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Alameda County
Environmental Health

June 17, 2009

Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Attention: Barbara J. Jakub, P.G., Hazardous Materials Specialist

Subject: Former Ambassador Laundry Post Remediation Subsurface Investigation and First Groundwater Monitoring Report City of Emeryville, Alameda County, California, Fuel Leak Case No. RO0002973 – EPA Grant BF-96985401

Dear Ms. Jakub:

This refers to the Former Ambassador Laundry Post Remediation Subsurface Investigation and First Groundwater Monitoring Report, City of Emeryville, Alameda County, California. The enclosed report was prepared in response to your request for implementing the Post Remediation Work Plan, Former Ambassador Laundry, Emeryville, California, Fuel Leak Case No. RO0002973, that was submitted to you attention on September 12, 2008 and approved by the Alameda County Environmental Health Services on January 9, 2009.

The information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge. If you have any questions or comments on the work plan please contact Álvaro Domínguez at (510) 628-9000 x 202, or my self at (510) 596-4356.

Sincerely,

Ignacio Dayrit
Project Manager

FORMER AMBASSADOR LAUNDRY
POST REMEDIATION SUBSURFACE INVESTIGATION AND FIRST GROUNDWATER MONITORING REPORT
CITY OF EMERYVILLE,
ALAMEDA COUNTY, CALIFORNIA

June 17, 2009

EPA Grant Number BF-96985401

Prepared for:

Mr. Ignacio Dayrit
City of Emeryville
1333 Park Avenue
Emeryville, California

FORMER AMBASSADOR LAUNDRY POST REMEDIATION SUBSURFACE INVESTIGATION AND FIRST GROUNDWATER MONITORING REPORT, CITY OF EMERYVILLE, ALAMEDA COUNTY, CALIFORNIA

Prepared by:

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Charles Almestad, P.G., C.HG.
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June 17, 2009

File Number 73943

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ACRONYM LIST

ACEH	Alameda County Environmental Health Care Services Agency
ACPW	Alameda County Public Works
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
BTOX	BTEX and Fuel Oxygenates
Cal/EPA	California Environmental Protection Agency
COPC	chemicals of potential concern
CPT	Cone Penetration Test
DIPE	di-isopropyl ether
DPT	Direct Push Technology
DQI	data quality indicators
DQO	Data quality objectives
EPA	Environmental Protection Agency
ESL	Environmental Screening Levels
LUST	leaking underground storage tank
MDL	method detection limit
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
MTBE	methyl tert-butyl ether
PARCCS	precision, accuracy, representativeness, completeness, comparability, and sensitivity
PID	Photo-ionization detector
QA	Quality Assurance
QC	Quality Control
RL	reporting limit
SFRWQCB	San Francisco Bay Regional Water Quality Control Board
TEPH	total extractable petroleum hydrocarbons
TPH	total petroleum hydrocarbons
TPH-d	total petroleum hydrocarbons as diesel range organics
TPH-g	total petroleum hydrocarbons as gasoline range organics
TPH-mo	total petroleum hydrocarbons as motor oil
TPH-ms	total petroleum hydrocarbons as mineral spirits
UST	underground storage tank
UST-G	underground storage tank for gasoline
UST-HO	underground storage tank for heating oil
VOC	volatile organic compounds

EXECUTIVE SUMMARY

The City of Emeryville (the City) is facilitating the redevelopment of several parcels along 36th Street, between Adeline Street and Peralta Street. The subject parcels are located at 1160-1168 36th Street and 3601 and 3623 Adeline Street, in Emeryville, Alameda County, California (the Site). Petroleum hydrocarbons are found in soil and groundwater at the Site as the result of releases from former underground storage tanks (USTs) or sumps in the property.

The Alameda County Environmental Health Care Services Agency (ACEH) requested that the City prepare and implement a subsurface investigation work plan to delineate the horizontal and vertical extent of petroleum hydrocarbon impacted soil, and to install groundwater monitoring wells to characterize groundwater conditions at the Site. On September 12, 2008, on behalf of the City, Kleinfelder prepared and submitted the Post Remediation Evaluation Work Plan (Work Plan). The Work Plan was approved by the ACEH on January 9, 2009. This report describes the field activities and analytical results of the post remediation subsurface investigation and first groundwater monitoring event proposed in the Work Plan.

Background

The U-shaped Site has a surface area of approximately 34,136 square feet (0.78-acres) and is located in a mixed, residential/light industrial, area of the City of Emeryville. Currently, the Site is a vacant lot with a billboard facing the west-bound traffic of Interstate 580. Formerly on the Site there were three building structures that included a two-story masonry building (1168 36th Street) with additions towards the east; a residential building with a single car garage (1160 36th Street); and a residential structure (3601 Adeline Street). The eastern portion of the Site (3623 Adeline Street) was an open paved yard associated with two garage/shops. All onsite structures were demolished in August 2005 (Clayton 2005).

In 1910, an industrial laundry facility was established at the Site and some type of industrial laundry facility operated at the Site between 1910 and the 1980s. In the mid 1980s the land use at the Site changed and became a multi-tenant, mixed residential/commercial site. Businesses operating at the Site included a spa assembly,

a commercial sign company, art studios, a bronze art foundry, a metal contractor, vehicle maintenance, and other commercial uses.

Available records indicate that two former USTs, an 8,000-gallon tank for gasoline (UST-G) and a 2,500-gallon tank for heating oil (UST-HO), were removed from the Site in 1994 and 1995, respectively. In February 14, 1995 the ACEH issued a UST closure letter for the 8,000-gallon UST-G. In October 10, 1996, the ACEH prepared a Case Closure Summary for the 2,500-gallon UST-HO. This summary was reviewed by the Regional Water Quality Control Board (RWQCB), and the recommendation for case closure was approved on December 18, 1996. Subsequently, on February 13, 1997, the ACEH issued a Remedial Action Completion Certification for the UST-HO case.

In 1999, a sump (Sump 1) located in a former mechanical room of one of the former buildings was cleaned, and in 2005 a second sump (Sump 2), observed during building demolition, was removed. During the removal of Sump 2 an unidentified UST for diesel (UST-D) was discovered. The UST-D was left in place for future removal.

The City retained Kleinfelder to prepare and implement a sampling and analysis plan (SAP) to address environmental data gaps on the Site, including a geophysical survey of the Site, the collection and analysis of soil vapor, soil, and groundwater samples, and the removal of the UST-D.

In October 2007, during removal of the UST-D, approximately 100-cubic yards of soil impacted with petroleum hydrocarbons were removed. Confirmation soil samples from the UST-D excavation indicated the residual presence of total petroleum hydrocarbons as diesel (TPH-d) at up to 774 milligrams per kilogram (mg/Kg); while grab groundwater samples collected in the immediate vicinity of the former UST-D indicated the presence of total petroleum hydrocarbons as gasoline (TPH-g), TPH-d, and total petroleum hydrocarbons as motor oil (TPH-mo) at concentrations up to 10 milligrams per Liter (mg/L), 22/1 mg/L and 53.7 mg/L, respectively.

Field activities and analytical results gathered during implementation of the SAP were summarized in the March 11, 2008 Subsurface Investigation Underground Storage Tank Removal and Remediation Report (Kleinfelder, March 11, 2008). The report was submitted to ACEH.

On July 7, 2008, after reviewing Kleinfelder's March 11, 2008 report, the ACEH requested that the City prepare and implement a subsurface investigation work plan to delineate the horizontal and vertical extent of contaminated soil in the former UST area and to install groundwater monitoring wells to characterize groundwater conditions at the site. Kleinfelder prepared and submitted the Post Remediation Evaluation Work Plan (Work Plan) on September 12, 2008. The Work Plan was approved by the ACEH on January 9, 2009.

Field Investigation

Field investigation activities described in this report include: conducting cone penetration tests (CPT), collecting subsurface soil samples using direct push technology (DPT), and installing six groundwater monitoring-wells within the first encountered groundwater bearing zone (GWBZ). To help identify the subsurface location of petroleum hydrocarbon impacted soils, the CPT probe was equipped with a membrane interface probe (MIP) capable of detecting the presence of petroleum hydrocarbons and volatile organic compounds (VOCs) in both soil and groundwater.

Site Stratigraphy

CPT measurements and the classification of soil cores indicate that the Site's stratigraphy is composed mostly of clay and silt mixture layers, with occasional relatively thin layers of sands and/or gravel containing materials. Like the CPT interpretative logs, the stratigraphy observed in the soil borings advanced in this investigation indicate that the first GWBZ is encountered at depths of approximately 18 to 24 feet bgs and extends to about 30 feet bgs. However, contrary to the CPT interpretative logs, the low transmissivity soil layer beneath the first GWBZ is at most five feet thick. Below these layers is a layer of sandy soils that reach a maximum depth of approximately 38 feet bgs. Borings for soil sample collection and soil stratigraphy classification were advanced to a maximum depth of 40 feet bgs (except for K-D that was terminated at 43 feet bgs) because the CPT interpretative logs suggested the first GWBZ had a maximum depth of 30 feet bgs. Based on the available CPT data, the soil stratigraphy between 38 feet bgs and 50 feet bgs is composed of silts and clay mixtures. At 50 feet, at location KA (MW-2), the CPT readings indicate the presence of a thin layer of sands; however, groundwater was not retrieved at 50 feet bgs from this location.

Delineation of Petroleum Impacted Soil

MIP readings and the analytical results of the subsurface soil samples collected during this investigation, and those reported in the Kleinfelder report dated March 11, 2008, were used to estimate the extent of subsurface impacted soil at the site. Both, the MIP measurements and the subsurface analytical results indicate that petroleum hydrocarbon impacted soil is limited to the area of interest, which comprises the area where the former Sump 2, the former UST–D, and UST-HO were located.

Petroleum hydrocarbon concentrations reported in the subsurface were compared to their respective environmental screening levels (ESLs), developed by the San Francisco Bay Area RWQCB. Petroleum hydrocarbons in soil at concentrations above their respective ESLs appear restricted to a depth ranging from approximately 18 to 23 feet bgs.

TPH-g and Total Petroleum Hydrocarbons as Stoddard Solvent (TPH-SS) and TPH-d were reported at concentrations up to 870 mg/Kg, 630 mg/Kg, and 2,000 mg/Kg, respectively.

Benzene, toluene, ethylbenzene, xylenes (BTEX) and fuel oxygenates in subsurface soil samples were not detected at concentrations above the laboratory's reporting limits (RL).

Petroleum Hydrocarbon Impacted Groundwater

Of the six groundwater samples, BTEX concentrations were reported in a single sample collected from MW-2, at 4.9 micrograms per Liter (µg/L), 1.4-µg/L, 2.5-µg/L, and 2.5-µg/L, respectively. These concentrations are below their respective ESLs.

TPH-g was reported in samples collected from MW-2, MW-4, and MW-6 at concentrations ranging from 170-µg/L to 310-µg/L, TPH-SS was only reported in the sample from MW-4, at 58-µg/L. TPH-d was reported in samples collected from MW-2, MW-4, and MW-6 at concentrations ranging from 79-µg/L to 120-µg/L. Except for the 310-µg/L of TPH-g in MW-2, TPH-g, TPH-SS and TPH-d concentrations were reported below their respective ESL.

Petroleum Hydrocarbons Biodegradation Indicators

Dissolved oxygen (DO) was measured in the field at concentrations ranging from 0.09 milligrams per Liter (mg/L) in MW-3 to 2.13 mg/L, in MW-6. Laboratory analytical results reported sulfate concentrations ranging from 76 mg/L in MW-2 to 110 mg/L in MW-6; nitrate concentrations ranging from 18 mg/L to 68 mg/L, and phosphate concentrations ranging from 0.06 mg/L in MW-2 to 0.65 mg/L in MW-1. Methane was reported at concentrations ranging from 0.59 mg/L to 3.2 mg/L.

Collectively the analytical data on the major biodegradation indicators in groundwater are consistent with biologically mediated breakdown of petroleum hydrocarbons, particularly in the area of interest (MW-2, MW-3, and MW-4). Groundwater migrating into the area of interest contains significant concentrations of high energy electron acceptors, as indicated in the MW-1 sample analysis, suggesting that petroleum hydrocarbon biodegradation is active and sustained, as indicated by the low concentrations of DO and other electron acceptors in the groundwater samples collected from MW-2, MW-3, MW-4, and MW-5, in the area of interest.

Potential Receptors and Preferential Pathway Survey

The Site is located along the City of Emeryville southern boundary with the City of Oakland. Kleinfelder conducted a potential receptor survey within a 2,000-foot radius of the Site. The survey consisted of obtaining and reviewing well records to identify potential groundwater plume receptors (monitoring, municipal and private water supply wells). Also, utility drawings were obtained to identify sewer and storm-drain lines that could serve as potential preferential pathways for contaminants in the subsurface.

Given the distance and location, as well as the completion depths of the offsite wells, no apparent potential receptors will likely be impacted by petroleum hydrocarbons from the Site. Sewer pipelines under streets down-gradient of the Site have flow lines at elevations lower than the groundwater surface elevation at the Site. Given that petroleum hydrocarbons do not appear to have migrated offsite and the plume is stable and attenuating, these utility lines are not believed to be acting as conduits for offsite migration of chemical of concern.

Conclusions

The following conclusions were developed from the field observations and analytical results obtained during this investigation:

- The former Sump 2 and the former UST-D and UST-HO were the apparent sources of the petroleum hydrocarbons impacting the Site's subsurface. The stratigraphy at the Site is heterogeneous and consists of fine soils mixtures inter bedded with layers of sandy materials.

- Petroleum hydrocarbon impacted soil was delineated and was found to be restricted to the area of interest at depths ranging from 12 feet bgs (north wall UST-D excavation, Kleinfelder March 11, 2008) to approximately 23 feet bgs.

- Groundwater is confined by a dense layer of fine materials that extends from the surface to approximately 18 to 20 feet bgs. The first GWBZ extends to a maximum depth of approximately 25 feet bgs and groundwater in the first GWBZ flows towards the southwest. The hydraulic gradient is approximately at a 0.02 ft/ft.

- The delineation of impacted soil and groundwater presented herein appears adequate and the results of chemical analysis of soil and groundwater samples collected along the down gradient edge of the Site do not indicate the presence of petroleum hydrocarbons.

- Subsurface utility pipelines (i.e. sewer) located under adjacent streets do not intercept the groundwater plume, as the plume is confined to the Site. Also, potential receptors (i.e. wells) are at significant distances such that no threat to human health is anticipated.

Recommendations

Kleinfelder understands that the City is interested in facilitating the redevelopment of the Site with a 2-story high density residential building. Current building design indicate that the footprint of the new structure will essentially cover the entire Site, with parking areas covering the ground level and residential units above ground surface.

The horizontal and vertical extent of petroleum hydrocarbon impacted soil and groundwater was delineated, and found to be contained within the area of interest. Degradation of petroleum hydrocarbons appears to be actively occurring, as indicated by the utilization of DO and other electron acceptors in the area of interest.

Kleinfelder recommends no further subsurface investigations and to continue monitoring the concentration of petroleum hydrocarbons in groundwater at the Site. Kleinfelder also recommends contacting the ACEH to discuss case closure and facilitate the development of the Site.

1.0 INTRODUCTION

The City of Emeryville (the City) is facilitating the redevelopment of several parcels of property along 36th Street, between Adeline Street and Peralta Street. The subject parcels (hereafter referred to as the Site) are located at 1160-1168 36th Street and 3601 and 3623 Adeline Street, in Emeryville, Alameda County, California (Plate 1). Portions of the Site were formerly occupied by the Ambassador Laundry facility. In the 1980s, the Site was used for various industrial/commercial activities that included a commercial sign operation, art studios, a bronze foundry, a metal contractor, and vehicle maintenance. Several environmental investigations and remediation activities have been conducted at the Site, including a Phase I Environmental Site Assessment (ESA), the removal of three underground storage tanks (UST), the cleaning of a sump (Sump 1), the removal of a wastewater sump (Sump 2), and collection and analysis of subsurface soil, soil vapor and groundwater samples. During the removal of Sump 2, a previously undiscovered UST was encountered and left in place for future removal.

On March 11, 2008, Kleinfelder completed a report summarizing a subsurface investigation, the removal of a previously undiscovered UST (Area of Interest), and the remediation activities of impacted soil associated with the removed UST. On July 7, 2008, after reviewing the Subsurface Investigation Underground Storage Tank Removal and Remediation Report (Kleinfelder, March 11, 2008), the Alameda County Environmental Health Care Services Agency (ACEH) requested that a post-remedial subsurface investigation work plan be prepared to delineate the horizontal and vertical extent of contaminated soil in the Area of Interest, and to install groundwater monitoring wells to characterize and monitor groundwater conditions at the site. Plate 2 shows a Site plan and the approximate sample locations of previous investigations.

The City directed Kleinfelder to prepare and implement the Post Remediation Work Plan (Work Plan). Kleinfelder completed the Work Plan on September 12, 2008, and responded to ACEH comments on the Work Plan on December 19, 2008. On January 9, 2009 the ACEH issued a letter approving the implementation of the Work Plan.

Investigation activities described in the Work Plan and performed for this investigation include:

1) Cone penetrometer tests (CPT) to:

- Assess the depth to groundwater at the proposed monitoring well locations;
- Assess the thickness of the first groundwater bearing zone (GWBZ) at the proposed monitoring well locations;
- Assess the thickness of low permeability soils below the first GWBZ in the Area of Interest; and if less than 10 to 12 feet thick, assess the thickness of the second GWBZ.

2) Collecting and analyzing subsurface soil samples from the Area of Interest to delineate the horizontal and vertical extent of petroleum hydrocarbon impacted soil;

3) If a second GWBZ is encountered, assess the need to install monitoring wells in the second GWBZ by collecting and analyzing groundwater samples from the second GWBZ;

4) Installing six monitoring wells screened in the first GWBZ, and if a second GWBZ is encountered in the in the Area of Interest and is found to be impacted with petroleum hydrocarbons, installing up to three monitoring wells screened in the second GWBZ;

5) Conduct quarterly groundwater monitoring events to assess groundwater quality and biodegradation parameters for at least three quarters;

6) Obtaining information on the location, status and construction of water wells and underground utilities within a 2,000-foot radius of the Site that may serve as receptors or preferential pathways for petroleum hydrocarbons in groundwater.

7) Summarizing field activities and analytical results in a soil and groundwater investigation report that includes cross-section diagrams describing the horizontal and vertical extent of petroleum hydrocarbons impacted soil and groundwater contour diagrams describing the general flow of groundwater.

8) Surveying the latitude, longitude and elevation of the monitoring wells;

9) Uploading the Site's information into the GeoTracker database system.

The following sections provide background information on the Site's land use and previous environmental investigations performed at the Site; a summary of any deviations from the Work Plan; a description of the field activities performed during this investigation; and a summary of the analytical results.

2.0 SITE BACKGROUND

Sections 2.1 through 2.4 provide a Site description, including general geologic and hydrogeologic information, an overview of the Site's operational history, and a summary of previous environmental investigations.

2.1 SITE DESCRIPTION

The U-shaped Site occupies approximately 34,136 square feet (0.78-acres) in a mixed, residential/light industrial land-use area of the City of Emeryville. Plate 2 provides a diagram of the Site and the approximate location of former subsurface features and sample locations. On the north, the Site is bordered by residences, on the west by Peralta Street, on the south by 36th Street, and on the east by Adeline Street and two residences. Currently, the Site is a vacant lot with a billboard facing the west-bound traffic of Interstate 580. The Site formerly consisted of three building structures that included a two-story masonry building (1168 36th Street) with additions towards the east; a residential building with a single car garage (1160 36th Street); and a residential structure (3601 Adeline Street). The eastern portion of the Site (3623 Adeline Street) was an open paved yard associated with two garage/shops. Onsite structures were demolished in August 2005 (Clayton, 2005).

2.2 GENERAL GEOLOGIC AND HYDROGEOLOGIC INFORMATION

The Site is located within the East Bay Plain Physiographic Region (EBPPR) of the San Francisco Bay Area. The East Bay Plain Physiographic Region is characterized by depositional fans of sediments originating from the Diablo Range that slope towards the southwest. The Hayward Fault is located approximately 2.6 miles northeast of the Site. Shallow sediments in the vicinity of the Site have been mapped as older and younger alluvium; typically consisting of unconsolidated to poorly consolidated clay, silt, sand and gravel, with generally low groundwater yield rates. The general groundwater flow in the region is towards the west / southwest (Clayton, 2003a).

The 1999 East Bay Plain Groundwater Basin Beneficial Use Evaluation Report (RWQCB, 1999), classifies the Emeryville Brownfields Groundwater Management Zone as Zone B – Groundwater unlikely to be used as a drinking water source, and noted that

"While these areas meet the broad 'sources of drinking water' criteria, limiting factors related to yield and water quality restrict practical uses."

2.3 OPERATIONAL HISTORY

In 1910, an industrial laundry facility, the New Method Laundry, was established at the Site. According to the file review summarized by in the Phase I ESA (Clayton, 2003a), some type of industrial laundry facility operated at the Site between 1910 and the 1980s. In the mid 1980s the land use at the Site changed and became a multi-tenant, mixed residential/commercial land-use area. Businesses operating at the Site included a spa assembly, a commercial sign company, art studios, a bronze art foundry, a metal contractor, vehicle maintenance, and other commercial uses. Available records indicate that two USTs, an 8,000-gallon tank for gasoline (UST-G) and a 2,500-gallon tank for heating oil (UST-HO), were removed from the Site in 1994 and 1995, respectively (Plate 2).

2.4 PREVIOUS INVESTIGATIONS/REGULATORY INVOLVEMENT

Pre 2003 environmental investigation reports are summarized in Clayton's Phase 1 ESA (Clayton, 2003a); including reports documenting the removal of the two USTs, soil and groundwater investigations associated with the removal of the USTs, a Phase I ESA, and the cleaning of Sump-1. Other Site investigations reports include a report summarizing a subsurface investigation to assess the potential subsurface impacts associated with the formerly removed 2,500-gallon UST-HO (Kleinfelder, 1996a), a groundwater sampling investigation and case closure request (Kleinfelder, 1996b), a soil and groundwater sampling investigation (Clayton, 2003b), a sump (Sump 2) closure report (Clayton, 2005), and a subsurface investigation and UST removal report (Kleinfelder 2008).

On July 7, 2008, after reviewing Kleinfelder's 2008 Report, the ACEH requested a work plan for a subsurface investigation to delineate the horizontal and vertical extent of contaminated soil in the former UST area, and to monitor groundwater conditions at the site. Kleinfelder prepared the Work Plan, which was approved by the ACEH on January 9, 2009. The following sections describe the field work and summarize the analytical results of the soil and groundwater samples collected during this investigation.

3.0 DELINEATION OF PETROLEUM HYDROCARBON IMPACTED SOIL

The following sections describe the field activities performed to assess the horizontal and vertical extent of petroleum impacted soil and groundwater at the Site. Field activities included: conducting CPT, collecting subsurface soil samples, installing groundwater monitoring wells, and collecting groundwater samples as part of the first groundwater monitoring event.

Field work was performed on February 16 and 17, and on March 30 and 31, 2009. Kleinfelder obtained drilling permits from the Alameda County Public Works (ACPW) Department before advancing the exploratory borings. Copies of the permits are included as Appendix A. The ACEH and the ACPW were informed of the field work schedule so they could witness the work.

Kleinfelder prepared and implemented a health and safety plan that established the protection standards and mandatory safety practices and procedures to be followed during field work. The health and safety plan was discussed with personal working at the site before commencing field activities, and implemented throughout each field event.

3.1 CPT / MIP INVESTIGATION

Kleinfelder retained the services of Precision Sampling to perform CPT at the Site. CPT was used to obtain information of the Site's stratigraphy, including depth to groundwater and thickness of the low-conductivity layers underneath the first GWBZ. To assess the potential presence of petroleum hydrocarbons and the depth at which they are located, the CPT rod was equipped with a membrane interface probe (MIP). The MIP is capable of detecting the presence of petroleum hydrocarbons and volatile organic compounds (VOCs) in both soil and groundwater. The CPT/MIP report, prepared by Precision Sampling, is included as Appendix B in this report.

In the area of interest four locations were targeted for CPT/MIP borings. Three of the four locations targeted for CPT/MIP explorations, identified as A, B and C, were performed on February 16 and 17, 2009. The fourth CPT/MIP exploration (D) in the area of interest, as well as the CPT in the locations for MW-1, MW-5, and MW-6, were

performed on March 30, 2009. An additional CPT/MIP boring (labeled E) was advanced south of MW-5 and west of MW-6. Plate 3 shows the approximate CPT (monitoring wells) locations.

In the area of interest the CPT probe was advanced to a maximum depth of 50 feet below ground surface (bgs). CPT results indicate the Site's stratigraphy is composed mostly of clay and silt mixture layers, with occasional, relatively thin, layers of sands and or gravel containing materials.

CPT measurements suggest that the first GWBZ is encountered at depths ranging from approximately 18 to 24 feet bgs; that the first GWBZ is approximately 10 to 12 feet thick, and consists of multiple layers of sand and mixtures of fine soils. CPT readings also suggest that the first GWBZ appears underlain by a low transmissivity layer of fine silts and clayey materials that is at least 10 feet thick.

MIP measurements are made using both flame ionization (FID) and photo-ionization (PID) detectors. In probes advanced in the area of interest, MIP measurements identified a single petroleum hydrocarbon impacted zone, ranging in depths from approximately 16 to 24 feet bgs. The MIP results did not indicate the presence of petroleum hydrocarbons at depths beneath the first GWBZ.

3.2 SOIL BORINGS AND SUBSURFACE SOIL SAMPLE COLLECTION

Borings to collect soil samples for chemical analysis were advanced using a track mounted direct push technology (DPT) drill rig equipped with a dual-tube sampling system. The direct push rig advances a four-foot long steel tube using a hydraulic ram and hydraulic percussion hammer. The steel tube is attached to a steel rod used to drive the sampler into the ground and has an inside diameter of 2½ inches. Interchangeable polyethlyene liners were placed inside the steel tube to collect continuous soil core sample.

The borings were advanced in locations adjacent to the four CPTs holes in the area of interest (labeled A-D). The stratigraphy encountered in each boring was classified according to the Unified Soil Classification System and logged by a Kleinfelder geologist. The boring logs are presented as Appendix C. Plate 3 shows the

approximate location of the wells, which correspond to the DPT locations A (MW-2), B (MW-3), C (MW-4), and K-D.

3.2.1 Soil Stratigraphy

Field observations of the subsurface soil confirmed that the Site's stratigraphy is composed mostly of clay and silt mixture layers, with occasional, relatively thin, layers of sands and or gravel containing materials. Like the CPT readings, the stratigraphy observed in the soil borings indicates that the first GWBZ is encountered at depths of approximately 18 to 24 feet bgs; however, contrary to the CPT readings, the low transmissivity soils layer beneath the first GWBZ is at most five feet thick at MW-2 (K-A). This soil layer is followed by another layer of sandy soils that according to the observations in the borings reaches a maximum depth of approximately 38 feet bgs.

3.2.2 Soil Sampling

Soil cores from each boring were screened with a hand-held PID. Three to four soil samples from each DPT boring were collected at depths corresponding with high MIP readings and/or where field observations, including elevated PID readings, or other field parameters, such as odors and/or discolorations or stains suggesting the presence of contamination were noticed. Soil samples were obtained by cutting an approximately six-inch section of the polyethylene liner holding the soil core. One soil sample was collected with a split-spoon sampler while drilling the hole to construct monitoring well 5 (MW-5) and the soil placed in a four-ounce jar. Upon collection, the samples were subsequently labeled and stored in chilled cooler with ice pending delivery to the laboratory.

The soil samples were delivered under chain-of-custody protocols to Curtis and Tompkins, a State certified laboratory in Berkeley, California. The laboratory was requested to analyze the subsurface soil samples for the following constituents:

- Benzene, toluene, ethylbenzene, xylenes (BTEX) and fuel oxygenates (tert-Butyl Alcohol (TBA), 1,2-Dibromoethane (EDB), 1,2-Dichloroethane (DCA, EDC), Ethyl tert-Butyl Ether (ETBE), Isopropyl Ether (DIPE), Methyl tert-Amyl Ether (TAME), and Methyl tert-Butyl Ether (MTBE)) using EPA Method 8260B; and

- Total Petroleum Hydrocarbons (TPH-g, TPH-SS, TPH-d, and TPH-mo) using EPA Method 8015.

3.3 INSTALLATION OF GROUNDWATER MONITORING WELLS

On March 30 and 31, 2009, six two-inch diameter PVC monitoring wells were drilled and installed at the Site. The monitoring wells were constructed adjacent to the locations where CPT and / or DPT probes were advanced.

A drill rig equipped with an eight-inch hollow stem auger was used to drill the holes for constructing the monitoring wells. The holes were advanced to a final depth of approximately 30-feet. The wells were constructed with ten feet of 0.02 inch factory slotted well screens. The screen interval was installed through the first GWBZ, approximately 19 feet bgs to 29 feet bgs. A sand pack was placed around the well screen and extended up one to two feet above the well screen. Approximately two feet of bentonite chips were placed above the sand pack and hydrated using tap water. Neat cement grout was then tremmied into the remaining hole to seal the wells. Neat cement was poured to approximately nine inches of ground surface. The well heads were completed in traffic-rated boxes. A locking cap was placed on the finished well. The approximate location of the wells is shown on Plate 3. The monitoring wells boring logs are included as Appendix C.

Kleinfelder developed the six monitoring wells on March 13, 2006. Well development was performed by surging the water in the well with a surge block and purging the water containing suspended sediments with a bailer until the water in the well was clear, or at least ten well volumes of water had been purged. Purged water was contained in United States Department of Transportation (U.S. DOT)-approved 55-gallon drums.

3.4 SOIL DISPOSAL

Soil cuttings generated during the advancement of soil borings and well installation were contained in U.S. DOT-approved 55-gallon drums. Drums were labeled and left onsite pending disposal at an appropriate facility.

3.5 DEVIATIONS FROM THE POST REMEDIATION WORK PLAN

The Work Plan stated that if the low transmissivity layer of soil beneath the first GWBZ was less than 10 feet thick, or if a second GWBZ was encountered and groundwater samples analysis from this second GWBZ indicated the presence of petroleum hydrocarbons, monitoring wells screened in the second GWBZ would be installed.

The CPT measurements suggest that the low transmissivity soil layer beneath the first GWBZ is at least 10 feet thick. Based on the CPT readings, the need for installing monitoring wells in a potential second GWBZ at approximately 50 feet bgs was assessed by attempting to collect groundwater samples from borings advanced at locations A (MW-2), B (MW-3), C (MW-4) and D (Plate 3).

From these four borings, a single groundwater sample, from Boring B (MW-3), was collected at 50 feet bgs because no groundwater was obtained in Borings A, C, or D. The deep groundwater sample from Boring B (MW-3) was contained in laboratory supplied vials, labeled, stored in a pre-chilled cooler with ice pending delivery to the laboratory. The sample was delivered to TestAmerica in Pleasanton California following chain-of-custody protocols. The laboratory was requested to analyze the sample within a 24 hour turn around time for:

- BTEX and fuel oxygenates using EPA Method 8260B; and
- Total Petroleum Hydrocarbons (TPH-g, TPH-SS, TPH-d, and TPH-mo) using EPA Method 8015.

The analytical results of the deep groundwater sample (K-BW-50) from Boring B were received on March 31, 2009, and indicated the presence of benzene, at 0.56 micrograms per Liter (µg/L), diisopropyl ether (DIPE), at 3.3-µg/L, toluene at 0.53 µg/L, and TPH-d at 67-µg/L. The concentrations of these chemicals of concern are slightly above the laboratory's reporting limit. Upon receiving the analytical results, Kleinfelder contacted Ms. Barbara Jakub, the ACEH case officer assigned for the Site. Ms. Jakub agreed with Kleinfelder that, given the soil stratigraphy of the Site and the low concentrations of constituents reported in groundwater, the need to install deep-screened wells was not apparent. Thus, based on the mutual assessment of the Site conditions, wells screened in the deeper GWBZ were not installed.

4.0 DATA QUALITY

The following subsections describe the quality assurance/quality control (QA/QC) program and data quality assessment (DQA) performed on the laboratory analytical data.

4.1 LABORATORY AND FIELD QUALITY ASSURANCE/QUALITY CONTROL

A data quality assessment (DQA) was performed on one hundred percent of the laboratory analytical data associated with the soil and groundwater samples collected by Kleinfelder for the Former Ambassador Laundry Post Remediation Subsurface Investigation. The samples were submitted to the following laboratories for analysis:

- Curtis and Tompkins Analytical Laboratory (Curtis and Tompkins), Berkeley, California
- TestAmerica Laboratory (TAL), San Francisco, California and Chicago, Illinois

Field and laboratory quality control (QC) are performed in order to establish whether or not the project quality objectives were met. Laboratory QC calls for precision and accuracy. The basic unit of analytical quality control is defined as the analytical batch. The analytical batch contains no more than 20 field samples of the same matrix. Field and QC samples within a batch are handled and processed in exactly the same way, and data from each analysis are manipulated in exactly the same manner. Batch assignment is made at the time of extraction or digestion. Samples within a batch are analyzed on the same instrument. Field samples are analyzed along with the QC samples prepared with them.

The field quality assurance (QA) and QC procedures implemented for this investigation consisted of the collection and analysis of matrix, spike/matrix, and spike duplicate (MS/MSD) samples; submission and analysis of trip blank samples; and use of established environmental protection agency (EPA) analytical methods. No groundwater field duplicate sample was collected.

The analytical laboratory QA/QC program included sample receipt verification, compliance with method-specific technical holding times, and the preparation and

analysis of laboratory QC samples (i.e., method blanks, laboratory control samples, and surrogates). The following sections provide a summary of the DQA of the analytical data collected during the Former Ambassador Laundry investigation.

It should be noted that there were several differences in total petroleum hydrocarbon (TPH) analyses performed on the samples by Curtis and Tompkins and by TAL. Curtis and Tompkins performed TPH-purgeable analysis by EPA method 8015B for gasoline and Stoddard solvent and TPH-extractable analysis by EPA method 8015B with silica gel cleanup for diesel and motor oil. TAL analyzed for gasoline as a VOC using EPA method 8260B and analyzed for Stoddard solvent, diesel, and motor oil as TPH-extractable by EPA method 8015B without silica gel cleanup. In addition, the carbon ranges quantified for gasoline, Stoddard solvent, and diesel were slightly different for Curtis and Tompkins and TAL.

4.2 DATA QUALITY ASSESSMENT

A data quality assessment (DQA) was performed on the laboratory analytical data as described in the sections below.

4.2.1 Sample Receipt and Handling

Sample handling and documentation were reviewed during the DQA, and included evaluating chain-of-custody (COC) documentation, technical sample integrity, preservation, and technical holding times. Samples were delivered to the analytical laboratories with proper COC documentation. The sample cooler temperatures were recorded at the time of laboratory receipt and met the method-driven requirement of 6 degrees Celsius or below, with one exception. The sample cooler temperature was not recorded at the time of sample receipt for Sample Delivery Group (SDG) 211056. No qualifications were assigned to the data as the sample receipt form included a notation that the samples were received “on ice.”

The technical holding times for sample preparation and analysis were met for the analyses performed, with one exception. Groundwater samples MW-1W, MW-2W, MW-3W, MW-4W, MW-5W, and MW-6W required reanalysis of nitrate due to failure of the closing standard for nitrate. The nitrate reanalysis was performed outside the 48 hours holding time. Nitrate data are qualified as estimated (“J” flagged) because the holding

time exceedance was less than two times the technical holding time per the anion method requirements for nitrate.

4.2.2 Blanks

A method blank is a laboratory-prepared contaminant-free matrix sample that is carried with the analytical batch through the entire sample preparation and analytical process. The method blank is used to assess the existence and magnitude of contamination resulting from laboratory activities. No analytes were reported above laboratory reporting limits in the method blanks.

Trip blank samples are used to detect volatile contamination introduced during sample handling and shipment. Trip blanks are prepared by the laboratory using contaminant-free reagent-grade water, and are shipped to the field together with sample containers. They remain unopened in the field, and are returned to the laboratory in every sample cooler containing samples to be analyzed for volatile analytes (e.g. volatile organic compounds [VOCs] and gasoline). Trip blank samples were submitted with volatile samples and were requested for VOC and gasoline analysis for samples submitted in SDGs 2110129 and 720-19193. No analytes were reported above laboratory reporting limits in trip blank samples.

4.2.3 Laboratory Control Samples

Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) are contaminant-free matrix samples (i.e., same used for a method blank), spiked with known concentration(s) of target analyte(s), that are carried through the entire sample preparation and analytical process with the analytical batch. The LCS and LCSD percent recoveries are used to assess the overall accuracy of the method and the LCS/LCSD relative percent difference (RPD) is used to assess the method precision. A LCS or LCS/LCSD was included in every analytical batch and recoveries were within laboratory control limits. LCS/LCSD RPDs were above laboratory control limits for methyl tert-butyl ether and tert-butyl alcohol analyzed in batch 148330 for soil samples. No qualifications were assigned to the data as LCS/LCSD recoveries were within acceptance criteria and field samples in the batch were non-detect for methyl tert-butyl ether and tert-butyl alcohol.

4.2.4 Matrix Spike and Matrix Spike Duplicates

A matrix spike (MS), and matrix spike duplicate (MSD), are aliquots of a sample that have been spiked with target analyte(s) of known concentration(s) during sample preparation. The impact of sample matrix on target analyte recovery (i.e. accuracy) and precision is assessed by the MS and MSD percent recovery (%R) and RPD. This discussion is limited to MS/MSD samples selected from the project field samples as they provide information about potential sample matrix effects. The project MS/MSD recoveries and RPDs were within laboratory control limits, except as noted. The MSD sample from K-B-18 recovered above acceptance criteria for diesel. No data were qualified because the LCS/LSCD and sample surrogate recoveries were within control limits.

4.2.5 Surrogate Recoveries

A surrogate is a non-target analyte spiked during sample preparation at known concentration in every sample, including field and laboratory QC samples. Surrogate analyses are used to monitor method performance on a matrix-specific/sample-specific basis. Surrogates were added to every sample analyzed for VOCs and total petroleum hydrocarbons (TPH). Sample surrogate recoveries were within laboratory control limits except as discussed below:

- Sample K-B-22.5: Trifluorotoluene recovered above acceptance criteria for TPH-purgeable analysis; hence, gasoline and Stoddard solvent results are qualified as estimated ("J" flagged). Trifluorotoluene was diluted out in VOC analysis due to the presence of elevated concentrations of non-target analytes and the required dilution. VOC data were qualified as estimated non-detect ("UJ" flagged).

- Sample K-C-18.5: Gasoline and Stoddard solvent results from K-C-18.5 are qualified as estimated ("J" flagged) due to the high recoveries of bromofluorobenzene and trifluorotoluene. O-terphenyl was diluted out in the TPH analysis for diesel and motor oil; diesel and motor oil results are qualified as estimated ("J" flagged).

- Sample K-D-19.5: Bromofluorobenzene and trifluorotoluene recovered outside acceptance criteria for TPH analysis for Stoddard solvent and gasoline; Stoddard solvent and gasoline results are qualified as estimated ("J flagged").

- MW-5-17: Bromofluorobenzene recovered above acceptance criteria for TPH analysis for Stoddard solvent and gasoline in the field sample, matrix spike, and matrix spike duplicate. Gasoline and Stoddard solvent results are qualified as estimated ("J" flagged) due to potential matrix interference.

4.3. USABILITY ASSESSMENT

A Kleinfelder project chemist performed a DQA on 100 percent of the laboratory analytical data generated for this project through a systematic procedure in which field and laboratory performance is compared to the defined project criteria referenced in the Work Plan for this investigation. The level of detail to which data was assessed is in general accordance with the EPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review (EPA, October 1999) and the CLP National Functional Guidelines for Inorganic Data Review (EPA, October 2004). Qualified data are presented in Tables 1 and 2. A total of 28 analytical results were qualified as estimated ("J" flagged/"UJ" flagged) and are considered usable for the project needs. No analytical data were rejected.

Based on the review of the laboratory analytical data, Kleinfelder concludes that the laboratory analytical data are deemed valid and acceptable for the intended project use. Copies of the laboratory analytical reports are provided in Appendix C.

5.0 SOIL SAMPLES ANALYTICAL RESULTS

Three to four subsurface soil samples were collected for chemical analysis from borings (A – D) advanced in the area of interest, and one soil sample during was collected the construction of MW-5. A total of 15 subsurface soil samples were collected and analyzed for BTEX, fuel oxygenates and TPH. The analytical results were compared to the corresponding May 2008 Environmental Screening Levels (ESL) developed by the San Francisco Bay Regional Water Quality Control Board (RWQCB). The following subsections summarize the analytical results of the soil samples collected for this investigation.

5.1 PETROLEUM HYDROCARBON IMPACTED SOIL

The presence of petroleum hydrocarbons in the subsurface was assessed with the CPT/MIP and through the collection and analysis of subsurface soil samples. Petroleum hydrocarbon analytical results are summarized in Table 1, and the CPT/MIP results are included in Appendix B.

Comparison of the MIP measurements with the laboratory analytical results from the corresponding soil samples showed a good correlation relative to the presence / absence of petroleum hydrocarbons in soil and their relative concentrations. In the area of interest, MIP measurements indicate the presence of petroleum hydrocarbons at depths ranging from approximately 16 feet bgs to 23 feet bgs. The laboratory analytical results of soil samples collected in the area of interest at this depth range indicate the presence of petroleum hydrocarbon concentrations above their corresponding ESL. The analytical results of soil samples collected at greater depths indicate that petroleum hydrocarbons were not detected at or above laboratory's RL or if they were detected their concentrations were below corresponding ESLs.

Analytical results of subsurface soil samples indicate that, except in the sample collected from boring C at 18.5 feet bgs (K-C-18.5), TPH-g and TPH-SS concentrations are below their ESL of 180 micrograms per Kilogram (mg/Kg). In K-C-18.5, TPH-g and TPH-SS concentrations were reported 870 mg/Kg and TPH-SS, at 630 mg/Kg.

Six of the 15 samples were reported with TPH-d concentrations above the 180 mg/Kg ESL, at concentrations ranging from 200 mg/Kg to 2,000 mg/Kg.

TPH as motor oil was reported at a maximum concentration of 1,100 in the samples collected from Boring K-B and K-C at 22.5 feet bgs and 18.5 feet bgs, respectively. The ESL for TPH as motor oil is 5,000 mg/Kg ESL.

5.2 BTEX AND FUEL OXYGENATES IMPACTED SOIL

BTEX, fuel oxygenates concentrations were not reported at concentrations above the laboratory's reporting limits in any of the 15 subsurface soil samples (Table 2).

6.0 ANALYTICAL RESULTS FIRST GROUNDWATER MONITORING EVENT

Samples for the first groundwater monitoring event were collected on April 17, 2009. The following sections describe the field work and analytical results of the first groundwater monitoring event.

6.1 WATER LEVEL MEASUREMENTS

Prior to purging and sampling groundwater, the depth to water in each monitoring well was measured to the nearest 0.01-foot using a clean and calibrated electronic water-level indicator. The water-level measurements were used to assess groundwater flow patterns and to estimate the volume of water purged from each monitoring well during sampling. Plate 5 includes groundwater surface elevations and groundwater flow pattern information.

6.2 DECONTAMINATION PROCEDURES

Prior to performing groundwater level measurements, and between measurements at each monitoring well location, the electronic water level indicator probe and cable was cleaned with an Alconox™ water solution and subsequently rinsed with tap water followed by distilled water. Disposable bailers and twine were dedicated to the purging and sampling of each monitoring well and disposed of after use.

6.3 GROUNDWATER SAMPLE COLLECTION

Kleinfelder purged a minimum of three well casing volumes of groundwater from each monitoring well prior to collecting samples for chemical analysis. Field parameters, including pH, temperature, electrical conductivity, and dissolved oxygen (DO) were measured during purging with a flow through device. Groundwater samples were collected when field parameters became stable (three measurements within 10% of each other), or after a minimum of three well volume casings had been removed. Table 3 includes a summary of the groundwater parameters measured in the field.

Groundwater samples were contained in laboratory supplied vials. The vials were labeled and subsequently placed into a pre-chilled cooler with ice pending delivery to the laboratory for chemical analysis.

6.4 ANALYTICAL LABORATORY AND ANALYSIS

Groundwater samples were delivered to TestAmerica in Pleasanton, California, a State-certified analytical laboratory. Samples were delivered to the laboratory following chain-of-custody protocols and the laboratory was requested to analyze the samples for the following chemical parameters:

- BTEX and fuel oxygenates using EPA Method 8260B;
- Total Petroleum Hydrocarbons (TPH-g, THP-SS, TPH-d, and TPH-mo) using EPA Method 8015
- Conductivity, Specific Conductance using EPA Method 120.1
- Solids, Total Dissolved (TDS) using EPA Method 2540C
- Anions - Ions using EPA Method 300
- Nitrogen- Ammonia, using EPA Method 350.2
- Iron and Ferrous using EPA Method 3500
- Orthophosphate using EPA Method 4500

6.5 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results are summarized in Table 3. To assess the potential risks associated with chemicals of concern reported in groundwater, the reported concentrations were compared to their corresponding ESLs (RWQCB, May 2008).
Groundwater samples were collected from the each of the six monitoring wells, of which only one sample, collected from MW-2, indicated the presence of BTEX. BTEX was reported in the sample from MW-2 at 4.9 micrograms per Liter (µg/L), 1.4-µg/L, 2.5-µg/L, and 2.5-µg/L, respectively. The reported BTEX concentrations are below their respective ESLs.

Except for DIPE, fuel oxygenate concentrations were not reported above the laboratory's reporting limits. DIPE was reported in the samples from each of the six

wells, and reported at concentrations ranging from 79-µg/L to 120-µg/L. No ESL has been established for DIPE.

TPH-g was reported in samples collected from MW-2, MW-4 and MW-6 at concentrations ranging from 170-µg/L to 310-µg/L. TPH-SS was reported in only one groundwater sample collected from MW-4, at 58-µg/L. TPH-d was reported in samples collected from MW-2, MW-4 and MW-6 at concentrations ranging from 79-µg/L to 120-µg/L. Except for the TPH-g concentration in MW-2, reported at 310-µg/L, TPH-g, TPH-SS and TPH-d concentrations were reported below their respective ESLs.

DO was measured in the field at concentrations ranging from -0.09 milligrams per Liter (mg/L) in MW-3 to 2.13 mg/L in MW-6. Laboratory analytical results reported sulfate concentrations ranging from 76 mg/L in MW-2 to 110 mg/L in MW-6; nitrate concentrations ranging from 18 mg/L to 68 mg/L, and phosphate concentrations ranging from 0.06 mg/L in MW-2 to 0.65 mg/L in MW-1. Methane was reported at concentrations ranging from 0.59 mg/L to 3.2 mg/L.

Methane. Methane is a byproduct of anaerobic biodegradation of petroleum hydrocarbons. Methane concentrations in groundwater ranged from less than 0.1 mg/L in the sample from MW-1 to 3.2 mg/L in the sample from MW-4. The presence of methane in groundwater samples collected from the area of interest is indicative of biologically mediated degradation.

Orthphosphate. Phosphate is a nutrient present involved in basic cell metabolism. Orthophosphate concentrations in groundwater ranged from 0.054 mg/L in the sample MW-5 to 0.65 mg/L in the sample MW-1. Orthophosphate concentrations in the samples collected from wells in the area of interest are low (0.054 mg/L to 0.07 mg/L) indicating biologically mediated degradation is actively taking place in the area of interest.

6.6 INVESTIGATION-DERIVED WASTE (IDW) HANDLING PROCEDURES

Investigation-derived wastes (IDW), consisting of monitoring well purge water and decontamination rinsate fluids were containerized onsite in United States DOT approved 55-gallon drums. The drum was labeled and left onsite pending disposal at

an appropriate facility. Waste water disposal will be handled together with the other waste water generated during this investigation.

7.0 PREFERENTIAL PATHWAY AND POTENTIAL RECEPTOR SURVEY

The Site is located along the City of Emeryville southern boundary with the City of Oakland. Kleinfelder conducted a preferential pathway survey (Survey) within a 2,000-foot radius of the Site. The survey consisted of obtaining and reviewing well records to identify potential groundwater plume receptors (monitoring, municipal and private water supply wells) and assessing the location of sewer and storm-drain lines that could serve as potential preferential pathways for contaminants in the subsurface.

Well records were obtained from the State of California Department of Water Resources (DWR) and the Alameda County Public Works Agency (ACPW). Storm-drain and sewer line maps for were requested from the City of Emeryville and the City of Oakland. DWR and ACPW records reviewed for this survey included well driller reports, well location sketches/maps, boring logs, and well completion logs for 197 wells in the area.

Plate 8 shows the approximate locations of 23 sites on which wells have been identified within the 2,000-foot search radius. A total of ninety-eight monitoring wells, one cathodic well, and one industrial well, were identified within the 2,000 feet radius. Copies of the Driller's Reports provided by the DWR and the results of the PWA well search are provided as Appendix E.

In 1995 one monitoring well was installed at the Site to a total depth of 25 feet. The well was installed to assess ground water conditions in the vicinity of the UST-HO removed in 1995. The ACEH closed the UST-HO leaking underground storage fuel tank (LUFT) case in a letter dated February 13, 1997. The monitoring well is assumed to have been abandoned, probably during building demolition activities in 2005, because the geophysical survey conducted at the Site in August 2007 did not reveal the presence of the monitoring well.

One industrial well and three groundwater monitoring wells are located at 3516 Adeline Street, approximately 300 feet southeast of the Site, in the cross-gradient ground water flow direction. The industrial well was installed in 1936, to a total depth of 97 feet, and the groundwater monitoring wells were installed in 1992 to a depth of 30 feet in association with an ongoing case with the ACEH.

The 120-foot cathodic well located more than 1,600 feet northeast of the Site was installed in 1974 approximately 61 feet east from the intersection of Apgar Street and Market Street. The deepest ground water monitoring well identified within the 2,000 feet radius is a 43 feet deep well located 1,300 feet northwest of the Site at the northwest corner of Yerba Buena and Hollis Streets, up-gradient ground water flow direction from the Site.

The remaining 93 monitoring wells identified within the 2,000 feet radius are located 680 feet or more away from the Site, and range in depth from 17 to 35 feet bgs. Of these 93 wells, seven wells are located in the down-gradient ground water flow direction of the Site; with the closest well located approximately 900 feet to the southwest. The seven down-gradient wells range in depth from 22 to 25 feet bgs. Due to their maximum depth (25 feet bgs), these down-gradient wells are not considered potential deep well conduits.

The sewer and storm-drain maps indicate two sewer lines bordering the east and west sides of the Site running south from the City of Emeryville into the City of Oakland; one sewer line along Adeline Street continuing on Adeline Street in Oakland, and another sewer line running south on San Pablo Avenue that continues running south on Peralta Street in the City of Oakland (Appendix E). Sewer and storm-drain lines also run along 36th Street, with flow towards the west and then south on Peralta. Sewer pipelines under streets down-gradient of the Site have flow lines at elevations lower than the groundwater surface elevation at the Site. Given that petroleum hydrocarbons do not appear to have migrated offsite and the plume is stable and attenuating, these utility lines are not believed to be acting as conduits for offsite migration of chemical of concern.

In summary, given the depth of offsite wells within a 2,000 feet radius and their distance to the Site, as well as the depth to water and the stratigraphy of the area, no apparent potential receptors will likely be impacted by petroleum hydrocarbons from the Site. Likewise, review of the sewer and storm drain lines in the Site's immediate vicinity suggests that, due to the depth of the groundwater table (approximately 20 feet bgs) sewer and storm drain lines are not acting as preferential pathways for contaminants in the subsurface.

8.0 SUMMARY AND DISCUSSION OF THE INVESTIGATION RESULTS

This section discusses the Site's environmental condition based on the analytical results obtained in during this investigation and those summarized in the March 11, 2008 Report.

Soil Stratigraphy

The CPT and soil boring logs from this and previous investigations show that the Site's soil stratigraphy is composed of layers of clay and silt mixtures inter-bedded with lenses of sandy materials. Like the CPT readings, the stratigraphy observed in the soil borings performed in this investigation indicates that the first GWBZ is encountered at depths of approximately 18 to 24 feet bgs; however, contrary to the CPT soil interpretations, a low transmissivity soils layer exists beneath the first GWBZ that is about five feet thick and is followed by a layer of sandy soils that reaches a maximum depth of approximately 38 feet bgs. The general stratigraphy of the Site is illustrated in the cross-section diagrams presented as Plate 6, which show the stratigraphy in the north south (A – A') and Plate 7, showing the west-east (B - B') stratigraphy through the area of interest. Plate 3 shows the locations of cross-sections.

Hydrology

In borings, groundwater was first encountered during drilling at depths ranging from 18 to 20 feet bgs. The first GWBZ extends to a maximum depth of approximately 25 feet bgs. The first GWBZ consists of layers of sandy materials inter-bedded with layers of clay-silt mixtures, and appears to be confined because groundwater stabilizes at a much higher elevation (approximately eight to nine feet bgs) than the depth it is encountered. Based on depth to groundwater measurements from the wells, groundwater appears to flow towards the southwest at an approximately 0.02 ft/ft gradient. Plate 5 shows an approximate representation of groundwater flow.

Impacted Soil Delineation

Based on the analytical results obtained during this investigation and those summarized in the March 11, 2008 report, the petroleum hydrocarbon impacted soil appears restricted to the area of interest, comprising the vicinity of the former Sump 2 (removed

in 2005) and the former UST-D, and the area adjacent to the former UST-HO (removed in 1995). Vertically, the impacted soil appears to extend from approximately 12 feet bgs, corresponding to the sample collected near the bottom of the northern wall UST-D excavation, to a depth of approximately 23 to 24 feet bgs at boring K-B (constructed as MW-3) where a sample collected at 22.5 feet bgs indicated the presence of TPH-d at 1,600 mg/Kg.

Horizontally, petroleum hydrocarbons in soil appear to have spread towards the south and southwest, in the general down-gradient direction. Petroleum hydrocarbon impacted soil does not appear to extend much further than MW-5, where the 380 mg/Kg of TPH-d was reported at 17 feet bgs (Plate 4). This assertion is supported by the marked decrease in petroleum concentration between up-gradient samples collected from Boring A (MW-2) and Boring B (MW-3) and the sample collected from MW-5, and because petroleum hydrocarbons were not detected in the MIP readings from K-E. Also, no petroleum hydrocarbons were reported in soil at KB-10.

Impacted Groundwater

TPH-g, TPH-SS and TPH-d were reported in groundwater samples from monitoring wells MW-2, MW-4 and MW-6, however, except for TPH-g, reported at 310-µg/L in the sample collected from MW-2, all other chemicals of concern in groundwater in the monitoring wells were reported below the laboratory's reporting limit or below their respective ESL.

The March 11, 2008 Report indicates that the grab groundwater samples collected from borings KB-7, KB-8 and KB-9 contained TPH-g, TPH-d and/or TPH-mo concentrations above their respective ESLs. Borings KB-7, KB-8 and KB-9 were advanced within the area of interest and their approximate location is presented in Plate 3. BTEX concentrations above ESLs were reported in the grab groundwater sample from KB-9 only.

Receptors and Pathways

No apparent potential receptors or preferential pathways were identified during the monitoring well survey or the review of the layout of sewer and storm drain lines surrounding the Site.

Petroleum Hydrocarbons Biodegradation Indicators

Many microorganisms use organic matter as a carbon and energy source. Most organic compounds, including hazardous chemicals, may be transformed to carbon dioxide and water through microbial metabolisms that involve biochemical reduction-oxidation (REDOX) reactions (Watts, 1997). Indigenous soil microorganisms have been shown to degrade a variety of hydrocarbons, including gasoline, diesel, and aromatic hydrocarbons (Wiedemeier, et al., 1995).

The basis for the degradation of organic matter, including petroleum hydrocarbons, is the metabolism of microorganisms and the cycling of energy and carbon. Biological reaction processes occur more rapidly through enzymatic catalysis that promote coupled REDOX reactions. The energy available for microbial growth and metabolism is directly proportional to the energy of the biochemical reaction, and thus biodegradation pathways are dictated by the conditions that yield the highest energy for the microorganism (Watts, 1997).

