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ENVIRONMENT

Ms. Alicia Barraza
New York State Department of Environmental Conservation
Remedial Bureau B
625 Broadway, 12th Floor
Albany, New York 12233-7016

Subject:
Bayer MaterialScience LLC
125 New South Road
Hicksville, New York
USEPA ID#: NYD002920312
Modified Metals Soil Delineation Summary Report

Date:
October 10, 2011

Contact:
John C. Brussel, P.E.

Phone:
315.671.9441

Email:
John.Brussel@arcadis-us.com

Our ref:
B0032305.0004 #10

Dear Ms. Barraza:

On behalf of Bayer MaterialScience LLC, this letter summarizes the findings of the metals soil delineation sampling activities recently performed at the Bayer MaterialScience LLC (Bayer) site located in Hicksville, New York ("the Site"). The sampling activities were implemented by ARCADIS in July 2011 and involved collecting soil samples from 26 soil borings for laboratory analysis for arsenic and cadmium. The sampling locations were in areas of the Site where data from prior sampling by Impact Environmental (Impact) suggested that arsenic and cadmium may be present at concentrations exceeding the commercial use soil cleanup objectives (SCOs) as set forth in Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b). The additional sampling was performed to address concerns over: (1) the slightly elevated concentrations in Impact's samples; (2) the wide intervals represented by the samples (e.g., 0 to 5 feet or 0 to 20 feet below ground surface [bgs]); and (3) data quality because Impact's analytical data was unvalidated.

The metals soil delineation sampling activities were performed in accordance with *Revised Metals Soil Delineation Work Plan* (ARCADIS, June 2011) ("the Work Plan"), which was conditionally-approved by the New York State Department of Environmental Conservation (NYSDEC) on July 1, 2011.

Relevant background information is presented below, followed by a summary of the work performed and findings of the delineation sampling activities, and conclusions/ recommendations.

I. BACKGROUND

Prior to the sampling activities summarized herein, metals concentrations in soil at the Site were evaluated by sampling and analysis as part of the: (1) 2004 Phase I and II RCRA Facility Investigation (RFI) completed by ARCADIS on behalf of Bayer; and (2) the 2006 Phase II Environmental Site Assessment (ESA) completed by Impact Environmental on behalf of New South Road Realty, LLC (NSSR). Findings from these investigations are summarized below, followed by information concerning former site use in areas where the slightly elevated arsenic and cadmium levels were identified.

Phase I and Phase II RFI Findings

The Phase I and II RFI sampling activities were conducted to evaluate conditions within areas of concern (AOCs) at the Site that were identified in the RCRA Facility Assessment (RFA) and to provide data to evaluate potential corrective measures, where appropriate, in a Corrective Measures Study (CMS). AOC locations were identified by Bayer and the NYSDEC based on review of former facility operations and were mostly located in the center of the Site, around the former footprint of Plants 1, 2, and 3.

Soil samples collected from 55 locations during the Phase I and II RFI were analyzed for Target Analyte List (TAL) inorganic constituents using United States Environmental Protection Agency (USEPA) SW-846 Method 6010. Soil at only one sampling location (i.e., location AOC 1-2 (0-1'), which is near the southwest corner of Plant 1) was found to contain arsenic at a concentration exceeding the 16 part per million (ppm) commercial use SCO. Under the recommended final corrective measure proposed for the Site, soil at sampling location AOC 1-2 (0-1') will be excavated for offsite disposal. Cadmium was not detected at concentrations exceeding the 9.3 ppm commercial use SCO at any of the 55 RFI sampling locations.

Phase II ESA Findings

The Phase II ESA involved due diligence sampling to further evaluate the presence and extent of potential constituents in soil at the Site. The Phase II ESA sampling locations were primarily selected to evaluate soil conditions in areas that would be affected by construction of a potential new warehouse building. Composite soil samples were collected from approximately 205 locations and analyzed for a variety of chemical constituents, including metals. The sampling interval at each location

was wide (i.e., 0 to 5 feet below ground surface [bgs] at most locations and 0 to 20 feet bgs at contemplated future dry well locations).

Arsenic was identified at concentrations exceeding the 16 ppm commercial use SCO at two sampling locations, and cadmium was identified at concentrations exceeding the 9.3 ppm commercial use SCOs at 13 sampling locations. The maximum arsenic and cadmium concentrations identified in the samples (19 ppm and 11.9 ppm, respectively), were only slightly greater than the corresponding commercial use SCOs. The majority of the Phase II ESA sampling locations with metals exceeding commercial use SCOs are located near the northeastern corner of the Site, approximately 50 feet from either the northern or eastern fence line. Two sampling locations with metals exceeding commercial use SCOs were in the southeastern corner of the Site (in an area where soil was already proposed for removal under the recommended final corrective measure).

Former Site Use

Review of former facility operations indicated that industrial processes were not performed in the northeast corner of the Site where arsenic and cadmium were identified in the Phase II ESA soil samples at concentrations exceeding the commercial use SCOs. Historical aerial photographs (refer to the Work Plan) show the following conditions in this area: (1) mowed lawn inside the fence line parallel to Commerce Place; and (2) a gravel driveway/parking area, a sump that was later backfilled, and a cooling water tower inside the fence line along the eastern property boundary.

II. SUMMARY OF WORK PERFORMED

ARCADIS performed land surveying during the week of July 4, 2011 to field-identify proposed metals delineation soil sampling locations using coordinates obtained from the sampling locations map included in the Work Plan. Each sampling location was marked using a flagged wooden stake. Drilling and sampling activities were performed during the week of July 11, 2011. Soil borings were drilled at the 26 locations listed below and shown on Figure 1:

- M-S1 through M-S14, which are approximately 100 feet apart in the northeast corner of the Site and near Impact sampling locations.

- M-S15 through M-S23, which are located along the northern and eastern fence lines.

- M-S24 and M-S25, which are in the southeastern corner of the Site near two Impact sampling locations (locations F042 and F034, respectively).

- M-S26, which is in the southern portion of the Site near ARCADIS sampling location AOC 1-2.

Six sampling locations were adjusted during field sampling activities to avoid tree, shrub, and poisonous plant (poison ivy) growth that prevented access for the sampling crew and rig. This included one sampling location near the recharge basin (location MS-13) and five locations along the fence line (locations M-S17, M-S18, M-S20, M-S21, and M-S22). Tie-distance measurements were obtained to document the adjusted sampling locations.

At each sampling location, ARCADIS's drilling subcontractor (Delta Well & Pump Company, Inc. of Ronkonkoma, New York) completed a soil boring to a depth of 10 feet bgs using a truck-mounted Geoprobe rig. Soil samples were continuously collected from each boring using a 4-foot long, 1½-inch outside diameter macrocore sampler. An ARCADIS geologist visually characterized the soil recovered at each boring for color, texture, moisture, density, cohesion, plasticity, and indication (if any) of staining. Portions of the soil recovered from each boring were placed in containers for headspace screening using a photoionization detector (PID). Samples selected for headspace screening represented the different strata encountered at each location.

Conditions encountered in each boring are summarized in Table 1 and documented on the soil boring logs included in Attachment A. Digital photographs showing conditions encountered in the borings are provided on the attached compact disc (CD). As indicated in Table 1, the soil recovered from the borings consisted mainly of brown fine to medium sand (with occasional silt). No visible staining, obvious odors, or PID headspace screening results greater than 0.0 parts per million (ppm) were encountered in any of the recovered soil samples with one exception. The material encountered from the 0 to 0.8 foot depth interval at location M-S9 (i.e., aggregate sub-base immediately below asphalt pavement cover) exhibited some staining and an obvious odor. A PID reading of up to 75 ppm was obtained for this material.

Up to three soil samples from each boring and a total of four blind duplicate samples were submitted for laboratory analysis for arsenic and cadmium. The samples submitted for analysis were collected from the following borings/depth intervals:

- Borings M-S1 through M-S25: Samples collected from the 0.0 to 0.5 foot, 0.5 to 2.0 foot, and 2.0 to 4.0 foot depth intervals at these borings were submitted for analysis.

- Boring M-S26: Samples collected from the 2.0 to 4.0 foot and 4.0 to 6.0 foot intervals at boring M-S26 were submitted for analysis. These intervals are at or below the proposed future depth of excavation to remove the "soil mound" at this location.

Soil samples recovered from the remaining (underlying) soil intervals were submitted for laboratory archive (for potential future analysis within holding times, if needed). Each sample submitted for laboratory analysis or archive was a composite formed from 3 to 5 discrete samples within the interval.

Laboratory analysis of the soil samples was performed by TestAmerica of Shelton, Connecticut using United States Environmental Protection Agency (USEPA) SW-846 Method 6010B. Analytical results for the metals delineation soil samples were reported using NYSDEC Analytical Services Protocol (ASP) Category B data deliverables.

Prior to moving from one boring to the next, all down-hole equipment was decontaminated using Alconox and water, and then rinsed with water. Upon completion, each soil boring was backfilled with bentonite grout. Soil sample liners and excess soil were placed in a labeled steel 55-gallon drum (staged in the Administration Building) for offsite disposal by Bayer. Wastewater generated during the sampling activities evaporated from the decontamination pad.

Airborne monitoring for particulate (dust) and volatile organic compounds (VOCs) was conducted in the worker breathing zone (WBZ) during the soil boring activities. Dust and VOC monitoring was conducted using a real-time aerosol monitor (MIE pDR-1000) and the PID, respectively. Air monitoring equipment was calibrated daily prior to the start of work activities. Dust generation from the boring installation work was minimal to non-existent. There were a few instantaneous readings in (and also upwind of) the WBZ greater than 0.150 milligrams per cubic meter (mg/m^3) when a gust of wind picked up fine sand from the nearby pavement surface, but dust levels

dropped back to, or close to, 0.0 mg/m^3 immediately thereafter. The field team did not identify 15-minute average dust readings above the 0.150 mg/m^3 action level. Hourly dust measurements were obtained downwind from the work area, and all results were close to 0.0 mg/m^3. WBZ PID readings were consistently 0.0 ppm. Air monitoring logs are provided in Attachment B.

III. INVESTIGATION FINDINGS

The laboratory analytical results for the metals delineation soil sampling were validated by ARCADIS and found to be of good quality and useable, as intended. The validated soil analytical results for arsenic and cadmium are presented in Table 2. The data validation report is included in Attachment C. The full laboratory analytical data report (NYSDEC ASP Category B data deliverables package) and electronic data deliverables (EDDs) in NYSDEC's required format (for upload to the NYSDEC's EQuIS database) are included on the attached CD.

The metals soil delineation analytical results for arsenic and cadmium are summarized below. Based on these results, none of the archived soil samples was released for analysis.

Arsenic Soil Analytical Results

Arsenic was detected in 72 of the 77 soil samples collected as part of the investigation, and the arsenic concentrations identified in most of these samples (all but 8 samples) were less than the 16 ppm commercial use SCO. Arsenic was identified at concentrations exceeding the 16 ppm commercial use SCO only in samples collected from the following locations:

- Seven locations along or close to the fenceline (locations M-S3, M-S4, M-S15, M-S16, M-S18, M-S20, and M-S22).
- One location more interior to the Site (M-S5).

The sampling intervals where arsenic was identified at concentrations exceeding the commercial use SCO were shallow, as follows:

- 0.0 to 0.5 feet bgs at five of the seven sampling locations (each location except M-S4 and M-S18).

- 0.5 to 2.0 feet bgs at sampling locations M-S4 and M-S18.

Arsenic was not identified at concentrations exceeding the commercial use SCO more than 2.0 feet bgs. Arsenic concentrations below 2 feet bgs were generally consistent from one location to the next (approximately 2 to 6 ppm, on average).

The delineation sampling locations where arsenic was detected at concentrations exceeding the commercial use SCO are within grass-covered/vegetated areas, primarily along the fence lines, in the northeastern corner of the site. Elsewhere onsite (except location AOC-1 where soil removal is proposed), arsenic concentrations are less than or generally consistent with the 13 ppm New York State rural soil background concentration as determined by the NYSDEC and New York State Department of Health (NYSDOH) and reported in 6 NYCRR Part 375-6.8(a).

Cadmium Soil Analytical Results

Cadmium was detected at a concentration exceeding the 9.3 ppm commercial use SCO in only one of the 77 metals delineation soil samples (14.2 ppm in the sample collected from the 0.5 to 2.0 foot depth interval at location M-S4). This location coincided with a location where arsenic was identified at a concentration exceeding its corresponding commercial use SCO.

IV. CONCLUSIONS AND RECOMMENDATIONS

The extent of soil containing arsenic at concentrations exceeding the commercial use SCO was sufficiently delineated for evaluating a potential soil capping (cover) or excavation scenario in the Corrective Measures Study (CMS). As a conservative and protective measure, Bayer proposes to excavate the soil containing arsenic at concentrations exceeding the commercial use SCO, as delineated by the sampling activities summarized herein. In doing so, Bayer will also remove soil from sampling location M-S4 where cadmium was also identified at a concentration exceeding the commercial use SCO.

The proposed excavation limits are shown on Figure 2. Soil excavation to these limits will be incorporated in the recommended remedial alternative in the CMS Report. Documentation samples will be collected for each proposed excavation along the fence line as discussed on a September 29, 2011 conference call with Bayer and ARCADIS. No additional offsite sampling is proposed for metals as indicated in September 29, 2011 e-mail correspondence from ARCADIS to the NYSDEC, which

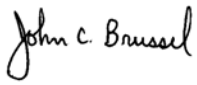
provided an aerial photograph showing offsite asphalt pavement and concrete adjacent to the proposed excavation areas along the fence line. Confirmation sampling will be performed for each proposed excavation area in accordance with Section 5.4(b)(5)(iii) of NYSDEC document entitled “DER-10/Technical Guidance for Site Investigation and Remediation” issued May 2010. Confirmation sampling will be proposed for these proposed excavation areas as well as the excavation areas proposed for the final site remedy and will be incorporated into the final remedy design.

ARCADIS will also revise the existing “draft” CMS Report to address review comments previously provided by and discussed with the NYSDEC. We anticipate submitting the revised “draft” CMS Report to the NYSDEC in October 2011.

Please do not hesitate to contact Ramon Simon of Bayer at 281.383.6149 or the undersigned at 315.671.9441 if you have any questions or require additional information.

Sincerely,

ARCADIS of New York, Inc.



John C. Brussel, P.E.
Principal Engineer

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ARCADIS

Tables

TABLE 1
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
M-S1	
0.0'-1.2'	Dark to medium brown, Silty SAND, very fine to fine sand, subangular to angular, pea gravel 0.0 to 0.2 feet, trace coarse sand to fine gravel subround to round, dry, nonplastic, No odor or staining
1.2'-2.2'	Medium to orangish brown, fine to medium SAND, trace coarse sand to fine gravel, subrounded to rounded, trace to few silts, wet to moist, No odor or staining
4.0'-4.7'	Slough
4.7'-6.7'	Medium to orangish brown, fine to medium SAND, trace coarse sand to fine gravel, subrounded to rounded, trace to few silts, wet, No odor or staining
8.0'-10.0'	Slough
10.0'-10.7'	Medium to orangish Brown, fine to medium SAND, trace coarse sand fine gravel, subrounded to rounded, trace to few silts, wet to saturated, No odor or staining
M-S2	
0.0'-0.8'	Dark brown, Gravely SILT, medium to coarse subrounded to rounded gravel, few fine to medium sand subangular to subrounded, loose, dry, nonplastic, No odor or staining
0.8'-2.2'	Orangish Brown, SILT, trace medium to coarse subangular to subrounded gravel, trace medium to fine sand, loose/soft, dry to moist, nonplastic, no odor or staining
2.2'-3.1'	Light Brown, SAND, fine to medium subangular to subrounded, few coarse sand to fine gravel, trace silt, trace medium to coarse subrounded to rounded gravel, loose, dry, No odor or staining
4.0'-5.15'	Slough
5.15'-6.4'	Light Brown, SAND, fine to medium subangular to subrounded, few coarse sand to fine gravel, trace silt, trace medium to coarse subrounded to rounded gravel, loose, dry, No odor or staining
8.0'-9.5'	Slough
9.5'-9.7'	Light Brown, SAND, fine to medium subangular to subrounded, few coarse sand to fine gravel, trace silt, trace medium to coarse subrounded to rounded gravel, loose, dry, No odor or staining
M-S3	
0.0'-2.45'	Dark Brown to Orangish Brown, Sandy SILT, medium to fine subangular to subrounded SAND, few coarse sand to fine gravel subangular to subrounded, trace medium to coarse gravel, trace organics at 0.0 to 0.3 feet (roots), subrounded to rounded, loose, dry to moist, nonplastic, No odor or staining
4.0'-4.5'	Slough
4.5'-5.5'	Orangish Brown, Silty SAND, very fine fine sand, some medium to coarse subangular to subrounded sands, few to trace medium to fine gravels subrounded to rounded, loose, moist, nonplastic, no odor or staining
5.5'-6.05'	Light Grey and Orangish Brown, Sandy CLAY, orangish very fine to fine sands, soft, moist,trace plasticity to nonplasticity, no odor or staining
8.0'-8.8'	Slough
8.8'-9.55'	Light Brownish Grey, Silty CLAY, trace medium to fine sands, stiff to med stiff, moist, nonplasticity to trace plasticity, No odor or staining

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METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
M-S4	
0.0'-2.6'	Medium to Orangish Brown, Sandy SILT, medium to fine sand, subangular to subrounded, few coarse to fine gravel, subangular to subrounded, trace organics at 0.0 to 0.2 feet, loose, moist to dry, nonplastic, No odor or staining
4.0'-4.4'	Slough
4.4'-5.0'	Medium to Orangish Brown, Sandy SILT, medium to fine sand, subangular to subrounded, few coarse to fine gravel, subangular to subrounded, trace organics at 0.0 to 0.2 feet, loose, moist to dry, nonplastic, No odor or staining
5.0'-6.6'	Medium Brown, Silty SAND, very fine to fine subangular sand, for coarse sand to fine gravels, trace medium to coarse subrounded to rounded gravels, loose to medium dense, moist, nonplastic, no odor or staining
6.6'-6.9'	Medium Brown, fine SAND, trace coarse to medium sand, loose, moist, no odor or staining
8.0'-9.4'	Slough
9.4'-10.5'	Medium Brown, fine SAND, few fine to medium. Subrounded to rounded gravels, trace coarse to medium sand, loose, moist, no odor or staining
M-S5	
0.0'-2.1'	Medium to Dark Brown, Sandy SILT, fine to medium subangular to subrounded sand, trace coarse sand to fine gravel subrounded to rounded, trace organics (roots, branches), moist to dry, loose, nonplastic, No odor or staining
2.1'-2.55'	Medium to Orangish Brown, Clayey SILT, few coarse subrounded to rounded sand, trace medium to fine subrounded to rounded gravel, medium stiff, moist, trace plasticity to nonplasticity, no odor or staining
4.0'-4.6'	Slough
4.6'-5.7'	Medium Brown to Orangish Brown, fine to medium SAND, subangular to subrounded, few coarse sand to fine gravel subrounded to rounded, loose, wet, no odor or staining
5.7'-6.4'	Medium to Orangish Brown, Clayey SILT, few coarse subrounded to rounded sand, trace medium to fine subrounded to rounded gravel, medium stiff, moist, trace plasticity to nonplasticity, no odor or staining
8.0'-8.8'	Slough
8.8'-9.5'	Medium to Orangish Brown, Clayey SILT, few coarse subrounded to rounded sand, trace medium to fine subrounded to rounded gravel, medium stiff, moist, trace plasticity to nonplastcity, no odor or staining
9.5'-10.3'	Medium to Orangish Brown, fine to medium SAND, subangular to subrounded, few coarse sand to fine gravel subrounded to rounded, loose, wet, no odor or staining
M-S6	
0.0'-1.0'	Medium to Light Brown, Sand SILT, Medium to Coarse sand subangular to subrounded, trace fine to medium gravel, subrounded to rounded, trace organics (Roots), loose, Dry, nonplastic, No odor or staining
1.0'-1.2'	fractured quartzite
1.2'-1.4'	orangish Brown, clayey SILT, trace Coarse sand to fine gravel, subrounded to subangular, medium stiff, nonplastic, no odor or staining
1.4'-1.8'	medium Brown, very fine to fine SAND, some medium to Coarse subangular to subrounded. sand, trace fine to medium. gravel subrounded to rounded, loose, Dry, no
4.0'-4.7'	Slough
4.7'-6.95'	same as 1.4-1.8' in 0-4' core
8.0'-9.5'	Slough
9.5'-9.8'	same as 1.4-1.8' in 0-4' core

