NJ D 068 715 424

11C

LNAPL INTERIM REMEDIAL MEASURES REPORT

ORTHO CLINICAL DIAGNOSTICS
RARITAN, NEW JERSEY

Prepared for:

Ortho Clinical Diagnostics
1001 US Route 202
Raritan, NJ 08869

Prepared by:

Langan Engineering & Environmental Services, Inc.
P.O. Box 1569
Doylestown, Pennsylvania 18901

1 April 2015
3568401

NJ Certificate of Authorization No. 24GA27996400

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

P.O. Box 1569 ◆ Doylestown, Pennsylvania 18901-0219 ◆ (215) 491-6500 ◆ FAX: (215) 491-6501

652625

LNAPL INTERIM REMEDIAL MEASURES REPORT

ORTHO CLINICAL DIAGNOSTICS
RARITAN, NEW JERSEY

Prepared for:

Ortho Clinical Diagnostics
1001 US Route 202
Raritan, NJ 08869

Prepared by:

Langan Engineering & Environmental Services, Inc.
P.O. Box 1569
Doylestown, PA 18901

Richard P. LoCastro, P.G.
Senior Associate

Shelly M. Beitler
Senior Project Manager

Erik Person
Project Hydrogeologist

1 April 2015
3568401

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

P.O. Box 1569 ♦ Doylestown, Pennsylvania 18901-0219 ♦ (215) 491-6500 ♦ FAX: (215) 491-6501

LNAPL Interim Remedial Measures Report
Ortho-Clinical Diagnostics
Raritan, New Jersey

NJDEP Case No. NJD068715424
SRP PI No. 005882

TABLE OF CONTENTS

CERTIFICATION
NJDEP FORM - LNAPL Reporting Form
LIST OF ACRONYMS

Section	Title	Page
1.0	**INTRODUCTION**	**1-1**
2.0	**PHYSICAL SETTING**	**2-1**
2.1	Site Location	2-1
2.2	Topography and Drainage	2-1
2.3	Geology	2-2
2.4	Hydrogeology	2-3
3.0	**RECEPTOR EVALUATION**	**3-1**
3.1	Land Use	3-1
3.2	Groundwater Use	3-1
3.3	Ecological Receptors	3-1
3.4	Vapor Intrusion	3-2
4.0	**TECHNICAL OVERVIEW**	**4-1**
4.1	Summary of LNAPL Identification	4-1
4.2	Summary of LNAPL Delineation	4-1
4.3	Summary of LNAPL Monitoring and Recovery	4-2
5.0	**SUMMARY OF LNAPL INVESTIGATION AND REPORTING**	**5-1**
5.1	LNAPL Occurrence	5-1
5.2	LNAPL Characteristics	5-1
	5.2.1 Chemical Composition	5-1
	5.2.2 LNAPL Migration and Extent	5-2
	5.2.3 LNAPL and Water Level Fluctuations	5-3
5.3	Data Quality Evaluation	5-4
5.4	Summary of LNAPL Reporting	5-4
6.0	**LNAPL INTERIM REMEDIAL MEASURES AND MONITORING**	**6-1**
6.1	LNAPL Recovery and Monitoring	6-1
6.2	Recommended LNAPL Recovery and Monitoring Plan	6-1
7.0	**CONCLUSIONS AND RECOMMENDATIONS**	**7-1**

REFERENCES

LNAPL Interim Remedial Measures Report
Ortho-Clinical Diagnostics
Raritan, New Jersey

NJDEP Case No. NJD068715424
SRP PI No. 005882

LIST OF TABLES

Table No.	Description
1	Monitoring Well Specifications
2	Water Level Measurement Data
3	Summary of LNAPL Monitoring and Recovery
4	Soil and Groundwater Sample and Analysis Summary Table
5	EPH Analytical Results for Soil
6	VOC Analytical Results for Soil
7	SVOC Analytical Results for Soil
8	VOC Analytical Results for Groundwater
9	SVOC Analytical Results for Groundwater

LIST OF FIGURES

Figure No.	Description
1	Site Location Map
2	Surrounding Land Use Map
3	Site Layout
4	Potentiometric Surface Elevations for Shallow Monitoring Wells (1/29/2015)
5	Approximate Extent of Observed Hydrocarbon Impacts
6	LNAPL Monitoring Trends for MW-47
7	Cross-Section through Area of Hydrocarbon Impacts

LIST OF APPENDICES

Appendices	Description
A	Confirmed Discharge Notification Form and LNAPL Reporting Form (60 Day)
B	Well Search Update
C	Well Construction Logs
D	Monitoring Well Forms A and B
E	Vapor Intrusion Documentation
F	LNAPL Hydrocarbon Identification Report for MW-47 – Torkelson Geochemistry, Inc.
G	LNAPL Hydrocarbon Identification Report for MW-47 – META Environmental, Inc.
H	Soil Boring Logs
I	Chain-of-Custody Records
J	Analytical Data Summary Sheets (Form 1s)
K	QA/QC Review Documentation

CERTIFICATION
PURSUANT TO N.J.A.C. 7:26E-1.5

Regarding the LNAPL Interim Remedial Measures Report, dated April 1, 2015, for which Ortho-Clinical Diagnostics (OCD) has prepared to summarize the results of investigative activities and soil remedial actions completed at the site:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

ORTHOCLINICAL DIAGNOSTICS

Keith Wojciechowski
Typed/ Printed Name

Sr. Environmental Engineer
Title

Signature

3-31-2015
Date

Sworn to and subscribed before me on this 31st day of March, 2015.

Notary Public - New Jersey

STAMP AND SEAL/COMMISSION EXPIRATION DATE:

GERDY H. GRACE
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires January 7, 2020

New Jersey Department of Environmental Protection
Site Remediation Program

LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) REPORTING FORM

Date Stamp
(For Department use only)

This form is to be used to report to the Department the presence of Light Non-Aqueous Phase Liquid (LNAPL) and to document initial LNAPL recovery efforts. (Note: Submittal of this form does not substitute for notifying the Department of a discharge pursuant to N.J.A.C. 7:26E-1.4.) In addition, this same form is used to accompany the report submittal that document actions taken for initial LNAPL recovery efforts and implementation of the interim remedial measure for LNAPL following completion of a focused remedial investigation conducted to determine the extent of LNAPL.

Submittal Type: ☐ Initial LNAPL Discovery ☒ 1-Year LNAPL Reporting Submission

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 U.S. Route 202

Municipality: Raritan Borough (Township, Borough or City)

County Somerset Zip Code 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD 068715424

Date Remediation Initiated Pursuant to N.J.A.C.26C-2:

State Plane Coordinates for a central location at the site: Easting: 450510 Northing: 633227

Municipal Block(s) and Lot(s):

Block # 31	Lot # 4	Block #	Lot #
Block #	Lot #	Block #	Lot #
Block #	Lot #	Block #	Lot #
Block #	Lot #	Block #	Lot #

SECTION B. NJDEP CASE MANAGER

Do you have an assigned Case Manager? ☒ Yes ☐ No

If "Yes," please list the Case Manager: Steve Urbanik

SECTION C. ACTIONS BEING REPORTED

1. ☐ **LNAPL Discovery Date:** _____

Type of LNAPL (Check all that apply)

☐ Gasoline ☐ Diesel Fuel ☐ #2 Fuel Oil ☐ #4 Fuel Oil ☐ #6 Fuel Oil ☐ Jet Fuel
☐ Lubricating Oil ☐ Hydraulic Fluid ☐ Waste Oil ☐ Kerosene ☐ Unknown
☐ Other, list: _____

List source(s) of LNAPL release (put unknown if source not identified) _____

Was an ongoing release discovered? ☐ Yes ☐ No

Was any ongoing release stopped? ☐ Yes ☐ No

If "No," explain: _____

LNAPL Thickness: _____

How was LNAPL discovered?

☐ In Monitoring Well ☐ In Excavation ☐ In Utility, list type: _____
☐ On Surface Water ☐ Seep ☐ Within a sump
☐ Other, explain: _____

Initial LNAPL Recovery Efforts. (check all that apply)

☐ Bailing ☐ Sorbent material (socks, pads, etc.)
☐ Skimmers ☐ Ejector pumps
☐ Single or Dual-Phase Vacuum Extraction ☐ Technically Impracticable
☐ Other, explain: _____

List frequency of action: _____

2. ☒ LNAPL Interim Remedial Measure (IRM)

a. Is the focused remedial investigation (delineation) for LNAPL complete? ..... ☒ Yes ☐ No
If "No," explain: _____

b. Is LNAPL still present at the site following initial recovery efforts? ..... ☒ Yes ☐ No
If "No," skip to 2.g. below.

c. Is the LNAPL present offsite? ..... ☐ Yes ☒ No ☐ Unknown

d. Has a LNAPL IRM been implemented at this site? ..... ☒ Yes ☐ No
If "No," explain: _____
If "Yes," provide date IRM implemented: 04/03/2014
List type of IRM: Gauge and Bail

e. Does any monitoring data, information or observations indicate that the LNAPL is migrating horizontally (i.e. aerial extent of LNAPL is expanding)? ..... ☐ Yes ☒ No
If "Yes." is the IRM designed to prevent further migration? ..... ☐ Yes ☐ No

g. Has the LNAPL response (Initial recovery, RI, IRM and reporting, as applicable) been performed following the "Light Non-Aqueous Phase Liquid (LNAPL) Initial Recovery and Interim Remedial Measures Guidance (LNAPL Guidance)"? ..... ☒ Yes ☐ No
If "No", define any variance from the LNAPL Guidance. _____

Note: Whenever a narrative explanation is requested, attach additional sheets as need to provide a complete response. Attach reports documenting all remedial investigation and initial/interim remedial measure activities related to LNAPL including plans for operational monitoring. See the LNAPL Guidance for suggested report format.

SECTION D . VARIANCE FROM REGULATIONS

If the Licensed Site Remediation Professional has varied from the Technical Rules, provide the citation(s) from which the remediation varied and the page(s) in the attached document where the rationale for the variance is provided.

N.J.A.C. 7:26E- _____ Page _____
N.J.A.C. 7:26E- _____ Page _____
N.J.A.C. 7:26E- _____ Page _____

SECTION E. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Ortho-Clinical Diagnostics, Inc.

Representative First Name: Keith Representative Last Name: Wojciechowski

Title: Sr. Environmental Engineer

Phone Number: (908) 704-3973 Ext: Fax:

Mailing Address: 1001 U.S. Route 202

City/Town: Raritan Borough State: NJ Zip Code: 08869

Email Address: KWojciec@its.jnj.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Keith Wojciechowski Date: 3-31-2015

Name/Title: Keith Wojciechowski/Sr. Environmental Engineer **No Changes Since Last Submittal** ☒

SECTION F. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with SRRA Section 16 d. and Section 30 b.2.

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____ **No Changes Since Last Submittal** ☐

Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

Ortho Clinical Diagnostics is a federal-lead RCRA Corrective Action site with an NJDEP Case Manager.

