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Remedial Action Progress Report / Sub-slab Soil Assessment

Former Axil-Belko Facility
Kingsville, MD

MDE Case Number: 1991-0916-BA4

May 9, 2012

Prepared For:

Ms. Jenny Herman
Maryland Department of the Environment
Oil Control Program
1800 Washington Blvd
Suite 620
Baltimore, MD 21230-1719

Prepared By:

Brownfield Science & Technology, Inc.
3157 Limestone Road
Cochranville, PA 19330

William " Tripp" Fischer, P.G
Principal Hydrogeologist

Shaun Quinlan
Environmental Scientist

Nicholas Santella PhD
Chemist/Hydrogeologist

Table of Contents

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

Brownfield Science & Technology, Inc. (BSTI) is pleased to submit this *Remedial Action Progress Report* (RAPR, or, Report) for the Former Axil-Belko Facility (Site) in Kingsville, MD (1991-0916-BA4). The activities detailed in this report are consistent with those put forth in *The Corrective Action Work Plan Supplement(CAWPS)*, submitted February 24, 2012. Assessment activities were performed to:

- Further define the extent of remedial activities (excavation) in the area beneath the footprint of Building 8, the adjacent AST, enclosure and Area C
- Evaluate the extent of soil contamination previously observed adjacent to the Accumulator area

The sub-slab soil assessment activities were conducted by BSTI and direct-push sub-contractor, Advanced Environmental Concepts, between March 14th and March 17th, 2012. Subsequent to this assessment, the site conceptual model was updated. This Report describes the assessment, the updated site conceptual model, and proposed updates to the CAWP in light of the improved site conceptual model.

2.0 PRE-SOIL ASSESSMENT ACTIVITIES

2.1 Disposal of Standing Water

Prior to performing the sub-slab soil investigation activities within the footprint of former Building 8, BSTI personnel removed standing water from the remaining concrete foundation via treatment with activated carbon. Approximately 1,000 gallons were treated in this fashion. The remainder of standing water, located primarily within the hydraulic room, contained trace sheen and was removed via vac-truck. Approximately 850 gallons of oily water was removed via vac-truck for offsite disposal. Once this water was removed, the footer wall of the foundation was pierced allowing future run off to drain freely to the boiler room slab. Oil sorbent booms were placed across the low end of the boiler room slab and will be maintained until the remedial excavation is complete. Disposal manifests for the oily water from the hydraulic room concrete slab are provided in **Appendix I**.

2.2 Evaluation of Piping Runs Into Building 8

As requested by MDE, piping runs entering the footprint of former Building 8 were evaluated. These pipes had been cut off at the exterior wall of Building 7 and plugged with sorbent pads during the demolition process. Three sets of pipes were identified; a drain pipe entering the boiler room several feet above the slab, several hydraulic oil pipes entering the hydraulic room through a doorway and several hydraulic oil pipes exiting Building 7 overhead. The drain pipe carries runoff/infiltrating groundwater from the pipe room under Building 7. This pipe is proposed to be left in place as there are no indications that it is a conduit for petroleum. Of the hydraulic oil pipes entering the hydraulic room, several have been cut and drained within the pipe room. Other pipes are intact and remain connected to a small holding tank within the pipe room which still contains liquids. The pipes and the holding tank are being considered to be added to the next phase of the environmental decommissioning process. Pipes exiting Building 7 overhead run through channels within the ground floor of Building 7 or extend to upper floors of the building. All of these pipes have been cut and drained within Building 7 as part of the environmental decommissioning process. Remaining pipes will be removed during future decommissioning activities if necessary.

3.0 SOIL ASSESSMENT ACTIVITIES

3.1 Methodology

Direct push cores were advanced until refusal was encountered at all locations. Depth of borings varied between 2 and 17.5 feet below ground surface. At all locations, soil cores were continuously logged including screening with a PID and use of Oil-In-Soil™ test kits as appropriate. The soil borings were classified in the field in three separate categories: 1) Strong evidence of containing petroleum substances, 2) Mild evidence of containing petroleum substances and 3) No evidence of containing petroleum substances.

In borings where the evidence of petroleum substances was strong (heavy staining or free phase petroleum) soil logs and/or test kits were sufficient to indicate the need for excavation and therefore no soils were collected for laboratory analysis. Where the evidence was Mild or nonexistent (slight odor, low PID readings, no Oil-In-Soil™ indicators), a soil sample was collected from the portion of the soil boring containing the most field evidence of petroleum. All soil borings advanced through the Building 8 slab had some evidence of petroleum impacts. Assuming the majority of these petroleum impacts will be excavated, no samples were collected directly beneath the slab. Instead, at a number of locations in Area C where clear evidence of petroleum impacts were observed at or below the water table, soil samples were collected from apparently clean soils located above the water table.

A total of 17 soil borings were advanced through the floor of former Building 8 to characterize soils in these areas. Concrete slabs were first penetrated using a direct push drill rig with a hammer drill point. An additional 21 borings were also advanced within Area C to better define the area of maximum petroleum impacts. The locations of soil borings installed within Area C are illustrated in **Figure 1**. Within the Accumulator Area, four borings were advanced to evaluate the lateral extent of petroleum impacts observed under the north corner of the Accumulator pad. This assessment was reported on in the 2011 third quarter Remedial Update Report. The locations of these borings are illustrated in **Figure 2**. Boring logs are presented in **Appendix II**. Upon completion, boreholes in the slab were backfilled with soil and capped with a concrete plug at grade with the slab. Boreholes in the soil were backfilled with soil and capped with bentonite.

3.2 Results

3.2.1 Area C

Observations from boring logs from the TriState Environmental *Phase II Environmental Site Assessment* (February 2002), Brownfield Associates *Supplemental Site Characterization Report* (November 5, 2009), and the sub-slab assessment have been combined to update the conceptual site model originally presented in the Brownfield Associates *Conceptual Site Model Report* (April 14, 2010).

Field observations from soil borings within Area C are presented as a series of cross sections in **Figure 3** through **Figure 11.** These figures represent a straight line interpolation of the observations from each boring. Within Area C, all soil borings advanced though the floor of Building 8 have some indication of petroleum impacts. In general, little to moderate staining was observed directly beneath the floor slab. Soil staining was primarily limited to soils at or below the perched water levels with heavy staining and or soil with residual NAPL observed directly above bedrock. These soil conditions are generally similar to those observed throughout Area C. Additional borings installed in Area C during this mobilization also fit this pattern. Notable exceptions were observed in the vicinity of monitoring point MP-12 and soil boring SB-21. In these areas, heavily stained soils were observed throughout the soil column. This observation suggests that the sources of petroleum impacts within Area C are near these locations. These observations are consistent with the description of former Site operations contained in the Langan *Focused Site Investigation, Interim Measures and Monitoring Activities* (November 12, 2004). In this document, the flow of oil is described through open channels, ultimately entering the hydraulic room through an opening adjacent to SB-21. Although not observed during the demolition of Building 8, the hydraulic room is described as having sumps in its floor for the recovery of this oil. In addition, a "pit" is described which received overflow of oil from pumps and vessels within the hydraulic room. This pit was approximately of the same size and location as the 10,000 gallon AST containment area which was directly adjacent to MP-12. Soils with no observed petroleum impacts were at the northern most extent of Area C (SB-34) in the direction of MW-9 and along the bank of the LGF (CHP-1, CGW-1, CHP-7, CHP-8, CHP-10, SB-27). It

should be noted, however, that some of these borings may have not reached sufficient depth to encounter the water table prior to refusal.

The thickness of heavily stained and NAPL bearing layers presented in cross sections is summarized in **Figure 12**. This figure presents the straight line interpolation of heavily stained layers equal to or greater than two (2) feet in thickness and of NAPL bearing layers equal to or greater than one half (0.5) foot in thickness. Heavily stained soils, pictured in color, are generally thickest at and down slope of MP-12 and SB-21. Maximum thickness, observed at MP-12 was approximately 11 feet. Layers of stained soils with residual NAPL are of lesser thickness and more randomly dispersed. The maximum thickness observed was over three feet in SB-17. Thin layers of floating NAPL are also known to be irregularly distributed throughout the southwest portion of Area C based on periodic observation of petroleum sheen in monitoring wells and continued observation of sheen and or small quantities of NAPL at the Seep area. It should be noted that, by definition, residual NAPL observed in formation with thicknesses of up to 3.6 feet does not gravity drain from the formation and does not accumulate as a significant thicknesses in wells.

Seven soil samples were collected and analyzed from Area C during this assessment. Analytical data is summarized in **Table 1** and full analytical is provided in **Appendix III**. Also provided in **Table 1** is the stratigraphic layer, as plotted in **Figures 3** through **11**, from which the sample was collected. Four samples with no petroleum impacts based on field observations had non-detectable levels of TPH-DRO. Three samples which indicated some level of petroleum impacts in the field were above MDE cleanup criteria (620 mg/kg) with concentrations ranging from 5,280 mg/kg to 12,200 mg/kg. These results confirm that soils above the perched water in the vicinity of the former Building 8 boiler room and at the northern extent of Area C (SB-34) are not impacted by petroleum. This data also provides additional confirmation that field observations (color, odor, shaker tests) can accurately identify impacted soils.

3.2.2 Accumulator Area

Four borings were advanced in the Accumulator Area to attempt to delineate previously observed petroleum impacts. The accumulator was a large above ground vessel of heavy riveted steel construction which was removed between August 2nd and August 4th, 2011. A soil sample

collected at a depth of approximately three feet, under the north corner of the Accumulator pad, contained 2,710 mg/kg TPH-DRO. One soil boring had previously been installed on the northwest side of the accumulator pad (FPH-3) with no indication of petroleum impacts. Soil borings were advanced on the other three sides of the Accumulator pad as illustrated in **Figure 2**. Boring SB-42 from the interior of Building 6 showed clear signs of petroleum impacts within two thin layers of staining observed at depths of approximately five and eight feet. Other cores (SB-39, SB-40 and SB-41) showed no presence of petroleum substances in the field. Field observations were confirmed when analytical results (**Table 1**) indicated that little or no TPH-DRO was present in these borings. Access to the area north of the Accumulator was limited due to the presence of concrete and other debris so further delineation in this direction was not possible. At one time, pipes penetrated the wall of Building 6 at this location and staining was observed on the lower portions of the interior wall. The results of this assessment suggest that the extents of petroleum impacts associated with the Accumulator are limited. Isolated soil layers with petroleum impacts appear to extend under the south corner of Building 6.

4.0 UPDATED CORRECTIVE ACTION PLAN

In light of the assessment described above, and updates to the site conceptual model, the following modifications are proposed to the approved December 22, 2011 Corrective Action Work Plan.

4.1 Remedial Goals

The remedial objective as stated in the CAW was to remove source material from the sub surface so as to eliminate the potential for future discharge of petroleum to the LGF River from the site. As such, an operational criteria was set to excavate soil with TPH-DRO concentrations greater than 2,500 mg/kg to the full extent practical. The 2,500 mg/kg level was chosen because it generally corresponds to the concentration at which sheen may occur and can be readily measured through field screening methods.

A condition of MDEs February 25, 2011 approval of the CAWP was excavation to attainment of the MDE default regulatory limit of 620 ug/kg. This standard is based on the human health risk assumed to be present in the case where all TPH-DRO is in the form of aromatic hydrocarbons, which are more toxic than aliphatic hydrocarbons. Based on the type of source material (hydraulic oil) and chemical analysis performed to date, the bulk of the TPH at this Site consists of aliphatic hydrocarbons. As such, the 620 ug/kg standard is overly conservative for the purposes of protecting human health and not applicable to meeting the remedial goal of elimination of discharges to the LGF River. For these reasons, BSTI proposes to retain the operational criteria of 2,500 mg/kg for both the purposes of determining the necessary extent of excavations and the sorting of soils for re-use and offsite disposal.

It should be noted that remediation of dissolved phase DRO in groundwater is not a goal of the corrective action; however, it is expected that the planned source area removal and associated dewatering of the excavation in Area C (if necessary) will result in a significant decrease in dissolved DRO mass.

4.2 Remedial Implementation

Based on assessments and activities conducted since the submittal of the CAWP, a number of changes are proposed in the implementation of remedial activities. These changes are discussed below.

4.2.1 Quarterly Sampling

In the CAWP it was proposed that TPH-GRO, VOCs, and SVOC's not be included in analyses for future monitoring well groundwater sampling at this site. In MDEs February 25, 2011 approval of the CAWP a condition called for continued sampling for these parameters. As summarized in the February 23, 2012 CAWPS, over 96 groundwater samples from the site have been analyzed for PAHs/SVOCs and VOCs. Of these, PAHs/SVOCs were sporadically detected slightly above drinking water standards in a very limited number (6%) of samples. No VOCs were detected in the majority (over 70%) of samples. Those VOCs which were detected were largely at trace (J qualified) levels. In only one well, W-6, has a VOC (chlorobenzen) been consistently observed at greater than trace levels, and this compound has remained almost an order of magnitude below the groundwater standard. No VOCs have been detected at concentrations above MDE groundwater standards. In addition, no PAH or VOCs have been detected above MDE non-residential soil cleanup standards at the Site. These results clearly indicate that VOCs/SVOCs are not present in any substantial quantity and present no human health or ecological risk. As such, TPH-DRO is the only contaminant of concern at the Site.

In light of the discussion above it is proposed that TPH-GRO and VOCs not be included in future quarterly sampling of monitoring wells, outfalls, or the Seep. Sampling of PAHs will continue until the completion of remedial excavations to address the concern that the relatively low concentrations of PAHs present in the subsurface may be mobilized during the excavation process. Sampling of VOCs in potable wells will continue for one additional quarter, for a total of eight quarters. At that time, assuming no detection of VOCs above drinking water quality standards, sampling of potable wells will be discontinued. Potable wells will be appropriately secured but not permanently abandoned.

4.2.2 Demolition Building 8

In the CAWP, contingencies describe remedial excavation with or without the demolition of Building 8. As described in a February 28, 2012 Remedial Action Progress Report, Building 8 was demolished to its foundation slab and that slab has subsequently been demolished and removed as described in a future report. As a result, excavation will proceed within the footprint of former Building 8 in the same manner as the remainder of Area C as described below. In addition, given the very limited access and hazardous conditions (failing beams and ceiling) within the Building 7 Pipe Room, no excavation is planned for this area. It should also be noted that the presence of petroleum substances in sub surface soils have not been confirmed in this area.

4.2.3 Decommissioning Outfall 1 and 2

Evaluation of Outfalls 1 and 2 was proposed in the CAWP as a preliminary to abandonment of Outfall 2. Evaluation of the paths of Outfall 1 and 2 along with measurements of their flow rates during rainfall events indicate that they receive large volumes of runoff from Jericho Rd. On this basis, abandonment of outfalls is not practical and will not be carried out.

4.2.4 Phased Excavation Approach

In light of the updated Site Conceptual Model, the areal extent of petroleum impacted soils is greater than known at the time of submission of the CAWP. Heavy petroleum impacts within Area C extend further to the north then indicated by prior assessments. For this reason it is proposed that excavation within Area C proceed in a step-wise fashion for technical practicability and feasibility. An initial pilot excavation will allow for evaluation of the level of effort required for dewatering of the excavation and the difficulties posed in reaching petroleum impacted soils located below the perched water table and beneath a layer of clean soils (e.g. SB-17). Based on the results of the pilot excavation, any additional changes to excavation implementation or dewatering methodology will be presented to MDE in writing prior to implementation. It is expected that a number of mobilizations of similar size to the pilot excavation, will be required to meet remedial goals. Phased implementation of subsequent excavation activities will allow for full evaluation of field and analytical data prior to

continuation of the excavation process. Areas of heavy petroleum impacts targeted for excavation are illustrated in **Figure 12**.

The pilot excavation is proposed for the area of maximal petroleum impacts, namely in the vicinity of wells MP-12 and soil boring SB-17. The goal of this excavation will be to remove contaminant mass with the intention of reaching remedial goals on the northern sidewall of the excavation. This initial excavation will be approximately 300 cubic yards in volume centered on the above referenced borings. It is expected that the majority (over 75%) of excavated material will be disposed of offsite while less than 25% may be of sufficient quality for reuse as backfill.

The excavation process for the pilot excavation and each subsequent mobilization will be similar. Soils will be excavated and segregated for offsite disposal (TPH greater than 2,500 mg/kg) or reuse (TPH less than 2,500 mg/kg). Assuming acceptable moisture content, soils to be disposed of offsite will be direct loaded into trucks for proper disposal at a licensed facility. Should moisture content be excessive, soils may be temporarily stockpiled to facilitate mixing or drying. Soils for reuse will be stockpiled and at least three samples will be collected for lab analysis of TPH-DRO for every 100 cubic yards of soil.

Upon completion of the mobilization, confirmation samples may be collected depending on observations made in the field. For sidewalls where field observations indicate remedial goals have been reached, or site constraints (e.g. necessary setbacks from foundation footers) limit further excavation, samples will be collected at the MDE requested rate of one sample for every 25 ft of sidewall and 50 square feet of excavation bottom (where bedrock is not reached). Sidewalls which will be excavated during a subsequent mobilization will not be sampled. At the completion of each mobilization the resulting excavation will be backfilled with stockpiled soil or imported clean fill. To facilitate subsequent mobilizations and future grading of the Site, excavations may be backfilled to less than existing grade. Backfill will be sufficient to minimize any physical hazards (e.g. open hole) and raise grade to above that of the water table.

4.2.5 Dewatering of Area C Excavations

As proposed in the CAWP, a pump test was performed to evaluate methodology for the dewatering of the Area C excavation. As described in a June 22, 2011 MW-3 Pump Test Report very small sustainable extraction rates were observed at MW-3. It was concluded that dewatering via points was not practical and that the excavation itself would be dewatered as necessary. As described in the Pump Test Report water extracted from excavations will be directed to a holding tank/wier tank and residual petroleum will be removed using absorbent boom. Water will be pumped through an organoclay drum to remove any residual sheen and activated carbon drum to remove remaining dissolved phase petroleum. The water will be treated and discharged in accordance with the Site's NPDES permit.

4.2.6 Accumulator Area

Additional characterization described above indicates that soil impacts adjacent to the accumulator area are limited in extent. A portion of the accumulator pad was removed during recent site activities while a portion of the pad remains in place. During future mobilizations it is proposed that a remedial excavation be carried out at the northern portion of the accumulator pad. Observations in the field and or confirmation sampling will determine if impacted soils can be excavated without complete removal of the pad. Due to proximity to Building 6, and the thickness of the pad (5 feet thick), it is not feasible to completely remove the Accumulator pad at this time.

4.2.7 Spill Prevention Plan

In order to prevent release of any oil encountered during Site work the following steps will be taken.

- Oil only boom and sorbent pads will continue to be maintained at the Seep and sorbent pads will maintained at Outfall 2.
- An inspection will be made of outfalls and the seep every day during excavation activities so as to detect and respond to any petroleum which may be mobilized from the subsurface.
- Spill control materials (oil only boom and oil only sorbent pads) will be stockpiled on Site so as to be available at any time in the event of a release.

- Any drums containing spent sorbents or petroleum will be closed and sealed on completion of work each day.
- All pumps, lines, tanks, and vessels used for extraction and treatment of groundwater will be inspected before use to ensure they are in sound working condition.
- During pumping of groundwater from excavations, frequent inspections will be made of the holding/wier tank to identify and remove any petroleum present and to prevent overfilling of the tank.
- Oil only boom will be maintained on the down gradient edge of the excavation area
- Free phase petroleum floating in any excavation or spilled to the ground surface will be recovered promptly using sorbents or other appropriate methodology (e.g. pumping off, vac truck).
- Contact numbers to all appropriate authorities (Coast Guard, MDE, State Police, etc) are maintained in the site specific health and safety plan which will be on site during all site activities.

4.2.8 Implementation Schedule

Table 2 presents an updated probable timeline for completion of the tasks included in the CAWP. The timeline is based on an assumption that BSTI obtains approval for modifications to the CAWP by May 25, 2012. This timeline assumes a total of six mobilizations for the purposes of remedial excavation. The actual number of mobilizations will be determined based on progress towards remedial goals. Any variance in schedule will be managed appropriately in accordance with the MDE Case Manager.

5.0 SUMMARY

Characterization activities have more closely established the distribution of petroleum impacts within Area C. TPH-DRO is the only contaminant of concern. The goal of remedial efforts is to remove high concentrations of TPH-DRO and residual NAPL which may be contributing to continuing release to the LGF River. In light of this implementation of the approved CAWP will continue with the following modifications:

- Building 8 has been demolished and excavation within its footprint will be carried out in the same fashion as in the remainder of Area C.
- Remedial goals are for the removal of source mass contributing to sheen with operational criteria of TPH-DRO greater than 2,500 mg/kg used for identifying soils for offsite disposal.
- Groundwater sampling will continue for TPH-DRO. PAH sampling will continue for the duration of remedial excavations. Only one additional quarter of potable well sampling will be conducted.
- Soil excavation in Area C will be conducted through a series of smaller mobilizations to allow for necessary adjustments to remedial methods and full evaluation of field and analytical data collected.
- No decommissioning of outfalls will take place.

It is expected that these corrective actions will remove and/or significantly reduce the remaining petroleum at the site, therefore, eliminating the source of the sheen previously observed at the seep on the bank of the LGF River. In addition, these activities are expected to result in both immediate and long term decreases in dissolved, non-toxic, DRO levels in groundwater. The success of these corrective actions will be assessed through confirmatory samples collected as part of the excavation efforts and through routine post-remediation quarterly monitoring of dissolved DRO levels in groundwater, outfalls and seep.

FIGURES

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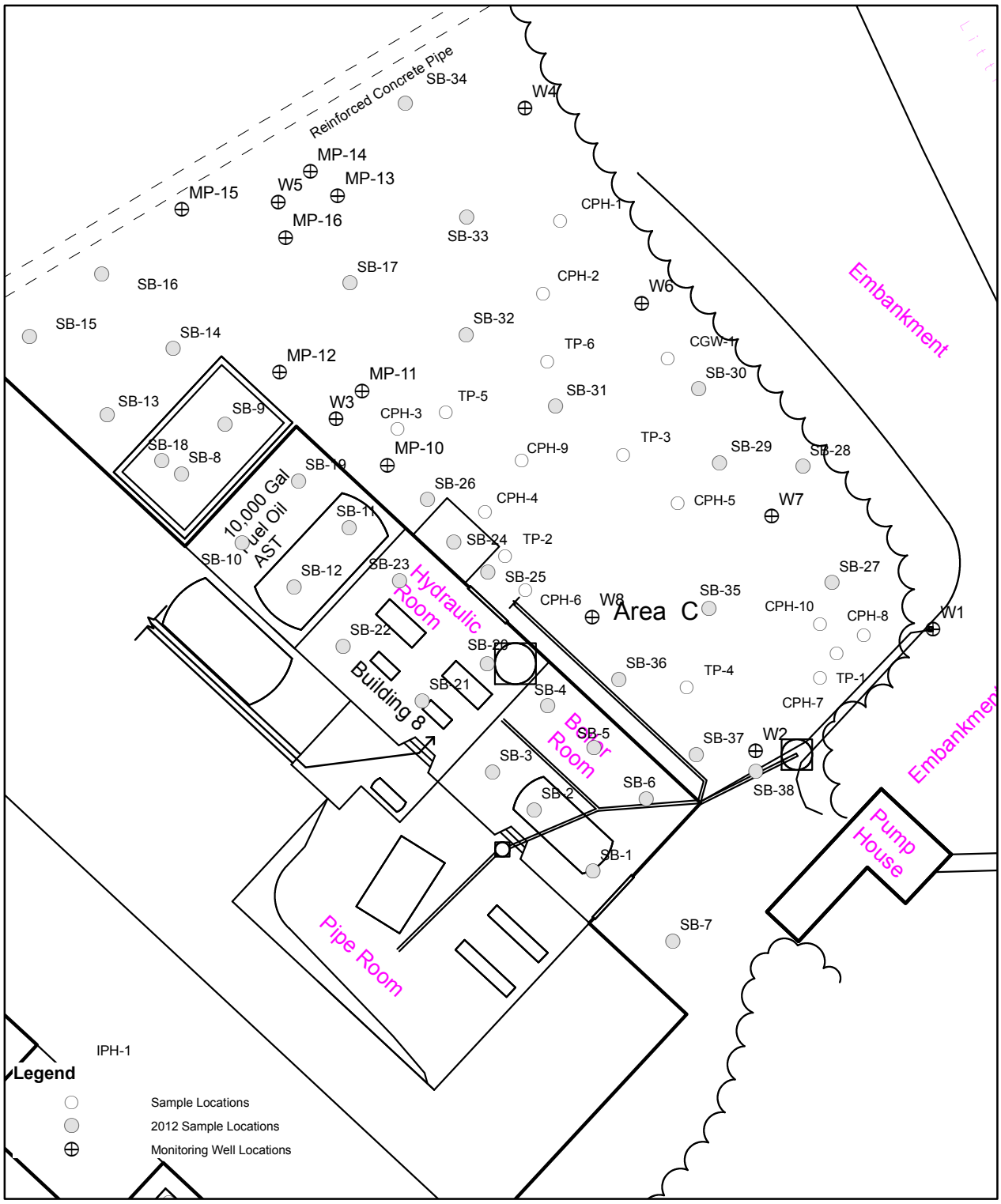

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Date: 2/20/2012	FIGURE 1 AREA C SAMPLE LOCATIONS AXIL BELKO FACILITY KINGSVILLE, MD
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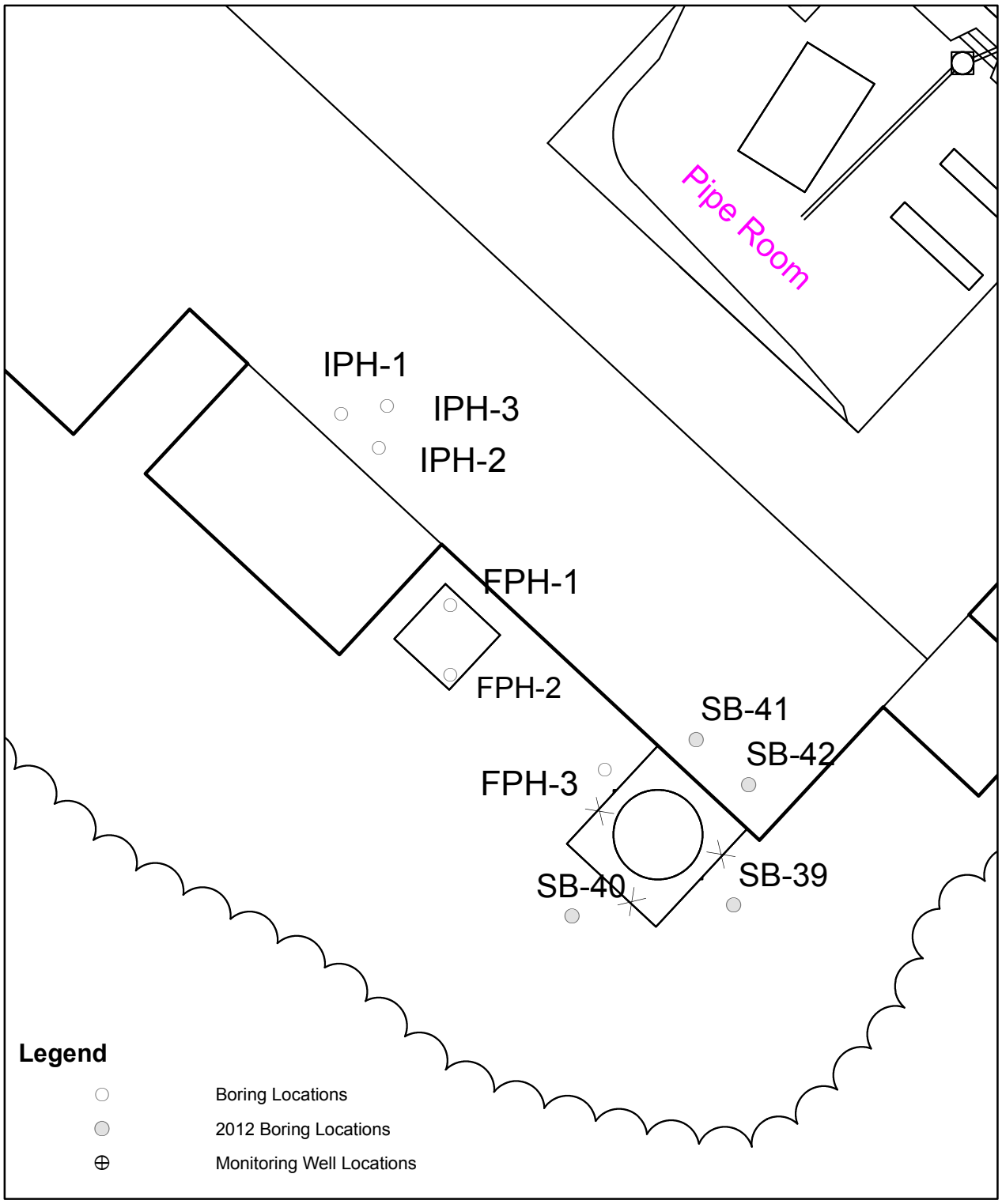

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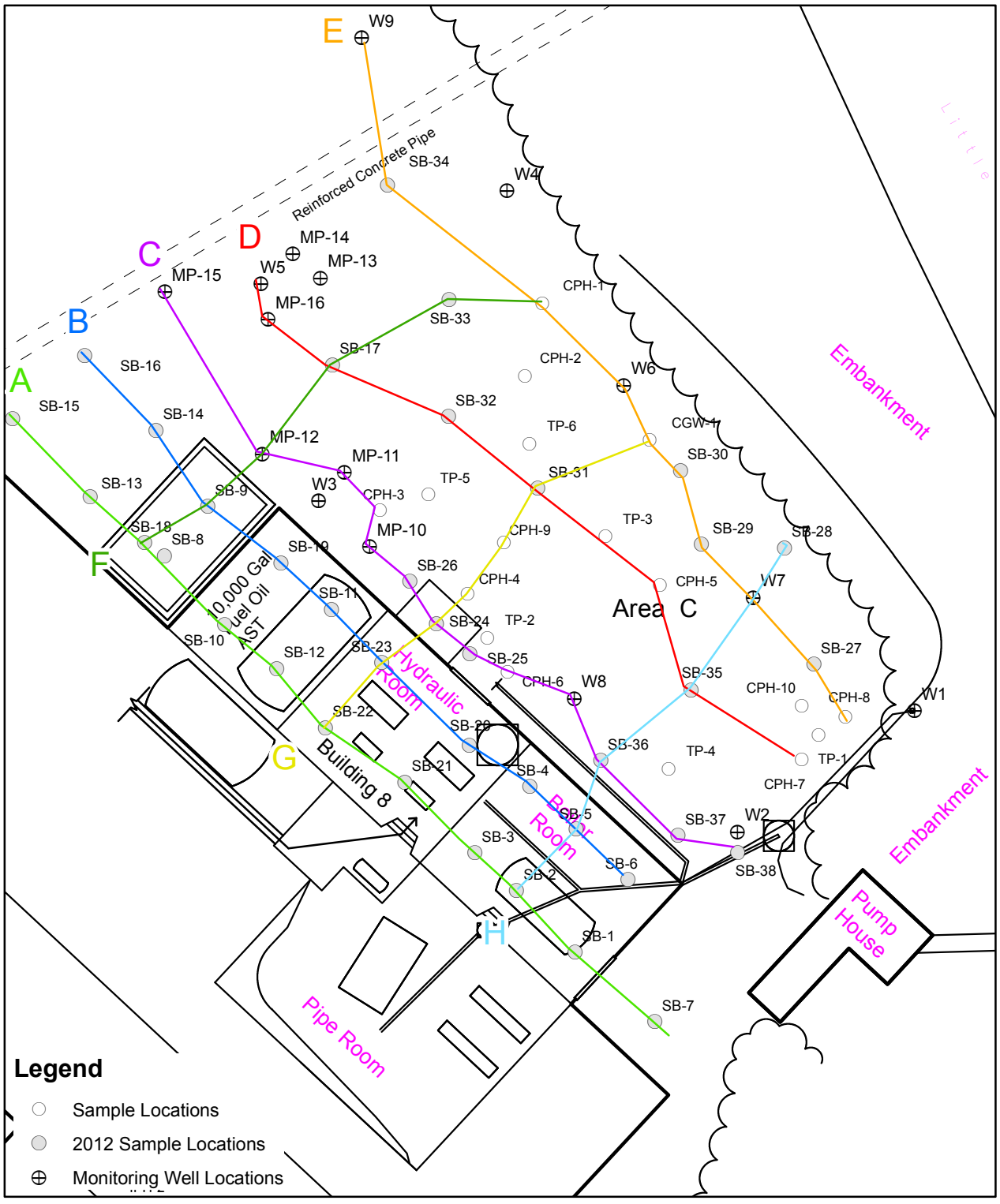

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Date: 2/20/2012	FIGURE 3 CROSS SECTION KEY AXIL BELKO FACILITY KINGSVILLE, MD
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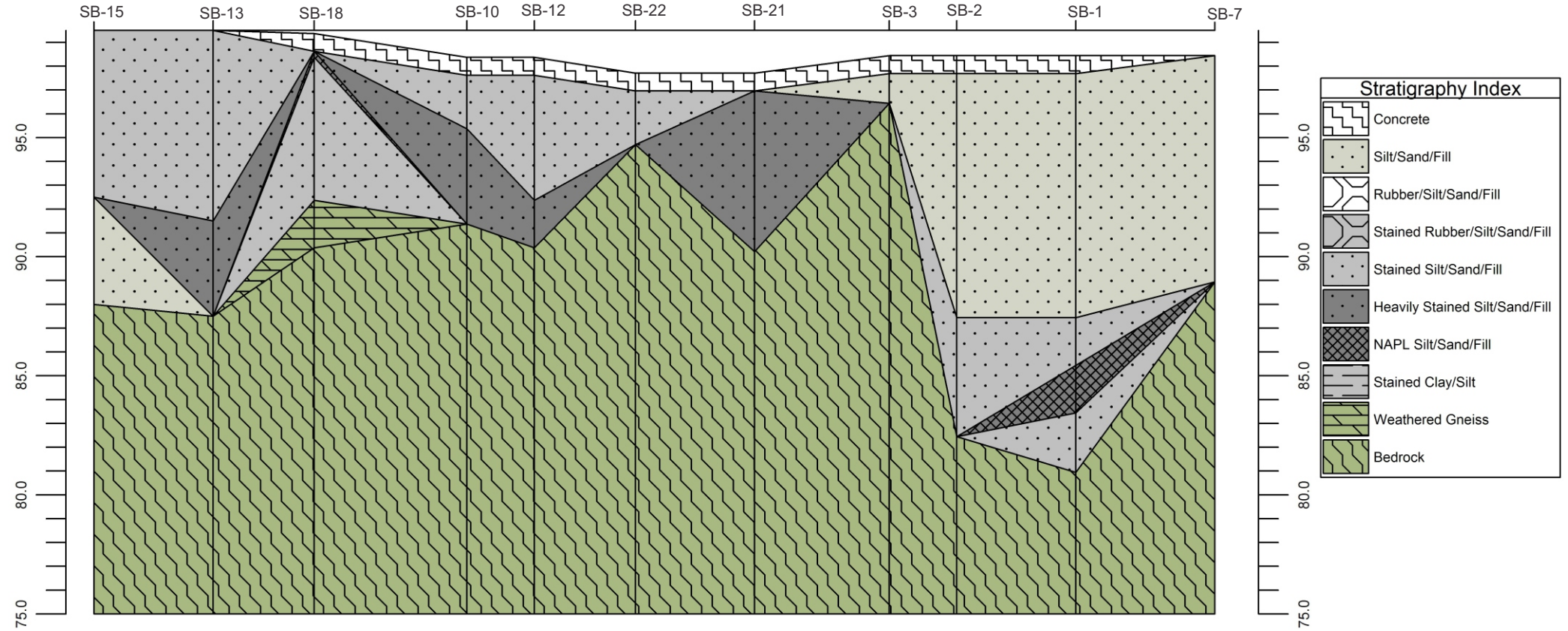

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Date: 4/5/2012	FIGURE 4 CROSS SECTION A AXIL BELKO FACILITY KINGSVILLE, MD
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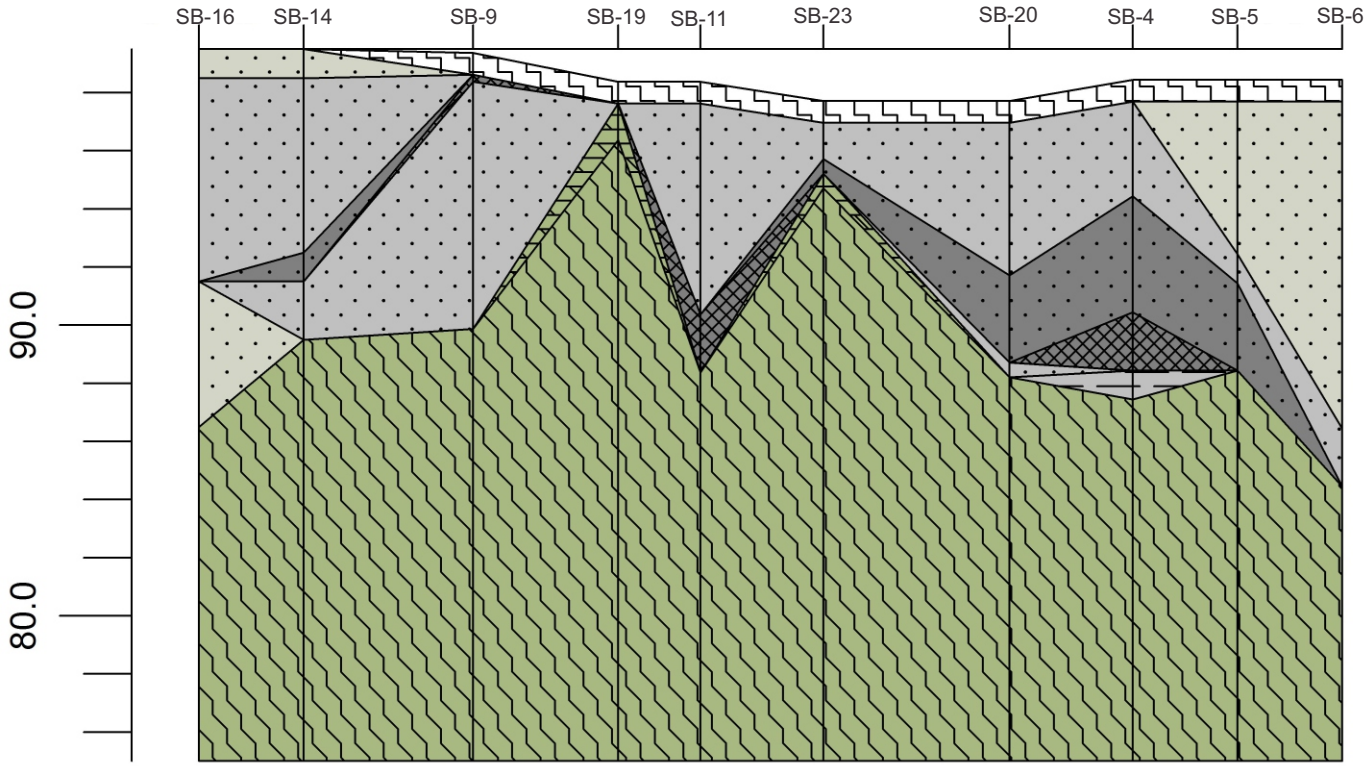