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METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
M-S7	
0.0'-2.1'	Medium to Orangish Brown, Sandy SILT, medium to coarse subrounded to subangular sand, trace coarse subrounded to rounded gravel, loose (0.0 to 0.6 feet,1.4 to 2.1 feet), stiff 0.6 to 1.4 feet, dry to moist, nonplastic, No odor or staining
2.1'-2.9'	Light Brown, fine to medium SAND, some coarse sand to fine gravel, subrounded to subangular, few coarse to medium subrounded to subangular gravel, trace silts, loose, dry, no odor or staining
4.0'-4.85'	Slough
4.85'-6.7'	Light Brown, fine to medium SAND, some coarse sand to fine gravel, subrounded to subangular, few coarse to medium subrounded to subangular gravel, trace silts, loose, dry, no odor or staining
8.0'-9.2'	Slough
9.2'-10.0'	Light Brown, fine to medium SAND, some coarse sand to fine gravel, subrounded to subangular, few coarse to medium subrounded to subangular gravel, trace silts, loose, dry, no odor or staining
M-S8	
0.0'-2.3'	Medium Gray at 1.9 feet (No Odor, 0.0 ppm) Medium Brown, Sandy SILT, very fine to fine sand, few organics 0.0 to 0.6 feet: wood fragments, roots, trace coarse sand to fine gravel subrounded to rounded, loose, dry, nonplastic, No odor or staining
4.0'-4.6'	Slough
4.6'-6.1'	Light Brown, Gravely SAND, very fine to medium subangular to subrounded Sand, medium to fine subrounded to rounded Gravel, trace silts, loose, dry to moist, no odor or staining
8.0'-9.5'	Slough
9.5'-10.0'	Light Brown, Gravely SAND, very fine to medium, subangular to subrounded Sand, medium to fine subrounded to rounded Gravel, trace silts, loose, dry to moist, no odor or
M-S9	
0.0'-0.8'	Asphalt, RCA (Reconstructed Aggregate), Stiff, silts and sands (medium to fine), stiff, Strong Odor, staining
0.8'-2.8'	Light Brown, fine to medium SAND, subangular to subrounded, few coarse sand to fine gravels, Subrounded to Rounded, loose, dry, No odor, straining
4.0'-5.0'	Light Brown, fine to medium SAND, subangular to subrounded, few coarse sand to fine gravels, subrounded to rounded, loose, dry, No odor or staining
5.0'-5.4'	Asphalt, RCA (Reconstructed Aggregate), Stiff, silts and sands (medium to fine), stiff, Strong Odor, staining
8.0'-8.8'	Slough
8.8'-9.7'	Light to Medium Brown, fine to medium SAND subangular to subrounded, few coarse sands to fine gravels, subrounded to rounded, loose, dry, no odor or staining
M-S10	
0.0'-1.25'	Medium Brown, Sandy SILT, fine to very fine Sand, few coarse sands to fine gravel, subrounded to rounded, loose, moist to dry, nonplastic, No odor or staining
1.25'-2.8'	Light Brown to Medium Brown, SAND medium to fine, subangular to subrounded, loose, few coarse sand to fine gravels, subrounded to rounded, trace medium to coarse gravels, subrounded, no odor or staining
4.0'-5.0'	Slough
5.0'-6.4'	Med Brown, medium to fine SAND, subangular to subrounded, and coarse subrounded to rounded sand, trace silts, trace medium to coarse subrounded to rounded gravel, loose, No odor or staining
8.0'-9.5'	Slough
9.5'-2.4'	Medium Brown, medium to fine SAND, subangular to subrounded, and coarse subrounded to rounded sand, trace silts, trace medium to coarse subrounded to rounded gravel, loose, no odor or staining

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125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
M-S11	
0.0'-1.9'	Medium to orangish Brown, SILT, same as very fine to fine sand subangular to subrounded, trace coarse sand to fine gravel, subrounded, loose, dry, nonplastic, No odor
1.9'-2.3'	Light Brown to Orangish Brown, Gravely SAND, fine to medium subangular to subrounded sand, fine to medium subrounded to rounded gravel, trace silts, loose, moist to dry, no odor or staining
4.0'-4.4'	Slough
4.4'-6.6'	Light Brown to Orangish Brown, Gravely SAND, fine to medium subangular to subrounded sand, fine to medium subrounded to rounded gravel, trace silts, loose, moist, no odor or staining
8.0'-8.7'	Slough
8.7'-10.4'	Light Brown to Orangish Brown, Gravely SAND, fine to medium subangular to subrounded sand, fine to medium subrounded to rounded gravel, trace silts, loose, moist, no odor or staining
M-S12	
0.0'-0.5'	Medium Brown, SILT (topsoil), few very fine to fine soils, loose, dry, No odor or staining
0.5'-2.7'	Medium Brown, Silty SAND, medium to fine sand, subangular to subrounded, few coarse sand to fine gravel subrounded to rounded, loose, moist, no odor or staining
4.0'-4.5'	Slough
4.5'-5.7'	Medium Brown, Silty SAND, medium to fine sand, subangular to subrounded, few coarse sand to fine gravel subrounded to rounded, loose, moist, no odor or staining
8.0'-9.1'	Slough
9.1'-9.6'	Medium Brown, Silty SAND, medium to fine sand, subangular to subrounded, few coarse sand to fine gravel subrounded to rounded, loose, moist, no odor or staining
M-S13	
0.0'-0.4'	fractured concrete material
0.4'-0.7'	Medium Brown, SILT, some very fine to fine sand, subangular to subrounded, loose, dry, nonplastic, no odor or staining
0.7'-2.4'	Medium Brown, medium to fine SAND, subangular to subrounded, few coarse subrounded sands, trace medium to gravels, loose, wet, no odor or staining, subrounded.
4.0'-4.7'	Slough
4.7'-6.75'	Medium Brown, medium to fine SAND, subangular to subrounded, few coarse subrounded sands, trace medium to gravels, loose, wet, no odor or staining, subrounded.
8.0'-8.8'	Slough
8.8'-9.6'	Medium to Orangish Brown, medium to fine SAND, subangular to subrounded, some fine to medium gravel, subrounded to subangular, few silts, trace coarse sands, sub, loose, wet to saturated at 1.4 to 1.6 feet, no odor or staining
M-S14	
0.0'-1.0'	Light Brown to Medium Brown, Sandy SILT, fine to very fine subangular to subrounded sand, few coarse subrounded to rounded sand, loose, dry, no odor or staining
1.0'-2.65'	Medium Brown, SILT, few very fine to fine sands, trace fine to medium subangular to subrounded gravel, stiff, dry to moist, nonplastic, no odor or staining
4.0'-4.9'	Medium Brown, SILT, few very fine to fine sands, trace fine to medium subangular to subrounded gravel, stiff, dry to moist, nonplastic, no odor or staining
4.9'-5.9'	Light Brown, very fine to fine SAND subangular to subrounded, trace Medium to coarse gravel subrounded to rounded, loose, moist, no odor or staining
8.0'-9.0'	Slough
9.0'-9.9'	Light Brown very fine to fine SAND subangular to subrounded, trace medium to fine gravel subrounded to rounded, loose wet, no odor or staining
9.9'-10.2'	Dark Brown, SILT, trace medium to fine subrounded gravel, stiff, wet, nonplastic, no odor or staining

TABLE 1
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
M-S15	
0.0'-2.2'	Dark Brown to Medium Brown, Sandy SILT, subangular to subrounded very fine to fine. sand, few Coarse sand to fine gravel subangular to subrounded, trace medium to coarse gravel subrounded to rounded, trace organics at 0.0 to 0.2 feet (Roots), loose, moist to Dry, nonplastic, no odor or staining
4.0'-4.7'	Slough
4.7'-6.3'	medium to Light Brown, medium to fine. SAND, subangular to subrounded, some very fine/coarse. sand subrounded to subangular, trace fine to medium. gravel, subrounded, loose, moist to dry, no odor or staining
8.0'-9.2'	Slough
9.2'-10.7'	medium to Light Brown, medium to fine. SAND, subangular to subrounded, some very fine/coarse. sand subrounded to subangular, trace fine to medium. gravel, subrounded, loose, moist to wet, no odor or staining
M-S16	
0.0'-2.05'	Dark to Orangish Brown, Sandy SILT, very fine to fine sand, trace coarse sand to fine gravel subrounded to rounded, loose, dry, nonplastic, No odor or staining
4.0'-4.9'	Slough
4.9'-6.4'	Orangish Brown, Sandy SILT, very fine to fine sand, trace coarse sand to fine gravel subrounded to rounded, loose, dry, nonplastic, No odor or staining
8.0'-9.5'	Slough
9.5'-9.7'	Orangish Brown, Sandy SILT, very fine to fine sand, trace coarse sand to fine gravel subrounded to rounded, loose, dry, nonplastic, No odor staining
9.7'-11.0'	Light Brown to Orangish Brown, fine to medium SAND, some very fine/coarse subrounded to rounded. sand, trace fine to medium subrounded to rounded gravel, trace silts, loose, wet to moist, no staining or odor
M-S17	
0.0'-1.8'	Dark Brown to Orangish Brown, Sandy SILT, medium to fine subangular to subrounded sand, trace coarse sand to fine gravel, loose, dry, nonplastic, No odor staining
1.8'-2.85'	Medium Brown, medium to fine SAND, some very fine/coarse sand subrounded to rounded, few silts, trace fine to medium gravel, subrounded to rounded, loose, dry, No odor or staining
4.0'-4.65'	Slough
4.65'-7.15'	Medium Brown, medium to fine SAND, some very fine/coarse sand subrounded to rounded, few silts, trace fine to medium gravel, subrounded to rounded, loose, moist, no odor or staining
8.0'-9.9'	Slough
9.9'-10.7'	Medium Brown, medium to fine SAND, some very fine/coarse sand subrounded to rounded, few silts, trace fine to medium gravel, subrounded to rounded, loose, wet, No odor or staining

TABLE 1
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
M-S18	
0.0'-1.2'	Dark Brown, Sandy SILT, fine to medium subangular to subrounded sand, few coarse sands to fine gravels subrounded to rounded, loose, dry, nonplastic, No odor or staining
1.2'-2.55'	Light to Orangish Brown, SAND, medium to fine subangular to subrounded, some very fine sands to silts, few coarse sand to fine gravels subrounded to rounded, trace medium to coarse subrounded to rounded gravels, loose, moist, no odor or staining
4.0'-4.7'	Slough
4.7'-6.5'	Light to Orangish Brown, SAND, medium to fine subangular to subrounded, some coarse sand to fine gravels subrounded to rounded, few very fine sands to silts, trace medium to coarse. Subrounded to rounded gravels, loose, moist, no odor or staining
8.0'-9.7'	Slough
9.7'-10.2'	Light to Orangish Brown, SAND, medium to fine subangular to subrounded, some coarse sand to fine gravels subrounded to rounded, few very fine sands to silts, trace medium to coarse. Subrounded to rounded gravels, loose, moist, no odor or staining
M-S19	
0.0'-2.3'	Medium to Orangish Brown, Sand SILT, fine to medium subangular to subrounded sand, few coarse sands to fine gravels, subrounded to rounded, loose, dry, nonplastic, No odor or staining
4.0'-4.7'	Slough
4.7'-6.7'	Medium to Orangish Brown, Sand SILT, fine to medium subangular to subrounded sand, few coarse sands to fine gravels, trace medium to coarse gravels subrounded to rounded, loose, moist, nonplastic, No odor or staining
8.0'-9.2'	Slough
9.2'-10.0'	Medium to Orangish Brown, Sand SILT, fine to medium subangular to subrounded sand, few coarse sands to fine gravels, trace medium to coarse gravels subrounded to rounded, loose, moist, nonplastic, No odor or staining
M-S20	
0.0'-0.7'	Dark Brown, Sandy SILT, very fine to fine sand, trace coarse sand to fine gravel subrounded to rounded, trace organics (roots/leaves), loose, dry, nonplastic, No odor or
0.7'-1.9'	Dark Brown, Sandy SILT, fine to medium sand, few coarse sand to fine gravel subrounded to rounded, trace organics (roots/leaves), loose, dry, nonplastic, No odor staining.
4.0'-4.4'	Slough
4.4'-5.6'	Light Brown, SAND, medium to very fine subangular to subrounded, few silts, few fine to medium subrounded to rounded gravel, loose, moist to dry, No odor or staining
8.0'-8.6'	Slough
8.6'-9.3'	Light Brown, SAND, medium to very vine subangular to subrounded, few silts, few fine to medium subrounded to rounded gravel, loose, moist to dry, no odor or staining
M-S21	
0.0'-2.7'	Dark to Medium Brown, Sandy SILT, very fine to fine sand, few coarse subangular to subrounded sand, trace organics at 0.0 to 0.4 feet (Roots), loose, dry, nonplastic, No odor or staining
4.0'-4.7'	Slough
4.7'-6.5'	Light Brown, Gravely SAND, fine to medium subangular to subrounded sand, fine to medium gravel subrounded to rounded, few coarse subrounded sand, loose, moist to dry, no odor or staining
8.0'-8.9'	Slough
8.9'-9.3'	Light Brown, Gravely SAND, fine to medium subangular to subrounded sand, fine to medium gravel subrounded to rounded, few coarse subrounded sand, loose, moist to dry, no odor or staining

TABLE 1
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
M-S22	
0.0'-0.9'	Dark Brown, SILT/SOIL, few very fine to fine sands, trace organics (Roots, Branches), dry, nonplastic, No odor or staining
0.9'-2.5'	Light Brown, Silty SAND, very fine to fine sand, few medium subangular to subrounded sands, trace coarse. Sands to fine gravels subrounded to rounded, loose, dry, no odor or staining
4.0'-4.7'	Slough
4.7'-5.9'	Light Brown, fine to very fine SAND, subangular to subrounded, trace coarse. Subrounded to rounded sand, loose, moist, no odor or staining
8.0'-9.1'	Slough
9.1'-10.4'	Light Brown, fine to very fine SAND, subangular to subrounded, trace coarse subrounded to rounded sand, loose, moist to wet, no odor or staining
M-S23	
0.0'-0.2'	top soil, Medium to Dark Brown, Sandy SILT, loose, dry, few organics (Plants, Roots), No odor or staining
0.2'-2.5'	Med to Light Brown, very fine to fine SAND and SILT, subangular to subrounded sand, few medium to coarse sands, trace-clay dense at 2.05 to 2.2 feet, loose, moist to dry, no odor or staining, nonplastic
4.0'-4.9'	Medium to Light Brown, very fine to fine SAND and SILT, subangular to subrounded sand, few medium to coarse sands, trace-clay dense at 2.05 to 2.2 feet, loose, moist to dry, no odor or staining, nonplastic
4.9'-5.5'	Light Brown, medium to coarse subangular to subrounded SAND, few medium to coarse subrounded to rounded gravel, trace very fine to fine sand, loose, moist, No odor or
8.0'-9.3'	Slough from above, medium to Light Brown sandy SILT, loose, No odor or staining
M-S24	
0.0'-1.2'	Medium to Dark Brown, fine to very fine (Subangular to Subrounded) SAND, few silts, trace medium to coarse (subangular to subrounded) gravel, loose, moist, nonplastic, No odor or staining
1.2'-2.3'	Dark Brown, fine to very fine (subangular to subrounded) SAND, few silts, trace medium to coarse (subangular to subrounded) gravel, loose, moist, nonplastic, No odor or staining
4.0'-6.7'	Medium to Orangish Brown, medium to fine SAND, subangular to subrounded, same very fine sand, trace silts, trace subrounded to rounded medium to coarse gravel, loose, moist to wet at 1.9 to 2.7 feet, no odor or staining
8.0'-9.4'	Medium to Orangish Brown, medium to fine SAND, subangular to subrounded, same very fine sand, trace silts, trace subrounded to rounded medium to coarse gravel, loose, wet at 1.9 to 2.7 feet, no odor or staining
M-S25	
0.0'-0.3'	Medium to Brown, medium to fine SAND, subangular to subrounded, some silt, few fine to medium subrounded gravel, loose, moist to dry, No odors or staining
4.0'-5.6'	Dark Brown, medium to fine SAND, subangular to subrounded, some silt, few fine to medium subrounded gravel, loose, moist at 0.9 to 1.6 feet, No odors or staining
8.0'-8.7'	Light Brown and Gray, fine to very fine SAND (subrounded to rounded), few silts, trace subrounded to rounded fine to medium gravel, loose, moist to dry, no odor or staining
8.7'-9.0'	Dark Brown, Silty SAND, medium to fine sand subangular to subrounded, medium dense, moist to wet, nonplastic, no odor or staining

TABLE 1
SOIL SAMPLE VISUAL CHARACTERIZATION RESULTS

METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Sample ID/ Depth Interval	Description
M-S26	
0.0'-1.3'	Medium to Light Brown, Gravely SAND, medium to fine subangular to subrounded sand, medium to coarse subrounded to rounded gravel, few silts, loose, dry, No odor or staining
1.3'-2.7'	Medium to Dark Brown, Sandy SILT, medium to fine subangular to subrounded sand, some medium to coarse gravel subrounded to rounded, medium stiff, moist, nonplastic, no odor or staining
4.0'-4.4'	Medium to Dark Brown, Sandy SILT, medium to fine subangular to subrounded sand, some medium to coarse gravel subrounded to rounded, medium stiff, moist, nonplastic, no odor or staining
4.4'-4.65'	Light Brown, medium to fine SAND, subangular to subrounded, loose, dry, no odor or staining
4.65'-6.1'	Orangish-Brown, medium to fine subangular to subrounded SAND, few silts, trace medium to fine subrounded gravel, wet to saturated, medium dense, No odor or staining
8.0'-9.9'	Light to Medium Brown, medium to fine SAND, few medium to coarse subrounded to rounded gravel, few silts at 0.5 to 1.1 feet, loose, moist to dry, no odor or staining

TABLE 2
SOIL ANALYTICAL RESULTS FOR ARSENIC AND CADMIUM (PPM)

METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Location ID	Depth (Feet)	Date Collected	Concentration (ppm)	
			Arsenic	Cadmium
Commercial Use SCOs:			16	9.3
M-S1	0 - 0.5	7/15/2011	4.30 J	<1.30
	0.5 - 2	7/15/2011	2.20 J	<1.30
	2 - 4	7/15/2011	2.00 J	<1.30
M-S2	0 - 0.5	7/14/2011	6.20	<1.30
	0.5 - 2	7/14/2011	6.10	<1.40
	2 - 4	7/14/2011	<5.00	<1.20
M-S3	0 - 0.5	7/14/2011	29.3	<1.30
	0.5 - 2	7/14/2011	13.9	<1.30
	2 - 4	7/14/2011	2.10 J	<1.30
M-S4	0 - 0.5	7/14/2011	9.50	8.70
	0.5 - 2	7/14/2011	24.0	14.2
	2 - 4	7/14/2011	3.90 J	<1.30
M-S5	0 - 0.5	7/14/2011	25.9	0.260 J
	0.5 - 2	7/14/2011	5.50	<1.30
	2 - 4	7/14/2011	3.60 J	<1.30
M-S6	0 - 0.5	7/14/2011	7.10	<1.20
	0.5 - 2	7/14/2011	4.40 J	<1.30
	2 - 4	7/14/2011	1.90 J	<1.30
M-S7	0 - 0.5	7/14/2011	4.80 J	<1.30
	0.5 - 2	7/14/2011	4.00 J [4.90 J]	<1.30 [<1.40]
	2 - 4	7/14/2011	<5.10	<1.20
M-S8	0 - 0.5	7/13/2011	3.90 J	0.360 J
	0.5 - 2	7/13/2011	4.80 J	0.400 J
	2 - 4	7/13/2011	4.80 J	0.770 J
M-S9	0 - 0.5	7/13/2011	5.40	<1.30
	0.5 - 2	7/13/2011	<5.20	<1.20
	2 - 4	7/13/2011	<5.30	<1.30
M-S10	0 - 0.5	7/13/2011	4.80 J	0.660 J
	0.5 - 2	7/13/2011	4.10 J [4.70 J]	1.10 J [1.40]
	2 - 4	7/13/2011	<5.00	<1.20
M-S11	0 - 0.5	7/13/2011	4.10 J	0.850 J
	0.5 - 2	7/13/2011	3.40 J	1.70
	2 - 4	7/13/2011	2.60 J	1.00 J
M-S12	0 - 0.5	7/13/2011	11.4	0.450 J
	0.5 - 2	7/13/2011	2.40 J	0.310 J
	2 - 4	7/13/2011	2.40 J	5.10

