	1.10	-	۲,	•	1
06:51	2.5	7.66	15.11	0.317	-146.4	0.30	0.66	1	r	• 12 21	1
											1
							1	Purce dat	a continued	on next sheet?	1
	PLING DA	ΤΔ		e					nemical A	· · · · · · · · · · · · · · · · · · ·	1
Method(	Bail	ler, Size:				mp 🗖 4" Sub. I				_	
•				•	•	Other: <u>Orfe</u>		rerro	us Iron:	mg/L	
	s: Pump/Bailer	Dedicat	ed 🛛 Pr	epared Off-Site	Field-Clea	ned 🛛 Dispos		DO:		<u> </u>	
Material	s: Tubing/Rope	Polyeth Dedicat	ylen <i>e</i> 🗆 Poly ed 🗆 Prepa	vpropylene 🖸 🕯 ared Off-Site 🛛	Teflon® ם Ny 🛛 Field-Cleane	lon □ Other: d 🖬 Disposab	le	Nitrat	e:	mg/L	
Depth to	Water at Time	e of Sampli	ing:	-	Field Filtere	d? ⊡ Yes I	ST No	Sulfat	e:	mg/L	
Sample	ID: MW 35	Sample D	ate: 11 16	<b>91</b> Sample	Time: <b>17:2</b>	5 # of Contai	ners: 2			~	
Duplicate	e Sample Colle	ected? 🗆	Yes 🙀 No	D:	<u>~</u>	# of Contai	ners:	Alkali	nity:	mg/L	1
Equipme	ent Blank Colle	cted?	Yes 🗗 No	D:		# of Contai	ners:				]
5. COM	MENTS				na a staril de un commune						1
							· · · · · ·				
											1
Vote: Include	comments such a	as well cond	ition, odor, pr	esence of NAP	L, or other item	s not on the field	data sheet.				1



WELL ID: <u>MW-35</u>

	Cum. Gallons	•• pH	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Cym. Gallons Removed (gal)	<b>ℓ±0</b> .1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Co	mments
82			$= 1_{\rm ec}$			5				
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2414	NGC 13									
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1	1.	D-Si	<u>स्वन्त</u> ्र स्वन्त्र	<u>- 8</u>	P	5	2- 2	E a se	a 1	10 A
	17		P* 1 -							
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	*		24 <b>8</b> 94	ha fys	2					16
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						-			1. AN	
			•				2		k	
		-						_		

Purge data continued on next sheet?

Page _____ of _____

WELL ID: <u>MW-36 Zone 1-Waterloo</u>

1. PRO	JECT INF	ORMA [·]	TION							
Project	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>	01			·		
Client:_/	Owens Corr	ning		<u>_</u>		_ Personnel:	c.Mine	> [J. M	eadows	
Project	Location: And	lerson, S	South Ca	rolina		_Weather:	Sunny	,701	>	
2. WEL	L DATA	C IT IS	Date Me	easured: "	1009	Time:	0.10.	Tem	orary Well	
Casing		_2 inc	thes					h dropen		56 HH
Screen	Diameter:	<u>.6</u> inc		gth of water co (8558.7-Curre		ation: g)*0.01797)*2.		4		
Samplin	ng Interval: 9	99.1-116	Wol	Vol. calculat	ion:	-		•		/4 /48\
Depth to	Static Water:	6244.3	Dg			rval(6") - vol o !.82 gal] + (0.0				(1/4")
Depth to	o Product:		feet		- 0					
Length (	of Water Colum	nn: <b>96.10</b>	feet	Well Volume	28.99	gal	Screened I	Interval (from	GS): <b>99.</b>	, 116
				Note: 1-in well	= 0.041 gal/ft	2-in well = 0.16	67 gal/ft 4-in v	well = 0.667 gal	/ft 6-in well =	= 1.469 gal/ft
3. PUR(	GE DATA			rged: <u>u</u>		_ Time:	13:54			ent Model(s)
Purge M	lethod: Cent	iler, Size: trifugal Pump	D D Perista	I Bladder Pump Itic Pump 🖸 Ine	□ 2" Sub. Pu ertial Lift Pump	ump 🛛 4" Sub.	. Pump	1. <b>¥</b>	556 1	mps
Material	s: Pump/Bailer	Dedica				Other: aned Dispo		2. <b>Þ</b>	PT- 15CE	Turbidi m
Material	s: Rope/Tubing	Di Polyeth	nylene 🗆 Po		Teflon® D Ny	ylon 🛛 Other:				
		🔨 🖓 Dedica				ed 🗆 Disposal	ble			
	to Purge (minir	mum): <u>*</u> D Yes		olumes or Pumping Ra		gallons	nulm.	. 4	Calibrated?	🕼 Yes 🗸
was we	Il purged dry? Cum. Gallons	<u></u>	Temp	Spec. Cond.	OBP	gammi r	Turbidity			<b>/</b>
Time	Removed	±0.1 su	±2°C	+- <b>·</b> ·····	> of ±10% or		·	Water Level	Co	omments
	(gal)			±10 µS/cm	±20 mV	±0.2 mg/L				
14:00	1	4.51	19.98	0.116	37.7	5.9812	(.16	6249.1		clear
14:05		6.14	19.66	0.116	42.2	4.92	6.20	6250.1	.\	• •
14:10	r	6.05	19.41	0.116	44.3	4.16	0.25	6248.6	61	4
14:13		5.99	19.34	0.116	46.2	3.17	0.18	બ્ર્યક.ર	4	1
14:20		5.99	19.35	0.116	49.1	3.96	0.15	6246.0	54	t į
					n			Purge dat	a continued o	n next sheet?
4. SAMF	PLING DA	TA						Geoc	nemical Ana	lyses
Method(		er, Size: ifugal Pump				mp D 4" Sub. I		Ferro	us Iron:	∽mg/L
Materials	s: Pump/Bailer	D Polyethy	lene 🛱 Stai	inless D PVC	C Teflon® C	Other:			11	
		Dedicate		epared Off-Site /propylene 🏼 🖛		ned 🛛 Dispos	able	DO:		mg/L
	s: Tubing/Rope	Dedicate	ed 🛛 Prepa	ared Off-Site		d Disposab	le	Nitrate	e:	mg/L
Depth to	Water at Time	of Sampli	ng: 620	<u>14.2</u>		d? 🖸 Yes 🖠	-	Sulfat	e:	mg/L
	ID: Zonel						ners:	 Alkalir	nitv:	mg/L
•	e Sample Colle					# of Contai				g, =
Equipme	ent Blank Collec	cted?	res 🖬 No	) ID:		# of Contai	ners:			
5. COM	MENTS									
	-									
	comments such a		· · · ·				· · · · · · · · · · · · · · · · · · ·			

B R O W N AND C A L D W E L L

Page _____ of _____

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: <u>MW-36 Zone 1-Waterloo</u>

	Gum, Gallons Removed	, pH., '	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	₽ <u></u> ±0. <del>1</del> su	, <del>,</del> ,2°C	> of ±3% or ±10 μS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Co	omments
14:25	1.09	5.97	19.28	0.116	49.7.	3.93	0.22	6249.5	£1	• •
14:30	sa	mple		•						
		_			-			e. 5020		
								1 F		
	-1,9 p				17.8			71.a.		
										_
	*****		12.2 : 2		for a log ?	1791				
1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	1 198 (5									
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										0 38203
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	1,	· CRAC	<del>e i jri</del>	بر بر ور ا		Gryl K	10 1	11/1		- 0
på	14	1.6.124	23.0		5.14		-19. 9 <u>-</u>			
11	· //	3.8HA.		Leve e	c		·*	5.2.2		31
1 1	19			No.c						0.4.4
		- Apa		27.0			Coloring -	1.7.2		
					S.			-		
0.00							- 130 	.*		
e.,								v v		
12. 				7.		Č. 4	ે (ડ્યુ) •		5-2.13	
					5.1		· · ·		MASS	
							5. 52		100	
							-			

Purge data continued on next sheet?

WELL ID: ____MW-36 Zone 3-Waterloo

1. PRO										
	JECT INF									
-	Number: <u>136</u>		Task Num	ber: <u>400.00</u>	01			0171	reader	
_	Owens Corr	-				Personnel:	Sunn		n en alb (	~ ~
Project	Location: And	<u>ierson, s</u>				Weather:				
2. WELI	L DATA		Date Me	asured: <u></u>	116 09	Time: <u></u>	0:12	Temp	orary Well: 0	Yes 📕 No
Casing I	Diameter:	<u>2</u> inc	hes Ler	oth of water	column calcul	lation:				
Screen	Diameter:	<u>6</u> inc	hes		-	ng)*0.02725)*/	2.3108) = Le	ength of water	column (ft)	
•	g Interval: <u>18</u>		feet	I Vol. calcula 1 well vol. =		erval(6") - vol	of waterloo	casing (2")] +	vol of wate	r in tubing(1/4")
Depth to	Static Water:	6411.7	feer Dg	=	[18.36 gal - :	2.09 gal] + (0.	0102 x leng	th of water co	lumn)	
	Product:		feet							
Length o	of Water Colun	nn: <b>160.8</b> 3	eet	Well Volume		gal _ <i>2-in well = 0.10</i>				-192.7
	GE DATA		Dete Du	rged:			4:33	wen = 0.007 ga		nt Model(s)
	D Ba	iler, Size:		Bladder Pum	p 🛛 2" Sub. P	ump 🛛 4" Sut	b. Pump		51 556	
Purge M	ethod: Cen	trifugal Pum	p 🛛 Perista	ltic Pump 🗅 In	ertial Lift Pump	B Other:		_		
Material	s: Pump/Bailer	Other:	Sedicate		C Teflon®			2. 🕅	1-1506	Turbidia
Material	s: Rope/Tubing	Polyet	nylene 🗆 Po ited 🗇 Prer	lypropylene	Teflon®	ylon D Other:_ ed Disposa	able	3		
Volume	to Purge (mini		_					4		· ·
	I purged dry?	🔉 Yes		Pumping Ra	te:	gei/min	melmm		Calibrated?	🕅 Yes 🗖
_	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity		0.	
Time	Removed (gal)	±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	Water Level	Co	nments
4:56		7.01	21.82	1.333	46.3	9.44	0.81	8062.3	waler	elear
14:55		7.03	12.72	1.344	43.9	5.91	0.64	8490.1	N	•1
15:00		7.06	22.82	1.347	-136.5	5.37	0.64	8398.4	te	1.
15:05		7.18	23.51	1.353	- 188.6	4.73	0.72	8642.5	5	
15:10	0.75ad	7.17	22.56	1.347	-165.9	3.71	0.701	9026.6	**	••
			-			<u> </u>			a continued o	n next sheet?
. SAMF	PLING DA	TA						Geocl	nemical Ana	lyses
Method(	e1'	· · · · · · · · · · · · · · · · · · ·				ump 🛛 4° Sub B-Other:	•	Ferro	us Iron:	mg/L
Material	s: Pump/Bailer					Other:				-
		u Dedicat				aned 🖸 Dispo		DO:		mg/L
Materials	s: Tubing/Rope	Dedicat	ed DPrep	ared Off-Site	Field-Cleane	ion 🗆 Other:_ ed 🗆 Disposa	ble	Nitrate	e:	mg/L
	Water at Time	•	J			i? 🗆 Yes t		Sulfat	e:	mg/L
			ate: 11 14 10				iners: 9	Alkalir	nitv:	mg/L
Sample	MN - 36					# - C t - :	_	: "	····,·	
Sample Duplicate	ID: 20029	ected?	Yes 😰 No							

BROWN AND CALDWELL

BROWN AND CALDWELL

ELL ID: <u>MW-36 Zone 3-Waterloo</u>

	GE DATA				ORP	DO	Turbidity	1		
Time	Cum. Gallons Removed	+0.1 eu	-±2°C	> of ±3% or			≤ 10 NTU	Water Leve	Comments	
	(gai)	10.130	1 12# V	-10 µS/cm	±20 mV		 		1	
				2112	1	N				
								]		
-									A	
-		1						0.1	<u>17.0356</u>	
	.691 . 2	1				11.1		5	6 941	
						<u></u>				
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	CAM 3			52 1	i)				-	-
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2							-,		λ	
W-12						AG	20	A 14	•.	
	8			ALSH JAS		C (			4.	
			8 0							
	73013 8	in the	ANT ANT	24. 10	41 41 00 -3 5 putter	÷		2.2.1		1
	P4	13			- Sterr					- 67
÷	. 8-					1.57 B	1			
			1.61.6.8	3 to	· 8.0	C.0	6		N	- ¢(
	• 5	- ų	- 21:02	45.2	89.4		6.20.1	1 <del></del>	n a fra	
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			CINAC?	• • •		1 + 5 % <u>-</u>				
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Purge data continued on next sheet?

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

WELL ID: <u>MW-36 Zone 5-Waterloo</u>

$5:35$ $6.67$ $19.90$ $1.755$ $-154.0$ $4.47$ $7350.347$ $31$ faint sulfer olor $5:46$ $em p + y i n g$ $YS$ $1$ $to$ $Stop$ $1ea$ $K$ $''$ $''$ $5:50$ $7.46$ $1.909$ $-208.6$ $3.52$ $7570.6$ $3.10$ $''$ $''$ $''$ $5:55$ $1.42$ $19.96$ $1.972$ $-195.6$ $1.12$ $7918.3^{-7}$ $1.98$ $''$ $''$ Purge data continued on next sheet?         Bailer, Size:         Bladder Pump $2^{*}$ Sub. Pump $4^{*}$ Sub. Pump	Client:			TION							
Project Location: Anderson, South Carolina       Weather: Sunny, 70*         2. WELL DATA       Date Measured: U/U/U 199       Time: I0:15       Temporary Well: Dress gifts         Casing Diameter: 1: 199: Tinches       Length of Watter column cabulation: 199: 15:15       Temporary Well: Dress gifts         Screen Diameter: 6: 199: Tinches       Length of Watter column cabulation: 199: 15:15       Temporary Well: Dress gifts         Screen Diameter: 6: 199: 200: 200: 200: 200: 200: 200: 200: 2		Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>	01					
2: WELL DATA       Date Measured: UIU 19.       Thrie: Losid.       Temporary Well: Dives 2010         Casing Diameter.		Owens Corr	ning				Personnel:	J. Mlad		.Mir	0
Casing Diameter       1.12.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	Project	Location: And	derson, S	South Car	olina		Weather:	Sunny	1.70°		
* Screen Diametel:       6	2. WEL	L DATA -	1969.	Date Me	asured: <u>u</u>	16 189 .	Time:	0:15	Temp	orary Well	□Yes <b>2</b> No
* Screen Diametel:       6	' Casind	Diameter:	· HALFI Tind	ches len	s U		tion:	3.2.1	1.37		90:3
Sampling Interval: 269.9-275_fet Well vol. calculation: 1 well vol. e [vol sami interval(6') - vol of water too casing (2')] + vol of water in tubing(1/4') Depth to Static Water: $6049.2$ teet $b_9 = [7.49 \text{ gal} - 0.85 \text{ gal}] + (0.0102 \times \text{length of water column})$ Depth to Product: feet Length of Water Column $351.66$ feet Well Volume: $9.20$ gal Screened Interval (from GS): $204.9 - 275$ Note: 1-in well = 0.041 gal/t 2-in well = 0.167 gal/t 4-in well = 0.667 gal/t 6-in well = 1.469 gal/t B. PURGE DATA Date Purged: $110000$ Time: $151.17$ Eauipment Model(S) Purge Method: Baller, Size:				hes (	8843.2-Curre	nt Dg reading				olumn (fi	)
Depth to Static Water: 6049.2 [set by]       = [7.49 gal - 0.85 gal] + (0.0102 x length of water column)         Depth to Product:				vvei	voi. calculati	on:					•
Length of Water Column $\frac{251.66}{100}$ feet       Well Volume: $9.20$ gal       Screened Interval (from GS): $269.9 - 375$ Note: 1-in well = 0.041 gal/t       Screened Interval (from GS): $269.9 - 375$ Note: 1-in well = 0.041 gal/t       2-in well = 0.167 gal/t       4-in well = 0.667 gal/t       6-in well = 1.469 gal/t         PURGE DATA       Date Purged: $11609$ Time: $517$ Equipment Model(S)         Purge Method:       Bailer, Size:       Bladder Pump       2'sub, Pump       1       Y51 556 M.PS         Materials:       Pump/Bailer       Polyethylene       Screened Off-Site       0-inform 2 other:       2       b.P.T. ISCE Turbidium         Materials:       RoperTubing       Polyethylene       Oplymopylene       Tellon®       Nylon       Other:       3       3         Volume to Purge (minimum):       NA       well volumes or       NA       gal/gas of       4.       Calibrated?       Presa         Time       Cum. Gallons       pH       Temp       Spec. Cond.       ORP       DO       Turbidity       Calibrated?       Presa       Comments         10       gal/gas       ston NTU       water Level       Comments       5       5       5       10 NTU       Vater Level       Comments         10       gas       of ±1	Depth to	o Static Water:	6049.2	teet Dg							
Note: 1-in well = 0.041 galft       2-in well = 0.167 galft       4-in well = 0.667 galft       6-in well = 1.469 galft         B:       PURGE DATA       Date Purged: $u_1[u]op$ Time:       [\$ 17]       Equipment Model(s)         Purge Method:       Bailer, Size:       Baileder Pump Dig 2' Sub. Pump       Ci '''       Size       Size       Size       Size:       Size: <t< td=""><td></td><td></td><td></td><td>•</td><td></td><td>9 20</td><td></td><td></td><td></td><td></td><td></td></t<>				•		9 20					
B. PURGE DATA       Date Purged: $u11009$ Time: $1517$ Equipment Model(s)         Purge Method:       Bailer, Size:       Bladder Pump       2' Sub. Pump       4' Sub. Pump       1.       Y61 556 M.pS         Materials:       Purge Method:       Polyethylene       Stainless       PVC       Telforthe       0 Other:       2.       DRT · 15CE Twbidim         Materials:       Polyethylene       Polyethylene<	Length	of Water Colun	nn. <b>251.6</b> 0	feet	Well Volume			Screened Ir	nterval (from	GS): <b>26</b> '	1.9 - 0 13
Purge Method:Bialier, Size:Bladder Pump1YS1 556 M.PSMaterials: Pump/BailerPrepared for SitePrepared for Site				Data Du					en = 0.007 gan		
Purge Method:Centrifugal PumpPeristaltic PumpInertial Lift Pump2In Total ScienceMaterials:Pump/BailerPolyethylenePolyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'EloyethyleneQ'Eloyet		□ Ba	iler, Size:		-				v		
Materials: Rope/TubingIntervolue of the observed of DisposableMaterials: Rope/TubingIPolychylene Dolypropylene Displone Other: IDedicated Derepared Of-Site Disposable3	Purge N		trifugal Pum	p 🛛 Peristal	tic Pump 🗅 Ine	ertial Lift Pump	Cther:				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Material	ls: Pump/Bailer						sable	2. <b>D</b>	2] • 15	E I VIDIAI
Volume to Purge (minimum): NA well volumes or NA gallons of gallons of multiplication of the purged dry?NoPumping Rate: 100gallons of multiplication of the purged dry?ACalibrated? PresTimeCum. Gallons Removed (gal)pHTempSpec. Cond.ORPDOTurbidity to 2 mg/LCommentsTimeCum. Gallons Removed (gal)pHTempSpec. Cond.ORPDOTurbidity to 2 mg/LComments5:306.8719.811.739 to 1.9535.05.744 multiplication for the purged dry?1131.9479.756Slight Yellow Galer5:356.8719.901.755-154.04.477350.34731 faint sulfer older5:46e.m. p+y i n.gY S1to Stop1 e.a.N5:507.4418.941.909-208.63.527570.63.105:551.4218.941.909-185.61.121918.31.98Purge data continued on next sheel?Geochemical AnalysesGeochemical Analyses	Materia	ls: Rope/Tubing						ole	3		1. 3 a U
Was well purged dry? $\Box$ YesNoPumping Rate: $\BoxOO$ $gatmin$ $mull massetCalibrated?B-YesTimeCum. GallonsRemoved(gal)pHTempSpec. Cond.ORPDOTurbidity\pm 0.1 su\pm 2^{\circ}C> of \pm 3\% or\pm 10 \ \mu S/cm> of \pm 10\% or\pm 20 \ mV> of \pm 10\% or\pm 0.2 \ mg/LS 10 NTUWater LevelComments5: 306.8719.811.139\pm 20^{\circ}R^{\circ}35.05.747131.8e\pm 79.56513n+910w (bler5: 356.8719.901.755-154.O4.4777350.3e^{47}314a^{\circ}mt subfer odor5: 40e.m. p+y i \cap gY S110Stop1e GK''5: 507.46(8.92)1.909-208.63.527570.8^{\circ}3.10''.5: 551.4218.9461.978-185.61.12791a.3^{\circ}1.98''.Purge data continued on next sheet?Water LevelCommentsSechemical AnalysesStop p1e Geochemical AnalysesStop p1e Geochemical AnalysesGeochemical Analyses$	Volume	to Purge (mini	-				•	•	4		
Time       Removed (gal) $\pm 0.1 \text{ su}$ $\pm 2^{\circ}C$ > of $\pm 3\%$ or $\pm 10 \ \mu\text{S/cm}$ > of $\pm 10\%$ or $\pm 20 \ mV$ > of $\pm 10\%$ or $\pm 0.2 \ mg/L$ $\leq 10 \ \text{NTU}$ Water Level       Comments         5: 30       6.87       19.81       1.739 molectrine       35.0       5.74 molectrine       1131.8e-79.56       \$light Yellow Goler         5: 35       6.87       19.90       1.755       -154.0       4.477       7350.3e7       31       faint sulfer odor         5: 45       e m p + y i ng       Y S       1       +0       \$to p       1 e a       K       ''       ''         5: 50       7.46       (8.92)       1.909       -208.6 $3.5.2$ 7570.8       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''							I	milan	× «	Calibrate	1? 📕-Yes 🗖
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			рН	Temp	Spec. Cond.	ORP	DO	Turbidity			0
5:35 $6.67$ $19.90$ $1.755$ $-154.0$ $4.47$ $7350.3471.31$ faint sulfer of our         5:46 $em p + y i n q$ $Y \le 1$ $to stop$ $1ea K$ ''       ''         5:50 $7.46$ $1.909$ $-208.6$ $3.52$ $7570.8$ $3.10$ ''       ''         5:50 $7.46$ $1.909$ $-208.6$ $3.52$ $7570.8$ $3.10$ ''       ''         5:55 $1.42$ $1.909$ $-185.6$ $1.12$ $7918.3$ ''       ''         Purge data continued on next sheet?         Bailer, Size: Bailer Pump2" Sub. Pump4" Sub. Pump	Time	1	±0.1 su	±2°C	•	1		≤ 10 NTU	water Level		Comments
5:40       emptying YSI to Stop Ira K       """"""""""""""""""""""""""""""""""""	15:30		6.87	19.81	1.739	35.0	5.74 ml+	7131. Se	-> 9.56	slight	Yellow color
5:50       7.46       18.92       1.909       -208.6       3.52       7570.8       3.10       *       *         5:55       1.42       18.96       1.972       -185.6       1.12       1918.3       1.98       *       *         Purge data continued on next sheet?         SAMPLING DATA         Geochemical Analyses         Bailer, Size: Bladder Pump _2" Sub. Pump _ 4" Sub. Pump	15:35		6.87	19.90	1.755	-154.0	4.47	7350.24	-ग्र.३।	baint	sulfer obor
5:50       7.40       10.92       1.909       -208.6       3.52       7570.8       3.10          5:55       1.42       19.96       1.972       -195.6       1.12       1912.3       1.98           Purge data continued on next sheet?         SAMPLING DATA         Geochemical Analyses         Bailer, Size: Bailer Pump [2"       2"       Sub. Pump       4"       Sub. Pump	15:40	en	npt)	ing	YS	1 to	stop	110	K	_	• •
5:55       7.42       19.90       1.97.8       -195.6       1.12       791.8.3       1.98       .         Purge data continued on next sheet?         #       SAMPLING DATA         Method(s):       Bailer, Size:       Bladder Pump       2" Sub. Pump       4" Sub. Pump	5: 50		7.46	(8.92	1.909	-208.6	3.52	7570.8	3.10		
. SAMPLING DATA  Method(s): Bailer, Size: Bladder Pump 2" Sub. Pump 4" Sub. Pump	15:55		7.42	18.96	1.972	-185.6	1.12	7912.3	-1.98	**	• • •
Method(s): Bailer, Size: Bladder Pump 2" Sub. Pump 4" Sub. Pump									Purge dat	a continue	d on next sheet?
	1. SAM	PLING DA	TA						<u>Geoc</u>	hemical /	nalyses
Method(s):  Centrifugal Pump Peristaltic Pump Inertial Lift Pump 2 Other: Ferrous Iron: mg/L	Method(							Pump	Ferro	us Iron: _	mg/L
Materials: Pump/Bailer Polyethylene Be-Stainless PVC Teflon® Other: DO: mg/L	Material	ls: Pump/Bailer						able	DO:		– mg/L
Materials: Tubing/Rope @ Polyethylene Delypropylene Define Delyno Dother:	Material	ls: Tubing/Rope	Polyeth	ylene 🗆 Poly	/propylene 🛛 1	Feflon® 🗆 Nyl	on DOther:		Nitrat	e	
Depth to Water at Time of Sampling:	Denth tr	o Water at Time					•	ΣΕF Νο			-
Sample ID: <u>Jon's</u> Sample Date: <u>11619</u> Sample Time: <u>1645</u> # of Containers: <u>3</u>						1000	-		Sultat	e:	mg/L
Duplicate Sample Collected?  Yes A No ID: # of Containers: Alkalinity: mg/L	- · · · · · · · · · · · · · · · · · · ·					-		-	Alkali	nity:	mg/L
Equipment Blank Collected?  Yes No ID: # of Containers:	Duplicat	•				•	# of Contai	ners:			
	•					_		_			
	Equipme										
	Equipme										
ote: Include comments such as well condition. odor, presence of NAPL, or other items not on the field data sheet.	Equipme			· · · · · · · · · · · · · · · · · · ·					,		

BROWN AND CALDWELL

Page _____ of _____

BROWN AND CALDWELL ELL ID: <u>MW-36 Zone 5-Waterloo</u>

			Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Cum, Gallons Removed (gal)	'±0.1 su		> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV			Water Level	ł ,	Comments
16:00	1	7.40	19:29	2.014	· · · · · · · · · · · · · · · · · · ·		2.25	7801.2	••	*1 * 1
16:05		7.37	19.46	a.017	- 139.8	0.46	2.89	7944.4	<b>N</b> 5 ¹	* * **
16:10	1.2 gel	7.37	19.53	2.034	-138.2	0.37	4.64	7855.2	u u	LL   /L
0							0.1			
			P				_	С. <b>.</b>		
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rule verili	· /··· 0,•	S. 763		<del>{~}</del> ++;+	3.3.21	227	1997 - 1992 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 -			
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Purge data continued on next sheet?