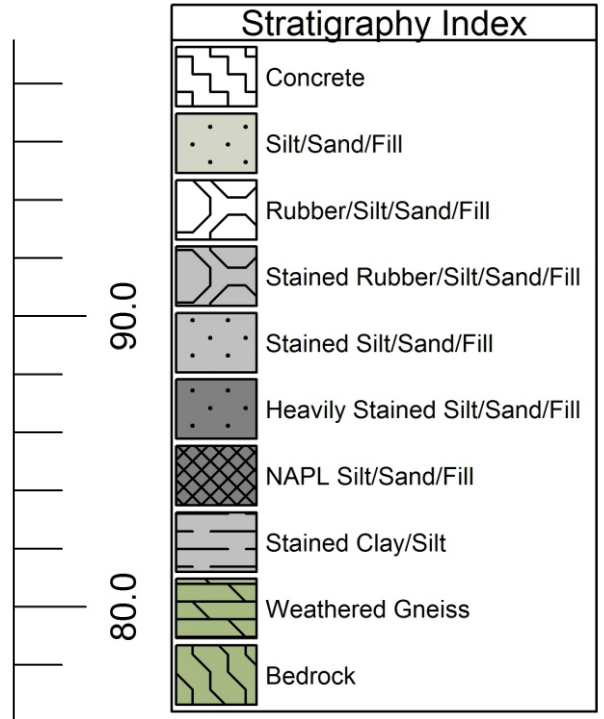

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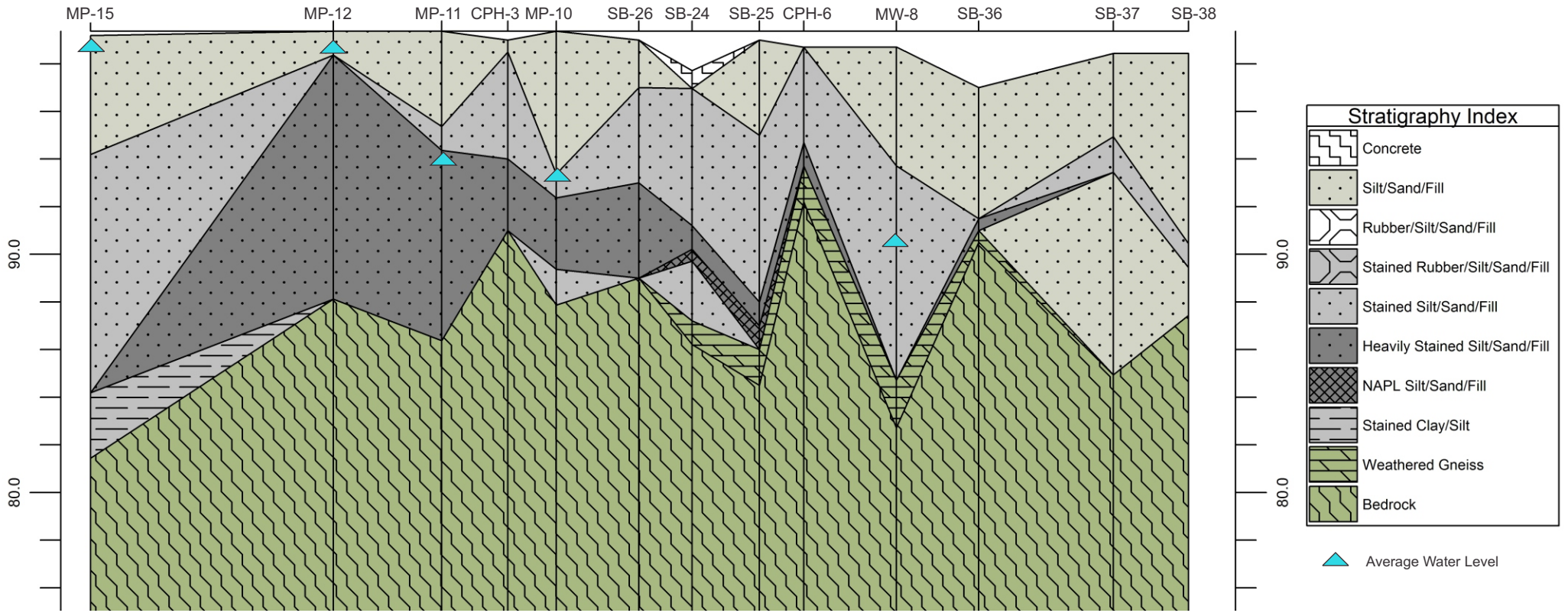

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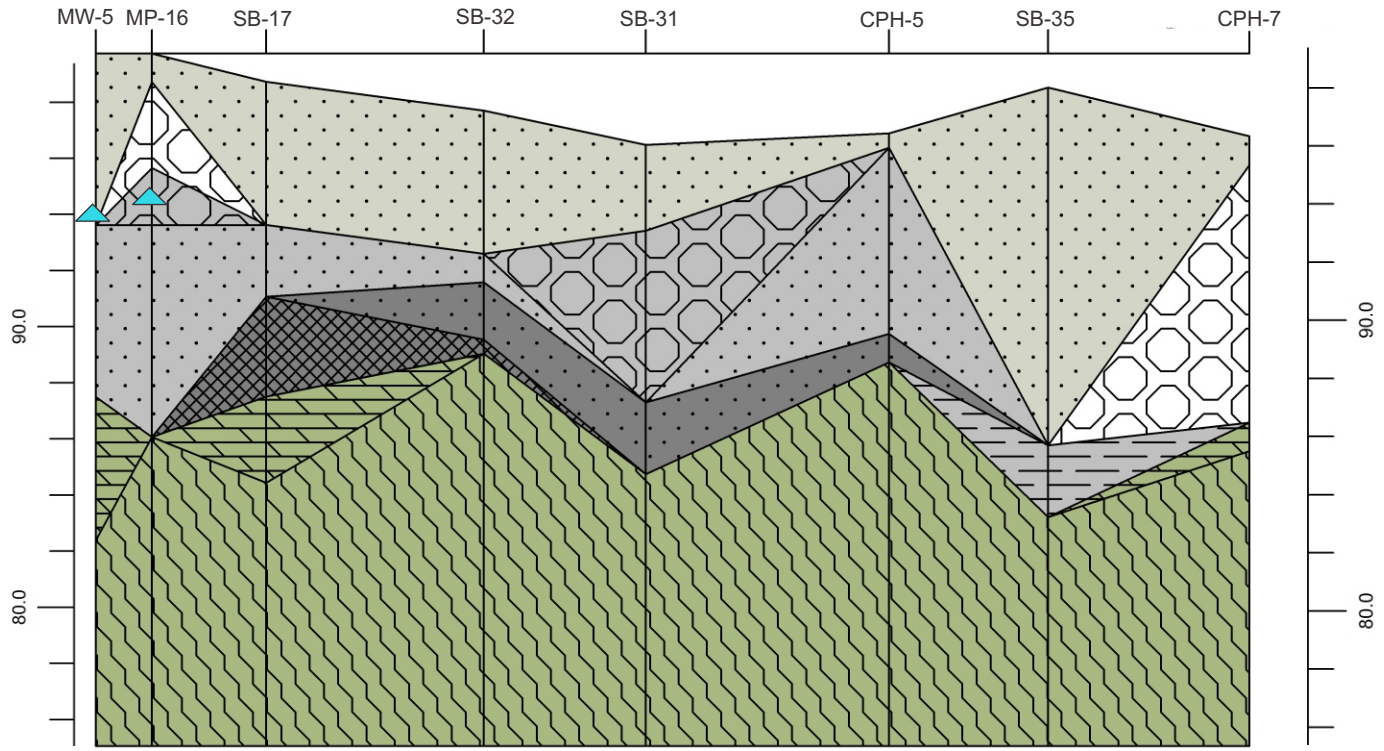

Stratigraphy Index

- Concrete
- Silt/Sand/Fill
- Rubber/Silt/Sand/Fill
- Stained Rubber/Silt/Sand/Fill
- Stained Silt/Sand/Fill
- Heavily Stained Silt/Sand/Fill
- NAPL Silt/Sand/Fill
- Stained Clay/Silt
- Weathered Gneiss
- Bedrock

Average Water Level

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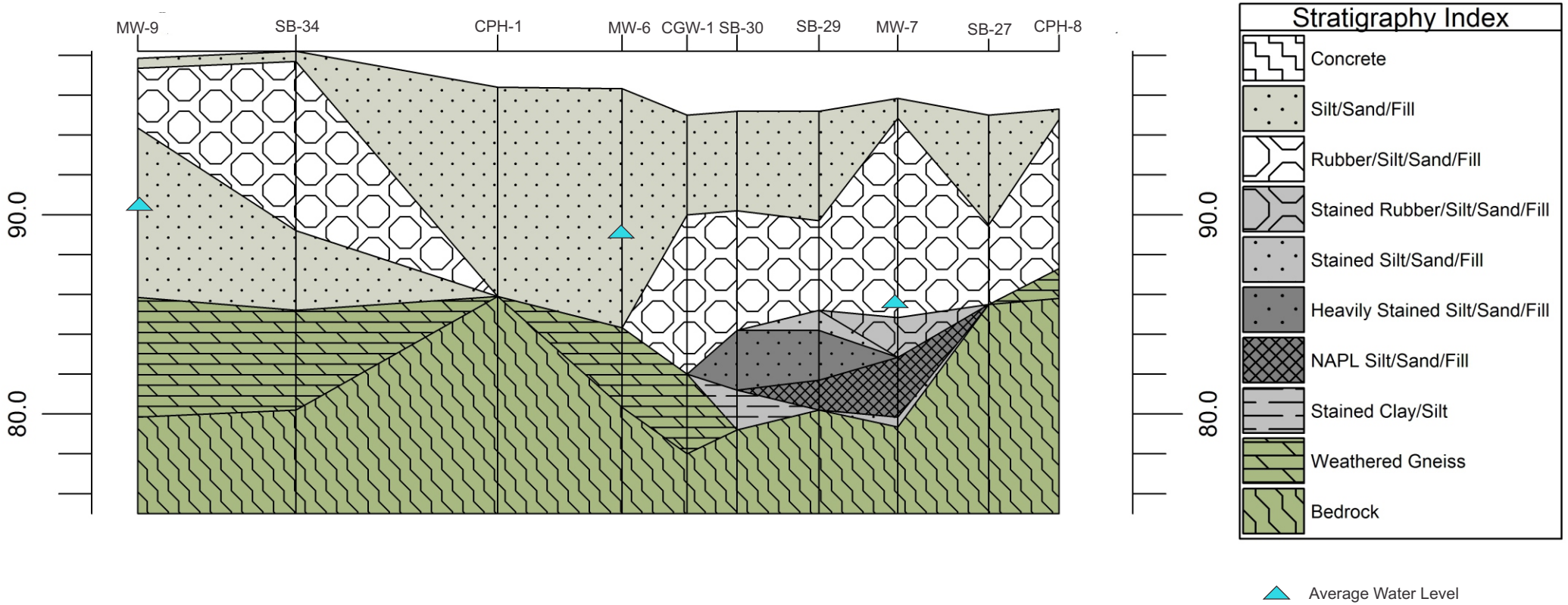

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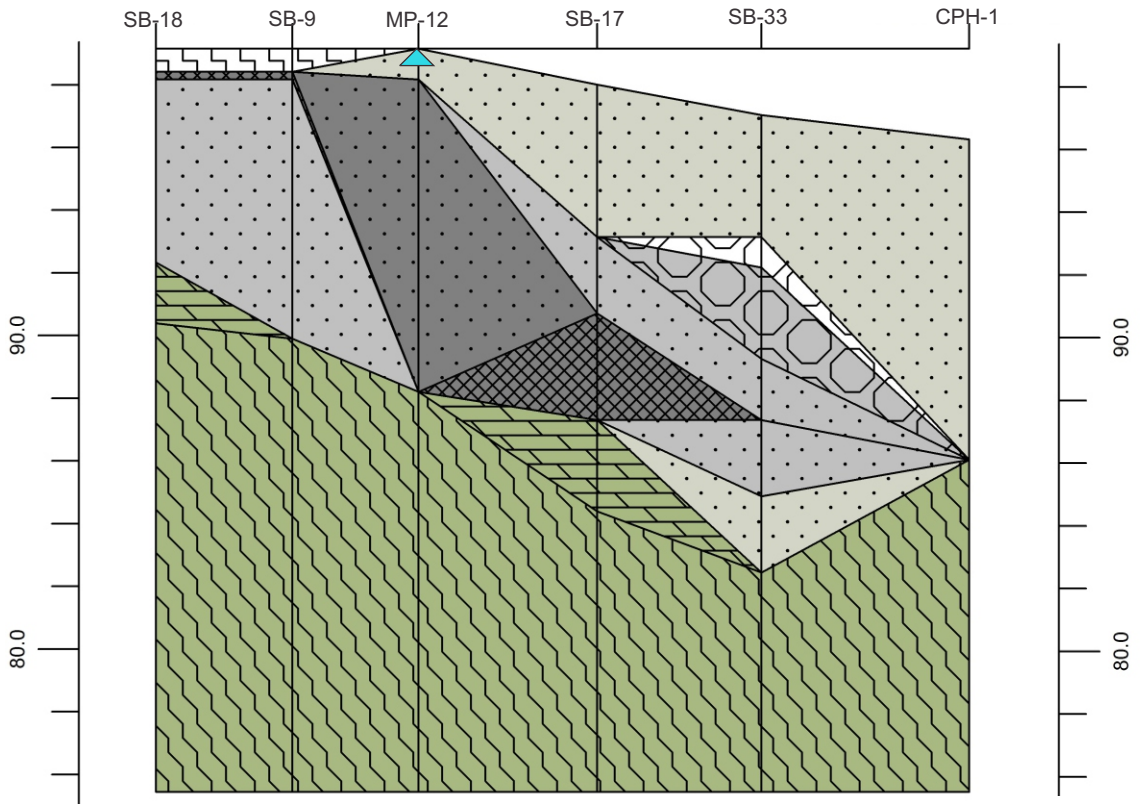

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- Stained Rubber/Silt/Sand/Fill
- Stained Silt/Sand/Fill
- Heavily Stained Silt/Sand/Fill
- NAPL Silt/Sand/Fill
- Stained Clay/Silt
- Weathered Gneiss
- Bedrock

Average Water Level

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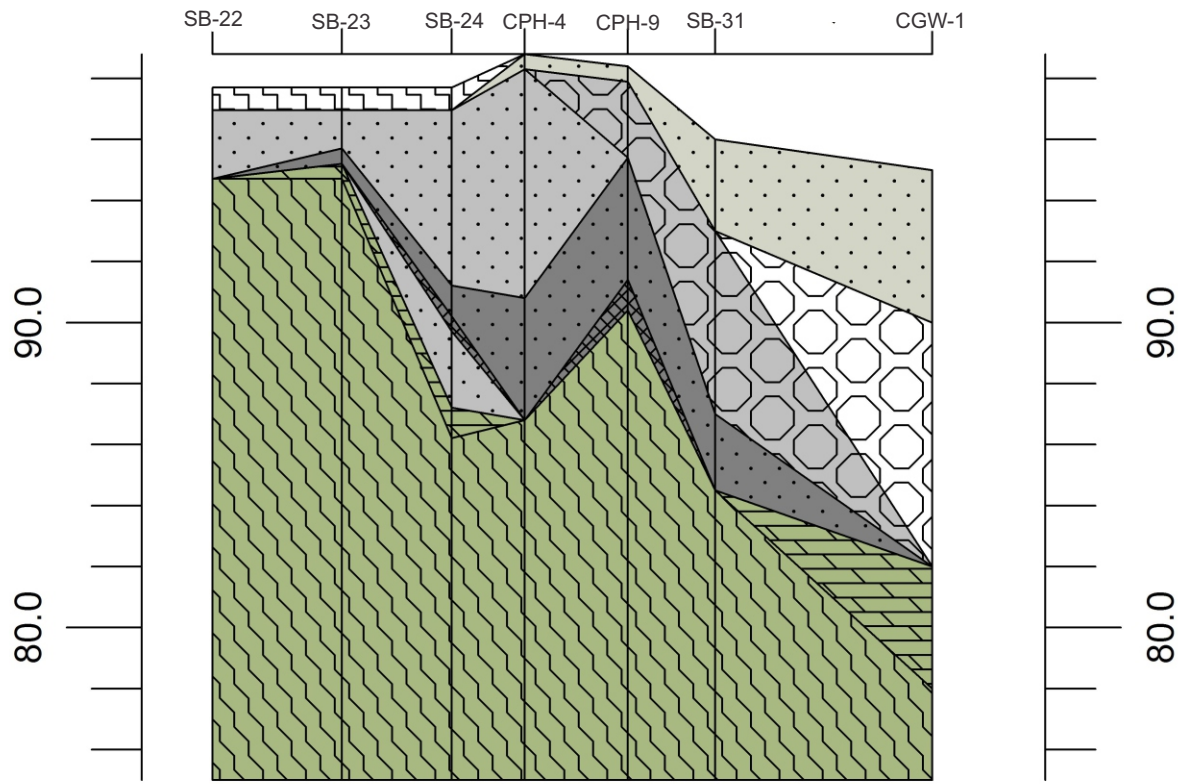

Stratigraphy Index

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- Stained Rubber/Silt/Sand/Fill
- Stained Silt/Sand/Fill
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- NAPL Silt/Sand/Fill
- Stained Clay/Silt
- Weathered Gneiss
- Bedrock

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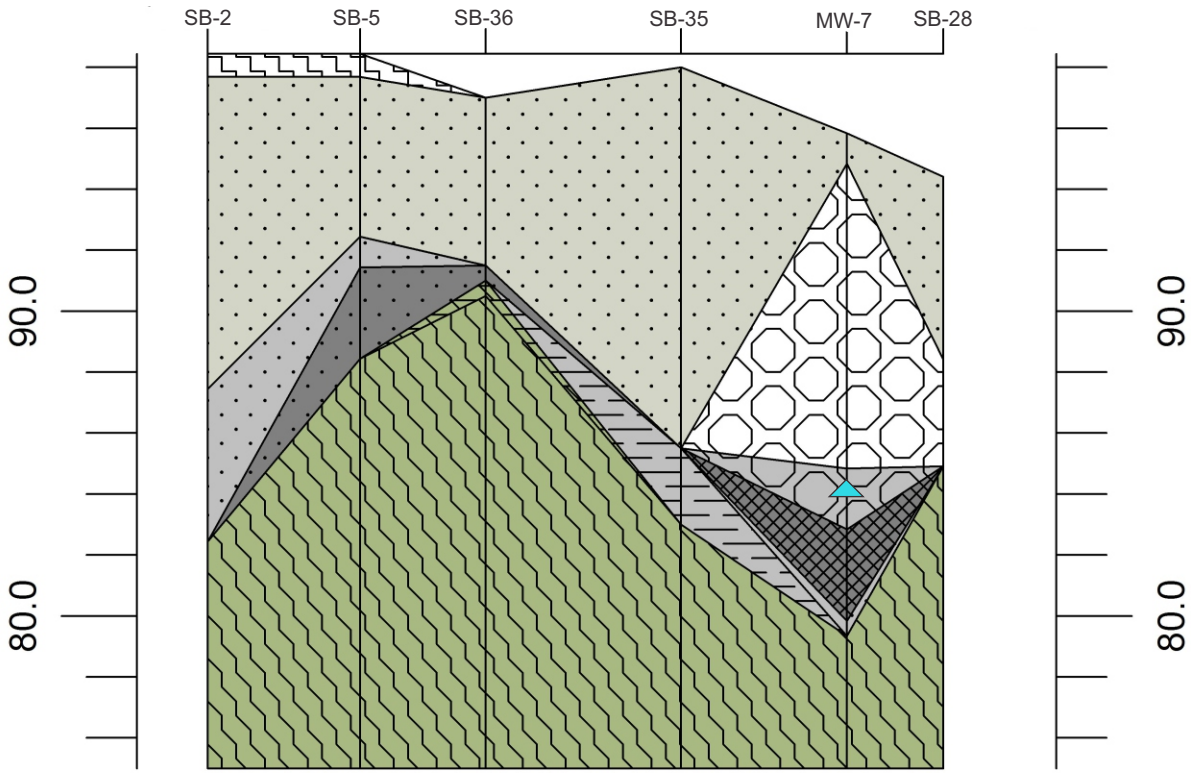
Date: 4/5/2012	FIGURE 10 CROSS SECTION G AXIL BELKO FACILITY KINGSVILLE, MD
Drawn By: NS	
Checked By: WTF	



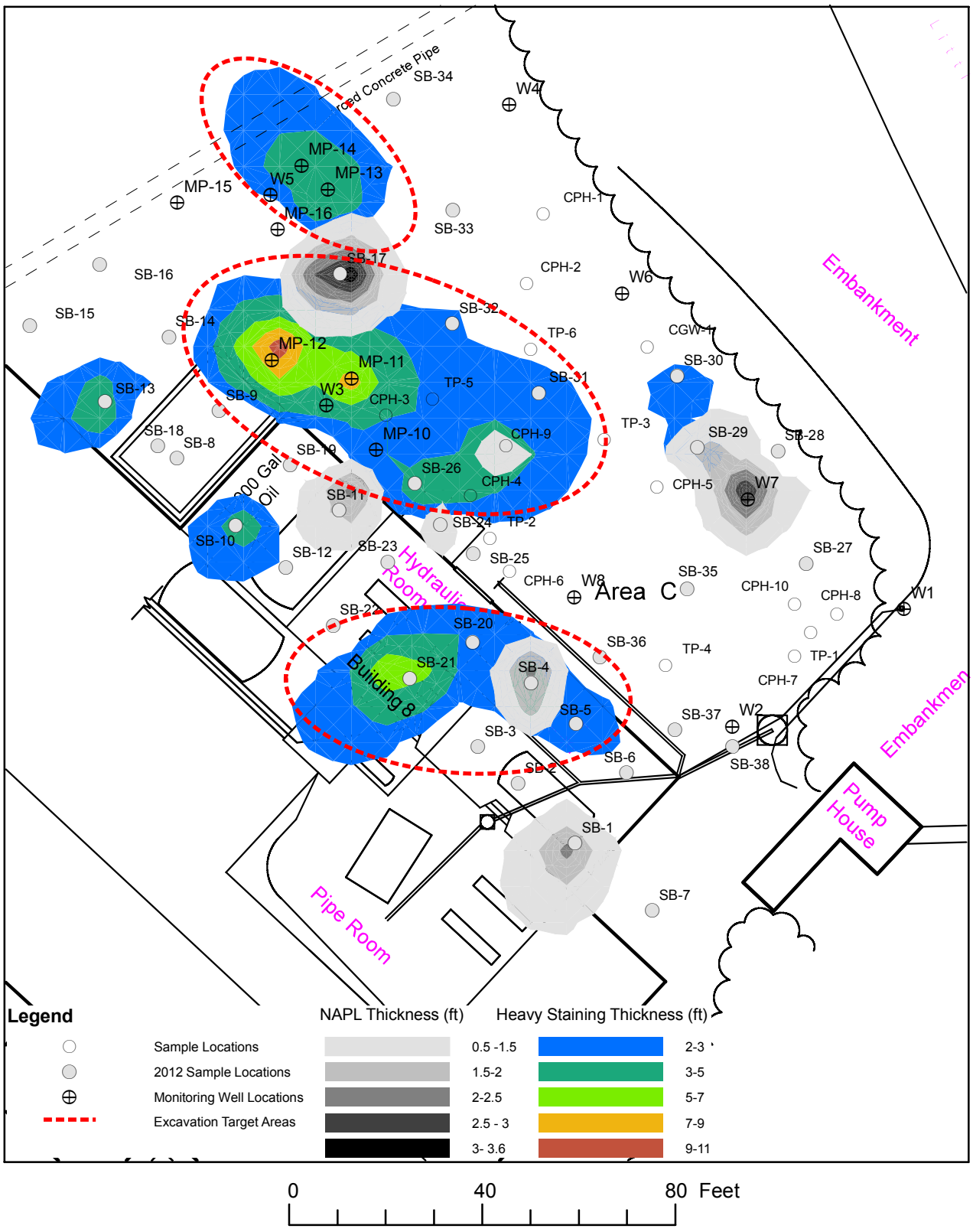
Stratigraphy Index

- Concrete
- Silt/Sand/Fill
- Rubber/Silt/Sand/Fill
- Stained Rubber/Silt/Sand/Fill
- Stained Silt/Sand/Fill
- Heavily Stained Silt/Sand/Fill
- NAPL Silt/Sand/Fill
- Stained Clay/Silt
- Weathered Gneiss
- Bedrock

Average Water Level

BROWNFIELD
SCIENCE & TECHNOLOGY

Date: 4/5/2012	FIGURE 11 CROSS SECTION H AXIL BELKO FACILITY KINGSVILLE, MD
Drawn By: NS	
Checked By: WTF	



BROWNFIELD SCIENCE & TECHNOLOGY

Date: 2/20/2012	FIGURE 12
Drawn By: GW	NAPL/HEAVY STAINING
Checked By: WTF	AXIL BELKO FACILITY
	KINGSVILLE, MD

APPENDIX I

BROWNFIELD
SCIENCE & TECHNOLOGY

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MDD093865760

Manifest Document No.: [illegible]

2. Page 1 of 1

3. Generator's Name and Mailing Address
ITRAN-Tompkins Rubber Corporation
375 Metuchen Road
South Plainfield, NJ 07080

4. Generator's Phone ( ) 610 866-7255

5. Transporter 1 Company Name: TIER Environmental Services, Inc.

6. US EPA ID Number: PAR000043752

A. State Transporter's ID

B. Transporter 1 Phone

C. State Transporter's ID 717-442-4400

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
Environmental Recovery Corporation
1062 Old Manheim Pike
Lancaster, PA 17601

10. US EPA ID Number: NOT REQUIRED

E. State Facility's ID

F. Facility's Phone 717-393-2627

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non-Regulated Material (Oily Water) Non-RCRA / Non-DOT	1	TT	850	G
b.				
c.				
d.				

GENERATOR

G. Additional Descriptions for Materials Listed Above
1.)

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Site Address: ITRAN Rubber Corporation (Fmr Anti-Ballo F
11931 Jericho Road
Kingsville, MD 21087

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name | Signature | Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name | Signature | Date: Month Day Year

NON-HAZARDOUS WASTE

APPENDIX II

BROWNFIELD
SCIENCE & TECHNOLOGY

BROWNFIELD SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-1**
Geoprobe Auger		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					9:30	9:45
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: 9" concrete
				0		0		Brown Silty sand, some gravel (moist)
	2'					1		
				0.1		2		sample collected SB-1 3'-4' (shaker test negative)
			X	0.1		3		
				0.1		4		
	1.5'			0.1		5		Sandy Silt (no odor)
				0.1		6		Brick fill layer
				1.1		7		Sandy silt (wet)
				0.1		8		
	2'					9		
						10		Brick fill
						11		
						12		Thin isolated black layer (saturated, petroleum odor)
	1'			0.3		13		Brick rubble, saturated, free phase oil (odor)
						14		
				0.3		15		Brick, saturated (drops of oil visible, petroleum odor)
	1'					16		Dark grey/black sand and fill (saturated with odor)
						17		Refusal at 17.5'
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing:		Screen Interval:		Sandpack:		Grout:	
BOH:	17.5	Riser Interval:		Bentonite:		Cover:	

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Geoprobe

Boring No. **SB-2**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					9:48	10:00
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: 9" concrete
						0		Tan sand
	2'					1		
				0.1		2		
				0.2		3		Brown silt (no odor)
						4		
	1.2'					5		Brown Silt with clay
				0.3		6		
				0.4		7		
						8		Brown silty-clay (moist)
	1.75'					9		Light brown silt
				0.8 1		10		Fill material (moist)
						11		Grey Silty-clay with sand (saturated, oil stained, odor)
						12		Silty sand (saturated, oil stained)
	1.5'			1.3		13		Fill Material (saturated, oil stained)
						14		
						15		Core barrell bent on Geo-probe (End)
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Geoprobe

Boring No. **SB-3**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					9:48	10:00
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: 9" concrete
	8"					0		Light and dark brown fill material (no odor)
						1		
						2		Refusal at 2'
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: " Screen Interval: Sandpack: Grout:

BOH: 2' Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Geoprobe

Boring No. **SB-4**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					10:06	10:20
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: 9" concrete
				0.4		0		Light tan silt with gravel
				0.5		1		Light grey silt sand with gravel (faint odor)
	2.75'							shaker test positive ++
				0.7		2		
				0.5		3		grey silt sand with gravel
								black stained silt with petroleum odor
						4		
								rock material
						5		
	1.2'			1.5		6		rock material stained with oil (petroleum odor)
						7		
				3.3		8		silt saturated (free product, odor)
	1.5'					9		
				4.8		10		silt-clay (saturated, oil stained, odor)
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-5**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					10:25	10:33
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: 9" concrete
						0		tan silty sand
	2.3'			0.5		1		
						2		
			X	0.5		3		tan silty sand with gravel (no odor)
						4		sample 3-4'
	1.5'			0.2		5		tan silty sand
						6		light grey saturated silt (petrol. Odor)
				0.4		7		dark grey silt with wood (odor)
				0.3		8		dark grey silt (saturated, petrol. Odor)
	1'			0.3		9		fill material (saturated, petrol. Odor)
						10		Refusal at 10"
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Gregg

WELL SPECIFICATIONS:

Diam. of casing:		Screen Interval:		Sandpack:	Grout:
BOH:	10'	Riser Interval:		Bentonite:	Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-6**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					10:35	10:48
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: 9" concrete
						0		tan silt with gravel (moist)
	1.5'			0.2		1		grey clay with gravel (moist)
						2		
				0.4		3		white gravel
								brown silt (no odor)
						4		brown silt with gravel
	2'			0.2		5		
				0.2		6		dark brown silt with gravel (moist)
				0.2		7		light brown silty clay (saturated, no odor)
				0.3		8		light brown silty clay (saturated, slight petrol. Odor)
	2'			0		9		**shaker test negative from 9'**
				0		10		brown silt with gravel
				0		11		fill material (saturated, no odor)
	1'			0		12		grey silt with fill material (oil stained, petrol. Odor)
						13		
						14		refusal at 14'
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing:		Screen Interval:		Sandpack:		Grout:	
BOH:	14'	Riser Interval:		Bentonite:		Cover:	

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-7**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					10:52	11:05
Date	3/14/2012				3/14/2012	2/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: Bare soil
				0		0		brown silt (no odor)
						1		brown silt with gravel
	2'					2		
								fill material
				0		3		
						4		light brown silt clay (moist, no odor)
								light brown silty sand (moist)
			X			5		sample 5-6'
	2'					6		
						7		light brown silty clay (saturated, no odor)
	1.5'					8		
						9		brown silt (moist)
								Refusal at 9.5'
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Gregg

WELL SPECIFICATIONS:

Diam. of casing:		Screen Interval:		Sandpack:		Grout:	
BOH:	9.5	Riser Interval:		Bentonite:		Cover:	

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-8**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					12:30	12:37
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: concrete, water rising into hole as drilling through slab before fully penetrating, free product flowed out of the hole
						0		water flowing out of bore hole with small quanty of free phase product
						1		refusal at 1.5'
						2		
						3		
				0		4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-9**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					12:39	13:00
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: concrete
				3.5		0		crushed stone with oil staining (petrol. Odor)
						1		test kit positive ++
	2'					2		
				5		3		crushed stone with staining (moist)
				5		4		grey silty-sand (saturated with petrol. Odor)
	3.5'			1.7		5		grey silty sand (moist with odor)
				1.6		6		
				2		7		grey silty sand (moist with odor)
				1.6		8		grey silty sand (saturated with odor)
	2'			1.6		9		
								9.5' refusal
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-10**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					13:27	13:35
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: concrete
				2		0		grey silt sand (moist with petrol. Odor)
				3		1		
	3'			3		2		
				3.9		3		dark grey silt sand (moist with petrol. Odor)
				13		4		dark grey silt sand (moist with petrol. Odor)
	3.5'			9		5		dark grey silt sand (moist with petrol. Odor)
				8		6		
				5		7		refusal at 7'
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-11**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					13:37	13:48
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: concrete
				9.5		0		gravel
				8.7		1		silt with grave (oil stained with petrol odor)
	1.5'			8.3		2		grey silty sand
				3.3		3		grey silty sand (moist)
				4.9		4		silty sand (oil stained with petrol odor, moist)
	4'			3.9		5		light grey silt sand (moist,petrol odor)
				5.2		6		
				7.8		7		grey with tan silty sand (moist with petrol odor)
	2'			8.9		8		dark grey silty sand (saturated, beads of oil visible, petrol odor)
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-12**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					13:50	14:00
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: concrete
						0		moist tan to grey sand (petrol odor)
				8		1		
	2.5'			5		2		
				9		3		
						4		
	2'			9		5		Moist grey silt and sand (petrol odor)
				8		6		
				12		7		
	2'			8.9		8		refusal at 8'
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-13**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					14:02	14:10
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: asphalt
				2		0		moist tan to black silty sand (petrol odor)
				3		1		
	2'					2		
				2		3		
				9		4		6" saturated black silty sand
	3.5'			1.8		5		grey to tan silty sand (faint odor)
				0		6		shaker test + bead slight pink with pink haze on side
				0		7		
	3.5'			9		8		dark grey silt/sand 4" thick (strong petrol odor)
				0.1		9		grey to tan silty sand (slight petrol odor)
				0.1		10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-14**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					14:10	15:25
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: asphalt
				0.1		0		gravel
				2				
				0.3		1		sand stained with oil (odor)
	2.2'			5		2		
				2		3		grey silty sand (odor)
				0.5		4		
	4'			1.5		5		grey silt (dry)
				7		6		
				10		7		dark grey silt sand (moist with odor)
	2'					8		grey silt (moist with odor)
						9		grey silt (saturated, odor)
								grey silt with staining (saturated, odor)
						10		10' refusal
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-15**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					14:10	15:25
Date	3/14/2012				3/14/2012	3/14/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		Tan/grey/black silty sand and gravel, trace rubber fragments (slight petrol odor)
				0		1		
	4'			0		2		
				0		3		
				0		4		Orange Tan Silty Sand
								Shaker test with pink bead
	4'			0.1		5		Grey/Tan Silty Sand (slight petrol odor to grey material)
								Sample 6"
			X	0		6		
				0		7		
				0		8		Orange Grey Silty Sand
	3'					9		
						10		
						11		
								11.5' refusal
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/14/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-16**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					14:10	15:25
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		clean sand
				0		1		
	2.5'			1		2		stained silty sand (moist , odor)
				3		3		
				2		4		saturated silty sand (oil stained with odor)
	3'			0.5		5		saturated silty sand (oil stained with odor)
				0.5		6		light grey silty sand with gravel (moist with faint odor)
				0.5		7		
	2'			0.3		8		
						9		gravel (wet with faint odor)
						10		light brown silt with gravel (wet with faint odor)
				0.3		11		
	1.5'			0		12		tan silty sand (saturated with faint odor)
				0		13		refusal at 13'
						14		Shaker test from 13' negative
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-17**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					9:00	9:13
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		silty sand with gravel (moist)
				0		1		fill material (moist)
	3'			0		2		
				0.3		3		tan-grey silty sand (moist)
				0.5		4		silt with fill (moist, faint odor)
	2'			1		5		
				0.5		6		grey silt (moist, odor)
				5		7		grey silty sand (oil stained, odor)
	3'			6.5		8		
				4.5		9		grey silty sand (oil stained, odor)
				3		10		silty sand (oil sheen, heavy odor)
				0.2		11		
				0.1		12		light grey silty sand (moist, odor)
				0.1		13		
						14		refusal at 14'
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-18**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					9:16	9:28
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				35		0		silty sand with some gravel
								grey (strong petrol. Odor)
						1		moist to saturated
	1'					2		
				17		3		
				4		4		1` tan to grey sand and rounded gravel saturated strong petrol odor
	3.5'			3		5		0.5' Tan silty sand and gravel saturated some odor
				1		6		
				0.1		7		2' grey tan silty sand (faint odor)
	1'					8		Tan to grey silty sand slight odor
						9		refusal at 9'
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-19**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					9:16	9:28
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: concrete - second location after hitting rebar on 1st
						0		refusal at 2'
						1		concrete dust with crushed rock chips at end of core
	1'					2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-20**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					10:30	10:45
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: concrete - second location after hitting rebar on 1st
				6		0		grey silty sand (oil stained with odor, moist)
						1		
	1.2'					2		
				6		3		
				3		4		tan-grey silt sand with staining (moist with odor)
				4.5		5		
								dark grey silt sand with staining (moist with odor)
	3.5'					6		
				0.5		7		
				4.1		8		
				3.2		9		dark grey silt sand (oil stained, saturated, odor) 2"
	2.5'							refusal at 9.5'
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-21**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					10:48	10:55
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				3		0		dark grey silty sand (heavy oil stains, saturated, petrol. Odor)
						1		
	1.5'			2		2		light grey silty sand (moist, stained, petrol. Odor)
						3		
				0.5		4		dark grey silty sand (stained, moist, petrol. Odor)
						5		light grey silt sand (dry)
	2'			0.5		6		dark grey silt sand (stained, saturated, petrol. Odor)
						7		refusal at 7.5'
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-22**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					10:57	10:59
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				2.5		0		grey sandy silt,saturated, petrol odor
	1.2'			1.5		1		
						2		
						3		refusal at 3'
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe
Boring No. **SB-23**
Sampling Method:
Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					11:00	11:04
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				9		0		dark grey silty sand (stained, moist, petrol. Odor)
	2'			4.5		1		tan-grey silty sand (stained, moist, petrol. Odor)
						2		dark grey silty sand (stained, saturated, petrol. Odor)
								light grey weathered stone (DRY)
						3		refusal at 3'
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:
BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-24**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					11:10	11:30
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: concrete
						0		
								concrete dust
	0					1		
						2		
						3		
								concrete dust
					1	4		
	2'				20	5		Tan silty sand (stained, moist, petrol odor)
						6		light grey silty sand with gravel (moist, faint petrol odor)
						7		
								Dark black silty sand (heavily saturated with free phase oil, heavy odor) - 0.3' thick
					1	8		
								dark grey silty sand (oil staining heavy, saturated, odor)
					1.5	9		
								dark grey silty sand (oil staining heavy, saturated, odor)
					1	10		
								light grey silty sand (stained, moist, petrol odor)
						11		light grey weathered rock - 1' thick
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-25**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					11:45	12:00
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: Bare soil
				0.8		0		
								tan/brown sandy silt with gravel rounded
	3'					1		dry
								stone layer - 0.3' thick at bottom
				0.1		2		
				2.3		3		
				1		4		grey/brown silty sand with wood fragments
								Moist
	1.2'			2.5		5		last 0.4' dark grey silty sand saturated (stained, strong odor)
				10		6		
						7		
				2.2		8		grey/brown clayey silt (saturated, strong odor) - 1'
				1		9		4" dark brown grey silt (saturated with odor)
	2.2'							
				1.2		10		grey silty sand (odor)
						11		brown/grey silt (hard, moist, odor)
				5		12		dark grey silty sand (saturated, liquid phase petroleum)
	3'			4		13		
				2		14		grey weatherd rockl (some odor) - 1.5'
								refusal - 14.5'
				1		15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-26**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					13:00	13:10
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		Brown silty sand (slight odor)
	3'			0.1		1		light brown silty sand (moist)
				17		2		black silty sand (oil stained, moist, odor) = 2"
			x	8		3		tan silty sand (oil stained, moist, odor)
				3		4		grey silty sand with fill (moist, odor)
	1'			5		5		
				10		6		black silty sand (heavy stains, odor, saturated) = 4"
				8		7		
				8		8		black silty sand (heavy stains, odor, saturated) = 6"
								tan silty sand with gravel (moist, odor)
	1'			10		9		black silty sand (heavy stains, odor, saturated) = 2"
						10		10' refusal
						11		
				5		12		
	3'			4		13		
				2		14		
				1		15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-27**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					13:13	13:22
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		
								brown silty sand with gravel (moist)
	2.75'			0		1		
								tan-grey silty sand with gravel (moist)
				0		2		
				0		3		
				0		4		
								grey silty sand (moist)
	6"			0		5		
				0		6		rubber
				0		7		
				0		8		rubber & rock
	4"			0		9		
								refusal 9.5'
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
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LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-28**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					13:13	13:22
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		
								brown silt with organics (moist)
	3'			0		1		
				2		2		tan silty sand (moist, slight odor)
				0.1		3		grey silty sand (faint odor, slight stain, moist)
								shaker test 3' NEGATIVE
				0		4		
								tan/grey silty sand (moist)
	1.75'			0		5		
				0		6		tan/grey silty sand with fill (moist)
				0		7		
								rubber material = 2"
				0		8		
								rubber material
	0					9		
						10		
						11		
						12		
	1'			1		13		
						14		
								rubber trace dark silt (slight odor, saturated)
						15		
						16		refusal 16'
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-29**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					13:45	14:00
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		brown silty sand (moist)
	2'			0		1		Light brown silty sand (moist)
				0		2		
				0		3		grey/tan silty sand (moist)
				0.3		4		
	2'			0.1		5		light grey silty sand (moist)
				0		6		rubber 2"
				0		7		brown silty sand with gravel (moist)
				0		8		grey silty sand (dry)
	2'			3.4		9		grey silty sand (DRY)
						10		rubber
				1.8		11		black stained silty sand (saturated, odor) = 12"
				0.5		12		
	1.5			1		13		black stained silty sand (free phase product, saturated, odor) = 1.5'
				6.4		14		
						15		refusal at 15'
						16		
						17		
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-30**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					14:05	14:24
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		Tan silty sand (moist)
	1.75'			0		1		grey silty sand (moist)
				0		2		
				0.1		3		
				0		4		fill material
	1'			0		5		rubber
				0.2		6		
				0.2		7		dark sandy silt (no odor)
				0.4		8		rust colored silty sand
	1.75'			0.3		9		
				0.4		10		rubber (saturated, odor)
						11		
						12		dark grey clay (saturated odor, oil stained)
				1		13		Black silty sand with rubber (saturated, odor)
	3'			0.7		14		dark grey clay silt (saturated, stained, odor)
				1.1		15		
				0.4		16		light grey clayey silt (saturated, stained, odor)
						17		refusal at 16'
						18		
						19		
						20		