TABLE 2
SOIL ANALYTICAL RESULTS FOR ARSENIC AND CADMIUM (PPM)

METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Location ID	Depth (Feet)	Date Collected	Concentration (ppm)	
			Arsenic	Cadmium
Commercial Use SCOs:			16	9.3
M-S13	0 - 0.5	7/13/2011	2.60 J	2.10
	0.5 - 2	7/13/2011	1.70 J	<1.30
	2 - 4	7/13/2011	2.10 J	<1.30
M-S14	0 - 0.5	7/12/2011	4.40 J	0.530 J
	0.5 - 2	7/12/2011	6.70	<1.30
	2 - 4	7/12/2011	2.40 J	<1.40
M-S15	0 - 0.5	7/15/2011	21.4	0.360 J
	0.5 - 2	7/15/2011	3.00 J [2.40 J]	<1.30 [<1.30]
	2 - 4	7/15/2011	4.00 J	<1.30
M-S16	0 - 0.5	7/15/2011	22.5	<1.30
	0.5 - 2	7/15/2011	4.70 J	<1.30
	2 - 4	7/15/2011	4.10 J	<1.30
M-S17	0 - 0.5	7/15/2011	11.2	0.310 J
	0.5 - 2	7/15/2011	15.5	<1.30
	2 - 4	7/15/2011	5.60	<1.20
M-S18	0 - 0.5	7/14/2011	14.6	0.720 J
	0.5 - 2	7/14/2011	16.2	<1.30
	2 - 4	7/14/2011	4.30 J	<1.30
M-S19	0 - 0.5	7/14/2011	5.80	6.20
	0.5 - 2	7/14/2011	6.10	1.50
	2 - 4	7/14/2011	5.10 J	0.600 J
M-S20	0 - 0.5	7/13/2011	25.7	2.60
	0.5 - 2	7/13/2011	4.50 J	<1.30
	2 - 4	7/13/2011	2.10 J	<1.20
M-S21	0 - 0.5	7/13/2011	6.10	<1.30
	0.5 - 2	7/13/2011	13.4	<1.30
	2 - 4	7/13/2011	3.90 J	<1.20
M-S22	0 - 0.5	7/12/2011	32.9	<1.30
	0.5 - 2	7/12/2011	5.80	<1.20
	2 - 4	7/12/2011	3.10 J	<1.30
M-S23	0 - 0.5	7/12/2011	4.00 J	<1.30
	0.5 - 2	7/12/2011	3.90 J [4.20 J]	<1.20 [<1.30]
	2 - 4	7/12/2011	4.40 J	<1.30
M-S24	0 - 0.5	7/12/2011	5.20 J	0.400 J
	0.5 - 2	7/12/2011	3.20 J	<1.20
	2 - 4	7/12/2011	2.20 J	0.880 J

TABLE 2
SOIL ANALYTICAL RESULTS FOR ARSENIC AND CADMIUM (PPM)

METALS SOIL DELINEATION SUMMARY REPORT
BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

Location ID	Depth (Feet)	Date Collected	Concentration (ppm)	
			Arsenic	Cadmium
Commercial Use SCOs:			16	9.3
M-S25	0 - 0.5	7/12/2011	4.70 J	<1.30
	0.5 - 2	7/12/2011	1.70 J	<1.30
	2 - 4	7/12/2011	3.30 J	<1.30
M-S26	2 - 4	7/12/2011	6.00	<1.40
	4 - 6	7/12/2011	2.80 J	<1.30

Notes:

1. Samples were collected by ARCADIS on the dates indicated.
2. Samples were analyzed by TestAmerica Laboratories, Inc. located in Shelton, Connecticut for arsenic and cadmium using United States Environmental Protection Agency (USEPA) SW-846 Method 6010.
3. All concentrations reported in dry weight parts per million (ppm), which is equivalent to milligrams per kilogram (mg/kg).
4. Field duplicate sample results are presented in brackets.
5. Data qualifiers are defined as follows:
   - < - Constituent was not detected at a concentration above the reported detection limit.
   - J - Indicates that the associated numerical value is an estimated concentration.
6. Commercial Use Soil Cleanup Objectives (SCOs) are from Title 6 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (6 NYCRR) Part 375-6.8(b).
7. Shading indicates that the result exceeds the corresponding 6 NYCRR Part 375 Commercial Use SCO.
8. The data has been validated.

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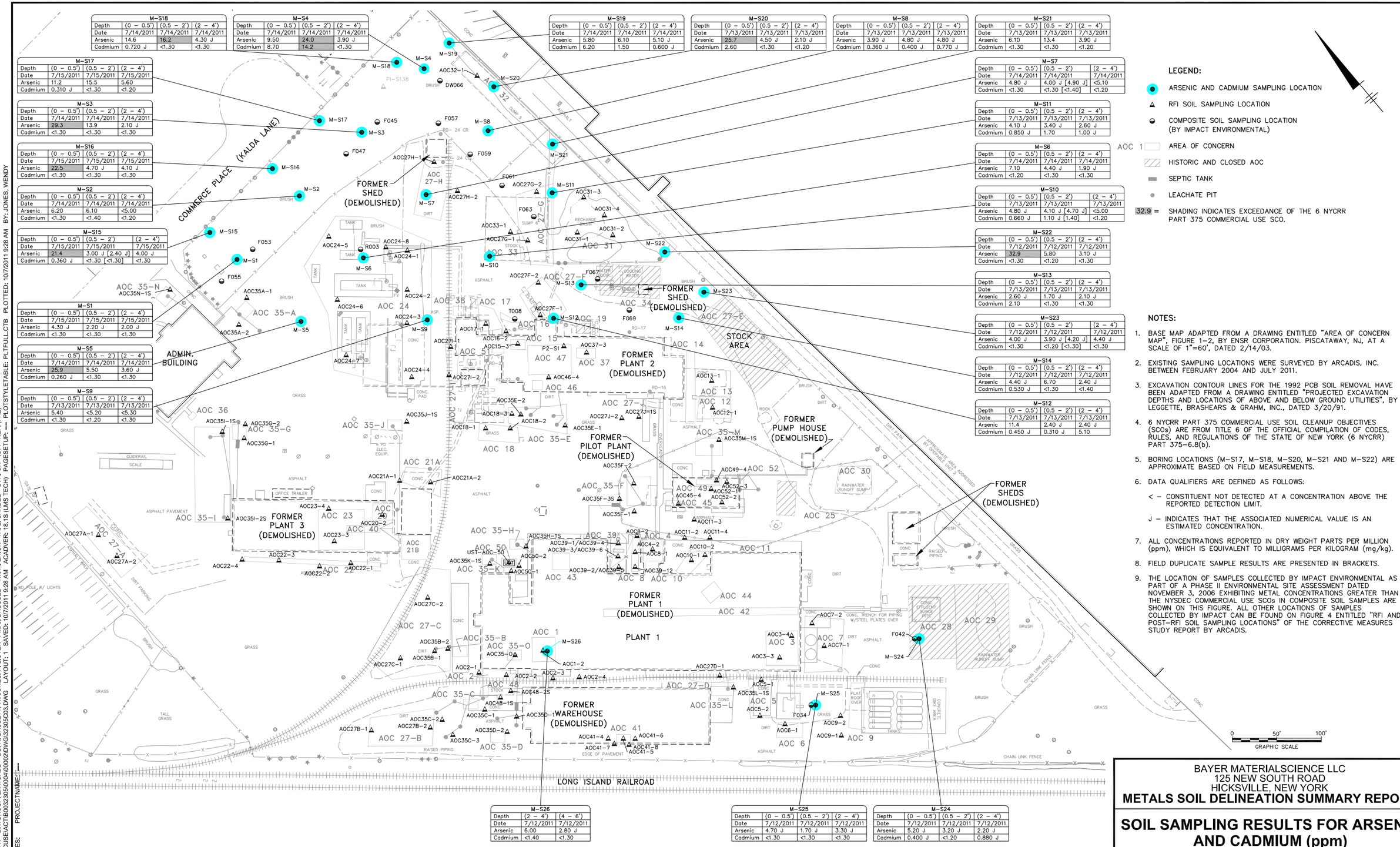
Figures



CITY: SYRACUSE, NY DIV/GROUP: ENV/CADD DB: R. BASSETT, W. JONES, P. LISTER PM: J. BRUSSEL TM: A. ENGK TR: L. CANDEE LYR: ON="OFF"=REF. (FRZ)
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BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK
METALS SOIL DELINEATION SUMMARY REPORT

SOIL SAMPLING RESULTS FOR ARSENIC AND CADMIUM (ppm)

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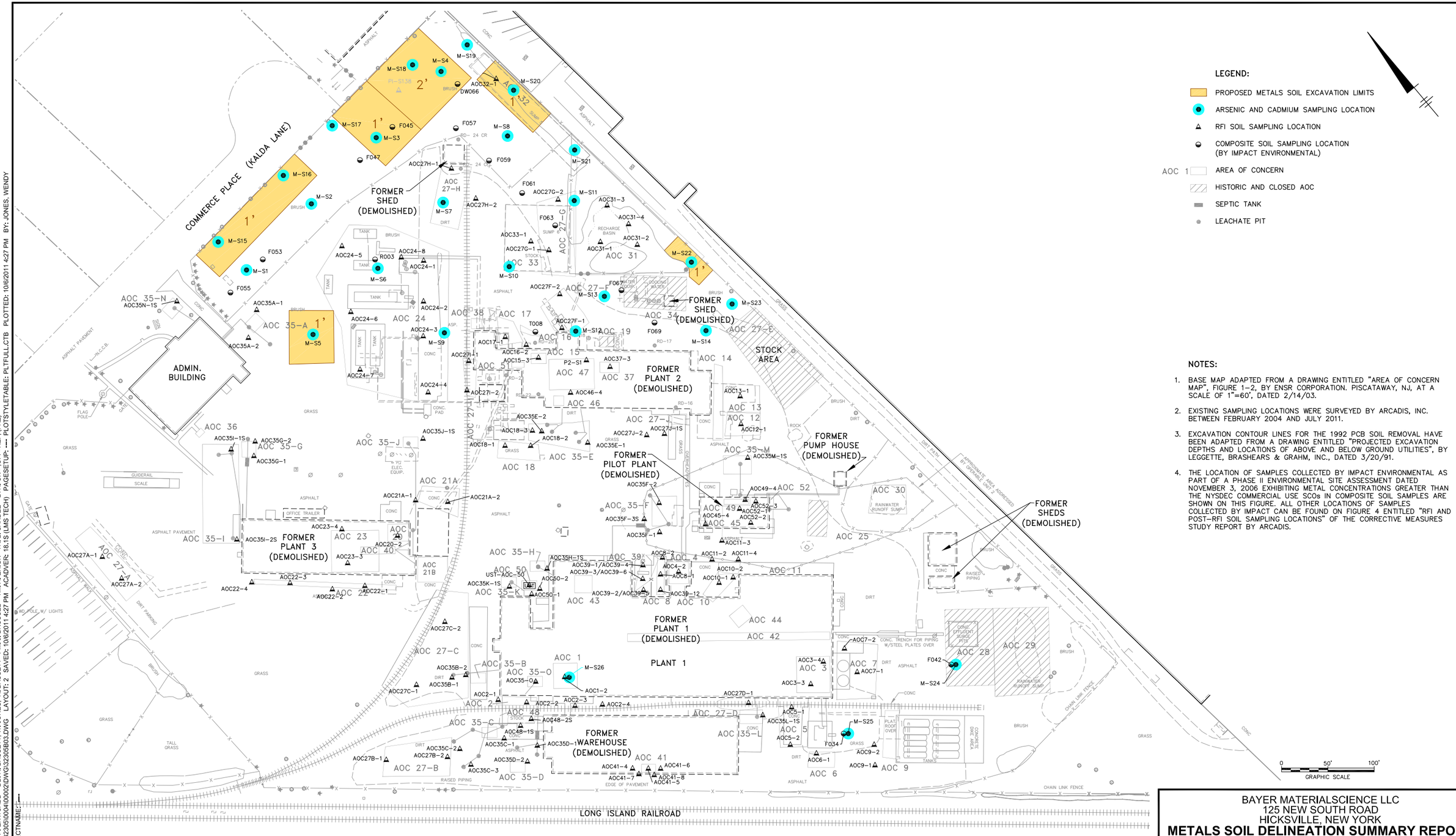
FIGURE 1



LEGEND:

- PROPOSED METALS SOIL EXCAVATION LIMITS
- ARSENIC AND CADMIUM SAMPLING LOCATION
- RFI SOIL SAMPLING LOCATION
- COMPOSITE SOIL SAMPLING LOCATION (BY IMPACT ENVIRONMENTAL)
- AOC 1 — AREA OF CONCERN
- HISTORIC AND CLOSED AOC
- SEPTIC TANK
- LEACHATE PIT

NOTES:

1. BASE MAP ADAPTED FROM A DRAWING ENTITLED "AREA OF CONCERN MAP", FIGURE 1-2, BY ENSR CORPORATION. PISCATAWAY, NJ, AT A SCALE OF 1"=60', DATED 2/14/03.
2. EXISTING SAMPLING LOCATIONS WERE SURVEYED BY ARCADIS, INC. BETWEEN FEBRUARY 2004 AND JULY 2011.
3. EXCAVATION CONTOUR LINES FOR THE 1992 PCB SOIL REMOVAL HAVE BEEN ADAPTED FROM A DRAWING ENTITLED "PROJECTED EXCAVATION DEPTHS AND LOCATIONS OF ABOVE AND BELOW GROUND UTILITIES", BY LEGGETTE, BRASHEARS & GRAHM, INC., DATED 3/20/91.
4. THE LOCATION OF SAMPLES COLLECTED BY IMPACT ENVIRONMENTAL AS PART OF A PHASE II ENVIRONMENTAL SITE ASSESSMENT DATED NOVEMBER 3, 2006 EXHIBITING METAL CONCENTRATIONS GREATER THAN THE NYSDEC COMMERCIAL USE SCOs IN COMPOSITE SOIL SAMPLES ARE SHOWN ON THIS FIGURE. ALL OTHER LOCATIONS OF SAMPLES COLLECTED BY IMPACT CAN BE FOUND ON FIGURE 4 ENTITLED "RFI AND POST-RFI SOIL SAMPLING LOCATIONS" OF THE CORRECTIVE MEASURES STUDY REPORT BY ARCADIS.

BAYER MATERIALSCIENCE LLC
125 NEW SOUTH ROAD
HICKSVILLE, NEW YORK

METALS SOIL DELINEATION SUMMARY REPORT

PROPOSED METALS SOIL EXCAVATION LIMITS

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FIGURE 2

CITY: SYRACUSE, NY DIV/GROUP: ENV/CADD DB: R. BASSETT; W. JONES, R. BASSETT PM: J. BRUSSEL TM: A. ENGK TR: L. CANDEE LYR: ON="OFF"=REF, (FRZ)
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32305X01 0956_001.tif

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Attachment A

Soil Boring Logs

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Sample Log

Boring ID: M-S1 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/15/11 Drilling Completed: 07/15/11

Total Depth Drilled: ~~12~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4'x1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McHolden Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.2'	0→~~1~~2	Dark Brown→Med Brown, Silty SAND, vf→f. Sand,	0.0
				SA→A, Dry, NP, NO/NS: No odor/Staining, Pea	
				gravel 0→0.2', trace C. Sand→f. Gravel, SR→R.	
			1.2→2.2'	Med→Orangish Brown, f→M SAND, trace C. Sand→	0.0
				f. gravel, SR→R, trace→few silts, wet→moist,	
				NO/NS.	
4	8'	2.7'	0→0.7'	Sloth	0.0
			0.7→2.7	SAA, wet	
8	12'	2.7'	0→2'	Sloth	0.0
			2'→2.7'	SAA, wet→saturated.	

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Sample Log

Boring ID: M-S2 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/14/11 Drilling Completed: 07/14/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	3.1'	0→0.8'	Dark Brown, Gravely SILT, M→C. SR→R	0.0
				gravel, few f→M sand SA→SR, loose, Dry,	
				NP, NO/NS: No odor/staining.	
			0.8→2.2'	Orangish Brown, SILT, trace M→C. SA→SR gravel,	0.0
				trace M→f. sand, loose/soft, Dry→moist, NP, NO/NS	
			2.2→3.1	Lt Brown, SAND, f→M, SA→SR, few C. sand→	0.0
				f. gravel, trace silt, trace M→C. SR→R. gravel,	
				loose, Dry, NO/NS	
4	8'	2.4'	0→1.15	Sloughs	0.0
			1.15→2.4'	Same as 2.2→3.1' in 0→4' core	0.0
8	12'	1.7'	0→1.5'	Sloughs	0.0
			1.5→1.7'	SAA	0.0

ARCADIS

Sample Log

Boring ID: M-S3 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/14/11 Drilling Completed: 07/14/11

Total Depth Drilled: ~~12~~ feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.45	0→2.45	Dark Brown → Orangish Brown, Sandy SILT, M→f.	0.0
				SA→SR SAND, few C. sand→f. gravel SA→SR,	
				trace M→C. gravel, SR→R, loose, NP, Dry→Moist, NO/NS:	
				No odor/staining, trace organics @ 0→0.3' (Roots).	
4	8'	2.05'	0→0.5'	Sloth.	0.0
			0.5→1.5'	Orangish Brown, Silty SAND, vf→f. sand, some	0.0
				M→C. SA→SR sands, few→trace CN→f. gravels	
				SR→R, loose, NP, NO/NS, M Dist.	
			1.5→2.05	Lt Gray + Orangish Brown, Sandy CLAY, orangish	0.0
				vf→f. sands, Moist, tP→NP, soft, NO/NS	
4	12'	1.55'	0→0.8'	Sloath	0.0
			0.8→1.55	Lt Brownish Gray, Silty CLAY, trace M→f.	0.0
				Sands, stiff→med stiff, NP→tP, NO/NS, Moist	

ARCADIS

Sample Log

Boring ID: M-S4 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/14/11 Drilling Completed: 07/14/11

Total Depth Drilled: ~~12~~ feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', 4-6' (Archive) 6-8', 8-10' (MS/MSD)

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.6'	0→2.6'	Med→orangish Brown, Sandy SILT, m→f. sand,	0.0
				SA→SR, few C→f gravel, SA→SR, trace organics	
				@ 0→0.2', loose, moist→Dry, NP, NO/NS: No	
				odor/staining	
4	8'	2.9'	0→0.4	Sloth	0.0
			0.4→1'	Same as 0→2.6' in 0→4' core	0.0
			1'→2.6'	Med Brown, silty SAND, Vf→f. SA sand,	0.0
				few C. sand→f. gravels, trace M→C. SR→R. gravels,	
				loose→med dense, moist, NP, NO/NS	
			2.6→2.9	Med Brown, f. SAND, trace C.→M. sand, loose,	0.0
				moist, NO/NS	
8	12'	2.5	0→1.4'	Sloth	0.0
			1.4→2.5'	Same as 2.6→2.9' of 4→8' core except	0.0
				few f→M. SR→R gravels, NO/NS	