## **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: <u>MW-37 Zone 1</u>

1. PROJE	ECT INFO	ORMA	TION							
				nber: <u>400.0</u>	01	Area of Cond	cern:			
	wens Corn					Personnel:		10 J.	ucadows	
Project Loc	cation: And	lerson, S	South Ca	rolina		_Weather:	cloud	4. 60	k,	
2. WELL	DATA	1.9%	Dáte M	easured; 🛄	1 41.4592-	Time:	9:30	•Tem	oorany Well: DYes CNo	
	ameter:1					s 🛛 Galv. Stee				
Screen Dia	ameter: <u>1</u>	ind	ches	Type: 🛍 P	VC 🛛 Stainles	s 🛛 Galv. Stee	el 🛛 Teflon®	Other:		1
	th of Well: <u>1</u>		_feet	From: D T	op of Well Casir	ng (T <b>O</b> C) 🗖 T	Fop of Protecti	ve Casing	Other:	
Depth to St	Static Water:_	16.80	_feet	From: 🎾 T	op of Well Casir	ng (TOC) 🗖 1	Fop of Protectiv	ve Casing	Other:	
•	roduct:		_feet		op of Well Casir		Top of Protecti	ve Casing 🛛 🗆	Other:	
Length of V	Water Colum	n: <u>176-</u> ð	lfeet		e:			nterval (from		_ ]
3. PURGE									//ft 6-in well = 1.469 gal/ft	
	🗖 Bail	ler, Size:		Bladder Pum		_ Time: \ mp □ 4" Sub.	4:25 Pump		Equipment Model(s	1
Purge Meth		rifugal Pum	p 🛛 Perista	Itic Pump 🛛 In	ertial Lift Pump	Other:	·		51 556 MPS	_  .
Materials: F	Pump/Bailer	Polyeti			🛛 Teflon® 🕻 e 関 Field-Clea	Other:	sable	2	RT- 15 LE TURI	<u>sid mel</u>
Materials: F	Rope/Tubing	Polyeth	hylene 🗆 Po		Teflon® D Ny	lon  ☐ Other: d  聲 Disposat		3		<u> </u>
Volume to !	Purge (minim				A10	a <b>a</b> Disposar gallons	DIE	4		
Was well p	-	G Yes		Pumping Ra	2.0	-	nt lunin	•	Calibrated? Ses Calibrated?	
Cı	um. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	±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	Water Level	Comments	
15:04		6.79	19.51	0.439	-156.8	4.01	2.20	16.90	water clear	
5:14		9.15	19.21	0.518	-168.3	2.02	-	-	* * 30	omeln
5:245	00 ml	7.18	18.99	0.554	- 178.3	1.61	3.2(	20.83	··· 30	min
		7.18	18.36	0.583	-198.5	7.14	3.38	23.59	* * ~?٢	
6:44		7.12	18.15	0.587	- 202.2	0.92		25.28	~	
<u>v</u> • 1					nyin		0.00		a continued on next sheet?	
. SAMPL	ING DA	TA						Geoc	hemical Analyses	
Method(s):	Baile				□ 2" Sub. Pun rtial Lift Pump 0	np 🔲 4" Sub. F	oump	Ferro	us Iron: mg/L	
Materials:	m h		ylene 🗖 Stai	nless 🗆 PVC	Teflon®	Other:				
	$\sim$	Dedicate			Field-Clean		able	DO:	mg/L	•
	$\mathcal{O}^{\mathbf{r}}$	Dedicate	ed 🗆 Prepa	ared Off-Site	Teflon® 🛛 Nylo I Field-Cleaned	on D Other: Disposable	e	Nitrat	e: <u> </u>	L
	ater at Time				Field Filtered		a No ≱	Sulfat	.e: mg/l	
	MM-31/ 5 7 mei			•	Time: 16:00	# of Contair	ners: 2			
	ample Collec					# of Contair	ners:	Alkalii	nity: mg/L	
Equipment f	Blank Collect	ted?	Yes 🗆 No	ID:		# of Contair	ners:			
5. COMME	ENTS	510	ght si	ther o	der ?	olignt 1	yellow (	lolor		
			0	·····V	· · · · · ·	<u> </u>	1			[
ote: Include com			the second se							

Page _____ of _____

**GROUNDWATER SAMPLING FIELD DATA SHEET** 

WELL ID: <u>MW-37 Zone 1</u>

	GE DATA			Spec. Cond.	ORP	DO	Turbidity		
Timé	Cum Gallons Removed (gal) 7	, <b>≠</b> 0.1 su	ڊ <del>ب</del> اغېر		> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comme
15:54	2000ml	7.18	18:12	-0.586	-212.5	0.83	409	26.91	-
						,^			
						3			zai-Su - Main
								(8.9)	
						- <u>1</u>			
·					- <u>e</u>			.ap.	
			n						
359.84	191 554		<u>* ; ; ;</u> ;	·	্ৰন) (		j. 11 g		
	121-124			-			*		
- 101 3	nest in fragme						•		42.02
								2	)
					- 44 ਹੁਣ		Al	•	
			with Se	M. Constanting	2.0	-	×		
									-
	13.39.4	20.11	00.5	·		Anjew .	1.3.8.	e. **	
Wayir	83.000 ·	· · · · ;		1. T.	5.501	- Sig-G	16.50	2	
3	نع ہے	in in							
36		· · · · · ·	10.5						M Soc 11
	-A/	03:1	3.35	7	- 3.9 45	583	181	611	35 11000
-	0	6 25	3.35			0.587			
	0		1. 910		, a + J2, 34 − 1	00.0	V / + 0 / -	C · · ·	
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-					-		<i>.</i>		
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مر. مر			5			1.0	12	195	
				· · · · · · · · · · · · · · · · · · ·	001	<del>^</del> -	:••;·.	1.	the second se
			-		рин, 				
1		Salat.	Wellst	- Harris d	r vih	r 1932 W	- 4ND1		

Purge data continued on next sheet?

Page _____ of _____



WELL ID: <u>MW-37 Zone 2</u>

1 PBO	JECT INF	ORMA ⁻	TION							e 
	Number: <u>136</u>			ber: 400.00	01	Area of Cond	ern:			
	Owens Corr					Personnel:	C.Mino	<u> </u>		
Project	Location: <u>Anc</u>	lerson, S	South Car	rolina		Weather:	<u>st. Clou</u>	dy. 60	5.	<u> </u>
2. WEL	L DATA		Date Me	easured:	117 09	Time:	9:00	Temp	orary Weil: 🛛 Yes 🛔	<b>Ľ</b> No
Casing	Diameter:	<u>1</u> inc	ches	Туре: 🛱 РУ	C D Stainles	s 🛛 Galv. Steel	I 🛛 Teflon®	Other:		
Screen	Diameter:	<u>1</u> inc	ches	Туре: 🐧 РУ	C 🛛 Stainles	s 🛛 Galv. Steel	I 🗆 Teflon®	Other:		
4	epth of Well:		feet	From: 🛛 To	op of Well Casir	ng (TOC) 🛛 T	op of Protectiv	re Casing	Other:	
Depth to	Static Water:	13.81	feet	• -	op of Well Casir		op of Protectiv	e Casing	Other:	-
	Product:		feet		op of Well Casii	ng (TOC) 🛛 T	op of Protecti	ve Casing	Other:	
Length o	of Water Colum	nn: <b>218.(4</b>	feet		<u>8.94</u>	_ gal 2-in well = 0.16			GS):	
	GE DATA		Date Pu		- 0.041 gam	······	1:30	en = 0.007 ga#	Equipment Mod	
		ilor Sizo:	r.	Bladdor Pump			Rump	V	51 556 MP	
	Cent	trifugal Pum	p 🖸 Perista	ltic Pump 🛛 Ine ainless 🖵 PVC			. <u></u>			
Material	s: Pump/Bailer	Dedica Dedica	ited DP	repared Off-Site	e 📭 Field-Clea	aned Dispos	sable	20	RT-1545 TI	A DIGINIETE
Material	s: Rope/Tubing			lypropylene		rlon 🛛 Other: ed 🛛 🎘 Disposat	ole	3		
Volume	to Purge (minii			olumes or	A	gallons		4		
	Il purged dry?	🛛 Yes		Pumping Ra	te: <u>a5</u>	g <del>al/min~_</del> 1	melnai	<u>~</u>	Calibrated? Ves	
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.		DO	Turbidity	Water Level	Comments	
Time	(gal)	±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	Water Lever	Comments	,
19:03		9.39	19.22	0.175	200.7	3.23		13.90	water slew	25 ml/1
12:12		9.61	19.27	0.17B	-195.2	2.36	2.31	13.95	d5 mUm	n pure not
12:22	500 mL	9.70	19.23	0.179	-189.4	1.69	2.57	13.95	n 1	
12:32		9.68	19.15	0.180	-189.4	1.32		-	-	
12:42	1500mL	9.68	19.11	0.18 2	-179.6	1.05	2.07	13.99	25 milini	E.
								Purge dat	a continued on next sh	neet?
4. SAMI	PLING DA	TA					•	Geoc	hemical Analyses	
Method(	S1.	ler, Size: rifuqal Pump		Bladder Pump lic Pump 🖸 Ine		mp □ 4" Sub. I □ Other:	Pump	Ferro	us Iron:	mg/L
Material	s: Pump/Bailer	D Polyeth	ylene 🔊 Sta	inless D PVC	Teflon®	Other:		DO:	~	mg/L
Matoriali	T T T T T T T T T T T T T T T T T T T	Dedicat		epared Off-Site ypropylene 🛛			adie			
	s: Tabing/Rope	Dedicat	ed DPrep	ared Off-Site	Field-Cleane	d 🔹 Disposab		Nitrat	e:	mg/L
	Water at Time		mg		Field Filtered	5	2	Sulfat	ie:	mg/L
	ID: Zonez				Time: <u>12:4</u>	# of Contai		Alkali	nity:r	mg/L
	e Sample Colle ent Blank Colle				11709	# of Contai # of Contai	2			
			0.11							
5. COM	MENTS	JC1	PM,	10 refi	11.5	discha	5/ 5	55 08	7 •	
			-puw	ip set	at 85	•	*			
Note: Include	comments such a	as well cond	ition, odor, pr	resence of NAP	L, or other item	s not on the field	data sheet.		and the second sec	
			· · · · · · · · · · · · · · · · · · ·							

Page _____ of _____

BROWN AND CALDWELL

WELL ID: <u>MW-37 Zone 2</u>

Time         Refixed (ga)         20.832         > of 200% or 200% or 200%         of 200% or 200%         store 200%         store 200%         store 200%		GE DATA	• 1 pH	Temp,	Spec. Cond.	ORP	DO	Turbidity	_	
	Time	Removed (gal)	.±0.1\.su	'₁ ±2°C	> of ±3% or .⁺ ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
	14			(: : : )		P. 5.1	s. 			
							2			
									8:	
									N. 212	
							e du			
	2415	1.27 (2)					1.11	<u>с</u>		·
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			-							003 00000 <del>0 - 74</del>
			-							
	5 WW	· istron				. <u> </u>	ALL	1.25 ×		35
		m ch		18.5	C	1.15	A	5	1	唐,
	1.2			to n						
					5	<u>11 p. j.</u>		<u> 19. p</u>		0.6
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		-			-			<u> </u>		
				¢.		10.7	1.99		2	
			•_ •		1		9.8.2.1.1	• • •	8-4	

Purge data continued on next sheet?

Page _____ of ____

#### BROWN AND CALDWELL

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: <u>MW-37 Zone 3</u>

1. PRO	JECT INF	ORMA	TION								]
Project I	Number: <u>136</u>	6868	Task Num	ber: <u>400.0</u>	01	Area of Cond				<u></u>	
Client:	Owens Corr	ning				_Personnel:		´	eadows		
Project I	_ocation: <u>Anc</u>	derson, S	South Car	rolina		_Weather:	pt. Clu	rdy 60	5		
2. WEL	L DATA		Date Me	easured: _t	117/09	_ Time: <b>0</b>	9:00	Temp	oorary Well: DYes	□No	1
Casing [	Diameter:	<u>1</u> inc	hes	Туре: 🏋 Р\	/C 🛛 Stainles	s 🛛 Galv. Stee	I Teflon®	Other:			
Screen I	Diameter:	<u>1</u> inc	hes	Туре: 📽 Р\	/C D Stainles	is 🛛 Galv. Stee	I 🛛 Teflon®	Other:			
Total De	epth of Well:	272	feet	From: D T	op of Well Casir	ng (TOC) 🛛 T	op of Protecti	ve Casing 🛛	Other:		
Depth to	Static Water:	17.02	feet	From: 🛍 Te	op of Well Casir	ng (TOC) 🛛 T	op of Protecti	ve Casing	Other:		
	Product:		feet		-	•	Fop of Protecti	ve Casing 🛛	Other:		
Length o	of Water Colun	nn. 54.18	feet		10.42	-		```	GS):		
				· · · · · · · · · · · · · · · · · · ·					/ft 6-in well = 1.469		4
							0 9:30 Pump		Equipment Mod	-	
Purge M	ethod: Cen					Imp 🛛 4" Sub.			31 556 MP		
Materials	s: Fump/Bailer	Polyeth     Dedica				Other: aned Dispose		2. <u></u>	RT-1545 T	x 6 <b>17</b> 4 y	peter
Materials	s: Rope/Tubin	Polyeth	nylene 🖸 Po	lypropylene	Teflon® 🖾 Ny	/lon D Other: d Disposat		3			1
Volume	to Purge (mini	-	•			gallons	bie	4			
	I purged dry?	I Yes		Pumping Ra	r ^	gal/min 🖌	nelmin	1	Calibrated? QYes		
	Cum. Gallons	ρН	Temp	Spec. Cond.	ORP	DO	Turbidity				1
Time	Removed (gal)	±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	Water Level	Comment	s	
10:12		6.85	16.63	0.223	- 60.	3.40 mg12	3.29	18.28	water clear	50	melin
10:22		6.70	16.04	0.219	-61.4	2.41	2.16	20.68	* 2	5 ml	· · · ·
10:32		6.75	16.73	0.218	-61.5	1.95	2.26	2a.17	25	nclm	- ·
10:42	1400 ml	6.74	16.82	0.217	-60.5	1.65	0.32	23.85	" 25 mcl	<i>m</i> i, •	
			=								
		1 - 50 - 10 - 10 45		h				Purge dat	a continued on next sl	neet? 🛛	
4. SAMF	LING DA	TA	-					Geoc	hemical Analyses		]
Method(s	SP:	ler, Size:		Bladder Pump ic Pump 🔲 Ine		np 🛛 4" Sub. F	Pump	Ferro	us Iron:	mg/L	52
Materials	: Puppo/Bailer			nless 🛛 PVC	•			-			
	-	Dedicate		epared Off-Site /propylene 🖸		ned 🖸 Disposi	able	DO:		mg/L	
	: Tubing/Rope	Dedicat	ed 🛛 Prepa	ared Off-Site		d 🛱 Disposabl	le	Nitrat	e:	mg/L	
1	Water at Time					1? 🗆 Yes 1	2	Sulfat	e:	mg/L	
Sample I	20105		-	<b>09</b> Sample	Time:	# of Contair	~	Alkalii	nitv:	mg/L	
	e Sample Colle					# of Contair					
Equipme	nt Blank Colle	cted? U	res KU No	D ID:		# of Contair	ners:				1
5. COM	MENTS	3	CPM	. arc	fill, 6	disch	and	60	psj		
Ť	USIDA	PW	WP II	ntake	105	"Bes			1: 1.M 1:		
Alaka ta t		••••••	No								-
ivote: înclude d	comments such a	as well condi	tion, odor, pr	esence of NAPI	L, or other items	s not on the field	data sheet.				1



WELL ID: <u>MW-37 Zone 3</u>

	Cum, Gallons Removed	PH o	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	(gal) • •			> of ±3% or ±10 µS/cm		> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comme
			-06:1	10	pe jr:	1 21			
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Purge data continued on next sheet?

Page _____ of ____



WELL ID:__TW-40___

1. PRO.	JECT INF	ORMA ⁻	TION						
	Number: <u>136</u>			ber: 400.00	1	Area of Conc	ern:		
	Owens Corr								
. –	Location: Anc	-							
2. WEL	L DATA	N	Date Me	asured 1	14-093	Time: AA	101.51	OT CTel	mporary Well: 🛛 Yes 🕯 🗘 Mó
	Diameter:					s Q.Qap. Spel			·
	Diameter:	•							
Total De	epth of Well:	94	feet	From: To	p of Well Casir	g (TOC) 🛛 T	op of Protecti	ve Casing	D Other:
Depth to	Static Water:	17.25	feet	From: 🗭 To	p of Well Casin	g (TOC) 🛛 T	op of Protecti	ve Casing	□ Other:
	Product:						op of Protecti	ive Casing	Other:
Length o	of Water Colum	nn: <b>7(.7)</b>	feet			-		•	m GS): gal/ft     6-in well = 1.469 gal/ft
3 PLIB	GE DATA		Date Pu		·······				Equipment Model(s)
Purge M	iethod. 🗆 Ba	iler, Size:	C	Bladder Pump	₽⁄2" Sub. Pu	mp 🛛 4" Sub.	Pump		
Ů		D Debueth		iinless 🛛 PVC	•	Other: Other:			Muccos- Pung
Material	s: Rump/Bailer	Dedica	ted DP	repared Off-Site	G-Field-Clea	ned 🛛 Dispos		-	DRT-15CE
Material	s: Rope/Tubing	Image: Polyeth Image: Dedica	iylene 🗆 Po ted 🗆 Prep	lypropylene	Teflon® ם Ny 🗆 Field-Cleane	lon 🖾 Other: d 🗳 <del>Dis</del> posab	le	3	451-556
Volume	to Purge (minii	mum): <u>5</u>	well v	olumes or 3	8.45	gallons		. 4	Heren digger
Was we	Il purged dry?	🛛 Yes	🗙 No	Pumping Ra	te:	gal/min			Calibrated? Gres Q
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Lev	vel Comments
Time	(gal)	±0.1 su	±2℃	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1552	0.5	13.67	17.91	3:836	18.3	5.29	10.6	22.29	preasitionate YSI
1557		13.68	18.28	3.829	22.0	5.09	7.69	23.7	4
1602	2	13.70	17.92	3.824	13.5	5.36	9.58	26.90	5
1607	2.5	13.68	18.01	3.814	12.3	5.07	9.13	28.15	
1612	2.75	13.69	18.10	3.813	12.2	4.72	9.11	28.72	
								Purge o	data continued on next sheet?
4. SAMF	PLING DA	TA						Ge	ochemical Analyses
Method(	ST.	ler, Size: rifugal Pump		Bladder Pump ic Pump Q Iner		np 🛛 4" Sub. F ] Other:	'ump	Fer	rous Iron: mg/L
Materials	: Cump Bailer	Polyethy		inless D PVC epared Off-Site			able	DO	: mg/L
Materials		D Dedicat	/lene 🛛 Poly	, propylene 1 ared Off-Site 1	eflon® 🔲 Nyl	on 🖸 Other:		Nitr	rate: mg/L
Depth to	Water at Time		· · · · · ·			I? 🗆 Yes D		e	fate mg/L
Sample	D:14-40	Sample Da	ate: / · / 6 ·	01 Sample 1	ime: 1625	_ # of Contair	ners: 3	Sui	
Duplicate	e Sample Colle	ected?	Yes 🖅 No	) ID:		# of Contair	ners:		álinity: J mg/L
Equipme	ent Blank Colle	cted? 🗆 `	Yes 🖬 No	) ID:	<u></u>	# of Contair	ners:		
5. COM	MENTS	YS1 4	Iving n	cadings .	of 4.0	S for	4.00	pH ar	1 4.497 yrs
for	4.49	m3 si	51'N.	So reade	y fine,	pH was	really	that 1	basic on this well.
Note: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	., or other items	not on the field	data sheet.		
							Re	Z	25
FORM GW-	2 (Rev 25.Sept.)	08 - sej)		Page	of _	2	Signature		

#### BROWN AND CALDWELL

## **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID:_____TW-40_____

B. PUR	Cum. Gallons	pН	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	•±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	Water Level	Comments
1617	3			3.814		5.01	8.10	30.00	
1622				3.813	6.9	4.94	7.70	31.42	
1625	Sample	Colle	ited			•			
						4		1.1.28	
	and the second								
					13.19			(*, <b>,</b> ;	
				1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -		<u></u>			
1.005					S.4				
	1998 - 1989 - 1989 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 -						•		
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	in the star				2.7.5			<b>v</b>	
						-	Y		
ton . Loui	entre Hig av Hill (and Shi	0.00			2.0	- 20.0	1 C. P.L	ra. e.t	the state
163.000						2.00			
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		2.9.4	ça.	02.0	6.4	1-28.6	-01-10	13.41	
		1. 22	4.4	- FAR	5 N.	+18. c	to Ri	2. 8	
	r								
		1.64	1 1 + +	25.1		3.6:3	5 83	<u>a.c.</u>	17.5 Albi
5						•			•
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2. 96	13.2 L		1. 2.	3 3	Nis 1		and the	7.57	

Purge data continued on next sheet?

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WELL ID: <u>TW-41</u>

1. PRO	JECT INF	ORMA	ΓΙΟΝ						
	Number: <u>136</u>			ber: <u>400.0</u> 0	1	Area of Conc	ern:		
	Owens Corn					Personnel:	DM + B	S	
	_ocation: And		outh Car	olina		Weather:			Cler
2. WÉL	L DATA	6.1.0	Date Me	asured: <u>CI</u>	1/16/09	Time AN	OS-Pi	ī, •te	emporary Well? DYes 200
Casing (	Diameter:		hes C.	Type: SCRV	C 🖵 Stainless	CI Galy, Steel	Teflón® (	D Other	1511 3.75
	Diameter:		0			Galy, Steel			
Total De	pth of Well:	55.3	feet			g (TOC) 🗖 Т			Other:
Depth to	Static Water:	14.73	feet	From: 🎽 To	p of Well Casin	g (TOC) 🗖 T	Protectiv	e Casing	
Depth to	Product:		feet		·	g (TOC) 🛛 Т	op of Protectiv	e Casing	Other:
Length o	of Water Colum	nn: <u>40.57</u>	feet	Well Volume	: 6.70		Screened Ir		om GS): gal/ft    6-in well = 1.469 gal/ft
			Data Du				36	en = 0.007	Equipment Model(s)
		iler. Size:		Bladder Pump	2" Sub. Pu	mp 🛛 4" Sub.	Pump		¥51.556
Purge M		trifugal Pump	D Peristal	tic Pump 🗅 Ine	rtial Lift Pump	Other:			
Material	s:(Pump/Bailer	Dedica	ted DPr		Field-Clea	ned 🛛 Dispos		-	DRT-ISCE
Material	s: Rope/Tubing		iylene 🛛 Pol	ypropylene	Teflon® D Nyl	lon	le	3.	Heron Dipper
Volume	to Purge (mini							4	Monsoon Pump
	Il purged dry?	🗆 Yes		Pumping Rat		gal/min			Calibrated? 18 Yes 🗆
	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Le	evel Comments
Time	Removed (gał)	±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	vvater Le	Comments
1441	0.5	8.81	18.47	6.452	165.9	3.32	16.5	20.7	5
1446	1.0	8.84	18.73	0.452	162.0	3.30	9.32	24.00	2-
1451	1.5	8.86	18.84	0.452	152.3	3.30	5.50	26.7	0
1456	2	8.86	19.15	0.452	146.3	3.15	4.48	28.7	8
1501	2.25	8.86	19.84	0.453	146.8	3.18	4.17	29.2	7'
								Purge	data continued on next sheet?
4. SAMI	PLING DA							Q	eochemical Analyses
Method(	s): □ Bail □ Centi	ler, Size: rifugal Pump	Peristalt	Bladder Pump ic Pump 🖵 Iner	1 🖬 2" Sub. Pur rtial Lift Pump	np 🛛 4* Sub. I I Other:	oump	Fe	errous Iron: mg/L
Material	s: ump/Bailer	Dedicat		nless 🖸 PVC		Other:	able	D	D:mg/L
Material	s:(Tubing)Rope		viene 🗆 Poly	/propylene 🏼 1	Teflon® 🛛 Nyl	on DOther:		Ni	trate: mg/L
	Water at Time	U Dedicat	ed 🖬 Prepa	ared On-Sile	- Field-Cleaned	d <b>XÍ</b> Disposabl			
	1D: <u>TW-41</u>						-	SL	ulfate: mg/L
1	e Sample Colle					# of Contai		All	kalinity: mg/L
	ent Blank Colle				"C 1530	# of Contai	2		X
5. COM					1 bL.	6P	<b>k</b> 1.1	I To	-11-16-89
		TUMP	MTUE			CD IS	HAD C ICA		-1(-10 91
Note: Include	comments such a	as well cond	ition. odor. pr	esence of NAP	L, or other items	s not on the field	data sheet.		1 2 4
							-1	24	ny/cg
FORM GW-	2 (Rev 25. Sept.	08 - sej)		Page	of	2	Signature	1	

#### B R O W N AND C A L D W E L L

# **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID:_____TW-41_____

	Cum. Gallons	pH .		Spec. Cond.		DO	Turbidity		
Time	Removed	±0.1 su	<b>≠2°</b> €	'> of ±3% or `' <b>1</b> 0 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
15.06	2.5	8.87	19.60	0.453	147.1	:3.22	4.71	29.98	
1511	2.75	8.88	19.10	0.452	149.1	3.34	0.53	33.82	· · · · · · · · · · · · · · · · · · ·
1516	3	8.86	19.21	6.452	147.6	3.24	3.36	35.23	
1520	Samp	e (6)	lectes	1		2 2		z ( )	1
							÷		
					1 N			1******	
			sel c	121	13	4.11			
	XS/- 55	}			•				
30	81 4 7 S.C.						1	-	
1050	Heran D			• 4				37	
MOY	Marsson				3.2.5	λ.	<i>:</i> .		· · · · · · · · · · · · · · · · · · ·
1							2	22	
			а с.				_		
	°	T.C.		-25.3		\$27.0	18.1	16.6	C.0 71
	_		3. <b>9</b> (m		Sa • 2 %	2.66	2.32	. s u	
		1.0-	5.5	3. C. C.	5.52:	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	18.51	07.5	
	e E			3 · · ·	C.a.		<u> 21. P</u> :	34.6	
_	•	••• 2		3.6		Section 2	10.	1000	
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					5. 6	-33		2	
	10 - 11 - 1			5-35		62 - 6 - 53		18	a la

Purge data continued on next sheet?