LIST OF ACRONYMS

AMSL	Above mean sea level
AOC	Area of Concern
BEE	Baseline Ecological Evaluation
COPEC	Contaminants of Potential Ecological Concern
CVOC	Chlorinated Volatile Organic Compound
DKQP	Data of Known Quality Protocols
DQA	Data Quality Assessment
DUE	Data Usability Evaluation
EPH	Extractable Petroleum Hydrocarbons
GQS	Groundwater Quality Standard
LNAPL	Light Non-Aqueous Phase Liquid
NAPA	North American Products
NJDEP	New Jersey Department of Environmental Protection
NRIASL	Non-Residential Indoor Air Screening Level
NRSGSL	Non-Residential Soil Gas Screening Level
OCD	Ortho-Clinical Diagnostics
PID	Photo-Ionization Detector
RCRA	Recovery Conservation and Recovery Act
RQD	Rock Quality Designation
SCC	Soil Cleanup Criteria
SVOC	Semi-Volatile Organic Compound
SWMU	Solid Waste Management Unit
TCE	Trichloroethene
TCL	Target Contaminant List
TPH	Total Petroleum Hydrocarbon
TOC	Total Organic Content
VI	Vapor Intrusion
VOC	Volatile Organic Compound

1.0 INTRODUCTION

Langan Engineering & Environmental Services, Inc. (Langan) has prepared this Light Non-Aqueous Phase Liquid (LNAPL) Interim Remedial Measures Report on behalf of Ortho Clinical Diagnostics (OCD) to summarize the detection, delineation and recovery of LNAPL at the OCD site located at 1001 US Route 202 in Raritan, New Jersey (the Site). A Site location map is provided as Figure 1 and a map showing the surrounding land use is presented as Figure 2. A Site layout map is presented as Figure 3. Environmental conditions have been investigated extensively at the Site over a long period of time pursuant to the Resource Conservation and Recovery Act (RCRA) Corrective Action program, which is overseen by the U.S. Environmental Protection Agency (USEPA) and the New Jersey Department of Environmental Protection (NJDEP).

The LNAPL monitoring, recovery and delineation activities described in this report were conducted in accordance with the NJDEP Technical Requirements for Site Remediation (N.J.A.C. 7:26E), last updated May 7, 2012, and the LNAPL Initial Recovery and Interim Remedial Measures Technical Guidance, dated June 29, 2012. LNAPL was first discovered in monitoring well MW-47 on April 2, 2014. Monitoring well MW-47 is located immediately south of Building J as shown on Figure 3. The source of the LNAPL is believed to be related to fuel oil storage in the vicinity of Building J based on the former storage of fuel oil in this area. Additional investigations are planned to further investigate the source of the LNAPL. OCD initiated recovery of the LNAPL in April 2014 and continues to recover LNAPL when sufficient volume accumulates to allow for bailing.

In response to the LNAPL discovery, OCD submitted a Confirmed Discharge Notification Form (Incident No. 14-04-03-0956-05) to NJDEP on April 4, 2014, and an LNAPL Reporting Form to NJDEP on June 2, 2014. Copies of these forms are provided in Appendix A. This LNAPL Interim Remedial Measures Report provides a summary of the LNAPL occurrence, recovery, and delineation efforts at the Site to date and also outlines OCD's plans to continue with LNAPL monitoring and recovery efforts.

2.0 PHYSICAL SETTING

2.1 SITE LOCATION

The Site is located at 1001 US Route 202, Raritan, Somerset County, New Jersey as shown on the Site location map (Figure 1). The property occupies Lot 4 on Block 31 of the Raritan Borough, New Jersey tax map and encompasses approximately 66 acres. A mix of industrial, commercial, and residential land usage characterizes the area surrounding the Site (Figure 2). Route 202 is located immediately north of the Site; the New Jersey Transit Raritan Maintenance Yard and train tracks border the Site to the south; a relatively new residential development is located to the east of the Site on the former North American Products (NAPA) property; and the Johnson & Johnson Information Technology Services facility is located to the west of the Site. The Raritan Industrial Park is situated south of the New Jersey Transit Raritan Maintenance Yard and south-southeast of the Site. The JFK Elementary School is located south of both the New Jersey Transit property and the Site.

2.2 TOPOGRAPHY AND DRAINAGE

The Site is relatively flat lying with a slight slope to the south. The topographic elevation of the northern portion of the Site is approximately 125 to 130 feet above mean sea level (AMSL), whereas the southern portion of the Site is at approximately 105 to 110 feet AMSL. The Site is situated approximately 1.2 miles east of the North Branch of the Raritan River, which flows south to its confluence with the South Branch forming the main branch of the Raritan River. The main branch of the Raritan River flows to the east and is located approximately 0.75 miles south of the Site. As illustrated in Figure 2, a small drainage ditch transmits storm water flow southward in the western portion of the Site, eventually leading to an unnamed tributary of the Raritan River. Storm water is conveyed in the eastern and central portions of the Site to either the East Storm Sewer Outfall (001) or the West Storm Sewer Outfall (002), respectively. Both of these outfalls discharge into a drainage ditch that runs along the New Jersey Transit railroad tracks, immediately south of the Site. The drainage ditch also receives runoff from the New Jersey Transit property, including the railroad tracks. A divide in the drainage ditch results in the flow of storm water toward the east and west, each pathway ultimately leading to an endpoint at the Raritan River.

2.3 GEOLOGY

The Site lies within the Piedmont Physiographic Province (Triassic Lowlands) which is characterized mainly by gently rounded lowland hills separated by wide valleys. The soils underlying the Site consist predominantly of the Norton Series in the northern half and the Penn Series in the southern half of the Site. A smaller area in the southern central portion of the Site is mapped as the Bowmansville Series (Kirkham, 1976). The Norton and Penn Series soils, consisting mainly of reddish-brown silts and clays, form on the undulating and rolling uplands of the Piedmont Plateau in material weathered from red shale, siltstone, or fine-grained sandstone. The Bowmansville Series soils are similar to the others except they contain some sand and gravel and develop in depressions or along old stream meanders. In general, the soils in this area are three to six feet in depth and are underlain by highly weathered shale.

During the early phase of the Resource Conservation and Recovery Act (RCRA) Facility Investigation, Dames & Moore conducted soil sampling to assess the physical properties of the soil at the Site. According to Dames & Moore's results, the following properties were measured in a soil sample collected from the monitoring well MW-16 location: 11.99% moisture content; 139.94 pounds per cubic foot (lb/ft^3) (2.24 grams per cubic centimeter (g/cm^3)) density; 0.25 porosity; 1.15E-07 centimeter per second (cm/s) permeability; and, 1.68% organic content. During the source characterization phase, McLaren/Hart collected soil samples for analysis of total organic carbon (TOC). Results of this analysis indicated a TOC content ranging from 0.04% to 0.72%.

The dominant formation within the vicinity of the Site is the Early Jurassic to Late Triassic Passaic Formation, which was formerly included in the Brunswick Supergroup (Olsen, 1980). The Passaic Formation consists of non-marine, reddish-brown mudstone, shale, siltstone, and fine-grained sandstone interbedded with a lesser amount of gray to black siltstone, shale, and mudstone. The reported thickness of the Passaic Formation is approximately 11,000 feet in the region (Montaverde and Volkert, 1997). Recent investigative findings from the Site indicated a bedrock strike of approximately N22°W and dip of approximately 8° to 11° to the east-northeast. Fractures occur along bedding planes and as steeply dipping to vertical joint sets. Recent borehole geophysical logging results from MW-45 and MW-45D indicated dominant joints oriented N10°W, N7°W, N5°W and N7°E.

The depth to bedrock at the Site generally varies from 3 to 12 feet below grade. Highly weathered shale/silstone is typically encountered between 3 and 6 feet, and the shale/siltstone generally becomes harder at a depth of 8 to 12 feet, leading to refusal when utilizing direct push technology for boring advancement. The shallow bedrock underlying the Site is highly fractured and weathered shale and siltstone. Bedrock coring conducted at test well locations T-1, T-2 and T-3 indicated Rock Quality Designation (RQD) values of 0% to 25% above a depth of 25 feet. More competent zones of bedrock are typically encountered below a depth of 30 feet, as indicated by increasing RQD values in the range of 50% to 75%. Less competent intervals may also be found below 30 feet, but occur less frequently than in the shallower bedrock zones.

2.4 HYDROGEOLOGY

The Passaic Formation is composed primarily of relatively impermeable materials, and derives its water-bearing properties mostly due to secondary porosity in the form of bedding plane fractures, near-vertical joints, and weathered zones within the formation. Michalski (1990) described the Passaic Formation as a "leaky" multi-unit aquifer that consists of thin water bearing units and much thicker, strata-bound, intervening aquitards. In this model, the principal direction of groundwater flow typically occurs along strike of major bedding plane fractures with minor vertical leakage occurring along the near-vertical joints.

Several water-bearing zones were identified at the Site during the RCRA facility investigation (RFI). The first water-bearing zone occurs in the overburden and shallow weathered bedrock within a depth of approximately 30 feet. A list of the monitoring wells installed in the shallow weathered bedrock is included in Table 1. The depth to water in monitoring wells screened within this zone located south of Building J varies from 7 to 13 feet below grade (Table 2). The potentiometric surface elevations in the shallow bedrock zone in the area immediately south of Building J vary from 104 to 110 feet AMSL (Table 2). This zone is characterized by very low permeability with recharge rates varying between 0.001 to 0.045 gallons per minute (gpm), and averaging approximately 0.034 gpm. The average hydraulic conductivity varies from 1.0E-07 to 6.45E-04 cm/s.

The groundwater flow direction in the shallow bedrock zone is generally toward the south, although the hydraulic gradient is not readily discernible from water level measurements due to the poor yielding

properties of the shallow bedrock zone. Other factors used in estimating groundwater flow direction in the shallow bedrock include: (1) the apparent migration pattern of constituent concentrations in groundwater, (2) general ground topography, which slopes toward the south, and (3) the location of a major surface water body (Raritan River) south of the Site. The overall hydraulic gradient across the Site for the shallow bedrock zone is estimated at 0.015 to 0.028. Monitoring well specifications for the wells installed at the Site to date are included in Table 1. The water level measurement data recorded from monitoring wells between January 29, 2015 and March 12, 2015 are summarized in Table 2. Potentiometric surface elevations are plotted on Figure 4 for water level measurements recorded in shallow bedrock monitoring wells on January 29, 2015. Contours are not drawn on Figure 4 because of the highly variable and non-uniform nature of the potentiometric surface elevations in the shallow bedrock zone.

\\langan.com\data\DT\data4\3568401\Office Data\Reports\2015 LNAPL IRM\Text\Section_2.doc

3.0 RECEPTOR EVALUATION

3.1 LAND USE

Land use in the vicinity of the Site is a mix of industrial, commercial, and residential. OCD's activities have historically focused on research and production operations. The facility manufactures hospital and laboratory reagents used primarily for blood chemistry clinical products, which are usually packaged into "diagnostic kits." The land use surrounding the Site was described in Section 2.1 and is shown on Figure 2. Residential areas are located to the east and southwest of the Site and the JFK Elementary School is located south of both the New Jersey Transit property and the Site. No sensitive populations or receptors are located near the area south of Building J, where the LNAPL was discovered. There are no known proposed changes to land use within the vicinity of the Site.

3.2 GROUNDWATER USE

An updated well search was conducted in March 2015 to identify potable wells within a one-half mile radius of the Site, and all irrigation and industrial wells located within a one-mile radius of the Site. The initial well searches for the Site were conducted between 1994 and 1996, and again during 2000 as described in the May 2, 2001 RCRA Facility Investigation Report. The results of the initial well searches did not identify active potable wells within the area down-gradient (south) of the Site. Other than monitoring wells, the only new wells identified from the March 2015 well search were two irrigation wells, which are both located up-gradient of the Site as shown on Figure B-1 in Appendix B. No potable, irrigation or industrial wells were identified within 500 feet down-gradient, 500 feet side-gradient or 250 feet up-gradient of the Site.

3.3 ECOLOGICAL RECEPTORS

A baseline ecological evaluation (BEE) was conducted in November 2000 and was submitted to the NJDEP in the May 2001 RCRA Facility Investigation Report. Langan concluded from the BEE that no adverse ecological effects were observed during the Site visit. Furthermore, completion of the BEE did not identify the potential for migration of Contaminants of Potential Ecological Concern (COPECs) to environmentally sensitive receptors from any of the identified Solid Waste Management Units (SWMUs)

and Areas of Concern (AOCs). Although COPECs were identified at the Site, and environmentally sensitive areas exist within and adjacent to the Site, the potential migration pathways to these areas are incomplete. As a result, no further actions were recommended with respect to ecological assessments at the Site. NJDEP approved the BEE in their correspondence dated March 30, 2006. Land use on and adjacent to the Site has not changed since the BEE was completed in 2000 that would add to ecological receptors, and the LNAPL area is localized and not in proximity to any environmentally sensitive areas.