Logged by: S Quinlan Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-31**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					14:25	11:45
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				1.1		0		tan/grey to brown silty sand
	3.5'			0.2		1		dark brown band at 3.5' with PID=1 (odor)
				0.1		2		
				0.2		3		rubber fragments mixed in bottom 6"
				0.7		4		
								tan/grey silty sand
	1.5					5		rubber and wood debris (stained, moist)
				4		6		
						7		
				8.3		8		black rubber fragments and silt (stained, saturated, odor)
	3'					9		dark grey sandy silt (odor, saturated)
				9		10		
						11		
								11.5' refusal
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-32**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					14:50	14:57
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				2		0		
	2.2'			2.5		1		tan/brown sandy silt with quartz gravel
				1		2		
						3		no staining or odor on bottom (odor on top)
				92.5		4		0.5 ' tan/brown sandy silt with quartz gravel
	2.2			21		5		Dark grey fractured rock saturated odor
				4		6		
						7		
	.3'			9.5		8		Dark grey sandy silt saturated trace free phase petroleum
						9		refusal at 8.5'
						10		
						11		
						12		11.5' refusal
						13		
						14		
						15		light grey clayey silt (saturated, stained, odor)
						16		refusal at 16'
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-33**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					15:00	15:15
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				1.5		0		brown to tan grey clay silt and sand (slight odor in grey layer)
	3'			1		1		
				0.5		2		
				0		3		
				0.2		4		tan to brown clayey silt (faint odor)
	1'			21		5		rubber fragments
				0.1		6		
						7		
				0.4		8		1" rubber fragments (saturated)
	2.2'			7		9		dark grey stained silty sand (odor) = 6"
				1.5		10		tan/grey sandy silt (slight odor)
				0.2		11		no free petroleum
				0.2		12		grey silty sand (faint odor)
	3'			0.1		13		0.4' red silt and sand (moist)
				0.1		14		shaker test on bottom grey is negative
				0		15		
						16		refusal at 15.5'
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-34**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					15:20	15:35
Date	3/15/2012				3/15/2012	3/15/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		brown to grey clayey silt with sand
								gravel layer and rubber fragments
				0		1		
	3'			0.1		2		
				0.1		3		
				0.1		4		0.5' brown to grey clayey silt with sand
								gravel layer and rubber fragments
				0.3		5		
				1.9				
	1.3'					6		rubber fragments with wood (saturated)
				2.5				
						7		
				0.5		8		grey silty sand (saturated, faint odor)
								shaker test
				0		9		sample SB-34
	4'			1		10		
			X			11		
				0		12		6" grey silty sand (saturated) with wood fragments (no odor)
	3.5'			0		13		
								tan brown silty sand with gravel (moist, no odor, weatherd rock)
				0		14		
				0		15		
				0		16		tan brown silty sand with gravel (moist, no odor, weatherd rock)
								grey weathered rock = 0.2'
	1.5'			0		17		
								stop at 18 not yet refusal
						18		
						19		
						20		

Logged by: N Santella Date: 3/15/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:
BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-35**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					8:30	8:45
Date	3/16/2012				3/16/2012	3/16/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				1.3		0		brown to tan/brown silty sand with gravel (fill)
				0.2		1		Moist, last 4" saturated
								no odor
	3'			0		2		
				0		3		
				0.4		4		clayey silt with tan sand and gravel
				0		5		grey and dark brown layer towards bottom
	2.5'			0		6		no odor, saturated
				0		7		
				0		8		Tan brown silt and sand
				0		9		
	3'			0		10		
				0		11		
				0.2		12		0.4' Tan brown silt and sand
	3.5'			0.5		13		
								grey silty clay (saturated, odor)
				1		14		0.3' weathered rock (some odor)
				1		15		
								refusal at 15'
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/16/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-36**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					8:45	9:00
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		red brown silty sand fill (moist)
				0		1		dark grey silty sand (moist)
	3.5'			0.2		2		NO ODOR
				0.1		3		
				0.7		4		grey to brown stily sand moist no odor
								dark grey silty sand with gravel and wood chips (odor) - 0.3' thick
	3'			0.1		5		5' shaker test negative
								0.4' weathered rock (no odor)
				0.3		6		
								6.5' refusal
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing:		Screen Interval:		Sandpack:	Grout:
BOH:		Riser Interval:		Bentonite:	Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-37**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					9:03	9:15
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		red brown sand and silt (moist , no odor)
				0.2		1		bottom 0.3' grey tan silt and sand
	2.2'			0		2		some odor in grey
				0.2		3		
				0.4		4		grey silty sand with wood fragments (moist, odor)
				0.4		5		tan to brown silty sand weathered rock fragments (no odor)
	1.8'			0.1		6		
						7		
				0.1		8		red brown claey silt (saturated, no odor)
				9		9		concrete fragments with wire reinforcement 1' thick - petroleum odor probable pipe
	1.5'			2		10		red brown claey silt (saturated, no odor)
				1		11		
						12		dark grey rock fragments
	1'			1.5		13		
								brick dust (petrol odor)
				2		14		
				1		15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-38**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					9:17	9:30
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0		0		brown to dark brown silty sand and gravel
				0.1		1		asphalt fragments (moist, no odor)
	1.5'			0		2		
				0.2		3		
				0		4		tan brown silty sand (moist, no odor)
				0		5		some grey rock fragments
	1.5'			0		6		
				2		7		
				4		8		red brown silty sand - 1.5' thick (moist)
				1.5		9		2 black layers petroleum odor
	2.2'			3.5		10		pink rock fragments
				0.5		11		refusal at 11' - pink rock fragments (slight odor)
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing:		Screen Interval:		Sandpack:	Grout:
BOH:		Riser Interval:		Bentonite:	Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-39**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time						
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				0.2		0		brown to brown tan claysy silt trace sand and gravel
								coal fragments (no odor , moist)
				0.1		1		
	3.5'			0		2		
				0		3		
			X	0.2		4		tan silty sand some quartz chunks (moist, no odor)
				0		5		
	3.2'			0		6		
				0		7		
				1		8		0.3' tan silty sand moist no odor
								Tan to grey silty sand (weatherd rock)
				0.1		9		
	4'			0.2		10		
				0.8		11		
				1		12		Tan to grey silty sand (weatherd rock)
				4		13		
	4'							
				1.7		14		
				5.5		15		
			X	3.5		16		Tan to grey silty sand (weatherd rock)
								negative shaker test
				6		17		
	3.5'							
				4.9		18		
				4.5		19		refusal at 19'
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-40**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time						
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions: soil
				1.5		0		Tan brown clayey silt trace sand moist
				2		1		
	3'			1.5		2		
				2		3		
			X	6.1		4		tan brown clayey silt trace xand moist 0.5' thick
								tand brown silty sand molted layered (weathered rock)
				2.2		5		no odor
	3.5'			4.8		6		
				4		7		
				7.2		8		tan grey slity sand (weathered rock) moist no odor
				6.3		9		
	1'			0.2		10		
				9		11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-41**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time						
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions:concrete
				0.7		0		brown clayey silt (moist, no odor)
				1		1		
	1'			1		2		
				2		3		
				1		4		tan brown sandy silt
				0.5		5		true brick fragments and gravel
	3.5'			0.6		6		
				1		7		
				0.7		8		tan brown silty sand (moist)
				1		9		true brick (no odor)
	3.5'			1		10		
			X	2.2		11		
				1.1		12		tan brown silty sand
								top 0.5' brick fragments
				0.8		13		no odor
	3.5'							
				1.5		14		14' refusal
				2.3		15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-42**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					11:20	
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions:concrete
	0					0		
						1		
						2		
						3		
	3.5'			1		4		Tan brown clayey stilt no odor moist 1`
								grey to tan brown clayey slit no odor moist 1'
				0.5		5		grey slity sand odor saturated
								brown to tan silty sand moist no odor
				1.2		6		
				1		7		
	3.5'			1.6		8		brown to tan silty sand moist no odor 0.3'
								grey slity sand odor saturated 0.3'
				1.2		9		grey to tand brown silty sand most no odor (weathered rock)
				1		10		
	3.5'			1.9		11		
				1		12		grey to tand brown silty sand most no odor (weathered rock)
	3.5'			1.1		13		
				2		14		refusal at 14'
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-43**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time						1:10
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions:concrete
	0					0		no return
						1		
						2		
						3		
	4'			1.7		4		White, tan, dark grey slity sand banding no odor (weathered rock)
				1.5		5		
				1.8		6		
				6.2		7		
	2'		X	1.8		8		Tan brown Silty sand molted layered (weathered rock)
								no odor moist
				4		9		
				3		10		10' refusal
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-44**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time						13:40
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions:concrete
	2.5'			0.5		0		
								cyinder and brick mixed with brown silt 0.2
				0.5		1		
								tan grey sandy silt (moist0
				0.3		2		
								no odor
				0.3		3		
	3'			0.1		4		greyish tan silty sand (weathered rock, moist, no odor)
				0.2		5		
				0.1		6		
				0		7		
	4'			0.1		8		same as above - bottom foot has slight odor
				0.2		9		shaker test is + bead slight pink sheen
			X	0		10		
				0		11		11' refusal
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-45**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time						
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions:concrete
	3.5'			0		0		
								concrete dust 0.4'
			x	0		1		
								tan to grey silty sand (moist, no odor)
				0		2		
				0.2		3		
	4'			0		4		tan to grey silty sand molted layerd (weathered rock)
								black mineral band no odor
				0.2		5		
				0.3		6		
				0.2		7		7' refusal
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-46**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time					14:00	
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions:concrete
	3.5'			0		0		Tan silty sand trace brick 0.6'
				0		1		
			X	0		2		tan to black silty sand (dry, no odor)
				0.2		3		
	1.5'			0		4		tan to grey silty sand (dry)
				0.1		5		
								refusal at 5.5'
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko

Drilling Method: Auger/ Geoprobe

Boring No. **SB-47**

Sampling Method:

Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time						
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions:concrete
	3.5'			0		0		brown silty sand moist 0.2'
				0.1		1		
				0.2		2		
			X					tanish brown silty sand (moist)
				0.4		3		no odor
						4		refusal 3.5'
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

BROWNFIELD
SCIENCE & TECHNOLOGY

LOG OF SOIL BORING

Coordinates (East):
Coordinates (North):
Surface Elevation:
Top of PVC Casing:
Permit #:

Job. No.	Client	Location
367		Axil Belko
Drilling Method:		Boring No. **SB-48**
Auger/ Geoprobe		
Sampling Method:		Sheet 1 of 1

					Drilling	
Water Level					Start	Finish
Time						14:15
Date	3/17/2012				3/17/2012	3/17/2012
Reference	bgs					

Sample Type	Inches Drvn/In. Recvrd	Dpth. Csg.	Samp. # /samp. depth	PID (ppm)	Blows per 6 in.	Depth in Feet	USCS Log	Surface Conditions:concrete
				4		0		concrete
				4.6		1		grey to tan silty sand (weathered rock, moist)
			X	6		2		slight odor at top of bottom
				6		3		
						4		refusal at 4'
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

Logged by: N Santella Date: 3/17/2012

Drilling Contractor: AEC Driller: Greg

WELL SPECIFICATIONS:

Diam. of casing: Screen Interval: Sandpack: Grout:

BOH: Riser Interval: Bentonite: Cover:

APPENDIX III

(available on electronic version)

BROWNFIELD
SCIENCE & TECHNOLOGY

New Jersey ACCUTEST LABORATORIES

04/02/12

Technical Report for

Brownfield Science & Technology

Axil Belko, Kingsville, MD

367

Accutest Job Number: JB2059

Sampling Dates: 03/14/12 - 03/16/12

Report to:

Brownfield Science & Technology
3157 Limesstone Road
Cochranville, PA 19330
nsantella@bstiweb.com

ATTN: Nick Santella

Total number of pages in report: **133**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul Ioannidis
Lab Director

Client Service contact: Kevin Dovedytis 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

Sections: 1 2 3 4 5 6 7

Table of Contents

Accutest Laboratories

Sample Summary

Brownfield Science & Technology

Job No: JB2059

Axil Belko, Kingsville, MD
Project No: 367

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB2059-1	03/14/12	10:05	NS	03/19/12	SO	Soil	SB-1 3'-4'
JB2059-2	03/14/12	14:00	NS	03/19/12	SO	Soil	SB-5 3'-4'
JB2059-3	03/14/12	11:05	NS	03/19/12	SO	Soil	SB-7 5'-6'
JB2059-4	03/14/12	15:50	NS	03/19/12	SO	Soil	SB-15 6'
JB2059-5	03/15/12	13:45	NS	03/19/12	SO	Soil	SB-26 3'-4'
JB2059-6	03/15/12	15:35	NS	03/19/12	SO	Soil	SB-34 11'-12'
JB2059-7	03/16/12	11:00	NS	03/19/12	SO	Soil	SB-39 4'-5'
JB2059-8	03/16/12	11:05	NS	03/19/12	SO	Soil	SB-39 16'-17'
JB2059-9	03/16/12	11:10	NS	03/19/12	SO	Soil	SB-40 4'-5'
JB2059-10	03/16/12	12:40	NS	03/19/12	SO	Soil	SB-41 11'-12'
JB2059-11	03/16/12	13:15	NS	03/19/12	SO	Soil	SB-43 8'-9'
JB2059-12	03/16/12	13:40	NS	03/19/12	SO	Soil	SB-44 10-11
JB2059-13	03/16/12	13:55	NS	03/19/12	SO	Soil	SB-45 1-2

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Brownfield Science & Technology

Job No: JB2059

Axil Belko, Kingsville, MD
Project No: 367

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB2059-14	03/16/12	14:15	NS	03/19/12	SO	Soil	SB-46 2-3
JB2059-15	03/16/12	14:10	NS	03/19/12	SO	Soil	SB-47 2.5-3.5
JB2059-16	03/16/12	14:25	NS	03/19/12	SO	Soil	SB-48 2-3
JB2059-17	03/14/12	15:30	NS	03/19/12	SO	Soil	SB-15 3-4'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Brownfield Science & Technology	**Job No**	JB2059
Site:	Axil Belko, Kingsville, MD	**Report Date**	4/2/2012 6:21:58 PM

On 03/19/2012, 17 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB2059 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GC By Method SW846 8015C

Matrix: SO **Batch ID:** OP55724

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB2059-1MS, JB2059-1MSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** OP55767

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB2222-1MS, JB2222-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for TPH-DRO (C10-C28) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM18 2540G

Matrix: SO **Batch ID:** GN63995

- The data for SM18 2540G meets quality control requirements.

Matrix: SO **Batch ID:** GN64013

- The data for SM18 2540G meets quality control requirements.

Matrix: SO **Batch ID:** GN64037

- The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-1 3'-4'		
Lab Sample ID:	JB2059-1	**Date Sampled:**	03/14/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	85.4
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43692.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	12	0.37	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	47%		13-142%
16416-32-3	Tetracosane-d50	46%		12-141%
438-22-2	5a-Androstane	51%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-5 3'-4'
Lab Sample ID: JB2059-2
Matrix: SO - Soil
Method: SW846 8015C SW846 3545A
Project: Axil Belko, Kingsville, MD

Date Sampled: 03/14/12
Date Received: 03/19/12
Percent Solids: 91.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43695.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	0.34	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	49%		13-142%
16416-32-3	Tetracosane-d50	45%		12-141%
438-22-2	5a-Androstane	50%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-7 5'-6'		
Lab Sample ID:	JB2059-3	**Date Sampled:**	03/14/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	87.3
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43696.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	0.36	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	46%		13-142%
16416-32-3	Tetracosane-d50	45%		12-141%
438-22-2	5a-Androstane	52%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-15 6'		
Lab Sample ID:	JB2059-4	**Date Sampled:**	03/14/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	87.5
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43864.D	5	03/28/12	MJ	03/21/12	OP55724	G2Y1809
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	5280	57	1.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		13-142%
16416-32-3	Tetracosane-d50	91%		12-141%
438-22-2	5a-Androstane	86%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-26 3'-4'
Lab Sample ID: JB2059-5
Matrix: SO - Soil
Method: SW846 8015C SW846 3545A
Project: Axil Belko, Kingsville, MD

Date Sampled: 03/15/12
Date Received: 03/19/12
Percent Solids: 89.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43865.D	5	03/28/12	MJ	03/21/12	OP55724	G2Y1809
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	5590	54	1.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		13-142%
16416-32-3	Tetracosane-d50	81%		12-141%
438-22-2	5a-Androstane	106%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-34 11'-12'
Lab Sample ID: JB2059-6
Matrix: SO - Soil
Method: SW846 8015C SW846 3545A
Project: Axil Belko, Kingsville, MD

Date Sampled: 03/15/12
Date Received: 03/19/12
Percent Solids: 78.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43699.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	13	0.41	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	46%		13-142%
16416-32-3	Tetracosane-d50	46%		12-141%
438-22-2	5a-Androstane	51%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-39 4'-5'
Lab Sample ID: JB2059-7
Matrix: SO - Soil
Method: SW846 8015C SW846 3545A
Project: Axil Belko, Kingsville, MD

Date Sampled: 03/16/12
Date Received: 03/19/12
Percent Solids: 91.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43700.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	0.35	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	53%		13-142%
16416-32-3	Tetracosane-d50	65%		12-141%
438-22-2	5a-Androstane	62%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-39 16'-17'
Lab Sample ID: JB2059-8
Matrix: SO - Soil
Method: SW846 8015C SW846 3545A
Project: Axil Belko, Kingsville, MD

Date Sampled: 03/16/12
Date Received: 03/19/12
Percent Solids: 79.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43701.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	13	0.40	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	49%		13-142%
16416-32-3	Tetracosane-d50	49%		12-141%
438-22-2	5a-Androstane	56%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-40 4'-5'
Lab Sample ID: JB2059-9
Matrix: SO - Soil
Method: SW846 8015C SW846 3545A
Project: Axil Belko, Kingsville, MD

Date Sampled: 03/16/12
Date Received: 03/19/12
Percent Solids: 87.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43702.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	24.5	11	0.35	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		13-142%
16416-32-3	Tetracosane-d50	58%		12-141%
438-22-2	5a-Androstane	65%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-41 11'-12'		
Lab Sample ID:	JB2059-10	**Date Sampled:**	03/16/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	89.8
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43703.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	0.36	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	47%		13-142%
16416-32-3	Tetracosane-d50	55%		12-141%
438-22-2	5a-Androstane	55%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-43 8'-9'		
Lab Sample ID:	JB2059-11	**Date Sampled:**	03/16/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	93.1
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43862.D	1	03/28/12	MJ	03/21/12	OP55724	G2Y1809
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	0.34	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		13-142%
16416-32-3	Tetracosane-d50	78%		12-141%
438-22-2	5a-Androstane	75%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-44 10-11		
Lab Sample ID:	JB2059-12	**Date Sampled:**	03/16/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	94.2
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43863.D	1	03/28/12	MJ	03/21/12	OP55724	G2Y1809
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1170	11	0.34	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		13-142%
16416-32-3	Tetracosane-d50	69%		12-141%
438-22-2	5a-Androstane	76%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-45 1-2		
Lab Sample ID:	JB2059-13	**Date Sampled:**	03/16/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	90.4
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43816.D	1	03/27/12	MJ	03/21/12	OP55724	G2Y1808
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	0.35	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		13-142%
16416-32-3	Tetracosane-d50	55%		12-141%
438-22-2	5a-Androstane	60%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-46 2-3		
Lab Sample ID:	JB2059-14	**Date Sampled:**	03/16/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	93.5
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43817.D	1	03/27/12	MJ	03/21/12	OP55724	G2Y1808
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	10	0.34	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		13-142%
16416-32-3	Tetracosane-d50	88%		12-141%
438-22-2	5a-Androstane	79%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-47 2.5-3.5		
Lab Sample ID:	JB2059-15	**Date Sampled:**	03/16/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	94.1
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43819.D	1	03/27/12	MJ	03/21/12	OP55724	G2Y1808
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	0.34	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		13-142%
16416-32-3	Tetracosane-d50	73%		12-141%
438-22-2	5a-Androstane	75%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-48 2-3		
Lab Sample ID:	JB2059-16	**Date Sampled:**	03/16/12
Matrix:	SO - Soil	**Date Received:**	03/19/12
Method:	SW846 8015C SW846 3545A	**Percent Solids:**	93.3
Project:	Axil Belko, Kingsville, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43820.D	1	03/27/12	MJ	03/21/12	OP55724	G2Y1808
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1140	10	0.33	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		13-142%
16416-32-3	Tetracosane-d50	56%		12-141%
438-22-2	5a-Androstane	70%		13-142%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-15 3-4'
Lab Sample ID: JB2059-17
Matrix: SO - Soil
Method: SW846 8015C SW846 3545A
Project: Axil Belko, Kingsville, MD

Date Sampled: 03/14/12
Date Received: 03/19/12
Percent Solids: 86.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y43723.D	1	03/23/12	CS	03/22/12	OP55767	G2Y1806
Run #2	2Y43866.D	20	03/28/12	MJ	03/22/12	OP55767	G2Y1809

	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2	10.3 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	12200 [a]	230	7.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	26%	106%	13-142%
16416-32-3	Tetracosane-d50	41%	81%	12-141%
438-22-2	5a-Androstane	16%	120%	13-142%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www. acutest.com

PAGE 1 OF 2

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # JB2059

Client / Reporting Information

Company Name: Brownfield Science & Tech
Street Address: 3157 Limestone Rd
City: Cochranville State: PA Zip: 19330
Project Contact: NSantella E-mail:
Phone #: 610 593-5500 Fax #:
Sampler(s) Name(s): NSantella SQuinlan Phone #:

Project Information

Project Name: Axil Belko
Street:
City: Kingsville State: MD
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

TPH-DRO

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPH-DRO	LAB USE ONLY
1	SB-1 3-4'		3/13/12	1005	NS	SO	1					1				X	
	~~SB-4 7-9'~~		~~3/14/12~~	~~1030~~	~~NS~~	~~SO~~	~~1~~										
2	SB-53 4'		3/14/12	1100	NS	SO	1					1				X	UTC21
3	SB-7 5-6'		3/14/12	1105	NS	SO	1					1				X	
4	SB-15 6'		3/14/12	1550	NS	SO	1					1				X	
5	SB-26 3-4		3/15/12	13 45	NS	SO	1					1				X	
6	SB-34 11-12'		3/15/12	1535	NS	SO	1					1				X	
7	SB-39 4-5		3/16/12	1100	NS	SO	1					1				X	
8	SB-39 16-17		3/16/12	1105	NS	SO	1					1				X	
9	SB-40 4-5'		3/16/12	1110	NS	SO	1					1				X	
10	SB-41 11-12'		3/16/12	1240	NS	SO	1					1				X	
11	SB-43 8-9		3/16/12	1315	NS	SO	1					1				X	

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Rec'd at Exton Service Center

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		03/19/12 1109	1	2	3/20/12 730	2
3	Relinquished by Sampler:	Date Time: 3/20/12 1340	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [X] Not intact	Preserved where applicable [ ]	On Ice [X]	Cooler Temp. 4.4-P

1A

JB2059: Chain of Custody
Page 1 of 4

50

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www. acutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # JB2059

Client / Reporting Information

Company Name: BrownField Sci & Tech
Street Address: 3157 Limestone Rd
City / State / Zip: Cochranville PA 19330
Project Contact: N Santella
E-mail:
Phone #: 610 593-5500
Fax #:
Sampler(s) Name(s): N Santella S Quinla
Phone #:

Project Information

Project Name: Axil Belko
Street:
City / State: Kingsville MD
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis (see TEST CODE sheet): TPH-DRO

Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL- Sludge, SED-Sediment, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe, FB-Field Blank, EB-Equipment Blank, RB- Rinse Blank, TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPH-DRO	LAB USE ONLY
12	SB-44 10-11		3/16/12	1340	NS	SO	1					1				X	
13	SB-45 1-2		3/16/12	1355	NS	SO	1					1				X	
14	SB-46 2-3		3/16/12	1415	NS	SO	1					1				X	
15	SB-47 2.5-3.5		3/16/12	1410	NS	SO	1					1				X	
16	SB-48 2-3		3/16/12	1425	NS	SO	1					1				X	
17	SB-15 3-4'						1										

Turnaround Time (Business days)

- [x] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Rec'd at Exton Service Center

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1 [signature]	Date Time: 03/19/12 1109	Received By: 1 [signature]	
Relinquished By: 2 [signature]	Date Time: 3/20/12 730	Received By: 2 [signature]	
Relinquished by Sampler: 3 [signature]	Date Time: 3/19/12 1340	Received By: 3 [signature]	
Relinquished By: 4	Date Time:	Received By: 4	
Relinquished by: 5	Date Time:	Received By: 5	

Custody Seal #: [ ] Intact [x] Not intact
Preserved where applicable [ ]
On Ice [x]
Cooler Temp. 4.4 °C

JB2059: Chain of Custody
Page 2 of 4

4.1
4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB2059 **Client:** BROWNFIELD-PA **Project:** AXIL

Date / Time Received: 3/20/2012 1340 **Delivery Method:** Accutest Courier **Airbill #'s:** N/A

Cooler Temps (Initial/Adjusted): #1: (4.4/4.4); 0

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☐		☑	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:			
4. No, Coolers			

Quality Control Preservation

	Y	N	N/A
1. Trip Blank present / cooler:	☐	☐	☑
2. Trip Blank listed on COC:	☐	☐	☑
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☑

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☐		☑
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☑	☐	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments -17 ADDED TO COC - NO DATE OR TIME ON LABEL
300ml SOIL LABELED "SB15 (3-4)"

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB2059: Chain of Custody
Page 3 of 4

Sample Receipt Summary - Problem Resolution

Accutest Job Number: JB2059

CSR: Kevin Dovedytis **Response Date:** 3/20/2012

Response: As per Nick Santella the sample collection date/time is 3/14/12 @ 15:30.

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
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JB2059: Chain of Custody
Page 4 of 4

Internal Sample Tracking Chronicle

Brownfield Science & Technology

Job No: JB2059

Axil Belko, Kingsville, MD
Project No: 367

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB2059-1	Collected: 14-MAR-12 10:05 By: NS			Received: 19-MAR-12	By: MPC	
SB-1 3'-4'						
JB2059-1	SW846 8015C	23-MAR-12 03:22	CS	21-MAR-12	JF	B8015DRO
JB2059-1	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-2	Collected: 14-MAR-12 14:00 By: NS			Received: 19-MAR-12	By: MPC	
SB-5 3'-4'						
JB2059-2	SW846 8015C	23-MAR-12 05:03	CS	21-MAR-12	JF	B8015DRO
JB2059-2	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-3	Collected: 14-MAR-12 11:05 By: NS			Received: 19-MAR-12	By: MPC	
SB-7 5'-6'						
JB2059-3	SW846 8015C	23-MAR-12 05:36	CS	21-MAR-12	JF	B8015DRO
JB2059-3	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-4	Collected: 14-MAR-12 15:50 By: NS			Received: 19-MAR-12	By: MPC	
SB-15 6'						
JB2059-4	SW846 8015C	28-MAR-12 13:48	MJ	21-MAR-12	JF	B8015DRO
JB2059-4	SM18 2540G	30-MAR-12	WR			%SOL
JB2059-5	Collected: 15-MAR-12 13:45 By: NS			Received: 19-MAR-12	By: MPC	
SB-26 3'-4'						
JB2059-5	SW846 8015C	28-MAR-12 14:23	MJ	21-MAR-12	JF	B8015DRO
JB2059-5	SM18 2540G	30-MAR-12	WR			%SOL
JB2059-6	Collected: 15-MAR-12 15:35 By: NS			Received: 19-MAR-12	By: MPC	
SB-34 11'-12'						
JB2059-6	SW846 8015C	23-MAR-12 07:17	CS	21-MAR-12	JF	B8015DRO
JB2059-6	SM18 2540G	30-MAR-12	WR			%SOL
JB2059-7	Collected: 16-MAR-12 11:00 By: NS			Received: 19-MAR-12	By: MPC	
SB-39 4'-5'						
JB2059-7	SW846 8015C	23-MAR-12 07:50	CS	21-MAR-12	JF	B8015DRO

Internal Sample Tracking Chronicle

Brownfield Science & Technology

Job No: JB2059

Axil Belko, Kingsville, MD
Project No: 367

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB2059-7	SM18 2540G	30-MAR-12	WR			%SOL
JB2059-8	Collected: 16-MAR-12 11:05 By: NS		Received: 19-MAR-12 By: MPC			
SB-39 16'-17'						
JB2059-8	SW846 8015C	23-MAR-12 08:23	CS	21-MAR-12	JF	B8015DRO
JB2059-8	SM18 2540G	30-MAR-12	WR			%SOL
JB2059-9	Collected: 16-MAR-12 11:10 By: NS		Received: 19-MAR-12 By: MPC			
SB-40 4'-5'						
JB2059-9	SW846 8015C	23-MAR-12 08:57	CS	21-MAR-12	JF	B8015DRO
JB2059-9	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-10	Collected: 16-MAR-12 12:40 By: NS		Received: 19-MAR-12 By: MPC			
SB-41 11'-12'						
JB2059-10	SW846 8015C	23-MAR-12 09:31	CS	21-MAR-12	JF	B8015DRO
JB2059-10	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-11	Collected: 16-MAR-12 13:15 By: NS		Received: 19-MAR-12 By: MPC			
SB-43 8'-9'						
JB2059-11	SW846 8015C	28-MAR-12 12:39	MJ	21-MAR-12	JF	B8015DRO
JB2059-11	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-12	Collected: 16-MAR-12 13:40 By: NS		Received: 19-MAR-12 By: MPC			
SB-44 10-11						
JB2059-12	SW846 8015C	28-MAR-12 13:14	MJ	21-MAR-12	JF	B8015DRO
JB2059-12	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-13	Collected: 16-MAR-12 13:55 By: NS		Received: 19-MAR-12 By: MPC			
SB-45 1-2						
JB2059-13	SW846 8015C	27-MAR-12 14:18	MJ	21-MAR-12	JF	B8015DRO
JB2059-13	SM18 2540G	29-MAR-12	KP			%SOL

Internal Sample Tracking Chronicle

Brownfield Science & Technology

Job No: JB2059

Axil Belko, Kingsville, MD
Project No: 367

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB2059-14	Collected: 16-MAR-12 14:15 By: NS		Received: 19-MAR-12 By: MPC			
SB-46 2-3						
JB2059-14	SW846 8015C	27-MAR-12 14:51	MJ	21-MAR-12	JF	B8015DRO
JB2059-14	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-15	Collected: 16-MAR-12 14:10 By: NS		Received: 19-MAR-12 By: MPC			
SB-47 2.5-3.5						
JB2059-15	SW846 8015C	27-MAR-12 15:25	MJ	21-MAR-12	JF	B8015DRO
JB2059-15	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-16	Collected: 16-MAR-12 14:25 By: NS		Received: 19-MAR-12 By: MPC			
SB-48 2-3						
JB2059-16	SW846 8015C	27-MAR-12 15:59	MJ	21-MAR-12	JF	B8015DRO
JB2059-16	SM18 2540G	29-MAR-12	KP			%SOL
JB2059-17	Collected: 14-MAR-12 15:30 By: NS		Received: 19-MAR-12 By: MPC			
SB-15 3-4'						
JB2059-17	SW846 8015C	23-MAR-12 15:56	CS	22-MAR-12		
JB2059-17	SW846 8015C	28-MAR-12 14:58	MJ	22-MAR-12	VP	B8015DRO
JB2059-17	SM18 2540G	29-MAR-12	KP			%SOL

Accutest Internal Chain of Custody

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD
Received: 03/19/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB2059-1.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-1.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-1.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-1.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-1.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-1.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-1.1
JB2059-1.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-1.1
JB2059-1.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-1.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-1.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-1.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-1.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-1.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-1.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-2.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-2.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-2.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-2.1
JB2059-2.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-2.1
JB2059-2.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-2.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-2.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-2.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-2.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-2.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-2.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-3.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-3.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-3.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-3.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-3.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-3.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-3.1
JB2059-3.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-3.1
JB2059-3.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-3.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-3.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-3.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-3.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-3.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-3.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage

Accutest Internal Chain of Custody

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD
Received: 03/19/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB2059-4.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-4.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-4.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-4.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-4.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-4.1	Secured Storage	John Thomas	03/30/12 09:40	Retrieve from Storage
JB2059-4.1	John Thomas	Wojciech Rodzik	03/30/12 09:44	Custody Transfer
JB2059-4.1	Wojciech Rodzik	Secured Storage	03/30/12 11:51	Return to Storage
JB2059-4.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-4.1
JB2059-4.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-4.1
JB2059-4.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-4.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-4.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-4.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-4.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-4.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-4.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-5.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-5.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-5.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-5.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-5.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-5.1	Secured Storage	John Thomas	03/30/12 09:40	Retrieve from Storage
JB2059-5.1	John Thomas	Wojciech Rodzik	03/30/12 09:44	Custody Transfer
JB2059-5.1	Wojciech Rodzik	Secured Storage	03/30/12 11:51	Return to Storage
JB2059-5.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-5.1
JB2059-5.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-5.1
JB2059-5.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-5.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-5.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-5.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-5.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-5.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-5.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-6.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-6.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-6.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-6.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-6.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage