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

#### BROWN AND CALDWELL

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: TW-42

1. PRO	JECT INF	ORMA	TION								
Project I	Number: <u>136</u>	868	Task Num	ber: <u>400.00</u>	)1	Area of Conc	ern:				
	<u>Owens</u> Corn								Meadow	>	
Project I	ocation: And	erson, S	South Car	olina		Weather:	vercast	LI.R	11n 60°.		
2. WEL	DATA	3.10	Date Me	easured: 川	18 09?	Time:	8500	C Temp	orary Well: DYe	es <b>IN</b> O	
Casing	Diameter:	<u>1</u> inc	ches	Type: 🕅 PV	C Stainles	s 🛛 Galv. Steel	D Teflon®	Other:			
Screen	Diameter:	1inc	ches	Туре: 🕅 РV	C 🛛 Stainles	s 🛛 Galv. Steel	Teflon®	Other:	<u>_</u> _		
Total De	pth of Well:	26	feet	From: D To	p of Well Casir	ng (TOC) 🛛 T	op of Protectiv	e Casing	Other:	<del></del> .	
Depth to	Static Water:_	13.69	feet	From: 🗆 To	p of Well Casir	ng (TOC) 🛛 T	op of Protectiv	re Casing	Other:		
	Product:		feet		p of Well Casir	ng (TOC) 🛛 T	op of Protectiv	ve Casing	Other:		
Length o	of Water Colum	in: 12.3 1	feet	Well Volume	0.50				GS):		
							): 2 5	eli = 0.667 gali	ft 6-in well = 1.4		1
		ler, Size:		rged: Bladder Pump	🛛 2" Sub. Pu	mp 🛛 4° Sub.			Equipment		
Purge N	ethod:   Cent	rifugal Pum	p 🗅 Perista	ltic Pump 🛯 Ine	ertial Lift Pump	□ Other:			T -15 (E		oten
Material	s: Pump/Bailer	Polyeth Dedica		ainless ם PVC repared Off-Site		Other: Ined Disposition	able	2. <b>BR</b>	-19CE	100.00	
Material	s: Rope/ ubing					lon 📮 Other: d 🕼 Disposab		3			
Volume	to Purge (minir					gallons		4			
	Il purged dry?	Yes		Pumping Ra	0 E	gal/min ¥	nllmin	,	Calibrated?	Yes 🗆	
	Cum. Gallons	рН	Temp	Spec. Cond.	ORP	DO	Turbidity				
Time	Removed (gal)	±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	Water Level	Comn	nents	
8:53	acomi	4.58	16.02	0.047	ષઽ .પ	6.38	68.4	13.74	slightly	さかい	
9:03		4.55	16.09	0.047	43.6	6.29	56.1	13.75	clearing	/	1
9:13		4.63	16.55	0.045	42.4	6.33	33.4	13.74			
9:23	500ml	4.52	16.02	1.045	42.9	6.26	20.7	13.74			
9:33		4.52	16.92	0.044	49.4	6.78	12.3	-	•		
								Purge dat	a continued on n	ext sheet? 🗶	
4. SAM	PLING DA	TA						<u>Geoc</u>	hemical Analys	ses	
Method(		er, Size: ifugal Pump		Bladder Pump tic Pump 🖸 Ine		np □ 4" Sub. F □ Other:t*	Pump •	Ferro	us Iron:	mg/L	
Material	s: Fump/Bailer						-61-	DO:	-	mg/L	
	s: Tubing/Rope			epared Off-Site							
		Dedicat	ted D Prep	ared Off-Site	Field-Cleane	d Ef Disposabl		Nitrat	e:	mg/L	
	Water at Time					d? □ Yes 0	3	Sulfat	e:	mg/L	0
	e Sample Colle				<u> </u>	# of Contair # of Contair		Alkali	nity:	mg/L	
	e Sample Colle ent Blank Colle				-	# of Contain	-				
					1						ł
5. COM	MENTS	pi	mp	set a	+ 23.	2.					
		· · · · ·	•								
Note: Include	comments such a	as well cond	lition, odor. p	resence of NAP	L, or other items	s not on the field	data sheet.				
					<u> </u>	· · · · · ·					



	GE DATA	, pH, .	• Jemp	Spec. Cond.	ORP	DO	Turbidity			
Time	Cum. Gallons Removed	, ±0.1 su		> of ±3% or / <del>±</del> 10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comm	nen
9:43			16:89.		4.2.6	16-29	7.91	13.76	ii	
	1					7				
					20	2				
						=				
	1 72					9		Polêr		
					- C - C			1814		
	1							- C   291		
			2:45	i.	cre A	11.				
	200			·* ,			*		8	
R RIT	50 er - 11 %	A.			7		v		<u> </u>	
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	2.00		num H		5.6		X			
			2						<u>.</u>	
	4 3.16 5	1.1.1.2.	1.42		- <del>1. 2</del> .	<u> </u>		4 - 1		<u> </u>
192	51.0 July 12	the se	1	P		1. 1	£.,	32.3		- - -
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Purge data continued on next sheet?

#### B R O W N AND C A L D W E L L

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID: TW-43

1. PRO	JECT INF	ORMA	TION				ï			
Project	Number: <u>136</u>	6868	Task Nun	1ber: <u>400.0</u>	01	Area of Cond	ern:	28 -		
	Owens Corr							ol J. Mea	edows	
Project	Location: And	derson, S						•	-	
2. WEL	L DATA		Date Me	easured: <u>1</u>	1909	_Time:	8:10	Temp	orary Well: 🔲	Yes 🛱No
Casing	Diameter:	<u>1</u> inc	hes	Туре: 🗣 РМ	/C   Stainles	s 🛛 Galv. Stee				
Screen	Diameter:1	inc	hes	Туре: 🕱 РМ	(C 🛛 Stainles	is 🛛 Galv. Stee	I 🗆 Teflon®	Other:		
Total De	epth of Well:	18.6	feet	From: 🗆 To	op of Well Casir	ng (TOC) 🔲 1	op of Protecti	ve Casing 🛛	Other:	
Depth to	Static Water:	13.60	feet	From: 🙀 To	op of Well Casir	ng (TOC) 🔲 1	op of Protecti	ve Casing 🛛	Other:	
Depth to	Product:	~	feet	From: 🗆 To	op of Well Casir	ng (TOC) 🔲 1	Fop of Protecti	ve Casing 🛛	Other:	
Length o	of Water Colun	nn: <u>5</u>	feet	Well Volume Note: 1-in well		gal 2-in well = 0.16		nterval (from vell = 0.667 gal		.469 gal/ft
3. PUR	GE DATA		Date Pu	irged:	1/19/09	Time:	8:15		Equipmen	t Model(s)
Purge M	Ba	iler, Size:	Ø	Bladder Pump	0 🛛 2" Sub. Pu	ump 🛛 4" Sub.	Pump	1 V	51 556	mps
, i i i i i i i i i i i i i i i i i i i	s:(Pump/Bailer	D Debuell		ainless D PVC				-		Turbidimet
	$\bigcirc$			•	•	aned Dispos	sable	2		<u>,</u>
Material	s: Rope/tubing					/lon 🛛 Other: ed 🕅 Disposal	ole	3		
Volume	to Purge (mini	mum): 📕	JA well v	volumes or	NA	gallons		4		
Was we	I purged dry?	O Yes	D No	Pumping Ra	te:	gal/min			Calibrated?	Yes 🗅
Time	Cum. Gallons Removed	рН	Temp	Spec. Cond.		DO	Turbidity	Water Level	Com	ments
Time	(gal)	±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	Waler Lever	Com	ments
4:20		4.63	15.18	0.055	56.5	8.58	5.43	13.60	Water ch	con
9:30		4.58	15.93	0.053	51.1	6.19	-	1360	••	<b>n</b>
9:40	450 mL	4.59	16.21	0.052	49.4	6.03	3.73	13.61	ه مو	· · · · ·
9:50	650ml	4.58	16.60	0.050	41.9	5.94	2.67	13.0	•	[*]
			8							
								Purge data	a continued on r	next sheet?
4. SAMF	LING DA	ТА					•	Geoc	nemical Analy	ses
Method(		ler, Size: rifugal Pump		Bladder Pump ic Pump 🖸 Iner		np □ 4" Sub. F ⊐ Other: <u>1*</u>	Pump	Ferro	us Iron:	mg/L
Materials	: Rump/Bailer	Polyeth		inless D PVC				DO:	-	mg/L
Materials	: / ubing/Rope			•		ned 🛛 Disposi on 🖾 Other:	adie	-5		
	Ċ	Dedicat	ed 🛛 Prepa	ared Off-Site	Field-Cleaned	d 🐮 Disposabl		Nitrate	e:	mg/L
•	Water at Time	•		<del></del>		l? ⊡ Yes û	· .	Sulfat	e:	mg/L
	D: <u>TW-43</u>				ime: 10 -01			 Alkalir	nity:	mg/L
	e Sample Colle nt Blank Colle					# of Contair		—	-	
Equipme				· ····································		# of Contair				
5. COM	MENTS									
Vote: Include	comments such a	as well condi	tion, odor, pr	esence of NAPL	., or other items	not on the field	data sheet.		0/4.11.11.11.11.11.11.11.11.11.11.11.11.11	

Page _____ of _____



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#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID:_____TW-43_____

	Cum. Gallons	pH_	Temp	Spec. Cond.	ORP	DO	Turbidity		
Time	Removed (gal)	10 D 8 1	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
2			s: 6		6.31354	10	-		
					¥.	( <b>4</b> )			
				< · ·		5.			
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A			,						
							<u></u>		· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·	2.01		<u> </u>	2 °C •	<del>- द्विण्डुक</del>			
<u>e 1</u>	1.7		<b>-</b> · · ··	<u> </u>	1.13	of Sec. 3.	61 34		
8	× • ,	<del></del>		<u>.</u>				- <u>-</u>	N SI SIC
	2 1	12.51		1 1 3		·			mill & Cont
			•	50 A.S.	30 •		11 12		
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					-		2		

Purge data continued on next sheet?

Page _____ of _____



1700

WELL ID: <u>TW-44</u>

1. PRO	JECT INF	ORMA	TION						
Project	Number: <u>136</u>	6868	_ Task Num	ber: <u>400.00</u>	01	Area of Conc	ern:		
Client:_	Owens Corr	ning				Personnel:	BS D	M	
Project	Location: And	derson, S	South Ca	rolina		Weather:	5 very	~45	·F
2. WEL	L DATA		Date Me	easured: 🎢	.16-04	Time: 4-2	<b>η</b>	• Temp	orary Well: DYes 2No
Casing	Diameter:	<u>2 in</u>	ches 🔊	Type: . CPV	C Stainles	s 🛛 Galv. Stee		Cther:	
Screen	Diameter:	<u>2</u> in	ches 🚆 .	Type: Type:	C 🗆 Stainles	s 🛛 Galv. Stee	□ Teflon®	Other:	and the second second
Total De	epth of Well:	74	_feet		· • •	ng (TOC)	· · · · ·		1996 - A. S. H. 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987
Depth to	Static Water:	9.55	feet ·		-	ng (TOC) 🗄 🖽 T	-	-	
1 ·	Product:		· · · · · ·		1. I I I I I I I I I I I I I I I I I I I	ng (TOC) 🔲 T		·	
Length	of Water Colur	np <u>; 6 4, 4 *</u>	Zfeet	Well Volume	- 0.011 ap//#	gal	Screened Ir	nterval (from	GS):
		2 A	Dete Du						Equipment Model(9)
· · ·									
Purge N						mp 4" Sub.			alpe
Material	s: Pump/Baile	Dedica	ated 👇 🖸 P	ainless	Field-Clea	ined 🖸 Dispos	sable	_ 2. <u> </u>	31-556
Material	s: Rope/Tubin	Polvet	hylene 🖸 Po	lypropylene.	Teflon® D Ny	lon □ Other: d		, 3. 🕂	onson Praip!
Volume	to Purge (mini	~	•					.4. <b>D</b>	RT-ISCE
	Il purged dry?			Pumping Ra		gal/min	n en la c	2749 E	Calibrated? 27es
	Cum. Gallons	рН	*Temp	Spec. Cond.		bo	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
45017	1.0 6.52 17.92 0.071 209.7 5.80 764 12.95								
1710	2.5	6.54	17.85	0.070	213.2	5.82	212	13.36-	
AIS	3.5	6.47	17.56	9.069	212.2	5.80	112.9	13.70-	
1720	5.0	6.44	17.81	0.008	213.7	5:80	56.7	13:8-	
1775	6.0	6:47	17.82	0.068	210.7	5.77	43.5	13.78	1. 3 P
				7. N. C 11	м Х _с ,		N. 194	Purge date	a continued on next sheet?
4. SAMF	PLING DA				ا المحاد مع			Geocl	nemical Analyses
Method(						np		Ferro	us Iron: mg/L
Materials	s: Pump/Bailer	•				Other:		DO:	ma/L
Materials	Materials: Tubing/Rope @Polyethylene Dolypropylene Difelion® Division Other:								
Death to Water et Time of Compliant									
			0				_	Sulfat	e:/mg/L
Sample ID: <u>10-111</u> Sample Date: <u>11000</u> Sample Time: <u>1900</u> # of Containers: <u>S</u> Duplicate Sample Collected? <u>Ves of No</u> ID: # of Containers: Alkatinity: mg/L									
Duplicate Sample Collected?       Yes       Yes									
	5. COMMENTS								
Note: Include	Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.								
			• <b>I</b> • 18				م م	al c	12 -
FORM GW-	2 (Rev 25.Sept.	08 - sej)		Page	of		Signature		

#### B R O W N AND C A L D W E L L

**GROUNDWATER SAMPLING FIELD DATA SHEET** 

WELL ID:_____TW-44_____

	Cum. Gallons	рH	Temp	Spec. Cond.	ORP	DO	Turbidity			
Time	Removed (gal)	, ±0.1 șu	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Co	omments
1730	7.0	6.45	17.77	2:067	240.7	\$.82	30.2	14.61-		
15135	8.0	6.42	17.80	0.069	209.0	5.79	26.0	15.51		
19740	8.5	6.44	17.64	0.069	211.1	5.79	28.3	14.42-		
1745	9.5	6.45	1778	0.069	208.3	5.22	26.6	14.89	/	
1750	19.0	6.41	17.81	0.069	210.1	5.80	18.4	16.02-		
1755	11.0	6.41	17.76	2069	210.2	5.78	18.0	16.92-	<u>.</u>	
1800	12.0	6.43	17:79	0-069	209.9.	5-75	17.3	15.81-		•
1805	13.00	6.41	17.84	0.068	209.5	626	15.6	16.46-		
1810:	7140	6.40	17.84	0.069	212.6	5.80	15.3	18.26		u
18:45	tsion.	6.41	17.82	0.069	211.9	5.73	22.9	18.43-		
1875	16.523	6.42		0.068	212.3	5.73	25.5	18.52		
1825	17.0	6.44	17.73	0.068	215.2	5.72	20.8	17.48		
1830	(8.0	6.42	17.69	0.070	215.6	5.70	15.7	15.6-		
1835	18.5	k. 46	17.63	0.068	2148	5.70	H	19.72	-	-
1840	19.0	6.46	17.70	2.068	214.0	5.72	18.3	15.1-		- 11 4 1
1845		er 1 / / / /		0.070	220.0	5.72	12.2	14.73	- <u></u>	1.25
1850	20.0	6.46	17.67	0.270	221.3	6.71	11.1	14.71-		
1855	200,20.5	6.46	17.68	2.069	227.4	571	1.3.3	14.42	-	
1900	Collect	ul	Jangeh	An	- pin	ging t	o / Z	house		
0	m pa	man. He	1 in	ia s	all h	/		· · · · · ·		
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									R	
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Purge data continued on next sheet?

25 Signature

Page _____ of _____

#### BROWN AND CALDWELL

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

1

WELL ID: TW-45

1. PROJECT INFORMATION						
Project Number: <u>136868</u> Task Number: <u>400.001</u> Area of Concern:						
Client: Owens Corning Personnel:						
Project Location: Anderson, South Carolina Weather:						
2. WELL DATA Date Measured: Time: Temporary Well: DYes DNo						
Casing Diameter: inches Type: DPVC DStainless DGalv. Steel DTeflon® DOther:						
Screen Diameter: inches Type: DPVC DStainless DGalv. Steel DTeflon® DOther:						
Total Depth of Well: 28.8 feet From: Top of Well Casing (TOC) Top of Protective Casing Other:						
Depth to Static Water:feet From: D Top of Well Casing (TOC) D Top of Protective Casing D Other:						
Depth to Product:feet From:						
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)						
Duran Manhard, 🖸 Bailer, Size: 🖸 Bladder Pump 🗇 2" Sub. Pump 🗇 4" Sub. Pump						
Centritugal Pump D Peristanic Pump D Inernal Lift Pump D Other:						
Materials: Pump/Baller Dedicated Prepared Off-Site Field-Cleaned Disposable 2.						
Materials: Rope/Tubing       Delivethylene       Delivethylene       Teflon®       Nylon       Other:						
Volume to Purge (minimum): well volumes or gallons 4						
Was well purged dry?  Yes No Pumping Rate: gal/min Calibrated? Yes						
Cum. Gallons         pH         Temp         Spec. Cond.         ORP         DO         Turbidity           Time         Removed         Image: set 10% or 1 and 10% or 1						
TimeRemoved (gal) $\pm 0.1 \text{ su}$ $\pm 2^{\circ}C$ > of $\pm 3\%$ or $\pm 10 \mu$ S/cm> of $\pm 10\%$ or $\pm 20 \text{ mV}$ > of $\pm 10 \text{ NTU}$ Water LevelComments(gal) $\pm 0.1 \text{ su}$ $\pm 2^{\circ}C$ > of $\pm 20 \text{ mV}$ $\pm 0.2 \text{ mg/L}$ $\leq 10 \text{ NTU}$ Water LevelComments						
DEN-NOT SAMPLED						
Princi Princip						
Purge data continued on next sheet?						
4. SAMPLING DATA <u>Geochemical Analyses</u>						
Method(s): Bailer, Size: Bladder Pump 2 2" Sub. Pump 4" Sub. Pump Control of the sub. Pump Contr						
Materials: Pump/Bailer Dolyethylene Stainless PVC Teflon® Other: Dedicated Prepared Off-Site Field-Cleaned Disposable DO:mg/L						
Materials: Tubing/Rope Delyethylene Delypropylene Define Delyn Delyn Define Delypropylene Delypropyl						
Depth to Water at Time of Sampling:						
Sample ID: Sample Date: Sample Time: # of Containers:						
Duplicate Sample Collected?  Ves  No ID: # of Containers: Alkalinity: mg/L						
Equipment Blank Collected?  Yes No ID: # of Containers:						
5. COMMENTS						
Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.						

Page _____ of _____



F

#### **GROUNDWATER SAMPLING FIELD DATA SHEET**

WELL ID:_____TW-45_____

	GE DATA Cum. Gallons	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	-	
Fime .	Removed (gal)	⊉⊓ ±0.1 su	±2°C	> of ±3% or ±10 µS/cm		> of ±10% or ±0.2 mg/L	≤ 10 NTU	Water Level	Comments
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	8 -	-							

Purge data continued on next sheet?

Page _____ of _____



WELL ID: TW-46

1. PROJ	ECT INF	ORMAT	ΓΙΟΝ						
Project N	Number: <u>136</u>	868	Task Num	per: <u>400.00</u>	1	Area of Conc	ern:		
	Owens Corn					Personnel:		M	
Project L	ocation: And	erson, S	outh Car	olina		Weather:	sor, a	ting	
2. WELL Casing D Screen D Total De Depth to Depth to Length c <b>3. PURC</b> Purge M	Diameter:	2inc 2inc 88.3 24.15 in: in: iiler, Size: trifugal Pump	Date Me hes feet feet feet Date Pui Date Pui	asured: <u>1. /</u> Type: <u>0</u> + V/ Type: <u>0</u> + V/ From: <u>0</u> To From: <u>10</u> To From: <u>10</u> To Well Volume Note: 1-in well rged: <u>(/ (</u> Bladder Pump tic Pump <u>10</u> Ine inless <u>0</u> P/C	C Stainless C Stainless p of Well Casin p of Well Casin p of Well Casin = 0.041 gal/tt	Time:	Teflon® Teflon® op of Protectiv op of Protectiv op of Protectiv Screened In 7 gal/ft 4-in w	Temp	Other:
Material Volume	s: RopeAubing to Purge (mining Il purged dry?	Dedica	nylene 🗆 Pol Ited 🗆 Prep	ypropylene D ared Off-Site	Teflon® D Ny D Field-Cleane		sable	35 <u>D</u>	Calibrated? Pres D
vvas we	Cum. Gallons	1	Temp	Spec. Cond.		DO	Turbidity		
Time	Removed (gal)	±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	Water Level	Comments
1017	0.50	12.97	20.04	1.331	-1.0	0.44	6.59	27.61	
1022	0.75	12.98	19.62	1.336	-9.3	0.38	6.65	28.65	-
1027	1.0	12.99	20.00	1.337	-14.8	0.34	8.95	30.45	
1032	1.25	13.03	11.40	1.335	-24.6	0.33	18.3	30.72	-
637	1.75	12.96	20.25	1.298	-18.5	0.52	17.5	32.45	
1037	1. 17							the second s	a continued on next sheet?
Method	4. SAMPLING DATA         Method(s):       Bailer, Size:       Bladder Pump       2 Sub. Pump       4" Sub. Pump         Geochemical Analyses         Method(s):       Polyethylene       Polyethylene       Polyethylene         Method(s):       Polyethylene       Polyethylene       Polyethylene								ugʻlron: mg/L
	s: Tubing/Rop		ted DPr nylene DPol	epared Off-Site	D-Field-Clea Teflon® D Ny	ined 🛛 Dispos Ion 🖾 Other:	<u></u>	DO: Nitrat	mg/L
	Materials: Tubing Rope       Indicated       Prepared Off-Site       Indicated       Indindicated       Indicated       Indicated								
Duplicat	ID: <u>////·Y//</u> te Sample Coll ent Blank Colle	ected?	Yes 🖌 N	D ID:	<u> </u>	# of Contai # of Contai # of Contai	iners:	Alkali	nity: mg/L
	MENTS				<u>(0)140</u>				·····
Note: Include	comments such	as well con	dition, odor, p	resence of NAF	PL, or other item	is not on the field	l data sheet.		

Page _____ of _____

#### B R O W N AND C A L D W E L L

**GROUNDWATER SAMPLING FIELD DATA SHEET** 

WELL ID:_____TW-46_____

	Cum. Gallons	рН	Temp	n page _/	ORP	DO	Turbidity		
Time	Removed (gal)	±0.1.su		1	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L		Water Level	Comments
042	2.0	12.95		1.7.75	-18.2	0.56	14.1	33.50	£
147	2.5	12.94	20.77	1.255	-24.8	0.26	12.5	37.16	-
52	3.0	12.94	20.75	1.258	-26.5	0.25	11.2	39.05	-
57	3.25						120	49.15	-
62	3. \$50						14.0	42.70	5
107				1.157			12.7	44.49-	-
112				1.176			12.4	45.82	
117.	5.0.4	12.84	21.38	1.144	-14.5	0.29	11.4	50.17	-
22.	1			1.128	-6.7	0.35	9.8	51.12	Q
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# APPENDIX B: LABORATORY ANALYTICAL REPORT

BROWN AND CALDWELL

В

#### ANALYTICAL ENVIRONMENTAL SERVICES, INC.



August 21, 2009

Tamara Berryman BROWN AND CALDWELL 990 Hammond Drive Suite 400 Atlanta, GA 30328

TEL: (770) 673-3678 FAX: (770) 396-9495

RE: Owens Corning

Order No.: 0908A01

Dear Tamara Berryman:

Analytical Environmental Services, Inc. received 19 samples on 8/14/2009 4:00:00 PM for the analyses presented in the 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 07/01/09-06/30/10. -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/09.

These results relate only to the items tested. This report may only be reproduced in full and contains  $\partial \psi$  total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

April Crenshaw Project Manager

AES	
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ANALYTICAL ENVIRONMENTAL SERVICES, INC 3785 Presidential Parkway, Atlanta GA 30340-3704

CHAIN OF CUSTODY

Work Order: 0908401 Dry 1 Ś 1 1

www.acsatlanta.com         check on the status of         ur results, place bottle         orders, etc.         name         REMARKS         RECEPT         Total # of Containers         Standard 5 Business Days         Standard 5 Business Days         Moter         Nother         If PACKAGE:         If PACKAGE:		r.		>			Visit our website	
Check on the status of orders, etc.         In results, place bottle         Orders, etc.         REMARKS         Recept         Total # of Containers         Standard 5 Business Days         Standard 5 Business Days         Standard 5 Business Days         Other         If PACKAGE:         If PACKAGE:         If PACKAGE:		Attank, 6A	303,	8			www.aesatlanta.com	
orders, etc.       REMARKS       REMARKS       REMARKS       REMARKS       REMARKS       REMARKS       REMARKS       Recept       Total # of Containers       Standard 5 Business Days Rush       Next Business Day Rush       Same Day Rush (auth req.)       Other       It PACKAGE:       It PACKAGE:	70-294-2997		1	5	. 5		to cneck on the status of your results, place bottle	stəu
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ANALYTICAL ENVIRONMENTAL SERVICES, INC 3785 Presidential Parkway, Atlanta GA 30340-3704

CHAIN OF CUSTODY

Work Order: DAD 87441  $\left( \right)$ C chu ha

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1: PROJECT #: 15 PROJECT #: 15 SITE ADDRESS:	PROJECT INFORMATION	RECEIPT	
PROJECT #: 12	ins (orning)	Total # of Containers	2
	<u> </u>	Tumarcund Time Request	
	Andeson, SC		
16.00 SEND REPORT TO:	Mera Derryman	Next Business Day Rush	
SPECIAL INSTRUCTIONS/COMMENTS:	and on	Same Day Rush (auth req.)	
IN CLIENT Fedex UPS MAIL COURTER		STATE PROGRAM (if any): E-mail? (Y) N; Fax7 , Y / N	
GREYHOUND OTHER QUOTE #	PO#:	TA PACKAGE: I (II) III	IV
SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT. SAMPLES ARE DISPOSED OF 30 DAYS AFTER CONNELETION OF REPORT THI RECORDED AS DEPORT THE SECOND AND AS AFTER COND	COC AES WILL PROCEED AS STANDARD T	AT.	

#### Sample/Cooler Receipt Checklist

client Brown and Caldwel	(	Work Order Number 0902	7A01
Checklist completed by <u>NDerinderg</u> Signature Date	<u>8/14/0</u>	9	
Carrier name: FedEx UPS Courier Client US	S Mail Othe		
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? (4°C±2)*	Yes 🗹	No	
Cooler #1 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 L	No	
Samples in proper container/bottle?	Yes 🗹	No	
Sample containers intact?	Yes L	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 su	bmitted	Yes L No	
Water - pH acceptable upon receipt?	Yes	No Not Applicable	
Adjusted?	Chec	ked by	
Sample Condition: Good Other(Explain)			
(For diffusive samples or AIHA lead) Is a known blank includ	ed? Yes	No	

#### See Case Narrative for resolution of the Non-Conformance.

......