3.4 VAPOR INTRUSION

Vapor intrusion (VI) investigations were conducted in the basement of Building J in September 2007, March 2010 and March 2014. For the purpose of this report, the three sub-slab soil gas samples (J-SG10, J-SG11 and J-SG12) and one indoor air sample (IA-JB11) immediately north of the LNAPL area (MW-47) will be discussed in further detail.

The March 2014 VI investigation in the southwestern portion of the Building J basement included analysis of three sub-slab soil gas samples and one indoor air sample. A summary of the VI investigation at the Site is provided in Appendix D. The results of the March 2014 VI investigation in the southwestern portion of Building J identified chloroform and trichlororethene (TCE) concentrations exceeding the non-residential sub-slab soil gas screening levels (NRSGSLs) in sub-slab soil gas sample J-SG12. The results for the two remaining sub-slab soil gas samples (J-SG10 and J-SG11) indicated either no detections or VOC concentrations below the NRSGSLs. The indoor air sample results also indicated either no detections or VOC concentrations below the NJDEP Non-Residential Indoor Air Screening Levels (NRIASLs). The VI investigation results from the Building J basement show no indication of VI concerns from the LNAPL identified in MW-47 immediately to the south of Building J. Results from the VI investigations completed at the Site were previously submitted to the NJDEP. The relevant VI investigation documentation from the Building J basement is included in Appendix D.

4.0 TECHNICAL OVERVIEW

4.1 SUMMARY OF LNAPL IDENTIFICATION

LNAPL was first identified on April 2, 2014 in monitoring well MW-47, which is located south and hydraulically downgradient of Building J as shown on Figure 3. OCD has been regularly monitoring MW-47 for the presence of LNAPL since that time using an oil-water interface probe, and removing LNAPL when a sufficient volume accumulates to allow for recovery. A summary of the LNAPL thickness measurements and recovery is presented in Table 3.

4.2 SUMMARY OF LNAPL DELINEATION

The extent of LNAPL in MW-47 has been evaluated through the advancement of six soil borings (J-SB1 through J-SB6) to assess a potential soil source and the installation of three monitoring wells (MW-47R, MW-50 and MW-51) to horizontally delineate the LNAPL. Soil borings were advanced to depths varying from 10 to 14 feet below grade and continuous soil cores were visually inspected for the presence of LNAPL. Although LNAPL was not observed in the continuous soil cores, soil samples were collected from the six-inch interval exhibiting the highest photo-ionization detection (PID) reading. High PID readings were observed in soil borings J-SB3 and J-SB6 at a depth of approximately 13 feet below grade. The soil boring locations and the approximate extent of the hydrocarbon impacts are shown on Figure 5.

Eleven soil samples were collected from the six soil borings and were analyzed for target compound list (TCL) volatile organic compounds (VOCs) via USEPA Method 8260, extractable petroleum hydrocarbons (EPH), and the semi-volatile organic compounds (SVOCs) naphthalene and 2-methylnaphthalene via USEPA Method 8270. A summary of the soil samples and analyses are provided in Table 4. The analytical results for the soil samples are presented in Table 5 (EPH), Table 6 (VOCs), and Table 7 (SVOCs). EPH concentrations varied from non-detect to 1,930 milligrams per kilogram (mg/kg), but were below the 10,000 mg/kg Total Petroleum Hydrocarbon (TPH) standard, which is the applicable criterion for the Site pursuant to the grandfathering of the 1999 NJDEP Soil Cleanup Criteria (SCC). A review of the laboratory analytical results indicated that VOCs were not detected at concentrations exceeding the NJDEP SCC (Table 6) and the concentrations of naphthalene and 2-methylnaphthalene were non-detect (Table 7).

Monitoring wells MW-50 and MW-51 were installed in January 2015 to the west and south of MW-47, respectively, to horizontally delineate LNAPL. Monitoring well MW-47R was installed to the east of MW-47 at a shallower interval to evaluate the presence of LNAPL in the overburden/shallow weathered bedrock. Monitoring well T-1B was previously installed at the Site and is used to delineate LNAPL to the east/southeast. To date, LNAPL has not been detected in any of the four delineation monitoring wells based on gauging events conducted between January and March 2015. Figure 5 depicts the locations of the soil borings and recently installed monitoring wells used to delineate the LNAPL observed in MW-47.

4.3 SUMMARY OF LNAPL MONITORING AND RECOVERY

OCD has been monitoring LNAPL at MW-47 since it was initially detected in April 2014. Recovery of LNAPL at MW-47 was initiated in April 2014 and has continued since that time. Approximately one gallon of LNAPL has been recovered from MW-47 from April 2014 through March 2015. OCD will conduct monthly product recovery events if the measured thickness of LNAPL in the wells is greater than two inches. Additionally, OCD will monitor MW-47R, MW-50, MW-51 and T-1B for the presence of LNAPL periodically to confirm the continued absence of LNAPL.

\\langan.com\data\DT\data4\3568401\Office Data\Reports\2015 LNAPL IRM\Text\Section_4.doc

5.0 SUMMARY OF LNAPL INVESTIGATION AND REPORTING

5.1 LNAPL OCCURRENCE

LNAPL has been identified in monitoring well MW-47, which is located south and hydraulically down-gradient of Building J as shown on Figure 3. The source of the LNAPL is believed to be related to fuel oil storage in the vicinity of Building J based on the former storage of fuel oil in this area. Additional investigations are planned to further investigate the source of the LNAPL. The presence of LNAPL has been monitored in MW-47 since LNAPL was first detected in April 2014. The thickness of LNAPL has varied from 0.02 to 0.95 foot since April 2014. A summary of the LNAPL monitoring events from April 2014 through March 2015 is provided in Table 3. The approximate extent of observed hydrocarbon impacts and the location of MW-47 are depicted on Figure 5.

5.2 LNAPL CHARACTERISTICS

5.2.1 Chemical Composition

On April 3, 2014, OCD collected a sample of the LNAPL from monitoring well MW-47 and sent it to Torkelson Geochemistry, Inc. (Torkelson) for LNAPL fingerprint analysis. The results of the analysis indicated that the predominant constituents of the LNAPL were extremely weathered middle distillates (kerosene, jet fuel or something similar like winter diesel fuel). The hydrocarbons detected in the LNAPL sample ranged from normal nonane (n-C_9) to n-eicosane (n-C_{20}). The weathering appears to be primarily biodegradation based on the preferential reduction in normal paraffin peaks relative to the more resistant isoprenoid peaks. The age of the sample was estimated to be at least 20 +/- 2 years or older. Torkelson's summary and analytical report for the LNAPL fingerprinting from MW-47 is provided in Appendix F.

On October 2, 2014, META Environmental, Inc. (META) performed a fingerprint analysis on a second LNAPL sample collected from MW-47. According to META, the LNAPL is a weathered light fuel oil with a boiling range between kerosene and No. 2 fuel oil. The total hydrocarbons concentration was 960,000 mg/kg, which indicated nearly pure fuel oil. No normal alkanes were detected indicating that the fuel

had been biologically weathered and that petroleum products with these characteristics include weathered kerosene, jet fuel and winter diesel. META's summary and analytical report for the LNAPL fingerprinting from MW-47 is provided in Appendix G.

5.2.2 LNAPL Migration and Extent

LNAPL has been detected only in monitoring well MW-47, and not in any of the other nearby monitoring wells: MW-MT, MW-20R, MW-47R, MW-50, MW-51, T1-A, T1-1A, or T-1B. The extent of LNAPL is therefore defined to the west by MW-50, to the east by MW-47R and to the south by MW-51. Delineation to the north by the installation of a monitoring well cannot be completed because of the presence of Building J.

In accordance with the NJDEP's LNAPL Initial Recovery and Interim Remedial Measures Technical Guidance, visual observations for LNAPL during the advancement of soil borings are an acceptable method for the determination of LNAPL. On May 15, 2014, six soil borings (J-SB1 through J-SB6) were advanced in the vicinity of MW-47. The locations of the soil borings are shown on Figure 5. The soil borings depths varied from 10 to 14 feet below grade. Continuous soil samples were collected, logged, and screened with a PID. Although LNAPL was not detected in any of the soil borings, a hydrocarbon-like odor was detected at soil boring locations J-SB3 and J-SB6 at approximately 13 feet below grade, as shown on the soil boring logs provided in Appendix H. Soil samples were collected from each soil boring from the depth interval exhibiting the highest PID reading. A summary of the soil samples and analyses is provided in Table 4.

The soil samples were analyzed for EPH. The concentrations of EPH detected in the soil samples from soil borings varied from non-detect to 1,930 mg/kg in J-SB6(12.5-13) (Table 5). As reported in an EPH-TPH Field Study, TPH concentrations via USEPA Method 418.1 are comparable to EPH concentrations with a ratio of approximately 1:1 with a regression coefficient of 0.8473. Therefore, the EPH concentrations can be compared to, and is below, the applicable TPH criterion of 10,000 mg/kg for the Site. A review of the laboratory analytical results indicated that VOCs were not detected at concentrations exceeding the NJDEP SCC (Table 6) and concentrations of naphthalene and 2-methylnaphthalene were not detected (Table 7). Consequently, the analytical results and absence of

LNAPL observations from the soil borings provide delineation of LNAPL to the north (J-SB6), south (J-SB2) and east (J-SB1, J-SB4 and J-SB5).

Monitoring well MW-47 was originally installed to evaluate groundwater quality for propylene glycol in response to the detection of propylene glycol concentrations in soil at AOC-18 (Propylene Glycol Aboveground Storage Tank in Building J Basement). Although results from initial groundwater sampling events did not indicate concentrations of propylene glycol above the NJDEP GQS, several chlorinated VOCs were detected in groundwater at concentrations above the NJDEP GQS. Monitoring well MW-47 has been sampled eight times since its installation in July 2013. A summary of the groundwater samples and analyses are provided in Table 4. A review of the laboratory analytical results indicate the following compounds have been detected at concentrations exceeding the NJDEP GQS: 1,1-dichloroethene, cis-1,2-dichloroethene, TCE, vinyl chloride and bis(2-ethylhexyl)phthalate. Laboratory analytical results from the eight groundwater sampling events are summarized in Table 8 (VOCs) and Table 9 (SVOCs). The presence of chlorinated VOCs in groundwater is unrelated to the LNAPL observed in MW-47 as supported by the on-going investigation and remediation of chlorinated VOCs south and/or east of Buildings G and J. Plans are underway for further investigation and monitoring of the chlorinated VOCs groundwater independent of the LNAPL-related activities.

Chain-of-custody records and analytical data summary sheets (Form 1's) from the soil and groundwater investigations are provided in Appendices I and J, respectively.

5.2.3 LNAPL and Water Level Fluctuations

Depth to water and LNAPL thickness has been monitored at monitoring well MW-47 since July 2013. The maximum LNAPL thickness (0.95 feet) recorded in MW-47 occurred on April 2, 2014, when LNAPL was first discovered. As shown on Figure 7, the water table fluctuates between being below and above the top of the screen in MW-47. With the exception of the first detection, as expected, the LNAPL thickness typically increases when the water table drops below the top of screen and decreases when the water table rises above the top of the screen. Monitoring well MW-47R was installed in January 2015 with a screen interval of 4 to 19 feet below grade to straddle the water table in anticipation of being better positioned to monitor and recover LNAPL. However, LNAPL has not been detected in MW-47R to date as indicated in Table 3. As depicted on Figure 7, the LNAPL appears to be near the overburden/shallow

weathered bedrock interface. Well construction logs are provided in Appendix C and well specifications are provided in Table 1. Monitoring well certification Forms A and B are presented in Appendix D.