Accutest Internal Chain of Custody

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD
Received: 03/19/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB2059-6.1	Secured Storage	John Thomas	03/30/12 09:40	Retrieve from Storage
JB2059-6.1	John Thomas	Wojciech Rodzik	03/30/12 09:44	Custody Transfer
JB2059-6.1	Wojciech Rodzik	Secured Storage	03/30/12 11:51	Return to Storage
JB2059-6.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-6.1
JB2059-6.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-6.1
JB2059-6.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-6.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-6.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-6.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-6.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-6.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-6.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-7.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-7.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-7.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-7.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-7.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-7.1	Secured Storage	John Thomas	03/30/12 09:40	Retrieve from Storage
JB2059-7.1	John Thomas	Wojciech Rodzik	03/30/12 09:44	Custody Transfer
JB2059-7.1	Wojciech Rodzik	Secured Storage	03/30/12 11:51	Return to Storage
JB2059-7.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-7.1
JB2059-7.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-7.1
JB2059-7.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-7.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-7.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-7.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-7.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-7.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-7.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-8.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-8.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-8.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-8.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-8.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-8.1	Secured Storage	John Thomas	03/30/12 09:40	Retrieve from Storage
JB2059-8.1	John Thomas	Wojciech Rodzik	03/30/12 09:44	Custody Transfer
JB2059-8.1	Wojciech Rodzik	Secured Storage	03/30/12 11:51	Return to Storage
JB2059-8.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-8.1
JB2059-8.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-8.1

Accutest Internal Chain of Custody

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD
Received: 03/19/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB2059-8.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-8.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-8.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-8.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-8.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-8.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-8.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-9.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-9.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-9.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-9.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-9.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-9.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-9.1
JB2059-9.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-9.1
JB2059-9.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-9.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-9.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-9.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-9.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-9.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-9.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-10.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-10.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-10.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-10.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-10.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-10.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-10.1
JB2059-10.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-10.1
JB2059-10.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-10.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-10.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-10.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-10.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-10.1.1	GC2Y	Mudassar Janjua	03/23/12 10:17	Unload from Instrument
JB2059-10.1.1	Mudassar Janjua	Extract Freezer	03/23/12 10:17	Return to Storage
JB2059-11.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-11.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-11.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-11.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer

Accutest Internal Chain of Custody

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD
Received: 03/19/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB2059-11.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-11.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-11.1
JB2059-11.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-11.1
JB2059-11.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-11.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-11.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-11.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-11.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-11.1.1	GC2Y	Mudassar Janjua	03/28/12 15:33	Unload from Instrument
JB2059-11.1.1	Mudassar Janjua	Extract Freezer	03/28/12 15:34	Return to Storage
JB2059-12.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-12.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-12.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-12.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-12.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-12.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-12.1
JB2059-12.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-12.1
JB2059-12.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-12.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-12.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-12.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-12.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-12.1.1	GC2Y	Mudassar Janjua	03/28/12 15:33	Unload from Instrument
JB2059-12.1.1	Mudassar Janjua	Extract Freezer	03/28/12 15:34	Return to Storage
JB2059-13.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-13.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-13.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-13.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-13.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-13.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-13.1
JB2059-13.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-13.1
JB2059-13.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-13.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-13.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-13.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-13.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-13.1.1	GC2Y	Mudassar Janjua	03/28/12 15:33	Unload from Instrument
JB2059-13.1.1	Mudassar Janjua	Extract Freezer	03/28/12 15:34	Return to Storage

Accutest Internal Chain of Custody

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD
Received: 03/19/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB2059-14.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-14.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-14.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-14.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-14.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-14.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-14.1
JB2059-14.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-14.1
JB2059-14.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-14.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-14.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-14.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-14.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-14.1.1	GC2Y	Mudassar Janjua	03/28/12 15:33	Unload from Instrument
JB2059-14.1.1	Mudassar Janjua	Extract Freezer	03/28/12 15:34	Return to Storage
JB2059-15.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-15.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-15.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-15.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-15.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-15.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-15.1
JB2059-15.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-15.1
JB2059-15.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-15.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-15.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-15.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument
JB2059-15.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-15.1.1	GC2Y	Mudassar Janjua	03/28/12 15:33	Unload from Instrument
JB2059-15.1.1	Mudassar Janjua	Extract Freezer	03/28/12 15:34	Return to Storage
JB2059-16.1	Secured Storage	Jamie Farrell	03/21/12 08:20	Retrieve from Storage
JB2059-16.1	Jamie Farrell	Secured Storage	03/21/12 12:08	Return to Storage
JB2059-16.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-16.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-16.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-16.1.1	Jamie Farrell	Organics Prep	03/21/12 08:21	Extract from JB2059-16.1
JB2059-16.1.1	Organics Prep	Jamie Farrell	03/21/12 15:55	Extract from JB2059-16.1
JB2059-16.1.1	Jamie Farrell	Extract Storage	03/21/12 15:55	Return to Storage
JB2059-16.1.1	Extract Storage	Mudassar Janjua	03/21/12 16:30	Retrieve from Storage
JB2059-16.1.1	Mudassar Janjua	GC2Z	03/21/12 16:30	Load on Instrument
JB2059-16.1.1	GC2Z	Cherry Seigler	03/22/12 15:19	Unload from Instrument

Accutest Internal Chain of Custody

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD
Received: 03/19/12

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB2059-16.1.1	Cherry Seigler	GC2Y	03/22/12 15:19	Load on Instrument
JB2059-16.1.1	GC2Y	Mudassar Janjua	03/28/12 15:33	Unload from Instrument
JB2059-16.1.1	Mudassar Janjua	Extract Freezer	03/28/12 15:34	Return to Storage
JB2059-17.1	Secured Storage	Adam Scott	03/22/12 16:00	Retrieve from Storage
JB2059-17.1	Adam Scott	Vlad Petrache	03/22/12 16:04	Custody Transfer
JB2059-17.1	Vlad Petrache	Secured Storage	03/22/12 23:16	Return to Storage
JB2059-17.1	Secured Storage	John Thomas	03/29/12 09:20	Retrieve from Storage
JB2059-17.1	John Thomas	Krimesh Patel	03/29/12 09:22	Custody Transfer
JB2059-17.1	Krimesh Patel	Secured Storage	03/29/12 17:05	Return to Storage
JB2059-17.1.1	Vlad Petrache	Organics Prep	03/22/12 16:08	Extract from JB2059-17.1
JB2059-17.1.1	Organics Prep	Vlad Petrache	03/22/12 23:18	Extract from JB2059-17.1
JB2059-17.1.1	Vlad Petrache	Extract Storage	03/22/12 23:18	Return to Storage
JB2059-17.1.1	Extract Storage	Mudassar Janjua	03/23/12 11:11	Retrieve from Storage
JB2059-17.1.1	Mudassar Janjua	GC2Y	03/23/12 11:11	Load on Instrument
JB2059-17.1.1	GC2Y	Mudassar Janjua	03/28/12 15:33	Unload from Instrument
JB2059-17.1.1	Mudassar Janjua	Extract Freezer	03/28/12 15:33	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55724-MB1	2Y43688.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805

The QC reported here applies to the following samples: **Method:** SW846 8015C

JB2059-1, JB2059-2, JB2059-3, JB2059-4, JB2059-5, JB2059-6, JB2059-7, JB2059-8, JB2059-9, JB2059-10, JB2059-11, JB2059-12, JB2059-13, JB2059-14, JB2059-15, JB2059-16

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	10	0.32	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	64%	13-142%
16416-32-3	Tetracosane-d50	63%	12-141%
438-22-2	5a-Androstane	69%	13-142%

Method Blank Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55767-MB1	2Y43715.D	1	03/23/12	CS	03/22/12	OP55767	G2Y1806

The QC reported here applies to the following samples: **Method:** SW846 8015C

JB2059-17

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	10	0.32	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	74%	13-142%
16416-32-3	Tetracosane-d50	68%	12-141%
438-22-2	5a-Androstane	79%	13-142%

Blank Spike Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55724-BS1	2Y43689.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805

The QC reported here applies to the following samples: **Method:** SW846 8015C

JB2059-1, JB2059-2, JB2059-3, JB2059-4, JB2059-5, JB2059-6, JB2059-7, JB2059-8, JB2059-9, JB2059-10, JB2059-11, JB2059-12, JB2059-13, JB2059-14, JB2059-15, JB2059-16

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	100	57.3	57	46-125

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	59%	13-142%
16416-32-3	Tetracosane-d50	58%	12-141%
438-22-2	5a-Androstane	63%	13-142%

Blank Spike Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55767-BS1	2Y43716.D	1	03/23/12	CS	03/22/12	OP55767	G2Y1806

The QC reported here applies to the following samples: **Method:** SW846 8015C

JB2059-17

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	100	78.7	79	46-125

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	80%	13-142%
16416-32-3	Tetracosane-d50	75%	12-141%
438-22-2	5a-Androstane	81%	13-142%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55724-MS	2Y43690.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
OP55724-MSD	2Y43691.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805
JB2059-1	2Y43692.D	1	03/23/12	CS	03/21/12	OP55724	G2Y1805

The QC reported here applies to the following samples: **Method:** SW846 8015C

JB2059-1, JB2059-2, JB2059-3, JB2059-4, JB2059-5, JB2059-6, JB2059-7, JB2059-8, JB2059-9, JB2059-10, JB2059-11, JB2059-12, JB2059-13, JB2059-14, JB2059-15, JB2059-16

CAS No.	Compound	JB2059-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	ND		116	60.3	52	50.1	43	18	10-160/50

CAS No.	Surrogate Recoveries	MS	MSD	JB2059-1	Limits
84-15-1	o-Terphenyl	53%	45%	47%	13-142%
16416-32-3	Tetracosane-d50	52%	44%	46%	12-141%
438-22-2	5a-Androstane	55%	47%	51%	13-142%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55767-MS	2Y43812.D	1	03/27/12	MJ	03/22/12	OP55767	G2Y1808
OP55767-MSD	2Y43813.D	1	03/27/12	MJ	03/22/12	OP55767	G2Y1808
JB2222-1	2Y43754.D	20	03/26/12	MJ	03/22/12	OP55767	G2Y1807

The QC reported here applies to the following samples: **Method:** SW846 8015C

JB2059-17

CAS No.	Compound	JB2222-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	16700		110	23600	6250* [a]	17100	362* [a]	32	10-160/50

CAS No.	Surrogate Recoveries	MS	MSD	JB2222-1	Limits
84-15-1	o-Terphenyl	15%	26%	88%	13-142%
16416-32-3	Tetracosane-d50	32%	16%	92%	12-141%
438-22-2	5a-Androstane	53%	25%	112%	13-142%

(a) Outside control limits due to high level in sample relative to spike amount.

Semivolatile Surrogate Recovery Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Method: SW846 8015C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]	S3 [a]
JB2059-1	2Y43692.D	47.0	46.0	51.0
JB2059-2	2Y43695.D	49.0	45.0	50.0
JB2059-3	2Y43696.D	46.0	45.0	52.0
JB2059-4	2Y43864.D	85.0	91.0	86.0
JB2059-5	2Y43865.D	105.0	81.0	106.0
JB2059-6	2Y43699.D	46.0	46.0	51.0
JB2059-7	2Y43700.D	53.0	65.0	62.0
JB2059-8	2Y43701.D	49.0	49.0	56.0
JB2059-9	2Y43702.D	61.0	58.0	65.0
JB2059-10	2Y43703.D	47.0	55.0	55.0
JB2059-11	2Y43862.D	71.0	78.0	75.0
JB2059-12	2Y43863.D	80.0	69.0	76.0
JB2059-13	2Y43816.D	59.0	55.0	60.0
JB2059-14	2Y43817.D	74.0	88.0	79.0
JB2059-15	2Y43819.D	73.0	73.0	75.0
JB2059-16	2Y43820.D	74.0	56.0	70.0
JB2059-17	2Y43866.D	106.0	81.0	120.0
JB2059-17	2Y43723.D	26.0	41.0	16.0
OP55724-BS1	2Y43689.D	59.0	58.0	63.0
OP55724-MB1	2Y43688.D	64.0	63.0	69.0
OP55724-MS	2Y43690.D	53.0	52.0	55.0
OP55724-MSD	2Y43691.D	45.0	44.0	47.0
OP55767-BS1	2Y43716.D	80.0	75.0	81.0
OP55767-MB1	2Y43715.D	74.0	68.0	79.0
OP55767-MS	2Y43812.D	15.0	32.0	53.0
OP55767-MSD	2Y43813.D	26.0	16.0	25.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	13-142%
S2 = Tetracosane-d50	12-141%
S3 = 5a-Androstane	13-142%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Check Std:	G2Y1805-CC1736	**Injection Date:**	03/22/12
Lab File ID:	2Y43682.D	**Injection Time:**	21:43
Instrument ID:	GC2Y	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.78	10.75	9.42

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
ZZZZZZ	2Y43687.D	03/23/12	00:33	8.79	10.75	9.43
OP55724-MB1	2Y43688.D	03/23/12	01:07	8.78	10.75	9.43
OP55724-BS1	2Y43689.D	03/23/12	01:40	8.78	10.75	9.43
OP55724-MS	2Y43690.D	03/23/12	02:14	8.78	10.75	9.43
OP55724-MSD	2Y43691.D	03/23/12	02:48	8.78	10.75	9.43
JB2059-1	2Y43692.D	03/23/12	03:22	8.79	10.75	9.43

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Check Std:	G2Y1805-CC1736	**Injection Date:**	03/23/12
Lab File ID:	2Y43693.D	**Injection Time:**	03:55
Instrument ID:	GC2Y	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.78	10.75	9.43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
JB2059-2	2Y43695.D	03/23/12	05:03	8.79	10.75	9.43
JB2059-3	2Y43696.D	03/23/12	05:36	8.79	10.75	9.43
JB2059-6	2Y43699.D	03/23/12	07:17	8.79	10.75	9.43
JB2059-7	2Y43700.D	03/23/12	07:50	8.79	10.75	9.43
JB2059-8	2Y43701.D	03/23/12	08:23	8.79	10.75	9.43
JB2059-9	2Y43702.D	03/23/12	08:57	8.79	10.75	9.43
JB2059-10	2Y43703.D	03/23/12	09:31	8.78	10.75	9.43

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Check Std:	G2Y1805-CC1736	**Injection Date:**	03/23/12
Lab File ID:	2Y43704.D	**Injection Time:**	10:17
Instrument ID:	GC2Y	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.79	10.75	9.43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Y1806-RT	2Y43714.D	03/23/12	10:50			
OP55767-MB1	2Y43715.D	03/23/12	11:24	8.79	10.75	9.43
OP55767-BS1	2Y43716.D	03/23/12	11:58	8.79	10.75	9.43
JB2059-17	2Y43723.D	03/23/12	15:56	8.80	10.79	9.47

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Check Std:	G2Y1808-CC1736	**Injection Date:**	03/27/12
Lab File ID:	2Y43809.D	**Injection Time:**	10:23
Instrument ID:	GC2Y	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.78	10.75	9.43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Y1808-RT	2Y43810.D	03/27/12	10:57			
OP55767-MS	2Y43812.D	03/27/12	12:04	8.81	10.74	9.48
OP55767-MSD	2Y43813.D	03/27/12	12:37	8.79	10.79	9.44
ZZZZZZ	2Y43814.D	03/27/12	13:11	8.79	10.75	9.44
ZZZZZZ	2Y43815.D	03/27/12	13:44	8.79	10.76	9.44
JB2059-13	2Y43816.D	03/27/12	14:18	8.79	10.75	9.43
JB2059-14	2Y43817.D	03/27/12	14:51	8.79	10.75	9.44
JB2059-15	2Y43819.D	03/27/12	15:25	8.79	10.75	9.43
JB2059-16	2Y43820.D	03/27/12	15:59	8.80	10.78	9.45

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Check Std:	G2Y1809-CC1736	**Injection Date:**	03/28/12
Lab File ID:	2Y43856.D	**Injection Time:**	09:12
Instrument ID:	GC2Y	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.79	10.76	9.44

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Y1809-RT	2Y43857.D	03/28/12	09:46			
OP55799-MB1	2Y43858.D	03/28/12	10:21	8.79	10.75	9.43
OP55799-BS1	2Y43859.D	03/28/12	10:55	8.79	10.75	9.44
OP55799-MS	2Y43860.D	03/28/12	11:30	8.79	10.75	9.44
OP55799-MSD	2Y43861.D	03/28/12	12:04	8.79	10.75	9.43
JB2059-11	2Y43862.D	03/28/12	12:39	8.78	10.75	9.43
JB2059-12	2Y43863.D	03/28/12	13:14	8.80	10.77	9.46
JB2059-4	2Y43864.D	03/28/12	13:48	8.79	10.76	9.45
JB2059-5	2Y43865.D	03/28/12	14:23	8.79	10.76	9.45
JB2059-17	2Y43866.D	03/28/12	14:58	8.79	10.76	9.44

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1736-ICC1736
Lab FileID: 2Y41547.D

Response Factor Report GC2Y2Z

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 15 11:14:04 2011
Response via : Initial Calibration

Calibration Files
250 =2y41549.D 500 =2y41548.D 1000=2y41547.D 2000=2y41546.D
5000=2y41545.D 100 =2y41550.D 10k =2y41544.D 50k =2y41543.D
= =

Compound	250	500	1000	2000	5000	100	10k	50k	Avg	%RSD
1) TPH-DRO	8.600	8.438	8.595	8.632	8.735	9.414	9.146	9.044	8.825 E5	3.82
2) TPH-DRO (C10-C44)	8.600	8.438	8.595	8.632	8.735	9.414	9.146	9.044	8.825 E5	3.82
3) TPH-ORO (>C28-C40)	8.600	8.438	8.595	8.632	8.735	9.414	9.146	9.044	8.825 E5	3.82
4) TPH-HRO (C18-C36)	8.600	8.438	8.595	8.632	8.735	9.414	9.146	9.044	8.825 E5	3.82
5) TPH-DRO (C10-C20)	8.600	8.438	8.595	8.632	8.735	9.414	9.146	9.044	8.825 E5	3.82
6) TPH-ORO (C20-C34)	8.600	8.438	8.595	8.632	8.735	9.414	9.146	9.044	8.825 E5	3.82
7) o-Terphenyl	1.113	1.093	1.065	1.061	1.082	1.285			1.116 E6	7.60
8) 5a-Androstane	1.057	1.063	0.980	1.040	1.063	1.123			1.054 E6	4.35
9) Tetracosane-d50	8.776	7.982	8.164	8.650	9.198	8.912			8.614 E5	5.34

(#) = Out of Range ### Number of calibration levels exceeded format ###

DRO2Y1736.M Thu Dec 15 11:15:19 2011

Initial Calibration Verification

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1736-ICV1736
Lab FileID: 2Y41551.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1736\2Y41551.D Vial: 53
Acq On : 14 Dec 2011 11:34 pm Operator: cherrys
Sample : icv1736-1000 Inst : GC2Y2Z
Misc : OP53518,G2y1736,1000,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Mon Dec 19 17:07:39 2011
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	882.545	844.737 E3	4.3	98	0.00	3.26-12.56
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-HRO (C18-C36)		----------NA----------				
5	H	TPH-DRO (C10-C20)		----------NA----------				
6	H	TPH-ORO (C20-C34)		----------NA----------				
7	S	o-Terphenyl		----------NA----------				
8	S	5a-Androstane		----------NA----------				
9	S	Tetracosane-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41547.D DRO2Y1736.M Wed Dec 28 08:39:52 2011

Continuing Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1805-CC1736
Lab FileID: 2Y43682.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1805\2Y43682.D Vial: 3
Acq On : 22 Mar 2012 9:43 pm Operator: cherrys
Sample : cc1736-500 Inst : GC2Y2Z
Misc : OP55741,G2y1805,10.0,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 23 08:16:36 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	882.545	830.594 E3	5.9	98	0.00	3.21-12.61
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-HRO (C18-C36)		----------NA----------				
5	H	TPH-DRO (C10-C20)		----------NA----------				
6	H	TPH-ORO (C20-C34)		----------NA----------				
7	S	o-Terphenyl	1.116	1.205 E6	-8.0	110	0.00	8.75- 8.81
8	S	5a-Androstane	1.054	1.170 E6	-11.0	110	0.00	9.39- 9.45
9	S	Tetracosane-d50	861.362	948.153 E3	-10.1	119	0.00	10.72-10.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41548.D DRO2Y1736.M Fri Mar 23 08:45:33 2012 RPT1

Continuing Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1805-CC1736
Lab FileID: 2Y43693.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1805\2Y43693.D Vial: 4
Acq On : 23 Mar 2012 3:55 am Operator: cherrys
Sample : cc1736-1000 Inst : GC2Y2Z
Misc : OP55724,G2y1805,10.0,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 29 12:44:08 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	882.545	785.205 E3	11.0	91	0.00	3.21-12.61
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-HRO (C18-C36)		----------NA----------				
5	H	TPH-DRO (C10-C20)		----------NA----------				
6	H	TPH-ORO (C20-C34)		----------NA----------				
7	S	o-Terphenyl	1.116	1.089 E6	2.4	102	0.06	8.75- 8.81
8	S	5a-Androstane	1.054	1.079 E6	-2.4	110	0.06	9.40- 9.46
9	S	Tetracosane-d50	861.362	907.713 E3	-5.4	111	0.04	10.72-10.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41547.D DRO2Y1736.M Thu Mar 29 13:02:19 2012 RPT1

Continuing Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1805-CC1736
Lab FileID: 2Y43704.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1805\2Y43704.D Vial: 3
Acq On : 23 Mar 2012 10:17 am Operator: cherrys
Sample : cc1736-500 Inst : GC2Y2Z
Misc : OP55724,G2y1805,10.0,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Wed Mar 14 09:47:52 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	882.545	863.154 E3	2.2	102	0.00	3.21-12.61
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-HRO (C18-C36)		----------NA----------				
5	H	TPH-DRO (C10-C20)		----------NA----------				
6	H	TPH-ORO (C20-C34)		----------NA----------				
7	S	o-Terphenyl	1.116	1.231 E6	-10.3	113	-0.02	8.76- 8.82
8	S	5a-Androstane	1.054	1.219 E6	-15.7	115	-0.03	9.40- 9.46
9	S	Tetracosane-d50	861.362	932.886 E3	-8.3	117	-0.02	10.72-10.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41548.D DRO2Y1736.M Fri Mar 23 10:44:14 2012 RPT1

Continuing Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1806-CC1736
Lab FileID: 2Y43724.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1806\2Y43724.D Vial: 4
Acq On : 23 Mar 2012 4:31 pm Operator: cherrys
Sample : cc1736-1000 Inst : GC2Y2Z
Misc : OP55767,G2y1806,10.0,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Wed Mar 14 09:47:52 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	882.545	885.199 E3	-0.3	103	0.00	3.21-12.61
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-HRO (C18-C36)		----------NA----------				
5	H	TPH-DRO (C10-C20)		----------NA----------				
6	H	TPH-ORO (C20-C34)		----------NA----------				
7	S	o-Terphenyl	1.116	1.217 E6	-9.1	114	-0.02	8.75- 8.81
8	S	5a-Androstane	1.054	1.047 E6	0.7	107	-0.03	9.40- 9.46
9	S	Tetracosane-d50	861.362	831.266 E3	3.5	102	-0.02	10.72-10.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41547.D DRO2Y1736.M Mon Mar 26 10:06:29 2012 RPT1

Continuing Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1808-CC1736
Lab FileID: 2Y43809.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1808\2Y43809.D Vial: 4
Acq On : 27 Mar 2012 10:23 am Operator: Mudassar
Sample : cc1736-1000 Inst : GC2Y2Z
Misc : OP55767,G2y1808,10.0,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Tue Mar 27 11:04:47 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	882.545	889.156 E3	-0.7	103	0.00	3.21-12.61
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-HRO (C18-C36)		----------NA----------				
5	H	TPH-DRO (C10-C20)		----------NA----------				
6	H	TPH-ORO (C20-C34)		----------NA----------				
7	S	o-Terphenyl	1.116	1.222 E6	-9.5	115	0.00	8.75- 8.81
8	S	5a-Androstane	1.054	1.184 E6	-12.3	121	0.00	9.40- 9.46
9	S	Tetracosane-d50	861.362	994.115 E3	-15.4	122	0.00	10.72-10.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41547.D DRO2Y1736.M Tue Mar 27 11:05:33 2012 RPT1

Continuing Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1808-CC1736
Lab FileID: 2Y43821.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1808\2Y43821.D Vial: 3
Acq On : 27 Mar 2012 4:33 pm Operator: Mudassar
Sample : cc1736-500 Inst : GC2Y2Z
Misc : OP55767,G2y1808,10.0,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Wed Mar 14 09:47:52 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	882.545	913.366 E3	-3.5	108	0.00	3.21-12.61
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-HRO (C18-C36)		----------NA----------				
5	H	TPH-DRO (C10-C20)		----------NA----------				
6	H	TPH-ORO (C20-C34)		----------NA----------				
7	S	o-Terphenyl	1.116	1.272 E6	-14.0	116	-0.03	8.75- 8.81
8	S	5a-Androstane	1.054	1.232 E6	-16.9	116	-0.03	9.40- 9.46
9	S	Tetracosane-d50	861.362	978.777 E3	-13.6	123	-0.02	10.72-10.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41548.D DRO2Y1736.M Tue Mar 27 17:04:10 2012 RPT1

Continuing Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1809-CC1736
Lab FileID: 2Y43856.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1809\2Y43856.D Vial: 4
Acq On : 28 Mar 2012 9:12 am Operator: Mudassar
Sample : cc1736-1000 Inst : GC2Y2Z
Misc : OP55799,G2y1809,10.0,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Wed Mar 14 09:47:52 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	882.545	812.145 E3	8.0	94	0.00	3.21-12.61
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-HRO (C18-C36)		----------NA----------				
5	H	TPH-DRO (C10-C20)		----------NA----------				
6	H	TPH-ORO (C20-C34)		----------NA----------				
7	S	o-Terphenyl	1.116	1.124 E6	-0.7	106	-0.02	8.76- 8.82
8	S	5a-Androstane	1.054	1.088 E6	-3.2	111	-0.02	9.41- 9.47
9	S	Tetracosane-d50	861.362	946.749 E3	-9.9	116	-0.01	10.73-10.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41547.D DRO2Y1736.M Wed Mar 28 09:39:35 2012 RPT1

Continuing Calibration Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: G2Y1809-CC1736
Lab FileID: 2Y43867.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\G2Y1809\2Y43867.D Vial: 3
Acq On : 28 Mar 2012 3:33 pm Operator: Mudassar
Sample : cc1736-500 Inst : GC2Y2Z
Misc : OP55767,G2y1809,10.0,,,1,1 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M (Chemstation Integrator)
Title :
Last Update : Wed Mar 28 16:00:24 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-DRO	882.545	859.554 E3	2.6	102	0.00	3.21-12.61
2 H	TPH-DRO (C10-C44)		----------NA----------				
3 H	TPH-ORO (>C28-C40)		----------NA----------				
4 H	TPH-HRO (C18-C36)		----------NA----------				
5 H	TPH-DRO (C10-C20)		----------NA----------				
6 H	TPH-ORO (C20-C34)		----------NA----------				
7 S	o-Terphenyl	1.116	1.169 E6	-4.7	107	0.00	8.75- 8.81
8 S	5a-Androstane	1.054	1.161 E6	-10.2	109	0.00	9.40- 9.46
9 S	Tetracosane-d50	861.362	874.746 E3	-1.6	110	0.00	10.72-10.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2y41548.D DRO2Y1736.M Wed Mar 28 16:01:24 2012 RPT1

New Jersey ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1805\
Data File : 2Y43692.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 3:22 am
Operator : cherrys
Sample : jb2059-1
Misc : OP55724,G2y1805,10.1,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:28:45 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	26129436	23.405 PPM
8) S	5a-Androstane	9.43f	26914384	25.529 PPM
9) S	Tetracosane-d50	10.75f	19921735	23.128 PPM
	Target Compounds			

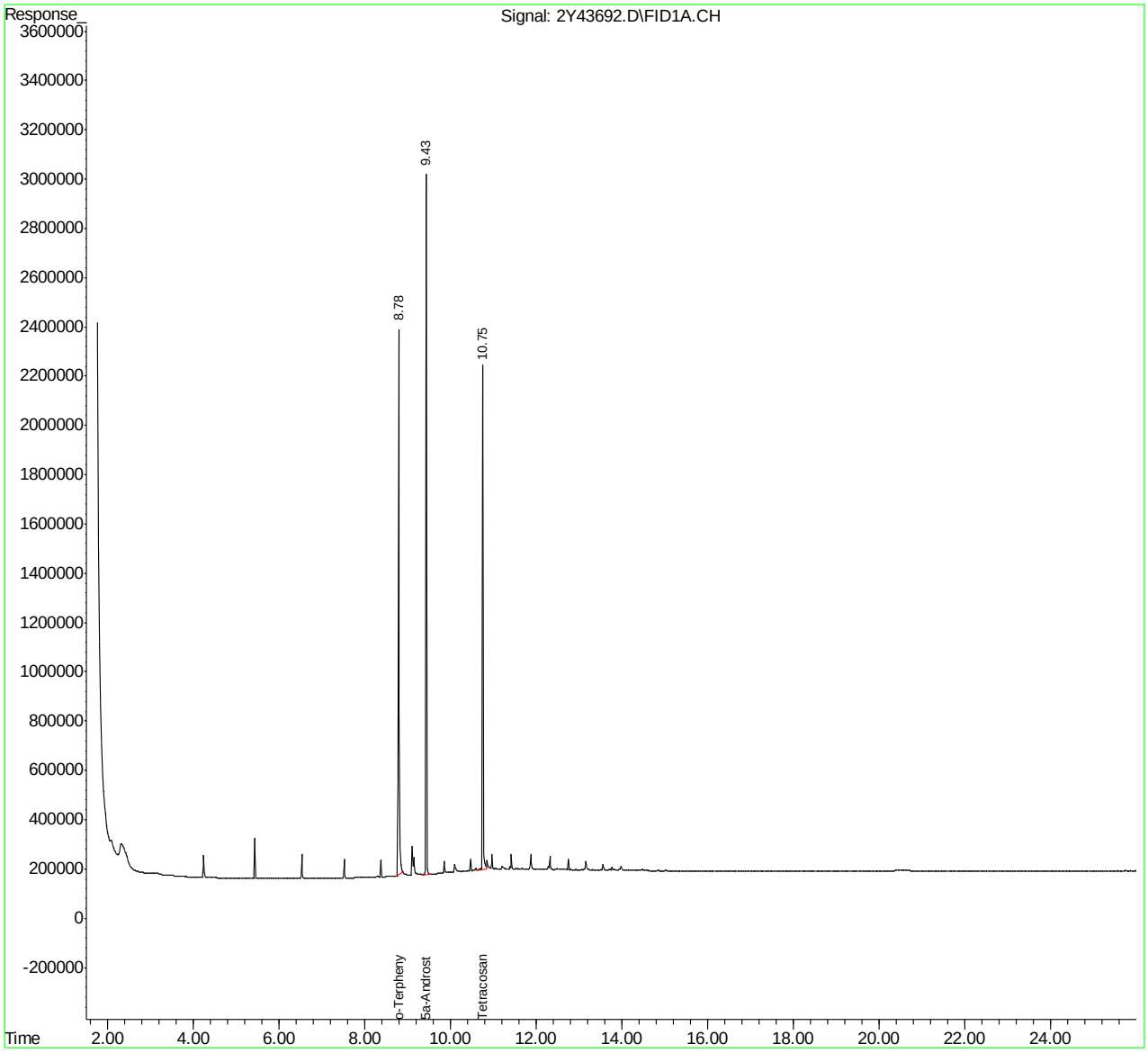
(f)=RT Delta > 1/2 Window (m)=manual int.

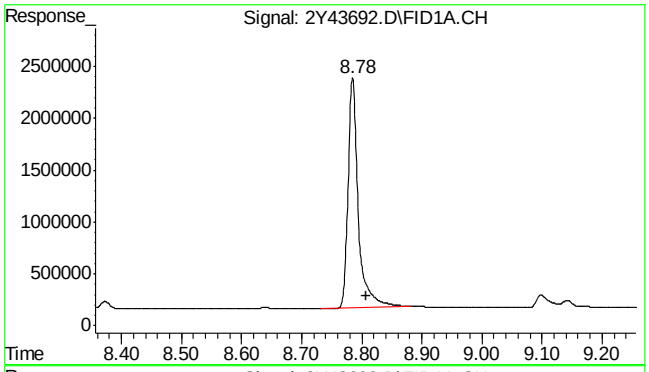
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1805\
Data File : 2Y43692.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 3:22 am
Operator : cherrys
Sample : jb2059-1
Misc : OP55724,G2y1805,10.1,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:28:45 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

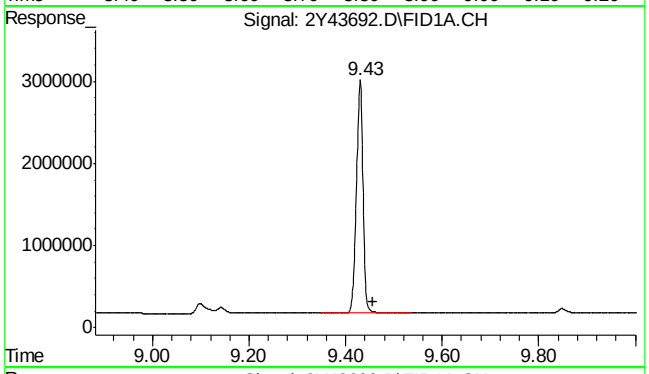
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





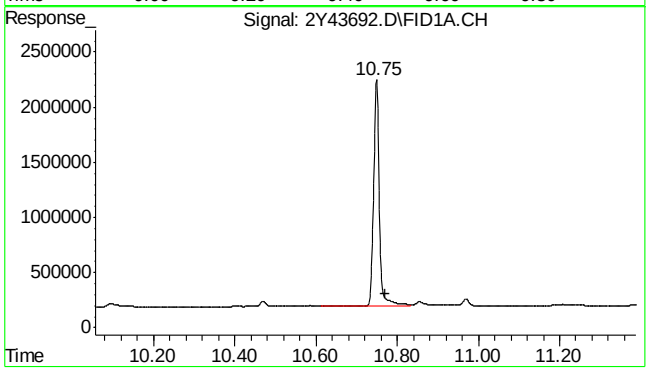
#7 o-Terphenyl

R.T.: 8.785 min
Delta R.T.: -0.023 min
Response: 26129436
Conc: 23.41 PPM



#8 5a-Androstane

R.T.: 9.430 min
Delta R.T.: -0.026 min
Response: 26914384
Conc: 25.53 PPM



#9 Tetracosane-d50

R.T.: 10.749 min
Delta R.T.: -0.021 min
Response: 19921735
Conc: 23.13 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43695.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 5:03 am
Operator : cherrys
Sample : jb2059-2
Misc : OP55724,G2y1805,10.2,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:30:49 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	27349990	24.499 PPM
8) S	5a-Androstane	9.43f	26619345	25.249 PPM
9) S	Tetracosane-d50	10.75f	19203174	22.294 PPM
	Target Compounds			

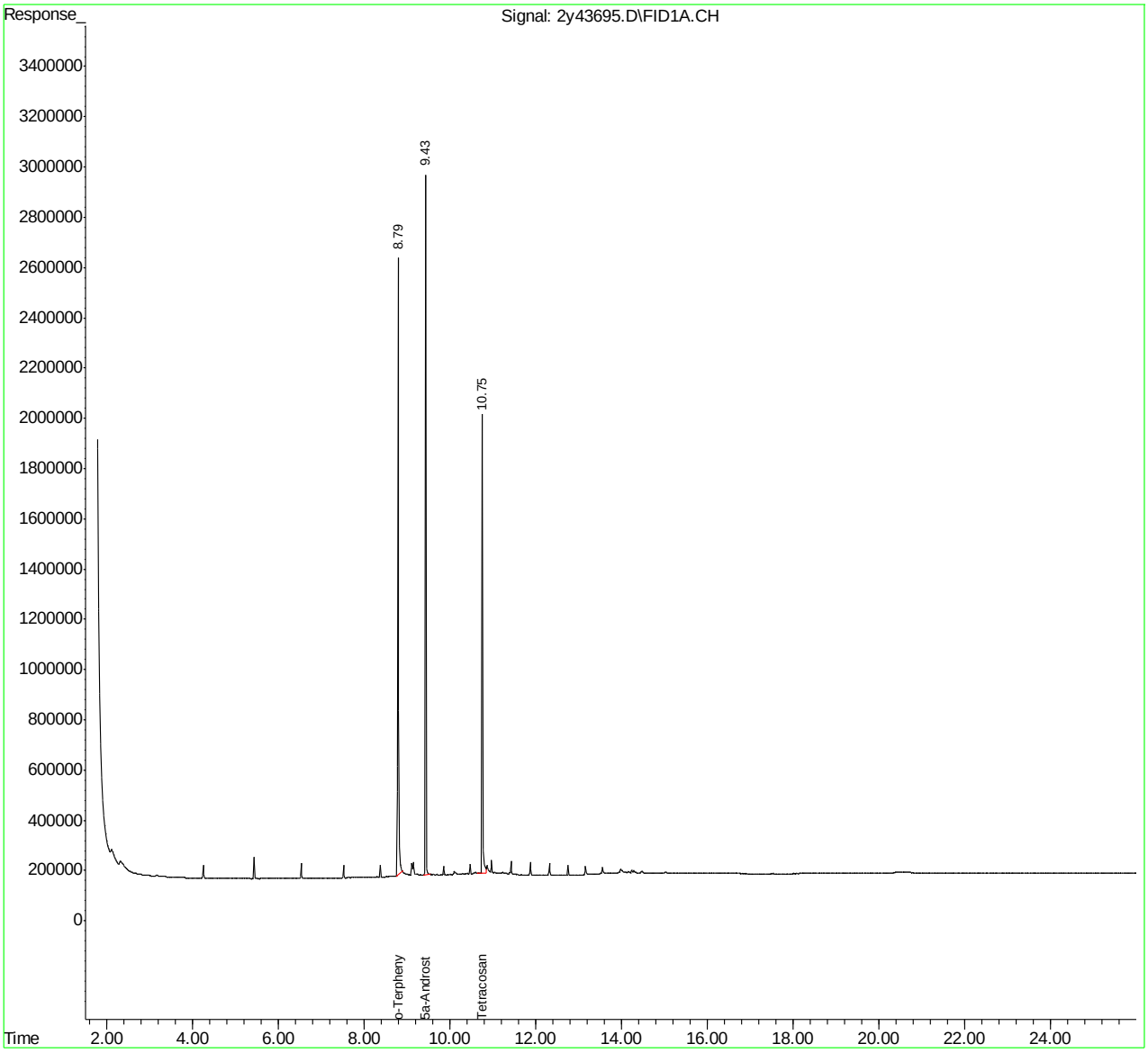
(f)=RT Delta > 1/2 Window (m)=manual int.