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Date:	21-Aug-09
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CLIENT:	BROWN AND CALDWELL
Lab Order:	0908A01
Project:	Owens Corning
Lab ID:	0908A01-001A

#### Client Sample ID: MW-33-245-255 Tag Number: Collection Date: 8/10/2009 6:05:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	S BY GC/MS SW	3260B	(SV	V5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
1,1-Dichloroethene	590	50	ug/L	117208	10	8/18/2009 12:55:00 AI
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Carbon tetrachloride	19	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Chloroform	18	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 6:33:00 AM
Surr: 4-Bromofluorobenzene	90.7	61.3-128	%REC	117208	1	8/18/2009 6:33:00 AM
Surr: 4-Bromofluorobenzene	90.9	61.3-128	%REC	117208	10	8/18/2009 12:55:00 AI
Surr: Dibromofluoromethane	114	67.8-130	%REC	117208	1	8/18/2009 6:33:00 AM
Surr: Dibromofluoromethane	105	67.8-130	%REC	117208	10	8/18/2009 12:55:00 Ał
Surr: Toluene-d8	96.1	70.6-121	%REC	117208	1	8/18/2009 6:33:00 AM
Surr: Toluene-d8	93.7	70.6-121	%REC	117208	10	8/18/2009 12:55:00 AI

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	в	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 1 of 19
	Ν	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 1 of 19
	S	Spike Recovery outside limits due to matrix		

Date: 21-Aug-09

CLIENT:	BROWN AND CALDWELL	Cli
Lab Order:	0908A01	
Project:	Owens Corning	C
Lab ID:	0908A01-002A	

#### Client Sample ID: MW-33-395-410 Tag Number: Collection Date: 8/11/2009 7:35:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUND	S BY GC/MS SW	3260B	(SW5030B)			Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
1,1-Dichloroethene	190	50	ug/L	117208	10	8/19/2009 11:36:00 Al
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Chloroform	14	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/19/2009 2:21:00 AM
Surr: 4-Bromofluorobenzene	91.2	61.3-128	%REC	117208	1	8/19/2009 2:21:00 AM
Surr: 4-Bromofluorobenzene	91.4	61.3-128	%REC	117208	10	8/19/2009 11:36:00 AI
Surr: Dibromofluoromethane	113	67.8-130	%REC	117208	10	8/19/2009 11:36:00 Al
Surr: Dibromofluoromethane	113	67.8-130	%REC	117208	1	8/19/2009 2:21:00 AM
Surr: Toluene-d8	97.2	70.6-121	%REC	117208	10	8/19/2009 11:36:00 AI
Surr: Toluene-d8	95.9	70.6-121	%REC	117208	1	8/19/2009 2:21:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	в	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 2 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 2 of 19
	S	Spike Recovery outside limits due to matrix		

# CLIENT:BROWN AND CALDWELLLab Order:0908A01Project:Owens CorningLab ID:0908A01-003A

Analyses

Date: 21-Aug-09

Client Sample ID: MW-33-355-365 Tag Number: Collection Date: 8/12/2009 1:35:00 PM Matrix: GROUNDWATER

BatchID DF Date Analyzed

DLATILE ORGANIC COMPOUNDS	BY GC/MS SV	V8260B	(S)	W5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
i,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
,1-Dichloroethene	530	50	ug/L	117208	10	8/18/2009 1:23:00 A
,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
enzene	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
Carbon tetrachloride	6.8	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
hloroform	18	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
is-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
thylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 #
tethylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 /
etrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 /
oluene	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
rans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
richloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
/inyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 7:01:00 A
ylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 7:01:00 A
Surr: 4-Bromofluorobenzene	92.9	61.3-128	%REC	117208	1	8/18/2009 7:01:00 A
Surr: 4-Bromofluorobenzene	94.1	61.3-128	%REC	117208	10	8/18/2009 1:23:00 A
Surr: Dibromofluoromethane	113	67.8-130	%REC	117208	1	8/18/2009 7:01:00 A
Surr: Dibromofluoromethane	106	67.8-130	%REC	117208	10	8/18/2009 1:23:00 A
Surr: Toluene-d8	96.4	70.6-121	%REC	117208	1	8/18/2009 7:01:00 A
Surr: Toluene-d8	92.7	70.6-121	%REC	117208	10	8/18/2009 1:23:00 A

Limit Qual Units

Result

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	в	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 3 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 3 of 19
	S -	Spike Recovery outside limits due to matrix		

CLIENT:	BROWN AND CALDWELL
Lab Order:	0908A01
Project:	Owens Corning
Lab ID:	0908A01-004A

#### Client Sample ID: EB-122 Tag Number: Collection Date: 8/12/2009 11:10:00 AM Matrix: AQUEOUS

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS_SW8	260B	(S\	V5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
1,1-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 3:17:00 AM
Surr: 4-Bromofluorobenzene	87.6	61.3-128	%REC	117208	1	8/18/2009 3:17:00 AM
Surr: Dibromofluoromethane	108	67.8-130	%REC	117208	1	8/18/2009 3:17:00 AM
Surr: Toluene-d8	93.8	70.6-121	%REC	117208	1	8/18/2009 3:17:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	в	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 4 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 4 of 19
	S	Spike Recovery outside limits due to matrix		

# BROWN AND CALDWELL

Lab Order:0908A01Project:Owens CorningLab ID:0908A01-005A

CLIENT:

#### Date: 21-Aug-09

Client Sample ID: MW-29R ZONE 3 Tag Number: Collection Date: 8/12/2009 7:15:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW	3260B	(S)	N5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
1,1-Dichloroethene	640	50	ug/L	117208	10	8/18/2009 1:51:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	<u>,</u> 1	8/18/2009 7:29:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Carbon tetrachloride	25	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Chloroform	18	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 7:29:00 AM
Surr: 4-Bromofluorobenzene	95.7	61.3-128	%REC	117208	1	8/18/2009 7:29:00 AM
Surr: 4-Bromofluorobenzene	91.2	61.3-128	%REC	117208	10	8/18/2009 1:51:00 AM
Surr: Dibromofluoromethane	113	67.8-130	%REC	117208	1	8/18/2009 7:29:00 AM
Surr: Dibromofluoromethane	105	67.8-130	%REC	117208	10	8/18/2009 1:51:00 AM
Surr: Toluene-d8	94.5	70.6-121	%REC	117208	1	8/18/2009 7:29:00 AM
Surr: Toluene-d8	95.1	70.6-121	%REC	117208	10	8/18/2009 1:51:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	в	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 5 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 5 of 19
	S	Spike Recovery outside limits due to matrix		

Date:	2.	1-Aug-09
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CLIENT:	BROWN AND CALDWELL	Client Sample ID: MW-29R ZONE 4
Lab Order:	0908A01	Tag Number:
Project:	Owens Corning	Collection Date: 8/13/2009 12:15:00 PM
Lab ID:	0908A01-006A	Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY	GC/MS SW	8260B	(SV	V5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
1,1-Dichloroethene	630	50	ug/L	117208	10	8/18/2009 2:19:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Carbon tetrachloride	22	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Chloroform	17	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 7:58:00 AM
Surr: 4-Bromofluorobenzene	91.8	61.3-128	%REC	117208	1	8/18/2009 7:58:00 AM
Surr: 4-Bromofluorobenzene	92.4	61.3-128	%REC	117208	10	8/18/2009 2:19:00 AM
Surr: Dibromofluoromethane	117	67.8-130	%REC	117208	1	8/18/2009 7:58:00 AM
Surr: Dibromofluoromethane	105	67.8-130	%REC	117208	10	8/18/2009 2:19:00 AM
Surr: Toluene-d8	96.8	70.6-121	%REC	117208	1	8/18/2009 7:58:00 AM
Surr: Toluene-d8	94.7	70.6-121	%REC	117208	10	8/18/2009 2:19:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	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		Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 6 of 1
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 6 of 1
	S	Spike Recovery outside limits due to matrix		

# CLIENT:BROWN AND CALDWELLLab Order:0908A01Project:Owens CorningLab ID:0908A01-007A

#### Date: 21-Aug-09

#### Client Sample ID: MW-36 ZONE 1 Tag Number: Collection Date: 8/13/2009 1:15:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW8	260B	(S)	N5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
1,1-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 3:45:00 AM
Surr: 4-Bromofluorobenzene	92.8	61.3-128	%REC	117208	1	8/18/2009 3:45:00 AM
Surr: Dibromofluoromethane	109	67.8-130	%REC	117208	1	8/18/2009 3:45:00 AM
Surr: Toluene-d8	92.0	70.6-121	%REC	117208	1	8/18/2009 3:45:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	Н	Holding times for preparation or analysis exceeded	l	Estimated value detected below Reporting Limit Page 7 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 7 of 19
	S	Spike Recovery outside limits due to matrix		

#### Date: 21-Aug-09

# CLIENT:BROWN AND CALDWELLLab Order:0908A01Project:Owens CorningLab ID:0908A01-008A

#### Client Sample ID: MW-36 ZONE 3 Tag Number: Collection Date: 8/13/2009 3:35:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW	3260B	(S\	N5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
1,1-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Methylene chloride	BRL.	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 4:13:00 AM
Surr: 4-Bromofluorobenzene	92.4	61.3-128	%REC	117208	1	8/18/2009 4:13:00 AM
Surr: Dibromofluoromethane	108	67.8-130	%REC	117208	1	8/18/2009 4:13:00 AM
Surr: Toluene-d8	93.5	70.6-121	%REC	117208	1	8/18/2009 4:13:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	. <	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 8 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 8 of 19
	S	Spike Recovery outside limits due to matrix		

# CLIENT:BROWN AND CALDWELLLab Order:0908A01Project:Owens CorningLab ID:0908A01-009A

#### Date: 21-Aug-09

Client Sample ID: MW-36 ZONE 5 Tag Number: Collection Date: 8/13/2009 4:30:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW8	260B	(!	SW5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
1,1-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Benzene	BRL	5.0	ug/L	117208	1 -	8/18/2009 4:41:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 4:41:00 AM
Surr: 4-Bromofluorobenzene	94.0	61.3-128	%REC	117208	1	8/18/2009 4:41:00 AM
Surr: Dibromofluoromethane	113	67.8-130	%REC	117208	1	8/18/2009 4:41:00 AM
Surr: Toluene-d8	93.5	70.6-121	%REC	117208	1	8/18/2009 4:41:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 9 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 9 of 19
	S	Spike Recovery outside limits due to matrix		

Date: 21-Aug-09

CLIENT:	BROWN AND CALDWELL	Client Sample ID: MW-22
Lab Order:	0908A01	Tag Number:
Project:	Owens Corning	Collection Date: 8/13/2009 6:40:00 PM
Lab ID:	0908A01-010A	Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY	GC/MS SW	8260B	(S\	V5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
1,1-Dichloroethene	650	250	ug/L	117208	50	8/17/2009 11:58:00 PI
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Carbon tetrachloride	30	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Chioroform	17	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Ethylbenzene	BRL	5.0	ug/L.	117208	1	8/19/2009 1:53:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/19/2009 1:53:00 AM
Surr: 4-Bromofluorobenzene	91.8	61.3-128	%REC	117208	1	8/19/2009 1:53:00 AM
Surr: 4-Bromofluorobenzene	96.7	61.3-128	%REC	117208	50	8/17/2009 11:58:00 PI
Surr: Dibromofluoromethane	107	67.8-130	%REC	117208	1	8/19/2009 1:53:00 AM
Surr: Dibromofluoromethane	103	67.8-130	%REC	117208	50	8/17/2009 11:58:00 PI
Surr: Toluene-d8	93.9	70.6-121	%REC	117208	1	8/19/2009 1:53:00 AM
Surr: Toluene-d8	90.7	70.6-121	%REC	117208	50	8/17/2009 11:58:00 Pł

Oualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
<b>C</b>	>	Greater than Result value	в	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 10 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 10 of 19
	S	Spike Recovery outside limits due to matrix		

#### Date: 21-Aug-09

CLIENT:	BROWN AND CALDWELL
Lab Order:	0908A01
Project:	Owens Corning
Lab ID:	0908A01-011A

#### Client Sample ID: EB-123 Tag Number: Collection Date: 8/13/2009 7:20:00 PM Matrix: AQUEOUS

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW	260B	(S\	V5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
1,1-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	· 1	8/18/2009 5:09:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 5:09:00 AM
Surr: 4-Bromofluorobenzene	91.9	61.3-128	%REC	117208	1	8/18/2009 5:09:00 AM
Surr: Dibromofluoromethane	110	67.8-130	%REC	117208	1	8/18/2009 5:09:00 AM
Surr: Toluene-d8	95.5	70.6-121	%REC	117208	1	8/18/2009 5:09:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	в	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 11 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 11 of 15
	S	Spike Recovery outside limits due to matrix		

# CLIENT:BROWN AND CALDWELLClient Sample ID:DUP-A1Lab Order:0908A01Tag Number:Project:Owens CorningCollection Date:8/13/2009 12:00:00 PMLab ID:0908A01-012AMatrix:GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW	260B	(SV	V5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
1,1-Dichloroethene	740	50	ug/L	117208	10	8/19/2009 12:04:00 Pł
1,2-Dichloroethane	5.2	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Carbon tetrachloride	33	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Chloroform	19	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/19/2009 3:46:00 AM
Surr: 4-Bromofluorobenzene	93.9	61.3-128	%REC	117208	10	8/19/2009 12:04:00 PI
Surr: 4-Bromofluorobenzene	93.0	61.3-128	%REC	117208	1	8/19/2009 3:46:00 AM
Surr: Dibromofluoromethane	114	67.8-130	%REC	117208	10	8/19/2009 12:04:00 PI
Surr: Dibromofluoromethane	114	67.8-130	%REC	117208	1	8/19/2009 3:46:00 AM
Surr: Toluene-d8	95.4	70.6-121	%REC	117208	10	8/19/2009 12:04:00 PI
Surr: Toluene-d8	97.7	70.6-121	%REC	117208	1	8/19/2009 3:46:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	1	Estimated value detected below Reporting Limit Reporting Limit Page 12 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 12 of 19
	S	Spike Recovery outside limits due to matrix		

Date: 21-Aug-09

Date: 21-Aug-09

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CLIENT: BI	ROWN AND CALDWELL	Client Sample ID:	MW-15
Lab Order: 09	08A01	Tag Number:	
Project: Ov	vens Corning	<b>Collection Date:</b>	8/13/2009 8:20:00 PM
Lab ID: 09	08A01-013A	Matrix:	GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW8	260B	(SV	V5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
1,1-Dichloroethene	420	50	ug/L	117208	10	8/18/2009 1:11:00 PM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/18/2009 5:37:00 AM
Surr: 4-Bromofluorobenzene	90.8	61.3-128	%REC	117208	10	8/18/2009 1:11:00 PM
Surr: 4-Bromofluorobenzene	90.1	61.3-128	%REC	117208	1	8/18/2009 5:37:00 AM
Surr: Dibromofluoromethane	109	67.8-130	%REC	117208	10	8/18/2009 1:11:00 PM
Surr: Dibromofluoromethane	110	67.8-130	%REC	117208	1	8/18/2009 5:37:00 AM
Surr: Toluene-d8	89.5	70.6-121	%REC	117208	10	8/18/2009 1:11:00 PM
Surr: Toluene-d8	94.9	70.6-121	%REC	117208	1	8/18/2009 5:37:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 13 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 13 of 19
	S	Spike Recovery outside limits due to matrix		

Date: 21-Aug-09

CLIENT:	BROWN AND CALDWELL
Lab Order:	0908A01
Project:	Owens Corning
Lab ID:	0908A01-014A

## Client Sample ID: MW-35 Tag Number: Collection Date: 8/13/2009 5:30:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW	3260B	(S)	N5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
1,1-Dichloroethene	470	250	ug/L	117208	50	8/18/2009 12:26:00 AI
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Carbon tetrachioride	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/19/2009 3:18:00 AM
Surr: 4-Bromofluorobenzene	92.4	61.3-128	%REC	117208	1	8/19/2009 3:18:00 AM
Surr: 4-Bromofluorobenzene	95.3	61.3-128	%REC	117208	50	8/18/2009 12:26:00 AI
Surr: Dibromofluoromethane	115	67.8-130	%REC	117208	1	8/19/2009 3:18:00 AM
Surr: Dibromofluoromethane	107	67.8-130	%REC	117208	50	8/18/2009 12:26:00 Al
Surr: Toluene-d8	94.9	70.6-121	%REC	117208	1	8/19/2009 3:18:00 AM
Surr: Toluene-d8	93.2	70.6-121	%REC	117208	50	8/18/2009 12:26:00 AI

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 14 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 14 of 19
	S	Spike Recovery outside limits due to matrix		

Date: 21-Aug-09

CLIENT:	BROWN AND CALDWELL	Client Sample ID: MW-37 ZONE 1
Lab Order:	0908A01	Tag Number:
Project:	Owens Corning	Collection Date: 8/14/2009 10:00:00 AM
Lab ID:	0908A01-015A	Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW	3260B	(S	W5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
1,1-Dichloroethene	5.5	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/19/2009 1:25:00 AM
Surr: 4-Bromofluorobenzene	94.4	61.3-128	%REC	117208	1	8/19/2009 1:25:00 AM
Surr: Dibromofluoromethane	107	67.8-130	%REC	117208	1	8/19/2009 1:25:00 AM
Surr: Toluene-d8	94.1	70.6-121	%REC	117208	1	8/19/2009 1:25:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 15 of 1
	Ν	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 15 of 1
	S	Spike Recovery outside limits due to matrix		

Date: 21-Aug-09

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CLIENT:	BROWN AND CALDWELL	Client Sample ID: EB-124
Lab Order:	0908A01	Tag Number:
Project:	Owens Corning	Collection Date: 8/14/2009 10:20:00 AM
Lab ID:	0908A01-016A	Matrix: AQUEOUS

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW8	260B	(S	W5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
1,1-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Chloroform	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Methylene chloride	BRI.	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/19/2009 4:14:00 AM
Surr: 4-Bromofluorobenzene	94.3	61.3-128	%REC	117208	1	8/19/2009 4:14:00 AM
Surr: Dibromofluoromethane	112	67.8-130	%REC	117208	1	8/19/2009 4:14:00 AM
Surr: Toluene-d8	94.1	70.6-121	%REC	117208	1	8/19/2009 4:14:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 16 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 16 of 19
	S	Spike Recovery outside limits due to matrix		

## Date: 21-Aug-09

CLIENT:	BROWN AND CALDWELL
Lab Order:	0908A01
Project:	Owens Corning
Lab ID:	0908A01-017A

## Client Sample ID: MW-37 ZONE 2 Tag Number: Collection Date: 8/14/2009 12:15:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW	8260B	(S\	N5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
1,1-Dichloroethene	200	50	ug/L	117208	10	8/18/2009 2:48:00 AM
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Benzene	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Chloroform	14	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Methylene chloride	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Toluene	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Trichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/19/2009 2:49:00 AM
Surr: 4-Bromofluorobenzene	93.7	61.3-128	%REC	117208	1	8/19/2009 2:49:00 AM
Surr: 4-Bromofluorobenzene	90.2	61.3-128	%REC	117208	10	8/18/2009 2:48:00 AM
Surr: Dibromofluoromethane	113	67.8-130	%REC	117208	1	8/19/2009 2:49:00 AM
Surr: Dibromofluoromethane	107	67.8-130	%REC	117208	10	8/18/2009 2:48:00 AM
Surr: Toluene-d8	91.9	70.6-121	%REC	117208	10	8/18/2009 2:48:00 AM
Surr: Toluene-d8	94.0	70.6-121	%REC	117208	1	8/19/2009 2:49:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Page 17 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 17 of 19
	S	Spike Recovery outside limits due to matrix		

1-Aug-09

CLIENT:	BROWN AND CALDWELL
Lab Order:	0908A01
Project:	Owens Corning
Lab ID:	0908A01-018A

## Client Sample ID: MW-37 ZONE 3 Tag Number: Collection Date: 8/14/2009 1:25:00 PM Matrix: GROUNDWATER

Analyses	Result	Limit Q	ual Units	BatchID	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS	BY GC/MS SW	3260B	(SV	V5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 Ał
1,1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
1,1-Dichloroethene	6.8	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Benzene	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 Ał
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Chloroform	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Methylene chloride	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Toluene	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Trichloroethene	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/19/2009 12:01:00 AI
Surr: 4-Bromofluorobenzene	91.8	61.3-128	%REC	117208	1	8/19/2009 12:01:00 Al
Surr: Dibromofluoromethane	106	67.8-130	%REC	117208	1	8/19/2009 12:01:00 AI
Surr: Toluene-d8	94.7	70.6-121	%REC	117208	1	8/19/2009 12:01:00 Al

Qualifiers:	*	Value exceeds Maximum Contaminant Level	. <	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Penorting Limit Page 18 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 18 of 19
	S	Spike Recovery outside limits due to matrix		

CLIENT:	BROWN AND CALDWELL	Client Sample ID: TRIP BLANK
Lab Order:	0908A01	Tag Number:
Project:	Owens Corning	Collection Date: 8/14/2009
Lab ID:	0908A01-019A	Matrix: AQUEOUS

Result

Limit Qual Units

Date: 21-Aug-09

BatchID DF Date Analyzed

## Analytical Environmental Services, Inc.

Analyses

		x	un onno	Datemin		Date maijzea
VOLATILE ORGANIC COMPOUND	BY GC/MS SW	/8260B	(S)	W5030B)		Analyst: JCT
1,1,1-Trichloroethane	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 P!
1.1-Dichloroethane	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
1,1-Dichloroethene	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 Pt
1,2-Dichloroethane	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
Benzene	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 Pł
Carbon tetrachloride	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
Chloroform	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
cis-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
Ethylbenzene	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
Methylene chloride	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 Pł
Tetrachloroethene	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
Toluene	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
trans-1,2-Dichloroethene	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
Trichloroethene	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 Pł
Vinyl chloride	BRL	2.0	ug/L	117208	1	8/17/2009 12:18:00 Pt
Xylenes, Total	BRL	5.0	ug/L	117208	1	8/17/2009 12:18:00 PI
Surr: 4-Bromofluorobenzene	97.4	61.3-128	%REC	117208	1	8/17/2009 12:18:00 PI
Surr: Dibromofluoromethane	109	67.8-130	%REC	117208	1	8/17/2009 12:18:00 Pł
Surr: Toluene-d8	94.1	70.6-121	%REC	117208	1	8/17/2009 12:18:00 Pł

Qualifiers:	*	Value exceeds Maximum Contaminant Level	<	Less than Result value
	>	Greater than Result value	В	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	Е	Estimated value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit Peneting Limit Page 19 of 19
	N	Analyte not NELAC certified	Rpt Lim	Reporting Limit Page 19 of 19
	S	Spike Recovery outside limits due to matrix		