ARCADIS

Sample Log

Boring ID: M-S5 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/14/11 Drilling Completed: 07/14/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4' X 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.55	0→2.1'	Med→Dark Brown, Sandy SILT, F→M. SA→SR	0.0
				Sand, trace C. Sand→f. gravel SR→R, trace Organics	
				(Roots, Branches), moist→Dry, loose, NP, NS/NO: No staining/odor.	
			2.1→2.55	Med→Orangish Brown, clayey SILT, few C. SR→R	0.0
				Sand, trace M→f. SR→R gravel, Med stiff, Moist,	
				TP→NP, NO/NS	
4	8'	2.4'	0→0.6'	Sloth	0.0
			0.6→1.7'	Med Brown→Orangish Brown, F→M. SAND, SA→SR,	0.0
				few C. Sand→f gravel SR→R, loose, wet, NO/NS	
			1.7→2.4	Same as 2.1→2.55 (Q) 0→4' Core.	0.0
8	12'	2.3'	0→0.8'	Sloth	0.0
			0.8→1.5	Same as 2.1→2.55' in 0→4' Core	0.0
			1.5→2.3'	Same as 0.6→1.7' in 4→8' Core	0.0

ARCADIS

Sample Log

Boring ID: M-S6 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/14/11 Drilling Completed: 07/14/11

Total Depth Drilled: ~~12~~ feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	1.8'	0→1'	Med→Lt Brown, Sandy SILT, M→C sand SA→	0.0
				SR, trace f→m gravel, SR→R, trace organics (roots),	
				loose, Dry, NP, NO/NS : No odor/staining	
			1'→1.2	Fractured quartzite	0.0
			1.2→1.4	Orangish Brown, clayey SILT, trace c. sand→f. gravel,	0.0
				SR→SA, med stiff, NP, NO/NS	
			1.4→1.8'	Med. Brown, vf→f. SAND, ~~Clay~~ some M→C. SA→SR.	0.0
				Sand, trace f→M. gravel SR→R, loose, Dry, NO/NS	
4	8'	2.95	0→0.7'	Sloth	0.0
			0.7→2.95	Same as 1.4→1.8' in 0→4' core.	0.0
8	12'	~~0~~ 1.8'	0→1.5'	Sloth.	0.0
			1.5→1.8'	Same as 1.4→1.8' in 0→4' core.	0.0

ARCADIS

Sample Log

Boring ID: M-S7 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/14/11 Drilling Completed: 07/14/11

Total Depth Drilled: 12.20 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', (5-2') 2-4', (4-6', (6-8', 8-10' Archive

Dup-071411 DUP-071411B

Length and Diameter of Sampling Device: 4' X 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat Macdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.9'	0→2.1'	Med→orange/wh Brown, sandy SILT, M→C. SR→SA	0.0
				Sandy, trace C. SR→R gravel, Loose (1.4→2.1', 0→0.6'), stiff	
				0.6→1.4', Dry→Moist, NP, NO/NS: No odor/stain	
			2.1→2.9'	LT Brown, f→M. SAND, some C. sand→f. gravel,	0.0
				SR→SA, few C→M SR→SA gravel, loose, Dry, trace	
				Silts, NO/NS	
4	8'	2.7'	0→0.85'	Sloth	0.0
			0.85→2.7'	Same as 2.1'→2.9' in 0→4' core.	0.0
8	12'	2'	0→1.2'	Sloth	0.0
			1.2→2.0'	Same as 2.7→2.9' in 0→4' core	0.0

ARCADIS

Sample Log

Boring ID: M-S8

Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/13/11

Drilling Completed: 07/13/11

Total Depth Drilled: 10 feet

Hole Diameter: 1.75 inches

Sampling Interval: (0-.5', .5-2', 2-4') (4-6', (6-8') 8-10') Archive; 6-8' → DUP-071311C

Length and Diameter of Sampling Device: 4' x 1.5"

Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe

Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta

Driller: Dat McAdam

Helper: NA

Prepared By: D.Zuck

Hammer Weight: NA

Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4	2.3'	0→2.3'	med Grey @ 1.9' (NO/NS 0.0 PID) Med Brown, Sandy SILT, vf→f. Sand, few organics	0.0
				0→0.6': wood Fragments, Roots, trace C. Sand→f. gravel	
				SR→R, loose, Dry, NP, NO/NS: No odor/staining	
4	8	2.9'	0→0.6'	Slough	0.0
			0.6→2.1	Lt Brown, Gravelly SAND, vf→m. SA→SR Sand,	0.0
				m→f. SR→R Gravel, loose, Dry→Moist, NO/NS,	
				trace Silts	
8	12'	2'	0→1.5'	Slough	0.0
			1.5→2'	SAA	0.0

ARCADIS

Sample Log

Boring ID: M-S9 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location 125 New South Road, Hicksville, NY Drilling Started 07/13/11 Drilling Completed 07/13/11

Total Depth Drilled ~~16~~ 12 feet Hole Diameter 1.75 inches Sampling Interval 0-.5', .5-2', 2-4', 4-6', 6-8', 8-10'

Length and Diameter of Sampling Device 4'x1.5" Type of Sampling Device Geoprobe Liner

Drilling Method Geopobe Drilling Fluid Used NA

Drilling Contractor ~~Zebra~~ Delta Driller Pat McAdam Helper NA

Prepared By D.Zuck Hammer Weight NA Hammer Drop NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.8'	0→0.8'	Asphalt, RCA (Reconstituted Aggregate), stiff, SO: Strong	75.2
				odor, staining, stiff, silts and sands (M→f).	
			0.8→2.8'	LT Brown, f→M. SAND, SA→SR, few C. Sand→	0.1→
				f. gravels, SR→R, Loose, NO/NS: no odor/staining,	0.0
				Dry	
4	8'	1.4'	0→1'	SAA	0.0
			1'→1.4'	~~Sandy~~ Sandy 0.8→0' in 0→4' core	7.2
8	12'	1.7'	0→0.8	sloght	0.0
			0.8→1.7	LT→Red Brown, f→M. SAND SA→SR, few C. Sands→	0.0
				f gravels, SR→R, loose, NO/NS, Dry.	

ARCADIS

Sample Log

Boring ID: M-S10 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/13/11 Drilling Completed: 07/13/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', (Archive 4-6', 6-8', 8-10') (DUP-071311 ↓) (DUP-071311B ↓)

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.8'	0→1.25	Med Brown, sandy SILT, f→vf. sand, few C.	0.0
				Sands→f. grad, SR→R, loose, moist→Dry, NP, NO/NS:	
				No odor/staining	
			1.25→2.8'	Lt Brown→Med Brown, SAND m→f, SA→SR, loose, few	0.0
				C. sand→f. grads, SR→R, trace m→C. grads, SR,	
				NO/NS	
4	8'	0→1'	2.4'	Slough	0.0
			1'→2.4	Med Brown, m→f. SAND, SA→SR, and C. SR→R	0.0
				sand, trace silts, trace m→C. SR→R grad, loose, NO/NS	
8	12	2.4'	0→1.5	Slough	0.0
			1.5→2.4	Same as 1'→2.4' in 4→8' core	0.0

ARCADIS

Sample Log

Boring ID: M-S11 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/13/11 Drilling Completed: 07/13/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', (.5-2') MS/MSD, 2-4', (4-6', 6-8', (8-10') MS/MSD) Archive

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat Madden Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.3'	0 → 1.9'	Med → Orangish Brown, SILT, some vf → f. Sand	0.0
				SA → SR, trace C. sand → f. gravel, SR, loose, Dry, NP,	
				NO/NS: No odor/staining	
			1.9 → 2.3'	LT Brown → Orangish Brown, Gravely SAND, f → M SA →	0.0
				SR Sand, SR(f) → M → R gravel, loose, trace silts, Moist → Dry, NO/NS	
4	8'	2.6	0 → 0.4'	Slough	0.0
			0.4 → 2.6	Same @ 1.9 → 2.3' in 0 → 4' Core, Moist	0.0
8	12	2.4	0 → 0.7'	Slough	0.0
			0.7 → 2.4'	SAA	0.0

ARCADIS

Sample Log

Boring ID: M-S12 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/13/11 Drilling Completed: 07/13/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McGahan Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4	2.7	0→0.5'	Med Brown, Silt (topsoil), ~~Few~~ Few vf→f sands,	0.0
				loose, Dry, NO/NS : no odor / staining	
			0.5→2.7'	Med Brown, Silty SAND, M→f. sand, SA→SR, few	0.0
				C. sand→f. gravel SR→R, loose, moist, NO / NS	
4	6'	1.7	0→0.5'	Slough	0.0
			0.5→1.7'	SAA, from 0→2.7' in 0→4' core	0.0
8	12	1.6	0→1.1'	Slough	0.0
			1.1→1.6	SAA	0.0

ARCADIS

Sample Log

Boring ID: M-S13 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/13/11 Drilling Completed: 07/13/11

Total Depth Drilled: ~~16~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', 4-6', 6-8', 8-10' (Archived)

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.4'	0→0.4	Fractured concrete Material	0.0
			0.4→0.7	Med Brown, SILT, some vf→f. Sand, SA→SR,	0.0
				loose, Dry, NP, NO/NS: No odor/staining	
			0.7→2.4	Med. Brown, M→f. SAND, SA→SR, few C. SR	0.0
				Sands, loose, wet, NO/NS, trace M→f gravels, SR.	
4	8'	2.75'	0→0.7	Sloth	0.0
			0.7→2.75	Same as 0.7→2.4' from 0→4' core	0.0
8	12'	1.6'	0→0.8'	Sloth	0.0
			0.8→1.6'	Med→orange Brown, M→f. SAND, SA→SR, ~~Few~~ some	0.0
				f→M. gravel, SR→SA, ~~Few~~ Few silts, trace C. Sands	
				SR→R., loose, wet → Saturated @ 1.4→1.6', NO/NS	

ARCADIS

Sample Log

Boring ID: M-S14 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/12/11 Drilling Completed: 07/13/11

Total Depth Drilled: 10 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive) 4-6', 6-8', 8-10'

Length and Diameter of Sampling Device: 4' X 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdams Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.65	0→1'	~~&~~LT Brown→Med Brown, Sandy SILT, f→vf. SA→SR	0.0
				Sand, loose, dry, few C. SR→R Sand, NO/NS:	
				No odor/staining	
			1→2.65	Med Brown, SILT, few vf→f. Sand s, trace	0.0
				f→m SA→SR gravel, stiff, moist→dry, NP/NO/NS	
4	8'	1.9'	0→0.9'	SAA	0.0
			0.9→1.9'	LT Brown, vf→f. ~~SAND~~ SA→SR, trace M→C. gravel	0.0
				SR→R., loose, moist, NO/NS	
8	10'	0.0	—	No Recag	
7/13 8	10'	2.2'	0→1'	Sloogh	0.0
			1'→1.9'	LT Brown vf→f. SAND SA→SR, trace M→f. gravel	0.0
				SR→~~SR~~R., loose wet, NO/NS	
			1.9→2.2	Dark Brown, SILT, trace M→f. SR gravel, stiff,	0.0
				wet, NP, NO/NS	

ARCADIS

Sample Log

Boring ID: M-S15 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/15/11 Drilling Completed: 07/15/11

Total Depth Drilled: ~~12~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', (Archive 4-6', 6-8', 8-10')

↓ DUP-071511 ↓ DUP-071511B

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.2'	0→2.2'	Dark Brown→ Med Brown, Sandy SILT, vf→f. Sand, SA→SR	0.0
				few C. sand→f. gravel, SA→SR, trace M→C. grad SR→R,	
				trace organics @ 0→0.2' (Roots), loose, moist→	
				Dry, NP, NO/NS: No odor/staining	
4	8'	2.3'	0→0.7'	Slgh	
			0.7→2.3'	Med→Lt Brown, M→f. SAND, SA→SR, some	
				vf/C. sand SR→SA, trace f→M. gravel, SR,	
				loose, moist→Dry, NO/NS	
8	12	2.7	0→1.2'	Slgh	
			1.2→2.7'	SAA, moist→wet	

ARCADIS

Sample Log

Boring ID: M-S16 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/15/11 Drilling Completed: 07/15/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.05'	0→2.05	Dark→Orangish Brown, Sandy SILT, vf→f. Sand,	0.0
				trace C. Sand→f. grael SR→R, loose, Dry, NP, NO/NS:	
				NO odor/staining.	
4	8'	2.4'	0→0.9'	Slough	0.0
			0.9→2.4'	Same as Above, Orangish Brown	0.0
8	12'	~~0~~3.0'	0→1.5'	Slough	0.0
			1.5→1.7'	SAA	0.0
			1.7→3'	Lt Brown→Orangish Brown, f→M SAND, some VF/C.	0.0
				SR→R. Sand, trace f→M. SR→R Gravel, trace	
				Silts, loose, wet→moist, NS/NO	

ARCADIS

Sample Log

Boring ID: M-S17 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/15/11 Drilling Completed: 07/15/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', (2-4' Archive) 4-6', 6-8', 8-10' (MS/MSD)

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.85'	0→1.8'	Dark Brown → Orange Brown, Sandy SILT, M→f.	0.0
				SA→SR ~~SAND~~ sand, trace C. sand→f. gravel, loose,	
				Dry, NP, NO/NS : No odor/staining	
			1.8→2.85'	Med Brown, M→f. SAND, some vf/C. sand SR→R,	0.0
				few silts, trace f→M. gravel, SR→R, loose, Dry,	
				NO/NS.	
4	8'	3.15	0→0.65'	Slough	0.0
			0.65→3.15	Same as 1.8→2.85' in 0→4' Core, Moist	0.0
8	12'	2.7'	0→1.9'	Slough	0.0
			1.9→2.7'	Same as above, wet	0.0

ARCADIS

Sample Log

Boring ID: M-S18 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/14/11 Drilling Completed: 07/14/11

Total Depth Drilled: 10 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', 4-6', 6-8', 8-10'

Length and Diameter of Sampling Device: 4' X 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.55	0→1.2'	Dark Brown, Sandy SICT, f→M. SA→SR Sand,	0.0
				few C. Sands→f. grands SR→R, loose, Dry, NP,	
				NO/NS : No odor/staining	
			1.2→2.55	LT→orangish Brown, SAND, M→f SA→SR, some	0.0
				vf. Sands→Silts, few C. Sand→f. grands SR→R,	
				trace M→C. SR→R grands, loose, moist, NO/NS	
4	8'	2.5'	0→0.7'	Sloph	0.0
			0.7→2.5'	SAA except, few vf→silts, some C. Sand→f. grands.	0.0
8	12'	2.2'	0→1.7'	Sloph	0.0
			1.7→2.2	Same as 0.7→2.5' in 4→8' core	0.0

ARCADIS

Sample Log

Boring ID: M-S19 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/14/11 Drilling Completed: 07/14/11

Total Depth Drilled: ~~16~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive) 4-6', 6-8', 8-10'

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.3'	0→2.3'	Med→ orange-ish Brown, sandy SILT, f→M SA→	0-0
				SR Sand, few C. sands→f. gravels, SR→R, loose,	
				Dry, NP, NO/NS: No odor/staining	
4	8'	2.7'	~~0→0.7'~~ 0→0.7' slough		0.0
			0.7→2.7'	Same as 0→2.3' in 0→4' core, trace	0.0
				M→C. gravels SR→R, moist	
8	12'	2.0'	0→1.2'	Slough	0.0
			1.2→2'	Same as 0.7→2.7' in 4→8' core	0.0

ARCADIS

Sample Log

Boring ID: M-S20 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/13/11 Drilling Completed: 07/13/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', 4-6', 6-8', 8-10' (Archive MS/MSD)

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Patrick McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	1.9	0→0.7'	Dark Brown, sandy SILT, vf→f. Sand, trace	0.0
				C. Sand→f. gravel SR→R, loose, Dry, trace	
				Organics (Roots/Leaves), NP, NO/NS: No odor/	
				Stormy.	
			0.7→1.9'	SAA except, f→M. Sand, few C. Sand→	0.0
				f. gravel.	
4	8'	1.6'	0→0.4'	Slough	0.0
			0.4→1.6'	Lt Brown, SAND, M→VF. SA→SR, few Silts,	0.0
				few f→M. SR→R gravel, loose, moist→Dry, NO/NS	
8	12'	1.3'	0→0.6	Slough	0.0
			0.6→1.3	SAA	0.0

- Note photo of 8→10' should be 4→8' Log

ARCADIS

Sample Log

Boring ID: M-S21 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/13/11 Drilling Completed: 07/13/11

Total Depth Drilled: ~~10~~ 12 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4' x 1.5' Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdams Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.7'	0→2.7'	Dark→Med Brown, Sandy SILT, vf→f. Sand,	0.0
				Few C. SA→SR sand, trace organics @ 0→0.4' (Roots),	
				Dry, loose, NP, NO/NS: No odor/staining.	
4	8'	2.5'	0→7.7'	Slough	0.0
			0.7→2.5'	Lt Brown, Gravly SAND, f→M. SA→SR Sand,	0.0
				f→M. grad SR→R, loose, few C. SR sand,	
				moist→Dry, NO/NS	
8	12'	1.3'	0→0.9	Slough	0.0
			0.9→1.3	SAA	0.0

—Photo 4→8' Did Not Record

ARCADIS

Sample Log

Boring ID: M-S22 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY

Drilling Started: 07/12/11 Drilling Completed: 07/13/11

Total Depth Drilled: 10 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive 4-6', 6-8', 8-10' collected 7/13/11)

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.5'	0→1.9'	Dark Brown, Silt/Soil, few vf→f Sands, trace	0.0
				organics (Roots, Brambles), Dry, NP, NO/NS: No	
				odor/staining	
			0.9→2.5	Lt Brown, Silty SAND, vf→f. sand, few M.	0.0
				SA→SR sands, trace C.Sands→f.gravels SR→R,	
				loose, Dry, NO/NS	
4	8	1.9'	0→.7	Slough	0.0
			.7→1.9'	Lt Brown, f→vf. SAND, SA→SR, loose, trace	0.0
				C. SR→R. Sand, ~~Dry~~ Moist, NO/NS	
8	10'	0.9'	0→0.9'	Slough (will attempt Re-Sample on 7/13/11)	0.0
7/13 8	12'	2.4'	0→1.1'	Slough	0.0
			1.1→2.4'	Lt Brown, F→vf. SAND, SA→SR, Loose, trace	0.0
				C. SR→R Sand, Moist→Wet, NO/NS	

ARCADIS

Sample Log

Boring ID: M-S23 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/12/11 Drilling Completed: 07/12/11

Total Depth Drilled: 10 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archived 4-6', 6-8', 8-10') Dup-071211

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Patrick McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.5'	0→0.2'	topSoil, med→Dark Brown Sandy SILT, loose, Dry,	0.0
				few Organics (Plants, Roots), NO/NS: No odor/staining	
			0.2→2.5'	Med→LT Brown, vf→f. SAND and SILT, SA→SR	0.0
				Sand, few m→C. Sand, trace-clay lense @ 2.05→	
				2.2', moist→Dry, loose, NO/NS, NP	
4	8'	1.5'	0→0.9'	SAA	0.0
			0.9→1.5'	LT Brown, M→C. SA→SR SAND, ~~trace~~ few	0.0
				M→C. SR→R gravel, loose, moist, trace vf→f Sand,	
				NO/NS	
8	10	1.3'	0→1.3'	Sloughs from Above, med→LT Brown Sandy SILT, loose,	0.0
				NO/NS	

ARCADIS

Sample Log

Boring ID: M-S24 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/12/11 Drilling Completed: 07/12/11

Total Depth Drilled: 10 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4' (Archive 4-6', 6-8', 8-10')

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4	2.3'	0→1.2'	med→Dark Brown, f→vf. (SA→SR) SAND, few silts,	0.0
				trace m→c. (SA→SR) gravel, moist, Loose, NP, NO/NS	
				NO/NS: No odor/No staining	
			1.2→2.3'	SAA; Dark Brown	0.0
4	8	2.7	0→2.7'	med→Orangish Brown, m→f. SAND, SA→SR,	0.0
				some vf. sand, trace silts, trace SR→R m→c. gravel,	
				loose, moist→wet @ 1.9→2.7', NO/NS	
8	10'	1.4	0→1.4'	SAA; wet	0.0