5.3 DATA QUALITY EVALUATION

Langan conducted a Quality Assurance/Quality Control (QA/QC) review of the data packages listed in the table below. The packages that were assessed prior to the implementation of NJDEP's Data of Known Quality Protocols (DKQPs) in October 2014 were reviewed relative to the requirements established in the analytical methodology. All data reviewed after October 2014 has been reviewed in accordance with NJDEP DKQP method performance criteria. Analytical methods for which NJDEP has not published performance criteria were evaluated relative to the method requirements.

Data Package	Sampling Date	Media	Pre-October 2014	Post-October 2014
JB46934	9/9/13	Groundwater	X	
JB67244	5/15/14	Soil	X	
JB75245	8/28/14	Groundwater	X	
11848	12/8/14	Groundwater		X

Langan completed NJDEP-published Data Quality Assessment (DQA) worksheets 1 and 2 electronically to document the results of each review. Following the completion of all project DQAs, Data Usability Evaluations (DUEs) were developed to support the use of data for the Site evaluation. The NJDEP's DUE worksheet was completed to assess departures from QA/QC criteria and consider their potential effects. The QA/QC reviews did not indicate any major deficiencies in the quality of the laboratory data for pre-October or post-October 2014 data. DQA/DUE forms are included in Appendix K.

5.4 SUMMARY OF LNAPL REPORTING

In accordance with N.J.A.C. 7:26E-1.10, OCD submitted the LNAPL Free Product Reporting Form to the NJDEP on June 2, 2014 (Appendix A). OCD has completed characterization of the LNAPL and results indicate the LNAPL at MW-47 is a highly weathered fuel oil. In addition to the existing monitoring well network, three monitoring wells were installed to horizontally delineate the LNAPL in MW-47. Furthermore, six soil borings were advanced in the vicinity of MW-47 in an attempt to identify LNAPL in

soil. In accordance with N.J.A.C. 7:26E-1.10, this LNAPL Interim Remedial Measures Report is being submitted within one year from when LNAPL was first discovered in MW-47 on April 2, 2014.

\\langan.com\data\DT\data4\3568401\Office Data\Reports\2015 LNAPL IRM\Text\Section_5.doc

6.0 LNAPL INTERIM REMEDIAL MEASURES AND MONITORING

6.1 LNAPL RECOVERY AND MONITORING

OCD initiated periodic monitoring and recovery of the LNAPL detected in MW-47 in April 2014. Since the initiation of the monitoring and recovery efforts in April 2014, 20 monitoring and recovery events have been completed. Recovery efforts included gauging and bailing LNAPL if the thickness was greater than two inches until the well was free of LNAPL. Approximately one gallon of LNAPL has been removed from MW-47 to date. A summary of the LNAPL monitoring and recovery at MW-47 is provided on Table 3.

6.2 RECOMMENDED LNAPL RECOVERY AND MONITORING PLAN

OCD proposes to continue with LNAPL monitoring and recovery events at MW-47 on a monthly schedule if the measured thickness of LNAPL in MW-47 or any other well is greater than two inches. The frequency of LNAPL monitoring and recovery will be reduced when the thickness of LNAPL decreases to less than two inches on a consistent basis. At that point, OCD may continue with the LNAPL recovery efforts through the installation of an oil-only absorbent sock. In addition to MW-47, OCD will periodically monitor the following monitoring wells for the presence of LNAPL wells: MW-47R, MW-50, MW-51 and T-1B.

\\langan.com\data\DT\data4\3568401\Office Data\Reports\2015 LNAPL IRM\Text\Section_6.doc

7.0 CONCLUSIONS AND RECOMMENDATIONS

LNAPL was first identified in monitoring well MW-47 at the Site in April 2014. The source of the LNAPL is believed to be related to fuel oil storage in the vicinity of Building J based on the former storage of fuel oil in this. Additional investigations are planned to further investigate the source of the LNAPL.

The extent of LNAPL appears to be limited based on the results of recent investigative activities. LNAPL within the vicinity of MW-47 has been delineated through soil sampling results and observations at six soil borings (J-SB1 through J-SB6), and additionally through the monitoring of four monitoring wells (MW-47R, MW-50, MW-51 and T1-B) within the area.

Sensitive receptors do not exist within the vicinity of MW-47, where the LNAPL has been observed. Well search results indicate no potable wells located within one-half mile down-gradient of the Site. The results of a prior ecological evaluation at the Site indicate that although compounds of potential ecological concern were identified at the Site, and environmentally sensitive areas exist within and adjacent to the Site, the potential migration pathways to these areas are incomplete. Additionally, the extensive characterization activities at the Site have included VI investigations that included the Building J basement, which is located nearest to the LNAPL area. However, the VI investigation results showed no indication of VI concerns related to LNAPL or petroleum hydrocarbons.

OCD initiated recovery of LNAPL in MW-47 in April 2014 via bailing and has continued with recovery of LNAPL to date. Approximately one gallon of LNAPL has been recovered from MW-47 since April 2014. OCD proposes to continue with LNAPL monitoring and recovery events at MW-47 on monthly schedule if the measured thickness of LNAPL in MW-47 or any other well is greater than two inches. The frequency of LNAPL monitoring and recovery will be reduced when the thickness of LNAPL decreases to less than two inches on a consistent basis. At that point, OCD may continue with the LNAPL recovery efforts through the installation of an oil-only absorbent sock. In addition to MW-47, OCD will also periodically monitor other nearby monitoring wells for the presence of LNAPL.

REFERENCES

Dames and Moore. June 30, 1993. Draft RCRA Facility Investigation Report.

Kirkham, W.C. December 1976. Soil Survey of Somerset County, New Jersey, USDA Soil Conservation Service.

Michalski, A. Fall 1990. Hydrogeology of the Brunswick (Passaic) Formation and Implications for Ground Water Monitoring Practice. *Groundwater Monitoring Review*, 134-143.

Monteverde,D.H. and Volkert, R.A. 1997. Bedrock Geology, Geology of the Raritan Quadrangle, Hunterdon and Somerset Counties, Geologic Map Series GMS-03-2, New Jersey Geological Survey.

Olsen, P. E. 1980. Triassic and Jurassic Formations of the Newark Basin. *Field Studies of New Jersey Geology and Guide to Field Trips: 52nd Annual Meeting of the New York State Geological Association.* pp 2-41.

Tables

Table 1
Monitoring Well Specifications
Ortho-Clinical Diagnostics
Raritan, New Jersey

Well ID	Date of Installation	Completion	Depth from GS (ft)	Casing Depth (ft)	Ground Surface Elevation (ft AMSL)	Casing Elevation (ft AMSL)	Screen Length (ft)	Diameter (inches)
SHALLOW BEDROCK ZONE								
MW-5	5/26/1989	Above grade	21	3	NS	119.67	18	4
MW-6	5/26/1989	Above grade	21	3	NS	118.65	18	4
MW-7	5/26/1989	Above grade	21	3	NS	117.79	18	4
MW-9	5/26/1989	Above grade	23	3	NS	120.02	20	4
MW-10	6/22/1990	Flush	33	20	118.70	118.28	13[a]	6
MW-14r	6/26/1990	Flush	31.5	22	112.08	111.77	10	2
MW-15r	6/26/1990	Flush	26	15	102.20	101.93	11	2
MW-16r	6/27/1990	Flush	31	22	104.07	103.73	9	2
MW-17	6/26/1990	Flush	26	12	107.36	106.87	14[a]	6
MW-20r	2/8/1991	Flush	30	18	114.00	113.64	12	2
MW-21r	2/8/1991	Flush	30	16	110.65	110.42	14	2
MW-22r	2/8/1991	Flush	30	13	102.77	102.50	17	2
MW-23	6/4/1991	Flush	30	13	106.76	106.17	17[a]	6
MW-25r	6/4/1991	Flush	32	16	100.89	100.60	16	2
MW-27r	6/3/1991	Flush	32	19	112.10	111.81	13	2
MW-28r	6/3/1991	Flush	32	20	106.11	105.78	12	2
MW-29r	10/23/1991	Flush	30	20	112.90	113.30	10	2
MW-30	10/25/1991	Flush	30	12	106.75	106.51	18[a]	6
MW-31	10/23/1991	Flush	30	17	112.08	111.60	13[a]	6
MW-32	8/11/1999	Flush	25	5	104.80	104.46	20	2
MW-33	4/22/1996	Flush	13	3	119.31	118.74	10	2
MW-34	8/14/1998	Flush	30	15	111.29	111.05	15	2
MW-35	8/14/1998	Flush	30	15	111.79	111.46	15	2
MW-36	9/29/1998	Flush	30	20	116.29	115.95	10	2
MW-38[b]	8/21/2003	Above grade	35	20	89.3	91.29	15	2
MW-39[b]	8/22/2003	Above grade	35	25	95.1	97.29	10	2
MW-40[b]	8/21/2003	Above grade	35	20	95.3	97.89	15	2
MW-42[c]	8/22/2005	Flush	35	20	89.5	89.25	15	2
MW-43[c]	8/22/2005	Flush	35	20	86.9	86.52	15	2
MW-44	9/19/2008	Flush	32	12	110.65	117.42	20	2
MW-46	6/19/2013	Flush	25	5	103.46	102.96	20	2
MW-47	7/17/2013	Flush	34	14	118.6	117.91	20	2
MW-47R	1/9/2015	Flush	19	4	118.67	118.36	19	4
MW-50	1/9/2015	Flush	30	5	116.19	115.90	25	2
MW-51	1/9/2015	Flush	25	5	116.41	115.83	20	2
MW-MT	1/21/1992	Flush	30	16	NS	111.51	14	6
INTERMEDIATE BEDROCK ZONE								
MW-45	6/19/2013	Flush	61	41	115.66	114.97	20[a]	6

Footnotes are on the last page of this table

Table 1
Monitoring Well Specifications
Ortho-Clinical Diagnostics
Raritan, New Jersey

Well Location	Well Interval ID	Date of Installation	Completion	Depth from GS (ft)	Casing Depth (ft)	Ground Surface Elevation (ft AMSL)	Casing Elevation (ft AMSL)	Open Hole Interval (ft)	Diameter (inches)
DEEP BEDROCK ZONE									
MW-1	NA	8/26/1987	Above grade	96	71	NS	125.87	25	2
MW-4	NA	8/27/1987	Above grade	110	85	NS	117.80	25	2
MW-24	NA	6/4/1991	Flush	80	55	103.03	102.50	25[a]	6
MW-26	NA	6/3/1991	Flush	80	55	110.8	110.46	25[a]	6
MW-28Dr	NA	10/22/1991	Flush	75	55	106.04	105.77	20	2
MW-29Dr	NA	10/24/1991	Flush	80	60	113.22	112.81	20	2
MW-30D	NA	10/25/1991	Flush	80	55	106.68	106.39	25[a]	6
MW-34D	NA	8/12/1999	Flush	75	55[d]	111.56	111.17	20	2
MW-37	NA	8/13/1999	Flush	80	60[d]	115.15	114.69	20	2
MW-41D[c]	NA	8/21/2003	Above grade	70	50	94.5	97.26	20[a]	6
DEEP BEDROCK ZONE - Continued (FLUTe™ Well)									
MW-45D	MW-45D-1	12/12/2013[e]	Flush	120	61	115.53	115.35	60 - 67[f]	0.25[g]
	MW-45D-2	12/12/2013[e]	Flush	120	61	115.53	115.36	75 - 85	0.25[g]
	MW-45D-3	12/12/2013[e]	Flush	120	61	115.53	115.36	90 - 100	0.25[g]
	MW-45D-4	12/12/2013[e]	Flush	120	61	115.53	115.37	110 - 120	0.25[g]
IRON PILOT STUDY TEST WELLS									
T-1	NA	9/1/1999	Flush	45	17	117.22	116.74	17-45	3.125
T-1-A	NA	9/7/1999	Flush	40	12	117.30	116.91	12-40	3.875
T-1-B	NA	9/7/1999	Flush	40	12	117.71	117.50	12-40	3.875
T-2	NA	9/2/1999	Flush	43	12	117.79	117.28	12-43	3.125
T-3	NA	9/2/1999	Flush	33	12	116.64	116.17	12-33	3.125