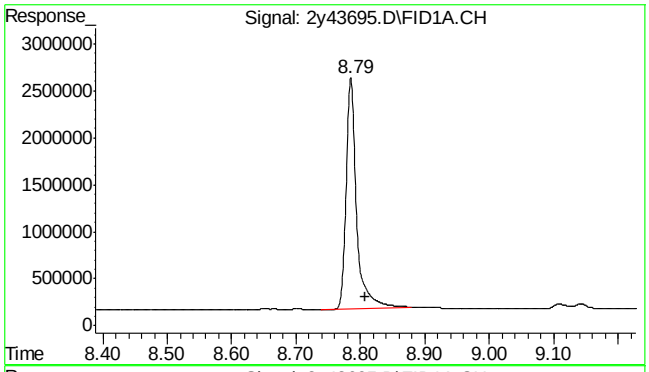
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43695.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 5:03 am
Operator : cherrys
Sample : jb2059-2
Misc : OP55724,G2y1805,10.2,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:30:49 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

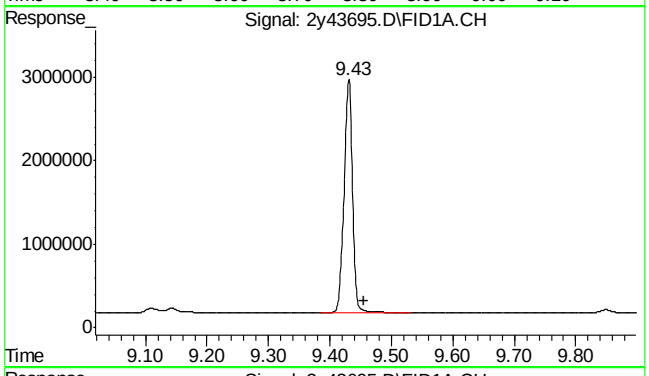
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





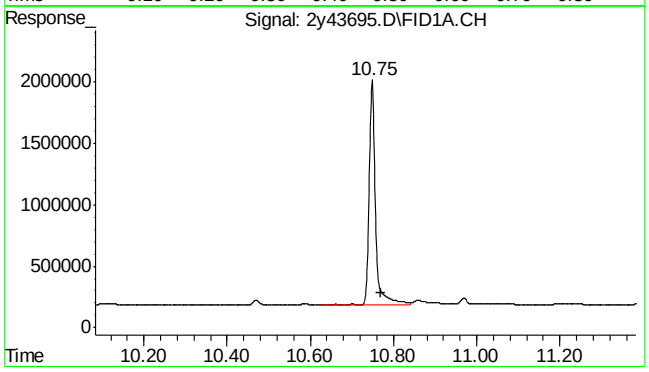
#7 o-Terphenyl

R.T.: 8.785 min
Delta R.T.: -0.023 min
Response: 27349990
Conc: 24.50 PPM



#8 5a-Androstane

R.T.: 9.430 min
Delta R.T.: -0.026 min
Response: 26619345
Conc: 25.25 PPM



#9 Tetracosane-d50

R.T.: 10.749 min
Delta R.T.: -0.021 min
Response: 19203174
Conc: 22.29 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1805\
Data File : 2y43696.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 5:36 am
Operator : cherrys
Sample : jb2059-3
Misc : OP55724,G2y1805,10.2,,,1,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:31:52 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	25738582	23.055 PPM
8) S	5a-Androstane	9.43f	27196666	25.796 PPM
9) S	Tetracosane-d50	10.75f	19583940	22.736 PPM
	Target Compounds			

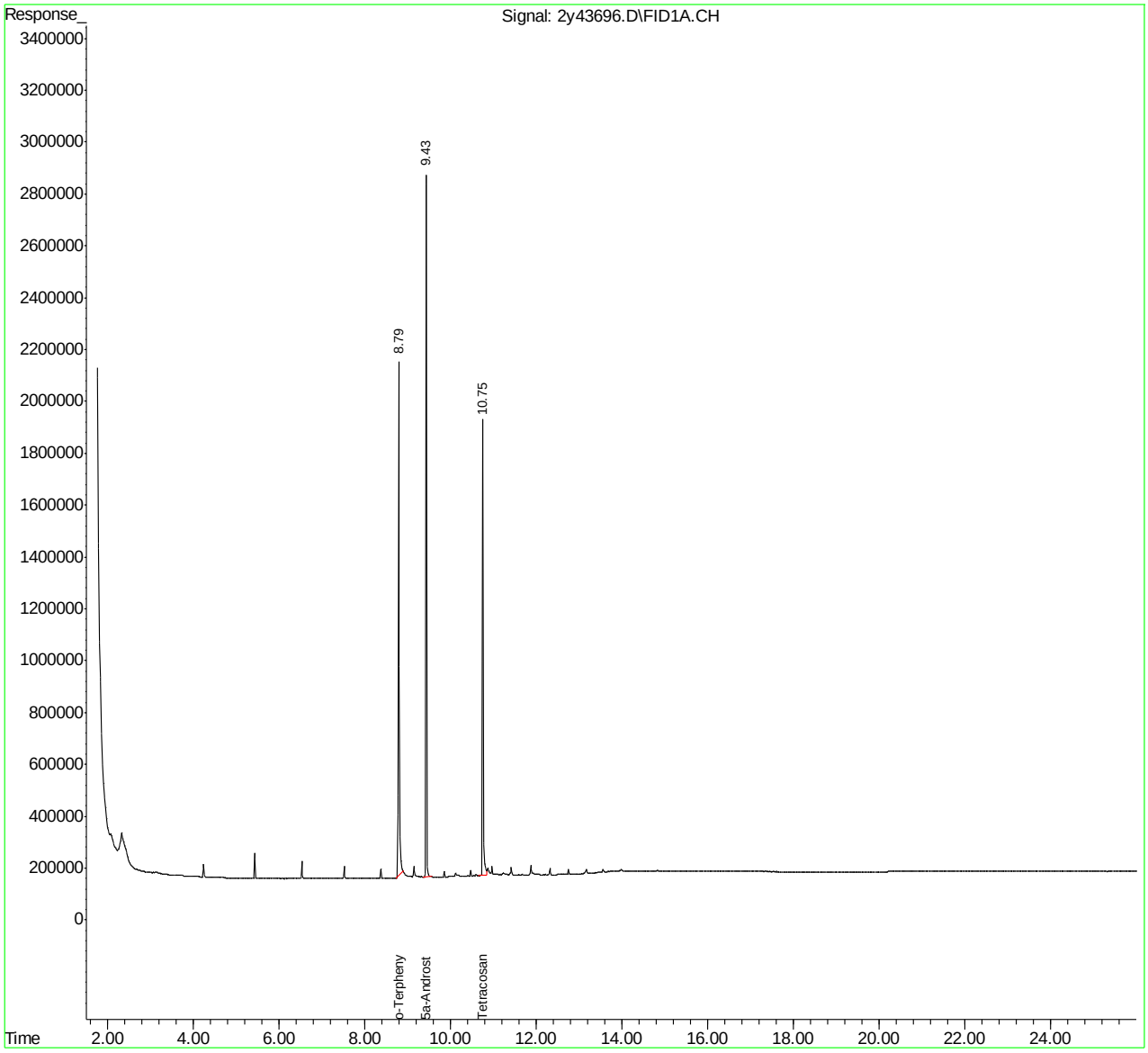
(f)=RT Delta > 1/2 Window (m)=manual int.

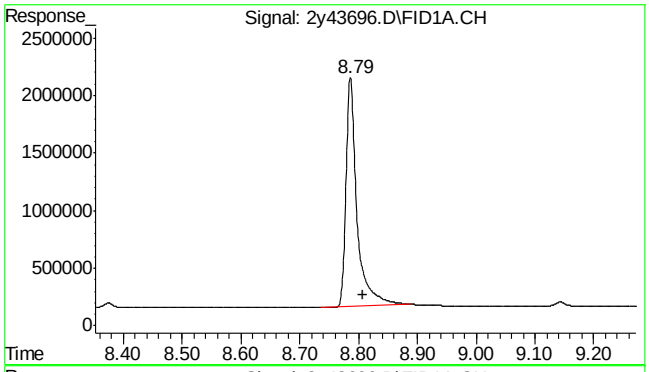
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1805\
Data File : 2y43696.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 5:36 am
Operator : cherrys
Sample : jb2059-3
Misc : OP55724,G2y1805,10.2,,,1,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:31:52 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

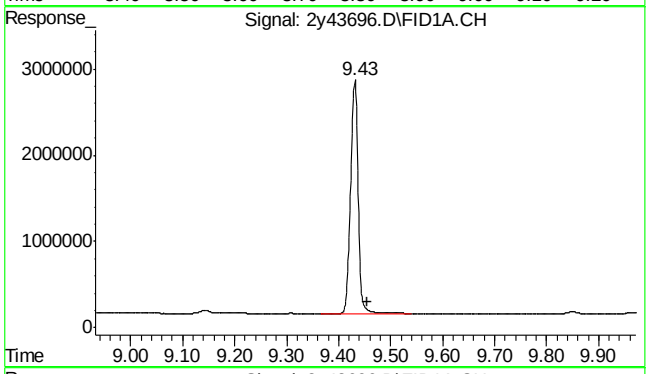
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





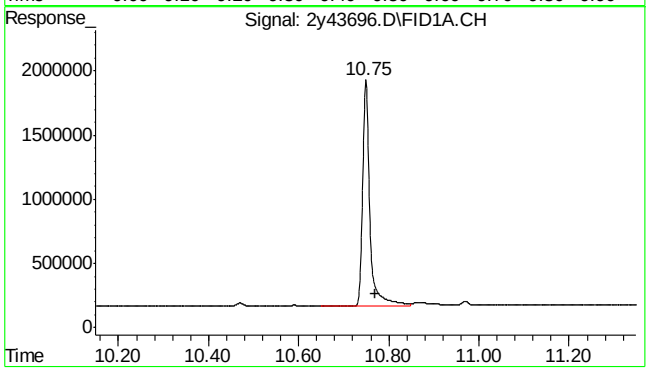
#7 o-Terphenyl

R.T.: 8.787 min
Delta R.T.: -0.021 min
Response: 25738582
Conc: 23.06 PPM



#8 5a-Androstane

R.T.: 9.431 min
Delta R.T.: -0.025 min
Response: 27196666
Conc: 25.80 PPM



#9 Tetracosane-d50

R.T.: 10.750 min
Delta R.T.: -0.020 min
Response: 19583940
Conc: 22.74 PPM

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
04/02/12 16:31

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2Y43864.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 1:48 pm
Operator : Mudassar
Sample : jb2059-4
Misc : OP55724,G2y1809,10.1,,,1,5
ALS Vial : 23 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 14:16:59 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
7) S	o-Terphenyl	8.79f	9516802	8.525	PPM	m
8) S	5a-Androstane	9.45	9034215	8.569	PPM	m
9) S	Tetracosane-d50	10.76	7829943	9.090	PPM	m
Target Compounds						
1) H	TPH-DRO	7.91	8233132414	9328.848	PPM	
2) H	TPH-DRO (C10-C44)	13.57	9633878298	10916.014	PPM	

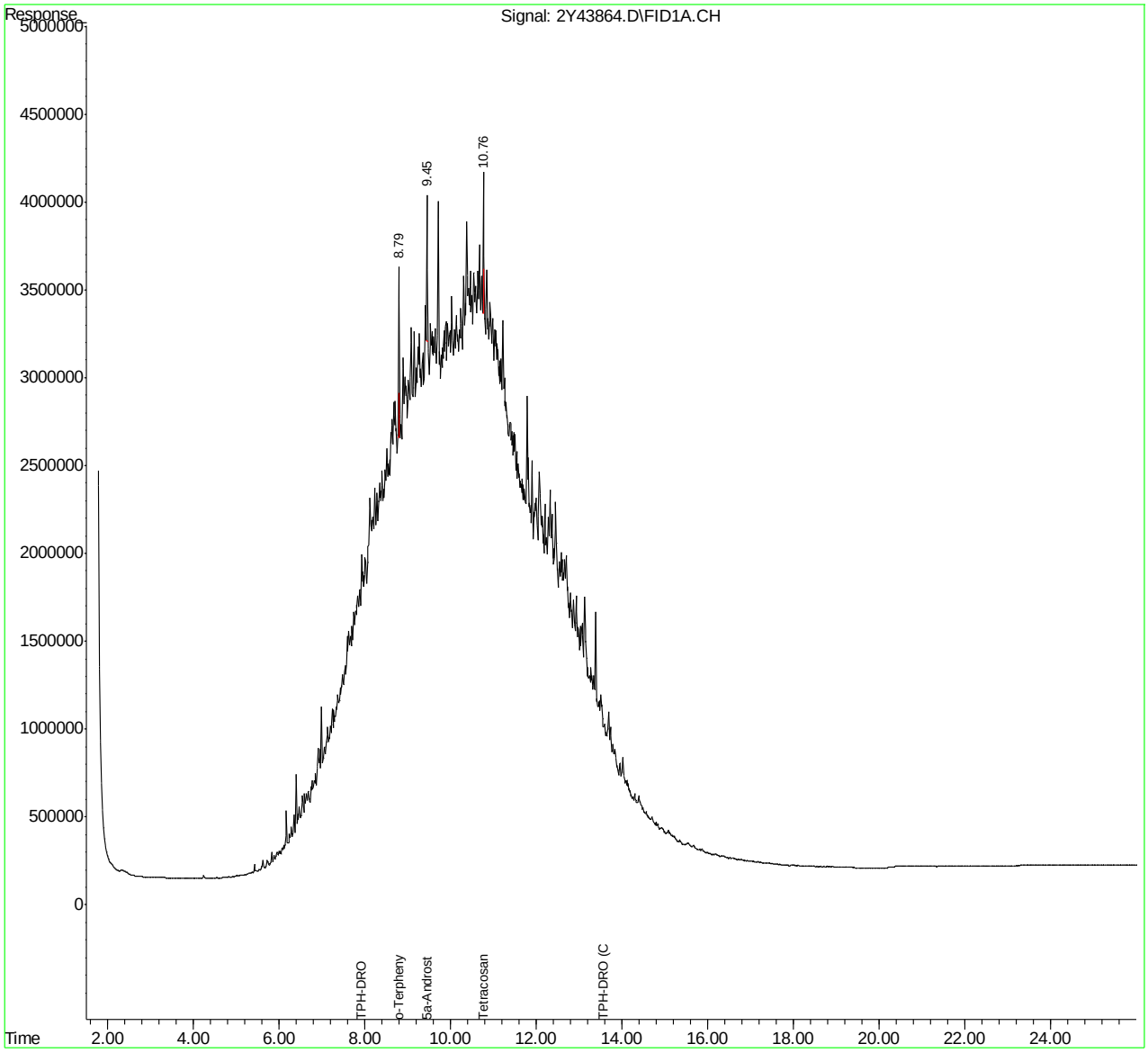
(f)=RT Delta > 1/2 Window (m)=manual int.

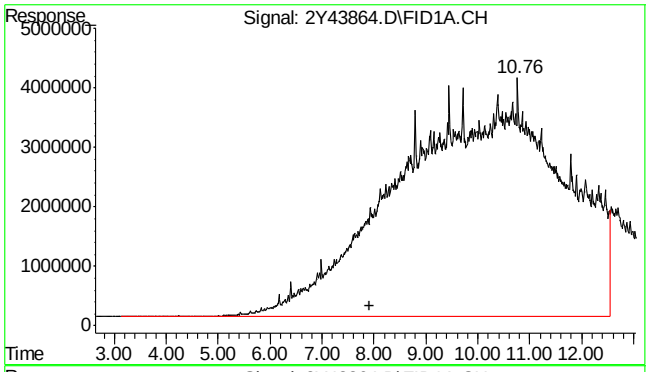
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2Y43864.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 1:48 pm
Operator : Mudassar
Sample : jb2059-4
Misc : OP55724,G2y1809,10.1,,,1,5
ALS Vial : 23 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 14:16:59 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

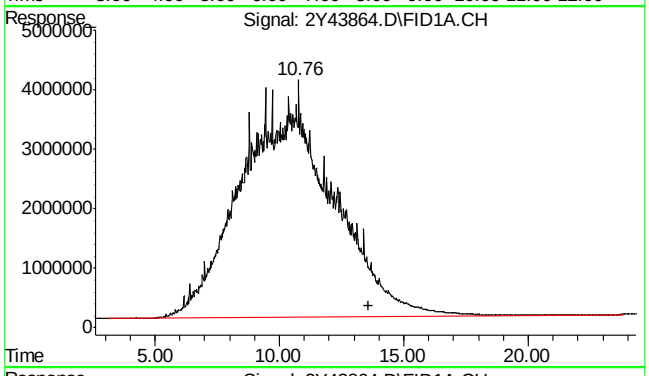
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





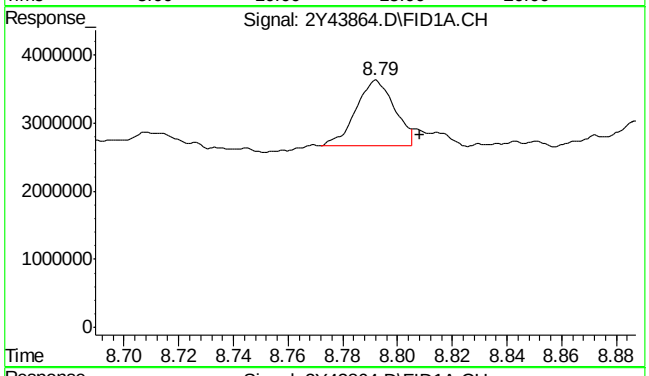
#1 TPH-DRO

R.T.: 7.910 min
Delta R.T.: 0.000 min
Response: 8233132414
Conc: 9328.85 PPM m



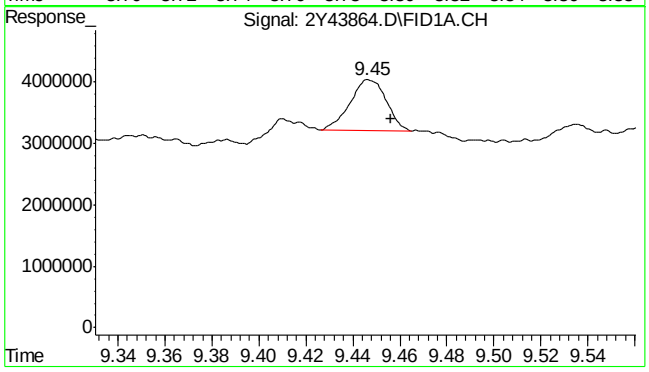
#2 TPH-DRO (C10-C44)

R.T.: 13.570 min
Delta R.T.: 0.000 min
Response: 9633878298
Conc: 10916.01 PPM m



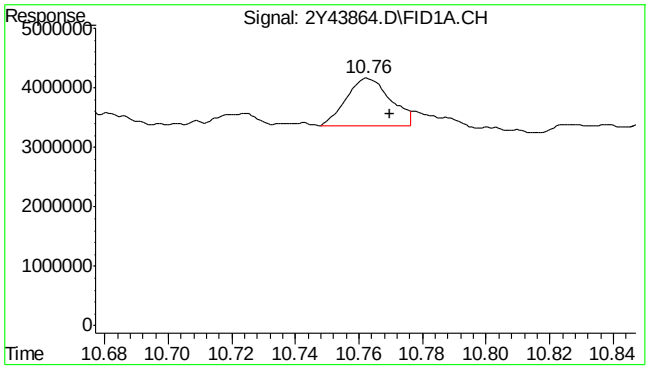
#7 o-Terphenyl

R.T.: 8.792 min
Delta R.T.: -0.016 min
Response: 9516802
Conc: 8.52 PPM m



#8 5a-Androstane

R.T.: 9.446 min
Delta R.T.: -0.010 min
Response: 9034215
Conc: 8.57 PPM m



#9 Tetracosane-d50

R.T.:	10.762 min
Delta R.T.:	-0.007 min
Response:	7829943
Conc:	9.09 PPM m

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
04/02/12 16:31

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2Y43865.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 2:23 pm
Operator : Mudassar
Sample : jb2059-5
Misc : OP55724,G2y1809,10.3,,,1,5
ALS Vial : 50 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 14:51:47 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
7) S	o-Terphenyl	8.79f	11738495	10.515	PPM	m
8) S	5a-Androstane	9.45	11171590	10.596	PPM	m
9) S	Tetracosane-d50	10.76	6986765	8.111	PPM	m
Target Compounds						
1) H	TPH-DRO	7.91	9088618352	10298.188	PPM	
2) H	TPH-DRO (C10-C44)	13.57	10910658939	12362.716	PPM	

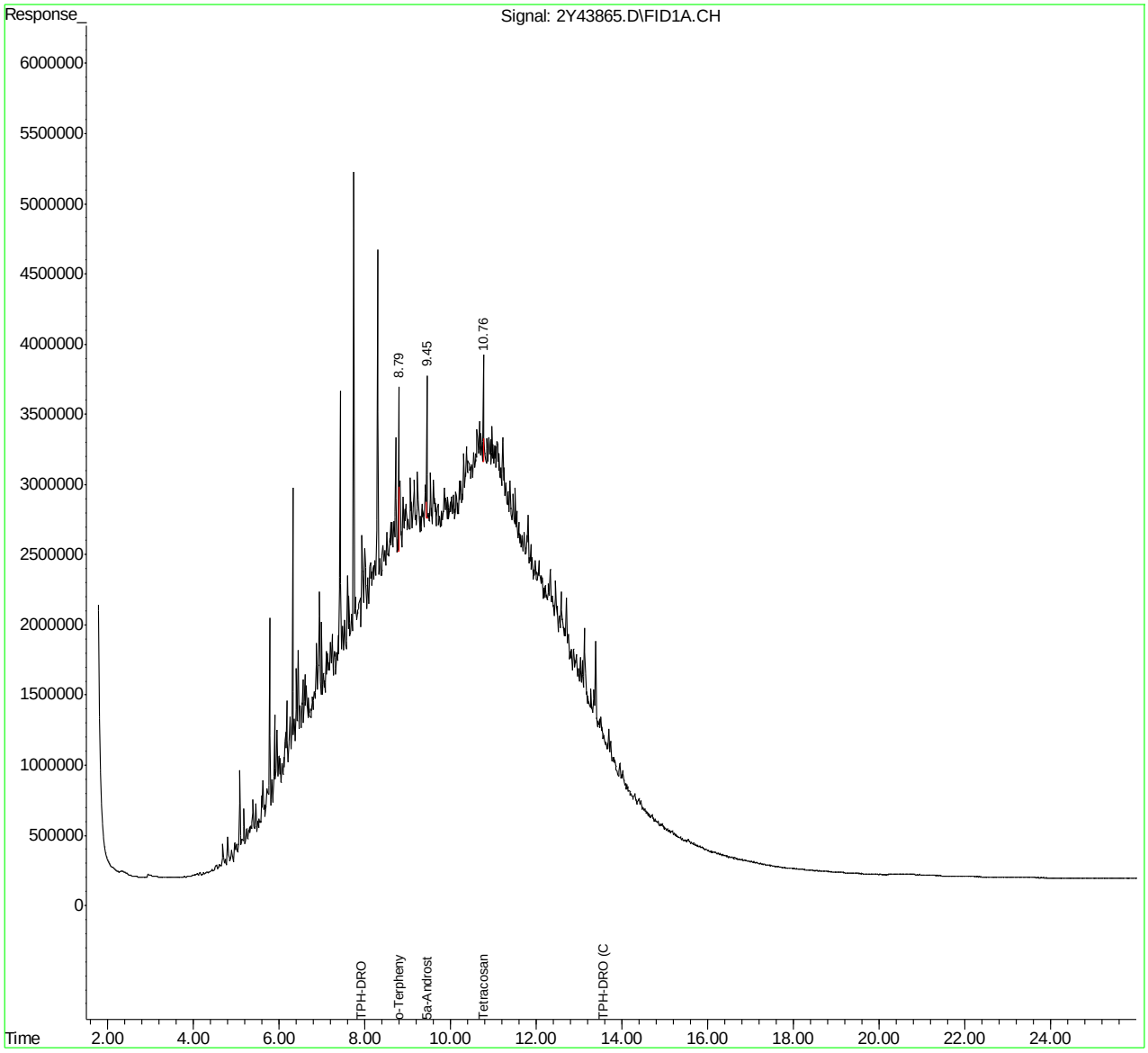
(f)=RT Delta > 1/2 Window (m)=manual int.

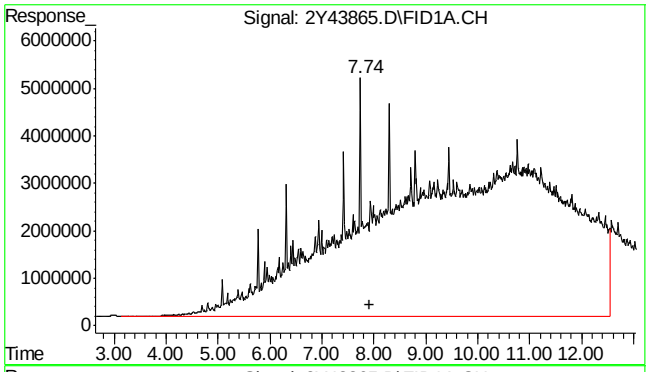
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2Y43865.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 2:23 pm
Operator : Mudassar
Sample : jb2059-5
Misc : OP55724,G2y1809,10.3,,,1,5
ALS Vial : 50 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 14:51:47 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

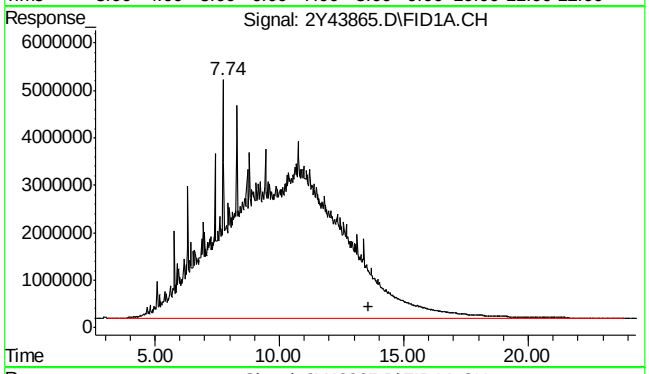
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





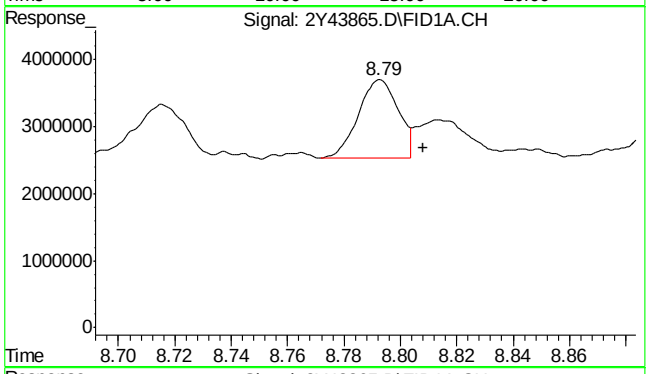
#1 TPH-DRO

R.T.: 7.910 min
Delta R.T.: 0.000 min
Response: 9088618352
Conc: 10298.19 PPM m



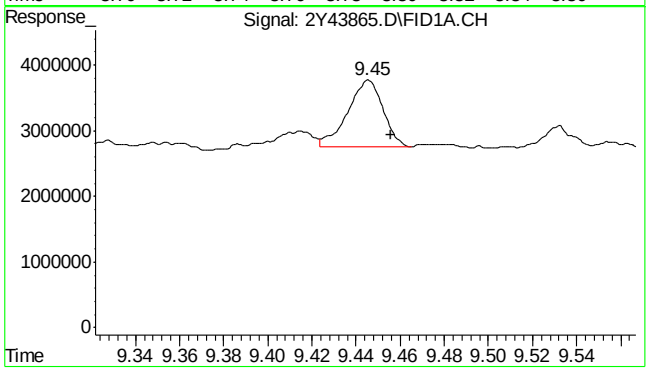
#2 TPH-DRO (C10-C44)

R.T.: 13.570 min
Delta R.T.: 0.000 min
Response: 10910658939
Conc: 12362.72 PPM m



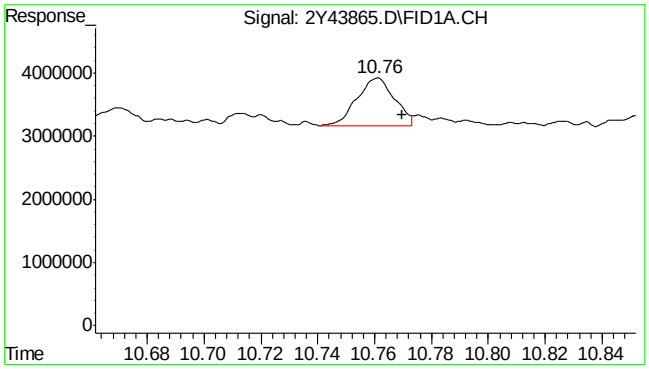
#7 o-Terphenyl

R.T.: 8.792 min
Delta R.T.: -0.016 min
Response: 11738495
Conc: 10.51 PPM m



#8 5a-Androstane

R.T.: 9.445 min
Delta R.T.: -0.011 min
Response: 11171590
Conc: 10.60 PPM m



#9 Tetracosane-d50

R.T.:	10.761 min
Delta R.T.:	-0.009 min
Response:	6986765
Conc:	8.11 PPM m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43699.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 7:17 am
Operator : cherrys
Sample : jb2059-6
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 36 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:39:29 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	25488450	22.831 PPM
8) S	5a-Androstane	9.43f	26935326	25.548 PPM
9) S	Tetracosane-d50	10.75f	19772242	22.955 PPM
	Target Compounds			

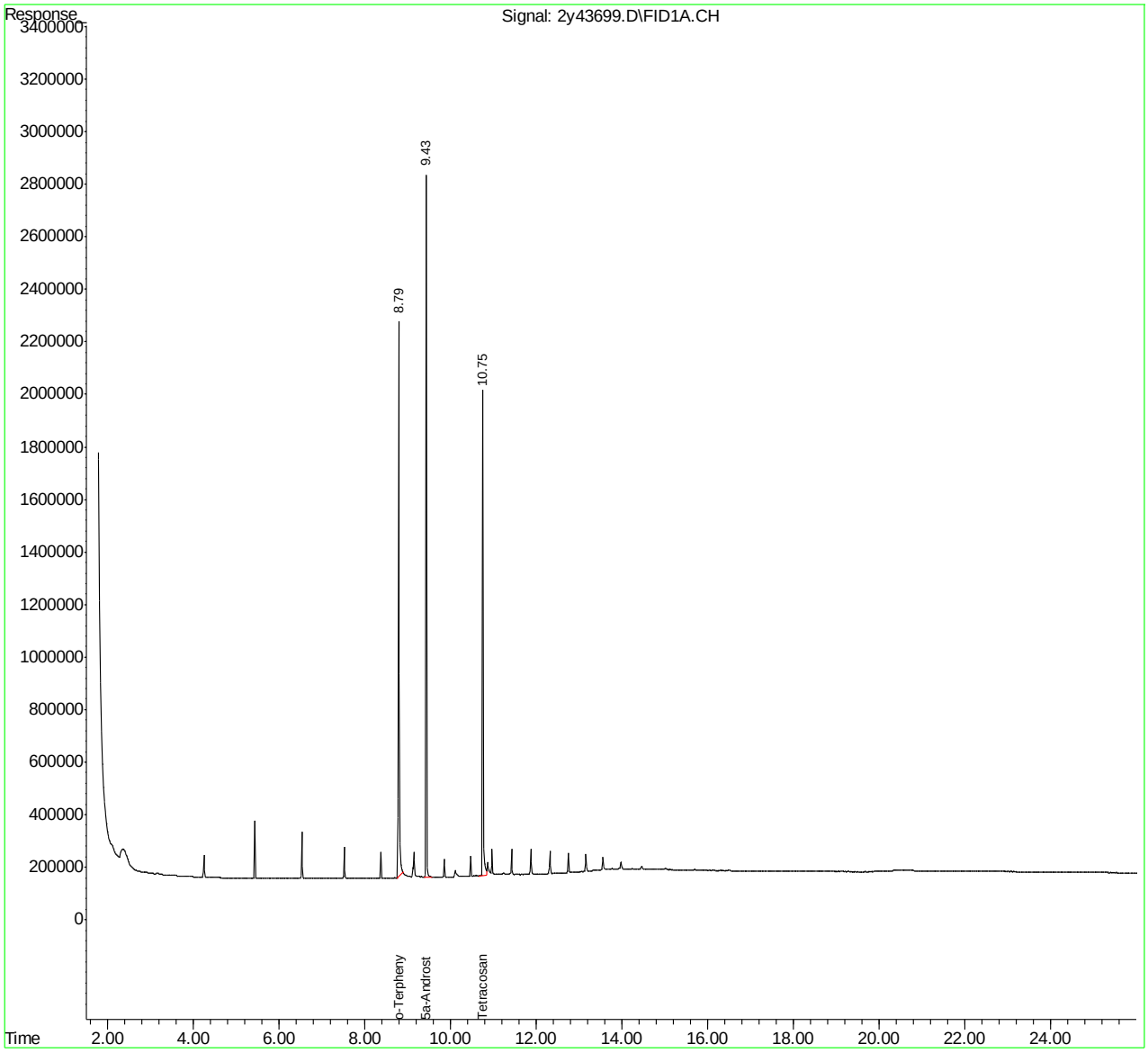
(f)=RT Delta > 1/2 Window (m)=manual int.

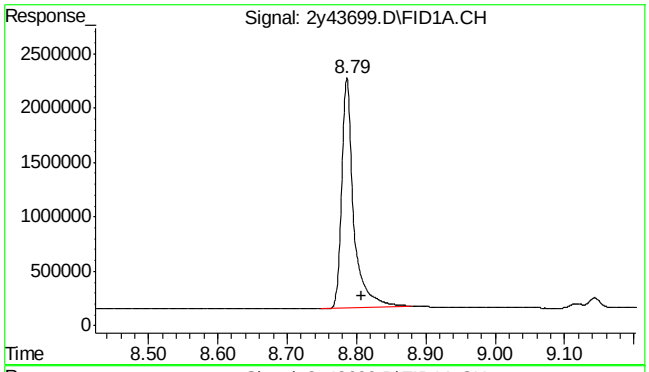
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43699.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 7:17 am
Operator : cherrys
Sample : jb2059-6
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 36 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:39:29 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

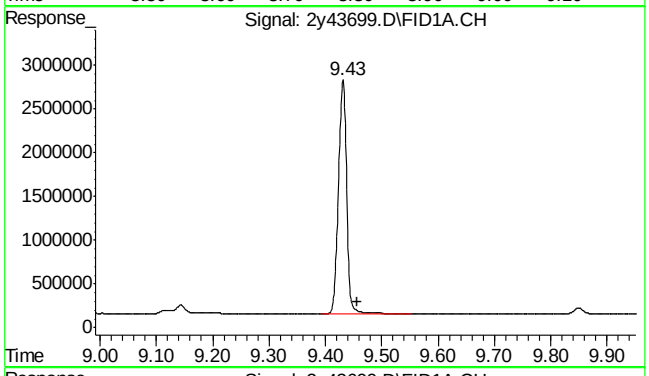
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





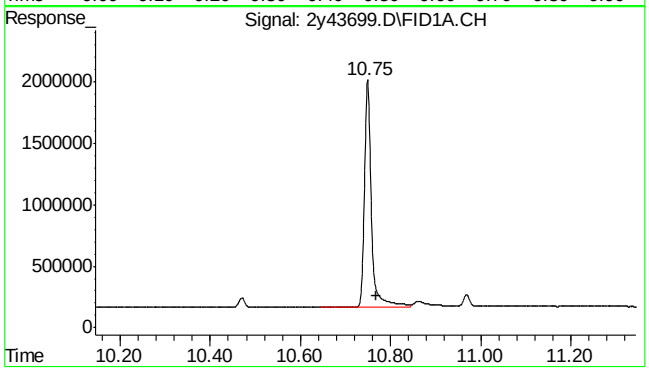
#7 o-Terphenyl

R.T.: 8.787 min
Delta R.T.: -0.022 min
Response: 25488450
Conc: 22.83 PPM



#8 5a-Androstane

R.T.: 9.431 min
Delta R.T.: -0.025 min
Response: 26935326
Conc: 25.55 PPM



#9 Tetracosane-d50

R.T.: 10.750 min
Delta R.T.: -0.020 min
Response: 19772242
Conc: 22.95 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43700.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 7:50 am
Operator : cherrys
Sample : jb2059-7
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 37 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:40:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	29460698	26.389 PPM
8) S	5a-Androstane	9.43f	32775892	31.088 PPM
9) S	Tetracosane-d50	10.75f	28041100	32.554 PPM
	Target Compounds			

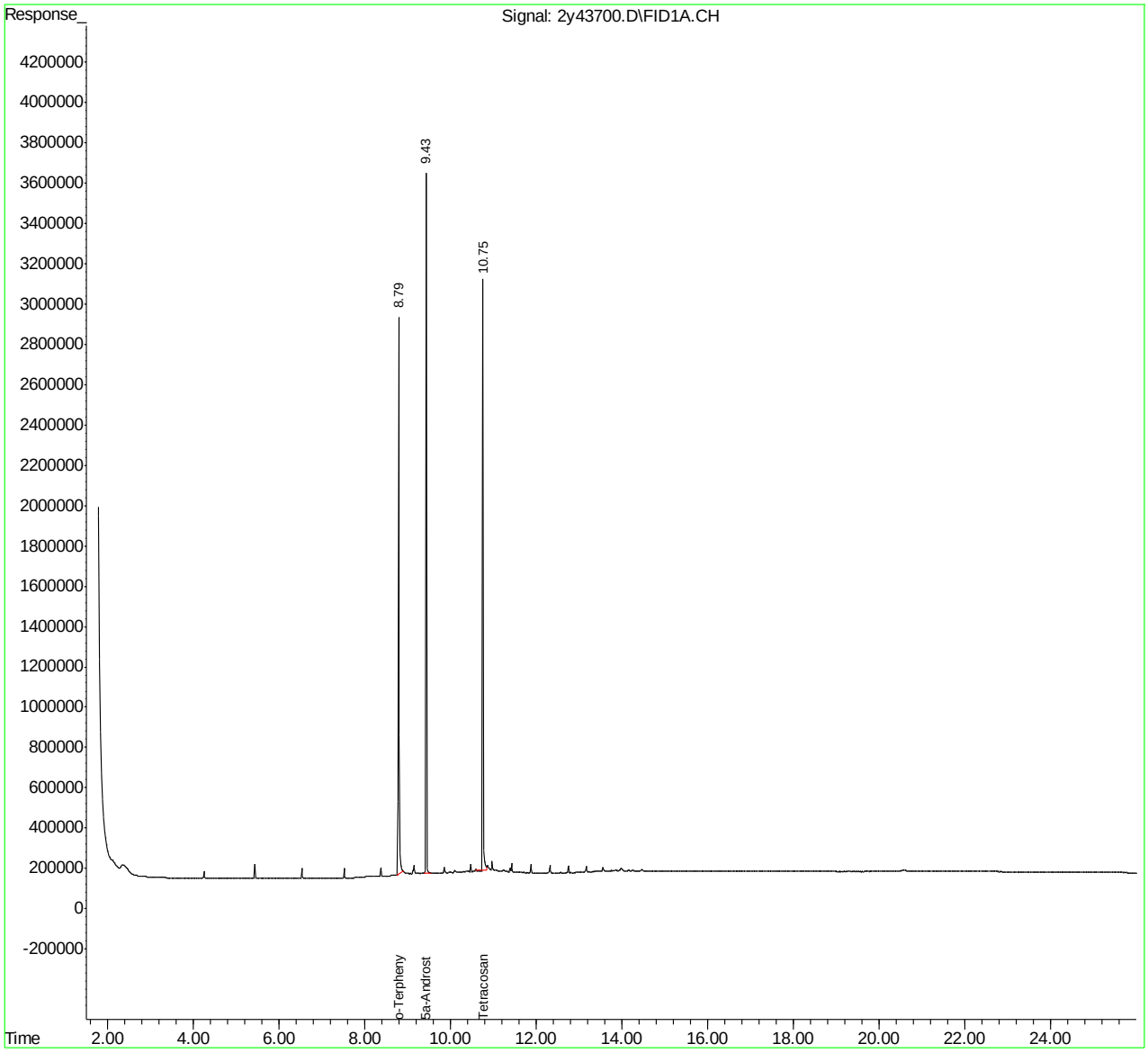
(f)=RT Delta > 1/2 Window (m)=manual int.