CLRNT:       BROWNAND CALDWELL         CLRNT:       BROWNAND CALDWELL         Work Crede:       Oydaxi         Work Crede:       Owdaxi       ANALYTICAL QC SUMMARY REPORT         Work Crede:       Owdaxi       Enclore       Pack and	Third from the Herit Housing Del VICes, 1110.				••••							10-Sutt- 17 - 100	10-201	
Overality         TestCode:         Viality         Components by CCMNS         SWR300B           Image: Intelling interling intelling inteli	CLIENT: Work Order:	BROWN A 0908A01	ND CALDV	VELL					ANAL	YTICA	r oc su	MMARY	REPOR	۲
N. ME-117.206       SamoType: MBLX       Batch ID: 117.208       Units: upL       Prop Date:       217.2006       RunNo: 15580         TeaclOcci:       Votable Organic Compounds by GCMIS SW2560E       Analysis Date:       217.2009       SeqUe: 37.1065         Monotheme       BRL       5.0       SeqUe: 37.0065       SeqUe: 37.0065       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37.006       SeqUe: 37.0065       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37.006       SeqUe: 37.0065       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37.0065       SeqUe: 37.0065       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37.006       SeqUe: 37.0065       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37.006       SeqUe: 37.0065       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37.006       SeqUe: 37.0065       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37.006       SeqUe: 37.0065       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37.006       SeqUe: 37.006       SeqUe: 37.0065         Monotheme       BRL       5.0       SeqUe: 37	Project:	Owens Con	ning				TestCo		atile Org2	inic Com	pounds by (	GC/MS_SW8	260B	
TestCode: Votatie Organic Compounds by GCNIS SW32605         Analysis Date:	Sample ID: MB-11	17208	SampType:	MBLK	Batch II	): 117208	Units: ug/L		Prep Dat	11	60	RunNo: 1538	60	
RestRestRPT LimitSPT Kearl ValSPC Kearl ValSPC ContinueRPD Ret ValSPC Ret Val	Client ID:		TestCode:	Volatile O	rganic Compo	unds by GC/	v)		Analysis Dat		60	SeqNo: 3170	895	
FRL         50	Analyte			Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLìmit	RPD Ref Val			Qual
BRL       5.0         RR       5.0         <	1,1,1-Trichloroeths	ane		BRL	5.0									
BRL         50           RL         50           RR         50           RR         51           RR	1,1-Dichloroethane	â		BRL	5.0									
RL         50           Result         Seth ID: 11720S           Analysis Date:         81/1700P           Result         Seth Result value           Result         Seth Result value           Seth Result value	1,1-Dichloroethen	(i)		BRL	5.0									
RL         50           RL         702           RL         702           RL         702           RL         703           RL         704           RL         705           SampType: LCS         Bath ID: 11708           Lestoreconconcet Size         117           Result         RPT Linit           Result         SPC           Result         SPC           Result         SPC           Result value         SPC           SSeAdo         129           SSeAdo         129           SSeAdo         120 </td <td>1,2-Dichloroethane</td> <td></td> <td></td> <td>BRL</td> <td>5.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	1,2-Dichloroethane			BRL	5.0									
BRL         5.0           BRL         5.1           Analysis Date         8772005           Marysis Batch ID: 117208         Innit: ugL           Analysis Date         87172005           Marysis Date         87172005           Marysis Date         87172005           Satch ID: 117208         Innit: ugL           FrestOcte         Voltimit           FrestOcte         Voltimit           FrestOcte         Voltimit           FrestOcte         Voltimit           FrestOcte         100 <td>Benzene</td> <td></td> <td></td> <td>BRL</td> <td>5.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Benzene			BRL	5.0									
BRL         50           BRL         20           BRL         20           BRL         20           BRL         20           A.52         0           A.50         0	Carbon tetrachlorid	de		BRL	5.0									
BRL         5.0           SampType: LCS         Batch ID: 117206           Samptype: LCS         Samptype ID: Match           Samptype: LCS         Samptype ID: Match           Samptype ID: Match </td <td>Chloroform</td> <td></td> <td></td> <td>BRL</td> <td>5.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Chloroform			BRL	5.0									
RL         5.0           BRL         2.0           BRL         2.1           Anbysis Date         81/12009           Anbysis Date         81/12009           SampType: LCS         50           SampType: LCS         50           SampType: CS         0           TestOde         0           Analysis Date         81/12009           Analysis Date         81/12009           Sadwis Sate         81/12009           Satewis Sate         81/12009           Satewis Sate         81/12009           Sated v	cis-1,2-Dichloroeth	lene		BRL	5.0									
BRL         5.0           JERL         5.0           JERL         7.0.5           JERL         171206           Analysis Date:         8/17/2005           Sednot:         7.0.5           TestCode:         Volatile           Analysis Date:         8/17/2006           Analysis Date:         8/17/2006           Sednot:         7.05           Sednot:         7.05           Sednot:         7.05           Sednot:         7.05           Sednot:         7.05           Sednot:         7.05           Sednot:         7	Ethylbenzene			BRL	5.0									
BRL         5.0           BRL         7.12           6.0         50           0         50           0         50           10         121           10         13360           11         70.5         121           10         50         0           10         50         0           11         70.5         121           11         70.5         121           11         11         11           11         11         11           11         11         11           11         11         11           11         11         11           11         11         11	vlethylene chlorid€	Ø		BRL	5.0									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	fetrachloroethene			BRL	5.0									
BRL         5.0           BRL         5.0         5.0         7.0         7.0         0         0           Atmatysis         Batch ID: 117208         Units: ugL         7.0         1.1         0         0         0           SampType: LCS         Batch ID: 117208         Units: ugL         7.0         1.2         0         0         0           TestCode:         Volatile         SPK value         SPK Ref Val         2.1         7.0.6         1.2         0         0         0           TestCode:         Yout         SPK ref Value         SPK Ref	oluene			BRL	5.0									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	rans-1,2-Dichloro	ethene		BRL	5.0									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	richloroethene			BRL	5.0									
BRL nzene5.0 47.2205.0 5.009.4.461.3128 61.3000athane $54.52$ 05009.4.461.3130000athane $54.52$ 050092.170.6121000AsnoAsno092.170.692.170.6121000SampType:LCSBatch ID: 117.20SUnits:ug/LAnalysis Date:81712009SeqNo:153860TestCode:VolatileRPT LimitSPK ref Val%RECLowLimitHighLimitRPD Ref Val%REC100TestCode:70.925.0014264.2156000Toss than Result value5.050014264.215600Bolow Reporting LimitSAnalyte not NELAC certifiedNAnalyte detected in the ssociated Method BilBototting LimitNAnalyte not NELAC certifiedNNAnalyte detected in the ssociated Method BilStatimated value detected below Reporting LimitNAnalyte not NELAC certifiedNNNStatimated value detected below Reporting LimitNAnalyte not NELAC certifiedNNNStatimated value detected below Reporting LimitNAnalyte not NELAC certifiedNNNStatimated value detected below Reporting LimitNAnalyte not NELAC certifiedNN<	/inyl chloride			BRL	2.0									
nzene47.22050094.461.3128000ethane54.52050010967.813000046.06050092.170.6121000SampType:LCSBatch ID: 117208Units: ug/LPrep Date:8/17/2009RuNNo: 153860SampType:LCSBatch ID: 117208Units: ug/LPrep Date:8/17/2009SeqNo: 3170834TestCode:VolattileRPT LimitSPK Ref Val%RECLowLimitRPT/I2009SeqNo: 3170834TestCode:VolattileSPK NalueSPK Ref Val%RECLowLimitRPT/I2009SeqNo: 3170834TestCode:VolattileSPK Ref Val%RECLowLimitRPT/I20090070.925.05.0014264.21500058.865.050011877.613000Sastati value5.050011877.613000Below Reputing LimitEstimated value above quantitation rangeHHolding times for preparation or analysis exceBelow Reporting LimitNAnalyte detected below Reporting LimitNAnalyte detected in the associated Method BitSastated Value detected below Reporting LimitNAnalyte not NELAC certifiedNNNSastated Value detected below Reporting LimitNAnalyte not NELAC certifiedN <t< td=""><td><pre>(ylenes, Total</pre></td><td></td><td></td><td>BRL</td><td>5.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	<pre>(ylenes, Total</pre>			BRL	5.0									
Ithane $54.52$ 0500109 $67.8$ 13000 $46.06$ 050092.170.6121000 $846.05$ $10$ $10$ $10$ $121$ $10$ $10$ $10$ $10$ $10$ SampType: $LCS$ $Batch 1D: 117208$ $Units: ug/L10121015360TestCode:Volatile OrganicCompounds Pic C/MSSW8260BAnalysis Date:8/17/2009RunNo: 153860TestCode:RPT LimitSPK ralueSPK Ref ValAnalysis Date:8/17/2009SeqNo: 370834TestCode:RPT LimitSPK ralueSPK Ref ValAnalysis Date:8/17/2009SeqNo: 370834TestCode:RPT LimitSPK ralueSPK Ref ValAnalysis Date:8/17/2009RinnitTestCode:RPT LimitSPK ralueSPK Ref ValAnalysis Cate:B/12/100900To set table50014264.2156000Salos50.350014264.215600Less thrat value5050014264.215600Less thrat value5064.2156130000Less thrat value5064.2156130000Less thrat value11877.61$	Surr: 4-Bromofli	uorobenzene		47.22	0	50	0	94.4	61.3	128	0	0		
46.06050092.170.6121000SampType:LCSBatch ID: 117208Units:ug/LPrep Date:8/17/2009RunNo:153860TestCode:Volatile Organic Compounds by GC/MSSW8260BAnalysis Date:8/17/2009SeqNo:370894TestCode:Volatile Organic Compounds by GC/MSSW8260BAnalysis Date:8/17/2009SeqNo:370894TestCode:Volatile Organic Compounds by GC/MSSV8260BAnalysis Date:8/17/2009SeqNo:370894To 325.050014264.215600058.865.050011877.6130000Below Reporting LimitEEstimated value above quantitation rangeBAnalyte detected in the associated Method BilLess than Result valuePAnalyte not NELAC certifiedRRR00Less than Result valuePAnalyte not NELAC certifiedRRRR00Setored below Reporting LimitNAnalyte not NELAC certifiedRRRRRRRSetored Limits due to matrixSSSSSSSSSSSetored below Reporting LimitNAnalyte not NELAC certifiedRRRRNSSSSSetored Limits due to matrixSSSSSS <td>Surr: Dibromofli</td> <td>uoromethane</td> <td></td> <td>54.52</td> <td>0</td> <td>50</td> <td>0</td> <td>109</td> <td>67.8</td> <td>130</td> <td>0</td> <td>0</td> <td></td> <td></td>	Surr: Dibromofli	uoromethane		54.52	0	50	0	109	67.8	130	0	0		
SampType:LCSBatch ID: 117208Units:ug/LPrep Date: $8171/2009$ RunNo:153860TestCode:Volatile Organic Compounds by GC/MSSW8260BAnalysis Date: $8171/2009$ SeqNo:3170894ResultRPT LimitSPK valueSPK Ref Val $\%$ RECLowLimitHighLimitRPD Ref Val $\%$ RPD70.925.050014264.21560070.925.050011877.61300058.865.050011877.613000Les than Result value56011877.613000Below Reporting LimitNAnalyte not NELAC certifiedBAnalyte detected in the associated Method BiEstimated value detected below Reporting LimitNAnalyte not NELAC certifiedRRPD outside limits due to matrixReporting LimitNSpike Recovery outside limits due to matrixRRPD outside limits due to matrix	Surr: Toluene-d	8		46.06	0	50	0	92.1	70.6	121	0	0		
Display="10">Display="10">TestCode:Volatile Organic Compounds by GC/MS SW8260BAnalysis Date:8/17/2009SeqNo:3170894ResultRPT LimitSPK valueSPK Ref Val $\%$ FCLowLimitHighLimitRPD Ref Val $\%$ RPDRPDLimitIdroethene70.925.050014264.2156000B58.865.050011877.6130000rs:58.865.050011877.613000BKLBelow Reporting LimitEstimated value above quantitation rangeBAnalyte for the associated Method BIJEstimated value detected below Reporting LimitNAnalyte not NELAC certifiedRRRPD outside limits due to matrixRpt LimReporting LimitNSpike Recovery outside limits due to matrixRRPD outside limits due to matrix	Sample ID: LCS-1	17208	SampType:	rcs	Batch II	): 117208	Units: ug/L		Prep Dat		60	RunNo: 1538	60	
ResultRPT LimitSPK valueSPK Ref Val%RECLowLimitHighLimitRPD Ref Val%RPDRPD LimitIdroethene70.925.050014264.215600B58.865.00011877.613000rs:<	Client ID:		TestCode:	Volatile O	rganic Compo	unds by GC/	MS SW8260B		Analysis Dat		60	SeqNo: 3170	894	
oethene     70.92     5.0     50     0     142     64.2     156       58.86     5.0     50     0     118     77.6     130         Less than Result value     5     64.2     130        Less than Result value     5     0     118     77.6     130        Less than Result value     >     Greater than Result value     B     B       BRL     Below Reporting Limit     N     Analyte not NELAC certified     H       J     Estimated value detected below Reporting Limit     N     Analyte not NELAC certified     R       Rpt Lim     Reporting Limit     S     Spike Recovery outside limits due to matrix	Analyte			Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val			Qual
58.86     5.0     50     0     118     77.6     130         Less than Result value     >     Greater than Result value     B       BRL     Below Reporting Limit     >     Greater than Result value     B       J     Estimated value detected below Reporting Limit     N     Analyte not NELAC certified     H       Rpt Lim     Reporting Limit     S     Spike Recovery outside limits due to matrix	1,1-Dichloroethen	0		70.92	5.0	50	0	142	64.2	156	0	0		
Less than Result value       >       Greater than Result value       B         BRL       Below Reporting Limit       E       Estimated value above quantitation range       H         J       Estimated value detected below Reporting Limit       N       Analyte not NELAC certified       R         Rpt Lim       Reporting Limit       S       Spike Recovery outside limits due to matrix	Benzene			58.86	5.0	50	0	118	77.6	130	0	0		
Below Reporting Limit     E     Estimated value above quantitation range     H       Estimated value detected below Reporting Limit     N     Analyte not NELAC certified     R       Reporting Limit     S     Spike Recovery outside limits due to matrix			ı Result value				reater than Result val	ue		B	Analyte detec	ted in the associate	ed Method Bla	검
Estimated value detected below Reporting Limit N Analyte not NELAC certified Reporting Limit S Spike Recovery outside limits due to matrix	Д		eporting Limit				stimated value above	quantitation	range	Н	Holding time	s for preparation or	r analysis excee	eded
Reporting Limit S			d value detected	l below Repo	orting Limit		nalyte not NELAC ce	rtified		R	RPD outside	limits due to matri	×	
	Rp		g Limit				oike Recovery outside	: limits due t	o matrix					

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Project: Owens Corning Sample ID: LCS-117208 Sam Client ID: Test						ANALY HUAL UC SUMMARY REPORT	1 1 1	} } ≯		
ID: LCS-117208 ):				TestCode:		ıtile Orga	nic Comp	Volatile Organic Compounds by GC/MS	3C/MS_SW8260B	260B
ö	SampType: LCS	Batch ID	Batch ID: 117208	Units: ug/L		Prep Date:	e: 8/17/2009		RunNo: 153860	20
analyte	TestCode: Volatile Organic Compounds by GC/MS	Organic Compo	ounds by GC/I	VIS SW8260B		Analysis Date:	e: 8/17/2009	_	SeqNo: 3170894	394
	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD I	RPDLimit Qual
Toluene	60.17	5.0	50	0	120	76.8	132	0	0	
Trichloroethene	59.83	5.0	50	o	120	7.77	134	0	0	
Surr: 4-Bromofluorobenzene	55.11	0	50	0	110	61.3	128	0	0	
Surr: Dibromofluoromethane	51.18	0	50	0	102	67.8	130	0	0	
Surr: Toluene-d8	51.99	0	50	0	104	70.6	121	0	0	
Sample ID: 0908A01-018AMS Sam	SampType: MS	Batch II	Batch ID: 117208	Units: ug/L		Prep Date:	e: 8/17/2009		RunNo: 153981	2
Client ID: MW-37 ZONE 3 Test	TestCode: Volatile	Volatile Organic Compounds by GC/MS	unds by GC/I	VIS SW8260B		Analysis Date:	e: 8/18/2009	_	SeqNo: 3172774	774
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit Qual
1,1-Dichloroethene	74.23	5.0	50	9.04	130	46.8	169	0	0	
Benzene	63.12	5.0	50	1.21	124	74.4	134	0	0	
Toluene	63.84	5.0	50	1.74	124	73.7	138	0	0	
Trichloroethene	61.52	5.0	50	o	123	66.9	142	0	0	
Surr: 4-Bromofluorobenzene	54.12	0	50	0	108	61.3	128	0	0	
Surr. Dibromofluoromethane	53.51	0	50	0	107	67.8	130	0	0	
Surr: Toluene-d8	54	0	50	0	108	70.6	121	0	0	
Sample ID: 0908A01-018AMSD Sam	SampType: MSD	Batch II	Batch ID: 117208	Units: ug/L		Prep Date:	e: 8/17/2009		RunNo: 153981	2
Client ID: MW-37 ZONE 3 Test	TestCode: Volatile Organic Compounds by GC/MS	Organic Compo	unds by GC/I	VIS SW8260B		Analysis Date:	e: 8/18/2009		SeqNo: 3172777	<i>LT1</i>
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit Qual
1,1-Dichloroethene	72.2	5.0	50	9.04	126	46.8	169	74.23	2.77	20
Benzene	61.24	5.0	50	1.21	120	74.4	134	63.12	3.02	20
Toluene	62.18	5.0	50	1.74	121	73.7	138	63.84	2.63	20
Trichloroethene	59.55	5.0	50	0	119	6.9	142	61.52	3.25	20
Surr: 4-Bromofluorobenzene	54.23	0	50	0	108	61.3	128	54.12	0	0
Surr: Dibromofluoromethane	51.16	0	50	0	102	67.8	130	53.51	0	0
Qualifiers: < Less than Result value	lt value			Greater than Result value	le		M	Analyte detec	Analyte detected in the associated Method Blank	ed Method Blank
BRL Below Reporting Limit	ıg Limit		E	Estimated value above quantitation range	quantitation	range	Н	Holding time	Holding times for preparation or analysis exceeded	analysis exceede
J Estimated value	Estimated value detected below Reporting Limit	porting Limit	•	Analyte not NELAC certified	rtified		R	RPD outside ]	RPD outside limits due to matrix	

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9143 Philips Hwy, Suite 200

904 739.2277

Jacksonville, FL 32256

www.caslab.com

December 01, 2009

Service Request No: J0905825

004 720 2041 655

Tamara Berryman Brown and Caldwell 990 Hammond Drive Suite 400 Atlanta, GA 30328

#### Laboratory Results for: Owens Corning/136868

Dear Tamara:

Enclosed are the results of the sample(s) submitted to our laboratory on November 21, 2009. For your reference, these analyses have been assigned our service request number **J0905825**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 4409. You may also contact me via email at CMyers@caslab.com.

Respectfully submitted,

**Columbia Analytical Services, Inc.** 

Craig Myers Project Manager

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*CAS Jacksonville is NELAC-accredited by the State of Florida, #E82502. Other state accreditations include: Georgia, #958; Kentucky, #63; Louisiana, #02086; North Carolina, #527; South Carolina, #96021001; Texas, #T104704197-09-TX.* 

**Client:** Brown and Caldwell **Project:** Owens Corning Sample Matrix: Water

Service Request No.: J0905825 Date Received:

## 11/21/09

#### **CASE NARRATIVE**

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

#### Sample Receipt

Sixty-four water samples and two trip blanks were received for analysis at Columbia Analytical Services on 11/21/09. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 4±2°C upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

#### **Volatile Organic Compounds by GC-MS**

The samples were analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

#### Surrogate Exceptions

The upper control criterion was exceeded for the following surrogate in samples MW-19, MW-9 and Method Blank JWG0903993-4: 4-Bromofluorobenzene. No target analytes were detected in the samples that were associated to the surrogate in question. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was appropriate.

#### Matrix Spike Recovery Exceptions

The control criterion for the matrix spike recovery of 1,1-Dichloroethene for sample MW-29R Zone 3 and MW-24 is not applicable. The analyte concentrations in the samples were significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

#### Lab Control Sample Exceptions

The spike recovery of 1,1,1-Trichloroethane (TCA) for Laboratory Control Sample (LCS) JWG0903993-3 was outside the upper control criterion. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

The spike recovery of o-Xylene for Laboratory Control Sample (LCS) JWG0904010-3 was outside the lower control criterion. The analyte in question was not detected in the associated field samples. Since the analyte was detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

Approved by

Chan Fly Date 12/109

#### **Elevated Method Reporting Limits**

Samples MW-7 and MW-28 required a dilution due to the presence of elevated levels of target analytes. The reporting limits are adjusted to reflect the dilution.

#### Batch QC Notes and Discussion

Quality control samples for MS/DMS were performed using samples from another sample delivery group (SDG). The frequency requirement for quality control sample analysis was consistent with the project's requirements. Matrix specific quality control results have no bearing on sample data from a different matrix or location. Therefore, control of the batch has been evaluated using the method blank and the laboratory control sample.

Cange My 12/1/09 Approved by Date

## **Data Qualifiers**

#### **Inorganic Data**

* The result is an outlier. See case narrative.

- # The control limit criteria are not applicable. See case narrative.
- The analyte was found in the associated method blank at a level that is significant relative to the sample result. В

The result is an estimated amount because the value exceeded the instrument calibration range. E

- The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL. J
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- Ζ Too many colonies were present (TNTC). The numeric value represents the filtration volume.
- The MRL/MDL has been elevated due to matrix interference. i
- Х See case narrative.

#### **Metals Data**

- * The result is an outlier. See case narrative.
- # The control limit criteria are not applicable. See case narrative.
- T The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The reported value is estimated because of the presence of matrix interference.
- M The duplicate injection precision was not met.
- The Matrix Spike sample recovery is not within control limits. See case narrative. N
- The result was determined by Method of Standard Additions (MSA). S
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- The MRL/MDL has been elevated due to matrix interference. i
- Х See case narrative.
- The correlation coefficient for the MSA is less than 0.995. +

#### **Organic Data**

- * The result is an outlier. See case narrative.
- # The control limit criteria are not applicable. See case narrative.
- The tentatively identified compound is a suspected aldol-condensation product. Α
- The analyte was found in the associated method blank at a level that is significant relative to the sample result. B
- $\mathbf{C}$ The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- Ν The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- Ρ The GC or HPLC confirmation criteria were exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)
- The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. U
- The MRL/MDL has been elevated due to a chromatographic interference. i
- Х See case narrative.

#### **Petroleum Hydrocarbon Specific**

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates Η the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- 0 The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Ζ The chromatographic fingerprint does not resemble a petroleum product.

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U.S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
М	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
ТРН	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Project:

## SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J0905825-001	MW-22	11/19/09	16:35
J0905825-002	MW-19	11/19/09	15:35
J0905825-003	MW-13	11/19/09	14:45
J0905825-004	MW-12	11/19/09	12:55
J0905825-005	MW-11	11/19/09	11:25
J0905825-006	MW-9	11/19/09	10:25
J0905825-007	MW-6	11/19/09	09:00
J0905825-008	MW-26	11/18/09	18:35
J0905825-009	MW-25	11/18/09	15:45
J0905825-010	MW-21	11/18/09	14:00
J0905825-011	MW-16	11/18/09	13:15
J0905825-012	TW-46	11/18/09	11:25
J0905825-013	Alloy	11/18/09	09:35
J0905825-014	MW-5	11/17/09	17:00
J0905825-015	MW-14	11/17/09	16:05
J0905825-016	MW-10	11/17/09	15:10
J0905825-017	MW-1	11/17/09	14:05
J0905825-018	MW-2	11/17/09	11:35
J0905825-019	MW-18	11/17/09	10:35
J0905825-020	MW-4	11/17/09	09:20
J0905825-021	TW-43	11/19/09	10:00
J0905825-022	TW-42	11/18/09	09:45
J0905825-023	MW-37 Zone 3	11/17/09	10:45
J0905825-024	MW-37 Zone 2	11/17/09	12:45
J0905825-025	MW-37 Zone 1	11/17/09	16:00
J0905825-026	MW-36 Zone 5	11/16/09	16:15
J0905825-027	MW-36 Zone 3	11/17/09	08:00
J0905825-028	MW-36 Zone 1	11/16/09	14:30
J0905825-029	MW-35	11/17/09	17:25
J0905825-030	MW-29R Zone 3	11/16/09	11:30
J0905825-031	MW-29R Zone 4	11/16/09	12:15
J0905825-032 J0905825-033	SW-1	11/18/09	11:05
J0905825-033 J0905825-034	SW-3A	11/18/09	16:00
J0905825-035	SW-3B	11/18/09	15:50
J0905825-035	SW-6	11/18/09	10:37
J0905825-030	SW-10	11/18/09	10:20
J0905825-037	SW-11 SW-12	11/18/09 11/18/09	12:20
J0905825-038	SW-12 SW-13		12:35
J0905825-040	SW-15 SW-14	11/18/09 11/18/09	11:50
J0905825-041	SW-14 SW-15	11/18/09	12:05
J0905825-041	Sw-15 MW-30	11/18/09	10:57 09:35
J0905825-042	EB-11-20-09	11/20/09	
J0905825-044	MW-31	11/20/09	10:00 12:10
J0905825-045	MW-7	11/20/09	12:10
J0905825-046	MW-28	11/20/09	10:33
000000000000000	1V1 VY ~20	11/20/09	12:13

6

Brown and Caldwell **Project:** Owens Corning/136868

## SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J0905825-047	MW-32	11/19/09	14:00
J0905825-048	MW-15	11/20/09	09:00
J0905825-049	MW-17	11/19/09	11:25
J0905825-050	MW-20	11/19/09	17:55
J0905825-051	MW-24	11/19/09	15:50
J0905825-052	MW-27	11/19/09	17:10
J0905825-053	SW-3	11/18/09	15:35
J0905825-054	EB111709	11/17/09	11:00
J0905825-055	EB111909	11/19/09	11:50
J0905825-056	DUP111609	11/16/09	08:00
J0905825-057	DUP111909	11/19/09	12:00
J0905825-058	TW-41	11/16/09	15:20
J0905825-059	MW-3	11/17/09	08:25
J0905825-060	TW-44	11/16/09	19:00
J0905825-061	TW-40	11/16/09	16:25
J0905825-062	EB-11-16-09	11/16/09	15:30
J0905825-063	DUP-11-18-09	11/18/09	12:00
J0905825-064	Trip Blank 1	11/18/09	00:00
J0905825-065	Trip Blank 2	11/18/09	00:00
J0905825-066	EB-11-18-09	11/18/09	11:40

7

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

# Service Request: J0905825 Date Collected: 11/19/2009 Date Received: 11/21/2009

### Volatile Organic Compounds by GC/MS

Sample Name:	MW-22	Units:	÷
Lab Code:	J0905825-001	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	2.7	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	540 D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	5.6	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	24	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	14	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	1.3	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	1.1	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	105	71-122	11/25/09	Acceptable
4-Bromofluorobenzene	119	75-120	11/25/09	Acceptable
Dibromofluoromethane	101	82-116	11/25/09	Acceptable
Toluene-d8	95	88-117	11/25/09	Acceptable

**Comments:** 

Merged

Form 1A - Organic

Analytical Results

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Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Service Request: J0905825 Date Collected: 11/19/2009 Date Received: 11/21/2009

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	MW-19 J0905825-002		Units: Basis:	e
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	3.1	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	<b>300</b> D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	7.5	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	0.34 J	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	7.2	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	3.3	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	2.1	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	······································

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	109	71-122	11/25/09	Acceptable
4-Bromofluorobenzene	122	75-120	11/25/09	Outside Control Limits
Dibromofluoromethane	95	82-116	11/25/09	Acceptable
Toluene-d8	90	88-117	11/25/09	Acceptable

Comments:

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-13
Lab Code:	J0905825-003
Extraction Method:	EPA 5030B
Analysis Method:	8260B

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	2.5	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	<b>490</b> D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	5.6	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	25	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	16	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	1.6	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	1.4	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	104	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	117	75-120	11/25/09	Acceptable	
Dibromofluoromethane	99	82-116	11/25/09	Acceptable	
Toluene-d8	92	88-117	11/25/09	Acceptable	

**Comments:** 

Form 1A - Organic

Units: ug/L

Basis: NA

Level: Low

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-12
Lab Code:	J0905825-004
Extraction Method:	EPA 5030B
Analysis Method:	8260B

Service Request:	J0905825
Date Collected:	11/19/2009
Date Received:	11/21/2009

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Units:	ug/L
<b>Basis:</b>	NA

Level: Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	1.8	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	<b>300</b> D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	3.5	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	13	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	19	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	1.2	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	<b>0.36</b> J	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	103	71-122	11/25/09	Acceptable
4-Bromofluorobenzene	118	75-120	11/25/09	Acceptable
Dibromofluoromethane	101	82-116	11/25/09	Acceptable
Toluene-d8	96	88-117	11/25/09	Acceptable

**Comments:** 

Merged

Form 1A - Organic

SuperSet Reference: RR31982

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Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-11
Lab Code:	J0905825-005
Extraction Method:	EPA 5030B
Analysis Method:	8260B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	3.1	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	190 D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	1.4	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Benzene	0.58 J	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	12	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	105	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	114	75-120	11/25/09	Acceptable	
Dibromofluoromethane	104	82-116	11/25/09	Acceptable	
Toluene-d8	92	88-117	11/25/09	Acceptable	

#### **Comments:**

Merged

Form 1A - Organic

**Date Received:** 11/21/2009

Units: ug/L Basis: NA Level: Low

**Service Request:** J0905825 **Date Collected:** 11/19/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-9
Lab Code:	J0905825-006
Extraction Method:	EPA 5030B
Analysis Method:	8260B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0903993	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	108	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	123	75-120	11/25/09	Outside Control Limits	
Dibromofluoromethane	98	82-116	11/25/09	Acceptable	
Toluene-d8	93	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

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 Service Request:
 J0905825

 Date Collected:
 11/19/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	MW-6 J0905825-007	
Extraction Method: Analysis Method:	EPA 5030B 8260B	

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0903993	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	106	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	118	75-120	11/25/09	Acceptable	
Dibromofluoromethane	99	82-116	11/25/09	Acceptable	
Toluene-d8	93	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/19/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-26
Lab Code:	J0905825-008
Extraction Method:	EPA 5030B
Analysis Method:	8260B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1 .	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0903993	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	106	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	117	75-120	11/25/09	Acceptable	
Dibromofluoromethane	100	82-116	11/25/09	Acceptable	
Toluene-d8	91	88-117	11/25/09	Acceptable	

Comments:

Merged

Form 1A - Organic

Service Request: J0905825 Date Collected: 11/18/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	MW-25 J0905825-009
<b>Extraction Method:</b>	EPA 5030B
Analysis Method:	8260B

Service Request:	J0905825
Date Collected:	11/18/2009
Date Received:	11/21/2009

Units:	ug/L
Basis:	NA
Level:	Low

Dilution Date Date Extraction **Analyte Name** Result Q MRL MDL Factor Extracted Analyzed Lot Note 1,1,1-Trichloroethane (TCA) ND U 1.0 0.21 1 11/25/09 11/25/09 JWG0903993 1,1-Dichloroethane ND U 1.0 0.56 1 11/25/09 11/25/09 JWG0903993 1,1-Dichloroethene ND U 1.0 0.16 JWG0903993 1 11/25/09 11/25/09 1,2-Dichloroethane (EDC) ND U 1.0 0.15 1 JWG0903993 11/25/09 11/25/09 Benzene ND U 1.0 0.52 1 11/25/09 11/25/09 JWG0903993 Carbon Tetrachloride ND U 1.0 0.18 1 11/25/09 11/25/09 JWG0903993 Chloroform ND U 1.0 0.10 1 11/25/09 11/25/09 JWG0903993 cis-1,2-Dichloroethene ND U 1.0 0.12 1 11/25/09 11/25/09 JWG0903993 Ethylbenzene ND U 1.0 0.10 1 11/25/09 JWG0903993 11/25/09 **Total Xylenes** ND U 3.0 0.32 1 11/25/09 11/25/09 JWG0903993 Methylene Chloride ND U 5.0 0.72 JWG0903993 1 11/25/09 11/25/09 Tetrachloroethene (PCE) ND U 1.0 0.22 1 11/25/09 11/25/09 JWG0903993 Toluene ND U 1.0 0.52 1 11/25/09 11/25/09 JWG0903993 trans-1,2-Dichloroethene ND U 0.13 1.0 1 11/25/09 11/25/09 JWG0903993 Trichloroethene (TCE) ND U 1.0 0.15 1 11/25/09 11/25/09 JWG0903993 Vinyl Chloride ND U 1.0 0.25 1 11/25/09 11/25/09 JWG0903993

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	103	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	120	75-120	11/25/09	Acceptable	
Dibromofluoromethane	102	82-116	11/25/09	Acceptable	
Toluene-d8	94	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	MW-21 J0905825-010
<b>Extraction Method:</b>	EPA 5030B
Analysis Method:	8260B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	. 1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0903993	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0903993	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	1,1/25/09	11/25/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0903993	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	· 1	11/25/09	11/25/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0903993	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0903993	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	105	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	117	75-120	11/25/09	Acceptable	
Dibromofluoromethane	101	82-116	11/25/09	Acceptable	
Toluene-d8	90	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/18/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Service Request: J0905825 Date Collected: 11/18/2009 Date Received: 11/21/2009

### Volatile Organic Compounds by GC/MS

Sample Name:	MW-16	Units:	0
Lab Code:	J0905825-011	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Ann - Lord - D.T.				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	104	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	107	75-120	11/25/09	Acceptable	
Dibromofluoromethane	106	82-116	11/25/09	Acceptable	
Toluene-d8	102	88-117	11/25/09	Acceptable	

Comments:

Merged

Form 1A - Organic

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	TW-46 J0905825-012	Units: Basis:	0
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	2.7	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	45	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	1.8	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	8.4	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	8.3	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	······································
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	<b>0.47</b> J	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	105	71-122	11/25/09	Acceptable
4-Bromofluorobenzene	109	75-120	11/25/09	Acceptable
Dibromofluoromethane	103	82-116	11/25/09	Acceptable
Toluene-d8	101	88-117	11/25/09	Acceptable

**Comments:** 

Analytical Results

# Client:Brown and CaldwellProject:Owens Corning/136868Sample Matrix:Water

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	Alloy J0905825-013		
Extraction Method: Analysis Method:	EPA 5030B 8260B		

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	2.2	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1 .	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	-1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	A and the second distance of the second distance of

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	101	71-122	11/25/09	Acceptable
4-Bromofluorobenzene	106	75-120	11/25/09	Acceptable
Dibromofluoromethane	98	82-116	11/25/09	Acceptable
Toluene-d8	100	88-117	11/25/09	Acceptable