Organic matter, such as aromatic hydrocarbons and fuel hydrocarbons serve as electron donors. Electron acceptors are compounds or elements that occur in oxidized states. For thermodynamic reasons, microorganisms preferentially utilize electron acceptors that provide the greatest amount of free energy. These electron acceptors include, in decreasing order: DO, nitrate, ferric iron, sulfate and carbon dioxide, all of which may be present in groundwater. As part of the current investigation at the Site, the biodegradation potential of fuel hydrocarbons was assessed in the groundwater from the six wells at the Site (Table 3).

The following is a discussion of the results for each major biodegradation indicator or parameter measured in groundwater at the Site.

- Dissolved Oxygen: Aerobic biodegradation occurs until DO is essentially depleted. Oxygen depletion is assumed to occur at concentrations of approximately 0.5 mg/L, a DO concentration at which most anaerobic microorganisms generally cannot function. DO readings in groundwater at the Site ranged from -0.09 mg/L (MW-3) to 2.13 mg/L (MW-6). DO readings in

groundwater from the area of interest are below 0.5 mg/L, suggesting that aerobic biodegradation is occurring and depleting the DO in groundwater as it becomes available, as suggested by the difference in DO concentrations between the up-gradient MW-1 (0.94 mg/L) and the two nearest down gradient monitoring wells, MW-2 (0.47 mg/L) and MW-3 (-0.09 mg/L).

- Nitrate. After DO, nitrate is the most effective electron acceptor commonly present in groundwater. During biodegradation, nitrate (NO_3) is reduced to nitrite (NO_2), ammonia (NH_4), and nitrogen gas (N_2). Nitrate in groundwater was reported at concentrations ranging from 10 mg/L (MW-6) to 68 mg/L (MW-1). Within the area of interest (MW-2, MW-3, MW-4, and MW-5) nitrate concentrations ranged from 18 mg/L to 24 mg/L.

- Ferric Iron. When ferric iron (Fe^{+3}) is used as an electron acceptor the iron is reduced to ferrous iron (Fe^{+2}). The presence of ferrous iron above the laboratory's reporting limit of 0.05 mg/L was reported in the groundwater samples from MW-2 (0.1 mg/L) and MW-6 (0.096 mg/L), suggesting that iron is being used as an electron acceptor at these locations.

- Sulfate. After DO, nitrate and available iron, sulfate is the most energy yielding electron acceptor commonly found in groundwater. Sulfate concentrations in groundwater at the Site ranged from 76 mg/L (MW-2) to 110 mg/L (MW-6).

- Oxidation/Reduction Potential (ORP). Low ORP is an indication of reducing conditions and the potential for methanogenesis. The low ORP in groundwater at MW-2 (-86.4 mV) as opposed to elsewhere (57.5 to 105 mV) is indicative of biologically mediated degradation.

- Methane. Methane is a byproduct of anaerobic biodegradation of petroleum hydrocarbons. Methane concentrations in groundwater ranged from less than 0.1 mg/L in the sample from MW-1 to 3.2 mg/L in the sample from MW-4. The presence of methane in groundwater samples collected from the area of interest is indicative of biologically mediated degradation.

- Orthphosphate. Phosphate is a nutrient present involved in basic cell metabolism. Orthophosphate concentrations in groundwater ranged from 0.054 mg/L in the sample MW-5 to 0.65 mg/L in the sample MW-1. Orthophosphate

concentrations in the samples collected from wells in the area of interest are low (0.054 mg/L to 0.07 mg/L) indicating biologically mediated degradation is actively taking place in the area of interest.

Collectively the groundwater data are consistent with biologically mediated breakdown of petroleum hydrocarbons. The low concentrations of DO and relatively low concentrations of NO_3 in the area of interest (MW-2, MW-3, and MW-4) suggest that high energy electron acceptors are consumed as they migrate into the area of interest and thus petroleum hydrocarbon biodegradation is actively occurring.

Conclusions

- The former Sump 2, the former UST-D and UST-HO were the apparent source of the petroleum hydrocarbons impacting the Site's subsurface. The stratigraphy at the Site and consists of fine soils mixtures inter bedded with layers of sandy materials.

- Petroleum hydrocarbon impacted soil was delineated and was found to be restricted to the area of interest at depths ranging from about 12 feet bgs (north wall UST-D excavation, Kleinfelder March 11, 2008) to approximately 23 feet bgs, as indicated in sample K-B-22.5. The horizontal and vertical delineation of impacted soil is illustrated in Plates 4, 6 and 7.

- Groundwater is confined by a dense layer of fine materials that extends from the surface to approximately 18 to 20 feet bgs. The first GWBZ extends to approximately 25 feet bgs and groundwater in the first GWBZ flows towards the southwest at a 0.02 ft/ft gradient.

- The extent of petroleum hydrocarbon impacted soil and groundwater are limited to the area of interest in the Site.

- Viable preferential pathways potentially carrying chemicals-of-concern to or from the Site were not identified in the 2,000 foot radius survey.

- No potential receptors (i.e. drinking water wells) were identified down-gradient of the Site.

Recommendations

Kleinfelder understands that the City is interested in facilitating the redevelopment of the Site with a 2-story high density residential building. Current building design indicate that the footprint of the new structure will essentially cover the entire Site, with parking areas covering the ground level and residential units above ground surface. The horizontal and vertical extent of petroleum hydrocarbon impacted soil and groundwater was delineated, and found to be contained within the area of interest. Aerobic biodegradation is actively occurring, as indicated by the low concentrations of electron acceptors in groundwater samples collected in the area of interest. Biodegradation in the area of interest is expected to continue as groundwater carrying electron acceptors naturally migrates to the Site and through the area of interest. Kleinfelder recommends continuing monitoring the concentration of petroleum hydrocarbons in groundwater at the Site. Kleinfelder also recommends contacting the ACEH to further discuss the process for case closure.

9.0 LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice that exists in Alameda County at the time the investigation was performed. It should be recognized that definition and evaluation of environmental conditions is difficult and inexact art. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the conditions resent. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies.

This report may be used only by the City of Emeryville and only for the purposes stated, within a reasonable time from its issuance, but in no event later than one (1) year from the date of the report. All information gathered by Kleinfelder is considered confidential and will be released only upon written authorization of the City of Emeryville or as required by law. Non-compliance with any of these requirements by the City of Emeryville or anyone else, unless specifically agreed to in advance by Kleinfelder in writing, will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party and the City of Emeryville agrees to defend, indemnify, and hold harmless Kleinfelder from any claim or liability associated with such unauthorized use of non-compliance.

Our firm has prepared this report for the Client's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended. If the City of Emeryville wishes to reduce the uncertainty beyond the level associated with this study, Kleinfelder should be notified for additional consultation.

Kleinfelder offers various levels of investigation and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of geologic and environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present. Although risk can never be eliminated, more-detailed and extensive investigations yield more information, which may help understand and manage the level of risk. Since detailed investigation and analysis

involves greater expense, our clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including subsurface investigations or field tests, may be performed to reduce uncertainties. Acceptance of this report will indicate that the City of Emeryville has reviewed the document and determined that it does not need or want a greater level of service than provided.

During the course of the performance of Kleinfelder's services, hazardous materials may be discovered. Kleinfelder will assume no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials. Nothing contained in this reports should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, generator, or person who arranges for disposal, transport, storage or treatment of hazardous materials within the meaning of any governmental statute, regulation or order. The City of Emeryville will be solely responsible for notifying all governmental agencies, and the public at large, of the existence, release, treatment or disposal of any hazardous materials observed at the project site, either before or during performance of Kleinfelder's services. The City of Emeryville will be responsible for all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including cuttings and samples resulting from Kleinfelder's services.

10.0 REFERENCES

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TABLES

TABLE 1

Petroleum Hydrocarbons in Soil

Former Ambassador Laundry

Emeryville, California

Analytical Method:				EPA 8015B			
Analyte:				TPH Gasoline (mg/Kg)	TPH Stoddard Solvent (mg/Kg)	TPH Diesel (mg/Kg)	TPH Motor Oil (mg/Kg)
Location	Sample Depth (ft)	Sample ID	Sample Date	Result	Result	Result	Result
Boring K-A	16.5	K-A-16.5	02/16/2009	4.4	3.4	**280**	220
Boring K-A	21	K-A-21	02/16/2009	8.9	8.6	**420**	270
Boring K-A	23	K-A-23	02/16/2009	< 1.2	< 1.2	< 1.2	< 5.9
Boring K-A	39.5	K-A-39.5	02/16/2009	< 1.3	< 1.3	< 1.3	< 6.5
Boring K-B	18	K-B-18	02/17/2009	2.5	1.4	**220**	200
Boring K-B	22.5	K-B-22.5	02/17/2009	160 J	150 J	**1,600**	1,100
Boring K-B	38	K-B-38	02/17/2009	2.9	1.9	10	12
Boring K-C	18.5	K-C-18.5	03/30/2009	**870 J**	**630 J**	**2000 J**	1100 J
MW-4 (K-C)	20	MW-4-20	03/30/2009	5.9	5.7	29	8.5
Boring K-C	26	K-C-26	03/30/2009	< 1.2	< 1.2	6.1	6.3
Boring K-C	40	K-C-40	03/30/2009	< 1.3	< 1.3	4.3	6.7
Boring K-D	19.5	K-D-19.5	03/30/2009	13 J	10 J	64	38
Boring K-D	22.5	K-D-22.5	03/30/2009	4.8	3.8	130	62
Boring K-D	43	K-D-43	03/30/2009	< 1.3	< 1.3	< 1.3	< 6.5
MW-5	17	MW-5-17	03/31/2009	8.5 J	6.7 J	**380**	290
ESL TableS C & D ESL TableS A & B			DWR Non DWR	83 180	83 180	83 180	5,000

Acronyms

DWR	Drinking Water Resource
ESL	Environmental Screening Levels- San Francisco Region Water Quality Control Board - May 2008
mg/Kg	milligrams per Kilogram
TPH	Total Petroleum Hydrocarbons
630	Exceeds ESL Tables C or D
	Exceeds ESL Tables A or B
UJ	Estimated nondetected result.

TABLE 2

Volatile Organic Compounds - Fuel Oxygenates in Soil

Former Ambassador Laundry

Emeryville, California

Analytical Method:				EPA 8260B											
Analyte:				Benzene (µg/Kg)	DIPE (µg/Kg)	EDB (µg/Kg)	EDC (µg/Kg)	Ethylbenzene (µg/Kg)	ETBE (µg/Kg)	MTBE (µg/Kg)	TAME (µg/Kg)	TBA (µg/Kg)	Toluene (µg/Kg)	m,p Xylene (µg/Kg)	o-Xylene (µg/Kg)
Location	Sample Depth (ft)	Sample ID	Sample Date	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Boring K-A	16.5	K-A-16.5	02/16/2009	< 6.8	< 6.8	< 6.8	< 6.8	< 6.8	< 6.8	< 6.8	< 6.8	< 140	< 6.8	< 6.8	< 6.8
Boring K-A	21	K-A-21	02/16/2009	< 33	< 33	< 33	< 33	< 33	< 33	< 33	< 33	< 660	< 33	< 33	< 33
Boring K-A	23	K-A-23	02/16/2009	< 5.3	< 5.3	< 5.3	< 5.3	< 5.3	< 5.3	< 5.3	< 5.3	< 110	< 5.3	< 5.3	< 5.3
Boring K-A	39.5	K-A-39.5	02/16/2009	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 130	< 6.4	< 6.4	< 6.4
Boring K-B	18	K-B-18	02/17/2009	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 120	< 6.0	< 6.0	< 6.0
Boring K-B	22.5	K-B-22.5	02/17/2009	< 640 UJ	< 640 UJ	< 640 UJ	< 640 UJ	< 640 UJ	< 640 UJ	< 640 UJ	< 640 UJ	< 13,000 UJ	< 640 UJ	< 640 UJ	< 640 UJ
Boring K-B	38	K-B-38	02/17/2009	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 130	< 6.4	< 6.4	< 6.4
Boring K-C	18.5	K-C-18.5	03/30/2009	< 1,600	< 1,600	< 1,600	< 1,600	< 1,600	< 1,600	< 1,600	< 1,600	< 32,000	< 1,600	< 1,600	< 1,600
MW-4 (K-C)	20	MW-4-20	03/30/2009	< 53	< 53	< 53	< 53	< 53	< 53	< 53	< 53	< 1100	< 53	< 53	< 53
Boring K-C	26	K-C-26	03/30/2009	< 5.9	< 5.9	< 5.9	< 5.9	< 5.9	< 5.9	< 5.9	< 5.9	< 120	< 5.9	< 5.9	< 5.9
Boring K-C	40	K-C-40	03/30/2009	< 5.9	< 5.9	< 5.9	< 5.9	< 5.9	< 5.9	< 5.9	< 5.9	< 120	< 5.9	< 5.9	< 5.9
Boring K-D	19.5	K-D-19.5	03/30/2009	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2	< 120	< 6.2	< 6.2	< 6.2
Boring K-D	22.5	K-D-22.5	03/30/2009	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2	< 120	< 6.2	< 6.2	< 6.2
Boring K-D	43	K-D-43	03/30/2009	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 120	< 6.0	< 6.0	< 6.0
MW-5	17	MW-5-17	03/31/2009	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 120	< 6.0	< 6.0	< 6.0
Non DWR	ESL Table	B A	Shallow Deep	120 2,000	NE	19 1,000	220 1,800	2,300 4,700	NE	8,400	NE	100,000 110,000	9,300	110,000	
DWR	ESL Table	D C	Shallow Deep	44	NE	0.3	4.5	2,300 3,300	NE	23	NE	75	2,900	2,300	

Acronyms

DIPE	Diisopropyl ether	TAME	t-amyl methyl ether
EDB	1,2-dibromoethane	TBA	2-methyl-2-propanol
EDC	1,2-dichloroethane	ESL	Environmental Screening Levels- San Francisco Region Water Quality Control Board - May 2008
ETBE	ethyl t-butyl ether	µg/Kg	micro gram per Kilogram
MTBE	methyl tert-butyl ether	DWR	Drinking Water Resource
	Potentially exceeds ESL Tables A or B	UJ	Estimated nondetected result.

Table 3

Groundwater Analytical Results
Former Ambassador Laundry
Emeryville, California

	Grab-Sample Boring B*	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	ESL DWR	ESL Non DWR
Benzene (µg/L)	0.56	< 0.5	4.9	< 0.5	< 0.5	< 0.5	< 0.5	1	46
Toluene (µg/L)	0.53	< 0.5	1.4	< 0.5	< 0.5	< 0.5	< 0.5	40	130
Ethylbenzene (µg/L)	< 0.5	< 0.5	2.5	< 0.5	< 0.5	< 0.5	< 0.5	30	43
Xylenes (µg/L)	< 1.0	< 1.0	2.5	< 1.0	< 1.0	< 1.0	< 1.0	20	100
DIPE	3.3	8.9	26	28	14	9.2	7	NE	
TPH-g (µg/L)	< 50	< 50	**310**	< 50	200	< 50	170	100	210
TPH-SS	NA	< 50	< 50	< 50	58	< 50	< 50	100	210
TPH-d (µg/L)	67	< 50	95	< 50	120	< 50	79	100	210
Dissolved Oxygen (mg/L)	NA	0.94	0.47	-0.09	0.15	0.3	2.13	NE	
ORP (mEV)	NA	209.8	70.7	105.2	117.9	129.5	115.6	NE	
Conductivity (µmhos/cm)	NA	710	1,000	1,100	1,000	1,100	1,200	NE	
TDS (mg/L)	NA	490	600	630	600	650	700	NE	
Sulfate (mg/L)	NA	78	76	79	81	91	110	NE	
Nitrate (mg/L)	NA	68 J	20 J	24 J	22 J	18 J	10 J	NE	
Ferrous (mg/L)	NA	< 0.05	0.1	< 0.05	< 0.05	< 0.05	0.096	NE	
Orthophosphate (mg/L)	NA	0.65	0.06	0.063	0.07	0.054	0.16	NE	
Methane (mg/L)	NA	< 0.1	2.4	0.59	3.2	< 0.1	2.4	NE	

Acronyme and Notes

DIPE	Diisopropyl ether
ESL	Environmental Screening Levels- San Francisco Region Water Quality Control Board - May 2008
µg/L	micrograms per Liter
mg/L	milligrams per Liter
DWR	Drinking Water Resource
TDS	Total Dissolved Solids
ORP	Oxydation Reduction Potential
TPH-d	Total Petroleum Hydrocarbons as diesel
TPH-g	Total Petroleum Hydrocarbons as gasoline
NA	Not Analyzed
310	Exceeds ESL
J	Result is an estimated value.

***NOTE:** Grab-groundwater sample collected at 50 feet below ground surface to assess the need to install a monitoring well screened at a deeper groundwater bearing zone. Groundwater sample depth selection based on CPT data*

PLATES

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PROJECT NO.	73943-pw-
DRAWN:	August 28, 2008
DRAWN BY:	IMc
CHECKED BY:	AD
FILE NAME:	Former Ambassador Laundry

Site Vicinity Map

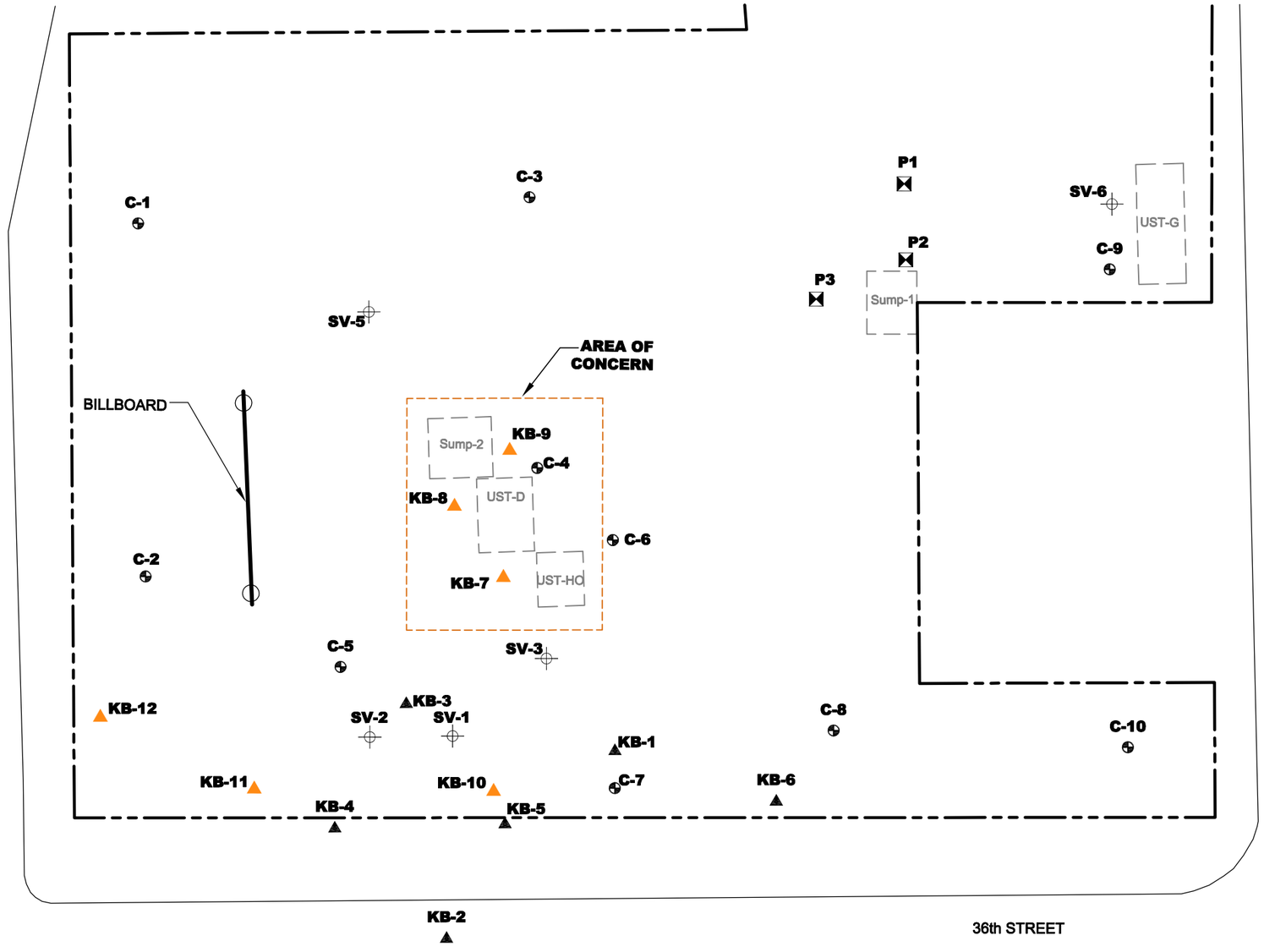
Former Ambassador Laundry
Further Site Investigation Work Plan
3601-3623 Adeline Street in Emeryville, California

PLATE

1

PLOTTED: 01 Jun 2009, 9:06am, jsala

PLEASANTON, CA CAD FILE: D:_PROJECTS\73943\PWRREP\ LAYOUT: SITEPLAN



LEGEND

— — —	SITE BOUNDARY
▲	BORING (Kleinfelder, 2007)
⊕	SOIL VAPOR (Kleinfelder, 2007)
◓	BORING (Clayton, 2003) Samples collected at 8 to 10 feet bgs
⋈	BORING (PES, 1999)
▲	BORING (Kleinfelder, 1996)
◒	SURFACE SAMPLE
UST-HO	UST - Heating Oil (Removed 1995)
UST-G	UST - Gasoline (Removed 1994)
UST-D	UST - Diesel (Removed 2007)
Sump-1	Sump - 1 (Cleaned 1999)
Sump-2	Sump-2 (Removed 2005)

NOTE: Locations are approximate.

N

30 15 0 30

APPROXIMATE SCALE (feet)

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DRAWN BY:	JDS
CHECKED BY:	AD
FILE NAME:	SITE PLAN.dwg

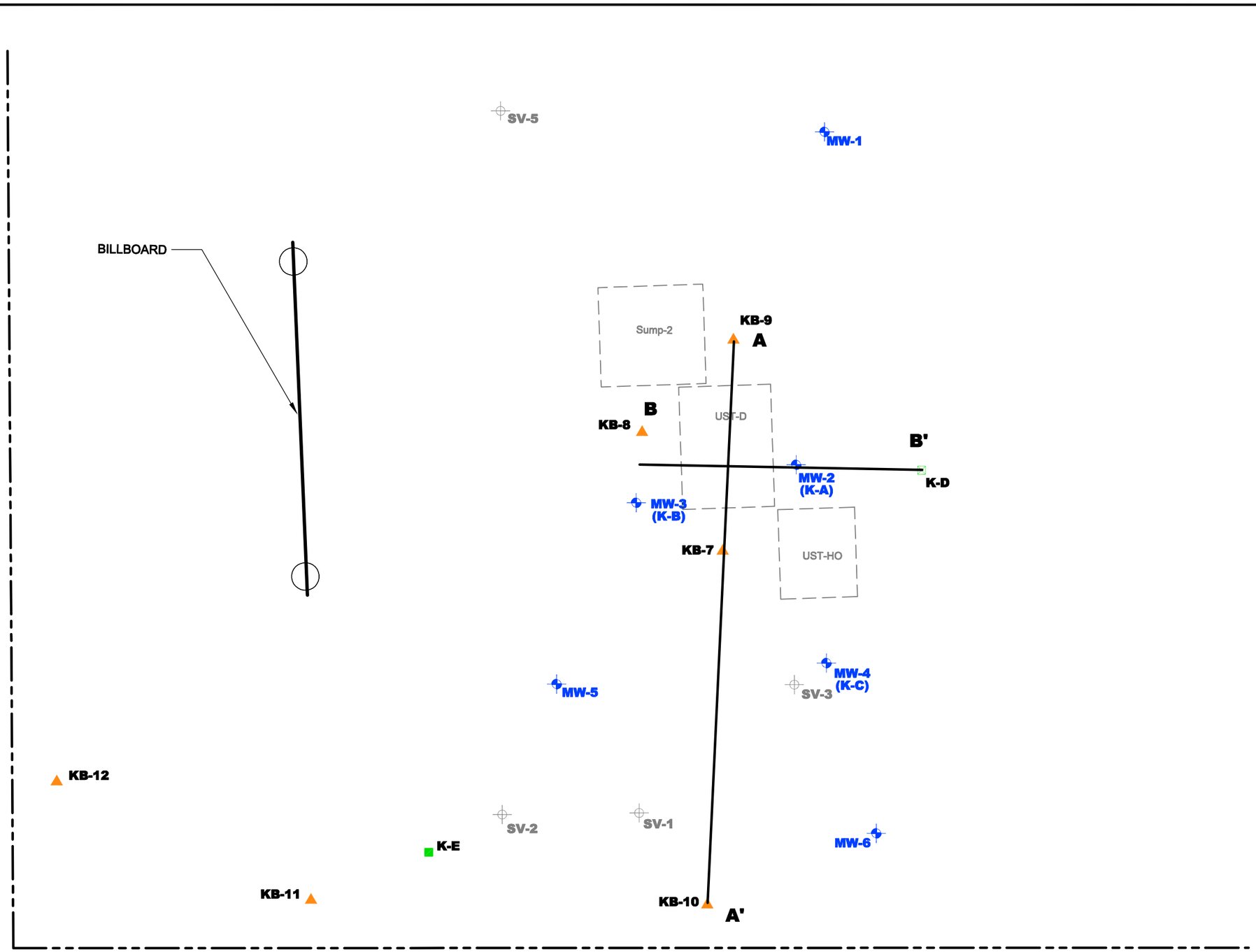
PRE INVESTIGATION SITE PLAN

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE **2**

PLOTTED: 01 Jun 2009, 9:06am, jsala

PLEASANTON, CA CAD FILE: D:_PROJECTS\73943\PWRREP\ LAYOUT: AREA OF CONCERN



LEGEND

- SITE BOUNDARY
- MONITORING WELL (Kleinfelder, 2009)
- BORING (Kleinfelder, 2007)
- SOIL VAPOR (Kleinfelder, 2007)
- SOIL VAPOR (Kleinfelder, 2007)
- B — B' CROSS SECTION LINE
- EXPLORATORY BORING
- CONE PENETROMETER TEST
- UST-G UST - Gasoline (Removed 1994)
- UST-HO UST - Heating Oil (Removed 1995)
- UST-D UST - Diesel (Removed 2007)
- Sump-1 Sump - 1 (Cleaned 1999)
- Sump-2 Sump-2 (Removed 2005)

NOTE: Locations are approximate.

N

15 7.5 0 15

APPROXIMATE SCALE (feet)

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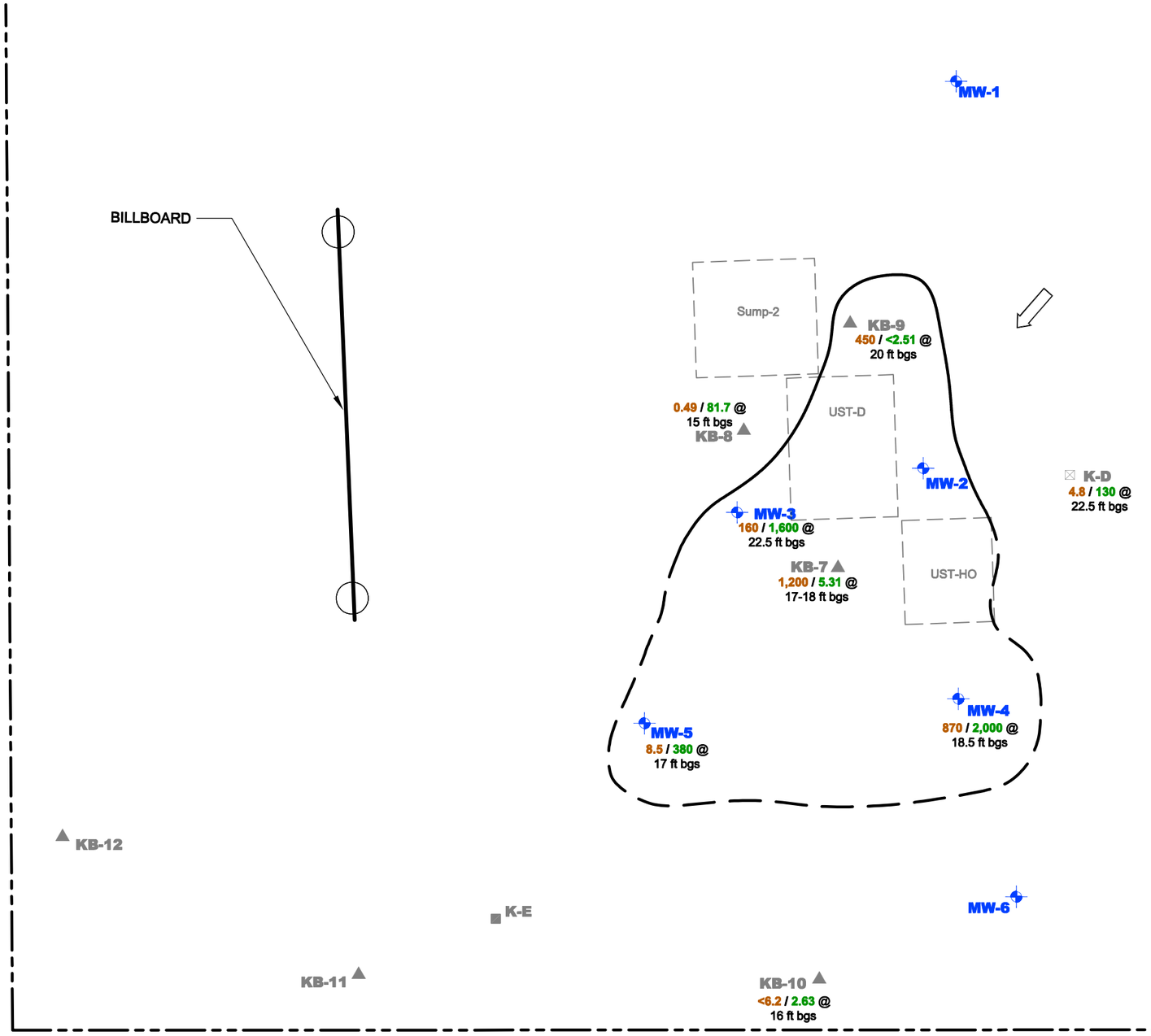
FILE NAME:	SITE PLAN.dwg

EXPLORATORY BORINGS IN THE AREA OF INTEREST AND MONITORING WELL LOCATION

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE
3

PLOTTED: 01 Jun 2009, 9:06am, jsala



LEGEND

	SITE BOUNDARY
	MONITORING WELL (Kleinfelder, 2009)
	BORING (Kleinfelder, 2007)
	EXPLORATORY BORING
	CONE PENETROMETER TEST
UST-HO	UST - Heating Oil (Removed 1995)
UST-G	UST - Gasoline (Removed 1994)
UST-D	UST - Diesel (Removed 2007)
Sump-1	Sump - 1 (Cleaned 1999)
Sump-2	Sump-2 (Removed 2005)
	Estimated extent of Total Petroleum Hydrocarbon exceeding ESLs in Soil
ESLs	Environmental Screening Levels
TPHg / TPHd	Total Petroleum Hydrocarbon as Gasoline (mg/kg)/ Total Petroleum Hydrocarbon as Diesel (mg/kg)
ft	Feet
bgs	Below Ground Surface
	Approximate groundwater flow direction
NA	Not Analyzed
ND	Not Detected
mg/kg	milligrams per kilogram

NOTE: Locations are approximate.
Impacted soil depth range from 16 - 23 ft bgs approxmately.

N

15 7.5 0 15

APPROXIMATE SCALE (feet)

CAD FILE: D:_PROJECTS\73943\PWRREP\ LAYOUT: TPH_CON

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CHECKED BY:	AD
FILE NAME:	SITE PLAN.dwg

TOTAL PETROLEUM HYDROCARBONS IMPACTED SUBSURFACE SOIL CONTOUR

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE
4

PLOTTED: 01 Jun 2009, 9:06am, jsala

LAYOUT: GW_CON

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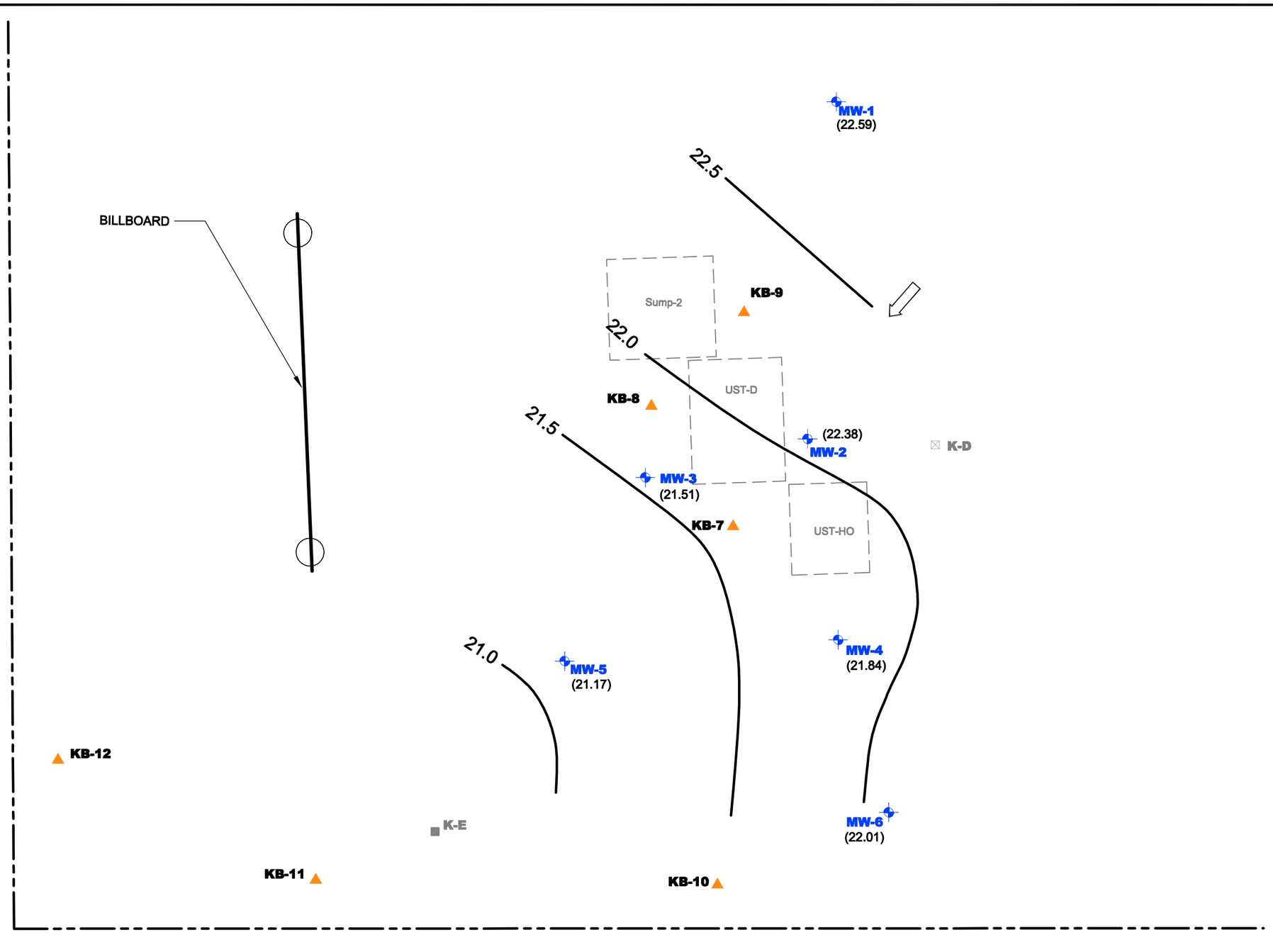

LEGEND

- SITE BOUNDARY
- MONITORING WELL (Kleinfelder, 2009
- BORING (Kleinfelder, 2007)
- EXPLORATORY BORING
- CONE PENETROMETER TEST
- UST-HO — UST - Heating Oil (Removed 1995)
- UST-G — UST - Gasoline (Removed 1994)
- UST-D — UST - Diesel (Removed 2007)
- Sump-1 — Sump - 1 (Cleaned 1999)
- Sump-2 — Sump-2 (Removed 2005)
- 22.5 — Groundwater Elevation Contour (feet, NAVD, 1988)
- (22.59) — Groundwater Elevation (feet, NAVD, 1988)
- Approximate Groundwater Flow Direction

NOTE: Locations are approximate.

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FILE NAME:	SITE PLAN.dwg

GROUNWATER CONTOUR MAP
MAY 2009

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

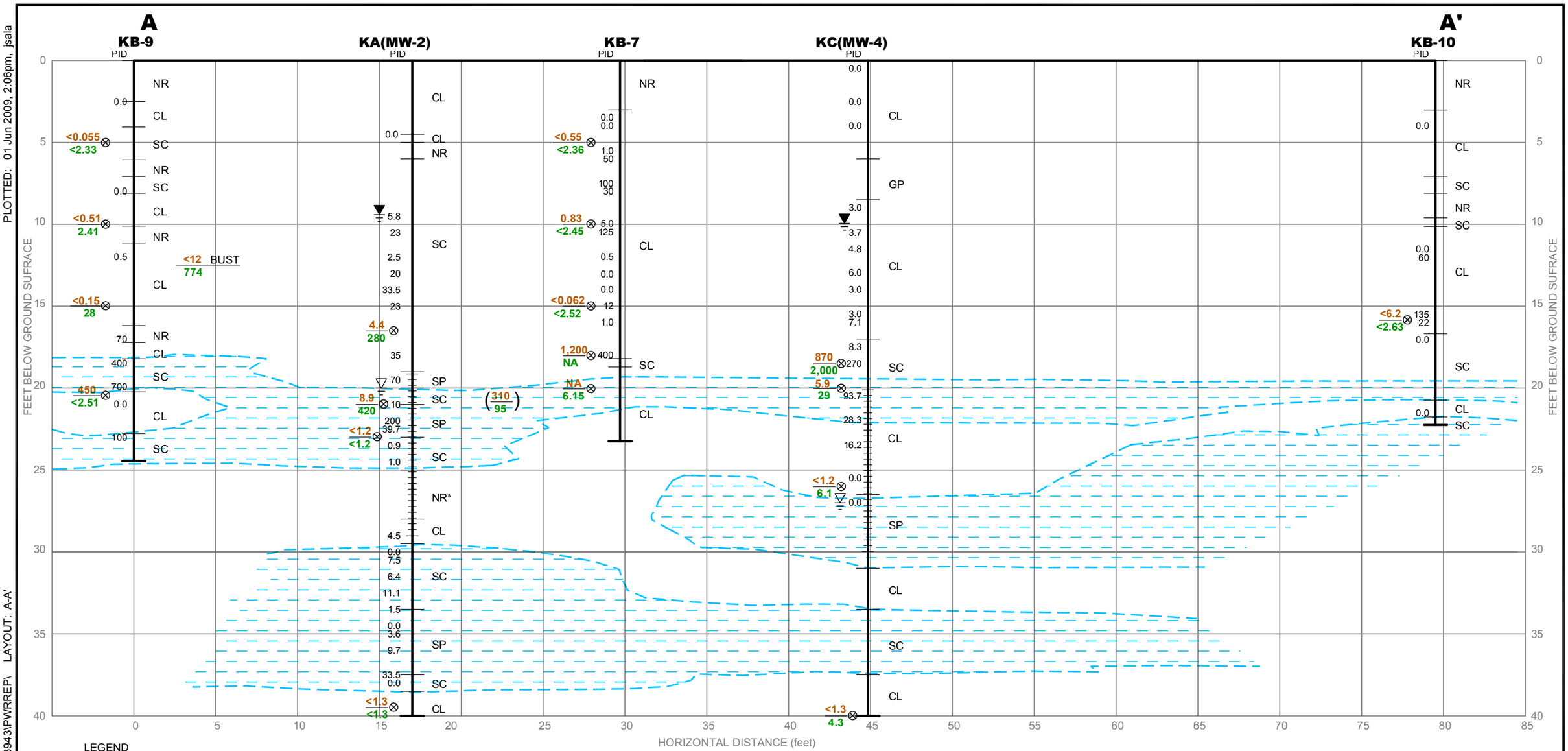
PLATE
5

PLOTTED: 01 Jun 2009, 2:06pm, jsala

LAYOUT: A-A'

CAD FILE: D:_PROJECTS\73943\PWRREP\

PLEASANTON, CA



LEGEND

CL	Clay
SC	Clayey Sand
SP	Sand
GP	Poorly Graded Gravel
NR	No Recovery
NA	Not Analyzed
UST	Underground Storage Tank

NOTE: Locations are approximate.

(310/95)	TPH-g (µg/L) in groundwater / TPHd (µg/L) in groundwater
870/2000 ⊗	TPH-g (mg/Kg) in soil / TPHd (mg/Kg) in soil
TPH-g	Total Petroleum Hydrocarbons as Gasoline
TPH-d	Total Petroleum Hydrocarbons as Diesel
BUST	Bottom former Underground Storage Tank
▽	Initial water level
▼	Stablized water level
132	Photo-ionization detector (PID)
	Screening zone in monitoring well

Groundwater bearing zone

mg/kg	Milligrams per Kilogram
µg/L	Micrograms per Liter
NR*	No Recovery in boring CPT log indicates Clay/Silty Clay

6 3 0 6

APPROXIMATE VERTICAL & HORIZONTAL SCALE (feet)

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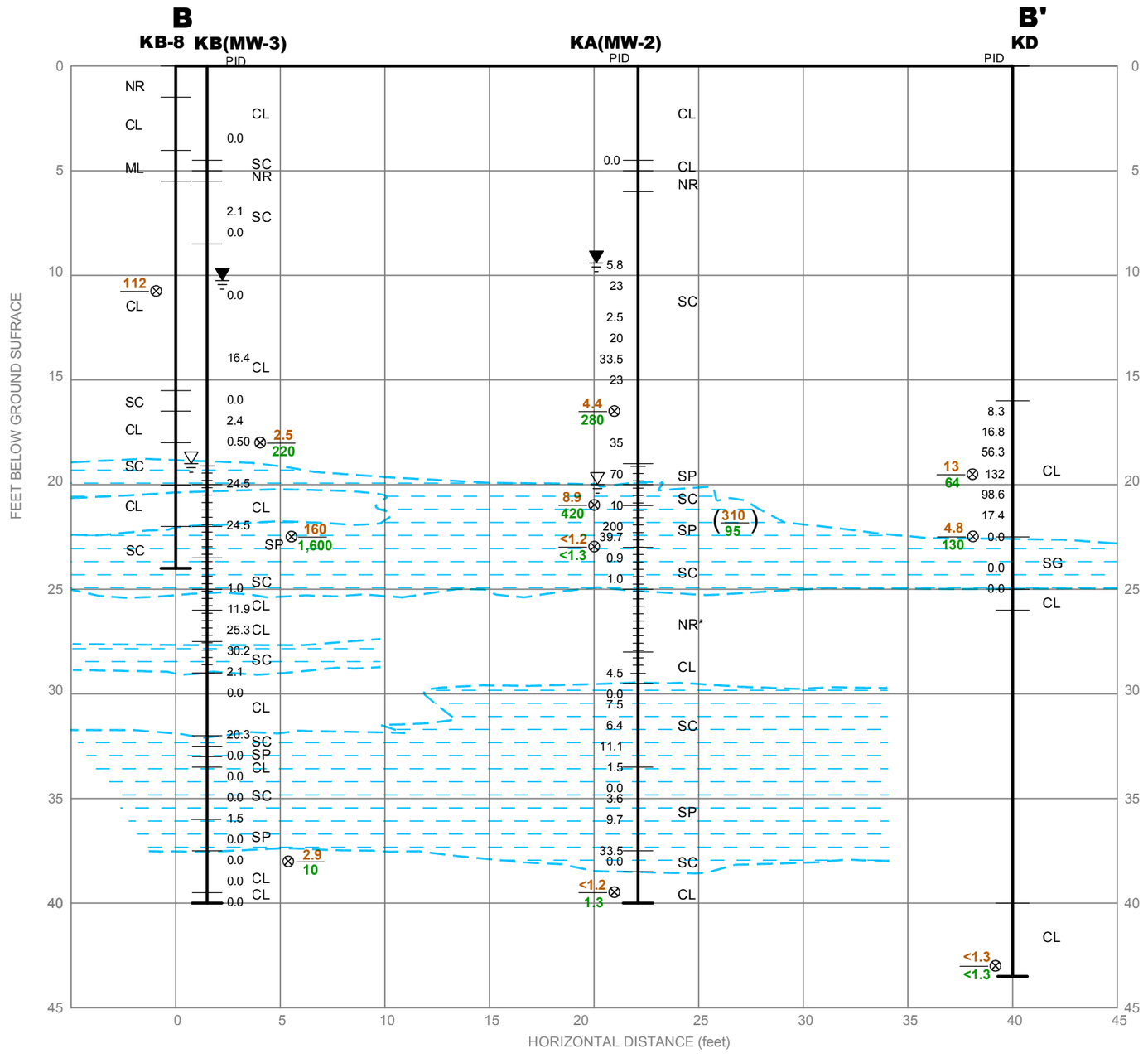
FILE NAME:	X-SECTIONS.dwg

GEOLOGIC CROSS-SECTION A-A'

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE
6



LEGEND

CL	Clay
SC	Clayey Sand
SP	Sand
GP	Poorly Graded Gravel
NR	No Recovery
NA	Not Analyzed
UST	Underground Storage Tank
(310 / 95)	TPH-g (µg/L) in groundwater / TPHd (µg/L) in groundwater
160 / 1,600 ⊗	TPH-g (mg/Kg) / TPHd (mg/Kg)
TPH-g	Total Petroleum Hydrocarbons as Gasoline
TPH-d	Total Petroleum Hydrocarbons as Diesel
▽	Initial water level
▼	Stablized water level
132 |	Photo-ionization detector (PID)
|	Screening zone in monitoring well
	Groundwater bearing zone
mg/kg	Milligrams per Kilogram
µg/L	Micrograms per Liter
NR*	No Recovery in boring CPT log indicates Clay/Silty Clay

NOTE: Locations are approximate.

6 3 0 6

APPROXIMATE VERTICAL & HORIZONTAL SCALE (feet)

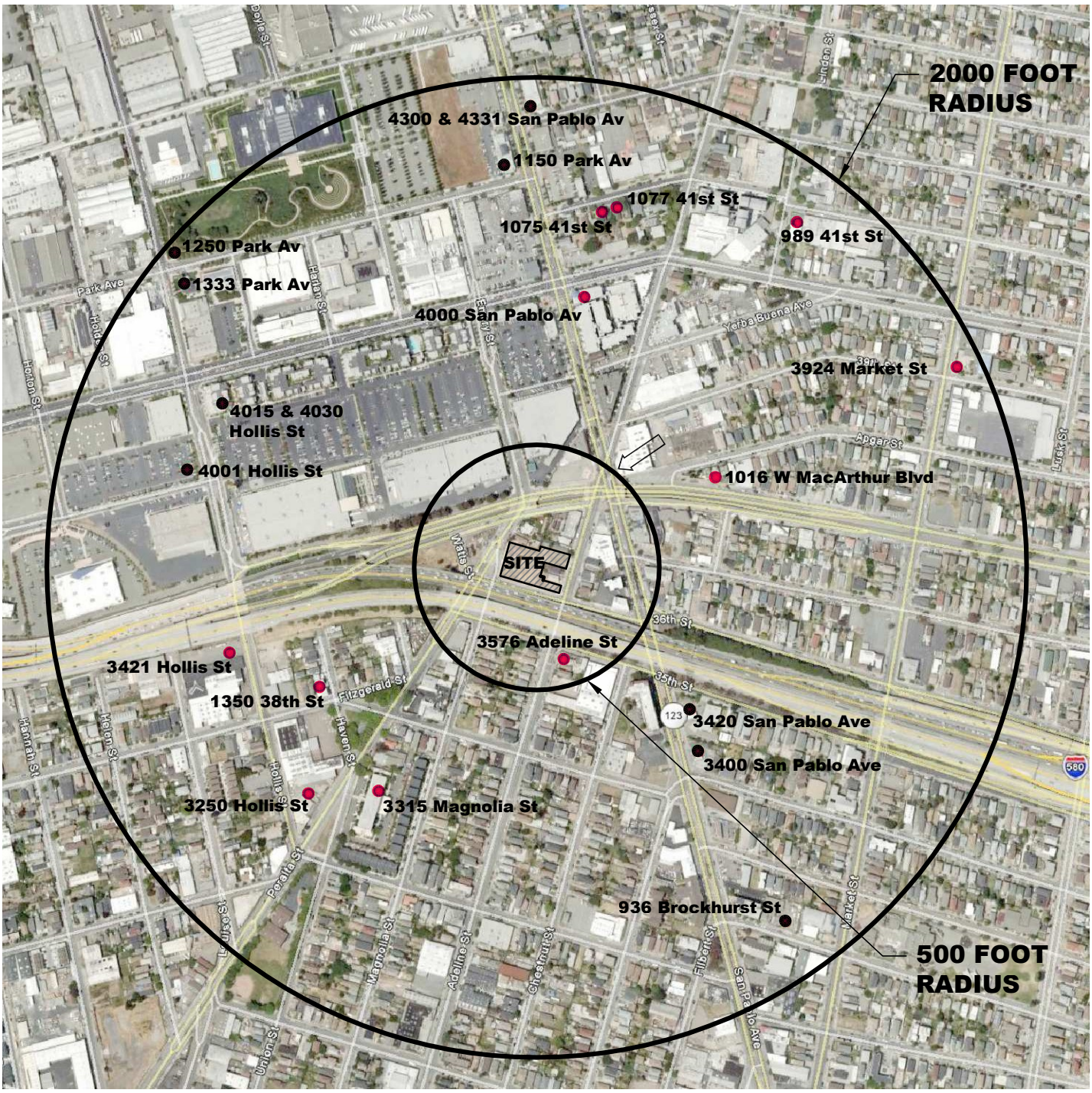
KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	73943
DRAWN:	MAY 2009
DRAWN BY:	JDS
CHECKED BY:	AD
FILE NAME:	X-SECTIONS.dwg

GEOLOGIC CROSS-SECTION B-B'

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE
7



600 300 0 600

APPROXIMATE SCALE (feet)

REFERENCE: Google Earth Pro, 2009

N

LEGEND

- GROUNDWATER FLOW DIRECTION
- WELLS OR GROUP OF WELLS NOT IN GROUNWATER FLOW DIRECTION
- WELLS OR GROUP OF WELLS IN GROUNWATER FLOW DIRECTION

NOTE: Locations are approximate.

