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D.E.P. SOUTHEAST REG.

July 8, 2005

Defense Energy Support Center
8725 John J. Kingman Road
Suite 2833
Fort Belvoir, VA 22060-6222
Attn: Hasan Dogrul

Re: Former Defense Supply Center Philadelphia
Contract SP-0600-00-D-6222
Intermediate and Deep Well Installation and Sampling Report

Dear Hasan:

Enclosed for your review is a copy of the Intermediate and Deep Well Installation and Sampling Report for the Former Defense Supply Center Philadelphia (DSCP).

If you have any questions, please feel free to contact me at (215) 702-4066 or Derek Pinkham at (215) 702-4070.

Sincerely,

Brian Blanchard, P.E.

Cc: File
D. Pinkham, TtFW
D. Burke, PADEP
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T. Raezer, DESC
S. Steffen, DSCP
R. Bell, DSCP
C. Travers, Stratus Consulting



**INTERMEDIATE AND DEEP WELL
INSTALLATION AND SAMPLING REPORT
FOR THE
FORMER DEFENSE SUPPLY CENTER PHILADELPHIA
FACILITY
PHILADELPHIA, PENNSYLVANIA**

Prepared for:

Department of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, PA 19401

Prepared by:

Tetra Tech, FW
(formerly Foster Wheeler Environmental Corporation)
One Oxford Valley, Suite 200
Langhorne, PA 19047

Prepared on behalf of:

Defense Energy Support Center
8725 John J. Kingman Road
Suite 2833
Fort Belvoir, VA 22060-6222

June 30, 2005

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1.0 INTRODUCTION

This work was completed in order to obtain additional information relating to the Potomac Raritan Magothy (PRM) aquifer, which is the deep aquifer underlying the site area. A total of six borings were advanced to the top of the weathered bedrock and four intermediate wells and six deep wells were installed on the former Defense Supply Center Philadelphia (DSCP) site, the former Passyunk Homes area and the CSX property. The intermediate and deep wells were installed at the site to obtain additional information on the lower PRM aquifer, determine groundwater flow direction in the deep aquifer, evaluate the chemistry of the aquifer in proximity to the DSCP site and to aid in the fate and transport analysis being completed at the site.

The drilling and well installation work was completed from January 2005 through April 2005. This work was completed by Tetra Tech FW, formerly Foster Wheeler Environmental Corporation, under Contract No. SP0600-00-D-5003 with the Defense Energy Support Center (DESC).

2.0 GEOLOGY

The DSCP site is located in the area of South Philadelphia, Pennsylvania, near the confluence of the Delaware and the Schuylkill Rivers. The site is situated in the Coastal Plain Physiographic Province just east of the Fall Line, a northeast-southwest trending escarpment that divides the rolling hills of the Piedmont Physiographic Province from the Coastal Plain. The topography is relatively flat with low relief. Much of the underlying Coastal Plain sediments have been developed and low-lying areas raised to grade with fill materials (i.e., cinders, bricks and other debris). Much of the study area is covered with roads, asphalt and buildings and the original pre-developed topography is highly altered. The area of the Coastal Plain underlying the study area consists of unconsolidated sediments of Cretaceous age or younger that dip at an angle steeper than the local topography, to the southeast, from the Fall Line towards the Atlantic Ocean. The orientation of the coastal plain beds result in the most recent sediments lying near the Atlantic Ocean with successively older bands of sediments cropping out further inland. In the South Philadelphia area, ancestral channels of both the Delaware and Schuylkill Rivers have altered Coastal plain sediments. This has resulted in the removal of some coastal plain sediment and the deposition of more recent alluvium, resulting in a complex series of subsurface channels filled with more recent sediments.

The following provides descriptions of the geologic units in the southern Philadelphia area:

Fill

The fill unit consists of modern fill type materials (i.e., brick, cinders etc.) and occupies formerly low-lying area. The fill unit generally lies on top of the Quaternary Alluvium. Within the study area, the thickness of the fill ranges from 0-40 feet, and is not laterally extensive. An increased thickness of this fill material is located in areas underlying the

railroad tracks to the west of the DSCP property (Integrated Science and Technology, 1998). Increased thicknesses were also identified in borings drilled along an ancient stream channel along the southeastern side of the DSCP property (Malcolm Pirnie 1997). Soil boring investigations revealed fill material ranging in thickness from 10–14 feet on the northwestern border of the DSCP property and the northwestern border of the Philadelphia Housing Authority just south of the Schuylkill Expressway.

Quaternary Alluvium (Qal)

This is the uppermost geologic unit in the study area. The unit is Holocene in age and consists of fine sand and silt and mud (Greenman et al, 1961). Regionally this unit can be up to 80 feet thick. Because the deposits are very fine grained and have very low permeabilities, the unit is not considered to be an important aquifer (Paulachok, 1991). However in some cases the unit may contain appreciable thicknesses (up to 3 feet) of interlayered sand and may show some localized perched water. This deposit at the site contains an extensive silt layer with variable amounts of clay (Malcolm Pirnie 1997). This dense silt layer, which varies in thickness, is present in the vadose zone above the water table over the entire DSCP and Passyunk Homes area. The silt layer dips to the south and intersects the water table on the southeastern portion of DSCP and Passyunk Homes. The silt layer has been extensively mapped and characterized as part of the Human Health Risk Assessment (Environ, 2001). In some areas the unit has been excavated for the emplacement of sewers and other utilities. The Qal overlies the Trenton Gravel.

Trenton Gravel (Op)

The Trenton Gravels have been described in detail by Owens and Minard, 1979. They were able to divide the Trenton Gravels into two distinct units. The Trenton Gravels are gray to brown sands and gravel with minor amounts of silt and clay (Greenman et al., 1961). The Trenton Gravels are a variable unit and at the site consist of sand, silt and gravel mixtures, uniform sands and some dense silt. Generally the gravels are yellow to red brown in color and show varying degrees of iron staining. In some places the gravels are densely compacted or show some degree of cementation. The coarse gravels are of mixed lithologies and may consist of either clasts of red brown shales, quartzites, sandstones and some metamorphic and igneous rocks of Piedmont Province origin (from the west or northwest) or re-worked, more rounded less varied lithologies of Coastal Plain origin (from the north or northeast). Regionally the Trenton Gravels average about 40 ft in thickness (Paulachok, 1991) and can be as thick as 80 feet. At the DSCP site the sand and gravel mixtures average about 20 feet in thickness and lie unconformably beneath the Quaternary Alluvium and atop the Bridgeton Formation when it is present. Most of the unconfined upper aquifer consists of the Trenton Gravels and water yields vary widely. Due to the similar lithologies of the units the, Trenton Gravels and the underlying Bridgeton Formation (of Tertiary Age and minimal thickness, see below) are grouped for simplicity as Qp.

The Bridgeton Formation is composed of gravel and very coarse to fine sand (Owens and Minard, 1979). The Bridgeton is not laterally extensive and usually is present on topographic highs as deposits less than 10 feet thick. Ages applied to the Bridgeton Formation have always been speculative, with some authors favoring a Quaternary Pleistocene age and others a Tertiary Miocene age. Because of the lateral discontinuity of the unit, its minimum thickness, and its connection to the upper Trenton Gravels. A Qp designation has been assigned for simplicity in mapping and hydrogeologic modeling purposes.

At the site the Bridgeton formation is either indistinguishable or very thin, and is not named outright in visual logs.

Upper Clay (Kru)

Mesozoic sediments deposited during the Cretaceous period underlie the units mentioned above. The uppermost of these units is the Upper Clay. Recent U.S. Geological Survey nomenclature includes both the Upper Clay and the underlying Old Bridge Sand as part of the Magothy Aquifer (Paulachok, 1991). Greenman and others, 1961, have called the Upper Clay, "the upper most member of the Raritan Formation". The Upper Clay has been described as "light gray more or less sandy clays; dark gray carbonaceous; and massive, red, white and yellow clays" (Greenman et al, 1961). On site, the Upper Clay is not a continuous unit and when encountered, was located approximately 33 to 36 feet below grade and 1-3 feet thick. The presence of the Upper Clay may result in localized confining conditions in the underlying Old Bridge Sand. Where the Upper Clay is missing, the Old Bridge sand and the Upper Pleistocene Trenton Gravels are connected hydraulically and form a single unconfined aquifer.

Upper Sand Unit or Old Bridge Sand (Kro)

The Upper Sand Unit or Old Bridge Sand represents the upper sand unit of the PRM aquifer system. It consists of coarse to medium sand and minor amounts of fine to very fine sand. (Greenman et al, 1961). Regionally, the upper sand is found in scour surfaces within the underlying middle clay. The unit is commonly about 35 feet thick. On site the unit ranges in thickness from 5 to 15 feet, but is extremely variable or may be missing due to Pleistocene erosion and channeling. When encountered, the sand observed on site is gray well-sorted sand that grades to fine gravels in some places. During drilling activities these sands tend to be "flowing sands".

Middle Clay (Krm)

The Middle Clay unit is composed of tough white and red clay with uniformly massive texture. (Greenman et al, 1961, Sloto, 2003). In the Philadelphia area, the Middle Clay merges with the underlying lower clay and are indistinguishable. The Middle Clay, the underlying Sayerville Sand and the Lower Clay form one unit in the Philadelphia area. This clay has also been described as a red clay. This laterally extensive clay creates confined conditions in the underlying Farrington Sand, except to the west near the

Schuylkill River where the clay is missing and the Farrington Sand is unconfined (Paulachok, 1991 and Greenman et al., 1961). In this area the upper unconfined aquifer is in direct hydraulic connection with the lower Farrington Sand aquifer (Paulachok, 1991, Greenman et al., 1961). At the DSCP site, the middle clay has been observed at depths of 45 to 57 feet. The base of the Middle Clay is marked by a bed of lignite (Sloto, 2003). However, where the Middle Clay lies directly on the Lower Clay, which is the case in many areas of Philadelphia, it is difficult to differentiate the two units (Sloto, 2003).

Middle Sand Unit or Sayerville Sand (Krs)

The Middle Sand Unit or Sayerville Sand is not an extensive deposit in the South Philadelphia region. When observed, it is typically located about 1.5 miles inland from the Delaware River in scour channels within the lower clay unit (Paulachok, 1991). The Sayerville is composed of light colored coarse to very fine sand with a few layers of light gray clay (Sloto, 2003).

It may be likely that the Middle Sand Unit is missing at the site and the Middle Clay sits atop the Lower Clay Unit (Greenman, et al 1961). Our current geological framework model supports previous studies that suggest this unit is missing under the study area.

Lower Clay (Krl)

The lower clay is composed mainly of a tough continuous bed, which separates the underlying Farrington Sand from the Sayerville sand. The thickness of the lower clay ranges in thickness from 0-60 feet and is often indistinguishable from the middle clay. The clay member is composed mainly of tough brick red clay with some interstratified softer layers. (Greenman et al, 1961) Few boring locations describe the lower clay at the DSCP site as this unit is commonly combined with the middle clay.

Lower Sand Unit Farrington Sand (Krf)

The Lower Sand Unit or Farrington Sand consists of fine gravel and coarse sand that grade upward into medium to fine sand and a few layers of white clay (Greenman et al, 1961). This unit lies directly atop bedrock or the weathered bedrock surface. This unit represented the principle source of groundwater in the Philadelphia area (Paulachok, 1991).

Wissahickon Formation

The basement rock underlying the site is known as the Wissahickon Formation. These pre-Cretaceous rocks consist of mica, hornblendes, schists and gneisses (Sloto, 1988). The upper portion of the formation (a few feet to tens of feet) is marked by soft, gray micaceous clay that becomes firmer and more granular with depth (Greenman, et al, 1961).

2.1 SITE- SPECIFIC HYDROGEOLOGY

The site is situated in the Coastal Plain Physiographic Plain Province, near the confluence of the Schuylkill and Delaware Rivers. This area of the Coastal Plain Physiographic Province is comprised of unconsolidated clastic sediments of Cretaceous or younger age. The topography of the site is relatively flat with topographic contours ranging from approximately 20 to 25 feet above sea level.

The regional stratigraphy consists of alternating layers of sand, gravel, silt, and clay. The youngest deposits at the site are classified as the Quaternary alluvium consisting of fine sand, silt and clay. The alluvium at the site has been designated as silt with variable amounts of clay (Malcolm Pirnie 1997). This silt layer, which varies in thickness, is present in the vadose zone above the water table over the entire DSCP and Passyunk Homes area. The water table in the northeastern and southeastern portion of the site intersects this silt layer (Malcolm Pirnie 1997). Due to the presence of the silt layer and the large amounts of paving and buildings, local recharge from precipitation is inhibited.

The Trenton gravel underlies the Alluvium. The Trenton gravel (the unconfined aquifer) is comprised of gray to brown, poorly sorted sand with considerable sub-angular to rounded gravel. The grain size distribution of the Trenton gravel is highly variable, and results in varying hydraulic conductivity and yields. The upper surface of the water table aquifer mainly occurs in the Trenton gravel, but it extends into recent alluvium in a few places where former channels eroded the Trenton gravel (IST, 1998). In the study area, the upper aquifer appears to extend into and include the Upper Sand or Old Bridge Sand Unit. There may also be areas in which the Upper Sand Unit is overlain by the Upper Clay Unit and results in semi-confined conditions. The yields in the Trenton gravel and Old Bridge Sand vary from 1 gallon per minute (gpm) to 1,370 gpm (Paulachok, 1991). A more statistical evaluation reveals that 90% of the wells yield in excess of 0.5 gpm while only 10% exceed 40 gpm (Paulachok, 1991). According to Paulachok, the average hydraulic conductivity of the Trenton gravel is 142 feet per day (ft/day). The Trenton Formation is not used as a drinking water aquifer in the region because of water quality problems.

Based upon recent potentiometric data, the groundwater in the unconfined aquifer flows from the northwest to southeast on the former DSCP Site (Tetra Tech FW, 2004). Locally, groundwater gradients may be altered by pumping of recovery wells on the Sunoco property and an apparent depression in the groundwater table near well S-44 on the Sunoco property. The depth to groundwater underlying the former DSCP and Passyunk Homes properties is approximately 16 to 23 feet below grade.

The PRM aquifer system underlies the unconfined water table aquifer. The PRM consists of interbedded gravel, sand, silt and clay units, however, one or more of these units may be locally absent (Paulachok, 1991). The U.S. Environmental Protection Agency (USEPA) has designated the Potomac-Raritan-Magothy (PRM) aquifer system as a sole source aquifer in Camden and Gloucester Counties in New Jersey. While the PRM is no longer used in the Philadelphia area, it is an important water supply source in New

Jersey. The high concentrations of iron (as high as 429 milligrams/liter (mg/l), manganese (as high as 4 mg/l) and sulfate (as high as 1,720 mg/l) have made the groundwater unusable for most purposes under the Philadelphia region (Sloto, 2003). The pumping of the Lower Sand unit of the PRM in New Jersey has been known to cause the groundwater flow in the confined Lower Sand unit in Philadelphia to flow towards New Jersey (Low, Hippe and Yannacci, 2002). Based upon regional potentiometric data, groundwater flow in the PRM aquifer is anticipated to be from the northwest to southeast (Sloto, 2003).

The Upper Sand Unit of the PRM aquifer is overlain in places with the Upper Clay. There are areas of the site where the Upper Clay is absent. Where the Upper Clay is absent, the Upper Sand Unit is hydraulically connected to the overlying unconfined aquifer to form a single aquifer (Paulachok, 1991). In New Jersey, the Upper aquifer is the least extensive unit of the PRM (Sloto, 2003a).

3.0 LOCATIONS OF SOIL BORINGS AND MONITORING WELLS

A total of six deep soil borings were advanced at each intermediate/deep well location. The soil boring numbers correspond to the location of the deep well since only one boring was logged to install both deep and when appropriate, the intermediate monitoring well. For example Soil Boring DW-1 was advanced at the location of well installation IW-1/DW-1. Figure 1 depicts the locations of all the intermediate and deep wells on the former DSCP, CSX, and former Passyunk Homes properties. One intermediate and two deep wells were installed on the former DSCP property. One intermediate and two deep wells were installed on the CSX property. Two intermediate and two deep wells were installed in the vicinity of the former Passyunk Homes property. Because site access could not be obtained from the Philadelphia Housing Authority (PHA) for the installation of the wells on the former Passyunk Homes property, the wells were installed on public road right of ways with permission from the Philadelphia Department of Streets.

Deep wells were installed at the site to obtain additional information on the lower PRM aquifer, determine groundwater flow direction in the deep aquifer and to evaluate the chemistry of the deep aquifer in proximity to the DSCP site. Intermediate wells were installed at the site in the Upper Sand Unit of the PRM Aquifer in order to obtain additional information on the relationship between the shallow unconfined aquifer and the Upper Sand Unit of the PRM aquifer, determine groundwater flow, evaluate the chemistry of this hydraulic unit and determine the relationship between the different layers.

4.0 DEEP SOIL BORING AND WELL INSTALLATION

A soil boring was advanced to the top of the weathered bedrock at each of the six locations of the intermediate and deep wells. The geology logged from the one boring at each location was used to determine the screened intervals of the monitoring wells. A direct-push rig was utilized at each location to log the borehole until refusal, and then a mud rotary drill rig and split spoon sampling were used to complete the geologic logging to depth. Continuous soil samples were collected using a direct-push rig with a Macrotube sampler until refusal for that method was encountered. Continuous split spoon samples were then collected with the mud rotary rig. The visual borings were logged by a geologist using the Unified Soil Classification System. Appendix A contains the soil boring logs.

The wells were installed using a mud rotary rig. A ten-inch diameter wing tip was used to advance the soil boring into the Upper and Middle Clay, when present. When the Middle Clay was encountered, a 6-inch inner diameter (ID) steel casing was then set 1 to 3 feet into the Middle Clay at each of the deep well locations. When the Upper Clay was encountered, a second boring was drilled to install the intermediate well. A 6-inch ID steel casing was installed into the Upper Clay. Due to the minor thickness of the Upper Clay, the steel casing was driven 0.5 to 1 foot into the Upper Clay. The steel casings were grouted in place and allowed to set for a minimum of 24 hours. After the minimum of 24 hours, the inside of the steel casing was flushed with clean potable water.

Upon setting the steel casings in place, the borehole was advanced inside the steel casing using a six-inch diameter wing bit and mud rotary. The borehole was advanced to the desired depth in this manner to the top of weathered bedrock. Upon reaching bedrock and determining the depths of the screened intervals, the borehole was backfilled to the desired depth to set the deep well. The intermediate well was then installed to the desired depth using the mud rotary rig.

Upon completion, the boring logs were compared to the geological information previously obtained from the Site to determine which Unit was encountered at each boring. Generally, the Clay Units that were observed were encountered near the depth that was anticipated. Although the Deep Clay Unit was not expected to be encountered at all as a separate layer as it was in boring DW-3.

When both the Upper and Middle Clay Units were countered at a boring location, a well was installed below the Upper Clay (intermediate well) and one was installed below the Middle Clay Unit (deep well). This was done to evaluate the water quality between each of the clay units.

IW/DW-1 Location

The IW/DW-1 location was adjacent to the existing shallow monitoring well MW-23A on the western portion of the former DSCP property. The Upper Clay Unit was encountered at 40 to 42 feet below grade and the Middle Clay Unit was encountered from

50 to 54 feet below grade. The Lower Clay Unit was not encountered in this boring. The soil boring for this location was advanced to a depth of 104 feet below grade. The weathered bedrock was encountered at a depth of approximately 98 feet below grade. Petroleum stained soils were first encountered approximately 14 to 16 feet below grade. Soils with either petroleum odors and/or staining were encountered from approximately 14 to 39.5 feet below grade with the highest PID readings (+ 2,000 ppm) at 30 to 35 feet below grade. PID readings of the soil cuttings between the Upper and Middle Clay ranged from 25 to 41 ppm, but no odors or staining were noted. PID readings below the Middle Clay Unit mostly ranged from 0 to 3.7 ppm, with the exception of 56 to 60 feet below grade, which had a PID reading of 26.3 ppm. No staining or petroleum odors were noted in soil cuttings below the Middle Clay Unit.

Since both the Upper and Middle Clay Units were encountered at this location, both the intermediate (IW-1) and deep (DW-1) monitoring wells were installed at this location. A steel casing was set at a depth of 42 feet below grade for IW-1 and the well was screened from 42 to 47 feet below grade. A steel casing was set a depth of 52 feet below grade for DW-1 and the well was screened from 65 to 80 feet below grade. Appendix A contains the well construction diagrams.

IW/DW-2 Location

The IW/DW-2 location was changed from the proposed location in the Work Plan for the Intermediate and Deep Monitoring Wells because access could not be obtained from PHA, the current owner of the former Passyunk Homes property. The location of IW/DW-2 was moved to Hartranft Street, approximately 180 feet west of monitoring well MWS-15. The movement of these wells was coordinated with the Pennsylvania Department of Environmental Protection (PADEP) and the Philadelphia Streets Department. The Upper Clay Unit was encountered at 28 to 32 feet below grade and the Middle Clay Unit was encountered from 52 to 82 feet below grade. PID readings as high as 48 ppm were noted below the Middle Clay Unit.

Since both the Upper and Middle Clay Units were encountered at this location, both the intermediate (IW-2) and deep (DW-2) monitoring wells were installed at this location. A steel casing was set at a depth of 21 feet below grade for IW-2 and the well was screened from 35 to 50 feet below grade. A steel casing was set a depth of 55 feet below grade for DW-2 and the well was screened from 84 to 99 feet below grade. The Lower Clay Unit was not encountered in this location.

IW/DW-3 Location

The IW/DW-3 location was changed from the proposed location in the Work Plan for the Intermediate and Deep Monitoring Wells because access could not be obtained from PHA, the current owner of the former Passyunk Homes property. The location of IW/DW-3 was moved north of Hartranft Street, just east of Penrose Ferry Road, adjacent to monitoring well PH-05. The movement of these wells was also coordinated with the PADEP and the Philadelphia Streets Department. The Upper Clay Unit was encountered at 37.5 to 38.5 feet below grade, the Middle Clay Unit was encountered from 58 to 68

feet below grade, and the Lower Clay Unit was encountered from 79 to 84 feet below grade. PID readings were all non-detect until a depth of 92 feet below grade. A slight petroleum odor was also noted at this depth. This highest PID reading (64.1 ppm) was encountered at 110 feet below grade. Beneath this depth, PID readings slowly decreased.

Since the Upper, Middle, and Lower Clay Units were encountered at this location, both the intermediate (IW-3) and deep (DW-3) monitoring wells were installed at this location. DW-3 was installed below the Lower Clay Unit and IW-3 was installed between the Middle and Upper Clay Units. A steel casing was set at a depth of 38 feet below grade for IW-3 and the well was screened from 42 to 57 feet below grade. A steel casing was set at a depth of 61 feet below grade for DW-3 and the well was screened from 85 to 100 feet below grade. This was the only location in which the lower clay was observed. DW-3 was the only well screened below this lower clay unit.

IW/DW-4 Location

The IW/DW-4 location was adjacent to the existing shallow monitoring well CSX-MW-7 on the southern portion of the CSX property. Neither the Upper, Middle, or Lower Clay Units were encountered at this location. The soil boring for this location was advanced to a depth of 116 feet below grade. The weathered bedrock was encountered at a depth of approximately 110 feet below grade. Elevated PID readings were first encountered at a depth of 36 feet below grade at this location. Soils with either petroleum odors and/or staining were encountered from approximately 36 to 58 feet below grade with the highest PID readings (1,057 ppm) at 54 to 56 feet below grade. The PID readings of the soils cutting decreased significantly below 60 feet below grade.

Since neither the Upper, Middle, or Lower Clay Units were encountered at the IW/DW-4 location, no steel casing was installed at this location. The well was screened from 85 to 100 feet below grade.

IW/DW-5 Location

The IW/DW-5 location was adjacent to the existing shallow monitoring well CSX-MW-5 on the CSX property. The Upper Clay Unit was encountered at 58 to 61 feet below grade and the Middle Clay Unit was encountered from 77 to 81 feet below grade. The soil boring for this location was advanced to a depth of 108 feet below grade. The weathered bedrock was encountered at a depth of approximately 106 feet below grade. Petroleum stained soils were first encountered approximately 14 to 16 feet below grade. Soils with either petroleum odors and/or staining were encountered from approximately 14 to 39.5 feet below grade with the highest PID readings (+ 2,000 ppm) at 30 to 35 feet below grade. PID readings of the soil cuttings between the Upper and Middle Clay ranged from 25 to 41 ppm, but no odors or staining were noted. PID readings below the Middle Clay Unit were all below 1.0 ppm, with a majority of the results being non-detect. No staining or petroleum odors were noted in soil cuttings below the Middle Clay Unit.

Since both the Upper and Middle Clay Units were encountered at this location, both the intermediate (IW-5) and deep (DW-5) monitoring wells were installed at this location. A

steel casing was set at a depth of 61 feet below grade for IW-5 and the well was screened from 63 to 68 feet below grade. A steel casing was set a depth of 77 feet below grade for DW-5 and the well was screened from 85 to 100 feet below grade. The Lower Clay Unit was not encountered in this location.

IW/DW-6 Location

The IW/DW-6 location was adjacent to the existing shallow monitoring well MW-2B on the northern portion of the former DSCP property. The Upper and the Middle Clay units appeared to be combined at this location from a depth of 36 to 49 feet below grade. This boring was advanced to a total depth of 154 feet below grade. The top of the weathered bedrock was encountered at approximately 134 feet below grade. No PID readings, odors or stained soils were noted during the logging of the soils at this location.

Since the Upper and Middle Clay units were combined at this location, and the Lower Clay Unit was not encountered, only one well (DW-6) was installed at this location. The steel casing for the well was set into the clay unit at a depth of 39 feet below grade. The well was screened from 55 to 75 feet below grade.

4.1 WELL DEVELOPMENT

The monitoring wells were developed a minimum of 24 hours after the completion of each well. The purpose of well development was to stabilize and increase the permeability of the gravel pack around the well screen and to restore the permeability of the formation that may have been reduced by drilling operations. Each monitoring well installed as part of the field investigation was developed by using the two-pipe air lifting procedure. Air was injected through an inner pipe at high pressure to bubble out into the surrounding pipe. The bubbles reduced the weight of the water, causing the column of water and sediments to be lifted upward, allowing groundwater from the formation to flow into the well. The water generated from the development process was containerized in drums for off-site disposal. Water quality parameters including pH, conductivity, temperature, dissolved oxygen and oxidation-reduction potential were obtained during the development process. Table 1 provides a summary of the groundwater quality parameters during the well development and the total gallons removed from each of the wells. Please note that due to the injection of air during the development of the wells, dissolved oxygen concentrations were greatly elevated and do not correspond to actual dissolved oxygen concentrations in the formation.

4.2 WELL SURVEYING

The locations and elevations of each well were surveyed by James Stewart, a Pennsylvania licensed surveyor. The wells were surveyed relative to the horizontal locations using North American Datum of 1983 (NAD 83) and the vertical elevations using the North American Vertical Datum of 1988 (NAVD 88). Table 2 provides the survey information for the intermediate and deep wells.

5.0 GROUNDWATER FLOW

The groundwater elevations used to prepare the groundwater elevation figure for the PRM were determined by subtracting the depth to water from the surveyed measuring point (inner well casing). Table 3 provides the groundwater measurements obtained from the shallow, deep, and when present, the intermediate monitoring well at each location. Only the measurements from the deep monitoring wells were used to construct the groundwater elevation figure for the deep aquifer. A groundwater contour map for the deep monitoring wells is presented as Figure 1. The groundwater contours of the shallow aquifer have been compiled on a quarterly basis as part of the on-going work at the former DSCP site and provided in the Quarterly Progress Reports.

Based upon the review of the groundwater measurements obtained from the deep wells associated with the former DSCP site, the groundwater flow in the PRM aquifer appears to flow from northwest to southeast across the CSX property, the former DSCP and former Passyunk Homes properties. The hydraulic heads in the shallow aquifer are higher than the hydraulic heads in the deep aquifer, indicating a downward component of groundwater flow. The hydraulic heads between the intermediate and deep wells varied from 0.18' (DW/IW-5) to 1.84' (DW/IW-2).

6.0 GROUNDWATER SAMPLING AND ANALYSIS

The groundwater sampling effort was conducted from April 11 through April 13, 2005. Prior to sampling, the monitoring wells were purged with a Redioflo2 submersible pump equipped with a flow controller. The water quality parameters including pH, conductivity, temperature, dissolved oxygen and oxidation-reduction potential were measured every 3 to 5 minutes during the well purging using a Horiba U-22 with a flow through cell. The purging proceeded until three well volumes were purged from the well and all water quality parameters stabilized. Stabilization was achieved when three consecutive readings varied by less than 10%. Table 4 provides a summary of the water quality parameters collected while purging the wells for sampling.

Groundwater samples were collected from the shallow, intermediate and deep wells at each cluster of wells: MW-23A, IW-01, DW-01, MWS-15, IW-02, DW-02, PH-06 IW-03, DW-03, CSX-MW-7, DW-04, CSX-MW-5, IW-05, DW-05, MW-2B and DW-06.

6.1 SAMPLE DESIGNATION

The objective of the sample identification system is to provide a framework for developing sample numbers that are unique to that sample and convey information regarding sample type that will enable data users to easily identify sample locations.

Each sample was designated by an alphanumeric code, which identifies the well and date sampled. Sample types shall be identified by a two-letter code, while each sample number shall be identified by a two-digit number. An example of the identification system is provided on the following page.

FIRST SEGMENT

MW, PH, IW, DW

Etc.: Well Indicator

SECOND SEGMENT

Well Number: 1, 2, A, etc

THIRD SEGMENT

Month and Year of Sample: (1104) (November 2004)

For example, a water sample obtained from Well IW-1 in April 2005 is identified as IW-10405. If the sample was field filtered for metals, the designation is IW-10405F.

6.2 GROUNDWATER ANALYSIS

The groundwater samples collected were analyzed for volatile organic compounds (VOCs), total dissolved solids, total and dissolved iron and manganese. This section provides a summary of the analytical results of the groundwater sampling effort. Tables 5 and 6 provide a summary of the analytical results and Figures 2 and 3 present the well locations with VOC and metal analytical results, respectively. Appendix B contains the laboratory analytical data.

CSX-MW-5, IW-05, DW-05

The groundwater from monitoring well CSX-MW-05 contained concentrations of benzene (2,000 micrograms per liter; $\mu\text{g/l}$), ethylbenzene (41 $\mu\text{g/l}$), toluene (18 $\mu\text{g/l}$) and xylenes (140 $\mu\text{g/l}$). There were no detectable concentrations of methyl tert-butyl ether (MTBE) in the groundwater sampled from CSX-MW-05. The groundwater from the intermediate well (IW-05) adjacent to CSX-MW-5 contained concentrations of benzene (110 $\mu\text{g/l}$), ethylbenzene (0.73 $\mu\text{g/l}$), xylenes (1.2 $\mu\text{g/l}$) and MTBE (34 $\mu\text{g/l}$). The groundwater from the deep well (DW-05) adjacent to CSX-MW-5 contained concentrations of MTBE (49 $\mu\text{g/l}$).

The total iron concentration of groundwater from CSX-MW-5 was 31,700 $\mu\text{g/l}$ and the dissolved iron was 24,600 $\mu\text{g/l}$. The total manganese concentration of groundwater from CSX-MW-5 was 496 $\mu\text{g/l}$ and the dissolved manganese was 400 $\mu\text{g/l}$. The total iron concentration of groundwater from IW-05 was 1,500 $\mu\text{g/l}$ and the dissolved iron was 600 $\mu\text{g/l}$. The total manganese concentration of groundwater from IW-5 was 3,540 $\mu\text{g/l}$ and the dissolved manganese was 3,690 $\mu\text{g/l}$. The total iron concentration of groundwater from DW-5 was 245 $\mu\text{g/l}$ and the dissolved iron was 296 $\mu\text{g/l}$. The total manganese concentration of groundwater from DW-5 was 7,970 $\mu\text{g/l}$ and the dissolved manganese was 7,650 $\mu\text{g/l}$.

CSX-MW-7, DW-4

The groundwater from monitoring well CSX-MW-07 contained concentrations of benzene (20 µg/l), ethylbenzene (4.2 µg/l), toluene (0.82 µg/l) and xylenes (3.4 µg/l). There were no detectable concentrations of MTBE in the groundwater sampled from CSX-MW-07. The groundwater from the deep well (DW-04) adjacent to CSX-MW-7 contained concentrations MTBE (13 µg/l) and chloroform (0.59 µg/l).

The total iron concentration of groundwater from CSX-MW-7 was 13,600 µg/l and the dissolved iron was 12,600 µg/l. The total manganese concentration of groundwater from CSX-MW-7 was 944 µg/l and the dissolved manganese was 908 µg/l. The total iron concentration of groundwater from DW-4 was 12,400 µg/l and the dissolved iron was 14,500 µg/l. The total manganese concentration of groundwater from DW-4 was 4,790 µg/l and the dissolved manganese was 5,520 µg/l.

MW-2B, DW-6

There were no detectable concentrations of VOCs in the groundwater sample collected from MW-2B. The groundwater in the deep well (DW-6) adjacent to MW-2B contained low concentrations of MTBE (0.70 µg/l), trichloroethene (0.53 µg/l) and tetrachloroethene (1.5 µg/l).

The total iron concentration of groundwater from MW-2B was 8,090 µg/l and the dissolved iron was 6,860 µg/l. The total manganese concentration of groundwater from DW-6 was 619 µg/l and the dissolved manganese was 623 µg/l. The total iron concentration of groundwater from DW-6 was 710 µg/l and the dissolved iron was 602 µg/l. The total manganese concentration of groundwater from DW-6 was 3,820 µg/l and the dissolved manganese was 3,240 µg/l.

MW-23A, IW-01, DW-01

The groundwater from monitoring well MW-23A contained concentrations of ethylbenzene (100 µg/l), toluene (7.4 µg/l), xylenes (39.8 µg/l), cis-1,2-dichloroethene (2.0 µg/l) and methylene chloride (8.8 µg/l). There were no detectable concentrations of methyl tert-butyl ether (MTBE) in the groundwater sampled from MW-23A. The groundwater from the intermediate well (IW-01) adjacent to MW-23A contained concentrations of benzene (0.66 µg/l), ethylbenzene (1.2 µg/l), xylenes (10.3 µg/l), MTBE (120 µg/l) and cis-1,2-dichloroethene (2.8 µg/l). The groundwater from the deep well (DW-01) adjacent to MW-23A contained concentrations MTBE (210 µg/l), chloromethane (4.4 µg/l), tetrachloroethene (3.4 µg/l), and chloroform (0.82 µg/l).

The total iron concentration of groundwater from MW-23A was 36,400 µg/l and the dissolved iron was 22,300 µg/l. The total manganese concentration of groundwater from MW-23A was 1,130 µg/l and the dissolved manganese was 1,030 µg/l. The total iron concentration of groundwater from IW-01 was 17,600 µg/l and the dissolved iron was

22,200 µg/l. The total manganese concentration of groundwater from IW-01 was 4,210 µg/l and the dissolved manganese was 4,990 µg/l. The total iron concentration of groundwater from DW-1 was 2,950 µg/l and the dissolved iron was 2,800 µg/l. The total manganese concentration of groundwater from DW-01 was 5,430 µg/l and the dissolved manganese was 5,100 µg/l.

The groundwater from the shallow monitoring well (MW-23A) located northeast of the free-phase plume on DSCP, did not contain detectable concentrations of MTBE. The groundwater in the intermediate well (IW-01) and deep well (DW-01) contained increasing concentrations of MTBE with depth. Concentrations of cis-1,2-dichloroethene were detected in the groundwater of the intermediate well and tetrachloroethene was detected in the groundwater of the deep well at this location.

MWS-15, IW-02, DW-02

The groundwater from monitoring well MWS-15 did not contain any detectable concentrations of VOCs. The groundwater from the intermediate well (IW-02) in close proximity to MWS-15 contained concentrations of benzene (130 µg/l), ethylbenzene (6.8 µg/l), toluene (3.3 µg/l) and xylenes (36.6 µg/l). The groundwater from the deep well (DW-02) in close proximity to MWS-15 contained concentrations of benzene (520 µg/l), ethylbenzene (0.87 µg/l), toluene (6.4 µg/l) xylenes (12.2 µg/l), cis-1,2-dichloroethene (2.0 µg/l), and chloroform (0.79 µg/l).

The total iron concentration of groundwater from MWS-15 was 123 µg/l and the dissolved iron was non-detect. The total manganese concentration of groundwater from MWS-15 was 5,790 µg/l and the dissolved manganese was 1.78 µg/l. The total iron concentration of groundwater from IW-02 was 14,300 µg/l and the dissolved iron was 13,200 µg/l. The total manganese concentration of groundwater from IW-02 was 1,490 µg/l and the dissolved manganese was 1,540 µg/l. The total iron concentration of groundwater from DW-2 was 4,810 µg/l and the dissolved iron was (4,770 µg/l). The total manganese concentration of groundwater from DW-02 was 1,370 µg/l and the dissolved manganese was 1,410 µg/l.

The groundwater from the shallow monitoring well (MWS-15) located to the southwest of the free-phase plume on DSCP did not contain detectable concentrations of VOCs and had low concentrations of iron. The concentrations of benzene in the groundwater increased with depth at this location, with the highest concentrations being detected in the deep well. Cis-1,2-dichloroethene was also detected in the groundwater of the deep well.

PH-05, IW-03, DW-03

The groundwater from monitoring well PH-05 did not contain any detectable concentrations of VOCs. The groundwater from the intermediate well (IW-03) adjacent to PH-05 did not contain any detectable concentrations of VOCs. The groundwater from the deep well (DW-03) adjacent to PH-05 contained concentrations of benzene (12,000 µg/l), ethylbenzene (34 µg/l), toluene (38 µg/l), xylenes (67 µg/l), and cis-1,2-dichloroethene (22 µg/l).

The total iron concentration of groundwater from PH-15 was non-detect and the dissolved iron was non-detect. The total manganese concentration of groundwater from PH-05 was 27.7 µg/l and the dissolved manganese was 20.6 µg/l. The total iron concentration of groundwater from IW-03 was 54.6 µg/l and the dissolved iron was non-detect. The total manganese concentration of groundwater from IW-03 was 891 µg/l and the dissolved manganese was 949 µg/l. The total iron concentration of groundwater from DW-03 was 10,900 µg/l and the dissolved iron was 9,940 µg/l. The total manganese concentration of groundwater from DW-03 was 3,020 µg/l and the dissolved manganese was 2,880 µg/l.

The groundwater from the shallow monitoring well (MWS-15) located to the southwest of the free-phase plume on DSCP did not contain detectable concentrations of VOCs and had low concentrations of iron. The concentrations of benzene in the groundwater increased with depth at this location, with the highest concentrations being detected in the deep well. Cis-1,2-dichloroethene was also detected in the groundwater of the deep well.

7.0 CONCLUSIONS

Based upon the lithological data collected during the deep soil boring and well installation effort, it was determined that the Upper and Middle Clay Unit of the PRM was encountered at all the borings advanced to weathered bedrock on the former DSCP property as well as the former Passyunk Homes property. The Lower Clay Unit of the PRM was only encountered at the soil boring advanced for DW-3, located on the southeastern portion of the former Passyunk Homes property. No Upper or Middle Clay Unit was encountered at the deep soil boring advanced at the DW-04 location on the CSX property. The Upper and Middle Clay Units were also not encountered in a deep soil boring that was previously advanced for the installation of MW-43, southeast of DW-4 on the former Passyunk Homes property. We also know that the Middle Clay is not present on portions of the Sunoco property. The Middle Clay Unit is not present beneath the western half of the North Yard or beneath the West Yard (ENSR, 1992).

Based upon the groundwater contours of the deep aquifer created from measurements obtained from the deep wells installed in association with the former DSCP site, the groundwater flow is from the northwest to the southeast across the CSX, former DSCP and former Passyunk Homes properties. It should be noted that deep monitoring wells are located on the adjacent Sunoco property to the west, but no recent groundwater measurement data was available at the time of this report preparation. However, the May 10, 2004 groundwater contour figures for the deep wells on the Sunoco property confirm that there is a northwest to southeast groundwater flow gradient in the deep aquifer to the west of the former DSCP property.

The laboratory analytical data from the groundwater samples collected from the deep wells, and the southeast groundwater gradients determined from measurements of water levels in deep wells (Figure 1) indicate that there is volatile organic compound (VOC) contamination migrating from off-site in the deep aquifer underlying the former DSCP/Passyunk Homes properties. MTBE concentrations were detected in a number of the intermediate and deep monitoring wells on the western portion of the former DSCP Site and the CSX property. In some of these locations, the MTBE concentration increases with depth. Even though the groundwater measurements obtained from the newly installed deep monitoring wells and the nearby shallow wells indicate that there is a vertical flow component, no MTBE was detected in the shallow wells at these locations. MTBE is not a contaminant of concern and is not attributable to the former DSCP free-phase and dissolved phase plume because it has not been detected in the free-phase plume. Other petroleum-related compounds were also detected in the deep aquifer, hydraulically upgradient from the former DSCP plume. These compounds include benzene, toluene, ethylbenzene and xylenes.

The highest concentration of benzene detected in the deep groundwater monitoring wells was detected in DW-3 (12,000 ug/l). This well also exhibited the highest overall BTEX concentrations of all the deep wells. The shallow well (PH-5) and intermediate well (IW-3) at the same location as DW-3 had non-detect concentrations of BTEX. Not only were both the Upper and Middle Clay Unit logged at this location, but the Lower Clay Unit of

the PRM was also logged at this location. Based on the evaluation of the shallow and intermediate BTEX concentrations in the immediate vicinity, it can be said that the BTEX concentrations detected in the groundwater at DW-3 were not from vertical contaminant flow in the immediate vicinity. Based upon a review of the groundwater contours of the deep aquifer and the available analytical data of the deep aquifer at this time, it cannot be readily determined if the source of the elevated benzene is from the former DSCP free-phase/dissolved phase plume, or from another source. A former deep well (MW-6D) that was located in the center of DSCP's free-phase plume was sampled in 1995. The groundwater from MW-6D in 1995 contained a benzene concentration of 590 ug/l. This well has since been abandoned due to improper construction. DW-03 does appear to be downgradient of the former MW-6D, but the concentrations of benzene detected in DW-03, which is outside of the both the shallow DSCP free-phase and dissolved phase plume, is higher than those previously detected in deep groundwater samples collected immediately under the free-phase plume. The shallow groundwater sampling effort that was conducted on the former DSCP site in 2003 determined that the highest benzene concentrations (36,000 ug/l) in the shallow groundwater, outside the free-phase plume, was detected in MW-62, which is located on the western boundary of the northern portion of the Steen property. The highest BTEX concentrations in the groundwater in wells with no product occurred in the November 2003 sampling at MW-62 and PH-1, which is on the northwestern corner of Passyunk Homes. These locations are also hydraulically upgradient of DW-03, but it is unknown if there is similar groundwater contamination of the deep aquifer in those immediate areas.

The groundwater quality parameters measured during the purging of the deep monitoring wells for sampling (Table 4) indicate that the deep aquifer is an anaerobic aquifer under the vicinity of the site since the dissolved oxygen levels measured were 0 mg/l. A flow-through system was used to evaluate the water quality parameters during the purging in order to minimize contact with the air. The absence of dissolved oxygen and low to negative oxidation reduction potential values (see Table 4) indicate reducing conditions are present in the groundwater. These reducing conditions result in the dissolution of iron and manganese from the aquifer matrix into the groundwater. Higher dissolved iron and manganese concentrations are generally correlated with higher VOC concentrations in the aquifer. Bacterial degradation of organic wastes, such as petroleum products, landfill leachate, and other industrial wastes results in oxygen depletion and reductive dissolution. The highest concentration of dissolved iron detected in the groundwater of the shallow monitoring wells that were analyzed was in CSX-MW-5 (24,600 ug/l) and MW-23A (22,300 ug/l). The elevated iron and manganese concentrations correlate to the higher VOC concentrations in these wells. The highest concentrations of dissolved iron in the deeper groundwater were detected in IW-2 (13,200 µg/l), IW-1 (22,200 µg/l) and DW-4 (14,500 µg/l). The lowest dissolved iron concentrations in any of the groundwater samples obtained (non-detect) were in PH-5, IW-3 and MWS-15 which corresponds to the non-detect concentrations of VOCs detected during this sampling event and from previous sampling events of the shallow wells.

It is well documented that dissolved iron concentrations in the PRM aquifer are a regional issue. Based upon studies completed by the United States Geological Survey (U.S.G.S),

the total and dissolved iron concentrations detected in the groundwater samples collected from the PRM aquifer in the vicinity of the former DSCP site are within the concentrations detected in the immediate region and lower than those detected closer to the Delaware River (Sloto, 2003).

The shallow and the deep (PRM) aquifer underlying the former DSCP study area are not being utilized as a drinking water source in Pennsylvania. A further discussion of groundwater flows, contamination and fate and transport analysis will be discussed in the DSCP Remedial Investigation Report to be submitted at a later date.

8.0 REFERENCES

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TABLES

TABLE 1
Former Defense Supply Center Philadelphia
Intermediate and Deep Well Groundwater Quality Parameters During Development
April 5 through 7, 2005

Well ID		Time	pH (S.U.)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Comments
DW-1		1654	7.18	0.585	999	9.92	16.02	-40	Pumped a total of 295 gallons from DW-1
DTW (initial):	21.22'	1658	6.91	0.776	372	9.85	15.78	-80	
DTP:	none	1701	6.85	0.799	120	9.80	15.75	-72	
DTB:	80.30'	1704	6.84	0.810	233.1	9.74	15.74	-68	
		1707	6.86	0.820	24.6	9.66	15.78	-68	
04/05/05		1710	6.37	0.824	15.2	9.54	15.77	-69	
DW-2		1255	7.39	0.547	999	10.90	16.73	29	A total of 300+ gallons were pumped from DW-2
DTW (initial):	17.13'	1258	7.06	0.623	999	10.53	15.83	-64	
DTP:	none	1300	7.01	0.645	999	10.31	15.64	-91	
DTB	98.78'	1305	6.89	0.644	293	10.21	15.63	-97	
		1308	6.88	0.638	181	10.35	15.65	-96	
4/7/2005		1312	6.87	0.636	146	10.36	15.61	-97	
		1315	6.67	0.637	117	10.38	15.62	-97	
DW-3		1510	8.76	0.520	999	12.02	16.24	80	Pumped a total of 300 gallons from DW-3 on 4/6/05
DTW (initial):	12.30'	1512	8.13	0.302	999	11.08	15.60	-123	
DTP:	none	1514	7.19	0.800	505	11.13	15.19	-127	
DTB:	100+	1516	7.00	0.765	207	11.04	15.11	-117	
4/6/2005		1520	7.06	0.761	144	10.79	15.12	-114	
4/7/2005		1651	6.58	0.725	999	10.39	15.49	-12	Pumped another 300 gallons on 4/7/2005
		1655	6.62	0.752	447	10.16	15.09	-66	
		1656	6.61	0.757	243	10.10	15.02	-81	
		1658	6.63	0.753	312	10.09	15.02	-93	
		1700	6.64	0.751	163	10.01	15.02	-94	
		1702	6.63	0.750	66.2	10.01	15.01	-96	
DW-4		1020	8.52	0.535	999	10.74	15.39	54	Pumped a total of 200 gallons from DW-4
DTW (initial):	40.02'	1025	7.44	0.865	638	10.56	15.29	-119	
DTP:	none	1030	7.13	0.892	80.9	10.48	15.33	-116	
DTB:	100.00	1035	7.09	0.891	34.1	10.38	15.27	-116	
4/6/05		1040	7.08	0.891	33.2	10.40	15.28	-117	
DW-5		1226	8.74	0.768	999	11.20	16.19	52	Pumped a total of 210 gallons from DW-5
DTW (initial):	47.55'	1230	8.38	0.777	378	10.99	15.52	39	
DTP:	none	1240	6.38	0.751	119	10.78	15.20	61	
DTB:	98.98'	1243	6.78	0.743	20.9	10.81	15.22	40	
		1245	6.75	0.743	8.2	10.83	15.26	25	
4/6/2005		1248	6.73	0.741	1.5	10.84	15.15	20	
		1250	6.75	0.739	2.1	10.81	15.22	20	
DW-6		1520	6.89	0.9191	128	9.70	16.32	-109	Pumped a total of 300 gallons from DW-6 4/5/2005
DTW (initial):	21.13'	1525	6.94	0.905	72.6	9.76	16.28	-115	
DTP:	none	1530	6.95	0.903	56.4	9.83	16.27	-115	
DTB:	70.00'								

Notes:

NA - Not Available

mS/cm - millisiemens per centimeter

NTU - nephelometric turbidity units

mV - millivolts

mg/L - milligrams per liter

mL/min - milliliter per minute

°C - degrees Centigrade

DTW - Depth to water below top of inner casing

DTP - Depth to product below top of inner casing

DTB - Depth to bottom below top of inner casing

DO - Dissolved Oxygen

ORP - Oxidation/Reduction Potential

Due to the introduction of air during the development process, DO readings are biased high and are not representative of normal aquifer conditions.

TABLE 1
Former Defense Supply Center Philadelphia
Intermediate and Deep Well Groundwater Quality Parameters During Development
April 5 through 7, 2005

Well ID		Time	pH (S.U.)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Comments
IW-1 DTW (initial): DTP: DTB: 4/6/2005	20.69' none 46.91'	805	6.06	1.440	999	10.17	15.46	-34	A total of 180 gallons pumped from IW-1
		810	6.93	1.440	295	10.03	15.60	-129	
		815	7.05	1.420	148	10.39	15.57	-142	
		820	7.16	1.410	76.7	10.13	15.67	-148	
		825	7.17	1.420	62.3	10.22	15.06	-148	
		830	7.19	1.440	55.9	10.03	15.52	-150	
		835	7.19	1.410	46.9	10.02	15.67	-151	
		840	7.10	1.420	45.8	10.02	15.65	-152	
IW-2 DTW (initial): DTP: DTB: 4/7/2005	15.60' nonw 49.59'	940	5.66	0.369	999	10.20	16.24	135	A total of over 500 gallons pumped from IW-2
		943	6.02	0.414	125	10.17	15.95	78	
		945	6.15	0.535	615	10.29	15.95	16	
		948	6.42	0.635	34.8	10.11	15.95	-39	
		950	6.50	0.693	22.9	10.12	15.98	-64	
		953	6.59	0.701	17.1	10.11	15.98	-80	
		955	6.61	0.733	11.5	9.84	16.00	-88	
		958	6.62	0.741	8.7	10.01	16.03	-93	
		1256	6.58	0.768	58.7	10.87	17.35	-73	
		1300	6.61	0.764	43.3	10.15	16.56	-84	
		1303	6.62	0.760	18.2	10.11	16.49	-86	
		1305	6.61	0.761	12.9	10.13	16.48	-89	
		1308	6.62	0.760	9.5	10.14	16.45	-87	
IW-3 DTW (initial): DTP: DTB: 4/7/2005	10.90' none 57.10'	1514	7.30	0.453	256	11.13	16.53	-13	A total of 490 gallons pumped from IW-3
		1516	6.59	0.421	80.7	10.24	15.85	14	
		1518	6.41	0.413	38.2	10.27	15.75	30	
		1520	6.40	0.410	240	10.23	15.73	41	
		1522	6.39	0.411	17.9	10.20	15.71	51	
		1524	6.39	0.410	2.7	10.19	15.72	63	
		1526	6.40	0.409	2.0	10.18	15.72	68	
		1558	6.63	0.402	40.1	10.09	15.91	76	
		1600	6.59	0.406	10.4	10.08	15.77	78	
		1602	6.44	0.409	5.7	10.08	15.72	79	
		1604	6.45	0.410	11.7	10.08	15.70	80	
		1606	6.51	0.409	4.9	10.09	15.69	81	
IW-5 DTW (initial): DTP: DTB: 4/6/2005	NM none NM	1345	7.77	1.35	999	11.72	19.22	77	Water turbid with low recoveries Purge at total of 25 gallons
		1350	8.02	0.993	584	10.49	18.09	47	
		1355	8.06	1.37	287	10.46	17.90	43	
		1400	8.08	1.37	218	10.44	18.01	39	
		1405	8.10	1.38	182	10.40	18.02	40	
		1412	8.11	1.39	193	10.38	18.04	41	

Notes:

NA - Not Available

mS/cm - millisiemens per centimeter

NTU - nephelometric turbidity units

mV - millivolts

mg/L - milligrams per liter

mL/min - milliliter per minute

°C - degrees Centigrade

DTW - Depth to water below top of inner casing

DTP - Depth to product below top of inner casing

DTB - Depth to bottom below top of inner casing

DO - Dissolved Oxygen

ORP - Oxidation/Reduction Potential

Due to the introduction of air during the development process, DO readings are biased high and are not representative of normal aquifer conditions.

Table 2
Former Defense Supply Center Philadelphia
Intermediate and Deep Well Survey Information

Well ID	Elevations (Feet above sea level)			Coordinates (US Survey Feet)	
	Ground	Inner	Protective	Northing	Easting
DW-1	22.02	21.95	22.29	222714.77	2686539.01
DW-2	17.40	17.18	17.47	220911.38	2686776.48
DW-3	12.51	12.26	12.68	220889.79	2687507.21
DW-4	42.83	42.59	42.96	222536.66	2686120.90
DW-5	48.89	48.61	49.06	223310.49	2686324.66
DW-6	21.86	21.67	21.91	223121.86	2687605.80
IW-1	21.85	21.71	22.24	222709.11	2686539.47
IW-2	17.35	17.08	17.42	220910.78	2686781.21
IW-3	12.45	12.19	12.55	220885.97	2687505.29
IW-5	48.94	48.62	49.05	223316.34	2686325.63

NOTES:

Survey performed on May 4, 2005 by James M. Stewart, Inc. of Philadelphia, Pennsylvania.