ARCADIS

Sample Log

Boring ID: M-S25 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/12/11 Drilling Completed: 07/12/11

Total Depth Drilled: 10 feet Hole Diameter: 1.75 inches Sampling Interval: 0-.5', .5-2', 2-4', (Archived) 4-6', 6-8', 8-10'

Length and Diameter of Sampling Device: 4' x 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta well Driller: Pat McAdam Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4	3'	0→3'	Med Brown, M→f. SAND, sub angular → sub Rounded,	0.0
				Some silt, few f→m sub Rounded gravel, loose,	
				moist → Dry, NO/NS (no odor/staining)	
4	6'	1.6'	0→1.6'	SAA; moist @ 0.9→1.6'; Dark Brown	0.0
6	10	1.0'	0→0.7'	Lt Brown + Gray, f→VF. SAND (SR→R), few silts, trace	0.0
				Sub Rounded→Rnded f→m. gravel, loose, moist→	
				Dry, NO/NS	
			0.7→1'	Dark Brown, silty SAND, M→f. Sand sub angular→SR,	0.0
				moist→wet, med Dense, NP, NO/NS	
				End of BH @ 10'	

Sample Log

Boring ID: M-S26 Project Name and No. Bayer Material Science LLC, B0032305.0004.00002

Site Location: 125 New South Road, Hicksville, NY Drilling Started: 07/12/11 Drilling Completed: 07/12/11

Total Depth Drilled: 10 feet Hole Diameter: 1.75 inches Sampling Interval: 2-4', 4-6', (6-8', 8-10') Archived

Length and Diameter of Sampling Device: 4' X 1.5" Type of Sampling Device: Geoprobe Liner

Drilling Method: Geopobe Drilling Fluid Used: NA

Drilling Contractor: ~~Zebra~~ Delta Driller: Patrick McAdams Helper: NA

Prepared By: D.Zuck Hammer Weight: NA Hammer Drop: NA inches

Sample Depth (feet below land surface) From	To	Sample Recovery (feet)	Sample Interval (feet)	Sample Description	PID (ppm)
0	4'	2.7'	0→1.3'	Med→Lt Brown, Gravely SAND, M→f. sub angular→	0.0
				Sub Rnded sand, M→C. sub Rnded→Rounded gravel,	
				few silts, loose, Dry, NS/NO :(wood or/stone)	
			1.3→2.7	Med→Dark Brown, Sandy SILT, M→f sub angular→	0.0
				Sub Rnded Sand, some M→C. gravel sub Rnded→Rnded,	
				med stiff, Moist, NP, NS/NO	
4	8'	2.1'	0→1.4	SAA	0.0
			0.4→0.65'	M→f. SAND, LT Brown, sub angular→sub Rnded,	0.0
				loose Dry, NO/NS	
			0.65→2.1'	Orangish-Brown, M→f. sub angular→ sub Rnded SAND,	0.0
				few Silts, trace M→f. sub Rnded gravels, wet→	
				Saturated, med Dense, NS/NO	
8	10'	1.9'	0→1.9'	Lt→Med Brown, M→f. SAND, few M→C. sub.	0.0
				Rnded→Rounded gravel, few silts @ 0.5→1.1', Moist→	
				Dry, loose, NO/NS	

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Attachment B

Air Monitoring Logs

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Infrastructure, environment, facilities

AIR MONITORING LOG

Project Bayer Material Science LLC **Site Location** Hicksville, NY

Project #: B0032305.4.2

Prepared by D.Zuck **Date** 7/12/2011

TIME	Wind Direction	Work Zone PID (ppm)	Work Zone PDR (ug/m3)	Upwind PDR (ug/m3)	Downwind PDR (ug/m3)	Notes
1045	NW	0	0.002	0	0.001	Unit on.
1145	W	0	0	0	0	
1240	W	0	0	0	0	Lunch from 1240-1320.
1345	SW	0	0.002	0	0	
1445	SW	0	0	0	0	
1545	W	0	0	0	0	
1645	W	0	0	0	0	
1745	W	0	0.001	0	0	Collected units for day.

COMMENTS

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Infrastructure, environment, facilities

AIR MONITORING LOG

Project Bayer Material Science LLC **Site Location** Hicksville, NY

Project #: B0032305.4.2

Prepared by D.Zuck **Date** 7/13/2011

TIME	Wind Direction	Work Zone PID (ppm)	Work Zone PDR (ug/m3)	Upwind PDR (ug/m3)	Downwind PDR (ug/m3)	Notes
830	NW	0	0	0	0	Unit on/changed out with Data Logger Unit.
930	NW	0	0	0	0	
1030	NW	0	0	0	0	
1130	NW	0	0.012	0	0.006	
1230	NW	0	0	0	0	
1330	NW	0	0	0	0	Eronos readings w/ no Re-cal. at 1255; Readings in normal range.
1430	NW	0	0.005	0.007	0.003	
1530	NW	0	0	0	0	
1630	WNW	0	0.009	0	0.001	
1730	NW	0	0.011	0	0	Completed drilling for day.
1830	W	0	0	0	0	
1920	WSW	0	0	0	0	Completed sampling/Equipment packed up.

COMMENTS

ARCADIS
Infrastructure, environment, facilities

AIR MONITORING LOG

Project Bayer Material Science LLC **Site Location** Hicksville, NY

Project #: B0032305.4.2

Prepared by D.Zuck **Date** 7/14/2011

TIME	Wind Direction	Work Zone PID (ppm)	Work Zone PDR (ug/m3)	Upwind PDR (ug/m3)	Downwind PDR (ug/m3)	Notes
915	NW	0	0	0	0	
1015	NW	0	0	0	0	
1115	NNW	0	0	0	0	
1215	WNW	0	0	0	0.002	Lunch at 1300.
1330	NW	0	0	0	0	Returned.
1430	NW	0	0	0	0	
1530	NW	0	0	0	0	
1630	NW	0	0	0	0	
1730	NW	0	0.009	0.003	0	About 1700, moved truck.
1830	NW	0	0	0	0	
1850	NW	0	0	0	0	End of day.

COMMENTS

At 1600 - 1620, moved locations; PDR was not stabilizing; turned off and back on; Read 0.000 (No calibration was redone).

Again at about 1700, same procedure.

Driller/Drilling completed at 1745.

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Infrastructure, environment, facilities

AIR MONITORING LOG

Project Bayer Material Science LLC **Site Location** Hicksville, NY

Project #: B0032305.4.2

Prepared by D.Zuck **Date** 7/15/2011

TIME	Wind Direction	Work Zone PID (ppm)	Work Zone PDR (ug/m3)	Upwind PDR (ug/m3)	Downwind PDR (ug/m3)	Notes
815	N	0	0	0	0	Start of work.
915	NW	0	0	0	0	
1015	NW	0	0	0	0	
1115	NW	0	0	0	0	Drilling completed at 1100.
1130	NW	0.0 - 0.1	0	0	0	End of work.

COMMENTS

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Attachment C

Data Validation Reports

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

Bayer MaterialScience LLC

Data Usability Summary Report (DUSR)

HICKSVILLE, NEW YORK

Metals Analyses

SDG #: 220-16006

Analyses Performed By:
TestAmerica
Shelton, Connecticut

Report #: 14528R
Review Level: Tier III
Project: B0032305.0004.00002

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 220-16006 for samples collected in association with the Bayer Material Science site in Hicksville, New York. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
M-S26(2-4')	220-16006-1	Soil	7/12/2011					X	
M-S26(4-6')	220-16006-2	Soil	7/12/2011					X	
M-S25(0-0.5')	220-16006-5	Soil	7/12/2011					X	
M-S25(0.5-2')	220-16006-6	Soil	7/12/2011					X	
M-S25(2-4')	220-16006-7	Soil	7/12/2011					X	
M-S24(0-0.5')	220-16006-11	Soil	7/12/2011					X	
M-S24(0.5-2')	220-16006-12	Soil	7/12/2011					X	
M-S24(2-4')	220-16006-13	Soil	7/12/2011					X	
DUP-071211	220-16006-17	Soil	7/12/2011	M-S23(0.5-2')				X	
M-S23(0-0.5')	220-16006-18	Soil	7/12/2011					X	
M-S23(0.5-2')	220-16006-19	Soil	7/12/2011					X	
M-S23(2-4')	220-16006-20	Soil	7/12/2011					X	
M-S22(0-0.5')	220-16006-24	Soil	7/12/2011					X	
M-S22(0.5-2')	220-16006-25	Soil	7/12/2011					X	
M-S22(2-4')	220-16006-26	Soil	7/12/2011					X	
M-S14(0-0.5')	220-16006-29	Soil	7/12/2011					X	
M-S14(0.5-2')	220-16006-30	Soil	7/12/2011					X	
M-S14(2-4')	220-16006-31	Soil	7/12/2011					X	
M-S13(0-0.5')	220-16006-36	Soil	7/13/2011					X	
M-S13(0.5-2')	220-16006-37	Soil	7/13/2011					X	
M-S13(2-4')	220-16006-38	Soil	7/13/2011					X	
M-S12(0-0.5')	220-16006-42	Soil	7/13/2011					X	
M-S12(0.5-2')	220-16006-43	Soil	7/13/2011					X	
M-S12(2-4')	220-16006-44	Soil	7/13/2011					X	
DUP-071311	220-16006-48	Soil	7/13/2011	M-S10(0.5-2')				X	
M-S10(0-0.5')	220-16006-50	Soil	7/13/2011					X	
M-S10(0.5-2')	220-16006-51	Soil	7/13/2011					X	
M-S10(2-4')	220-16006-52	Soil	7/13/2011					X	
M-S11(0-0.5')	220-16006-56	Soil	7/13/2011					X	
M-S11(0.5-2')	220-16006-57	Soil	7/13/2011					X	
M-S11(2-4')	220-16006-58	Soil	7/13/2011					X	
M-S8(0-0.5')	220-16006-62	Soil	7/13/2011					X	

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
M-S8(0.5-2')	220-16006-63	Soil	7/13/2011					X	
M-S8(2-4')	220-16006-64	Soil	7/13/2011					X	
M-S20(0-0.5')	220-16006-69	Soil	7/13/2011					X	
M-S20(0.5-2')	220-16006-70	Soil	7/13/2011					X	
M-S20(2-4')	220-16006-71	Soil	7/13/2011					X	
M-S21(0-0.5')	220-16006-75	Soil	7/13/2011					X	
M-S21(0.5-2')	220-16006-76	Soil	7/13/2011					X	
M-S21(2-4')	220-16006-77	Soil	7/13/2011					X	
M-S9(0-0.5')	220-16006-81	Soil	7/13/2011					X	
M-S9(0.5-2')	220-16006-82	Soil	7/13/2011					X	
M-S9(2-4')	220-16006-83	Soil	7/13/2011					X	
M-S5(0-0.5')	220-16006-87	Soil	7/14/2011					X	
M-S5(0.5-2')	220-16006-88	Soil	7/14/2011					X	
M-S5(2-4')	220-16006-89	Soil	7/14/2011					X	
M-S6(0-0.5')	220-16006-93	Soil	7/14/2011					X	
M-S6(0.5-2')	220-16006-94	Soil	7/14/2011					X	
M-S6(2-4')	220-16006-95	Soil	7/14/2011					X	
M-S7(0-0.5')	220-16006-99	Soil	7/14/2011					X	
M-S7(0.5-2')	220-16006-100	Soil	7/14/2011					X	
M-S7(2-4')	220-16006-101	Soil	7/14/2011					X	
DUP-071411	220-16006-105	Soil	7/14/2011	M-S7(0.5-2')				X	

Note: Sample results were reported on a dry-weight basis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 6010B. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002 and USEPA Region II SOP HW-2 Revision 13, September 2006.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within control limits.

    * Duplicate analysis is not within control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010B	Water	180 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
	Soil	180 days from collection to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminant analytes are calculated at ten times) is calculated for QA blanks containing concentrations greater than the instrument detection limit (IDL) or method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results are not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All initial and continuing calibration verification standard recoveries were within the control limit.

3.3 Reporting limit (RL) Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the RL. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table.

All RL standard recoveries were within control limits.

3.4 ICP Interference Check Standard (ICS)

The ICS verifies the laboratories inter-element and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Sample Analysis

MS/MSD and laboratory duplicate sample data are used to assess the precision and accuracy of the analytical method.

4.1 Matrix Spike Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The relative percent difference (RPD) between the MS and MSD results must be no greater than the established acceptance limit of 20%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed. Sample results associated with MS exceedances where the parent samples are not site-specific are not qualified.

Sample locations M-S22(2-4'), M-S11(0.5-2'), and M-S21(0-0.5') were used in the MS/MSD analyses. All analytes associated with MS/MSD recoveries and RPDs were within the control limits.

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the reporting limit (RL). A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

Sample locations M-S22(2-4'), M-S11(0.5-2'), and M-S21(0-0.5') were used in the laboratory duplicate analyses. The laboratory duplicate sample results exhibited RPDs within the control limit.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analyses exhibited recoveries within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in mg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
M-S23(0.5-2')/DUP-071211	Arsenic	3.9 J	4.2 J	AC
	Cadmium	1.2 U	1.3 U	AC
M-S10(0.5-2')/DUP-071311	Arsenic	4.1 J	4.7 J	AC
	Cadmium	1.1 J	1.4	AC
M-S7(0.5-2')/DUP-071411	Arsenic	4.0 J	4.9 J	AC
	Cadmium	1.3 U	1.4 U	AC

AC Acceptable
J Estimated (result is < RL)
U Not detected

The field duplicate sample results are acceptable.

7. Post-Digestion Spike (PDS) Analysis

The post-digestion spike analysis is used to assess if a significant interference exists independent of the sample digestion process. All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The PDS recovery control limits do not apply for PDS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the PDS concentration by a factor of four or greater. Sample results associated with PDS exceedances where the parent samples are not site-specific are not qualified.

Sample locations M-S22(2-4'), M-S11(0.5-2'), and M-S21(0-0.5') were used in the PDS analyses. The PDS results exhibited acceptable recoveries.

8. Serial Dilution Analysis

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

Sample locations M-S22(2-4'), M-S11(0.5-2'), and M-S21(0-0.5') were used in the serial dilution analyses. The serial dilution results exhibited %Ds within the control limit.

9. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Matrix Spike (MS) Accuracy (%R)		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Post-Digestion Spike (PDS) Accuracy (%R)		X		X	
Post-Digestion Spike Duplicate (PDSD) %R					X
PDS/PDSD Precision (RPD)					X
Laboratory Duplicate Sample RPD		X		X	
Field Duplicate Sample RPD		X		X	
ICP Serial Dilution		X		X	
Reporting Limit Verification		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
RL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R – Percent recovery
RPD – Relative percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
220-16006	7/12/2011	SW-846 6010B	M-S26(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S26(4-6')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S25(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S25(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S25(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S24(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S24(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S24(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	DUP-071211	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S23(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S23(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S23(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S22(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S22(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S22(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S14(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S14(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/12/2011	SW-846 6010B	M-S14(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S13(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S13(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S13(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S12(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S12(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S12(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	DUP-071311	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S10(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S10(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S10(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S11(0-0.5')	Solid	--	--	--	Yes	--	

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
220-16006	7/13/2011	SW-846 6010B	M-S11(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S11(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S8(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S8(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S8(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S20(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S20(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S20(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S21(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S21(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S21(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S9(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S9(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/13/2011	SW-846 6010B	M-S9(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S5(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S5(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S5(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S6(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S6(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S6(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S7(0-0.5')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S7(0.5-2')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	M-S7(2-4')	Solid	--	--	--	Yes	--	
220-16006	7/14/2011	SW-846 6010B	DUP-071411	Solid	--	--	--	Yes	--	

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

Validation Performed By: Dennis Dyke

Signature: 

Date: August 3, 2011

Peer Review: Dennis Capria

Date: August 12, 2011

CHAIN OF CUSTODY /
CORRECTED SAMPLE ANALYSIS DATA SHEETS

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Andy Enigk	**Field Sampler:** D. Zuck	**TAT Required (business days):** 10 Days	**Lab PM/Contact:** Jackie Trudell
Company: Arcadis	**Mobile/Field Number:** 516-369-2741		**Lab Job Number (Lab Use Only):** 160086 split 7/14/11
Address: 6723 Towpath Rd	**E-Mail:** DZuck@Arcadis-US.com	**Deliverable Type (Report/EDD):**	**Passed Rad Screen (Lab Use Only):** [X] Yes [ ] No
City, State, Zip: Syracuse, NY 13214	**PO #:**	**Sample Disposal:** [ ] Return to Client [ ] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained for longer than 1 month)	**Cooler Temperatures (Lab Use Only):** 1) 3.4 2) 3.7 3) 2.5 FR-
Phone: 315-671-9548	**WO #:**		
Email: Andrew.Enigk@Arcadis-US.com	**Project #:** B0032305.4.2	**State Regulatory QC Criteria Requirements:**	
Project Name/Site Location (State): Bayer Hicksville, NY	**SSOW#:**		

Samples submitted for analysis will be subject to TestAmerica's terms and conditions

							No. of Containers/Preservatives							Analysis (Attach list if more space is needed)										Comments
TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	(USEPA SW-846 Method 6010 As+Cd		Archive Sample (on Hold)									
1	M-526 (2→4')	7/12/11	1110	S		1							X											
2	M-526 (4→6')		1125			1							X											
3	M-526 (6→8')		1126			1									X									
4	M-526 (8→10')		1140			1									X									
5	M-525 (0→.5')		1208			1							X											
6	M-525 (.5→2')		1209			1							X											
7	M-525 (2→4')		1210			1							X											
8	M-525 (4→6')		1220			1									X									
9	M-525 (6→8')		1221			1									X									
10	M-525 (8→10')		1230			1									X									

Relinquished by: Dan Zuck	Date/Time: 7/14/11 1400	Company: Arcadis	Received by:	Date/Time: 7/14/11 @ 1445	Company: TAL
Relinquished by:	Date/Time: 7/14/11 @ 1800	Company: TAL	Received by:	Date/Time: 7/14/11 1900	Company: TACT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Comments: Please Report Results to Andy Enigk; Note Some Samples to be held

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Andy Enigk	Field Sampler: D. Zuck	TAT Required (business days): 2 week TAT	Lab PM/Contact: Jackie Trudell	COC Number: 20274
Company: Arcadis	Mobile/Field Number: 516-369-2741		Lab Job Number (Lab Use Only): 160086 SRH 7/14/11	Page 2 of 10
Address: 6723 Towpath Rd	E-Mail:	Deliverable Type (Report/EDD):	Passed Rad Screen (Lab Use Only): [X] Yes, [ ] No	Carrier Tracking Notes:
City, State, Zip: Syracuse, NY 13214	PO #:	Sample Disposal: [ ] Return to Client [ ] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained for longer than 1 month)	Cooler Temperatures (Lab Use Only): 1) 3.4 2) 3.7 3) 2.5 IR-3	
Phone: 315-671-9548	WO #:			
Email: Andrew.Enigk@Arcadis-us.com	Project #: B0032305.4.2	State Regulatory QC Criteria Requirements:		
Project Name/Site Location (State): Bayer Hicksville NY	SSOW#:			

Samples Submitted to TestAmerica will be subject to TestAmerica Terms and Conditions

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	USEPA SW-846 Method 6010 As/Cd	Archive Sample (On Hold)	Comments
11	M-S24 (0→0.5')	7/12/11	1350	S	N	1							X		
12	M-S24 (0.5→2')	↓	1351	↓	↓	1							X		
13	M-S24 (2→4')	↓	1352	↓	↓	1							X		
14	M-S24 (4→6')	↓	1426	↓	↓	1								X	
15	M-S24 (6→8')	↓	1427	↓	↓	1								X	
16	M-S24 (8→10')	↓	1435	↓	↓	1								X	
17	DUP-071211	↓	—	↓	↓	1							X		
18	M-S23 (0→0.5')	↓	1500	↓	↓	1							X		
19	M-S23 (0.5→2')	↓	1501	↓	↓	1							X		
20	M-S23 (2→4')	↓	1502	↓	↓	1							X		

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Dan Zuck	7/14/11 1400	Arcadis	[signature]	7/14/11 @ 1415	TA/CT
[signature]	7/14/11 @ 1800	TA/CT	[signature]	7/14/11 1900	TA CT

Comments: See Page #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Andy Enrick	**Field Sampler:** D. Enrick	**TAT Required (business days):** 2wk TAT	**Lab PM/Contact:** Jackie Trudell
Company: Arcadis	**Mobile/Field Number:** 516-369-2741		**Lab Job Number (Lab Use Only):** 160056 SDG# 7/14/11
Address: 6723 Towpath Rd	**E-Mail:**	**Deliverable Type (Report/EDD):**	**Passed Rad Screen (Lab Use Only):** Yes [ ] No
City, State, Zip: Syracuse, NY 13214	**PO #:**	**Sample Disposal:** [ ] Return to Client [ ] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained for longer than 1 month)	**Cooler Temperatures (Lab Use Only):** 1) 3.4 3) 2.5 2) 3.7 IR-3
Phone: 315-671-9548	**WO #:**		
Email: Andrew.Enrick@Arcadis-us.com	**Project #:** B0032305.4.2	**State Regulatory QC Criteria Requirements:**	
Project Name/Site Location (State): Boyer Hicksville, NY	**SSOW#:**		

Carrier Tracking Notes:

COC Number: 20275
Page 3 of 10

Samples submitted for analysis will be subject to TestAmerica's Terms and Conditions.