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	73943
DRAWN:	MAY 2009
DRAWN BY:	JDS
CHECKED BY:	AD
FILE NAME:	WELL SURVEY.dwg

2,000 FEET RADIUS WELL SURVEY

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE **8**

PLOTTED: 01 Jun 2009, 9:12am, jsala
CAD FILE: D:_PROJECTS\73943\PWRREP\ LAYOUT: Layout1
PLEASANTON, CA

APPENDIX A

ALAMEDA COUNTY PUBLIC WORKS BORING AND WELL INSTALLATION PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 01/14/2009 By jamesy

Permit Numbers: W2009-0016 to W2009-0022
Permits Valid from 03/19/2009 to 04/15/2009

Application Id: 1231535517106
City of Project Site: Emeryville
Site Location: 3601-3623 Adeline Street, Emeryville, CA
Project Start Date: 01/26/2009
Completion Date: 01/30/2009
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org
Extension Start Date: 03/19/2009
Extension End Date: 04/15/2009
Extension Count: 2
Extended By: vickyh1

Applicant: Kleinfelder - Gabriel Fuson
1970 Broadway, Suite 710, Oakland, CA 94612
Phone: 510-628-9000

Property Owner: City of Emeryville City of Emeryville
1333 Park Avenue, Emeryville, CA 94608
Phone: 510-596-4300

Client: City of Emeryville City of Emeryville
1333 Park Avenue, Emeryville, CA 94608
Phone: 510-596-4300

Contact: Gabriel Fuson
Phone: 510-628-9000
Cell: 510-774-4115

Total Due: $2300.00
Receipt Number: WR2009-0013 **Total Amount Paid:** $2300.00
Payer Name : Kleinfelder Oakland Paid By: MC **PAID IN FULL**

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 6 Wells
Driller: Precision Sampling - Lic #: 636387 - Method: hstem **Work Total: $2070.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2009-0016	01/14/2009	04/26/2009	MW-1	8.00 in.	2.00 in.	18.00 ft	30.00 ft
W2009-0017	01/14/2009	04/26/2009	MW-2	8.00 in.	2.00 in.	18.00 ft	30.00 ft
W2009-0018	01/14/2009	04/26/2009	MW-3	8.00 in.	2.00 in.	18.00 ft	30.00 ft
W2009-0019	01/14/2009	04/26/2009	MW-4	8.00 in.	2.00 in.	18.00 ft	30.00 ft
W2009-0020	01/14/2009	04/26/2009	MW-5	8.00 in.	2.00 in.	18.00 ft	30.00 ft
W2009-0021	01/14/2009	04/26/2009	MW-6	8.00 in.	2.00 in.	18.00 ft	30.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

6. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

8. Minimum surface seal thickness is two inches of cement grout placed by tremie

9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

Borehole(s) for Investigation-Environmental/Monitorinig Study - 7 Boreholes
Driller: Precision Sampling - Lic #: 636387 - Method: DP **Work Total: $230.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2009-0022	01/14/2009	04/26/2009	7	2.00 in.	50.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

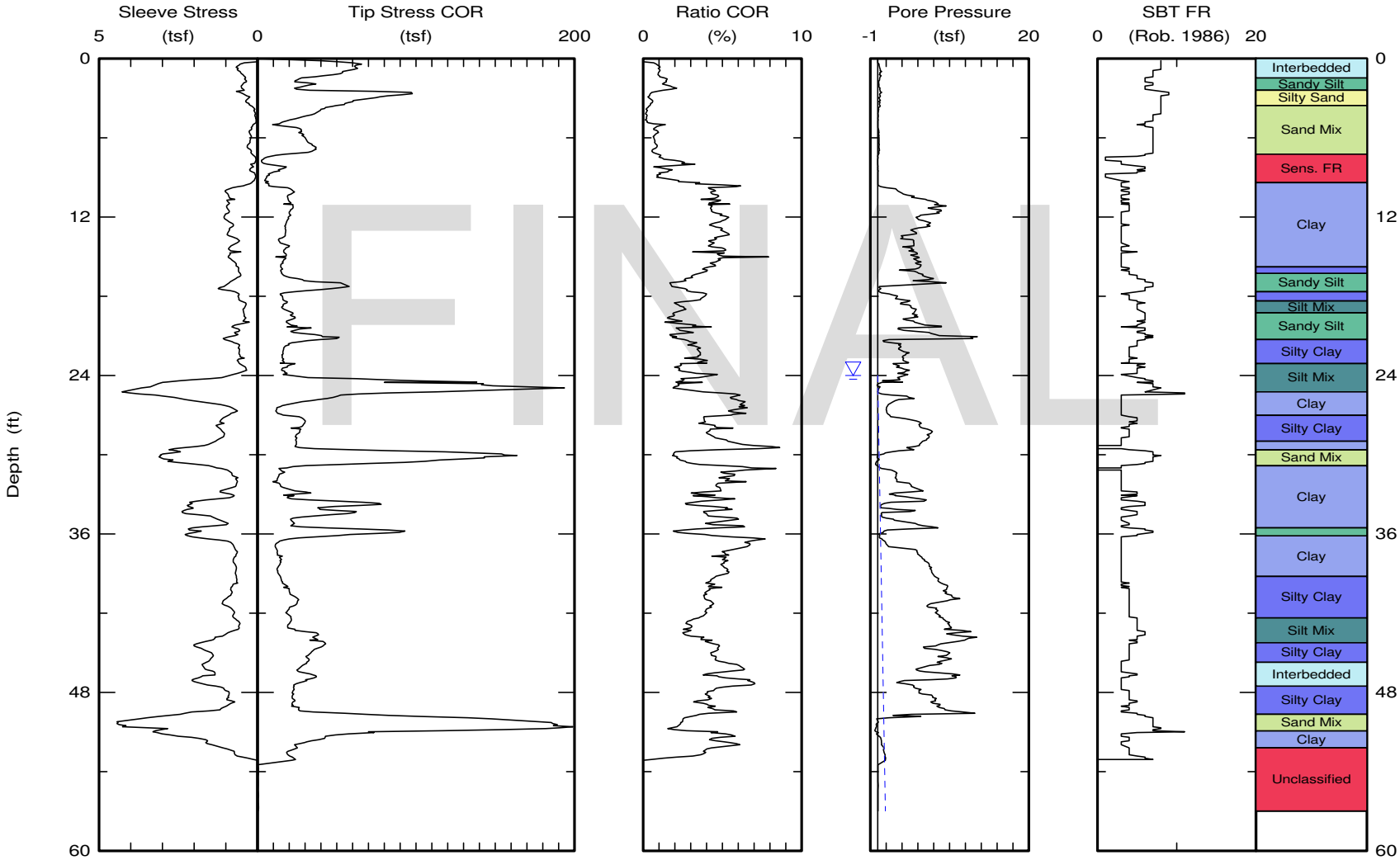
6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX B

CPT-MIP REPORT

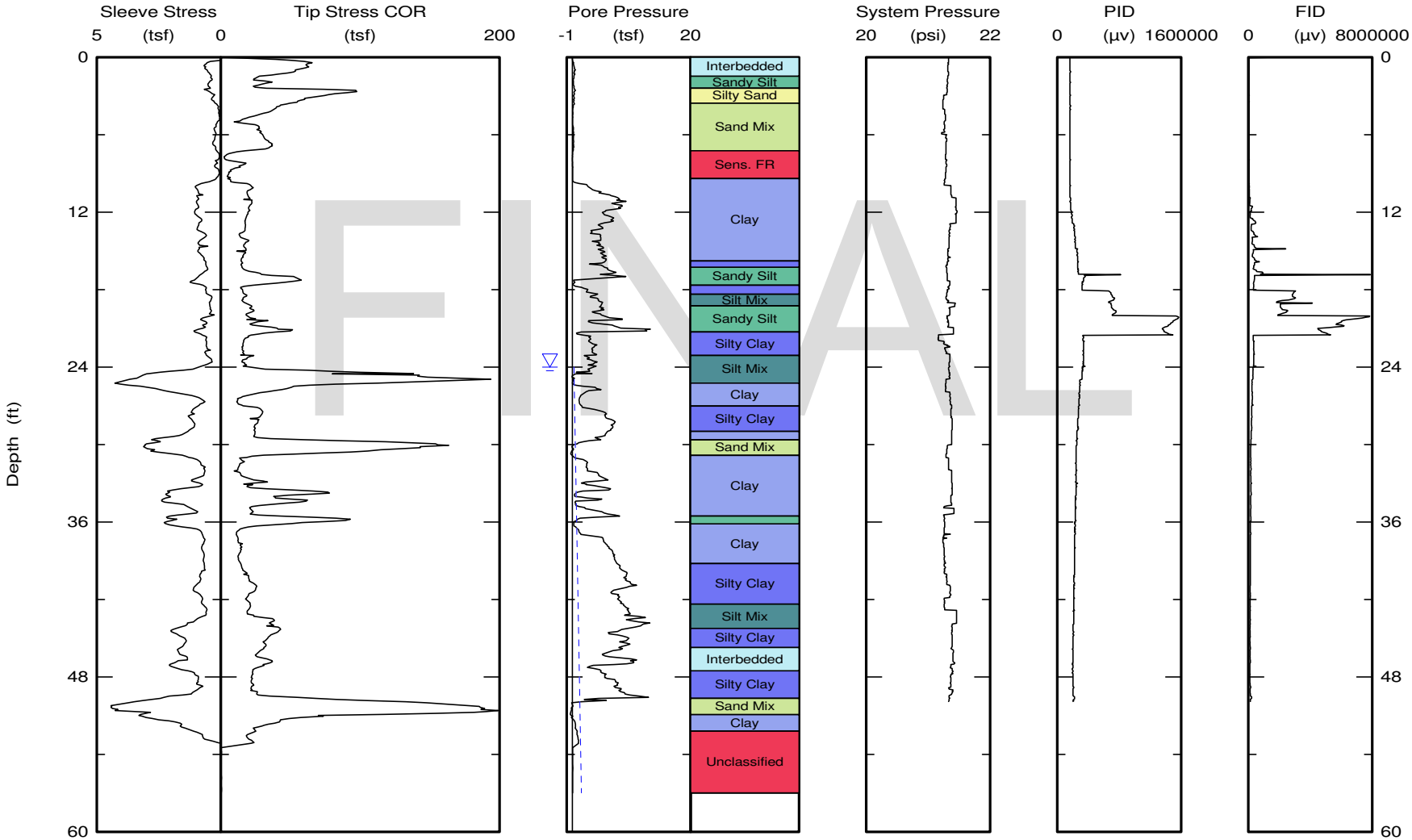
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 16/Feb/2009 Test ID: MIP-A Project: FAL
	Customer: Kleinfelder Job Site: FAL	



Maximum depth: 56.99 (ft)

▽ Estimated Phreatic Surface

DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 16/Feb/2009 Test ID: MIP-A Project: FAL
	Customer: Kleinfelder Job Site: FAL	

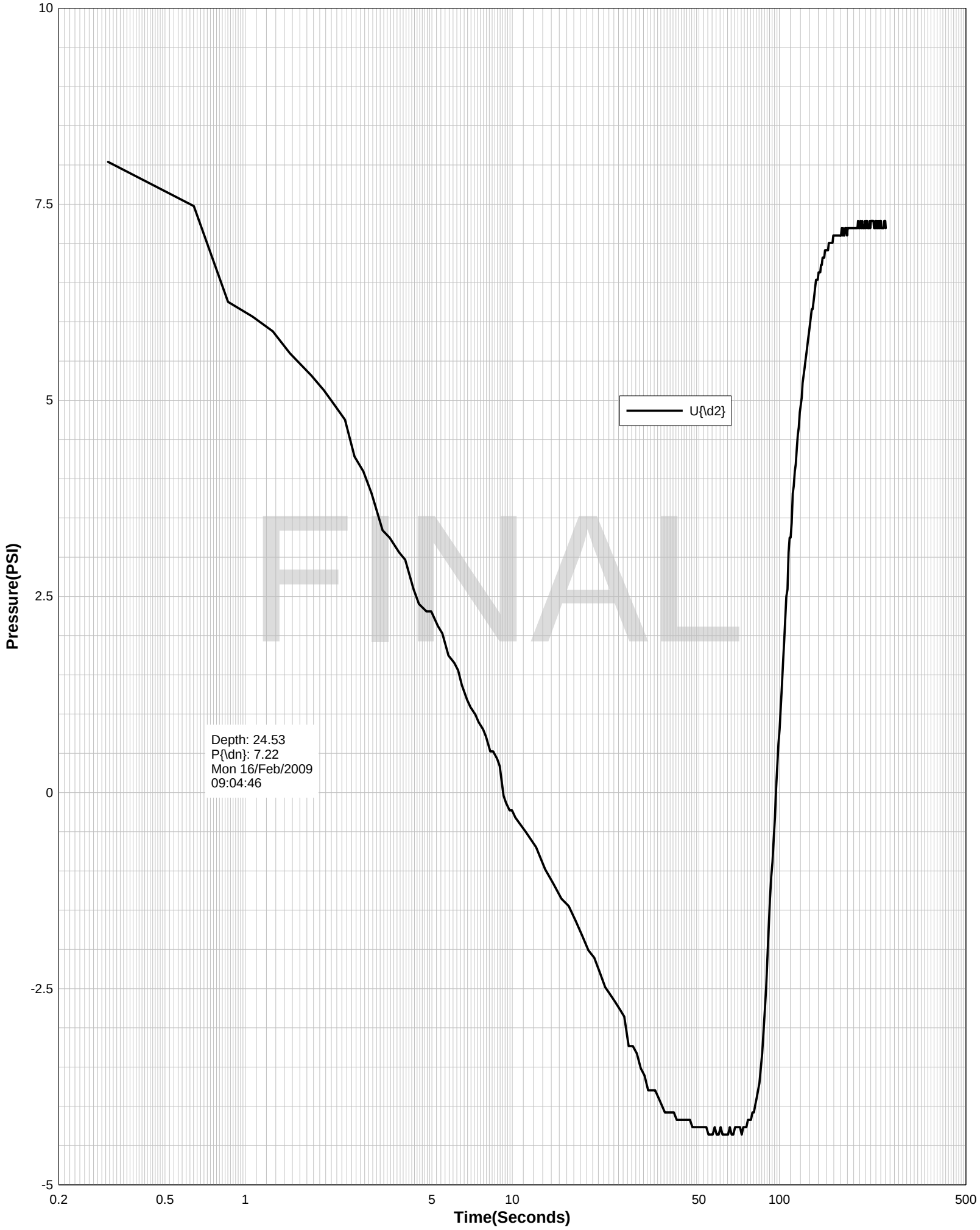


Maximum depth: 56.99 (ft)

▽ Estimated Phreatic Surface

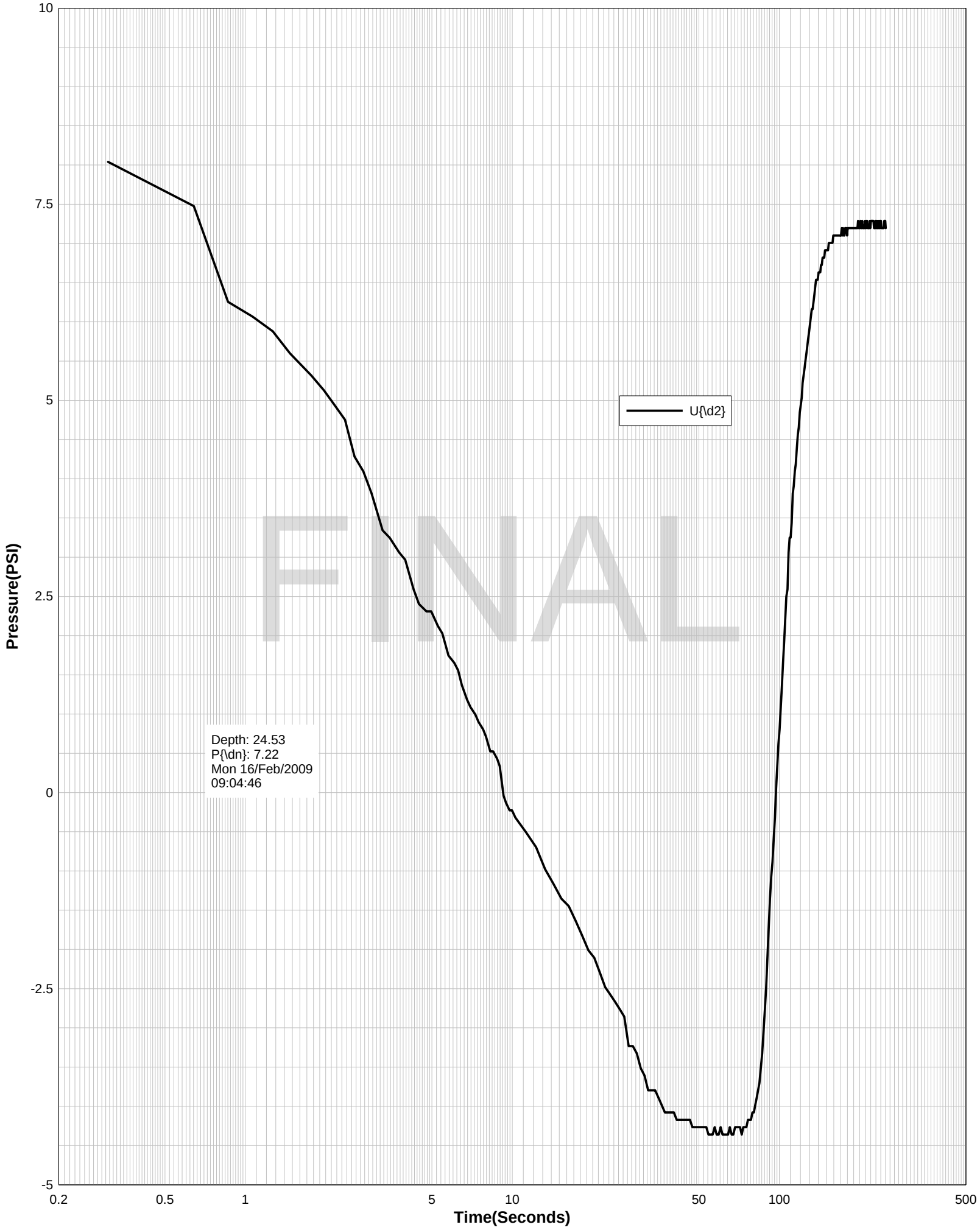
Kleinfelder

The DSD MIP-AD.25



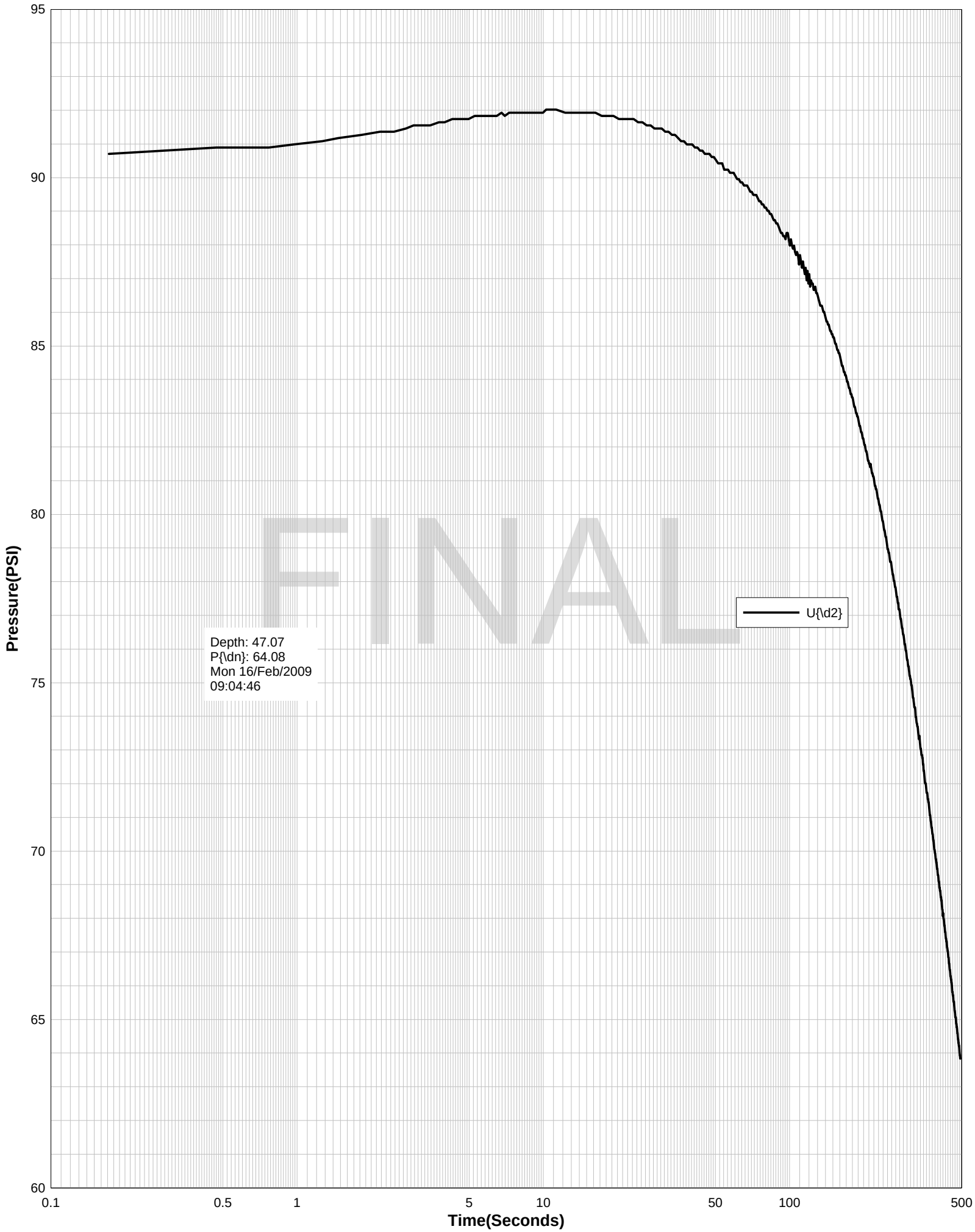
Kleinfelder

The DSD MIP-AD.25

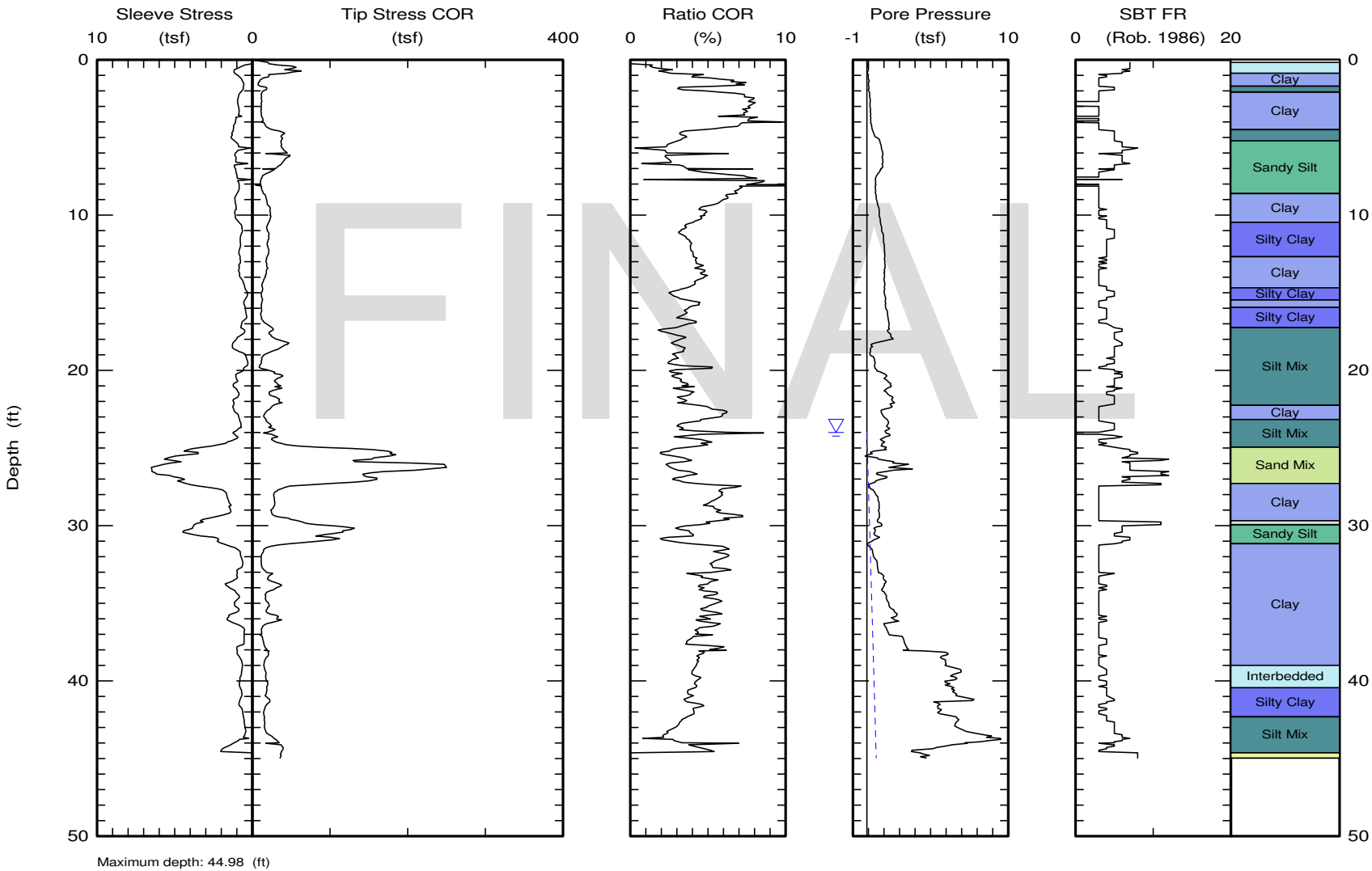


Kleinfelder

The DSD MIP-AD.47



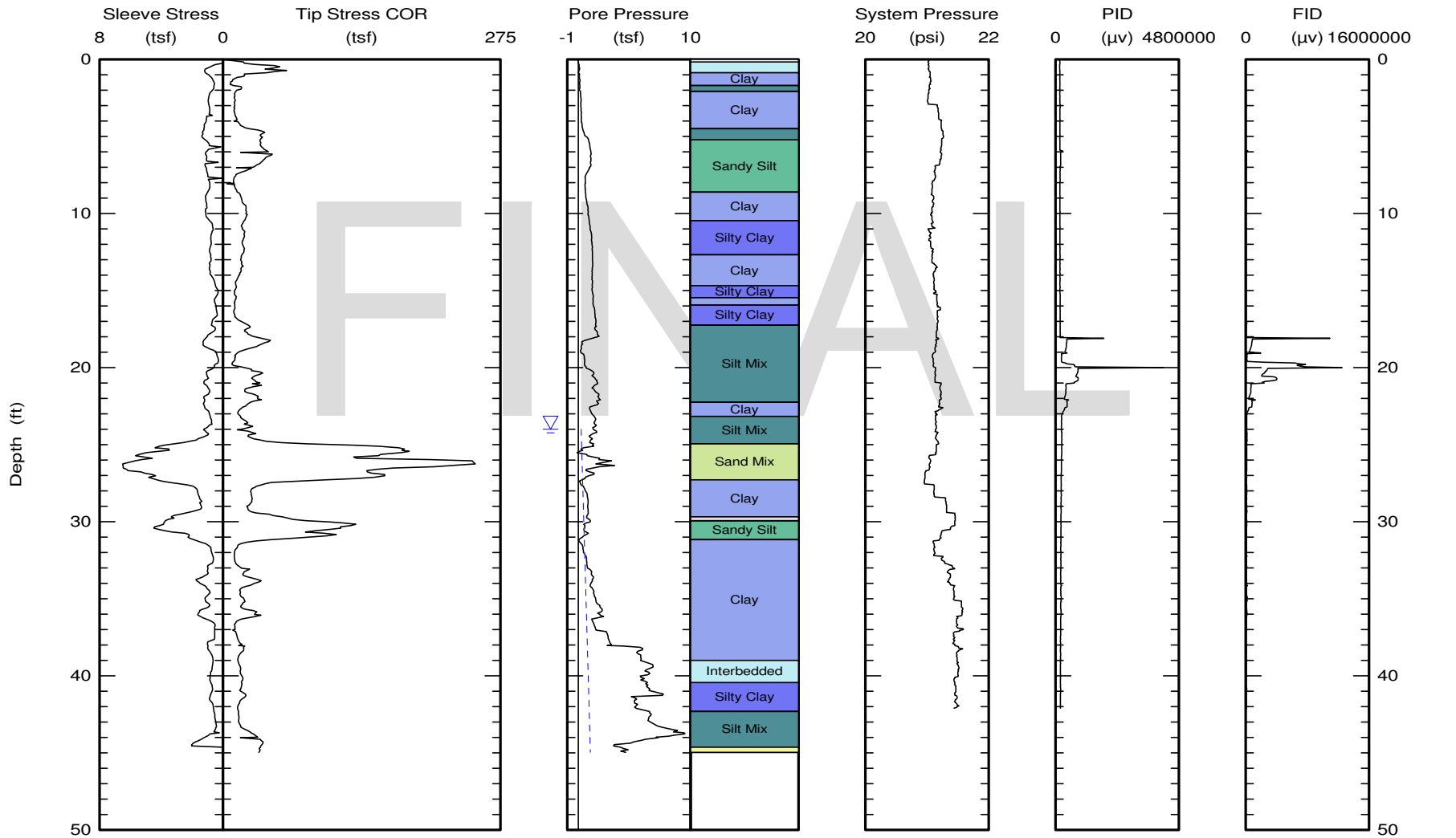
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 16/Feb/2009 Test ID: MIP-B Project: FAL
	Customer: Kleinfelder Job Site: FAL	



Maximum depth: 44.98 (ft)

▽ Estimated Phreatic Surface

DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 16/Feb/2009 Test ID: MIP-B Project: FAL
	Customer: Kleinfelder Job Site: FAL	



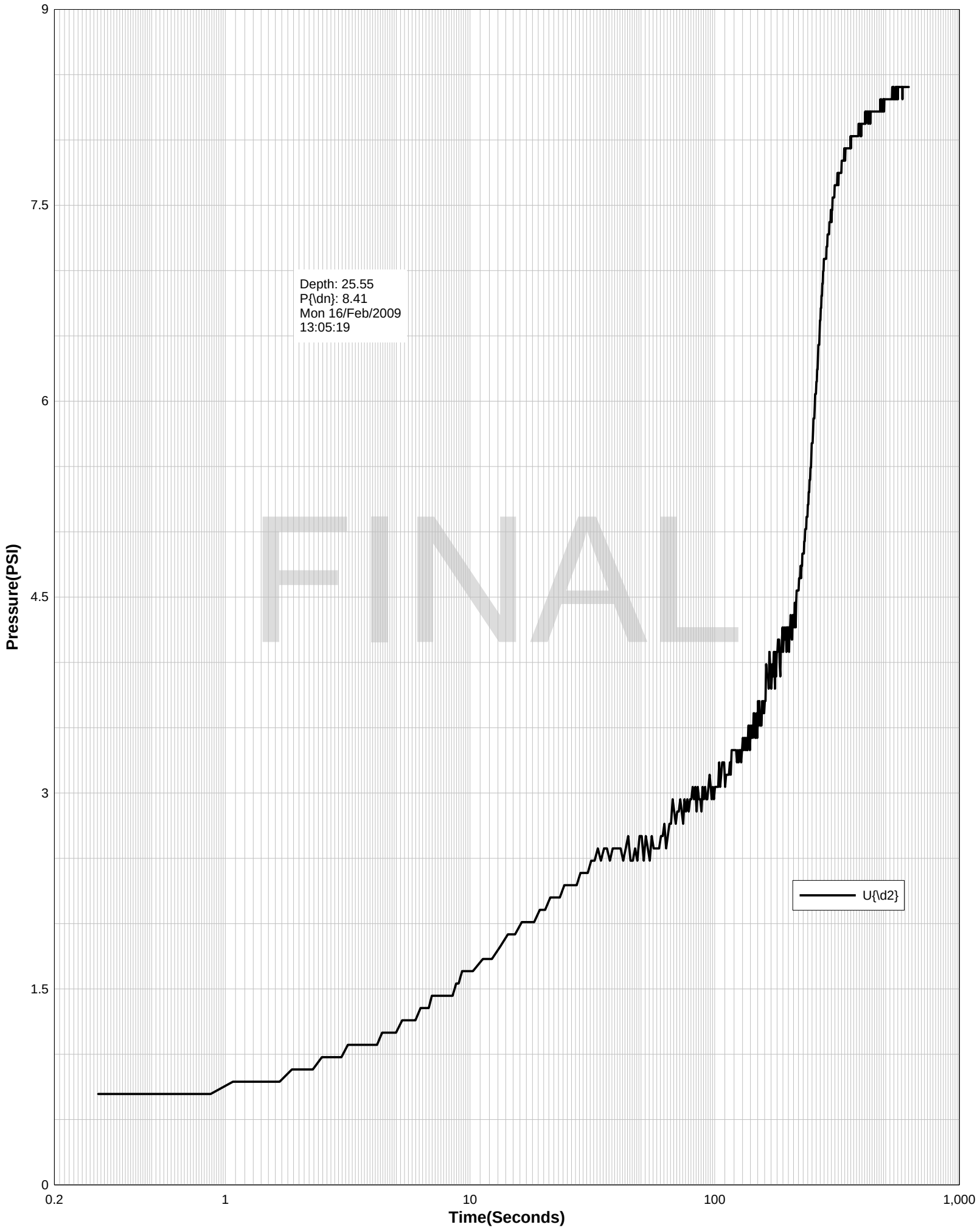
Maximum depth: 44.98 (ft)

▽ Estimated Phreatic Surface

Test ID: MIP-B
File: MIP-B.ecp

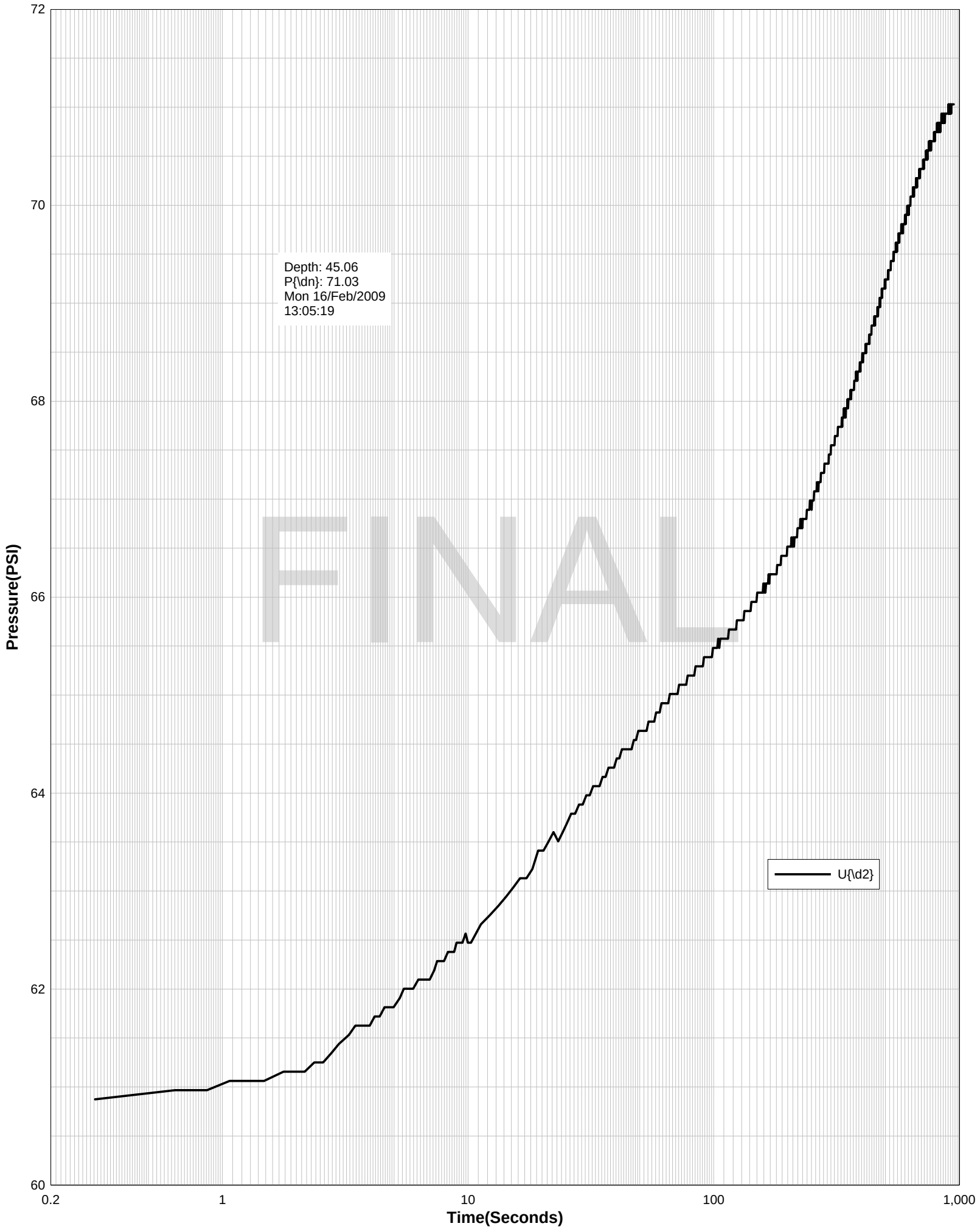
Kleinfelder MIP-B

The DSD MIP-BD.26

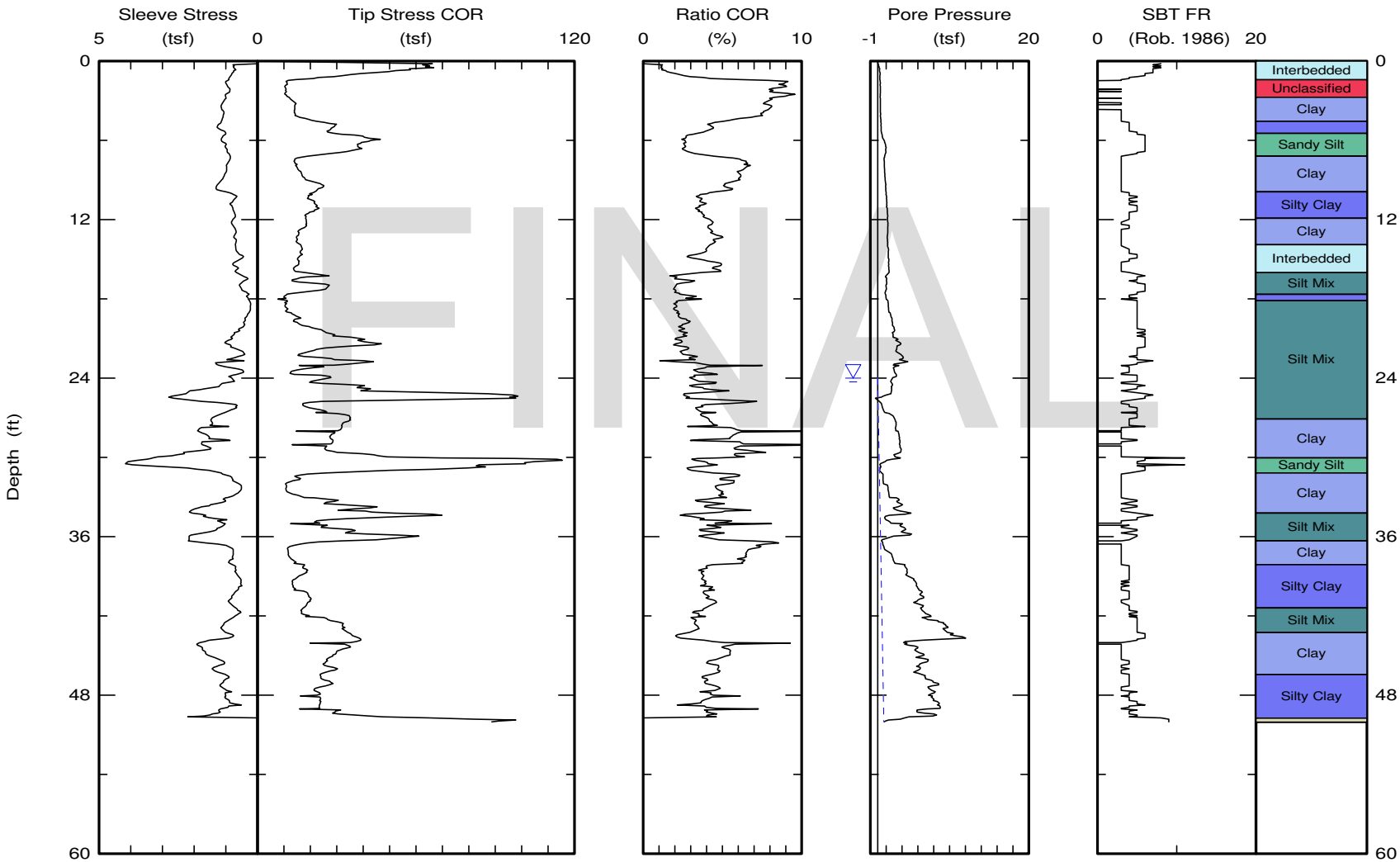


Kleinfelder MIP-B

The DSD MIP-BD.45



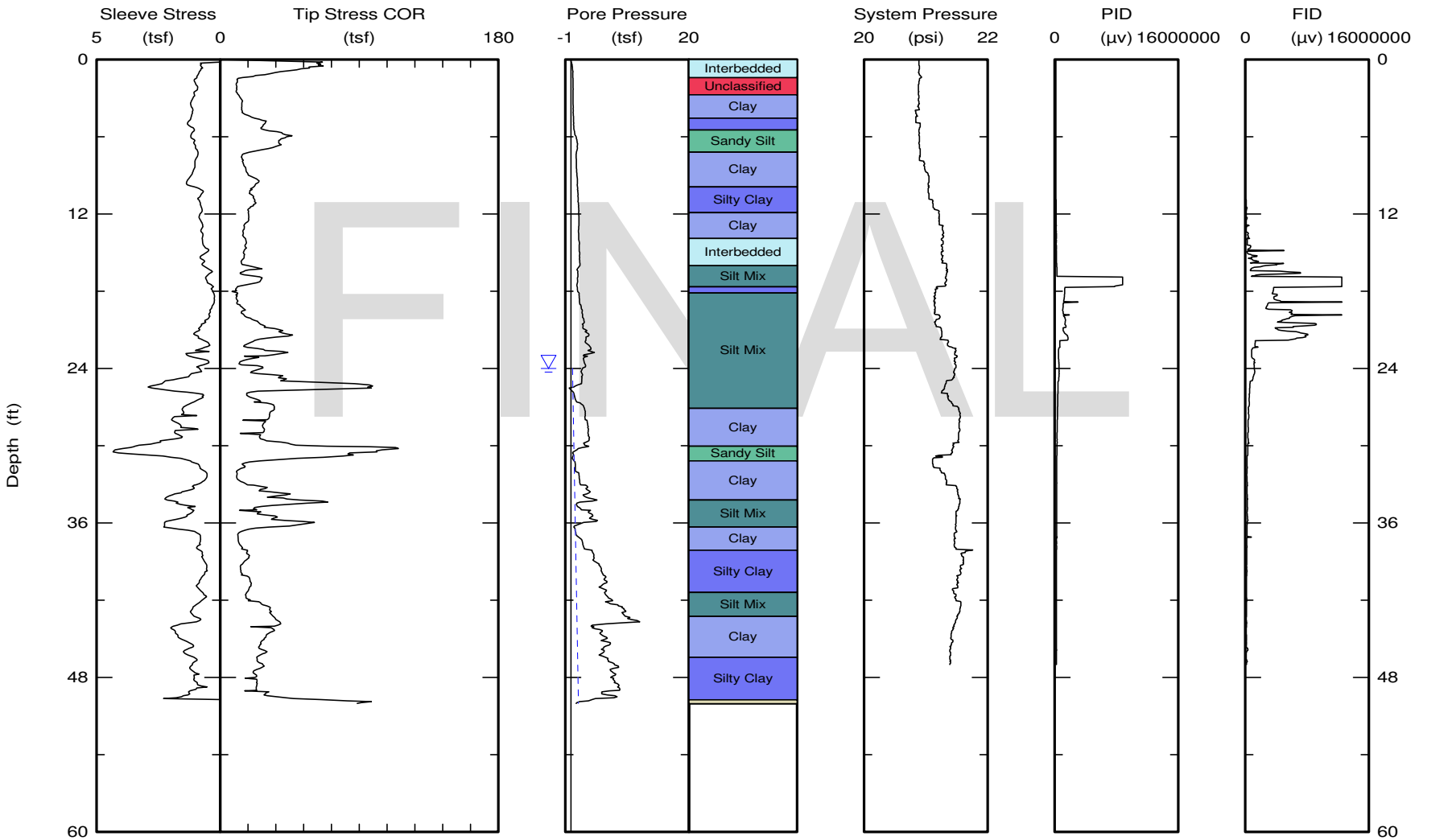
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 16/Feb/2009 Test ID: MIP-C Project: FAL
	Customer: Kleinfelder Job Site: FAL	



Maximum depth: 50.04 (ft)

▽ Estimated Phreatic Surface

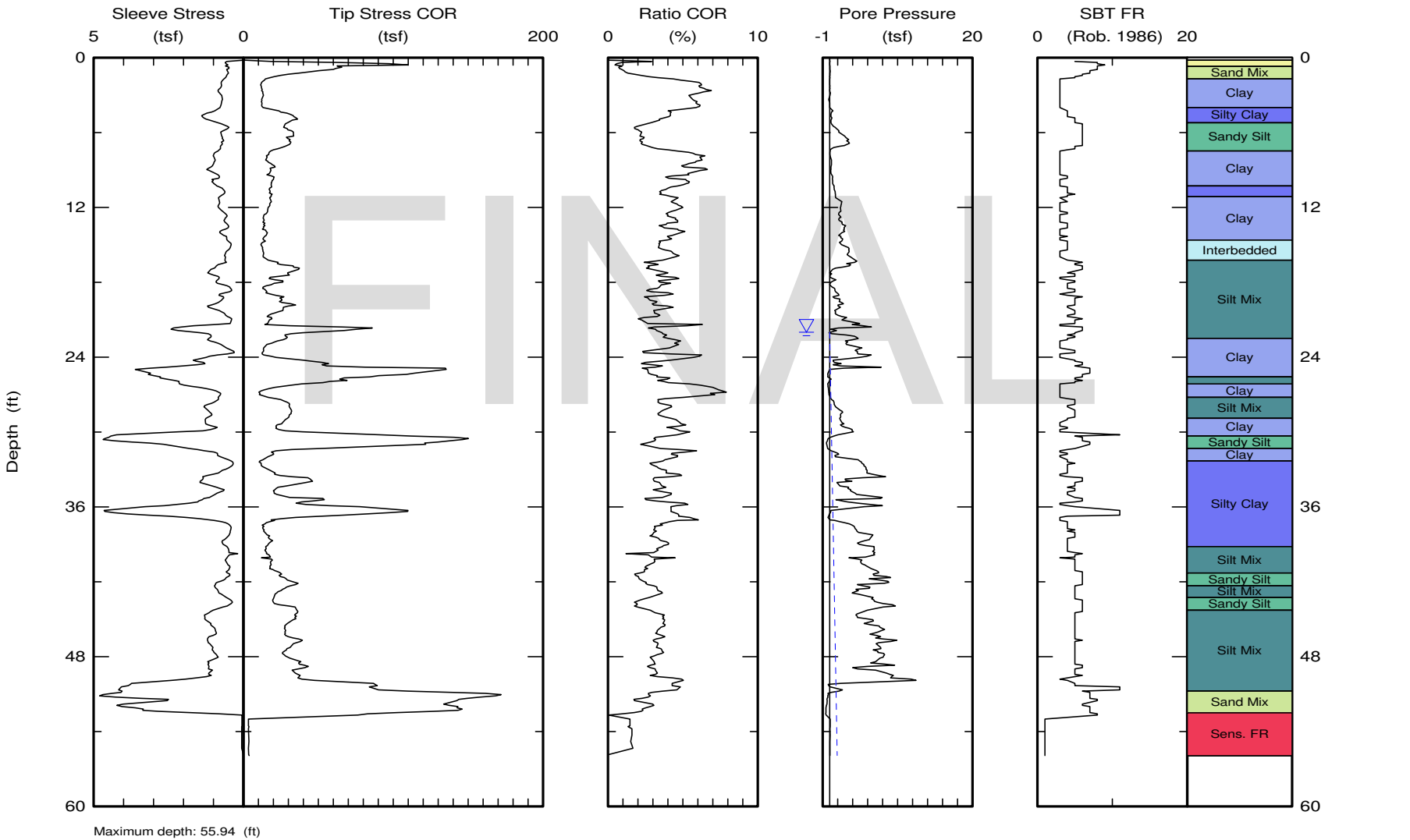
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 16/Feb/2009 Test ID: MIP-C Project: FAL
	Customer: Kleinfelder Job Site: FAL	



Maximum depth: 50.04 (ft)

▽ Estimated Phreatic Surface

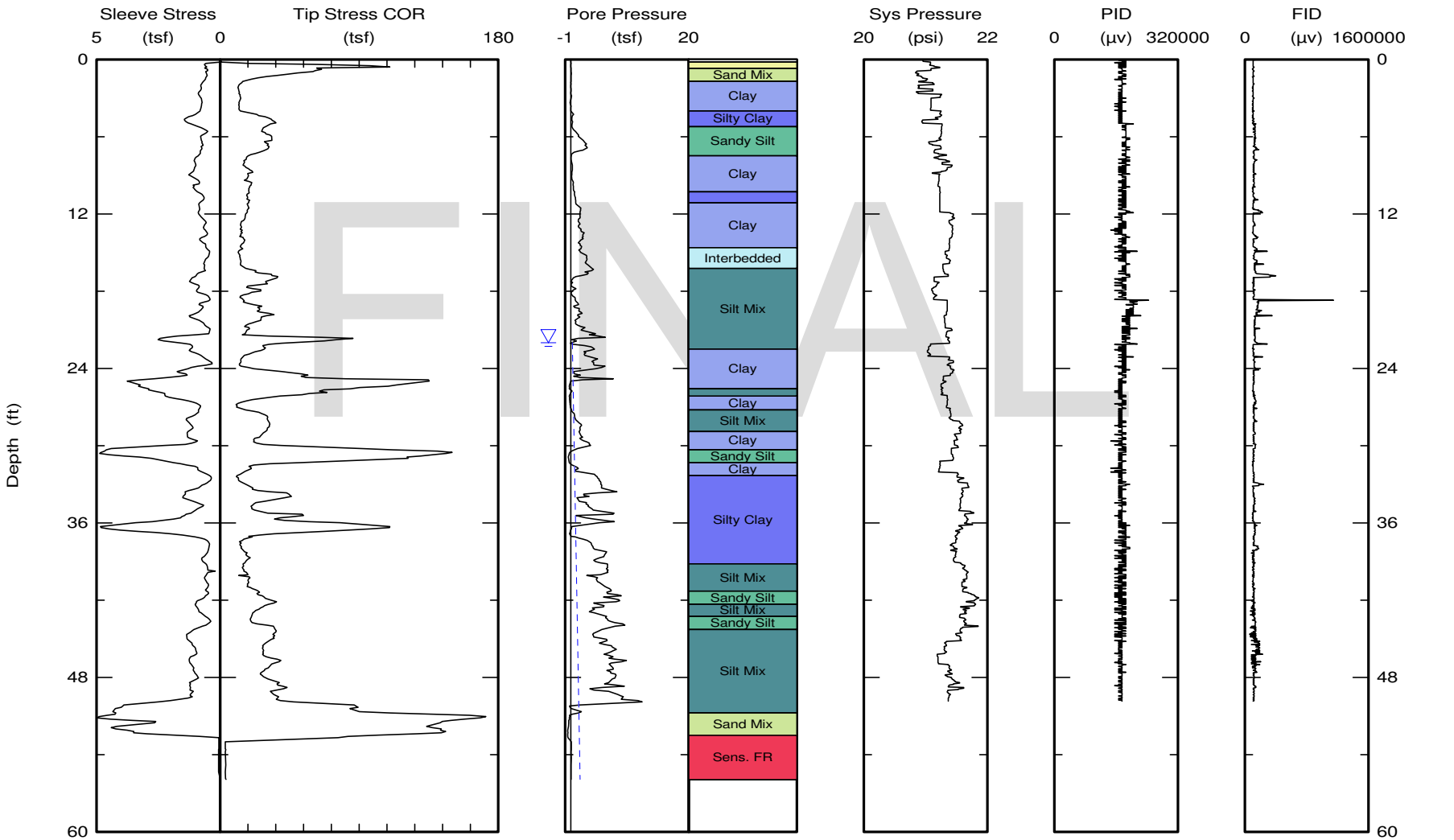
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 30/Mar/2009 Test ID: D Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	



Maximum depth: 55.94 (ft)

▽ Estimated Phreatic Surface

DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 30/Mar/2009 Test ID: D Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	

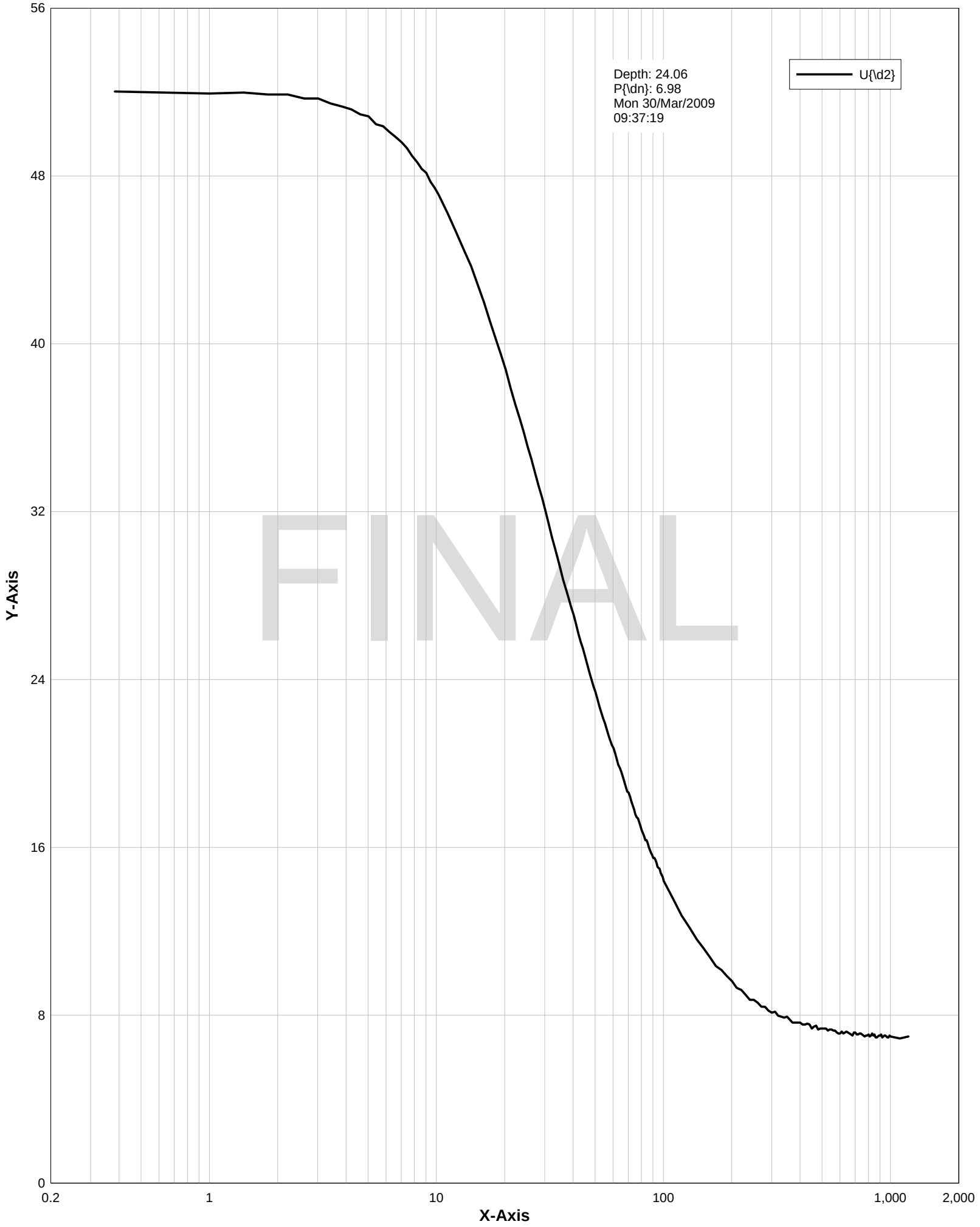


Maximum depth: 55.94 (ft)