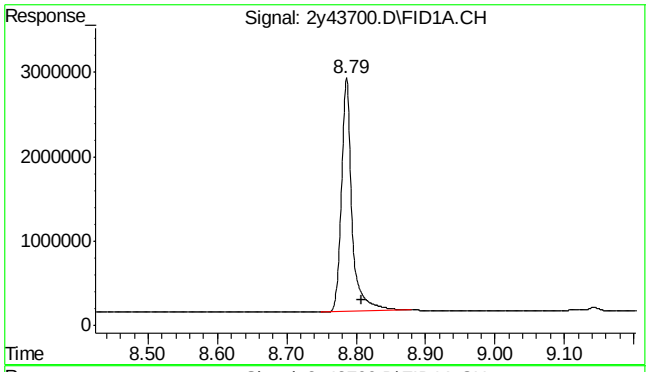
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43700.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 7:50 am
Operator : cherrys
Sample : jb2059-7
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 37 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:40:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

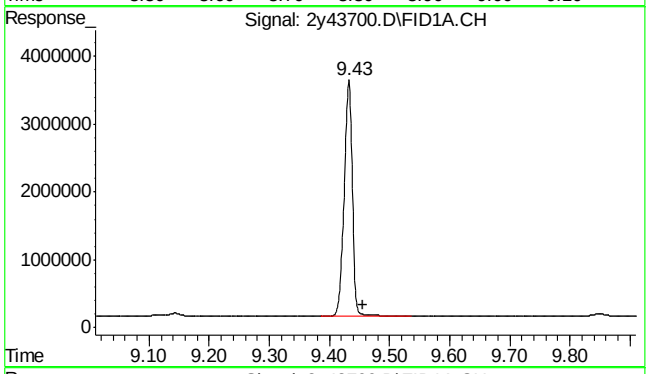
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





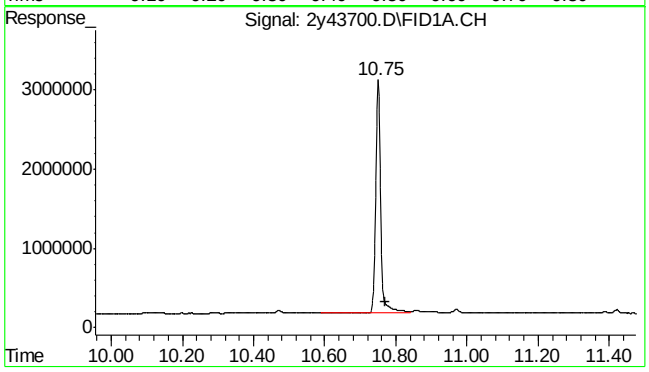
#7 o-Terphenyl

R.T.: 8.786 min
Delta R.T.: -0.022 min
Response: 29460698
Conc: 26.39 PPM



#8 5a-Androstane

R.T.: 9.432 min
Delta R.T.: -0.024 min
Response: 32775892
Conc: 31.09 PPM



#9 Tetracosane-d50

R.T.: 10.751 min
Delta R.T.: -0.019 min
Response: 28041100
Conc: 32.55 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43701.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 8:23 am
Operator : cherrys
Sample : jb2059-8
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 38 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:40:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	27454845	24.593 PPM
8) S	5a-Androstane	9.43f	29260146	27.754 PPM
9) S	Tetracosane-d50	10.75f	21255430	24.677 PPM
	Target Compounds			

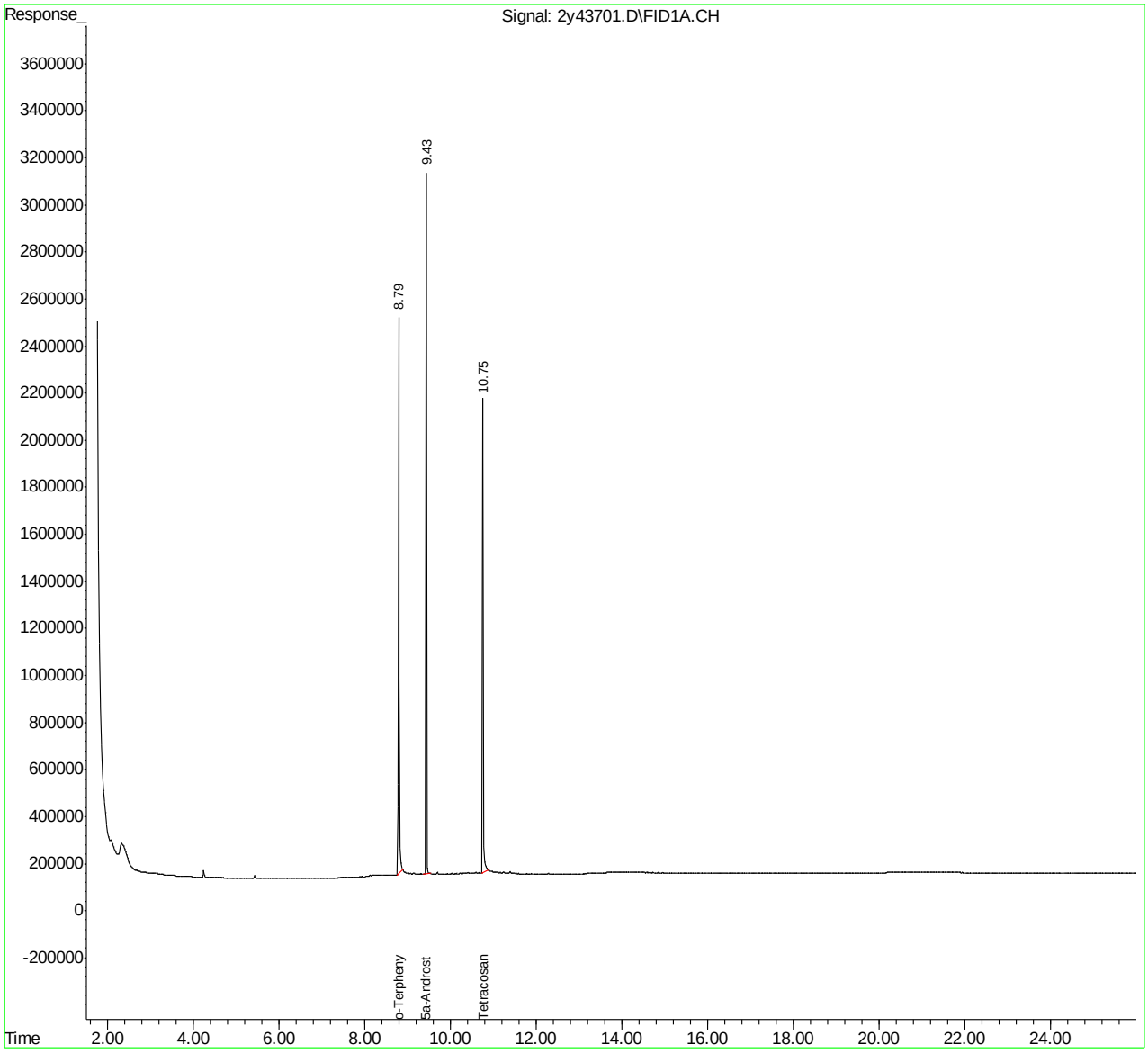
(f)=RT Delta > 1/2 Window (m)=manual int.

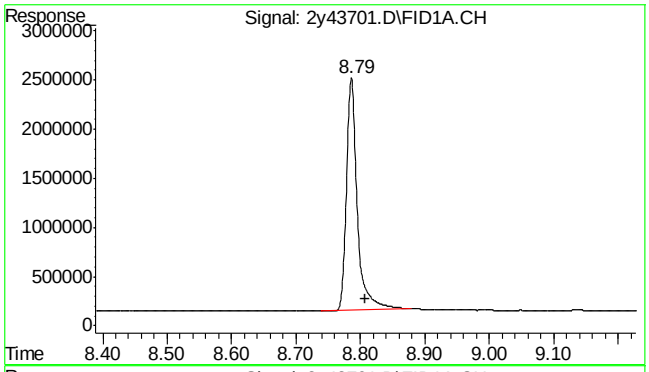
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43701.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 8:23 am
Operator : cherrys
Sample : jb2059-8
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 38 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:40:42 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

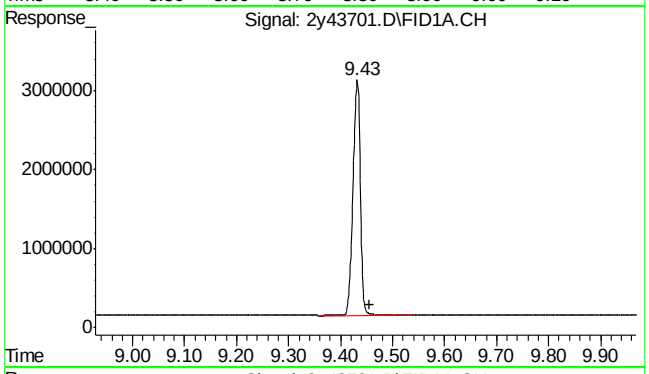
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





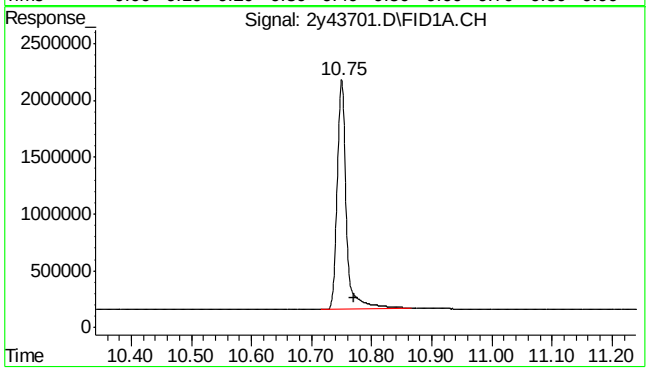
#7 o-Terphenyl

R.T.: 8.786 min
Delta R.T.: -0.022 min
Response: 27454845
Conc: 24.59 PPM



#8 5a-Androstane

R.T.: 9.431 min
Delta R.T.: -0.025 min
Response: 29260146
Conc: 27.75 PPM



#9 Tetracosane-d50

R.T.: 10.750 min
Delta R.T.: -0.020 min
Response: 21255430
Conc: 24.68 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43702.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 8:57 am
Operator : cherrys
Sample : jb2059-9
Misc : OP55724,G2y1805,10.3,,,1,1
ALS Vial : 39 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:41:24 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	34116622	30.560 PPM
8) S	5a-Androstane	9.43f	34393714	32.623 PPM
9) S	Tetracosane-d50	10.75f	24839422	28.837 PPM
	Target Compounds			
1) H	TPH-DRO	7.91	195550414	221.575 PPM
2) H	TPH-DRO (C10-C44)	13.57	423912913	480.330 PPM

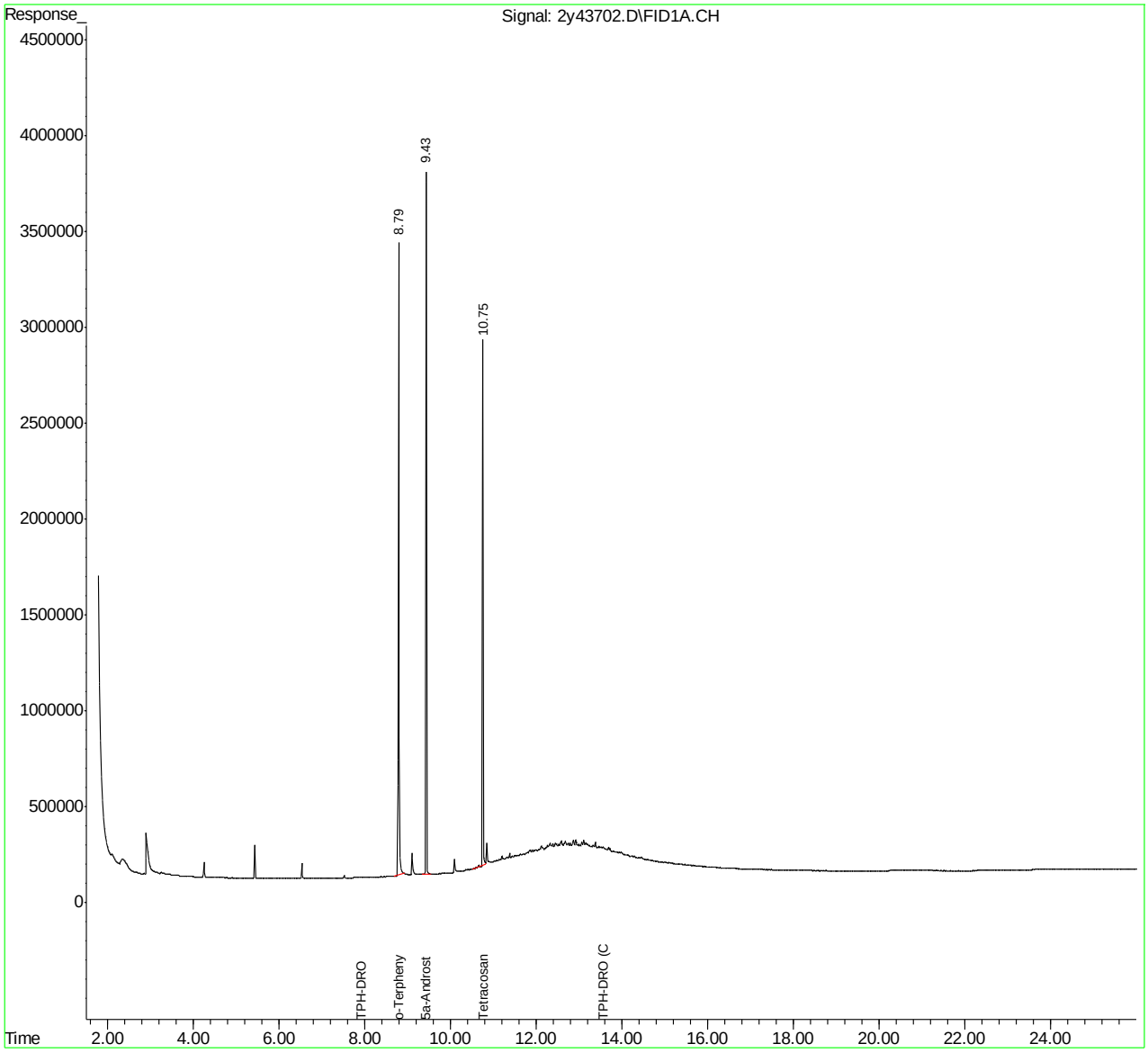
(f)=RT Delta > 1/2 Window (m)=manual int.

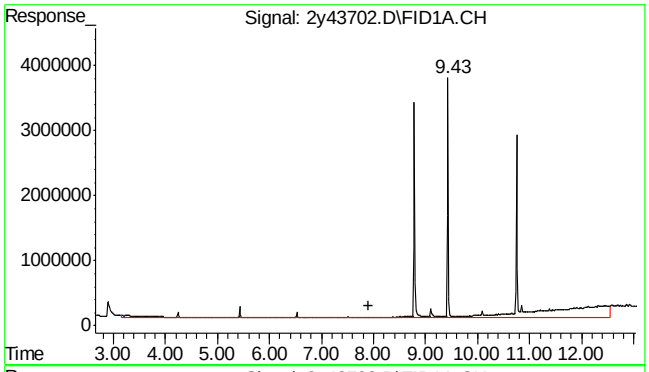
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43702.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 8:57 am
Operator : cherrys
Sample : jb2059-9
Misc : OP55724,G2y1805,10.3,,,1,1
ALS Vial : 39 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:41:24 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

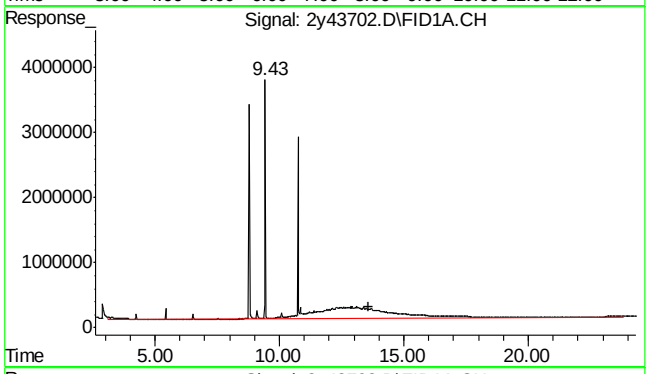
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





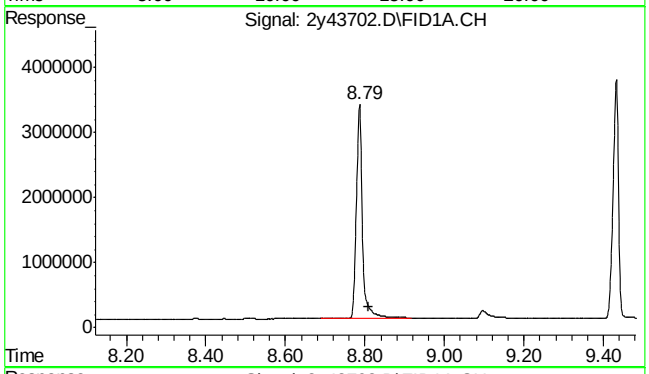
#1 TPH-DRO

R.T.: 7.910 min
Delta R.T.: 0.000 min
Response: 195550414
Conc: 221.58 PPM m



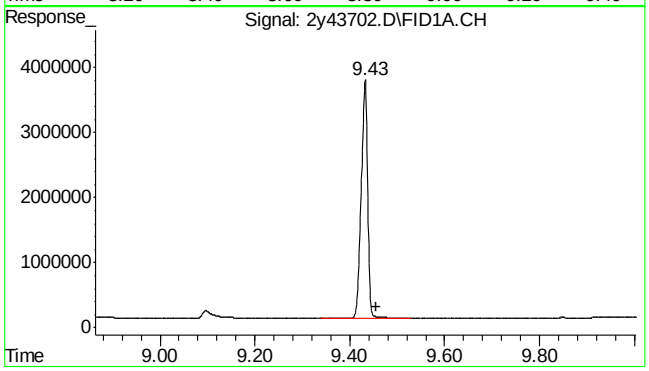
#2 TPH-DRO (C10-C44)

R.T.: 13.570 min
Delta R.T.: 0.000 min
Response: 423912913
Conc: 480.33 PPM m



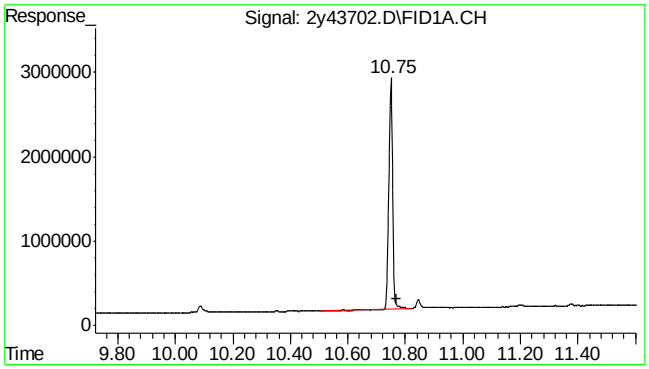
#7 o-Terphenyl

R.T.: 8.786 min
Delta R.T.: -0.022 min
Response: 34116622
Conc: 30.56 PPM



#8 5a-Androstane

R.T.: 9.431 min
Delta R.T.: -0.025 min
Response: 34393714
Conc: 32.62 PPM



#9 Tetracosane-d50

R.T.:	10.749 min
Delta R.T.:	-0.020 min
Response:	24839422
Conc:	28.84 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1805\
Data File : 2Y43703.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 9:31 am
Operator : cherrys
Sample : jb2059-10
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 40 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 10:08:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.78f	26184459	23.455 PPM
8) S	5a-Androstane	9.43f	28842178	27.357 PPM
9) S	Tetracosane-d50	10.75f	23880298	27.724 PPM
	Target Compounds			

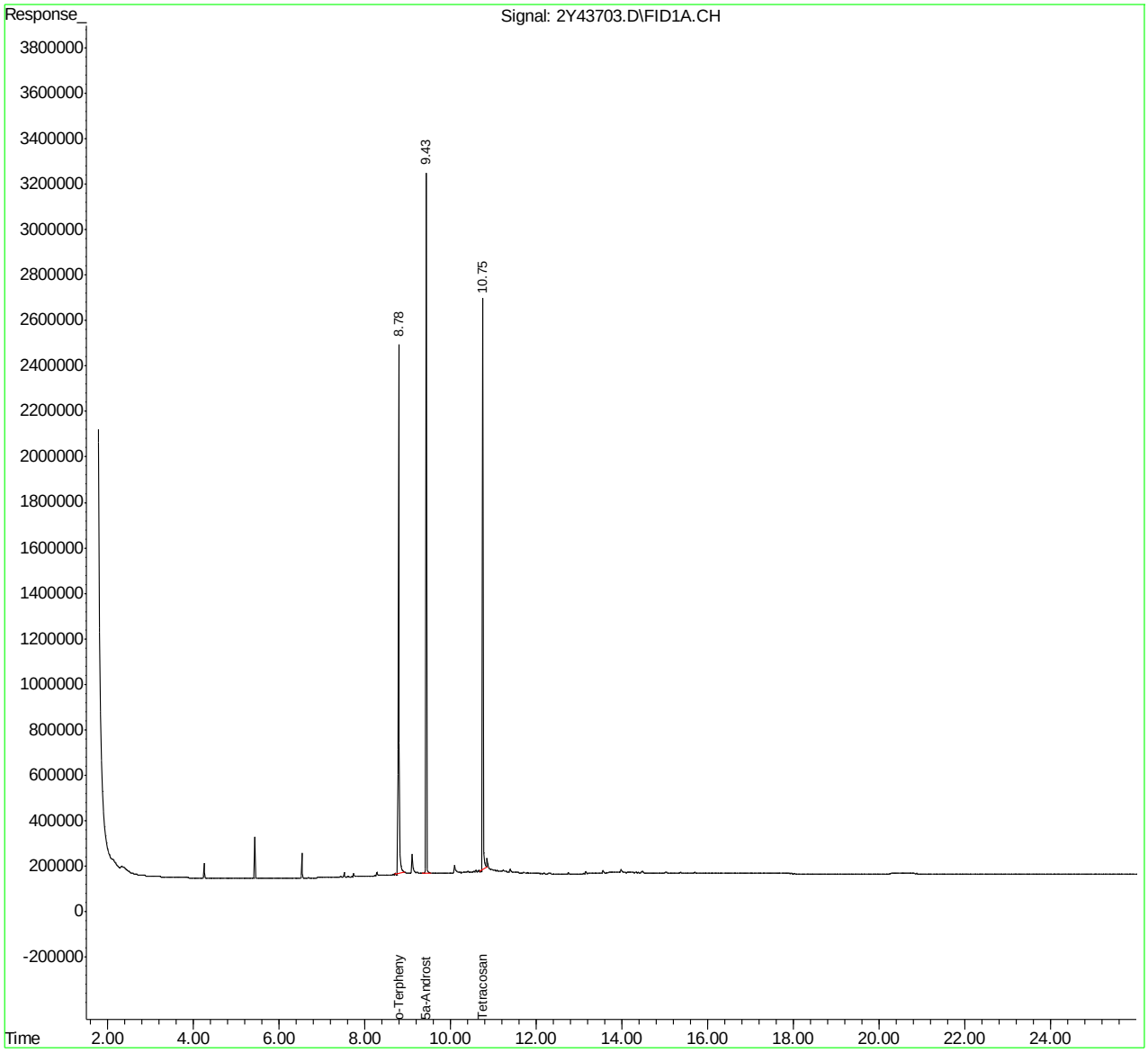
(f)=RT Delta > 1/2 Window (m)=manual int.

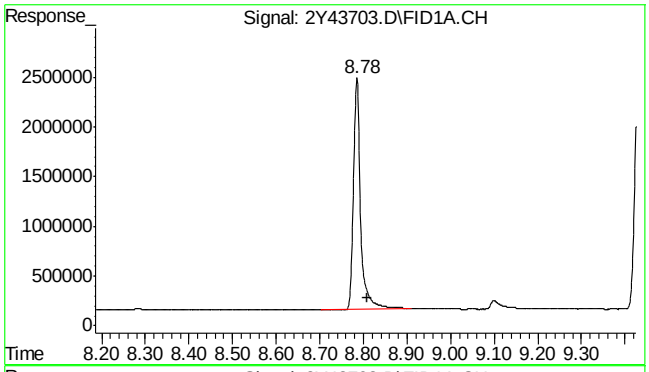
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1805\
Data File : 2Y43703.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 9:31 am
Operator : cherrys
Sample : jb2059-10
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 40 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 10:08:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

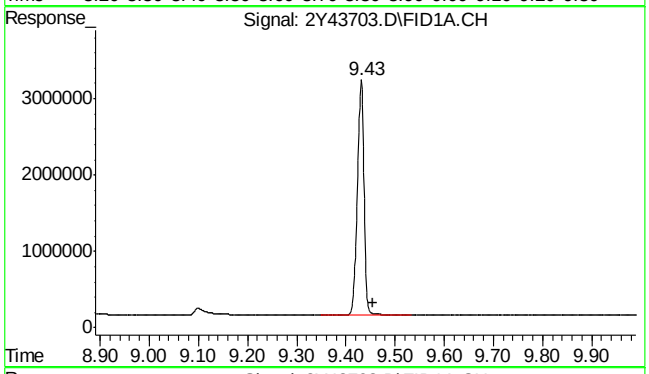
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





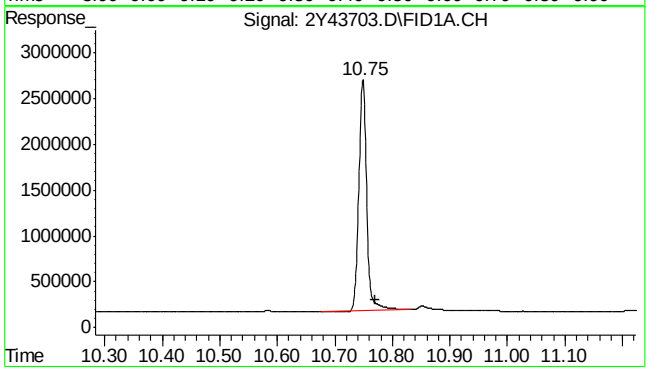
#7 o-Terphenyl

R.T.: 8.785 min
Delta R.T.: -0.023 min
Response: 26184459
Conc: 23.45 PPM



#8 5a-Androstane

R.T.: 9.431 min
Delta R.T.: -0.025 min
Response: 28842178
Conc: 27.36 PPM



#9 Tetracosane-d50

R.T.: 10.749 min
Delta R.T.: -0.021 min
Response: 23880298
Conc: 27.72 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2y43862.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 12:39 pm
Operator : Mudassar
Sample : jb2059-11
Misc : OP55724,G2y1809,10.0,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 13:13:53 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.78f	39670642	35.535 PPM
8) S	5a-Androstane	9.43f	39370723	37.344 PPM
9) S	Tetracosane-d50	10.75f	33772220	39.208 PPM
	Target Compounds			

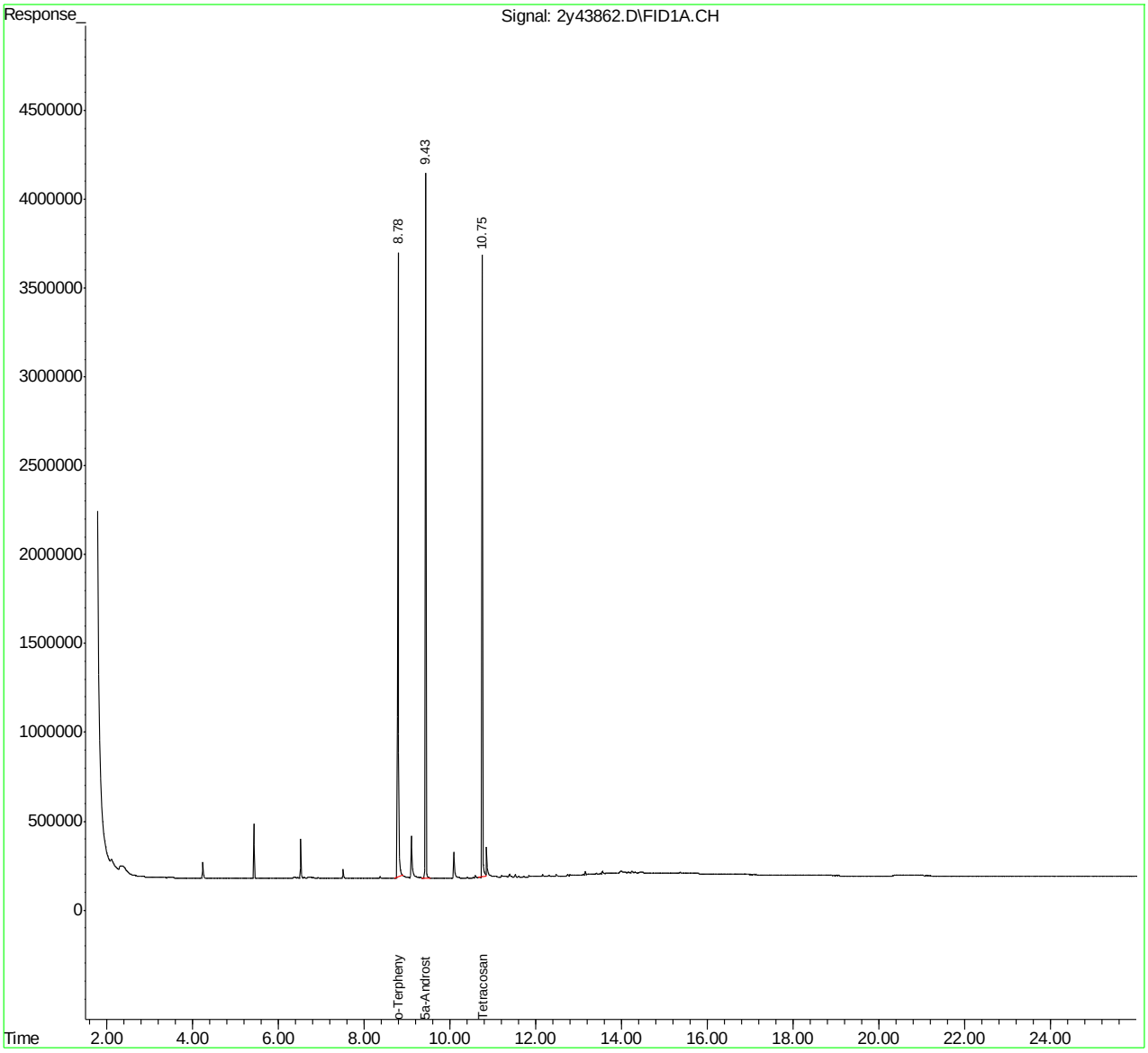
(f)=RT Delta > 1/2 Window (m)=manual int.

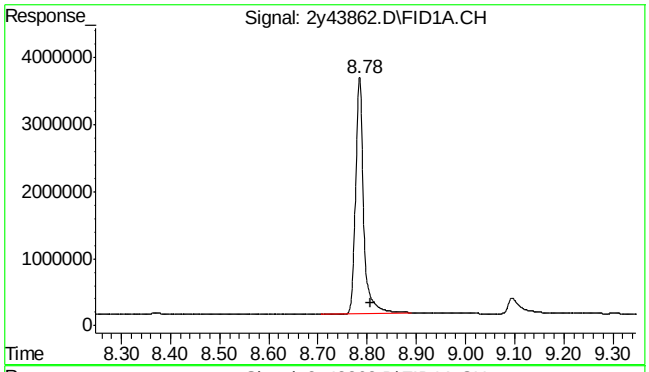
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2y43862.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 12:39 pm
Operator : Mudassar
Sample : jb2059-11
Misc : OP55724,G2y1809,10.0,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 13:13:53 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

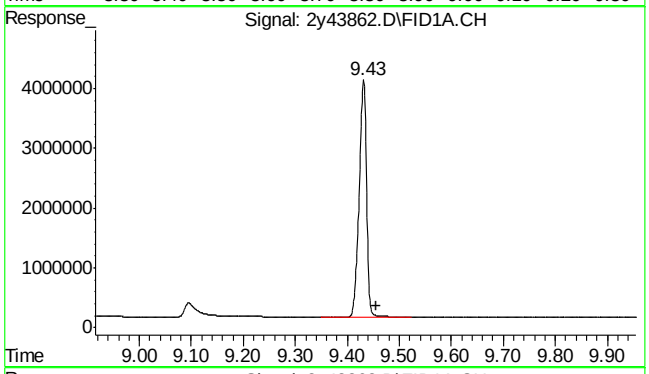
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





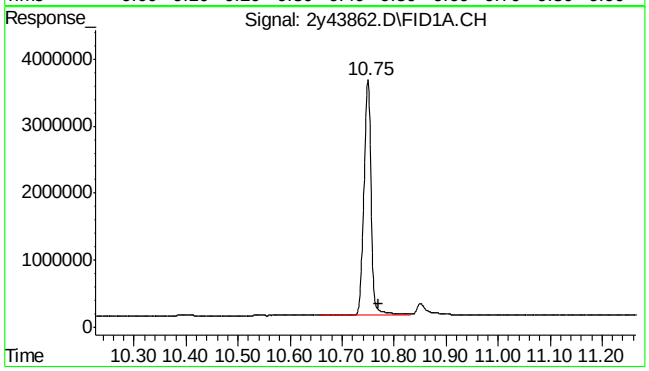
#7 o-Terphenyl

R.T.: 8.785 min
Delta R.T.: -0.024 min
Response: 39670642
Conc: 35.54 PPM



#8 5a-Androstane

R.T.: 9.430 min
Delta R.T.: -0.025 min
Response: 39370723
Conc: 37.34 PPM



#9 Tetracosane-d50

R.T.: 10.749 min
Delta R.T.: -0.020 min
Response: 33772220
Conc: 39.21 PPM

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
04/02/12 16:31

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2Y43863.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 1:14 pm
Operator : Mudassar
Sample : jb2059-12
Misc : OP55724,G2y1809,10.1,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 13:41:40 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
7) S	o-Terphenyl	8.80	44831490	40.158	PPM	m
8) S	5a-Androstane	9.46	40242119	38.170	PPM	m
9) S	Tetracosane-d50	10.77	29734529	34.520	PPM	m
Target Compounds						
1) H	TPH-DRO	7.91	9800848645	11105.206	PPM	
2) H	TPH-DRO (C10-C44)	13.57	10751830586	12182.750	PPM	

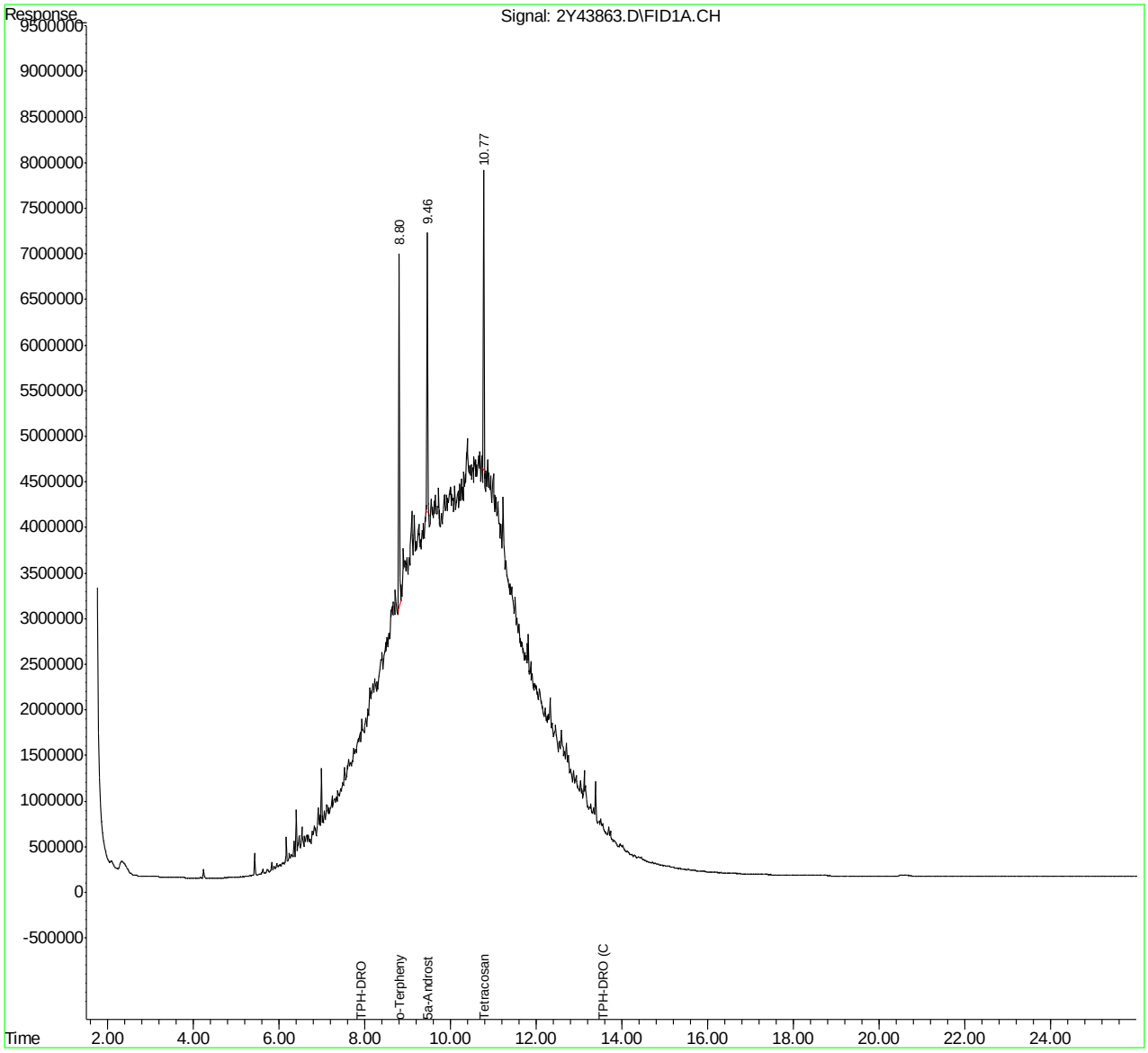
(f)=RT Delta > 1/2 Window (m)=manual int.