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	No. of Containers/Preservatives: Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	Analysis (Attach list if more space is needed): USEPA SW-846 Method 8010 As/Cd	Archive Sample (on Hold)	Comments
21	M-S23 (4→6')	7/12/11	1510	S	N	1								X	
22	M-S23 (6→8')		1510		N	1								X	
23	M-S23 (8→10')		1520		N	1								X	
24	M-S22 (0→0.5)		1730		N	1							X		
25	M-S22 (0.5→2)		1730		N	1							X		
26	M-S22 (2→4')		1730		Y	3							X		MS/MSD
27	M-S22 (4→6')		1755		N	1								X	
28	M-S22 (6→8')		1756		N	1								X	
	~~M-S22 (8→10')~~ DUP					1									DUP
29	M-S14 (0→0.5)		1630		N	1							X		

Relinquished by: Dan Enrick	Date/Time: 7/14/11 @ 1400	Company: Arcadis	Received by:	Date/Time: 7/14/11 @ 1400	Company: TA/CT
Relinquished by:	Date/Time: 7/14/11 @ 1800	Company: TA/CT	Received by: Judith Hall	Date/Time: 7/14/11 1900	Company: TA/CT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Comments: See COC #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

07/20/2011

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Andy Enigk	Field Sampler: D. Zuck	TAT Required (business days): 2wk	Lab PM/Contact: Jackie Trudell	COC Number: 20276
Company: Arcadis	Mobile/Field Number: 516-369-2741		Lab Job Number (Lab Use Only): 160086 SEH 7/14/11	Page 4 of 10
Address: 6723 Towpath Rd	E-Mail: DZuck@Arcadis-US.com	Deliverable Type (Report/EDD):		Carrier Tracking Notes:
City, State, Zip: Syracuse, NY 13214	PO #:	Sample Disposal: [ ] Return to Client [ ] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained for longer than 1 month)	Passed Rad Screen (Lab Use Only): [X] Yes [ ] No	
Phone: 315-671-9544	WO #:		Cooler Temperatures (Lab Use Only): 1) 3.4 2) 3.7 3) 2.5 IR	
Email: Andrew.Enigk@Arcadis-US.com	Project #: B0032805.4.2	State Regulatory QC Criteria Requirements:	Analysis (Attach list if more space is needed)	
Project Name/Site Location (State): Bayer Hicksville, NY	SSOW#:			

Samples submitted for analysis will be subject to TestAmerica Terms and Conditions.

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	USEPA SW-846 Method 6010 As/Cd	Archive Sample (on Hold)	Comments
30	M-S14 (0.5→2')	7/12/11	1633	S	N	1 (3)							X		
31	M-S14 (2→4')	7/12/11	1635	↓	N	1							X		
32	M-S14 (4→6')	7/12/11	1705	↓	N	1								X	
33	M-S14 (6→8')	7/12/11	1706	↓	↓	1								X	
34	M-S14 (8→10')	7/13/11	1050	↓	↓	1								X	
35	M-S22 (8→10')	7/13/11	1032	↓	↓	1								X	
36	M-S13 (0→0.5')	↓	1105	↓	↓	1							X		
37	M-S13 (0.5→2')	↓	1106	↓	↓	1							X		
38	M-S13 (2→4')	↓	1107	↓	↓	1							X		
39	M-S13 (4→6')	↓	1115	↓	↓	1								X	

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Dan Zuck	7/14/11 @ 1400	Arcadis	[signature]	7/14/11 1400	TA/CT
[signature]	7/14/11 @ 1800	TA/CT	Scott Rafall	7/14/11 1900	TA CT

Comments: See Page #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

TestAmerica Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: Andy Enigk	Field Sampler: D. Zuck	TAT Required (business days): 2 week	Lab PM/Contact: Jackie Trudell	COC Number: 20277
Company: Arcadis	Mobile/Field Number: 516-369-2741		Lab Job Number (Lab Use Only): 160086 SR 7/14/11	Page 5 of 10
Address: 6723 Towpath Rd	E-Mail:	Deliverable Type (Report/EDD):	Passed Rad Screen (Lab Use Only): [X] Yes [ ] No	Carrier Tracking Notes:
City, State, Zip: Syracuse, NY 13214	PO #:	Sample Disposal: [ ] Return to Client [ ] Disposal by Lab [ ] Archive for __ Months (A fee may be assessed if samples are retained for longer than 1 month)	Cooler Temperatures (Lab Use Only): 1) 3.4 2) 3.7 3) 2.5 IR	
Phone: 315-671-9548	WO #:			
Email: Andrew.Enigk@Arcadis-us.com	Project #: B0032305.4.2	State Regulatory QC Criteria Requirements:	Analysis (Attach list if more space is needed)	
Project Name/Site Location (State): Bayer Hicksville, NY	SSOW#:			

Samples submitted for analysis will be subject to TestAmerica Terms and Conditions

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	USEPA SW-846, Method 6010 As/Cd	Archive Sample (On Hold)	Comments
40	M-S13 (6→8')	7/13/11	1116	S		1								X	
41	M-S13 (8→10')	↓	1140	↓		1								X	
42	M-S12 (0→0.5')		1235			1							X		
43	M-S12 (0.5→2')		1236			1							X		
44	M-S12 (2→4')		1238			1							X		
45	M-S12 (4→6')		1255			1								X	
46	M-S12 (6→8')		1256			1								X	
47	M-S12 (8→10')		1305			1								X	
48	DUP-071311		—			1							X		
49	DUP-071311B	↓	—	↓		1								X	

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Dan Zuck	7/14/11 1400	Arcadis	[signature]	7/14/11 @ 1415	TA CT
[signature]	7/14/11 @ 1800	TA CT	Scott Hall	7/14/11 1900	TA CT

Comments: Please Report Results to Andy Enigk

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy
Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

TAL-0015 (0609)

160086 SRH 7/14/11

ARCADIS

Laboratory Task Order No./P.O. No. B00323054.2 **CHAIN-OF-CUSTODY RECORD** Page 6 of 10

Project Number/Name Bayer Material Science LLC

Project Location Hicksville, NY

Laboratory Test America CT

Project Manager Andy Enright (315-671-9548)

Sampler(s)/Affiliation D. Zuck (516-369-2741)

	Sample ID/Location	Matrix	Date/Time Sampled	# of Jars / ~~Lab ID~~	ANALYSIS / METHOD / SIZE: US EPA Method 6010 SW-846	Archive sample (Hold)					Remarks	Total
50	M-S10 (0→0.5')	S	7/13/11 (1345)	1	X							1
51	M-S10 (0.5→2')		(1346)		X							1
52	M-S10 (2→4')		(1347)		X							1
53	M-S10 (4→6')		(1440)			X						1
54	M-S10 (6→8')		(1441)			X						1
55	M-S10 (8→10')		(1447)			X						1
56	M-S11 (0→0.5')		(1534)		X							1
*57	M-S11 (0.5→2')		(1535)		X						MS/MSD	3
58	M-S11 (2→4')		(1537)		X							1
59	M-S11 (4→6')		(1546)			X						1
60	M-S11 (6→8')		(1548)			X						1
61	M-S11 (8→10')		(1550)			X					MS/MSD	3
*62	M-S8 (0→0.5')		(1643)		X							1
63	M-S8 (0.5→2')		(1644)		X							1
64	M-S8 (2→4')		(1645)		X							1

Total No. of Bottles/ Containers: 19

Sample Matrix: L = Liquid; S = Solid; A = Air

					Seal Intact?
Relinquished by: D. Zuck	Organization: Arcadis	Date 7/14/11	Time 1400		
Received by:	Organization: TA CT	Date 7/14/11	Time 1605		Yes No N/A
Relinquished by:	Organization: TA CT	Date 7/14/11	Time 1800		Seal Intact?
Received by: Todd Hall	Organization: TA CT	Date 7/14/11	Time 1900		Yes No N/A

Special Instructions/Remarks: Please Report Results to Andy Enright

Temps @ 1) @ 3.4 2) @ 3.7 3) @ 2.5 IR-3

Delivery Method: ☐ In Person ☐ Common Carrier _____ SPECIFY ☒ Lab Courier ☐ Other _____ SPECIFY

07/27/2011

AG 05-12/01

ARCADIS

160056 SRH 7/14/11

Laboratory Task Order No./P.O. No. B0032305.42 **CHAIN-OF-CUSTODY RECORD** Page 7 of 10

Project Number/Name Boxer Mateval Science LLC

Project Location Hudsville, NY

Laboratory Test America CT

Project Manager Andrew Ewig 315-671-9548

Sampler(s)/Affiliation Dan Zuck 516-369-2741

	Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	ANALYSIS / METHOD / SIZE: Method 6010 SW-846 EPA	Archive Sample (Hold)					Remarks	Total
65	M-58 (4→6')	S	7/13/11 (1707)			X						1
66	M-58 (6→8')		(1708)			X						1
67	M-58 (8→10')		(1715)			X						1
68	DUP-071311C		(—)			X						1
69	M-520 (0→0.5')		(1742)		X							1
70	M-520 (0.5→2')		(1743)		X							1
71	M-520 (2→4')		(1744)		X							1
72	MS-20 (4→6')		(1757)			X						1
73	MS-20 (6→8')		(1800)			X					MS/MSD	3
74	MS-20 (8→10')		(1807)			X						1
75	M-521 (0→0.5')		(1828)		X							1
76	M-521 (0.5→2')		(1829)		X							1
77	M-521 (2→4')		(1830)		X							1
78	M-521 (4→6')		(1837)			X						1
79	M-521 (6→8')		(1838)			X						1

Total No. of Bottles/ Containers 17

Sample Matrix: L = Liquid; S = Solid; A = Air

					Seal Intact?
Relinquished by: D. Zuck	Organization: Arcadis	Date 7/14/11	Time 1400		
Received by:	Organization: TA CT	Date 7/14/11	Time 1445		Yes No N/A
Relinquished by:	Organization: TA CT	Date 7/14/11	Time 1800		Seal Intact?
Received by: Scott Hall	Organization: TA CT	Date 7/14/11	Time 1900		Yes No N/A

Special Instructions/Remarks: See page #1

Temps 1) @ 3.4 2) @ 3.7 3) @ 2.5 IR-3

Delivery Method: ☐ In Person ☐ Common Carrier _____ SPECIFY ☒ Lab Courier ☐ Other _____ SPECIFY

07/27/2011

AG 05-12/01

ARCADIS

160036 SEH 7/14/11

Laboratory Task Order No./P.O. No. B0032305.42 **CHAIN-OF-CUSTODY RECORD** Page 8 of 10

Project Number/Name Bayer Material Science LLC

Project Location Hicksville, NY

Laboratory Test America CT

Project Manager Andrew Enright 315-671-9546

Sampler(s)/Affiliation Daniel Eudy 516-369-2741

	Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	Method 6010 USEPA SW-846	Archive sample (Hold)					Remarks	Total
80	M-52 1 (8→10')	S	7/13/11 (1845)			X						1
81	M-59 (0→0.5')		(1900)		X							1
82	M-59 (0.5→2')		(1901)		X							1
83	M-59 (2→4')		(1902)		X							1
84	M-59 (4→6')		(1912)			X						1
85	M-59 (6→8')		(1913)			X						1
86	M-59 (8→10')		(1920)			X						1
87	M-55 (0→0.5')		7/14/11 (0950)		X							1
88	M-55 (0.5→2')		(0951)		X							1
89	M-55 (2→4')		(0952)		X							1
90	M-55 (4→6')		(1017)			X						1
91	M-55 (6→8')		(1018)			X						1
92	M-55 (8→10')		(1030)			X						1
93	M-56 (0→0.5')		(1050)		X							1
94	M-56 (0.5→2')		(1051)		X							1

Total No. of Bottles/ Containers: 15

Sample Matrix: L = Liquid; S = Solid; A = Air

						Seal Intact?
Relinquished by:	Dan Eudy	Organization:	Arcadis	Date 7/14/11	Time 1400	
Received by:		Organization:	TA CT	Date 7/14/11	Time 1415	Yes No N/A
Relinquished by:		Organization:	TA CT	Date 7/14/11	Time 1800	Seal Intact?
Received by:	Scott Kuhl	Organization:	TA CT	Date 7/14/11	Time 1900	Yes No N/A

Special Instructions/Remarks: See page #1

Temps · 1) @ 3.4 2) @ 3.7 3) @ 2.5 IR-3

Delivery Method: ☐ In Person ☐ Common Carrier _____ SPECIFY ☒ Lab Courier ☐ Other _____ SPECIFY

07/27/2011

AG 05-12/01

[redacted]

Chain of Custody Record

Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Tel: 203-929-8140
Fax: 203-929-8142

160056 SRH 7/14/11

TAL-0015 (0508)

Client: Arcadis	Project Manager: John Brussel / Andy Enigk	Date: 7/14/11	Chain of Custody Number: 016963
Address: 6723 Towpath Rd	Telephone Number (Area Code)/Fax Number/e-mail address: 315-671-9548	Field Telephone Number: 516-369-2741	Page 9 of 10
City: Syracuse / State: NY / Zip Code: 13214	Site Contact: Dan Eads	Lab Contact: Jackie Trudell	
Project Name and Location (State): Baker Material Science LLC	Sample Disposal: ☒ Disposal By Lab ☒ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client		
Contract/Purchase Order/Project No.: B0032305.4.2			

Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Matrix: Aqueous	Matrix: Solid	Matrix: Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Analysis: USEPA Method 6010C (SW-846)	Analysis: Archive Samples (Hold)	Comments
95 M-56 (2→4')	7/14/11	1052		X		1							X		
96 M-56 (4→6')		1104				1								X	
97 M-56 (6→8')		1105				1								X	
98 M-56 (8→10')		1113				1								X	
99 M-57 (0→.5')		1150				1							X		
100 M-57 (.5→2')		1151				1							X		
101 M-57 (2→4')		1152				1							X		
102 M-57 (4→6')		1220				1								X	
103 M-57 (6→8')		1226				1								X	
104 M-57 (8→10')		1235				1								X	

Page 500 of 502

Turn Around Time Required (business days) Report / EDD Requirements
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☒ 10 Days ☐ 15 Days ☐ Other ____

State Regulatory QC Requirements

1. Relinquished By: Daniel Eade	Date: 7/14/11	Time: 1400	1. Received By: [signature]	Date: 7/14/11	Time: 1415
2. Relinquished By: [signature]	Date: 7/14/11	Time: 1800	2. Received By: Scott Hall	Date: 7/14/11	Time: 1900
3. Received By: [signature]	Date:	Time:	Cooler Temps:	Passed Rad. Screen (Lab Use Only): ☒ Yes ☐ No	

Comments: See Page #1

07/21/2011

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Temps 1) 3.4
2) 3.7
3) 2.5

IR-3

Chain of Custody Record

Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Tel: 203-929-8140
Fax: 203-929-8142

160056 SRH 7/14/11

TAL-0015 (0508)

Client: Avadis	Project Manager: John Brussel / Andy Enright	Date: 7/14/11	Chain of Custody Number: 016962
Address: 6723 Towpad Rd	Telephone Number (Area Code)/Fax Number/e-mail address: 315-671-9548	Field Telephone Number: 516-369-2741	Page 10 of 10
City: Syracuse / State: NY / Zip Code: 13214	Site Contact: Dan Zuck	Lab Contact: Jackie Trudell	
Project Name and Location (State): Bayer Material Science LLC	Sample Disposal: ☒ Disposal By Lab ☒ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client		
Contract/Purchase Order/Project No.: B0032305.4.2			

Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Matrix: Aqueous	Solid	Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Analysis (Attach list if more space is needed): US EPA SW-846 method 8010	Archive Sample (Hold)	Comments
105 DUP-071411	7/14/11			S		1							X		
106 DUP-071411B	7/14/11					1								X	

Turn Around Time Required (business days) Report / EDD Requirements
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☒ 10 Days ☐ 15 Days ☐ Other ____

State Regulatory QC Requirements

1. Relinquished By: Daniel Zuck	Date: 7/14/11	Time: 1400	1. Received By:	Date: 7/14/11	Time: 1400
2. Relinquished By:	Date: 7/14/11	Time: 1800	2. Received By: Scott Kyball	Date: 7/14/1	Time: 1900
3. Received By:	Date:	Time:	Cooler Temps:	Passed Rad. Screen (Lab Use Only): ☐ Yes ☐ No	

Comments: See Page #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Temps 1) 3.4 2) 3.7 3) 2.5

IR-3

Page 501 of 502

07/27/2011

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S26(2-4')**

Lab Sample ID: 220-16006-1 | Date Sampled: 07/12/2011 1110
Client Matrix: Solid | % Moisture: 9.4 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.00 g
Analysis Date:	07/18/2011 1328			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		6.0		1.9	5.8
Cadmium		1.4	U	0.28	1.4

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S26(4-6')**

Lab Sample ID: 220-16006-2 | Date Sampled: 07/12/2011 1125
Client Matrix: Solid | % Moisture: 4.8 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/18/2011 1331			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.8	J	1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S25(0-0.5')**

Lab Sample ID: 220-16006-5 | Date Sampled: 07/12/2011 1208
Client Matrix: Solid | % Moisture: 5.0 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/18/2011 1334			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.7	J	1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S25(0.5-2')**

Lab Sample ID: 220-16006-6 | Date Sampled: 07/12/2011 1209
Client Matrix: Solid | % Moisture: 2.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/18/2011 1338			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.7	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S25(2-4')**

Lab Sample ID: 220-16006-7 | Date Sampled: 07/12/2011 1210
Client Matrix: Solid | % Moisture: 3.1 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/18/2011 1347			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.3	J	1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S24(0-0.5')**

Lab Sample ID: 220-16006-11 | Date Sampled: 07/12/2011 1350
Client Matrix: Solid | % Moisture: 2.1 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/18/2011 1350			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.2	J	1.7	5.3
Cadmium		0.40	J	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S24(0.5-2')**

Lab Sample ID: 220-16006-12 | Date Sampled: 07/12/2011 1351
Client Matrix: Solid | % Moisture: 0.8 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/18/2011 1353			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.2	J	1.7	5.2
Cadmium		1.2	U	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S24(2-4')**

Lab Sample ID: 220-16006-13 | Date Sampled: 07/12/2011 1352
Client Matrix: Solid | % Moisture: 1.1 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/18/2011 1357			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.2	J	1.7	5.3
Cadmium		0.88	J	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **DUP-071211**

Lab Sample ID: 220-16006-17 | Date Sampled: 07/12/2011 0000
Client Matrix: Solid | % Moisture: 1.3 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/18/2011 1400			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.2	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S23(0-0.5')**

Lab Sample ID: 220-16006-18 | Date Sampled: 07/12/2011 1500
Client Matrix: Solid | % Moisture: 2.1 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/18/2011 1403			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.0	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S23(0.5-2')**