GS: Ground Surface
AMSL : Above Mean Sea Level based on North American Vertical Datum of 1988
NS: Not surveyed
NA: Not applicable
[a]: Screen length = open hole
[b]: Monitoring well is located on NJ Transit property
[c]: Monitoring well is located on JFK Elementary School property
[d]: Wells are double cased. Six-inch diameter steel casings to 50 feet and two-inch diameter wells to depths referenced above
[e]: The FLUTe well installation was completed on 12/12/2013 after removing the blank liner
[f]: Open borehole interval represents the FLUTe monitoring depth. Top portion of sampling interval is within the casing.
[g]: Tubing where sample is collected from the FLUTe multiport monitoring system is 0.25" in diameter. The FLUTe system is installed in a 6" diameter open hole

Table 2
Water Level Measurement Data
Ortho Clinical Diagnostics
Raritan, New Jersey

Shallow Bedrock Zone

Monitoring Well	TIC Elevation (ft. AMSL)	Depth to Water from TIC (ft.) 1/29/2015	Groundwater Elevation (ft.) 1/29/2015	Depth to Water from TIC (ft.) 2/18/2015	Groundwater Elevation (ft.) 2/18/2015	Depth to Water from TIC (ft.) 3/12/2015	Groundwater Elevation (ft.) 3/12/2015
MW-20r	113.64	14.76	98.88	NM	NM	NM	NM
MW-47	117.91	12.09 (11.99[a])	105.82 (105.92[a])	12.35 (12.27[a])	105.56 (105.64[a])	12.2 (12.13[a])	105.71 (105.78[a])
MW-47R	118.36	10.50	107.86	11.99	106.37	7.92	110.44
MW-50	115.90	8.58	107.32	9.11	106.79	9.52	106.38
MW-51	115.83	8.43	107.40	9.78	106.05	7.30	108.53
T-1B	117.50	12.02	105.48	13.02	104.48	13.07	104.43

Notes:
Water levels only provided for wells in proximity to observed area of Light Non-Aqueous Phase Liquid (LNAPL)
AMSL: Above Mean Sea Level based on North American Vertical Datum of 1988
TIC: Top of Inner Casing
NM: Not Measured
a: Corrected measurement accounting for Light Non-Aqueous Phase Liquid (LNAPL) on top of water table (LNAPL specific gravity assumed to be 0.85)

Table 3
Summary of LNAPL Monitoring and Recovery
Ortho Clinical Diagnostics
Raritan, New Jersey

MW-47

Date	Depth to Water (feet below TIC)	Depth to LNAPL (feet below TIC)	LNAPL Thickness (feet)	LNAPL Removed (gallons)
4/3/2014	12.15	11.46	0.69	0.10
4/4/2014	11.52	11.49	0.03	-
4/7/2014	11.49	11.43	0.06	-
4/17/2014	11.96	11.90	0.06	-
4/22/2014	11.13	11.10	0.03	-
5/7/2014	11.84	11.79	0.05	-
5/16/2014	11.96	11.93	0.03	-
7/10/2014	12.86	12.82	0.04	-
8/28/2014	14.43	13.59	0.84	0.10
9/4/2014	14.20	13.60	0.60	0.10
9/11/2014	14.32	13.90	0.42	0.10
9/18/2014	14.57	14.22	0.35	0.05
9/26/2014	15.58	15.22	0.36	0.06
11/20/2014	17.10	16.45	0.65	0.30
12/5/2014	14.81	14.26	0.55	0.10
12/12/2014	13.05	12.82	0.23	0.08
1/6/2015	12.21	12.10	0.11	-
1/9/2015	11.88	11.75	0.13	-
1/12/2015	12.12	12.00	0.12	-
1/29/2014	12.09	11.97	0.12	-
2/18/2015	12.35	12.26	0.09	0.04
3/2/2015	12.58	12.50	0.08	-
3/12/2015	12.20	12.12	0.08	-
			Total:	**1.03**

LNAPL: Light Non-Aqueous Phase Liquid
TIC: Top of Inner Casing
- : Insufficient volume of LNAPL for recovery
Note: LNAPL was not detected in MW-47R, MW-50 or MW-51 on 1/29/2015, 2/18/2015 or 3/12/2015

Table 4
Soil and Groundwater Sample and Analysis Summary
Ortho Clinical Diagnostics
Raritan, New Jersey

Sample Location	Sample ID	Sample Depth (feet)	Sample Date	Laboratory Analysis
SOIL: LNAPL Investigation - Exterior of Building J				
J-SB1	J-SB1(3.5-4)	3.5 - 4.0	5/15/2014	VOCs, Naphthalene, 2-Methyl Naphthalene, EPH
J-SB2	J-SB2(3.5-4)	3.5 - 4.0		VOCs, Naphthalene, 2-Methyl Naphthalene, EPH
J-SB3	J-SB3(3.5-4)	3.5 - 4.0		VOCs, Naphthalene, 2-Methyl Naphthalene, EPH
	D051514[1]	3.5 - 4.0		VOCs, Naphthalene, 2-Methyl Naphthalene, EPH
	J-SB3(13-13.5)	13.0 - 13.5		VOCs, Naphthalene, 2-Methyl Naphthalene, EPH
	J-SB3(13.5-14)	13.5 - 14.0		TCE
J-SB4	J-SB4(3.5-4)	3.5 - 4.0		VOCs, Naphthalene, 2-Methyl Naphthalene, EPH
J-SB5	J-SB5(11.5-12)	11.5 - 12.0		VOCs
J-SB6	J-SB6(3.5-4)	3.5 - 4.0		VOCs, Naphthalene, 2-Methyl Naphthalene, EPH
	J-SB6(12.5-13)	12.5 - 13.0		VOCs, Naphthalene, 2-Methyl Naphthalene, EPH
	J-SB6(13.5-14)	13.5 - 14.0		TCE
GROUNDWATER				
MW-47	MW-47(080613)	14.0 - 34.0	8/6/2013	VOCs, Propylene Glycol
	D080613B[1]			Propylene Glycol
	MW-47(090913)		9/9/2013	VOCs, Propylene Glycol
	D090913[1]			VOCs, Propylene Glycol
	MW-47(121213)		12/12/2013	VOCs
	D121213[1]			VOCs
	MW-47(22.5)	21.75 - 23.25		VOCs
	MW-47(27.75)	27.0 - 28.5		VOCs
	MW-47(32.25)	31.5 - 33.0		VOCs
	MW-47(021914)	14.0 - 34.0	2/19/2014	VOCs
	D021914[1]			VOCs
	MW-47 Q214		6/11/2014	VOCs
	MW-47 Q314		8/27/2014	VOCs
	MW-47(082814)		8/28/2014	VOCs, SVOCs
	MW-47 Q414		12/8/2014	VOCs

Table 4
Soil and Groundwater Sample and Analysis Summary
Ortho Clinical Diagnostics
Raritan, New Jersey

Sample Location	Sample ID	Sample Depth (feet)	Sample Date	Laboratory Analysis
FIELD BLANKS AND TRIP BLANKS				
Field Blanks	FB080613	NA	8/6/2013	VOCs
	FB090913	NA	9/9/2013	VOCs
	FB121213	NA	12/12/2013	VOCs
	FB021914	NA	2/19/2014	VOCs
	FB051514	NA	5/15/2014	VOCs
	FB082814	NA	8/28/2014	VOCs, SVOCs
Trip Blanks	TB090913	NA	9/9/2013	VOCs
	TB121213	NA	12/12/2013	VOCs
	TB021914	NA	2/19/2014	VOCs
	TB082814	NA	8/28/2014	VOCs

VOCs: Volatile Organic Compounds
SVOCs: Semi-Volatile Organic Compounds
EPH: Extractable Petroleum Hydrocarbons
TCE: Trichloroethene
NA: Not Applicable
[1]: Duplicate of preceding sample
Note: Field blanks and trip blanks associated with the quarterly sampling program will be submitted in the annual groundwater monitoring report

Table 5
EPH Analytical Results for Soil
Ortho Clinical Diagnostics
Raritan, New Jersey

Sample ID **Sample Depth (feet)** **Lab ID** **Sample Date** **Dilution Factor**	**NJDEP TPH Criterion (1999)**	J-SB1(3.5-4) 3.5-4.0 JB67244-1 5/15/2014 1	J-SB2(3.5-4) 3.5-4.0 JB67244-12 5/15/2014 1	J-SB3(3.5-4) 3.5-4.0 JB67244-7 5/15/2014 1	D051514[1] 3.5-4.0 JB67244-11 5/15/2014 1
Non- Fractionated EPH (mg/kg)					
EPH (C9-C28)	NS	7.6 U	7.8 U	7.4 U	7.8 U
EPH (>C28-C40)	NS	7.6 U	7.8 U	7.4 U	7.8 U
Total EPH (C9-C40)	10,000*	7.6 U	7.8 U	7.4 U	7.8 U

Sample ID **Sample Depth (feet)** **Lab ID** **Sample Date** **Dilution Factor**	**NJDEP TPH Criterion (1999)**	J-SB3(13-13.5) 13.0-13.5 JB67244-9 5/15/2014 1	J-SB4(3.5-4) 3.5-4.0 JB67244-3 5/15/2014 1	J-SB6(3.5-4) 3.5-4.0 JB67244-16 5/15/2014 1	J-SB6(12.5-13) 12.5-13.0 JB67244-18 5/15/2014 1
Non- Fractionated EPH (mg/kg)					
EPH (C9-C28)	NS	356 J	6.9 U	7.4 U	1,930 J
EPH (>C28-C40)	NS	7.1 U	6.9 U	7.4 U	7.4 U
Total EPH (C9-C40)	10,000*	356 J	6.9 U	7.4 U	1,930 J

NJDEP: New Jersey Department of Environmental Protection

EPH: Extractable Petroleum Hydrocarbons. Total EPH reported to three significant figures.