Horizontal Datum: Pennsylvania State Plane Coordinates NAD 83 - South Zone

Vertical Datum: NAVD 88

Monuments Used: Horizontal= NGS CORS (RED1, DNRC, SHK1)

Vertical= NGS N 276 (Elevation: 15.17')

Table 3
Former Defense Supply Center Philadelphia
Intermediate and Deep Well Groundwater Measurements
May 3, 2005

Well ID	Depth to Water (Feet)	Casing Elevation (Feet ASL)	Groundwater Elevation (Feet ASL)	Time
DW-1	21.00	21.95	-0.95	1213
IW-1	20.41	21.71	-1.30	1217
MW-23A	20.54	21.87	-1.33	1221
MW-2B	19.19	21.34	-2.15	1231
DW-3	12.34	12.26	0.08	1239
IW-3	11.19	12.19	-1.00	1243
PH-5	13.00	14.03	-1.03	1247
MWS-15	15.34	22.58	-7.24	1251
IW-2	15.17	17.08	-1.91	1255
DW-2	17.11	17.18	-0.07	1259
DW-5	47.49	48.61	-1.12	1312
IW-5	47.31	48.62	-1.31	1318
CSX-MW5	45.12	48.72	-3.60	1323
MW-20	20.14	24.67	-4.53	1325
MW-20D	23.49	24.81	-1.32	1326
DW-4	41.73	42.59	-0.86	1328
CSX-MW7	45.47	46.13	-0.66	1331

Notes:
Feet ASL - Feet Above Sea Level

Table 4
Former Defense Supply Center Philadelphia
Shallow, Intermediate and Deep Well Groundwater Quality Parameters During Sampling

Well ID		Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Comments
DW-1	04/12/05	850	6.63	0.864	641	1.03	15.94	-15	PID headspace 1.0 ppm LEL headspace 0%
DTW (initial):	21.06	855	6.23	0.865	100	0	16.24	-13	
DTP:	none	900	6.24	0.866	12.8	0	16.26	-15	
DTB:	80.42	905	6.27	0.869	10.0	0	16.29	-19	
		910	6.31	0.871	7.6	0	16.29	-25	
		915	6.35	0.872	6.3	0	16.29	-31	
		920	6.37	0.874	8.5	0	16.31	-33	
		925	6.39	0.875	10.0	0	16.32	-35	
DW-2	04/13/05	1125	6.57	0.741	999	1.17	15.82	-28	PID headspace 25.1 ppm LEL headspace 0%
DTW (initial):	17.06	1130	6.41	0.727	36	0	15.95	-52	
DTP:	none	1135	6.48	0.717	21	0	15.94	-69	
DTB:	98.78	1140	6.53	0.706	18	0	15.93	-79	
		1145	6.58	0.697	16	0	15.96	-89	
		1150	6.61	0.688	16	0	15.95	-90	
		1155	6.67	0.684	16	0	15.95	-104	
		1200	6.71	0.681	16	0	15.95	-113	
		1205	6.72	0.672	16	0	15.95	-115	
DW-3	04/12/05	1500	6.42	0.97	110	0	15.34	-12	PID headspace 84.3 ppm LEL headspace 0%
DTW (initial):	12.27	1505	6.54	0.98	70.3	0	15.46	-59	
DTP:	none	1510	6.60	0.97	18	0	15.47	-72	
DTB:	114.80	1515	6.64	0.97	12	0	15.48	-80	
		1520	6.67	0.98	10.8	0	15.50	-87	
		1525	6.68	10.5	10.6	0	15.50	-91	
		1530	6.69	0.99	10.3	0	15.50	-94	
		1535	6.71	0.99	10.4	0	15.50	-97	
		1540	6.72	0.99	10.3	0	15.52	-101	
		1545	6.74	0.99	10.4	0	15.52	-107	
		1550	6.74	0.99	10.3	0	15.52	-107	
DW-4	04/11/05	1110	6.65	0.873	42.0	0.23	15.47	-39	PID headspace 0.5 ppm LEL headspace 0%
DTW (initial):	41.84	1115	6.12	0.884	20.9	0	15.85	-16	
DTP:	none	1125	6.15	0.888	18.7	0	15.88	-30	
DTB:	100.00	1130	6.21	0.895	14.8	0	15.87	-44	
		1135	6.25	0.896	11.0	0	15.88	-50	
		1140	6.29	0.897	14.5	0	15.89	-52	
		1145	6.31	0.897	10.4	0	15.90	-56	
DW-5	04/11/05	1435	6.29	0.815	66	2.83	15.55	57	PID headspace 0 ppm LEL headspace 0%
DTW (initial):	47.55	1440	5.90	0.792	17.2	0	15.74	73	
DTP:	none	1445	5.84	0.783	7.4	0	15.74	83	
DTB:	99.60	1450	5.83	0.777	20.2	0	15.75	83	
		1455	5.84	0.771	24.3	0	15.75	83	
		1450	5.84	0.770	4.2	0	15.73	81	
DW-6	04/11/05	900	5.94	0.932	198	3.28	16.37	189	PID headspace 0 ppm LEL headspace 0%
DTW (initial):	21.00	905	6.09	0.925	136	0	13.73	74	
DTP:	none	910	6.21	0.922	52.4	0	16.78	36	
DTB:	70.00	915	6.30	0.923	9.6	0	16.84	17	
		920	6.32	0.921	4.8	0	16.82	8	
		925	6.34	0.921	1.2	0	16.83	6	

Notes:

NA - Not Available

mS/cm - millisiemens per centimeter

NTU - nephelometric turbidity units

mV - millivolts

mg/L - milligrams per liter

mL/min - milliliter per minute

°C - degrees Centigrade

DTW - Depth to water in feet below top of inner casing

DTP - Depth to product in feet below top of inner casing

DTB - Depth to bottom in feet below top of inner casing

DO - Dissolved Oxygen

ORP - Oxidation/Reduction Potential

Table 4 (Continued)
Former Defense Supply Center Philadelphia
Shallow, Intermediate and Deep Well Groundwater Quality Parameters During Sampling

Well ID		Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Comments
IW-1	04/12/05	945	6.57	1.410	187	0	16.20	-85	PID headspace 10.0 ppm LEL headspace 0%
DTW (initial):	20.55	950	6.63	1.420	71	0	16.27	-105	
DTP:	20.54	1000	6.65	1.430	27	0	16.32	-115	
DTB:	47.00	1005	6.67	1.430	11.8	0	16.33	-122	
IW-2	04/13/05	1230	6.52	0.746	491	1.8	16.18	-81	PID headspace 32.6 ppm LEL headspace 0%
DTW (initial):	15.41	1235	6.30	0.776	26	0	16.49	-91	
DTP:	15.40	1240	6.36	0.774	20	0	16.49	-102	
DTB:	49.80	1245	6.43	0.763	21	0	16.51	-111	
		1250	6.50	0.749	22	0	16.54	-118	
		1255	6.56	0.733	21	0	16.53	-124	
		1300	6.58	0.728	21	0	16.52	-126	
		1305	6.60	0.728	22	0	16.52	-127	
IW-3	04/12/05	1415	5.59	0.470	73.2	0	16.03	78	PID headspace 0.2 ppm LEL headspace 0%
DTW (initial):	10.89	1420	5.55	0.475	17.8	0	16.07	86	
DTP:	none	1425	5.59	0.476	9.1	0	16.04	85	
DTB:	57.10	1430	5.59	0.474	8.7	0	16.05	84	
		1435	5.64	0.474	7.7	0	16.07	82	
		1440	5.73	0.474	6.9	0	16.05	77	
IW-5	04/11/05	1520	6.43	1.47	266	0	15.99	-13	PID headspace 0 ppm LEL headspace 0%
DTW (initial):	47.35	1525	6.43	1.47	215	0	15.98	-13	
DTP:	none	1530	6.44	1.46	84.3	0	15.94	-12	
DTB:	67.40	1535	6.44	1.46	83	0	15.96	-12	
CSX-MW-5	04/11/05	1555	6.69	1.84	999	4.58	15.63	-98	PID headspace 0 ppm LEL headspace 0%
DTW (initial):	45.03	1600	6.71	1.83	65	0	15.44	-124	
DTP:	none	1605	6.72	1.82	60.9	0	15.46	-130	
DTB:	53.30	1615	6.75	1.80	45.2	0	15.50	-139	
CSX-MW-7	04/11/05	1205	6.65	1.73	226	5.58	15.87	-89	PID headspace 94 ppm LEL headspace 0%
DTW (initial):	45.61	1210	6.72	1.75	133	0	16.14	-127	
DTP:	none	1215	6.74	1.76	69.8	0	16.07	-132	
DTB:	62.00	1220	6.75	1.77	77	0	16.07	-138	
		1225	6.77	1.78	47	0	16.05	-144	
		1230	6.77	1.78	40	0	16.07	-147	
		1235	6.78	1.78	37.8	0	16.05	-148	
		1240	6.79	1.77	27.3	0	16.06	-154	

Notes:

NA - Not Available

mS/cm - millisiemens per centimeter

NTU - nephelometric turbidity units

mV - millivolts

mg/L - milligrams per liter

mL/min - milliliter per minute

°C - degrees Centigrade

DTW - Depth to water in feet below top of inner casing

DTP - Depth to product in feet below top of inner casing

DTB - Depth to bottom in feet below top of inner casing

DO - Dissolved Oxygen

ORP - Oxidation/Reduction Potential

Table 4 (Continued)
Former Defense Supply Center Philadelphia
Shallow, Intermediate and Deep Well Groundwater Quality Parameters During Sampling

Well ID	Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Comments	
MW-2B	04/11/05	955	6.54	0.849	999	0	15.8	-91	PID headspace 0 ppm LEL headspace 0%
DTW (initial):	19.34	1005	6.57	0.842	359	0	16.04	-110	
DTP:	none	1010	6.67	0.83	138	0	16.09	-122	
DTB:	34.00	1015	6.76	0.828	79.6	0	16.1	-129	
		1020	6.79	0.821	45.8	0	16.11	-133	
		1024	6.8	0.817	36.7	0	16.13	-134	
MW-23A	04/12/05	1100	6.64	0.595	379	0	15.87	-130	PID headspace 65.2 ppm LEL headspace 0%
DTW (initial):	20.69	1105	6.73	0.591	455	0	16.02	-143	
DTP:	20.67	1110	6.82	0.602	999	0	16.42	-157	
DTB:	65.20	1115	6.83	0.622	999	0	17.08	-163	
		1120	6.83	0.614	999	0	17.45	-166	
		1125	6.8	0.618	999	0	17.89	-165	
		1130	6.77	0.604	999	0	17.1	-163	
		1135	6.77	0.553	999	0	17.22	-155	
		1140	6.74	0.565	919	0	17.53	-145	
		1145	6.76	0.555	746	0	17.26	-141	
		1150	6.74	0.559	717	0	17.38	-138	
		1155	6.73	0.559	712	0	17.29	-134	
MWS-15	04/13/05	1330	6.42	0.712	999	3.93	14	12	PID headspace 0 ppm LEL headspace 0%
DTW (initial):	15.13	1335	6.13	0.686	153	1.74	13.43	43	
DTP:	15.12	1340	6.14	0.695	130	1.66	13.46	45	
DTB:	24.10	1345	6.14	0.698	75	1.66	13.51	48	
		1350	6.14	0.696	69	1.62	13.56	53	
		1355	6.14	0.696	65	1.62	16.54	56	
PH-5	04/13/05	840	7.07	0.625	116	2.48	14.25	132	PID headspace 0.3 ppm LEL headspace 0% Pumping stopped from 850 to 900 due to generator problem
DTW (initial):	12.67	845	6.43	0.654	160	1.16	14.21	144	
DTP:	none	850	6.43	0.681	117	0.065	14.21	144	
DTB:	32.82	900	6.64	0.685	136	10.51	14.08	29	
		905	6.48	0.685	90.0	2.34	14.08	42	
		910	6.38	0.701	43.6	0.89	14.22	68	
		915	6.39	0.710	35.3	0.35	14.22	81	
		920	6.47	0.722	16.1	0	14.26	98	
		925	6.49	0.727	15.2	0	14.27	104	
		930	6.49	0.729	14.2	0	14.27	104	
		935	6.50	0.726	13.1	0	14.25	106	
		940	6.51	0.726	14.1	0	14.28	106	

Notes:

NA - Not Available

mS/cm - millisiemens per centimeter

NTU - nephelometric turbidity units

mV - millivolts

mg/L - milligrams per liter

mL/min - milliliter per minute

ORP - Oxidation/Reduction Potential

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DTW - Depth to water in feet below top of inner casing

DTP - Depth to product in feet below top of inner casing

DTB - Depth to bottom in feet below top of inner casing

DO - Dissolved Oxygen

TABLE 5
Former Defense Supply Center Philadelphia
Groundwater Volatile Organic Compound Analytical Results

Sample ID Date Collected	MSC Used Aquifer	MSC Non-Use Aquifer	DW-6 4/11/2005	DW-4 4/11/2005	CSX-MW-7 4/11/2005	DW-5 4/11/2005	IW-5 4/11/2005	CSX-MW-5 4/11/2005	DW-1 4/12/2005
Chloroethane	230	23,000	ND	ND	ND	ND	ND	ND	4.4
MTBE	20	200	0.70J	13	ND	49D	34	ND	210D
Methylene Chloride	5	500	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	50	ND	ND	ND	ND	ND	ND	ND
Chloroform	100	1,000	ND	1.6	ND	0.59J	0.55J	ND	0.82J
Benzene	5	500	ND	ND	20	ND	110D	2,000D	ND
Trichloroethene	5	50	0.53J	ND	ND	ND	ND	ND	ND
Toluene	1,000	100,000	ND	ND	0.82J	ND	ND	18	ND
Tetrachloroethene	5	50	1.5	ND	ND	ND	ND	ND	3.4
Chlorobenzene	100	10,000	ND	ND	ND	ND	ND	ND	ND
Ethyl Benzene	700	70,000	ND	ND	4.2	ND	0.73J	41	ND
Xylenes (Total)	10,000	180,000	ND	ND	3.4	ND	1.2	140	ND

Notes:

All Results in micrograms per liter, µg/l.

ND - Not Detected

MTBE - Methyl tertiary butyl ether

J - Estimated concentration

D - Concentration was obtained from a diluted sample

MSC - Medium Specific Concentration

Bold values indicate concentrations above MSC

TABLE 5 (Continued)
Former Defense Supply Center Philadelphia
Groundwater Volatile Organic Compound Analytical Results

Sample ID Date Collected	MSC Used Aquifer	MSC Non-Use Aquifer	IW-1 4/12/2005	MW-23A 4/12/2005	MW-23A 4/12/2005	IW-3 4/12/2005	DW-3 4/12/2005	PH-5 4/13/2005	DW-2 4/13/2005	IW-2 4/13/2005	MWS-15 4/13/2005
Chloroethane	230	23,000	3.1	-	7.3	-	ND	ND	ND	ND	ND
MTBE	20	200	120D	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	500	8.8JD	ND	ND	ND	ND	ND	23D	ND	ND
cis-1,2-Dichloroethene	5	50	2	2.8	2.8	ND	22D	ND	2	ND	ND
Chloroform	100	1,000	ND	ND	ND	ND	ND	ND	0.79J	ND	ND
Benzene	5	500	0.66J	ND	ND	ND	12,000D	ND	520D	130D	ND
Trichloroethene	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	100,000	0.56J	7.4	8.0	ND	38D	ND	6.4	3.3	ND
Tetrachloroethene	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	10,000	ND	2.5	2.6	ND	ND	ND	ND	ND	ND
Ethyl Benzene	700	70,000	1.2	100D	94D	ND	34D	ND	0.87J	6.8	ND
Xylenes (Total)	10,000	180,000	10.3	39.8	43.6	ND	67	ND	12.2	36.6	ND

Notes:

All Results in micrograms per liter, µg/l.

ND - Not Detected

MTBE - Methyl tertiary butyl ether

J - Estimated concentration

D - Concentration was obtained from a diluted sample

MSC - Medium Specific Concentration

Bold values indicate concentrations above MSC

TABLE 6
Former Defense Supply Center Philadelphia
Groundwater Metal Analytical Results
April 2005

Sample ID	Dissolved Iron	Dissolved Manganese	Total Iron	Total Manganese
DW-1	2,800	5,100	2,950	5,430
DW-2	4,770	1,410	4,810	1,370
DW-3	9,940	2,880	10,900	3,020
DW-4	14,500	5,520	12,400	4,790
DW-5	296	7,650	245	7,970
DW-6	602	3,240	710	3,820
IW-1	22,200	4,990	17,600	4,210
IW-2	13,200	1,540	14,300	1,490
IW-3	ND	949	54.6J	891
IW-5	600	3,690	1,500	3,540
CSX-MW-5	24,600	400	31,700	496
CSX-MW-7	12,600	908	13,600	944
MW-23A	22,300	1,030	36,400	1,130
MW-23A-Dup	22,100	1,130	48,300	1,390
MWS-15	ND	1.78J	123	5.790J
PH-5	ND	20.6	ND	27.7

NOTES:

All results in micrograms per liter, µg/l.

ND - Not Detected

J - estimated concentration

FIGURES



- Legend:
- MW-9 Shallow Monitoring Well
 - RW-F Extraction Well
 - DW06 Deep Monitoring Well
 - IW06 Intermediate Monitoring Well
 - S-50 Sunoco Monitoring Well
 - SUN-RW1 Sunoco Extraction Well
 - Sewer Line
 - Manhole
 - Groundwater Elevation Contour of PRM Aquifer (Feet Above Mean Sea Level)

0 200 FEET

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D.E.P. SOUTHEAST REG.

Former Defense Supply Center Philadelphia DSCP/Passyunk Homes	
Figure 1 Groundwater Contour Map May 5, 2005	
 TETRA TECH FW, INC.	

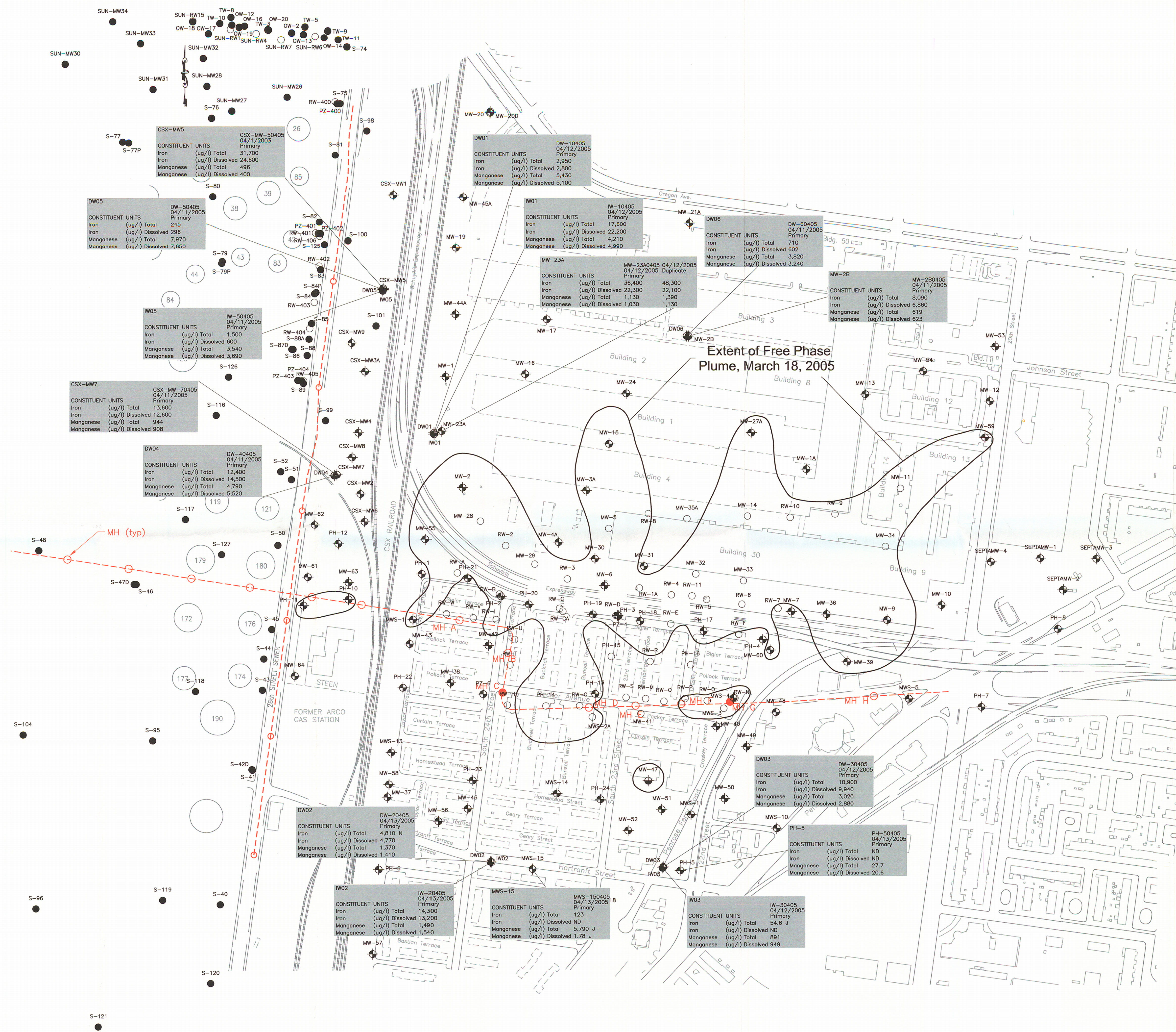


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DSCP/Passyunk Homes

Figure 2
Volatile Organic Compound Concentrations
April 2005

TETRA TECH FW, INC.



- Legend:
- MW-9 Shallow Monitoring Well
 - RW-F Extraction Well
 - DW06 Deep Monitoring Well
 - IW06 Intermediate Monitoring Well
 - S-50 Sunoco Monitoring Well
 - SUN-RW1 Sunoco Extraction Well
 - Sewer Line
 - Manhole
 - Extent of Free Phase Plume Inferred Apparent Product Thickness (Feet)
 - ND = Not Detected at Sample Quantitation Limit
 - J = Estimated Concentration

0 200 FEET

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Former Defense Supply Center Philadelphia
DSCP/Passyunk Homes

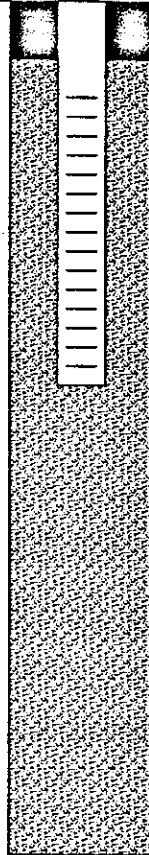
Figure 3
Iron and Manganese Concentrations
April 2005

TETRA TECH FW, INC.

APPENDIX A
Soil Boring Logs and
Well Construction Diagrams

TETRA TECH FW, INC.		Elevation: 22.02'	
Location: DSCP		Completed Depth: 80.00'	
Well Id: DW01		Total Depth: 104.50'	
Logged By: J. Funk		Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 52.00'	
Date(s): 01/20/05 - 02/16/05		Inner Casing: type: PVC dia: 2.00in fm: 1.0' to: 65.00'	
Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS		Screens: type: Slotted size: 0.020in dia: 2.00in fm: 65.00' to: 80.00'	
Drilling Method: MUD ROTARY		Annular Fill: type: Bentonite Grout fm: 0.00' to: 58.00'	
X Coordinate: 2686539.01		type: Bentonite-Pellets fm: 58.00' to: 63.00'	
Y Coordinate: 222714.77		type: Sand Pack (generic) fm: 63.00' to: 104.50'	
Remarks: Stiff, cohesive clay confining layer		type: fm: to:	

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
		Brown	TO FI		0'-0.5': Topsoil		
			SP		0.5'-3': Brown silt and brick debris		20
					3'-4': Sand and gravel with some mica		
					4'-8': Clayey silt		
10		Gr/brn	ML		8'-11.5': Gray brown clayey silt		
		dk gray			11.5'-12': Dark gray fine sand and clay		10
					12'-14': Dark gray fine sand and clayey silt		
		red, grn tan			14'-16': Stained fine to coarse sand and gravel		
20			GM/GP		16'-17': Stained fine to coarse sand and gravel		
					17'-20': Red, green, and tan fine to coarse sand and gravel, no staining, Petrol odor		0
					20'-24': Same as above		
					24'-24.5': Stained fine to coarse sand and gravel, hit refusal, move boring over 2'		
30		Brown	SM		24.5'-28': Fine to coarse sand and gravel heavy staining and strong odor		
			SW/SW		28'-30': Fine to coarse sand and gravel with brown silt		
					30'-32': Brown fine sand and silt, trace mica		-10
					32'-35': Fine to coarse sand with some silt		
		grn/gry gray	CL		35'-35.5': Fine to coarse sand with some gravel and silt		
40			SP		35.5'-36': Thin lens of greenish-gray clay with greenish-gray fine sand		
		red-brn or-gry	ML		36'-39.5': Gray fine sand, some staining and odor		
		red-brn	CL		39.5'-40': Reddish brown clayey silt with some fine sand		
		Brown	SW		40'-42': Orange and gray mottled clay		-20
			SP		42'-42.5': Reddish brown fine to coarse sand and well rounded gravel		
		red-gry			42.5'-44': Brown fine sand, trace mica fragments, iron-stained near bottom of sleeve		
50		gry-brn	CL		44'-47': Brown fine to medium sand with trace mica		
			SW		47'-48': Red-gray clay with trace mica		
		red	CL		48'-50': Grayish brown fine sand, trace mica fragments		-30
					50'-52': Red clay, trace mica fragments, slowly graded from sand to clay between 50' and 51'		
					52'-54': Red clay and fine to medium sand		
					54'-54.5': Dark gray fine to coarse sand		
					54.5'-56': Brown fine to coarse sand		
					56'-60': Orange brown fine to coarse sand		

L. T. TETRA TECH FW, INC.					Well Id: DW01		
Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
60		or-bm	SP		60'-64': Same as above		-40
64					64'-68': Same as above, some fine gravel from 64' to 65'		-45
68					68'-70': Brown fine to medium sand, gravel at bottom of spoon		-50
70		or-bm	GM/GP		70'-72': Orange brown fine to coarse sand and gravel with some silt, thin layer of reddish fine sand and mica at 71'		-55
72					72'-74': No recovery		-60
74					74'-76': Pale gray fine to coarse sand and gravel		-65
76					76'-78': Same as above		-70
78		or-gry			78'-80': Pale orange gray fine to medium sand, some coarse sand and silt, trace gravel		-75
80					80'-82': Pale gray fine to coarse sand and gravel		-80
84			GP		84'-86': Same as above		-85
88					88'-90': Multi-colored gravel with pale gray fine to coarse sand, some iron staining		-90
92		varies			92'-94': Same as above		-95
96					96'-98': Weathered bedrock - driller noted this was encountered @93'		-100
98			BD		98'-100': Micaceous clay, trace fine sand		-105
100					100'-102': Same as above		-110
102					102'-104': Same as above but becoming more competent		-115
104					104': Bedrock refusal# WATER		-120

TETRA TECH FW, INC.	Elevation: 17.40'
Location: Passyunk Homes	Completed Depth: 99.00'
Well Id: DW02	Total Depth: 130.00'
Logged By: J. Funk	Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 55.00'
Date(s): 03/24/05 - 04/01/05	Inner Casing: type: PVC dia: 2.00in fm: 1.0' to: 84.00'
Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS	Screens: type: Slotted size: 0.020in dia: 2.00in fm: 84.00' to: 99.00'
Drilling Method: MUD ROTARY	Annular Fill: type: Bentonite Grout fm: 0.00' to: 81.00'
X Coordinate: 2686776.48	type: Bentonite-Pellets fm: 81.00' to: 83.00'
Y Coordinate: 220911.38	type: Sand Pack (generic) fm: 83.00' to: 130.00'
Remarks: Stiff, cohesive clay confining layer	type: fm: to:

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
0		or-brn	AS		0'-2': Asphalt / subbase		
					2'-4': Orange brown silt		
			MH		4'-6': Same as above		
					6'-8': Same as above		
10		or-gry	ML		8'-10': Orange gray clayey silt, iron-stained silt at bottom with well rounded cobble in shoe		10
		brown	SP		10'-12': Brown fine to coarse sand and gravel, some silt		
					12'-14': Brown fine to medium sand with brown fine to coarse sand and gravel in shoe		
					14'-16': Coarse gravel, some sand and silt		
		varies			16'-18': Multi-colored fine to coarse gravel and sand, some red and brown silt		0
20			GM/GP		18'-20': Same as above		
					20'-22': Same as above		
					22'-24': Same as above		
					24'-26': Same as above		
		brown	SM/SP		26'-28': Brown fine to coarse sand, some gravel and silt		-10
30		tan-or	CL		28'-28.2': Brown fine to medium sand, trace gravel		
					28.2'-30': Tan and orange mottled silty clay, dry and dense		
					30'-32': Tan and orange mottled silty clay		
		or-gry			32'-34': Orange gray fine sand and silt, dense and dry, gray fine sand in shoe		
		gray			34'-34.5': Gray fine sand and silt		
		orange	SM		34.5'-35.5': Orange fine sand grading back to gray fine sand		
		gray			35.5'-36': Gray fine sand		-20
					36'-38': Gray fine sand with iron stained fine sand @37'		
40		gr-brn	SP		38'-39.5': Gray fine sand		
					39.5'-40': Gray brown fine to coarse sand, a 0.5" black stain and odor @39.5'		
			SW		40'-42': Gray brown fine to coarse sand, slight odor		
		brown			42'-44': Brown fine to medium sand, trace coarse sand, slight odor		
		gray	SP		44'-46': Gray fine to medium sand with trace orange gray clay at bottom of spoon		
		gr/or			46'-47': Gray and orange fine to medium sand		-30
50		gray			47'-48': Gray fine to coarse sand, trace gravel		
		brown	SW		48'-50': Brown fine to coarse sand		
		red/wh			50'-51.5': Same as above		
					51.5'-52': Red and white clay, dense		
					52'-54': Red and white clay with a 0.25" lens of orange sand @52.5'		
					54'-56': Red and white clay		
					56'-58': Same as above		-40
			CL		58'-60': Same as above		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
60'-62'					Same as above		
62'-64'					Same as above		
64'-66'			SM/SP		Same as above with some brown clay mixed in @65'		
66'-68'					Red, brown, and white clay		
68'-70'					Same as above		-50
70'-72'					Same as above		
72'-74'			CL		Same as above		
74'-76'					Same as above		
76'-78'					Same as above		
78'-80'					Same as above		-60
80'-82'					Same as above with more white clay		
82'-82.5'		gray			Same as above		
82.5'-82.9'					Pale gray fine sand, staining		
84'-86'		brown gray	SP		Pale gray fine to medium sand with fine to coarse sand, trace clay, clay lens @84.9		
86'-88'					Brown fine to medium sand with fine to coarse sand and gravel in shoe		
88'-90'					Gray fine to coarse well-rounded gravel and sand, some clay		-70
90'-92'					Gray fine to coarse gravel, some sand		
94'-96'			GM/GW		Same as above		
98'-100'		tan			Tan fine to coarse sand, trace gravel		-80
102'-104'			SP		Same as above with large piece of gravel		
106'-108'					Same as above		
110'-112'		dk gry			No recovery, change in drilling @111', possibly out of gravel layer		-90
112'-114'					Dark gray clay, trace mica grains, very dry and dense		
114'-116'					Same as above		
116'-116.5'		wh/tan			White and tan micaceous clay		
116.5'-117.3'					Fine to coarse sand and gravel		
118'-120'		gray			Gray fine sand and micaceous clay		-100
120'-122'		dk gry	BD		Dark gray grainy clay, appears to be weathered bedrock		
122'-124'		tan			Tan fine to coarse sand with some gravel		
126'-128'		gry-wh			pale gray/white fine to coarse sand and clay, some mica		
128'-130'					Weathered schist# WATER		-110
							-120
							-130

TETRA TECH FW, INC.		Elevation: 12.51'
Location: Passyunk Homes		Completed Depth: 115.00'
Well Id: DW03		Total Depth: 151.00'
Logged By: J. Funk		Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 61.00'
Date(s): 02/03/05 - 03/21/05		Inner Casing: type: PVC dia: 2.00in fm: 1.0' to: 100.00'
Drilling Subcontractor: CHESAPEAK GEOSYSTEMS		Screens: type: Slotted size: 20slot dia: 2.00"fm: 100.00' to: 115.00'
Drilling Method: MUD ROTARY		Annular Fill: type: Bentonite Grout fm: 0.00' to: 93.00' type: Bentonite-Pellets fm: 93.00' to: 97.00' type: Sand Pack (generic) fm: 97.00' to: 117.00' type: fm: to:
X Coordinate: 2687507.21		
Y Coordinate: 220889.79		
Remarks: Stiff, cohesive clay confining layer		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
10		brown	ML		0'-2': 6" topsoil then fine to coarse sand with some brick fragments 2'-4': Brown fine sand and silt, trace mica 4'-5': Same as above 5'-8': Brown fine to coarse sand and gravel		10
			GP		8'-10': Same as above		
			SC/SP		10'-12': Brown fine sand with a thin lens of brown clay from 11' to 11.5' 12'-16': Brown fine to medium sand, wet @13'		0
20					16'-20': Brown fine to coarse sand and gravel		
			SP		20'-24': Same as above 24'-28": Same as above 28'-32': Same as above 32'-36': Same as above		-10
30							-20
40		gray or-gray	CL		36'-37.5': Same as above 37.5'-38': Gray, dense clay, geoprobe refusal @38'		
			SW		38'-38.5': Orange gray clay 38.5'-40': Fine to coarse sand 40'-42': Fine to coarse orange brown sand		
		or-brn	GM/GP		42'-44': Orange brown fine to coarse sand and gravel		-30
50			SW		44'-45.5': Same as above 45.5'-46': Orange fine to medium sand 46'-48': Orange brown fine to coarse sand, trace gravel @46.5' 48'-50': Orange brown fine to coarse sand, trace gravel and clay in shoe 50'-52': Orange brown fine to medium sand 52'-54': Same as above with iron staining and a 0.25" clay lens @53' 54'-56': Orange brown fine to medium sand 56'-58': Same as above with tan fine to medium sand in shoe @58'		-40
		tan			58'-58.2': Same as above 58.2'-60': Tan very dense clay		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
		wh/red			60'-62': White and red dense clay		
		gray	CL		62'-64': Shelby tube collected, no lithology logged		-50
					64'-66': pale gray slightly silty clay with orange-brown mottles, 3" thick pale gray fine sand and silt layer @65.5'		
					66'-67': Pale gray slightly silty clay with orange-brown mottles		
					67'-68': Pale gray silty very fine sand, small black mica fragments present		
					68'-70': Pale gray silty very fine sand		
70					70'-72': Pale gray silty very fine sand		
		or-brn	SM		72'-73.5': Pale gray very silty fine sand		-60
					73.5'-74': Dark orange brown fine sand and silt		
					74'-76': Dark orange brown fine sand and silt, iron or manganese layer @74'		
		br-gry			76'-76.5': Same as above		
		gray	SW		76.5'-78': Pale brownish gray fine to medium sand with thin black layers throughout, some clay present @77'		
80					78'-79': Same as above		
					79'-79.5': Pale gray sandy clay		
			CL		79.5'-80': Pale gray medium to coarse sand, clay in tip of spoon		-70
					80'-81': Pale gray clay with orange mottles		
					81'-82': Pale red brown and gray clay		
			SM/SC		82'-82.5': Same as above		
					82.5'-83.5': Pale gray tight clay		
					83.5'-84': Pale gray sandy clay with some silt, heavily mottled		
			SC/SW		84'-86': Pale gray to pale orange brown fine to medium sand with some silt and clay		
90					86'-88': Pale gray fine to medium sand with little clay and trace gravel		
					88'-90': Pale gray fine to medium sand with large gravel, some clayey sand layers		
					92'-94': Pale gray fine to coarse sand and gravel, some silt and clay		-80
			GM/GC		96'-98': Same as above		
100		or-brn	GC		100'-101': Medium orange brown sandy and gravelly clay, petroleum odor present		
		yl-brn	SC		101'-102': No recovery		-90
		brown gray			102'-102.5': Yellow brown sandy clay, petroleum odor		
					102.5'-104': No recovery		
					104'-105': Light and dark brown medium to coarse sandy clay		
					105'-106': Pale to dark gray medium to coarse sandy clay with gravel		
					106'-108': Same as above		
110			GC		108'-109': Gray medium to coarse sandy and gravelly clay		
					109'-110': No recovery		-100
					110'-112': Same as above, strong petroleum odor		
					112'-114': No measurable recovery, however, appears to be same as above		
		yel-brn	SM		114'-115': Gravelly, sandy clay		
					115'-116': No recovery		
					116'-117': Yellow brown fine to medium sand with some silt		
120					117'-118': No recovery		
					118'-119': Yellow brown clayey sand and gravel		
					119'-120': No recovery		
					120'-122': Same as above with slightly more clay		-110
					122'-124': Sample appeared to be disturbed during spooning and removal, appeared to be pale gray sandy gravel		
					126'-128': Minimal recovery, appears to be same as above		
130					130'-132': Minimal recovery, appears to be same as above		-120
			GC		134'-135': Same as above		
					135'-136': No recovery		
140					139'-139.5': Same as above		
					139.5'-141': No recovery		-130
					141'-143': No measurable recovery, appears to be the same as above		
					148'-150': Appears to be same as above		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
			BD		152'-153': Weathered bedrock, based on drilling appears to be 0151' WATER		-140
160							-150
170							-160
180							-170
190							-180
200							-190
210							-200
220							-210
230							-220

TETRA TECH FW, INC.		Elevation: 42.83'
Location: CSX		Completed Depth: 100.00'
Well Id: DW04		Total Depth: 116.00'
Logged By: J. Funk		Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 85.00'
Date(s): 02/01/05 - 03/02/05		
Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS		Inner Casing: type: PVC dia: 2.00in fm: 1.0' to: 85.00'
Drilling Method: MUD ROTARY		Screens: type: Slotted size: 0.020in dia: 2.00in fm: 85.00' to: 100.00'
X Coordinate: 2686120.90		Annular Fill: type: Bentonite Grout fm: 0.00' to: 79.00' type: Bentonite-Pellets fm: 79.00' to: 83.00' type: Sand Pack (generic) fm: 83.00' to: 116.00' type: fm: to:
Y Coordinate: 222536.66		
Remarks: Stiff, cohesive clay confining layer		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
0		or-brn			0'-0.5': Topsoil		
0.5					0.5'-4': Orange brown fine to coarse sand with some gravel, brick fragments at end of sleeve, trace mica		40
4					4'-8': Same as above with concrete and brick debris		
8					8'-12': Same as above		
12		brown	FI		12'-16': Brown silt with fine to coarse sand and gravel fill		30
16					16'-20': Same as above with some clayey silt and mica fragments from 19' to 20'		
20					20'-24': Same as above with 3" of brick debris then clayey silt at bottom of sleeve		20
24					24'-28': Same as above, gray brown clayey silt at bottom of sleeve		
28		or-brn			28'-32': Orange brown silty clay		
32			ML/CL		32'-36': No recovery due to stuck piston in sleeve		10
36		brown			36'-40': Brown fine to coarse sand with gravel, started getting PID readings @37'		
40			GP		40'-42': Brown fine to coarse sand and fine to medium gravel, petroleum odor, Geoprobe refusal @42'		
42			GM		42'-44': Brown silt and fine to coarse sand and gravel with some silt		0
44		black			44'-46': Black stained fill fine to coarse sand and gravel with some silt		
48			GM/GP		48'-50': Gray fine to medium sand with some coarse gravel @49.5'-50'		
50		gray varies			50'-52': Multi-colored fine to coarse sand with some gravel		
52					52'-54': Multi-colored fine to coarse sand and gravel, petroleum odor		-10
54		varies			54'-56': Gray fine to coarse sand with some gravel, petroleum odor		
56			SP		56'-58': Same as above		
58		brn-gr			58'-60': Brown-gray fine to coarse sand and gravel		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
		gray			60'-62': Gray fine to medium sand		
		rd-brn			62'-64': Gray fine to medium sand with a reddish brown silt layer @61.5', reddish brown fine sand in bottom of shoe @62'		-20
					64'-66': Reddish brown fine sand with some clayey silt @65.5 (2" thick), trace mica and iron staining @65.7'		
70			SM		66'-68': Same as above		
					68'-70': Same as above		
					70'-72': Reddish brown fine sand and silt with trace mica		
		gray			72'-73.5': Same as above		-30
		rd-brn	SM/SW		73.5'-74': Gray fine to coarse sand with a 2" clay lens		
		brown			74'-76': Red brown fine sand with a 1" lens of gray		
80			SW		76'-78': Brown fine to medium sand		
					78'-80': Same as above		
					80'-81.5': Same as above		
					81.5'-82': Fine to coarse sand with some gravel		-40
					82'-84': Brown fine to coarse sand with some gravel		
		or-brn			84'-86': Brown fine to coarse sand		
90			SP		86'-88': Orange brown to fine coarse sand and gravel, 1" of red silt stone @87'		
					88'-90': Orange brown fine to coarse sand with trace gravel		
					90'-92': Orange brown fine to coarse sand, heavy gravel layer encountered while drilling through this layer		-50
		tan-wh			95'-97': Tan to white fine to coarse gravel and sand		
		or-tan	GP		96.5'-98': Tan fine to coarse gravel and sand		
100			SC/SP		98'-100': Orange tan fine to coarse sand and clayey silt with some gravel		
			GP		100'-102': Orange grading to tan fine to coarse sand and gravel		
					102'-102.5': Fine sand and clay		-60
					102.5'-104': Orange and tan clay, dark gray sand at contact		
					104'-106': Sample disturbed due to having to push spoon twice, appears to be orange and gray clay		
			CL		106'-106.5': Fine sand and clay, thin lens of brown sand, then gravel		
110					106.5'-108': Tan clay with sand, trace mica fragments		
			BD		110'-112': Orange tan silty clay with mica fragments (weathered bedrock)		-70
					114'-116': Weathered bedrock, black and white micaceous silt#		
120					WATER		-80
130							-90
140							-100

TETRA TECH FW, INC.		Elevation: 48.89'
Location: CSX		Completed Depth: 100.00'
Well Id: DW05		Total Depth: 110.00'
Logged By: J. Funk		Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 77.00'
Date(s): 02/01/05 - 03/11/05		Inner Casing: type: PVC dia: 2.00in fm: 1.0' to: 85.00'
Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS		Screens: type: Slotted size: 0.020in dia: 2.00in fm: 85.00' to: 100.00'
Drilling Method: MUD ROTARY		Annular Fill: type: Bentonite Grout fm: 0.00' to: 81.00' type: Bentonite-Pellets fm: 81.00' to: 83.00' type: Sand Pack (generic) fm: 83.00' to: 110.00' type: fm: to:
X Coordinate: 2686324.66		
Y Coordinate: 223310.49		
Remarks: Stiff, cohesive clay confining layer		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
0		brown			0'-4': 6" topsoil layer over multi-colored fine to coarse sand, gravel and silt, fill		
4					4'-8': Same as above		
8					8'-12': Same as above		
12					12'-15.5': Same as above		
15.5					15.5'-16': Fine to coarse sand and silt, trace mica fragments		
16					16'-20': Fine to coarse sand, gravel and silt fill		
20					20'-24': Same as above		
24					24'-28': Same as above, with large quartzite fragments at top of sleeve		
28					28'-32': Same as above with a 3" clay lens @31', then more fill below		
32					32'-36': Same as above; wet at bottom with dark gray sand and gravel		
36					36'-40': Same as above, dark gray fine to coarse sand and gravel		
40					40'-42': Same as above		
42		gray			42'-44': Gray, very dense clay		
44		varies	CL		44'-48': Multi-colored fine to coarse sand and gravel with some clayey silt, strong petroleum odor at bottom on sleeve		
48			GM/GP		48'-49': Green gray fine to coarse sand and gravel with some clayey silt, strong petroleum odor, Geoprobe refusal @49'		
49		grn-gry	GP		49'-51': Green, fine to coarse sand, trace gravel, some staining @50.5' and 51', petroleum odor		
51		green	SP		51'-53': Multi-colored fine to coarse sand and gravel with some clayey silt		
53		varies			53'-55': Same as above		
55			GM/GP		55'-57': Very little recovery due to rock stuck in shoe, however, appears to be greenish brown fine to coarse sand and gravel		
57					57'-58': Gray brown fine sand and silt		
58		gry-brn			58'-59': Orange brown silty clay		
59		or-brn			59'-61': Orange gray clay		
61		orange	ML/CL				

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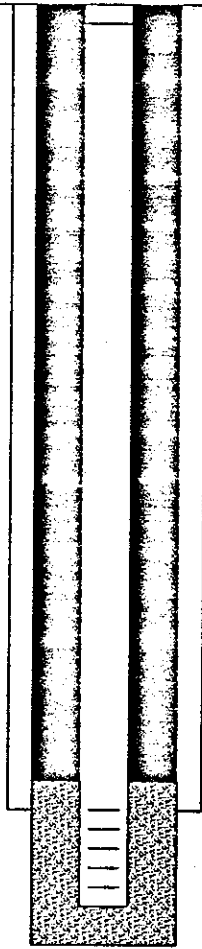
 TETRA TECH FW, INC.	Elevation: 21.86'		
Location: DSCP	Completed Depth: 70.00'		
Well Id: DW06	Total Depth: 154.00'		
Logged By: J. Funk	Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 55.00'		
Date(s): 01/20/05 – 02/10/05			
Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS	Inner Casing: type: PVC dia: 2.00in fm: 1.0' to: 55.00'		
Drilling Method: MUD ROTARY	Screens: type: Slotted size: 0.020in dia: 2.00in fm: 55.00' to: 70.00'		
X Coordinate: 2687605.80			
Y Coordinate: 223121.86	Annular Fill: type: Bentonite Grout fm: 0.00' to: 47.00' type: Bentonite-Pellets fm: 47.00' to: 53.00' type: Sand Pack (generic) fm: 53.00' to: 154.00' type: fm: to:		
Remarks: Stiff, cohesive clay confining layer			

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
0		gry-brn			0'-4': Grayish brown silt, fill		20
4		rd-brn	FI		4'-8': Reddish brown clay with mottles		
8					8'-11': Same as above		
11		red-or			11'-12': Reddish orange silt with fine to medium sand and gravel		10
12		red-brn	ML/CL		12'-14': Orange gray clay		
14		gry-brn			14'-15': Red-brown silt with quartz fragments		
15		varies	ML		15'-16': Red-brown silt with some gravel		
16					16'-17.5': Gray brown clayey silt and sand		
17.5					17.5'-20': Multi-colored silt and fine to coarse sand with well rounded quartz gravel		
20		or-red	SM		20'-24': Orange-red fine to coarse sand and silt, little gravel		0
24		orange	SM/SP		24'-28': Orange fine to coarse sand with well rounded quartz gravel		
28		brown			28'-32': Brown fine to coarse sand, some gravel, trace mica		
32		orange	SW		32'-36': Orange fine to medium sand		-10
36		or-brn			36'-40': Orange brown clay		
40			CL		40'-44': Orange brown clay with trace mica fragments		-20
44					44'-48': Same as above		
48		red-brn	SM		48'-49': Same as above		
49					49'-51.5': Reddish brown fine to medium sand and silt		
51.5					51.5'-52': Reddish brown fine to medium sand and silt, 0.5' clay layer @ 51.25', thin organic layer at bottom of clay, possible lign		-30
52			GP		52'-54': Same as above		
54					54'-55.5': Same as above		
55.5					55.5'-56.5': Medium to coarse sand with some silt		
56.5					56.5'-57.5': Orange brown micaceous silt		
57.5					57.5'-58': Same as above		
58					58'-59': Fine to medium sand and silt, thin (0.25") gravel layer		
59					59'-60': Same as above with more silt		
60					60'-60': Pale grayish brown clayey sand with a 0.1' thick clay layer above		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
60		gy-grn	GM		60'-61': Same as above		-40
61		brown			61'-62': Pale gray-green fine sand and clay with pale gray clay layer above, several small gravel pieces		
62			GM/GC		62'-63': Medium brown fine to medium sand and silt		
63					63'-64': Silty gravel and coarse sand		
64			GM/GC		64'-66': Coarse gravel with sand, silt, and clay		
66					66'-68': Limited recovery, appears to be same as above		
70		pale gry	GP		72'-74': Pale gray sand and gravel		-50
79					79'-81': Same as above		
81					81'-83': Same as above		
83					83'-85': Same as above		-60
85					85'-87': Same as above		
87					87'-89': Same as above		
89					89'-91': Same as above		
91					91'-93': Same as above		-70
93					93'-95': Same as above		
95					95'-97': Same as above		
97			GC/GP		97'-122': No samples collected due to drilling conditions necessitating use of roller bit		-80
100							
102							-90
104							
106			CL		122'-124': Coarse sand and gravel with some white clay and silt		-100
108					124'-126': Same as above		
110					126'-128": Same as above		
112			BD		132'-134': Reddish brown clay with trace mica fragments, then graded back into fine to medium sand and clay, gravel in tip of shoe		-110
114					134'-136': White green clay and mica fragments, weathered bedrock		
116					136'-138': Micaceous clay (weathered bedrock)		
118					138'-140': Same as above		
120					140'-142': Same as above		-120
122					142'-144': Same as above		
124					144'-146': Same as above		
126					146'-148': Same as above		
128					148'-150': Same as above		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
					150'-152': Same as above 152'-154': Same as above# WATER		-130
160							-140
170							-150
180							-160
190							-170
200							-180
210							-190
220							-200
230							-210

TETRA TECH FW, INC.		Elevation: 21.85'	
Location: DSCP		Completed Depth: 47.00'	
Well Id: IW01		Total Depth: 49.00'	
Logged By: J. Funk		Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 42.00'	
Date(s): / / - 02/11/05		Inner Casing: type: PVC dia: 2.00in fm: 1.0' to: 42.00'	
Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS		Screens: type: Slotted size: 0.020in dia: 2.00in fm: 42.00' to: 47.00'	
Drilling Method: MUD ROTARY		Annular Fill: type: Bentonite Grout fm: 0.00' to: 36.00' type: Bentonite-Pellets fm: 36.00' to: 40.50' type: Sand Pack (generic) fm: 40.50' to: 49.00' type: fm: to:	
X Coordinate: 2686539.47			
Y Coordinate: 222709.11			
Remarks: Stiff, cohesive clay confining layer			

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
10					See DW01 for boring information.		20
20							0
30							-10
40							-20
50							-30



TETRA TECH FW, INC.

Elevation: 18.08'

Location: DSCP

Completed Depth: 50.00'

Well Id: IW02

Total Depth: 51.50'

Logged By: J. Funk

Outer Casing:

type: STEEL dia: 6.00in fm: 0.00' to: 21.00'

Date(s): / / - 04/04/05

Inner Casing:

type: PVC dia: 2.00in fm: 1.0' to: 35.00'

Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS

Drilling Method: MUD ROTARY

Screens:

type: Slotted size: 0.020in dia: 2.00in fm: 35.00' to: 50.00'

X Coordinate: 2686781.21

Y Coordinate: 220910.78

Remarks:

Stiff, cohesive clay confining layer

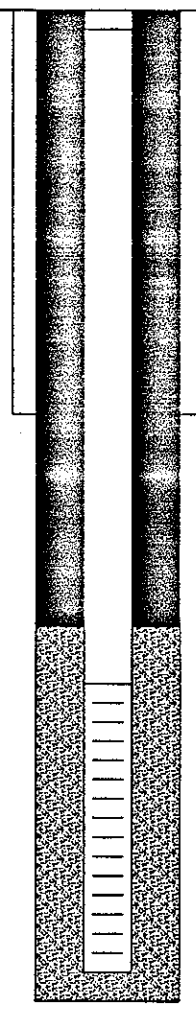
Annular Fill:

type: Bentonite Grout fm: 0.00' to: 29.00'

type: Bentonite-Pellets fm: 29.00' to: 32.00'

type: Sand Pack (generic) fm: 32.00' to: 51.50'

type: fm: to:

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
0					See DW02 for boring information.		20
10							10
20							0
30							-10
40							-20
50							-30

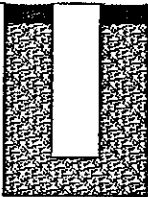
TETRA TECH FW, INC.		Elevation: 12.45'
Location: Passyunk Homes		Completed Depth: 57.00'
Well Id: IW03		Total Depth: 58.00'
Logged By: J. Funk		Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 38.00'
Date(s): / / - 02/11/05		Inner Casing: type: PVC dia: 2.00in fm: 1.0' to: 42.00'
Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS		Screens: type: Slotted size: 0.020in dia: 2.00in fm: 42.00' to: 57.00'
Drilling Method: MUD ROTARY		Annular Fill: type: Bentonite Grout fm: 0.00' to: 36.00' type: Bentonite-Pellets fm: 36.00' to: 40.00' type: Sand Pack (generic) fm: 40.00' to: 57.00' type: fm: to:
X Coordinate: 2687505.29		
Y Coordinate: 220885.97		
Remarks: Stiff, cohesive clay confining layer		

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
10					See DW03 for boring information.		10
20							0
30							-10
40							-20
50							-30
							-40

TETRA TECH FW, INC.		Elevation: 48.94'	
Location: IW05		Completed Depth: 68.00'	
Well Id: IW05		Total Depth: 85.00'	
Logged By: J. Funk		Outer Casing: type: STEEL dia: 6.00in fm: 0.00' to: 38.00'	
Date(s): / / - 03/11/05		Inner Casing: type: PVC dia: 2.00in fm: 0.0' to: 42.00'	
Drilling Subcontractor: CHESAPEAKE GEOSYSTEMS		Screens: type: Slotted size: 0.020in dia: 2.00in fm: 42.00to: 57.00'	
Drilling Method: MUD ROTARY		Annular Fill: type: Bentonite Grout fm: 0.00' to: 58.00' type: Bentonite-Pellets fm: 58.00' to: 61.00' type: Sand Pack (generic) fm: 61.00' to: 70.00' type: fm: to:	
X Coordinate: 2686325.63			
Y Coordinate: 223316.34			
Remarks: Stiff, cohesive clay confining layer			

Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
10					See DW05 for boring information.		40
20							30
30							20
40							10
50							0
							-10

H:\GISPRO\IDS\ey\geo\logs\IW05.dwg, 6/30/2005 2:10:02 PM

TETRA TECH FW, INC.					Well Id: IW05		
Depth (ft)	Recovery %	Color	USCS Code	Graphic Log	Material Description	Well Construction	Elevation (ft)
70							-20
80							-30
90							-40
100							-50
110							-60
120							-70
130							-80
140							-90
							-100

APPENDIX B
Laboratory Data Packages

ANALYTICAL RESULTS SUMMARY

PROJECT NAME: DSCP New Wells

**TETRA TECH EC INC..
2300 LINCOLN HIGHWAY EAST
ONE OXFORD VALLEY, SUITE 200
LANGHORNE, PA 19047-
215-702-4086**

**CHEMTECH PROJECT NO.
ATTENTION:**

**T2310
Mike Heffron**

Summary Sheet
SW-846

SDG No.: T2310

Order ID: T2310

Client: Tetra Tech EC Inc..

Project ID: FOST01

Sample ID	Client ID	Matrix	Parameter	Concentration	C	RDL	MDL	Units
Client ID:	DW-40405							
T2310-03	DW-40405	WATER	Methyl tert-butyl Ether	13		1.0	0.22	ug/L
T2310-03	DW-40405	WATER	Chloroform	1.6		1.0	0.16	ug/L
			Total VOC's:	14.60				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	14.60				
Client ID:	DW-50405							
T2310-05	DW-50405	WATER	Methyl tert-butyl Ether	45	E	1.0	0.22	ug/L
T2310-05	DW-50405	WATER	Chloroform	0.59	J	1.0	0.16	ug/L
			Total VOC's:	45.59				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	45.59				
Client ID:	DW-50405DL							
T2310-05DL	DW-50405DL	WATER	Methyl tert-butyl Ether	49	D	5.0	1.1	ug/L
			Total VOC's:	49.00				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	49.00				
Client ID:	DW-60405							
T2310-01	DW-60405	WATER	Methyl tert-butyl Ether	0.70	J	1.0	0.22	ug/L
T2310-01	DW-60405	WATER	Trichloroethene	0.53	J	1.0	0.12	ug/L
T2310-01	DW-60405	WATER	Tetrachloroethene	1.5		1.0	0.12	ug/L
			Total VOC's:	2.73				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	2.73				
Client ID:	IW-50405							
T2310-06	IW-50405	WATER	Methyl tert-butyl Ether	34		1.0	0.22	ug/L
T2310-06	IW-50405	WATER	Chloroform	0.55	J	1.0	0.16	ug/L
T2310-06	IW-50405	WATER	Benzene	160	E	1.0	0.15	ug/L
T2310-06	IW-50405	WATER	Ethyl Benzene	0.73	J	1.0	0.11	ug/L
T2310-06	IW-50405	WATER	m&p-Xylenes	1.2		1.0	0.24	ug/L
			Total VOC's:	196.48				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	196.48				
Client ID:	IW-50405DL							
T2310-06DL	IW-50405DL	WATER	Methyl tert-butyl Ether	22	D	10	2.2	ug/L
T2310-06DL	IW-50405DL	WATER	Benzene	110	D	10	1.5	ug/L
			Total VOC's:	132.00				
			Total TIC's:	0.00				
			Total VOC's and TIC's:	132.00				

Note: The asterisk "*" flag next to a parameter signifies a TIC parameter.

Summary Sheet
SW-846

SDG No.: T2310

Order ID: T2310

Client: Tetra Tech EC Inc..