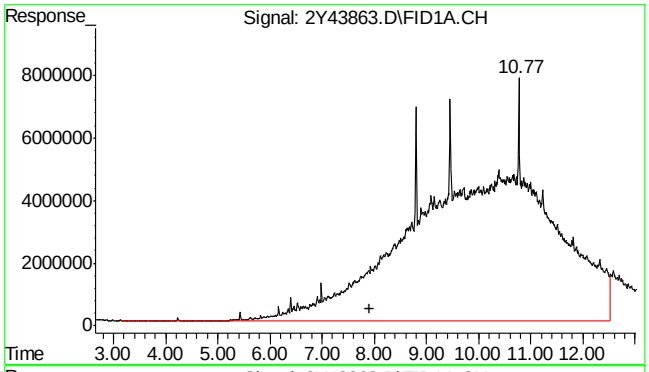
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2Y43863.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 1:14 pm
Operator : Mudassar
Sample : jb2059-12
Misc : OP55724,G2y1809,10.1,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 13:41:40 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

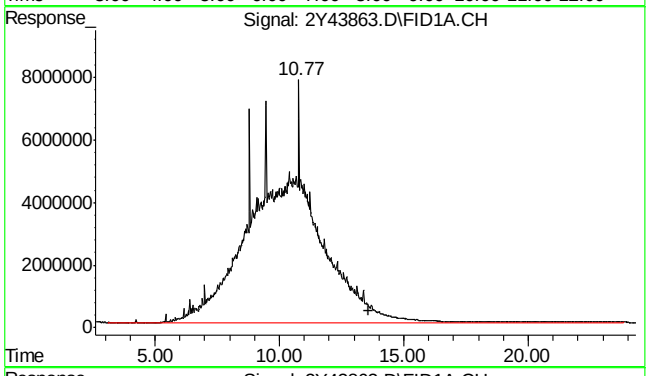
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





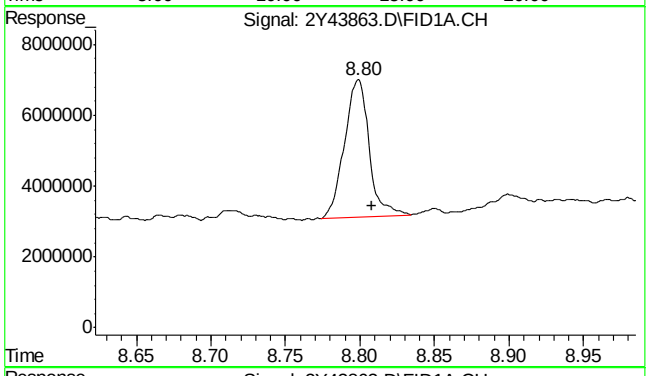
#1 TPH-DRO

R.T.: 7.910 min
Delta R.T.: 0.000 min
Response: 9800848645
Conc: 11105.21 PPM m



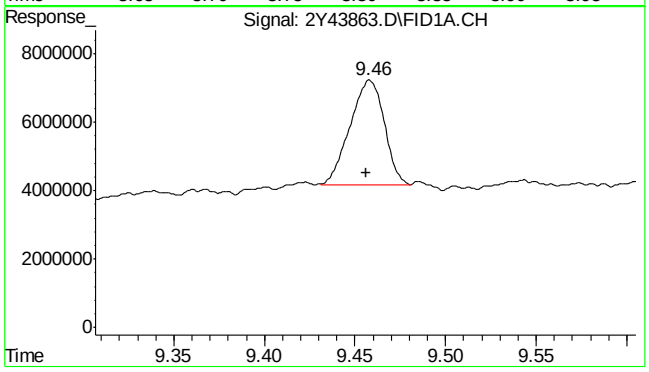
#2 TPH-DRO (C10-C44)

R.T.: 13.570 min
Delta R.T.: 0.000 min
Response: 10751830586
Conc: 12182.75 PPM m



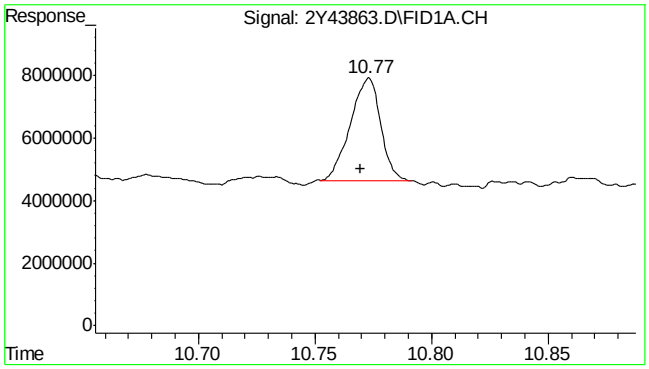
#7 o-Terphenyl

R.T.: 8.799 min
Delta R.T.: -0.009 min
Response: 44831490
Conc: 40.16 PPM m



#8 5a-Androstane

R.T.: 9.458 min
Delta R.T.: 0.002 min
Response: 40242119
Conc: 38.17 PPM m



#9 Tetracosane-d50

R.T.:	10.773 min
Delta R.T.:	0.004 min
Response:	29734529
Conc:	34.52 PPM m

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1808\
Data File : 2y43816.D
Signal(s) : FID1A.CH
Acq On : 27 Mar 2012 2:18 pm
Operator : Mudassar
Sample : jb2059-13
Misc : OP55724,G2y1808,10.1,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 27 14:53:16 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	32902395	29.472 PPM
8) S	5a-Androstane	9.43f	31634426	30.006 PPM
9) S	Tetracosane-d50	10.75f	23805945	27.638 PPM
	Target Compounds			

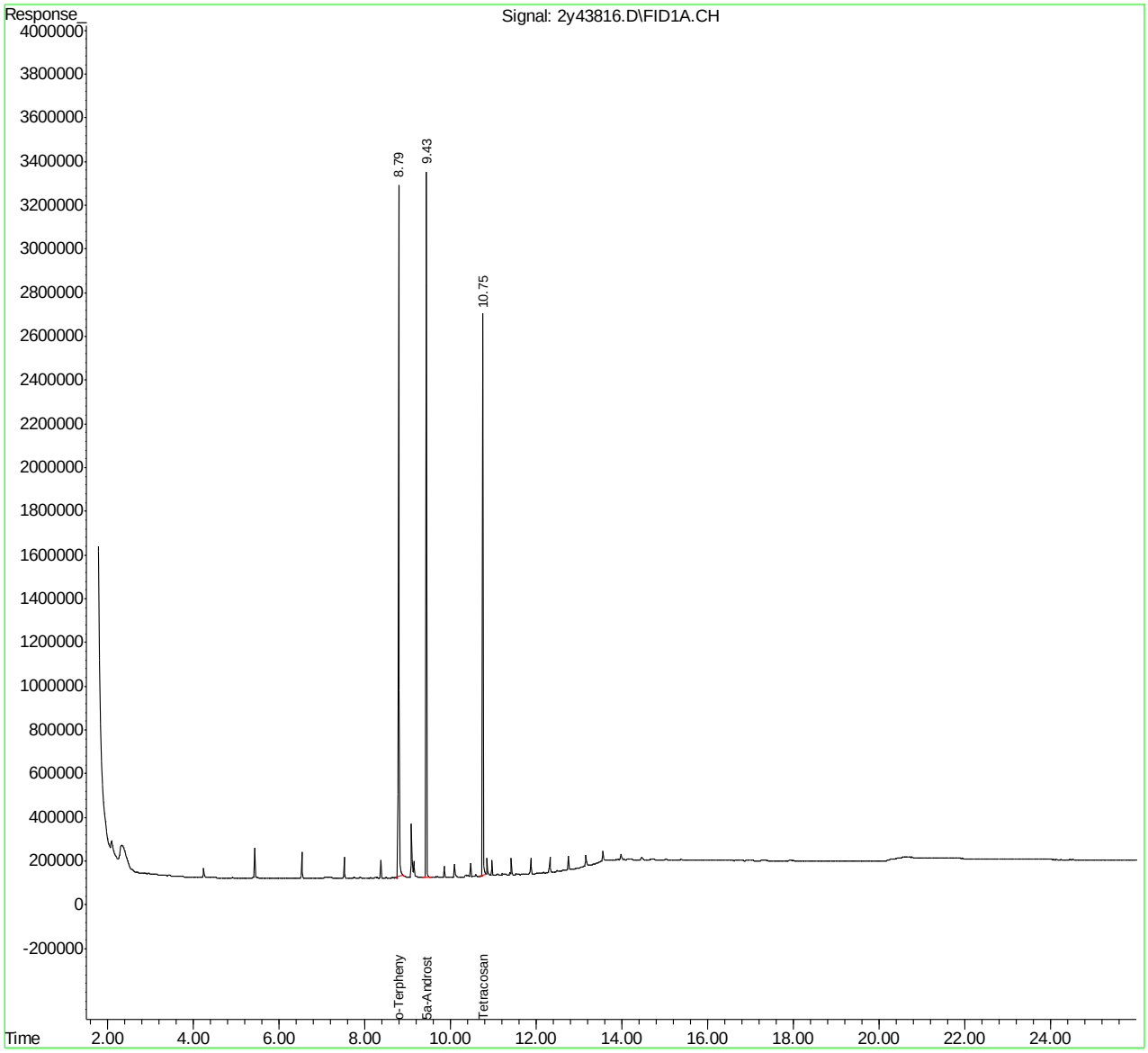
(f)=RT Delta > 1/2 Window (m)=manual int.

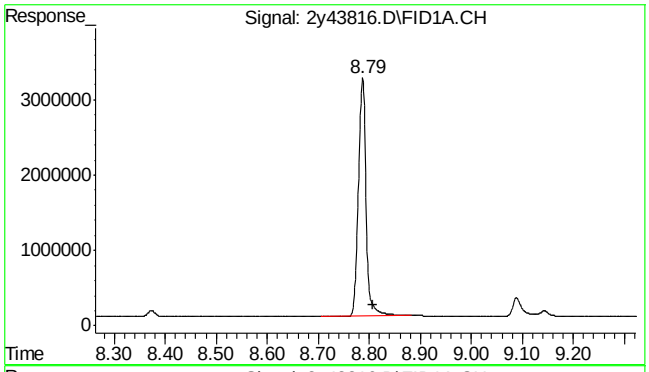
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1808\
Data File : 2y43816.D
Signal(s) : FID1A.CH
Acq On : 27 Mar 2012 2:18 pm
Operator : Mudassar
Sample : jb2059-13
Misc : OP55724,G2y1808,10.1,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 27 14:53:16 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

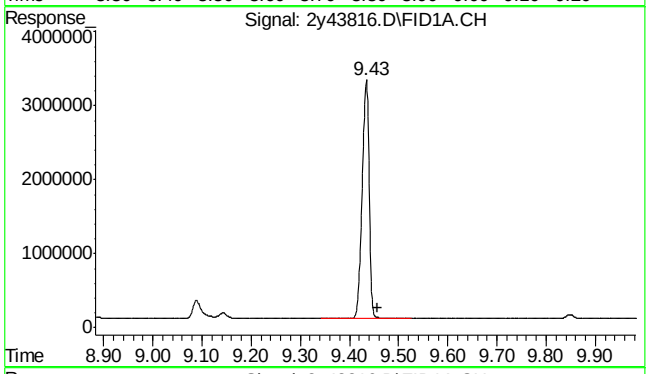
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





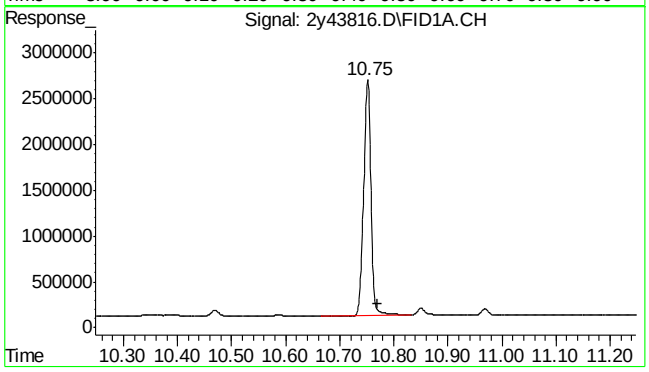
#7 o-Terphenyl

R.T.: 8.786 min
Delta R.T.: -0.022 min
Response: 32902395
Conc: 29.47 PPM



#8 5a-Androstane

R.T.: 9.433 min
Delta R.T.: -0.023 min
Response: 31634426
Conc: 30.01 PPM



#9 Tetracosane-d50

R.T.: 10.751 min
Delta R.T.: -0.018 min
Response: 23805945
Conc: 27.64 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1808\
Data File : 2y43817.D
Signal(s) : FID1A.CH
Acq On : 27 Mar 2012 2:51 pm
Operator : Mudassar
Sample : jb2059-14
Misc : OP55724,G2y1808,10.2,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 27 15:52:04 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	41416996	37.099 PPM
8) S	5a-Androstane	9.44f	41641789	39.498 PPM
9) S	Tetracosane-d50	10.75f	37698469	43.766 PPM
	Target Compounds			

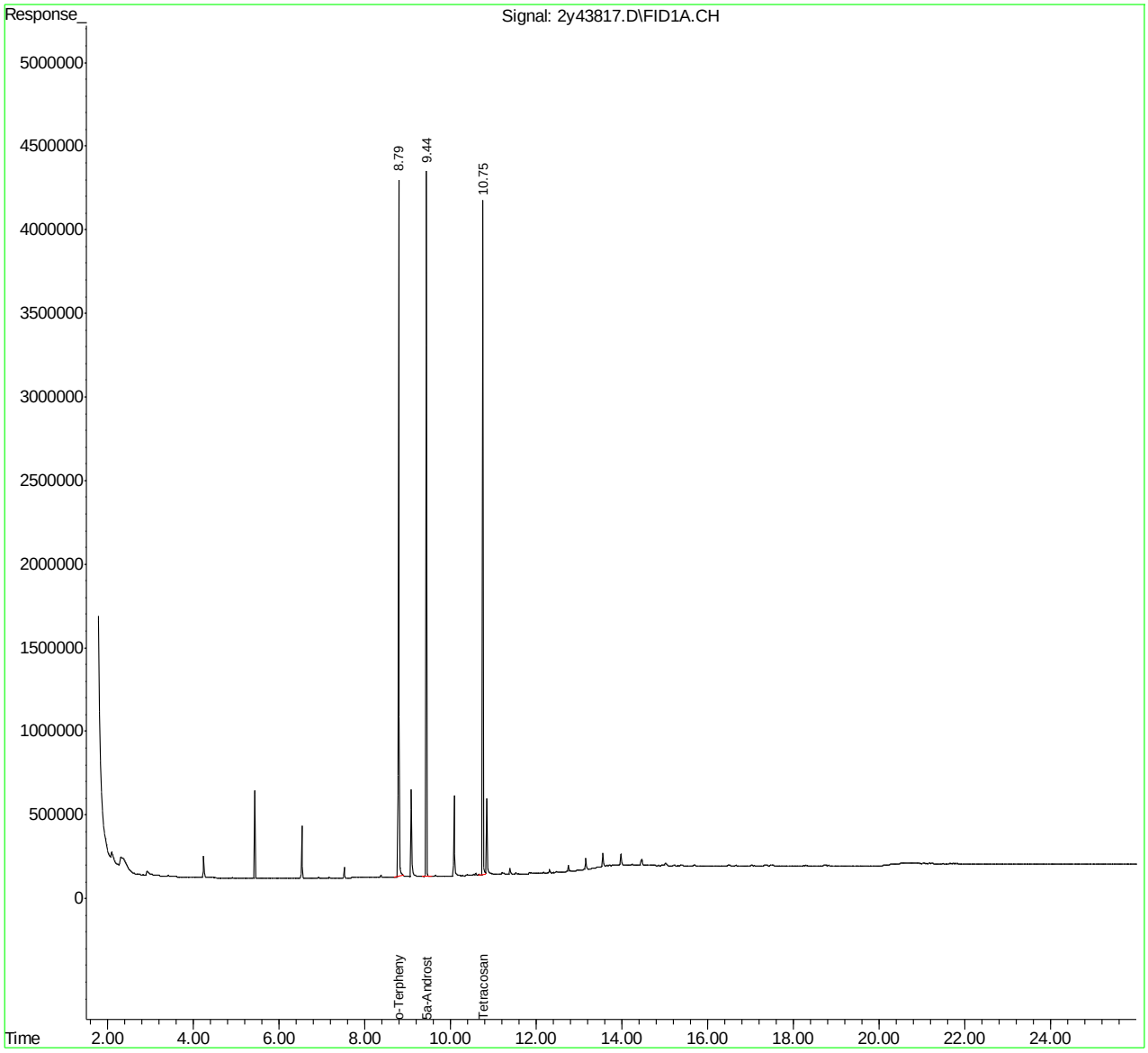
(f)=RT Delta > 1/2 Window (m)=manual int.

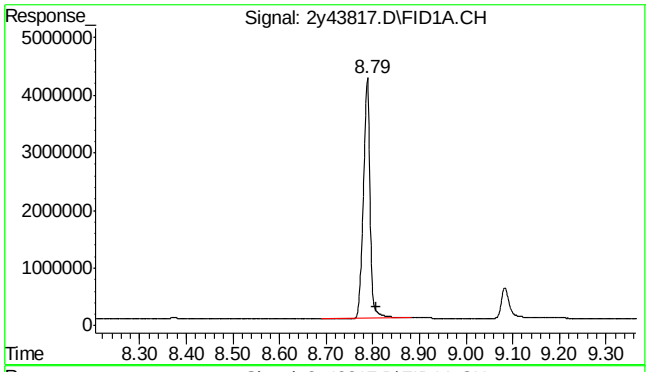
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1808\
Data File : 2y43817.D
Signal(s) : FID1A.CH
Acq On : 27 Mar 2012 2:51 pm
Operator : Mudassar
Sample : jb2059-14
Misc : OP55724,G2y1808,10.2,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 27 15:52:04 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

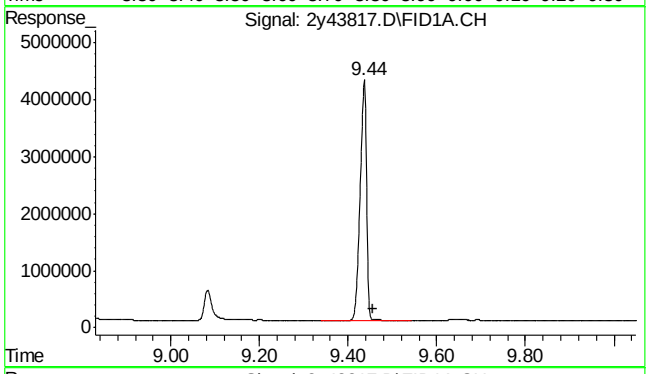
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





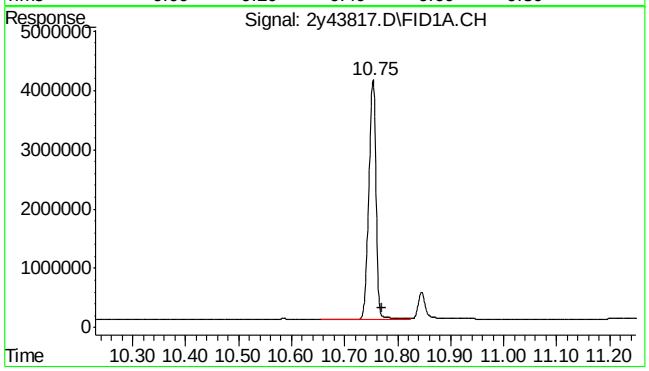
#7 o-Terphenyl

R.T.: 8.787 min
Delta R.T.: -0.021 min
Response: 41416996
Conc: 37.10 PPM



#8 5a-Androstane

R.T.: 9.435 min
Delta R.T.: -0.021 min
Response: 41641789
Conc: 39.50 PPM



#9 Tetracosane-d50

R.T.: 10.753 min
Delta R.T.: -0.017 min
Response: 37698469
Conc: 43.77 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1808\
Data File : 2Y43819.D
Signal(s) : FID1A.CH
Acq On : 27 Mar 2012 3:25 pm
Operator : Mudassar
Sample : jb2059-15
Misc : OP55724,G2y1808,10.1,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 27 15:52:56 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
7) S	o-Terphenyl	8.79f	40586374	36.355 PPM
8) S	5a-Androstane	9.43f	39574354	37.537 PPM
9) S	Tetracosane-d50	10.75f	31617905	36.707 PPM
	Target Compounds			

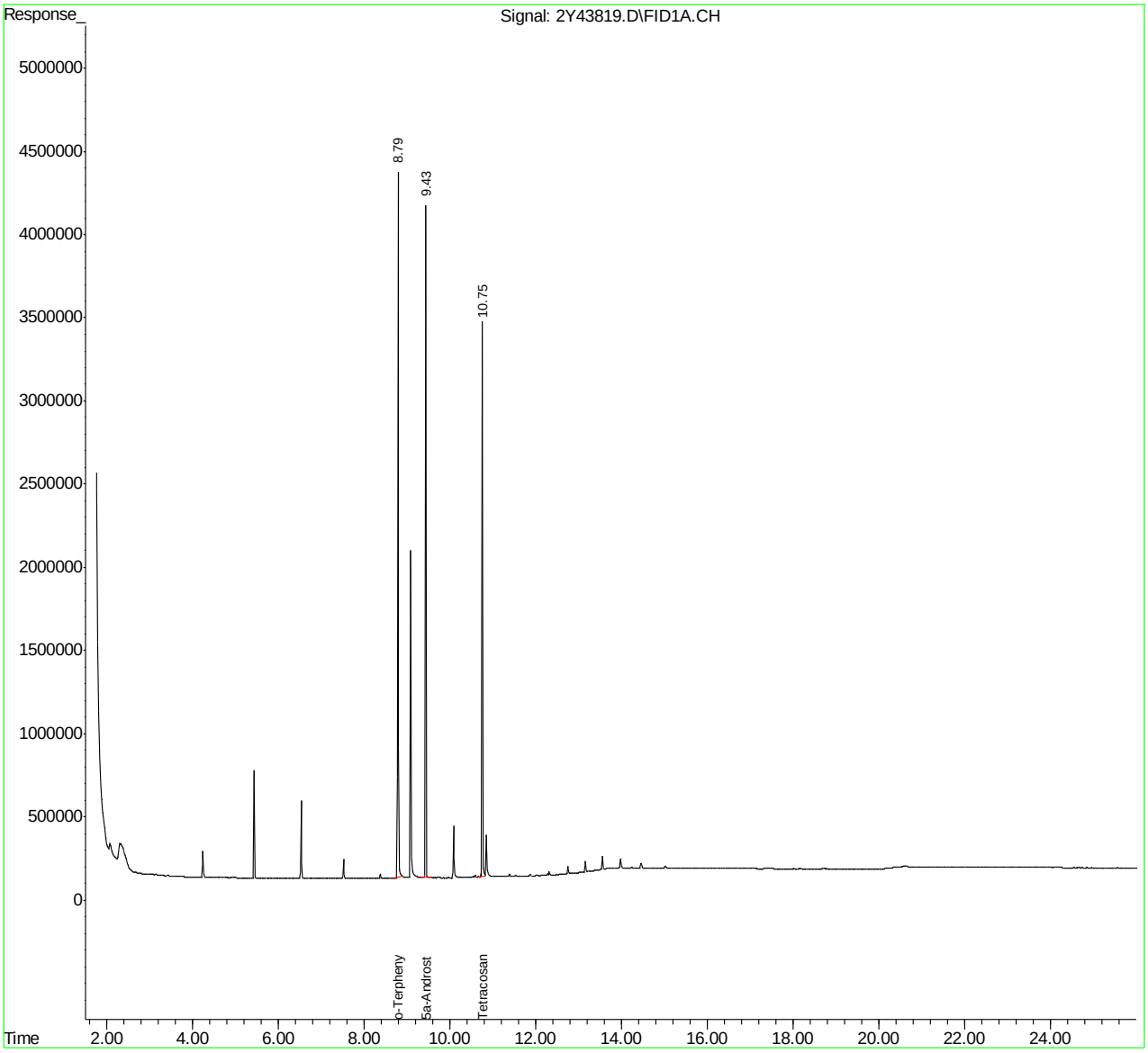
(f)=RT Delta > 1/2 Window (m)=manual int.

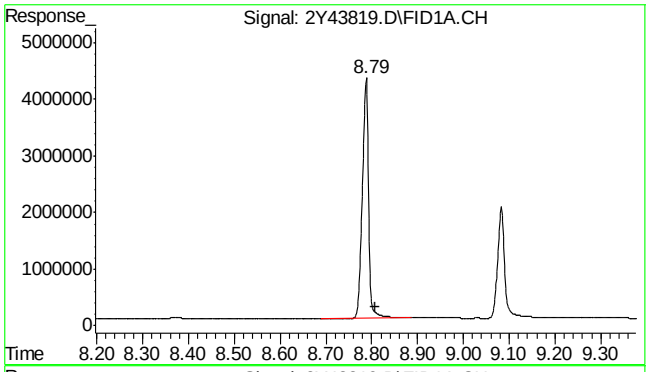
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1808\
Data File : 2Y43819.D
Signal(s) : FID1A.CH
Acq On : 27 Mar 2012 3:25 pm
Operator : Mudassar
Sample : jb2059-15
Misc : OP55724,G2y1808,10.1,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 27 15:52:56 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

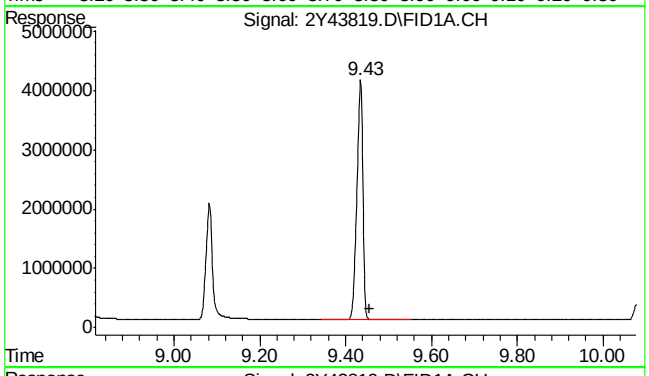
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





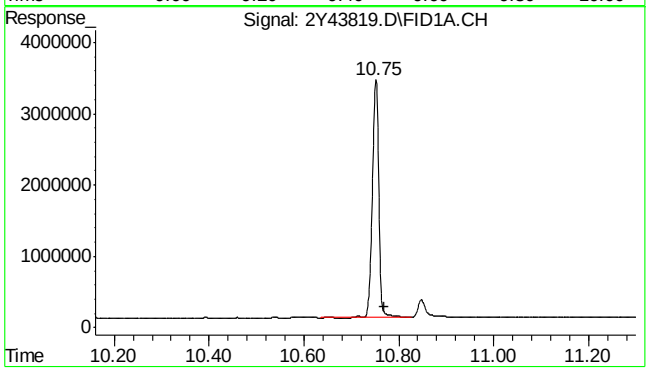
#7 o-Terphenyl

R.T.: 8.787 min
Delta R.T.: -0.021 min
Response: 40586374
Conc: 36.36 PPM



#8 5a-Androstane

R.T.: 9.434 min
Delta R.T.: -0.022 min
Response: 39574354
Conc: 37.54 PPM



#9 Tetracosane-d50

R.T.: 10.751 min
Delta R.T.: -0.018 min
Response: 31617905
Conc: 36.71 PPM

Manual Integrations APPROVED (compounds with "m" flag)
Wen Wen Chi
04/01/12 14:33

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1808\
Data File : 2Y43820.D
Signal(s) : FID1A.CH
Acq On : 27 Mar 2012 3:59 pm
Operator : Mudassar
Sample : jb2059-16
Misc : OP55724,G2y1808,10.3,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 27 16:27:36 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
7) S	o-Terphenyl	8.80	41194809	36.900	PPM	m
8) S	5a-Androstane	9.45	36662252	34.775	PPM	m
9) S	Tetracosane-d50	10.78	24314668	28.228	PPM	m
Target Compounds						
1) H	TPH-DRO	7.91	9683542779	10972.288	PPM	
2) H	TPH-DRO (C10-C44)	13.57	10793968110	12230.496	PPM	

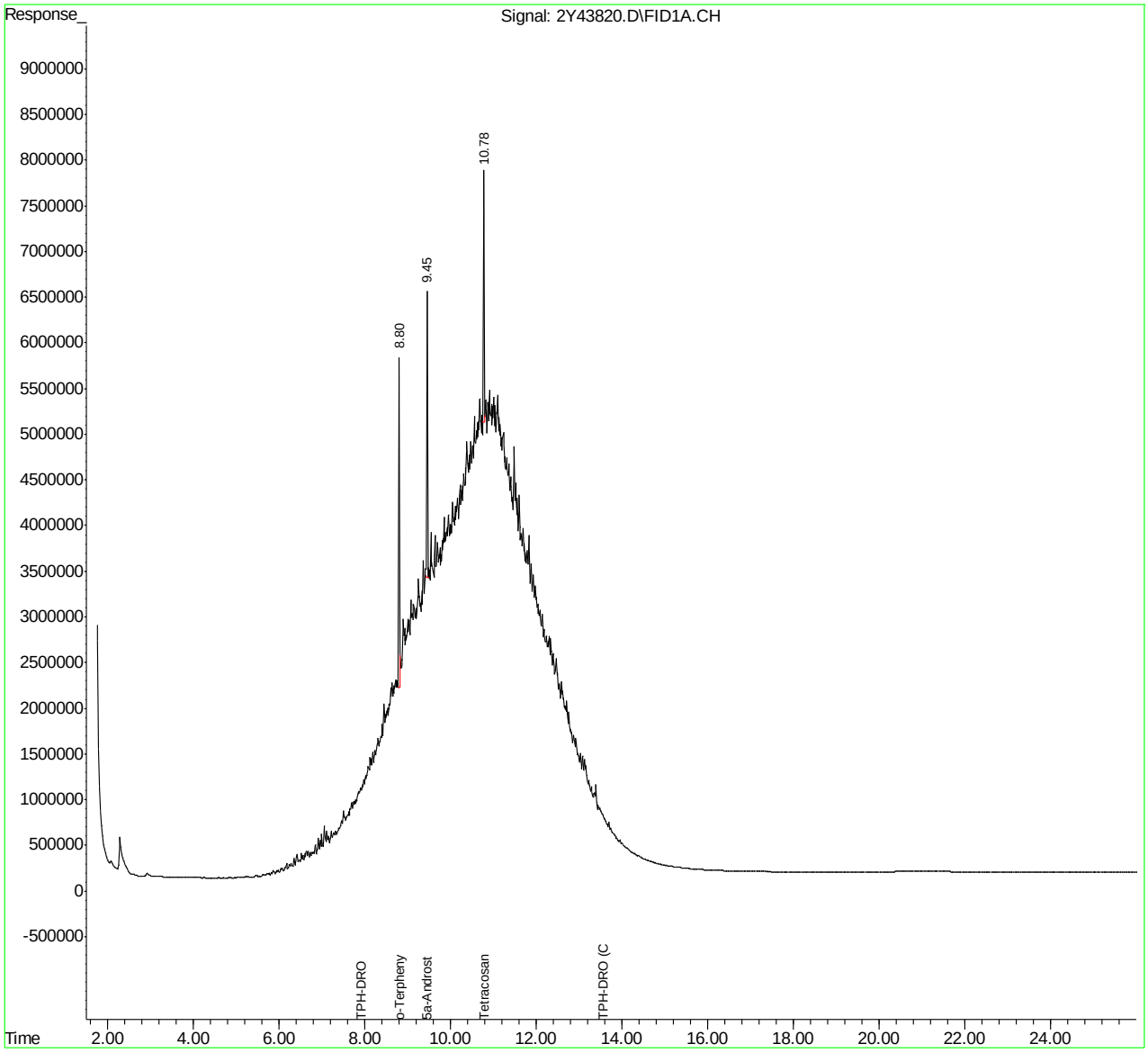
(f)=RT Delta > 1/2 Window (m)=manual int.