TPH: Total Petroleum Hydrocarbons

mg/kg: milligrams per kilogram

NS: Not specified

*: Soil cleanup criteria listed reflects the Total Organic Cap. There is no specific soil cleanup criteria for TPH

U: Analyte not detected above referenced reporting limit

J: Estimated concentration at or below the reporting limit

[1]Sample is a duplicate of preceding sample

Table 6
VOC Analytical Results for Soil
Ortho Clinical Diagnostics
Raritan, New Jersey

Sample ID Sampling Depth (feet) Lab ID Sample Date Dilution Factor	CAS#	NJDEP SCC (5/12/1999)			Exterior of Building J		
		Residential Direct Contact	Non-Residential Direct Contact	Impact to Groundwater	J-SB1(3.5-4) 3.5-4.0 JB67244-1 5/15/2014 1	J-SB2(3.5-4) 3.5-4.0 JB67244-12 5/15/2014 1	J-SB3(3.5-4) 3.5-4.0 JB67244-7 5/15/2014 1
VOLATILE ORGANIC COMPOUNDS (VOCs) (mg/kg)							
1,1,1-Trichloroethane	71-55-6	290[a]	4,200[a]	50	0.0047 U	0.0046 U	0.0045 U
1,1,2,2-Tetrachloroethane	79-34-5	1[b]	3[b]	1	0.0047 U	0.0046 U	0.0045 U
1,1,2-Trichloroethane	79-00-5	2[b]	6[b]	1	0.0047 U	0.0046 U	0.0045 U
1,1-Dichloroethane	75-34-3	8[b]	24[b]	10	0.0047 U	0.0046 U	0.0045 U
1,1-Dichloroethene	75-35-4	11[a]	150	10	0.0047 U	0.0046 U	0.0045 U
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	0.0047 U	0.0046 U	0.0045 U
1,2,4-Trichlorobenzene	120-82-1	73[a]	1200	100	0.0047 U	0.0046 U	0.0045 U
1,2-Dibromo-3-chloropropane	96-12-8	0.08[c]	0.2[c]	.005	0.0093 U	0.0092 U	0.0091 U
1,2-Dibromoethane	106-93-4	0.008	0.04	.005	0.00093 U	0.00092 U	0.00091 U
1,2-Dichlorobenzene	95-50-1	5,300[a]	59,000[a]	50	0.0047 U	0.0046 U	0.0045 U
1,2-Dichloroethane	107-06-2	6	24	1	0.00093 U	0.00092 U	0.00091 U
1,2-Dichloropropane	78-87-5	10	43	NS	0.0047 U	0.0046 U	0.0045 U
1,3-Dichlorobenzene	541-73-1	5,300[a]	59,000[a]	100	0.0047 U	0.0046 U	0.0045 U
1,4-Dichlorobenzene	106-46-7	5[b]	13[b]	100	0.0047 U	0.0046 U	0.0045 U
1,4-Dioxane	123-91-1	NS	NS	NS	0.12 U	0.12 U	0.11 U
2-Butanone (MEK)	78-93-3	3,100a	44,000[a]	50	0.0093 U	0.0092 U	0.0091 U
2-Hexanone	591-78-6	NS	NS	NS	0.0047 U	0.0046 U	0.0045 U
4-Methyl-2-pentanone(MIBK)	108-10-1	1000	1000	50	0.0047 U	0.0046 U	0.0045 U
Acetone	67-64-1	70,000[a]	1000	100	0.0093 U	0.0092 U	0.0091 U
Benzene	71-43-2	3	13	1	0.00093 U	0.00092 U	0.00091 U
Bromochloromethane	74-97-5	NS	NS	NS	0.0047 U	0.0046 U	0.0045 U
Bromodichloromethane	75-27-4	1[b]	3[b]	1	0.0047 U	0.0046 U	0.0045 U
Bromoform	75-25-2	86	370	1	0.0047 U	0.0046 U	0.0045 U
Bromomethane	74-83-9	79	59[b]	1	0.0047 U	0.0046 U	0.0045 U
Carbon disulfide	75-15-0	7,800	110,000	4	0.0047 U	0.0046 U	0.0045 U
Carbon tetrachloride	56-23-5	2	4	1	0.0047 U	0.0046 U	0.0045 U
Chlorobenzene	108-90-7	510[a]	7,400[a]	1	0.0047 U	0.0046 U	0.0045 U
Chloroethane	75-00-3	220	1,100	NA	0.0047 U	0.0046 U	0.0045 U
Chloroform	67-66-3	0.6[b]	2[b]	1	0.0047 U	0.0046 U	0.0045 U
Chloromethane	74-87-3	4[b]	12[b]	10	0.0047 U	0.0046 U	0.0045 U
cis-1,2-Dichloroethene	156-59-2	230[a]	1,000	1	0.0047 U	0.0046 U	0.0045 U
cis-1,3-Dichloropropene	10061-01-5	4	5	1	0.0047 U	0.0046 U	0.0045 U
Cyclohexane	110-82-7	NS	NS	NS	0.0047 U	0.0046 U	0.0045 U
Dibromochloromethane	124-48-1	3[b]	8[b]	.005	0.0047 U	0.0046 U	0.0045 U
Dichlorodifluoromethane	75-71-8	490[a]	230,000[a]	25	0.0047 U	0.0046 U	0.0045 U
Ethylbenzene	100-41-4	7,800[a]	110,000[a]	100	0.00093 U	0.00092 U	0.00091 U
Freon 113	76-13-1	NS	NS	NS	0.0047 U	0.0046 U	0.0045 U
Isopropylbenzene	98-82-8	NS	NS	NS	0.0047 U	0.0046 U	0.0045 U
Methyl Acetate	79-20-9	NS	NS	NS	0.0047 U	0.0046 U	0.0045 U
Methyl Tert Butyl Ether	1634-04-4	110	320	.2	0.00093 U	0.00092 U	0.00091 U
Methylcyclohexane	108-87-2	NS	NS	NS	0.0047 U	0.0046 U	0.0045 U
Methylene chloride	75-09-2	49	210	1	0.0047 U	0.0046 U	0.0045 U
Styrene	100-42-5	90[a]	260[a]	100	0.0047 U	0.0046 U	0.0045 U
Tetrachloroethene	127-18-4	4	6	1	0.0047 U	0.0046 U	0.0045 U
Toluene	108-88-3	6,300[a]	91,000[a]	500	0.00093 U	0.00092 U	0.00091 U
trans-1,2-Dichloroethene	156-60-5	1300[a]	19,000[a]	50	0.0047 U	0.0046 U	0.0045 U
trans-1,3-Dichloropropene	10061-02-6	4	5	1	0.0047 U	0.0046 U	0.0045 U
Trichloroethene	79-01-6	23	54	1	0.0047 U	0.0046 U	0.0045 U
Trichlorofluoromethane	75-69-4	23,000[c]	340,000[c]	22	0.0047 U	0.0046 U	0.0045 U
Vinyl chloride	75-01-4	2	7	10	0.0047 U	0.0046 U	0.0045 U
Xylene (total)	1330-20-7	12,000[a]	170,000[a]	67	0.00093 U	0.00092 U	0.00091 U

Total Targeted VOC Concentration	NS	0	0	0
Total Number of TICs	NS	0	2	0
Total Concentrations of TICs	NS	0	0.0174	0
Total VOC and TIC Concentrations	NS	0	0.0174	0

Footnotes are on the last page of this table

Table 6
VOC Analytical Results for Soil
Ortho Clinical Diagnostics
Raritan, New Jersey

Sample ID Sampling Depth (feet) Lab ID Sample Date Dilution Factor	CAS#	NJDEP SCC (5/12/1999)			Exterior of Building J		
		Residential Direct Contact	Non-Residential Direct Contact	Impact to Groundwater	D051514[1] 3.5-4.0 JB67244-11 5/15/2014 1	J-SB3(13-13.5) 13.0-13.5 JB67244-9 5/15/2014 1	J-SB3(13.5-14) 13.5-14.0 JB67244-10 5/15/2014 1
VOLATILE ORGANIC COMPOUNDS (VOCs) (mg/kg)							
1,1,1-Trichloroethane	71-55-6	290[a]	4,200[a]	50	0.0043 U	0.0050 U	NA
1,1,2,2-Tetrachloroethane	79-34-5	1[b]	3[b]	1	0.0043 U	0.0050 U	NA
1,1,2-Trichloroethane	79-00-5	2[b]	6[b]	1	0.0043 U	0.0050 U	NA
1,1-Dichloroethane	75-34-3	8[b]	24[b]	10	0.0043 U	0.0050 U	NA
1,1-Dichloroethene	75-35-4	11[a]	150	10	0.0043 U	0.0050 U	NA
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	0.0043 U	0.0050 U	NA
1,2,4-Trichlorobenzene	120-82-1	73[a]	1200	100	0.0043 U	0.0050 U	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.08[c]	0.2[c]	.005	0.0087 U	0.010 U	NA
1,2-Dibromoethane	106-93-4	0.008	0.04	.005	0.00087 U	0.0010 U	NA
1,2-Dichlorobenzene	95-50-1	5,300[a]	59,000[a]	50	0.0043 U	0.0050 U	NA
1,2-Dichloroethane	107-06-2	6	24	1	0.00087 U	0.0010 U	NA
1,2-Dichloropropane	78-87-5	10	43	NS	0.0043 U	0.0050 U	NA
1,3-Dichlorobenzene	541-73-1	5,300[a]	59,000[a]	100	0.0043 U	0.0050 U	NA
1,4-Dichlorobenzene	106-46-7	5[b]	13[b]	100	0.0043 U	0.0050 U	NA
1,4-Dioxane	123-91-1	NS	NS	NS	0.11 U	0.13 U	NA
2-Butanone (MEK)	78-93-3	3,100a	44,000[a]	50	0.0087 U	0.010 U	NA
2-Hexanone	591-78-6	NS	NS	NS	0.0043 U	0.0050 U	NA
4-Methyl-2-pentanone(MIBK)	108-10-1	1000	1000	50	0.0043 U	0.0050 U	NA
Acetone	67-64-1	70,000[a]	1000	100	0.0087 U	0.0061 J	NA
Benzene	71-43-2	3	13	1	0.00087 U	0.0010 U	NA
Bromochloromethane	74-97-5	NS	NS	NS	0.0043 U	0.0050 U	NA
Bromodichloromethane	75-27-4	1[b]	3[b]	1	0.0043 U	0.0050 U	NA
Bromoform	75-25-2	86	370	1	0.0043 U	0.0050 U	NA
Bromomethane	74-83-9	79	59[b]	1	0.0043 U	0.0050 U	NA
Carbon disulfide	75-15-0	7,800	110,000	4	0.0043 U	0.0050 U	NA
Carbon tetrachloride	56-23-5	2	4	1	0.0043 U	0.0050 U	NA
Chlorobenzene	108-90-7	510[a]	7,400[a]	1	0.0043 U	0.0050 U	NA
Chloroethane	75-00-3	220	1,100	NA	0.0043 U	0.0050 U	NA
Chloroform	67-66-3	0.6[b]	2[b]	1	0.0043 U	0.0050 U	NA
Chloromethane	74-87-3	4[b]	12[b]	10	0.0043 U	0.0050 U	NA
cis-1,2-Dichloroethene	156-59-2	230[a]	1,000	1	0.0043 U	0.0013 J	NA
cis-1,3-Dichloropropene	10061-01-5	4	5	1	0.0043 U	0.0050 U	NA
Cyclohexane	110-82-7	NS	NS	NS	0.0043 U	0.0050 U	NA
Dibromochloromethane	124-48-1	3[b]	8[b]	.005	0.0043 U	0.0050 U	NA
Dichlorodifluoromethane	75-71-8	490[a]	230,000[a]	25	0.0043 U	0.0050 U	NA
Ethylbenzene	100-41-4	7,800[a]	110,000[a]	100	0.00087 U	0.0010 U	NA
Freon 113	76-13-1	NS	NS	NS	0.0043 U	0.0050 U	NA
Isopropylbenzene	98-82-8	NS	NS	NS	0.0043 U	0.0050 U	NA
Methyl Acetate	79-20-9	NS	NS	NS	0.0043 U	0.0050 U	NA
Methyl Tert Butyl Ether	1634-04-4	110	320	.2	0.00087 U	0.0010 U	NA
Methylcyclohexane	108-87-2	NS	NS	NS	0.0043 U	0.0050 U	NA
Methylene chloride	75-09-2	49	210	1	0.0043 U	0.0050 U	NA
Styrene	100-42-5	90[a]	260[a]	100	0.0043 U	0.0050 U	NA
Tetrachloroethene	127-18-4	4	6	1	0.0043 U	0.0050 U	NA
Toluene	108-88-3	6,300[a]	91,000[a]	500	0.00087 U	0.0010 U	NA
trans-1,2-Dichloroethene	156-60-5	1300[a]	19,000[a]	50	0.0043 U	0.0050 U	NA
trans-1,3-Dichloropropene	10061-02-6	4	5	1	0.0043 U	0.0050 U	NA
Trichloroethene	79-01-6	23	54	1	0.0043 U	0.0912	0.0698
Trichlorofluoromethane	75-69-4	23,000[c]	340,000[c]	22	0.0043 U	0.0050 U	NA
Vinyl chloride	75-01-4	2	7	10	0.0043 U	0.0050 U	NA
Xylene (total)	1330-20-7	12,000[a]	170,000[a]	67	0.00087 U	0.0010 U	NA