Project ID: FOST01

Sample ID	Client ID	Matrix	Parameter	Concentration	C	RDL	MDL	Units
Client ID:	CSX-MW-50405							
T2310-07	CSX-MW-50405	WATER	Benzene	700	E	1.0	0.15	ug/L
T2310-07	CSX-MW-50405	WATER	Toluene	18		1.0	0.11	ug/L
T2310-07	CSX-MW-50405	WATER	Ethyl Benzene	42	E	1.0	0.11	ug/L
T2310-07	CSX-MW-50405	WATER	m&p-Xylenes	98	E	1.0	0.24	ug/L
T2310-07	CSX-MW-50405	WATER	o-Xylene	3.5		1.0	0.13	ug/L
Total VOC's:				861.50				
Total TIC's:				0.00				
Total VOC's and TIC's:				861.50				
Client ID:	CSX-MW-50405DL							
T2310-07DL	CSX-MW-50405DL	WATER	Benzene	1800	ED	10	1.5	ug/L
T2310-07DL	CSX-MW-50405DL	WATER	Toluene	16	D	10	1.1	ug/L
T2310-07DL	CSX-MW-50405DL	WATER	Ethyl Benzene	41	D	10	1.1	ug/L
T2310-07DL	CSX-MW-50405DL	WATER	m&p-Xylenes	140	D	10	2.4	ug/L
Total VOC's:				1997.00				
Total TIC's:				0.00				
Total VOC's and TIC's:				1997.00				
Client ID:	CSX-MW-50405DL2							
T2310-07DL2	CSX-MW-50405DL2	WATER	Benzene	2000	D	100	15	ug/L
T2310-07DL2	CSX-MW-50405DL2	WATER	m&p-Xylenes	59	JD	100	24	ug/L
Total VOC's:				2059.00				
Total TIC's:				0.00				
Total VOC's and TIC's:				2059.00				
Client ID:	CSX-MW-70405							
T2310-04	CSX-MW-70405	WATER	Benzene	20		1.0	0.15	ug/L
T2310-04	CSX-MW-70405	WATER	Toluene	0.80	J	1.0	0.11	ug/L
T2310-04	CSX-MW-70405	WATER	Ethyl Benzene	4.3		1.0	0.11	ug/L
T2310-04	CSX-MW-70405	WATER	m&p-Xylenes	3.6		1.0	0.24	ug/L
Total VOC's:				28.70				
Total TIC's:				0.00				
Total VOC's and TIC's:				28.70				
Client ID:	CSX-MW-70405RE							
T2310-04RE	CSX-MW-70405RE	WATER	Benzene	20		1.0	0.15	ug/L
T2310-04RE	CSX-MW-70405RE	WATER	Toluene	0.82	J	1.0	0.11	ug/L
T2310-04RE	CSX-MW-70405RE	WATER	Ethyl Benzene	4.2		1.0	0.11	ug/L
T2310-04RE	CSX-MW-70405RE	WATER	m&p-Xylenes	3.4		1.0	0.24	ug/L
Total VOC's:				28.42				
Total TIC's:				0.00				
Total VOC's and TIC's:				28.42				

Note: The asterisk "*" flag next to a parameter signifies a TIC parameter.

Chemtech Consulting Group

Hit Summary Sheet SW-846

SDG No.: T2310

Client: Tetra Tech EC Inc..

Order ID: T2310

Project ID: DSCP New Wells

Sample ID	Client ID	Matrix	Parameter	Concentration	C	RDL	MDL	Units
Client ID:	CSX-MW-50405							
T2310-07	CSX-MW-50405	WATER	Iron	31700		100	27.0	ug/L
T2310-07	CSX-MW-50405	WATER	Manganese	496		15.0	0.106	ug/L
Client ID:	CSX-MW-50405F							
T2310-14	CSX-MW-50405F	WATER	Iron	24600		100	27.0	ug/L
T2310-14	CSX-MW-50405F	WATER	Manganese	400		15.0	0.106	ug/L
Client ID:	CSX-MW-70405							
T2310-04	CSX-MW-70405	WATER	Iron	13600		100	27.0	ug/L
T2310-04	CSX-MW-70405	WATER	Manganese	944		15.0	0.106	ug/L
Client ID:	CSX-MW-70405F							
T2310-11	CSX-MW-70405F	WATER	Iron	12600		100	27.0	ug/L
T2310-11	CSX-MW-70405F	WATER	Manganese	908		15.0	0.106	ug/L
Client ID:	DW-40405							
T2310-03	DW-40405	WATER	Iron	12400		100	27.0	ug/L
T2310-03	DW-40405	WATER	Manganese	4790		15.0	0.106	ug/L
Client ID:	DW-40405F							
T2310-10	DW-40405F	WATER	Iron	14500		100	27.0	ug/L
T2310-10	DW-40405F	WATER	Manganese	5520		15.0	0.106	ug/L
Client ID:	DW-50405							
T2310-05	DW-50405	WATER	Iron	245		100	27.0	ug/L
T2310-05	DW-50405	WATER	Manganese	7970		15.0	0.106	ug/L
Client ID:	DW-50405F							
T2310-12	DW-50405F	WATER	Iron	296		100	27.0	ug/L
T2310-12	DW-50405F	WATER	Manganese	7650		15.0	0.106	ug/L
Client ID:	DW-60405							
T2310-01	DW-60405	WATER	Iron	710		100	27.0	ug/L
T2310-01	DW-60405	WATER	Manganese	3820		15.0	0.106	ug/L
Client ID:	DW-60405F							
T2310-08	DW-60405F	WATER	Iron	602		100	27.0	ug/L
T2310-08	DW-60405F	WATER	Manganese	3240		15.0	0.106	ug/L
Client ID:	IW-50405							
T2310-06	IW-50405	WATER	Iron	1500		100	27.0	ug/L
T2310-06	IW-50405	WATER	Manganese	3540		15.0	0.106	ug/L
Client ID:	IW-50405F							
T2310-13	IW-50405F	WATER	Iron	600		100	27.0	ug/L
T2310-13	IW-50405F	WATER	Manganese	3690		15.0	0.106	ug/L

Hit Summary Sheet
SW-846

SDG No.: T2310

Client: Tetra Tech EC Inc..

Order ID: T2310

Project ID: DSCP New Wells

Sample ID	Client ID	Matrix	Parameter	Concentration	C	RDL	MDL	Units
Client ID:	MW-2B0405							
T2310-02	MW-2B0405	WATER	Iron	8090		100	27.0	ug/L
T2310-02	MW-2B0405	WATER	Manganese	619		15.0	0.106	ug/L
Client ID:	MW-2B0405F							
T2310-09	MW-2B0405F	WATER	Iron	6860		100	27.0	ug/L
T2310-09	MW-2B0405F	WATER	Manganese	623		15.0	0.106	ug/L

**DATA PACKAGE FOR
VOLATILE ORGANICS
METALS
GENERAL CHEMISTRY**

PROJECT NAME: DSCP New Wells

**TETRA TECH EC INC..
2300 LINCOLN HIGHWAY EAST
ONE OXFORD VALLEY, SUITE 200
LANGHORNE, PA 19047-
215-702-4086**

**CHEMTECH PROJECT NO.
ATTENTION:**

**T2310
Mike Heffron**

CHEMTECH

284 Sheffield Street, Mountainside 07092
Tel: 908-789-8900 Fax: 908-789-8922

COVER PAGE

COVER PAGE**OrderID:** T2310**ProjectID:** DSCP New Wells
CustomerName: Tetra Tech EC Inc..

LAB SAMPLE NO.	CLIENT SAMPLE NO
T2310-01	DW-60405
T2310-02	MW-2B0405
T2310-03	DW-40405
T2310-04	CSX-MW-70405
T2310-05	DW-50405
T2310-06	IW-50405
T2310-07	CSX-MW-50405
T2310-08	DW-60405F
T2310-09	MW-2B0405F
T2310-10	DW-40405F
T2310-11	CSX-MW-70405F
T2310-12	DW-50405F
T2310-13	IW-50405F
T2310-14	CSX-MW-50405F
T2310-15	TB041105

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature

Signature: [Signature] Name: Supa Dusey
Date: 4/29/05 Title: CH/EC

CHEMTECH

QA/QC DELIVERABLES CHECKLIST

Project Number: 52310

THIS FORM HAS BEEN COMPLETED BY CHEMTECH LABORATORY AND ACCOMPANIES ALL DATA DELIVERABLES PACKAGES.

The following laboratory deliverables are included in this analytical report. Any deviations from the accepted methodology and procedures, or performance values outside acceptable ranges are summarized in the Non-Conformance Summary.

	Yes	NA
I. Report Cover Page, Laboratory Certification and Field Sample to Lab Sample ID Cross Reference	☒	
II. Table of Contents	☒	
III. Chain of Custody Documents	☒	
IV. Methodology Summaries	☒	
V. Laboratory Chronicle and Hold Time Checks	☒	
VI. Non-Conformance Summary	☒	
VII. Tabulated Analytical Results	☒	
VIII. Initial and Continuing Calibration Information	☒	
IX. Tune and Internal Standard Area Summaries (GC/MS)	☒	
X. Quality Control Summary Reports	☒	
XI. Surrogate Recovery Summary	☒	
XII. Raw Data Chromatogram, Blank, Samples and QC when applicable	☒	
XIII. Subcontract Data		☒

Carole Collins
QA/QC Data Reviewer

4/29/05
Date

☐ 110 Route 4
Englewood, NJ 07631
Phone: 201.568.7400 Fax: 201.567.3231

☒ 284 Sheffield Street
Mountainside, NJ 07092
Tel 908.789.8900 Fax: 908.789.8922

NYSDOH Certification No. 10624

NYSDOH Certification No. 11376
NJDEP Certification No. 20012

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CHEMTECH

284 Sheffield Street, Mountainside 07092
Tel: 908-789-8900 Fax: 908-789-8922

**CHAIN OF
CUSTODY
RECORD**

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Morristown, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. 02310

COC Number 051494

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: TTEC
ADDRESS: 2300 Lincoln Hwy East, One Oak Valley Sub. Dr.
CITY: Langhorne STATE: PA ZIP: 19047
ATTENTION: Mike Heffron
PHONE: 215-702-4015 FAX: 215-702-4045

CLIENT PROJECT INFORMATION

PROJECT NAME: DSCP
PROJECT NO.: 2277 LOCATION: Phila.
PROJECT MANAGER: Mike Heffron
e-mail:
PHONE: 215-702-4015 FAX: 215-702-4045

CLIENT BILLING INFORMATION

BILL TO: J. FREEMAN PO#:
ADDRESS: TTEC
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD FORMAT _____

VOCs
Total 204 Iron + Manganese
Dissolved Iron + Manganese
TDS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		A/B	B/E	B/E	-E						
1.	DW-6 0405	H2O		X	4-11-05	0930	6	X	X	X	X						
2.	MW-2B 0405					1025											
3.	DW-4 0405					1150											
4.	CSX-MW-7 0405					1245											
5.	DW-5 0405					1505											
6.	IW-5 0405					1540											
7.	CSX-MW-5 0405					1620											
8.	TB 041105	AQ		X	4-7-05	-	3	X									
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. <i>[Signature]</i>	DATE/TIME: 4-12-05/10:00	RECEIVED BY: 1. <i>[Signature]</i>	Conditions of bottles or coolers at receipt: ☒ Compliant ☐ Non Compliant	Cooler Temp. _____
RELINQUISHED BY: 2. <i>[Signature]</i>	DATE/TIME: 4-12-05	RECEIVED BY: 2. <i>[Signature]</i>	MeOH extraction requires an additional 4 oz jar for percent solid.	Ice in Cooler?: <i>YES</i>
RELINQUISHED BY: 3. <i>[Signature]</i>	DATE/TIME: 4-12-05	RECEIVED FOR LAB BY: 3. <i>[Signature]</i>	Filtered metals designated with "F" / Only analy. for Iron + Manganese (metals)	

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☒ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☒ YES ☐ NO

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Morristown, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.

2310

COC Number

051548

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: TREC
ADDRESS: ONE OXFORD VALLEY SUITE 200
CITY: LANCASTER STATE: PA ZIP: 17604
ATTENTION: M. HEFFERN
PHONE: 215 702 4015 FAX: 215 702 4015

CLIENT PROJECT INFORMATION

PROJECT NAME: DSCP
PROJECT NO.: 2277 LOCATION: Phila PA
PROJECT MANAGER: M. HEFFERN
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: S. FROSTEN PO#:
ADDRESS: LANCASTER PA
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS*
HARD COPY: _____ DAYS*
EDD: _____ DAYS*

* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD FORMAT _____

NOTE: FIELD FILTERED
DESIGNATE BY "F" ON BOTTLE

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS ← Specify Preservatives A-HCl B-HNO ₃ C-H ₂ SO ₄ D-NaOH E-ICE F-Other		
			COMP	GRAB	DATE	TIME		B/E	1	2	3	4	5	6	7	8		9	
1.	DW 6 0405 F	↓			4-11-05	930	2	X			X								JUST COC
2.	MW 2B 0405 F	↓				1025	2	X											AMENDED-
3.	DW 40405 F	↓				1150	2	X											TO COC SENT
4.	CSX MW 7 0405 F	↓				1245	2	X											ON 4-12-05
5.	DW 5 0405 F	↓				1505	2	X											
6.	MW 5 0405 F	↓				1540	2	X											
7.	CSX MW 5 0405 F	↓				1620	2	X											
8.																			
9.																			
10.																			

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Conditions of bottles or coolers at receipt:	Compliant	Non Compliant	Cooler Temp.:
1. [Signature]	4-12-05	1. [Signature]	MeOH extraction requires an additional 4 oz jar for percent solid.			
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	Comments:	Ice in Cooler?:		
2. [Signature]		2. [Signature]	This COC for SAMPLES PICKED UP 4-12-05 - SAMPLES			
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:	SHIPPED VIA: CLIENT:	HAND DELIVERED	OVERNIGHT	Shipment Complete:
3. [Signature]	4/14/05 5:00	3. [Signature]	CHEMTECH: PICKED UP	OVERNIGHT		YES NO

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following "Results Qualifiers" are used:

Value	
	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.

CHEMTECH

234 Sheffield Street Mountainside NJ 07092
Tel 908-789-8900 Fax 908-789-8922

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following "Results Qualifiers" are used:

- J If the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
- U If the analyte was analyzed for, but not detected.
- E The reported value is estimated because of the presence of interference
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- S The reported value was determined by the Method of Standard Addition (MSA).
- W Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while absorbance is less than 50% of spike absorbance.
- * Duplicate analysis not within control limits.
- + Correlation coefficient for the MSA is less than 0.995.
- *** Entering "S", "W" or "+" is mutually exclusive. NO combination of these qualifiers can appear in the same field for an analyte.
- D The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
- M Method qualifiers
 - "P" for ICP instrument
 - "A" for Flame AA
 - "PM" for ICP when Microwave Digestion is used
 - "AM" for flame AA when Microwave Digestion is used
 - "FM" for furnace AA when Microwave Digestion is used
 - "CV" for Manual Cold Vapor AA
 - "AV" for automated Cold Vapor AA
 - "CA" for MIDI-Distillation Spectrophotometric
 - "AS" for Semi-Automated Spectrophotometric
 - "C" for Manual Spectrophotometric
 - "T" for Titrimetric
 - "NR" for analyte not required to be analyzed

QA REVIEW GENERAL DOCUMENTATION

Project #: T2310

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page)

Check chain-of-custody for proper relinquish/return of samples

Is the chain of custody signed and complete

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

Collect information for each project id from server. Were all requirements followed

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody and on login page

Do lab numbers and client Ids on cover page agree with the Chain of Custody

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

Do requested analyses on Chain of Custody agree with the log-in page

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

Were the samples received within hold time

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

Non - Conformance /Comments:

1st Level QA Review Signature: Carole Collins Date: 4/29/05

2nd Level QA Review Signature: Krupa Dubey Date: 4/29/05

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Tel: 908-789-8900 Fax: 908-789-8922

**METHODOLOGY
REVIEW
&
LABORATORY
CHRONICLE**

CHEMTECH

Lab Chronicle

Order ID:
Client:
Contact:

T2310
Tetra Tech EC Inc.,
Mike Heffron

Order Date:
Project:

4/12/2005 6:26:33 PM
DSCP New Wells

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnalDate	Received
T2310-01	DW-60405	WATER	VOCMS Group2	8260-Low	04/11/05		04/14/05	04/12/05
T2310-02	MW-2B0405	WATER	VOCMS Group2	8260-Low	04/11/05		04/14/05	04/12/05
T2310-03	DW-40405	WATER	VOCMS Group2	8260-Low	04/11/05		04/14/05	04/12/05
T2310-04	CSX-MW-70405	WATER	VOCMS Group2	8260-Low	04/11/05		04/14/05	04/12/05
T2310-04RE	CSX-MW-70405RE	WATER	VOCMS Group2	8260-Low	04/11/05		04/15/05	04/12/05
T2310-05	DW-50405	WATER	VOCMS Group2	8260-Low	04/11/05		04/16/05	04/12/05
T2310-05DL	DW-50405DL	WATER	VOCMS Group2	8260-Low	04/11/05		04/15/05	04/12/05
T2310-06	IW-50405	WATER	VOCMS Group2	8260-Low	04/11/05		04/15/05	04/12/05
T2310-06DL	IW-50405DL	WATER	VOCMS Group2	8260-Low	04/11/05		04/15/05	04/12/05
T2310-07	CSX-MW-50405	WATER	VOCMS Group2	8260-Low	04/11/05		04/15/05	04/12/05
T2310-07DL	CSX-MW-50405DL	WATER	VOCMS Group2	8260-Low	04/11/05		04/15/05	04/12/05
T2310-07DL2	CSX-MW-50405DL2	WATER	VOCMS Group2	8260-Low	04/11/05		04/16/05	04/12/05
T2310-15	TB041105	WATER	VOCMS Group2	8260-Low	04/11/05		04/15/05	04/12/05
			VOCMS Group2	8260	04/07/05		04/14/05	

CHEMTECH

Lab Chronicle

Order ID:
Client:
Contact:

T2310
Tetra Tech EC Inc.,
Mike Heffron

Order Date:
Project:

4/12/2005 6:26:33 PM
DSCP New Wells

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnalDate	Received
T2310-01	DW-60405	WATER			04/11/05			04/12/05
			Metals Group3	6010		04/14/05	04/15/05	
T2310-02	MW-2B0405	WATER			04/11/05			04/12/05
			Metals Group3	6010		04/14/05	04/15/05	
T2310-03	DW-40405	WATER			04/11/05			04/12/05
			Metals Group3	6010		04/14/05	04/15/05	
T2310-04	CSX-MW-70405	WATER			04/11/05			04/12/05
			Metals Group3	6010		04/14/05	04/15/05	
T2310-05	DW-50405	WATER			04/11/05			04/12/05
			Metals Group3	6010		04/14/05	04/15/05	
T2310-06	IW-50405	WATER			04/11/05			04/12/05
			Metals Group3	6010		04/14/05	04/15/05	
T2310-07	CSX-MW-50405	WATER			04/11/05			04/12/05
			Metals Group3	6010		04/14/05	04/15/05	
T2310-08	DW-60405F	WATER			04/11/05			04/12/05
			Dissolved ICP-TAL Metals	6010		04/14/05	04/15/05	
T2310-09	MW-2B0405F	WATER			04/11/05			04/12/05
			Dissolved ICP-TAL Metals	6010		04/14/05	04/15/05	
T2310-10	DW-40405F	WATER			04/11/05			04/12/05
			Dissolved ICP-TAL Metals	6010		04/14/05	04/15/05	
T2310-11	CSX-MW-70405F	WATER			04/11/05			04/12/05
			Dissolved ICP-TAL Metals	6010		04/14/05	04/15/05	

T2310-12 DW-50405F	WATER		04/11/05		04/12/05
		Dissolved ICP-TAL Metals 6010		04/14/05 04/15/05	
T2310-13 IW-50405F	WATER		04/11/05		04/12/05
		Dissolved ICP-TAL Metals 6010		04/14/05 04/15/05	
T2310-14 CSX-MW-50405F	WATER		04/11/05		04/12/05
		Dissolved ICP-TAL Metals 6010		04/14/05 04/15/05	

CHEMTECH

Lab Chronicle

Order ID:
Client:
Contact:

T2310
Tetra Tech EC Inc.,
Mike Heffron

Order Date: 4/12/2005 6:26:33 PM
Project: DSCP New Wells

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnalDate	Received
T2310-01	DW-60405	WATER			04/11/05			04/12/05
			TDS	160.1		04/17/05	04/17/05	
T2310-02	MW-2B0405	WATER			04/11/05			04/12/05
			TDS	160.1		04/17/05	04/17/05	
T2310-03	DW-40405	WATER			04/11/05			04/12/05
			TDS	160.1		04/17/05	04/17/05	
T2310-04	CSX-MW-70405	WATER			04/11/05			04/12/05
			TDS	160.1		04/17/05	04/17/05	
T2310-05	DW-50405	WATER			04/11/05			04/12/05
			TDS	160.1		04/17/05	04/17/05	
T2310-06	IW-50405	WATER			04/11/05			04/12/05
			TDS	160.1		04/17/05	04/17/05	
T2310-07	CSX-MW-50405	WATER			04/11/05			04/12/05
			TDS	160.1		04/17/05	04/17/05	

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Tel: 908-789-8900 Fax: 908-789-8922

**CONFORMANCE/
NON-
CONFORMANCE
SUMMARY**

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: T2310

MATRIX: Water

METHOD: 8260

- | | NA | NO | YES |
|--|----|----|-----|
| 1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks) | | | ✓ |
| 2. GC/MS Tuning Specifications
BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY
ASP CLP, CLP AND NJ) | | | ✓ |
| 3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for
8000 Series. | | | ✓ |
| 4. GC/MS Calibration - Initial Calibration performed before sample analysis and
continuing calibration performed within 24 hours of sample analysis for 600 series and
12 hours for 8000 series. | | | ✓ |
| 5. GC/MS Calibration Requirements. | | | ✓ |
| a. Calibration Check Compounds for 8260 and CLP. | | | ✓ |
| b. System Performance Check Compounds for 8260 and CLP | | | ✓ |

8260 CALIBRATION CRITERIA

<u>SPCC Compounds</u>	<u>MIN RF</u>	<u>CCC Compounds</u>
Chloromethane	0.1	1,1-Dichloroethene
1,1-Dichloroethane	0.1	Chloroform
Bromoform	0.1	1,2-Dichloropropane
Chlorobenzene	0.3	Toluene
1,1,2,2-Tetrachloroethane	0.3	Ethylbenzene
Vinyl chloride		

For CCC compounds Initial Calibration Criteria – RSD less than or equal to 30%
For CCC compounds Continuing Calibration Criteria - %D less than or equal to 20%

- | | |
|---|---|
| 6. Blank Contamination - If yes, list compounds and concentrations in each blank: | ✓ |
| 7. Surrogate Recoveries Meet Criteria | ✓ |
- If not met, list those compounds and their recoveries which fall outside the acceptable ranges.

The Surrogate recoveries met the acceptable criteria except for CSX-MW-70405,
CSX-MW-70405RE and IW-50405

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria ✓

If not met, list those compounds and their recoveries which fall outside the acceptable range.

Blank Spike provided

9. Internal Standard Area/Retention Time Shift Meet Criteria ✓

Comments:

10. Analysis Holding Time Met ✓

If not met, list number of days exceeded for each sample:

ADDITIONAL COMMENTS:

Carole Collins
QA REVIEW

4/25/05
Date

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: T2310

MATRIX: Water

METHOD: 6010

- | | NA | NO | YES |
|--|----|----|-----|
| 1. Calibration Summary met criteria. | | | ✓ |
| 2. ICP Interference Check Sample Results Summary Submitted. | | | ✓ |
| 3. Serial Dilution Summary (if applicable) Submitted. | | | ✓ |
| 4. Laboratory Control Sample Summary (if applicable) Submitted. | | | ✓ |
| 5. Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 6. Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria
If not met, list those compounds and their recoveries which fall outside the acceptable range. | | | ✓ |
| 7. Sample Duplicate Analysis Met QC Criteria
If not met, list those compounds and their recoveries which fall outside the acceptable range. | | | ✓ |
| 8. Digestion Holding Time Met
If not met, list number of days exceeded for each sample: | | | ✓ |
| 9. Analysis Holding Time Met
If not met, list those compounds and their recoveries which fall outside the acceptable range. | | | ✓ |

ADDITIONAL COMMENTS:

Carole Collins
QA REVIEW

4/29/05
Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: T2310

MATRIX: Water

METHOD: 160.1

- | | NA | NO | YES |
|--|----|----|-----|
| 1. Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 2. Matrix Spike Duplicate Recoveries Met Criteria | | | ✓ |
| If not met, list those compounds and their recoveries which fall outside the acceptable range. | | | |
| 3. Sample Duplicate Analysis Met QC Criteria | | | ✓ |
| If not met, list those compounds and their recoveries which fall outside the acceptable range. | | | |
| 8. Digestion Holding Time Met | | ✓ | |
| If not met, list number of days exceeded for each sample: | | | |

ADDITIONAL COMMENTS:

Carole Collins
QA REVIEW

4/29/05
Date

CHEMTECH



Volatile Organic Data

CHEMTECH



Analytical Results Summary

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	DW-60405	SDG No.:	T2310
Lab Sample ID:	T2310-01	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041425.D	1	4/14/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.70	J	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.53	J	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	1.5		1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	DW-60405	SDG No.:	T2310
Lab Sample ID:	T2310-01	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041425.D	1	4/14/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	9.98	100 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.14	101 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.68	107 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	10.82	108 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	487656	4.59
540-36-3	1,4-Difluorobenzene	878007	5.32
3114-55-4	Chlorobenzene-d5	843827	8.54
3855-82-1	1,4-Dichlorobenzene-d4	380697	10.68

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	MW-2B0405	SDG No.:	T2310
Lab Sample ID:	T2310-02	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041426.D	1	4/14/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/05**Project:** DSCP New Wells**Date Received:** 4/12/05**Client Sample ID:** MW-2B0405**SDG No.:** T2310**Lab Sample ID:** T2310-02**Matrix:** WATER**Analytical Method:** 8260-LOW**% Moisture:** 100**Sample Wt/Wol:** 25.0 Units: mL**Soil Extract Vol:** uL**Soil Aliquot Vol:** uL**File ID:****Dilution:****Date Analyzed****Analytical Batch ID**

VG041426.D

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CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	10.57	106 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.15	102 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	9.97	100 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	10.64	106 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	482905	4.59		
540-36-3	1,4-Difluorobenzene	912915	5.31		
3114-55-4	Chlorobenzene-d5	861742	8.53		
3855-82-1	1,4-Dichlorobenzene-d4	380153	10.68		

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	DW-40405	SDG No.:	T2310
Lab Sample ID:	T2310-03	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041427.D	1	4/14/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	13		1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	1.6		1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L

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Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	DW-40405	SDG No.:	T2310
Lab Sample ID:	T2310-03	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041427.D	1	4/14/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	9.13	91 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	9.15	92 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.24	102 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	10.76	108 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	472840	4.60
540-36-3	1,4-Difluorobenzene	843667	5.32
3114-55-4	Chlorobenzene-d5	811092	8.53
3855-82-1	1,4-Dichlorobenzene-d4	382898	10.68

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N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	CSX-MW-70405	SDG No.:	T2310
Lab Sample ID:	T2310-04	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041428.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	20		1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.80	J	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	4.3		1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	3.6		1.0	0.24	ug/L

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E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	CSX-MW-70405	SDG No.:	T2310
Lab Sample ID:	T2310-04	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041428.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	11.71	117 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.02	100 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.67	107 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	13.49	135 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	420419	4.59	
540-36-3	1,4-Difluorobenzene	737263	5.31	
3114-55-4	Chlorobenzene-d5	720172	8.54	
3855-82-1	1,4-Dichlorobenzene-d4	357118	10.68	

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N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc.	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	DW-50405	SDG No.:	T2310
Lab Sample ID:	T2310-05	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041429.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	45	E	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.59	J	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L

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RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	DW-50405	SDG No.:	T2310
Lab Sample ID:	T2310-05	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041429.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	9.19	92 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	9.55	96 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	9.93	99 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	10.34	103 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	504025	4.59
540-36-3	1,4-Difluorobenzene	910305	5.31
3114-55-4	Chlorobenzene-d5	864742	8.53
3855-82-1	1,4-Dichlorobenzene-d4	400706	10.68

U = Not Detected
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MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis

Client: Tetra Tech EC Inc..

Date Collected: 4/11/05

Project: DSCP New Wells

Date Received: 4/12/05

Client Sample ID: DW-50405DL

SDG No.: T2310

Lab Sample ID: T2310-05DL

Matrix: WATER

Analytical Method: 8260-LOW

% Moisture: 100

Sample Wt/Wol: 25.0 Units: mL

Soil Extract Vol: uL

Soil Aliquot Vol: uL

File ID: VG041524.D

Dilution: 5

Date Analyzed

4/15/05

Analytical Batch ID

VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
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TARGETS

74-87-3	Chloromethane	0.40	UD	5.0	0.40	ug/L
75-01-4	Vinyl chloride	0.42	UD	5.0	0.42	ug/L
74-83-9	Bromomethane	0.88	UD	5.0	0.88	ug/L
75-00-3	Chloroethane	2.3	UD	5.0	2.3	ug/L
75-35-4	1,1-Dichloroethene	0.94	UD	5.0	0.94	ug/L
67-64-1	Acetone	7.9	UD	25	7.9	ug/L
75-15-0	Carbon disulfide	0.55	UD	5.0	0.55	ug/L
1634-04-4	Methyl tert-butyl Ether	49	D	5.0	1.1	ug/L
75-09-2	Methylene Chloride	2.1	UD	5.0	2.1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	UD	5.0	0.50	ug/L
75-34-3	1,1-Dichloroethane	0.84	UD	5.0	0.84	ug/L
78-93-3	2-Butanone	1.2	UD	25	1.2	ug/L
56-23-5	Carbon Tetrachloride	0.78	UD	5.0	0.78	ug/L
156-59-2	cis-1,2-Dichloroethene	0.46	UD	5.0	0.46	ug/L
67-66-3	Chloroform	0.80	UD	5.0	0.80	ug/L
71-55-6	1,1,1-Trichloroethane	0.81	UD	5.0	0.81	ug/L
71-43-2	Benzene	0.74	UD	5.0	0.74	ug/L
107-06-2	1,2-Dichloroethane	0.64	UD	5.0	0.64	ug/L
79-01-6	Trichloroethene	0.58	UD	5.0	0.58	ug/L
78-87-5	1,2-Dichloropropane	0.76	UD	5.0	0.76	ug/L
75-27-4	Bromodichloromethane	0.68	UD	5.0	0.68	ug/L
108-10-1	4-Methyl-2-Pentanone	2.3	UD	25	2.3	ug/L
108-88-3	Toluene	0.54	UD	5.0	0.54	ug/L
10061-02-6	t-1,3-Dichloropropene	0.48	UD	5.0	0.48	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.60	UD	5.0	0.60	ug/L
79-00-5	1,1,2-Trichloroethane	0.56	UD	5.0	0.56	ug/L
591-78-6	2-Hexanone	2.9	UD	25	2.9	ug/L
124-48-1	Dibromochloromethane	0.65	UD	5.0	0.65	ug/L
127-18-4	Tetrachloroethene	0.61	UD	5.0	0.61	ug/L
108-90-7	Chlorobenzene	0.55	UD	5.0	0.55	ug/L
100-41-4	Ethyl Benzene	0.57	UD	5.0	0.57	ug/L
126777-61-2	m&p-Xylenes	1.2	UD	5.0	1.2	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/05**Project:** DSCP New Wells**Date Received:** 4/12/05**Client Sample ID:** DW-50405DL**SDG No.:** T2310**Lab Sample ID:** T2310-05DL**Matrix:** WATER**Analytical Method:** 8260-LOW**% Moisture:** 100**Sample Wt/Wol:** 25.0 Units: mL**Soil Extract Vol:** uL**Soil Aliquot Vol:** uL**File ID:** VG041524.D**Dilution:** 5**Date Analyzed**

4/15/05

Analytical Batch ID

VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.65	UD	5.0	0.65	ug/L
100-42-5	Styrene	0.56	UD	5.0	0.56	ug/L
75-25-2	Bromoform	0.47	UD	5.0	0.47	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.46	UD	5.0	0.46	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	10.1	101 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	9.52	95 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.08	101 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	11.33	113 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	544008	4.58		
540-36-3	1,4-Difluorobenzene	956142	5.30		
3114-55-4	Chlorobenzene-d5	934667	8.53		
3855-82-1	1,4-Dichlorobenzene-d4	437472	10.66		

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N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	IW-50405	SDG No.:	T2310
Lab Sample ID:	T2310-06	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041430.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	34		1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.55	J	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	160	E	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.73	J	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	1.2		1.0	0.24	ug/L

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MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	IW-50405	SDG No.:	T2310
Lab Sample ID:	T2310-06	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041430.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	11.79	118 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	10.59	106 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.83	108 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	12.05	121 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	471513	4.59			
540-36-3	1,4-Difluorobenzene	771665	5.30			
3114-55-4	Chlorobenzene-d5	806384	8.53			
3855-82-1	1,4-Dichlorobenzene-d4	377518	10.67			

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MDL = Method Detection Limit
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J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/05**Project:** DSCP New Wells**Date Received:** 4/12/05**Client Sample ID:** IW-50405DL**SDG No.:** T2310**Lab Sample ID:** T2310-06DL**Matrix:** WATER**Analytical Method:** 8260-LOW**% Moisture:** 100**Sample Wt/Wol:** 25.0 Units: mL**Soil Extract Vol:** uL**Soil Aliquot Vol:** uL**File ID:****Dilution:****Date Analyzed****Analytical Batch ID**

VG041526.D

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4/15/05

VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.80	UD	10	0.80	ug/L
75-01-4	Vinyl chloride	0.85	UD	10	0.85	ug/L
74-83-9	Bromomethane	1.8	UD	10	1.8	ug/L
75-00-3	Chloroethane	4.6	UD	10	4.6	ug/L
75-35-4	1,1-Dichloroethene	1.9	UD	10	1.9	ug/L
67-64-1	Acetone	16	UD	50	16	ug/L
75-15-0	Carbon disulfide	1.1	UD	10	1.1	ug/L
1634-04-4	Methyl tert-butyl Ether	22	D	10	2.2	ug/L
75-09-2	Methylene Chloride	4.2	UD	10	4.2	ug/L
156-60-5	trans-1,2-Dichloroethene	0.99	UD	10	0.99	ug/L
75-34-3	1,1-Dichloroethane	1.7	UD	10	1.7	ug/L
78-93-3	2-Butanone	2.3	UD	50	2.3	ug/L
56-23-5	Carbon Tetrachloride	1.6	UD	10	1.6	ug/L
156-59-2	cis-1,2-Dichloroethene	0.92	UD	10	0.92	ug/L
67-66-3	Chloroform	1.6	UD	10	1.6	ug/L
71-55-6	1,1,1-Trichloroethane	1.6	UD	10	1.6	ug/L
71-43-2	Benzene	110	D	10	1.5	ug/L
107-06-2	1,2-Dichloroethane	1.3	UD	10	1.3	ug/L
79-01-6	Trichloroethene	1.2	UD	10	1.2	ug/L
78-87-5	1,2-Dichloropropane	1.5	UD	10	1.5	ug/L
75-27-4	Bromodichloromethane	1.4	UD	10	1.4	ug/L
108-10-1	4-Methyl-2-Pentanone	4.6	UD	50	4.6	ug/L
108-88-3	Toluene	1.1	UD	10	1.1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.96	UD	10	0.96	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.2	UD	10	1.2	ug/L
79-00-5	1,1,2-Trichloroethane	1.1	UD	10	1.1	ug/L
591-78-6	2-Hexanone	5.8	UD	50	5.8	ug/L
124-48-1	Dibromochloromethane	1.3	UD	10	1.3	ug/L
127-18-4	Tetrachloroethene	1.2	UD	10	1.2	ug/L
108-90-7	Chlorobenzene	1.1	UD	10	1.1	ug/L
100-41-4	Ethyl Benzene	1.1	UD	10	1.1	ug/L
126777-61-2	m&p-Xylenes	2.4	UD	10	2.4	ug/L

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E = Value Exceeds Calibration Range

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N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	IW-50405DL	SDG No.:	T2310
Lab Sample ID:	T2310-06DL	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041526.D	10	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	1.3	UD	10	1.3	ug/L
100-42-5	Styrene	1.1	UD	10	1.1	ug/L
75-25-2	Bromoform	0.94	UD	10	0.94	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.93	UD	10	0.93	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	10.74	107 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.21	102 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.36	104 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	10.67	107 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	479349	4.56
540-36-3	1,4-Difluorobenzene	914400	5.28
3114-55-4	Chlorobenzene-d5	884219	8.52
3855-82-1	1,4-Dichlorobenzene-d4	397619	10.66

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Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	CSX-MW-50405	SDG No.:	T2310
Lab Sample ID:	T2310-07	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041431.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	700	E	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	18		1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	42	E	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	98	E	1.0	0.24	ug/L

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/05**Project:** DSCP New Wells**Date Received:** 4/12/05**Client Sample ID:** CSX-MW-50405**SDG No.:** T2310**Lab Sample ID:** T2310-07**Matrix:** WATER**Analytical Method:** 8260-LOW**% Moisture:** 100**Sample Wt/Wol:** 25.0 Units: mL**Soil Extract Vol:** uL**Soil Aliquot Vol:** uL**File ID:****Dilution:****Date Analyzed****Analytical Batch ID**

VG041431.D

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VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	3.5		1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	9.27	93 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.14	101 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.98	110 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	11	110 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	385662	4.58
540-36-3	1,4-Difluorobenzene	623517	5.30
3114-55-4	Chlorobenzene-d5	626888	8.53
3855-82-1	1,4-Dichlorobenzene-d4	250650	10.68

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	CSX-MW-50405DL	SDG No.:	T2310
Lab Sample ID:	T2310-07DL	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041533.D	10	4/16/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.80	UD	10	0.80	ug/L
75-01-4	Vinyl chloride	0.85	UD	10	0.85	ug/L
74-83-9	Bromomethane	1.8	UD	10	1.8	ug/L
75-00-3	Chloroethane	4.6	UD	10	4.6	ug/L
75-35-4	1,1-Dichloroethene	1.9	UD	10	1.9	ug/L
67-64-1	Acetone	16	UD	50	16	ug/L
75-15-0	Carbon disulfide	1.1	UD	10	1.1	ug/L
1634-04-4	Methyl tert-butyl Ether	2.2	UD	10	2.2	ug/L
75-09-2	Methylene Chloride	4.2	UD	10	4.2	ug/L
156-60-5	trans-1,2-Dichloroethene	0.99	UD	10	0.99	ug/L
75-34-3	1,1-Dichloroethane	1.7	UD	10	1.7	ug/L
78-93-3	2-Butanone	2.3	UD	50	2.3	ug/L
56-23-5	Carbon Tetrachloride	1.6	UD	10	1.6	ug/L
156-59-2	cis-1,2-Dichloroethene	0.92	UD	10	0.92	ug/L
67-66-3	Chloroform	1.6	UD	10	1.6	ug/L
71-55-6	1,1,1-Trichloroethane	1.6	UD	10	1.6	ug/L
71-43-2	Benzene	1800	ED	10	1.5	ug/L
107-06-2	1,2-Dichloroethane	1.3	UD	10	1.3	ug/L
79-01-6	Trichloroethene	1.2	UD	10	1.2	ug/L
78-87-5	1,2-Dichloropropane	1.5	UD	10	1.5	ug/L
75-27-4	Bromodichloromethane	1.4	UD	10	1.4	ug/L
108-10-1	4-Methyl-2-Pentanone	4.6	UD	50	4.6	ug/L
108-88-3	Toluene	16	D	10	1.1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.96	UD	10	0.96	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.2	UD	10	1.2	ug/L
79-00-5	1,1,2-Trichloroethane	1.1	UD	10	1.1	ug/L
591-78-6	2-Hexanone	5.8	UD	50	5.8	ug/L
124-48-1	Dibromochloromethane	1.3	UD	10	1.3	ug/L
127-18-4	Tetrachloroethene	1.2	UD	10	1.2	ug/L
108-90-7	Chlorobenzene	1.1	UD	10	1.1	ug/L
100-41-4	Ethyl Benzene	41	D	10	1.1	ug/L
126777-61-2	m&p-Xylenes	140	D	10	2.4	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	CSX-MW-50405DL	SDG No.:	T2310
Lab Sample ID:	T2310-07DL	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041533.D	10	4/16/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	1.3	UD	10	1.3	ug/L
100-42-5	Styrene	1.1	UD	10	1.1	ug/L
75-25-2	Bromoform	0.94	UD	10	0.94	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.93	UD	10	0.93	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	9.51	95 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.81	108 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.51	105 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	11.76	118 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	477829	4.57
540-36-3	1,4-Difluorobenzene	810684	5.28
3114-55-4	Chlorobenzene-d5	840270	8.52
3855-82-1	1,4-Dichlorobenzene-d4	389394	10.66

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	CSX-MW-50405DL2	SDG No.:	T2310
Lab Sample ID:	T2310-07DL2	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041525.D	100	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	8.0	UD	100	8.0	ug/L
75-01-4	Vinyl chloride	8.5	UD	100	8.5	ug/L
74-83-9	Bromomethane	18	UD	100	18	ug/L
75-00-3	Chloroethane	46	UD	100	46	ug/L
75-35-4	1,1-Dichloroethene	19	UD	100	19	ug/L
67-64-1	Acetone	160	UD	500	160	ug/L
75-15-0	Carbon disulfide	11	UD	100	11	ug/L
1634-04-4	Methyl tert-butyl Ether	22	UD	100	22	ug/L
75-09-2	Methylene Chloride	42	UD	100	42	ug/L
156-60-5	trans-1,2-Dichloroethene	9.9	UD	100	9.9	ug/L
75-34-3	1,1-Dichloroethane	17	UD	100	17	ug/L
78-93-3	2-Butanone	23	UD	500	23	ug/L
56-23-5	Carbon Tetrachloride	16	UD	100	16	ug/L
156-59-2	cis-1,2-Dichloroethene	9.2	UD	100	9.2	ug/L
67-66-3	Chloroform	16	UD	100	16	ug/L
71-55-6	1,1,1-Trichloroethane	16	UD	100	16	ug/L
71-43-2	Benzene	2000	D	100	15	ug/L
107-06-2	1,2-Dichloroethane	13	UD	100	13	ug/L
79-01-6	Trichloroethene	12	UD	100	12	ug/L
78-87-5	1,2-Dichloropropane	15	UD	100	15	ug/L
75-27-4	Bromodichloromethane	14	UD	100	14	ug/L
108-10-1	4-Methyl-2-Pentanone	46	UD	500	46	ug/L
108-88-3	Toluene	11	UD	100	11	ug/L
10061-02-6	t-1,3-Dichloropropene	9.6	UD	100	9.6	ug/L
10061-01-5	cis-1,3-Dichloropropene	12	UD	100	12	ug/L
79-00-5	1,1,2-Trichloroethane	11	UD	100	11	ug/L
591-78-6	2-Hexanone	58	UD	500	58	ug/L
124-48-1	Dibromochloromethane	13	UD	100	13	ug/L
127-18-4	Tetrachloroethene	12	UD	100	12	ug/L
108-90-7	Chlorobenzene	11	UD	100	11	ug/L
100-41-4	Ethyl Benzene	11	UD	100	11	ug/L
126777-61-2	m&p-Xylenes	59	JD	100	24	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/05
Project:	DSCP New Wells	Date Received:	4/12/05
Client Sample ID:	CSX-MW-50405DL2	SDG No.:	T2310
Lab Sample ID:	T2310-07DL2	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041525.D	100	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	13	UD	100	13	ug/L
100-42-5	Styrene	11	UD	100	11	ug/L
75-25-2	Bromoform	9.4	UD	100	9.4	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	9.3	UD	100	9.3	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	10.7	107 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.27	103 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.32	103 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	10.87	109 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	482132	4.55		
540-36-3	1,4-Difluorobenzene	915838	5.28		
3114-55-4	Chlorobenzene-d5	876051	8.52		
3855-82-1	1,4-Dichlorobenzene-d4	401156	10.67		

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/7/05**Project:** DSCP New Wells**Date Received:** 4/12/05**Client Sample ID:** TB041105**SDG No.:** T2310**Lab Sample ID:** T2310-15**Matrix:** WATER**Analytical Method:** 8260-LOW**% Moisture:** 100**Sample Wt/Wol:** 25.0 Units: mL**Soil Extract Vol:** uL**Soil Aliquot Vol:** uL**File ID:**
VG041423.D**Dilution:**
1**Date Analyzed**
4/14/05**Analytical Batch ID**
VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/7/05**Project:** DSCP New Wells**Date Received:** 4/12/05**Client Sample ID:** TB041105**SDG No.:** T2310**Lab Sample ID:** T2310-15**Matrix:** WATER**Analytical Method:** 8260-LOW**% Moisture:** 100**Sample Wt/Wol:** 25.0 Units: mL**Soil Extract Vol:** uL**Soil Aliquot Vol:** uL**File ID:**
VG041423.D**Dilution:**
1**Date Analyzed**
4/14/05**Analytical Batch ID**
VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	10.91	109 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	10.3	103 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.38	104 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.64	106 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	499865	4.59			
540-36-3	1,4-Difluorobenzene	944087	5.31			
3114-55-4	Chlorobenzene-d5	888909	8.55			
3855-82-1	1,4-Dichlorobenzene-d4	394407	10.69			

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

CHEMTECH



Tunning Results Summary

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Chemtech

Contract: FOST01

Code: CTECH

Case No.: T2310

SAS No.: T2310

SDG NO.: T2310

Lab File ID: VG040711.D

BFB Injection Date: 4/7/05

Instrument ID: MSVOAG

BFB Injection Time: 17:07

GC Column: RTX624 ID: 0.18 (mm)

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.5
75	30.0 - 60.0% of mass 95	43.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.3 (0.5) 1
174	50.0 - 100.0% of mass 95	60.2
175	5.0 - 9.0% of mass 174	4.5 (7.5) 1
176	95.0 - 101.0% of mass 174	59.5 (98.8) 1
177	5.0 - 9.0% of mass 176	4.0 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD001	1 PPB ICC	VG040712.D	4/7/05	17:48
VSTD004	4 PPB ICC	VG040713.D	4/7/05	18:29
VSTD010	10 PPB ICC	VG040714.D	4/7/05	19:10
VSTD020	20 PPB ICC	VG040715.D	4/7/05	19:51
VSTD040	40 PPB ICC	VG040716.D	4/7/05	20:32

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Chemtech

Contract: POST01

Code: CTECH

Case No.: T2310

SAS No.: T2310

SDG NO.: T2310

Lab File ID: VG041401.D

BFB Injection Date: 4/14/05

Instrument ID: MSVOAG

BFB Injection Time: 06:07

GC Column: RTX624 ID: 0.18 (mm)

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.3
75	30.0 - 60.0% of mass 95	42.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.2 (0.3) 1
174	50.0 - 100.0% of mass 95	74.2
175	5.0 - 9.0% of mass 174	5.4 (7.3) 1
176	95.0 - 101.0% of mass 174	71.3 (96.1) 1
177	5.0 - 9.0% of mass 176	4.9 (6.8) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	10 PPB CCC	VG041402.D	4/14/05	06:48
VBLK01	VBG0414W2	VG041404.D	4/14/05	08:09
VLCS01	BSG0414W1	VG041417.D	4/14/05	17:01
VLCS02	BSG0414W2	VG041418.D	4/14/05	17:43

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Chemtech

Contract: POST01

Lab Code: CTECH

Case No.: T2310

SAS No.: T2310

SDG NO.: T2310

Lab File ID: VG041419.D

BFB Injection Date: 4/14/05

Instrument ID: MSVOAG

BFB Injection Time: 18:24

GC Column: RTX624 ID: 0.18 (mm)

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.4
75	30.0 - 60.0% of mass 95	42.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.3 (0.5) 1
174	50.0 - 100.0% of mass 95	71.0
175	5.0 - 9.0% of mass 174	5.2 (7.4) 1
176	95.0 - 101.0% of mass 174	68.7 (96.8) 1
177	5.0 - 9.0% of mass 176	4.7 (6.8) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	10 PPB CCC	VG041420.D	4/14/05	19:05
VBLK02	VBG0414W4	VG041422.D	4/14/05	20:27
TB041105	T2310-15	VG041423.D	4/14/05	21:08
DW-60405	T2310-01	VG041425.D	4/14/05	22:30
MW-2B0405	T2310-02	VG041426.D	4/14/05	23:11
DW-40405	T2310-03	VG041427.D	4/14/05	23:52
CSX-MW-70405	T2310-04	VG041428.D	4/15/05	00:33
DW-50405	T2310-05	VG041429.D	4/15/05	01:14
IW-50405	T2310-06	VG041430.D	4/15/05	01:55
CSX-MW-50405	T2310-07	VG041431.D	4/15/05	02:35

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Chemtech

Contract: POST01

Lab Code: CTECH

Case No.: T2310

SAS No.: T2310

SDG NO.: T2310

Lab File ID: VG041519.D

BFB Injection Date: 4/15/05

Instrument ID: MSVOAG

BFB Injection Time: 18:58

GC Column: RTX624 ID: 0.18 (mm)

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.6
75	30.0 - 60.0% of mass 95	46.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.3 (0.6) 1
174	50.0 - 100.0% of mass 95	53.9
175	5.0 - 9.0% of mass 174	4.1 (7.7) 1
176	95.0 - 101.0% of mass 174	53.2 (98.7) 1
177	5.0 - 9.0% of mass 176	3.7 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	10 PPB CCC	VG041520.D	4/15/05	19:39
VBLK03	VBG0415W4	VG041522.D	4/15/05	21:01
DW-50405DL	T2310-05DL	VG041524.D	4/15/05	22:23
CSX-MW-50405DL2	T2310-07DL2	VG041525.D	4/15/05	23:04
IW-50405DL	T2310-06DL	VG041526.D	4/15/05	23:44
CSX-MW-70405RE	T2310-04RE	VG041531.D	4/16/05	03:09
CSX-MW-50405DL	T2310-07DL	VG041533.D	4/16/05	04:30

CHEMTECH



Method Blank Summary

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: Chemtech

Contract: POST01

Lab Code: CTECH Case No.: T2310

SAS No.: T2310

SDG NO.: T2310

Lab File ID: VG041404.D

Lab Sample ID: VBG0414W2

Date Analyzed: 4/14/05

Time Analyzed: 08:09

GC Column: RTX624 ID: 0.18 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOAG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
VLCS01	BSG0414W1	VG041417.D	17:01
VLCS02	BSG0414W2	VG041418.D	17:43

COMMENTS:

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	
Project:	DSCP New Wells	Date Received:	
Client Sample ID:	VBLK01	SDG No.:	T2310
Lab Sample ID:	VBG0414W2	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041404.D	1	4/14/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	
Project:	DSCP New Wells	Date Received:	
Client Sample ID:	VBK01	SDG No.:	T2310
Lab Sample ID:	VBG0414W2	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041404.D	1	4/14/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	9.38	94 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.12	101 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.68	107 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	10.6	106 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	632136	4.60
540-36-3	1,4-Difluorobenzene	1076686	5.32
3114-55-4	Chlorobenzene-d5	1041964	8.55
3855-82-1	1,4-Dichlorobenzene-d4	464578	10.69

U = Not Detected
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MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: Chemtech

Contract: POST01

Lab Code: CTECH Case No.: T2310

SAS No.: T2310 SDG NO.: T2310

Lab File ID: VG041422.D

Lab Sample ID: VBG0414W4

Date Analyzed: 4/14/05

Time Analyzed: 20:27

GC Column: RTX624 ID: 0.18 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOAG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
TB041105	T2310-15	VG041423.D	21:08
DW-60405	T2310-01	VG041425.D	22:30
MW-2B0405	T2310-02	VG041426.D	23:11
DW-40405	T2310-03	VG041427.D	23:52
CSX-MW-70405	T2310-04	VG041428.D	00:33
DW-50405	T2310-05	VG041429.D	01:14
IW-50405	T2310-06	VG041430.D	01:55
CSX-MW-50405	T2310-07	VG041431.D	02:35

COMMENTS:

Report of Analysis

Client:	Tetra Tech EC Inc.	Date Collected:	
Project:	DSCP New Wells	Date Received:	
Client Sample ID:	VBLK02	SDG No.:	T2310
Lab Sample ID:	VBG0414W4	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041422.D	1	4/14/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Project:** DSCP New Wells**Client Sample ID:** VBLK02**Lab Sample ID:** VBG0414W4**Analytical Method:** 8260-LOW**Sample Wt/Wol:** 25.0 Units: mL**Soil Aliquot Vol:** uL**Date Collected:****Date Received:****SDG No.:** T2310**Matrix:** WATER**% Moisture:** 100**Soil Extract Vol:** uL**File ID:****Dilution:****Date Analyzed****Analytical Batch ID**

VG041422.D

1

4/14/05

VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	10.97	110 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	10.15	102 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.37	104 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.4	104 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	516152	4.58			
540-36-3	1,4-Difluorobenzene	962985	5.31			
3114-55-4	Chlorobenzene-d5	913116	8.54			
3855-82-1	1,4-Dichlorobenzene-d4	392721	10.68			

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VELK03

Lab Name: Chemtech

Contract: FOST01

Lab Code: CTECH Case No.: T2310

SAS No.: T2310 SDG NO.: T2310

Lab File ID: VG041522.D

Lab Sample ID: VBG0415W4

Date Analyzed: 4/15/05

Time Analyzed: 21:01

GC Column: RTX624 ID: 0.18 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOAG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
DW-50405DL	T2310-05DL	VG041524.D	22:23
CSX-MW-50405DL2	T2310-07DL2	VG041525.D	23:04
IW-50405DL	T2310-06DL	VG041526.D	23:44
CSX-MW-70405RE	T2310-04RE	VG041531.D	03:09
CSX-MW-50405DL	T2310-07DL	VG041533.D	04:30

COMMENTS:

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	
Project:	DSCP New Wells	Date Received:	
Client Sample ID:	VLK03	SDG No.:	T2310
Lab Sample ID:	VBG0415W4	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041522.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	
Project:	DSCP New Wells	Date Received:	
Client Sample ID:	VBLK03	SDG No.:	T2310
Lab Sample ID:	VBG0415W4	Matrix:	WATER
Analytical Method:	8260-LOW	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG041522.D	1	4/15/05	VG040705

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	10.33	103 %	72 - 119	SPK: 10
1868-53-7	Dibromofluoromethane	10.1	101 %	85 - 115	SPK: 10
2037-26-5	Toluene-d8	10.4	104 %	81 - 120	SPK: 10
460-00-4	4-Bromofluorobenzene	10.78	108 %	76 - 119	SPK: 10

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	512373	4.56
540-36-3	1,4-Difluorobenzene	964132	5.29
3114-55-4	Chlorobenzene-d5	929553	8.53
3855-82-1	1,4-Dichlorobenzene-d4	416623	10.67

U = Not Detected
RL = Reporting Limit
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E = Value Exceeds Calibration Range

J = Estimated Value
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N = Presumptive Evidence of a Compound

CHEMTECH



Calibration Summary

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Chemtech Contract: POST01
 Lab Code: CTECH Case No.: T2310 SAS No.: T2310 SDG No.: T2310
 Instrument ID: MSVOAG Calibration Date(s): 4/7/05 4/7/05
 Heated Purge: (Y/N) N Calibration Time(s): 17:48 20:32
 GC Column: RTX624 ID: 0.18 (mm)

LAB FILE ID:

RRF001 = VG040712.D

RRF004 = VG040713.D

RRF010 = VG040714.D

RRF020 = VG040715.D

RRF040 = VG040716.D

COMPOUND	RRF001	RRF004	RRF010	RRF020	RRF040	RRF	% RSD
Chloromethane *	0.625	0.713	0.727	0.710	0.777	0.710	7.7
Vinyl Chloride *	0.563	0.706	0.721	0.714	0.753	0.691	10.7
Bromomethane	0.542	0.565	0.549	0.485	0.330	0.494	19.6
Chloroethane	0.293	0.368	0.352	0.310	0.260	0.317	13.8
1,1-Dichloroethene *	0.289	0.311	0.317	0.303	0.330	0.310	4.9
Acetone	0.052	0.046	0.048	0.049	0.057	0.050	8.6
Carbon Disulfide	1.044	1.167	1.007	0.915	0.859	0.998	12.0
Methyl tert-butyl Ether	0.675	0.622	0.592	0.521	0.465	0.575	14.4
Methylene Chloride	0.443	0.559	0.503	0.471	0.431	0.481	10.7
trans-1,2-Dichloroethen	0.518	0.569	0.594	0.519	0.471	0.534	9.0
1,1-Dichloroethane *	0.907	1.131	1.061	0.972	0.899	0.994	10.1
2-Butanone	0.092	0.118	0.134	0.164	0.178	0.137	25.3
Carbon Tetrachloride *	0.320	0.353	0.350	0.329	0.331	0.337	4.2
cis-1,2-Dichloroethene	0.588	0.705	0.723	0.702	0.681	0.680	7.9
Chloroform *	0.865	1.102	1.088	1.030	1.011	1.019	9.3
1,1,1-Trichloroethane *	0.571	0.690	0.659	0.605	0.591	0.623	8.0
Benzene *	1.116	1.381	1.401	1.294	1.293	1.297	8.7
1,2-Dichloroethane *	0.221	0.286	0.274	0.274	0.274	0.266	9.6
Trichloroethene *	0.304	0.425	0.430	0.418	0.445	0.404	14.1
1,2-Dichloropropane *	0.304	0.344	0.361	0.335	0.336	0.336	6.2
Bromodichloromethane *	0.342	0.462	0.491	0.450	0.457	0.440	13.0
4-Methyl-2-Pentanone	0.131	0.127	0.143	0.148	0.149	0.140	7.2
Toluene *	0.687	0.870	0.877	0.830	0.845	0.822	9.5
t-1,3-Dichloropropene *	0.251	0.378	0.397	0.383	0.393	0.360	17.1
cis-1,3-Dichloropropene *	0.378	0.502	0.511	0.508	0.522	0.484	12.4
1,1,2-Trichloroethane *	0.167	0.217	0.225	0.221	0.226	0.211	11.8
2-Hexanone	0.080	0.089	0.110	0.124	0.124	0.105	19.2
Dibromochloromethane *	0.184	0.252	0.273	0.268	0.284	0.252	15.8
Tetrachloroethene *	0.396	0.508	0.541	0.565	0.575	0.517	14.0
Chlorobenzene *	1.037	1.147	1.104	1.037	1.074	1.080	4.3
Ethyl Benzene *	0.492	0.576	0.547	0.521	0.507	0.529	6.3
m&p-Xylenes	0.596	0.720	0.683	0.627	0.595	0.644	8.6
o-Xylene *	0.553	0.683	0.648	0.607	0.608	0.620	7.9
Styrene *	0.965	1.213	1.149	1.078	1.072	1.095	8.5
Bromoform *	0.104	0.147	0.156	0.165	0.175	0.149	18.4
1,1,2,2-Tetrachloroetha *	0.514	0.576	0.580	0.576	0.560	0.561	4.9
1,2-Dichloroethane-d4	0.399	0.406	0.401	0.364	0.353	0.385	6.3

* Compounds with required minimum RRF and maximum %RSD values.
 All other compounds must meet a minimum RRF of 0.010.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Chemtech Contract: POST01
 Lab Code: CTECH Case No.: T2310 SAS No.: T2310 SDG No.: T2310
 Instrument ID: MSVOAG Calibration Date(s): 4/7/05 4/7/05
 Heated Purge: (Y/N) N Calibration Time(s): 17:48 20:32
 GC Column: RTX624 ID: 0.18 (mm)

LAB FILE ID:							
RRF001 = VG040712.D				RRF004 = VG040713.D			
RRF010 = VG040714.D				RRF020 = VG040715.D			
				RRF040 = VG040716.D			
COMPOUND	RRF001	RRF004	RRF010	RRF020	RRF040	RRF	% RSD
Dibromofluoromethane	0.320	0.323	0.320	0.321	0.324	0.322	0.6
Toluene-d8	1.135	1.124	1.137	1.123	1.163	1.136	1.4
4-Bromofluorobenzene *	0.403	0.420	0.418	0.411	0.417	0.414	1.7

* Compounds with required minimum RRF and maximum %RSD values.
 All other compounds must meet a minimum RRF of 0.010.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech Contract: POST01

Lab Code: CTECH Case No.: T2310 SAS No.: T2310 SDG No.: T2310

Instrument ID: MSVOAG Calibration Date/Time: 4/14/05 06:48

Lab File ID: VG041402.D Init. Calib. Date(s): 4/7/05 4/7/05

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:48 20:32

GC Column: RTX624 ID: 0.18 (mm)

COMPOUND	RRF	RRF10	MIN RRF	%D	MAX%D
Chloromethane	0.710	0.648	0.100	8.7	
Vinyl Chloride	0.691	0.704		1.9	20.0
Bromomethane	0.494	0.473		4.3	
Chloroethane	0.317	0.342		7.9	
1,1-Dichloroethene	0.310	0.344		11.0	20.0
Acetone	0.050	0.065		30.0	
Carbon Disulfide	0.998	0.996		0.2	
Methyl tert-butyl Ether	0.575	0.505		12.2	
Methylene Chloride	0.481	0.509		5.8	
trans-1,2-Dichloroethene	0.534	0.587		9.9	
1,1-Dichloroethane	0.994	1.085	0.100	9.2	
2-Butanone	0.137	0.162		18.2	
Carbon Tetrachloride	0.337	0.335		0.6	
cis-1,2-Dichloroethene	0.680	0.741		9.0	
Chloroform	1.019	1.139		11.8	20.0
1,1,1-Trichloroethane	0.623	0.675		8.3	
Benzene	1.297	1.374		5.9	
1,2-Dichloroethane	0.266	0.262		1.5	
Trichloroethene	0.404	0.497		23.0	
1,2-Dichloropropane	0.336	0.331		1.5	20.0
Bromodichloromethane	0.440	0.443		0.7	
4-Methyl-2-Pentanone	0.140	0.121		13.6	
Toluene	0.822	0.892		8.5	20.0
t-1,3-Dichloropropene	0.360	0.332		7.8	
cis-1,3-Dichloropropene	0.484	0.439		9.3	
1,1,2-Trichloroethane	0.211	0.214		1.4	
2-Hexanone	0.105	0.087		17.1	
Dibromochloromethane	0.252	0.276		9.5	
Tetrachloroethene	0.517	0.614		18.8	
Chlorobenzene	1.080	1.036	0.300	4.1	
Ethyl Benzene	0.529	0.509		3.8	20.0
m&p-Xylenes	0.644	0.652		1.2	
o-Xylene	0.620	0.618		0.3	
Styrene	1.095	1.021		6.8	
Bromoform	0.149	0.143	0.100	4.0	
1,1,2,2-Tetrachloroethane	0.561	0.434	0.300	22.6	
1,2-Dichloroethane-d4	0.385	0.392		1.8	
Dibromofluoromethane	0.322	0.321		0.3	
Toluene-d8	1.136	1.109		2.4	
4-Bromofluorobenzene	0.414	0.416		0.5	

VOLATILE CONTINUING CALIBRATION CHECK

All other compounds must meet a minimum RRF of 0.010.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech Contract: POST01

Lab Code: CTECH Case No.: T2310 SAS No.: T2310 SDG No.: T2310

Instrument ID: MSVOAG Calibration Date/Time: 4/14/05 19:05

Lab File ID: VG041420.D Init. Calib. Date(s): 4/7/05 4/7/05

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:48 20:32

GC Column: RTX624 ID: 0.18 (mm)

COMPOUND	RRF	RRF10	MIN RRF	%D	MAX%D
Chloromethane	0.710	0.718	0.100	1.1	
Vinyl Chloride	0.691	0.765		10.7	20.0
Bromomethane	0.494	0.528		6.9	
Chloroethane	0.317	0.348		9.8	
1,1-Dichloroethene	0.310	0.349		12.6	20.0
Acetone	0.050	0.077		54.0	
Carbon Disulfide	0.998	0.950		4.8	
Methyl tert-butyl Ether	0.575	0.606		5.4	
Methylene Chloride	0.481	0.569		18.3	
trans-1,2-Dichloroethene	0.534	0.607		13.7	
1,1-Dichloroethane	0.994	1.214	0.100	22.1	
2-Butanone	0.137	0.205		49.6	
Carbon Tetrachloride	0.337	0.360		6.8	
cis-1,2-Dichloroethene	0.680	0.830		22.1	
Chloroform	1.019	1.201		17.9	20.0
1,1,1-Trichloroethane	0.623	0.741		18.9	
Benzene	1.297	1.437		10.8	
1,2-Dichloroethane	0.266	0.295		10.9	
Trichloroethene	0.404	0.441		9.2	
1,2-Dichloropropane	0.336	0.368		9.5	20.0
Bromodichloromethane	0.440	0.484		10.0	
4-Methyl-2-Pentanone	0.140	0.139		0.7	
Toluene	0.822	0.907		10.3	20.0
t-1,3-Dichloropropene	0.360	0.407		13.1	
cis-1,3-Dichloropropene	0.484	0.556		14.9	
1,1,2-Trichloroethane	0.211	0.244		15.6	
2-Hexanone	0.105	0.120		14.3	
Dibromochloromethane	0.252	0.296		17.5	
Tetrachloroethene	0.517	0.559		8.1	
Chlorobenzene	1.080	1.080	0.300	0.0	
Ethyl Benzene	0.529	0.528		0.2	20.0
m&p-Xylenes	0.644	0.672		4.3	
o-Xylene	0.620	0.654		5.5	
Styrene	1.095	1.082		1.2	
Bromoform	0.149	0.154	0.100	3.4	
1,1,2,2-Tetrachloroethane	0.561	0.605	0.300	7.8	
1,2-Dichloroethane-d4	0.385	0.395		2.6	
Dibromofluoromethane	0.322	0.327		1.6	
Toluene-d8	1.136	1.146		0.9	
4-Bromofluorobenzene	0.414	0.447		8.0	

VOLATILE CONTINUING CALIBRATION CHECK

All other compounds must meet a minimum RRF of 0.010.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech

Contract: POST01

Lab Code: CTECH

Case No.: T2310

SAS No.: T2310

SDG No.: T2310

Instrument ID: MSVOAG

Calibration Date/Time: 4/15/05 19:39

Lab File ID: VG041520.D

Init. Calib. Date(s): 4/7/05 4/7/05

Heated Purge: (Y/N) N

Init. Calib. Time(s): 17:48 20:32

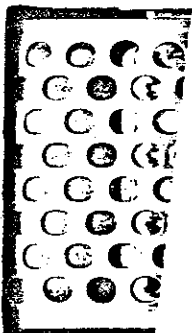
GC Column: RTX624 ID: 0.18 (mm)

COMPOUND	RRF	RRF10	MIN RRF	%D	MAX%D
Chloromethane	0.710	0.581	0.100	18.2	
Vinyl Chloride	0.691	0.632		8.5	20.0
Bromomethane	0.494	0.494		0.0	
Chloroethane	0.317	0.364		14.8	
1,1-Dichloroethene	0.310	0.360		16.1	20.0
Acetone	0.050	0.102		104.0	
Carbon Disulfide	0.998	0.996		0.2	
Methyl tert-butyl Ether	0.575	0.680		18.3	
Methylene Chloride	0.481	0.582		21.0	
trans-1,2-Dichloroethene	0.534	0.622		16.5	
1,1-Dichloroethane	0.994	1.202	0.100	20.9	
2-Butanone	0.137	0.216		57.7	
Carbon Tetrachloride	0.337	0.371		10.1	
cis-1,2-Dichloroethene	0.680	0.824		21.2	
Chloroform	1.019	1.222		19.9	20.0
1,1,1-Trichloroethane	0.623	0.733		17.7	
Benzene	1.297	1.434		10.6	
1,2-Dichloroethane	0.266	0.294		10.5	
Trichloroethene	0.404	0.458		13.4	
1,2-Dichloropropane	0.336	0.360		7.1	20.0
Bromodichloromethane	0.440	0.467		6.1	
4-Methyl-2-Pentanone	0.140	0.150		7.1	
Toluene	0.822	0.924		12.4	20.0
t-1,3-Dichloropropene	0.360	0.403		11.9	
cis-1,3-Dichloropropene	0.484	0.533		10.1	
1,1,2-Trichloroethane	0.211	0.241		14.2	
2-Hexanone	0.105	0.115		9.5	
Dibromochloromethane	0.252	0.289		14.7	
Tetrachloroethene	0.517	0.579		12.0	
Chlorobenzene	1.080	1.066	0.300	1.3	
Ethyl Benzene	0.529	0.531		0.4	20.0
m&p-Xylenes	0.644	0.671		4.2	
o-Xylene	0.620	0.627		1.1	
Styrene	1.095	1.076		1.7	
Bromoform	0.149	0.147	0.100	1.3	
1,1,2,2-Tetrachloroethane	0.561	0.570	0.300	1.6	
1,2-Dichloroethane-d4	0.385	0.411		6.8	
Dibromofluoromethane	0.322	0.339		5.3	
Toluene-d8	1.136	1.158		1.9	
4-Bromofluorobenzene	0.414	0.459		10.9	

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VOLATILE CONTINUING CALIBRATION CHECK

All other compounds must meet a minimum RRF of 0.010.



CHEMTECH



Surrogate Compound Summary

Surrogate Summary
SW-846

SDG No.: T2310

Client: Tetra Tech EC Inc.

Analytical Method: EPA SW846 8260 - LOW

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
BSG0414W1	VLCS01	1,2-Dichloroethane-d4	10	11.75	118		72.00	119.0
		Dibromofluoromethane	10	9.92	99		85.00	115.0
		Toluene-d8	10	10.18	102		81.00	120.0
		4-Bromofluorobenzene	10	10.56	106		76.00	119.0
BSG0414W2	VLCS02	1,2-Dichloroethane-d4	10	11.61	116		72.00	119.0
		Dibromofluoromethane	10	10.12	101		85.00	115.0
		Toluene-d8	10	10.37	104		81.00	120.0
		4-Bromofluorobenzene	10	10.79	108		76.00	119.0
T2310-01	DW-60405	1,2-Dichloroethane-d4	10	9.98	100		72.00	119.0
		Dibromofluoromethane	10	10.14	101		85.00	115.0
		Toluene-d8	10	10.68	107		81.00	120.0
		4-Bromofluorobenzene	10	10.82	108		76.00	119.0
T2310-02	MW-2B0405	1,2-Dichloroethane-d4	10	10.57	106		72.00	119.0
		Dibromofluoromethane	10	10.15	102		85.00	115.0
		Toluene-d8	10	9.97	100		81.00	120.0
		4-Bromofluorobenzene	10	10.64	106		76.00	119.0
T2310-03	DW-40405	1,2-Dichloroethane-d4	10	9.13	91		72.00	119.0
		Dibromofluoromethane	10	9.15	92		85.00	115.0
		Toluene-d8	10	10.24	102		81.00	120.0
		4-Bromofluorobenzene	10	10.76	108		76.00	119.0
T2310-04	CSX-MW-70405	1,2-Dichloroethane-d4	10	11.71	117		72.00	119.0
		Dibromofluoromethane	10	10.02	100		85.00	115.0
		Toluene-d8	10	10.67	107		81.00	120.0
		4-Bromofluorobenzene	10	13.49	135	*	76.00	119.0
T2310-04RE	CSX-MW-70405RE	1,2-Dichloroethane-d4	10	13.21	132	*	72.00	119.0
		Dibromofluoromethane	10	10.49	105		85.00	115.0
		Toluene-d8	10	10.64	106		81.00	120.0
		4-Bromofluorobenzene	10	14.05	141	*	76.00	119.0
T2310-05	DW-50405	1,2-Dichloroethane-d4	10	9.19	92		72.00	119.0
		Dibromofluoromethane	10	9.55	96		85.00	115.0
		Toluene-d8	10	9.93	99		81.00	120.0
		4-Bromofluorobenzene	10	10.34	103		76.00	119.0
T2310-05DL	DW-50405DL	1,2-Dichloroethane-d4	10	10.1	101		72.00	119.0
		Dibromofluoromethane	10	9.52	95		85.00	115.0
		Toluene-d8	10	10.08	101		81.00	120.0
		4-Bromofluorobenzene	10	11.33	113		76.00	119.0
T2310-06	IW-50405	1,2-Dichloroethane-d4	10	11.79	118		72.00	119.0
		Dibromofluoromethane	10	10.59	106		85.00	115.0
		Toluene-d8	10	10.83	108		81.00	120.0
		4-Bromofluorobenzene	10	12.05	121	*	76.00	119.0
T2310-06DL	IW-50405DL	1,2-Dichloroethane-d4	10	10.74	107		72.00	119.0
		Dibromofluoromethane	10	10.21	102		85.00	115.0

Surrogate Summary
SW-846

SDG No.: T2310

Client: Tetra Tech EC Inc.

Analytical Method: EPA SW846 8260 - LOW

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
T2310-06DL	IW-50405DL	Toluene-d8	10	10.36	104		81.00	120.00
		4-Bromofluorobenzene	10	10.67	107		76.00	119.00
T2310-07	CSX-MW-50405	1,2-Dichloroethane-d4	10	9.27	93		72.00	119.00
		Dibromofluoromethane	10	10.14	101		85.00	115.00
		Toluene-d8	10	10.98	110		81.00	120.00
		4-Bromofluorobenzene	10	11	110		76.00	119.00
T2310-07DL	CSX-MW-50405DL	1,2-Dichloroethane-d4	10	9.51	95		72.00	119.00
		Dibromofluoromethane	10	10.81	108		85.00	115.00
		Toluene-d8	10	10.51	105		81.00	120.00
		4-Bromofluorobenzene	10	11.76	118		76.00	119.00
T2310-07DL2	CSX-MW-50405DL2	1,2-Dichloroethane-d4	10	10.7	107		72.00	119.00
		Dibromofluoromethane	10	10.27	103		85.00	115.00
		Toluene-d8	10	10.32	103		81.00	120.00
		4-Bromofluorobenzene	10	10.87	109		76.00	119.00
T2310-15	TB041105	1,2-Dichloroethane-d4	10	10.91	109		72.00	119.00
		Dibromofluoromethane	10	10.3	103		85.00	115.00
		Toluene-d8	10	10.38	104		81.00	120.00
		4-Bromofluorobenzene	10	10.64	106		76.00	119.00
VBG0414W2	VBLK01	1,2-Dichloroethane-d4	10	9.38	94		72.00	119.00
		Dibromofluoromethane	10	10.12	101		85.00	115.00
		Toluene-d8	10	10.68	107		81.00	120.00
		4-Bromofluorobenzene	10	10.6	106		76.00	119.00
VBG0414W4	VBLK02	1,2-Dichloroethane-d4	10	10.97	110		72.00	119.00
		Dibromofluoromethane	10	10.15	102		85.00	115.00
		Toluene-d8	10	10.37	104		81.00	120.00
		4-Bromofluorobenzene	10	10.4	104		76.00	119.00
VBG0415W4	VBLK03	1,2-Dichloroethane-d4	10	10.33	103		72.00	119.00
		Dibromofluoromethane	10	10.1	101		85.00	115.00
		Toluene-d8	10	10.4	104		81.00	120.00
		4-Bromofluorobenzene	10	10.78	108		76.00	119.00

CHEMTECH



MS/MSD Summary

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: T2310

Client: Tetra Tech EC Inc..

Analytical Method: EPA SW846 8260 - LOW

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Low	Limits	
								High	RPD
BSG0414W1	1,1-Dichloroethene	10	12	120			74	126	
	Benzene	10	10	100			80	127	
	Trichloroethene	10	9.8	98			76	126	
	Toluene	10	11	110			80	124	
	Chlorobenzene	10	10	100			76	135	
BSG0414W2	1,1-Dichloroethene	10	12	120			74	126	
	Benzene	10	11	110			80	127	
	Trichloroethene	10	11	110			76	126	
	Toluene	10	11	110			80	124	
	Chlorobenzene	10	10	100			76	135	

CHEMTECH



Internal Standards Summary

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Chemtech Contract FOST01
 Lab Code: CTECH Case No.: T2310 SAS No.: T2310 SDG No.: T2310
 Lab File ID: VG041402.D Date Analyzed: 4/14/05
 Instrument ID: MSVOAG Time Analyzed: 06:48
 GC Column: RTX624 ID: 0.1 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT#	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	523673	4.60	917264	5.31	832290	8.55
UPPER LIMIT	1047346	5.10	1834528	5.81	1664580	9.05
LOWER LIMIT	261837	4.10	458632	4.81	416145	8.05
SAMPLE NO.						
VBLK01	632136	4.60	1076686	5.32	1041964	8.55
VLCS01	533939	4.60	1025085	5.33	895766	8.55
VLCS02	515717	4.59	988335	5.32	903221	8.55

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Chemtech Contract: POST01
 Lab Code: CTECH Case No. T2310 SAS No.: T2310 SDG No.: T2310
 Lab File ID: VG041402.D Date Analyzed: 4/14/05
 Instrument ID: MSVOAG Time Analyzed: 06:48
 GC Column: RTX624 ID: 0.1 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT#				
12 HOUR STD	374824	10.69				
UPPER LIMIT	749648	11.19				
LOWER LIMIT	187412	10.19				
SAMPLE NO.						
VBLK01	464578	10.69				
VLCS01	424514	10.69				
VLCS02	423563	10.69				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Chemtech Contract FOST01
 Lab Code: CTECH Case No.: T2310 SAS No.: T2310 SDG No.: T2310
 Lab File ID: VG041420.D Date Analyzed: 4/14/05
 Instrument ID: MSVOAG Time Analyzed: 19:05
 GC Column: RTX624 ID: 0.1 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT#	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	489753	4.59	884853	5.31	820935	8.54
UPPER LIMIT	979506	5.09	1769706	5.81	1641870	9.04
LOWER LIMIT	244877	4.09	442427	4.81	410468	8.04
SAMPLE NO.						
VBLK02	516152	4.58	962985	5.31	913116	8.54
TB041105	499865	4.59	944087	5.31	888909	8.55
DW-60405	487656	4.59	878007	5.32	843827	8.54
MW-2B0405	482905	4.59	912915	5.31	861742	8.53
DW-40405	472840	4.60	843667	5.32	811092	8.53
CSX-MW-70405	420419	4.59	737263	5.31	720172	8.54
DW-50405	504025	4.59	910305	5.31	864742	8.53
IW-50405	471513	4.59	771665	5.30	806384	8.53
CSX-MW-50405	385662	4.58	623517	5.30	626888	8.53

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Chemtech Contract: FOST01
 Lab Code: CTECH Case No. T2310 SAS No.: T2310 SDG No.: T2310
 Lab File ID: VG041420.D Date Analyzed: 4/14/05
 Instrument ID: MSVOAG Time Analyzed: 19:05
 GC Column: RTX624 ID: 0.1 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT#				
12 HOUR STD	368465	10.69				
UPPER LIMIT	736930	11.19				
LOWER LIMIT	184233	10.19				
SAMPLE NO.						
VBLK02	392721	10.68				
TB041105	394407	10.69				
DW-60405	380697	10.68				
MW-2B0405	380153	10.68				
DW-40405	382898	10.68				
CSX-MW-70405	357118	10.68				
DW-50405	400706	10.68				
IW-50405	377518	10.67				
CSX-MW-50405	250650	10.68				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Chemtech Contract POST01
 Lab Code: CTECH Case No.: T2310 SAS No.: T2310 SDG No.: T2310
 Lab File ID: VG041520.D Date Analyzed: 4/15/05
 Instrument ID: MSVOAG Time Analyzed: 19:39
 GC Column: RTX624 ID: 0.1 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT#	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	514336	4.57	911155	5.29	856217	8.53
UPPER LIMIT	1028672	5.07	1822310	5.79	1712434	9.03
LOWER LIMIT	257168	4.07	455578	4.79	428109	8.03
SAMPLE NO.						
VBLK03	512373	4.56	964132	5.29	929553	8.53
DW-50405DL	544008	4.58	956142	5.30	934667	8.53
CSX-MW-50405DL2	482132	4.55	915838	5.28	876051	8.52
IW-50405DL	479349	4.56	914400	5.28	884219	8.52
CSX-MW-70405RE	395604	4.55	720098	5.28	725277	8.52
CSX-MW-50405DL	477829	4.57	810684	5.28	840270	8.52

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

Report of Analysis

Client:	Tetra Tech EC Inc.	Date Collected:	4/11/2005
Project:	DSCP New Wells	Date Received:	4/12/2005
Client Sample ID:	IW-50405	SDG No.:	T2310
Lab Sample ID:	T2310-06	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	1500		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	3540		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Chemtech Contract: POST01
 Lab Code: CTECH Case No. T2310 SAS No.: T2310 SDG No.: T2310
 Lab File ID: VG041520.D Date Analyzed: 4/15/05
 Instrument ID: MSVOAG Time Analyzed: 19:39
 GC Column: RTX624 ID: 0.1 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT#				
12 HOUR STD	405098	10.67				
UPPER LIMIT	810196	11.17				
LOWER LIMIT	202549	10.17				
SAMPLE NO.						
VBLK03	416623	10.67				
DW-50405DL	437472	10.66				
CSX-MW-50405DL2	401156	10.67				
IW-50405DL	397619	10.66				
CSX-MW-70405RE	365171	10.67				
CSX-MW-50405DL	389394	10.66				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

CHEMTECH



Chromatograms

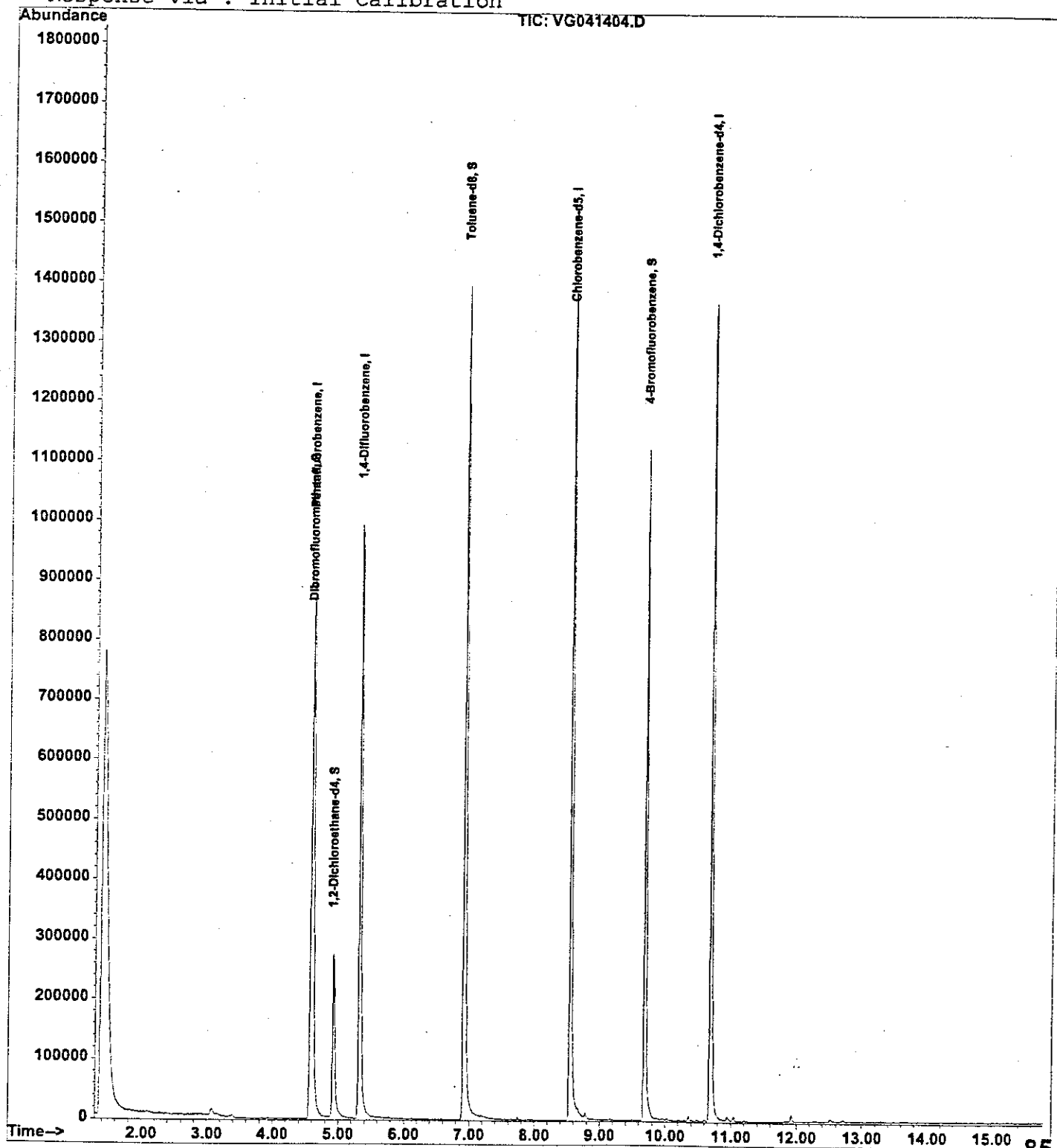
Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041404.D
Acq On : 14 Apr 2005 8:09 am
Sample : VBG0414W2
Misc : 25mL
MS Integration Params: RTEINT.P
Quant Time: Apr 14 12:30 2005

Vial: 22
Operator: KP
Inst : voa3
Multiplr: 1.00

Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
Title : SW846 8260
Last Update : Fri Apr 08 10:00:48 2005
Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041404.D

Vial: 22

Acq On : 14 Apr 2005 8:09 am

Operator: KP

Sample : VBG0414W2

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 14 12:30 2005

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.60	168	632136	10.00	ug/l	0.00
31) 1,4-Difluorobenzene	5.32	114	1076686	10.00	ug/l	0.00
57) Chlorobenzene-d5	8.55	117	1041964	10.00	ug/l	-0.01
66) 1,4-Dichlorobenzene-	10.69	152	464578	10.00	ug/l	-0.01
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.92	65	228034	9.38	ug/l	0.00
32) Dibromofluoromethane	4.58	113	350093	10.12	ug/l	0.00
43) Toluene-d8	6.92	98	1307150	10.68	ug/l	-0.01
56) 4-Bromofluorobenzene	9.69	95	472385	10.60	ug/l	-0.01

Target Compounds

Qvalue

Analyst Signature: M. J. W. Analyst Name: _____ Date: 04-14-05

-----REASONS FOR MANUAL INTEGRATIONS-----

____ Poor resolution of peaks exhibited on chromatogram.Compound #: _____

____ Peak integrated by software incorrectly.Compound #: _____

____ OTHER: _____ Compound #: _____

(#) = qualifier out of range (m) = manual integration

VG041404.D SAG0407W.M

Wed Apr 27 16:20:01 2005

RPT1

Page 1

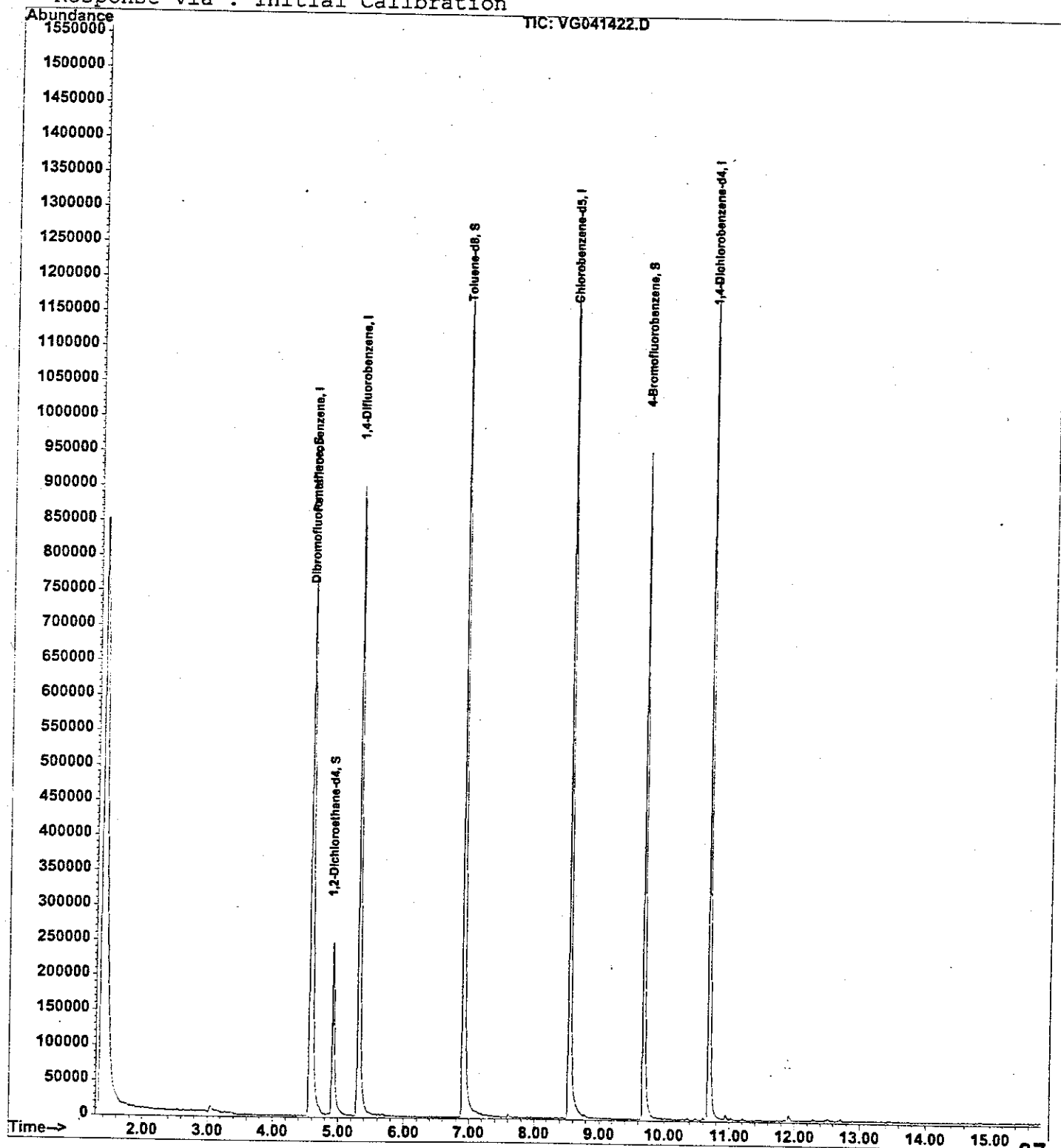
Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041422.D
 Acq On : 14 Apr 2005 8:27 pm
 Sample : VBG0414W4
 Misc : 25mL
 MS Integration Params: RTEINT.P
 Quant Time: Apr 15 11:59 2005

Vial: 4
 Operator: KP
 Inst : voa3
 Multiplr: 1.00

Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041422.D

Acq On : 14 Apr 2005 8:27 pm

Sample : VBG0414W4

Misc : 25mL

MS Integration Params: RTEINT.P

Quant Time: Apr 15 11:59 2005

Vial: 4

Operator: KP

Inst : voa3

Multiplr: 1.00

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.58	168	516152	10.00	ug/l	-0.02
31) 1,4-Difluorobenzene	5.31	114	962985	10.00	ug/l	-0.02
57) Chlorobenzene-d5	8.54	117	913116	10.00	ug/l	-0.01
66) 1,4-Dichlorobenzene-	10.68	152	392721	10.00	ug/l	-0.02
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.91	65	217750	10.97	ug/l	-0.01
32) Dibromofluoromethane	4.56	113	314126	10.15	ug/l	0.00
43) Toluene-d8	6.91	98	1134864	10.37	ug/l	-0.02
56) 4-Bromofluorobenzene	9.68	95	414587	10.40	ug/l	-0.01

Target Compounds

Qvalue

Analyst Signature: M. Shaw Analyst Name: _____ Date: 04-15-05

-----REASONS FOR MANUAL INTEGRATIONS-----

___ Poor resolution of peaks exhibited on chromatogram.Compound #: _____

___ Peak integrated by software incorrectly.Compound #: _____

___ OTHER: _____ Compound #: _____

(#) = qualifier out of range (m) = manual integration

VG041422.D SAG0407W.M

Fri Apr 15 12:12:09 2005

RPT1

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Page 1

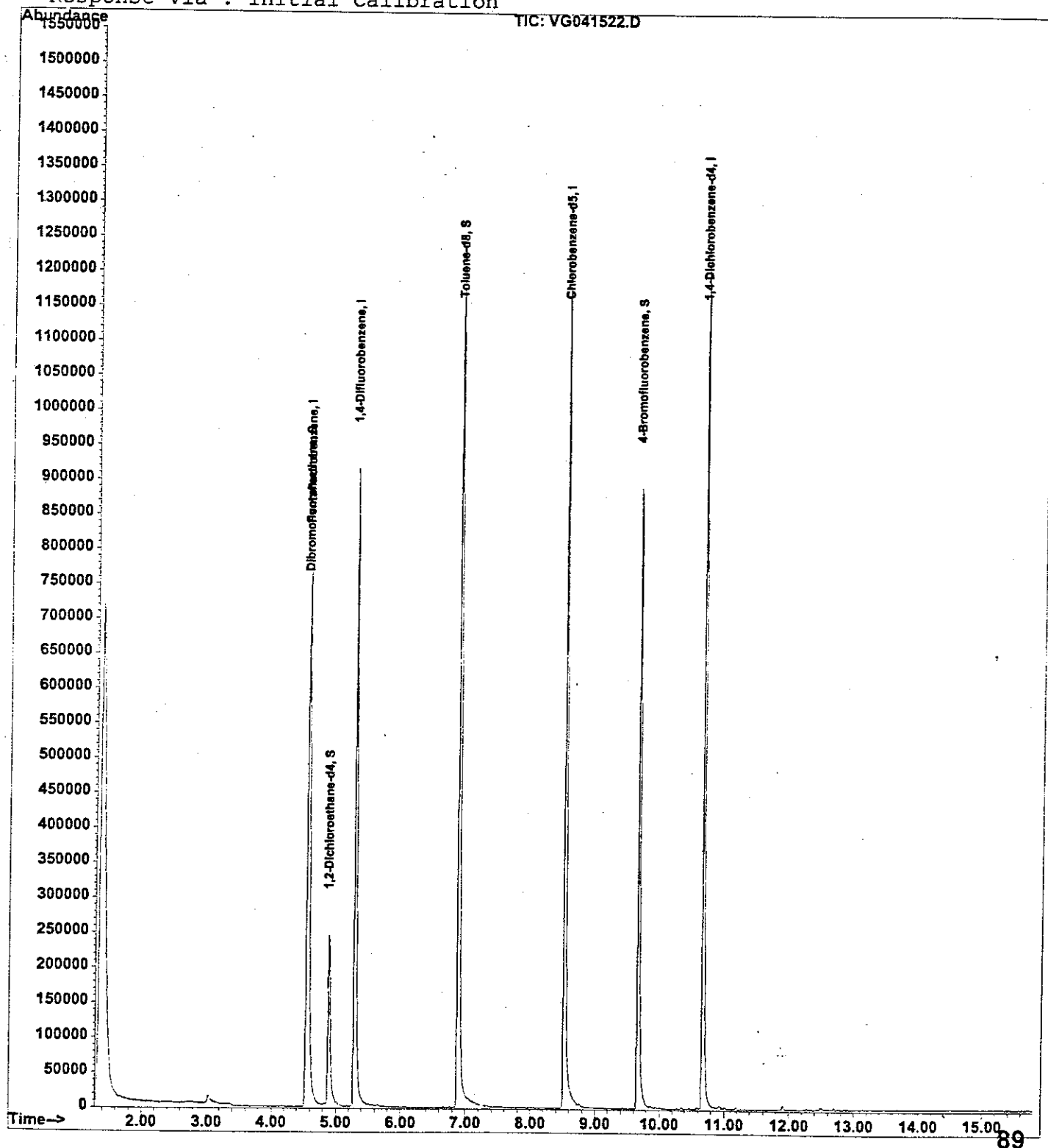
Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041505\VG041522.D
 Acq On : 15 Apr 2005 9:01 pm
 Sample : VBG0415W4
 Misc : 25mL
 MS Integration Params: RTEINT.P
 Quant Time: Apr 18 11:58 2005

Vial: 4
 Operator: KP
 Inst : voa3
 Multiplr: 1.00

Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041505\VG041522.D

Acq On : 15 Apr 2005 9:01 pm

Sample : VBG0415W4

Misc : 25mL

MS Integration Params: RTEINT.P

Quant Time: Apr 18 11:58 2005

Vial: 4

Operator: KP

Inst : voa3

Multiplr: 1.00

Quant Results File: SAG0407W.RES

Quant Method : F:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.56	168	512373	10.00	ug/l	-0.04
31) 1,4-Difluorobenzene	5.29	114	964132	10.00	ug/l	-0.04
57) Chlorobenzene-d5	8.53	117	929553	10.00	ug/l	-0.03
66) 1,4-Dichlorobenzene-	10.67	152	416623	10.00	ug/l	-0.04
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.89	65	203601	10.33	ug/l	-0.03
32) Dibromofluoromethane	4.54	113	312969	10.10	ug/l	-0.03
43) Toluene-d8	6.89	98	1139809	10.40	ug/l	-0.04
56) 4-Bromofluorobenzene	9.66	95	430419	10.78	ug/l	-0.04

Target Compounds

Qvalue

Analyst Signature: M. Shu Analyst Name: _____ Date: 04-17-05

-----REASONS FOR MANUAL INTEGRATIONS-----

___ Poor resolution of peaks exhibited on chromatogram. Compound #: _____

___ Peak integrated by software incorrectly. Compound #: _____

___ OTHER: _____ Compound #: _____

(#) = qualifier out of range (m) = manual integration

VG041522.D SAG0407W.M

Wed Apr 27 15:59:12 2005

RPT1

Page 1

Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041425.D

Acq On : 14 Apr 2005 10:30 pm

Sample : T2310-01

Misc : 25mL

Vial: 7

Operator: KP

Inst : voa3

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:20 2005

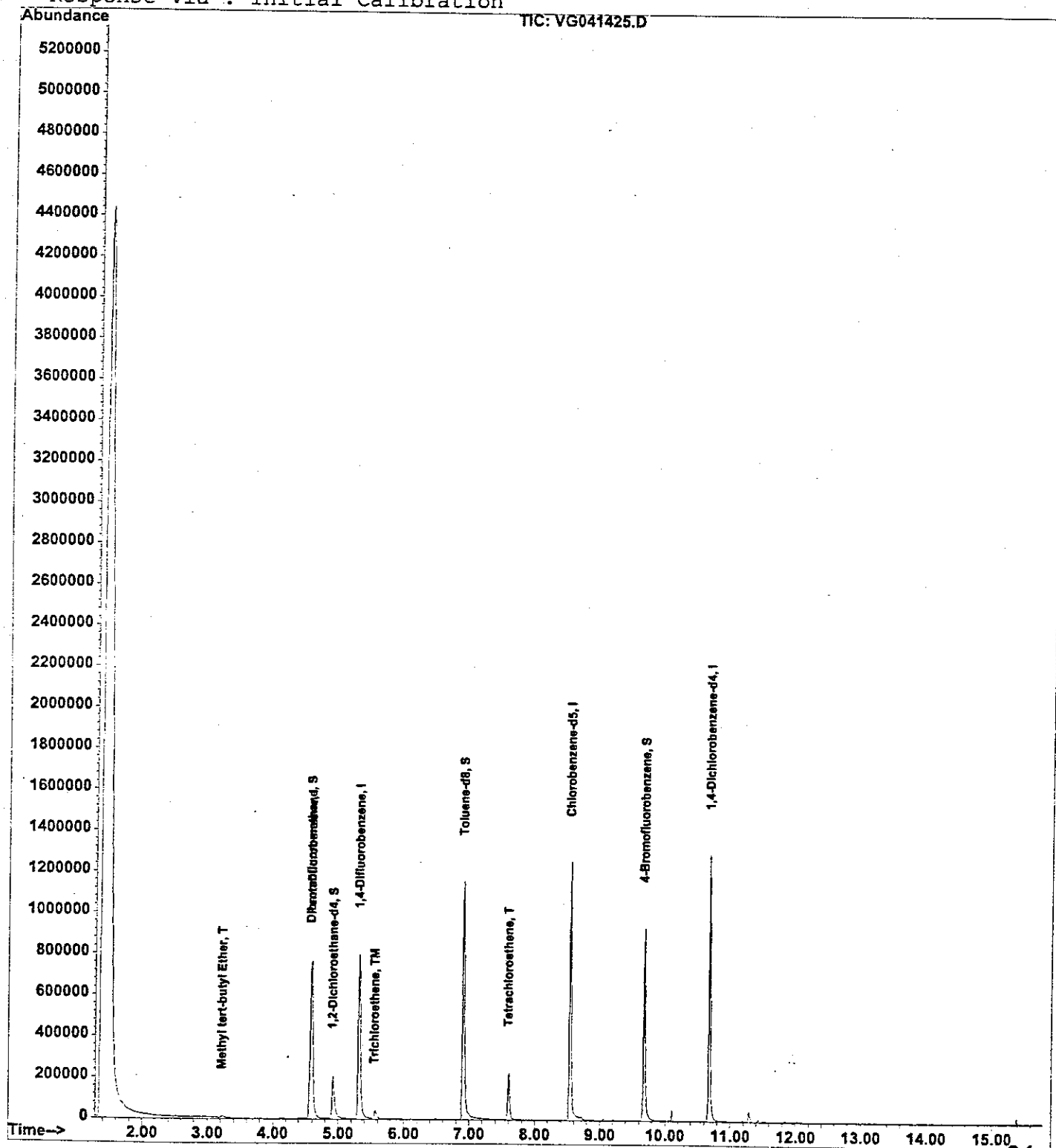
Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041425.D
Acq On : 14 Apr 2005 10:30 pm
Sample : T2310-01
Misc : 25mL
MS Integration Params: RTEINT.P
Quant Time: Apr 15 12:20 2005

Vial: 7
Operator: KP
Inst : voa3
Multiplr: 1.00

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
Title : SW846 8260
Last Update : Fri Apr 08 10:00:48 2005
Response via : Initial Calibration
DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.59	168	487656	10.00	ug/l	0.00
31) 1,4-Difluorobenzene	5.32	114	878007	10.00	ug/l	0.00
57) Chlorobenzene-d5	8.54	117	843827	10.00	ug/l	-0.02
66) 1,4-Dichlorobenzene-	10.68	152	380697	10.00	ug/l	-0.03

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
30) 1,2-Dichloroethane-d	4.92	65	187158	9.98	ug/l	0.00
32) Dibromofluoromethane	4.57	113	286169	10.14	ug/l	0.00
43) Toluene-d8	6.91	98	1065341	10.68	ug/l	-0.02
56) 4-Bromofluorobenzene	9.68	95	393197	10.82	ug/l	-0.02

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
18) Methyl tert-butyl Et	3.23	73	19668m	0.70	ug/l	
38) Trichloroethene	5.56	130	18811	0.53	ug/l	89
58) Tetrachloroethene	7.61	164	64504	1.48	ug/l	97

Analyst Signature: MSW Analyst Name: _____ Date: 04-15-05

-----REASONS FOR MANUAL INTEGRATIONS-----

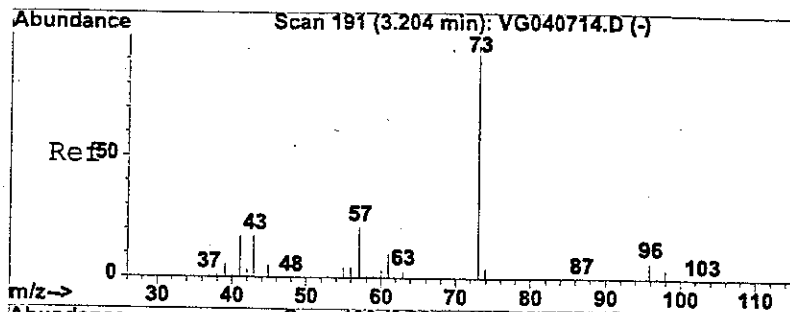
☒ Poor resolution of peaks exhibited on chromatogram. Compound #: _____
☒ Peak integrated by software incorrectly. Compound #: 18
OTHER: _____ Compound #: _____

(#) = qualifier out of range (m) = manual integration

VG041425.D SAG0407W.M

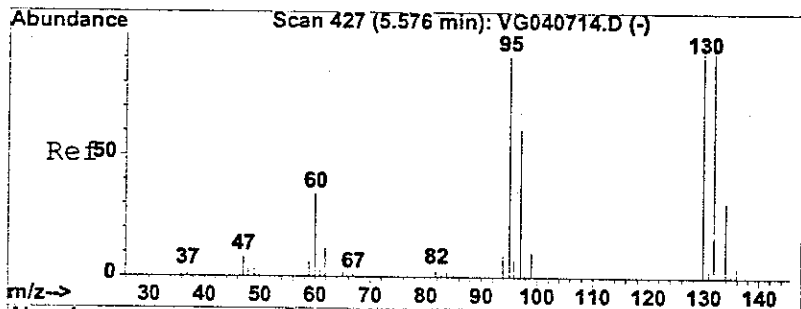
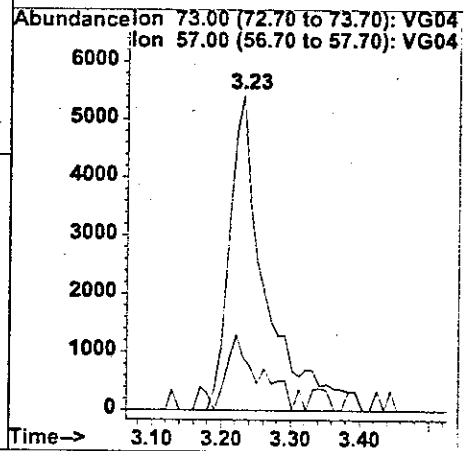
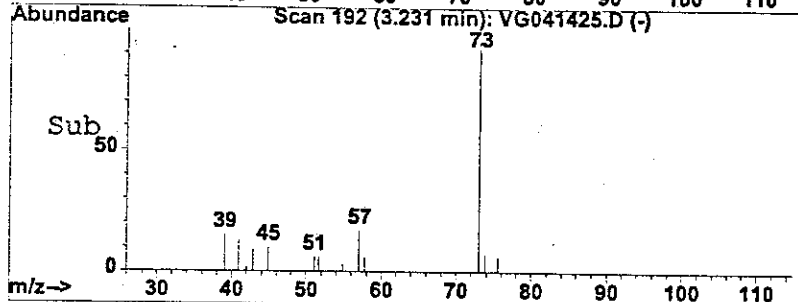
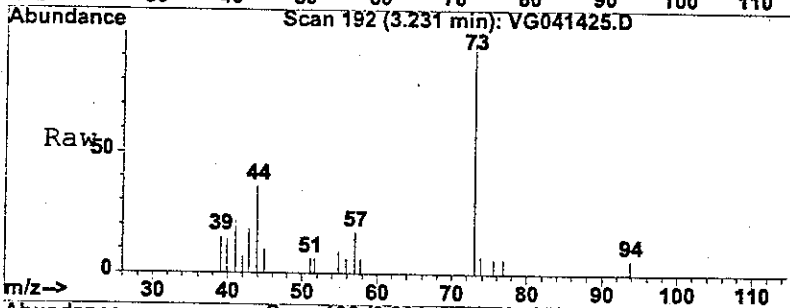
Fri Apr 15 12:20:15 2005

RPT1



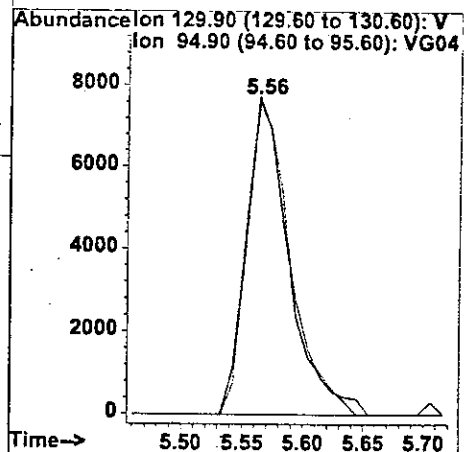
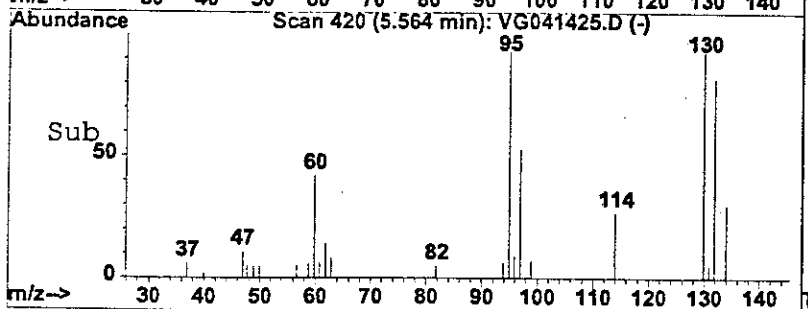
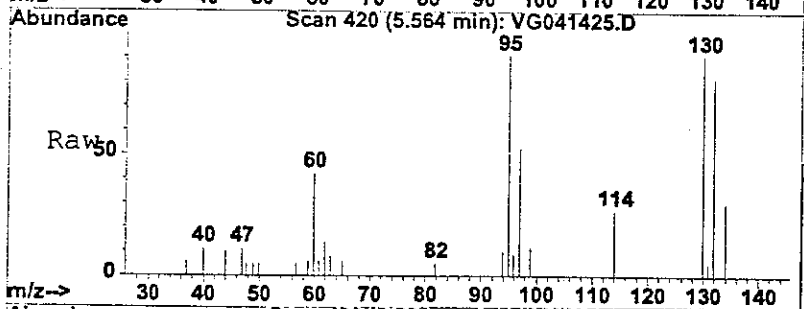
#18
Methyl tert-butyl Ether
Concen: 0.70 ug/l m
RT: 3.23 min Scan# 192
Delta R.T. 0.03 min
Lab File: VG041425.D
Acq: 14 Apr 2005 10:30 pm

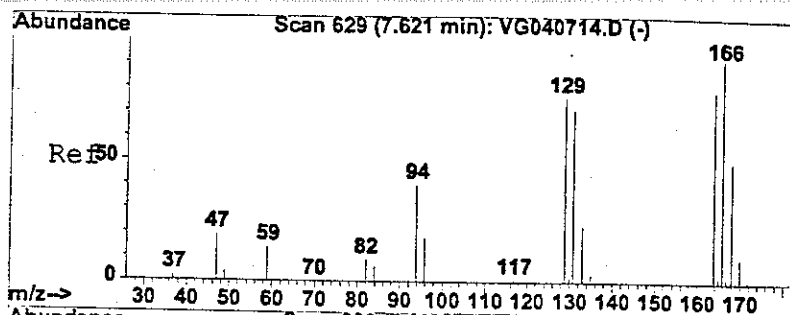
Tgt Ion: 73 Resp: 19668
Ion Ratio Lower Upper
73 100
57 16.9 16.6 24.8



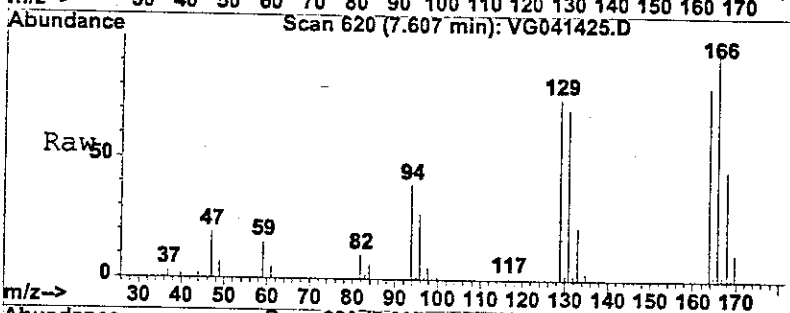
#38
Trichloroethene
Concen: 0.53 ug/l
RT: 5.56 min Scan# 420
Delta R.T. -0.01 min
Lab File: VG041425.D
Acq: 14 Apr 2005 10:30 pm

Tgt Ion: 130 Resp: 18811
Ion Ratio Lower Upper
130 100
95 101.1 0.0 181.4



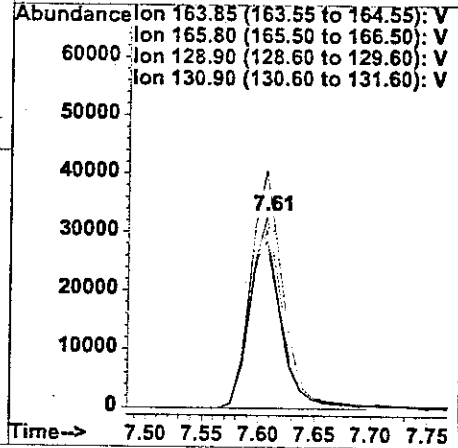
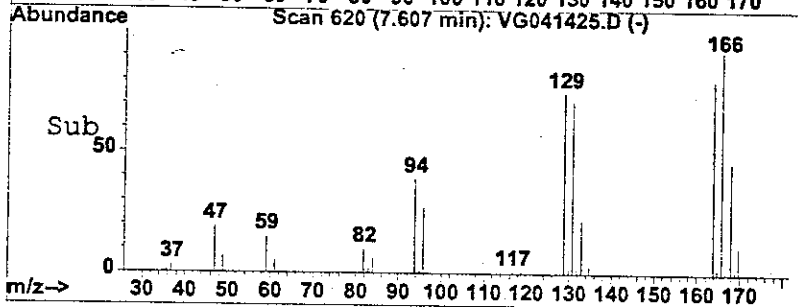