▽ Estimated Phreatic Surface

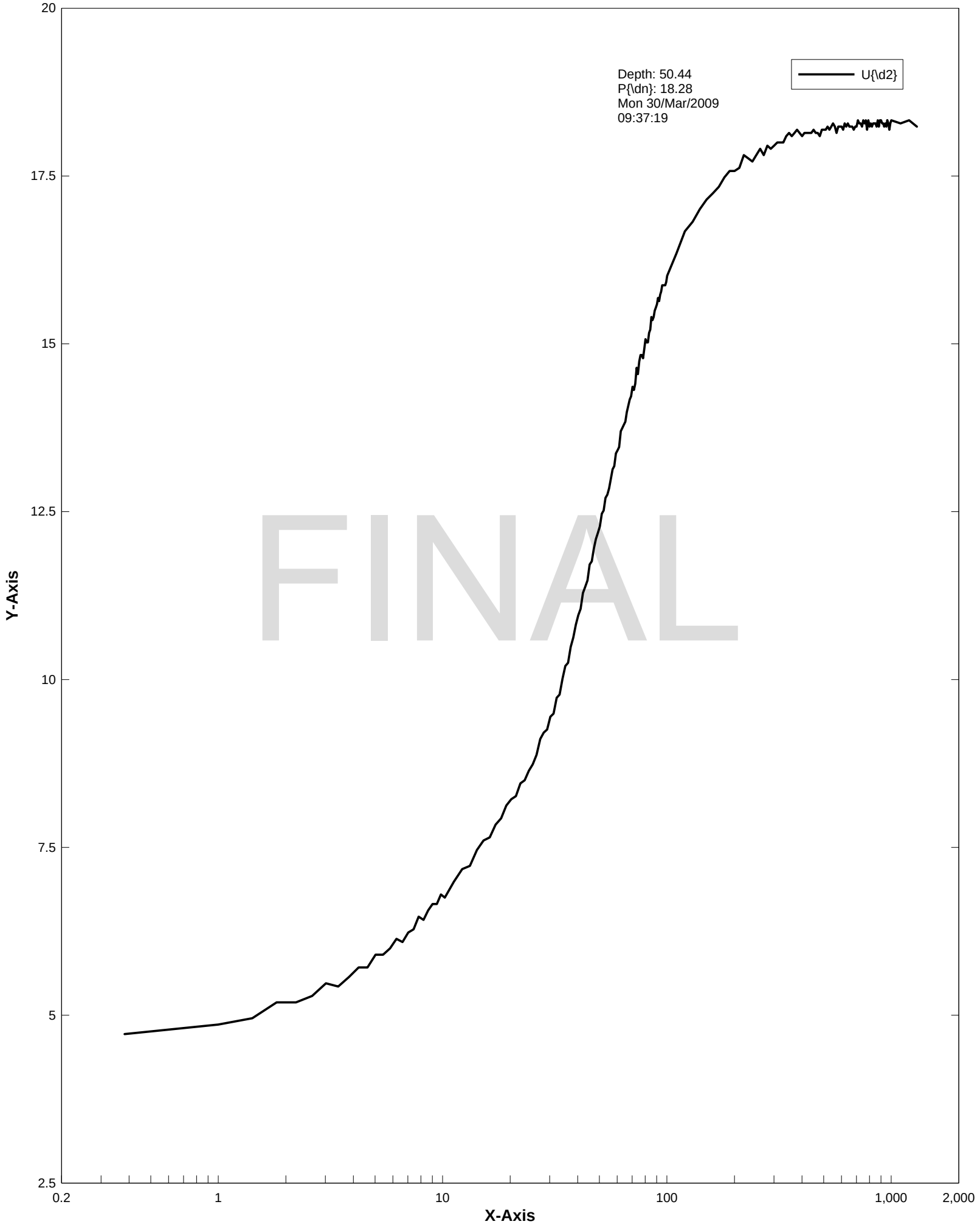
KLIENFELDER

RAY REED R30M0901D.24

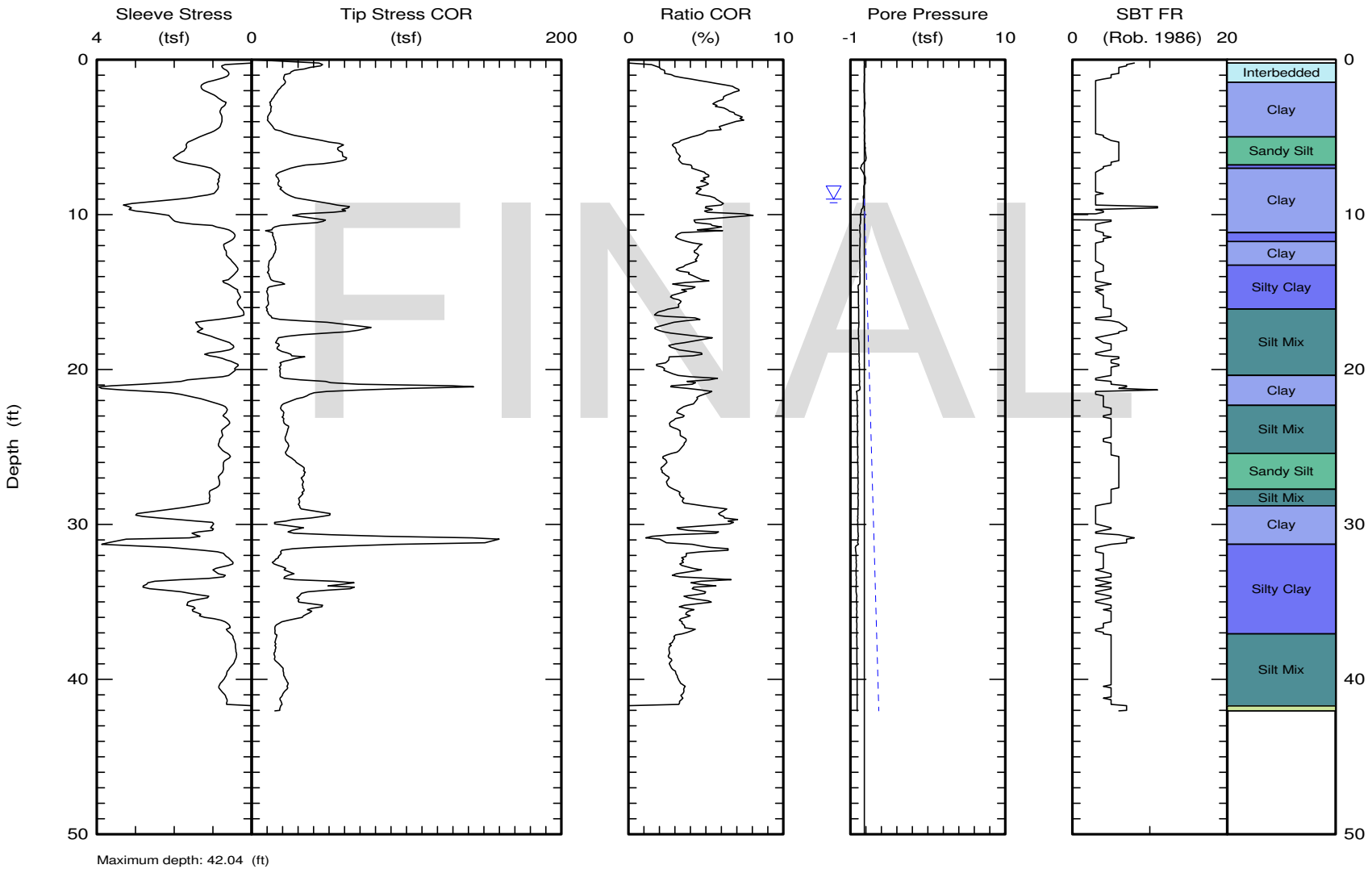


KLIENFELDER

RAY REED R30M0901D.50



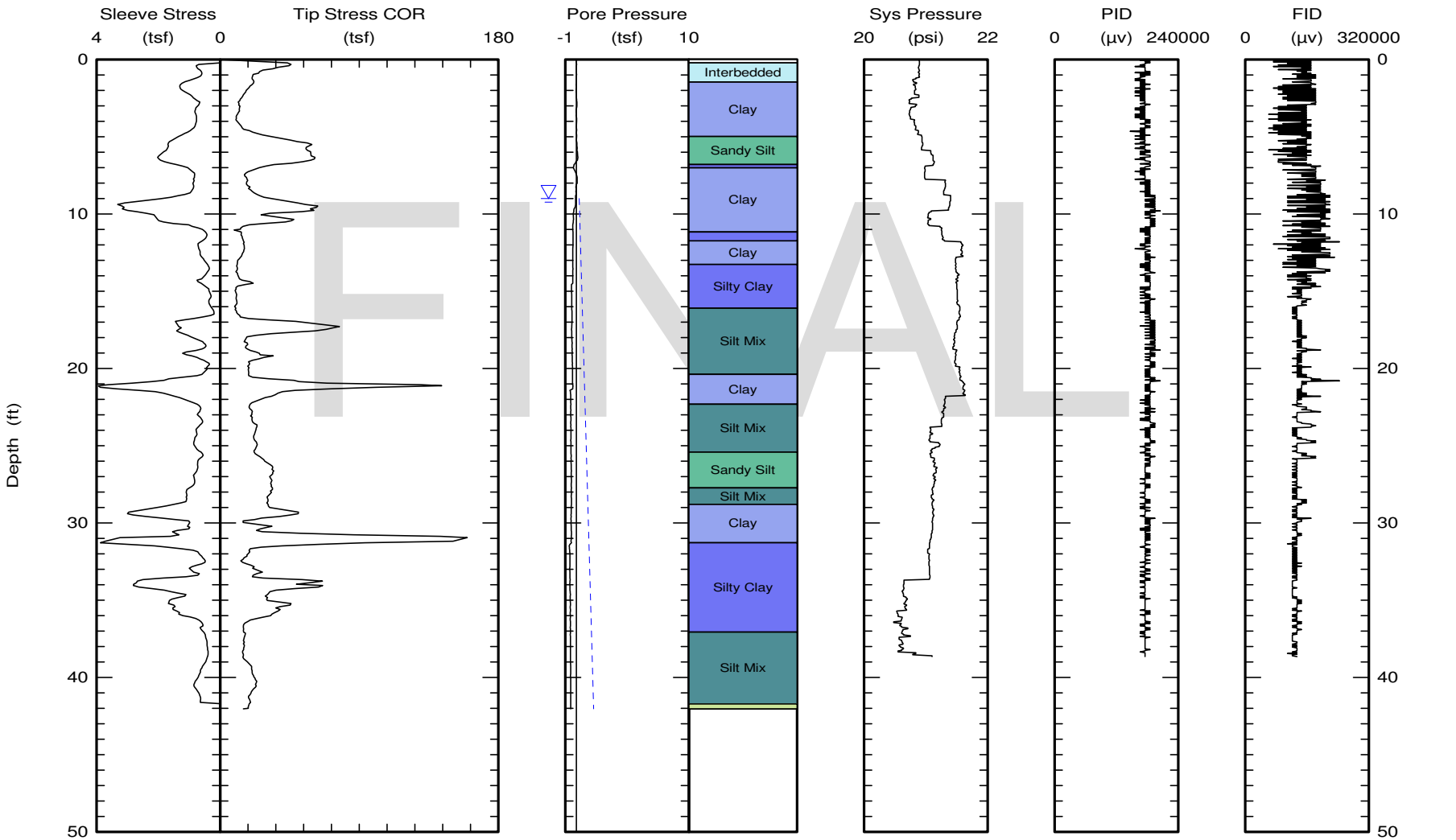
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 31/Mar/2009 Test ID: F E Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	



Maximum depth: 42.04 (ft)

▽ Estimated Phreatic Surface

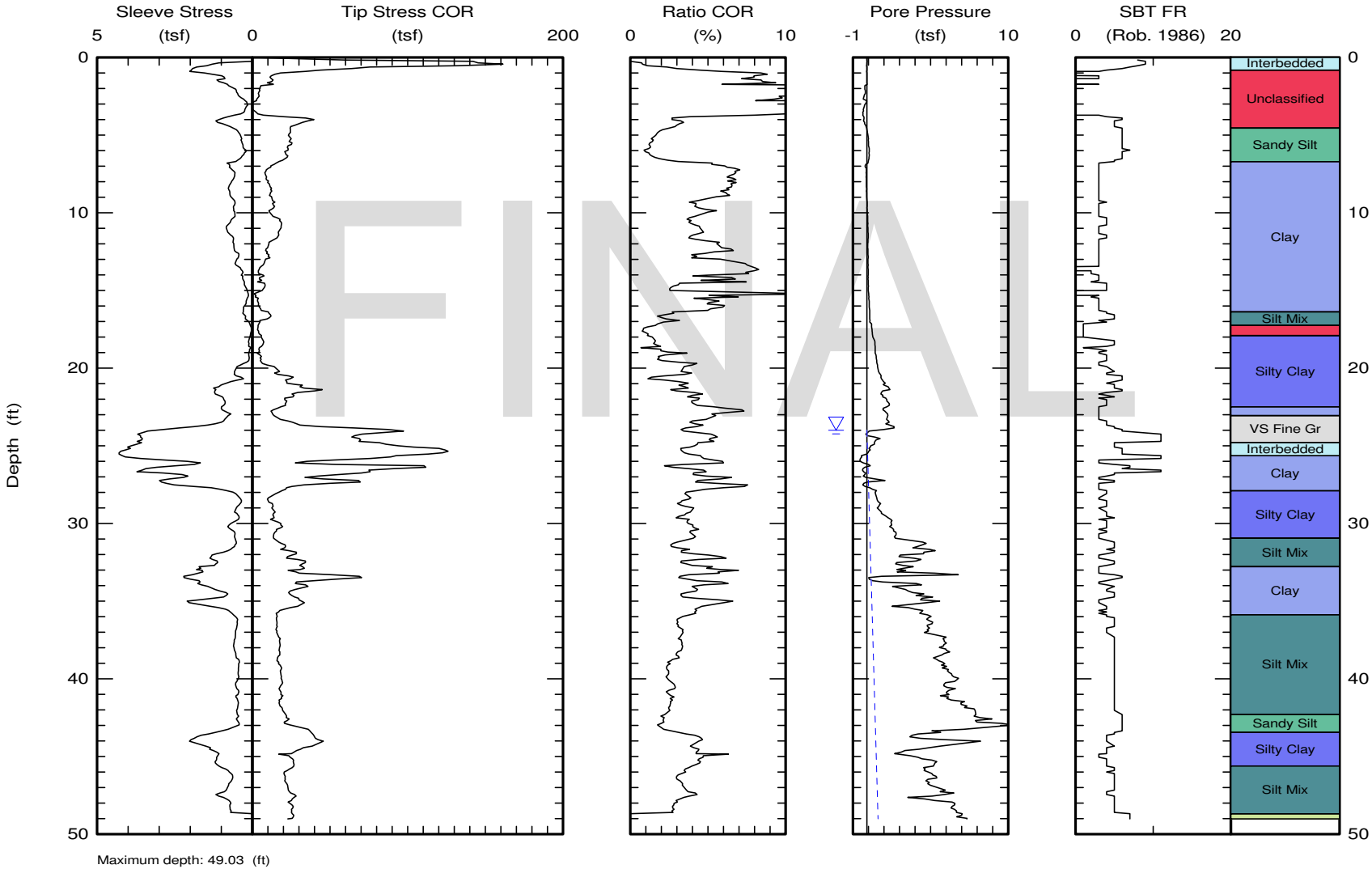
DIRECT SENSING	nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:
		Date: 31/Mar/2009 Test ID: F E Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	



Maximum depth: 42.04 (ft)

▽ Estimated Phreatic Surface

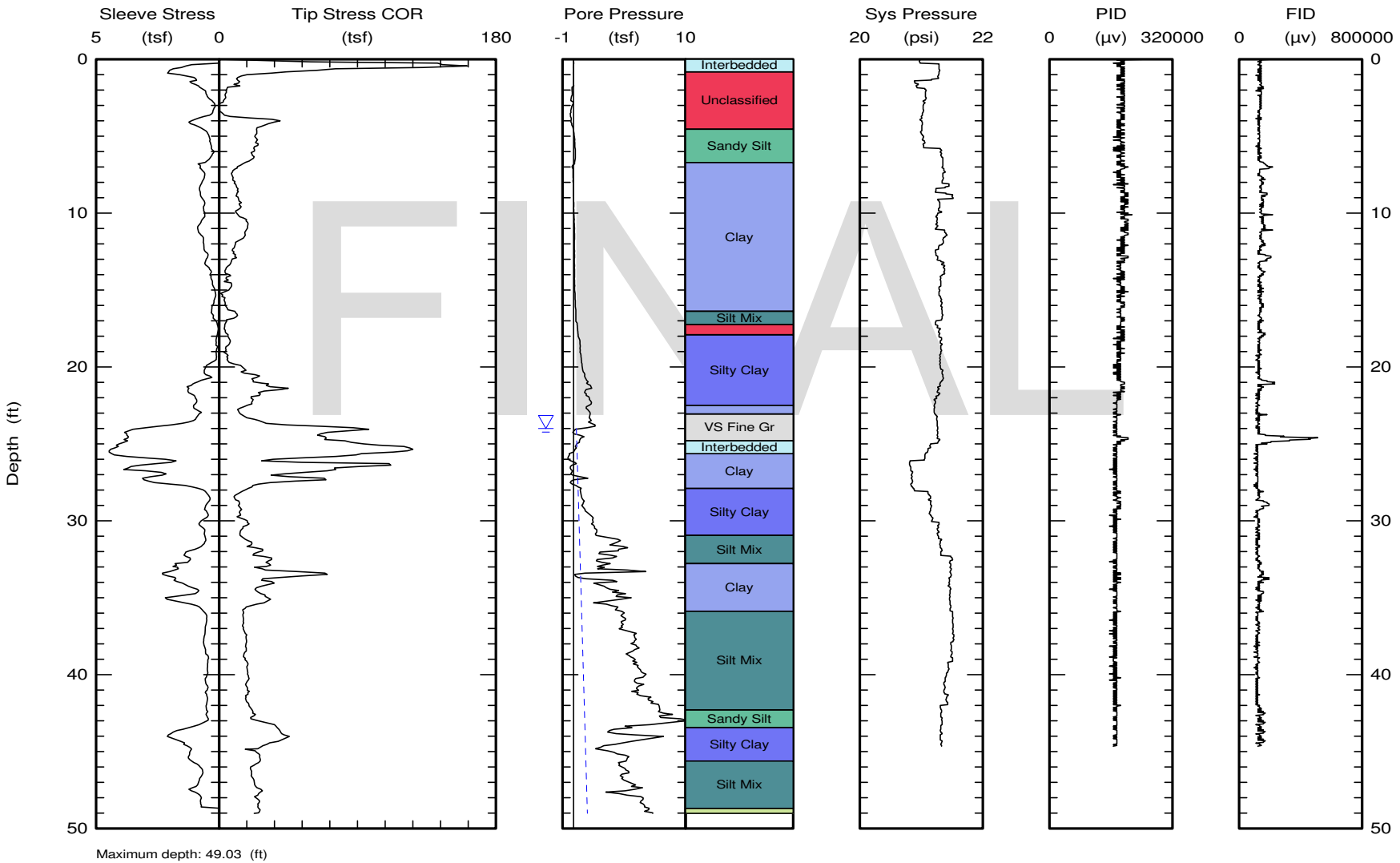
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 30/Mar/2009 Test ID: MW1 Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	



Maximum depth: 49.03 (ft)

▽ Estimated Phreatic Surface

DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 30/Mar/2009 Test ID: MW1 Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	

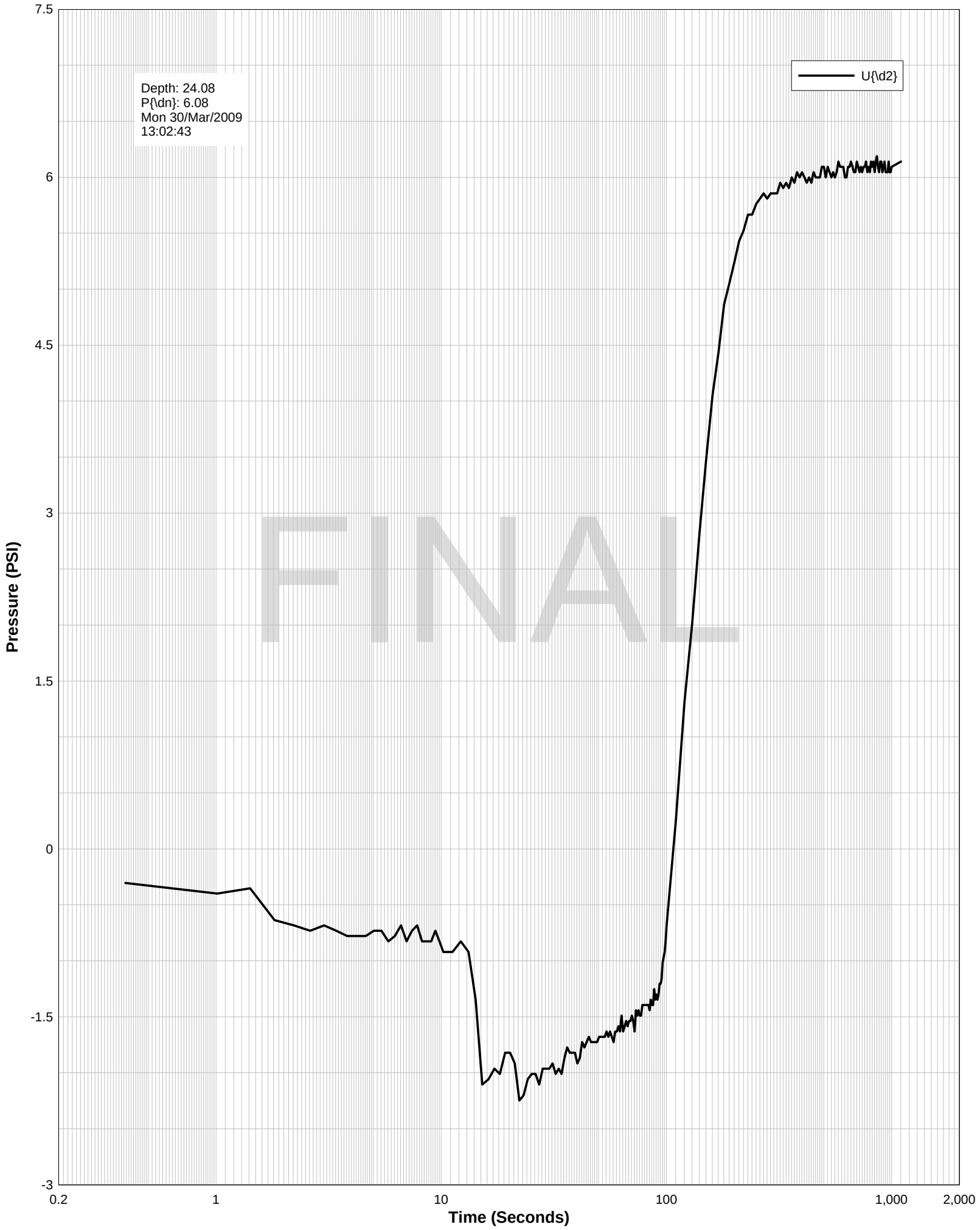


Maximum depth: 49.03 (ft)

▽ Estimated Phreatic Surface

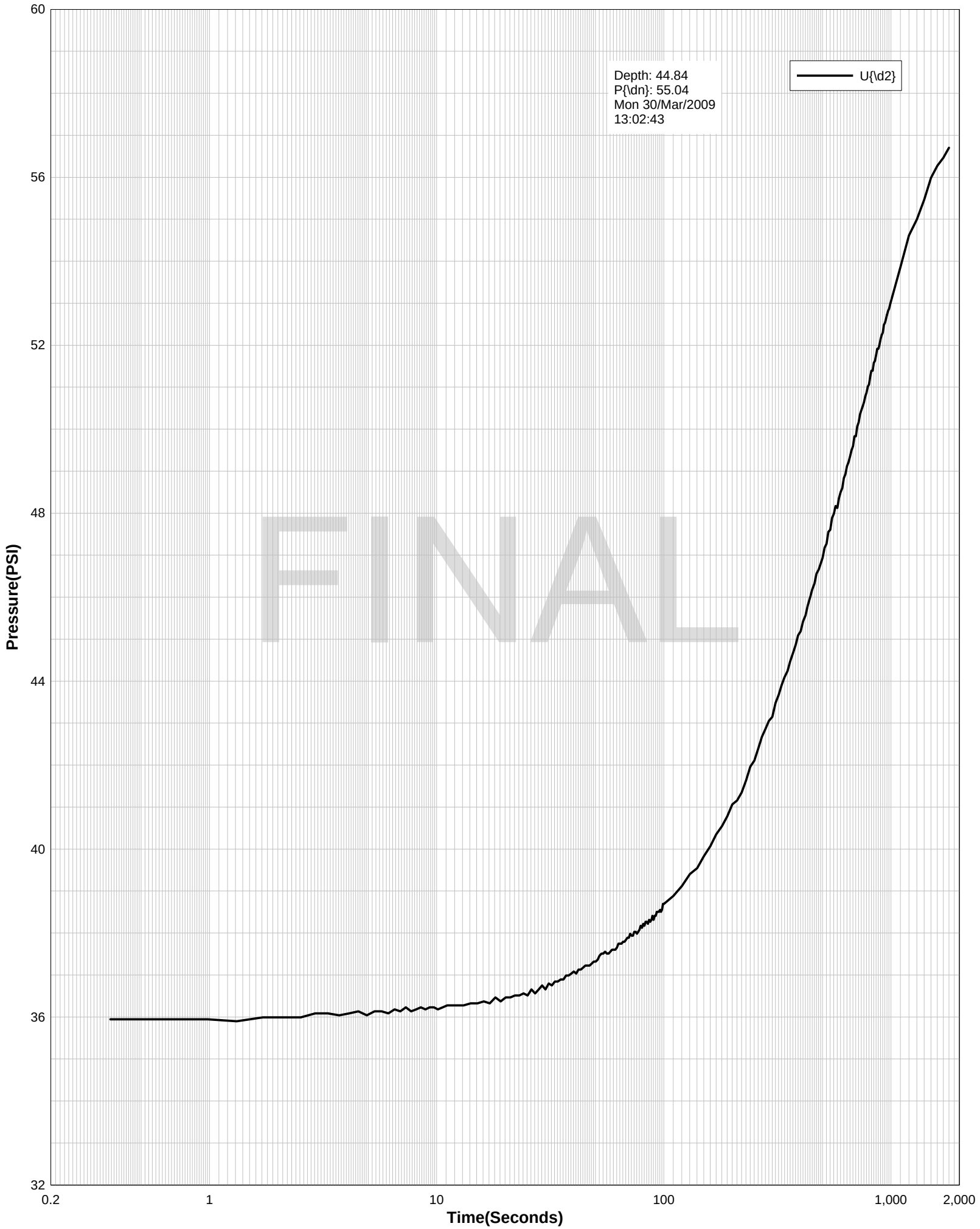
KLIENFELDER MW1

AH/JT R30M0902D.24

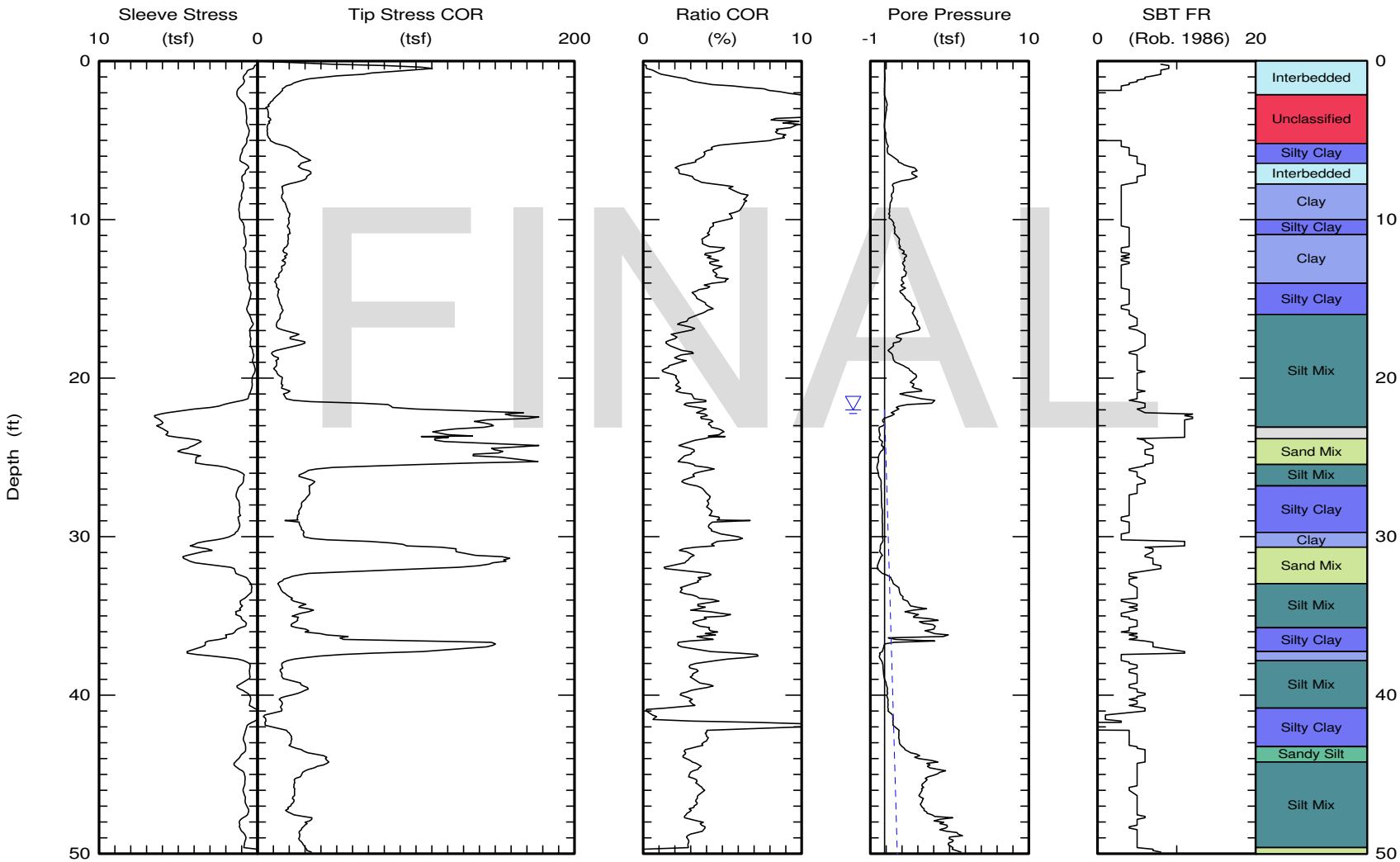


KLIENFELDER MW1

DSD R30M0902D.45



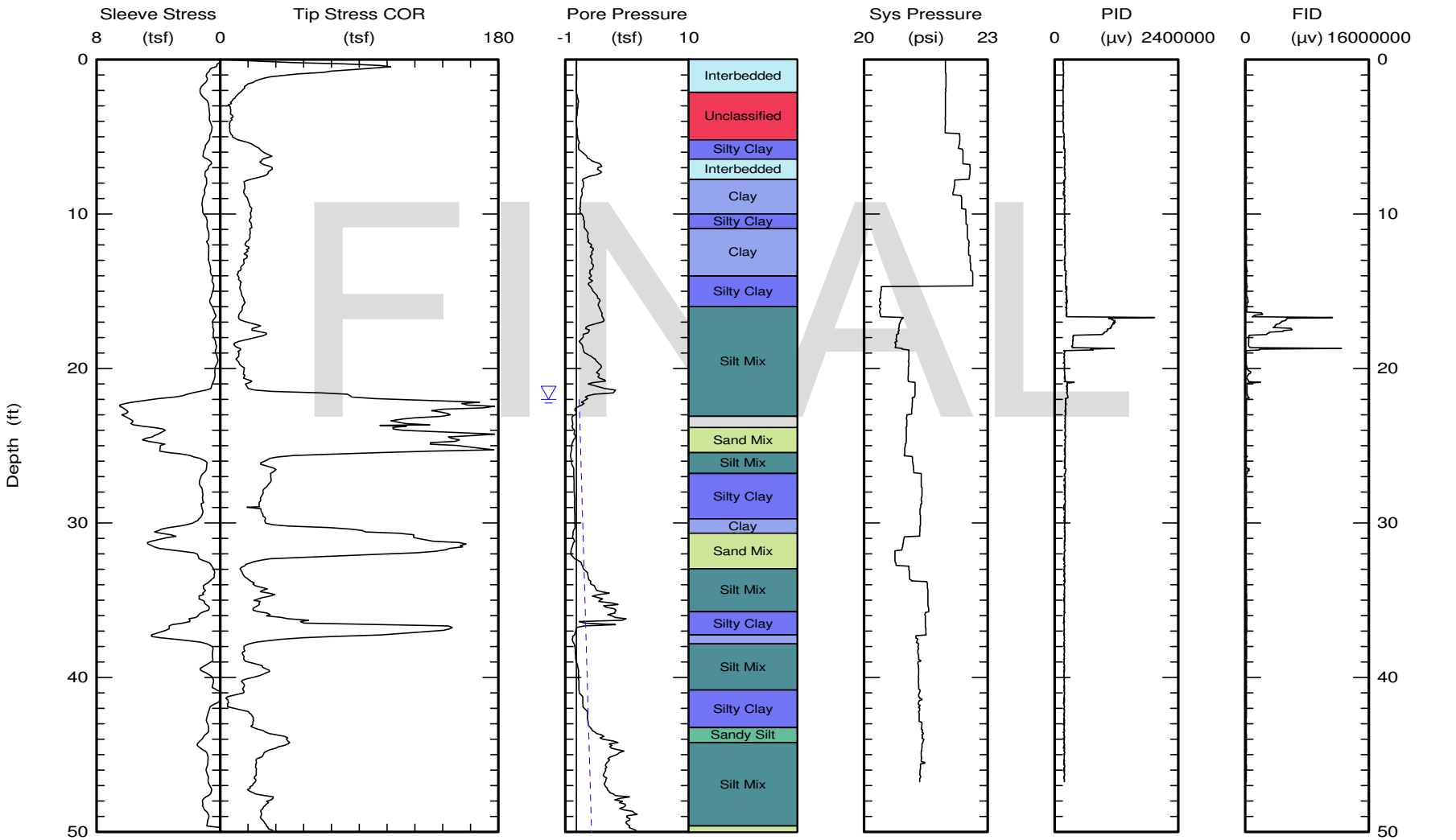
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 31/Mar/2009 Test ID: MW5 Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	



Maximum depth: 50.00 (ft)

▽ Estimated Phreatic Surface

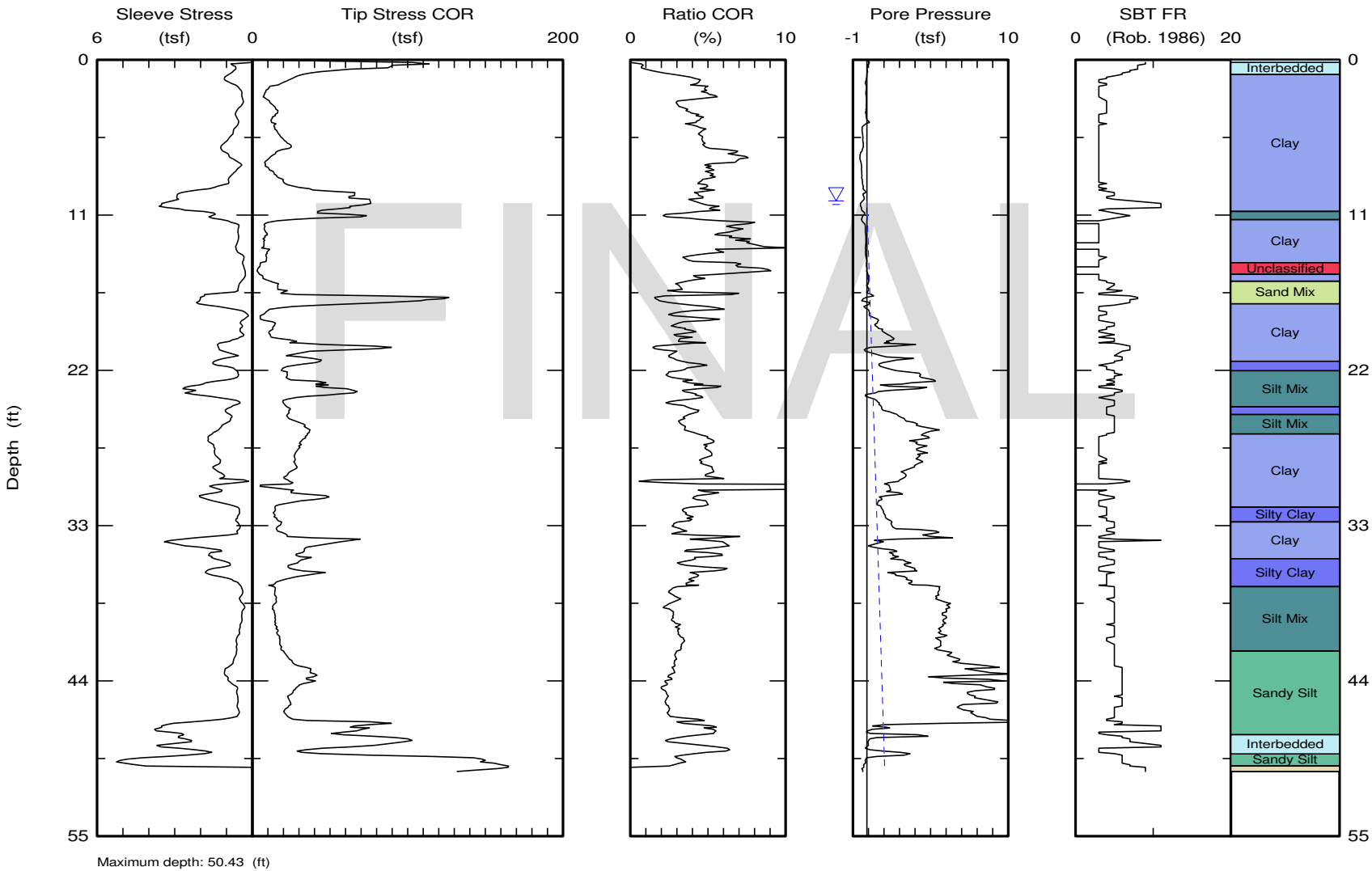
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 31/Mar/2009 Test ID: MW5 Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	



Maximum depth: 50.00 (ft)

▽ Estimated Phreatic Surface

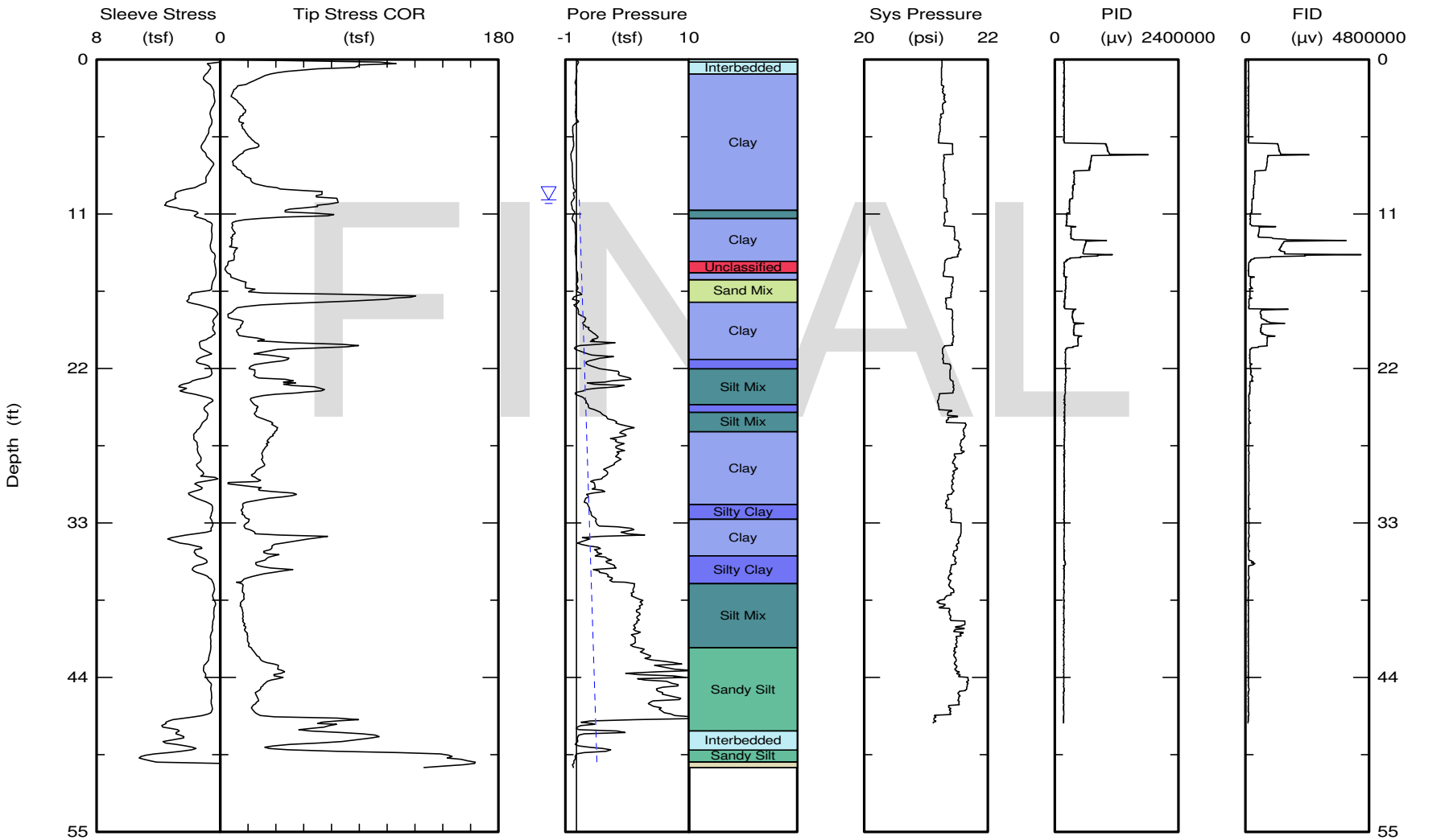
DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 30/Mar/2009 Test ID: MW6 Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	



Maximum depth: 50.43 (ft)

▽ Estimated Phreatic Surface

DIRECT SENSING nedatek & Direct Sensing, Inc. 2300 Silver Star Orlando FL,32804 407-426-7885 mike.fraser@nedatek.com www.nedatek.com	Northing: Easting: Elevation:	Date: 30/Mar/2009 Test ID: MW6 Project: KLEI
	Customer: KLIENFELDER Job Site: FAL	

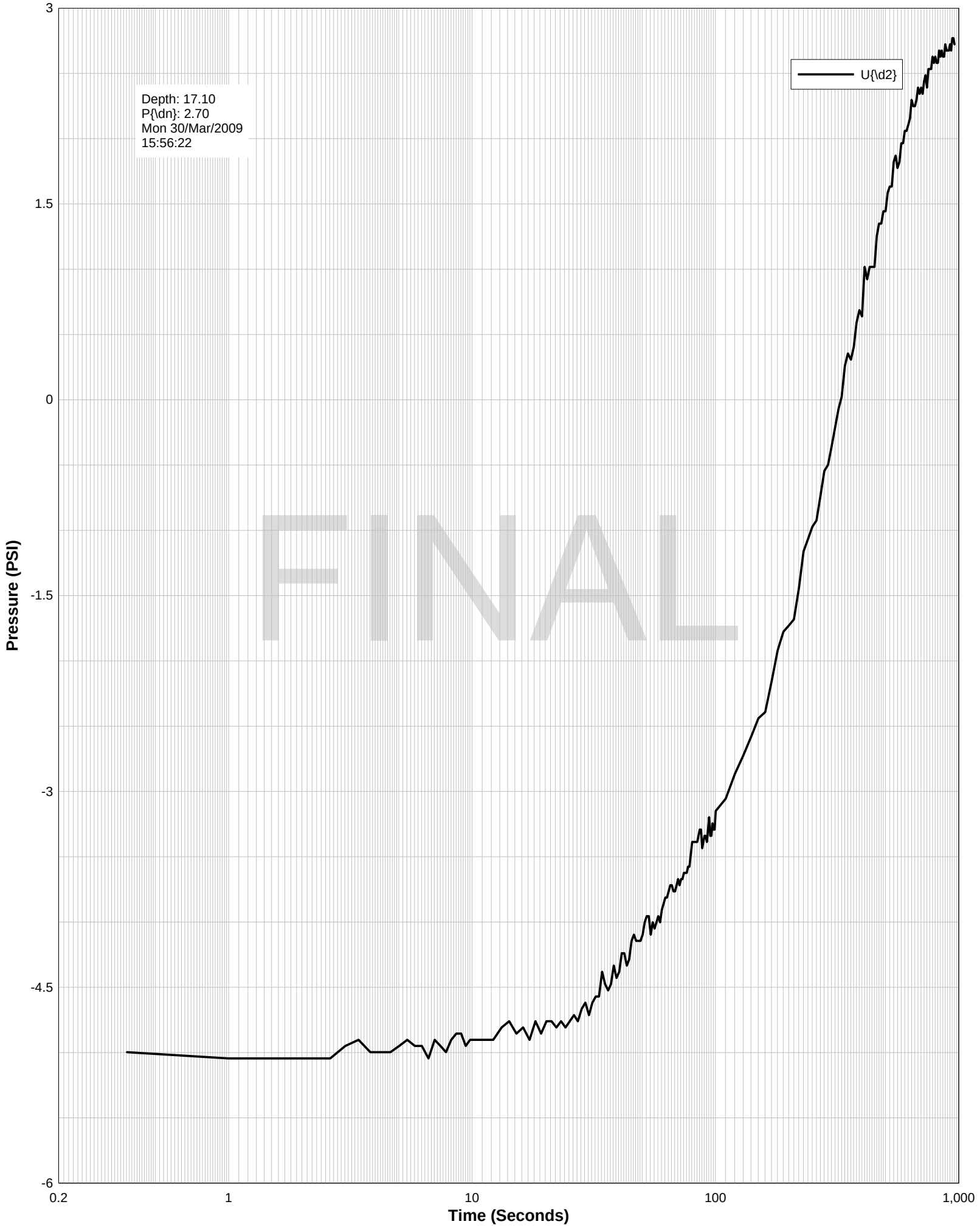


Maximum depth: 50.43 (ft)

▽ Estimated Phreatic Surface

KLIENFELDER MW6

DSD R30M0903D.17



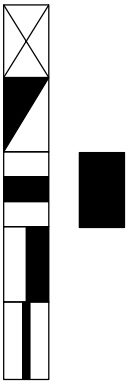
APPENDIX C

BORING LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		LTR	ID	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY	GW		Well-graded gravels or gravel with sand, little or no fines.
		GP		Poorly-graded gravels or gravel with sand, little or no fines.
		GM		Silty gravels, silty gravel with sand mixture.
		GC		Clayey gravels, clayey gravel with sand mixture.
	SAND AND SANDY	SW		Well-graded sands or gravelly sands, little or no fines.
		SP		Poorly-graded sands or gravelly sands, little or no fines.
		SM		Silty sand.
		SC		Clayey sand.

MAJOR DIVISIONS		LTR	ID	DESCRIPTION
FINE GRAINED SOILS	SILTS AND CLAYS	ML		Inorganic silts and very fine sands, rock flour or clayey silts with slight plasticity.
		CL		Inorganic lean clays of low to medium plasticity, gravelly clays, sandy clays, silty clays.
		OL		Organic silts and organic silt-clays of low plasticity.
	SILTS AND CLAYS	MH		Inorganic elastic silts, micaceous or diatomaceous or silty soils.
		CH		Inorganic fat clays (high plasticity).
		OH		Organic clays of medium high to high plasticity.
HIGHLY ORGANIC SOILS		Pt		Peat and other highly organic soils.



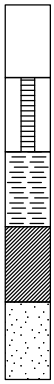
Geoprobe, Direct Push Sample

Large Bore Discrete Soil Sampler, 1.5 in. O.D., 1.12 in. I.D.

Modified California Sampler, 2.5 in. O.D., 2 in. I.D.

California Sampler, 3.0 in. dia.

Shelby Tube 3.0 inch O.D.



Blank casing

Screened casing

Cement grout

Bentonite

Sand pack or gravel pack

Sharp Contact (observed)

Inferred Contact (contact not observed)

Gradational Contact (observed)

Water level observed in boring

Stabilized water level

OVA	Organic Vapor Analyzer
PID	Total organic vapors (parts per million) measured by a photo-ionization device
FID	Total Organic vapors (parts per million) measured by a flame-ionization device
NA	Not Applicable
NFWE	No free water encountered

Notes: Blow counts represent the number of blows a 140-pound hammer falling 30 inches required to drive a sampler through the last 12 inches of an 18 inch penetration.

The lines separating strata on the logs represent approximate boundaries only. The actual transition may be gradual. No warranty is provided as to the continuity of soil strata between borings. Logs represent the soil section observed at the boring location on the date of drilling only.

References to plasticity of cohesive soils are based on qualitative field observations and not on quantative field or laboratory tests. Qualitative soil plasticity is noted solely to aid in stratigraphic correlation and is not intended for geotechnical characterization of soils.

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PROJECT NO. 73943

BORING LOG LEGEND

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

4/9/2009 1:26:56 PM

Date Completed: **3/31/09**

Logged By: **N. Berner**

Total Depth: **29.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1									Traffic rated well box
2									
3									
4									
5									
6									
7									
8								▽	Type II-V Portland Cement grout
9								▼ 9:50	
10									Blank 2" SCH40 PVC
11									
12									
13									
14									
15									
16									Bentonite Chips
17									
18									# 2/12 Sand
19									
20									
21									
22									

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PROJECT NO. **73943**

WELL CONSTRUCTION MW-1

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

1

L:\2009\09PROJECTS\73943\73943.GPJ

5/8/2009 8:00:23 AM

Date Completed: **3/31/09**

Logged By: **N. Berner**

Total Depth: **29.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
23									
24									Screened 2" 0.010 Slot SCH40 PVC
25									
26									
27									
28									
29									Bottom of well at 29 feet
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									

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PROJECT NO. **73943**

WELL CONSTRUCTION MW-1

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

1

(cont'd)

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5/8/2009 8:00:23 AM

Date Completed: **2/16/09**

Logged By: **G. Fuson**

Total Depth: **40.0 ft**

Drilling method: **2" Direct Push**
Driller: Precision Sampling
Track mounted Geoprobe

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1				100			**SILTY CLAY (CL)** - dark gray, moist, trace coarse grained sand, furrow molts ~20% of matrix		Traffic rated well box
2									
3									
4							- dark gray mottled with tan, trace organic material (root)		
5				80			**SANDY CLAY (CL)** - olive-tan, moist, fine grained sand, trace fine gravel, furrow molts ~20% of matrix		
6									
7							**No Recovery**		
8							**CLAYEY SAND (SC)** - olive-tan, moist, fine grained sand, trace fine gravel, furrow molts ~20% of matrix		Type II-V Portland Cement grout
9							- olive-gray, trace coarse grained sand	▼	
10				100	23		- hydrocarbon odor		Blank 2" SCH40 PVC
11									
12									
13									
14									
15				100			- olive-gray green, fine grained sand		
16									Bentonite Chips
17	K-A-16.5	☒							
18									# 2/12 Sand
19									
20				100			**POORLY GRADED SAND (SP)**- olive gray-green, moist, fine grained sand, trace clay, hydrocarbon odor	▽	
21	K-A-21	☒					**CLAYEY SAND (SC)** - olive gray-green, wet, fine grained sand, hydrocarbon odor	13:46	
22									

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PROJECT NO. **73943**

LOG OF BORING NO. MW-2/K-A

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

2

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5/8/2009 8:00:24 AM

Date Completed: **2/16/09**

Logged By: **G. Fuson**

Total Depth: **40.0 ft**

Drilling method: **2" Direct Push**
Driller: Precision Sampling
Track mounted Geoprobe

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
23	K-A-23						**POORLY GRADED SAND (SP)**- olive gray-green, wet, fine to medium grained sand, hydrocarbon odor		
24							**CLAYEY SAND (SC)** - orange-brown mottled with beige, wet, fine grained sand		Screened 2" 0.010 Slot SCH40 PVC
25				37			**No Recovery**		
26									
27									
28							**SANDY GRAVELLY CLAY (CL)**- brown, moist, fine to coarse grained sand, fine subrounded gravel		
29									Bottom of well at 29 feet
30				100	7.5		**CLAYEY SAND (SC)** - yellow-brown mottled with beige, moist, fine grained sand		
31							- olive-gray green, wet, fine to medium grained sand		
32							- orange-brown, wet, grading from medium to coarse grained sand with depth		
33							- orange-brown mottled with dark brown and beige, moist, fine grained sand		
34							**POORLY GRADED SAND (SP)**- medium brown, moist, medium grained sand		
35				100			- tan-brown, wet, fine to medium grained sand, trace gravel		
36									
37									
38							**CLAYEY SAND (SC)** - orange-brown mottled with tan, moist, fine grained sand		
39							**SILTY CLAY (CL)** - gray mottled with dark gray		
40	K-A-39.5						Boring terminated at approx. 40 feet below ground surface.		
41							Monitoring well MW-2 installed 3/31/09 near Boring K-A.		
42									
43									
44									

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PROJECT NO. **73943**

LOG OF BORING NO. MW-2/K-A

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

2

(cont'd)

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5/8/2009 8:00:24 AM

Date Completed: **2/17/09**

Logged By: **G. Fuson**

Total Depth: **40.0 ft**

Drilling method: **2" Direct Push**
Driller: Precision Sampling
Track mounted Geoprobe

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							**CLAY (CL)** - dark brown, moist, trace fine gravel		Traffic rated well box
2									
3									
4									
5							**CLAYEY SAND (SC)** - beige, moist, fine grained sand, furrow molts ~10%		
6							**No Recovery**		
7							**CLAYEY SAND (SC)** - olive gray-green mottled with gray, moist, fine grained sand		
8									Type II-V Portland Cement grout
9							**SANDY CLAY (CL)** - tan-olive, moist, fine grained sand		
10							- olive gray-green	▼	Blank 2" SCH40 PVC
11									
12									
13									
14									
15									
16									Bentonite Chips
17									
18	K-B-18	⊠							# 2/12 Sand
19							- wet	▽ 8:50	
20							**SILTY CLAY (CL)** - olive-tan, moist, sheen detected, hydrocarbon odor detected		
21									
22									

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PROJECT NO. **73943**

LOG OF BORING NO. MW-3/K-B

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

3

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5/8/2009 8:00:24 AM

Date Completed: **2/17/09**

Logged By: **G. Fuson**

Total Depth: **40.0 ft**

Drilling method: **2" Direct Push**
Driller: Precision Sampling
Track mounted Geoprobe

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
23	MW-3/K-B-22.5						**POORLY GRADED SAND (SP)**- olive gray-green, wet, fine to medium grained sand, _____ of brown liquid, sheen detected, hydrocarbon odor detected		Screened 2" 0.010 Slot SCH40 PVC
24							**CLAYEY SAND (SC)** - olive-tan, moist, fine grained sand, 2" pockets of orange-brown, subrounded gravel, trace fine gravel		
25							**SILTY CLAY (CL)** - olive-gray, moist, sheen detected, hydrocarbon odor detected, some fine grained sand		
26							**SANDY CLAY (CL)** - olive-gray, wet, fine grained sand, sheen detected, hydrocarbon odor detected		
27							**CLAYEY SAND (SC)** - orange-brown, wet, fine grained sand - moist, trace fine gravel		Bottom of well at 29 feet
28							**SANDY CLAY (CL)** - orange-brown, moist, fine grained sand, trace fine gravel		
29							**SILTY CLAY some SAND (CL)**- olive-tan, wet, fine grained sand, sheen detected, hydrocarbon odor detected, trace fine gravel		
30							**CLAYEY SAND (SC)** - olive-tan, moist, fine grained sand		
31							**GRAVELLY SAND (SP)** - orange-brown, moist, fine to medium grained sand, fine gravel		
32							**SANDY CLAY (CL)** - orange-brown, moist, fine grained sand		
33							**CLAYEY SAND (SC)** - orange-brown, moist, fine grained sand - tan-brown, wet, some fine gravel		
34							**GRAVELLY SAND (SP)** - tan-brown, wet, fine to coarse grained sand, fine gravel		
35							**SANDY CLAY (CL)** - tan-brown mottled with orange-brown, moist, fine grained sand		
36							**SILTY CLAY (CL)** - gray, moist		
37							Boring terminated at approx. 40 feet below ground surface.		
38	K-B-38						Monitoring well MW-3 installed 3/31/09 near Boring K-B.		
39									
40									
41									
42									
43									
44									

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PROJECT NO. **73943**

LOG OF BORING NO. MW-3/K-B

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

3

(cont'd)

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5/8/2009 8:00:24 AM

Date Completed: **3/30/09**

Logged By: **N. Berner**

Total Depth: **40.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1				95	0.0		**SILTY CLAY with SAND (CL)**- yellowish-brown, moist, coarse grained sand		Traffic rated well box
2									
3					0.0				
4					0.0				
5				75					
6							**POORLY GRADED GRAVEL/SAND (GP)**		
7									
8									Type II-V Portland Cement grout
9					3.0		**SILTY CLAY (CL)** - brown, stiff, low plasticity, hydrocarbon odor/discoloration		
10				100				▼	Blank 2" SCH40 PVC
11					3.7				
12					4.8				
13									
14					6.0				
15					3.0				
16				100	3.0				
17					7.1				Bentonite Chips
18							**CLAYEY SAND (SC)** - brown, moist, dense, hydrocarbon odor/discoloration		
19	K-C-18.5	☒			270				# 2/12 Sand
20		☒		80	8.3				
21					93.7		**SANDY CLAY (CL)** - brown, mottling, moist, medium stiff, hydrocarbon odor/discoloration		
22									

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PROJECT NO. **73943**

LOG OF BORING NO. MW-4/K-C

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

4

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5/8/2009 8:00:25 AM

Date Completed: **3/30/09**

Logged By: **N. Berner**

Total Depth: **40.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
23					28.3		**SANDY CLAY (CL)** - continued		
24					16.2		- discoloration fades out from 24 to 25 feet		
25				60					Screened 2" 0.010 Slot SCH40 PVC
26	K-C-26	☒			0.0				
27					0.0		**SAND (SP)** - red, wet, coarse grained sand	▽ 13:56	
28									
29									
30				70					Bottom of well at 30 feet
31							**SANDY CLAY (CL)** - tan, mottling, moist, stiff, medium plasticity		
32									
33									
34							**CLAYEY SAND (SC)** - red-brown, mottling, dense, coarse grained sand		
35									
36									
37									
38							**SILTY CLAY (CL)** - blue-gray, moist, stiff, low plasticity		
39									
40	K-C-40	☒					Boring terminated at approx. 40 feet below ground surface. Monitoring well MW-2 installed 3/31/09 near Boring K-A.		
41									
42									
43									
44									

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PROJECT NO. **73943**

LOG OF BORING NO. MW-4/K-C

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

4

(cont'd)

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5/8/2009 8:00:25 AM

Date Completed: **3/31/09**

Logged By: **N. Berner**

Total Depth: **44.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
16				100	8.3		**SILTY CLAY (CL)** - brown, moist, hydrocarbon odor/discolor		
17					16.8				
18					56.3				
19									
20	K-D-19.5			100	132				
21					98.6				
22					17.4				

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PROJECT NO. **73943**

LOG OF BORING NO. K-D

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

5

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5/8/2009 8:00:23 AM

Date Completed: **3/31/09**
Logged By: **N. Berner**
Total Depth: **44.0 ft**
Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling
Hammer Wt: **None**
Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
							SILTY CLAY (CL) - continued		
23	K-D-22.5				0.0		**GRAVELLY SAND (SG)**		
24					0.0				
25					0.0		**SILTY CLAY (CL)**		
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40							**SILTY CLAY (CL)** - blue gray, moist, very stiff mottling, medium plasticity		
41									
42									
43	K-D-43								
44							Boring terminated at approx. 43.5 feet below ground surface.		