Total Targeted VOC Concentration	NS	0	0.0986	0.0698
Total Number of TICs	NS	2	11	0
Total Concentrations of TICs	NS	0.0157	1.194	0
Total VOC and TIC Concentrations	NS	0.0157	1.29	0.0698

Footnotes are on the last page of this table

Table 6
VOC Analytical Results for Soil
Ortho Clinical Diagnostics
Raritan, New Jersey

Sample ID Sampling Depth (feet) Lab ID Sample Date Dilution Factor	CAS#	NJDEP SCC (5/12/1999)			Exterior of Building J		
		Residential Direct Contact	Non-Residential Direct Contact	Impact to Groundwater	J-SB4(3.5-4) 3.5-4.0 JB67244-3 5/15/2014 1	J-SB5(11.5-12) 11.5-12.0 JB67244-5 5/15/2014 1	J-SB6(3.5-4) 3.5-4.0 JB67244-16 5/15/2014 1
VOLATILE ORGANIC COMPOUNDS (VOCs) (mg/kg)							
1,1,1-Trichloroethane	71-55-6	290[a]	4,200[a]	50	0.0038 U	0.0044 U	0.0047 U
1,1,2,2-Tetrachloroethane	79-34-5	1[b]	3[b]	1	0.0038 U	0.0044 U	0.0047 U
1,1,2-Trichloroethane	79-00-5	2[b]	6[b]	1	0.0038 U	0.0044 U	0.0047 U
1,1-Dichloroethane	75-34-3	8[b]	24[b]	10	0.0038 U	0.0044 U	0.0047 U
1,1-Dichloroethene	75-35-4	11[a]	150	10	0.0038 U	0.0044 U	0.0047 U
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	0.0038 U	0.0044 U	0.0047 U
1,2,4-Trichlorobenzene	120-82-1	73[a]	1200	100	0.0038 U	0.0044 U	0.0047 U
1,2-Dibromo-3-chloropropane	96-12-8	0.08[c]	0.2[c]	.005	0.0077 U	0.0087 U	0.0093 U
1,2-Dibromoethane	106-93-4	0.008	0.04	.005	0.00077 U	0.00087 U	0.00093 U
1,2-Dichlorobenzene	95-50-1	5,300[a]	59,000[a]	50	0.0038 U	0.0044 U	0.0047 U
1,2-Dichloroethane	107-06-2	6	24	1	0.00077 U	0.00087 U	0.00093 U
1,2-Dichloropropane	78-87-5	10	43	NS	0.0038 U	0.0044 U	0.0047 U
1,3-Dichlorobenzene	541-73-1	5,300[a]	59,000[a]	100	0.0038 U	0.0044 U	0.0047 U
1,4-Dichlorobenzene	106-46-7	5[b]	13[b]	100	0.0038 U	0.0044 U	0.0047 U
1,4-Dioxane	123-91-1	NS	NS	NS	0.096 U	0.11 U	0.12 U
2-Butanone (MEK)	78-93-3	3,100a	44,000[a]	50	0.0077 U	0.0087 U	0.0093 U
2-Hexanone	591-78-6	NS	NS	NS	0.0038 U	0.0044 U	0.0047 U
4-Methyl-2-pentanone(MIBK)	108-10-1	1000	1000	50	0.0038 U	0.0044 U	0.0047 U
Acetone	67-64-1	70,000[a]	1000	100	0.0077 U	0.0055 J	0.0093 U
Benzene	71-43-2	3	13	1	0.00077 U	0.00087 U	0.00093 U
Bromochloromethane	74-97-5	NS	NS	NS	0.0038 U	0.0044 U	0.0047 U
Bromodichloromethane	75-27-4	1[b]	3[b]	1	0.0038 U	0.0044 U	0.0047 U
Bromoform	75-25-2	86	370	1	0.0038 U	0.0044 U	0.0047 U
Bromomethane	74-83-9	79	59[b]	1	0.0038 U	0.0044 U	0.0047 U
Carbon disulfide	75-15-0	7,800	110,000	4	0.0038 U	0.0044 U	0.0047 U
Carbon tetrachloride	56-23-5	2	4	1	0.0038 U	0.0044 U	0.0047 U
Chlorobenzene	108-90-7	510[a]	7,400[a]	1	0.0038 U	0.0044 U	0.0047 U
Chloroethane	75-00-3	220	1,100	NA	0.0038 U	0.0044 U	0.0047 U
Chloroform	67-66-3	0.6[b]	2[b]	1	0.0038 U	0.0044 U	0.0047 U
Chloromethane	74-87-3	4[b]	12[b]	10	0.0038 U	0.0044 U	0.0047 U
cis-1,2-Dichloroethene	156-59-2	230[a]	1,000	1	0.0038 U	0.0044 U	0.0047 U
cis-1,3-Dichloropropene	10061-01-5	4	5	1	0.0038 U	0.0044 U	0.0047 U
Cyclohexane	110-82-7	NS	NS	NS	0.0038 U	0.0044 U	0.0047 U
Dibromochloromethane	124-48-1	3[b]	8[b]	.005	0.0038 U	0.0044 U	0.0047 U
Dichlorodifluoromethane	75-71-8	490[a]	230,000[a]	25	0.0038 U	0.0044 U	0.0047 U
Ethylbenzene	100-41-4	7,800[a]	110,000[a]	100	0.00077 U	0.00087 U	0.00093 U
Freon 113	76-13-1	NS	NS	NS	0.0038 U	0.0044 U	0.0047 U
Isopropylbenzene	98-82-8	NS	NS	NS	0.0038 U	0.0044 U	0.0047 U
Methyl Acetate	79-20-9	NS	NS	NS	0.0038 U	0.0044 U	0.0047 U
Methyl Tert Butyl Ether	1634-04-4	110	320	.2	0.00077 U	0.00087 U	0.00093 U
Methylcyclohexane	108-87-2	NS	NS	NS	0.0038 U	0.0044 U	0.0047 U
Methylene chloride	75-09-2	49	210	1	0.0038 U	0.0044 U	0.0047 U
Styrene	100-42-5	90[a]	260[a]	100	0.0038 U	0.0044 U	0.0047 U
Tetrachloroethene	127-18-4	4	6	1	0.0038 U	0.0044 U	0.0047 U
Toluene	108-88-3	6,300[a]	91,000[a]	500	0.00077 U	0.00087 U	0.00093 U
trans-1,2-Dichloroethene	156-60-5	1300[a]	19,000[a]	50	0.0038 U	0.0044 U	0.0047 U
trans-1,3-Dichloropropene	10061-02-6	4	5	1	0.0038 U	0.0044 U	0.0047 U
Trichloroethene	79-01-6	23	54	1	0.0038 U	0.0007 J	0.0047 U
Trichlorofluoromethane	75-69-4	23,000[c]	340,000[c]	22	0.0038 U	0.0044 U	0.0047 U
Vinyl chloride	75-01-4	2	7	10	0.0038 U	0.0044 U	0.0047 U
Xylene (total)	1330-20-7	12,000[a]	170,000[a]	67	0.00077 U	0.00087 U	0.00093 U
Total Targeted VOC Concentration		NS			0	0.0062	0
Total Number of TICs		NS			1	0	1
Total Concentrations of TICs		NS			0.004	0	0.0078
Total VOC and TIC Concentrations		NS			0.004	0.0062	0.0078

Footnotes are on the last page of this table

Table 6
VOC Analytical Results for Soil
Ortho Clinical Diagnostics
Raritan, New Jersey

Sample ID Sampling Depth (feet) Lab ID Sample Date Dilution Factor	CAS#	NJDEP SCC (5/12/1999)			Exterior of Building J	
		Residential Direct Contact	Non-Residential Direct Contact	Impact to Groundwater	J-SB6(12.5-13) 12.5-13.0 JB67244-18 5/15/2014 1	J-SB6(13.5-14) 13.5-14.0 JB67244-15 5/15/2014 1
VOLATILE ORGANIC COMPOUNDS (VOCs) (mg/kg)						
1,1,1-Trichloroethane	71-55-6	290[a]	4,200[a]	50	0.0047 U	NA
1,1,2,2-Tetrachloroethane	79-34-5	1[b]	3[b]	1	0.0047 U	NA
1,1,2-Trichloroethane	79-00-5	2[b]	6[b]	1	0.0047 U	NA
1,1-Dichloroethane	75-34-3	8[b]	24[b]	10	0.0047 U	NA
1,1-Dichloroethene	75-35-4	11[a]	160	10	0.0047 U	NA
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	0.0047 U	NA
1,2,4-Trichlorobenzene	120-82-1	73[a]	1200	100	0.0047 U	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.08[c]	0.2[c]	.005	0.0095 U	NA
1,2-Dibromoethane	106-93-4	0.008	0.04	.005	0.00095 U	NA
1,2-Dichlorobenzene	95-50-1	5,300[a]	59,000[a]	50	0.0047 U	NA
1,2-Dichloroethane	107-06-2	6	24	1	0.00095 U	NA
1,2-Dichloropropane	78-87-5	10	43	NS	0.0047 U	NA
1,3-Dichlorobenzene	541-73-1	5,300[a]	59,000[a]	100	0.0047 U	NA
1,4-Dichlorobenzene	106-46-7	6[b]	13[b]	100	0.0047 U	NA
1,4-Dioxane	123-91-1	NS	NS	NS	0.12 U	NA
2-Butanone (MEK)	78-93-3	3,100a	44,000[a]	50	0.0095 U	NA
2-Hexanone	591-78-6	NS	NS	NS	0.0047 U	NA
4-Methyl-2-pentanone(MIBK)	108-10-1	1000	1000	50	0.0047 U	NA
Acetone	67-64-1	70,000[a]	1000	100	0.0142	NA
Benzene	71-43-2	3	13	1	0.00095 U	NA
Bromochloromethane	74-97-5	NS	NS	NS	0.0047 U	NA
Bromodichloromethane	75-27-4	1[b]	3[b]	1	0.0047 U	NA
Bromoform	75-25-2	86	370	1	0.0047 U	NA
Bromomethane	74-83-9	79	59[b]	1	0.0047 U	NA
Carbon disulfide	75-15-0	7,800	110,000	4	0.0047 U	NA
Carbon tetrachloride	56-23-5	2	4	1	0.0047 U	NA
Chlorobenzene	108-90-7	510[a]	7,400[a]	1	0.0047 U	NA
Chloroethane	75-00-3	220	1,100	NA	0.0047 U	NA
Chloroform	67-66-3	0.6[b]	2[b]	1	0.0047 U	NA
Chloromethane	74-87-3	4[b]	12[b]	10	0.0047 U	NA
cis-1,2-Dichloroethene	156-59-2	230[a]	1,000	1	0.0086	NA
cis-1,3-Dichloropropene	10061-01-5	4	5	1	0.0047 U	NA
Cyclohexane	110-82-7	NS	NS	NS	0.0047 U	NA
Dibromochloromethane	124-48-1	3[b]	8[b]	.005	0.0047 U	NA
Dichlorodifluoromethane	75-71-8	490[a]	230,000[a]	25	0.0047 U	NA
Ethylbenzene	100-41-4	7,800[a]	110,000[a]	100	0.00095 U	NA
Freon 113	76-13-1	NS	NS	NS	0.0047 U	NA
Isopropylbenzene	98-82-8	NS	NS	NS	0.0047 U	NA
Methyl Acetate	79-20-9	NS	NS	NS	0.0047 U	NA
Methyl Tert Butyl Ether	1634-04-4	110	320	.2	0.00095 U	NA
Methylcyclohexane	108-87-2	NS	NS	NS	0.0047 U	NA
Methylene chloride	75-09-2	49	210	1	0.0047 U	NA
Styrene	100-42-5	90[a]	260[a]	100	0.0047 U	NA
Tetrachloroethene	127-18-4	4	6	1	0.0047 U	NA
Toluene	108-88-3	6,300[a]	91,000[a]	500	0.00095 U	NA
trans-1,2-Dichloroethene	156-60-5	1300[a]	19,000[a]	50	0.0048	NA
trans-1,3-Dichloropropene	10061-02-6	4	5	1	0.0047 U	NA
Trichloroethene	79-01-6	23	54	1	0.0509	0.0076
Trichlorofluoromethane	75-69-4	23,000[c]	340,000[c]	22	0.0047 U	NA
Vinyl chloride	75-01-4	2	7	10	0.0047 U	NA
Xylene (total)	1330-20-7	12,000[a]	170,000[a]	67	0.00095 U	NA