#58
Tetrachloroethene
Concen: 1.48 ug/l
RT: 7.61 min Scan# 620
Delta R.T. -0.01 min
Lab File: VG041425.D
Acq: 14 Apr 2005 10:30 pm



Tgt Ion: 164 Resp: 64504

Ion	Ratio	Lower	Upper
164	100		
166	124.3	101.3	151.9
129	92.9	76.6	115.0
131	87.7	72.4	108.6



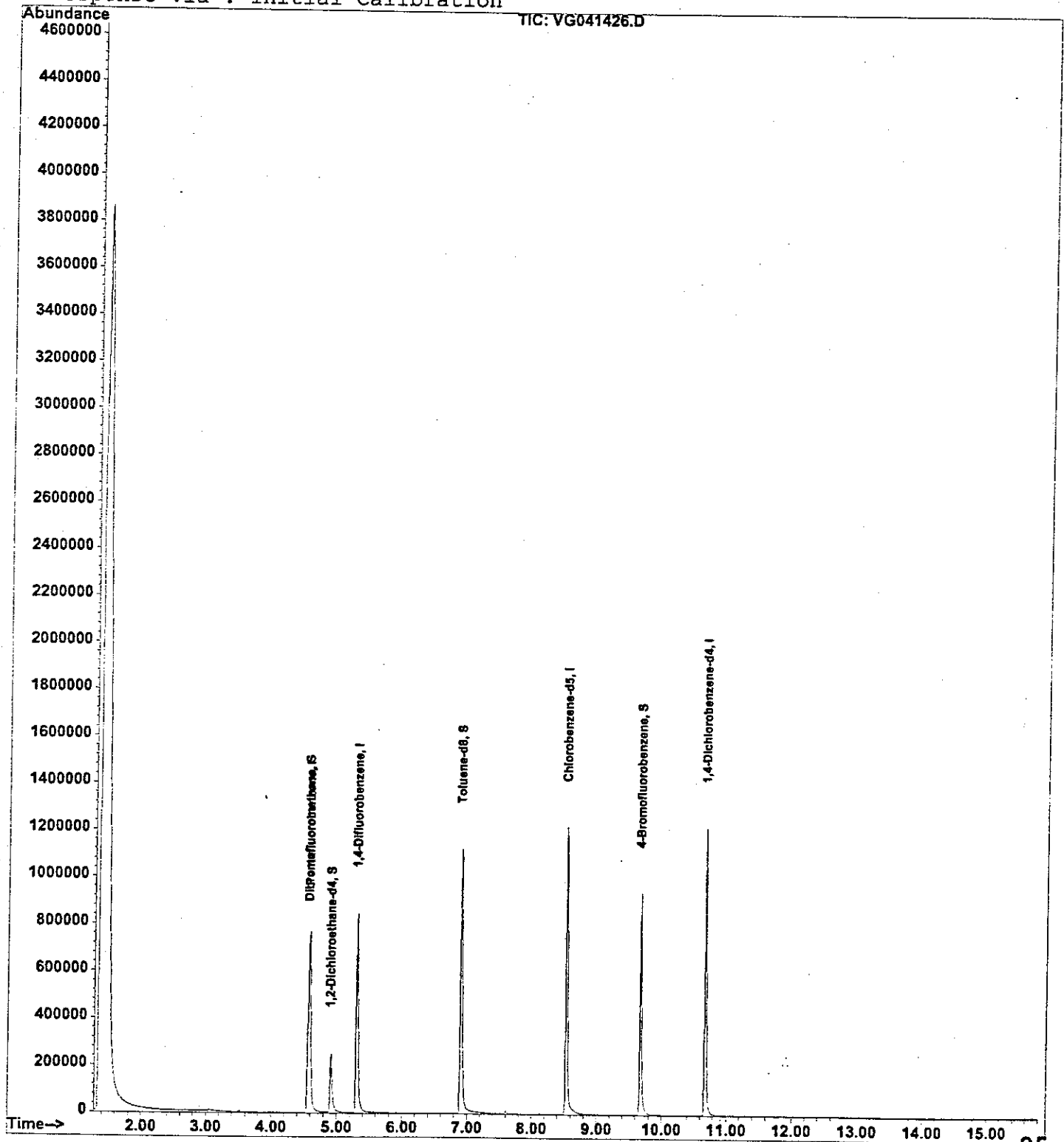
Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041426.D
 Acq On : 14 Apr 2005 11:11 pm
 Sample : T2310-02
 Misc : 25mL
 MS Integration Params: RTEINT.P
 Quant Time: Apr 15 12:20 2005

Vial: 8
 Operator: KP
 Inst : voa3
 Multiplr: 1.00

Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041426.D

Acq On : 14 Apr 2005 11:11 pm

Sample : T2310-02

Misc : 25mL

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:20 2005

Vial: 8

Operator: KP

Inst : voa3

Multiplr: 1.00

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.59	168	482905	10.00	ug/l	-0.02
31) 1,4-Difluorobenzene	5.31	114	912915	10.00	ug/l	-0.01
57) Chlorobenzene-d5	8.53	117	861742	10.00	ug/l	-0.03
66) 1,4-Dichlorobenzene-	10.68	152	380153	10.00	ug/l	-0.03
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.91	65	196379	10.57	ug/l	0.00
32) Dibromofluoromethane	4.57	113	297964	10.15	ug/l	0.00
43) Toluene-d8	6.90	98	1033805	9.97	ug/l	-0.03
56) 4-Bromofluorobenzene	9.68	95	402099	10.64	ug/l	-0.02

Target Compounds

Qvalue

Analyst Signature: MJh Analyst Name: _____ Date: 04-15-05

-----REASONS FOR MANUAL INTEGRATIONS-----

___ Poor resolution of peaks exhibited on chromatogram.Compound #: _____

___ Peak integrated by software incorrectly.Compound #: _____

___ OTHER: _____ Compound #: _____

(#)=qualifier out of range (m)=manual integration

VG041426.D SAG0407W.M

Fri Apr 15 12:21:18 2005

RPT1

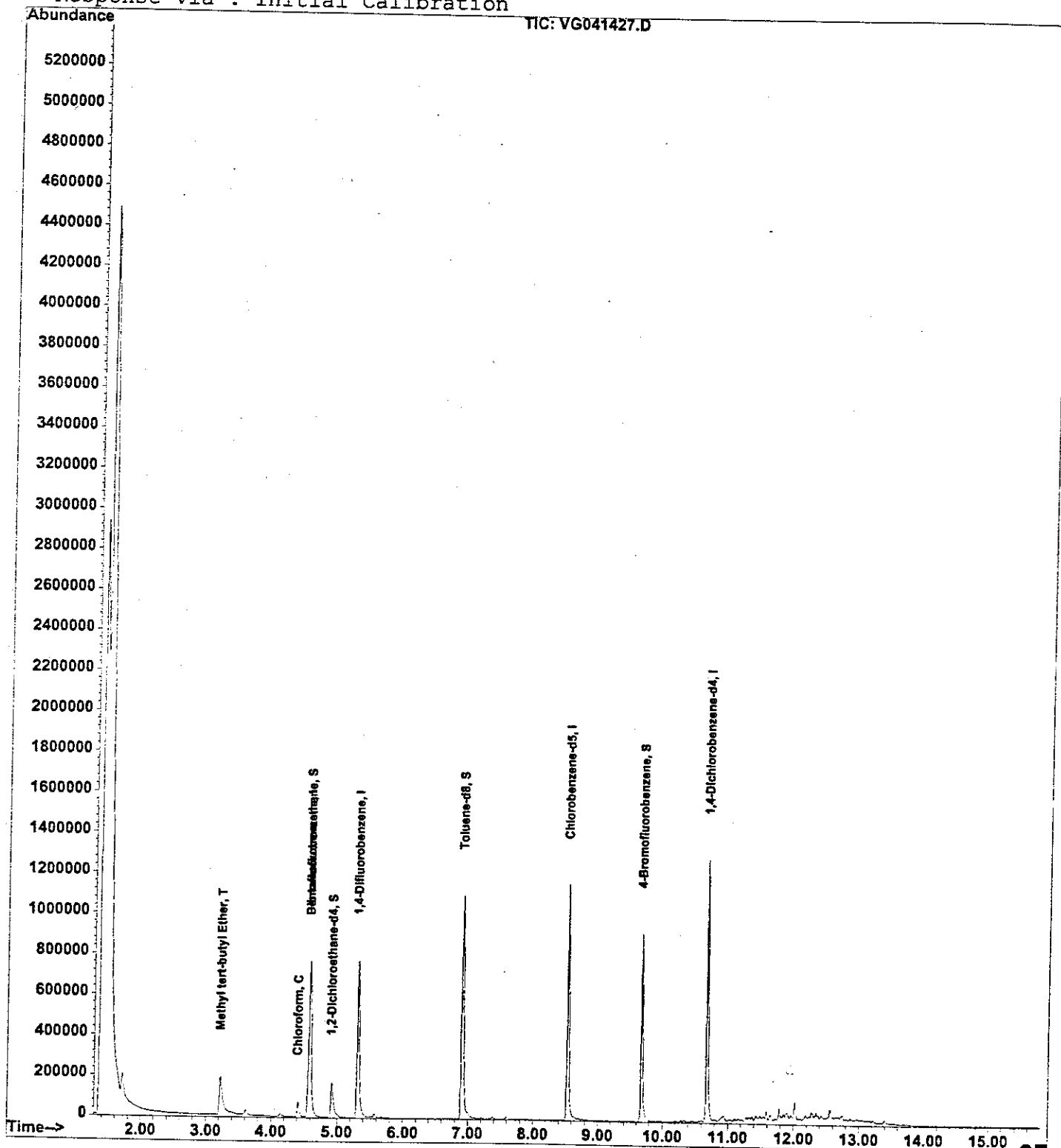
Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041427.D
 Acq On : 14 Apr 2005 11:52 pm
 Sample : T2310-03
 Misc : 25mL
 MS Integration Params: RTEINT.P
 Quant Time: Apr 15 12:22 2005

Vial: 9
 Operator: KP
 Inst : voa3
 Multiplr: 1.00

Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041427.D

Acq On : 14 Apr 2005 11:52 pm

Sample : T2310-03

Misc : 25mL

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:22 2005

Vial: 9

Operator: KP

Inst : voa3

Multiplr: 1.00

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.60	168	472840	10.00	ug/l	0.00
31) 1,4-Difluorobenzene	5.32	114	843667	10.00	ug/l	0.00
57) Chlorobenzene-d5	8.53	117	811092	10.00	ug/l	-0.03
66) 1,4-Dichlorobenzene-	10.68	152	382898	10.00	ug/l	-0.03
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.92	65	166073	9.13	ug/l	0.00
32) Dibromofluoromethane	4.58	113	248132	9.15	ug/l	0.00
43) Toluene-d8	6.91	98	981776	10.24	ug/l	-0.02
56) 4-Bromofluorobenzene	9.68	95	375901	10.76	ug/l	-0.02
Target Compounds						
18) Methyl tert-butyl Et	3.23	73	347678	12.79	ug/l	Qvalue 99
27) Chloroform	4.41	83	75190	1.56	ug/l	98

Analyst Signature: MSH Analyst Name: _____ Date: 04-15-05

-----REASONS FOR MANUAL INTEGRATIONS-----

___ Poor resolution of peaks exhibited on chromatogram.Compound #: _____

___ Peak integrated by software incorrectly.Compound #: _____

___ OTHER: _____ Compound #: _____

(#)= qualifier out of range (m)= manual integration

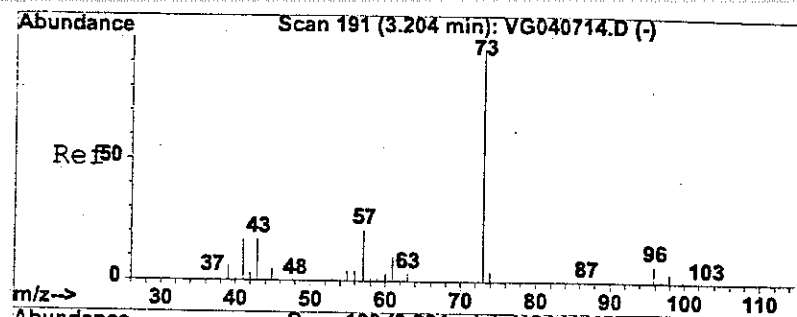
VG041427.D SAG0407W.M

Fri Apr 15 12:22:20 2005

RPT1

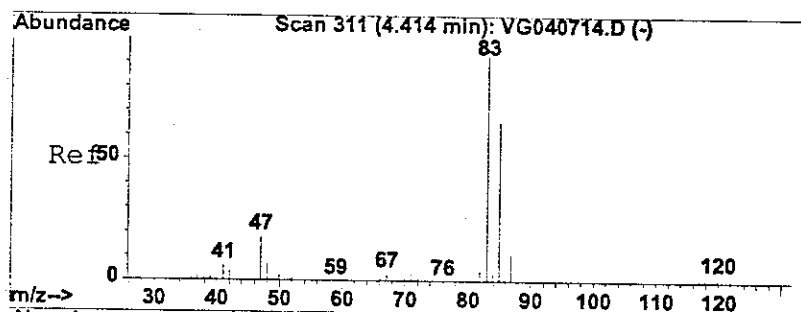
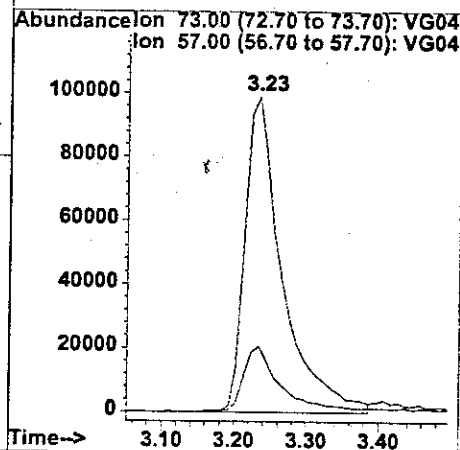
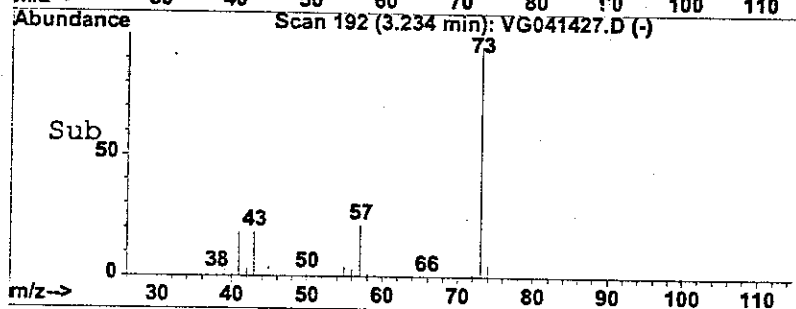
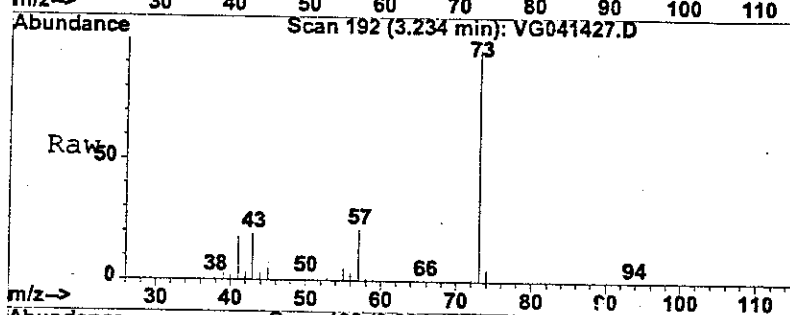
98

Page 1



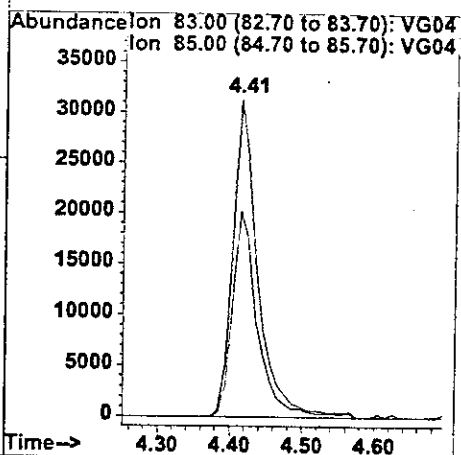
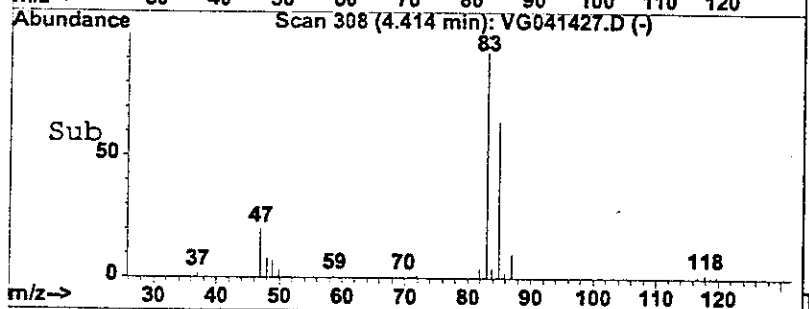
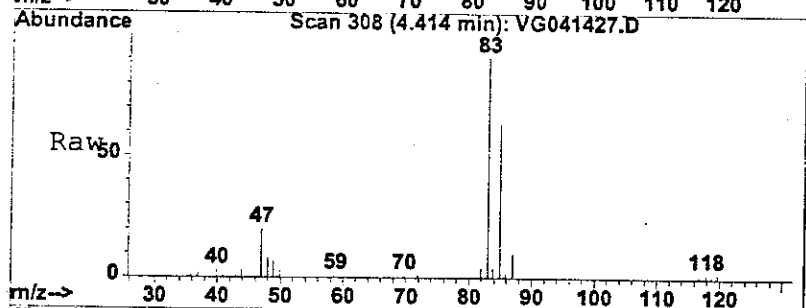
#18
Methyl tert-butyl Ether
Concen: 12.79 ug/l
RT: 3.23 min Scan# 192
Delta R.T. 0.03 min
Lab File: VG041427.D
Acq: 14 Apr 2005 11:52 pm

Tgt Ion: 73 Resp: 347678
Ion Ratio Lower Upper
73 100
57 20.3 16.6 24.8



#27
Chloroform
Concen: 1.56 ug/l
RT: 4.41 min Scan# 308
Delta R.T. 0.00 min
Lab File: VG041427.D
Acq: 14 Apr 2005 11:52 pm

Tgt Ion: 83 Resp: 75190
Ion Ratio Lower Upper
83 100
85 64.4 53.0 79.4



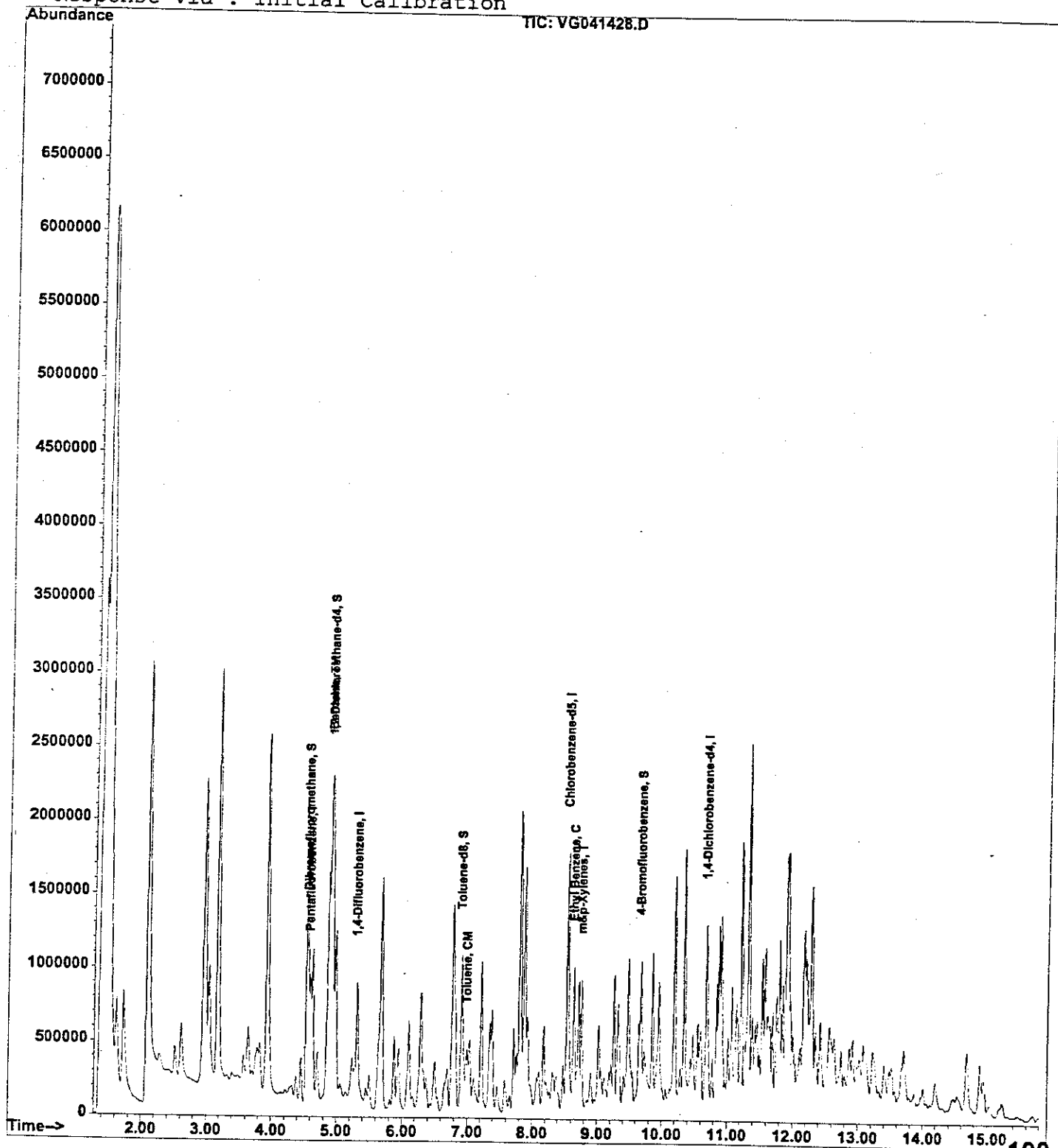
Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041428.D
 Acq On : 15 Apr 2005 12:33 am
 Sample : T2310-04
 Misc : 25mL
 MS Integration Params: RTEINT.P
 Quant Time: Apr 15 12:25 2005

Vial: 10
 Operator: KP
 Inst : voa3
 Multiplr: 1.00

Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041428.D

Vial: 10

Acq On : 15 Apr 2005 12:33 am

Operator: KP

Sample : T2310-04

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:25 2005

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.59	168	420419	10.00	ug/l	0.00
31) 1,4-Difluorobenzene	5.31	114	737263	10.00	ug/l	-0.01
57) Chlorobenzene-d5	8.54	117	720172	10.00	ug/l	-0.02
66) 1,4-Dichlorobenzene-	10.68	152	357118	10.00	ug/l	-0.02

System Monitoring Compounds

30) 1,2-Dichloroethane-d	4.92	65	189429m	11.71	ug/l	0.00
32) Dibromofluoromethane	4.56	113	237452	10.02	ug/l	0.00
43) Toluene-d8	6.91	98	893649	10.67	ug/l	-0.02
56) 4-Bromofluorobenzene	9.67	95	411630	13.49	ug/l	-0.02

Target Compounds

Qvalue

36) Benzene	4.90	78	1923684	20.12	ug/l	100
46) Toluene	7.00	92	48233	0.80	ug/l	94
61) Ethyl Benzene	8.64	106	164062	4.31	ug/l	100
62) m&p-Xylenes	8.76	106	166600	3.59	ug/l	98

Analyst Signature: Mylm Analyst Name: _____ Date: 04-15-05

-----REASONS FOR MANUAL INTEGRATIONS-----

/ Poor resolution of peaks exhibited on chromatogram.Compound #: _____

/ Peak integrated by software incorrectly.Compound #: 30

OTHER: _____ Compound #: _____

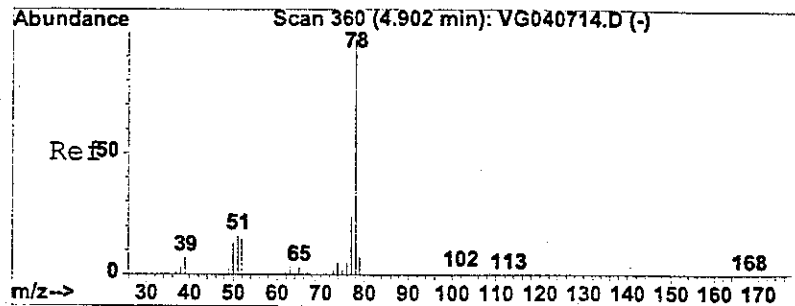
(#) = qualifier out of range (m) = manual integration

VG041428.D SAG0407W.M

Fri Apr 15 12:25:50 2005

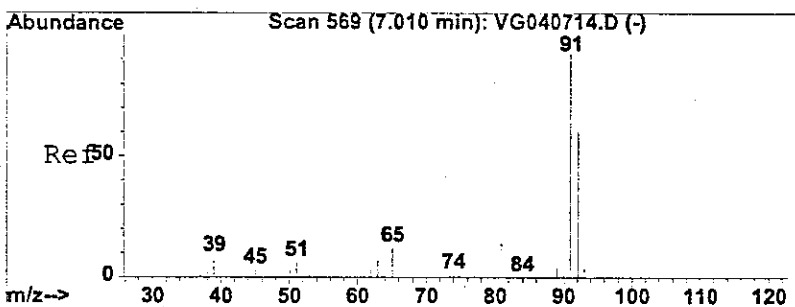
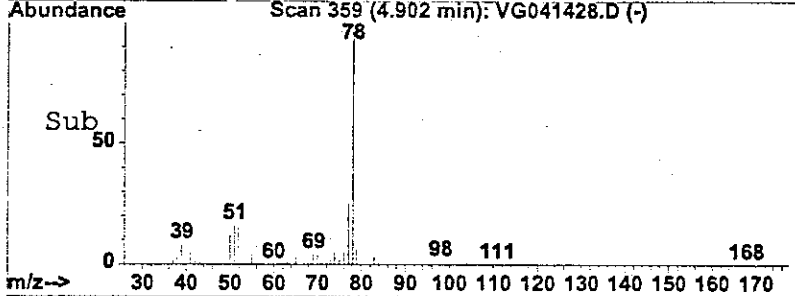
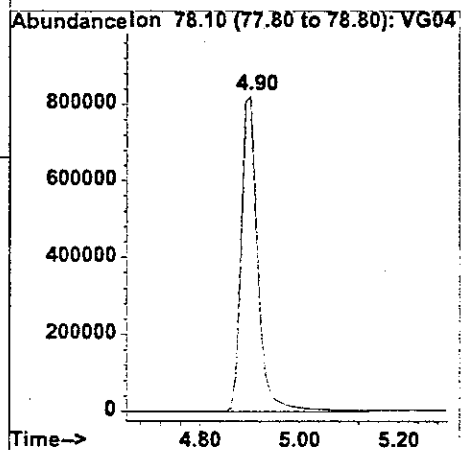
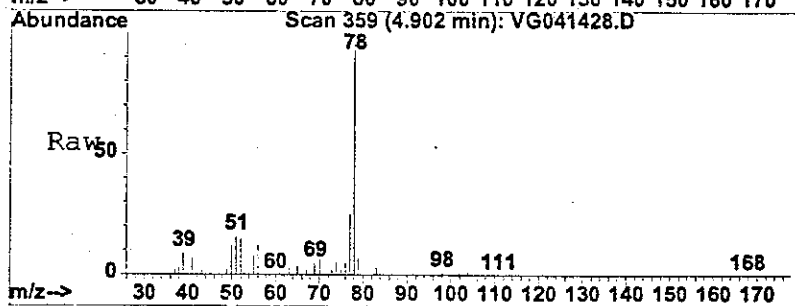
RPT1

Page 1



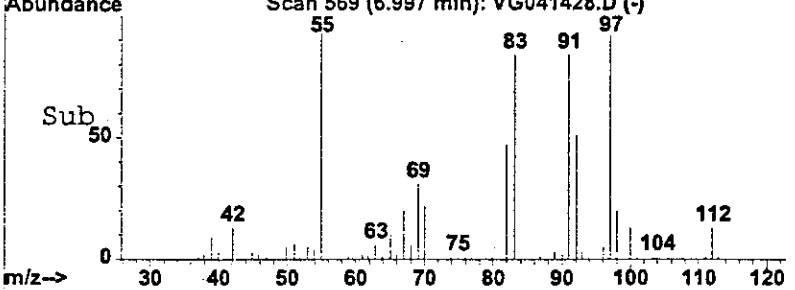
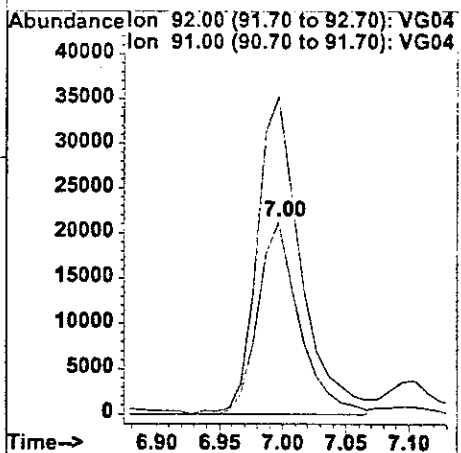
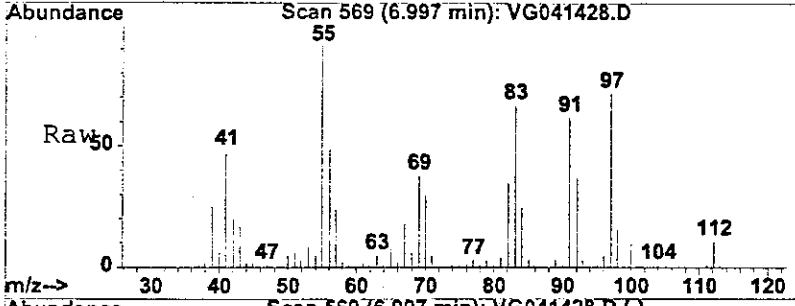
#36
Benzene
Concen: 20.12 ug/l
RT: 4.90 min Scan# 359
Delta R.T. -0.00 min
Lab File: VG041428.D
Acq: 15 Apr 2005 12:33 am

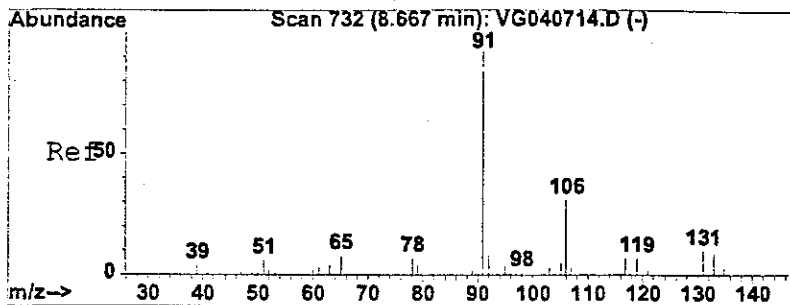
Tgt Ion: 78 Resp: 1923684



#46
Toluene
Concen: 0.80 ug/l
RT: 7.00 min Scan# 569
Delta R.T. -0.01 min
Lab File: VG041428.D
Acq: 15 Apr 2005 12:33 am

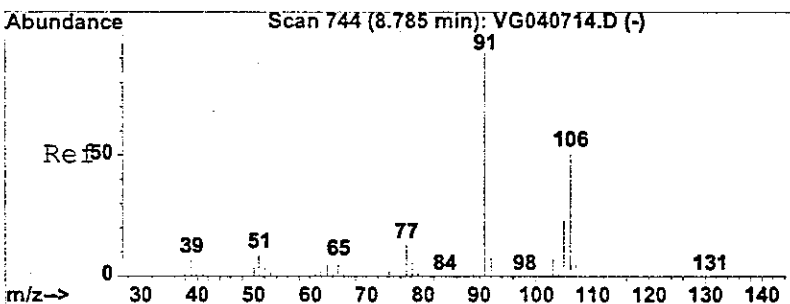
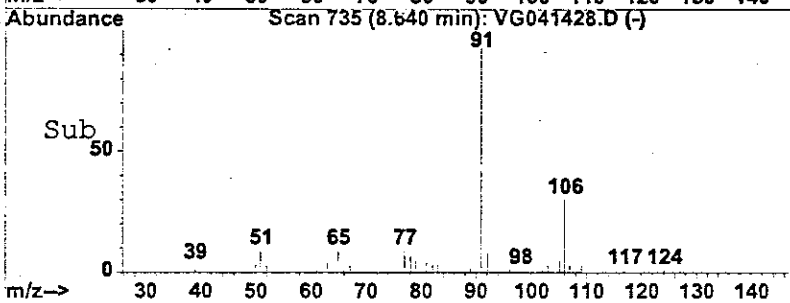
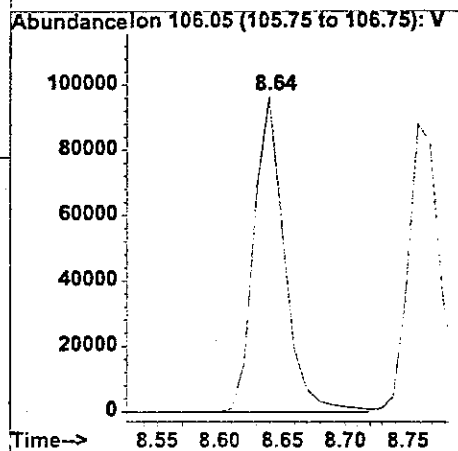
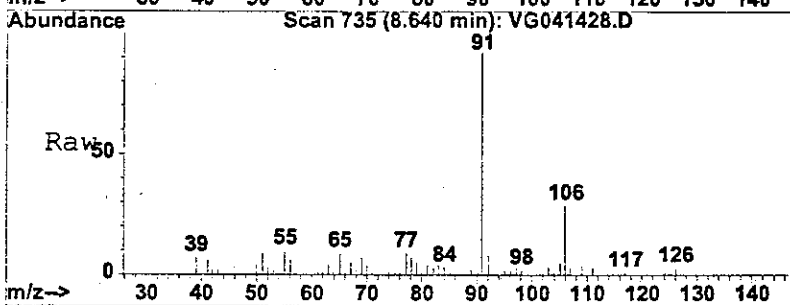
Tgt Ion: 92 Resp: 48233
Ion Ratio Lower Upper
92 100
91 174.0 132.3 198.5





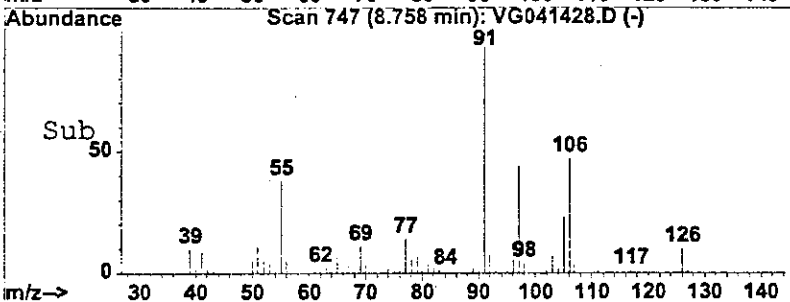
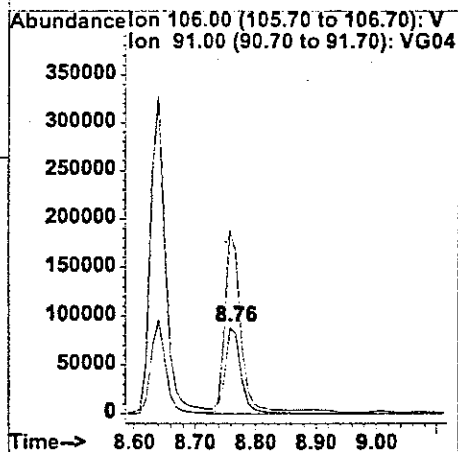
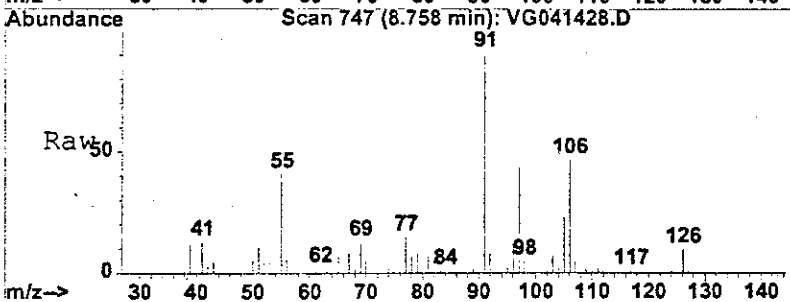
#61
Ethyl Benzene
Concen: 4.31 ug/l
RT: 8.64 min Scan# 735
Delta R.T. -0.03 min
Lab File: VG041428.D
Acq: 15 Apr 2005 12:33 am

Tgt Ion:106 Resp: 164062



#62
m&p-Xylenes
Concen: 3.59 ug/l
RT: 8.76 min Scan# 747
Delta R.T. -0.03 min
Lab File: VG041428.D
Acq: 15 Apr 2005 12:33 am

Tgt Ion:106 Resp: 166600
Ion Ratio Lower Upper
106 100
91 200.4 162.5 243.7

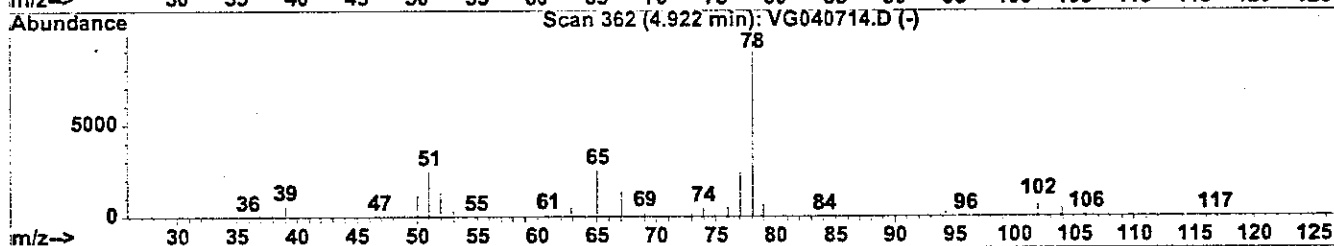
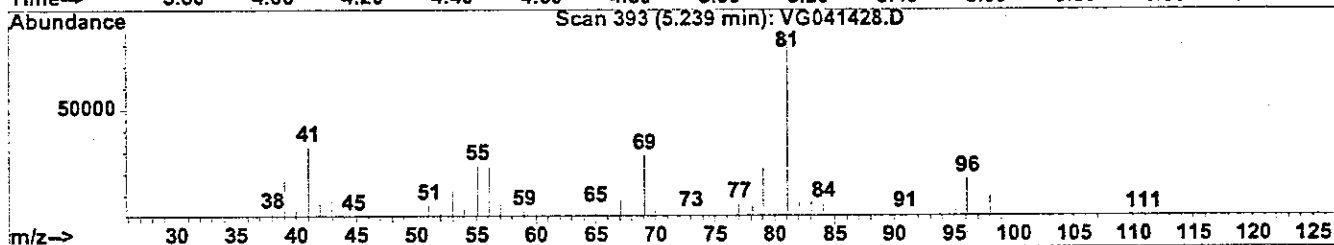
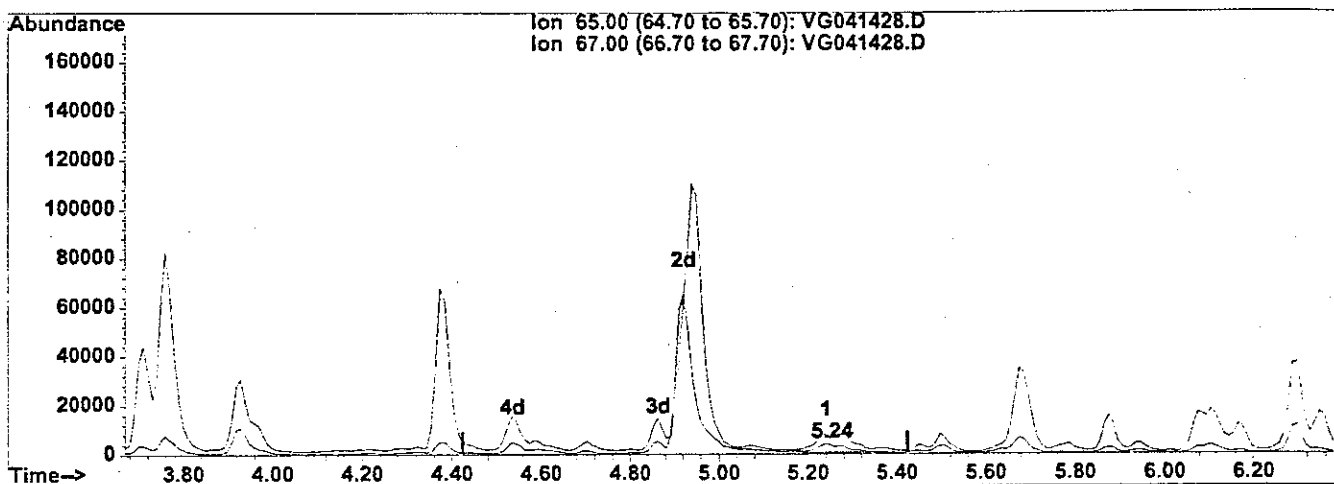


Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041428.D
 Acq On : 15 Apr 2005 12:33 am
 Sample : T2310-04
 Misc : 25mL
 Quant Time: Apr 15 12:22 2005

Vial: 10
 Operator: KP
 Inst : voa3
 Multiplr: 1.00
 Quant Results File: temp.res

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Multiple Level Calibration



TIC: VG041428.D

(30) 1,2-Dichloroethane-d4 (S)

5.24min 0.95ug/l

response 15362

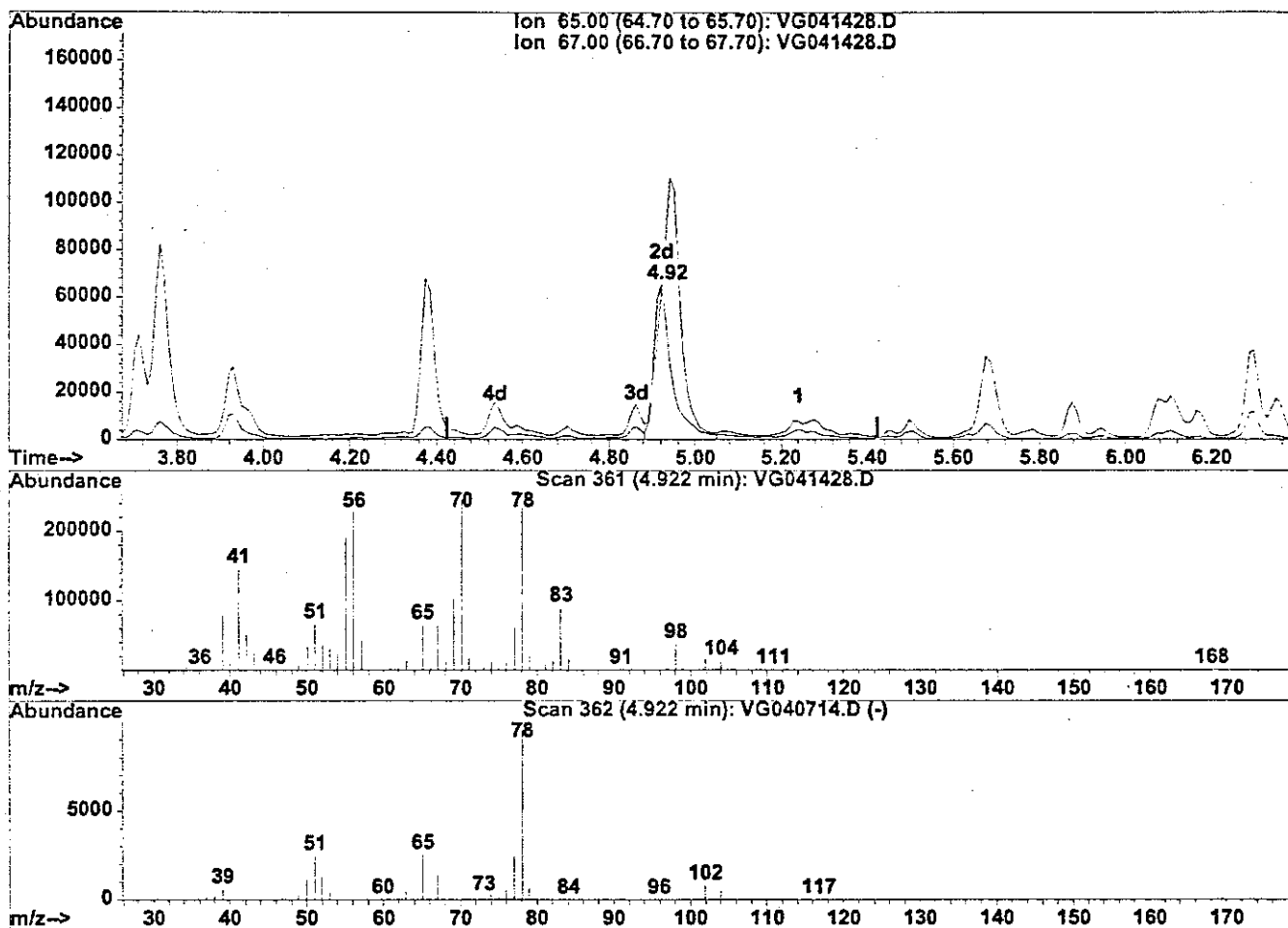
Ion	Exp%	Act%
65.00	100	100
67.00	53.10	93.49
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041428.D
Acq On : 15 Apr 2005 12:33 am
Sample : T2310-04
Misc : 25mL
Quant Time: Apr 15 12:22 2005

Vial: 10
Operator: KP
Inst : voa3
Multiplr: 1.00
Quant Results File: temp.res

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
Title : SW846 8260
Last Update : Fri Apr 08 10:00:48 2005
Response via : Multiple Level Calibration



TIC: VG041428.D

(30) 1,2-Dichloroethane-d4 (S)

4.92min 11.71ug/l m

response 189429

Ion	Exp%	Act%
65.00	100	100
67.00	53.10	7.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041505\VG041531.D

Vial: 13

Acq On : 16 Apr 2005 3:09 am

Operator: KP

Sample : T2310-04

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 27 16:00 2005

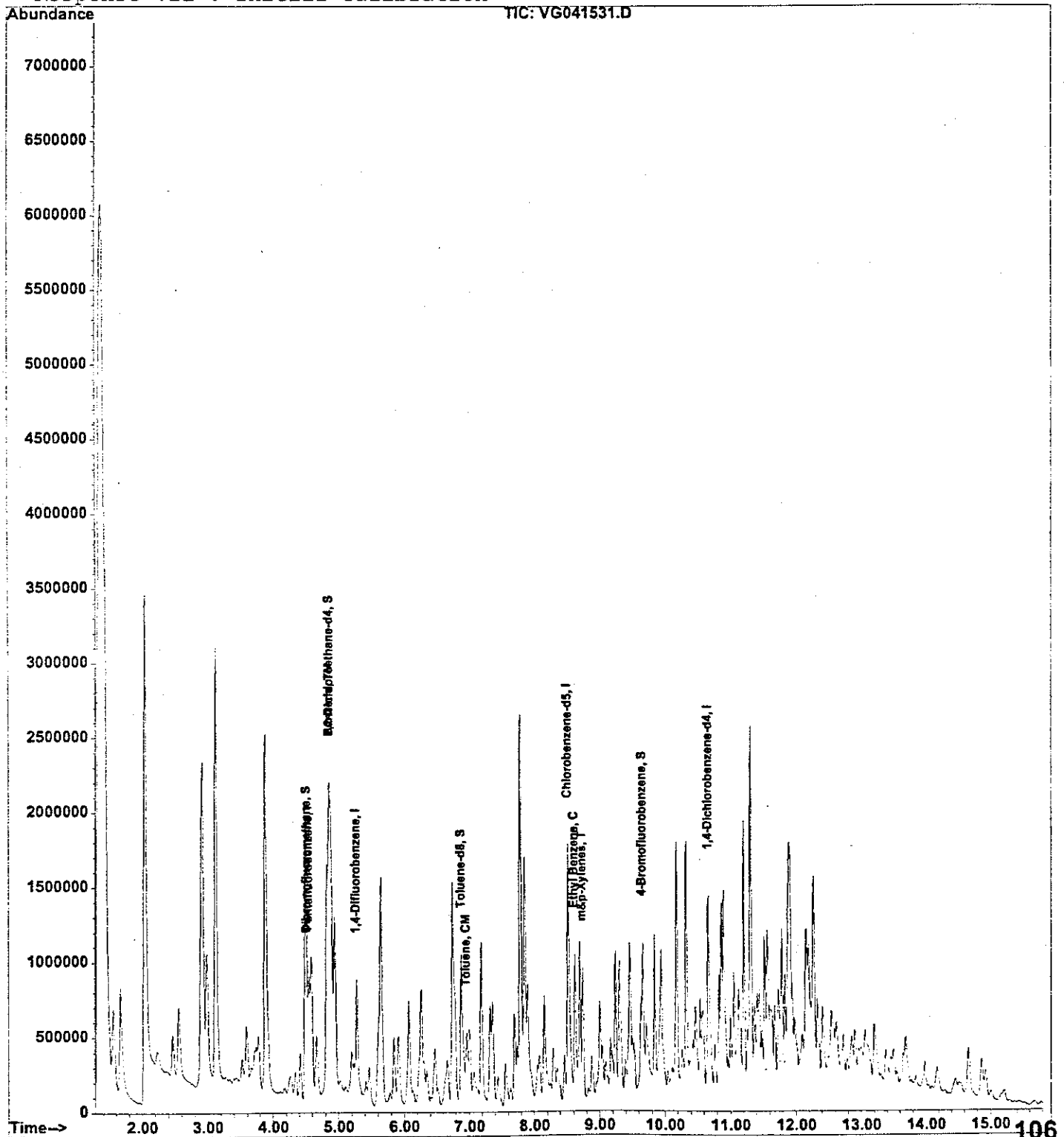
Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041505\VG041531.D

Vial: 13

Acq On : 16 Apr 2005 3:09 am

Operator: KP

Sample : T2310-04

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 27 16:00 2005

Quant Results File: SAG0407W.RES

Quant Method : F:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.55	168	395604	10.00	ug/l	-0.05
31) 1,4-Difluorobenzene	5.28	114	720098	10.00	ug/l	-0.05
57) Chlorobenzene-d5	8.52	117	725277	10.00	ug/l	-0.04
66) 1,4-Dichlorobenzene-	10.67	152	365171	10.00	ug/l	-0.04
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.88	65	200985m	13.21	ug/l	-0.04
32) Dibromofluoromethane	4.53	113	242890	10.49	ug/l	-0.04
43) Toluene-d8	6.89	98	870557	10.64	ug/l	-0.04
56) 4-Bromofluorobenzene	9.66	95	418726	14.05	ug/l	-0.04
Target Compounds						
36) Benzene	4.86	78	1899696	20.34	ug/l	Qvalue 100
46) Toluene	6.96	92	48252m	0.82	ug/l	
61) Ethyl Benzene	8.62	106	159264	4.15	ug/l	100
62) m&p-Xylenes	8.75	106	157579	3.37	ug/l	98

Analyst Signature: MSH Analyst Name: _____ Date: 04-27-05

-----REASONS FOR MANUAL INTEGRATIONS-----

Poor resolution of peaks exhibited on chromatogram.Compound #:

☒ Peak integrated by software incorrectly.Compound #: 30 46

OTHER: _____ Compound #:

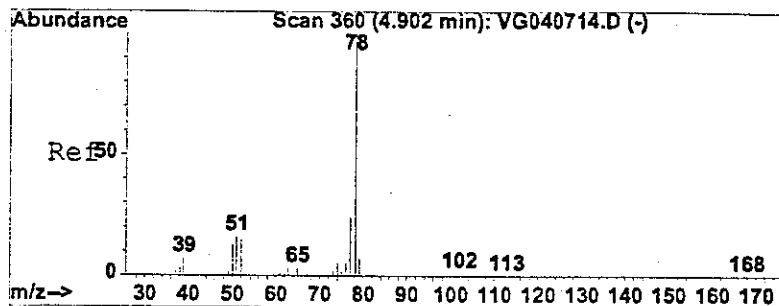
(#) = qualifier out of range (m) = manual integration

VG041531.D SAG0407W.M

Wed Apr 27 16:01:17 2005

RPT1

Page 1



#36

Benzene

Concen: 20.34 ug/l

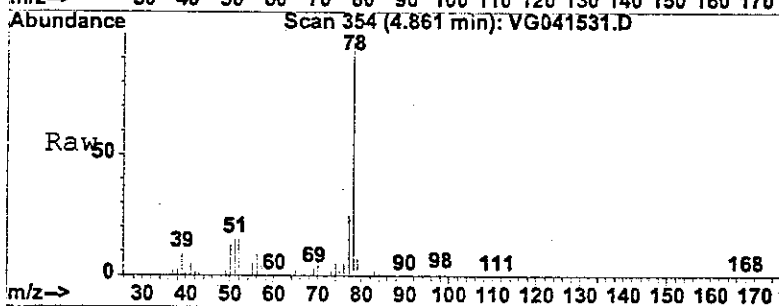
RT: 4.86 min Scan# 354

Delta R.T. -0.04 min

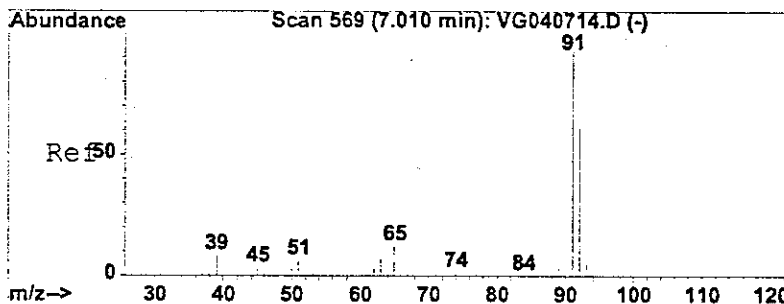
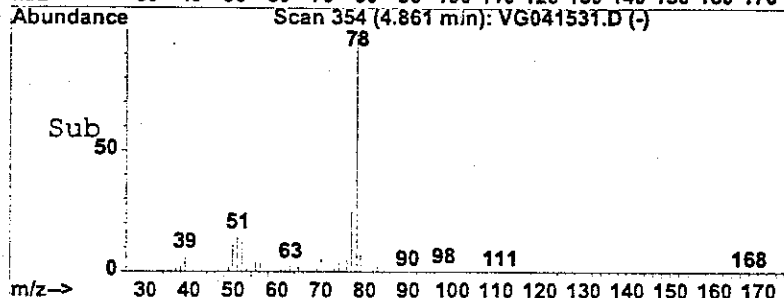
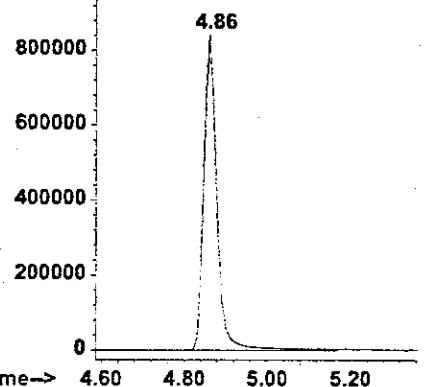
Lab File: VG041531.D