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PROJECT NO. **73943**

LOG OF BORING NO. K-D

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

5

(cont'd)

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5/8/2009 8:00:23 AM

Date Completed: **3/31/09**

Logged By: **N. Berner**

Total Depth: **30.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1–22	MW-5-17						**CLAYEY SAND (SC)** - brown, loose, coarse grained sand - hydrocarbon odor/discoloration **SILTY CLAY (CL)** - gray, mottling, stiff, no odor or discoloration **CLAYEY GRAVEL (GC)** - wet, dense, poorly graded	▽ 13:30	Traffic rated well box Type II-V Portland Cement grout Blank 2" SCH40 PVC Bentonite Chips # 2/12 Sand Screened 2" 0.010 Slot SCH40 PVC

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PROJECT NO. **73943**

LOG OF BORING NO. MW-5

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

6

L:\2009\09PROJECTS\73943\73943.GPJ

5/8/2009 8:00:25 AM

Date Completed: **3/31/09**

Logged By: **N. Berner**

Total Depth: **30.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
23							**SILTY CLAY (CL)** - continued		
24									
25									
26									
27									
28									# 2/12 Sand
29									
30									Bottom of well at 30 feet
31									
32									
33									
34									
35									
36									
37									
38									
39									
40							Boring terminated at approx. 40 feet below ground surface. Monitoring well MW-5 installed.		
41									
42									
43									
44									

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PROJECT NO. **73943**

LOG OF BORING NO. MW-5

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

6

(cont'd)

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5/8/2009 8:00:25 AM

Date Completed: **3/31/09**

Logged By: **N. Berner**

Total Depth: **29.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1									Traffic rated well box
2									
3									
4									
5									
6									
7									
8									Type II-V Portland Cement grout
9									
10									Blank 2" SCH40 PVC
11								▽	
12								11:43	
13									
14									
15									
16									Bentonite Chips
17									
18									# 2/12 Sand
19									
20									
21									
22									

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PROJECT NO. **73943**

WELL CONSTRUCTION MW-6

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

7

L:\2009\09PROJECTS\73943\73943.GPJ

5/8/2009 8:00:25 AM

Date Completed: **3/31/09**

Logged By: **N. Berner**

Total Depth: **29.0 ft**

Drilling method: **8" Hollow Stem Auger**
Driller: Precision Sampling

Hammer Wt: **None**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
23									
24									Screened 2" 0.010 Slot SCH40 PVC
25									
26									
27									
28									
29									Bottom of well at 29 feet
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									

KLEINFELDER
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PROJECT NO. **73943**

WELL CONSTRUCTION MW-6

FORMER AMBASSADOR LAUNDRY
3601-3623 ADELINE STREET
EMERYVILLE, CALIFORNIA

PLATE

7

(cont'd)

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APPENDIX D

LABORATORY ANALYTICAL REPORTS

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**210129**
Client:	**Kleinfelder**
Project:	**73943**
Location:	**Ambassador Laundry**
Request Date:	**02/17/09**
Samples Received:	**02/17/09**

This data package contains sample and QC results for seven soil samples and two water samples, requested for the above referenced project on 02/17/09. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B) Water:
No analytical problems were encountered.

TPH-Purgeables and/or BTXE by GC (EPA 8015B) Soil:
High recoveries were observed for gasoline C7-C12 in the MS/MSD for batch 148094; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High surrogate recovery was observed for trifluorotoluene (FID) in K-B-22.5 (lab # 210129-008); the corresponding bromofluorobenzene (FID) surrogate recovery was within limits. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
High recovery was observed for diesel C10-C24 in the MSD of K-B-18 (lab # 210129-007); the LCS was within limits, and the associated RPD was within limits. K-B-22.5 (lab # 210129-008) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:
High RPD was observed for MTBE and tert-butyl alcohol (TBA) in the BS/BSD for batch 148330; these analytes were not detected at or above the RL in the associated sample. Low surrogate recoveries were observed for dibromofluoromethane in the MS/MSD for batch 148177; the parent sample was not a project sample. K-B-22.5 (lab # 210129-008) was diluted due to high non-target analytes. No other analytical problems were encountered.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Field ID:	TRIP BLANK	Diln Fac:	1.000
Matrix:	Water	Batch#:	148148
Units:	ug/L	Received:	02/17/09

Type: SAMPLE Sampled: 02/16/09
Lab ID: 210129-005 Analyzed: 02/22/09

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	61-149
Bromofluorobenzene (FID)	105	65-146

Type: SAMPLE Sampled: 02/17/09
Lab ID: 210129-006 Analyzed: 02/22/09

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	61-149
Bromofluorobenzene (FID)	113	65-146

Type: BLANK Analyzed: 02/21/09
Lab ID: QC484280

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	61-149
Bromofluorobenzene (FID)	105	65-146

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Type:	BS	Diln Fac:	1.000
Lab ID:	QC484281	Batch#:	148148
Matrix:	Water	Analyzed:	02/21/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,057	106	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	125	61-149
Bromofluorobenzene (FID)	109	65-146

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Type:	BSD	Diln Fac:	1.000
Lab ID:	QC484450	Batch#:	148148
Matrix:	Water	Analyzed:	02/21/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,932	97	78-120	9	25

Surrogate	%REC	Limits
Trifluorotoluene (FID)	145	61-149
Bromofluorobenzene (FID)	119	65-146

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Received:	02/17/09
Units:	mg/Kg		

Field ID:	K-A-16.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	148229
Lab ID:	210129-001	Sampled:	02/16/09
Basis:	dry	Analyzed:	02/24/09
Moisture:	27%		

Analyte	Result	RL
Gasoline C7-C12	4.4 Y	1.4
Stoddard Solvent C7-C12	3.4 Y	1.4

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	55-151
Bromofluorobenzene (FID)	106	55-153

Field ID:	K-A-21	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	148205
Lab ID:	210129-002	Sampled:	02/16/09
Basis:	dry	Analyzed:	02/23/09
Moisture:	26%		

Analyte	Result	RL
Gasoline C7-C12	8.9 Y	1.3
Stoddard Solvent C7-C12	8.6 Y	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	129	55-151
Bromofluorobenzene (FID)	149	55-153

Field ID:	K-A-23	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	148151
Lab ID:	210129-003	Sampled:	02/16/09
Basis:	dry	Analyzed:	02/21/09
Moisture:	16%		

Analyte	Result	RL
Gasoline C7-C12	ND	1.2
Stoddard Solvent C7-C12	ND	1.2

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	55-151
Bromofluorobenzene (FID)	93	55-153

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Received:	02/17/09
Units:	mg/Kg		

Field ID:	K-A-39.5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	148151
Lab ID:	210129-004	Sampled:	02/16/09
Basis:	dry	Analyzed:	02/21/09
Moisture:	23%		

Analyte	Result	RL
Gasoline C7-C12	ND	1.3
Stoddard Solvent C7-C12	ND	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	77	55-151
Bromofluorobenzene (FID)	81	55-153

Field ID:	K-B-18	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	148094
Lab ID:	210129-007	Sampled:	02/17/09
Basis:	dry	Analyzed:	02/19/09
Moisture:	20%		

Analyte	Result	RL
Gasoline C7-C12	2.5 Y	1.3
Stoddard Solvent C7-C12	1.4 Y	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	55-151
Bromofluorobenzene (FID)	117	55-153

Field ID:	K-B-22.5	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	148205
Lab ID:	210129-008	Sampled:	02/17/09
Basis:	dry	Analyzed:	02/23/09
Moisture:	22%		

Analyte	Result	RL
Gasoline C7-C12	160 Y	13
Stoddard Solvent C7-C12	150 Y	13

Surrogate	%REC	Limits
Trifluorotoluene (FID)	235 *	55-151
Bromofluorobenzene (FID)	151	55-153

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Received:	02/17/09
Units:	mg/Kg		

Field ID:	K-B-38	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	148151
Lab ID:	210129-009	Sampled:	02/17/09
Basis:	dry	Analyzed:	02/21/09
Moisture:	22%		

Analyte	Result	RL
Gasoline C7-C12	2.9 Y	1.3
Stoddard Solvent C7-C12	1.9 Y	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	55-151
Bromofluorobenzene (FID)	110	55-153

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC484025	Batch#:	148094
Basis:	as received	Analyzed:	02/19/09

Analyte	Result	RL
Gasoline C7-C12	ND	0.20
Stoddard Solvent C7-C12	ND	0.20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	55-151
Bromofluorobenzene (FID)	106	55-153

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC484294	Batch#:	148151
Basis:	as received	Analyzed:	02/21/09

Analyte	Result	RL
Gasoline C7-C12	ND	1.0
Stoddard Solvent C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	91	55-151
Bromofluorobenzene (FID)	88	55-153

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Received:	02/17/09
Units:	mg/Kg		

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC484518	Batch#:	148205
Basis:	as received	Analyzed:	02/23/09

Analyte	Result	RL
Gasoline C7-C12	ND	0.20
Stoddard Solvent C7-C12	ND	0.20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	55-151
Bromofluorobenzene (FID)	102	55-153

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC484627	Batch#:	148229
Basis:	as received	Analyzed:	02/24/09

Analyte	Result	RL
Gasoline C7-C12	ND	0.20
Stoddard Solvent C7-C12	ND	0.20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	55-151
Bromofluorobenzene (FID)	96	55-153

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC484026	Diln Fac:	1.000
Matrix:	Soil	Batch#:	148094
Units:	mg/Kg	Analyzed:	02/19/09

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	4.864	97	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	55-151
Bromofluorobenzene (FID)	110	55-153

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
MSS Lab ID:	210122-001	Batch#:	148094
Matrix:	Soil	Sampled:	02/18/09
Units:	mg/Kg	Received:	02/18/09
Basis:	dry	Analyzed:	02/20/09

Type: MS Moisture: 25%
Lab ID: QC484027

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	9.415	333.3	449.4	132 *	29-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	148	55-151
Bromofluorobenzene (FID)	141	55-153

Type: MSD Moisture: 25%
Lab ID: QC484028

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	333.3	474.6	140 *	29-120	5	34

Surrogate	%REC	Limits
Trifluorotoluene (FID)	150	55-151
Bromofluorobenzene (FID)	145	55-153

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Field ID:	K-B-18	Diln Fac:	1.000
MSS Lab ID:	210129-007	Batch#:	148094
Matrix:	Soil	Sampled:	02/17/09
Units:	mg/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/19/09

Type: MS Moisture: 20%
Lab ID: QC484057

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	2.488	13.30	13.88	86	29-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	144	55-151
Bromofluorobenzene (FID)	121	55-153

Type: MSD Moisture: 20%
Lab ID: QC484058

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	13.16	17.26	112	29-120	23	34

Surrogate	%REC	Limits
Trifluorotoluene (FID)	142	55-151
Bromofluorobenzene (FID)	134	55-153

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC484295	Diln Fac:	1.000
Matrix:	Soil	Batch#:	148151
Units:	mg/Kg	Analyzed:	02/21/09

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	5.317	106	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	55-151
Bromofluorobenzene (FID)	102	55-153

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	210131-005	Batch#:	148151
Matrix:	Soil	Sampled:	02/18/09
Units:	mg/Kg	Received:	02/18/09
Basis:	as received	Analyzed:	02/22/09

Type: MS Lab ID: QC484296

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1042	10.64	6.568	61	29-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	127	55-151
Bromofluorobenzene (FID)	105	55-153

Type: MSD Lab ID: QC484297

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.99	7.125	64	29-120	5	34

Surrogate	%REC	Limits
Trifluorotoluene (FID)	130	55-151
Bromofluorobenzene (FID)	105	55-153

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC484519	Diln Fac:	1.000
Matrix:	Soil	Batch#:	148205
Units:	mg/Kg	Analyzed:	02/23/09

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	4.551	91	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	55-151
Bromofluorobenzene (FID)	107	55-153

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	210185-002	Batch#:	148205
Matrix:	Soil	Sampled:	02/17/09
Units:	mg/Kg	Received:	02/19/09
Basis:	as received	Analyzed:	02/24/09

Type: MS Lab ID: QC484545

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.09882	10.42	9.324	89	29-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	146	55-151
Bromofluorobenzene (FID)	117	55-153

Type: MSD Lab ID: QC484546

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.00	9.059	90	29-120	1	34

Surrogate	%REC	Limits
Trifluorotoluene (FID)	149	55-151
Bromofluorobenzene (FID)	119	55-153

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	148229
Basis:	as received	Analyzed:	02/24/09

Type: BS Lab ID: QC484628

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	4.850	97	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	55-151
Bromofluorobenzene (FID)	98	55-153

Type: BSD Lab ID: QC484629

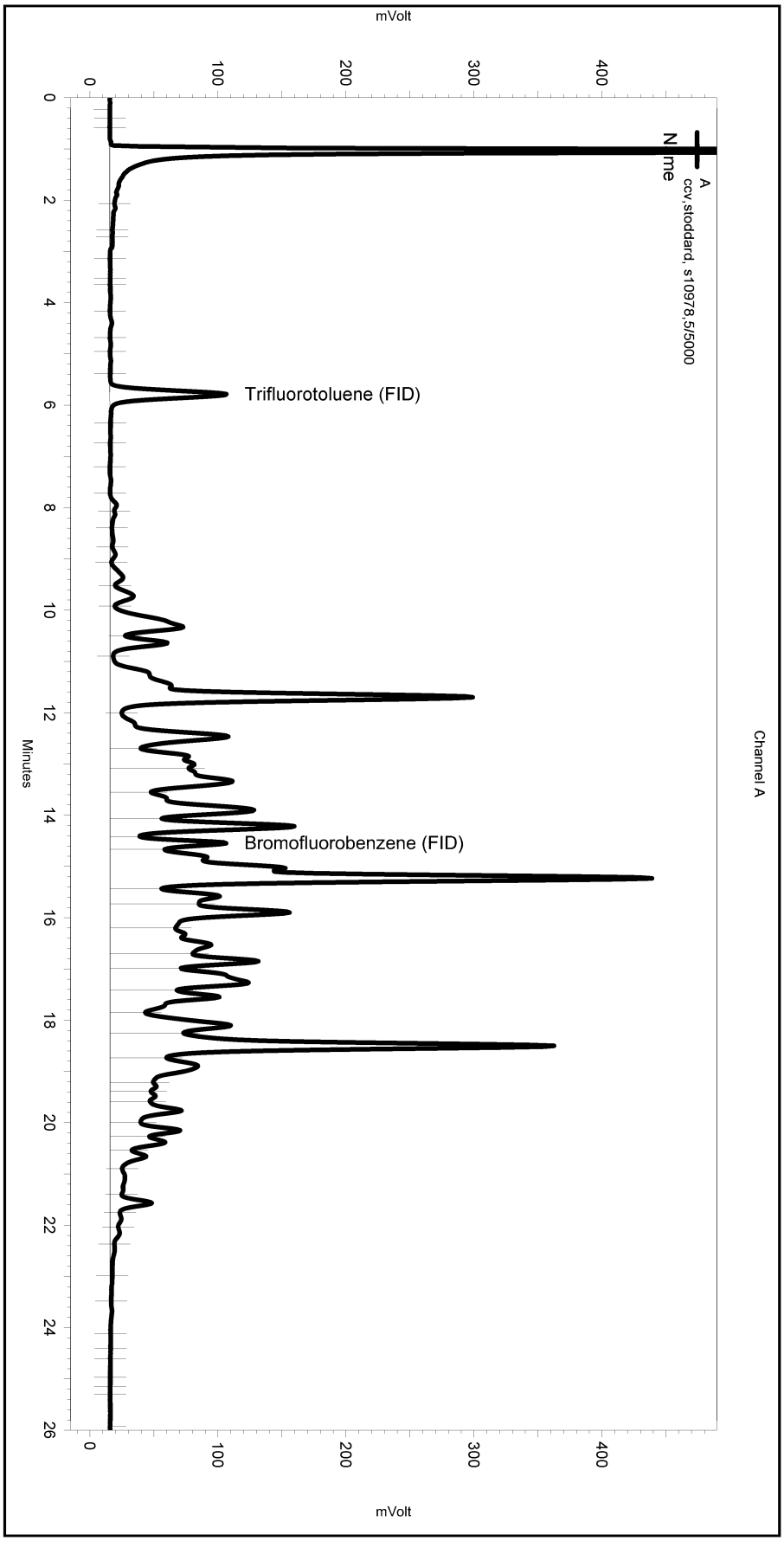
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.00	7.930	79	78-120	20	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	55-151
Bromofluorobenzene (FID)	101	55-153

RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\052.seq**
Sample Name: **ccv,stoddard, s10978,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\052_006**
Instrument: GC04 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe010.met

Software Version 3.1.7
Run Date: 2/21/2009 5:08:33 PM
Analysis Date: 2/21/2009 5:38:02 PM
Sample Amount: 1 Multiplier: 1
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10047\052_006_AE12.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Received:	02/17/09
Units:	mg/Kg	Prepared:	02/21/09
Batch#:	148149		

Field ID:	K-A-16.5	Moisture:	27%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	210129-001	Sampled:	02/16/09
Basis:	dry	Analyzed:	02/25/09

Analyte	Result	RL
Diesel C10-C24	280	1.4
Motor Oil C24-C36	220	6.8

Surrogate	%REC	Limits
o-Terphenyl	108	56-141

Field ID:	K-A-21	Moisture:	26%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	210129-002	Sampled:	02/16/09
Basis:	dry	Analyzed:	02/25/09

Analyte	Result	RL
Diesel C10-C24	420	1.3
Motor Oil C24-C36	270	6.7

Surrogate	%REC	Limits
o-Terphenyl	92	56-141

Field ID:	K-A-23	Moisture:	16%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	210129-003	Sampled:	02/16/09
Basis:	dry	Analyzed:	02/25/09

Analyte	Result	RL
Diesel C10-C24	ND	1.2
Motor Oil C24-C36	ND	5.9

Surrogate	%REC	Limits
o-Terphenyl	101	56-141

Field ID:	K-A-39.5	Moisture:	23%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	210129-004	Sampled:	02/16/09
Basis:	dry	Analyzed:	02/25/09

Analyte	Result	RL
Diesel C10-C24	ND	1.3
Motor Oil C24-C36	ND	6.5

Surrogate	%REC	Limits
o-Terphenyl	88	56-141

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Received:	02/17/09
Units:	mg/Kg	Prepared:	02/21/09
Batch#:	148149		

Field ID:	K-B-18	Moisture:	20%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	210129-007	Sampled:	02/17/09
Basis:	dry	Analyzed:	02/23/09

Analyte	Result	RL
Diesel C10-C24	220	1.2
Motor Oil C24-C36	200	6.2

Surrogate	%REC	Limits
o-Terphenyl	89	56-141

Field ID:	K-B-22.5	Moisture:	22%
Type:	SAMPLE	Diln Fac:	5.000
Lab ID:	210129-008	Sampled:	02/17/09
Basis:	dry	Analyzed:	02/25/09

Analyte	Result	RL
Diesel C10-C24	1,600	6.4
Motor Oil C24-C36	1,100	32

Surrogate	%REC	Limits
o-Terphenyl	56	56-141

Field ID:	K-B-38	Moisture:	22%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	210129-009	Sampled:	02/17/09
Basis:	dry	Analyzed:	02/25/09

Analyte	Result	RL
Diesel C10-C24	10 Y	1.3
Motor Oil C24-C36	12	6.4

Surrogate	%REC	Limits
o-Terphenyl	87	56-141

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC484284	Analyzed:	02/23/09
Basis:	as received		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	86	56-141

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC484285	Batch#:	148149
Matrix:	Soil	Prepared:	02/21/09
Units:	mg/Kg	Analyzed:	02/23/09
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.88	51.73	104	51-123

Surrogate	%REC	Limits
o-Terphenyl	99	56-141

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Field ID:	K-B-18	Batch#:	148149
MSS Lab ID:	210129-007	Sampled:	02/17/09
Matrix:	Soil	Received:	02/17/09
Units:	mg/Kg	Prepared:	02/21/09
Basis:	dry	Analyzed:	02/23/09
Diln Fac:	1.000		

Type: MS Moisture: 20%
Lab ID: QC484286

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	219.1	62.44	247.9	46	38-140

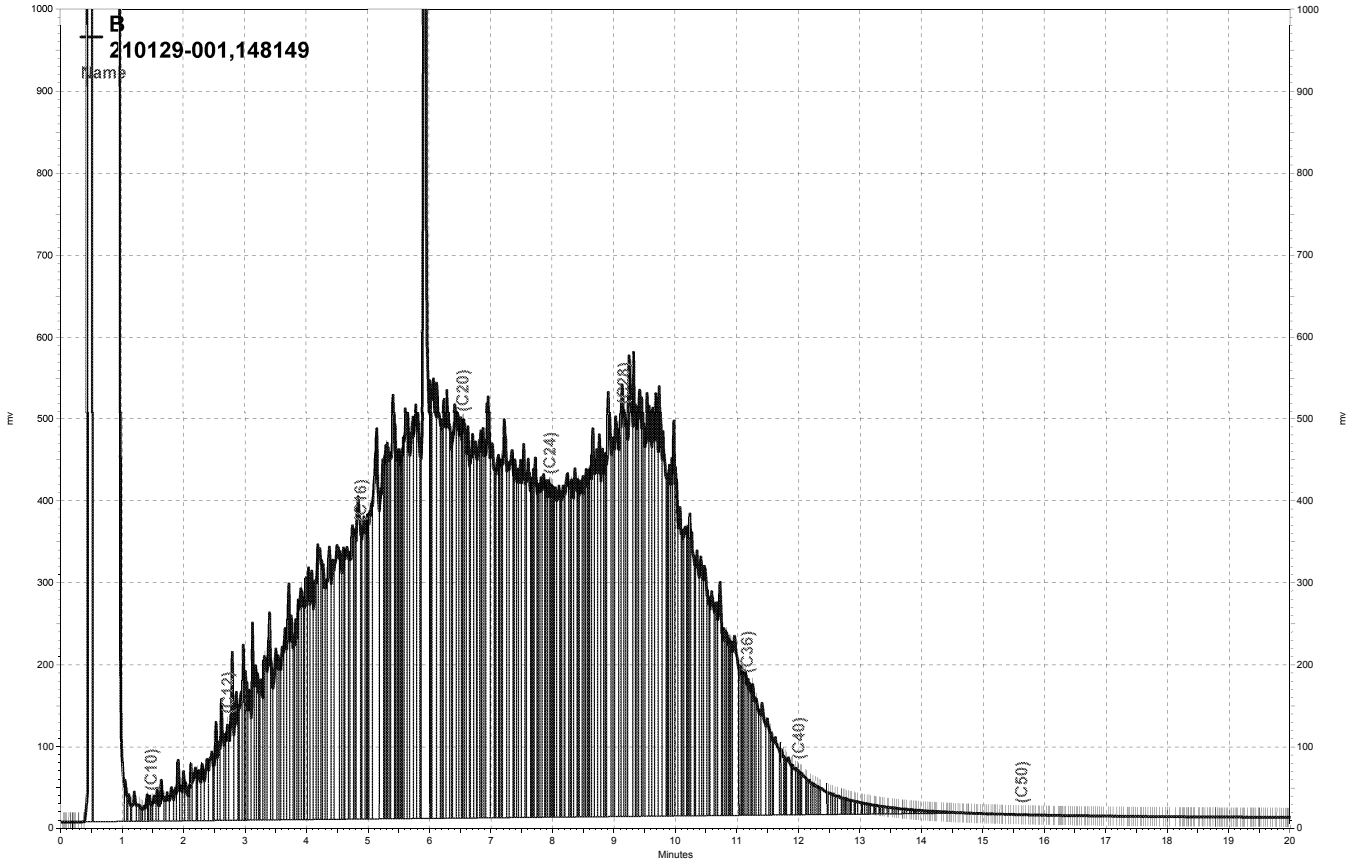
Surrogate	%REC	Limits
o-Terphenyl	92	56-141

Type: MSD Moisture: 20%
Lab ID: QC484287

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	62.46	332.3	181 *	38-140	29	49

Surrogate	%REC	Limits
o-Terphenyl	92	56-141

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference



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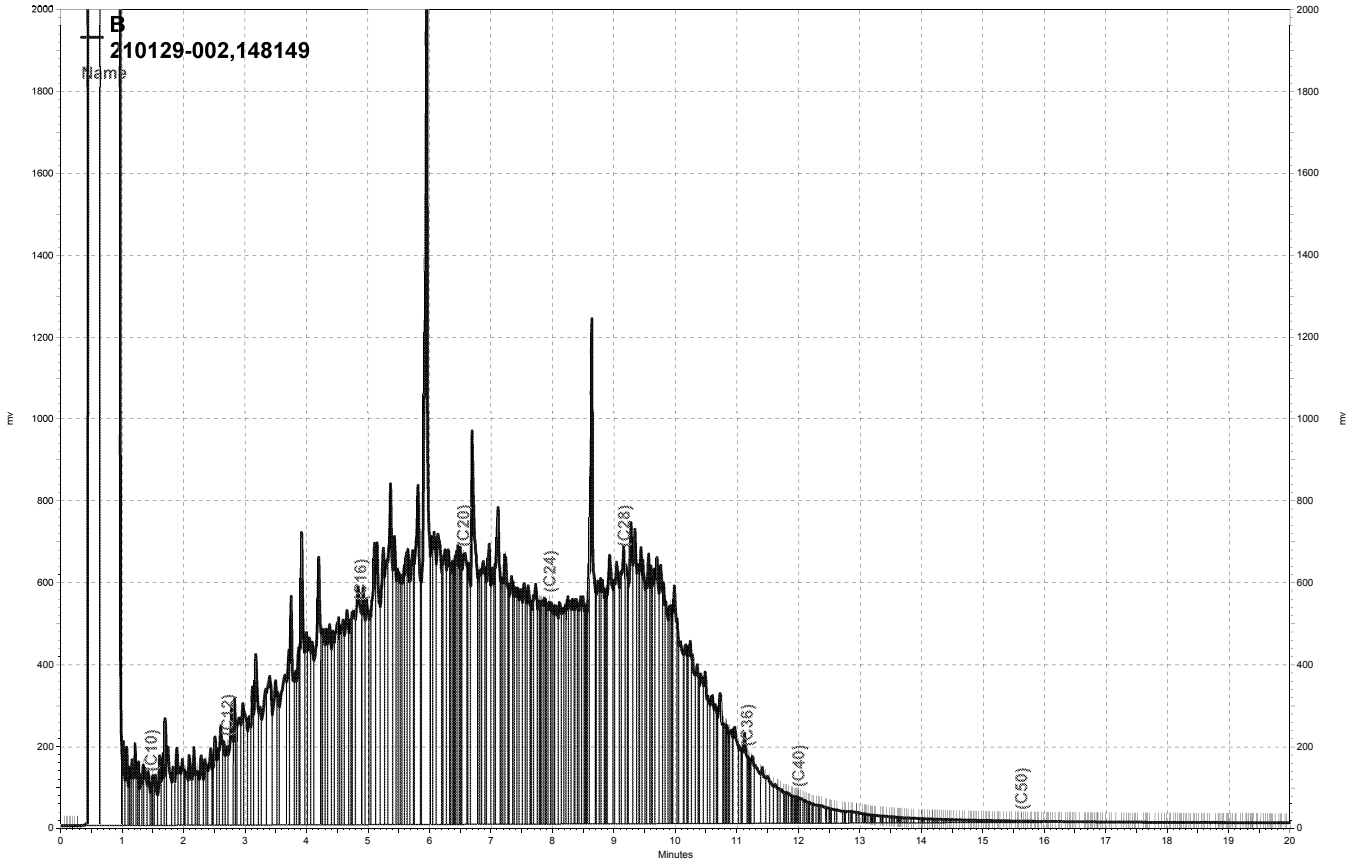

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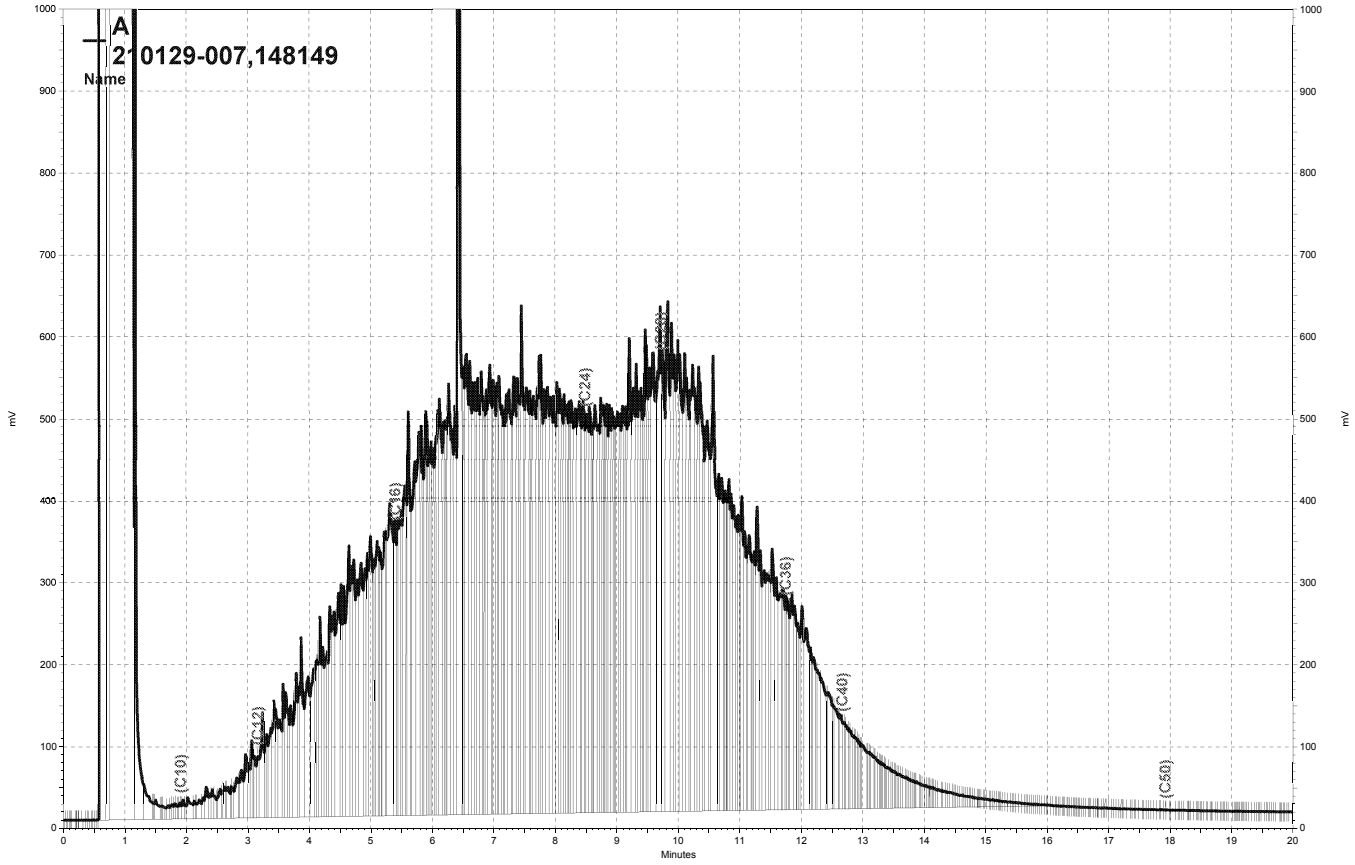

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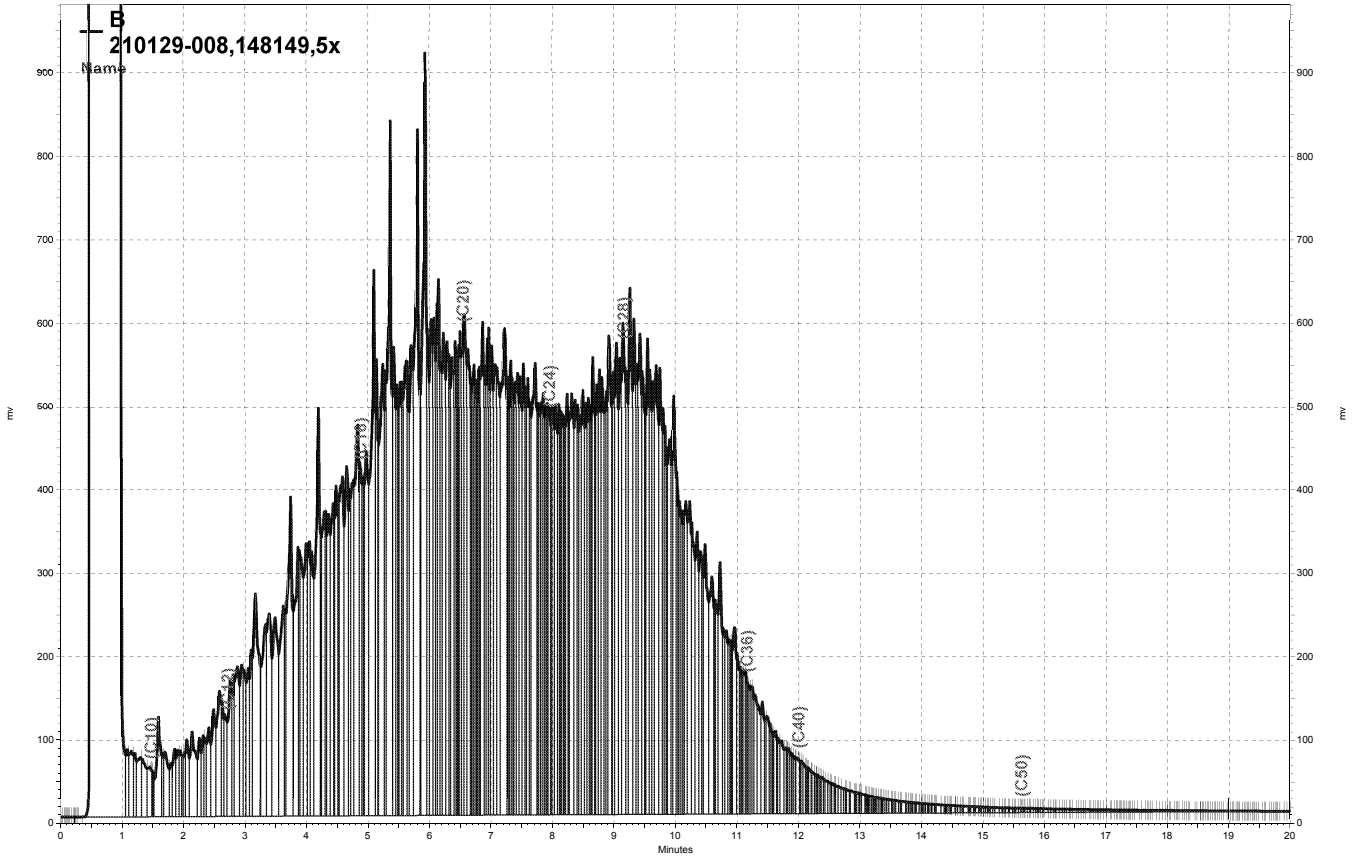

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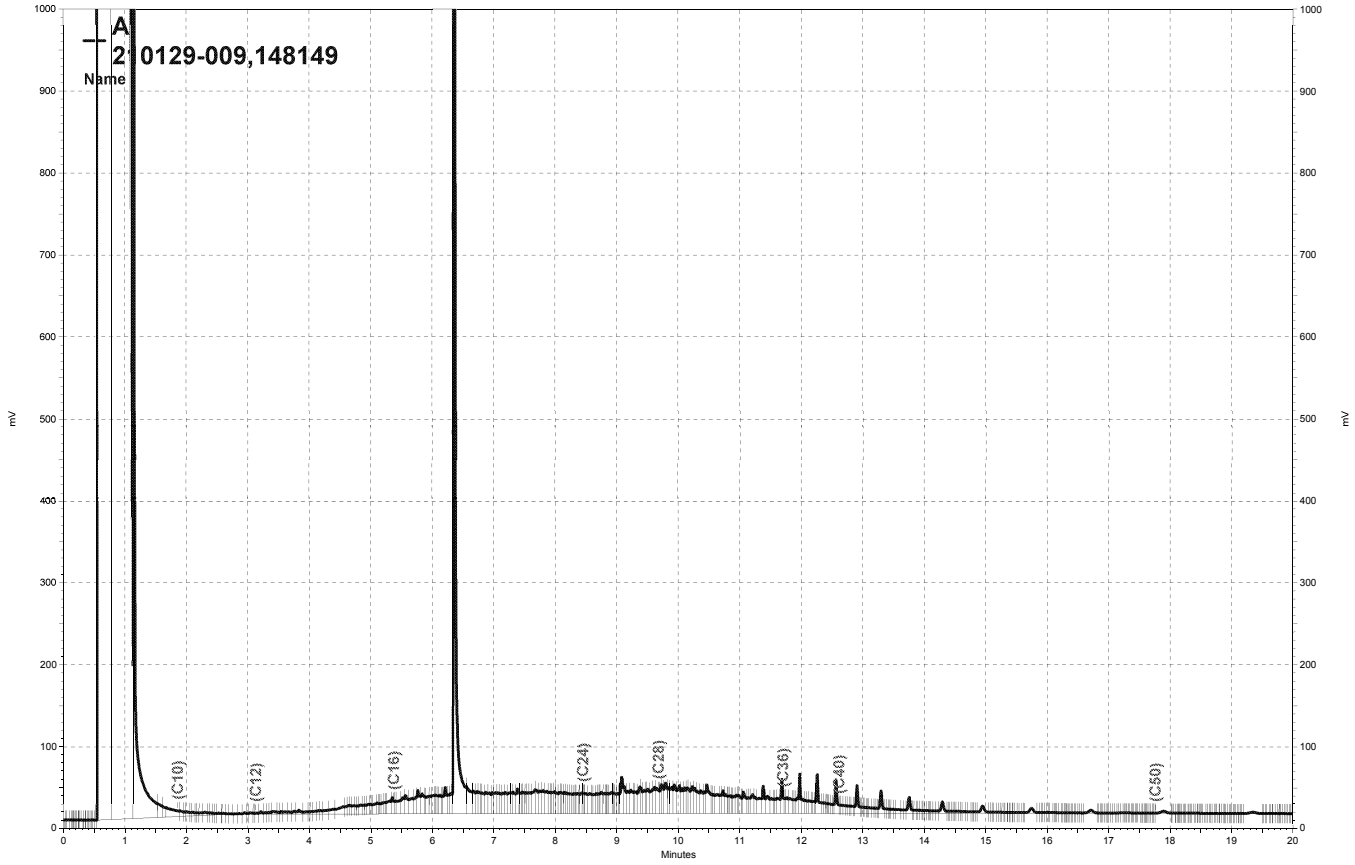

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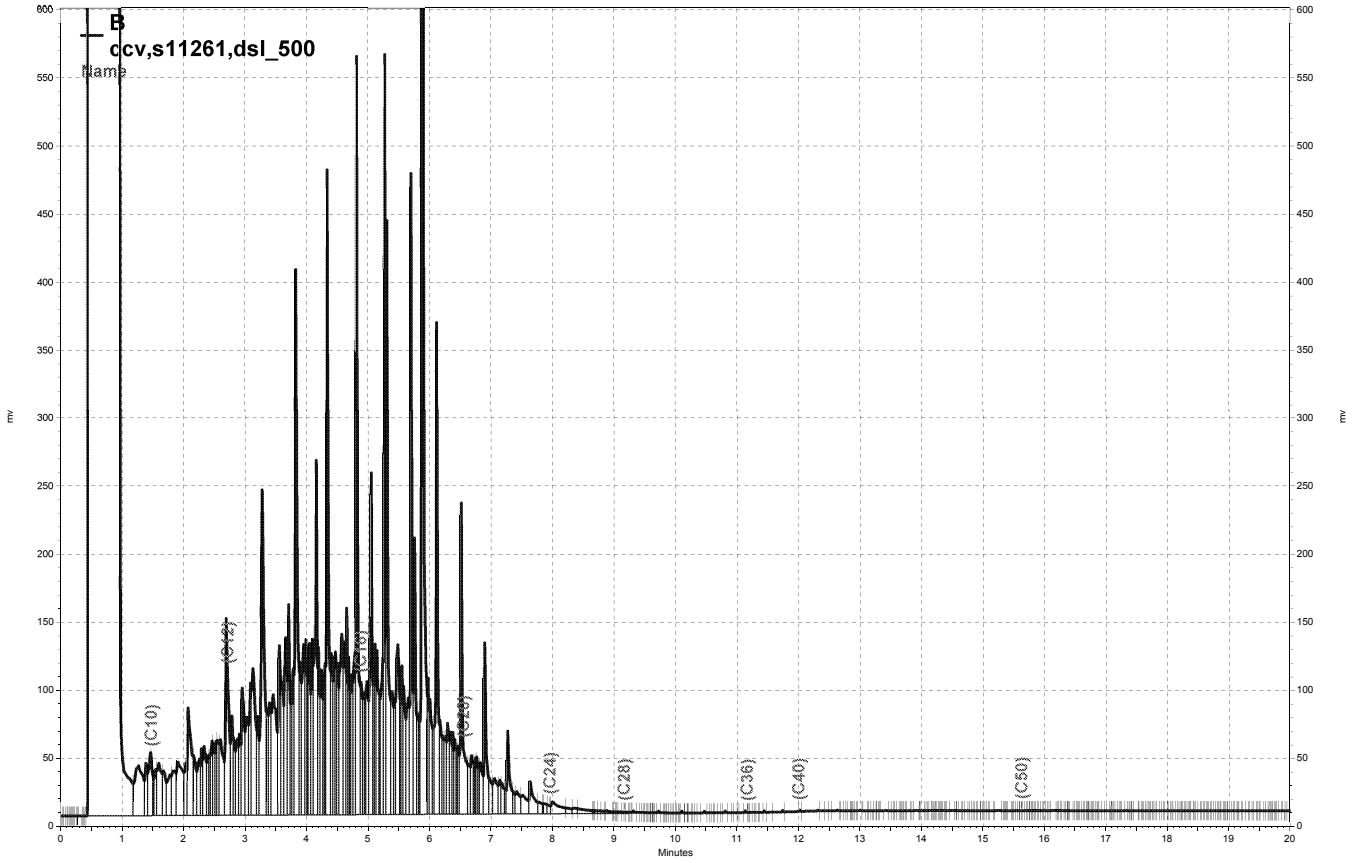

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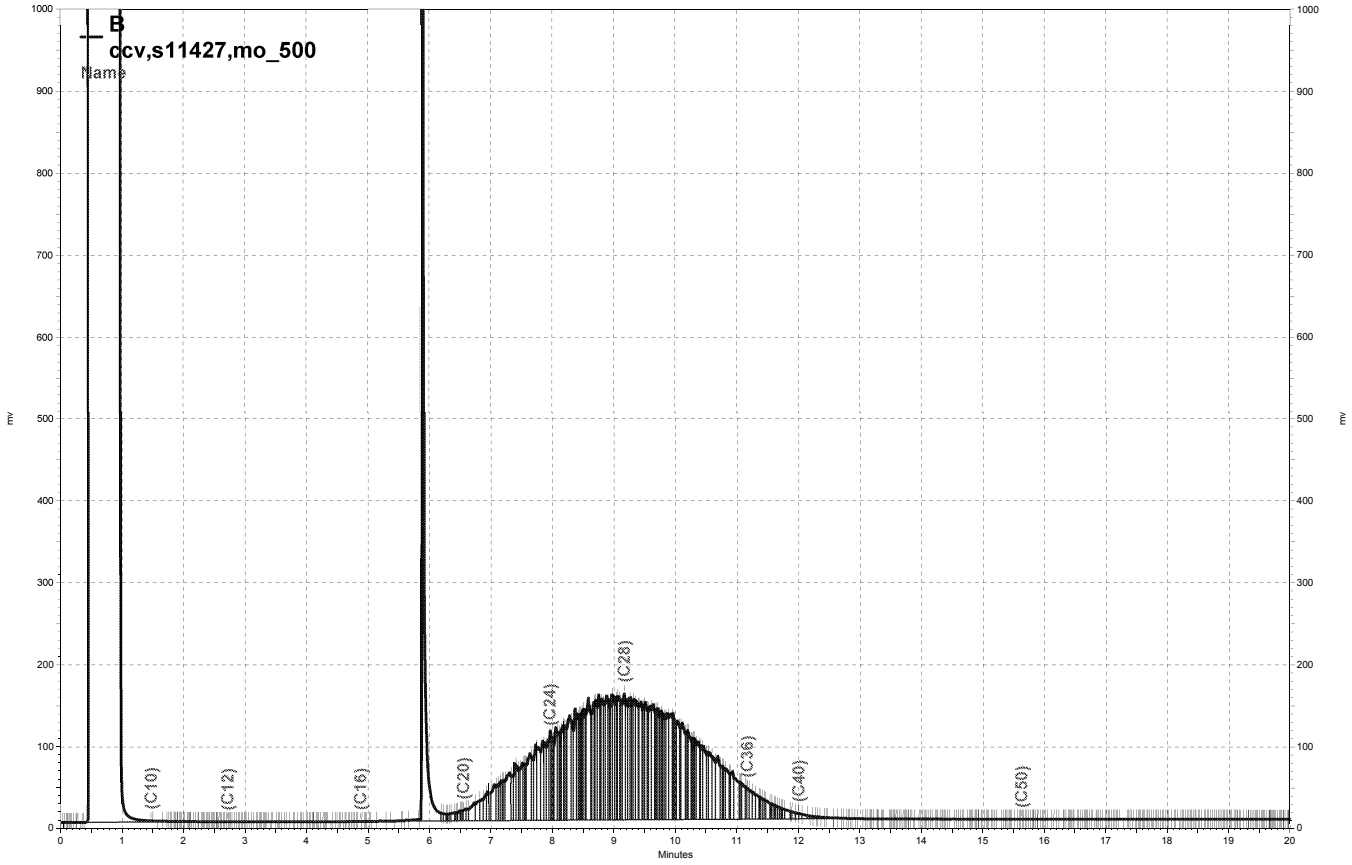

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Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	148110
Lab ID:	210129-005	Sampled:	02/16/09
Matrix:	Water	Received:	02/17/09
Units:	ug/L	Analyzed:	02/20/09
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	112	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	148110
Lab ID:	210129-006	Sampled:	02/17/09
Matrix:	Water	Received:	02/17/09
Units:	ug/L	Analyzed:	02/20/09
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	148110
Units:	ug/L	Analyzed:	02/20/09
Diln Fac:	1.000		

Type: BS Lab ID: QC484091

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	76.45	76	59-152
MTBE	20.00	17.49	87	70-125
Isopropyl Ether (DIPE)	20.00	18.56	93	67-126
Ethyl tert-Butyl Ether (ETBE)	20.00	19.62	98	69-127
1,2-Dichloroethane	20.00	20.72	104	78-132
Benzene	20.00	19.31	97	80-120
Methyl tert-Amyl Ether (TAME)	20.00	19.01	95	80-122
Toluene	20.00	18.69	93	80-120
1,2-Dibromoethane	20.00	19.61	98	80-120
Ethylbenzene	20.00	19.83	99	80-122
m,p-Xylenes	40.00	40.04	100	80-126
o-Xylene	20.00	19.62	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-122

Type: BSD Lab ID: QC484092

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	83.75	84	59-152	9	20
MTBE	20.00	17.73	89	70-125	1	20
Isopropyl Ether (DIPE)	20.00	18.42	92	67-126	1	20
Ethyl tert-Butyl Ether (ETBE)	20.00	19.56	98	69-127	0	20
1,2-Dichloroethane	20.00	20.74	104	78-132	0	20
Benzene	20.00	19.37	97	80-120	0	20
Methyl tert-Amyl Ether (TAME)	20.00	19.54	98	80-122	3	20
Toluene	20.00	18.95	95	80-120	1	20
1,2-Dibromoethane	20.00	19.97	100	80-120	2	20
Ethylbenzene	20.00	19.80	99	80-122	0	20
m,p-Xylenes	40.00	40.20	100	80-126	0	20
o-Xylene	20.00	19.76	99	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	99	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC484206	Batch#:	148110
Matrix:	Water	Analyzed:	02/20/09
Units:	ug/L		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-A-16.5	Diln Fac:	0.9980
Lab ID:	210129-001	Batch#:	148177
Matrix:	Soil	Sampled:	02/16/09
Units:	ug/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/23/09

Moisture: 27%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	140
MTBE	ND	6.8
Isopropyl Ether (DIPE)	ND	6.8
Ethyl tert-Butyl Ether (ETBE)	ND	6.8
1,2-Dichloroethane	ND	6.8
Benzene	ND	6.8
Methyl tert-Amyl Ether (TAME)	ND	6.8
Toluene	ND	6.8
1,2-Dibromoethane	ND	6.8
Ethylbenzene	ND	6.8
m,p-Xylenes	ND	6.8
o-Xylene	ND	6.8

Surrogate	%REC	Limits
Dibromofluoromethane	97	75-129
1,2-Dichloroethane-d4	109	74-133
Toluene-d8	106	80-120
Bromofluorobenzene	99	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-A-21	Diln Fac:	4.902
Lab ID:	210129-002	Batch#:	148177
Matrix:	Soil	Sampled:	02/16/09
Units:	ug/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/23/09

Moisture: 26%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	660
MTBE	ND	33
Isopropyl Ether (DIPE)	ND	33
Ethyl tert-Butyl Ether (ETBE)	ND	33
1,2-Dichloroethane	ND	33
Benzene	ND	33
Methyl tert-Amyl Ether (TAME)	ND	33
Toluene	ND	33
1,2-Dibromoethane	ND	33
Ethylbenzene	ND	33
m,p-Xylenes	ND	33
o-Xylene	ND	33

Surrogate	%REC	Limits
Dibromofluoromethane	93	75-129
1,2-Dichloroethane-d4	98	74-133
Toluene-d8	99	80-120
Bromofluorobenzene	106	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-A-23	Diln Fac:	0.8977
Lab ID:	210129-003	Batch#:	148128
Matrix:	Soil	Sampled:	02/16/09
Units:	ug/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/20/09

Moisture: 16%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	110
MTBE	ND	5.3
Isopropyl Ether (DIPE)	ND	5.3
Ethyl tert-Butyl Ether (ETBE)	ND	5.3
1,2-Dichloroethane	ND	5.3
Benzene	ND	5.3
Methyl tert-Amyl Ether (TAME)	ND	5.3
Toluene	ND	5.3
1,2-Dibromoethane	ND	5.3
Ethylbenzene	ND	5.3
m,p-Xylenes	ND	5.3
o-Xylene	ND	5.3

Surrogate	%REC	Limits
Dibromofluoromethane	88	75-129
1,2-Dichloroethane-d4	109	74-133
Toluene-d8	109	80-120
Bromofluorobenzene	101	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-A-39.5	Diln Fac:	0.9804
Lab ID:	210129-004	Batch#:	148128
Matrix:	Soil	Sampled:	02/16/09
Units:	ug/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/20/09

Moisture: 23%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	130
MTBE	ND	6.4
Isopropyl Ether (DIPE)	ND	6.4
Ethyl tert-Butyl Ether (ETBE)	ND	6.4
1,2-Dichloroethane	ND	6.4
Benzene	ND	6.4
Methyl tert-Amyl Ether (TAME)	ND	6.4
Toluene	ND	6.4
1,2-Dibromoethane	ND	6.4
Ethylbenzene	ND	6.4
m,p-Xylenes	ND	6.4
o-Xylene	ND	6.4

Surrogate	%REC	Limits
Dibromofluoromethane	97	75-129
1,2-Dichloroethane-d4	120	74-133
Toluene-d8	113	80-120
Bromofluorobenzene	104	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-B-18	Diln Fac:	0.9653
Lab ID:	210129-007	Batch#:	148128
Matrix:	Soil	Sampled:	02/17/09
Units:	ug/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/20/09

Moisture: 20%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	120
MTBE	ND	6.0
Isopropyl Ether (DIPE)	ND	6.0
Ethyl tert-Butyl Ether (ETBE)	ND	6.0
1,2-Dichloroethane	ND	6.0
Benzene	ND	6.0
Methyl tert-Amyl Ether (TAME)	ND	6.0
Toluene	ND	6.0
1,2-Dibromoethane	ND	6.0
Ethylbenzene	ND	6.0
m,p-Xylenes	ND	6.0
o-Xylene	ND	6.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	75-129
1,2-Dichloroethane-d4	119	74-133
Toluene-d8	112	80-120
Bromofluorobenzene	104	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-B-22.5	Diln Fac:	100.0
Lab ID:	210129-008	Batch#:	148330
Matrix:	Soil	Sampled:	02/17/09
Units:	ug/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/26/09

Moisture: 22%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	13,000
MTBE	ND	640
Isopropyl Ether (DIPE)	ND	640
Ethyl tert-Butyl Ether (ETBE)	ND	640
1,2-Dichloroethane	ND	640
Benzene	ND	640
Methyl tert-Amyl Ether (TAME)	ND	640
Toluene	ND	640
1,2-Dibromoethane	ND	640
Ethylbenzene	ND	640
m,p-Xylenes	ND	640
o-Xylene	ND	640

Surrogate	%REC	Limits
Dibromofluoromethane	99	75-129
1,2-Dichloroethane-d4	98	74-133
Toluene-d8	98	80-120
Bromofluorobenzene	111	79-127
Trifluorotoluene (MeOH)	DO	55-147

DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-B-38	Diln Fac:	0.9960
Lab ID:	210129-009	Batch#:	148128
Matrix:	Soil	Sampled:	02/17/09
Units:	ug/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/21/09

Moisture: 22%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	130
MTBE	ND	6.4
Isopropyl Ether (DIPE)	ND	6.4
Ethyl tert-Butyl Ether (ETBE)	ND	6.4
1,2-Dichloroethane	ND	6.4
Benzene	ND	6.4
Methyl tert-Amyl Ether (TAME)	ND	6.4
Toluene	ND	6.4
1,2-Dibromoethane	ND	6.4
Ethylbenzene	ND	6.4
m,p-Xylenes	ND	6.4
o-Xylene	ND	6.4

Surrogate	%REC	Limits
Dibromofluoromethane	93	75-129
1,2-Dichloroethane-d4	109	74-133
Toluene-d8	105	80-120
Bromofluorobenzene	96	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC484185	Diln Fac:	1.000
Matrix:	Soil	Batch#:	148128
Units:	ug/Kg	Analyzed:	02/20/09

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	89	75-129
1,2-Dichloroethane-d4	101	74-133
Toluene-d8	114	80-120
Bromofluorobenzene	96	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC484186	Diln Fac:	1.000
Matrix:	Soil	Batch#:	148128
Units:	ug/Kg	Analyzed:	02/20/09

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	101.6	81	58-141
MTBE	25.00	21.91	88	67-127
Isopropyl Ether (DIPE)	25.00	21.67	87	68-126
Ethyl tert-Butyl Ether (ETBE)	25.00	23.42	94	66-128
1,2-Dichloroethane	25.00	25.55	102	72-127
Benzene	25.00	26.94	108	80-123
Methyl tert-Amyl Ether (TAME)	25.00	25.70	103	73-130
Toluene	25.00	28.14	113	80-124
1,2-Dibromoethane	25.00	26.41	106	80-122
Ethylbenzene	25.00	27.22	109	80-127
m,p-Xylenes	50.00	57.56	115	80-125
o-Xylene	25.00	26.55	106	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	96	75-129
1,2-Dichloroethane-d4	92	74-133
Toluene-d8	103	80-120
Bromofluorobenzene	96	79-127

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-B-18	Dil'n Fac:	0.9653
MSS Lab ID:	210129-007	Batch#:	148128
Matrix:	Soil	Sampled:	02/17/09
Units:	ug/Kg	Received:	02/17/09
Basis:	dry	Analyzed:	02/21/09

Type: MS Moisture: 20%
Lab ID: QC484232

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<24.13	301.6	252.8	84	41-130
MTBE	<1.207	60.33	50.98	85	51-121
Isopropyl Ether (DIPE)	<1.207	60.33	47.56	79	48-120
Ethyl tert-Butyl Ether (ETBE)	<1.207	60.33	52.33	87	49-122
1,2-Dichloroethane	<1.207	60.33	48.73	81	50-120
Benzene	<1.207	60.33	48.69	81	54-120
Methyl tert-Amyl Ether (TAME)	<1.207	60.33	50.18	83	52-124
Toluene	<1.207	60.33	45.77	76	50-120
1,2-Dibromoethane	<1.207	60.33	51.69	86	50-120
Ethylbenzene	<1.207	60.33	41.25	68	46-120
m,p-Xylenes	<1.207	120.7	83.62	69	44-120
o-Xylene	<1.207	60.33	40.43	67	45-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	75-129
1,2-Dichloroethane-d4	93	74-133
Toluene-d8	99	80-120
Bromofluorobenzene	93	79-127