Lab Sample ID: 220-16006-19 | Date Sampled: 07/12/2011 1501
Client Matrix: Solid | % Moisture: 1.6 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.05 g
Analysis Date:	07/18/2011 1406			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.9	J	1.7	5.2
Cadmium		1.2	U	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S23(2-4')**

Lab Sample ID: 220-16006-20 | Date Sampled: 07/12/2011 1502
Client Matrix: Solid | % Moisture: 5.2 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/18/2011 1409			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.4	J	1.8	5.5
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S22(0-0.5')**

Lab Sample ID: 220-16006-24 | Date Sampled: 07/12/2011 1730
Client Matrix: Solid | % Moisture: 4.5 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/18/2011 1412			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		32.9		1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S22(0.5-2')**

Lab Sample ID: 220-16006-25 | Date Sampled: 07/12/2011 1730
Client Matrix: Solid | % Moisture: 3.2 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.07 g
Analysis Date:	07/18/2011 1415			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.8		1.7	5.2
Cadmium		1.2	U	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S22(2-4')**

Lab Sample ID: 220-16006-26 | Date Sampled: 07/12/2011 1730
Client Matrix: Solid | % Moisture: 1.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/18/2011 1310			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.1	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S14(0-0.5')**

Lab Sample ID: 220-16006-29 | Date Sampled: 07/12/2011 1630
Client Matrix: Solid | % Moisture: 1.8 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/18/2011 1425			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.4	J	1.7	5.3
Cadmium		0.53	J	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S14(0.5-2')**

Lab Sample ID: 220-16006-30 | Date Sampled: 07/12/2011 1633
Client Matrix: Solid | % Moisture: 9.5 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.05 g
Analysis Date:	07/18/2011 1428			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		6.7		1.8	5.7
Cadmium		1.3	U	0.27	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S14(2-4')**

Lab Sample ID: 220-16006-31 | Date Sampled: 07/12/2011 1635
Client Matrix: Solid | % Moisture: 13.1 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.08 g
Analysis Date:	07/18/2011 1431			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.4	J	1.9	5.8
Cadmium		1.4	U	0.28	1.4

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S13(0-0.5')**

Lab Sample ID: 220-16006-36 | Date Sampled: 07/13/2011 1105
Client Matrix: Solid | % Moisture: 2.5 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/18/2011 1434			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.6	J	1.7	5.3
Cadmium		2.1		0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S13(0.5-2')**

Lab Sample ID: 220-16006-37 | Date Sampled: 07/13/2011 1106
Client Matrix: Solid | % Moisture: 3.5 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-52987	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-52903	Lab File ID:	071811d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/18/2011 1437			Final Weight/Volume:	250 mL
Prep Date:	07/15/2011 1248				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.7	J	1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S13(2-4')**

Lab Sample ID: 220-16006-38 | Date Sampled: 07/13/2011 1107
Client Matrix: Solid | % Moisture: 4.5 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/20/2011 1144			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.1	J	1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S12(0-0.5')**

Lab Sample ID: 220-16006-42 | Date Sampled: 07/13/2011 1235
Client Matrix: Solid | % Moisture: 4.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.06 g
Analysis Date:	07/20/2011 1147			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		11.4		1.7	5.3
Cadmium		0.45	J	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S12(0.5-2')**

Lab Sample ID: 220-16006-43 | Date Sampled: 07/13/2011 1236
Client Matrix: Solid | % Moisture: 3.9 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.06 g
Analysis Date:	07/20/2011 1150			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.4	J	1.7	5.3
Cadmium		0.31	J	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S12(2-4')**

Lab Sample ID: 220-16006-44 | Date Sampled: 07/13/2011 1238
Client Matrix: Solid | % Moisture: 5.4 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/20/2011 1153			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.4	J	1.7	5.4
Cadmium		5.1		0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **DUP-071311**

Lab Sample ID: 220-16006-48 | Date Sampled: 07/13/2011 0000
Client Matrix: Solid | % Moisture: 2.2 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/20/2011 1156			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.7	J	1.7	5.3
Cadmium		1.4		0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S10(0-0.5')**

Lab Sample ID: 220-16006-50 | Date Sampled: 07/13/2011 1345
Client Matrix: Solid | % Moisture: 2.1 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/20/2011 1206			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.8	J	1.7	5.3
Cadmium		0.66	J	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S10(0.5-2')**

Lab Sample ID: 220-16006-51 | Date Sampled: 07/13/2011 1346
Client Matrix: Solid | % Moisture: 1.9 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/20/2011 1209			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.1	J	1.7	5.2
Cadmium		1.1	J	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S10(2-4')**

Lab Sample ID: 220-16006-52 | Date Sampled: 07/13/2011 1347
Client Matrix: Solid | % Moisture: 0.4 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.09 g
Analysis Date:	07/20/2011 1212			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.0	U	1.6	5.0
Cadmium		1.2	U	0.24	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S11(0-0.5')**

Lab Sample ID: 220-16006-56 | Date Sampled: 07/13/2011 1534
Client Matrix: Solid | % Moisture: 4.3 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/20/2011 1215			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.1	J	1.7	5.4
Cadmium		0.85	J	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S11(0.5-2')**

Lab Sample ID: 220-16006-57 | Date Sampled: 07/13/2011 1535
Client Matrix: Solid | % Moisture: 1.9 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/20/2011 1218			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.4	J	1.7	5.3
Cadmium		1.7		0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S11(2-4')**

Lab Sample ID: 220-16006-58 | Date Sampled: 07/13/2011 1537
Client Matrix: Solid | % Moisture: 0.4 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/20/2011 1243			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.6	J	1.7	5.2
Cadmium		1.0	J	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S8(0-0.5')**

Lab Sample ID: 220-16006-62 | Date Sampled: 07/13/2011 1643
Client Matrix: Solid | % Moisture: 2.4 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/20/2011 1246			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.9	J	1.7	5.4
Cadmium		0.36	J	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S8(0.5-2')**

Lab Sample ID: 220-16006-63 | Date Sampled: 07/13/2011 1644
Client Matrix: Solid | % Moisture: 2.9 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.08 g
Analysis Date:	07/20/2011 1249			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.8	J	1.7	5.2
Cadmium		0.40	J	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S8(2-4')**

Lab Sample ID: 220-16006-64 | Date Sampled: 07/13/2011 1645
Client Matrix: Solid | % Moisture: 4.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/20/2011 1252			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.8	J	1.7	5.4
Cadmium		0.77	J	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S20(0-0.5')**

Lab Sample ID: 220-16006-69 | Date Sampled: 07/13/2011 1742
Client Matrix: Solid | % Moisture: 6.4 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.00 g
Analysis Date:	07/20/2011 1255			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		25.7		1.8	5.6
Cadmium		2.6		0.27	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S20(0.5-2')**

Lab Sample ID: 220-16006-70 | Date Sampled: 07/13/2011 1743
Client Matrix: Solid | % Moisture: 6.6 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/20/2011 1259			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.5	J	1.8	5.6
Cadmium		1.3	U	0.27	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S20(2-4')**

Lab Sample ID: 220-16006-71 | Date Sampled: 07/13/2011 1744
Client Matrix: Solid | % Moisture: 2.0 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53039	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.05 g
Analysis Date:	07/20/2011 1302			Final Weight/Volume:	250 mL
Prep Date:	07/19/2011 1525				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.1	J	1.7	5.2
Cadmium		1.2	U	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S21(0-0.5')**

Lab Sample ID: 220-16006-75 | Date Sampled: 07/13/2011 1828
Client Matrix: Solid | % Moisture: 6.0 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/20/2011 1431			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		6.1		1.8	5.5
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S21(0.5-2')**

Lab Sample ID: 220-16006-76 | Date Sampled: 07/13/2011 1829
Client Matrix: Solid | % Moisture: 7.9 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/20/2011 1507			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		13.4		1.8	5.6
Cadmium		1.3	U	0.27	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S21(2-4')**

Lab Sample ID: 220-16006-77 | Date Sampled: 07/13/2011 1830
Client Matrix: Solid | % Moisture: 3.2 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.10 g
Analysis Date:	07/20/2011 1510			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.9	J	1.7	5.2
Cadmium		1.2	U	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S9(0-0.5')**

Lab Sample ID: 220-16006-81 | Date Sampled: 07/13/2011 1900
Client Matrix: Solid | % Moisture: 5.4 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.09 g
Analysis Date:	07/20/2011 1520			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.4		1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S9(0.5-2')**

Lab Sample ID: 220-16006-82 | Date Sampled: 07/13/2011 1901
Client Matrix: Solid | % Moisture: 1.4 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.05 g
Analysis Date:	07/20/2011 1523			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.2	U	1.7	5.2
Cadmium		1.2	U	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S9(2-4')**

Lab Sample ID: 220-16006-83 | Date Sampled: 07/13/2011 1902
Client Matrix: Solid | % Moisture: 1.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.00 g
Analysis Date:	07/20/2011 1526			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.3	U	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S5(0-0.5')**

Lab Sample ID: 220-16006-87 | Date Sampled: 07/14/2011 0950
Client Matrix: Solid | % Moisture: 3.8 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.07 g
Analysis Date:	07/20/2011 1529			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		25.9		1.7	5.3
Cadmium		0.26	J	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S5(0.5-2')**

Lab Sample ID: 220-16006-88 | Date Sampled: 07/14/2011 0951
Client Matrix: Solid | % Moisture: 8.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.09 g
Analysis Date:	07/20/2011 1532			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.5		1.8	5.5
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S5(2-4')**

Lab Sample ID: 220-16006-89 | Date Sampled: 07/14/2011 0952
Client Matrix: Solid | % Moisture: 5.3 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.07 g
Analysis Date:	07/22/2011 1138			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.6	J	1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S6(0-0.5')**

Lab Sample ID: 220-16006-93 | Date Sampled: 07/14/2011 1050
Client Matrix: Solid | % Moisture: 2.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.07 g
Analysis Date:	07/22/2011 1141			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		7.1		1.7	5.2
Cadmium		1.2	U	0.25	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S6(0.5-2')**

Lab Sample ID: 220-16006-94 | Date Sampled: 07/14/2011 1051
Client Matrix: Solid | % Moisture: 3.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/22/2011 1144			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.4	J	1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S6(2-4')**

Lab Sample ID: 220-16006-95 | Date Sampled: 07/14/2011 1052
Client Matrix: Solid | % Moisture: 3.5 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.06 g
Analysis Date:	07/20/2011 1535			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.9	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S7(0-0.5')**

Lab Sample ID: 220-16006-99 | Date Sampled: 07/14/2011 1150
Client Matrix: Solid | % Moisture: 5.1 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/20/2011 1539			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.8	J	1.8	5.5
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S7(0.5-2')**

Lab Sample ID: 220-16006-100 | Date Sampled: 07/14/2011 1151
Client Matrix: Solid | % Moisture: 7.0 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.00 g
Analysis Date:	07/20/2011 1542			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.0	J	1.8	5.6
Cadmium		1.3	U	0.27	1.3

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **M-S7(2-4')**

Lab Sample ID: 220-16006-101 | Date Sampled: 07/14/2011 1152
Client Matrix: Solid | % Moisture: 0.7 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.07 g
Analysis Date:	07/20/2011 1545			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.1	U	1.6	5.1
Cadmium		1.2	U	0.24	1.2

Client: ARCADIS U.S. Inc | Job Number: 220-16006-1

Client Sample ID: **DUP-071411**

Lab Sample ID: 220-16006-105 | Date Sampled: 07/14/2011 0000
Client Matrix: Solid | % Moisture: 11.8 | Date Received: 07/14/2011 1900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53096	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53057	Lab File ID:	072011d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/20/2011 1548			Final Weight/Volume:	250 mL
Prep Date:	07/20/2011 0622				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.9	J	1.9	5.9
Cadmium		1.4	U	0.28	1.4

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Data Usability Summary Report (DUSR)

HICKSVILLE, NEW YORK

Metals Analyses

SDG #: 220-16020

Analyses Performed By:
TestAmerica
Shelton, Connecticut

Report #: 14529R
Review Level: Tier III
Project: B0032305.0004.00002

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 220-16020 for samples collected in association with the Bayer Material Science site in Hicksville, New York. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
M-S19(0-0.5')	220-16020-1	Soil	7/14/2011					X	
M-S19(0.5-2')	220-16020-2	Soil	7/14/2011					X	
M-S19(2-4')	220-16020-3	Soil	7/14/2011					X	
M-S4(0-0.5')	220-16020-7	Soil	7/14/2011					X	
M-S4(0.5-2')	220-16020-8	Soil	7/14/2011					X	
M-S4(2-4')	220-16020-9	Soil	7/14/2011					X	
M-S18(0-0.5')	220-16020-13	Soil	7/14/2011					X	
M-S18(0.5-2')	220-16020-14	Soil	7/14/2011					X	
M-S18(2'-4')	220-16020-15	Soil	7/14/2011					X	
M-S2(0-0.5')	220-16020-19	Soil	7/14/2011					X	
M-S2(0.5'-2')	220-16020-20	Soil	7/14/2011					X	
M-S2(2-4')	220-16020-21	Soil	7/14/2011					X	
M-S3(0-0.5')	220-16020-25	Soil	7/14/2011					X	
M-S3(0.5-2')	220-16020-26	Soil	7/14/2011					X	
M-S3(2-4')	220-16020-27	Soil	7/14/2011					X	
M-S1(0-0.5')	220-16020-31	Soil	7/15/2011					X	
M-S1(0.5-2')	220-16020-32	Soil	7/15/2011					X	
M-S1(2-4')	220-16020-33	Soil	7/15/2011					X	
M-S15(0-0.5')	220-16020-37	Soil	7/15/2011					X	
M-S15(0.5-2')	220-16020-38	Soil	7/15/2011					X	
M-S15(2-4')	220-16020-39	Soil	7/15/2011					X	
M-S16(0-0.5')	220-16020-43	Soil	7/15/2011					X	
M-S16(0.5-2')	220-16020-44	Soil	7/15/2011					X	
M-S16(2-4')	220-16020-45	Soil	7/15/2011					X	
DUP-071511	220-16020-49	Soil	7/15/2011	M-S15(0.5-2')				X	
M-S17(0-0.5')	220-16020-51	Soil	7/15/2011					X	
M-S17(0.5-2')	220-16020-52	Soil	7/15/2011					X	
M-S17(2-4')	220-16020-53	Soil	7/15/2011					X	

Note: Sample results were reported on a dry-weight basis.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 6010B. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002 and USEPA Region II SOP HW-2 Revision 13, September 2006.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within control limits.

    * Duplicate analysis is not within control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected as unusable. The compound may or may not be present in the sample.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010B	Water	180 days from collection to analysis	Cool to 4±2 °C; pH < 2 with HNO_3
	Soil	180 days from collection to analysis	Cool to 4±2 °C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e. laboratory method blanks and equipment rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks also measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected analyte in an associated blank (common laboratory contaminant analytes are calculated at ten times) is calculated for QA blanks containing concentrations greater than the instrument detection limit (IDL) or method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results are not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration

The initial calibration must exhibit a correlation coefficient greater than 0.995. A technical review of the data applies limits to all analytes with no exceptions.

3.2 Continuing Calibration

All target analytes associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All initial and continuing calibration verification standard recoveries were within the control limit.

3.3 Reporting limit (RL) Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the RL. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table.

All RL standard recoveries were within control limits.

3.4 ICP Interference Check Standard (ICS)

The ICS verifies the laboratories inter-element and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Sample Analysis

MS/MSD and laboratory duplicate sample data are used to assess the precision and accuracy of the analytical method.

4.1 Matrix Spike Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The relative percent difference (RPD) between the MS and MSD results must be no greater than the established acceptance limit of 20%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed. Sample results associated with MS exceedances where the parent samples are not site-specific are not qualified.

Sample locations M-S4(2-4') and M-S17(2-4') were used in the MS/MSD analyses. All analytes associated with MS/MSD recoveries and RPDs were within the control limits.

4.2 Laboratory Duplicate Sample Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to five times the reporting limit (RL). A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

Sample locations M-S4(2-4') and M-S17(2-4') were used in the laboratory duplicate analyses. The laboratory duplicate sample results exhibited RPDs within the control limit.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analyses exhibited recoveries within the control limits.

6. Field Duplicate Sample Analysis

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to five times the reporting limit (RL), a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results (in mg/kg) for the field duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
M-S15(0.5-2') / DUP-071511	Arsenic	3 J	2.4 J	AC
	Cadmium	1.3 U	1.3 U	AC

AC Acceptable
J Estimated (result is < RL)
U Not detected

The field duplicate sample results are acceptable.

7. Post-Digestion Spike (PDS) Analysis

The post-digestion spike analysis is used to assess if a significant interference exists independent of the sample digestion process. All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The PDS recovery control limits do not apply for PDS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the PDS concentration by a factor of four or greater. Sample results associated with PDS exceedances where the parent samples are not site-specific are not qualified.

Sample locations M-S4(2-4') and M-S17(2-4') were used in the PDS analyses. The PDS results exhibited acceptable recoveries.

8. Serial Dilution Analysis

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

Sample locations M-S4(2-4') and M-S17(2-4') were used in the serial dilution analyses. The serial dilution results exhibited %Ds within the control limit.

9. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma – Atomic Emission Spectrometry (ICP)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X		X	
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS)		X		X	
Matrix Spike (MS) Accuracy (%R)		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Post-Digestion Spike (PDS) Accuracy (%R)		X		X	
Post-Digestion Spike Duplicate (PDSD) %R					X
PDS/PDSD Precision (RPD)					X
Laboratory Duplicate Sample RPD		X		X	
Field Duplicate Sample RPD		X		X	
ICP Serial Dilution		X		X	
Reporting Limit Verification		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
RL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R – Percent recovery
RPD – Relative percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
220-16020	7/14/2011	SW-846 6010B	M-S19(0-0.5')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S19(0.5-2')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S19(2-4')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S4(0-0.5')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S4(0.5-2')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S4(2-4')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S18(0-0.5')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S18(0.5-2')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S18(2'-4')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S2(0-0.5')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S2(0.5'-2')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S2(2-4')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S3(0-0.5')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S3(0.5-2')	Solid	--	--	--	Yes	--	
220-16020	7/14/2011	SW-846 6010B	M-S3(2-4')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S1(0-0.5')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S1(0.5-2')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S1(2-4')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S15(0-0.5')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S15(0.5-2')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S15(2-4')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S16(0-0.5')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S16(0.5-2')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S16(2-4')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	DUP-071511	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S17(0-0.5')	Solid	--	--	--	Yes	--	

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
220-16020	7/15/2011	SW-846 6010B	M-S17(0.5-2')	Solid	--	--	--	Yes	--	
220-16020	7/15/2011	SW-846 6010B	M-S17(2-4')	Solid	--	--	--	Yes	--	

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

Validation Performed By: Dennis Dyke

Signature: 

Date: August 3, 2011

Peer Review: Dennis Capria

Date: August 12, 2011

CHAIN OF CUSTODY /
CORRECTED SAMPLE ANALYSIS DATA SHEETS

Chain of Custody Record

Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Tel: 203-929-8140
Fax: 203-929-8142

16020

TAL-0015 (0508)

Client: Arcadis	Project Manager: John Brassell / Andy Enright	Date: 7/14/11	Chain of Custody Number: 016961
Address: 6723 Towpath Rd	Telephone Number (Area Code)/Fax Number/e-mail address: 315-671-9548	Field Telephone Number: 516-369-2741	Page 1 of 6
City: Syracuse / State: NY / Zip Code: 13214	Site Contact: Dan Zuck	Lab Contact: Jackie Trudell	
Project Name and Location (State): Bayer Midland Scenic LLC	Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☒ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)		
Contract/Purchase Order/Project No.: B0032305.4.2			

	Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Matrix: Aqueous	Matrix: Solid	Matrix: Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Analysis: USEPA Method 6010, (SW-846)	Archive Sample (Hold)	Comments
1	M-S19 (0→0.5')	7/14/11	1440		X		1							X		
2	M-S19 (0.5→2')		1442				1							X		
3	M-S19 (2→4')		1443				1							X		
4	M-S19 (4→6')		1505				1								X	
5	M-S19 (6→8')		1506				1								X	
6	M-S19 (8→10')		1510				1								X	
7	M-S4 (0→0.5')		1525				1							X		
8	M-S4 (0.5→2')		1526				1							X		
9	M-S4 (2→4')		1527				3							X		MS/MSD
10	M-S4 (4→6')		1540				3								X	MS/MSD

Page 2 of 2

Turn Around Time Required (business days) Report / EDD Requirements
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☒ 10 Days ☐ 15 Days ☐ Other ____

State Regulatory QC Requirements

1. Relinquished By: Daniel Zuck	Date: 7/15/11	Time: 1135	1. Received By:	Date: 7/15/11	Time: 1135
2. Relinquished By:	Date: 7/15/11	Time: 1730	2. Received By:	Date: 7/15/11	Time: 1730
3. Received By:	Date:	Time:	Cooler Temps: 2.5 IR4	Passed Rad. Screen (Lab Use Only): ☒ Yes ☐ No	

Comments: Please Report Results to Andy Enright.