Acq: 16 Apr 2005 3:09 am

Tgt Ion: 78 Resp: 1899696



Abundance Ion 78.10 (77.80 to 78.80): VG04



#46

Toluene

Concen: 0.82 ug/l m

RT: 6.96 min Scan# 565

Delta R.T. -0.05 min

Lab File: VG041531.D

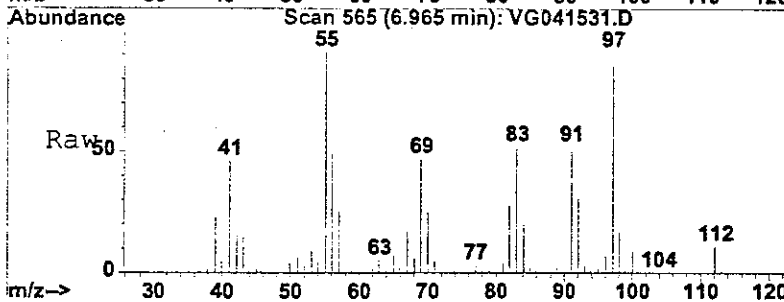
Acq: 16 Apr 2005 3:09 am

Tgt Ion: 92 Resp: 48252

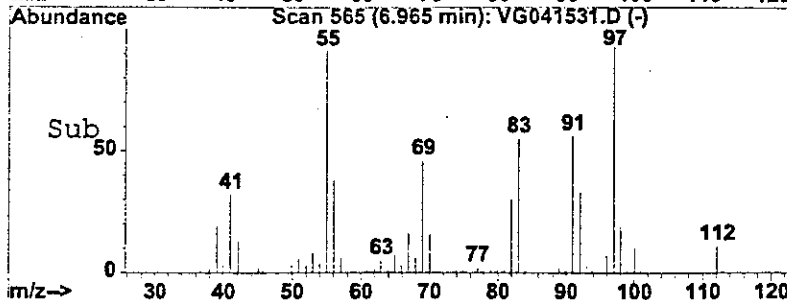
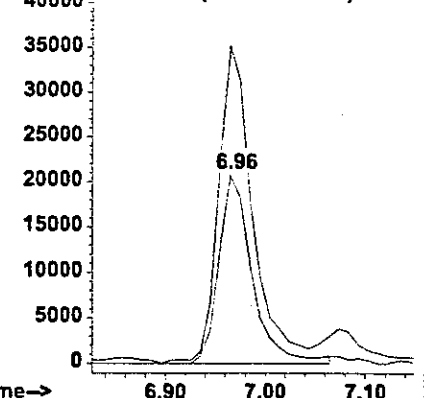
Ion Ratio Lower Upper

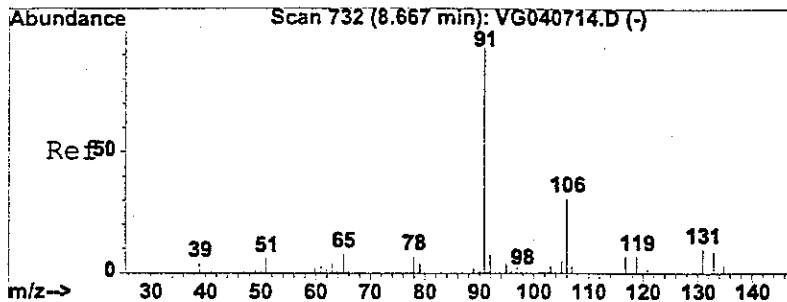
92 100

91 173.3 132.3 198.5

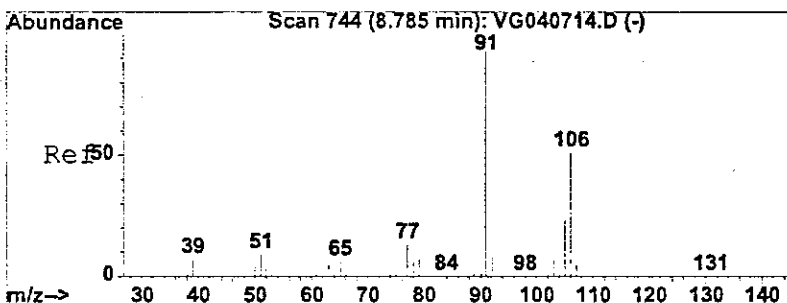
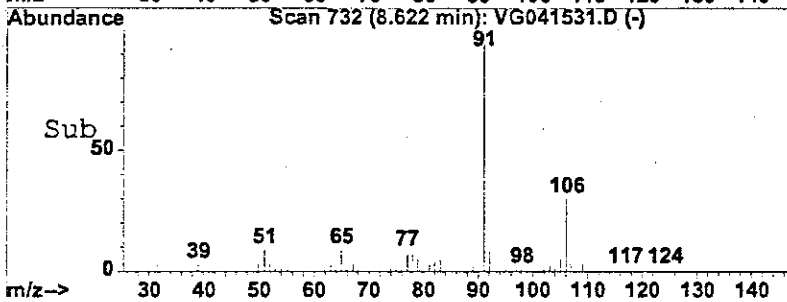
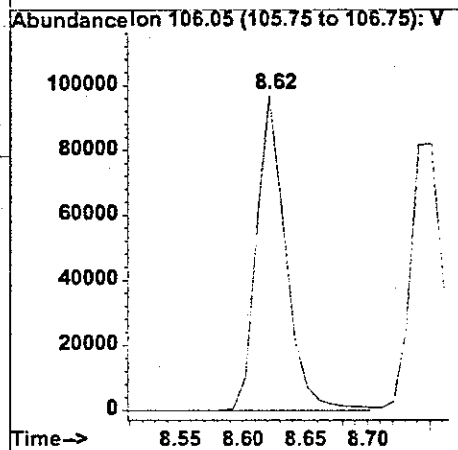
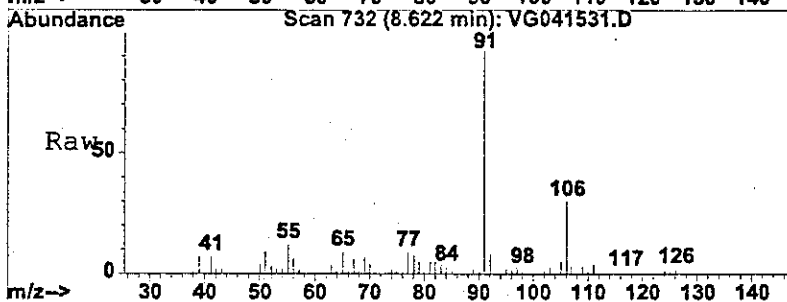


Abundance Ion 92.00 (91.70 to 92.70): VG04
Ion 91.00 (90.70 to 91.70): VG04



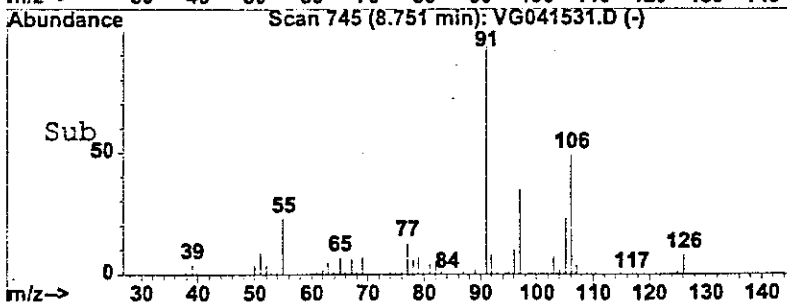
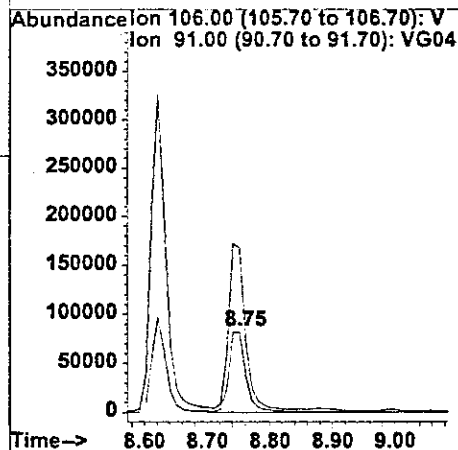
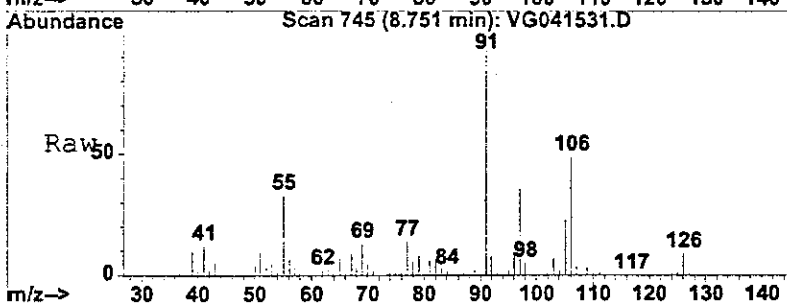


#61
Ethyl Benzene
Concen: 4.15 ug/l
RT: 8.62 min Scan# 732
Delta R.T. -0.05 min
Lab File: VG041531.D
Acq: 16 Apr 2005 3:09 am
Tgt Ion:106 Resp: 159264



#62
m&p-Xylenes
Concen: 3.37 ug/l
RT: 8.75 min Scan# 745
Delta R.T. -0.03 min
Lab File: VG041531.D
Acq: 16 Apr 2005 3:09 am

Tgt Ion:106 Resp: 157579
Ion Ratio Lower Upper
106 100
91 200.7 162.5 243.7

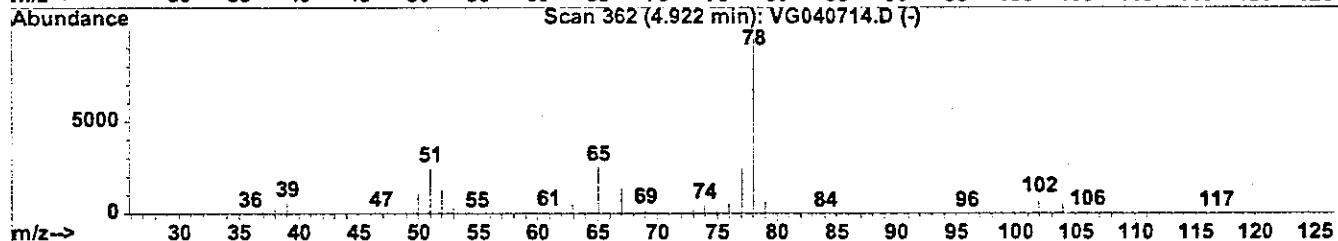
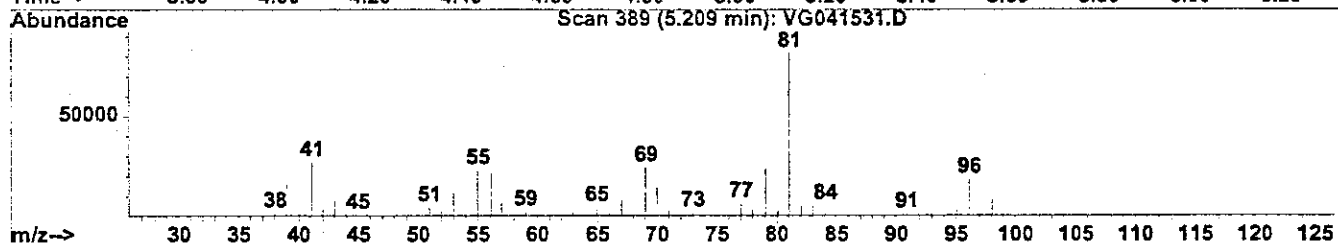
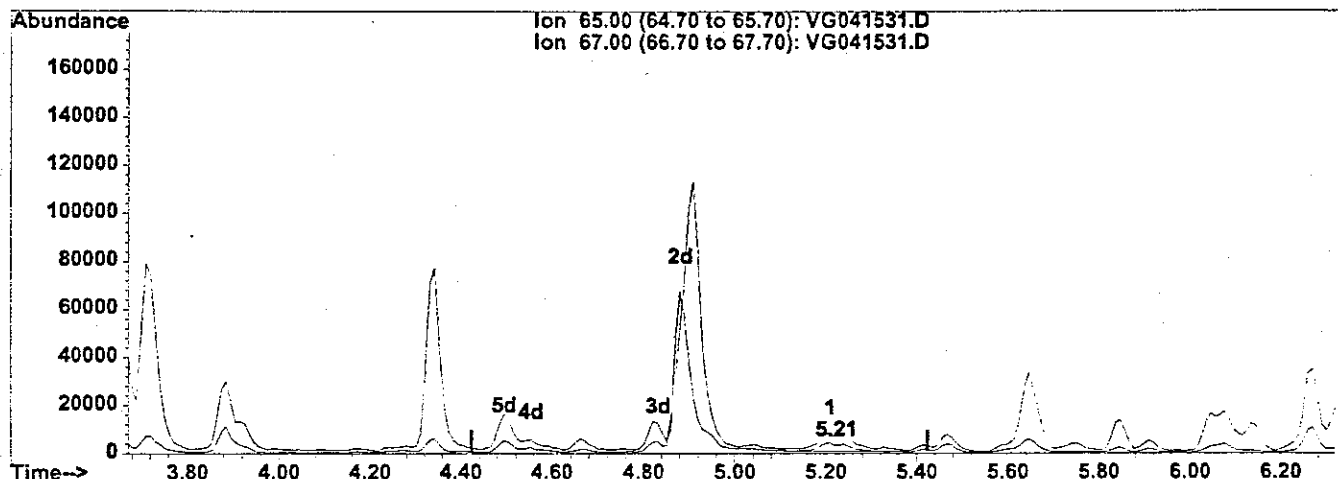


Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041505\VG041531.D
 Acq On : 16 Apr 2005 3:09 am
 Sample : T2310-04
 Misc : 25mL
 Quant Time: Apr 27 15:59 2005

Vial: 13
 Operator: KP
 Inst : voa3
 Multiplr: 1.00
 Quant Results File: temp.res

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Multiple Level Calibration



TIC: VG041531.D

(30) 1,2-Dichloroethane-d4 (S)

5.21min 1.05ug/l

response 15956

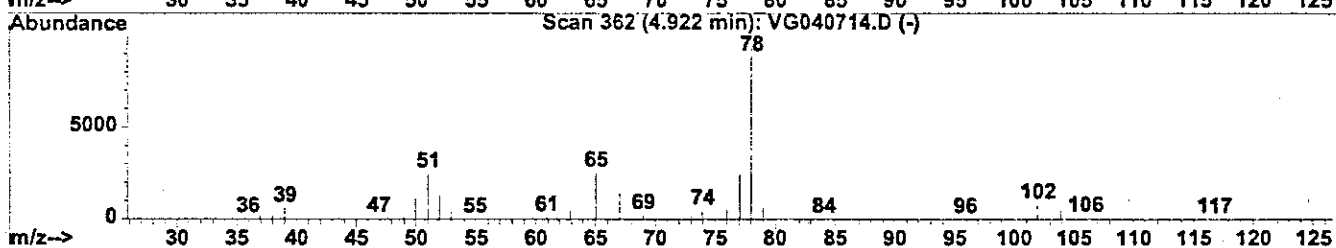
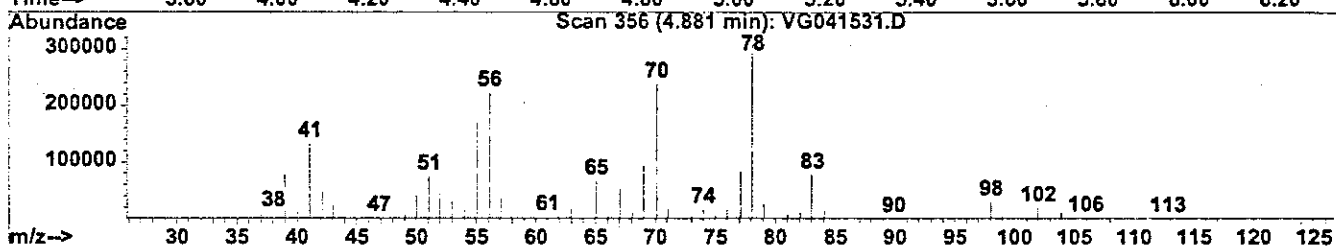
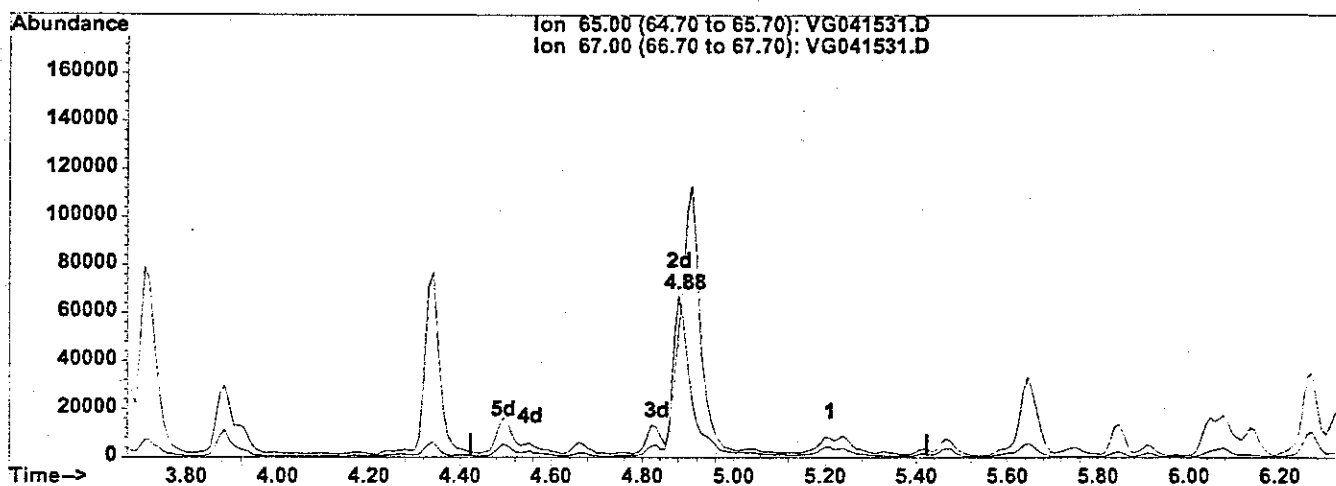
Ion	Exp%	Act%
65.00	100	100
67.00	53.10	104.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041505\VG041531.D
 Acq On : 16 Apr 2005 3:09 am
 Sample : T2310-04
 Misc : 25mL
 Quant Time: Apr 27 16:00 2005

Vial: 13
 Operator: KP
 Inst : voa3
 Multiplr: 1.00
 Quant Results File: temp.res

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Multiple Level Calibration



TIC: VG041531.D

(30) 1,2-Dichloroethane-d4 (S)

4.88min 13.21ug/l m

response 200985

Ion	Exp%	Act%
65.00	100	100
67.00	53.10	8.32
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041405\VG041429.D

Vial: 11

Acq On : 15 Apr 2005 1:14 am

Operator: KP

Sample : T2310-05

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:26 2005

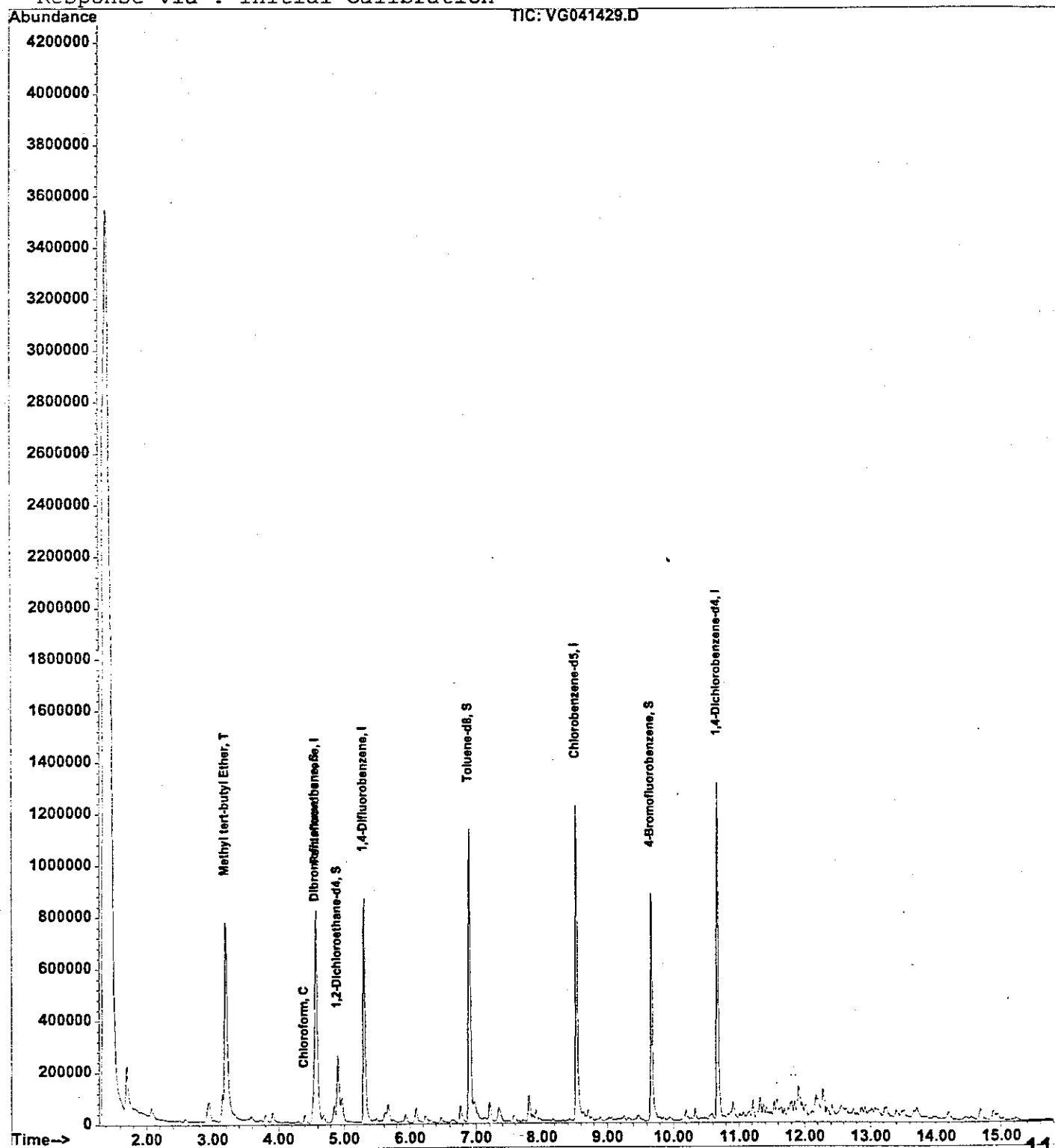
Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041429.D

Vial: 11

Acq On : 15 Apr 2005 1:14 am

Operator: KP

Sample : T2310-05

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:26 2005

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.59	168	504025	10.00	ug/l	-0.02
31) 1,4-Difluorobenzene	5.31	114	910305	10.00	ug/l	-0.02
57) Chlorobenzene-d5	8.53	117	864742	10.00	ug/l	-0.03
66) 1,4-Dichlorobenzene-	10.68	152	400706	10.00	ug/l	-0.03
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.91	65	178157	9.19	ug/l	-0.01
32) Dibromofluoromethane	4.56	113	279366	9.55	ug/l	-0.02
43) Toluene-d8	6.90	98	1026650	9.93	ug/l	-0.03
56) 4-Bromofluorobenzene	9.67	95	389728	10.34	ug/l	-0.03
Target Compounds						
18) Methyl tert-butyl Et	3.20	73	1297330	44.77	ug/l	100
27) Chloroform	4.40	83	30425	0.59	ug/l	98

Analyst Signature: MSH Analyst Name: _____ Date: 04-15-05

-----REASONS FOR MANUAL INTEGRATIONS-----

___ Poor resolution of peaks exhibited on chromatogram.Compound #:

___ Peak integrated by software incorrectly.Compound #:

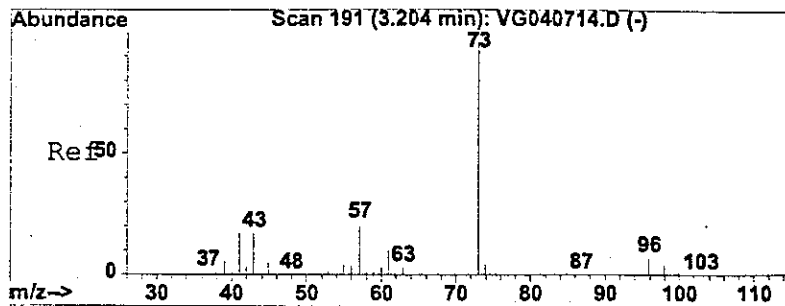
___ OTHER: _____ Compound #:

(#)= qualifier out of range (m)= manual integration

VG041429.D SAG0407W.M

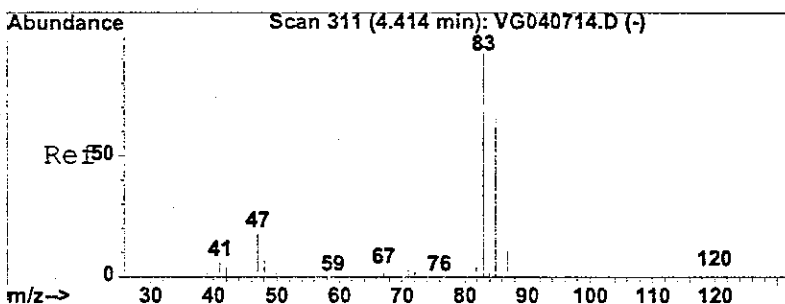
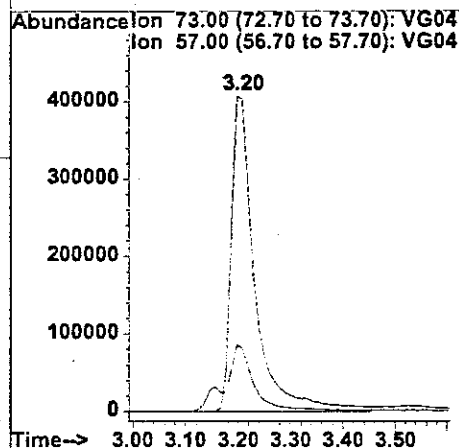
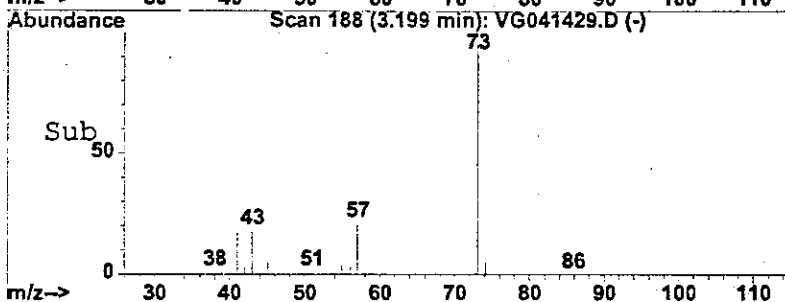
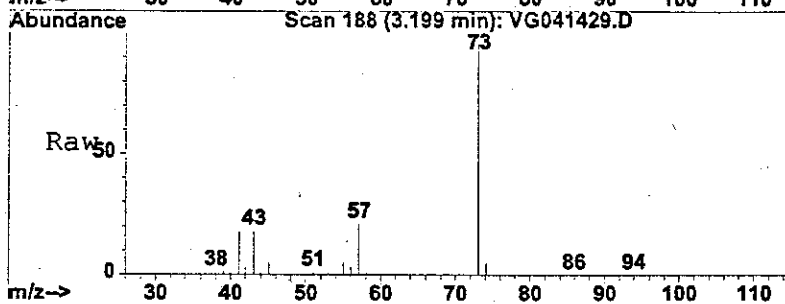
Fri Apr 15 12:27:13 2005

RPT1



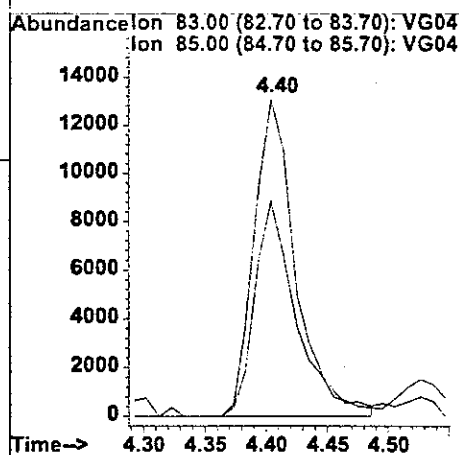
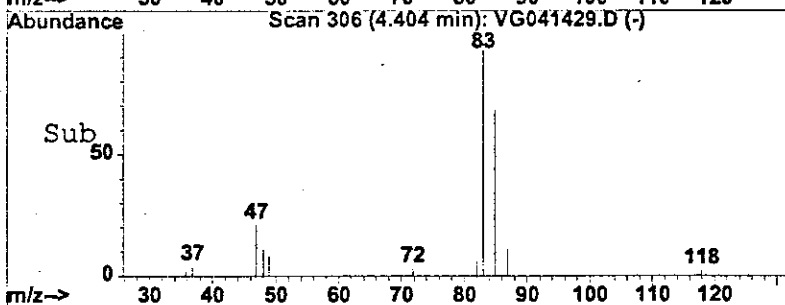
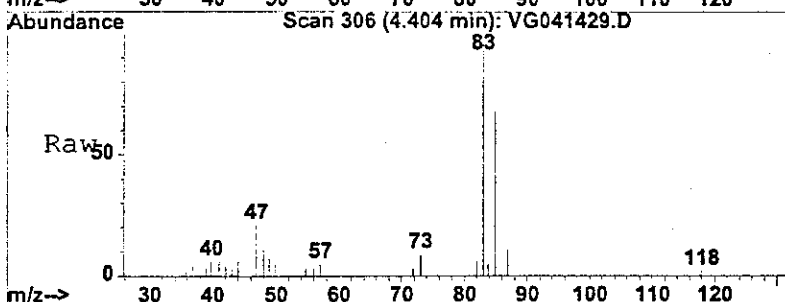
#18
Methyl tert-butyl Ether
Concen: 44.77 ug/l
RT: 3.20 min Scan# 188
Delta R.T. -0.01 min
Lab File: VG041429.D
Acq: 15 Apr 2005 1:14 am

Tgt Ion: 73 Resp: 1297330
Ion Ratio Lower Upper
73 100
57 20.8 16.6 24.8



#27
Chloroform
Concen: 0.59 ug/l
RT: 4.40 min Scan# 306
Delta R.T. -0.01 min
Lab File: VG041429.D
Acq: 15 Apr 2005 1:14 am

Tgt Ion: 83 Resp: 30425
Ion Ratio Lower Upper
83 100
85 67.6 53.0 79.4



Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041505\VG041524.D

Vial: 6

Acq On : 15 Apr 2005 10:23 pm

Operator: KP

Sample : T2310-05 5X

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 18 11:59 2005

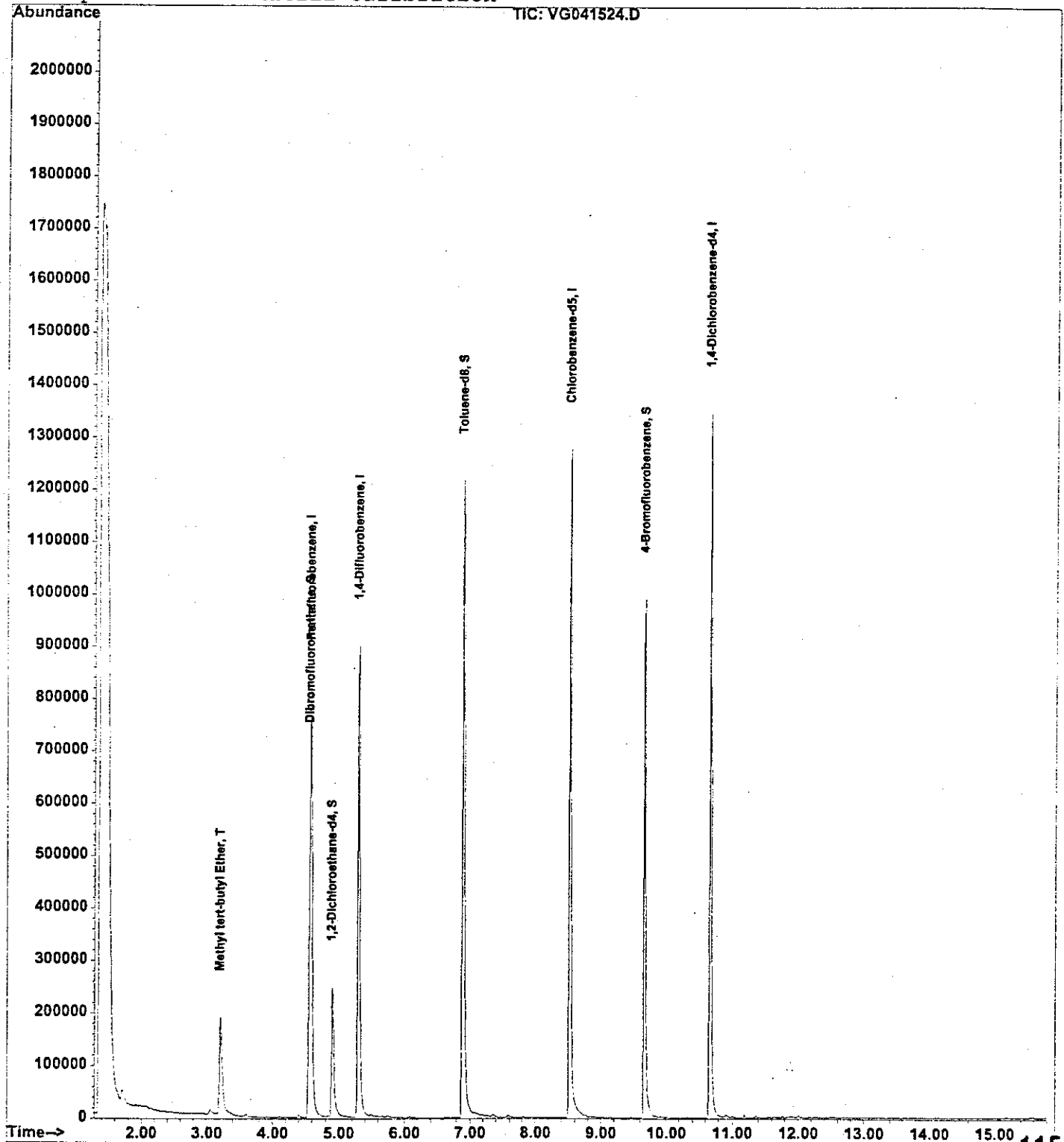
Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041505\VG041524.D

Vial: 6

Acq On : 15 Apr 2005 10:23 pm

Operator: KP

Sample : T2310-05 5X

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 18 11:59 2005

Quant Results File: SAG0407W.RES

Quant Method : F:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.58	168	544008	10.00	ug/l	-0.02
31) 1,4-Difluorobenzene	5.30	114	956142	10.00	ug/l	-0.02
57) Chlorobenzene-d5	8.53	117	934667	10.00	ug/l	-0.03
66) 1,4-Dichlorobenzene-	10.66	152	437472	10.00	ug/l	-0.04
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.90	65	211253	10.10	ug/l	-0.02
32) Dibromofluoromethane	4.55	113	292671	9.52	ug/l	-0.02
43) Toluene-d8	6.89	98	1095585	10.08	ug/l	-0.04
56) 4-Bromofluorobenzene	9.67	95	448405	11.33	ug/l	-0.03
Target Compounds						Qvalue
18) Methyl tert-butyl Et	3.21	73	308360	9.86	ug/l	99

Analyst Signature: M. Shu Analyst Name: _____ Date: 04-17-05

-----REASONS FOR MANUAL INTEGRATIONS-----

___ Poor resolution of peaks exhibited on chromatogram.Compound #: _____

___ Peak integrated by software incorrectly.Compound #: _____

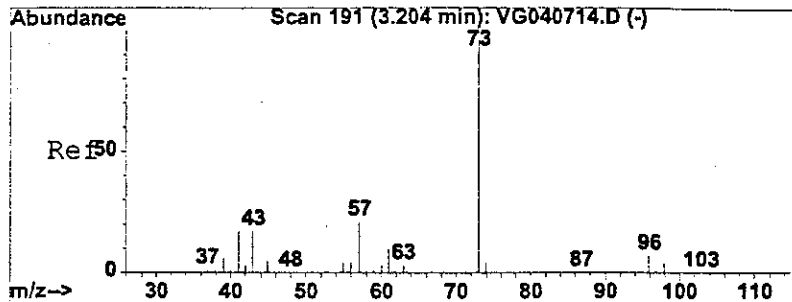
___ OTHER: _____ Compound #: _____

(#) = qualifier out of range (m) = manual integration

VG041524.D SAG0407W.M

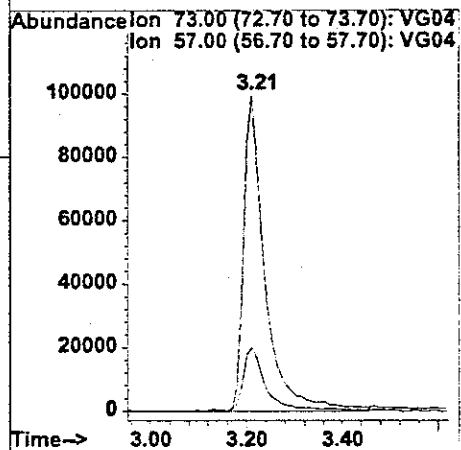
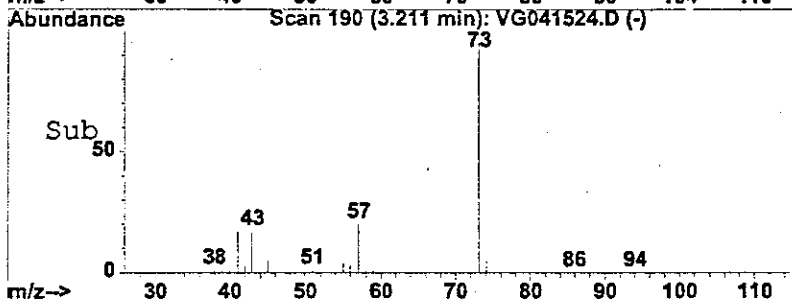
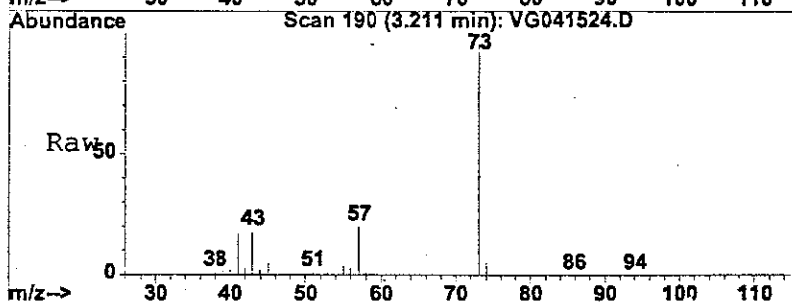
Wed Apr 27 16:02:44 2005

RPT1



#18
Methyl tert-butyl Ether
Concen: 9.86 ug/l
RT: 3.21 min Scan# 190
Delta R.T. 0.01 min
Lab File: VG041524.D
Acq: 15 Apr 2005 10:23 pm

Tgt Ion: 73 Resp: 308360
Ion Ratio Lower Upper
73 100
57 20.1 16.6 24.8



Data File : K:\1\DATA\MSVOAG\VG041405\VG041430.D

Vial: 12

Acq On : 15 Apr 2005 1:55 am

Operator: KP

Sample : T2310-06

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:29 2005

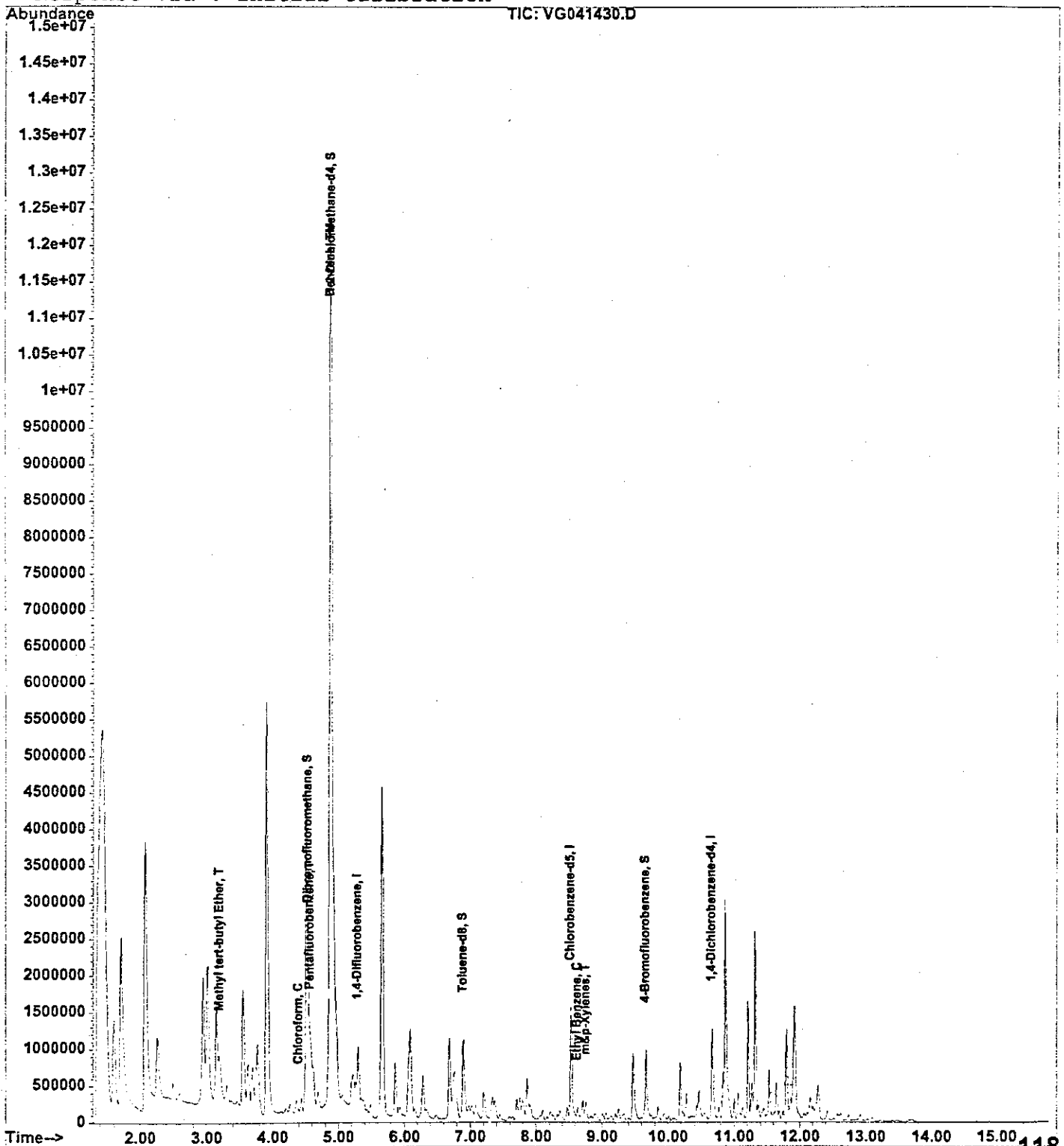
Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041430.D

Vial: 12

Acq On : 15 Apr 2005 1:55 am

Operator: KP

Sample : T2310-06

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:29 2005

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.59	168	471513	10.00	ug/l	-0.02
31) 1,4-Difluorobenzene	5.30	114	771665	10.00	ug/l	-0.02
57) Chlorobenzene-d5	8.53	117	806384	10.00	ug/l	-0.03
66) 1,4-Dichlorobenzene-	10.67	152	377518	10.00	ug/l	-0.03
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.91	65	213852	11.79	ug/l	0.00
32) Dibromofluoromethane	4.56	113	262711	10.59	ug/l	-0.02
43) Toluene-d8	6.91	98	949697	10.83	ug/l	-0.03
56) 4-Bromofluorobenzene	9.67	95	385069	12.05	ug/l	-0.02
Target Compounds						
18) Methyl tert-butyl Et	3.21	73	910341	33.58	ug/l	Qvalue # 87
27) Chloroform	4.40	83	26622	0.55	ug/l	100
36) Benzene	4.89	78	15863095	158.51	ug/l	100
61) Ethyl Benzene	8.63	106	30990	0.73	ug/l	100
62) m&p-Xylenes	8.76	106	65027	1.25	ug/l	89

Analyst Signature: M Shw Analyst Name: _____ Date: 04-15-05

-----REASONS FOR MANUAL INTEGRATIONS-----

___ Poor resolution of peaks exhibited on chromatogram.Compound #: _____

___ Peak integrated by software incorrectly.Compound #: _____

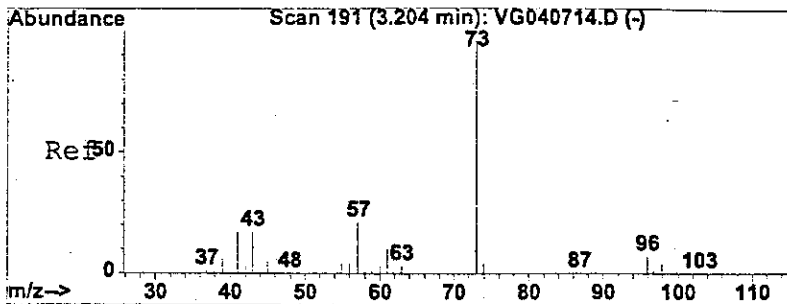
___ OTHER: _____ Compound #: _____

(#) = qualifier out of range (m) = manual integration

VG041430.D SAG0407W.M

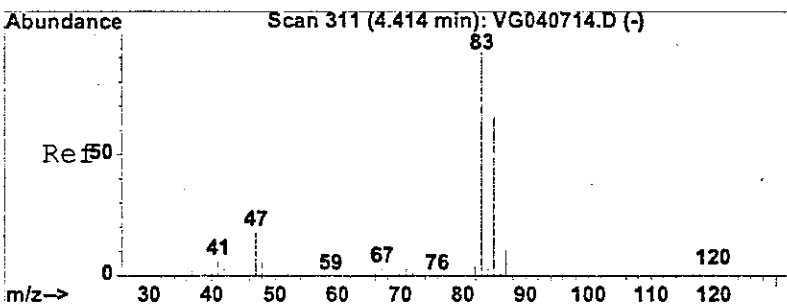
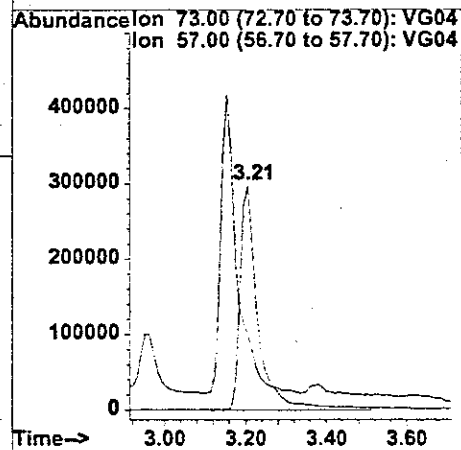
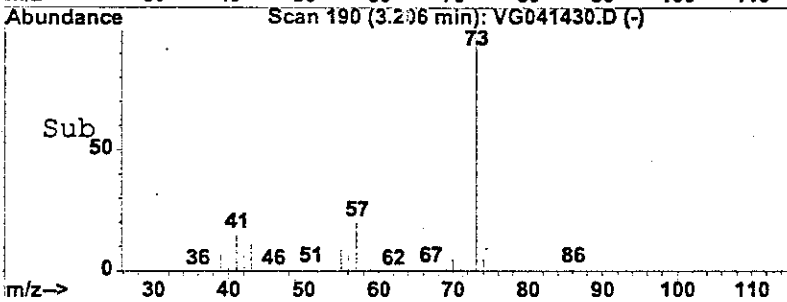
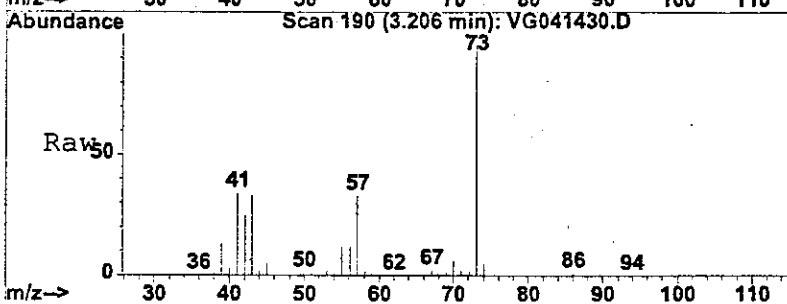
Fri Apr 15 12:29:56 2005

RPT1



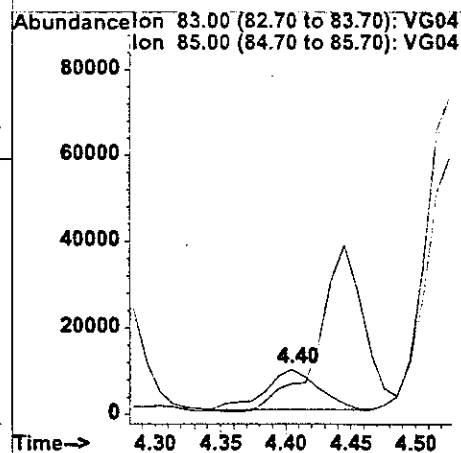
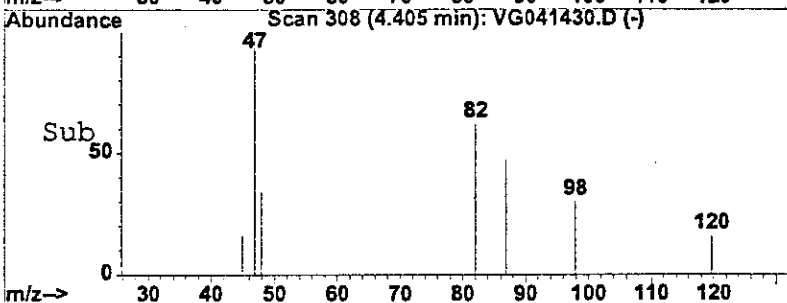
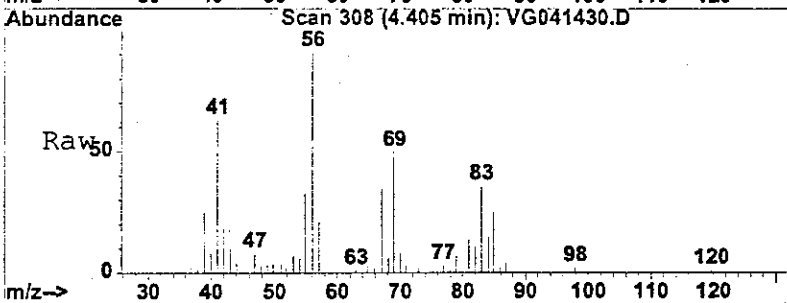
#18
Methyl tert-butyl Ether
Concen: 33.58 ug/l
RT: 3.21 min Scan# 190
Delta R.T. 0.00 min
Lab File: VG041430.D
Acq: 15 Apr 2005 1:55 am

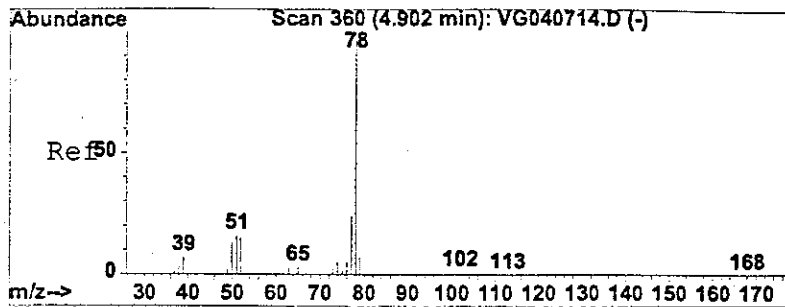
Tgt Ion: 73 Resp: 910341
Ion Ratio Lower Upper
73 100
57 26.5 16.6 24.8#



#27
Chloroform
Concen: 0.55 ug/l
RT: 4.40 min Scan# 308
Delta R.T. -0.01 min
Lab File: VG041430.D
Acq: 15 Apr 2005 1:55 am

Tgt Ion: 83 Resp: 26622
Ion Ratio Lower Upper
83 100
85 66.3 53.0 79.4





#36

Benzene

Concen: 158.51 ug/l

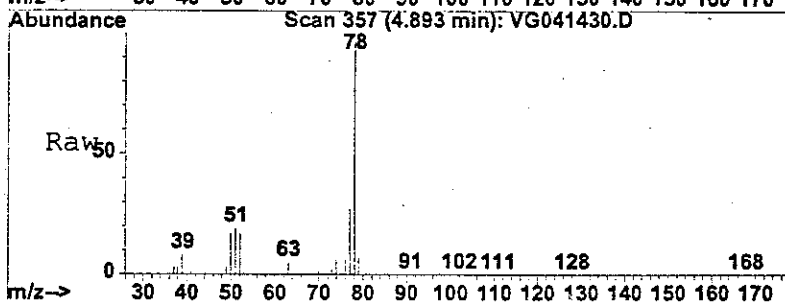
RT: 4.89 min Scan# 357

Delta R.T. -0.01 min

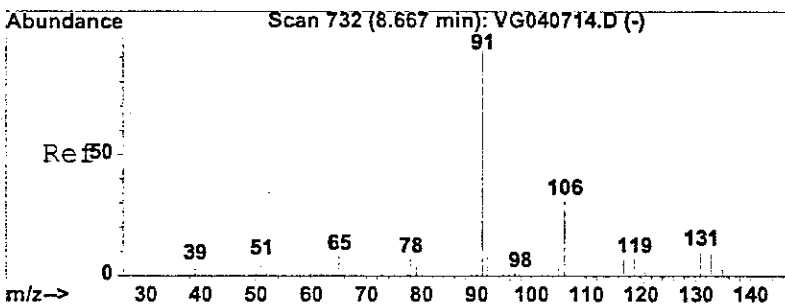
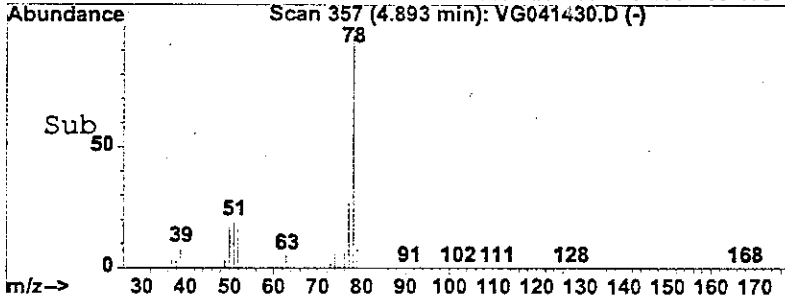
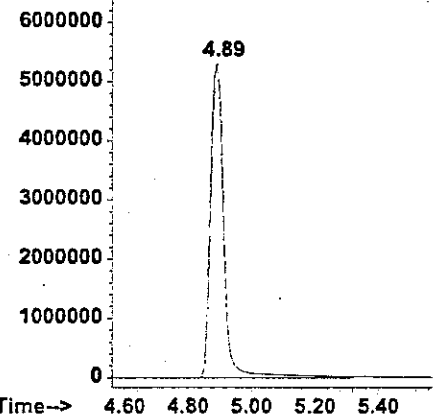
Lab File: VG041430.D