#### **Comments:**

Merged

Service Request: J0905825

Date Collected: 11/18/2009

Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-5	Units: U	•
Lab Code:	J0905825-014	Basis: 1	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	ini
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	999 and anno 2000 k a marca a sa a
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	108	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	111	75-120	11/25/09	Acceptable	
Dibromofluoromethane	105	82-116	11/25/09	Acceptable	
Toluene-d8	102	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Volatile Organic Compounds by GC/MS

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

Sample Name:	MW-14	Units:	0
Lab Code:	J0905825-015	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	102	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	110	75-120	11/25/09	Acceptable	
Dibromofluoromethane	101	82-116	11/25/09	Acceptable	
Toluene-d8	101	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-10	Units:	0
Lab Code:	J0905825-016	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	105	71-122	11/25/09	Acceptable	<u> </u>
4-Bromofluorobenzene	108	75-120	11/25/09	Acceptable	
Dibromofluoromethane	104	82-116	11/25/09	Acceptable	
Toluene-d8	99	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-1	Units: ug/L
Lab Code:	J0905825-017	Basis: NA
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level: Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	. 1	11/25/09	11/25/09	JWG0904002	Provide States
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	107	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	112	75-120	11/25/09	Acceptable	
Dibromofluoromethane	99	82-116	11/25/09	Acceptable	
Toluene-d8	100	88-117	11/25/09	Acceptable	

Comments:

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

# Service Request: J0905825 Date Collected: 11/17/2009 Date Received: 11/21/2009

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-2	Units:	$\sim$
Lab Code:	J0905825-018	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	. 1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1 .	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	101	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	110	75-120	11/25/09	Acceptable	
Dibromofluoromethane	100	82-116	11/25/09	Acceptable	
Toluene-d8	101	88-117	11/25/09	Acceptable	

#### **Comments:**

Merged

Form 1A - Organic

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-18
Lab Code:	J0905825-019
Extraction Method:	EPA 5030B
Analysis Method:	8260B

 Service Request:
 J0905825

 Date Collected:
 11/17/2009

 Date Received:
 11/21/2009

Units: ug/L Basis: NA Level: Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	106	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	113	75-120	11/25/09	Acceptable	
Dibromofluoromethane	105	82-116	11/25/09	Acceptable	
Toluene-d8	101	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	MW-4 J0905825-020	Units: Basis:	0
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1.	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	10070110
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	107	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	111	75-120	11/25/09	Acceptable	
Dibromofluoromethane	102	82-116	11/25/09	Acceptable	
Toluene-d8	103	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/17/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Service Request: J0905825 **Date Collected:** 11/19/2009 Date Received: 11/21/2009

#### Volatile Organic Compounds by GC/MS

Sample Name:	TW-43	Units:	0
Lab Code:	J0905825-021	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	a an
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note		
1,2-Dichloroethane-d4	101	71-122	11/25/09	Acceptable	·····	
4-Bromofluorobenzene	108	75-120	11/25/09	Acceptable		
Dibromofluoromethane	99	82-116	11/25/09	Acceptable		1
Toluene-d8	98	88-117	11/25/09	Acceptable		

#### **Comments:**

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	TW-42 J0905825-022		Units: ug/L Basis: NA
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level: Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	106	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	111	75-120	11/25/09	Acceptable	
Dibromofluoromethane	101	82-116	11/25/09	Acceptable	
Toluene-d8	104	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Date Collected: 11/18/2009 Date Received: 11/21/2009

Service Request: J0905825

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

# Service Request: J0905825 Date Collected: 11/17/2009 Date Received: 11/21/2009

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	MW-37 Zone 3 J0905825-023		Units: Basis:	Ç
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	.0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	4.8	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	0.90 J	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	0.40 J	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	1.9	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	· 1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	
		for the	200 <b>7</b>					

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	99	71-122	11/25/09	Acceptable	P-1000000000000000000000000000000000000
4-Bromofluorobenzene	107	75-120	11/25/09	Acceptable	
Dibromofluoromethane	98	82-116	11/25/09	Acceptable	
Toluene-d8	98	88-117	11/25/09	Acceptable	

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-37 Zone 2	Units:	0
Lab Code:	J0905825-024	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	1.6	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	180	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	2.7	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	11	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	1.2	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	106	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	109	75-120	11/25/09	Acceptable	
Dibromofluoromethane	101	82-116	11/25/09	Acceptable	
Toluene-d8	106	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/17/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	MW-37 Zone 1 J0905825-025			Units: Basis:	Ų
Extraction Method: Analysis Method:	EPA 5030B 8260B			Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	<b>0.5</b> 7 J	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	20	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	<b>0.85</b> J	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	0.73 J	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1 .	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	109	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	103	75-120	11/25/09	Acceptable	
Dibromofluoromethane	104	82-116	11/25/09	Acceptable	
Toluene-d8	99	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

1 of 1

 Service Request:
 J0905825

 Date Collected:
 11/17/2009

 Date Received:
 11/21/2009

Analytical Results

# Client:Brown and CaldwellProject:Owens Corning/136868Sample Matrix:Water

 Service Request:
 J0905825

 Date Collected:
 11/16/2009

 Date Received:
 11/21/2009

Units: ug/L Basis: NA Level: Low

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-36 Zone 5
Lab Code:	J0905825-026
Extraction Method:	EPA 5030B
Analysis Method:	8260B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	2.4	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	109	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	112	75-120	11/25/09	Acceptable	
Dibromofluoromethane	106	82-116	11/25/09	Acceptable	
Toluene-d8	108	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-36 Zone 3	Units: ug/L
Lab Code:	J0905825-027	Basis: NA
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level: Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	······································
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	х 
1,2-Dichloroethane-d4	107	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	115	75-120	11/25/09	Acceptable	
Dibromofluoromethane	103	82-116	11/25/09	Acceptable	
Toluene-d8	106	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Service Request: J0905825 Date Collected: 11/17/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-36 Zone 1	Ur
Lab Code:	J0905825-028	Ba
Extraction Method: Analysis Method:	EPA 5030B 8260B	Le

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	108	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	115	75-120	11/25/09	Acceptable	
Dibromofluoromethane	102	82-116	11/25/09	Acceptable	
Toluene-d8	98	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

**Units:** ug/L

 Service Request:
 J0905825

 Date Collected:
 11/16/2009

 Date Received:
 11/21/2009

Basis: NA

Level: Low

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-35
Lab Code:	J0905825-029
Extraction Method:	EPA 5030B
Analysis Method:	8260B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	1.9	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	<b>340</b> D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	2.9	1.0	0.15	1 -	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	0.88 J	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	<b>0.70</b> J	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	103	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	106	75-120	11/25/09	Acceptable	
Dibromofluoromethane	99	82-116	11/25/09	Acceptable	
Toluene-d8	103	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

 $36_{\text{page}}$ 

Units:	ug/l

 Service Request:
 J0905825

 Date Collected:
 11/17/2009

 Date Received:
 11/21/2009

Units: ug/L Basis: NA

Level: Low

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-29R Zone 3
Lab Code:	J0905825-030
Extraction Method:	EPA 5030B
Analysis Method:	8260B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	2.3	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	230 D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	3.8	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	9.8	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	12	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	<b>0.49</b> J	1.0	0.15	· 1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	104	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	109	75-120	11/25/09	Acceptable	
Dibromofluoromethane	97	82-116	11/25/09	Acceptable	
Toluene-d8	101	88-117	11/25/09	Acceptable	

#### **Comments:**

 $37_{\text{Page}}$ 

Basis: NA Level: Low

Units: ug/L

Service Request:	J0905825
Date Collected:	11/16/2009
Date Received:	11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-29R Zone 4	Units:	Ų
Lab Code:	J0905825-031	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MDI	RAINT	Dilution	Date	Date	Extraction	<b>.</b> .
		MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethane	2.3	1.0	0.56	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethene	<b>320</b> D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	3.8	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
Carbon Tetrachloride	4.6	1.0	0.18	1	11/25/09	11/25/09	JWG0904005	
Chloroform	13	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	106	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	117	75-120	11/25/09	Acceptable	
Dibromofluoromethane	104	82-116	11/25/09	Acceptable	
Toluene-d8	106	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Service Request: J0905825 Date Collected: 11/16/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	SW-1	Units:	0
Lab Code:	J0905825-032	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethene	7.8	1.0	0.16	1	11/25/09	11/25/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	· 1	11/25/09	11/25/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
Carbon Tetrachloride	0.34 J	1.0	0.18	1	11/25/09	11/25/09	JWG0904005	
Chloroform	0.58 J	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	J.	
1,2-Dichloroethane-d4	104	71-122	11/25/09	Acceptable		
4-Bromofluorobenzene	111	75-120	11/25/09	Acceptable		
Dibromofluoromethane	104	82-116	11/25/09	Acceptable		
Toluene-d8	105	88-117	11/25/09	Acceptable		

#### **Comments:**

Merged

Form 1A - Organic

Service Request: J0905825 **Date Collected:** 11/18/2009 Date Received: 11/21/2009

	Units:	ug
	Desta	

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Service Request: J0905825 Date Collected: 11/18/2009 Date Received: 11/21/2009

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	SW-3A J0905825-033	•	Units: Basis:	0
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethane	1.6	1.0	0.56	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethene	<b>290</b> D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	1.9	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
Carbon Tetrachloride	7.4	1.0	0.18	1	11/25/09	11/25/09	JWG0904005	
Chloroform	7.1	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904005	
Tetrachloroethene (PCE)	0.65 J	1.0	0.22	1	11/25/09	11/25/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1 -	11/25/09	11/25/09	JWG0904005	
Trichloroethene (TCE)	0.72 J	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Vinyl Chloride	4.8	1.0	0.25	1	11/25/09	11/25/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	103	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	112	75-120	11/25/09	Acceptable	
Dibromofluoromethane	103	82-116	11/25/09	Acceptable	
Toluene-d8	104	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Service Request: J0905825 Date Collected: 11/18/2009 Date Received: 11/21/2009

## Volatile Organic Compounds by GC/MS

Sample Name:	SW-3B	Units:	-
Lab Code:	J0905825-034	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethene	1.1	1.0	0.16	1	11/25/09	11/25/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904005	
Chloroform	<b>0.54</b> J	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	1754 da
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	105	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	113	75-120	11/25/09	Acceptable	
Dibromofluoromethane	106	82-116	11/25/09	Acceptable	
Toluene-d8	98	88-117	11/25/09	Acceptable	

#### **Comments:**

Analytical Results

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Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	SW-6	Units:	0
Lab Code:	J0905825-035	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethene	5.3	1.0	0.16	1	11/25/09	11/25/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904005	
Chloroform	0.35 J	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904005	<b>**</b>

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	106	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	106	75-120	11/25/09	Acceptable	
Dibromofluoromethane	105	82-116	11/25/09	Acceptable	
Toluene-d8	98	88-117	11/25/09	Acceptable	

#### **Comments:**

Merged

Service Request:	J0905825
Date Collected:	11/18/2009
Date Received:	1.1/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

 Service Request:
 J0905825

 Date Collected:
 11/18/2009

 Date Received:
 11/21/2009

Units: ug/L Basis: NA Level: Low

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	SW-10 J0905825-036	
Extraction Method: Analysis Method:	EPA 5030B 8260B	

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethene	2.9	1.0	0.16	1	11/25/09	11/25/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904005	
Chloroform	0.20 J	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	108	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	112	75-120	11/25/09	Acceptable	
Dibromofluoromethane	106	82-116	11/25/09	Acceptable	
Toluene-d8	103	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	SW-11	Units:	0
Lab Code:	J0905825-037	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethene	7.7	1.0	0.16	1	11/25/09	11/25/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
Carbon Tetrachloride	0.28 J	1.0	0.18	1	11/25/09	11/25/09	JWG0904005	
Chloroform	3.2	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	104	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	106	75-120	11/25/09	Acceptable	
Dibromofluoromethane	99	82-116	11/25/09	Acceptable	
Toluene-d8	99	<b>88-1</b> 17	11/25/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Date Received:	11/21/2009

Service Request: J0905825 **Date Collected:** 11/18/2009

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Analytical Results

#### **Client:** Brown and Caldwell **Project:** Owens Corning/136868 Sample Matrix: Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	SW-12	Units:	-
Lab Code:	J0905825-038	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	7.5	1.0	0.16	1	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	2.6	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	98	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	109	75-120	11/26/09	Acceptable	
Dibromofluoromethane	103	82-116	11/26/09	Acceptable	
Toluene-d8	99	88-117	11/26/09	Acceptable	

#### **Comments:**

Merged

Form 1A - Organic

Service Request: J0905825

**Date Collected:** 11/18/2009

Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Service Request: J0905825 Date Collected: 11/18/2009 Date Received: 11/21/2009

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	SW-13 J0905825-039	•	Units: Basis:	0
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	$\mathbf{v} = \mathbf{N} \mathbf{D} \cdot \mathbf{U}$	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	and include a second second second second second

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	103	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	102	75-120	11/26/09	Acceptable	
Dibromofluoromethane	100	82-116	11/26/09	Acceptable	
Toluene-d8	96	88-117	11/26/09	Acceptable	

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Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	SW-14	Units:	0
Lab Code:	J0905825-040	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	. 1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	5.1	1.0	0.16	1	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	· 1	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	3.3	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	101	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	108	75-120	11/26/09	Acceptable	
Dibromofluoromethane	99	82-116	11/26/09	Acceptable	
Toluene-d8	102	88-117	11/26/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Level:	Lov

Service Request: J0905825 Date Collected: 11/18/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	SW-15	Units:	<u> </u>
Lab Code:	J0905825-041	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	6.8	1.0	0.16	1	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	0.53 J	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	98	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	113	75-120	11/26/09	Acceptable	
Dibromofluoromethane	101	82-116	11/26/09	Acceptable	
Toluene-d8	99	88-117	11/26/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/18/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Service Request: J0905825 Date Collected: 11/20/2009 Date Received: 11/21/2009

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-30	Units:	U
Lab Code:	J0905825-042	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	1.6	1.0	0.21	1	11/30/09	11/30/09	JWG0904039	
1,1-Dichloroethane	16	1.0	0.56	1	11/30/09	11/30/09	JWG0904039	
1,1-Dichloroethene	<b>4200</b> D	100	16	100	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	22	1.0	0.15	1	11/30/09	11/30/09	JWG0904039	
Benzene	ND U	1.0	0.52	1	11/30/09	11/30/09	JWG0904039	
Carbon Tetrachloride	180	1.0	0.18	1	11/30/09	11/30/09	JWG0904039	
Chloroform	6.2	1.0	0.10	1	11/30/09	11/30/09	JWG0904039	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/30/09	11/30/09	JWG0904039	
Ethylbenzene	ND U	1.0	0.10	1	11/30/09	11/30/09	JWG0904039	
Total Xylenes	ND U	3.0	0.32	1	11/30/09	11/30/09	JWG0904039	
Methylene Chloride	ND U	5.0	0.72	1	11/30/09	11/30/09	JWG0904039	
Tetrachloroethene (PCE)	2.6	1.0	0.22	1	11/30/09	11/30/09	JWG0904039	
Toluene	ND U	1.0	0.52	1	11/30/09	11/30/09	JWG0904039	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/30/09	11/30/09	JWG0904039	
Trichloroethene (TCE)	5.1	1.0	0.15	1	11/30/09	11/30/09	JWG0904039	
Vinyl Chloride	ND U	1.0	0.25	1	11/30/09	11/30/09	JWG0904039	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	đu
1,2-Dichloroethane-d4	109	71-122	11/30/09	Acceptable	
4-Bromofluorobenzene	102	75-120	11/30/09	Acceptable	
Dibromofluoromethane	106	82-116	11/30/09	Acceptable	
Toluene-d8	99	88-117	11/30/09	Acceptable	

#### **Comments:**

Form 1A - Organic

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Service Request: J0905825 Date Collected: 11/20/2009 Date Received: 11/21/2009

## Volatile Organic Compounds by GC/MS

Sample Name:	EB-11-20-09	Units:	U
Lab Code:	J0905825-043	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	. 1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	. 1	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	107	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	111	75-120	11/26/09	Acceptable	
Dibromofluoromethane	104	82-116	11/26/09	Acceptable	
Toluene-d8	101	88-117	11/26/09	Acceptable	

#### **Comments:**

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-31	Units:	0
Lab Code:	J0905825-044	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/30/09	11/30/09	JWG0904039	
1,1-Dichloroethane	17	1.0	0.56	1	11/30/09	11/30/09	JWG0904039	
1,1-Dichloroethene	<b>4900</b> D	100	16	100	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	21	1.0	0.15	1.	11/30/09	11/30/09	JWG0904039	
Benzene	ND U	1.0	0.52	1	11/30/09	11/30/09	JWG0904039	
Carbon Tetrachloride	52	1.0	0.18	1	11/30/09	11/30/09	JWG0904039	
Chloroform	5.6	1.0	0.10	1	11/30/09	11/30/09	JWG0904039	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/30/09	11/30/09	JWG0904039	
Ethylbenzene	ND U	1.0	0.10	1	11/30/09	11/30/09	JWG0904039	
Total Xylenes	ND U	3.0	0.32	1	11/30/09	11/30/09	JWG0904039	
Methylene Chloride	ND U	5.0	0.72	1	11/30/09	11/30/09	JWG0904039	
Tetrachloroethene (PCE)	5.3	1.0	0.22	1	11/30/09	11/30/09	JWG0904039	
Toluene	ND U	1.0	0.52	1	11/30/09	11/30/09	JWG0904039	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/30/09	11/30/09	JWG0904039	
Trichloroethene (TCE)	5.4	1.0	0.15	1	11/30/09	11/30/09	JWG0904039	
Vinyl Chloride	ND U	1.0	0.25	1	11/30/09	11/30/09	JWG0904039	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	110	71-122	11/30/09	Acceptable	
4-Bromofluorobenzene	108	75-120	11/30/09	Acceptable	
Dibromofluoromethane	108	82-116	11/30/09	Acceptable	
Toluene-d8	100	88-117	11/30/09	Acceptable	

**Comments:** 

Merged

 Service Request:
 J0905825

 Date Collected:
 11/20/2009

 Date Received:
 11/21/2009

Analytical Results

#### Client: Brown and Caldwell **Project:** Owens Corning/136868 Sample Matrix: Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-7	Units:	U
Lab Code:	J0905825-045	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result (	Q MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	<b>30000</b> I	D 1000	210	1000	11/30/09	11/30/09	JWG0904039	
1,1-Dichloroethane	<b>96</b> J	D 100	56	100	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	60000 I	<b>D</b> 1000	160	1000	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	ND L	J 100	15	100	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	J 100	52	100	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND U	J 100	18	100	11/26/09	11/26/09	JWG0904005	
Chloroform	ND U	J 100	10	100	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	J 100	12	100	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	J 100	10	100	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND L	J 300	32	100	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	J 500	72	100	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	35 J	D 100	22	100	11/26/09	11/26/09	JWG0904005	
Toluene	130 E	D 100	52	100	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	J 100	13	100	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	J 100	15	100	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND L	J 100	25	100	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	104	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	111	75-120	11/26/09	Acceptable	
Dibromofluoromethane	105	82-116	11/26/09	Acceptable	
Toluene-d8	99	88-117	11/26/09	Acceptable	

#### **Comments:**

Merged

Form 1A - Organic

SuperSet Reference: RR31982

Service Request: J0905825

Date Collected: 11/20/2009

Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-28	Units:	0
Lab Code:	J0905825-046	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	93000	D	1000	210	1000	11/30/09	11/30/09	JWG0904039	
1,1-Dichloroethane	410	D	100	56	100	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	110000	D	1000	160	1000	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	100	D	100	15	100	11/26/09	11/26/09	JWG0904005	
Benzene	ND	U	100	52	100	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND	U	100	18	100	11/26/09	11/26/09	JWG0904005	
Chloroform	46	JD	100	10	100	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND	U	100	12	100	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND	U	100	10	100	11/26/09	11/26/09	JWG0904005	
Total Xylenes	46	JD	300	32	100	11/26/09	11/26/09	JWG0904005	Walter for an and a second second second
Methylene Chloride	ND	U	500	72	100	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	40	JD	100	22	100	11/26/09	11/26/09	JWG0904005	
Toluene	85	JD	100	52	100	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND	U	100	13	100	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	88	JD	100	15	100	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND	U	100	25	100	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	104	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	108	75-120	11/26/09	Acceptable	
Dibromofluoromethane	112	82-116	11/26/09	Acceptable	
Toluene-d8	101	88-117	11/26/09	Acceptable	

#### **Comments:**

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/20/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-32
Lab Code:	J0905825-047

Extraction Method:	EPA 5030B
Analysis Method:	8260B

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	14	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	10	1.0	0.56	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	29	1.0	0.16	1	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	71-122	11/26/09	Acceptable
4-Bromofluorobenzene	111	75-120	11/26/09	Acceptable
Dibromofluoromethane	100	82-116	11/26/09	Acceptable
Toluene-d8	106	88-117	11/26/09	Acceptable

**Comments:** 

Merged

Units: ug/L Basis: NA

Level: Low

Service Request: J0905825 Date Collected: 11/19/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-15	Units:	0
Lab Code:	J0905825-048	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Descult O	MDI	MDI	Dilution	Date	Date	Extraction	
	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	1.9	1.0	0.56	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	<b>320</b> D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	2.9	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/26/09	11/26/09	JWG0904005	-
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	<b>0.62</b> J	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	<b>0.74</b> J	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	108	71-122	11/26/09	Acceptable
4-Bromofluorobenzene	110	75-120	11/26/09	Acceptable
Dibromofluoromethane	108	82-116	11/26/09	Acceptable
Toluene-d8	97	88-117	11/26/09	Acceptable

**Comments:** 

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/20/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name:	MW-17	Units:	0
Lab Code:	J0905825-049	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	<b>0.46</b> J	1.0	0.16	1	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	•
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	108	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	116	75-120	11/26/09	Acceptable	
Dibromofluoromethane	104	82-116	11/26/09	Acceptable	
Toluene-d8	102	88-117	11/26/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/19/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### **Date Collected:** 11/19/2009 **Date Received:** 11/21/2009

Service Request: J0905825

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-20	Units	ug/L
Lab Code:	J0905825-050	Basis	NA
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/26/09	11/26/09	JWG0904005	
1,1-Dichloroethene	19	1.0	0.16	1	11/26/09	11/26/09	JWG0904005	
1,2-Dichloroethane (EDC)	0.66 J	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
Carbon Tetrachloride	3.4	1.0	0.18	1	11/26/09	11/26/09	JWG0904005	
Chloroform	44	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/26/09	11/26/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/26/09	11/26/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/26/09	11/26/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/26/09	11/26/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/26/09	11/26/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/26/09	11/26/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/26/09	11/26/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/26/09	11/26/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/26/09	11/26/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	105	71-122	11/26/09	Acceptable	
4-Bromofluorobenzene	106	75-120	11/26/09	Acceptable	
Dibromofluoromethane	102	82-116	11/26/09	Acceptable	
Toluene-d8	103	88-117	11/26/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

SuperSet Reference: RR31982

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

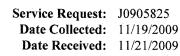
Sample Name:	MW-24	Units:	0
Lab Code:	J0905825-051	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MDI	мрі	Dilution	Date	Date	Extraction	<b>N</b> T (
		MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	0.66 J	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	85	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	1.7	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	19	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	-1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	. 1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	118	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	112	75-120	11/27/09	Acceptable	
Dibromofluoromethane	104	82-116	11/27/09	Acceptable	
Toluene-d8	109	88-117	11/27/09	Acceptable	

#### **Comments:**

Merged



Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-27	Units:	0
Lab Code:	J0905825-052	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	1.0	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	120	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	1.9	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	3.8	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	12	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	<b>0.92</b> J	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	······································
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	1.2	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	109	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	102	75-120	11/27/09	Acceptable	
Dibromofluoromethane	105	82-116	11/27/09	Acceptable	
Toluene-d8	105	88-117	11/27/09	Acceptable	

#### **Comments:**

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/19/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	SW-3	Units:	Ų
Lab Code:	J0905825-053	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	11010
1,1-Dichloroethane	ND U	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	1.1	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	0.52 J	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	110	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	111	75-120	11/27/09	Acceptable	
Dibromofluoromethane	111	82-116	11/27/09	Acceptable	
Toluene-d8	110	88-117	11/27/09	Acceptable	

#### **Comments:**

Merged

Form 1A - Organic

 Service Request:
 J0905825

 Date Collected:
 11/18/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Service Request: J0905825 Date Collected: 11/17/2009 Date Received: 11/21/2009

## Volatile Organic Compounds by GC/MS

Sample Name:	EB111709	Units:	•
Lab Code:	J0905825-054	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	9897 - Tolomo Cana - Canada anna an an an a
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	117	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	111	75-120	11/27/09	Acceptable	
Dibromofluoromethane	107	82-116	11/27/09	Acceptable	
Toluene-d8	107	88-117	11/27/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	EB111909 J0905825-055	* . •	Units: Basis:	0
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	110	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	112	75-120	11/27/09	Acceptable	
Dibromofluoromethane	109	82-116	11/27/09	Acceptable	
Toluene-d8	107	88-117	11/27/09	Acceptable	

Comments:

Merged

Form 1A - Organic

Service Request: J0905825 **Date Collected:** 11/19/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	DUP111609 J0905825-056	, e ^{n 1}	Units: Basis:	0
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1				Note
				1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	2.4	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	410 D	10	1.6	10	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	3.7	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	10	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	12	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	0.55 J	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	114	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	102	75-120	11/27/09	Acceptable	
Dibromofluoromethane	104	82-116	11/27/09	Acceptable	
Toluene-d8	102	88-117	11/27/09	Acceptable	

**Comments:** 

Merged

Service Request: J0905825 **Date Collected:** 11/16/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	DUP111909	Units:	0
Lab Code:	J0905825-057	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	85	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	1.7	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	18	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	115	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	116	75-120	11/27/09	Acceptable	
Dibromofluoromethane	112	82-116	11/27/09	Acceptable	
Toluene-d8	111	88-117	11/27/09	Acceptable	

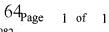
Comments:

Merged

 Service Request:
 J0905825

 Date Collected:
 11/19/2009

 Date Received:
 11/21/2009



Analytical Results

Volatile Organic Compounds by GC/MS

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

Sample Name:	TW-41	Units:	0
Lab Code:	J0905825-058	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	ND U	1.0	0.10	- 1	11/27/09	11/27/09	JWG0904010	PP. Constants
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	117	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	98	75-120	11/27/09	Acceptable	
Dibromofluoromethane	110	82-116	11/27/09	Acceptable	
Toluene-d8	102	88-117	11/27/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Service Request: J0905825 Date Collected: 11/16/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Service Request: J0905825 Date Collected: 11/17/2009 Date Received: 11/21/2009

#### Volatile Organic Compounds by GC/MS

Sample Name:	MW-3	Units:	0
Lab Code:	J0905825-059	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	ND U	1.0	0.10	1 .	11/27/09	11/27/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	110	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	105	75-120	11/27/09	Acceptable	
Dibromofluoromethane	109	82-116	11/27/09	Acceptable	
Toluene-d8	102	88-117	11/27/09	Acceptable	