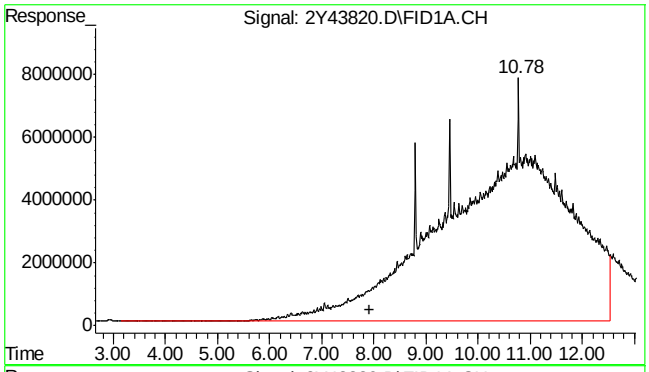
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1808\
Data File : 2Y43820.D
Signal(s) : FID1A.CH
Acq On : 27 Mar 2012 3:59 pm
Operator : Mudassar
Sample : jb2059-16
Misc : OP55724,G2y1808,10.3,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 27 16:27:36 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

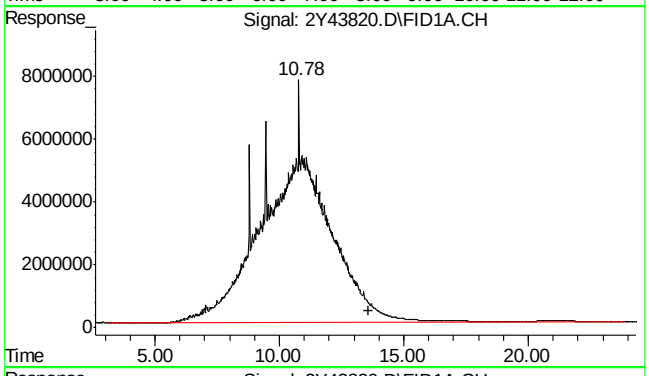
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





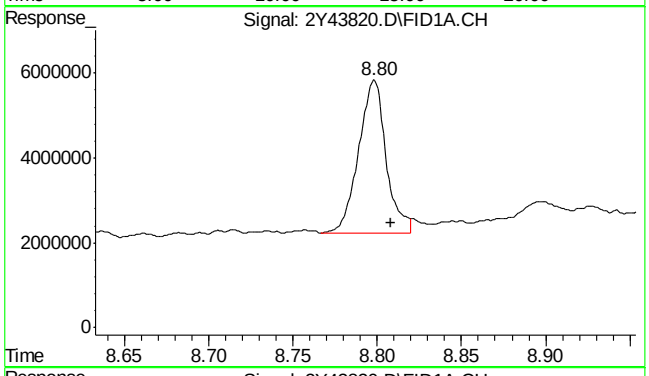
#1 TPH-DRO

R.T.: 7.910 min
Delta R.T.: 0.000 min
Response: 9683542779
Conc: 10972.29 PPM m



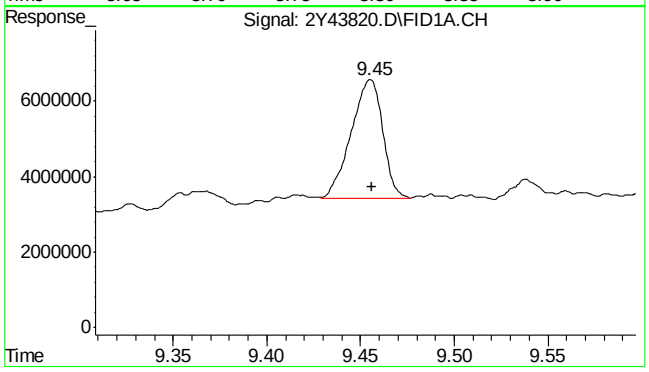
#2 TPH-DRO (C10-C44)

R.T.: 13.570 min
Delta R.T.: 0.000 min
Response: 10793968110
Conc: 12230.50 PPM m



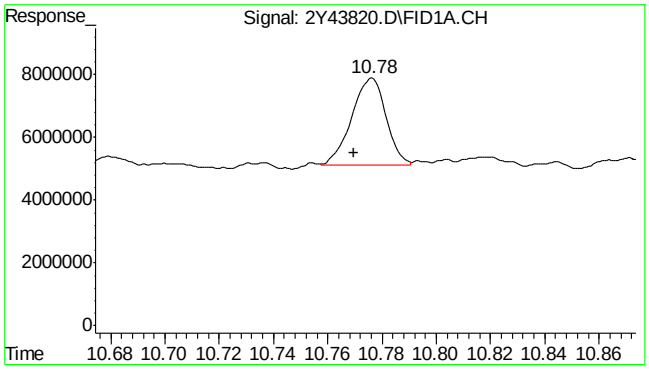
#7 o-Terphenyl

R.T.: 8.798 min
Delta R.T.: -0.010 min
Response: 41194809
Conc: 36.90 PPM m



#8 5a-Androstane

R.T.: 9.455 min
Delta R.T.: -0.001 min
Response: 36662252
Conc: 34.77 PPM m



#9 Tetracosane-d50

R.T.:	10.776 min
Delta R.T.:	0.007 min
Response:	24314668
Conc:	28.23 PPM m

Manual Integrations APPROVED (compounds with "m" flag)
Wen Wen Chi
04/01/12 14:33

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1806\
Data File : 2y43723.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 3:56 pm
Operator : cherrys
Sample : jb2059-17
Misc : OP55767,G2y1806,10.3,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 26 10:05:41 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
7) S	o-Terphenyl	8.80	14270306	12.783	PPM	m
8) S	5a-Androstane	9.47	8508160	8.070	PPM	m
9) S	Tetracosane-d50	10.79f	17480847	20.294	PPM	m
Target Compounds						
1) H	TPH-DRO	7.91	61557321969	69749.749	PPM	
2) H	TPH-DRO (C10-C44)	13.57	63353887114	71785.412	PPM	

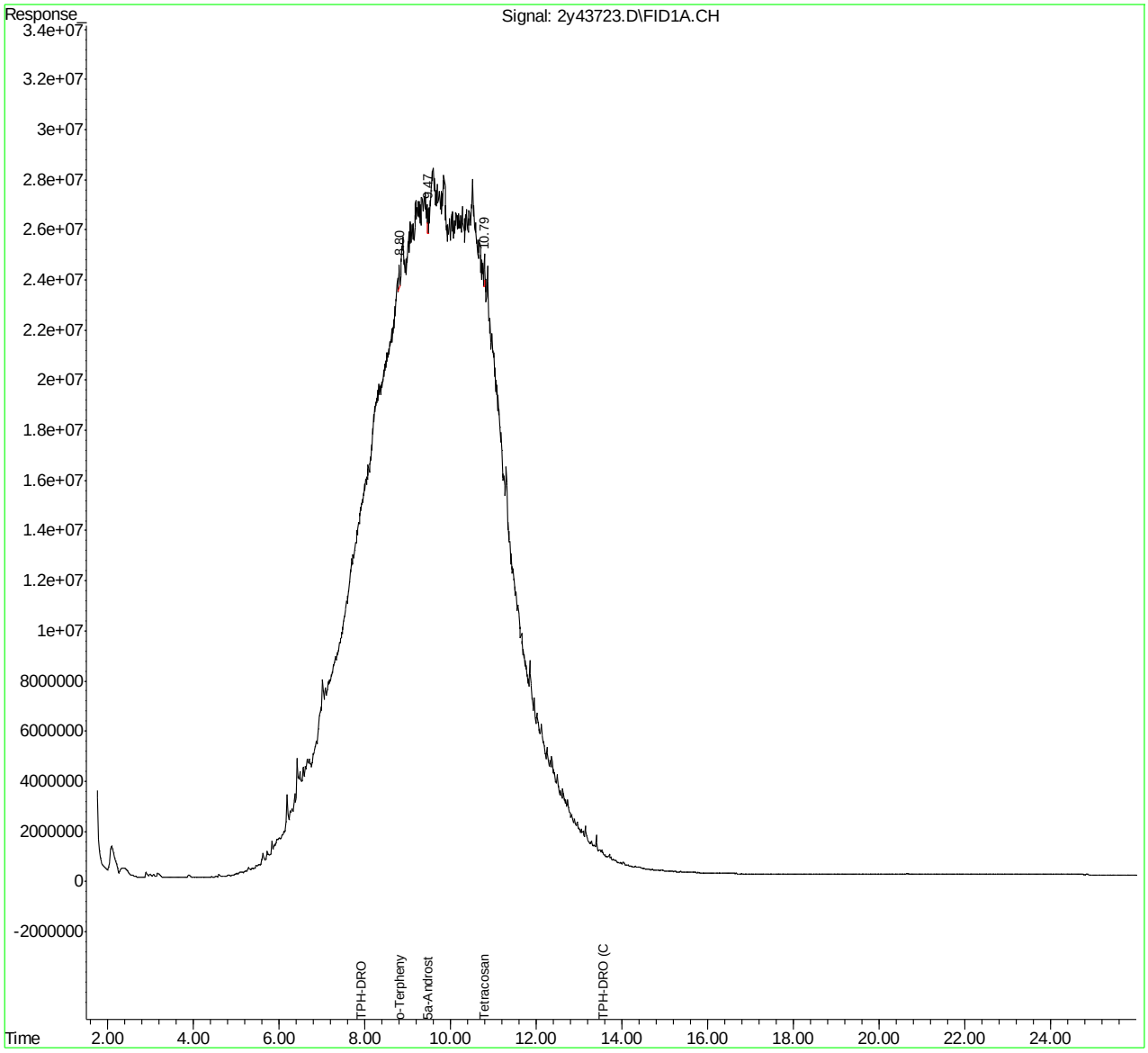
(f)=RT Delta > 1/2 Window (m)=manual int.

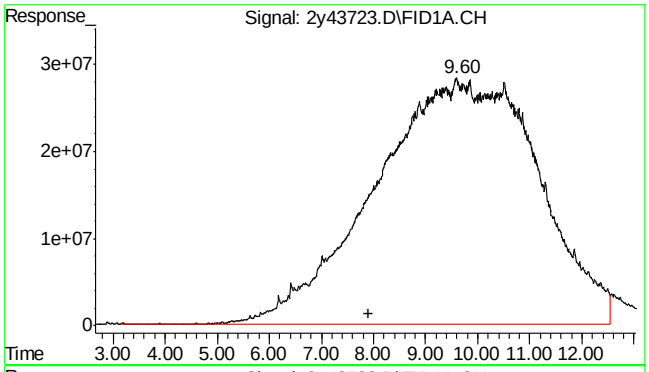
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1806\
Data File : 2y43723.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 3:56 pm
Operator : cherrys
Sample : jb2059-17
Misc : OP55767,G2y1806,10.3,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 26 10:05:41 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

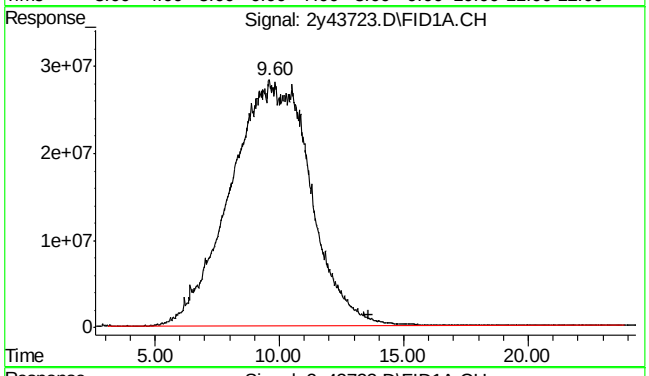
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





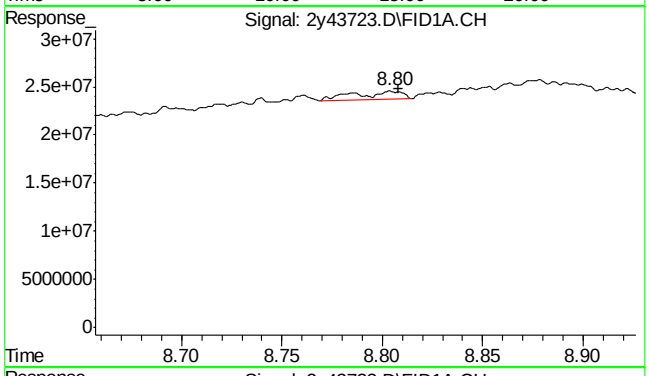
#1 TPH-DRO

R.T.: 7.910 min
Delta R.T.: 0.000 min
Response: 61557321969
Conc: 69749.75 PPM m



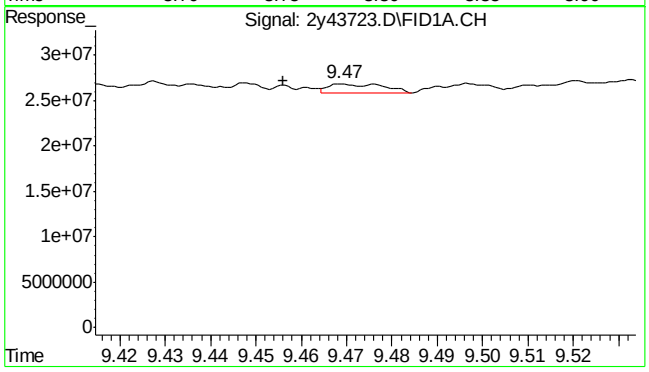
#2 TPH-DRO (C10-C44)

R.T.: 13.570 min
Delta R.T.: 0.000 min
Response: 63353887114
Conc: 71785.41 PPM m



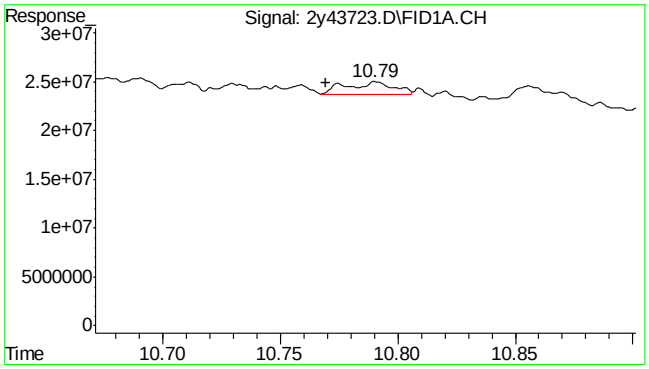
#7 o-Terphenyl

R.T.: 8.803 min
Delta R.T.: -0.005 min
Response: 14270306
Conc: 12.78 PPM m



#8 5a-Androstane

R.T.: 9.468 min
Delta R.T.: 0.012 min
Response: 8508160
Conc: 8.07 PPM m



#9 Tetracosane-d50

R.T.:	10.790 min
Delta R.T.:	0.020 min
Response:	17480847
Conc:	20.29 PPM m

Manual Integrations APPROVED (compounds with "m" flag)
Wen Wen Chi
04/01/12 14:33

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2Y43866.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 2:58 pm
Operator : Mudassar
Sample : jb2059-17
Misc : OP55767,G2y1809,10.3,,,1,20
ALS Vial : 29 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 15:26:38 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
7) S	o-Terphenyl	8.79f	2967794	2.658	PPM	m
8) S	5a-Androstane	9.44f	3165260	3.002	PPM	m
9) S	Tetracosane-d50	10.76	1745583	2.027	PPM	m
Target Compounds						
1) H	TPH-DRO	7.91	4779308452	5415.368	PPM	
2) H	TPH-DRO (C10-C44)	13.57	5545662706	6283.714	PPM	

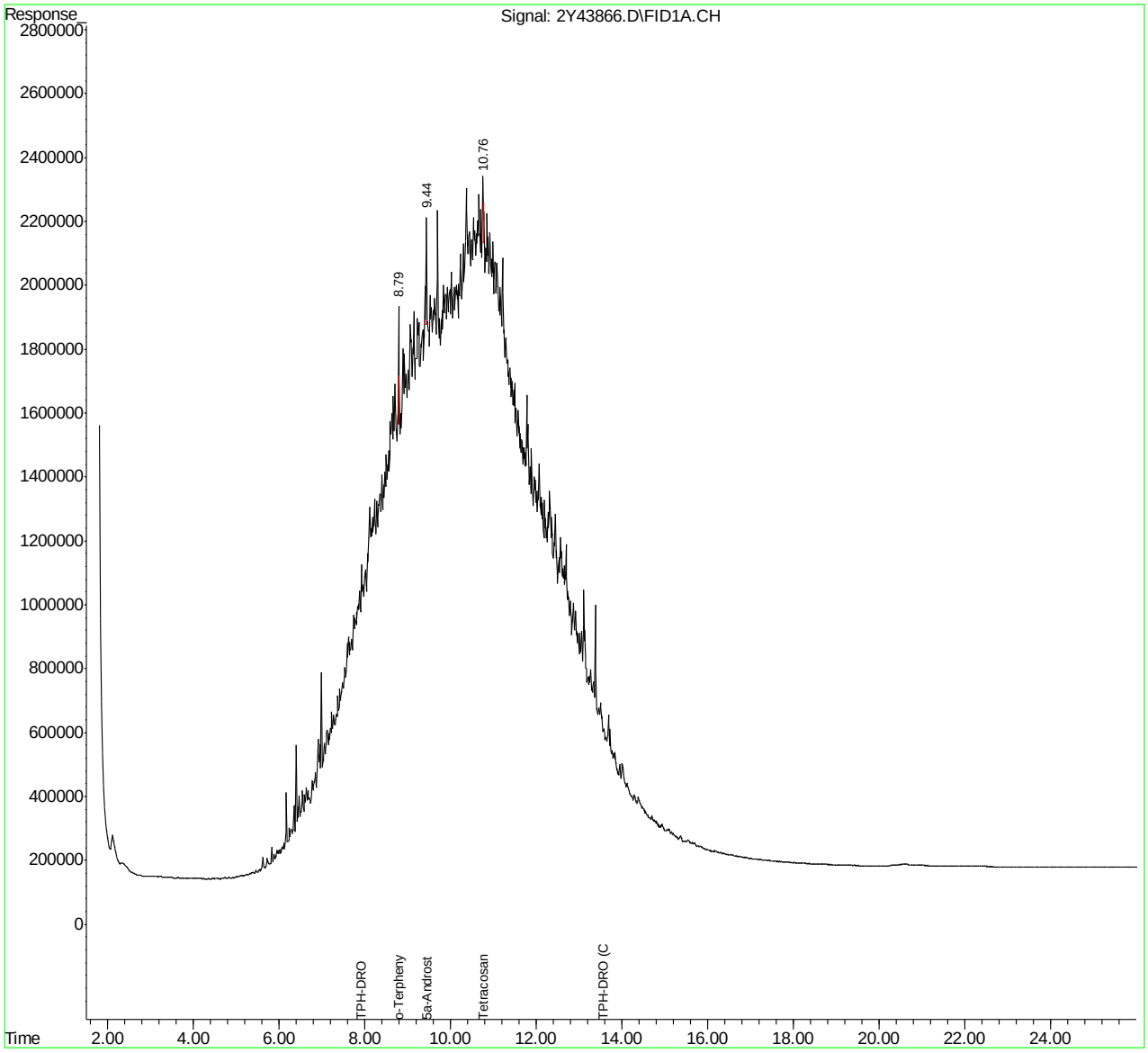
(f)=RT Delta > 1/2 Window (m)=manual int.

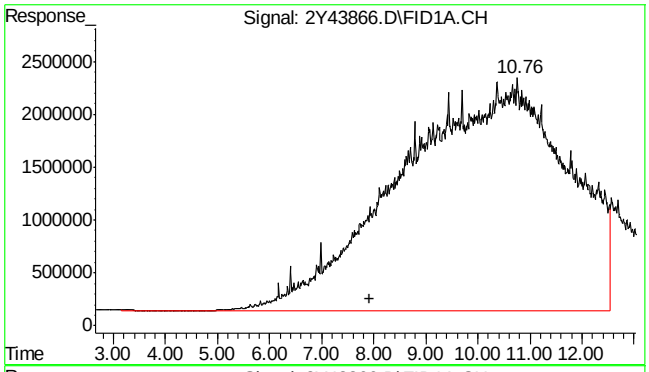
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1809\
Data File : 2Y43866.D
Signal(s) : FID1A.CH
Acq On : 28 Mar 2012 2:58 pm
Operator : Mudassar
Sample : jb2059-17
Misc : OP55767,G2y1809,10.3,,,1,20
ALS Vial : 29 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 28 15:26:38 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

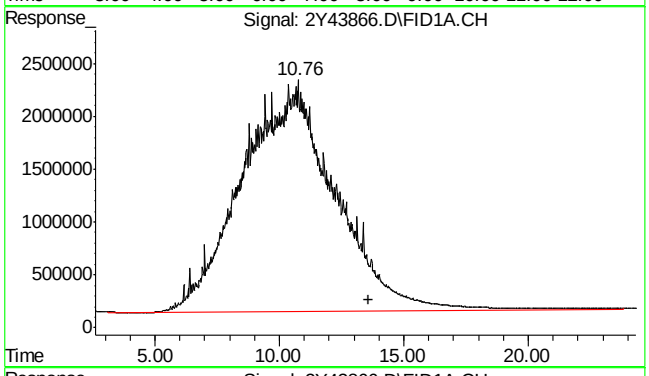
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





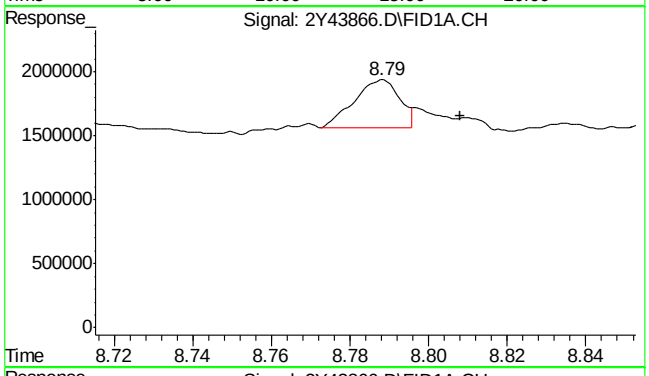
#1 TPH-DRO

R.T.: 7.910 min
Delta R.T.: 0.000 min
Response: 4779308452
Conc: 5415.37 PPM m



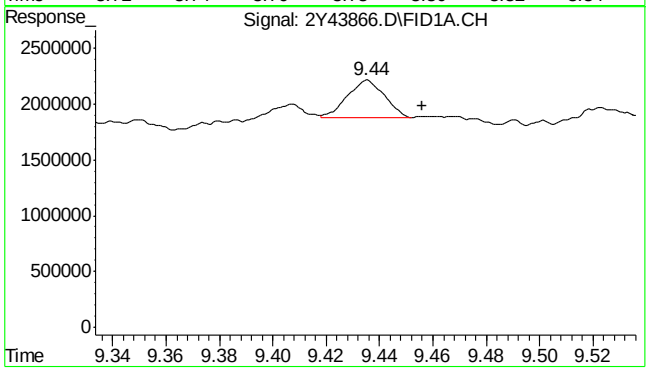
#2 TPH-DRO (C10-C44)

R.T.: 13.570 min
Delta R.T.: 0.000 min
Response: 5545662706
Conc: 6283.71 PPM m



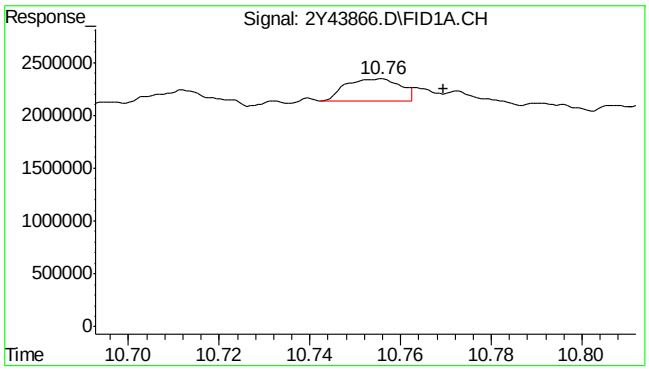
#7 o-Terphenyl

R.T.: 8.788 min
Delta R.T.: -0.020 min
Response: 2967794
Conc: 2.66 PPM m



#8 5a-Androstane

R.T.: 9.435 min
Delta R.T.: -0.021 min
Response: 3165260
Conc: 3.00 PPM m



#9 Tetracosane-d50

R.T.:	10.756 min
Delta R.T.:	-0.014 min
Response:	1745583
Conc:	2.03 PPM m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43688.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 1:07 am
Operator : cherrys
Sample : op55724-mb1
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:21:03 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Fri Mar 23 08:16:36 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
7) S	o-Terphenyl	8.78	35740554	32.015 PPM
8) S	5a-Androstane	9.43	36202095	34.338 PPM
9) S	Tetracosane-d50	10.75	27303973	31.699 PPM
Target Compounds				

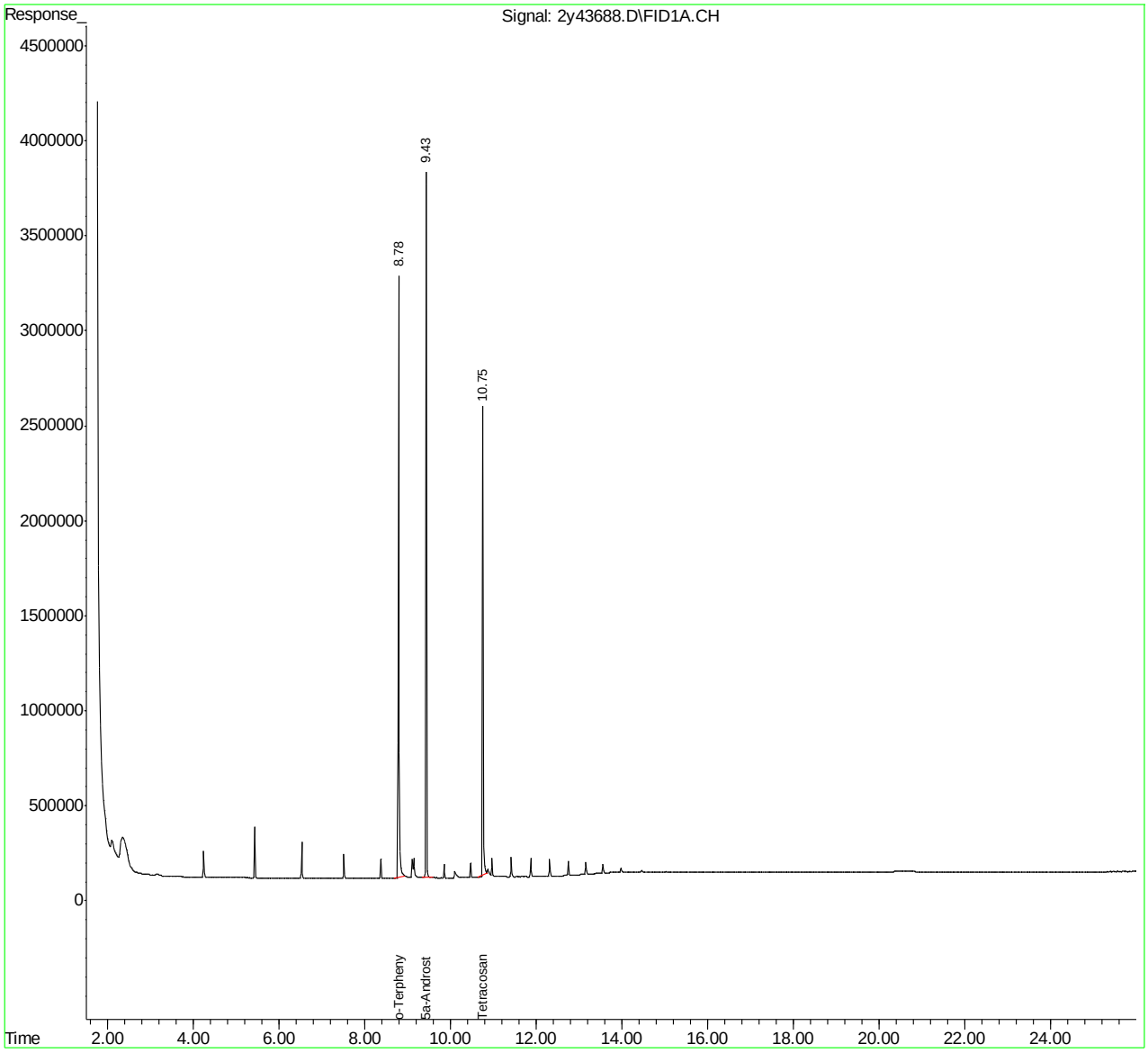
(f)=RT Delta > 1/2 Window (m)=manual int.

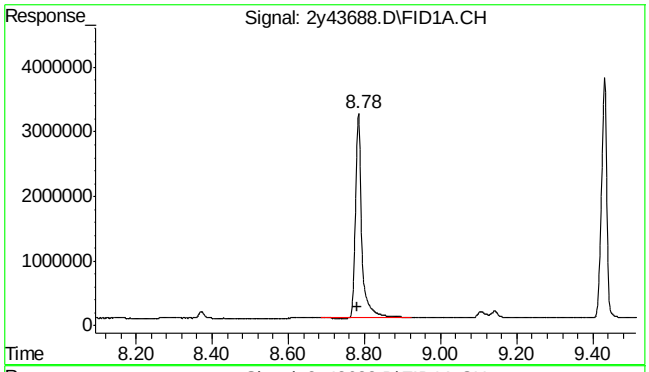
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g2y1805\
Data File : 2y43688.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 1:07 am
Operator : cherrys
Sample : op55724-mb1
Misc : OP55724,G2y1805,10.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 09:21:03 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Fri Mar 23 08:16:36 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

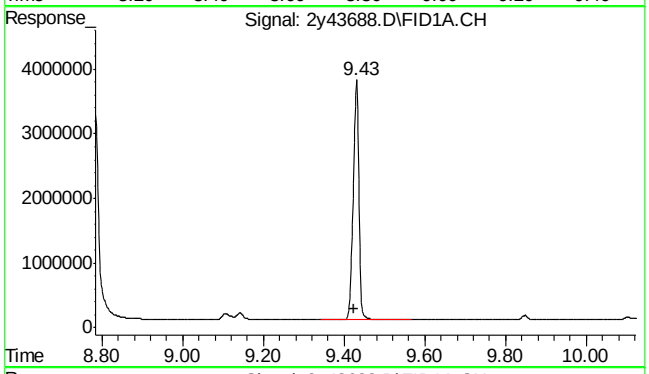
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





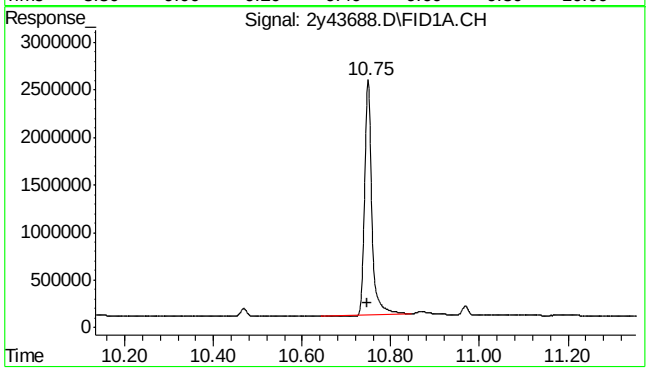
#7 o-Terphenyl

R.T.: 8.784 min
Delta R.T.: 0.004 min
Response: 35740554
Conc: 32.01 PPM



#8 5a-Androstane

R.T.: 9.430 min
Delta R.T.: 0.006 min
Response: 36202095
Conc: 34.34 PPM



#9 Tetracosane-d50

R.T.: 10.749 min
Delta R.T.: 0.003 min
Response: 27303973
Conc: 31.70 PPM

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1806\
Data File : 2Y43715.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 11:24 am
Operator : cherrys
Sample : op55767-mb1
Misc : OP55767,G2y1806,10.0,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 11:51:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
7) S	o-Terphenyl	8.79f	41552396	37.221 PPM
8) S	5a-Androstane	9.43f	41860100	39.705 PPM
9) S	Tetracosane-d50	10.75f	29320262	34.039 PPM
Target Compounds				

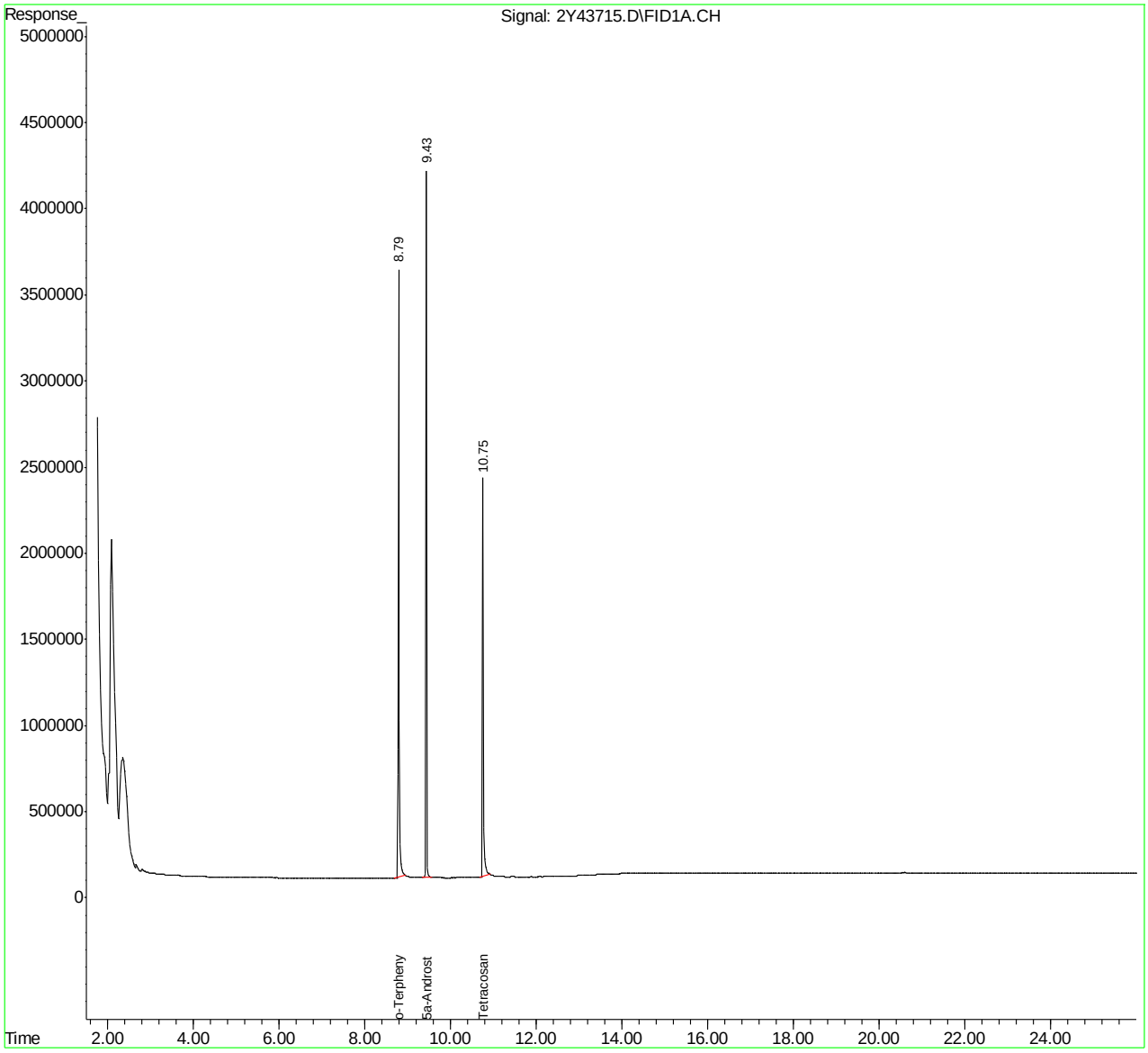
(f)=RT Delta > 1/2 Window (m)=manual int.

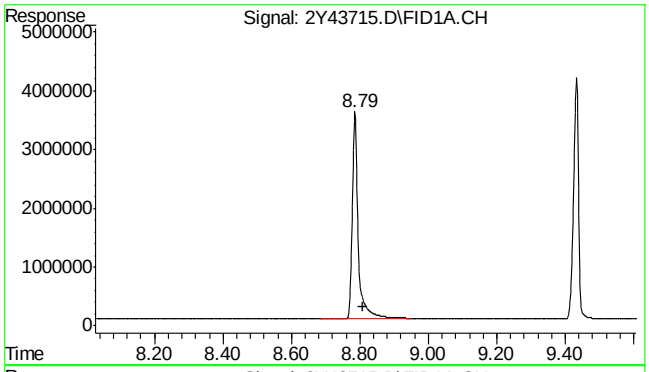
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\G2Y1806\
Data File : 2Y43715.D
Signal(s) : FID1A.CH
Acq On : 23 Mar 2012 11:24 am
Operator : cherrys
Sample : op55767-mb1
Misc : OP55767,G2y1806,10.0,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: events.e
Quant Time: Mar 23 11:51:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y1736.M
Quant Title :
QLast Update : Wed Mar 14 09:47:52 2012
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

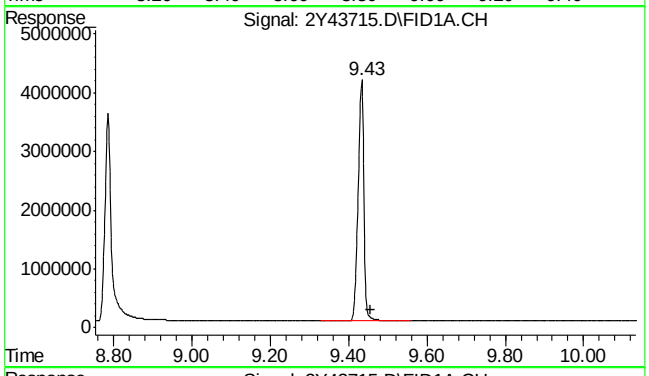
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





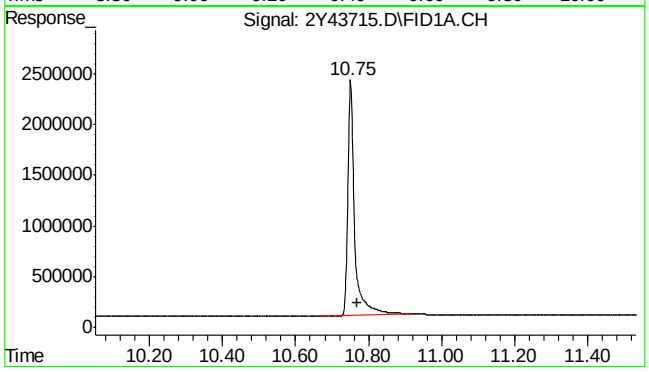
#7 o-Terphenyl

R.T.: 8.786 min
Delta R.T.: -0.022 min
Response: 41552396
Conc: 37.22 PPM



#8 5a-Androstane

R.T.: 9.432 min
Delta R.T.: -0.024 min
Response: 41860100
Conc: 39.70 PPM



#9 Tetracosane-d50

R.T.: 10.751 min
Delta R.T.: -0.018 min
Response: 29320262
Conc: 34.04 PPM

New Jersey ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: JB2059-1 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-1 3'-4'

Wet Weight (Total)	32.01	g
Tare Weight	26.46	g
Dry Weight (Total)	31.2	g
Solids, Percent	85.4	%

Sample: JB2059-2 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-5 3'-4'

Wet Weight (Total)	30.05	g
Tare Weight	24.72	g
Dry Weight (Total)	29.57	g
Solids, Percent	91	%

Sample: JB2059-3 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-7 5'-6'

Wet Weight (Total)	26.25	g
Tare Weight	20.66	g
Dry Weight (Total)	25.54	g
Solids, Percent	87.3	%

Sample: JB2059-4 **Analyzed:** 30-MAR-12 by WR **Method:** SM18 2540G
ClientID: SB-15 6'

Wet Weight (Total)	32.18	g
Tare Weight	25.29	g
Dry Weight (Total)	31.32	g
Solids, Percent	87.5	%

Sample: JB2059-5 **Analyzed:** 30-MAR-12 by WR **Method:** SM18 2540G
ClientID: SB-26 3'-4'

Wet Weight (Total)	25.18	g
Tare Weight	19.27	g
Dry Weight (Total)	24.56	g
Solids, Percent	89.5	%

Sample: JB2059-6 **Analyzed:** 30-MAR-12 by WR **Method:** SM18 2540G
ClientID: SB-34 11'-12'

Wet Weight (Total)	26.17	g
Tare Weight	18.78	g
Dry Weight (Total)	24.61	g
Solids, Percent	78.9	%

Percent Solids Raw Data Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: JB2059-7 **Analyzed:** 30-MAR-12 by WR **Method:** SM18 2540G
ClientID: SB-39 4'-5'

Wet Weight (Total)	26.78	g
Tare Weight	19.18	g
Dry Weight (Total)	26.1	g
Solids, Percent	91.1	%

Sample: JB2059-8 **Analyzed:** 30-MAR-12 by WR **Method:** SM18 2540G
ClientID: SB-39 16'-17'

Wet Weight (Total)	26.19	g
Tare Weight	17.82	g
Dry Weight (Total)	24.47	g
Solids, Percent	79.5	%

Sample: JB2059-9 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-40 4'-5'

Wet Weight (Total)	33.27	g
Tare Weight	27.33	g
Dry Weight (Total)	32.54	g
Solids, Percent	87.7	%

Sample: JB2059-10 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-41 11'-12'

Wet Weight (Total)	33.63	g
Tare Weight	26.88	g
Dry Weight (Total)	32.94	g
Solids, Percent	89.8	%

Sample: JB2059-11 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-43 8'-9'

Wet Weight (Total)	27.88	g
Tare Weight	22.48	g
Dry Weight (Total)	27.51	g
Solids, Percent	93.1	%

Sample: JB2059-12 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-44 10-11

Wet Weight (Total)	31.9	g
Tare Weight	26.86	g
Dry Weight (Total)	31.61	g
Solids, Percent	94.2	%

Percent Solids Raw Data Summary

Job Number: JB2059
Account: BRONJB Brownfield Science & Technology
Project: Axil Belko, Kingsville, MD

Sample: JB2059-13 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-45 1-2

Wet Weight (Total)	32.97	g
Tare Weight	27.36	g
Dry Weight (Total)	32.43	g
Solids, Percent	90.4	%

Sample: JB2059-14 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-46 2-3

Wet Weight (Total)	27.05	g
Tare Weight	21.85	g
Dry Weight (Total)	26.71	g
Solids, Percent	93.5	%

Sample: JB2059-15 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-47 2.5-3.5

Wet Weight (Total)	31.17	g
Tare Weight	25.43	g
Dry Weight (Total)	30.83	g
Solids, Percent	94.1	%

Sample: JB2059-16 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-48 2-3

Wet Weight (Total)	28.25	g
Tare Weight	22.41	g
Dry Weight (Total)	27.86	g
Solids, Percent	93.3	%

Sample: JB2059-17 **Analyzed:** 29-MAR-12 by KP **Method:** SM18 2540G
ClientID: SB-15 3-4'

Wet Weight (Total)	31.22	g
Tare Weight	24.13	g
Dry Weight (Total)	30.25	g
Solids, Percent	86.3	%