Acq: 15 Apr 2005 1:55 am

Tgt Ion: 78 Resp:15863095



Abundance on 78.10 (77.80 to 78.80): VG04



#61

Ethyl Benzene

Concen: 0.73 ug/l

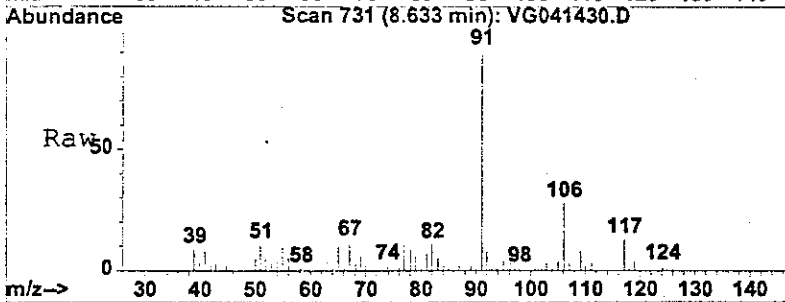
RT: 8.63 min Scan# 731

Delta R.T. -0.03 min

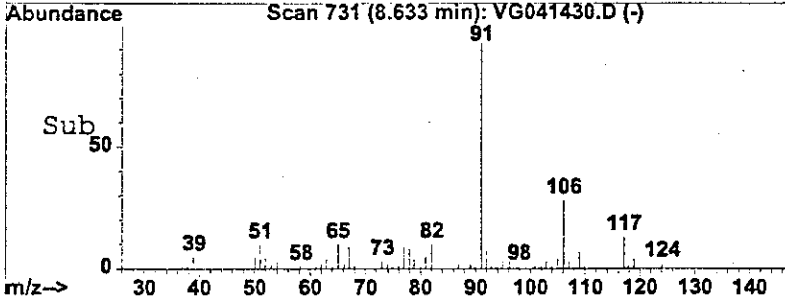
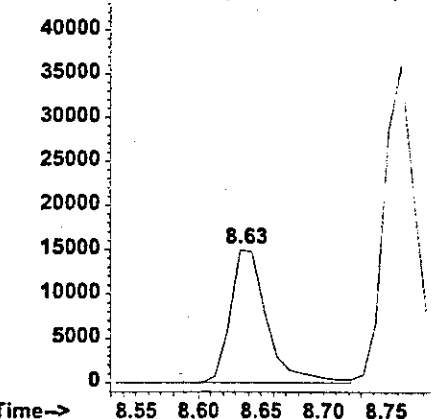
Lab File: VG041430.D

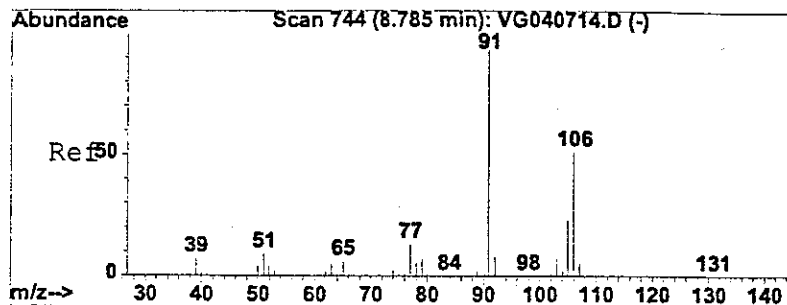
Acq: 15 Apr 2005 1:55 am

Tgt Ion:106 Resp: 30990



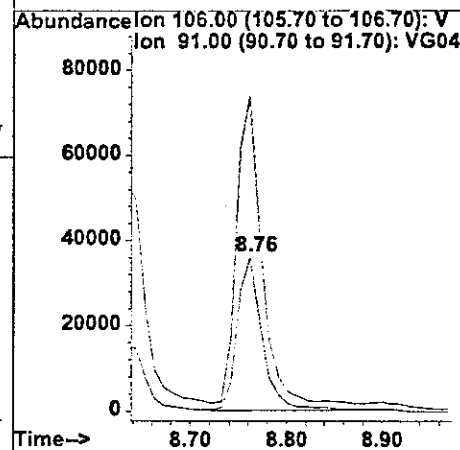
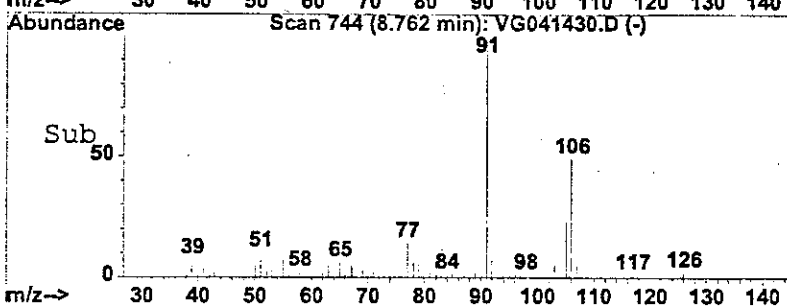
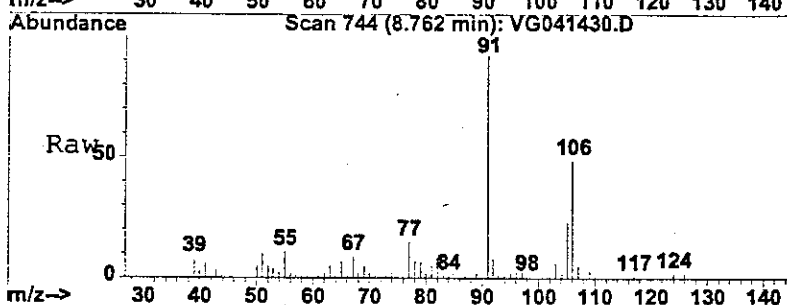
Abundance on 106.05 (105.75 to 106.75): V





#62
 m&p-Xylenes
 Concen: 1.25 ug/l
 RT: 8.76 min Scan# 744
 Delta R.T. -0.02 min
 Lab File: VG041430.D
 Acq: 15 Apr 2005 1:55 am

Tgt Ion:106 Resp: 65027
 Ion Ratio Lower Upper
 106 100
 91 220.1 162.5 243.7



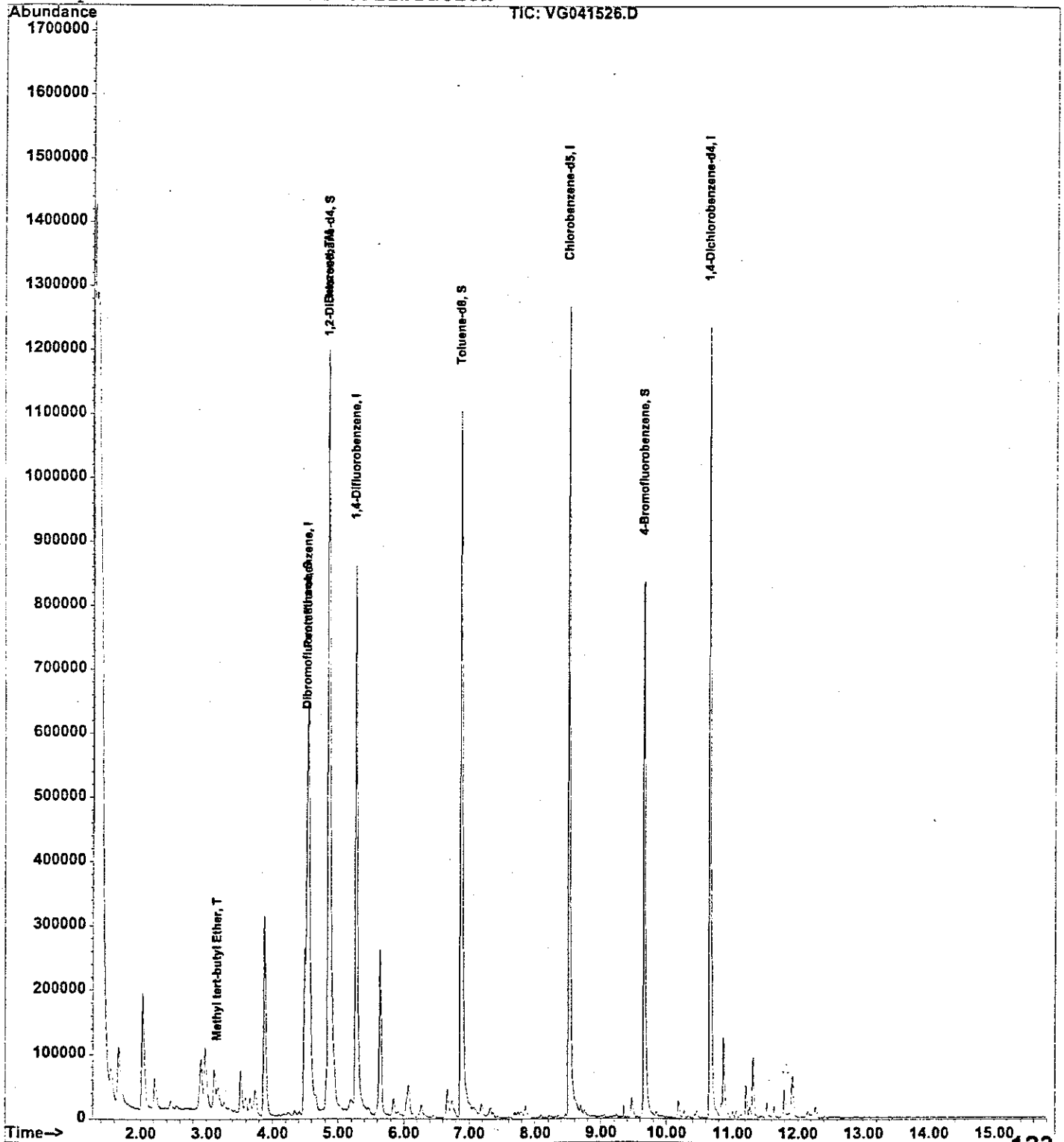
Quantitation Report

Data File : K:\1\DATA\MSVOAG\VG041505\VG041526.D
 Acq On : 15 Apr 2005 11:44 pm
 Sample : T2310-06 10X
 Misc : 25mL
 MS Integration Params: RTEINT.P
 Quant Time: Apr 27 16:06 2005

Vial: 8
 Operator: KP
 Inst : voa3
 Multiplr: 1.00

Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041505\VG041526.D

Vial: 8

Acq On : 15 Apr 2005 11:44 pm

Operator: KP

Sample : T2310-06 10X

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 27 16:06 2005

Quant Results File: SAG0407W.RES

Quant Method : F:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.56	168	479349	10.00	ug/l	-0.05
31) 1,4-Difluorobenzene	5.28	114	914400	10.00	ug/l	-0.04
57) Chlorobenzene-d5	8.52	117	884219	10.00	ug/l	-0.04
66) 1,4-Dichlorobenzene-	10.66	152	397619	10.00	ug/l	-0.04
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.88	65	197951	10.74	ug/l	-0.05
32) Dibromofluoromethane	4.53	113	299989	10.21	ug/l	-0.05
43) Toluene-d8	6.88	98	1076630	10.36	ug/l	-0.05
56) 4-Bromofluorobenzene	9.66	95	403898	10.67	ug/l	-0.04
Target Compounds						Qvalue
18) Methyl tert-butyl Et	3.18	73	61493	2.23	ug/l	92
36) Benzene	4.86	78	1300612m	10.97	ug/l	

Analyst Signature: M. Sh Analyst Name: _____ Date: 04-17-05

-----REASONS FOR MANUAL INTEGRATIONS-----

☐ Poor resolution of peaks exhibited on chromatogram.Compound #:☒ Peak integrated by software incorrectly.Compound #: 36

OTHER: _____ Compound #:

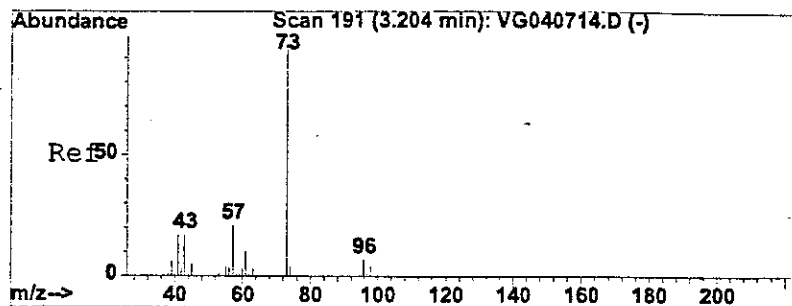
(#) = qualifier out of range (m) = manual integration

VG041526.D SAG0407W.M

Wed Apr 27 16:06:40 2005

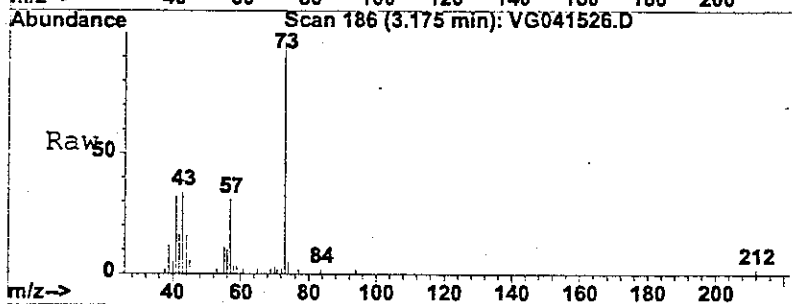
RPT1

Page 1

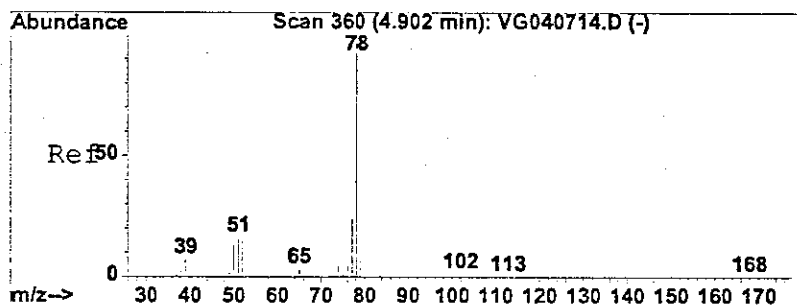
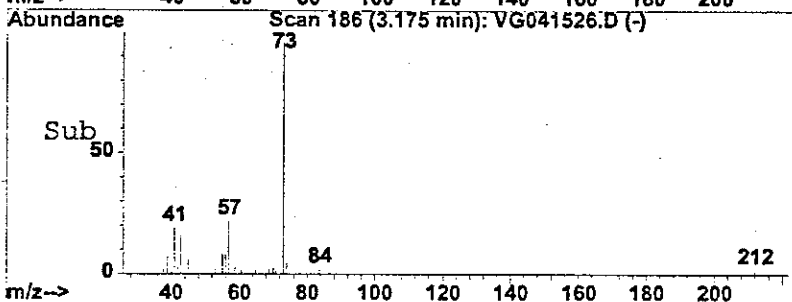
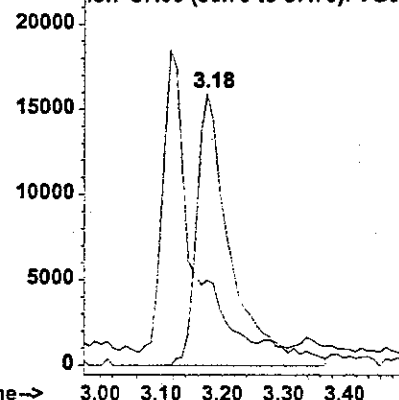


#18
Methyl tert-butyl Ether
Concen: 2.23 ug/l
RT: 3.18 min Scan# 186
Delta R.T. -0.03 min
Lab File: VG041526.D
Acq: 15 Apr 2005 11:44 pm

Tgt Ion: 73 Resp: 61493
Ion Ratio Lower Upper
73 100
57 24.3 16.6 24.8

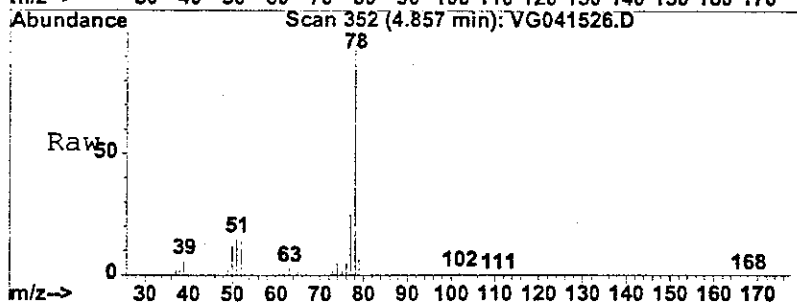


Abundance Ion 73.00 (72.70 to 73.70): VG04
Ion 57.00 (56.70 to 57.70): VG04

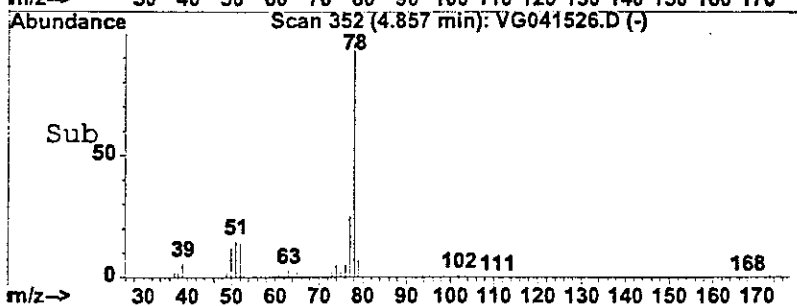
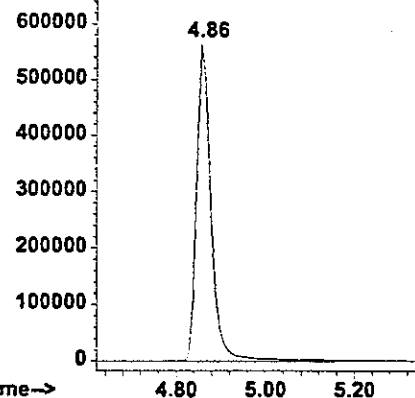


#36
Benzene
Concen: 10.97 ug/l m
RT: 4.86 min Scan# 352
Delta R.T. -0.05 min
Lab File: VG041526.D
Acq: 15 Apr 2005 11:44 pm

Tgt Ion: 78 Resp: 1300612



Abundance Ion 78.10 (77.80 to 78.80): VG04



Data File : K:\1\DATA\MSVOAG\VG041405\VG041431.D

Vial: 13

Acq On : 15 Apr 2005 2:35 am

Operator: KP

Sample : T2310-07

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:32 2005

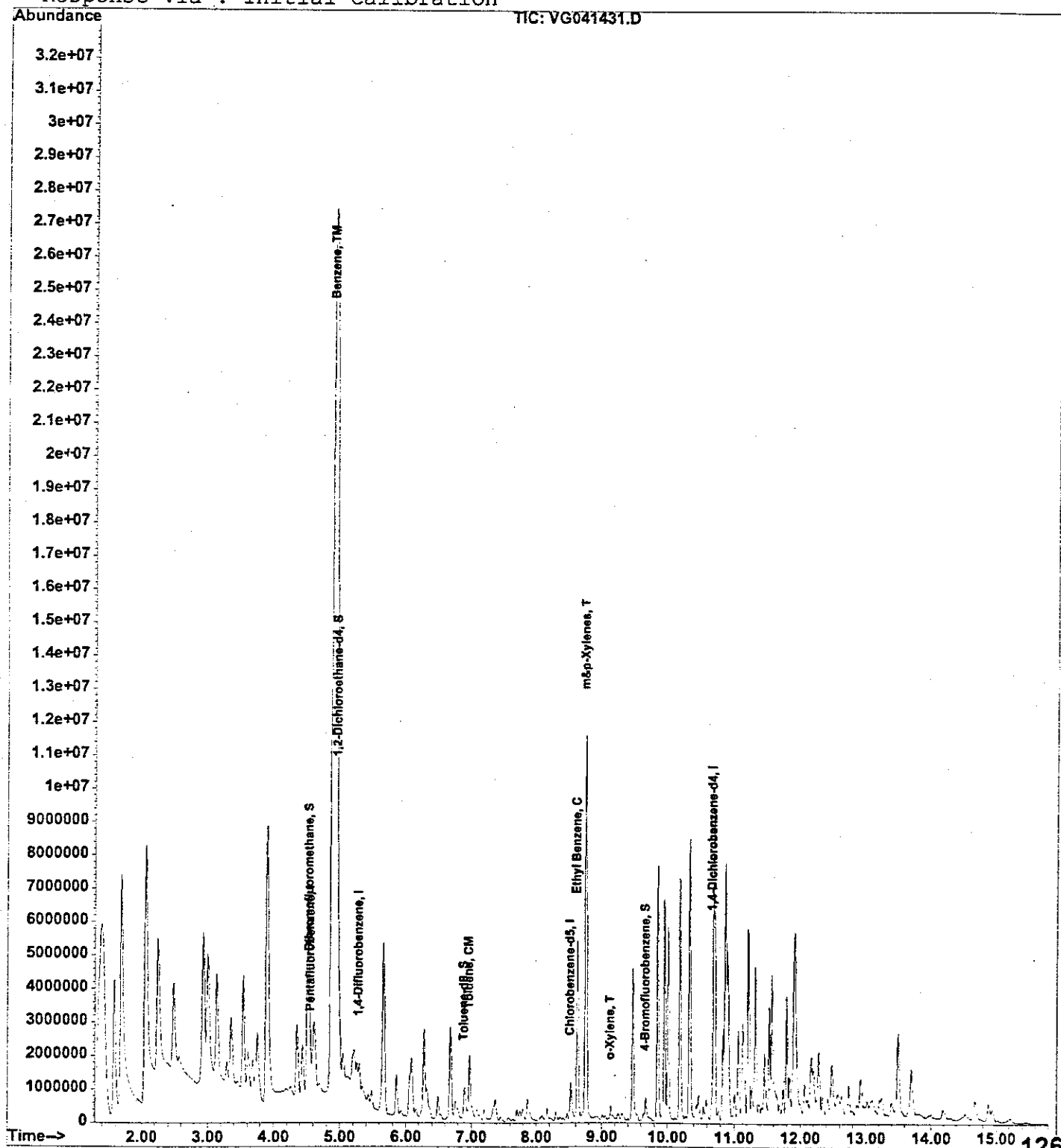
Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041431.D
Acq On : 15 Apr 2005 2:35 am
Sample : T2310-07
Misc : 25mL
MS Integration Params: RTEINT.P
Quant Time: Apr 15 12:32 2005

Vial: 13
Operator: KP
Inst : voa3
Multiplr: 1.00

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
Title : SW846 8260
Last Update : Fri Apr 08 10:00:48 2005
Response via : Initial Calibration
DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.58	168	385662	10.00	ug/l	-0.03
31) 1,4-Difluorobenzene	5.30	114	623517	10.00	ug/l	-0.03
57) Chlorobenzene-d5	8.53	117	626888	10.00	ug/l	-0.03
66) 1,4-Dichlorobenzene-	10.68	152	250650	10.00	ug/l	-0.03
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.98	65	137436	9.27	ug/l	0.06
32) Dibromofluoromethane	4.56	113	203154	10.14	ug/l	-0.02
43) Toluene-d8	6.90	98	777710	10.98	ug/l	-0.03
56) 4-Bromofluorobenzene	9.67	95	283908	11.00	ug/l	-0.02
Target Compounds						
36) Benzene	4.91	78	56998536m	704.86	ug/l	Qvalue
46) Toluene	6.98	92	937689	18.30	ug/l	98
61) Ethyl Benzene	8.64	106	1398617	42.21	ug/l	100
62) m&p-Xylenes	8.76	106	3975996	98.42	ug/l	95
63) o-Xylene	9.15	106	136607	3.52	ug/l	95

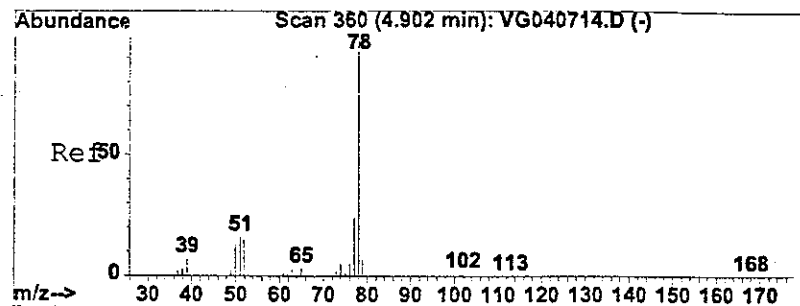
Analyst Signature: MSH Analyst Name: _____ Date: 04-15-05

REASONS FOR MANUAL INTEGRATIONS

☒ Poor resolution of peaks exhibited on chromatogram. Compound #: _____
☒ Peak integrated by software incorrectly. Compound #: 26
OTHER: _____ Compound #: _____

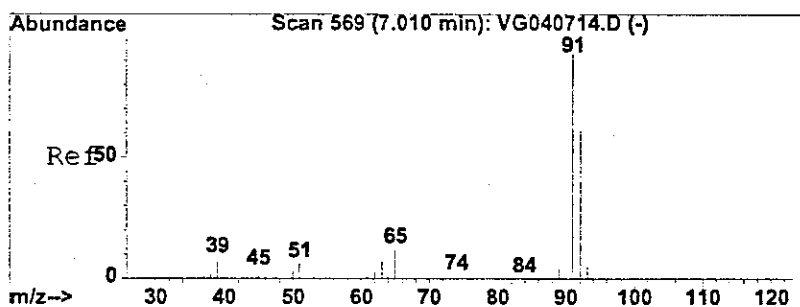
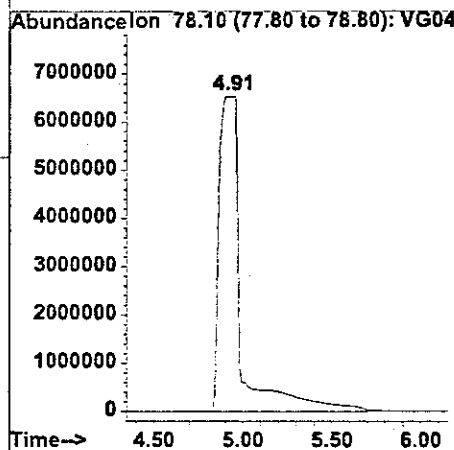
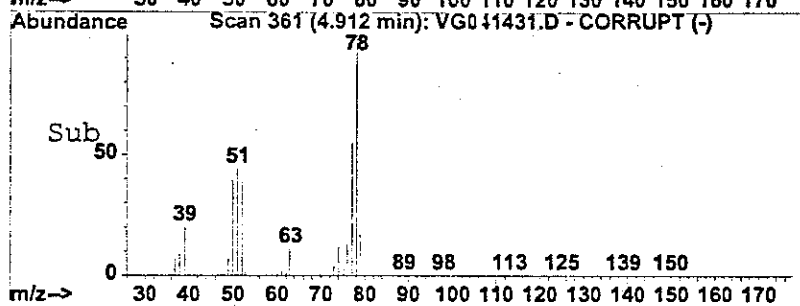
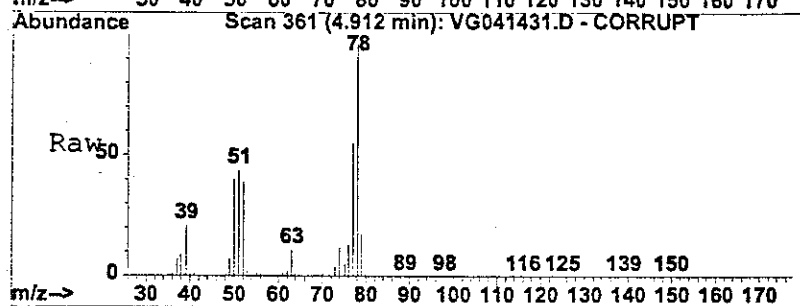
(#) = qualifier out of range (m) = manual integration
VG041431.D SAG0407W.M Fri Apr 15 12:33:21 2005

RPT1



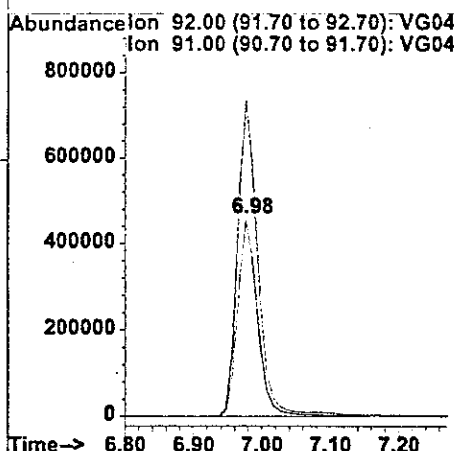
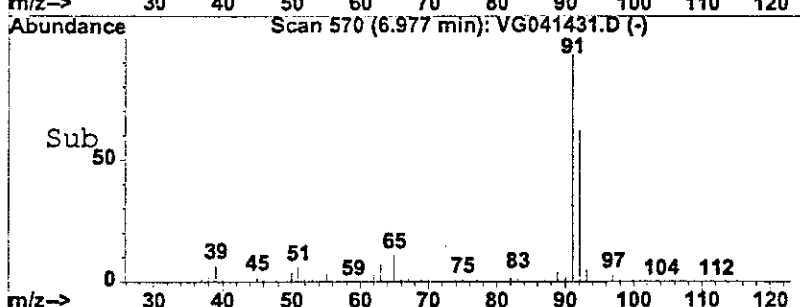
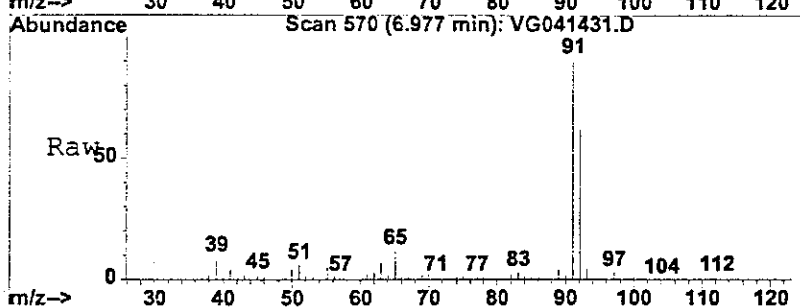
#36
Benzene
Concen: 704.86 ug/l m
RT: 4.91 min Scan# 361
Delta R.T. 0.01 min
Lab File: VG041431.D
Acq: 15 Apr 2005 2:35 am

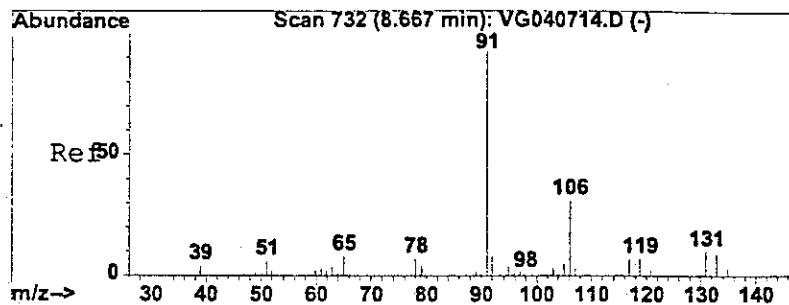
Tgt Ion: 78 Resp: 56998536



#46
Toluene
Concen: 18.30 ug/l
RT: 6.98 min Scan# 570
Delta R.T. -0.03 min
Lab File: VG041431.D
Acq: 15 Apr 2005 2:35 am

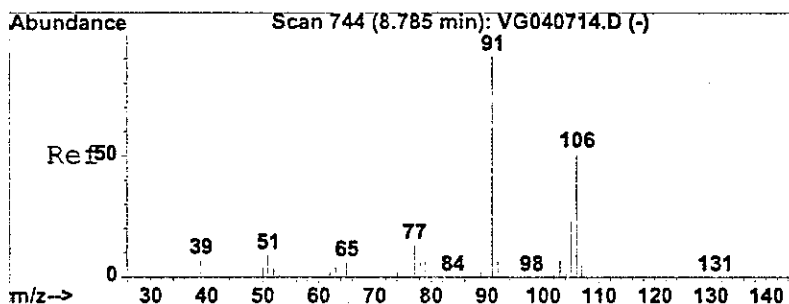
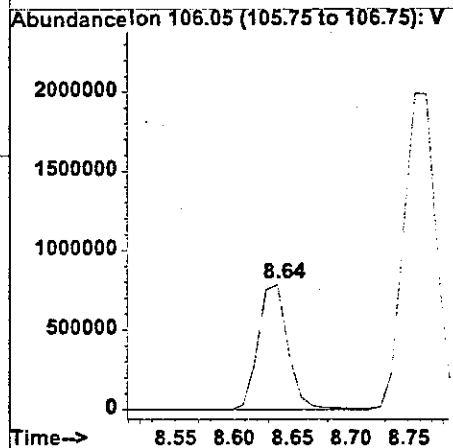
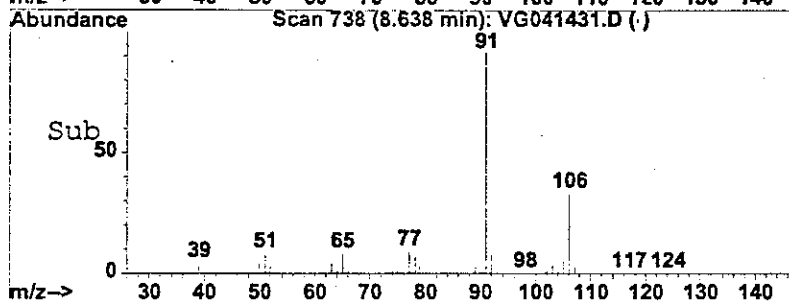
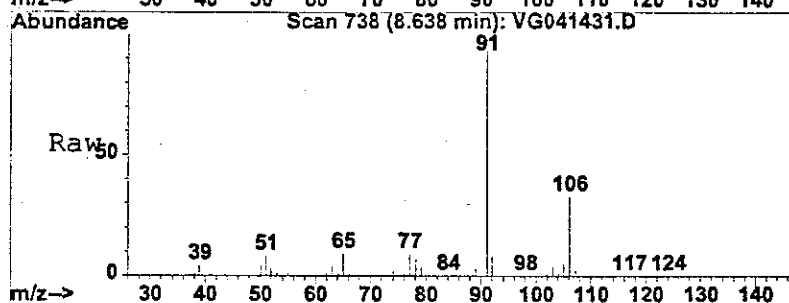
Tgt Ion: 92 Resp: 937689
Ion Ratio Lower Upper
92 100
91 163.2 132.3 198.5





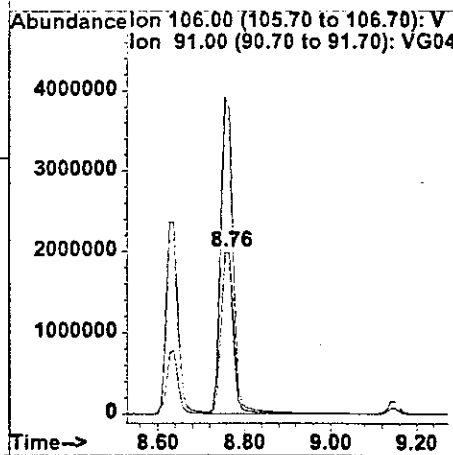
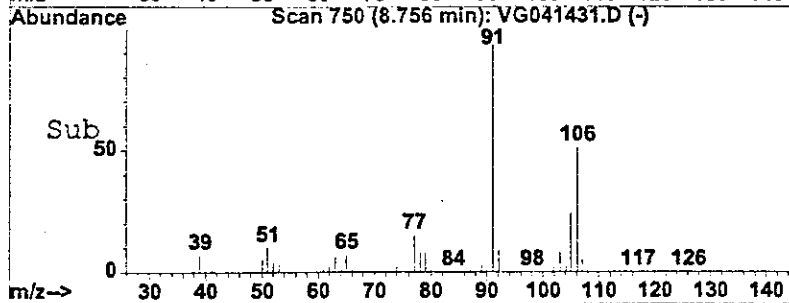
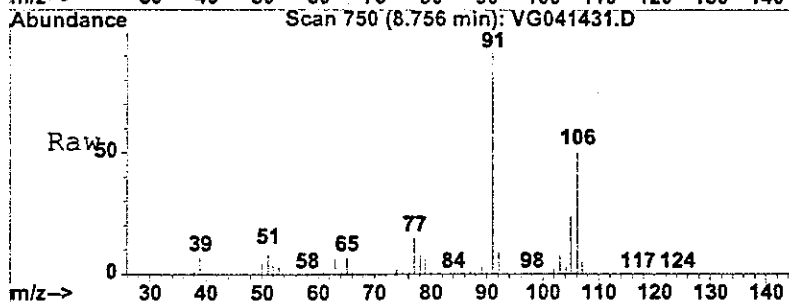
#61
Ethyl Benzene
Concen: 42.21 ug/l
RT: 8.64 min Scan# 738
Delta R.T. -0.03 min
Lab File: VG041431.D
Acq: 15 Apr 2005 2:35 am

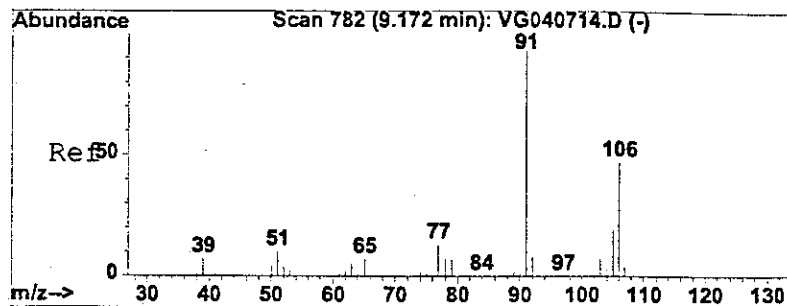
Tgt Ion:106 Resp: 1398617



#62
m&p-Xylenes
Concen: 98.42 ug/l
RT: 8.76 min Scan# 750
Delta R.T. -0.03 min
Lab File: VG041431.D
Acq: 15 Apr 2005 2:35 am

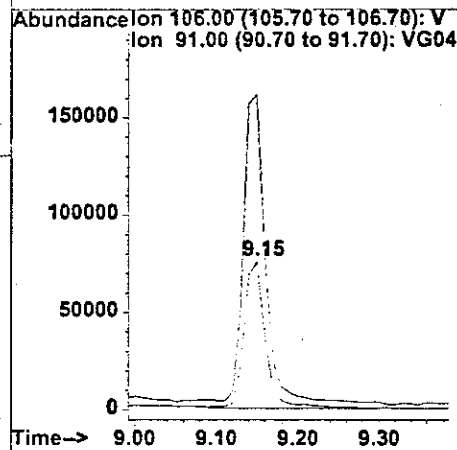
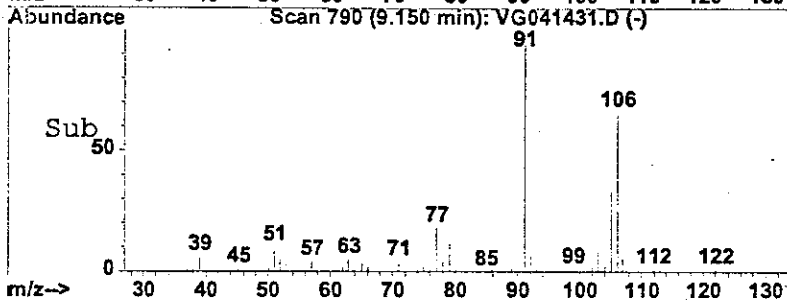
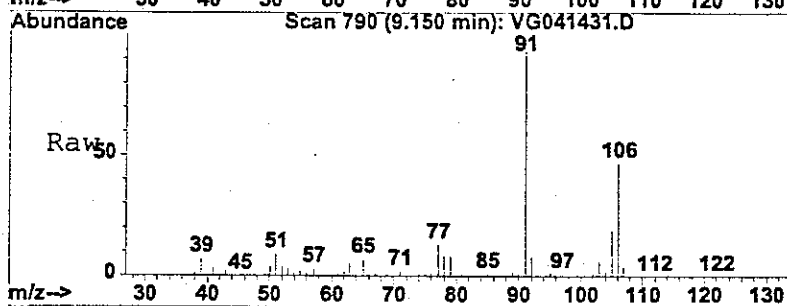
Tgt Ion:106 Resp: 3975996
Ion Ratio Lower Upper
106 100
91 195.0 162.5 243.7





#63
 o-Xylene
 Concen: 3.52 ug/l
 RT: 9.15 min Scan# 790
 Delta R.T. -0.02 min
 Lab File: VG041431.D
 Acq: 15 Apr 2005 2:35 am

Tgt Ion: 106 Resp: 136607
 Ion Ratio Lower Upper
 106 100
 91 222.3 107.5 322.5



Data File : K:\1\DATA\MSVOAG\VG041505\VG041533.D

Vial: 15

Acq On : 16 Apr 2005 4:30 am

Operator: KP

Sample : T2310-07 10X

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 27 16:07 2005

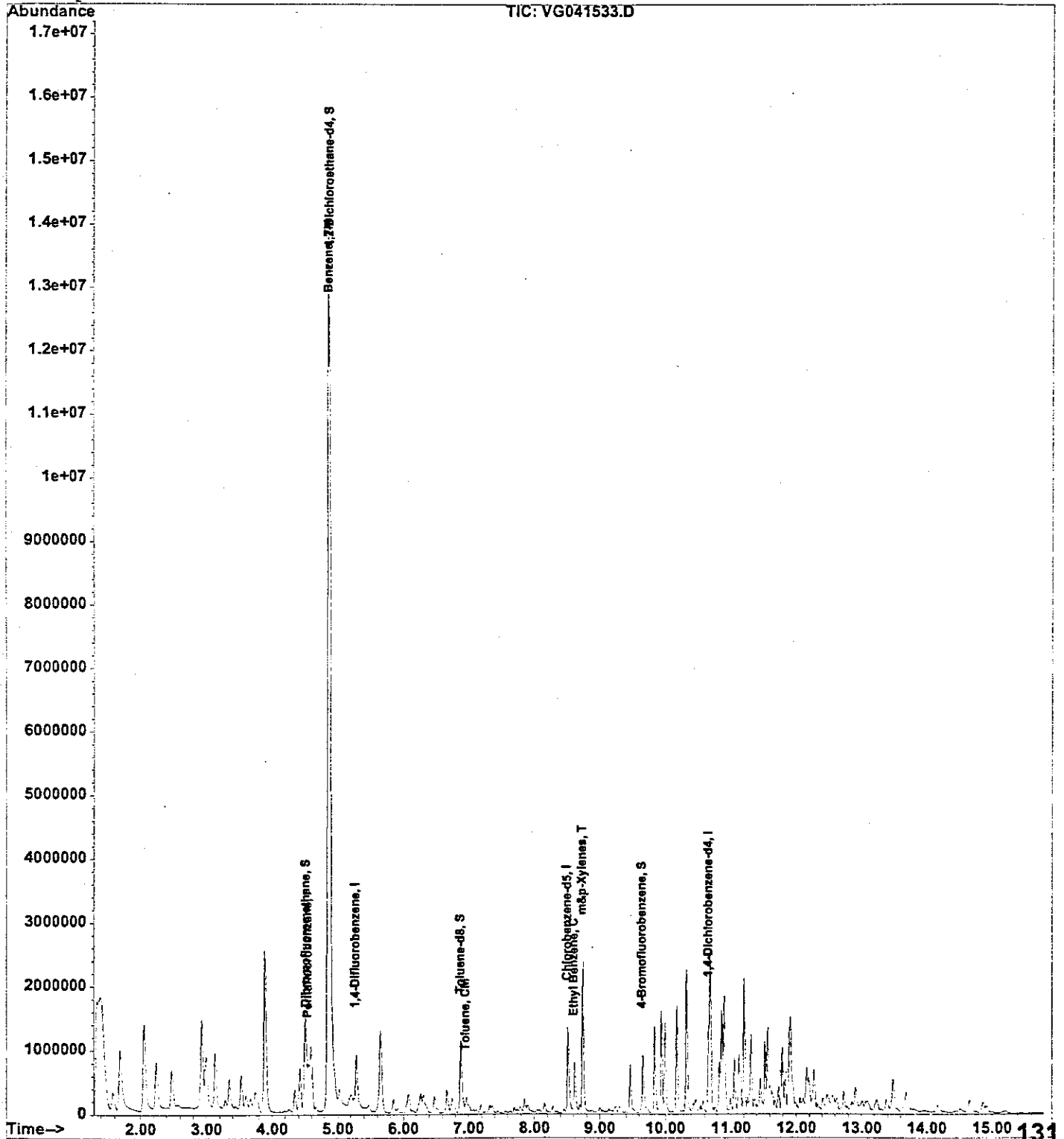
Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041505\VG041533.D

Vial: 15

Acq On : 16 Apr 2005 4:30 am

Operator: KP

Sample : T2310-07 10X

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 27 16:07 2005

Quant Results File: SAG0407W.RES

Quant Method : F:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.57	168	477829	10.00	ug/l	-0.04
31) 1,4-Difluorobenzene	5.28	114	810684	10.00	ug/l	-0.04
57) Chlorobenzene-d5	8.52	117	840270	10.00	ug/l	-0.04
66) 1,4-Dichlorobenzene-	10.66	152	389394	10.00	ug/l	-0.04

System Monitoring Compounds

30) 1,2-Dichloroethane-d	4.90	65	174709	9.51	ug/l	-0.03
32) Dibromofluoromethane	4.54	113	281693	10.81	ug/l	-0.04
43) Toluene-d8	6.89	98	967947	10.51	ug/l	-0.04
56) 4-Bromofluorobenzene	9.66	95	394683	11.76	ug/l	-0.04

Target Compounds

Qvalue

36) Benzene	4.88	78	18997632m	180.69	ug/l	
46) Toluene	6.97	92	103835	1.56	ug/l	96
61) Ethyl Benzene	8.62	106	184091	4.14	ug/l	100
62) m&p-Xylenes	8.75	106	739129	13.65	ug/l	99

Analyst Signature: M. Sh... Analyst Name: _____ Date: 04-27-05

-----REASONS FOR MANUAL INTEGRATIONS-----

Poor resolution of peaks exhibited on chromatogram.Compound #: _____

☒ Peak integrated by software incorrectly.Compound #: 36

OTHER: _____ Compound #: _____

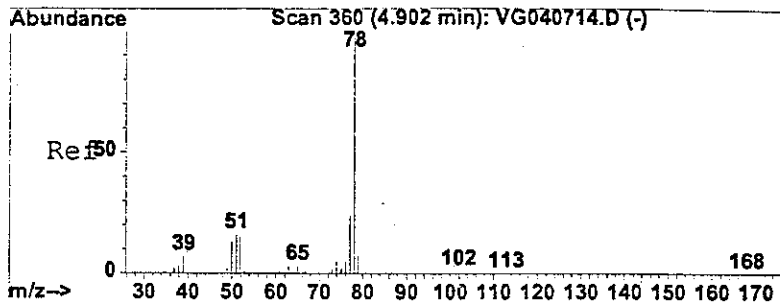
(#) = qualifier out of range (m) = manual integration

VG041533.D SAG0407W.M

Wed Apr 27 16:08:31 2005

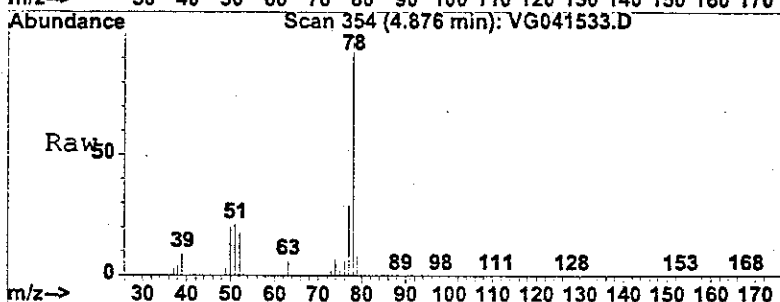
RPT1

Page 1

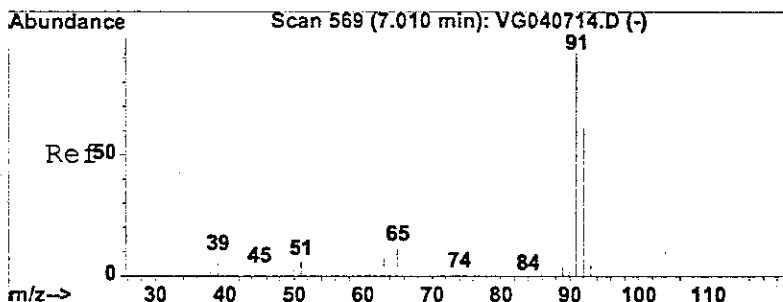
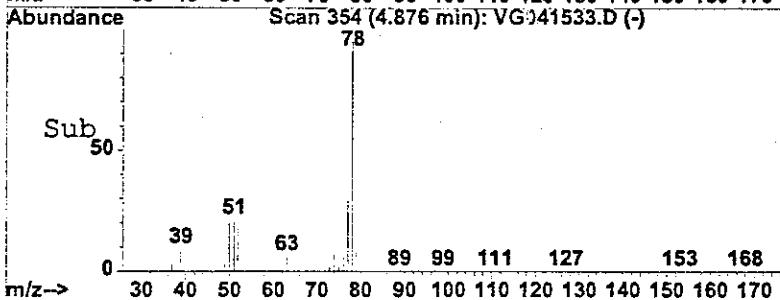
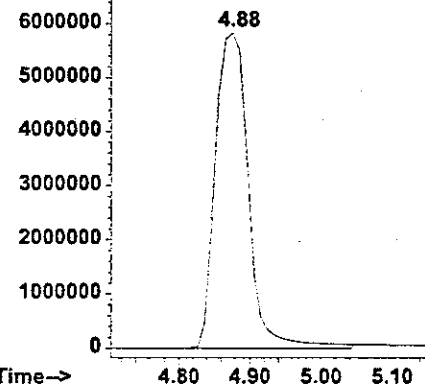


#36
Benzene
Concen: 180.69 ug/l m
RT: 4.88 min Scan# 354
Delta R.T. -0.03 min
Lab File: VG041533.D
Acq: 16 Apr 2005 4:30 am

Tgt Ion: 78 Resp:18997632

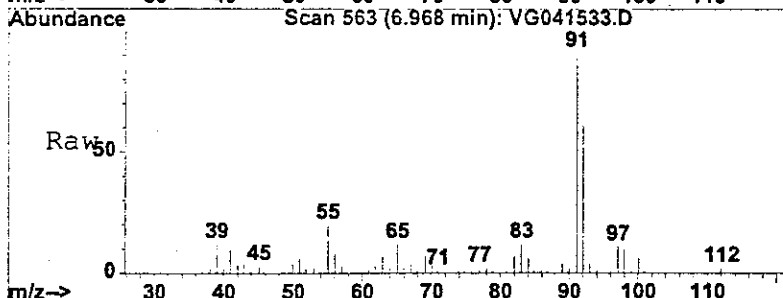


Abundance Ion 78.10 (77.80 to 78.80): VG04

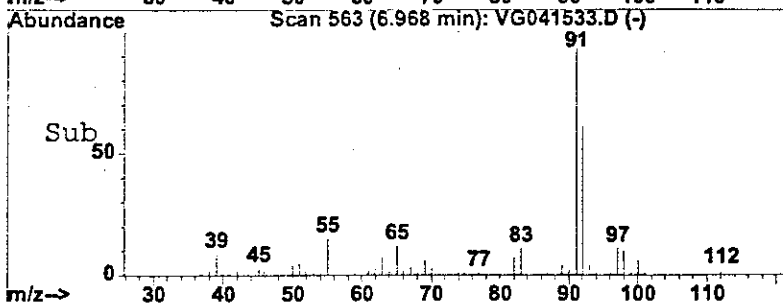
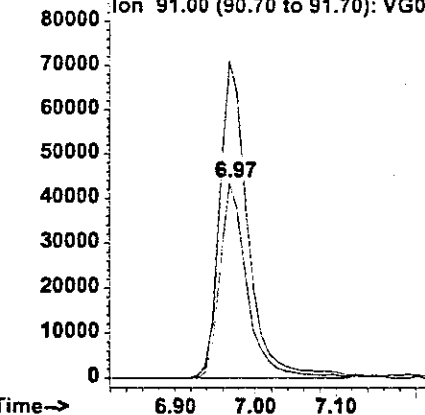


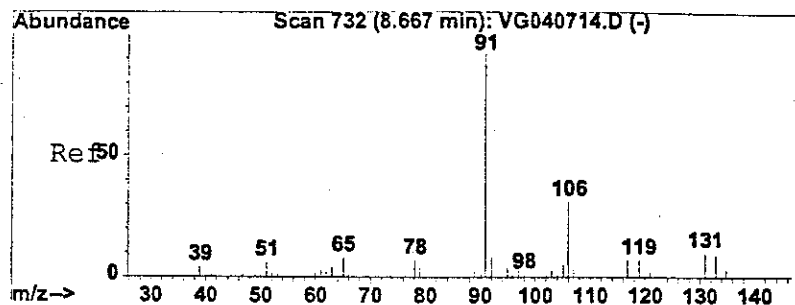
#46
Toluene
Concen: 1.56 ug/l
RT: 6.97 min Scan# 563
Delta R.T. -0.04 min
Lab File: VG041533.D
Acq: 16 Apr 2005 4:30 am

Tgt Ion: 92 Resp: 103835
Ion Ratio Lower Upper
92 100
91 171.3 132.3 198.5

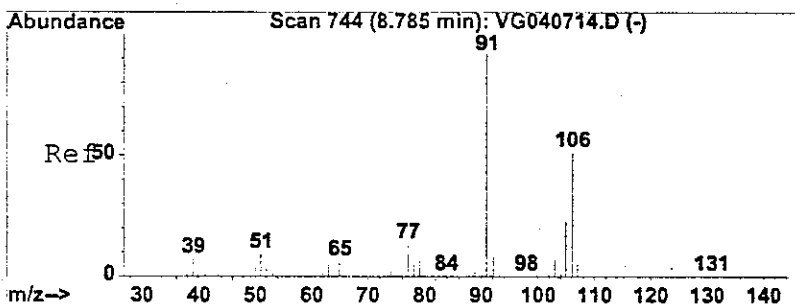
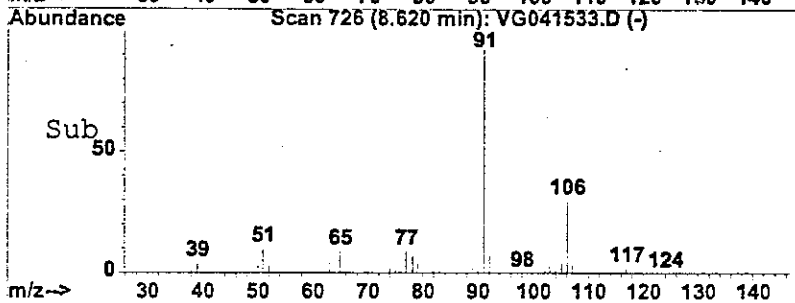
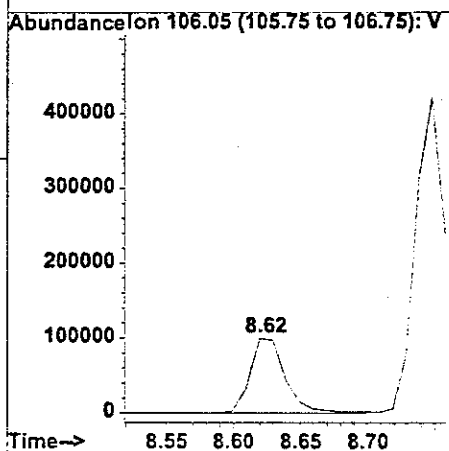
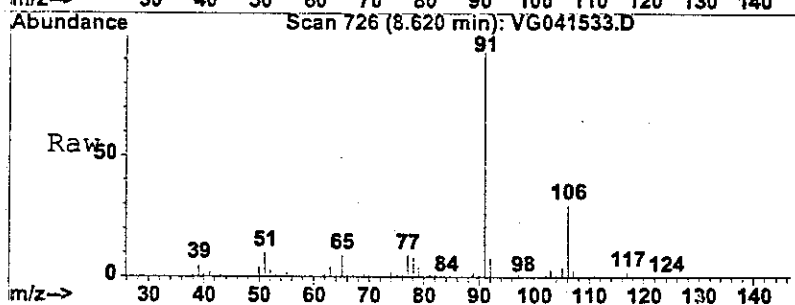