#### **Comments:**

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	TW-44	Units:	÷
Lab Code:	J0905825-060	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/28/09	11/28/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/28/09	11/28/09	JWG0904010	-
Chloroform	ND U	1.0	0.10	· 1	11/28/09	11/28/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/28/09	11/28/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/28/09	11/28/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/28/09	11/28/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/28/09	11/28/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/28/09	11/28/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/28/09	11/28/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	112	71-122	11/28/09	Acceptable	
4-Bromofluorobenzene	109	75-120	11/28/09	Acceptable	
Dibromofluoromethane	106	82-116	11/28/09	Acceptable	
Toluene-d8	103	88-117	11/28/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Service Request: J0905825 Date Collected: 11/16/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	TW-40 J0905825-061		Units: Basis:	0
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethene	0.58 J	1.0	0.16	1	11/28/09	11/28/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/28/09	11/28/09	JWG0904010	
Chloroform	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/28/09	11/28/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/28/09	11/28/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/28/09	11/28/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/28/09	11/28/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/28/09	11/28/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/28/09	11/28/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	112	71-122	11/28/09	Acceptable	
4-Bromofluorobenzene	107	75-120	11/28/09	Acceptable	
Dibromofluoromethane	106	82-116	11/28/09	Acceptable	
Toluene-d8	105	88-117	11/28/09	Acceptable	

Comments:

Merged

Form 1A - Organic

RR31982

Service Request: J0905825 Date Collected: 11/16/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	EB-11-16-09
Lab Code:	J0905825-062
Extraction Method:	EPA 5030B
Analysis Method:	8260B

Service Request:	J0905825
Date Collected:	11/16/2009
Date Received:	11/21/2009

Units:	ug/L
Basis:	NA
Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/28/09	11/28/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/28/09	11/28/09	JWG0904010	
Chloroform	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/28/09	11/28/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/28/09	11/28/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/28/09	11/28/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/28/09	11/28/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/28/09	11/28/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/28/09	11/28/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	107	71-122	11/28/09	Acceptable	
4-Bromofluorobenzene	105	75-120	11/28/09	Acceptable	
Dibromofluoromethane	107	82-116	11/28/09	Acceptable	
Toluene-d8	100	88-117	11/28/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	DUP-11-18-09	Units:	0
Lab Code:	J0905825-063	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethene	2.2	1.0	0.16	1	11/28/09	11/28/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/28/09	11/28/09	JWG0904010	
Chloroform	<b>0.24</b> J	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/28/09	11/28/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/28/09	11/28/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/28/09	11/28/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/28/09	11/28/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/28/09	11/28/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/28/09	11/28/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	108	71-122	11/28/09	Acceptable	
4-Bromofluorobenzene	103	75-120	11/28/09	Acceptable	
Dibromofluoromethane	111	82-116	11/28/09	Acceptable	
Toluene-d8	106	88-117	11/28/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

 Date Collected:
 11/18/2009

 Date Received:
 11/21/2009

Service Request: J0905825

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	Trip Blank 1 J0905825-064	Units: Basis:	0
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/28/09	11/28/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/28/09	11/28/09	JWG0904010	
Chloroform	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/28/09	11/28/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/28/09	11/28/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/28/09	11/28/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/28/09	11/28/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/28/09	11/28/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/28/09	11/28/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	111	71-122	11/28/09	Acceptable	
4-Bromofluorobenzene	108	75-120	11/28/09	Acceptable	
Dibromofluoromethane	109	82-116	11/28/09	Acceptable	
Toluene-d8	106	88-117	11/28/09	Acceptable	

Merged

Form 1A - Organic

71 Page SuperSet Reference: RR31982

 Service Request:
 J0905825

 Date Collected:
 11/18/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	Trip Blank 2	Units:	0
Lab Code:	J0905825-065	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/28/09	11/28/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/28/09	11/28/09	JWG0904010	
Chloroform	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	- 1	11/28/09	11/28/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/28/09	11/28/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/28/09	11/28/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/28/09	11/28/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/28/09	11/28/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/28/09	11/28/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	109	71-122	11/28/09	Acceptable	
4-Bromofluorobenzene	105	75-120	11/28/09	Acceptable	
Dibromofluoromethane	105	82-116	11/28/09	Acceptable	
Toluene-d8	103	88-117	11/28/09	Acceptable	

**Comments:** 

Merged

 Service Request:
 J0905825

 Date Collected:
 11/18/2009

 Date Received:
 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	EB-11-18-09 J0905825-066	Units: Basis:	U
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRŁ	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/28/09	11/28/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/28/09	11/28/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/28/09	11/28/09	JWG0904010	
Chloroform	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/28/09	11/28/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/28/09	11/28/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/28/09	11/28/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/28/09	11/28/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/28/09	11/28/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/28/09	11/28/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/28/09	11/28/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/28/09	11/28/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/28/09	11/28/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	108	71-122	11/28/09	Acceptable	
4-Bromofluorobenzene	104	75-120	11/28/09	Acceptable	
Dibromofluoromethane	103	82-116	11/28/09	Acceptable	
Toluene-d8	106	88-117	11/28/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Service Request: J0905825 Date Collected: 11/18/2009 Date Received: 11/21/2009

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Service Request: J0905825 Date Collected: NA Date Received: NA

#### Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	Method Blank JWG0903993-4		Units: Basis:	•
Extraction Method: Analysis Method:	EPA 5030B 8260B		Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/24/09	11/24/09	JWG0903993	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/24/09	11/24/09	JWG0903993	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/24/09	11/24/09	JWG0903993	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/24/09	11/24/09	JWG0903993	
Benzene	ND U	1.0	0.52	1	11/24/09	11/24/09	JWG0903993	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/24/09	11/24/09	JWG0903993	
Chloroform	ND U	1.0	0.10	1	11/24/09	11/24/09	JWG0903993	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/24/09	11/24/09	JWG0903993	
Ethylbenzene	ND U	1.0	0.10	1	11/24/09	11/24/09	JWG0903993	
Total Xylenes	ND U	3.0	0.32	1	11/24/09	11/24/09	JWG0903993	
Methylene Chloride	ND U	5.0	0.72	1	11/24/09	11/24/09	JWG0903993	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/24/09	11/24/09	JWG0903993	
Toluene	ND U	1.0	0.52	1	11/24/09	11/24/09	JWG0903993	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/24/09	11/24/09	JWG0903993	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/24/09	11/24/09	JWG0903993	
Vinyl Chloride	ND U	1.0	0.25	1	11/24/09	11/24/09	JWG0903993	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	95	71-122	11/24/09	Acceptable	
4-Bromofluorobenzene	122	75-120	11/24/09	Outside Control Limits	
Dibromofluoromethane	97	82-116	11/24/09	Acceptable	
Toluene-d8	94	88-117	11/24/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Service Request: J0905825 Date Collected: NA Date Received: NA

#### Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	Units:	0
Lab Code:	JWG0904002-4	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904002	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904002	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904002	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904002	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904002	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904002	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904002	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904002	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904002	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904002	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904002	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	108	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	112	75-120	11/25/09	Acceptable	
Dibromofluoromethane	106	82-116	11/25/09	Acceptable	
Toluene-d8	99	88-117	11/25/09	Acceptable	

**Comments:** 

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Service Request: J0905825 Date Collected: NA Date Received: NA

#### Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	Units:	0
Lab Code:	JWG0904005-4	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/25/09	11/25/09	JWG0904005	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/25/09	11/25/09	JWG0904005	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Benzene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/25/09	11/25/09	JWG0904005	
Chloroform	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/25/09	11/25/09	JWG0904005	
Ethylbenzene	ND U	1.0	0.10	1	11/25/09	11/25/09	JWG0904005	
Total Xylenes	ND U	3.0	0.32	1	11/25/09	11/25/09	JWG0904005	
Methylene Chloride	ND U	5.0	0.72	1	11/25/09	11/25/09	JWG0904005	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/25/09	11/25/09	JWG0904005	
Toluene	ND U	1.0	0.52	1	11/25/09	11/25/09	JWG0904005	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/25/09	11/25/09	JWG0904005	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/25/09	11/25/09	JWG0904005	
Vinyl Chloride	ND U	1.0	0.25	1	11/25/09	11/25/09	JWG0904005	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	102	71-122	11/25/09	Acceptable	
4-Bromofluorobenzene	112	75-120	11/25/09	Acceptable	
Dibromofluoromethane	101	82-116	11/25/09	Acceptable	
Toluene-d8	108	88-117	11/25/09	Acceptable	

Comments:

Merged

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	Units:	0
Lab Code:	JWG0904010-4	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/27/09	11/27/09	JWG0904010	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/27/09	11/27/09	JWG0904010	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Benzene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/27/09	11/27/09	JWG0904010	
Chloroform	ND U	1.0	0.10	. 1	11/27/09	11/27/09	JWG0904010	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/27/09	11/27/09	JWG0904010	
Ethylbenzene	ND U	1.0	0.10	1	11/27/09	11/27/09	JWG0904010	
Total Xylenes	ND U	3.0	0.32	1	11/27/09	11/27/09	JWG0904010	
Methylene Chloride	ND U	5.0	0.72	1	11/27/09	11/27/09	JWG0904010	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/27/09	11/27/09	JWG0904010	
Toluene	ND U	1.0	0.52	1	11/27/09	11/27/09	JWG0904010	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1 ·	11/27/09	11/27/09	JWG0904010	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/27/09	11/27/09	JWG0904010	
Vinyl Chloride	ND U	1.0	0.25	1	11/27/09	11/27/09	JWG0904010	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	107	71-122	11/27/09	Acceptable	
4-Bromofluorobenzene	104	75-120	11/27/09	Acceptable	
Dibromofluoromethane	106	82-116	11/27/09	Acceptable	
Toluene-d8	107	88-117	11/27/09	Acceptable	

**Comments:** 

Merged

Service Request: J0905825 Date Collected: NA Date Received: NA

Analytical Results

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	Units:	0
Lab Code:	JWG0904039-3	Basis:	
Extraction Method: Analysis Method:	EPA 5030B 8260B	Level:	Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,1,1-Trichloroethane (TCA)	ND U	1.0	0.21	. 1	11/30/09	11/30/09	JWG0904039	
1,1-Dichloroethane	ND U	1.0	0.56	1	11/30/09	11/30/09	JWG0904039	
1,1-Dichloroethene	ND U	1.0	0.16	1	11/30/09	11/30/09	JWG0904039	
1,2-Dichloroethane (EDC)	ND U	1.0	0.15	1	11/30/09	11/30/09	JWG0904039	
Benzene	ND U	1.0	0.52	1	11/30/09	11/30/09	JWG0904039	
Carbon Tetrachloride	ND U	1.0	0.18	1	11/30/09	11/30/09	JWG0904039	
Chloroform	ND U	1.0	0.10	1	11/30/09	11/30/09	JWG0904039	
cis-1,2-Dichloroethene	ND U	1.0	0.12	1	11/30/09	11/30/09	JWG0904039	
Ethylbenzene	ND U	1.0	0.10	1	11/30/09	11/30/09	JWG0904039	
Total Xylenes	ND U	3.0	0.32	1	11/30/09	11/30/09	JWG0904039	
Methylene Chloride	ND U	5.0	0.72	1	11/30/09	11/30/09	JWG0904039	
Tetrachloroethene (PCE)	ND U	1.0	0.22	1	11/30/09	11/30/09	JWG0904039	
Toluene	ND U	1.0	0.52	1	11/30/09	11/30/09	JWG0904039	
trans-1,2-Dichloroethene	ND U	1.0	0.13	1	11/30/09	11/30/09	JWG0904039	
Trichloroethene (TCE)	ND U	1.0	0.15	1	11/30/09	11/30/09	JWG0904039	
Vinyl Chloride	ND U	1.0	0.25	1	11/30/09	11/30/09	JWG0904039	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,2-Dichloroethane-d4	104	71-122	11/30/09	Acceptable	
4-Bromofluorobenzene	104	75-120	11/30/09	Acceptable	
Dibromofluoromethane	108	82-116	11/30/09	Acceptable	
Toluene-d8	105	88-117	11/30/09	Acceptable	

**Comments:** 

Merged

Form 1A - Organic

Service Request: J0905825 Date Collected: NA Date Received: NA

QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Surrogate Recovery Summary Volatile Organic Compounds by GC/MS

Extraction Method:EPA 5030BAnalysis Method:8260B

Units:	PERCENT
Level:	Low

Sample Name	Lab Code	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	Sur4
MW-22	J0905825-001	105	119	101	95
MW-19	J0905825-002	109	122 *	95	90
MW-13	J0905825-003	104	117	99	92
MW-12	J0905825-004	103	118	101	96
MW-11	J0905825-005	105	114	104	92
MW-9	J0905825-006	108	123 *	98	93
MW-6	J0905825-007	106	118	99	93
MW-26	J0905825-008	106	117	100	91
MW-25	J0905825-009	103	120	102	94
MW-21	J0905825-010	105	117	101	90
MW-16	J0905825-011	104	107	106	102
TW-46	J0905825-012	105	109	103	101
Alloy	J0905825-013	101	106	98	100
MW-5	J0905825-014	108	111	105	102
MW-14	J0905825-015	102	110	101	101
MW-10	J0905825-016	105	108	104	99
MW-1	J0905825-017	107	112	99	100
MW-2	J0905825-018	101	110	100	101
MW-18	J0905825-019	106	113	105	101
MW-4	J0905825-020	107	111	102	103
TW-43	J0905825-021	101	108	99	98
TW-42	J0905825-022	106	111	101	104
MW-37 Zone 3	J0905825-023	99	107	98	98
MW-37 Zone 2	J0905825-024	106	109	101	106
MW-37 Zone 1	J0905825-025	109	103	104	99
MW-36 Zone 5	J0905825-026	109	112	106	108
MW-36 Zone 3	J0905825-027	107	115	103	106
MW-36 Zone 1	J0905825-028	108	115	102	98
MW-35	J0905825-029	103	106	99	103
MW-29R Zone 3	J0905825-030	104	109	97	101
MW-29R Zone 4	J0905825-031	106	117	104	106
SW-1	J0905825-032	104	111	104	105
SW-3A	J0905825-033	103	112	103	104
SW-3B	J0905825-034	105	113	106	98

#### Surrogate Recovery Control Limits (%)

Sur1 = 1,2-Dichloroethane-d4	71-122	
Sur2 = 4-Bromofluorobenzene	75-120	
Sur3 = Dibromofluoromethane	82-116	
Sur4 = Toluene-d8	88-117	

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Service Request: J0905825

QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Surrogate Recovery Summary Volatile Organic Compounds by GC/MS

<b>Extraction Method:</b>	EPA 5030B
Analysis Method:	8260B

Units: PERCENT Level: Low

Service Request: J0905825

Sample Name	Lab Code	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
SW-6	J0905825-035	106	106	105	98
SW-10	J0905825-036	108	112	106	103
SW-11	J0905825-037	104	106	99	99
SW-12	J0905825-038	98	109	103	99
SW-13	J0905825-039	103	102	100	96
SW-14	J0905825-040	101	108	99	102
SW-15	J0905825-041	98	113	101	99
MW-30	J0905825-042	109	102	106	99
EB-11-20-09	J0905825-043	107	111	104	101
MW-31	J0905825-044	110	108	108	100
MW-7	J0905825-045	104	111	105	99
MW-28	J0905825-046	104	108	112	101
MW-32	J0905825-047	104	111	100	106
MW-15	J0905825-048	108	110	108	97
MW-17	J0905825-049	108	116	104	102
MW-20	J0905825-050	105	106	102	103
MW-24	J0905825-051	118	112	104	109
MW-27	J0905825-052	109	102	105	105
SW-3	J0905825-053	110	111	111	110
EB111709	J0905825-054	117	111	107	107
EB111909	J0905825-055	110	112	109	107
DUP111609	J0905825-056	114	102	104	102
DUP111909	J0905825-057	115	116	112	111
TW-41	J0905825-058	117	98	110	102
MW-3	J0905825-059	110	105	109	102
TW-44	J0905825-060	112	109	106	103
TW-40	J0905825-061	112	107	106	105
EB-11-16-09	J0905825-062	107	105	107	100
DUP-11-18-09	J0905825-063	108	103	111	106
Trip Blank 1	J0905825-064	111	108	109	106
Trip Blank 2	J0905825-065	109	105	105	103
EB-11-18-09	J0905825-066	108	104	103	106
Method Blank	JWG0903993-4	95	122 *	97	94
Method Blank	JWG0904002-4	108	112	106	99
Surrogate Recovery Control Limits	(%)				

# Sur1 = 1,2-Dichloroethane-d471-122Sur2 = 4-Bromofluorobenzene75-120Sur3 = Dibromofluoromethane82-116Sur4 = Toluene-d888-117

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

#### Surrogate Recovery Summary Volatile Organic Compounds by GC/MS

Extraction Method:EPA 5030BAnalysis Method:8260B

Sample Name	Lab Code	<u>Sur1</u>	<u>Sur2</u>	<u>Sur3</u>	<u>Sur4</u>
Method Blank	JWG0904005-4	102	112	101	108
Method Blank	JWG0904010-4	107	104	106	107
Method Blank	JWG0904039-3	104	104	108	105
MW-29R Zone 3MS	JWG0904002-1	93	102	95	98
MW-29R Zone 3DMS	JWG0904002-2	102	109	100	101
MW-20MS	JWG0904005-1	107	113	103	104
MW-20DMS	JWG0904005-2	106	111	102	104
MW-24MS	JWG0904010-1	105	108	102	105
MW-24DMS	JWG0904010-2	110	109	107	104
Lab Control Sample	JWG0903993-3	97	119	97	97
Lab Control Sample	JWG0904002-3	90	108	94	105
Lab Control Sample	JWG0904005-3	102	116	99	107
Lab Control Sample	JWG0904010-3	101	105	99	105
Lab Control Sample	JWG0904039-1	105	114	108	106
Duplicate Lab Control Sample	JWG0904039-2	107	114	111	108

#### Surrogate Recovery Control Limits (%)

Sur1 = 1,2-Dichloroethane-d4	71-122	
Sur2 = 4-Bromofluorobenzene	75-120	
Sur3 = Dibromofluoromethane	82-116	
Sur4 = Toluene-d8	88-117	

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Service Request: J0905825

Units: PERCENT

Level: Low

QA/QC Report

Client:Brown and CaldwellProject:Owens Corning/136868Sample Matrix:Water

 Service Request:
 J0905825

 Date Extracted:
 11/25/2009

 Date Analyzed:
 11/25/2009

#### Matrix Spike/Duplicate Matrix Spike Summary Volatile Organic Compounds by GC/MS

Sample Name:	MW-29R Zone 3	Units:	0
Lab Code:	J0905825-030	Basis:	
Extraction Method:	EPA 5030B	Level:	
Analysis Method:	8260B	Extraction Lot:	

	Sample	MW-29R Zone 3MS JWG0904002-1 Matrix Spike			MW-29R Zone 3DMS JWG0904002-2 Duplicate Matrix Spike			%Rec		RPD
Analyte Name	Result	Result	Expected	%Rec	Result	Expected	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane (TCA)	ND	23.9	20.0	120	22.5	20.0	113	76-130	6	30
1,1-Dichloroethane	2.3	24.4	20.0	111	24.7	20.0	112	78-125	1	30
1,1-Dichloroethene	230	387E	20.0	808 #	390E	20.0	823 #	79-133	1	30
1,2-Dichloroethane (EDC)	3.8	25.3	20.0	108	25.5	20.0	109	74-126	1	30
Benzene	ND	21.9	20.0	109	21.4	20.0	107	78-123	2	30
Carbon Tetrachloride	9.8	32.5	20.0	113	33.0	20.0	116	76-131	2	30
Chloroform	12	33.2	20.0	107	32.9	20.0	106	81-124	1	30
cis-1,2-Dichloroethene	ND	21.5	20.0	108	20.9	20.0	105	75-127	3	30
Ethylbenzene	ND	21.6	20.0	108	21.4	20.0	107	87-122	1	30
Total Xylenes	ND	65.5	60.0	109	62.0	60.0	103	80-121	5	30
Methylene Chloride	ND	20.4	20.0	102	19.8	20.0	99	75-123	3	30
Tetrachloroethene (PCE)	ND	22.3	20.0	111	21.7	20.0	108	79-123	3	30
Toluene	ND	20.9	20.0	105	20.8	20.0	104	86-119	0	30
trans-1,2-Dichloroethene	ND	23.3	20.0	117	23.2	20.0	116	76-125	1	30
Trichloroethene (TCE)	0.49	23.7	20.0	116	22.4	20.0	109	77-128	6	30
Vinyl Chloride	ND	23.6	20.0	118	22.9	20.0	114	78-141	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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#### QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

## Service Request: J0905825 Date Extracted: 11/26/2009 Date Analyzed: 11/26/2009

#### Matrix Spike/Duplicate Matrix Spike Summary Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:	MW-20 J0905825-050	Units: Basis:	÷
<b>Extraction Method:</b>		Level:	Low
Analysis Method:	8260B	Extraction Lot:	JWG0904005

	Sample	JW	MW-20MS /G0904005-1 Matrix Spike	l	JW	1W-20DMS /G0904005-2 cate Matrix S _l		%Rec		RPD
Analyte Name	Result	Result	Expected	%Rec	Result	Expected	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane (TCA)	ND	23.7	20.0	118	23.9	20.0	119	76-130	1	30
1,1-Dichloroethane	ND	22.1	20.0	110	22.2	20.0	111	78-125	1	30
1,1-Dichloroethene	19	44.4	20.0	128	45.1	20.0	132	79-133	2	30
1,2-Dichloroethane (EDC)	0.66	23.3	20.0	113	24.1	20.0	117	74-126	4	30
Benzene	ND	21.2	20.0	106	21.9	20.0	109	78-123	3	30
Carbon Tetrachloride	3.4	27.6	20.0	121	28.7	20.0	126	76-131	4	30
Chloroform	44	63.4	20.0	98	65.5	20.0	109	81-124	3	30
cis-1,2-Dichloroethene	ND	21.1	20.0	105	21.6	20.0	108	75-127	3	30
Ethylbenzene	ND	20.1	20.0	100	21.0	20.0	105	87-122	5	30
Total Xylenes	ND	61.4	60.0	102	62.2	60.0	104	80-121	1	30
Methylene Chloride	ND	20.0	20.0	100	21.3	20.0	107	75-123	6	30
Tetrachloroethene (PCE)	ND	22.2	20.0	111	21.1	20.0	105	79-123	5	30
Toluene	ND	20.8	20.0	104	21.2	20.0	106	86-119	2	30
trans-1,2-Dichloroethene	ND	22.3	20.0	112	23.5	20.0	118	76-125	5	30
Trichloroethene (TCE)	ND	23.2	20.0	116	23.0	20.0	115	77-128	1	30
Vinyl Chloride	ND	23.4	20.0	117	23.4	20.0	117	78-141	0	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Form 3A - Organic

SuperSet Reference:

83 Page 1 of 1 RR31982

QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

### Service Request: J0905825 Date Extracted: 11/28/2009 Date Analyzed: 11/28/2009

#### Matrix Spike/Duplicate Matrix Spike Summary Volatile Organic Compounds by GC/MS

Sample Name:	MW-24	Units:	0
Lab Code:	J0905825-051	Basis:	
Extraction Method:	EPA 5030B	Level:	
Analysis Method:	8260B	Extraction Lot:	

	Sample	JW	MW-24MS /G0904010-1 //atrix Spike	l	JW	1W-24DMS /G0904010-2 cate Matrix S ₁		%Rec		RPD
Analyte Name	Result	Result	Expected	%Rec	Result	Expected	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane (TCA)	ND	21.9	20.0	109	21.3	20.0	107	76-130	3	30
1,1-Dichloroethane	0.66	20.9	20.0	101	21.1	20.0	102	78-125	1	30
1,1-Dichloroethene	85	112	20.0	133 #	107	20.0	111 #	79-133	4	30
1,2-Dichloroethane (EDC)	1.7	22.5	20.0	104	21.6	20.0	100	74-126	4	30
Benzene	ND	19.9	20.0	99	19.4	20.0	97	78-123	3	30
Carbon Tetrachloride	ND	21.9	20.0	110	21.4	20.0	107	76-131	2	30
Chloroform	19	39.1	20.0	103	37.2	20.0	93	81-124	5	30
cis-1,2-Dichloroethene	ND	20.1	20.0	101	20.1	20.0	101	75-127	0	30
Ethylbenzene	ND	19.9	20.0	99	17.9	20.0	90	87-122	11	30
Total Xylenes	ND	55.6	60.0	93	54.1	60.0	90	80-121	3	30
Methylene Chloride	ND	19.7	20.0	99	18.7	20.0	93	75-123	5	30
Tetrachloroethene (PCE)	ND	19.8	20.0	99	17.8	20.0	89	79-123	11	30
Toluene	ND	18.7	20.0	93	18.6	20.0	93	86-119	1	30
trans-1,2-Dichloroethene	ND	21.5	20.0	107	20.6	20.0	103	76-125	4	30
Trichloroethene (TCE)	ND	20.6	20.0	103	20.9	20.0	105	77-128	2	30
Vinyl Chloride	ND	21.9	20.0	109	21.7	20.0	109	78-141	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

SuperSet Reference: RR31982

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QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

 Service Request:
 J0905825

 Date Extracted:
 11/24/2009

 Date Analyzed:
 11/24/2009

#### Lab Control Spike Summary Volatile Organic Compounds by GC/MS

<b>Extraction Method:</b>	El
Analysis Method:	82

EPA 5030B 3260B

ug/L
NA
Low
JWG0903993

	Lab Control Sample JWG0903993-3 Lab Control Spike			%Rec	
Analyte Name	Result	Expected	%Rec	Limits	
1,1,1-Trichloroethane (TCA)	25.2	20.0	126 *	79-124	
1,1-Dichloroethane	22.9	20.0	115	80-128	
1,1-Dichloroethene	24.7	20.0	124	78-130	
1,2-Dichloroethane (EDC)	24.7	20.0	123	80-124	
Benzene	20.8	20.0	104	79-119	
Carbon Tetrachloride	24.6	20.0	123	81-125	
Chloroform	23.3	20.0	117	83-124	
cis-1,2-Dichloroethene	21.1	20.0	106	80-126	
Ethylbenzene	20.0	20.0	100	90-118	
Total Xylenes	59.6	60.0	99	86-121	
Methylene Chloride	21.4	20.0	107	72-124	
Tetrachloroethene (PCE)	22.2	20.0	111	80-121	
Toluene	19.9	20.0	99	86-117	
trans-1,2-Dichloroethene	24.0	20.0	120	77-124	
Trichloroethene (TCE)	21.4	20.0	107	76-124	
Vinyl Chloride	20.2	20.0	101	78-132	

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

 Service Request:
 J0905825

 Date Extracted:
 11/25/2009

 Date Analyzed:
 11/25/2009

#### Lab Control Spike Summary Volatile Organic Compounds by GC/MS

<b>Extraction Method:</b>	EP
Analysis Method:	820

EPA 5030B 8260B

Units: ug/L Basis: NA Level: Low Extraction Lot: JWG0904002

	Lab Control Sample JWG0904002-3 Lab Control Spike			%Rec	
Analyte Name	Result	Expected	%Rec	Limits	
1,1,1-Trichloroethane (TCA)	20.3	20.0	101	79-124	
1,1-Dichloroethane	19.4	20.0	97	80-128	
1,1-Dichloroethene	20.9	20.0	105	78-130	
1,2-Dichloroethane (EDC)	19.7	20.0	99	80-124	
Benzene	18.9	20.0	95	79-119	
Carbon Tetrachloride	19.6	20.0	98	81-125	
Chloroform	19.2	20.0	96	83-124	
cis-1,2-Dichloroethene	19.4	20.0	97	80-126	
Ethylbenzene	19.8	20.0	99	90-118	
Total Xylenes	58.8	60.0	98	86-121	
Methylene Chloride	18.2	20.0	91	72-124	
Tetrachloroethene (PCE)	19.6	20.0	98	80-121	
Toluene	20.4	20.0	102	86-117	
trans-1,2-Dichloroethene	19.8	20.0	99	77-124	
Trichloroethene (TCE)	20.1	20.0	101	76-124	
Vinyl Chloride	19.6	20.0	98	78-132	