Type: MSD Moisture: 20%
Lab ID: QC484233

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	301.6	258.3	86	41-130	2	37
MTBE	60.33	51.30	85	51-121	1	29
Isopropyl Ether (DIPE)	60.33	46.32	77	48-120	3	29
Ethyl tert-Butyl Ether (ETBE)	60.33	54.34	90	49-122	4	29
1,2-Dichloroethane	60.33	49.89	83	50-120	2	25
Benzene	60.33	51.81	86	54-120	6	25
Methyl tert-Amyl Ether (TAME)	60.33	51.18	85	52-124	2	27
Toluene	60.33	46.56	77	50-120	2	28
1,2-Dibromoethane	60.33	52.40	87	50-120	1	28
Ethylbenzene	60.33	43.05	71	46-120	4	29
m,p-Xylenes	120.7	86.21	71	44-120	3	30
o-Xylene	60.33	44.07	73	45-120	9	30

Surrogate	%REC	Limits
Dibromofluoromethane	100	75-129
1,2-Dichloroethane-d4	90	74-133
Toluene-d8	98	80-120
Bromofluorobenzene	98	79-127

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC484405	Diln Fac:	1.000
Matrix:	Soil	Batch#:	148177
Units:	ug/Kg	Analyzed:	02/23/09

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	92	75-129
1,2-Dichloroethane-d4	101	74-133
Toluene-d8	111	80-120
Bromofluorobenzene	99	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC484406	Diln Fac:	1.000
Matrix:	Soil	Batch#:	148177
Units:	ug/Kg	Analyzed:	02/23/09

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	104.8	84	58-141
MTBE	25.00	22.60	90	67-127
Isopropyl Ether (DIPE)	25.00	22.59	90	68-126
Ethyl tert-Butyl Ether (ETBE)	25.00	25.07	100	66-128
1,2-Dichloroethane	25.00	26.52	106	72-127
Benzene	25.00	28.15	113	80-123
Methyl tert-Amyl Ether (TAME)	25.00	28.81	115	73-130
Toluene	25.00	28.24	113	80-124
1,2-Dibromoethane	25.00	27.67	111	80-122
Ethylbenzene	25.00	26.82	107	80-127
m,p-Xylenes	50.00	55.88	112	80-125
o-Xylene	25.00	26.60	106	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	94	75-129
1,2-Dichloroethane-d4	94	74-133
Toluene-d8	100	80-120
Bromofluorobenzene	98	79-127

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Dil'n Fac:	0.9766
MSS Lab ID:	210027-001	Batch#:	148177
Matrix:	Soil	Sampled:	02/13/09
Units:	ug/Kg	Received:	02/13/09
Basis:	dry	Analyzed:	02/23/09

Type: MS Moisture: 20%
Lab ID: QC484438

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<24.41	305.2	263.5	86	41-130
MTBE	<1.221	61.04	56.11	92	51-121
Isopropyl Ether (DIPE)	<1.221	61.04	54.71	90	48-120
Ethyl tert-Butyl Ether (ETBE)	<1.221	61.04	61.96	102	49-122
1,2-Dichloroethane	<1.221	61.04	58.49	96	50-120
Benzene	<1.221	61.04	56.89	93	54-120
Methyl tert-Amyl Ether (TAME)	<1.221	61.04	63.70	104	52-124
Toluene	<1.221	61.04	55.93	92	50-120
1,2-Dibromoethane	<1.221	61.04	58.45	96	50-120
Ethylbenzene	<1.221	61.04	52.28	86	46-120
m,p-Xylenes	<1.221	122.1	104.9	86	44-120
o-Xylene	<1.221	61.04	49.64	81	45-120

Surrogate	%REC	Limits
Dibromofluoromethane	69 *	75-129
1,2-Dichloroethane-d4	100	74-133
Toluene-d8	98	80-120
Bromofluorobenzene	118	79-127

Type: MSD Moisture: 20%
Lab ID: QC484439

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	305.2	266.8	87	41-130	1	37
MTBE	61.04	54.76	90	51-121	2	29
Isopropyl Ether (DIPE)	61.04	53.48	88	48-120	2	29
Ethyl tert-Butyl Ether (ETBE)	61.04	59.43	97	49-122	4	29
1,2-Dichloroethane	61.04	53.57	88	50-120	9	25
Benzene	61.04	53.89	88	54-120	5	25
Methyl tert-Amyl Ether (TAME)	61.04	59.21	97	52-124	7	27
Toluene	61.04	53.60	88	50-120	4	28
1,2-Dibromoethane	61.04	55.09	90	50-120	6	28
Ethylbenzene	61.04	49.02	80	46-120	6	29
m,p-Xylenes	122.1	101.7	83	44-120	3	30
o-Xylene	61.04	47.87	78	45-120	4	30

Surrogate	%REC	Limits
Dibromofluoromethane	65 *	75-129
1,2-Dichloroethane-d4	94	74-133
Toluene-d8	97	80-120
Bromofluorobenzene	123	79-127

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC485111	Diln Fac:	1.000
Matrix:	Soil	Batch#:	148330
Units:	ug/Kg	Analyzed:	02/26/09

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	75-129
1,2-Dichloroethane-d4	113	74-133
Toluene-d8	103	80-120
Bromofluorobenzene	106	79-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Matrix:	Soil	Dil'n Fac:	1.000
Units:	ug/Kg	Batch#:	148330
Basis:	as received	Analyzed:	02/26/09

Type: BS Lab ID: QC485112

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	138.0	110	58-141
MTBE	25.00	27.99	112	67-127
Isopropyl Ether (DIPE)	25.00	27.79	111	68-126
Ethyl tert-Butyl Ether (ETBE)	25.00	26.70	107	66-128
1,2-Dichloroethane	25.00	30.47	122	72-127
Benzene	25.00	26.44	106	80-123
Methyl tert-Amyl Ether (TAME)	25.00	28.55	114	73-130
Toluene	25.00	25.56	102	80-124
1,2-Dibromoethane	25.00	26.63	107	80-122
Ethylbenzene	25.00	27.44	110	80-127
m,p-Xylenes	50.00	50.35	101	80-125
o-Xylene	25.00	25.16	101	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	106	75-129
1,2-Dichloroethane-d4	120	74-133
Toluene-d8	101	80-120
Bromofluorobenzene	102	79-127

Type: BSD Lab ID: QC485113

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	96.76	77	58-141	35 *	27
MTBE	25.00	22.49	90	67-127	22 *	20
Isopropyl Ether (DIPE)	25.00	24.53	98	68-126	12	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.72	99	66-128	8	20
1,2-Dichloroethane	25.00	27.75	111	72-127	9	20
Benzene	25.00	25.65	103	80-123	3	20
Methyl tert-Amyl Ether (TAME)	25.00	26.53	106	73-130	7	20
Toluene	25.00	25.73	103	80-124	1	20
1,2-Dibromoethane	25.00	24.77	99	80-122	7	20
Ethylbenzene	25.00	27.34	109	80-127	0	20
m,p-Xylenes	50.00	50.19	100	80-125	0	20
o-Xylene	25.00	25.62	102	80-122	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	75-129
1,2-Dichloroethane-d4	111	74-133
Toluene-d8	103	80-120
Bromofluorobenzene	104	79-127

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Moisture

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	METHOD
Project#:	73943	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Batch#:	148105
Matrix:	Soil	Received:	02/17/09
Units:	%	Analyzed:	02/20/09
Diln Fac:	1.000		

Field ID	Lab ID	Result	RL	Sampled
K-A-16.5	210129-001	27	1	02/16/09
K-A-21	210129-002	26	1	02/16/09
K-A-23	210129-003	16	1	02/16/09
K-A-39.5	210129-004	23	1	02/16/09
K-B-18	210129-007	20	1	02/17/09
K-B-22.5	210129-008	22	1	02/17/09
K-B-38	210129-009	22	1	02/17/09

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Moisture

Lab #:	210129	Location:	Ambassador Laundry
Client:	Kleinfelder	Prep:	METHOD
Project#:	73943	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	K-B-38	Diln Fac:	1.000
Type:	SDUP	Batch#:	148105
MSS Lab ID:	210129-009	Sampled:	02/17/09
Lab ID:	QC484074	Received:	02/17/09
Matrix:	Soil	Analyzed:	02/20/09

MSS Result	Result	RL	RPD	Lim
22.13	21.59	1.000	2	15

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/30/09
Units:	mg/Kg	Received:	03/30/09
Batch#:	149562		

Field ID:	K-C-18.5	Basis:	dry
Type:	SAMPLE	Moisture:	21%
Lab ID:	211030-001		

Analyte	Result	RL	Diln Fac	Analyzed
Gasoline C7-C12	870 Y	32	25.00	04/03/09
Stoddard Solvent C7-C12	630 Y	1.3	1.000	04/02/09

Surrogate	%REC	Limits	Diln Fac	Analyzed
Trifluorotoluene (FID)	219 *	54-152	25.00	04/03/09
Bromofluorobenzene (FID)	209 *	50-152	25.00	04/03/09

Field ID:	MW-4-20	Moisture:	15%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	211030-002	Analyzed:	04/02/09
Basis:	dry		

Analyte	Result	RL
Gasoline C7-C12	5.9 Y	1.2
Stoddard Solvent C7-C12	5.7 Y	1.2

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	54-152
Bromofluorobenzene (FID)	131	50-152

Field ID:	K-C-26	Moisture:	19%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	211030-003	Analyzed:	04/02/09
Basis:	dry		

Analyte	Result	RL
Gasoline C7-C12	ND	1.2
Stoddard Solvent C7-C12	ND	1.2

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	54-152
Bromofluorobenzene (FID)	111	50-152

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/30/09
Units:	mg/Kg	Received:	03/30/09
Batch#:	149562		

Field ID:	K-C-40	Moisture:	21%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	211030-004	Analyzed:	04/02/09
Basis:	dry		

Analyte	Result	RL
Gasoline C7-C12	ND	1.3
Stoddard Solvent C7-C12	ND	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	54-152
Bromofluorobenzene (FID)	108	50-152

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC490143	Analyzed:	04/02/09
Basis:	as received		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20
Stoddard Solvent C7-C12	ND	0.20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	54-152
Bromofluorobenzene (FID)	106	50-152

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	149562
Basis:	as received	Analyzed:	04/02/09

Type: BS Lab ID: QC490144

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	4.646	93	77-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	127	54-152
Bromofluorobenzene (FID)	110	50-152

Type: BSD Lab ID: QC490145

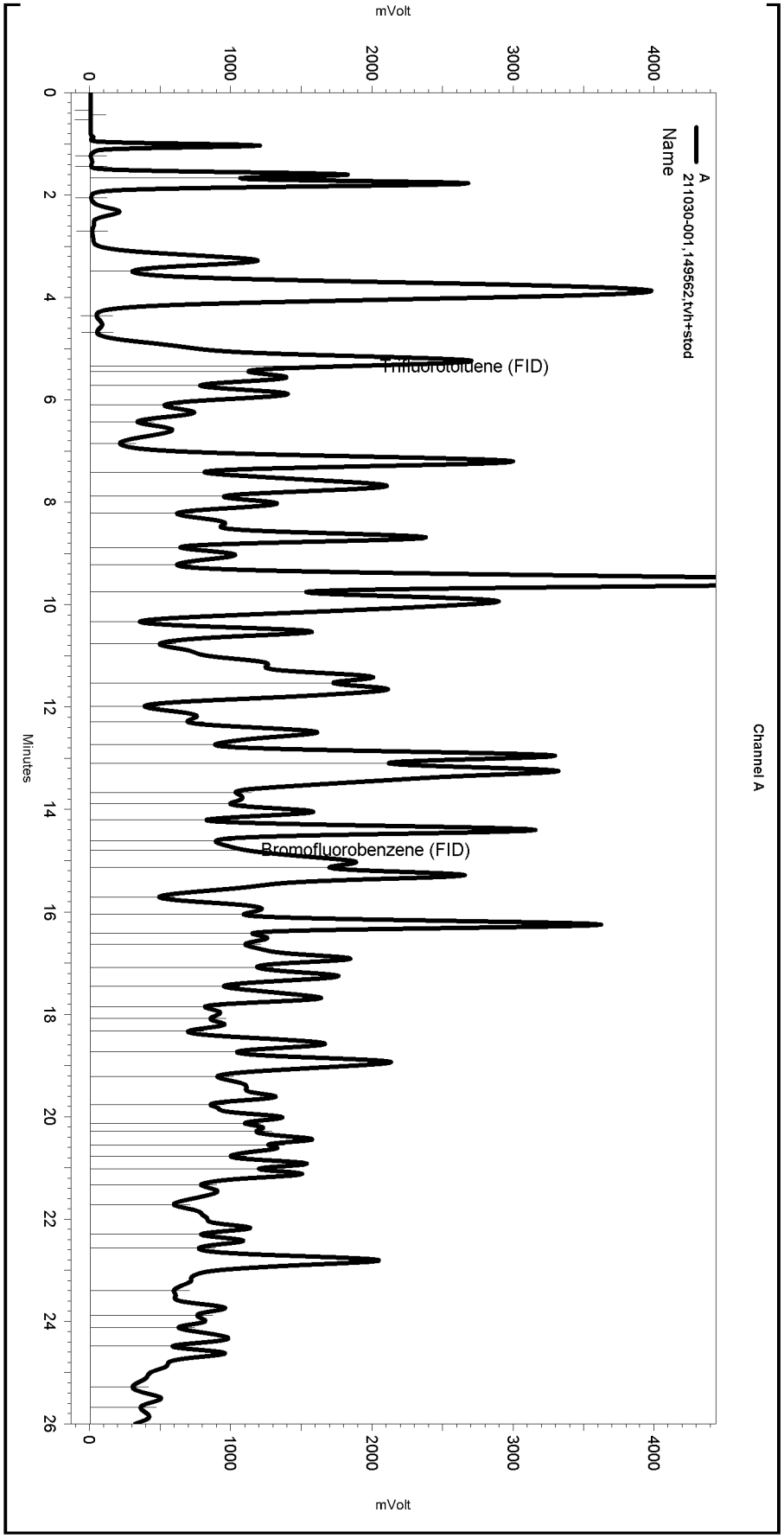
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	5.000	4.611	92	77-120	1	21

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	54-152
Bromofluorobenzene (FID)	107	50-152

RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\092.seq**
Sample Name: **211030-001,149562,tvh+stod**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\092_010**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe090.met

Software Version 3.1.7
Run Date: 4/2/2009 8:49:50 PM
Analysis Date: 4/5/2009 3:36:22 PM
Sample Amount: 0.97 Multiplier: 0.97
Vial & pH or Core ID: A



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\092_010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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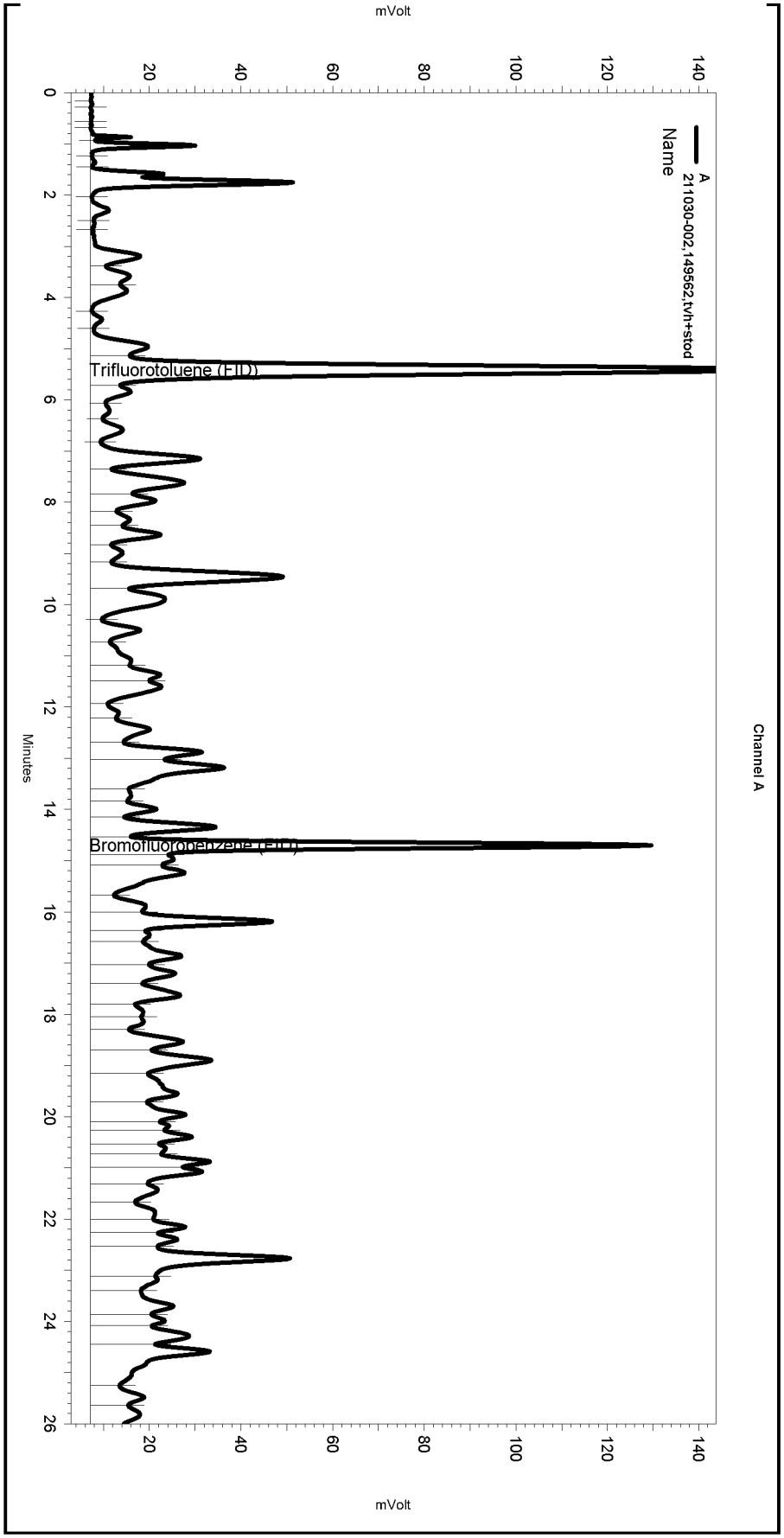
Yes	Split Peak	5.326	0	0
Yes	Split Peak	14.807	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\092.seq**
Sample Name: **211030-002,149562,tvh+stod**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\092_011**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe090.met

Software Version 3.1.7
Run Date: 4/2/2009 9:25:25 PM
Analysis Date: 4/5/2009 3:39:56 PM
Sample Amount: 0.95 Multiplier: 0.95
Vial & pH or Core ID: A



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

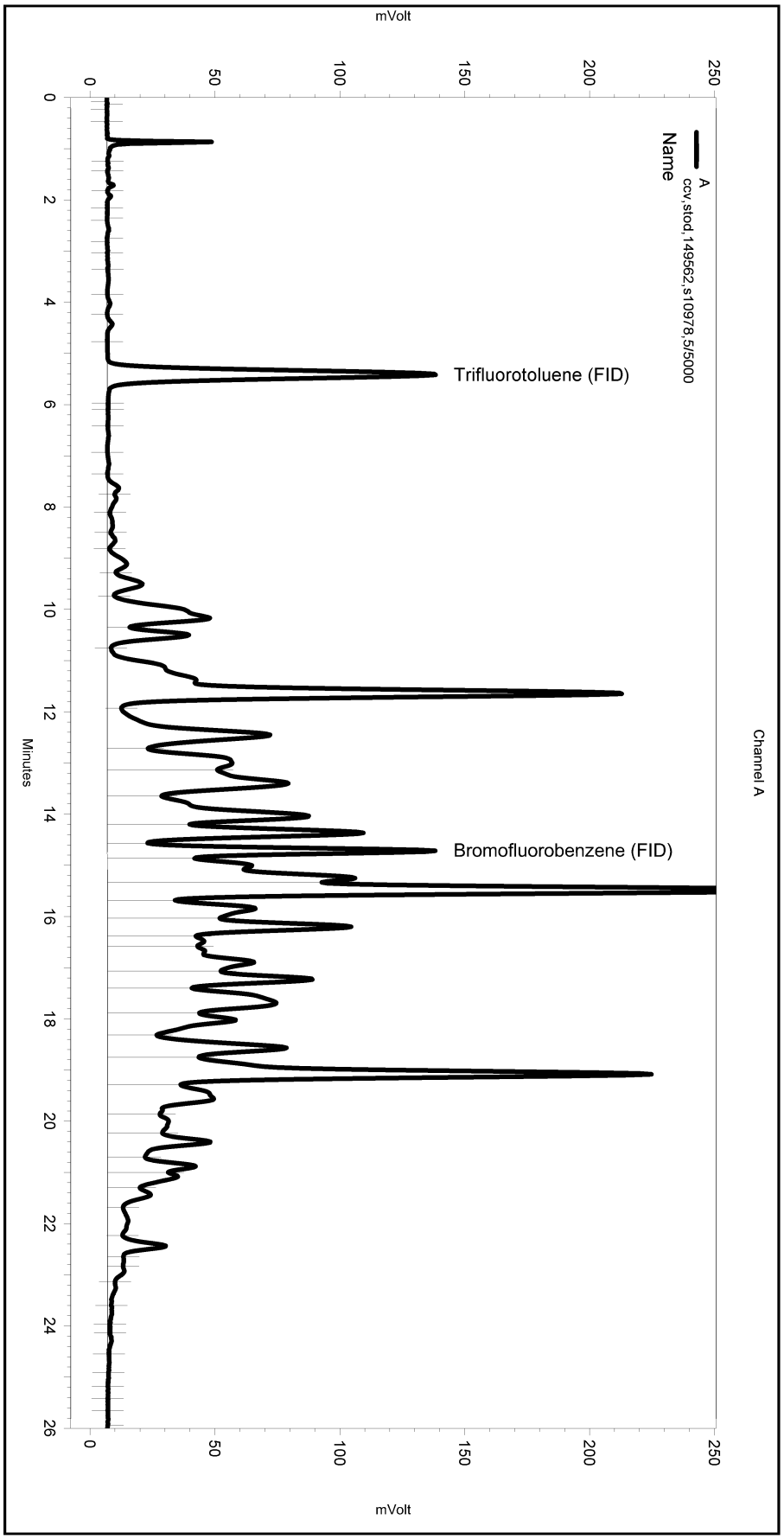
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\092_011

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\092.seq**
Sample Name: **ccv,stod,149562,s10978,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\092_006**
Instrument: GC05 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe090.met

Software Version 3.1.7
Run Date: 4/2/2009 6:27:34 PM
Analysis Date: 4/2/2009 6:56:17 PM
Sample Amount: 1 Multiplier: 1
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10048\092_006_B298.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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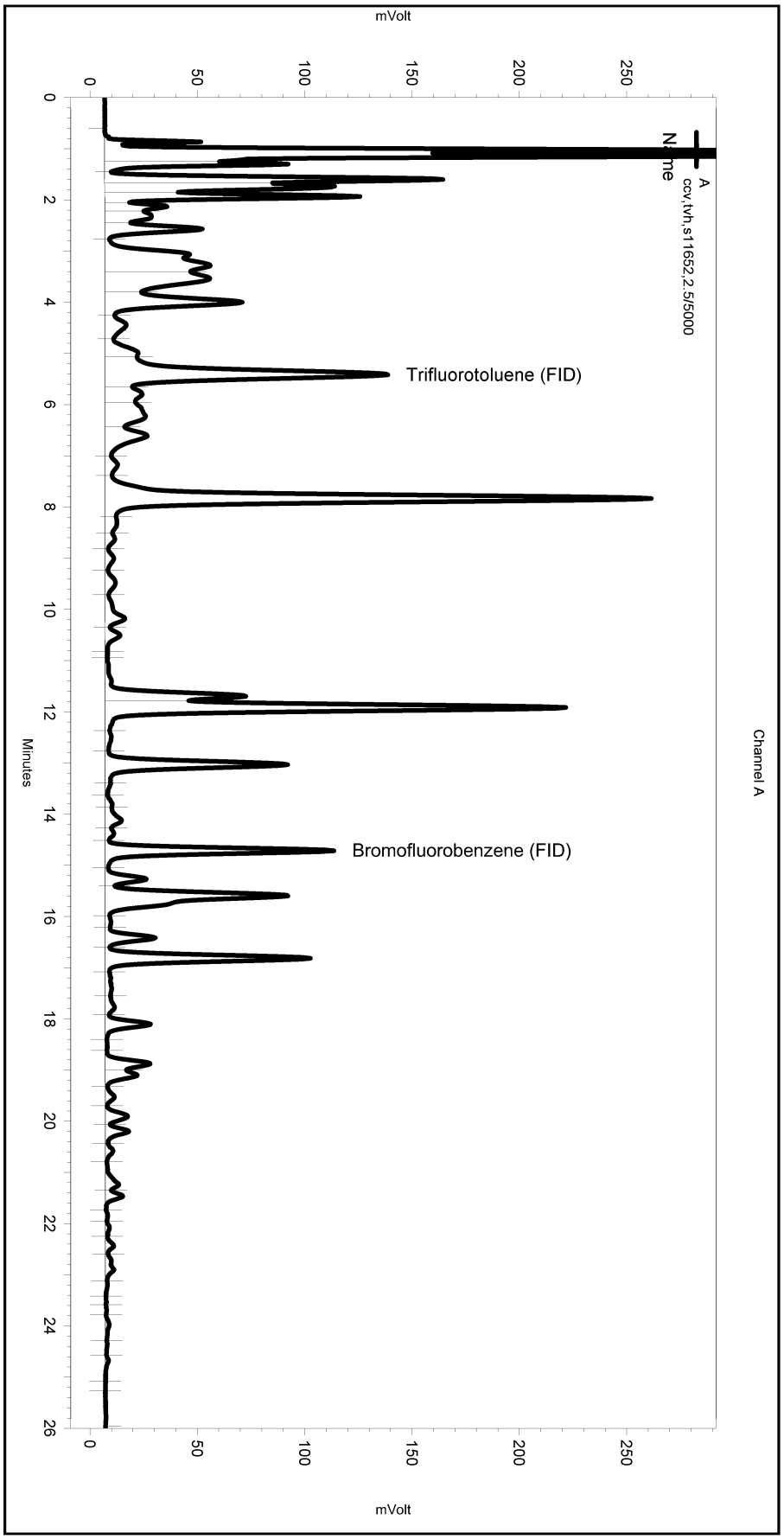
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\092.seq**
Sample Name: **ccv,tvh,s11652,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\092_003**
Instrument: GC05 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe090.met

Software Version 3.1.7
Run Date: 4/2/2009 4:08:55 PM
Analysis Date: 4/2/2009 4:37:38 PM
Sample Amount: 1 Multiplier: 1
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10048\092_003_B294.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/30/09
Units:	mg/Kg	Received:	03/30/09
Batch#:	149614	Prepared:	04/03/09

Field ID:	K-C-18.5	Moisture:	21%
Type:	SAMPLE	Diln Fac:	10.00
Lab ID:	211030-001	Analyzed:	04/10/09
Basis:	dry	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	2,000 Y	13
Motor Oil C24-C36	1,100	63

Surrogate	%REC	Limits
o-Terphenyl	DO	53-133

Field ID:	MW-4-20	Moisture:	15%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	211030-002	Analyzed:	04/10/09
Basis:	dry	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	29 Y	1.2
Motor Oil C24-C36	8.5	5.9

Surrogate	%REC	Limits
o-Terphenyl	87	53-133

Field ID:	K-C-26	Moisture:	19%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	211030-003	Analyzed:	04/10/09
Basis:	dry	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	6.1 Y	1.2
Motor Oil C24-C36	6.3	6.2

Surrogate	%REC	Limits
o-Terphenyl	73	53-133

Field ID:	K-C-40	Moisture:	21%
Type:	SAMPLE	Diln Fac:	1.000
Lab ID:	211030-004	Analyzed:	04/10/09
Basis:	dry	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	4.3 Y	1.3
Motor Oil C24-C36	6.7	6.3

Surrogate	%REC	Limits
o-Terphenyl	83	53-133

Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/30/09
Units:	mg/Kg	Received:	03/30/09
Batch#:	149614	Prepared:	04/03/09

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC490374	Analyzed:	04/09/09
Basis:	as received	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	120	53-133

Y= Sample exhibits chromatographic pattern which does not resemble standard
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC490375	Batch#:	149614
Matrix:	Soil	Prepared:	04/03/09
Units:	mg/Kg	Analyzed:	04/05/09
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.72	49.20	99	52-128

Surrogate	%REC	Limits
o-Terphenyl	110	53-133

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	149614
MSS Lab ID:	211034-003	Sampled:	03/30/09
Matrix:	Soil	Received:	03/30/09
Units:	mg/Kg	Prepared:	04/03/09
Basis:	dry	Analyzed:	04/06/09
Diln Fac:	1.000		

Type: MS
Lab ID: QC490376
Moisture: 62%
Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	63.84	131.0	289.9	173 *	33-145

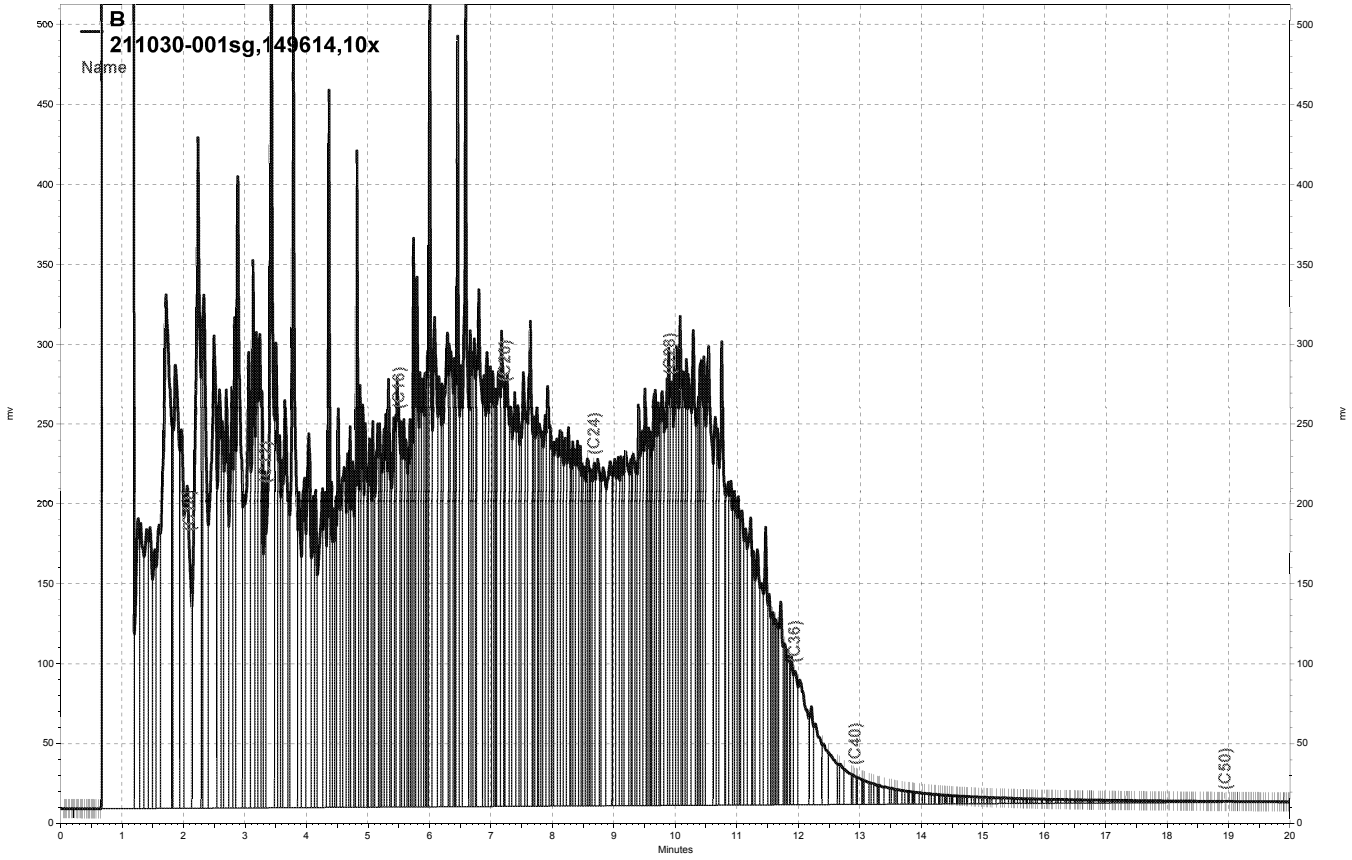
Surrogate	%REC	Limits
o-Terphenyl	126	53-133

Type: MSD
Lab ID: QC490377
Moisture: 62%
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	131.2	176.8	86	33-145	49 *	44

Surrogate	%REC	Limits
o-Terphenyl	114	53-133

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference



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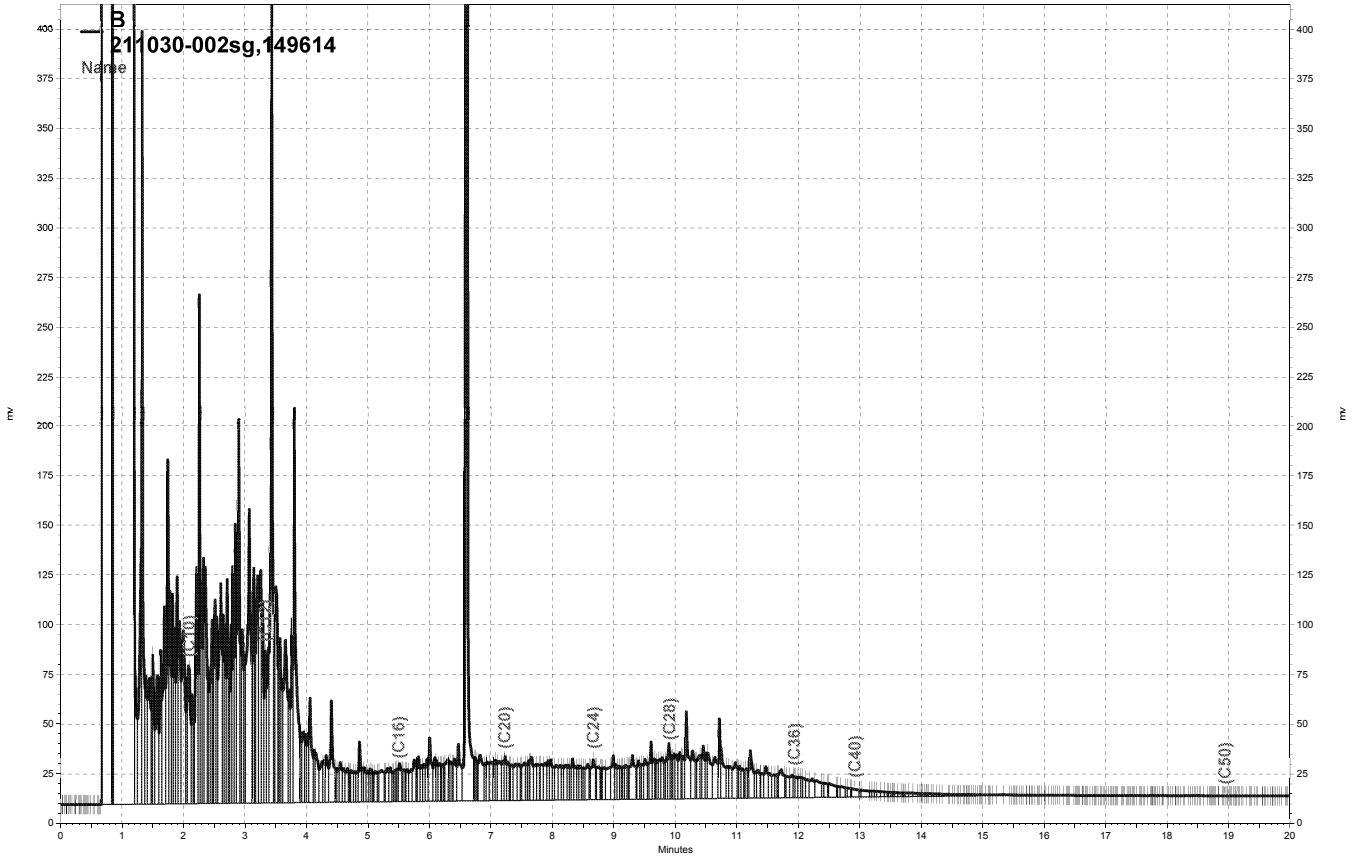

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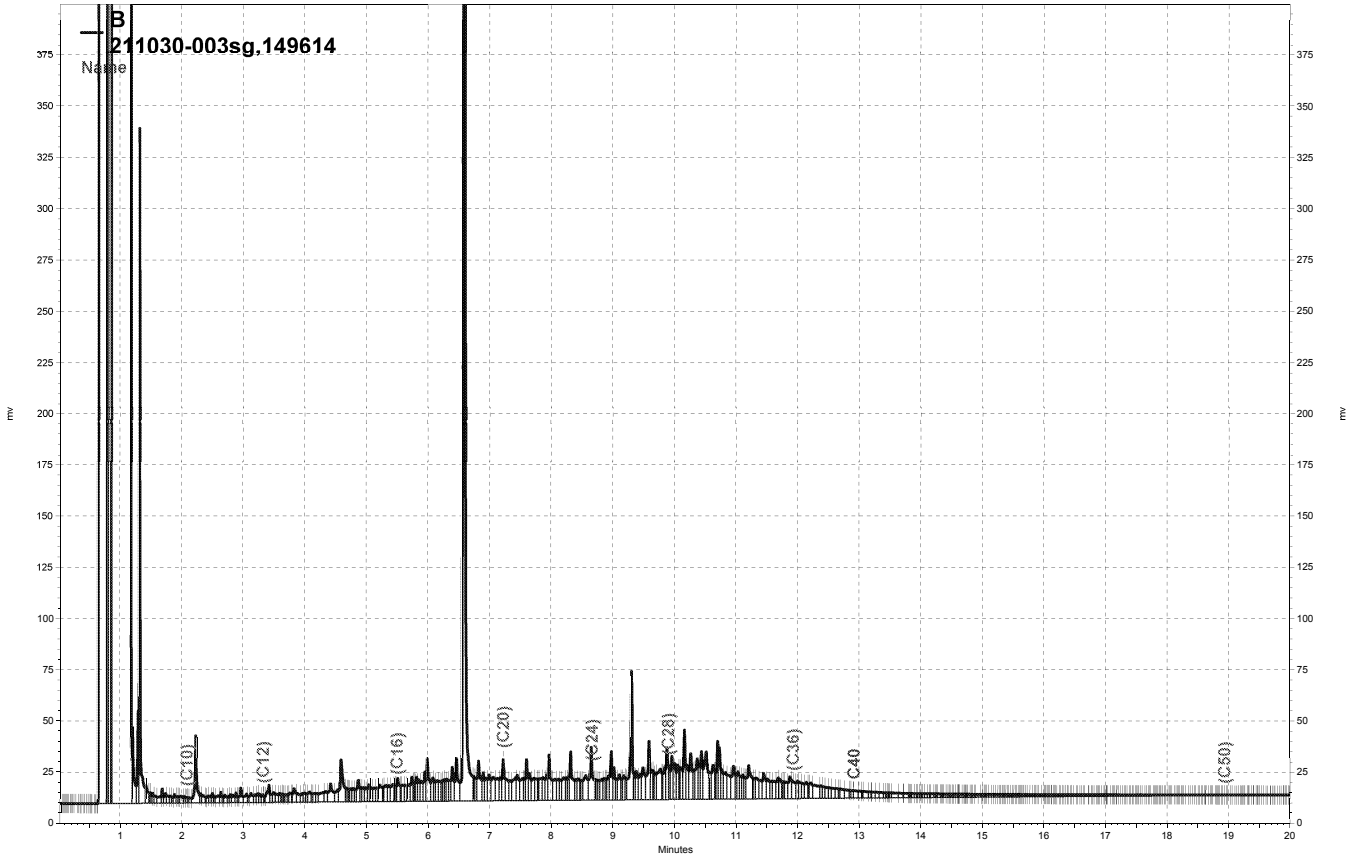

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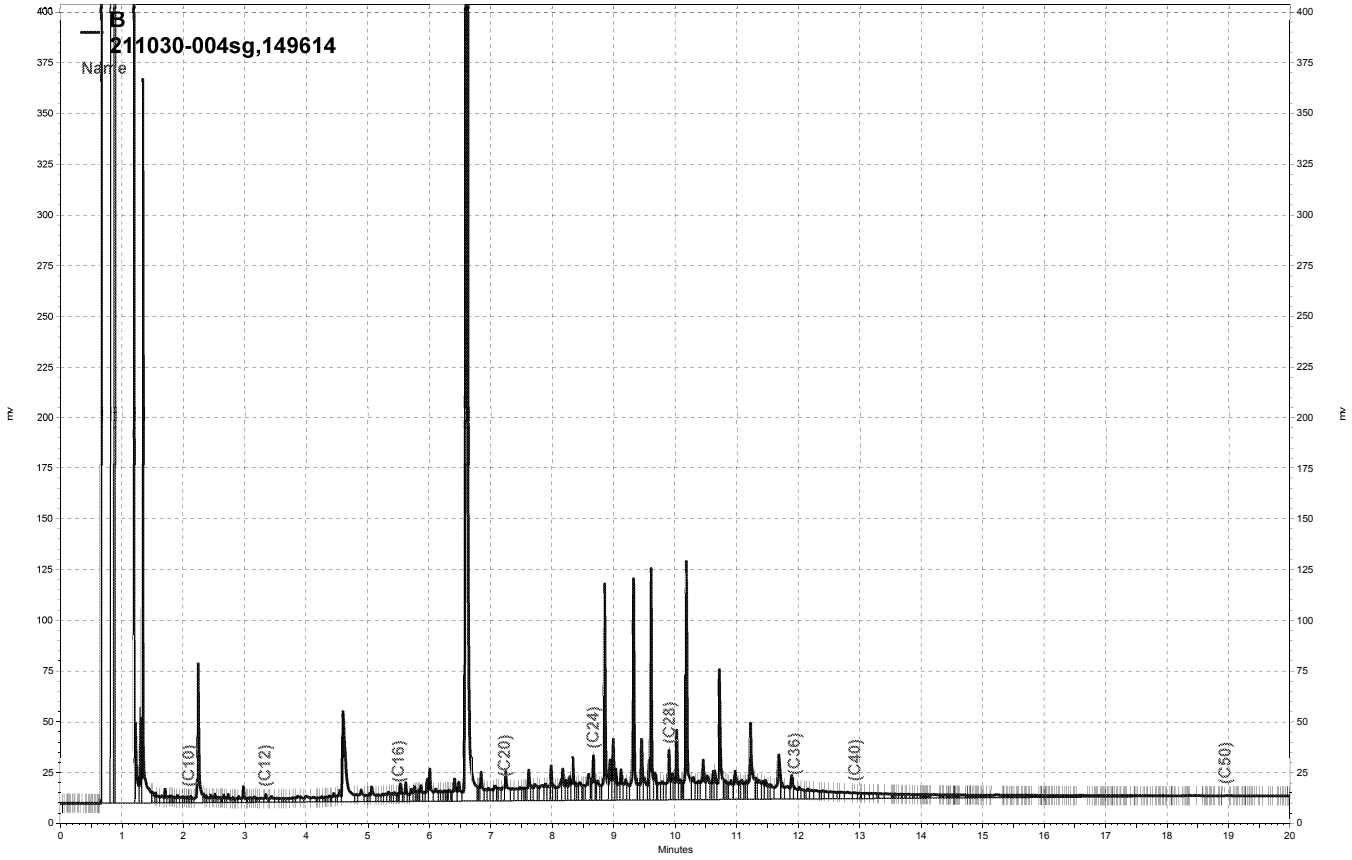

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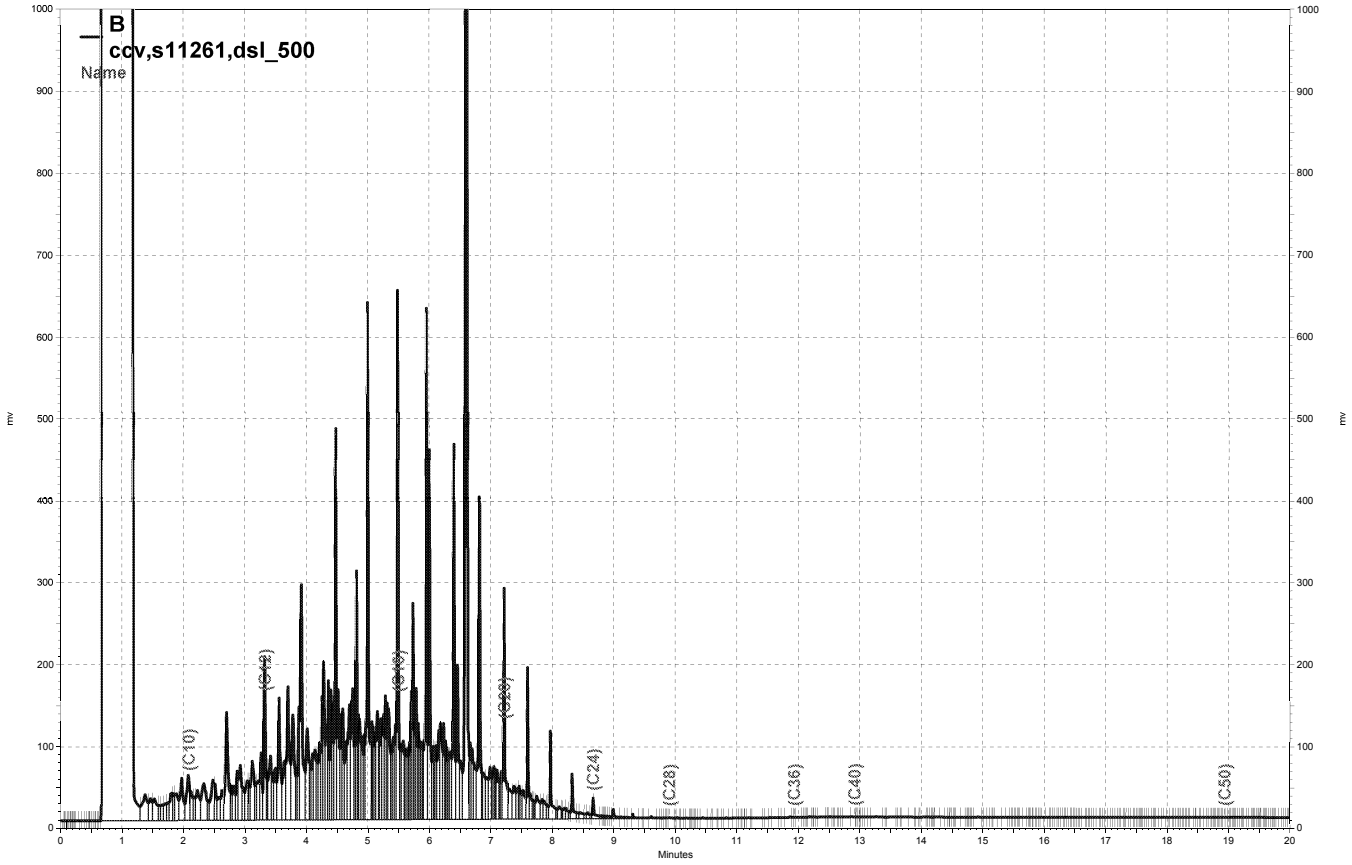

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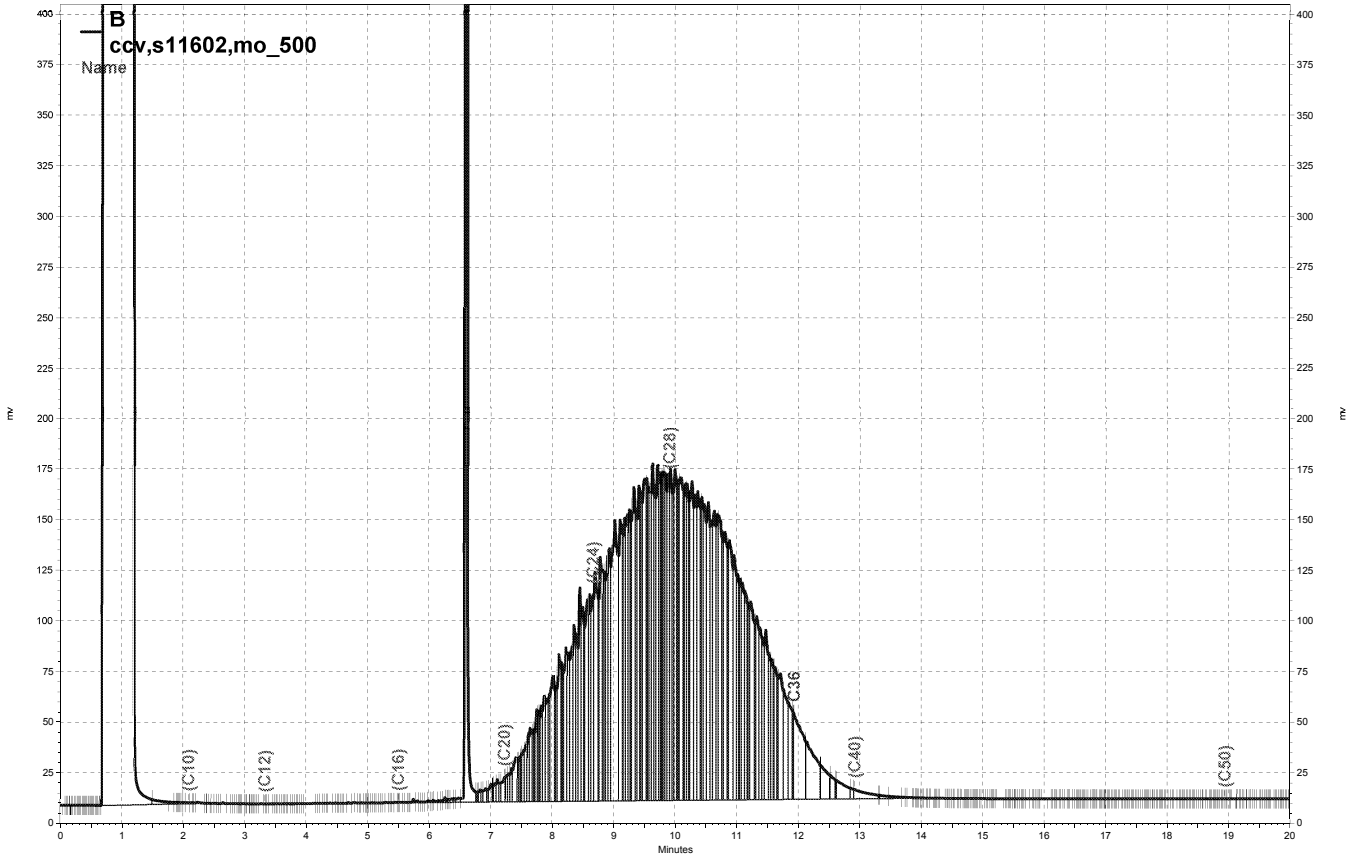

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Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-C-18.5	Diln Fac:	250.0
Lab ID:	211030-001	Batch#:	149761
Matrix:	Soil	Sampled:	03/30/09
Units:	ug/Kg	Received:	03/30/09
Basis:	dry	Analyzed:	04/08/09

Moisture: 21%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	32,000
MTBE	ND	1,600
Isopropyl Ether (DIPE)	ND	1,600
Ethyl tert-Butyl Ether (ETBE)	ND	1,600
1,2-Dichloroethane	ND	1,600
Benzene	ND	1,600
Methyl tert-Amyl Ether (TAME)	ND	1,600
Toluene	ND	1,600
1,2-Dibromoethane	ND	1,600
Ethylbenzene	ND	1,600
m,p-Xylenes	ND	1,600
o-Xylene	ND	1,600

Surrogate	%REC	Limits
Dibromofluoromethane	99	71-128
1,2-Dichloroethane-d4	98	69-135
Toluene-d8	102	80-120
Bromofluorobenzene	112	77-131
Trifluorotoluene (MeOH)	109	56-147

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	MW-4-20	Diln Fac:	9.091
Lab ID:	211030-002	Batch#:	149761
Matrix:	Soil	Sampled:	03/30/09
Units:	ug/Kg	Received:	03/30/09
Basis:	dry	Analyzed:	04/08/09

Moisture: 15%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	1,100
MTBE	ND	53
Isopropyl Ether (DIPE)	ND	53
Ethyl tert-Butyl Ether (ETBE)	ND	53
1,2-Dichloroethane	ND	53
Benzene	ND	53
Methyl tert-Amyl Ether (TAME)	ND	53
Toluene	ND	53
1,2-Dibromoethane	ND	53
Ethylbenzene	ND	53
m,p-Xylenes	ND	53
o-Xylene	ND	53

Surrogate	%REC	Limits
Dibromofluoromethane	95	71-128
1,2-Dichloroethane-d4	86	69-135
Toluene-d8	97	80-120
Bromofluorobenzene	109	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-C-26	Diln Fac:	0.9634
Lab ID:	211030-003	Batch#:	149761
Matrix:	Soil	Sampled:	03/30/09
Units:	ug/Kg	Received:	03/30/09
Basis:	dry	Analyzed:	04/08/09

Moisture: 19%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	120
MTBE	ND	5.9
Isopropyl Ether (DIPE)	ND	5.9
Ethyl tert-Butyl Ether (ETBE)	ND	5.9
1,2-Dichloroethane	ND	5.9
Benzene	ND	5.9
Methyl tert-Amyl Ether (TAME)	ND	5.9
Toluene	ND	5.9
1,2-Dibromoethane	ND	5.9
Ethylbenzene	ND	5.9
m,p-Xylenes	ND	5.9
o-Xylene	ND	5.9

Surrogate	%REC	Limits
Dibromofluoromethane	105	71-128
1,2-Dichloroethane-d4	99	69-135
Toluene-d8	97	80-120
Bromofluorobenzene	102	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-C-40	Diln Fac:	0.9363
Lab ID:	211030-004	Batch#:	149761
Matrix:	Soil	Sampled:	03/30/09
Units:	ug/Kg	Received:	03/30/09
Basis:	dry	Analyzed:	04/08/09

Moisture: 21%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	120
MTBE	ND	5.9
Isopropyl Ether (DIPE)	ND	5.9
Ethyl tert-Butyl Ether (ETBE)	ND	5.9
1,2-Dichloroethane	ND	5.9
Benzene	ND	5.9
Methyl tert-Amyl Ether (TAME)	ND	5.9
Toluene	ND	5.9
1,2-Dibromoethane	ND	5.9
Ethylbenzene	ND	5.9
m,p-Xylenes	ND	5.9
o-Xylene	ND	5.9

Surrogate	%REC	Limits
Dibromofluoromethane	110	71-128
1,2-Dichloroethane-d4	102	69-135
Toluene-d8	97	80-120
Bromofluorobenzene	102	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC490983	Diln Fac:	1.000
Matrix:	Soil	Batch#:	149761
Units:	ug/Kg	Analyzed:	04/08/09

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	105	71-128
1,2-Dichloroethane-d4	97	69-135
Toluene-d8	96	80-120
Bromofluorobenzene	103	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Matrix:	Soil	Dil'n Fac:	1.000
Units:	ug/Kg	Batch#:	149761
Basis:	as received	Analyzed:	04/08/09