Abundance Ion 92.00 (91.70 to 92.70): VG04
Ion 91.00 (90.70 to 91.70): VG04



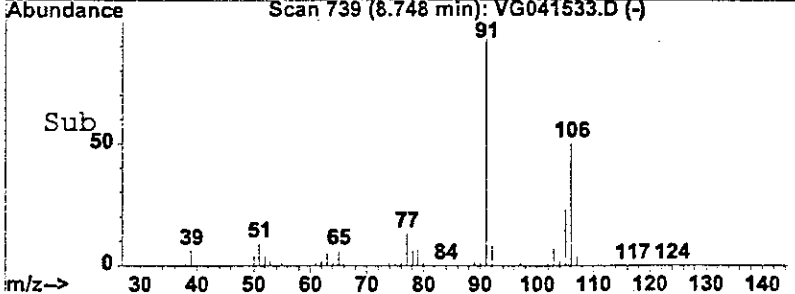
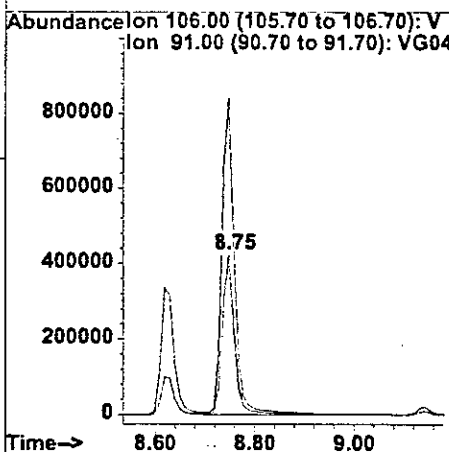
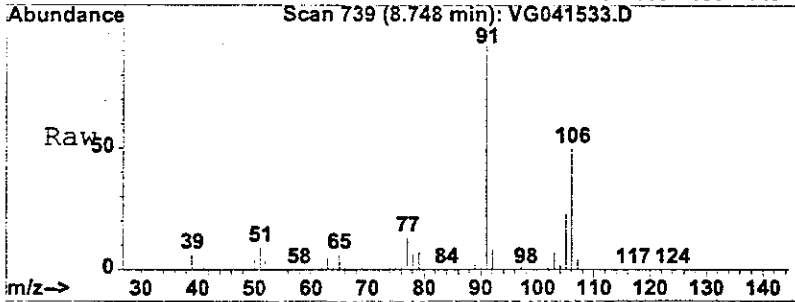


#61
Ethyl Benzene
Concen: 4.14 ug/l
RT: 8.62 min Scan# 726
Delta R.T. -0.05 min
Lab File: VG041533.D
Acq: 16 Apr 2005 4:30 am
Tgt Ion:106 Resp: 184091



#62
m&p-Xylenes
Concen: 13.65 ug/l
RT: 8.75 min Scan# 739
Delta R.T. -0.04 min
Lab File: VG041533.D
Acq: 16 Apr 2005 4:30 am

Tgt Ion:106 Resp: 739129
Ion Ratio Lower Upper
106 100
91 201.8 162.5 243.7



Data File : K:\1\DATA\MSVOAG\VG041505\VG041525.D

Vial: 7

Acq On : 15 Apr 2005 11:04 pm

Operator: KP

Sample : T2310-07 100X

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 27 16:09 2005

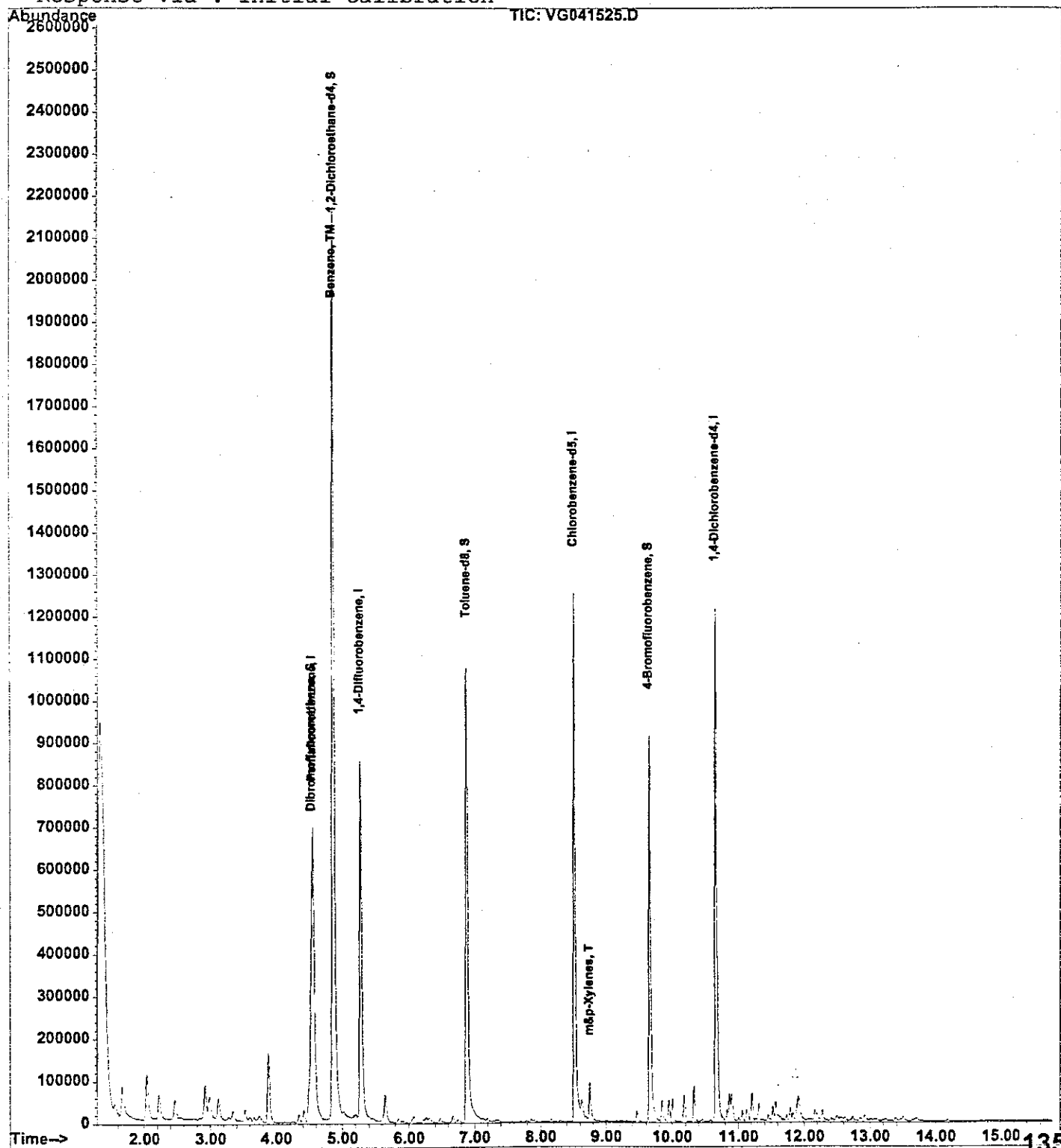
Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041505\VG041525.D

Vial: 7

Acq On : 15 Apr 2005 11:04 pm

Operator: KP

Sample : T2310-07 100X

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 27 16:09 2005

Quant Results File: SAG0407W.RES

Quant Method : F:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.55	168	482132	10.00	ug/l	-0.05
31) 1,4-Difluorobenzene	5.28	114	915838	10.00	ug/l	-0.04
57) Chlorobenzene-d5	8.52	117	876051	10.00	ug/l	-0.04
66) 1,4-Dichlorobenzene-	10.67	152	401156	10.00	ug/l	-0.04
System Monitoring Compounds						
30) 1,2-Dichloroethane-d	4.88	65	198350	10.70	ug/l	-0.04
32) Dibromofluoromethane	4.53	113	302238	10.27	ug/l	-0.04
43) Toluene-d8	6.89	98	1073913	10.32	ug/l	-0.04
56) 4-Bromofluorobenzene	9.66	95	412303	10.87	ug/l	-0.04
Target Compounds						
36) Benzene	4.86	78	2412521	20.31	ug/l	Qvalue 100
62) m&p-Xylenes	8.76	106	33197	0.59	ug/l	92

Analyst Signature: MSW Analyst Name: _____ Date: 04-27-05

-----REASONS FOR MANUAL INTEGRATIONS-----

Poor resolution of peaks exhibited on chromatogram.Compound #: _____

Peak integrated by software incorrectly.Compound #: _____

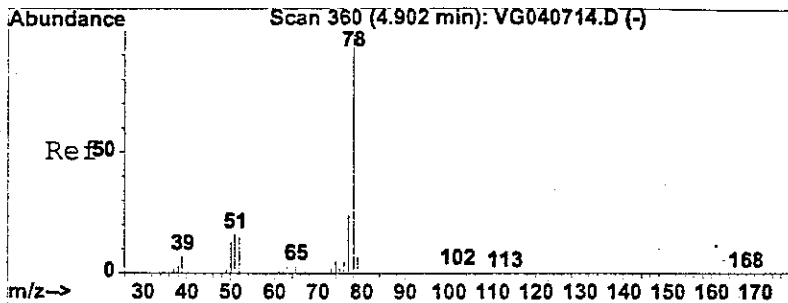
OTHER: _____ Compound #: _____

(#) = qualifier out of range (m) = manual integration

VG041525.D SAG0407W.M

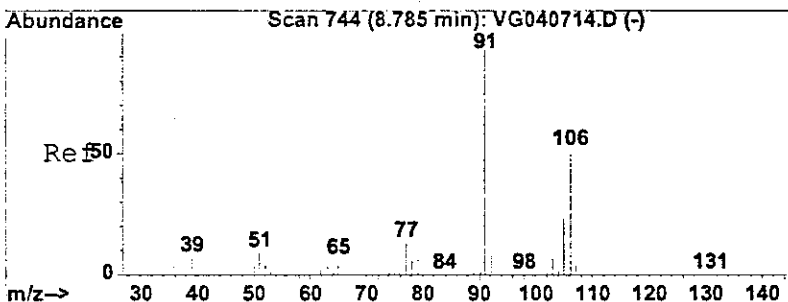
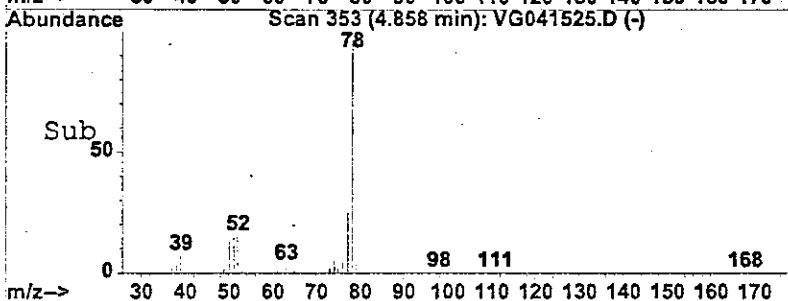
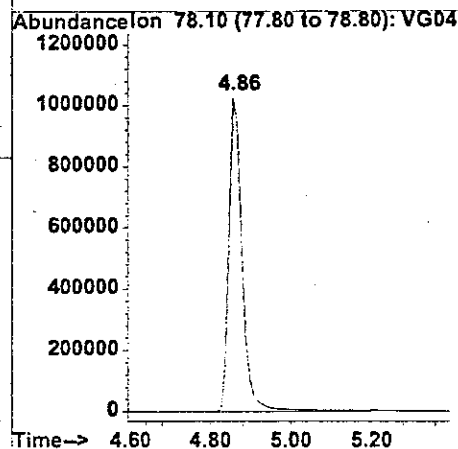
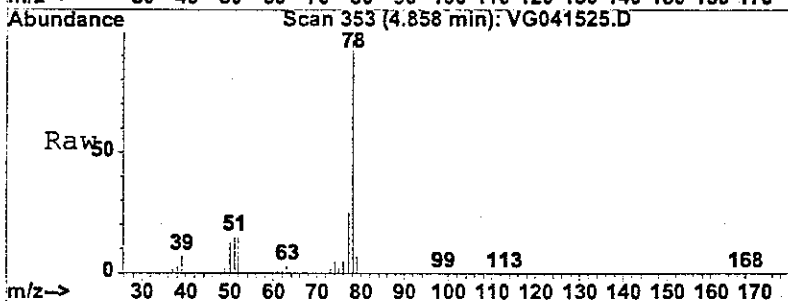
Wed Apr 27 16:10:05 2005

RPT1



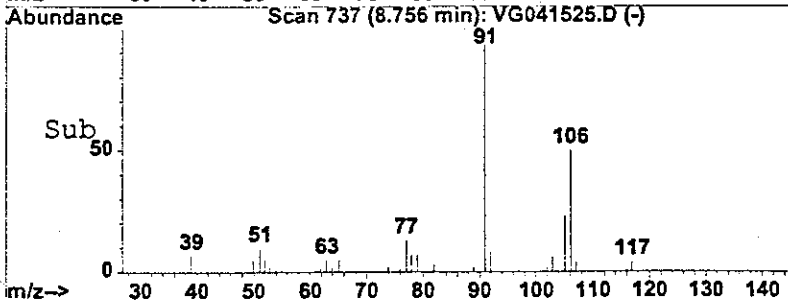
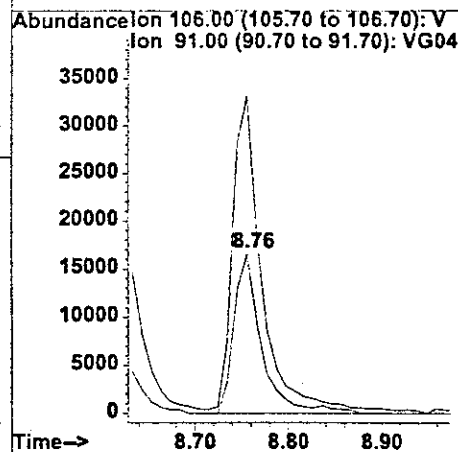
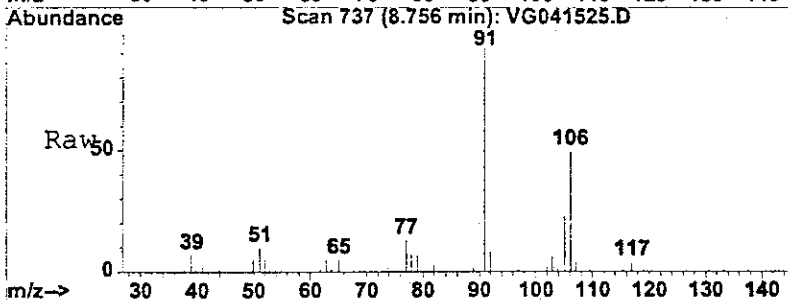
#36
Benzene
Concen: 20.31 ug/l
RT: 4.86 min Scan# 353
Delta R.T. -0.04 min
Lab File: VG041525.D
Acq: 15 Apr 2005 11:04 pm

Tgt Ion: 78 Resp: 2412521



#62
m&p-Xylenes
Concen: 0.59 ug/l
RT: 8.76 min Scan# 737
Delta R.T. -0.03 min
Lab File: VG041525.D
Acq: 15 Apr 2005 11:04 pm

Tgt Ion: 106 Resp: 33197
Ion Ratio Lower Upper
106 100
91 214.6 162.5 243.7

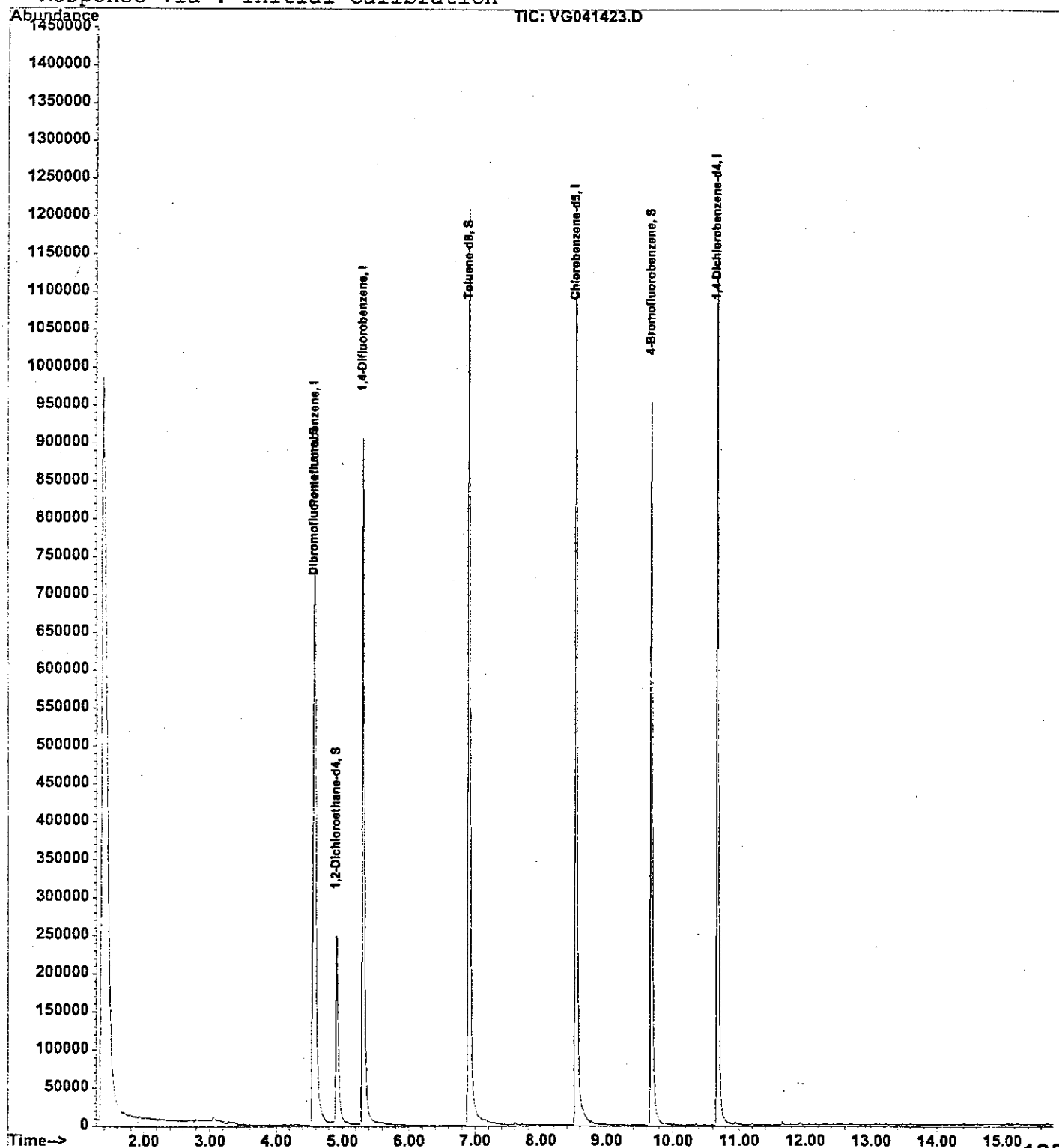


Data File : K:\1\DATA\MSVOAG\VG041405\VG041423.D
 Acq On : 14 Apr 2005 9:08 pm
 Sample : T2310-15
 Misc : 25mL
 MS Integration Params: RTEINT.P
 Quant Time: Apr 15 12:13 2005

Vial: 5
 Operator: KP
 Inst : voa3
 Multiplr: 1.00

Quant Results File: SAG0407W.RES

Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)
 Title : SW846 8260
 Last Update : Fri Apr 08 10:00:48 2005
 Response via : Initial Calibration



Data File : K:\1\DATA\MSVOAG\VG041405\VG041423.D

Vial: 5

Acq On : 14 Apr 2005 9:08 pm

Operator: KP

Sample : T2310-15

Inst : voa3

Misc : 25mL

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 15 12:13 2005

Quant Results File: SAG0407W.RES

Quant Method : K:\1\METHODS\VOAG\SAG0407W.M (RTE Integrator)

Title : SW846 8260

Last Update : Fri Apr 08 10:00:48 2005

Response via : Initial Calibration

DataAcq Meth : VG_AMV

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.59	168	499865	10.00	ug/l	-0.02
31) 1,4-Difluorobenzene	5.31	114	944087	10.00	ug/l	-0.01
57) Chlorobenzene-d5	8.55	117	888909	10.00	ug/l	-0.01
66) 1,4-Dichlorobenzene-	10.69	152	394407	10.00	ug/l	-0.02

System Monitoring Compounds

30) 1,2-Dichloroethane-d	4.91	65	209799	10.91	ug/l	-0.01
32) Dibromofluoromethane	4.57	113	312684	10.30	ug/l	0.00
43) Toluene-d8	6.91	98	1113579	10.38	ug/l	-0.02
56) 4-Bromofluorobenzene	9.68	95	415981	10.64	ug/l	-0.02

Target Compounds

Qvalue

Analyst Signature: MSH Analyst Name: _____ Date: 04-15-05

-----REASONS FOR MANUAL INTEGRATIONS-----

___ Poor resolution of peaks exhibited on chromatogram.Compound #:

___ Peak integrated by software incorrectly.Compound #:

___ OTHER: _____ Compound #:

(#) = qualifier out of range (m) = manual integration

VG041423.D SAG0407W.M

Fri Apr 15 12:13:26 2005

RPT1

CHEMTECH



Metals Data

CHEMTECH



Analytical Results Summary

Report of Analysis**Client:** Tetra Tech EC Inc.**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** DW-60405**SDG No.:** T2310**Lab Sample ID:** T2310-01**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	710		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	3820		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis

Client: Tetra Tech EC Inc..

Date Collected: 4/11/2005

Project: DSCP New Wells

Date Received: 4/12/2005

Client Sample MW-2B0405

SDG No.: T2310

ID:
Lab Sample ID: T2310-02

Matrix: WATER

% Solids: **0.00**

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	8090		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	619		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** DW-40405**SDG No.:** T2310**Lab Sample ID:** T2310-03**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	12400		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	4790		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** CSX-MW-70405**SDG No.:** T2310**Lab Sample ID:** T2310-04**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	13600		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	944		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection LimitJ = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** DW-50405**SDG No.:** T2310**Lab Sample ID:** T2310-05**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	245		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	7970		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** CSX-MW-50405**SDG No.:** T2310**Lab Sample ID:** T2310-07**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	31700		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	496		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected

DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value

B = Analyte Found In Associated Method Blank

N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/2005
Project:	DSCP New Wells	Date Received:	4/12/2005
Client Sample ID:	DW-60405F	SDG No.:	T2310
Lab Sample ID:	T2310-08	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	602		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	3240		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** MW-2B0405F**SDG No.:** T2310**Lab Sample ID:** T2310-09**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	6860		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	623		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** DW-40405F**SDG No.:** T2310**Lab Sample ID:** T2310-10**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	14500		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	5520		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** CSX-MW-70405F**SDG No.:** T2310**Lab Sample ID:** T2310-11**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	12600		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	908		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** DW-50405F**SDG No.:** T2310**Lab Sample ID:** T2310-12**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	296		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	7650		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** IW-50405F**SDG No.:** T2310**Lab Sample ID:** T2310-13**Matrix:** WATER**% Solids:** 0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	600		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	3690		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/2005
Project:	DSCP New Wells	Date Received:	4/12/2005
Client Sample ID:	CSX-MW-50405F	SDG No.:	T2310
Lab Sample ID:	T2310-14	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7439-89-6	Iron	24600		ug/L	27.0	1	4/14/2005	4/15/2005	EPA SW-846 6010
7439-96-5	Manganese	400		ug/L	0.106	1	4/14/2005	4/15/2005	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH



Method Blank Summary

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech EC Inc..

SDG No.: T2310

Contract: Tetra Tech EC Inc..

Lab Code: CHEMED

Case No.: T2310

SAS No.: T2310

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
ICB01	Iron	-29.0	+/-100.0	J	27.0	100.0	P	4/15/2005	08:27	P104155
	Manganese	-0.3	+/-15.0	J	0.1	15.0	P	4/15/2005	08:27	P104155
CCB01	Iron	-29.0	+/-100.0	J	27.0	100.0	P	4/15/2005	08:53	P104155
	Manganese	-0.2	+/-15.0	J	0.1	15.0	P	4/15/2005	08:53	P104155
CCB02	Iron	84.6	+/-100.0	J	27.0	100.0	P	4/15/2005	09:38	P104155
	Manganese	2.9	+/-15.0	J	0.1	15.0	P	4/15/2005	09:38	P104155
CCB03	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	10:05	P104155
	Manganese	-1.1	+/-15.0	J	0.1	15.0	P	4/15/2005	10:05	P104155
CCB04	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	10:35	P104155
	Manganese	0.2	+/-15.0	J	0.1	15.0	P	4/15/2005	10:35	P104155
CCB05	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	11:04	P104155
	Manganese	1.1	+/-15.0	J	0.1	15.0	P	4/15/2005	11:04	P104155
CCB06	Iron	30.1	+/-100.0	J	27.0	100.0	P	4/15/2005	11:47	P104155
	Manganese	0.1	+/-15.0	U	0.1	15.0	P	4/15/2005	11:47	P104155
CCB07	Iron	-40.6	+/-100.0	J	27.0	100.0	P	4/15/2005	12:24	P104155
	Manganese	0.6	+/-15.0	J	0.1	15.0	P	4/15/2005	12:24	P104155

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech EC Inc..

SDG No.: T2310

Contract: Tetra Tech EC Inc..

Lab Code: CHEMED

Case No.: T2310

SAS No.: T2310

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
CCB08	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	12:57	P104155
	Manganese	0.2	+/-15.0	J	0.1	15.0	P	4/15/2005	12:57	P104155
CCB09	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	13:23	P104155
	Manganese	0.4	+/-15.0	J	0.1	15.0	P	4/15/2005	13:23	P104155
CCB10	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	14:05	P104155
	Manganese	-0.2	+/-15.0	J	0.1	15.0	P	4/15/2005	14:05	P104155
CCB11	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	14:34	P104155
	Manganese	-0.2	+/-15.0	J	0.1	15.0	P	4/15/2005	14:34	P104155
CCB12	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	15:05	P104155
	Manganese	0.1	+/-15.0	U	0.1	15.0	P	4/15/2005	15:05	P104155
CCB13	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	15:40	P104155
	Manganese	0.1	+/-15.0	U	0.1	15.0	P	4/15/2005	15:40	P104155
CCB14	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	16:03	P104155
	Manganese	1.0	+/-15.0	J	0.1	15.0	P	4/15/2005	16:03	P104155
CCB15	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	16:31	P104155
	Manganese	-0.2	+/-15.0	J	0.1	15.0	P	4/15/2005	16:31	P104155

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech EC Inc..

SDG No.: T2310

Contract: Tetra Tech EC Inc..

Lab Code: CHEMED

Case No.: T2310

SAS No.: T2310

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
CCB16	Iron	27.0	+/-100.0	U	27.0	100.0	P	4/15/2005	17:05	P104155
	Manganese	0.4	+/-15.0	J	0.1	15.0	P	4/15/2005	17:05	P104155
CCB17	Iron	33.5	+/-100.0	J	27.0	100.0	P	4/15/2005	17:34	P104155
	Manganese	0.1	+/-15.0	U	0.1	15.0	P	4/15/2005	17:34	P104155
CCB18	Iron	28.1	+/-100.0	J	27.0	100.0	P	4/15/2005	17:56	P104155
	Manganese	0.6	+/-15.0	J	0.1	15.0	P	4/15/2005	17:56	P104155

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech EC Inc..

SDG No.: T2310

Instrument: P1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	MDL ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB04792BL		WATER		Batch Number:	PB04792			Prep Date:	4/14/2005	
	Iron	-18.000	<100.000	U	26.973	100.000	P	4/15/2005	12:09	P104155
	Manganese	-0.090	<15.000	U	0.106	15.000	P	4/15/2005	12:09	P104155
PB04791BL		WATER		Batch Number:	PB04791			Prep Date:	4/14/2005	
	Iron	-27.025	<100.000	J	26.973	100.000	P	4/15/2005	15:12	P104155
	Manganese	-0.130	<15.000	J	0.106	15.000	P	4/15/2005	15:12	P104155

CHEMTECH



Calibration Summary

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech EC Inc..

SDG No.: T2310

Contract: Tetra Tech EC Inc..

Lab Code: CHEMED

Case No.: T2310

SAS No.: T2310

Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01									
	Iron	4986.82	5107.0	97.6	90.0 - 110.0	P	4/15/2005	08:25	P104155
	Manganese	520.46	495.0	105.1	90.0 - 110.0	P	4/15/2005	08:25	P104155
CCV01									
	Iron	4609.29	5000.0	92.2	90.0 - 110.0	P	4/15/2005	08:51	P104155
	Manganese	2316.52	2500.0	92.7	90.0 - 110.0	P	4/15/2005	08:51	P104155
CCV02									
	Iron	5345.71	5000.0	106.9	90.0 - 110.0	P	4/15/2005	09:30	P104155
	Manganese	2672.61	2500.0	106.9	90.0 - 110.0	P	4/15/2005	09:30	P104155
CCV03									
	Iron	4879.22	5000.0	97.6	90.0 - 110.0	P	4/15/2005	10:02	P104155
	Manganese	2348.67	2500.0	93.9	90.0 - 110.0	P	4/15/2005	10:02	P104155
CCV04									
	Iron	4934.97	5000.0	98.7	90.0 - 110.0	P	4/15/2005	10:32	P104155
	Manganese	2374.24	2500.0	95.0	90.0 - 110.0	P	4/15/2005	10:32	P104155
CCV05									
	Iron	5055.29	5000.0	101.1	90.0 - 110.0	P	4/15/2005	11:02	P104155
	Manganese	2508.57	2500.0	100.3	90.0 - 110.0	P	4/15/2005	11:02	P104155
CCV06									
	Iron	5295.77	5000.0	105.9	90.0 - 110.0	P	4/15/2005	11:45	P104155
	Manganese	2576.16	2500.0	103.0	90.0 - 110.0	P	4/15/2005	11:45	P104155
CCV07									
	Iron	5210.96	5000.0	104.2	90.0 - 110.0	P	4/15/2005	12:22	P104155
	Manganese	2571.54	2500.0	102.9	90.0 - 110.0	P	4/15/2005	12:22	P104155

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech EC Inc.SDG No.: T2310Contract: Tetra Tech EC Inc. Lab Code: CHEMEDCase No.: T2310 SAS No.: T2310Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV08									
	Iron	5150.22	5000.0	103.0	90.0 - 110.0	P	4/15/2005	12:51	P104155
	Manganese	2525.10	2500.0	101.0	90.0 - 110.0	P	4/15/2005	12:51	P104155
CCV09									
	Iron	5322.57	5000.0	106.5	90.0 - 110.0	P	4/15/2005	13:20	P104155
	Manganese	2623.50	2500.0	104.9	90.0 - 110.0	P	4/15/2005	13:20	P104155
CCV10									
	Iron	4939.10	5000.0	98.8	90.0 - 110.0	P	4/15/2005	14:03	P104155
	Manganese	2467.85	2500.0	98.7	90.0 - 110.0	P	4/15/2005	14:03	P104155
CCV11									
	Iron	5038.54	5000.0	100.8	90.0 - 110.0	P	4/15/2005	14:31	P104155
	Manganese	2508.18	2500.0	100.3	90.0 - 110.0	P	4/15/2005	14:31	P104155
CCV12									
	Iron	5137.96	5000.0	102.8	90.0 - 110.0	P	4/15/2005	15:01	P104155
	Manganese	2748.45	2500.0	109.9	90.0 - 110.0	P	4/15/2005	15:01	P104155
CCV13									
	Iron	5025.09	5000.0	100.5	90.0 - 110.0	P	4/15/2005	15:38	P104155
	Manganese	2494.35	2500.0	99.8	90.0 - 110.0	P	4/15/2005	15:38	P104155
CCV14									
	Iron	5021.07	5000.0	100.4	90.0 - 110.0	P	4/15/2005	16:01	P104155
	Manganese	2493.04	2500.0	99.7	90.0 - 110.0	P	4/15/2005	16:01	P104155
CCV15									
	Iron	5120.56	5000.0	102.4	90.0 - 110.0	P	4/15/2005	16:29	P104155
	Manganese	2518.98	2500.0	100.8	90.0 - 110.0	P	4/15/2005	16:29	P104155

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech EC Inc.SDG No.: T2310Contract: Tetra Tech EC Inc. Lab Code: CHEMEDCase No.: T2310 SAS No.: T2310Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV16									
	Iron	5160.88	5000.0	103.2	90.0 - 110.0	P	4/15/2005	17:02	P104155
	Manganese	2501.50	2500.0	100.1	90.0 - 110.0	P	4/15/2005	17:02	P104155
CCV17									
	Iron	5249.64	5000.0	105.0	90.0 - 110.0	P	4/15/2005	17:32	P104155
	Manganese	2504.99	2500.0	100.2	90.0 - 110.0	P	4/15/2005	17:32	P104155
CCV18									
	Iron	4753.67	5000.0	95.1	90.0 - 110.0	P	4/15/2005	17:54	P104155
	Manganese	2404.65	2500.0	96.2	90.0 - 110.0	P	4/15/2005	17:54	P104155

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: Tetra Tech EC Inc.SDG No.: T2310Contract: Tetra Tech EC Inc.Lab Code: CHEMEDCase No.:
T2310SAS No.: T2310

AA CRDL Standard Source: _____

ICP CRDL Standard Source: INOR-VEN

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01									
	Iron	182.670	200.0	91.34	75 - 125	P	4/15/2005	08:35	P104155
	Manganese	29.19	30.0	97.3	75 - 125	P	4/15/2005	08:35	P104155
CRI02									
	Iron	213.565	200.0	106.78	75 - 125	P	4/15/2005	16:20	P104155
	Manganese	32.62	30.0	108.7	75 - 125	P	4/15/2005	16:20	P104155

CHEMTECH



ICP ICS Summary

Metals

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INTERFERENCE CHECK SAMPLE

Client: Tetra Tech EC Inc..

SDG No.: T2310

Contract: Tetra Tech EC Inc..

Lab Code: CHEMED

Case No.: T2310

SAS No.: T2310

ICS Source: EPA

Instrument ID: P1

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICS-A01								
	Iron	167000	195000	85.6	80 - 120%	4/15/2005	08:40	P104155
	Manganese	0.57				4/15/2005	08:40	P104155
ICS-AB01								
	Iron	165000	194600	84.8	80 - 120%	4/15/2005	08:46	P104155
	Manganese	429	438	97.9	80 - 120%	4/15/2005	08:46	P104155
ICS-A02								
	Iron	183000	195000	93.8	80 - 120%	4/15/2005	16:23	P104155
	Manganese	2.0				4/15/2005	16:23	P104155
ICS-AB02								
	Iron	179000	194600	92.0	80 - 120%	4/15/2005	16:26	P104155
	Manganese	464	438	105.9	80 - 120%	4/15/2005	16:26	P104155

CHEMTECH



Spike Sample Summary

Metals

- 5a -

MATRIX SPIKE SUMMARY

Client: Tetra Tech EC Inc. Level: LOW SDG No.: T2310
Contract: Tetra Tech EC Inc. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
Matrix: WATER Sample ID: T2310-09 Client ID: MW-2B0405FS
Percent Solids for Sample: 0.00 Spiked ID: T2310-09S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	80 - 120	9745.4900		6861.1200		3000.00	96.1		P
Manganese	ug/L	80 - 120	817.9850		622.9250		200.00	97.5		P

Metals

- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

Client: Tetra Tech EC Inc. Level: LOW SDG No.: T2310
Contract: Tetra Tech EC Inc. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
Matrix: WATER Sample ID: T2310-09 Client ID: MW-2B0405FSD
Percent Solids for Sample: 0.00 Spiked ID: T2310-09SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	80 - 120	9636.6700		6861.1200		3000.00	92.5		P
Manganese	ug/L	80 - 120	810.4050		622.9250		200.00	93.7		P

Metals

- 5a -

MATRIX SPIKE SUMMARY

Client: Tetra Tech EC Inc. Level: LOW SDG No.: T2310
Contract: Tetra Tech EC Inc. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
Matrix: WATER Sample ID: T2308-01 Client ID: TT-INF-08S
Percent Solids for Sample: 0.00 Spiked ID: T2308-01S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Iron	ug/L	80 - 120	2897.6200		321.3150		3000.00	85.9		P
Manganese	ug/L	80 - 120	192.3400		6.5600 J		200.00	92.9		P

Metals

- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

Client: Tetra Tech EC Inc. Level: LOW SDG No.: T2310
Contract: Tetra Tech EC Inc. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
Matrix: WATER Sample ID: T2308-01 Client ID: TT-INF-08SD
Percent Solids for Sample: 0.00 Spiked ID: T2308-01SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual.	M
Iron	ug/L	80 - 120	3019.9150		321.3150		3000.00	90.0		P
Manganese	ug/L	80 - 120	195.5450		6.5600	J	200.00	94.5		P

CHEMTECH



Duplicate Sample Summary

Metals

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DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech EC Inc.. Level: LOW SDG No.: T2310
 Contract: Tetra Tech EC Inc.. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
 Matrix: WATER Sample ID: T2310-09 Client ID: MW-2B0405FD
 Percent Solids for Sample: 0.00 Duplicate ID: T2310-09D Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L		6861.1200		6856.8800		0.1		P
Manganese	ug/L		622.9250		622.7100		0.0		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech EC Inc. Level: LOW SDG No.: T2310
Contract: Tetra Tech EC Inc. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
Matrix: WATER Sample ID: T2310-09S Client ID: MW-2B0405FSD
Percent Solids for Sample: 0.00 Duplicate ID: T2310-09SD Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L		9745.4900		9636.6700		1.1		P
Manganese	ug/L		817.9850		810.4050		0.9		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech EC Inc.. Level: LOW SDG No.: T2310
Contract: Tetra Tech EC Inc.. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
Matrix: WATER Sample ID: T2308-01 Client ID: TT-INF-08D
Percent Solids for Sample: 0.00 Duplicate ID: T2308-01D Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L	100.0000	321.3150		325.1950		1.2		P
Manganese	ug/L		6.5600	J	7.3400	J	11.2		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech EC Inc.. Level: LOW SDG No.: T2310
Contract: Tetra Tech EC Inc.. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
Matrix: WATER Sample ID: T2308-01S Client ID: TT-INF-08SD

Percent Solids for Sample: 0.00

Duplicate ID: T2308-01SD

Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Iron	ug/L		2897.6200		3019.9150		4.1		P
Manganese	ug/L		192.3400		195.5450		1.7		P

CHEMTECH



LCS Results Summary

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech EC Inc.

SDG No.: T2310

Contract: Tetra Tech EC Inc.

Lab Code: CHEMED

Case No.: T2310

SAS No.: T2310

Aqueous LCS Source: EPA-ICV

Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB04791BS								
	Iron	ug/L	3000.0	3078.81		102.6	80.0 - 120.0	P
	Manganese	ug/L	200.0	206.13		103.1	80.0 - 120.0	P

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech EC Inc.

SDG No.: T2310

Contract: Tetra Tech EC Inc.

Lab Code: CHEMED

Case No.: T2310

SAS No.: T2310

Aqueous LCS Source: EPA-ICV

Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB04792BS								
	Iron	ug/L	3000.0	3038.66		101.3	80.0 - 120.0	P
	Manganese	ug/L	200.0	207.03		103.5	80.0 - 120.0	P

CHEMTECH



Serial Dilution Summary

Metals

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SERIAL DILUTION SAMPLE SUMMARY

Client: Tetra Tech EC Inc. SDG No.: T2310
 Contract: Tetra Tech EC Inc. Lab Code: CHEMED Case No.: T2310 SAS No.: T2310
 Matrix: WATER Level: LOW Client ID: MW-2B0405FL
 Sample ID: T2310-09 Serial Dilution ID: T2310-09L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Iron	6861.12		6907.85		0.7		10.00 %	P
Manganese	622.93		635.48		2.0		10.00 %	P

Metals

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SERIAL DILUTION SAMPLE SUMMARY

Client: Tetra Tech EC Inc.SDG No.: T2310Contract: Tetra Tech EC Inc.Lab Code: CHEMEDCase No.: T2310SAS No.: T2310Matrix: WATERLevel: LOWClient ID: TT-INF-08LSample ID: T2308-01Serial Dilution ID: T2308-01L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Iron	321.32		288.33	J	10.3		10.00 %	P
Manganese	6.56	J	8.20	J	25.0		10.00 %	P

Metals
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ANALYSIS RUN LOG

Client: Tetra Tech EC Inc..Contract: Tetra Tech EC Inc..Lab Code: CHEMEDCase No.: T2310SAS No.: T2310 SDG No.: T2310Instrument ID Number: P1Method: P Run Number: P104155Start Date: 4/15/2005End Date: 4/15/2005

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A L	N T	T V	Z N	C N					
S0	1.00	0800											X			X															
S1	1.00	0802											X			X															
S2	1.00	0806											X			X															
S	1.00	0808											X			X															
HMS	1.00	0816											X			X															
HS	1.00	0818											X			X															
ICV01	1.00	0825											X			X															
ICB01	1.00	0827											X			X															
CRI01	1.00	0835											X			X															
ICS-A01	1.00	0840											X			X															
ICS-AB01	1.00	0846											X			X															
ZZZZZZ	1.00	0848											X			X															
CCV01	1.00	0851											X			X															
CCB01	1.00	0853											X			X															
ZZZZZZ	1.00	0900											X			X															
ZZZZZZ	1.00	0903																													
ZZZZZZ	1.00	0905																													
ZZZZZZ	1.00	0908																													
ZZZZZZ	1.00	0910																													
ZZZZZZ	1.00	0912																													
ZZZZZZ	1.00	0915																													
ZZZZZZ	1.00	0918																													
ZZZZZZ	1.00	0921																													
ZZZZZZ	1.00	0923																													
ZZZZZZ	1.00	0926																													
CCV02	1.00	0930											X			X															
CCB02	1.00	0938											X			X															
ZZZZZZ	1.00	0941																													
ZZZZZZ	1.00	0944																													
ZZZZZZ	1.00	0946																													
ZZZZZZ	1.00	0948																													
ZZZZZZ	1.00	0950																													
ZZZZZZ	1.00	0952																													
ZZZZZZ	1.00	0954																													
ZZZZZZ	1.00	0956																													
ZZZZZZ	1.00	0958																													

Metals
14
ANALYSIS RUN LOG

Client: Tetra Tech EC Inc..Contract: Tetra Tech EC Inc..Lab Code: CHEMEDCase No.: T2310SAS No.: T2310 SDG No.: T2310Instrument ID Number: P1Method: PRun Number: P104155Start Date: 4/15/2005End Date: 4/15/2005

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A L	N T	V L	Z N	C N	
ZZZZZZ	1.00	1000																									
CCV03	1.00	1002											X		X												
CCB03	1.00	1005											X		X												
ZZZZZZ	1.00	1009											X		X												
ZZZZZZ	1.00	1011																									
ZZZZZZ	1.00	1014																									
ZZZZZZ	1.00	1016																									
ZZZZZZ	1.00	1018																									
ZZZZZZ	1.00	1021																									
ZZZZZZ	1.00	1023																									
ZZZZZZ	1.00	1025																									
ZZZZZZ	1.00	1027																									
ZZZZZZ	1.00	1030																									
CCV04	1.00	1032											X		X												
CCB04	1.00	1035											X		X												
ZZZZZZ	5.00	1038											X		X												
ZZZZZZ	1.00	1040																									
ZZZZZZ	1.00	1043																									
ZZZZZZ	1.00	1045																									
ZZZZZZ	1.00	1048																									
ZZZZZZ	100.00	1051																									
ZZZZZZ	100.00	1053																									
ZZZZZZ	1.00	1055																									
ZZZZZZ	1.00	1058																									
ZZZZZZ	1.00	1100																									
CCV05	1.00	1102											X		X												
CCB05	1.00	1104											X		X												
ZZZZZZ	1.00	1108																									
ZZZZZZ	1.00	1110																									
ZZZZZZ	1.00	1112																									
ZZZZZZ	1.00	1118																									
ZZZZZZ	1.00	1132																									
ZZZZZZ	1.00	1135																									
ZZZZZZ	1.00	1137																									
ZZZZZZ	1.00	1139																									
ZZZZZZ	1.00	1141																									

Metals
14
ANALYSIS RUN LOG

Client: Tetra Tech EC Inc..Contract: Tetra Tech EC Inc..Lab Code: CHEMEDCase No.: T2310SAS No.: T2310 SDG No.: T2310Instrument ID Number: P1Method: PRun Number: P104155Start Date: 4/15/2005End Date: 4/15/2005

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	E E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A L	N T	V L	Z N	C N					
ZZZZZZ	1.00	1143																													
CCV06	1.00	1145																													
CCB06	1.00	1147											X			X															
ZZZZZZ	1.00	1149											X			X															
ZZZZZZ	1.00	1152																													
ZZZZZZ	5.00	1154																													
ZZZZZZ	1.00	1158																													
ZZZZZZ	1.00	1200																													
ZZZZZZ	1.00	1202																													
ZZZZZZ	1.00	1205																													
PB04792BL	1.00	1209											X			X															
PB04792BS	1.00	1217											X			X															
ZZZZZZ	1.00	1220											X			X															
CCV07	1.00	1222											X			X															
CCB07	1.00	1224											X			X															
ZZZZZZ	1.00	1230											X			X															
ZZZZZZ	1.00	1232																													
ZZZZZZ	1.00	1235																													
ZZZZZZ	1.00	1237																													
ZZZZZZ	1.00	1239																													
ZZZZZZ	1.00	1241																													
ZZZZZZ	1.00	1243																													
ZZZZZZ	1.00	1245																													
ZZZZZZ	1.00	1247																													
ZZZZZZ	1.00	1248																													
CCV08	1.00	1251											X			X															
CCB08	1.00	1257											X			X															
MW-2B0405F	1.00	1259											X			X															
MW-2B0405FD	1.00	1301											X			X															
MW-2B0405FL	5.00	1302											X			X															
MW-2B0405FS	1.00	1305											X			X															
MW-2B0405FSD	1.00	1307											X			X															
ZZZZZZ	1.00	1309											X			X															
DW-40405F	1.00	1311											X			X															
CSX-MW-70405F	1.00	1314											X			X															
DW-50405F	1.00	1316											X			X															

Metals
14
ANALYSIS RUN LOG

Client: Tetra Tech EC Inc..Contract: Tetra Tech EC Inc..Lab Code: CHEMEDCase No.: T2310SAS No.: T2310 SDG No.: T2310Instrument ID Number: P1Method: P Run Number: P104155Start Date: 4/15/2005End Date: 4/15/2005

EPA Sample No.	D/F	Time	% R	Analytes																					
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F B	P B	M G	M N	H G	N I	K E	S G	A L	N T	V L	Z N
IW-50405F	1.00	1318												X		X									
CCV09	1.00	1320												X		X									
CCB09	1.00	1323												X		X									
CSX-MW-50405F	1.00	1328												X		X									
ZZZZZZ	1.00	1331												X		X									
ZZZZZZ	1.00	1340																							
ZZZZZZ	1.00	1342																							
ZZZZZZ	1.00	1348																							
ZZZZZZ	1.00	1351																							
ZZZZZZ	1.00	1353																							
ZZZZZZ	1.00	1356																							
ZZZZZZ	1.00	1358																							
ZZZZZZ	1.00	1400																							
CCV10	1.00	1403												X		X									
CCB10	1.00	1405												X		X									
ZZZZZZ	1.00	1409												X		X									
ZZZZZZ	1.00	1412																							
ZZZZZZ	1.00	1414																							
ZZZZZZ	1.00	1416																							
ZZZZZZ	1.00	1418																							
ZZZZZZ	1.00	1420																							
ZZZZZZ	1.00	1423																							
ZZZZZZ	1.00	1425																							
ZZZZZZ	1.00	1427																							
ZZZZZZ	1.00	1429																							
CCV11	1.00	1431												X		X									
CCB11	1.00	1434												X		X									
ZZZZZZ	1.00	1436												X		X									
ZZZZZZ	1.00	1438																							
ZZZZZZ	1.00	1441																							
ZZZZZZ	5.00	1443																							
ZZZZZZ	1.00	1448																							
ZZZZZZ	1.00	1450																							
ZZZZZZ	1.00	1452																							
ZZZZZZ	10.00	1454																							
ZZZZZZ	10.00	1456																							

Metals
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ANALYSIS RUN LOG

Client: Tetra Tech EC Inc..Contract: Tetra Tech EC Inc..Lab Code: CHEMEDCase No.: T2310SAS No.: T2310 SDG No.: T2310Instrument ID Number: P1Method: PRun Number: P104155Start Date: 4/15/2005End Date: 4/15/2005

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V	Z N	C N
ZZZZZZ	10.00	1458																									
CCV12	1.00	1501												X		X											
CCB12	1.00	1505												X		X											
ZZZZZZ	10.00	1509																									
PB04791BL	1.00	1512												X		X											
PB04791BS	1.00	1521												X		X											
ZZZZZZ	1.00	1524																									
ZZZZZZ	1.00	1526																									
ZZZZZZ	1.00	1528																									
ZZZZZZ	1.00	1530																									
ZZZZZZ	1.00	1532																									
ZZZZZZ	1.00	1533																									
ZZZZZZ	1.00	1536																									
CCV13	1.00	1538												X		X											
CCB13	1.00	1540												X		X											
ZZZZZZ	1.00	1542																									
ZZZZZZ	1.00	1544																									
DW-60405	1.00	1546												X		X											
MW-2B0405	1.00	1548												X		X											
DW-40405	1.00	1550												X		X											
CSX-MW-70405	1.00	1552												X		X											
DW-50405	1.00	1554												X		X											
IW-50405	1.00	1556												X		X											
CSX-MW-50405	1.00	1557												X		X											
DW-60405F	1.00	1559												X		X											
CCV14	1.00	1601												X		X											
CCB14	1.00	1603												X		X											
TT-INF-08D	1.00	1606												X		X											
TT-INF-08L	5.00	1608												X		X											
TT-INF-08S	1.00	1610												X		X											
TT-INF-08SD	1.00	1612												X		X											
ZZZZZZ	1.00	1613																									
ZZZZZZ	1.00	1615																									
ZZZZZZ	1.00	1617																									
CRI02	1.00	1620												X		X											
ICS-A02	1.00	1623												X		X											

Metals
14
ANALYSIS RUN LOG

Client: Tetra Tech EC Inc..Contract: Tetra Tech EC Inc..Lab Code: CHEMEDCase No.: T2310SAS No.: T2310 SDG No.: T2310Instrument ID Number: P1Method: PRun Number: P104155Start Date: 4/15/2005End Date: 4/15/2005

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V	Z N	C N
ICS-AB02	1.00	1626												X		X											
CCV15	1.00	1629												X		X											
CCB15	1.00	1631												X		X											
ZZZZZZ	1.00	1634												X		X											
ZZZZZZ	1.00	1639																									
ZZZZZZ	1.00	1644																									
ZZZZZZ	1.00	1646																									
ZZZZZZ	1.00	1648																									
ZZZZZZ	1.00	1650																									
ZZZZZZ	1.00	1652																									
ZZZZZZ	1.00	1654																									
ZZZZZZ	1.00	1656																									
ZZZZZZ	1.00	1701																									
CCV16	1.00	1702												X		X											
CCB16	1.00	1705												X		X											
ZZZZZZ	1.00	1709												X		X											
ZZZZZZ	1.00	1712																									
ZZZZZZ	1.00	1716																									
ZZZZZZ	1.00	1719																									
ZZZZZZ	5.00	1721																									
ZZZZZZ	1.00	1723																									
ZZZZZZ	1.00	1725																									
ZZZZZZ	1.00	1727																									
ZZZZZZ	1.00	1729																									
ZZZZZZ	1.00	1730																									
CCV17	1.00	1732												X		X											
CCB17	1.00	1734												X		X											
ZZZZZZ	1.00	1736												X		X											
ZZZZZZ	1.00	1739																									
ZZZZZZ	1.00	1741																									
ZZZZZZ	10.00	1743																									
ZZZZZZ	10.00	1745																									
ZZZZZZ	50.00	1746																									
ZZZZZZ	10.00	1748																									
ZZZZZZ	10.00	1750																									
ZZZZZZ	10.00	1752																									

Metals
14
ANALYSIS RUN LOG

Client: Tetra Tech EC Inc..Contract: Tetra Tech EC Inc..Lab Code: CHEMEDCase No.: T2310SAS No.: T2310 SDG No.: T2310Instrument ID Number: P1Method: P Run Number: P104155Start Date: 4/15/2005End Date: 4/15/2005

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T A	V L	Z N	C N
CCV18	1.00	1754												X			X										
CCB18	1.00	1756												X			X										

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General Chemistry Data

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Analytical Results Summary

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** DW-60405**SDG No.:** T2310**Lab Sample ID:** T2310-01**Matrix:** WATER**% Solids:** 0.00

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TDS	680		10	mg/L	1	4/17/2005	160.1 TDS

Report of Analysis

Client: Tetra Tech EC Inc..

Date Collected: 4/11/2005

Project: DSCP New Wells

Date Received: 4/12/2005

Client Sample ID: MW-2B0405

SDG No.: T2310

Lab Sample ID: T2310-02

Matrix: WATER

% Solids: 0.00

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TDS	610		10	mg/L	1	4/17/2005	160.1 TDS

Report of Analysis

Client: Tetra Tech EC Inc..

Date Collected: 4/11/2005

Project: DSCP New Wells

Date Received: 4/12/2005

Client Sample ID: DW-40405

SDG No.: T2310

Lab Sample ID: T2310-03

Matrix: WATER

% Solids: 0.00

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TDS	740		10	mg/L	1	4/17/2005	160.1 TDS

Report of Analysis

Client: Tetra Tech EC Inc..

Date Collected: 4/11/2005

Project: DSCP New Wells

Date Received: 4/12/2005

Client Sample ID: CSX-MW-70405

SDG No.: T2310

Lab Sample ID: T2310-04

Matrix: WATER

% Solids: 0.00

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TDS	1000		10	mg/L	1	4/17/2005	160.1 TDS

Report of Analysis**Client:** Tetra Tech EC Inc..**Date Collected:** 4/11/2005**Project:** DSCP New Wells**Date Received:** 4/12/2005**Client Sample ID:** DW-50405**SDG No.:** T2310**Lab Sample ID:** T2310-05**Matrix:** WATER**% Solids:** 0.00

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TDS	690		10	mg/L	1	4/17/2005	160.1 TDS

Report of Analysis

Client: Tetra Tech EC Inc..

Date Collected: 4/11/2005

Project: DSCP New Wells

Date Received: 4/12/2005

Client Sample ID: IW-50405

SDG No.: T2310

Lab Sample ID: T2310-06

Matrix: WATER

% Solids: 0.00

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TDS	780		10	mg/L	1	4/17/2005	160.1 TDS

Report of Analysis

Client:	Tetra Tech EC Inc..	Date Collected:	4/11/2005
Project:	DSCP New Wells	Date Received:	4/12/2005
Client Sample ID:	CSX-MW-50405	SDG No.:	T2310
Lab Sample ID:	T2310-07	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TDS	920		10	mg/L	1	4/17/2005	160.1 TDS

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QC Results Summary

Preparation Blank Summary**Client:** Tetra Tech EC Inc..**SDG No.:** T2310**Project:**

Analyte	Units	Result	Acceptance Limits	Conc Qual	RDL	Analysis Date
Sample ID: LB04250B						
TDS	mg/L	< 10.00	+/-10.00	U	10.00	4/17/2005

Matrix Spike Summary**Client:** Tetra Tech EC Inc..**SDG No.:** T2310**Project:****Sample ID:** T2292-04**Client ID:** 411001DS**Percent Solids for Spike Sample:** 0.0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	Dilution Factor	% Rec	Qual	Date Analyzed
TDS	mg/L	75-125	902.0		678.0		250.00	1	89.6		4/17/2005

Duplicate Sample Summary

Client: Tetra Tech EC Inc.,

SDG No.: T2310

Project:

Sample ID: T2292-04

Client ID: 411001DD

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/ AD	Qual	Date Analyzed
TDS	mg/L	+/-20	678.00		670.00		1	1.2		4/17/2005

Laboratory Control Sample Summary

Client: Tetra Tech EC Inc..

SDG No.: T2310

Project:

Sample ID		Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
Analyte									
LB04250BS									
TDS		mg/L	250.00	293.00		117.2	1	80-120	4/17/2005

Method Detection Limits

Client: Tetra Tech EC Inc..

SDG No.: T2310

Project:

Analyte	Units	MDL	RDL
Method: 160.1 TDS	MDL Date: 1/15/2005		
Matrix Category: LIQUID			
TDS	mg/L	10.00	10.00

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Tel. 908-739-8900

END OF ANALYTICAL RESULTS