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

Service Request:	J0905825
Date Extracted:	11/25/2009
Date Analyzed:	11/25/2009

#### Lab Control Spike Summary Volatile Organic Compounds by GC/MS

Extraction Method: EPA 5030B **Analysis Method:** 

8260B

Units:	ug/L
Basis:	NA
Level:	Low
<b>Extraction Lot:</b>	JWG0904005

Lab Control Sample JWG0904005-3 Lab Control Spike		%Rec			
Analyte Name	Result	Expected	%Rec	Limits	
1,1,1-Trichloroethane (TCA)	20.0	20.0	100	79-124	
1,1-Dichloroethane	19.5	20.0	97	80-128	
1,1-Dichloroethene	21.3	20.0	107	78-130	
1,2-Dichloroethane (EDC)	19.5	20.0	97	80-124	
Benzene	18.5	20.0	93	79-119	
Carbon Tetrachloride	20.0	20.0	100	81-125	
Chloroform	19.9	20.0	99	83-124	
cis-1,2-Dichloroethene	19.5	20.0	97	80-126	
Ethylbenzene	19.3	20.0	96	90-118	
Total Xylenes	56.0	60.0	93	86-121	
Methylene Chloride	18.4	20.0	92	72-124	
Tetrachloroethene (PCE)	18.5	20.0	93	80-121	
Toluene	19.0	20.0	95	86-117	
trans-1,2-Dichloroethene	20.0	20.0	100	77-124	
Trichloroethene (TCE)	19.9	20.0	99	76-124	
Vinyl Chloride	18.2	20.0	91	78-132	

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QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

Service Request:	J0905825
Date Extracted:	11/27/2009
Date Analyzed:	11/27/2009

#### Lab Control Spike Summary Volatile Organic Compounds by GC/MS

Extraction Method:	EPA 5030B
Analysis Method:	8260B

Units: ug/L Basis: NA Level: Low Extraction Lot: JWG0904010

	Lab Control Sample JWG0904010-3 Lab Control Spike		%Rec			
Analyte Name	Result	Expected	%Rec	Limits		
1,1,1-Trichloroethane (TCA)	19.7	20.0	99	79-124	 	
1,1-Dichloroethane	19.2	20.0	96	80-128		
1,1-Dichloroethene	21.8	20.0	109	78-130		
1,2-Dichloroethane (EDC)	18.5	20.0	93	80-124		
Benzene	18.6	20.0	93	79-119		
Carbon Tetrachloride	19.6	20.0	98	81-125		
Chloroform	19.0	20.0	95	83-124		
cis-1,2-Dichloroethene	18.9	20.0	94	80-126		
Ethylbenzene	19.1	20.0	95	90-118		
Total Xylenes	54.1	60.0	90	86-121		
Methylene Chloride	17.3	20.0	87	72-124		
Tetrachloroethene (PCE)	17.6	20.0	88	80-121		
Toluene	18.3	20.0	91	86-117		
rans-1,2-Dichloroethene	19.8	20.0	99	77-124		
Trichloroethene (TCE)	19.1	20.0	96	76-124		
Vinyl Chloride	19.6	20.0	98	78-132		

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Brown and Caldwell
Project:	Owens Corning/136868
Sample Matrix:	Water

 Service Request:
 J0905825

 Date Extracted:
 11/30/2009

 Date Analyzed:
 11/30/2009

#### Lab Control Spike/Duplicate Lab Control Spike Summary Volatile Organic Compounds by GC/MS

<b>Extraction Method:</b>	EPA 5030B	Units:	ug/L
Analysis Method:	8260B	Basis:	NA
		Level:	Low
		Extraction Lot:	JWG0904039

	JW	Control Samp G0904039-1 Control Spike		JW	Lab Control S G0904039-2 Lab Control	*	%Rec		RPD
Analyte Name	Result	Expected	%Rec	Result	Expected	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane (TCA)	21.9	20.0	110	21.2	20.0	106	79-124	3	30
1,1-Dichloroethane	21.7	20.0	109	21.3	20.0	106	80-128	2	30
1,1-Dichloroethene	23.1	20.0	116	22.5	20.0	112	78-130	3	30
1,2-Dichloroethane (EDC)	21.4	20.0	107	21.7	20.0	108	80-124	1	30
Benzene	21.1	20.0	105	21.0	20.0	105	79-119	0	30
Carbon Tetrachloride	22.2	20.0	111	21.5	20.0	108	81-125	3	30
Chloroform	21.3	20.0	107	21.5	20.0	108	83-124	1	30
cis-1,2-Dichloroethene	20.6	20.0	103	21.0	20.0	105	80-126	2	30
Ethylbenzene	19.4	20.0	97	19.5	20.0	98	90-118	1	30
Total Xylenes	57.1	60.0	95	56.9	60.0	95	86-121	0	30
Methylene Chloride	19.4	20.0	97	19.8	20.0	99	72-124	2	30
Tetrachloroethene (PCE)	18.9	20.0	94	18.4	20.0	92	80-121	3	30
Toluene	19.3	20.0	97	19.4	20.0	97	86-117	1	30
trans-1,2-Dichloroethene	22.5	20.0	113	21.9	20.0	110	77-124	3	30
Trichloroethene (TCE)	21.7	20.0	109	21.3	20.0	107	76-124	2	30
Vinyl Chloride	20.4	20.0	102	19.9	20.0	99	78-132	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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OURIER:	CAS UPS	FEDEX	Other	<i>A</i>	trbill # <u>1955</u>	3186900
1	Were custody seals o	on outside of cooler	?	(Y	es No	
	If yes, how many and	l where?		e:	x: 1 on lid 2	on cool
2	Were seals intact and	l signature and date	e correct?	Y ST	es No	N/A
3	Were custody papers	properly filled out	?	(Y	es No	N/A 🔹
	COC #				NIA	
4	Temperature of cooler	(s) upon receipt (She	ould be 4 +/- 2 degrees (	C)		MANA ANALY STREAM ST
5	Temperature Blank			1.9°C	1.0'0	· · · · · · · · · · · · · · · · · · ·
6	Were Ice or Ice Pack	s present			re loe I	Packs
7	Did all bottles arrive	in good condition			es No	E[V]
8	Type of packing mat	erial present	gan	bage/bubl	sle bags	[ziplack
9	Were all bottle label	s complete (sample	e ID, preservation.	etc)?	es No	N/A
10	Did all bottle labels	and tags agree with	n custody papers?	9	es No	N/A
11	Were the correct bot	tles used for the te	sts indicated?	G	Tes No	N/A
12	Were all of the preserved HNO3 pH<2 H2SO Preservative additions noted be	4 pH<2 ZnAc2/Na		rvative? H pH>12 HCl p	es No pH<2	N/A
13	Were all samples rec	eived within analy	sis holding times	2 6	es) No	N/A
14	Were VOA vials checke	d for absence of air bul	bbles? If present, note	e below	es No	N/A
15	Where did the bottle	s originate?		$\sim$	AS Client	
	Sample ID	Reagent	Lot #	ml added	Initials	
					4844-94888-8448-4488-4484-4484-448-488-48	
				· .	·····	

Client approval to run samples if discrepancies noted:

als: 1 19 20 21 22 23 10 20 21 22 23 NMA 2 2 2 NMA 2 2 NMA 2 2 2 NMA 2 2 N			24         25         25         27         29         29         30           202         402         B02         1602         59         100ml         Misc.           G         G         G         G         F         P         Misc.           NMS         NMA         NMA         NMA         Misc.         Misc.											
Drate:       A. J.		Minufals:	16         19         20         21         22         23           300ml         11         11         11         11         11           P         P         G         G         G         G           HN03         HN03         HN03         HCI         H204         4204											
B     9     10     11     12       Finition listed at the column heading the solution heading the solution listed at the column heading the solution listed to the solution listed to the solution heading the solution listed to the solution listed to the solution heading the solution listed to the solution heading the solution listed to the solution listed to the solution listed to the solution heading the solution listed to the solution heading the solution listed to the s	SR # . JOYO3 (2)       checked and meets the required pH orthano heading 1       checked and meets the required pH orthano heading 1       3     4     5     6     7     9     9     10     11     7       3     7     7     7     7     7     7     7       4     7     7     7     7     7     7       104003       1040135601     125601     125601     125601     125601     12601       10401     1     1     1     1     1       10401     1     1     1     1     1       10401     1     1     1     1     1     1       10401     1     1     1     1     1     1       10401     1     1     1     1     1     1     1       10401     1     1     1     1     1     1     1     1       10401     1     1     1     1     1     1     1     1     1       10401     1     1     1     1     1     1	Date: <u>11. 27</u> · (	Bottla Code 13 14 15 16 17 Somi 250ml 250ml 500ml 500ml P G G P P P a0H HNO3 HNO3 200 200 200 200 200 200 200 200 200 20											
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Columbia CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM	SR #	Jugu5825
9143 Philips Highway, Ste 200 • Jacksonville, FL 32256 (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011 PAGE		CAS Contact Craig Myers
OWENS COTING 136868	ANALYSIS REQUESTED (Include Method Number an	
Mora Bergman		
Dr. NE Str 400		
Atlanta 61A 3020 "Navior 30328 AT		2. HNCC 3. HNC3 3. HNC3 4. N2SC04
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SPECIAL INSTRUCTIONSCOMMENTS X FOCUSED 8260 134 (Project Specific) of VOCS TURNAROUND REQUIREMENTS	REPORT REQUIREMENTS	INVOICE INFORMATION
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### APPENDIX C: HISTORICAL GROUNDWATER DATA

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

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Table E-1. Summary of Selected Groundwater Analytical Results for Overburden Wells, Owens Corning, Anderson, South Carolina.

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Table E-1. Summary of Selected Groundwater Analytical Results for Overburden Wells, Owens Corning, Anderson, South Carolina.

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Table E-1 Summary of Selected Groundwater Analytical Results for Overburden Wells, Owens Corning, Anderson, South Carolina.

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Table E-2. Summary of Selected Groundwater Results for the Top of Ruck Wells, Owens Coming, Andcrson, South Carolina.

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Table E-2. Summary of Selected Groundwater Results for the Top of Rock Wells, Owens Corning, Anderson, South Carolina.

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Table E-2. Summary of Selected Groundwater Results for the Top of Rock Wells, Owens Corning. Anderson, South Carolina.

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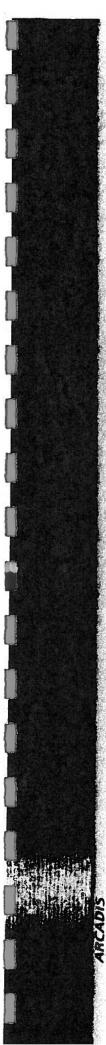


Table E-2. Summary of Selected Groundwater Results for the Top of Rock Wells, Owens Corning. Anderson, South Carolina.

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Table E-3. Summary of Selected Groundwater Results for Bedrock Wells, Owens Corning, Anderson, South Carolina.

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Table E-3. Summary of Selected Groundwater Results for Bedrock Wells, Owens Corning, Anderson, South Carolina.

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      1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	No. 50, 50, 50, 50, 50, 50, 50, 50, 50, 50,

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Table E-3. Summary of Selected Groundwater Results for Bedrock Wells, Owens Corning, Anderson, South Carolina.

		 					<u> 22-WW</u>										8-	<u>MW-27</u>					1
Parameter Hannester	Units	E6-15060A	2€∙19dm939Ω	December-96	Dereniber-98	96-19dm9390	December-00	10-voN	December-02	Decempor-03	December-04	20-19dm9voN	5e-19dm9tq92	December-95	December-96	December-98	December-99	December-00	10-70N	Decemper-02	Decemper-03	December-04	Kovember-05
Tetrachioroetmpiene	ven	ЧŅ	1	7	ND	<u>U</u> N	CN	ç	QN										5	ND ND	4 6	2.5	Ē
fu, higtoethylene	hQ2	5	22	Z	62	CN	ND	50	ÛN								-		2 9	ON	23	<u>_</u>	7
u, reachtorachgaeae Magi Calonae	₩ <b>6</b> n	25	015 MA	520 M	050 ND	SF2	586 ND	566 ND	480 ND	300 ND	310 31 ND 1	SOOD 3	550 1 NA 1	130 2 NA 1	ND ND	46 1 ND 7	<u>ت م</u>	126 ND	021 00	120 ND	<u>ड</u> ि छै	74 NJ	091 091
Halogenated Methanes																							
Canton lettachlonde Onlagtono	(fin	2	1	守:	17	24 2	24 3	21.9	GN										43	34	17	15	ul.
Methode Culorde	r C C		22	- 17	N N	ND 4	6 71 ND	12.7 ND	QN QN	01 CN	1 0	in q	17 MA	9 Q	25 ND	23 23 2 MD 3	22.4 2	25.7 2 MG	26.8	29 104	5 2	56	2 -
																	_		_				-
Halogenated Ethanes 1, 1, 1-Trichloroethane 1, 2, 1, 246, 2000, 2000, 2000	100 N		NC	çî (	QN	QN	ŨŇ	UN	QN											2	-e	13	02
aupinan-narina 77	1/6:1	2	Z	с <del>к</del> .	04	сл 	57	47	QN	AA	QN	ON	13	ND	5	DN DN	7.4 9	85	80	50	٨A	3.5	4.4
<u>Aromatic Hydrocarbons</u> ëënzenë	(Em	$V_{i,1}^{(1)}$	NI.	N	QN	QN	QN	ŊŨ	QN	NA	ND		UN ND	UN CIN	QN	QN	Q	ΝŪ	ND	07	9	QN	đN
Metals																							
Arsenuc	1/5n	A S	<	NA NA	<b>AN</b>	ΝA	NA	Ψ	AN											AM	CN	41A	VN
etery hada	l/h-1	1	10.1	8 A		25	100	8	AN .	AA	NA	AN	57 8	32.9 5	55 6	50	66	64	78	NA	NA	٩N	VN
w husesan	-900	2	1		CN CN	CN ON			AN AN											AA VA	4N	٧N	VN
- () -	files.	00	14	CV.	00	QN	QN QN													MA .	A N	×2 .	MA
N.ko	202	(	1.1	02	ND	ΩN	QN	CN	NA													YN YN	52
Fluoride		100	3	32 []	1	9											-			5	(	~	¥1
	4	-		20.1	9	ΝÐ	QN	QV	AN	NA N	NA N	NA AN	ND 1	100	ND ND	N.C. N	ND I		0.1	MA	Y11	11	11/
A.D Annual and a																		$\left  \right $			ĺ		

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Table E-3. Summary of Selected Groundwater Results for Berfrock Welk, Owens Corning, Anderson, South Carolina.

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		MW	<u>MW-29R</u>					2	Alloy								Gladden	len	
Parameter Halogenated Alkenes	Units	December-04	20-19dm9voN	5eriedmeire3	December-95	December-96	Vovember-97	December-98	December-99	December-00	10-von	December-02	Decemper-03	Pecember-04	20-19dm9voN	September-93	December-96	7e-19dm9voØ	December-98
Tetrachloroetrylene Fristiloroetrylene 1. Fristiloroetrylene Vitryr Crinor Je	ปฏิมา ไปอุณ ไปอุณ	UN CN CC C C C C C C C C C C C C C C C C	Q Q S Q Q N G N	ND NA NA NA	N N N N	00 1 00 N 1 0	Q Q Q Q N N N N N	QN ND ND ND	QN QN QN	N N N N			QN QN QN	Q Q Q		ND NA NA	N S N	Q Q Q Q	00 00 00 00
<u>Halogenated Methanes</u> Garbon Tetraulonde Ontonotorm Methylene Otronoe	убен Ибл <b>И</b> бл	2 :: 2	5 4 3 5 ND	QN QN QN QN	ON ON ON	QN QN	QN QN QN	DN DN DN	ND ND	QN QN	ND ND 15	QN QN	QN QN	QN QN	Q Q Q	ND ND NA	DN DN DN	O N N	UN NG NG
Halogenated Ethanes 1,1,1-finulacroethane 1,2-Dichicroethane	Vộn Vộn	ũN QN	ND	QN QN	DN NC	QN	QN N	QN QN	Q Q	QN QN	QN QN	QN ND	ND NA	ND ND	n n	QN ND	QN N	QN N	S S S
Aromatic Hydrotarbons Benzene Metals	y6n	ÛN	ÛN	ĜN	ŊŊ	ND	QN	QN	QN	QN	Q	ŊŊ	AN	QN	QN	NC	QN	QN	DN N
Arsenic Baruch Beryhium	y6n r1	NA NA	AN AN	NA 1100	NA 216	NA 160	<b>NA</b> 50						DN DN	AN AN	AN AN	4N P	AN AN	NA 200	ΥΥ Α
Čtrčehaun Trád Mickel	1/60 1/60 1/60	NA NA NA	A A A A A A A A A A A A A A A A A A A	3 1 22 190 28	- 4	1.7 3.6 25 g ND	a e a	MD v o m	DN ND N	ND S D	ND 2 2 QN	N N N N N N N N N N N N N N N N N N N	ANNA	V V V V	A N N N N A N N N N A N N N N N N N N N		NO 00 NO 00 NO	007 QN ~ 01 -	9 - <u>2</u> -
Fluoride	in the second se	ΝÂ	NA	370	ŊŊ	88.3	100	100	QN	230	QN						493	200	- QV

ND - Not-Defect NA - Net Analyzed

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lected Groundwater Results for Bedruck Wells, Owens Corning, Anderson, South Carolina.	
Table E.3. Summary of Selected	

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	tion.	r0-redoroC	го-тэфтэхой	20-төрөт-02	E0-19dm90-90	Peredmaced	Ko-19dni9voM	Cctober-01	10-19dm9voN	December-02	Decemper-03	December-04	November-05	Cctober-01	10-19dm9voN	December-02	Decemper-03	December-04	November-05
Frances Halogenated Alkenes Lerschlostugene 1,4.0 autoroethytere 1,4.0 autoroethytere 2190/1219-000	4/6n 1/6n 1/6n	e v v e	0.02 C G	n da Na da	2222	UN GN UN	ON V CN CN CN CN	QN QN	UN DN DN DN	ON ON ON	QN QN QN	QN QN CN	QN QN QN	ON ON ON	ON ON ON ON	ON ON ON ON	Q Q Q Q	QN QN QN QN	QN QN QN
<u>Haloyenated Methanes</u> Viaroon Letrornionde Aletrophene Universe Aletrophene Universe	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 ( =	01 2 5 2 6	UN ND	222	QN QN	Q Q Q N Z Z	ND NC	DN DN DN	NO ON	ON ON	QN QN		ND ND 1 8	QN QN QN	QN QN	n n N N N	Q Q Q	QN QN QN
<u>Halogenated Ethanes</u> 1, 1, 1, - Endigrowthane 1, 2-0-glagroethane	n ngu tran	à à	ý ý	22	N N	Q Q N N	NC NC	QN QN	ON ND	Q Q	QN N	CN CN	22	N D	QN QN	Q Q	QN AN	0 Q	CIN DN
Aromatic Hydrocarbons hetizene	y6n	N.	e.	đΝ	AN	្លារ	ÛN	QN	QN	Q	AN	ND	Ö	QN	QN	* Q	MN	QN	CN
Metals Arsens Burnars Professor Arsed Net el		N <u>5 5 6 5 7 0</u>	222222		NA NA NA NA NA NA	42 42 42 42 42 42 42 42 42 42 42 42 42 4	A N N N N N N N N N N N N N N N N N N N	680 680 ND 16	ND NA NA NA NA NA	N N N N N N N N N N N N N N N N N N N	N N N N N N N N N N N N N N N N N N N	A A A A A A A A A A A A A A A A A A A A	4 4 4 4 4 4 2 2 2 2 2 2 2	ND 120 ND 21 22 ND ND 22 12 0 ND	N N N N N N N N N N N N N N N N N N N	A N N A N A N A N A N A N A N A N A N A	NŬ NA NA NA NA	N N N N N N N N N N N N N N N N N N N	NA NA NA NA NA NA
Etuon <u>de</u>	1.11	- 98.C	N.	VN	4	Aut.	NA	103	AA	ΨN.	NA	ΥN	AN:	C.N.	AN	NA	ΥN	Ϋ́	AN

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# APPENDIX D: MANN-KENDELL TEST RESULTS

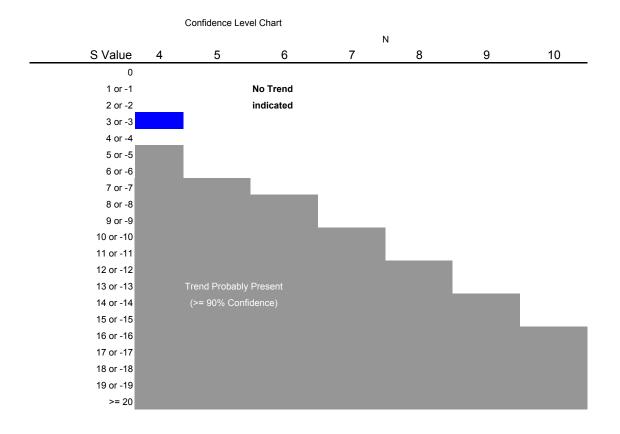
BROWN AND CALDWELL

### DCE - MW-27

		Nov-06	Nov-07	Nov-08	Nov-09	
μg/L		180	200	120	120	
Row 3: Compare to	Nov-06		1	-1	-1	-1
Row 4: Compare to	Nov-07			-1	-1	-2
Row 5: Compare to	Nov-08				0	0
S					S =	-3
Ν					N =	4

Mann-Kendall Statistic (S) = Total

Conclusion: No Trend (Stable)



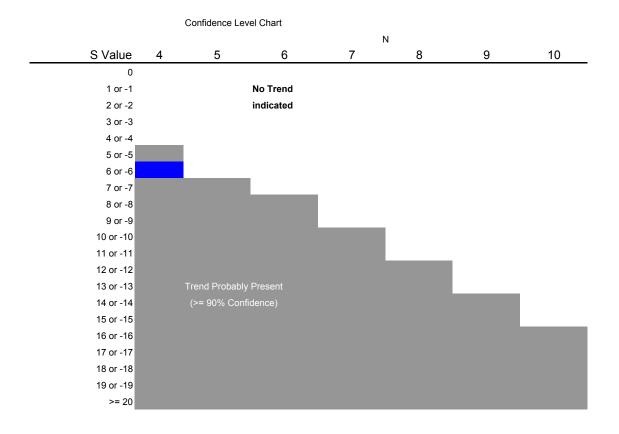
Stability Evaluation Results	
Trend present (>= 90%	% Confidence)
S < 0	Concentration decreasing
S > 0	Concentration Increasing

### DCE - MW-35

		Feb-09	May-09	Aug-09	Nov-09	
μg/L		550	500	470	340	
Row 3: Compare to	Feb-09		-1	-1	-1	-3
Row 4: Compare to	May-09			-1	-1	-2
Row 5: Compare to	Aug-09				-1	-1
S					S =	-6
Ν					N =	4
						-

Mann-Kendall Statistic (S) = Total

**Conclusion: Decreasing Trend** 



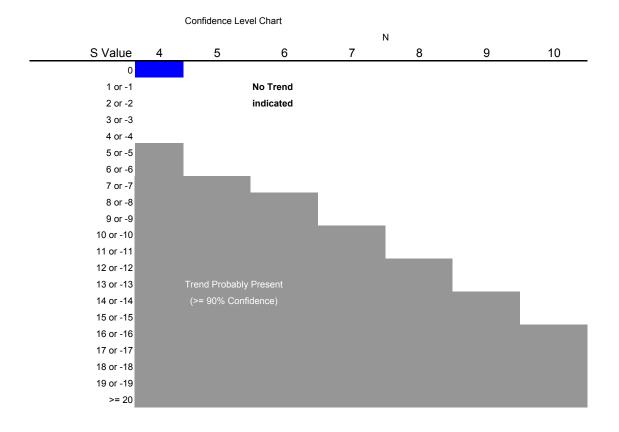
Stability Evaluation Results	
Trend present (>= 90%	% Confidence)
S < 0	Concentration decreasing
S > 0	Concentration Increasing

### DCE - MW-37 Zone 1

		Feb-09	May-09	Aug-09	Nov-09	
μg/L		8.3	72	5.5	20	
Row 3: Compare to	Feb-09		1	-1	1	1
Row 4: Compare to	May-09			-1	-1	-2
Row 5: Compare to	Aug-09				1	1
S					S =	0
Ν					N =	4

Mann-Kendall Statistic (S) = Total

Conclusion: No Trend (Stable)



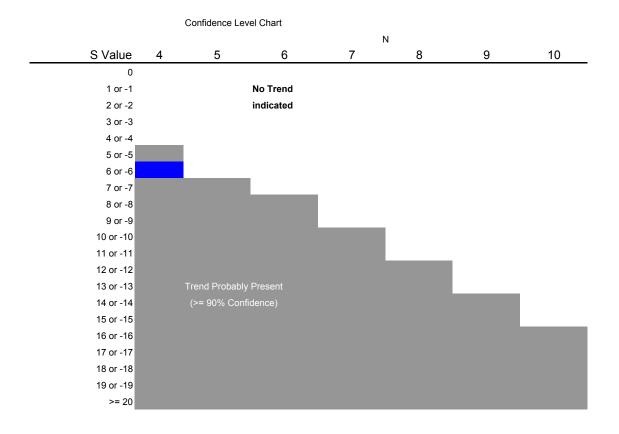
Stability Evaluation Results	
Trend present (>= 90%	% Confidence)
S < 0	Concentration decreasing
S > 0	Concentration Increasing

## DCE - MW-37 Zone 2

		Feb-09	May-09	Aug-09	Nov-09	
μg/L		370	290	200	180	
Row 3: Compare to	Feb-09		-1	-1	-1	-3
Row 4: Compare to	May-09			-1	-1	-2
Row 5: Compare to	Aug-09				-1	-1
S					S =	-6
Ν					N =	4

Mann-Kendall Statistic (S) = Total

**Conclusion: Decreasing Trend** 



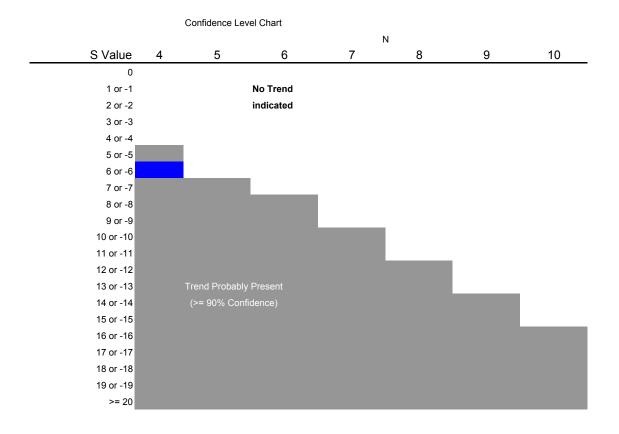
Stability Evaluation Results				
Trend present (>= 90% Confidence)				
S < 0	Concentration decreasing			
S > 0	Concentration Increasing			

## DCE - MW-37 Zone 3

		Feb-09	May-09	Aug-09	Nov-09	
μg/L		11	7.4	6.8	4.8	
Row 3: Compare to	Feb-09		-1	-1	-1	-3
Row 4: Compare to	May-09			-1	-1	-2
Row 5: Compare to	Aug-09				-1	-1
S					S =	-6
Ν					N =	4

Mann-Kendall Statistic (S) = Total

**Conclusion: Decreasing Trend** 



Stability Evaluation Results				
Trend present (>= 90% Confidence)				
S < 0	Concentration decreasing			
S > 0	Concentration Increasing			