Type: BS Lab ID: QC490984

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	98.49	79	56-140
MTBE	25.00	23.22	93	66-129
Isopropyl Ether (DIPE)	25.00	26.71	107	65-131
Ethyl tert-Butyl Ether (ETBE)	25.00	26.18	105	66-132
1,2-Dichloroethane	25.00	24.83	99	70-128
Benzene	25.00	26.97	108	80-125
Methyl tert-Amyl Ether (TAME)	25.00	26.66	107	75-128
Toluene	25.00	27.37	109	80-126
1,2-Dibromoethane	25.00	25.20	101	80-122
Ethylbenzene	25.00	28.10	112	80-127
m,p-Xylenes	50.00	57.91	116	80-125
o-Xylene	25.00	28.23	113	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	97	71-128
1,2-Dichloroethane-d4	94	69-135
Toluene-d8	99	80-120
Bromofluorobenzene	100	77-131

Type: BSD Lab ID: QC490985

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	95.49	76	56-140	3	26
MTBE	25.00	23.26	93	66-129	0	20
Isopropyl Ether (DIPE)	25.00	26.68	107	65-131	0	20
Ethyl tert-Butyl Ether (ETBE)	25.00	26.79	107	66-132	2	20
1,2-Dichloroethane	25.00	24.94	100	70-128	0	20
Benzene	25.00	26.78	107	80-125	1	20
Methyl tert-Amyl Ether (TAME)	25.00	26.98	108	75-128	1	20
Toluene	25.00	27.15	109	80-126	1	20
1,2-Dibromoethane	25.00	25.72	103	80-122	2	20
Ethylbenzene	25.00	26.91	108	80-127	4	20
m,p-Xylenes	50.00	54.82	110	80-125	5	20
o-Xylene	25.00	26.80	107	80-122	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	71-128
1,2-Dichloroethane-d4	96	69-135
Toluene-d8	101	80-120
Bromofluorobenzene	102	77-131

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Moisture

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	METHOD
Project#:	73943	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Batch#:	149448
Matrix:	Soil	Sampled:	03/30/09
Units:	%	Received:	03/30/09
Diln Fac:	1.000	Analyzed:	03/31/09

Field ID	Lab ID	Result	RL
K-C-18.5	211030-001	21	1
MW-4-20	211030-002	15	1
K-C-26	211030-003	19	1
K-C-40	211030-004	21	1

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Moisture

Lab #:	211030	Location:	Former Ambassador Laundry
Client:	Kleinfelder	Prep:	METHOD
Project#:	73943	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	149448
MSS Lab ID:	211032-002	Sampled:	03/30/09
Lab ID:	QC489678	Received:	03/30/09
Matrix:	Soil	Analyzed:	03/31/09

MSS Result	Result	RL	RPD	Lim
4.767	6.842	1.000	36 *	15

*= Value outside of QC limits; see narrative
RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	149591
Units:	mg/Kg	Received:	03/31/09
Diln Fac:	1.000	Analyzed:	04/03/09

Field ID:	K-D-19.5	Basis:	dry
Type:	SAMPLE	Moisture:	23%
Lab ID:	211056-001	Sampled:	03/30/09

Analyte	Result	RL
Gasoline C7-C12	13 Y	1.3
Stoddard Solvent C7-C12	10 Y	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	184 *	54-152
Bromofluorobenzene (FID)	284 *	50-152

Field ID:	K-D-22.5	Basis:	dry
Type:	SAMPLE	Moisture:	21%
Lab ID:	211056-002	Sampled:	03/30/09

Analyte	Result	RL
Gasoline C7-C12	4.8 Y	1.3
Stoddard Solvent C7-C12	3.8 Y	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	84	54-152
Bromofluorobenzene (FID)	124	50-152

Field ID:	K-D-43	Basis:	dry
Type:	SAMPLE	Moisture:	23%
Lab ID:	211056-003	Sampled:	03/30/09

Analyte	Result	RL
Gasoline C7-C12	ND	1.3
Stoddard Solvent C7-C12	ND	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	79	54-152
Bromofluorobenzene (FID)	82	50-152

Field ID:	MW-5-17	Basis:	dry
Type:	SAMPLE	Moisture:	18%
Lab ID:	211056-004	Sampled:	03/31/09

Analyte	Result	RL
Gasoline C7-C12	8.5 Y	1.3
Stoddard Solvent C7-C12	6.7 Y	1.3

Surrogate	%REC	Limits
Trifluorotoluene (FID)	92	54-152
Bromofluorobenzene (FID)	223 *	50-152

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	149591
Units:	mg/Kg	Received:	03/31/09
Diln Fac:	1.000	Analyzed:	04/03/09

Type: BLANK
Lab ID: QC490260

Basis: as received

Analyte	Result	RL
Gasoline C7-C12	ND	1.0
Stoddard Solvent C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	79	54-152
Bromofluorobenzene (FID)	86	50-152

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC490261	Diln Fac:	1.000
Matrix:	Soil	Batch#:	149591
Units:	mg/Kg	Analyzed:	04/03/09

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	3.000	2.662	89	77-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	54-152
Bromofluorobenzene (FID)	103	50-152

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8015B
Field ID:	MW-5-17	Diln Fac:	1.000
MSS Lab ID:	211056-004	Batch#:	149591
Matrix:	Soil	Sampled:	03/31/09
Units:	mg/Kg	Received:	03/31/09
Basis:	dry	Analyzed:	04/03/09

Type: MS Moisture: 18%
Lab ID: QC490262

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	8.535	11.73	13.19	40	31-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	54-152
Bromofluorobenzene (FID)	167 *	50-152

Type: MSD Moisture: 18%
Lab ID: QC490263

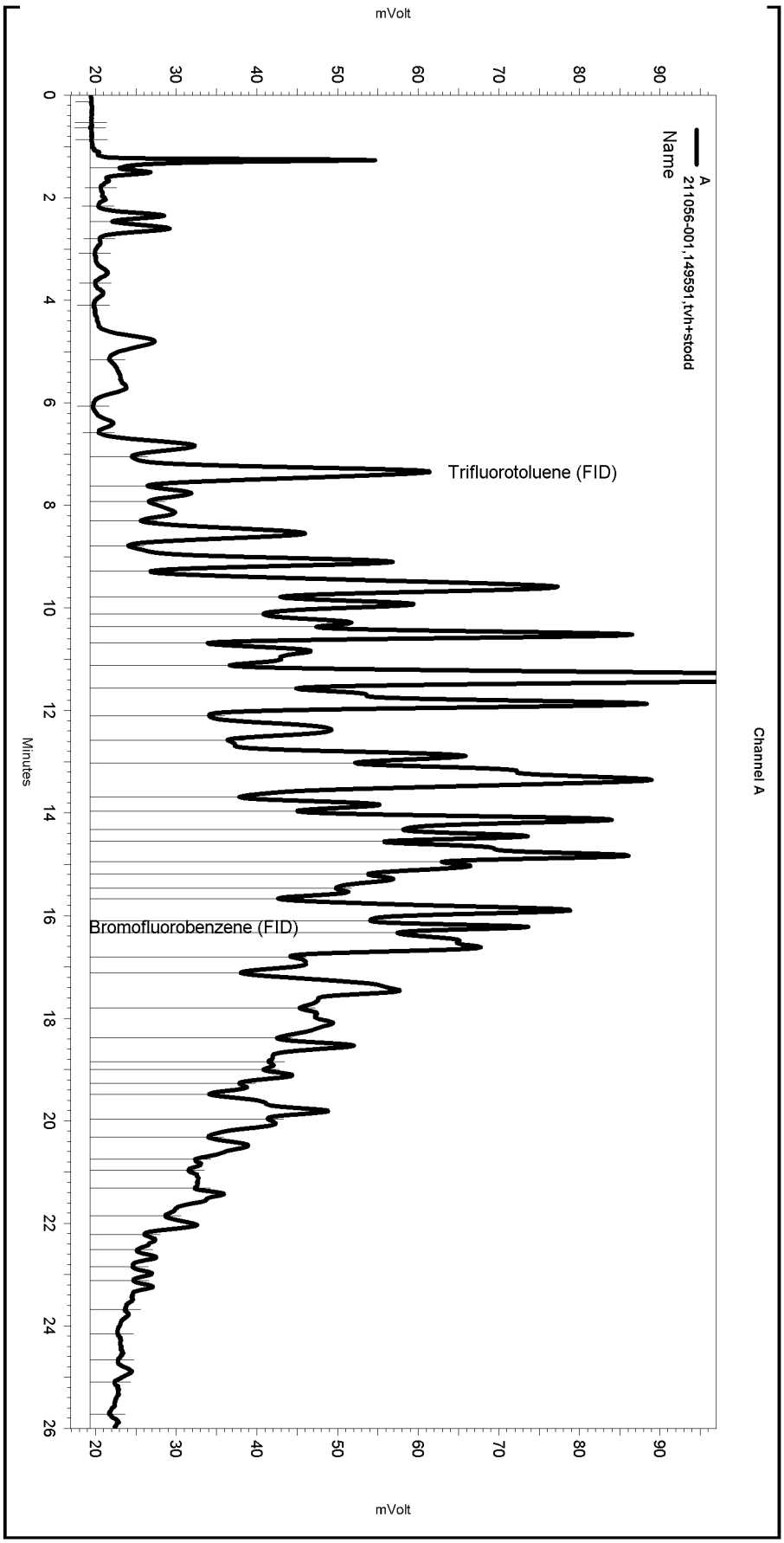
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	18.67	19.79	60	31-120	11	34

Surrogate	%REC	Limits
Trifluorotoluene (FID)	135	54-152
Bromofluorobenzene (FID)	285 *	50-152

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\093.seq**
Sample Name: **211056-001,149591,tvh+stodd**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\093_013**
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe083.met

Software Version 3.1.7
Run Date: 4/3/2009 4:03:32 PM
Analysis Date: 4/5/2009 12:37:11 PM
Sample Amount: 0.98 Multiplier: 0.98
Vial & pH or Core ID: {Data Description}



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

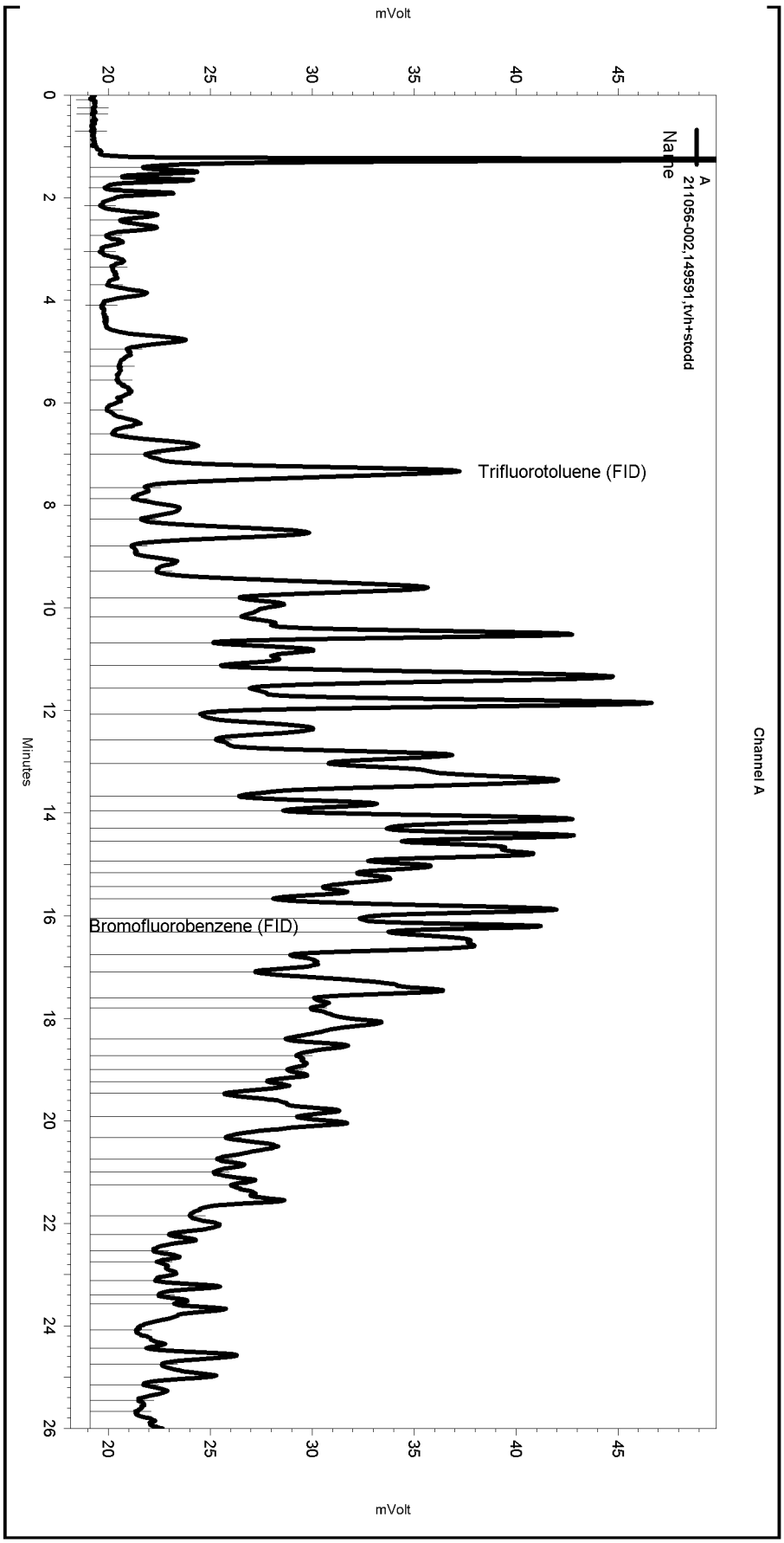
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\093_013

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\093.seq**
Sample Name: **211056-002,149591,tvh+stodd**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\093_008**
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe083.met

Software Version 3.1.7
Run Date: 4/3/2009 12:55:22 PM
Analysis Date: 4/5/2009 12:28:31 PM
Sample Amount: 0.98 Multiplier: 0.98
Vial & pH or Core ID: a



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

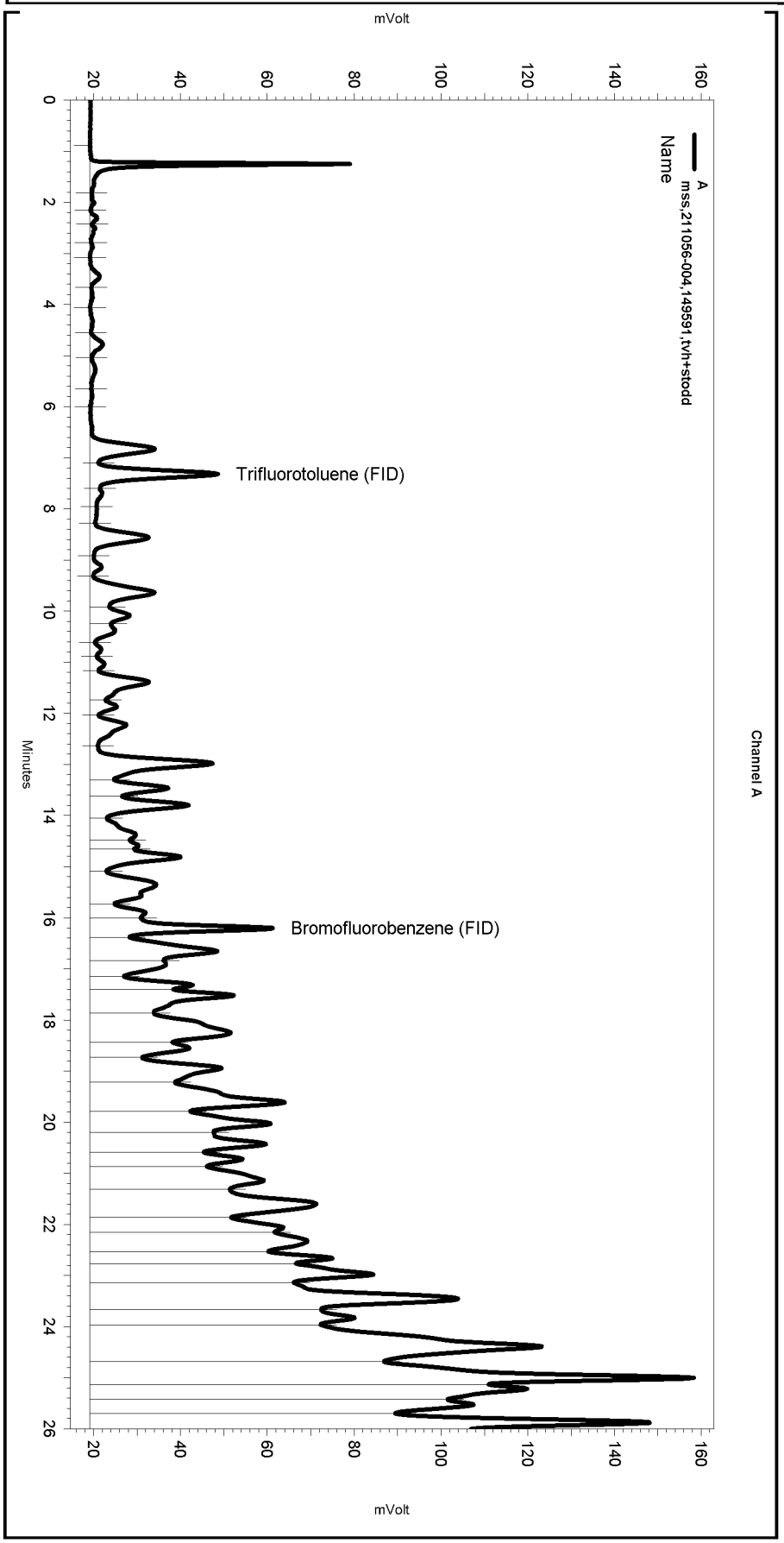
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\093_008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\093.seq**
Sample Name: **mss,211056-004,149591,tvh+stodd**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\093_010**
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe083.met

Software Version 3.1.7
Run Date: 4/3/2009 2:10:38 PM
Analysis Date: 4/5/2009 12:34:37 PM
Sample Amount: 0.92 Multiplier: 0.92
Vial & pH or Core ID: a



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

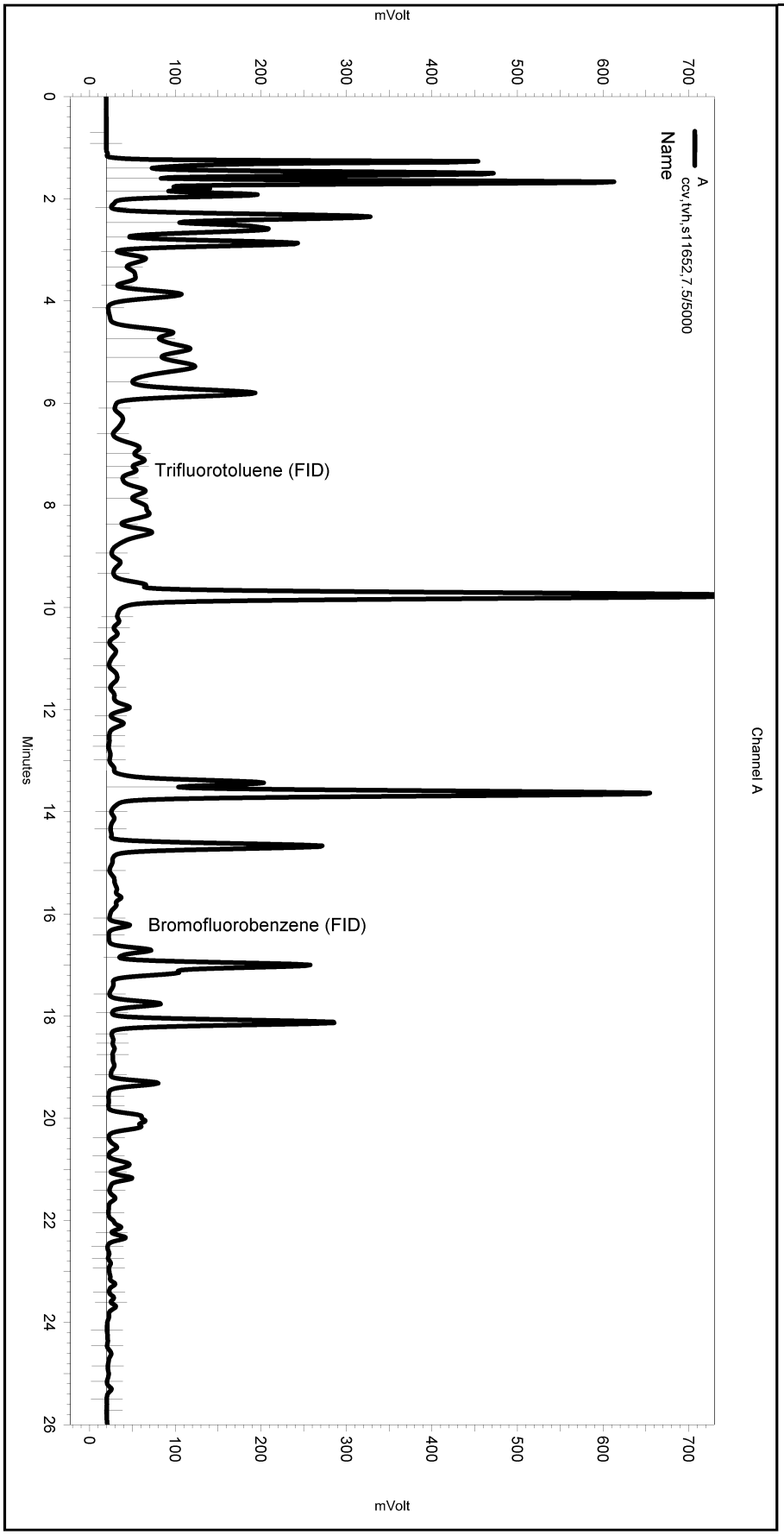
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\093_010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\093.seq**
Sample Name: **ccv,tvh,s11652,7.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\093_002**
Instrument: GC19 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe083.met

Software Version 3.1.7
Run Date: 4/3/2009 8:32:53 AM
Analysis Date: 4/3/2009 9:02:01 AM
Sample Amount: 1 Multiplier: 1
Vial & pH or Core ID: {Data Description}



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

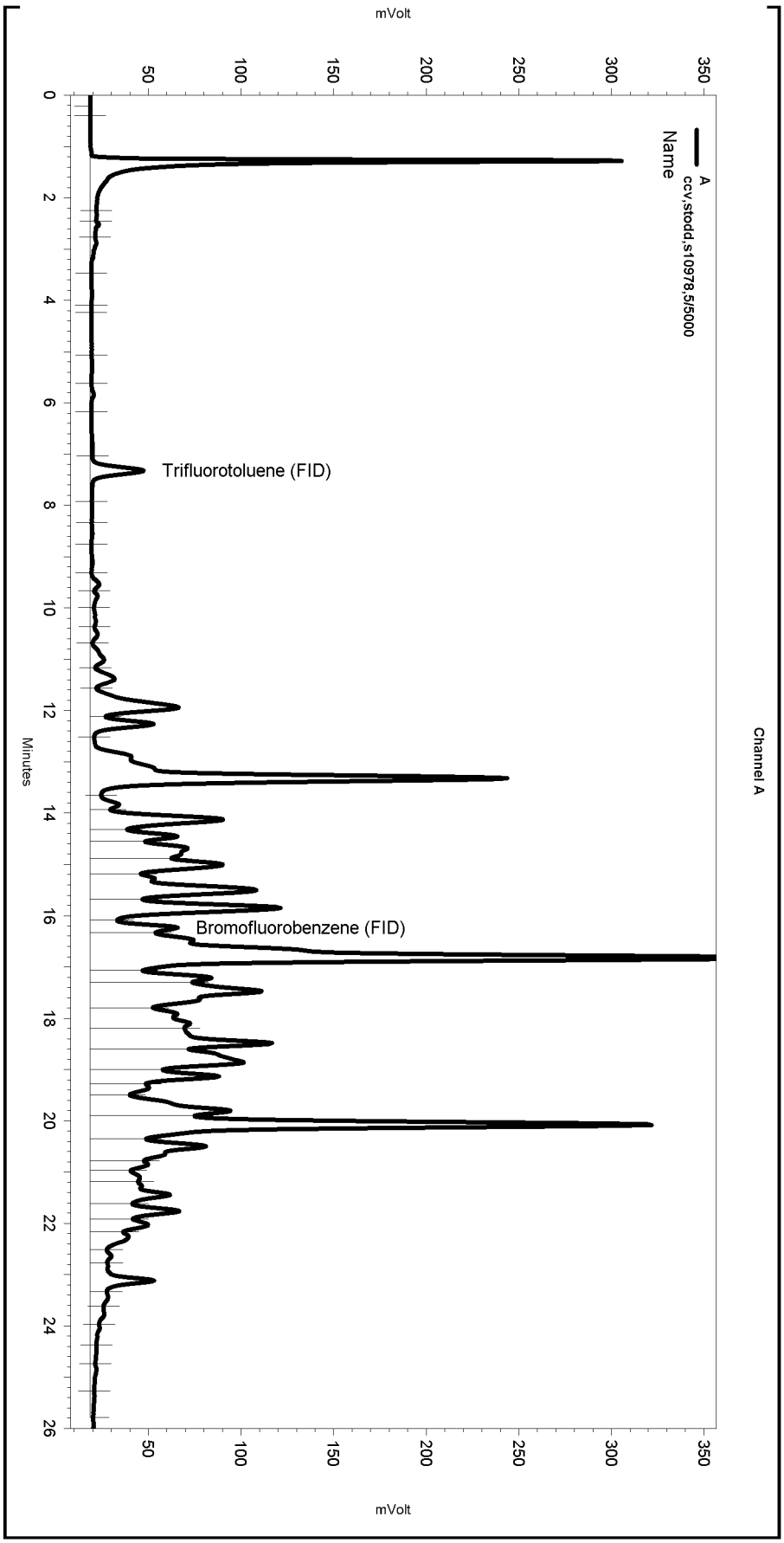
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10050\093_002_E924.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\093.seq**
Sample Name: **ccv,stodd,s10978,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\093_003**
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe083.met

Software Version 3.1.7
Run Date: 4/3/2009 9:10:34 AM
Analysis Date: 4/5/2009 12:21:46 PM
Sample Amount: 1 Multiplier: 1
Vial & pH or Core ID: {Data Description}



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\093_003

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	149633
Units:	mg/Kg	Received:	03/31/09
Diln Fac:	1.000	Prepared:	04/05/09

Field ID:	K-D-19.5	Moisture:	23%
Type:	SAMPLE	Sampled:	03/30/09
Lab ID:	211056-001	Analyzed:	04/13/09
Basis:	dry	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	64	1.3
Motor Oil C24-C36	38	6.5

Surrogate	%REC	Limits
o-Terphenyl	103	53-133

Field ID:	K-D-22.5	Moisture:	21%
Type:	SAMPLE	Sampled:	03/30/09
Lab ID:	211056-002	Analyzed:	04/11/09
Basis:	dry	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	130	1.3
Motor Oil C24-C36	62	6.3

Surrogate	%REC	Limits
o-Terphenyl	99	53-133

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	149633
Units:	mg/Kg	Received:	03/31/09
Diln Fac:	1.000	Prepared:	04/05/09

Field ID:	K-D-43	Moisture:	23%
Type:	SAMPLE	Sampled:	03/30/09
Lab ID:	211056-003	Analyzed:	04/11/09
Basis:	dry	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.3
Motor Oil C24-C36	ND	6.5

Surrogate	%REC	Limits
o-Terphenyl	84	53-133

Field ID:	MW-5-17	Moisture:	18%
Type:	SAMPLE	Sampled:	03/31/09
Lab ID:	211056-004	Analyzed:	04/11/09
Basis:	dry	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	380	1.2
Motor Oil C24-C36	290	6.1

Surrogate	%REC	Limits
o-Terphenyl	106	53-133

Type:	BLANK	Analyzed:	04/07/09
Lab ID:	QC490449	Cleanup Method:	EPA 3630C
Basis:	as received		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	90	53-133

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC490450	Batch#:	149633
Matrix:	Soil	Prepared:	04/05/09
Units:	mg/Kg	Analyzed:	04/07/09
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.58	45.69	92	52-128

Surrogate	%REC	Limits
o-Terphenyl	101	53-133

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	SHAKER TABLE
Project#:	73943	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	149633
MSS Lab ID:	211010-024	Sampled:	03/26/09
Matrix:	Soil	Received:	03/27/09
Units:	mg/Kg	Prepared:	04/05/09
Basis:	dry	Analyzed:	04/10/09
Diln Fac:	1.000		

Type: MS Moisture: 10%
Lab ID: QC490451

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.3402	55.30	43.65	78	33-145

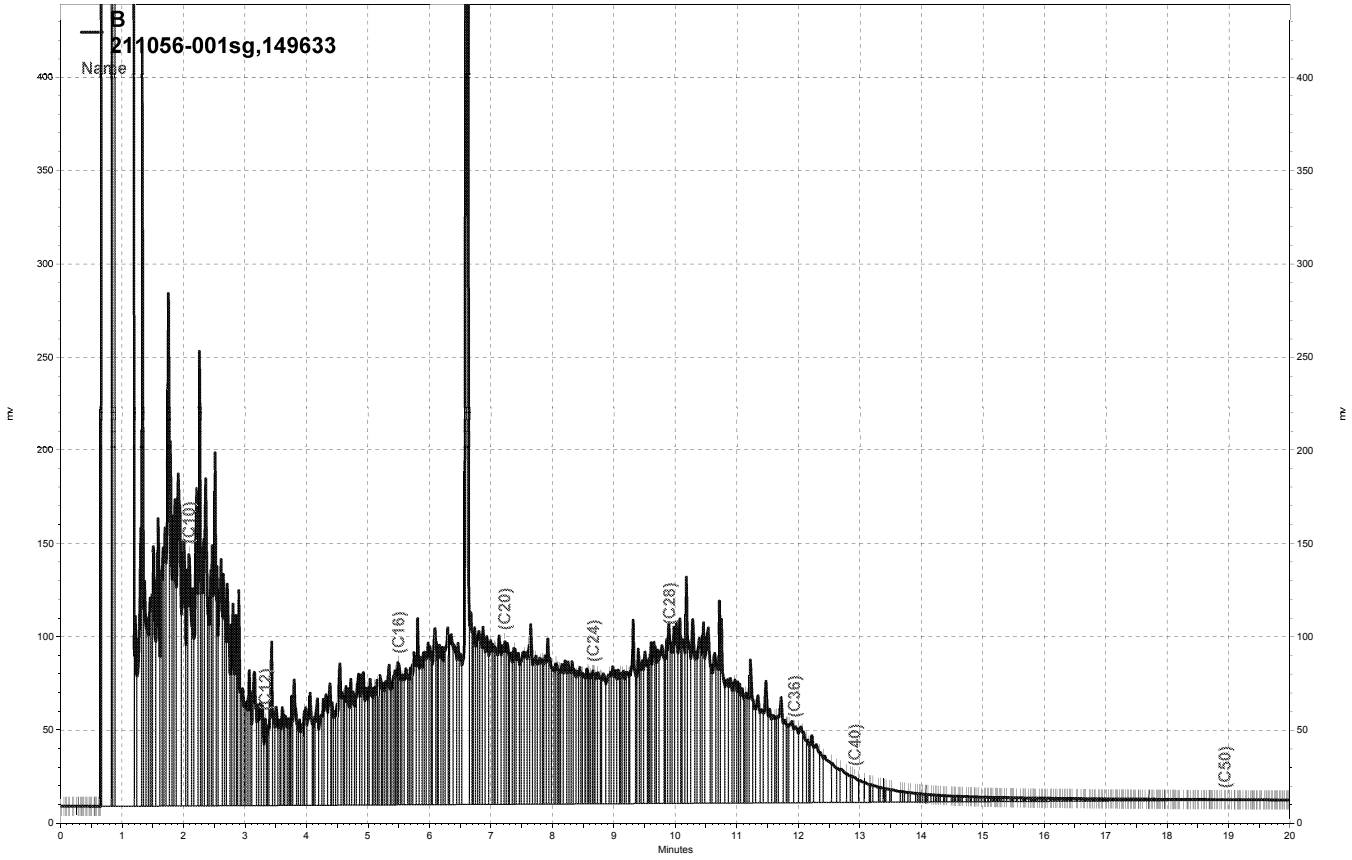
Surrogate	%REC	Limits
o-Terphenyl	84	53-133

Type: MSD Moisture: 10%
Lab ID: QC490452

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	55.09	50.59	91	33-145	15	44

Surrogate	%REC	Limits
o-Terphenyl	99	53-133

RPD= Relative Percent Difference



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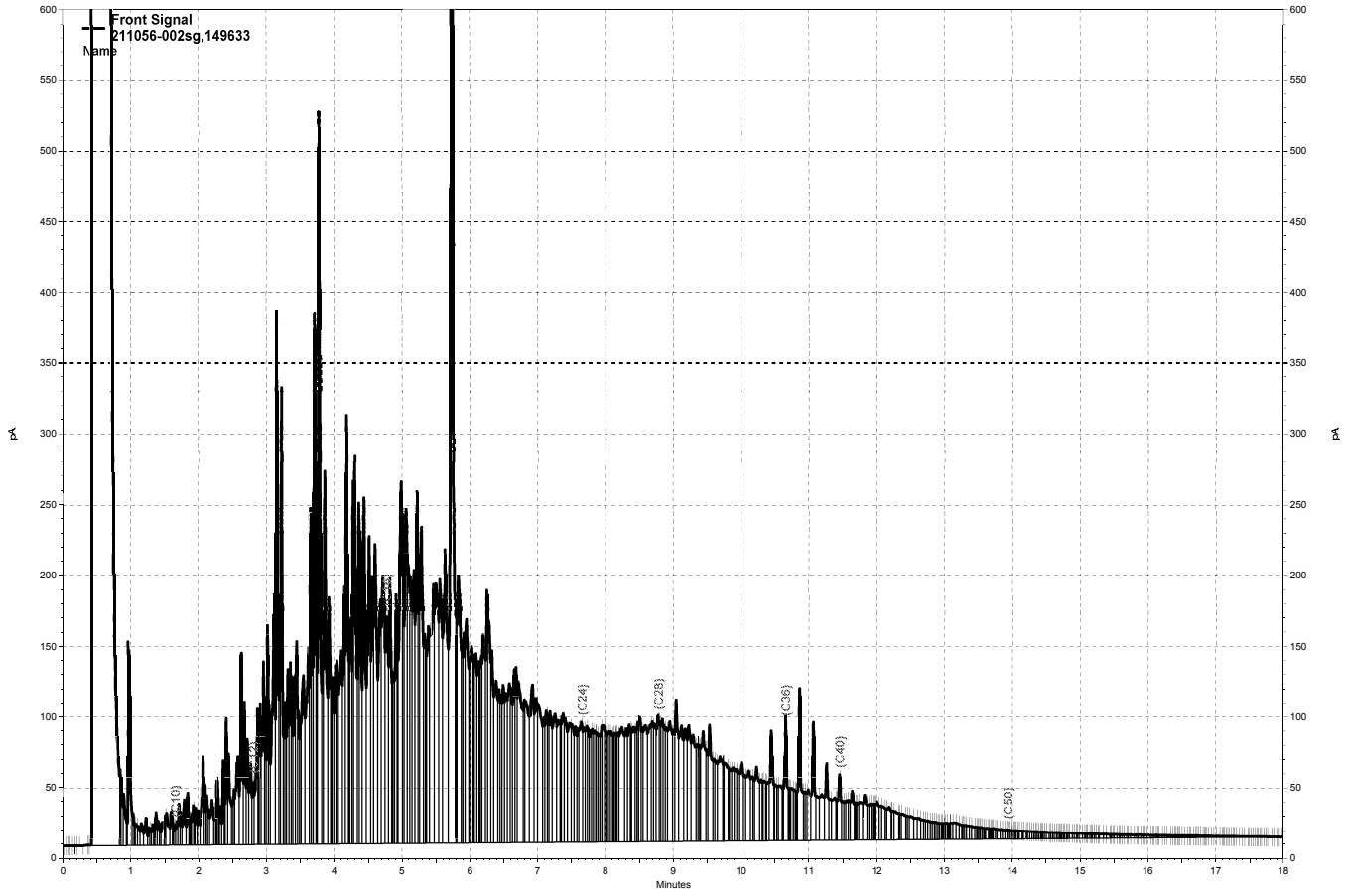

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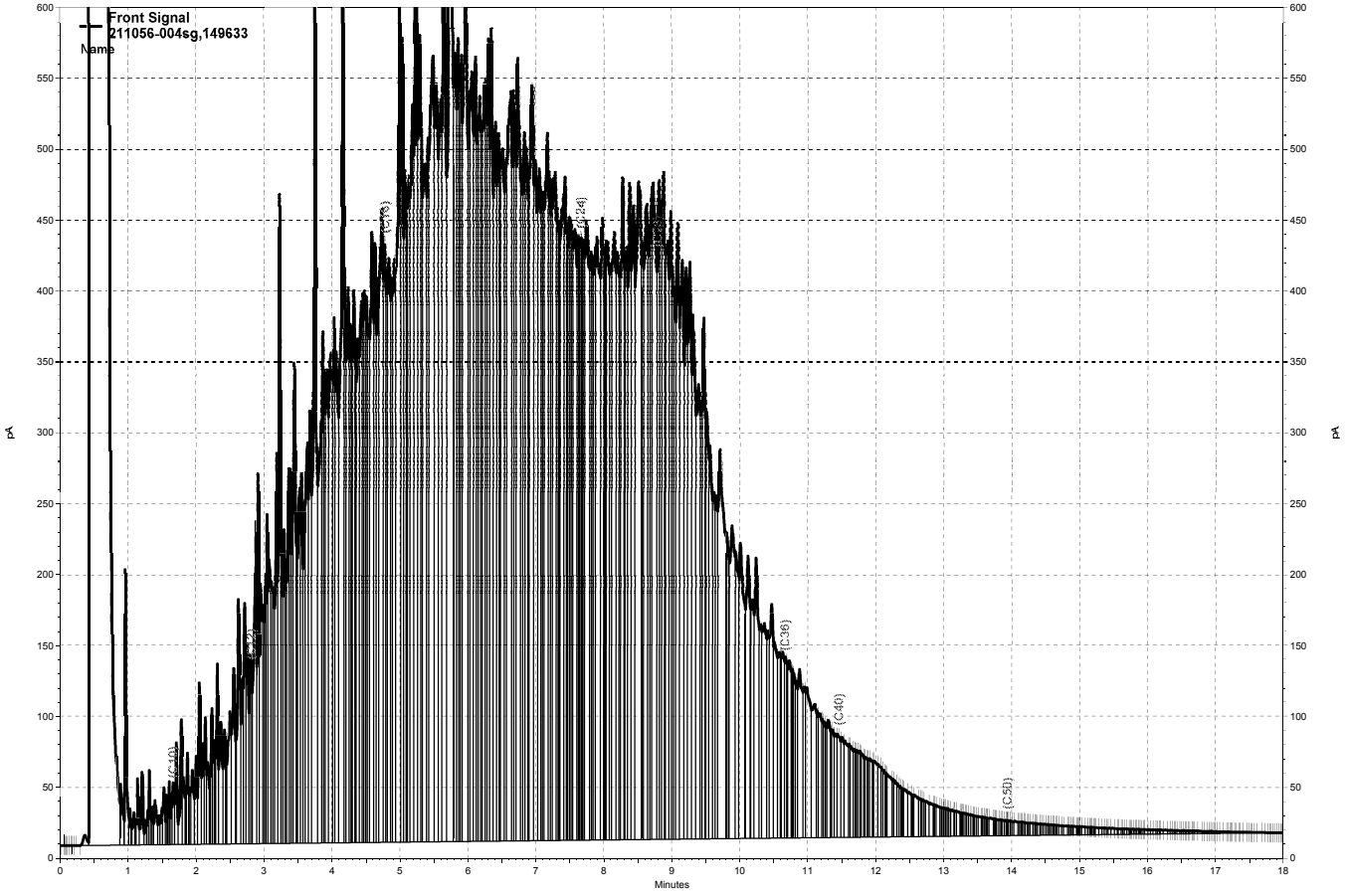

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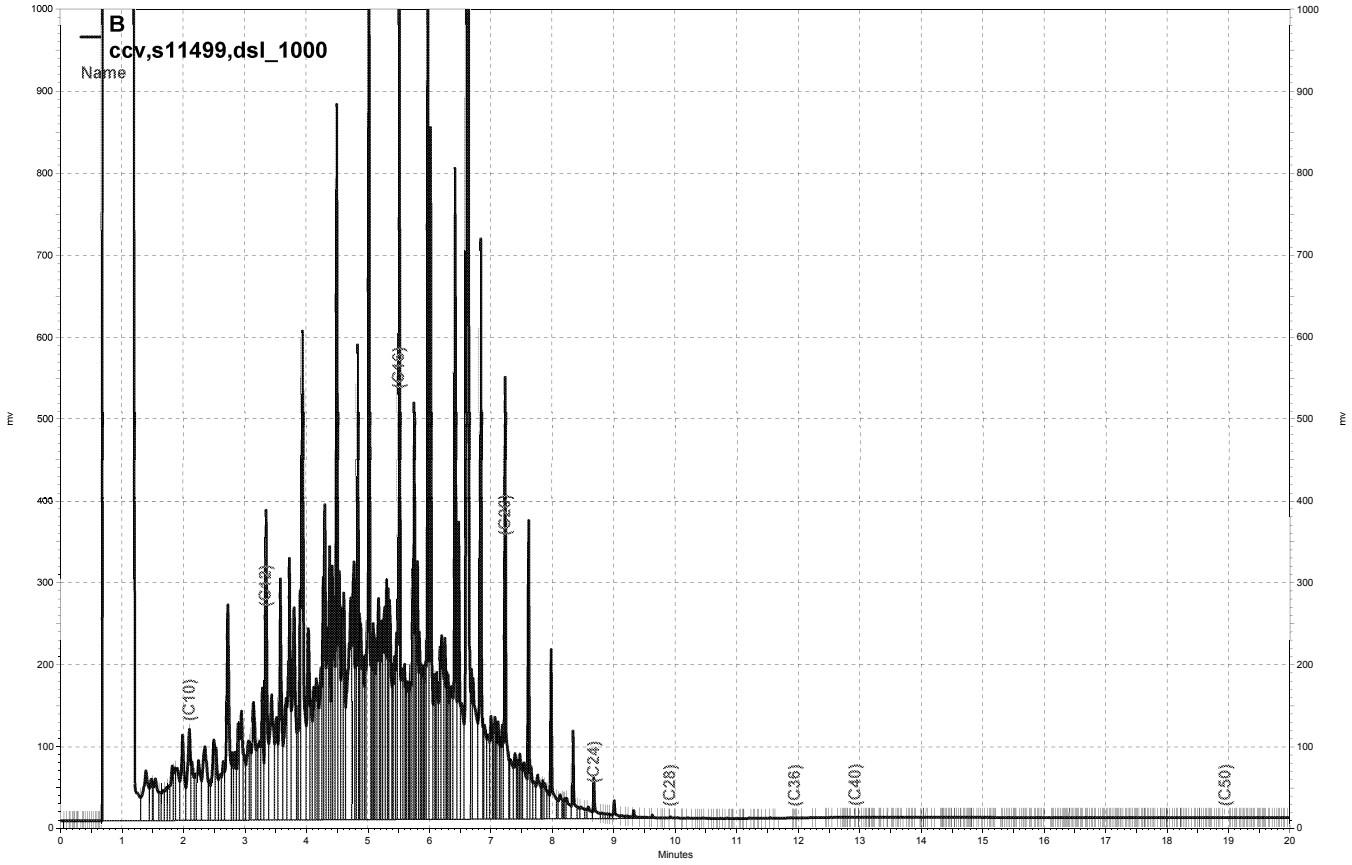

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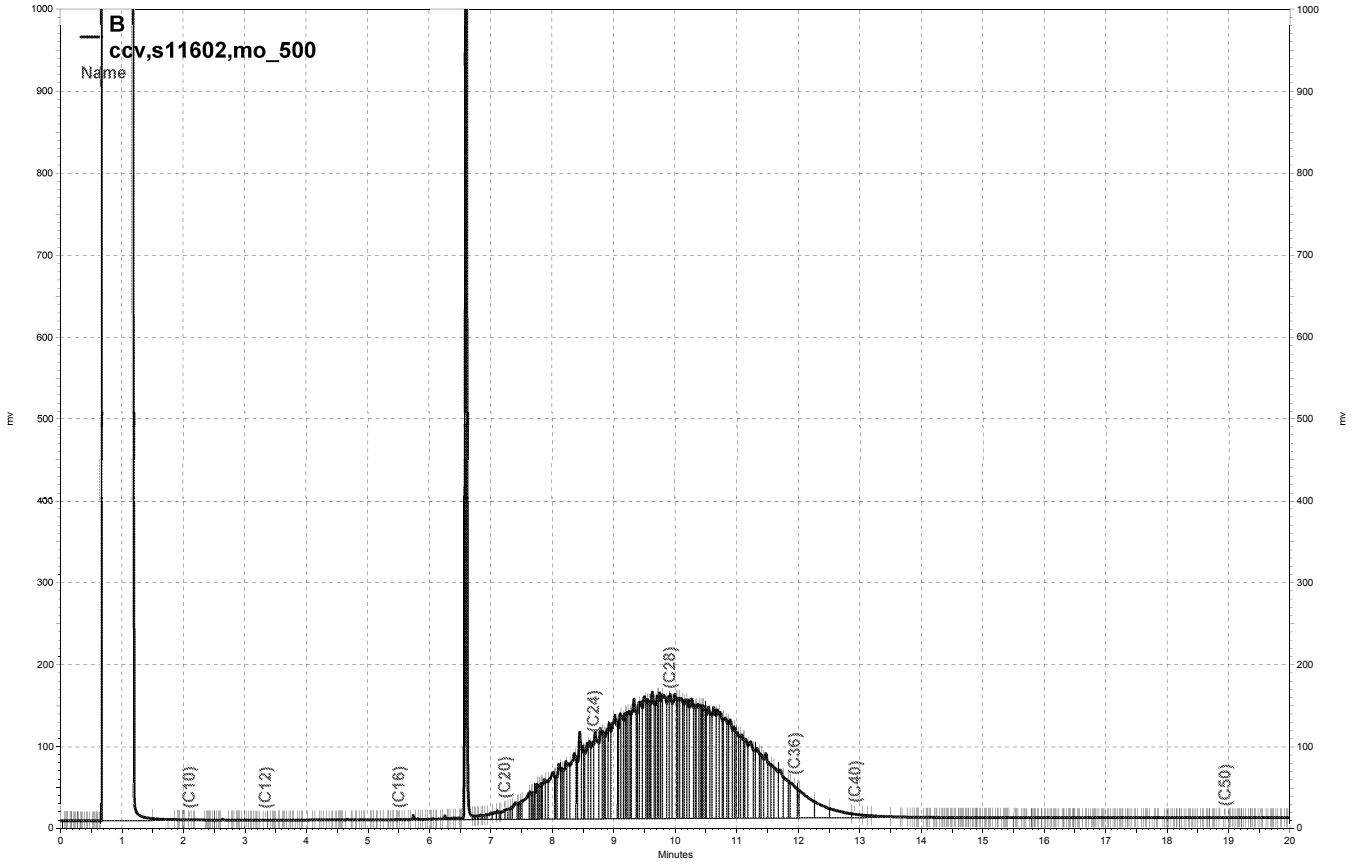

\\Lims\gdrive\ezchrom\Projects\GC15B\Data\096b022, B

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-D-19.5	Diln Fac:	0.9524
Lab ID:	211056-001	Batch#:	149677
Matrix:	Soil	Sampled:	03/30/09
Units:	ug/Kg	Received:	03/31/09
Basis:	dry	Analyzed:	04/07/09

Moisture: 23%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	120
MTBE	ND	6.2
Isopropyl Ether (DIPE)	ND	6.2
Ethyl tert-Butyl Ether (ETBE)	ND	6.2
1,2-Dichloroethane	ND	6.2
Benzene	ND	6.2
Methyl tert-Amyl Ether (TAME)	ND	6.2
Toluene	ND	6.2
1,2-Dibromoethane	ND	6.2
Ethylbenzene	ND	6.2
m,p-Xylenes	ND	6.2
o-Xylene	ND	6.2

Surrogate	%REC	Limits
Dibromofluoromethane	97	71-128
1,2-Dichloroethane-d4	94	69-135
Toluene-d8	107	80-120
Bromofluorobenzene	126	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-D-22.5	Diln Fac:	0.9843
Lab ID:	211056-002	Batch#:	149677
Matrix:	Soil	Sampled:	03/30/09
Units:	ug/Kg	Received:	03/31/09
Basis:	dry	Analyzed:	04/07/09

Moisture: 21%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	120
MTBE	ND	6.2
Isopropyl Ether (DIPE)	ND	6.2
Ethyl tert-Butyl Ether (ETBE)	ND	6.2
1,2-Dichloroethane	ND	6.2
Benzene	ND	6.2
Methyl tert-Amyl Ether (TAME)	ND	6.2
Toluene	ND	6.2
1,2-Dibromoethane	ND	6.2
Ethylbenzene	ND	6.2
m,p-Xylenes	ND	6.2
o-Xylene	ND	6.2

Surrogate	%REC	Limits
Dibromofluoromethane	91	71-128
1,2-Dichloroethane-d4	70	69-135
Toluene-d8	94	80-120
Bromofluorobenzene	121	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	K-D-43	Diln Fac:	0.9276
Lab ID:	211056-003	Batch#:	149646
Matrix:	Soil	Sampled:	03/30/09
Units:	ug/Kg	Received:	03/31/09
Basis:	dry	Analyzed:	04/06/09

Moisture: 23%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	120
MTBE	ND	6.0
Isopropyl Ether (DIPE)	ND	6.0
Ethyl tert-Butyl Ether (ETBE)	ND	6.0
1,2-Dichloroethane	ND	6.0
Benzene	ND	6.0
Methyl tert-Amyl Ether (TAME)	ND	6.0
Toluene	ND	6.0
1,2-Dibromoethane	ND	6.0
Ethylbenzene	ND	6.0
m,p-Xylenes	ND	6.0
o-Xylene	ND	6.0

Surrogate	%REC	Limits
Dibromofluoromethane	90	71-128
1,2-Dichloroethane-d4	111	69-135
Toluene-d8	104	80-120
Bromofluorobenzene	90	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	MW-5-17	Diln Fac:	0.9901
Lab ID:	211056-004	Batch#:	149646
Matrix:	Soil	Sampled:	03/31/09
Units:	ug/Kg	Received:	03/31/09
Basis:	dry	Analyzed:	04/06/09

Moisture: 18%

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	120
MTBE	ND	6.0
Isopropyl Ether (DIPE)	ND	6.0
Ethyl tert-Butyl Ether (ETBE)	ND	6.0
1,2-Dichloroethane	ND	6.0
Benzene	ND	6.0
Methyl tert-Amyl Ether (TAME)	ND	6.0
Toluene	ND	6.0
1,2-Dibromoethane	ND	6.0
Ethylbenzene	ND	6.0
m,p-Xylenes	ND	6.0
o-Xylene	ND	6.0

Surrogate	%REC	Limits
Dibromofluoromethane	84	71-128
1,2-Dichloroethane-d4	97	69-135
Toluene-d8	98	80-120
Bromofluorobenzene	108	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC490503	Diln Fac:	1.000
Matrix:	Soil	Batch#:	149646
Units:	ug/Kg	Analyzed:	04/06/09

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	87	71-128
1,2-Dichloroethane-d4	103	69-135
Toluene-d8	105	80-120
Bromofluorobenzene	89	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC490504	Diln Fac:	1.000
Matrix:	Soil	Batch#:	149646
Units:	ug/Kg	Analyzed:	04/06/09

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	95.69	77	56-140
MTBE	25.00	18.79	75	66-129
Isopropyl Ether (DIPE)	25.00	20.25	81	65-131
Ethyl tert-Butyl Ether (ETBE)	25.00	19.69	79	66-132
1,2-Dichloroethane	25.00	22.80	91	70-128
Benzene	25.00	25.19	101	80-125
Methyl tert-Amyl Ether (TAME)	25.00	22.02	88	75-128
Toluene	25.00	25.49	102	80-126
1,2-Dibromoethane	25.00	24.94	100	80-122
Ethylbenzene	25.00	27.77	111	80-127
m,p-Xylenes	50.00	56.97	114	80-125
o-Xylene	25.00	27.12	108	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	90	71-128
1,2-Dichloroethane-d4	97	69-135
Toluene-d8	96	80-120
Bromofluorobenzene	94	77-131

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Matrix:	Soil	Dil'n Fac:	1.000
Units:	ug/Kg	Batch#:	149677
Basis:	as received	Analyzed:	04/07/09

Type: BS Lab ID: QC490642

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	85.09	85	56-140
MTBE	20.00	17.21	86	66-129
Isopropyl Ether (DIPE)	20.00	18.68	93	65-131
Ethyl tert-Butyl Ether (ETBE)	20.00	17.98	90	66-132
1,2-Dichloroethane	20.00	17.87	89	70-128
Benzene	20.00	20.76	104	80-125
Methyl tert-Amyl Ether (TAME)	20.00	18.98	95	75-128
Toluene	20.00	21.63	108	80-126
1,2-Dibromoethane	20.00	19.26	96	80-122
Ethylbenzene	20.00	22.61	113	80-127
m,p-Xylenes	40.00	45.43	114	80-125
o-Xylene	20.00	21.42	107	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	94	71-128
1,2-Dichloroethane-d4	88	69-135
Toluene-d8	101	80-120
Bromofluorobenzene	96	77-131

Type: BSD Lab ID: QC490643

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	77.93	78	56-140	9	26
MTBE	20.00	17.61	88	66-129	2	20
Isopropyl Ether (DIPE)	20.00	18.58	93	65-131	1	20
Ethyl tert-Butyl Ether (ETBE)	20.00	18.23	91	66-132	1	20
1,2-Dichloroethane	20.00	17.48	87	70-128	2	20
Benzene	20.00	21.44	107	80-125	3	20
Methyl tert-Amyl Ether (TAME)	20.00	19.01	95	75-128	0	20
Toluene	20.00	22.40	112	80-126	3	20
1,2-Dibromoethane	20.00	19.88	99	80-122	3	20
Ethylbenzene	20.00	22.71	114	80-127	0	20
m,p-Xylenes	40.00	44.79	112	80-125	1	20
o-Xylene	20.00	21.25	106	80-122	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	71-128
1,2-Dichloroethane-d4	88	69-135
Toluene-d8	100	80-120
Bromofluorobenzene	97	77-131

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC490644	Diln Fac:	1.000
Matrix:	Soil	Batch#:	149677
Units:	ug/Kg	Analyzed:	04/07/09

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	94	71-128
1,2-Dichloroethane-d4	80	69-135
Toluene-d8	98	80-120
Bromofluorobenzene	97	77-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	211056	Location:	FAL
Client:	Kleinfelder	Prep:	EPA 5030B
Project#:	73943	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	149677
MSS Lab ID:	211097-005	Sampled:	03/31/09
Matrix:	Soil	Received:	04/02/09
Units:	ug/Kg	Analyzed:	04/08/09
Basis:	as received		

Type: MS Diln Fac: 0.9843
Lab ID: QC490682

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<18.38	246.1	178.1	72	42-139
MTBE	<0.9191	49.21	39.13	80	53-127
Isopropyl Ether (DIPE)	<0.9191	49.21	38.50	78	49-130
Ethyl tert-Butyl Ether (ETBE)	<0.9191	49.21	39.01	79	52-130
1,2-Dichloroethane	<0.9191	49.21	32.37	66	51-124
Benzene	<0.9191	49.21	44.54	91	56-126
Methyl tert-Amyl Ether (TAME)	<0.9191	49.21	40.38	82	58-126
Toluene	<0.9191	49.21	46.75	95	52-125
1,2-Dibromoethane	<0.9191	49.21	46.49	94	52-121
Ethylbenzene	<0.9191	49.21	44.88	91	48-126
m,p-Xylenes	<1.245	98.43	97.51	99	46-125
o-Xylene	<0.9191	49.21	47.36	96	46-122

Surrogate	%REC	Limits
Dibromofluoromethane	91	71-128
1,2-Dichloroethane-d4	65 *	69-135
Toluene-d8	93	80-120
Bromofluorobenzene	94	77-131

Type: MSD Diln Fac: 0.9709
Lab ID: QC490683

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	242.7	170.9	70	42-139	3	36
MTBE	48.54	40.36	83	53-127	4	28
Isopropyl Ether (DIPE)	48.54	41.11	85	49-130	8	27
Ethyl tert-Butyl Ether (ETBE)	48.54	42.99	89	52-130	11	26
1,2-Dichloroethane	48.54	32.48	67	51-124	2	23
Benzene	48.54	44.52	92	56-126	1	26
Methyl tert-Amyl Ether (TAME)	48.54	43.50	90	58-126	9	25
Toluene	48.54	46.07	95	52-125	0	29
1,2-Dibromoethane	48.54	45.53	94	52-121	1	26
Ethylbenzene	48.54	45.38	93	48-126	2	29
m,p-Xylenes	97.09	97.69	101	46-125	2	30
o-Xylene	48.54	48.97	101	46-122	5	30

Surrogate	%REC	Limits
Dibromofluoromethane	91	71-128
1,2-Dichloroethane-d4	66 *	69-135
Toluene-d8	94	80-120
Bromofluorobenzene	94	77-131

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-18766-1

Job Description: FAL-73943

For:
Kleinfelder Inc
1970 Broadway
Suite 710
Oakland, CA 94612

Attention: Mr. Alvaro Dominguez

Approved for release.
Dimple Sharma
Project Manager I
3/31/2009 5:46 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com
03/31/2009

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Job Narrative
720-J18766-1

Comments
No additional comments.