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

07/28/2011

Chain of Custody Record

[redacted]
Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Tel: 203-929-8140
Fax: 203-929-8142

160020

TAL-0015 (0508)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	John Drussel / Andy Eurek	7/14/11	016960
Address 6723 Tower Park Rd	**Telephone Number (Area Code)/Fax Number/e-mail address** 315-671-9546	**Field Telephone Number** 516-369-2741	Page 2 of 6
City Syracuse / **State** NY / **Zip Code** 13214	**Site Contact** Dan Zuck	**Lab Contact** Jackie Trudell	Analysis (Attach list if more space is needed)
Project Name and Location (State) Boyer Material Science LLC	**Sample Disposal** ☒ Disposal By Lab ☐ Return To Client ☒ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)		Comments
Contract/Purchase Order/Project No. B0032305.4.2			

	Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Matrix: Aqueous	Matrix: Solid	Matrix: Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Analysis	Comments
11	M-S4 (6→8')	7/14/11	1541		X		1							X	
12	M-S4 (8→10')		1600				1							X	
13	M-S18 (0→0.5')		1645				1							X	
14	M-S18 (0.5→2')		1646				1							X	
15	M-S18 (2'→4')		1647				1							X	
16	M-S18 (4→6')		1655				1							X	
17	M-S18 (6→8')		1656				1							X	
18	M-S18 (8→10')		1705				1							X	
19	M-S2 (0→0.5')		1725				1							X	
20	M-S2 (0.5'→2')		1726				1							X	

Page 298 of 298

Turn Around Time Required (business days) Report / EDD Requirements
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☒ 10 Days ☐ 15 Days ☐ Other ____

State Regulatory QC Requirements

		Date	Time
1. Relinquished By	Daniel Zuck	7/15/11	1135
1. Received By		7/15/11	1135
2. Relinquished By		7/15/11	1730
2. Received By		7/15/11	1730
3. Received By			

Cooler Temp 2.5 IR-25 #4 2c

Passed Rad. Screen (Lab Use Only) ☒ Yes ☐ No

Comments See Page #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

07/28/2011

Chain of Custody Record

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Shelton, CT 06484
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Fax: 203-929-8142

16020

TAL-0015 (0508)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	John Brussel / Andy Enigk	7/14/11	016959
Address 6723 Towpath Rd	**Telephone Number (Area Code)/Fax Number/e-mail address** 315-671-9548	**Field Telephone Number** 5163692741	Page 3 of 6
City Syracuse / **State** NY / **Zip Code** 13214	**Site Contact** Dan Zuck	**Lab Contact** Jackie Trudell	
Project Name and Location (State) Bayer Material Science LLC	**Sample Disposal** ☒ Disposal By Lab ☒ Archive For 6 Months ☐ Return To Client (A fee may be assessed if samples are retained longer than 1 month)		
Contract/Purchase Order/Project No. B0032305.4.2			

Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Matrix: Aqueous	Solid	Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Analysis (Attach list if more space is needed): Method 6010 USEPA SW-846			Archive Sample (Hold)						Comments
21 M-52 (2→4')	7/14/11	1727		S		1							X									
22 M-52 (4→6')		1750														X						
23 M-52 (6→8')		1750														X						
24 M-52 (8→10')		1758														X						
25 M-53 (0→0.5')		1820											X									
26 M-53 (0.5→2')		1821											X									
27 M-53 (2→4')		1822											X									
28 M-53 (4→6')		1830														X						
29 M-53 (6→8')		1831														X						
30 M-53 (8→10')		1836														X						

Turn Around Time Required (business days) Report / EDD Requirements
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☒ 10 Days ☐ 15 Days ☐ Other

State Regulatory QC Requirements

1. Relinquished By: Daniel Zuck	Date: 7/15/11	Time: 1135	1. Received By:	Date: 7/15/11	Time: 1135
2. Relinquished By:	Date: 7/15/11	Time: 1730	2. Received By:	Date: 7/15/11	Time: 1730
3. Received By:	Date:	Time:	Cooler Temps: 2.5 IR-4	Passed Rad. Screen (Lab Use Only): ☒ Yes ☐ No	

Comments: See page #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

passed rad screen

07/28/2011

[redacted]

Chain of Custody Record

TAL-0015 (0508)

Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Tel: 203-929-8140
Fax: 203-929-8142

16020

Client: Arcadis	Project Manager: John Brussel / Andy Finck	Date: 7/15/11	Chain of Custody Number: 016956
Address: 6723 Towpath Rd	Telephone Number (Area Code)/Fax Number/e-mail address: 315-671-9548	Field Telephone Number: 516-369-2741	Page 4 of 6
City: Syracuse; State: NY; Zip Code: 13214	Site Contact: Dan Zach; Lab Contact: Jackie Trudell	Analysis (Attach list if more space is needed)	
Project Name and Location (State): Bayer Material Science LLC	Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☒ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)		
Contract/Purchase Order/Project No.: B0032305.4.2			

	Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Matrix: Aqueous	Matrix: Solid	Matrix: Other	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Method USEPA 6010 SW-846	(Hold) Archive Sample	Comments
31	M-S1 (0→0.5')	7/15/11	1049		X		1							X		
32	M-S1 (0.5→2')	↓	1050		↓		1							X		
33	M-S1 (2→4')	↓	1051		↓		1							X		
34	M-S1 (4→6')	↓	1107		↓		1								X	
35	M-S1 (6→8')	↓	1108		↓		1								X	
36	M-S1 (8→10')	↓	1115		↓		1								X	
37	M-S15 (0→0.5')	↓	0958		↓		1							X		
38	M-S15 (0.5→2')	↓	0959		↓		1							X		
39	M-S15 (2→4')	↓	1000		↓		1							X		
40	M-S115 (4→6')	↓	1015		↓		1								X	

Turn Around Time Required (business days) Report / EDD Requirements: ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☒ 10 Days ☐ 15 Days ☐ Other ____

State Regulatory QC Requirements:

1. Relinquished By: Daniel Zach	Date: 7/15/11	Time: 1135	1. Received By: [signature]	Date: 7/15/11	Time: 1135
2. Relinquished By: [signature]	Date: 7/15/11	Time: 1730	2. Received By: [signature]	Date: 7/15/11	Time: 1730
3. Received By:	Date:	Time:	Cooler Temps: 2.5 IR-4	Passed Rad. Screen (Lab Use Only): ☒ Yes ☐ No	

Comments: see page #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
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Fax: 203-929-8142

16020

TAL-0015 (0508)

Client: Arcadis	Project Manager: John Brussel / Andy Enright	Date: 7/15/11	Chain of Custody Number: 016957
Address: 6723 Towpath Rd	Telephone Number (Area Code)/Fax Number/e-mail address: 315-671-9546	Field Telephone Number: 516-369-2741	Page 5 of 6
City: Syracuse / State: NY / Zip Code: 13214	Site Contact: Dan Zuck	Lab Contact: Jackie Trudell	
Project Name and Location (State): Bayer Material Science LLC	Sample Disposal: ☒ Disposal By Lab ☐ Return To Client ☒ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)		
Contract/Purchase Order/Project No.: B0032305.4.2			

Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Matrix: Aqueous	Solid	Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	Analysis: USEPA Method 6010, SW-846	Archive Sample (Hold)	Comments
41 M-S15 (6→8')	7/15/11	1016		S		1								X	
42 M-S15 (8→10')		1029				1								X	
43 M-S16 (0→0.5')		0913				1							X		
44 M-S16 (0.5→2')		0914				1							X		
45 M-S16 (2→4')		0915				1							X		
46 M-S16 (4→6')		0935				1								X	
47 M-S16 (6→8')		0936				1								X	
48 M-S16 (8→10')		0942				1								X	
49 DUP-071511						1							X		
50 DUP-071511B						1								X	

Turn Around Time Required (business days) Report / EDD Requirements
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☒ 10 Days ☐ 15 Days ☐ Other ____

State Regulatory QC Requirements

1. Relinquished By: Daniel Zuck	Date: 7/15/11	Time: 1135	1. Received By:	Date: 7/15/11	Time: 1135
2. Relinquished By:	Date: 7/15/11	Time: 1730	2. Received By:	Date: 7/15/11	Time: 1730
3. Received By:	Date:	Time:	Cooler Temps: 2.5 IR-4	Passed Rad. Screen (Lab Use Only): ☒ Yes ☐ No	

Comments: See Page #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

07/28/2011

[redacted]

Chain of Custody Record

TAL-0015 (0508)

Connecticut
128 Long Hill Cross Road
Shelton, CT 06484
Tel: 203-929-8140
Fax: 203-929-8142

16020

Client: Arcadis	Project Manager: John Brussel / Andy Emek	Date: 7/15/11
Address: 6723 Towpath Rd	Telephone Number (Area Code)/Fax Number/e-mail address: 315-671-9548	Field Telephone Number: 516-369-2741
City: Syracuse; State: NY; Zip Code: 13214	Site Contact: Dan Zuck; Lab Contact: Jackie Trudell	Chain of Custody Number: 016958
Project Name and Location (State): Bayer Material Science LLC	Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☒ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)	Page 6 of 6
Contract/Purchase Order/Project No.: B0032305.4.2		

Field Sample I.D. (Containers for each sample may be combined on one line)	Collection Date	Collection Time	Aqueous	Solid	Other	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Other	USEPA method 6010, SW-846	Archive Sample (Hold)	Comments
S1 M-S17 (0-0.5')	7/15/11	0838		S		1							X		
S2 M-S17 (0.5-2')	↓	0839		↓		1							X		
S3 M-S17 (2-4')	↓	0840		↓		3							X		MS/MSD
S4 M-S17 (4-6')	↓	0854		↓		1								X	
S5 M-S17 (6-8')	↓	0855		↓		3								X	MS/MSD
S6 M-S17 (8-10')	↓	0901		↓		1								X	

Turn Around Time Required (business days) Report / EDD Requirements
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☒ 10 Days ☐ 15 Days ☐ Other____

State Regulatory QC Requirements

	Date	Time		Date	Time
1. Relinquished By: Daniel Zuck	7/15/11	1135	1. Received By: [signature]	7/15/11	1135
2. Relinquished By: [signature]	7/15/11	1730	2. Received By: [signature]	7/15/11	1730
3. Received By			Cooler Temps: 2.4 IR-4	Passed Rad. Screen (Lab Use Only): ☒ Yes ☐ No	

Comments: See page #1

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S19(0-0.5')

Lab Sample ID: 220-16020-1
Client Matrix: Solid

% Moisture: 0.9

Date Sampled: 07/14/2011 1440
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/22/2011 1156			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.8		1.7	5.2
Cadmium		6.2		0.25	1.2

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S19(0.5-2')

Lab Sample ID: 220-16020-2
Client Matrix: Solid

% Moisture: 2.4

Date Sampled: 07/14/2011 1442
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.09 g
Analysis Date:	07/22/2011 1206			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		6.1		1.7	5.1
Cadmium		1.5		0.25	1.2

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S19(2-4')

Lab Sample ID: 220-16020-3
Client Matrix: Solid

% Moisture: 3.7

Date Sampled: 07/14/2011 1443
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.00 g
Analysis Date:	07/22/2011 1209			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.1	J	1.8	5.5
Cadmium		0.60	J	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S4(0-0.5')

Lab Sample ID: 220-16020-7
Client Matrix: Solid

% Moisture: 2.0

Date Sampled: 07/14/2011 1525
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/22/2011 1212			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		9.5		1.7	5.3
Cadmium		8.7		0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S4(0.5-2')

Lab Sample ID: 220-16020-8
Client Matrix: Solid

% Moisture: 8.7

Date Sampled: 07/14/2011 1526
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/22/2011 1215			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		24.0		1.8	5.7
Cadmium		14.2		0.27	1.4

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S4(2-4')

Lab Sample ID: 220-16020-9
Client Matrix: Solid

% Moisture: 5.3

Date Sampled: 07/14/2011 1527
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.09 g
Analysis Date:	07/22/2011 1219			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.9	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S18(0-0.5')

Lab Sample ID: 220-16020-13
Client Matrix: Solid

% Moisture: 5.6

Date Sampled: 07/14/2011 1645
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/22/2011 1234			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		14.6		1.8	5.5
Cadmium		0.72	J	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S18(0.5-2')

Lab Sample ID: 220-16020-14
Client Matrix: Solid

% Moisture: 5.4

Date Sampled: 07/14/2011 1646
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/22/2011 1244			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		16.2		1.8	5.5
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S18(2'-4')

Lab Sample ID: 220-16020-15
Client Matrix: Solid

% Moisture: 3.9

Date Sampled: 07/14/2011 1647
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.04 g
Analysis Date:	07/22/2011 1247			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.3	J	1.7	5.4
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S2(0-0.5')

Lab Sample ID: 220-16020-19
Client Matrix: Solid

% Moisture: 4.1

Date Sampled: 07/14/2011 1725
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.07 g
Analysis Date:	07/22/2011 1250			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		6.2		1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S2(0.5'-2')

Lab Sample ID: 220-16020-20
Client Matrix: Solid

% Moisture: 8.2

Date Sampled: 07/14/2011 1726
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/22/2011 1253			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		6.1		1.8	5.7
Cadmium		1.4	U	0.27	1.4

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S2(2-4')

Lab Sample ID: 220-16020-21
Client Matrix: Solid

% Moisture: 0.6

Date Sampled: 07/14/2011 1727
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.10 g
Analysis Date:	07/22/2011 1256			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.0	U	1.6	5.0
Cadmium		1.2	U	0.24	1.2

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S3(0-0.5')

Lab Sample ID: 220-16020-25
Client Matrix: Solid

% Moisture: 4.7

Date Sampled: 07/14/2011 1820
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.09 g
Analysis Date:	07/22/2011 1259			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		29.3		1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S3(0.5-2')

Lab Sample ID: 220-16020-26
Client Matrix: Solid

% Moisture: 5.1

Date Sampled: 07/14/2011 1821
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.08 g
Analysis Date:	07/22/2011 1302			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		13.9		1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S3(2-4')

Lab Sample ID: 220-16020-27
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 07/14/2011 1822
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.05 g
Analysis Date:	07/22/2011 1305			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.1	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S1(0-0.5')

Lab Sample ID: 220-16020-31
Client Matrix: Solid

% Moisture: 5.3

Date Sampled: 07/15/2011 1049
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/22/2011 1309			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.3	J	1.8	5.5
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S1(0.5-2')

Lab Sample ID: 220-16020-32
Client Matrix: Solid

% Moisture: 3.4

Date Sampled: 07/15/2011 1050
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/22/2011 1312			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.2	J	1.7	5.4
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S1(2-4')

Lab Sample ID: 220-16020-33
Client Matrix: Solid

% Moisture: 2.1

Date Sampled: 07/15/2011 1051
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/22/2011 1321			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.0	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S15(0-0.5')

Lab Sample ID: 220-16020-37
Client Matrix: Solid

% Moisture: 7.4

Date Sampled: 07/15/2011 0958
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.09 g
Analysis Date:	07/22/2011 1324			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		21.4		1.7	5.4
Cadmium		0.36	J	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S15(0.5-2')

Lab Sample ID: 220-16020-38
Client Matrix: Solid

% Moisture: 2.5

Date Sampled: 07/15/2011 0959
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53099	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.05 g
Analysis Date:	07/22/2011 1327			Final Weight/Volume:	250 mL
Prep Date:	07/21/2011 0712				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.0	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S15(2-4')

Lab Sample ID: 220-16020-39
Client Matrix: Solid

% Moisture: 1.7

Date Sampled: 07/15/2011 1000
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53258	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53174	Lab File ID:	072511d.prn
Dilution:	1.0			Initial Weight/Volume:	2.02 g
Analysis Date:	07/25/2011 1420			Final Weight/Volume:	250 mL
Prep Date:	07/22/2011 1010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.0	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S16(0-0.5')

Lab Sample ID: 220-16020-43
Client Matrix: Solid

% Moisture: 6.7

Date Sampled: 07/15/2011 0913
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53258	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53174	Lab File ID:	072511d.prn
Dilution:	1.0			Initial Weight/Volume:	2.00 g
Analysis Date:	07/25/2011 1423			Final Weight/Volume:	250 mL
Prep Date:	07/22/2011 1010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		22.5		1.8	5.6
Cadmium		1.3	U	0.27	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S16(0.5-2')

Lab Sample ID: 220-16020-44
Client Matrix: Solid

% Moisture: 5.2

Date Sampled: 07/15/2011 0914
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53258	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53174	Lab File ID:	072511d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/25/2011 1426			Final Weight/Volume:	250 mL
Prep Date:	07/22/2011 1010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.7	J	1.8	5.5
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: **M-S16(2-4')**

Lab Sample ID: 220-16020-45
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 07/15/2011 0915
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53258	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53174	Lab File ID:	072511d.prn
Dilution:	1.0			Initial Weight/Volume:	2.00 g
Analysis Date:	07/25/2011 1429			Final Weight/Volume:	250 mL
Prep Date:	07/22/2011 1010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		4.1	J	1.8	5.5
Cadmium		1.3	U	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: DUP-071511

Lab Sample ID: 220-16020-49
Client Matrix: Solid

% Moisture: 1.6

Date Sampled: 07/15/2011 0000
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53258	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53174	Lab File ID:	072511d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/25/2011 1432			Final Weight/Volume:	250 mL
Prep Date:	07/22/2011 1010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.4	J	1.7	5.3
Cadmium		1.3	U	0.25	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S17(0-0.5')

Lab Sample ID: 220-16020-51
Client Matrix: Solid

% Moisture: 4.9

Date Sampled: 07/15/2011 0838
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53258	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53174	Lab File ID:	072511d.prn
Dilution:	1.0			Initial Weight/Volume:	2.01 g
Analysis Date:	07/25/2011 1436			Final Weight/Volume:	250 mL
Prep Date:	07/22/2011 1010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		11.2		1.8	5.5
Cadmium		0.31	J	0.26	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: M-S17(0.5-2')

Lab Sample ID: 220-16020-52
Client Matrix: Solid

% Moisture: 8.1

Date Sampled: 07/15/2011 0839
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53258	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53174	Lab File ID:	072511d.prn
Dilution:	1.0			Initial Weight/Volume:	2.03 g
Analysis Date:	07/25/2011 1445			Final Weight/Volume:	250 mL
Prep Date:	07/22/2011 1010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		15.5		1.8	5.6
Cadmium		1.3	U	0.27	1.3

Client: ARCADIS U.S. Inc

Job Number: 220-16020-1
Sdg Number:

Client Sample ID: **M-S17(2-4')**

Lab Sample ID: 220-16020-53
Client Matrix: Solid

% Moisture: 2.9

Date Sampled: 07/15/2011 0840
Date Received: 07/15/2011 1730

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	220-53198	Instrument ID:	ICAP3
Prep Method:	3050B	Prep Batch:	220-53174	Lab File ID:	072211d.prn
Dilution:	1.0			Initial Weight/Volume:	2.07 g
Analysis Date:	07/22/2011 1455			Final Weight/Volume:	250 mL
Prep Date:	07/22/2011 1010				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.6		1.7	5.2
Cadmium		1.2	U	0.25	1.2