Receipt
Sample(s) TRIP BLANKS were submitted for analysis; however, it was not listed on the Chain-of-Custody (COC), logged HOLD.

All other samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Kleinfelder Inc

Job Number: 720-18766-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-18766-1	**K-BW-50**				
Benzene		0.56	0.50	ug/L	8260B/CA_LUFTMS
DIPE		3.3	1.0	ug/L	8260B/CA_LUFTMS
Toluene		0.53	0.50	ug/L	8260B/CA_LUFTMS
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		67	50	ug/L	8015B

METHOD SUMMARY

Client: Kleinfelder Inc

Job Number: 720-18766-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)	TAL SF		SW846 3510C SGC

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Kleinfelder Inc

Job Number: 720-18766-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-18766-1	K-BW-50	Water	03/30/2009 1115	03/30/2009 1725

Client: Kleinfelder Inc

Job Number: 720-18766-1

Client Sample ID: **K-BW-50**

Lab Sample ID: 720-18766-1
Client Matrix: Water

Date Sampled: 03/30/2009 1115
Date Received: 03/30/2009 1725

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/30/2009 2007
Date Prepared: 03/30/2009 2007

Analysis Batch: 720-48187

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\033009\sa-wa-
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50
Benzene	0.56		0.50
1,2-Dichloroethane	ND		0.50
MTBE	ND		0.50
Ethylbenzene	ND		0.50
Ethyl t-butyl ether	ND		0.50
DIPE	3.3		1.0
TAME	ND		0.50
EDB	ND		0.50
Toluene	0.53		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	91	78 - 112
1,2-Dichloroethane-d4 (Surr)	86	67 - 126

Client: Kleinfelder Inc

Job Number: 720-18766-1

Client Sample ID: **K-BW-50**

Lab Sample ID: 720-18766-1
Client Matrix: Water

Date Sampled: 03/30/2009 1115
Date Received: 03/30/2009 1725

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method: 8015B
Preparation: 3510C SGC
Dilution: 1.0
Date Analyzed: 03/31/2009 1216
Date Prepared: 03/30/2009 1818

Analysis Batch: 720-48198
Prep Batch: 720-48143

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	67		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	4	0 - 5
p-Terphenyl	71	31 - 120

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: Kleinfelder Inc

Job Number: 720-18766-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-48187					
LCS 720-48187/2	Lab Control Spike	T	Water	8260B/CA_LUFT	
LCSD 720-48187/1	Lab Control Spike Duplicate	T	Water	8260B/CA_LUFT	
MB 720-48187/3	Method Blank	T	Water	8260B/CA_LUFT	
720-18766-1	K-BW-50	T	Water	8260B/CA_LUFT	

Report Basis
T = Total

GC Semi VOA					
Prep Batch: 720-48143					
LCS 720-48143/2-A	Lab Control Spike	A	Water	3510C SGC	
LCSD 720-48143/3-A	Lab Control Spike Duplicate	A	Water	3510C SGC	
MB 720-48143/1-A	Method Blank	A	Water	3510C SGC	
720-18766-1	K-BW-50	A	Water	3510C SGC	
Analysis Batch:720-48198					
LCS 720-48143/2-A	Lab Control Spike	A	Water	8015B	720-48143
LCSD 720-48143/3-A	Lab Control Spike Duplicate	A	Water	8015B	720-48143
MB 720-48143/1-A	Method Blank	A	Water	8015B	720-48143
720-18766-1	K-BW-50	A	Water	8015B	720-48143

Report Basis
A = Silica Gel Cleanup

Client: Kleinfelder Inc

Job Number: 720-18766-1

Method Blank - Batch: 720-48187

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-48187/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/30/2009 1019
Date Prepared: 03/30/2009 1019

Analysis Batch: 720-48187
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\033009\mb-sc
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50
Benzene	ND		0.50
1,2-Dichloroethane	ND		0.50
MTBE	ND		0.50
Ethylbenzene	ND		0.50
Ethyl t-butyl ether	ND		0.50
DIPE	ND		1.0
TAME	ND		0.50
EDB	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	95	78 - 112
1,2-Dichloroethane-d4 (Surr)	93	67 - 126

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-18766-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-48187

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-48187/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/30/2009 1042
Date Prepared: 03/30/2009 1042

Analysis Batch: 720-48187
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\033009\ls-wa
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-48187/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/30/2009 1104
Date Prepared: 03/30/2009 1104

Analysis Batch: 720-48187
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\033009\ld-wa-9
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	65	65	42 - 80	0	20		
Benzene	89	88	74 - 112	2	20		
MTBE	90	91	69 - 104	2	20		
Toluene	75	74	65 - 98	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	91	92	78 - 112
1,2-Dichloroethane-d4 (Surr)	82	100	67 - 126

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-48143

Method: 8015B
Preparation: 3510C SGC
Silica Gel Cleanup

Lab Sample ID: MB 720-48143/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/31/2009 1055
Date Prepared: 03/30/2009 1438

Analysis Batch: 720-48198
Prep Batch: 720-48143
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	95	31 - 120

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-48143

Method: 8015B
Preparation: 3510C SGC
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-48143/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/31/2009 1122
Date Prepared: 03/30/2009 1438

Analysis Batch: 720-48198
Prep Batch: 720-48143
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-48143/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/31/2009 1149
Date Prepared: 03/30/2009 1438

Analysis Batch: 720-48198
Prep Batch: 720-48143
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	82	78	49 - 120	5	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	106	107	31 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-18766

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 11530 X3 BM 3/30

Date_____ Page_____ of_____

Report To

Attn: Alvaro Dominiguez
Company: Kleinfelder
Address: 1970 Broadway, Oakland, CA
Phone: Email: ADominiguez@Kle
Bill To:
Sampled By: Nathan Berner
Attn:
Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M*: ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS ☐	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	BTOX		1 Amber 1 LT X 3 VOAs, HCL	Number of Containers
KBW-50	3/30/09	1115	W	3 HCl	X		X																X		X	4

RUSH

Page 13 of 15

Project Info.

Project Name: FAL
Project#: 73943
PO#:
Credit Card#:

Sample Receipt

of Containers: 4
Head Space:
Temp: 1.5°C
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank
Fund EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from C_5-C_{24} (industry norm). Default for 8015B is C_{10}/C_{28}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: Nathan Berner Time: 1618	Signature: [illegible] Time: 1725	Signature: Time:
Printed Name: Nathan Berner Date: 3/30/09	Printed Name: Bryan Thomas Date: 3/30/09	Printed Name: Date:
Company:	Company: TestAmerica	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [illegible] Time: 1618	Signature: [illegible] Time: 1725	Signature: Time:
Printed Name: Bryan Thomas Date: 3/30/09	Printed Name: I Bullock Date: 3/30/09	Printed Name: Date:
Company: TestAmerica	Company: TEST AMERICA	Company:

Rev02/09

720-18766

Sharma, Dimple

From: Alvaro Dominguez [ADominguez@kleinfelder.com]
Sent: Friday, March 27, 2009 2:11 PM
To: Sharma, Dimple
Subject: 24-hr TAT water Monday

Hi Dimple
I'll be collecting two to thee GW samples that require 24-hr TAT.

The samples are to be analyzed for:

Analytical Group	Analytical Method	Compound	Laboratory Reporting Limit
			Aqueous (ug/L)
TPH-P (gasoline & Stoddard solvent)	EPA 8015B	Gasoline	50
		Stoddard Solvent	50
VOCs (BTEX, oxygenates, EDB, & EDC)	EPA 8260B	Benzene	0.5
		tert-Butyl Alcohol (TBA)	10
		1,2-Dibromoethane (EDB)	0.5
		1,2-Dichloroethane (DCA, EDC)	0.5
		Ethylbenzene	0.5
		Ethyl tert-Butyl Ether (ETBE)	0.5
		Isopropyl Ether (DIPE)	0.5
		Methyl tert-Amyl Ether (TAME)	0.5
		Methyl tert-Butyl Ether (MTBE)	0.5
TPH-E (diesel and motor oil) with silica gel cleanup	EPA 3630C/8015B	Diesel	50
		Motor Oil	300

Can you do the analysis?

Please call me - 510-628-9000 x 202
Thanks
A

Álvaro Domínguez
Environmental Project Professional
KLEINFELDER
1970 Broadway - Suite 710
Oakland, CA - 94612
o: 510 628-9000 x 202
c: 510 715-7570
f: 510-628-9009 - fax

KLEINFELDER
Bright People. Right Solutions.

Login Sample Receipt Check List

Client: Kleinfelder Inc

Job Number: 720-18766-1

Login Number: 18766
List Source: TestAmerica San Francisco
Creator: Bullock, Tracy
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-19193-1

Job Description: FAL

For:
Kleinfelder Inc
1970 Broadway
Suite 710
Oakland, CA 94612

Attention: Mr. Alvaro Dominguez

Approved for release.
Dimple Sharma
Project Manager I
5/5/2009 11:49 AM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com
05/05/2009

Job Narrative
720-J19193-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

General Chemistry
Method(s) 300.0: Reanalysis of the following sample(s) was performed outside of the analytical holding time: MW-1W (720-19193-1), MW-2W (720-19193-2), MW-3W (720-19193-3), MW-4W (720-19193-4), MW-5W (720-19193-5), MW-6W (720-19193-6). Original analyis was performed within holding time.

No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Kleinfelder Inc

Job Number: 720-19193-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
720-19193-1	**MW-1W**					
DIPE		8.9		0.50	ug/L	8260B
Specific Conductance		710		10	umhos/cm	120.1
Sulfate		78		10	mg/L	300.0
Nitrate as NO3		68	H	10	mg/L	300.0
Total Dissolved Solids		490		50	mg/L	SM 2540C
Orthophosphate as P		0.065		0.020	mg/L	SM 4500 P E
720-19193-2	**MW-2W**					
Benzene		4.9		0.50	ug/L	8260B
Ethylbenzene		2.5		0.50	ug/L	8260B
Toluene		1.4		0.50	ug/L	8260B
Xylenes, Total		2.5		1.0	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		310		50	ug/L	8260B
DIPE		26		0.50	ug/L	8260B
Methane		2.4		0.10	mg/L	RSK-175
Diesel Range Organics [C10-C28]		95		50	ug/L	8015B
Specific Conductance		1000		10	umhos/cm	120.1
Sulfate		76		10	mg/L	300.0
Nitrate as NO3		20	H	10	mg/L	300.0
Total Dissolved Solids		600		50	mg/L	SM 2540C
Ferrous Iron		0.10		0.050	mg/L	SM 3500 FE D
Orthophosphate as P		0.060		0.020	mg/L	SM 4500 P E
720-19193-3	**MW-3W**					
DIPE		28		0.50	ug/L	8260B
Methane		0.59		0.10	mg/L	RSK-175
Specific Conductance		1100		10	umhos/cm	120.1
Sulfate		79		10	mg/L	300.0
Nitrate as NO3		24	H	10	mg/L	300.0
Total Dissolved Solids		630		50	mg/L	SM 2540C
Orthophosphate as P		0.063		0.020	mg/L	SM 4500 P E

EXECUTIVE SUMMARY - Detections

Client: Kleinfelder Inc

Job Number: 720-19193-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
720-19193-4	**MW-4W**					
Gasoline Range Organics (GRO)-C5-C12		200		50	ug/L	8260B
DIPE		14		0.50	ug/L	8260B
Methane		3.2		0.10	mg/L	RSK-175
Diesel Range Organics [C10-C28]		120		50	ug/L	8015B
Stoddard Solvent Range Organics (C9-C13)		58		50	ug/L	8015B
Specific Conductance		1000		10	umhos/cm	120.1
Sulfate		81		10	mg/L	300.0
Nitrate as NO3		22	H	10	mg/L	300.0
Total Dissolved Solids		600		50	mg/L	SM 2540C
Orthophosphate as P		0.070		0.020	mg/L	SM 4500 P E
720-19193-5	**MW-5W**					
DIPE		9.2		0.50	ug/L	8260B
Specific Conductance		1100		10	umhos/cm	120.1
Sulfate		91		10	mg/L	300.0
Nitrate as NO3		18	H	1.0	mg/L	300.0
Total Dissolved Solids		650		50	mg/L	SM 2540C
Orthophosphate as P		0.054		0.020	mg/L	SM 4500 P E
720-19193-6	**MW-6W**					
Gasoline Range Organics (GRO)-C5-C12		170		50	ug/L	8260B
DIPE		7.0		0.50	ug/L	8260B
Methane		2.4		0.10	mg/L	RSK-175
Diesel Range Organics [C10-C28]		79		50	ug/L	8015B
Specific Conductance		1200		10	umhos/cm	120.1
Sulfate		110		10	mg/L	300.0
Nitrate as NO3		10	H	1.0	mg/L	300.0
Total Dissolved Solids		700		50	mg/L	SM 2540C
Ferrous Iron		0.096		0.050	mg/L	SM 3500 FE D
Orthophosphate as P		0.16		0.020	mg/L	SM 4500 P E

METHOD SUMMARY

Client: Kleinfelder Inc

Job Number: 720-19193-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL SF	SW846 8260B	
Purge and Trap	TAL SF		SW846 5030B
Dissolved Gases (GC)	TAL SF	RSK RSK-175	
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)	TAL SF		SW846 3510C
Conductivity, Specific Conductance	TAL SF	MCAWW 120.1	
Anions, Ion Chromatography	TAL SF	MCAWW 300.0	
Nitrogen, Ammonia, Distillation	TAL CHI	MCAWW 350.2	
Distillation, Ammonia	TAL CHI		Distill/Ammonia
Solids, Total Dissolved (TDS)	TAL SF	SM SM 2540C	
Iron, Ferrous and Ferric	TAL SF	SM SM 3500 FE D	
Orthophosphate	TAL SF	SM SM 4500 P E	

Lab References:

TAL CHI = TestAmerica Chicago

TAL SF = TestAmerica San Francisco

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Kleinfelder Inc

Job Number: 720-19193-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-19193-1	MW-1W	Water	04/15/2009 1115	04/16/2009 0810
720-19193-2	MW-2W	Water	04/15/2009 1320	04/16/2009 0810
720-19193-3	MW-3W	Water	04/15/2009 1445	04/16/2009 0810
720-19193-4	MW-4W	Water	04/15/2009 1645	04/16/2009 0810
720-19193-5	MW-5W	Water	04/15/2009 1745	04/16/2009 0810
720-19193-6	MW-6W	Water	04/15/2009 1545	04/16/2009 0810
720-19193-7TB	TRIP BLANK	Water	04/14/2009 0000	04/16/2009 0810

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-1W**

Lab Sample ID: 720-19193-1
Client Matrix: Water

Date Sampled: 04/15/2009 1115
Date Received: 04/16/2009 0810

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 04/25/2009 1743
Date Prepared: 04/25/2009 1743

Analysis Batch: 720-49375

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04250916.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	8.9		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108	72 - 125
Toluene-d8 (Surr)	98	82 - 120

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: MW-2W

Lab Sample ID: 720-19193-2
Client Matrix: Water

Date Sampled: 04/15/2009 1320
Date Received: 04/16/2009 0810

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 04/27/2009 0004
Date Prepared: 04/27/2009 0004

Analysis Batch: 720-49546

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04260931.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Benzene	4.9		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	2.5		0.50
Toluene	1.4		0.50
Xylenes, Total	2.5		1.0
Gasoline Range Organics (GRO)-C5-C12	310		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	26		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114	72 - 125
Toluene-d8 (Surr)	100	82 - 120

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: MW-3W

Lab Sample ID: 720-19193-3
Client Matrix: Water

Date Sampled: 04/15/2009 1445
Date Received: 04/16/2009 0810

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 04/25/2009 1847
Date Prepared: 04/25/2009 1847

Analysis Batch: 720-49375

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04250918.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	28		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111	72 - 125
Toluene-d8 (Surr)	97	82 - 120

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-4W**

Lab Sample ID: 720-19193-4
Client Matrix: Water

Date Sampled: 04/15/2009 1645
Date Received: 04/16/2009 0810

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 04/25/2009 1918
Date Prepared: 04/25/2009 1918

Analysis Batch: 720-49375

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04250919.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	200		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	14		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113	72 - 125
Toluene-d8 (Surr)	98	82 - 120

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-5W**

Lab Sample ID: 720-19193-5
Client Matrix: Water

Date Sampled: 04/15/2009 1745
Date Received: 04/16/2009 0810

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 04/27/2009 0036
Date Prepared: 04/27/2009 0036

Analysis Batch: 720-49546

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04260932.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	9.2		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114	72 - 125
Toluene-d8 (Surr)	98	82 - 120

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-6W**

Lab Sample ID: 720-19193-6
Client Matrix: Water

Date Sampled: 04/15/2009 1545
Date Received: 04/16/2009 0810

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 04/28/2009 1342
Date Prepared: 04/28/2009 1342

Analysis Batch: 720-49374

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04280908.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	170		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	7.0		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115	72 - 125
Toluene-d8 (Surr)	100	82 - 120

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 720-19193-7TB
Client Matrix: Water

Date Sampled: 04/14/2009 0000
Date Received: 04/16/2009 0810

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 04/28/2009 1518
Date Prepared: 04/28/2009 1518

Analysis Batch: 720-49374

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04280911.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109	72 - 125
Toluene-d8 (Surr)	96	82 - 120

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-1W**

Lab Sample ID: 720-19193-1
Client Matrix: Water

Date Sampled: 04/15/2009 1115
Date Received: 04/16/2009 0810

RSK-175 Dissolved Gases (GC)

Method: RSK-175
Preparation: N/A
Dilution: 1.0
Date Analyzed: 04/21/2009 1101
Date Prepared: N/A

Analysis Batch: 720-49228

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (mg/L)	Qualifier	RL
Methane	ND		0.10

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-2W**

Lab Sample ID: 720-19193-2
Client Matrix: Water

Date Sampled: 04/15/2009 1320
Date Received: 04/16/2009 0810

RSK-175 Dissolved Gases (GC)

Method: RSK-175
Preparation: N/A
Dilution: 1.0
Date Analyzed: 04/21/2009 1117
Date Prepared: N/A

Analysis Batch: 720-49228

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (mg/L)	Qualifier	RL
Methane	2.4		0.10

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-3W**

Lab Sample ID: 720-19193-3
Client Matrix: Water

Date Sampled: 04/15/2009 1445
Date Received: 04/16/2009 0810

RSK-175 Dissolved Gases (GC)

Method: RSK-175
Preparation: N/A
Dilution: 1.0
Date Analyzed: 04/21/2009 1133
Date Prepared: N/A

Analysis Batch: 720-49228

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (mg/L)	Qualifier	RL
Methane	0.59		0.10

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-4W**

Lab Sample ID: 720-19193-4
Client Matrix: Water

Date Sampled: 04/15/2009 1645
Date Received: 04/16/2009 0810

RSK-175 Dissolved Gases (GC)

Method: RSK-175
Preparation: N/A
Dilution: 1.0
Date Analyzed: 04/21/2009 1315
Date Prepared: N/A

Analysis Batch: 720-49228

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (mg/L)	Qualifier	RL
Methane	3.2		0.10

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-5W**

Lab Sample ID: 720-19193-5
Client Matrix: Water

Date Sampled: 04/15/2009 1745
Date Received: 04/16/2009 0810

RSK-175 Dissolved Gases (GC)

Method: RSK-175
Preparation: N/A
Dilution: 1.0
Date Analyzed: 04/21/2009 1331
Date Prepared: N/A

Analysis Batch: 720-49228

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (mg/L)	Qualifier	RL
Methane	ND		0.10

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-6W**

Lab Sample ID: 720-19193-6
Client Matrix: Water

Date Sampled: 04/15/2009 1545
Date Received: 04/16/2009 0810

RSK-175 Dissolved Gases (GC)

Method: RSK-175
Preparation: N/A
Dilution: 1.0
Date Analyzed: 04/21/2009 1348
Date Prepared: N/A

Analysis Batch: 720-49228

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (mg/L)	Qualifier	RL
Methane	2.4		0.10

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: MW-1W

Lab Sample ID: 720-19193-1
Client Matrix: Water

Date Sampled: 04/15/2009 1115
Date Received: 04/16/2009 0810

8015B Diesel Range Organics (DRO) (GC)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 04/24/2009 1756
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	ND		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	78	23 - 156

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: MW-2W

Lab Sample ID: 720-19193-2
Client Matrix: Water

Date Sampled: 04/15/2009 1320
Date Received: 04/16/2009 0810

8015B Diesel Range Organics (DRO) (GC)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 04/24/2009 1817
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	95		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	ND		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	93	23 - 156

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: **MW-3W**

Lab Sample ID: 720-19193-3
Client Matrix: Water

Date Sampled: 04/15/2009 1445
Date Received: 04/16/2009 0810

8015B Diesel Range Organics (DRO) (GC)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 04/24/2009 1838
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	ND		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	79	23 - 156

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: MW-4W

Lab Sample ID: 720-19193-4
Client Matrix: Water

Date Sampled: 04/15/2009 1645
Date Received: 04/16/2009 0810

8015B Diesel Range Organics (DRO) (GC)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 04/24/2009 1859
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	120		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	58		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	87	23 - 156

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: MW-5W

Lab Sample ID: 720-19193-5
Client Matrix: Water

Date Sampled: 04/15/2009 1745
Date Received: 04/16/2009 0810

8015B Diesel Range Organics (DRO) (GC)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 04/24/2009 1919
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	ND		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	78	23 - 156

Client: Kleinfelder Inc

Job Number: 720-19193-1

Client Sample ID: MW-6W

Lab Sample ID: 720-19193-6
Client Matrix: Water

Date Sampled: 04/15/2009 1545
Date Received: 04/16/2009 0810

8015B Diesel Range Organics (DRO) (GC)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 04/24/2009 1940
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	79		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	ND		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	81	23 - 156

General Chemistry

Client Sample ID: MW-1W

Lab Sample ID: 720-19193-1
Client Matrix: Water

Date Sampled: 04/15/2009 1115
Date Received: 04/16/2009 0810

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	710		umhos/cm	10	1.0	120.1
Anly Batch: 720-49241	Date Analyzed 04/27/2009 1550					
Total Dissolved Solids	490		mg/L	50	1.0	SM 2540C
Anly Batch: 720-48914	Date Analyzed 04/21/2009 1747					
Sulfate	78		mg/L	10	10	300.0
Anly Batch: 720-48967	Date Analyzed 04/16/2009 1845					
Nitrate as NO3	68	H	mg/L	10	10	300.0
Anly Batch: 720-48979	Date Analyzed 04/18/2009 0323					
Ammonia (as N)	ND		mg/L	0.20	1.0	350.2
Anly Batch: 500-62349	Date Analyzed (Start) 04/24/2009 0701			(End) 04/24/2009 0701		
Prep Batch: 500-62205	Date Prepared: 04/23/2009 1024					
Ferrous Iron	ND		mg/L	0.050	1.0	SM 3500 FE D
Anly Batch: 720-49416	Date Analyzed 04/16/2009 1840					
Orthophosphate as P	0.065		mg/L	0.020	1.0	SM 4500 P E
Anly Batch: 720-49285	Date Analyzed 04/16/2009 1340					

General Chemistry

Client Sample ID: MW-2W

Lab Sample ID: 720-19193-2
Client Matrix: Water

Date Sampled: 04/15/2009 1320
Date Received: 04/16/2009 0810

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	1000		umhos/cm	10	1.0	120.1
Anly Batch: 720-49241	Date Analyzed 04/27/2009 1550					
Total Dissolved Solids	600		mg/L	50	1.0	SM 2540C
Anly Batch: 720-48914	Date Analyzed 04/21/2009 1747					
Sulfate	76		mg/L	10	10	300.0
Anly Batch: 720-48967	Date Analyzed 04/16/2009 1920					
Nitrate as NO3	20	H	mg/L	10	10	300.0
Anly Batch: 720-48979	Date Analyzed 04/18/2009 0340					
Ammonia (as N)	ND		mg/L	0.20	1.0	350.2
Anly Batch: 500-62349	Date Analyzed (Start) 04/24/2009 0701 (End) 04/24/2009 0701					
Prep Batch: 500-62205	Date Prepared: 04/23/2009 1024					
Ferrous Iron	0.10		mg/L	0.050	1.0	SM 3500 FE D
Anly Batch: 720-49416	Date Analyzed 04/16/2009 1840					
Orthophosphate as P	0.060		mg/L	0.020	1.0	SM 4500 P E
Anly Batch: 720-49285	Date Analyzed 04/16/2009 1340					

General Chemistry

Client Sample ID: MW-3W

Lab Sample ID: 720-19193-3
Client Matrix: Water

Date Sampled: 04/15/2009 1445
Date Received: 04/16/2009 0810

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	1100		umhos/cm	10	1.0	120.1
Anly Batch: 720-49241	Date Analyzed 04/27/2009 1550					
Total Dissolved Solids	630		mg/L	50	1.0	SM 2540C
Anly Batch: 720-48914	Date Analyzed 04/21/2009 1747					
Sulfate	79		mg/L	10	10	300.0
Anly Batch: 720-48967	Date Analyzed 04/16/2009 1954					
Nitrate as NO3	24	H	mg/L	10	10	300.0
Anly Batch: 720-48979	Date Analyzed 04/18/2009 0357					
Ammonia (as N)	ND		mg/L	0.20	1.0	350.2
Anly Batch: 500-62349	Date Analyzed (Start) 04/24/2009 0701 (End) 04/24/2009 0702					
Prep Batch: 500-62205	Date Prepared: 04/23/2009 1024					
Ferrous Iron	ND		mg/L	0.050	1.0	SM 3500 FE D
Anly Batch: 720-49416	Date Analyzed 04/16/2009 1840					
Orthophosphate as P	0.063		mg/L	0.020	1.0	SM 4500 P E
Anly Batch: 720-49285	Date Analyzed 04/16/2009 1340					

General Chemistry

Client Sample ID: MW-4W

Lab Sample ID: 720-19193-4
Client Matrix: Water

Date Sampled: 04/15/2009 1645
Date Received: 04/16/2009 0810

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	1000		umhos/cm	10	1.0	120.1
Anly Batch: 720-49241	Date Analyzed 04/27/2009 1550					
Total Dissolved Solids	600		mg/L	50	1.0	SM 2540C
Anly Batch: 720-48914	Date Analyzed 04/21/2009 1747					
Sulfate	81		mg/L	10	10	300.0
Anly Batch: 720-48967	Date Analyzed 04/16/2009 2029					
Nitrate as NO3	22	H	mg/L	10	10	300.0
Anly Batch: 720-48979	Date Analyzed 04/18/2009 0414					
Ammonia (as N)	ND		mg/L	0.20	1.0	350.2
Anly Batch: 500-62349	Date Analyzed (Start) 04/24/2009 0702 (End) 04/24/2009 0702					
Prep Batch: 500-62205	Date Prepared: 04/23/2009 1024					
Ferrous Iron	ND		mg/L	0.050	1.0	SM 3500 FE D
Anly Batch: 720-49416	Date Analyzed 04/16/2009 1840					
Orthophosphate as P	0.070		mg/L	0.020	1.0	SM 4500 P E
Anly Batch: 720-49285	Date Analyzed 04/16/2009 1340					

General Chemistry

Client Sample ID: MW-5W

Lab Sample ID: 720-19193-5
Client Matrix: Water

Date Sampled: 04/15/2009 1745
Date Received: 04/16/2009 0810

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	1100		umhos/cm	10	1.0	120.1
Anly Batch: 720-49241	Date Analyzed 04/28/2009 0832					
Total Dissolved Solids	650		mg/L	50	1.0	SM 2540C
Anly Batch: 720-48914	Date Analyzed 04/21/2009 1747					
Nitrate as NO3	18	H	mg/L	1.0	1.0	300.0
Anly Batch: 720-48979	Date Analyzed 04/18/2009 0431					
Sulfate	91		mg/L	10	10	300.0
Anly Batch: 720-48967	Date Analyzed 04/16/2009 2103					
Ammonia (as N)	ND		mg/L	0.20	1.0	350.2
Anly Batch: 500-62349	Date Analyzed (Start) 04/24/2009 0702 (End) 04/24/2009 0702					
Prep Batch: 500-62205	Date Prepared: 04/23/2009 1024					
Ferrous Iron	ND		mg/L	0.050	1.0	SM 3500 FE D
Anly Batch: 720-49416	Date Analyzed 04/16/2009 1840					
Orthophosphate as P	0.054		mg/L	0.020	1.0	SM 4500 P E
Anly Batch: 720-49285	Date Analyzed 04/16/2009 1340					

General Chemistry

Client Sample ID: MW-6W

Lab Sample ID: 720-19193-6
Client Matrix: Water

Date Sampled: 04/15/2009 1545
Date Received: 04/16/2009 0810

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	1200		umhos/cm	10	1.0	120.1
Anly Batch: 720-49241	Date Analyzed 04/27/2009 1550					
Total Dissolved Solids	700		mg/L	50	1.0	SM 2540C
Anly Batch: 720-48914	Date Analyzed 04/21/2009 1747					
Nitrate as NO3	10	H	mg/L	1.0	1.0	300.0
Anly Batch: 720-48979	Date Analyzed 04/18/2009 0449					
Sulfate	110		mg/L	10	10	300.0
Anly Batch: 720-48967	Date Analyzed 04/16/2009 2212					
Ammonia (as N)	ND		mg/L	0.20	1.0	350.2
Anly Batch: 500-62349	Date Analyzed (Start) 04/24/2009 0702 (End) 04/24/2009 0703					
Prep Batch: 500-62205	Date Prepared: 04/23/2009 1024					
Ferrous Iron	0.096		mg/L	0.050	1.0	SM 3500 FE D
Anly Batch: 720-49416	Date Analyzed 04/16/2009 1840					
Orthophosphate as P	0.16		mg/L	0.020	1.0	SM 4500 P E
Anly Batch: 720-49285	Date Analyzed 04/16/2009 1340					

DATA REPORTING QUALIFIERS

Client: Kleinfelder Inc

Job Number: 720-19193-1

Lab Section	Qualifier	Description
General Chemistry		
	H	Sample was prepped or analyzed beyond the specified holding time

Client: Kleinfelder Inc

Job Number: 720-19193-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-49374					
LCS 720-49374/4	Lab Control Sample	T	Water	8260B	
LCS 720-49374/5	Lab Control Sample	T	Water	8260B	
LCSD 720-49374/6	Lab Control Sample Duplicate	T	Water	8260B	
MB 720-49374/7	Method Blank	T	Water	8260B	
720-19193-6	MW-6W	T	Water	8260B	
720-19193-7TB	TRIP BLANK	T	Water	8260B	
Analysis Batch:720-49375					
LCS 720-49375/3	Lab Control Sample	T	Water	8260B	
LCS 720-49375/4	Lab Control Sample	T	Water	8260B	
LCSD 720-49375/5	Lab Control Sample Duplicate	T	Water	8260B	
MB 720-49375/6	Method Blank	T	Water	8260B	
720-19193-1	MW-1W	T	Water	8260B	
720-19193-3	MW-3W	T	Water	8260B	
720-19193-4	MW-4W	T	Water	8260B	
Analysis Batch:720-49546					
LCS 720-49546/4	Lab Control Sample	T	Water	8260B	
LCS 720-49546/5	Lab Control Sample	T	Water	8260B	
LCSD 720-49546/6	Lab Control Sample Duplicate	T	Water	8260B	
MB 720-49546/7	Method Blank	T	Water	8260B	
720-19193-2	MW-2W	T	Water	8260B	
720-19193-5	MW-5W	T	Water	8260B	

Report Basis
T = Total

GC VOA

Analysis Batch:720-49228					
LCS 720-49228/2	Lab Control Sample	T	Water	RSK-175	
LCSD 720-49228/3	Lab Control Sample Duplicate	T	Water	RSK-175	
MB 720-49228/1	Method Blank	T	Water	RSK-175	
720-19193-1	MW-1W	T	Water	RSK-175	
720-19193-1MS	Matrix Spike	T	Water	RSK-175	
720-19193-1MSD	Matrix Spike Duplicate	T	Water	RSK-175	
720-19193-2	MW-2W	T	Water	RSK-175	
720-19193-3	MW-3W	T	Water	RSK-175	
720-19193-4	MW-4W	T	Water	RSK-175	
720-19193-5	MW-5W	T	Water	RSK-175	
720-19193-6	MW-6W	T	Water	RSK-175	

Report Basis
T = Total

Client: Kleinfelder Inc

Job Number: 720-19193-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-48922					
LCS 720-48922/2-A	Lab Control Sample	T	Water	3510C	
LCSD 720-48922/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 720-48922/1-A	Method Blank	T	Water	3510C	
720-19193-1	MW-1W	T	Water	3510C	
720-19193-2	MW-2W	T	Water	3510C	
720-19193-3	MW-3W	T	Water	3510C	
720-19193-4	MW-4W	T	Water	3510C	
720-19193-5	MW-5W	T	Water	3510C	
720-19193-6	MW-6W	T	Water	3510C	
Analysis Batch:720-49136					
LCS 720-48922/2-A	Lab Control Sample	T	Water	8015B	720-48922
LCSD 720-48922/3-A	Lab Control Sample Duplicate	T	Water	8015B	720-48922
MB 720-48922/1-A	Method Blank	T	Water	8015B	720-48922
720-19193-1	MW-1W	T	Water	8015B	720-48922
720-19193-2	MW-2W	T	Water	8015B	720-48922
720-19193-3	MW-3W	T	Water	8015B	720-48922
720-19193-4	MW-4W	T	Water	8015B	720-48922
720-19193-5	MW-5W	T	Water	8015B	720-48922
720-19193-6	MW-6W	T	Water	8015B	720-48922

Report Basis
T = Total

Client: Kleinfelder Inc

Job Number: 720-19193-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:720-48914					
LCS 720-48914/2	Lab Control Sample	T	Water	SM 2540C	
LCSD 720-48914/3	Lab Control Sample Duplicate	T	Water	SM 2540C	
MB 720-48914/1	Method Blank	T	Water	SM 2540C	
720-19193-1	MW-1W	T	Water	SM 2540C	
720-19193-2	MW-2W	T	Water	SM 2540C	
720-19193-3	MW-3W	T	Water	SM 2540C	
720-19193-4	MW-4W	T	Water	SM 2540C	
720-19193-5	MW-5W	T	Water	SM 2540C	
720-19193-6	MW-6W	T	Water	SM 2540C	
Analysis Batch:720-48967					
LCS 720-48967/10	Lab Control Sample	T	Water	300.0	
MB 720-48967/11	Method Blank	T	Water	300.0	
720-19193-1	MW-1W	T	Water	300.0	
720-19193-2	MW-2W	T	Water	300.0	
720-19193-3	MW-3W	T	Water	300.0	
720-19193-4	MW-4W	T	Water	300.0	
720-19193-5	MW-5W	T	Water	300.0	
720-19193-6	MW-6W	T	Water	300.0	
Analysis Batch:720-48979					
LCS 720-48979/15	Lab Control Sample	T	Water	300.0	
MB 720-48979/16	Method Blank	T	Water	300.0	
720-19193-1	MW-1W	T	Water	300.0	
720-19193-2	MW-2W	T	Water	300.0	
720-19193-3	MW-3W	T	Water	300.0	
720-19193-4	MW-4W	T	Water	300.0	
720-19193-5	MW-5W	T	Water	300.0	
720-19193-6	MW-6W	T	Water	300.0	
Analysis Batch:720-49241					
LCS 720-49241/2	Lab Control Sample	T	Water	120.1	
LCSD 720-49241/3	Lab Control Sample Duplicate	T	Water	120.1	
MB 720-49241/1	Method Blank	T	Water	120.1	
720-19193-1	MW-1W	T	Water	120.1	
720-19193-2	MW-2W	T	Water	120.1	
720-19193-3	MW-3W	T	Water	120.1	
720-19193-4	MW-4W	T	Water	120.1	
720-19193-5	MW-5W	T	Water	120.1	
720-19193-6	MW-6W	T	Water	120.1	

Client: Kleinfelder Inc

Job Number: 720-19193-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:720-49285					
LCS 720-49285/2	Lab Control Sample	T	Water	SM 4500 P E	
LCSD 720-49285/9	Lab Control Sample Duplicate	T	Water	SM 4500 P E	
MB 720-49285/1	Method Blank	T	Water	SM 4500 P E	
720-19193-1	MW-1W	T	Water	SM 4500 P E	
720-19193-2	MW-2W	T	Water	SM 4500 P E	
720-19193-3	MW-3W	T	Water	SM 4500 P E	
720-19193-4	MW-4W	T	Water	SM 4500 P E	
720-19193-5	MW-5W	T	Water	SM 4500 P E	
720-19193-6	MW-6W	T	Water	SM 4500 P E	
Analysis Batch:720-49416					
LCS 720-49416/2	Lab Control Sample	T	Water	SM 3500 FE D	
LCSD 720-49416/3	Lab Control Sample Duplicate	T	Water	SM 3500 FE D	
MB 720-49416/1	Method Blank	T	Water	SM 3500 FE D	
720-19193-1	MW-1W	T	Water	SM 3500 FE D	
720-19193-1MS	Matrix Spike	T	Water	SM 3500 FE D	
720-19193-1MSD	Matrix Spike Duplicate	T	Water	SM 3500 FE D	
720-19193-2	MW-2W	T	Water	SM 3500 FE D	
720-19193-3	MW-3W	T	Water	SM 3500 FE D	
720-19193-4	MW-4W	T	Water	SM 3500 FE D	
720-19193-5	MW-5W	T	Water	SM 3500 FE D	
720-19193-6	MW-6W	T	Water	SM 3500 FE D	
Prep Batch: 500-62205					
LCS 500-62205/2-A	Lab Control Sample	T	Water	Distill/Ammonia	
MB 500-62205/1-A	Method Blank	T	Water	Distill/Ammonia	
720-19193-1	MW-1W	T	Water	Distill/Ammonia	
720-19193-2	MW-2W	T	Water	Distill/Ammonia	
720-19193-3	MW-3W	T	Water	Distill/Ammonia	
720-19193-4	MW-4W	T	Water	Distill/Ammonia	
720-19193-5	MW-5W	T	Water	Distill/Ammonia	
720-19193-6	MW-6W	T	Water	Distill/Ammonia	
Analysis Batch:500-62349					
LCS 500-62205/2-A	Lab Control Sample	T	Water	350.2	500-62205
MB 500-62205/1-A	Method Blank	T	Water	350.2	500-62205
720-19193-1	MW-1W	T	Water	350.2	500-62205
720-19193-2	MW-2W	T	Water	350.2	500-62205
720-19193-3	MW-3W	T	Water	350.2	500-62205
720-19193-4	MW-4W	T	Water	350.2	500-62205
720-19193-5	MW-5W	T	Water	350.2	500-62205
720-19193-6	MW-6W	T	Water	350.2	500-62205

Client: Kleinfelder Inc

Job Number: 720-19193-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-49374

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-49374/7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/28/2009 1310
Date Prepared: 04/28/2009 1310

Analysis Batch: 720-49374
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04280907.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112	72 - 125
Toluene-d8 (Surr)	97	82 - 120

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113	72 - 125
Toluene-d8 (Surr)	101	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-49374

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-49374/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/28/2009 1135
Date Prepared: 04/28/2009 1135

Analysis Batch: 720-49374
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04280904.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-49374/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/28/2009 1239
Date Prepared: 04/28/2009 1239

Analysis Batch: 720-49374
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04280906.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	96		70 - 130				
Toluene	100		70 - 130				

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109	115	72 - 125
Toluene-d8 (Surr)	99	100	82 - 120

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-49374

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-49374/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/28/2009 1207
Date Prepared: 04/28/2009 1207

Analysis Batch: 720-49374
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04280905.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-49374/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/28/2009 1239
Date Prepared: 04/28/2009 1239

Analysis Batch: 720-49374
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04280906.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	77	89	40 - 145	14	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-49375

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-49375/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/25/2009 1131
Date Prepared: 04/25/2009 1131

Analysis Batch: 720-49375
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04250907.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112	72 - 125
Toluene-d8 (Surr)	99	82 - 120

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105	72 - 125
Toluene-d8 (Surr)	98	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-49375

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-49375/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/25/2009 0943
Date Prepared: 04/25/2009 0943

Analysis Batch: 720-49375
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04250904.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-49375/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/25/2009 1055
Date Prepared: 04/25/2009 1055

Analysis Batch: 720-49375
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04250906.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	96		70 - 130				
Toluene	101		70 - 130				

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105	108	72 - 125
Toluene-d8 (Surr)	99	99	82 - 120

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-49375

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-49375/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/25/2009 1023
Date Prepared: 04/25/2009 1023

Analysis Batch: 720-49375
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04250905.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-49375/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/25/2009 1055
Date Prepared: 04/25/2009 1055

Analysis Batch: 720-49375
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04250906.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	92	91	40 - 145	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-49546

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-49546/7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/26/2009 2333
Date Prepared: 04/26/2009 2333

Analysis Batch: 720-49546
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04260930.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		5.0
Benzene	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108	72 - 125
Toluene-d8 (Surr)	96	82 - 120

Lab Control Sample - Batch: 720-49546

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 720-49546/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/26/2009 2157
Date Prepared: 04/26/2009 2157

Analysis Batch: 720-49546
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04260927.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	10.0	9.63	96	70 - 130	
Toluene	10.0	9.97	100	70 - 130	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108	72 - 125
Toluene-d8 (Surr)	100	82 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-49546

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-49546/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/26/2009 2229
Date Prepared: 04/26/2009 2229

Analysis Batch: 720-49546
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04260928.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-49546/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/26/2009 2301
Date Prepared: 04/26/2009 2301

Analysis Batch: 720-49546
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 04260929.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	87	86	40 - 145	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-49228

Method: RSK-175
Preparation: N/A

Lab Sample ID: MB 720-49228/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/21/2009 0812
Date Prepared: N/A

Analysis Batch: 720-49228
Prep Batch: N/A
Units: mg/L

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Result	Qual	RL
Methane	ND		0.10

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-49228

Method: RSK-175
Preparation: N/A

LCS Lab Sample ID: LCS 720-49228/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/21/2009 0828
Date Prepared: N/A

Analysis Batch: 720-49228
Prep Batch: N/A
Units: mg/L

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:

LCSD Lab Sample ID: LCSD 720-49228/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/21/2009 0845
Date Prepared: N/A

Analysis Batch: 720-49228
Prep Batch: N/A
Units: mg/L

Instrument ID: Varian 3800 GC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1 mL
Injection Volume:

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methane	103	100	65 - 135	3	35		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-49228

Method: RSK-175
Preparation: N/A

MS Lab Sample ID:	720-19193-1	Analysis Batch:	720-49228	Instrument ID:	Varian 3800 GC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Date Analyzed:	04/21/2009 1226			Final Weight/Volume:	1 mL
Date Prepared:	N/A			Injection Volume:	

MSD Lab Sample ID:	720-19193-1	Analysis Batch:	720-49228	Instrument ID:	Varian 3800 GC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Date Analyzed:	04/21/2009 1242			Final Weight/Volume:	1 mL
Date Prepared:	N/A			Injection Volume:	

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methane	102	100	65 - 135	1	35		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-48922

Method: 8015B
Preparation: 3510C

Lab Sample ID: MB 720-48922/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/24/2009 1735
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922
Units: ug/L

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		300
Stoddard Solvent Range Organics (C9-C13)	ND		50

Surrogate	% Rec	Acceptance Limits
p-Terphenyl	83	23 - 156

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-48922

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID: LCS 720-48922/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/23/2009 1652
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922
Units: ug/L

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-48922/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/23/2009 1712
Date Prepared: 04/21/2009 1855

Analysis Batch: 720-49136
Prep Batch: 720-48922
Units: ug/L

Instrument ID: HP GC 7890
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	104	101	46 - 150	3	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	148	140	23 - 156

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-49241

Method: 120.1
Preparation: N/A

Lab Sample ID: MB 720-49241/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/27/2009 1550
Date Prepared: N/A

Analysis Batch: 720-49241
Prep Batch: N/A
Units: umhos/cm

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Specific Conductance	ND		10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-48967

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 720-48967/11
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/16/2009 1102
Date Prepared: N/A

Analysis Batch: 720-48967
Prep Batch: N/A
Units: mg/L

Instrument ID: DionexIC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Sulfate	ND		1.0
Nitrate as NO3	ND		1.0

Lab Control Sample - Batch: 720-48967

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 720-48967/10
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/16/2009 1119
Date Prepared: N/A

Analysis Batch: 720-48967
Prep Batch: N/A
Units: mg/L

Instrument ID: DionexIC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfate	10.0	9.82	98	90 - 110	
Nitrate as NO3	10.0	9.97	100	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-48979

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 720-48979/16
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/18/2009 0248
Date Prepared: N/A

Analysis Batch: 720-48979
Prep Batch: N/A
Units: mg/L

Instrument ID: DionexIC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Sulfate	ND		1.0
Nitrate as NO3	ND		1.0

Lab Control Sample - Batch: 720-48979

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 720-48979/15
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/18/2009 0305
Date Prepared: N/A

Analysis Batch: 720-48979
Prep Batch: N/A
Units: mg/L

Instrument ID: DionexIC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfate	10.0	9.79	98	90 - 110	
Nitrate as NO3	10.0	10.1	101	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 500-62205

Method: 350.2
Preparation: Distill/Ammonia

Lab Sample ID: MB 500-62205/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/24/2009 0700
Date Prepared: 04/23/2009 1024

Analysis Batch: 500-62349
Prep Batch: 500-62205
Units: mg/L

Instrument ID: Shimadzu UV mini 1240V
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	RL
Ammonia (as N)	ND		0.20

Lab Control Sample - Batch: 500-62205

Method: 350.2
Preparation: Distill/Ammonia

Lab Sample ID: LCS 500-62205/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/24/2009 0700
Date Prepared: 04/23/2009 1024

Analysis Batch: 500-62349
Prep Batch: 500-62205
Units: mg/L

Instrument ID: Shimadzu UV mini 1240V
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Ammonia (as N)	2.50	2.25	90	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-48914

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 720-48914/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/21/2009 1747
Date Prepared: N/A

Analysis Batch: 720-48914
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	RL
Total Dissolved Solids	ND		50

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-48914

Method: SM 2540C
Preparation: N/A

LCS Lab Sample ID: LCS 720-48914/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/21/2009 1747
Date Prepared: N/A

Analysis Batch: 720-48914
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

LCSD Lab Sample ID: LCSD 720-48914/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/21/2009 1747
Date Prepared: N/A

Analysis Batch: 720-48914
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Total Dissolved Solids	95	91	80 - 120	5	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-49416

Method: SM 3500 FE D
Preparation: N/A

Lab Sample ID: MB 720-49416/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/16/2009 1840
Date Prepared: N/A

Analysis Batch: 720-49416
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Ferrous Iron	ND		0.050

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-49416

Method: SM 3500 FE D
Preparation: N/A

LCS Lab Sample ID: LCS 720-49416/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/16/2009 1840
Date Prepared: N/A

Analysis Batch: 720-49416
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

LCSD Lab Sample ID: LCSD 720-49416/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/16/2009 1840
Date Prepared: N/A

Analysis Batch: 720-49416
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Ferrous Iron	95	92	80 - 120	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-49416

Method: SM 3500 FE D
Preparation: N/A

MS Lab Sample ID:	720-19193-1	Analysis Batch:	720-49416	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	04/16/2009 1840			Final Weight/Volume:	5 mL
Date Prepared:	N/A				

MSD Lab Sample ID:	720-19193-1	Analysis Batch:	720-49416	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	04/16/2009 1840			Final Weight/Volume:	5 mL
Date Prepared:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ferrous Iron	91	93	80 - 120	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kleinfelder Inc

Job Number: 720-19193-1

Method Blank - Batch: 720-49285

Method: SM 4500 P E
Preparation: N/A

Lab Sample ID: MB 720-49285/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/16/2009 1340
Date Prepared: N/A

Analysis Batch: 720-49285
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Orthophosphate as P	ND		0.020

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-49285

Method: SM 4500 P E
Preparation: N/A

LCS Lab Sample ID: LCS 720-49285/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/16/2009 1340
Date Prepared: N/A

Analysis Batch: 720-49285
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-49285/9
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 04/16/2009 1340
Date Prepared: N/A

Analysis Batch: 720-49285
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Orthophosphate as P	98	95	90 - 110	3	15		

Calculations are performed before rounding to avoid round-off errors in calculated results.

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone (925) 484-1919 • (925) [illegible]

720-19193

Reference #: 115689

Date 4/15/09 Page ____ of ____

Report To

Attn: Alvaro Dominguez
Company: Kleinfelder
Address:
Phone: Email:
Bill To:
Sampled By: Nathan Reiner
Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics: BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	Fuel Tank EPA 8260B: ☐ Gas ☐ BTEX ☐ Fuel Oxygenates ☐ TCA ☐ DCE ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	W.E.T (STLC): ☐ TCLP	Hexavalent Chromium ☐ pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity TSS ☐ TDS	Anions: ☐ Cl ☐ SO4 ☐ F ☐ Br ☐ NO_3 ☐ PO_4	Ferrous Fe, Methane, NH_3			Number of Containers
MW-1W	4/15/09	1115	W	3 Samples Analyzed			X	X													X	X	X			11
MW-2W	4/15/09	1320	W				X	X													X	X	X			11
MW-3W	4/15/09	1445	W				X	X													X	X	X			11
MW-4W	4/15/09	1645	W				X	X													X	X	X			11
MW-5W	4/15/09	1745	W				X	X													X	X	X			11
MW-6W	4/15/09	1545	W				X	X													X	X	X			11
Trip blank	4/14/09		W	VOA			N/A	X													N/A	N/A	N/A			2

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Project Info.

Project Name: FAL
Project#: 73943
PO#:
Credit Card#:

Sample Receipt

of Containers: 11 containers per sample
Head Space:
Temp:
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Results: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank Format EDF

Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse
*TestAmerica SF records 8015M from C_7-C_{24} (industry norm) Default for 8015B is C_{10}-C_{24}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: Nathan Reiner Time: 810	Signature: Time:	Signature: Time:
Printed Name: Nathan Reiner Date: 4/16/09	Printed Name: Date:	Printed Name: Date:
Company: Kleinfelder	Company:	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: Joan Mullen Time: 810	Signature: Time:	Signature: Time:
Printed Name: Joan Mullen Date: 4-16-09	Printed Name: Date:	Printed Name: Date:
Company: TA Fremont	Company:	Company:

Rev02/09

Login Sample Receipt Check List

Client: Kleinfelder Inc

Job Number: 720-19193-1

Login Number: 19193
List Source: TestAmerica San Francisco
Creator: Mullen, Joan
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Login Sample Receipt Check List

Client: Kleinfelder Inc

Job Number: 720-19193-1

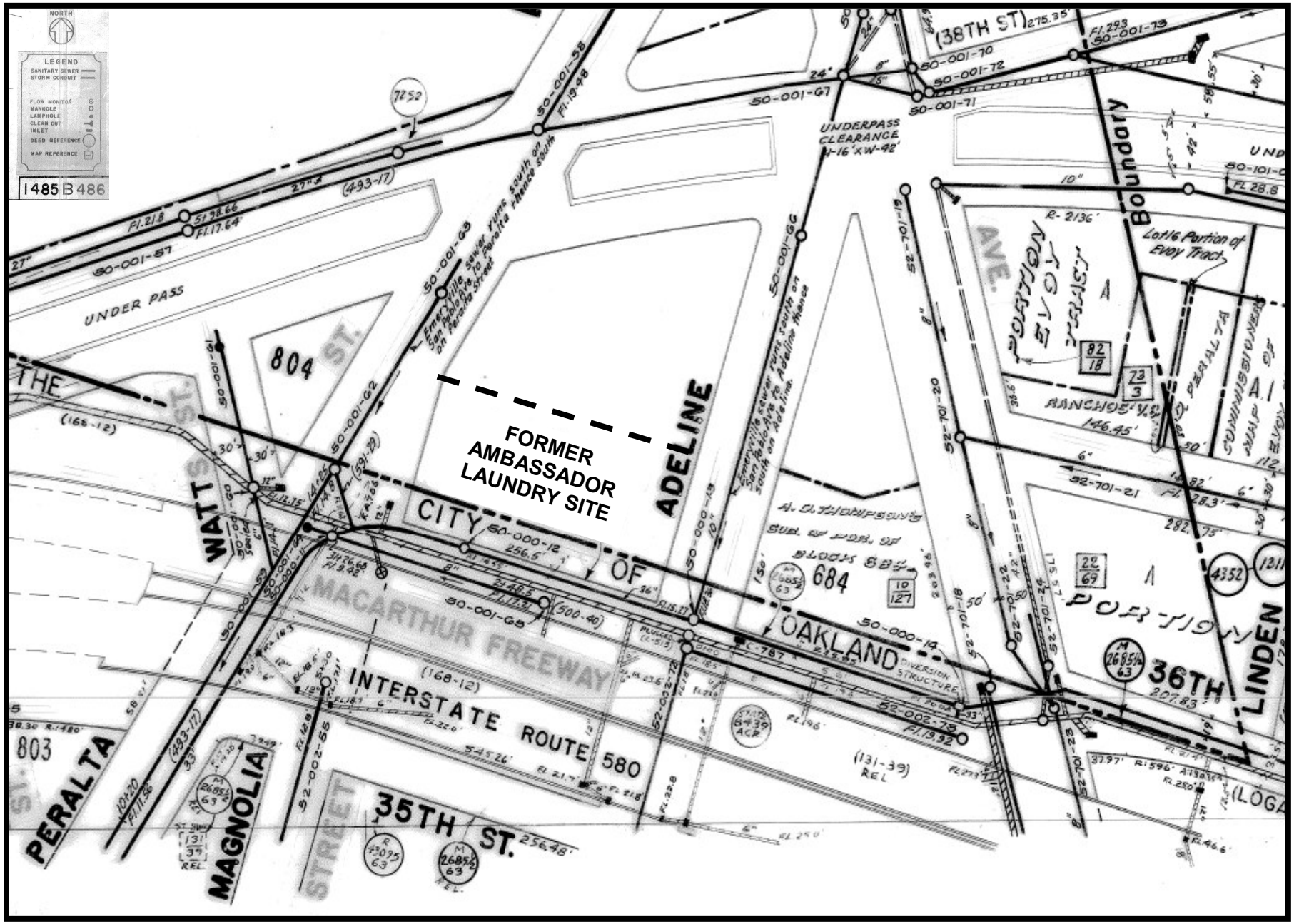
Login Number: 19193
Creator: Lunt, Jeff T
List Number: 1

List Source: TestAmerica Chicago
List Creation: 04/22/09 11:11 AM

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

APPENDIX E

SEWER AND STORM DRAIN LINES IN THE SITE'S VICINITY



Map Showing Sewer and Storm Drain Utility Lines Around the Site