Total Targeted VOC Concentration	NS	0.0785	0.0076
Total Number of TICs	NS	6	0
Total Concentrations of TICs	NS	0.0396	0

Total VOC and TIC Concentrations	NS	0.12	0.0076

Footnotes are on the last page of this table

Table 6
VOC Analytical Results for Soil
Ortho Clinical Diagnostics
Raritan, New Jersey

		Field Blank
Sample ID		FB051514
Sampling Depth (feet)		-
Lab ID	**CAS#**	JB67244-34
Sample Date		5/15/2014
Dilution Factor		1

VOLATILE ORGANIC COMPOUNDS (VOCs) (ug/L)

1,1,1-Trichloroethane	71-55-6	1.0 U
1,1,2,2-Tetrachloroethane	79-34-5	1.0 U
1,1,2-Trichloroethane	79-00-5	1.0 U
1,1-Dichloroethane	75-34-3	1.0 U
1,1-Dichloroethene	75-35-4	1.0 U
1,2,3-Trichlorobenzene	87-61-6	5.0 U
1,2,4-Trichlorobenzene	120-82-1	5.0 U
1,2-Dibromo-3-chloropropane	96-12-8	5.0 U
1,2-Dibromoethane	106-93-4	1.0 U
1,2-Dichlorobenzene	95-50-1	1.0 U
1,2-Dichloroethane	107-06-2	1.0 U
1,2-Dichloropropane	78-87-5	1.0 U
1,3-Dichlorobenzene	541-73-1	1.0 U
1,4-Dichlorobenzene	106-46-7	1.0 U
1,4-Dioxane	123-91-1	130 U
2-Butanone (MEK)	78-93-3	10 U
2-Hexanone	591-78-6	5.0 U
4-Methyl-2-pentanone(MIBK)	108-10-1	5.0 U
Acetone	67-64-1	10 U
Benzene	71-43-2	0.50 U
Bromochloromethane	74-97-5	5.0 U
Bromodichloromethane	75-27-4	1.0 U
Bromoform	75-25-2	2.0 U
Bromomethane	74-83-9	2.0 U
Carbon disulfide	75-15-0	2.0 U
Carbon tetrachloride	56-23-5	1.0 U
Chlorobenzene	108-90-7	1.0 U
Chloroethane	75-00-3	1.0 U
Chloroform	67-66-3	1.0 U
Chloromethane	74-87-3	1.0 U
cis-1,2-Dichloroethene	156-59-2	1.0 U
cis-1,3-Dichloropropene	10061-01-5	1.0 U
Cyclohexane	110-82-7	5.0 U
Dibromochloromethane	124-48-1	1.0 U
Dichlorodifluoromethane	75-71-8	5.0 U
Ethylbenzene	100-41-4	0.50 U
Freon 113	76-13-1	5.0 U
Isopropylbenzene	98-82-8	1.0 U
m,p-Xylene	NS	1.0 U
Methyl Acetate	79-20-9	5.0 U
Methyl Tert Butyl Ether	1634-04-4	1.0 U
Methylcyclohexane	108-87-2	5.0 U
Methylene chloride	75-09-2	2.0 U
o-Xylene	95-47-6	1.0 U
Styrene	100-42-5	2.0 U
Tetrachloroethene	127-18-4	1.0 U
Toluene	108-88-3	1.0 U
trans-1,2-Dichloroethene	156-60-5	1.0 U
trans-1,3-Dichloropropene	10061-02-6	1.0 U
Trichloroethene	79-01-6	1.0 U
Trichlorofluoromethane	75-69-4	5.0 U
Vinyl chloride	75-01-4	1.0 U
Xylene (total)	1330-20-7	1.0 U

Total Targeted VOC Concentration	NS	0
Total Number of TICs	NS	0
Total Concentrations of TICs	NS	0

Total VOC and TIC Concentrations	NS	0

Footnotes are on the last page of this table

Table 6
VOC Analytical Results for Soil
Ortho Clinical Diagnostics
Raritan, New Jersey

Footnotes:
NJDEP: New Jersey Department of Environmental Prot
CAS: Chemical Abstracts Service
TIC: Tentatively identified compound. TIC concentrations are estimated.
mg/kg: milligrams per killigram
ug/L: micrograms per liter
U: Not detected above referenced reporting limit
J: Estimated concentration at or below the reporting limit
NA: Not Analyzed
-: Not Applicable
NS: Not Specified
[1]: Duplicate of preceding sample
SCC: NJDEP Soil Cleanup Criteria (May 12, 1999)
[a]: The 2012 Soil Remediation Standard is listed due to an increase from the 1999 Soil Cleanup Criteria
[b]: The 2012 Soil Remediation Standard is listed due to an order-of-magnitude decrease from the 1999 Soil Cleanup Criteria
[c]: The 2012 Soil Remediation Standard is listed because there is no 1999 Soil Cleanup Criteria for this compound
SRS: NJDEP Soil Remediation Standard (May 2012)

Table 7
SVOC Analytical Results for Soil
Ortho Clinical Diagnostics
Raritan, New Jersey

Sample ID Sample Depth (feet) Lab ID Sample Date Dilution Factor	CAS#	NJDEP SCC (5/12/1999) Residential Direct Contact	NJDEP SCC (5/12/1999) Non-Res Direct Contact	NJDEP SCC (5/12/1999) Impact to Groundwater	J-SB1(3.5-4) 3.5-4.0 JB67244-1 5/15/2014 1	J-SB2(3.5-4) 3.5-4.0 JB67244-12 5/15/2014 1	J-SB3(3.5-4) 3.5-4.0 JB67244-7 5/15/2014 1	D051514[1] 3.5-4.0 JB67244-11 5/15/2014 1
SEMI- VOLATILE ORGANIC COMPOUNDS (mg/kg)								
2-Methylnaphthalene	91-57-6	230[a]	2,400[a]	NS	0.15 U	0.16 U	0.15 U	0.16 U
Naphthalene	91-20-3	6[b]	17[b]	100	0.15 U	0.16 U	0.15 U	0.16 U
Total Targeted SVOC Concentration		NS			0	0	0	0
Total Number of TICs		NS			10	13	NA	NA
Total Concentrations of TICs		NS			13	14	NA	NA
Total SVOC and TIC Concentrations		NS			13	14	NA	NA

Sample ID Sample Depth (feet) Lab ID Sample Date Dilution Factor	CAS#	NJDEP SCC (5/12/1999) Residential Direct Contact	NJDEP SCC (5/12/1999) Non-Res Direct Contact	NJDEP SCC (5/12/1999) Impact to Groundwater	J-SB3(13-13.5) 13.0-13.5 JB67244-9 5/15/2014 1	J-SB4(3.5-4) 3.5-4.0 JB67244-3 5/15/2014 1	J-SB6(3.5-4) 3.5-4.0 JB67244-16 5/15/2014 1	J-SB6(12.5-13) 12.5-13.0 JB67244-18 5/15/2014 1
SEMI- VOLATILE ORGANIC COMPOUNDS (mg/kg)								
2-Methylnaphthalene	91-57-6	230[a]	2,400[a]	NS	0.14 U	0.14 U	0.15 U	0.15 U
Naphthalene	91-20-3	6[b]	17[b]	100	0.14 U	0.14 U	0.15 U	0.15 U
Total Targeted SVOC Concentration		NS			0	0	0	0
Total Number of TICs		NS			NA	NA	NA	NA
Total Concentrations of TICs		NS			NA	NA	NA	NA
Total SVOC and TIC Concentrations		NS			NA	NA	NA	NA

NJDEP: New Jersey Department of Environmental Protection
CAS: Chemical Abstracts Service
mg/kg: milligrams per kilogram
TIC: Tentatively identified compound. TIC concentrations are estimated.
U: Concentration not detected above referenced reporting limit
NA: Not Analyzed
SCC: Soil Cleanup Criteria (May 12, 1999)
[1]: Duplicate of preceding sample
[a]: The 2012 SRS is listed because there is no 1999 SCC for this compound
[b]: The 2012 SRS is listed due to an order-of-magnitude decrease from the 1999 SCC
SRS: NJDEP Soil Remediation Standard (May 2012)

Table 8
VOC Analytical Results for Groundwater
Ortho Clinical Diagnostics
Raritan, New Jersey

			Area South of Building J			
Sample ID			MW-47(080613)	MW-47 (090913)	D090913[1]	MW-47(121213)
Sampling Depth (ft)		Higher of	14 - 34	14 - 34	14 - 34	14 - 34
Lab ID	CAS No.	POL and	JB44086-6	JB46934-2	JB46934-3	JB55683-9
Sample Date		GQS	8/6/2013	9/9/2013	9/9/2013	12/12/2013
Dilution Factor			1 and 20	1 and 10	1 and 10	10
VOLATILE ORGANIC COMPOUNDS (ug/L)						
Acetone	67-64-1	6,000	5.0 U	5.0 U	5.0 U	50 U
Benzene	71-43-2	1	0.34 J	1.0 U	1.0 U	*10* U
Bromochloromethane	74-97-5	NS	1.0 U	1.0 U	1.0 U	10 U
Bromodichloromethane	75-27-4	1	1.0 U	1.0 U	1.0 U	*10* U
Bromoform	75-25-2	4	1.0 U	1.0 U	1.0 U	*10* U
Bromomethane	74-83-9	10	1.0 U	1.0 U	1.0 U	10 U
2-Butanone (MEK)	78-93-3	300	5.0 U	5.0 U	5.0 U	50 U
Carbon disulfide	75-15-0	700	1.0 U	1.0 U	1.0 U	10 U
Carbon tetrachloride	56-23-5	1	1.0 U	1.0 U	1.0 U	*10* U
Chlorobenzene	108-90-7	50	1.0 U	1.0 U	1.0 U	10 U
Chloroethane[b]	75-00-3	5	1.0 U	1.0 U	1.0 U	*10* U
Chloroform	67-66-3	70	1.0 U	1.0 U	1.0 U	10 U
Chloromethane	74-87-3	NS	1.0 U	1.0 U	1.0 U	10 U
Cumene	98-82-8	700	1.0 U	1.0 U	1.0 U	10 U
Cyclohexane	110-82-7	NS	2.0 U	2.0 U	2.0 U	20 U
1,2-Dibromo-3-chloropropane	96-12-8	0.02	*2.0* U	*2.0* U	*2.0* U	*20* U
Dibromochloromethane	124-48-1	1	1.0 U	1.0 U	1.0 U	*10* U
1,2-Dibromoethane	106-93-4	0.03	*1.0* U	*1.0* U	*1.0* U	*10* U
1,2-Dichlorobenzene	95-50-1	600	1.0 U	1.0 U	1.0 U	10 U
1,3-Dichlorobenzene	541-73-1	600	1.0 U	1.0 U	1.0 U	10 U
1,4-Dichlorobenzene	106-46-7	75	1.0 U	1.0 U	1.0 U	10 U
Dichlorodifluoromethane	75-71-8	1,000	2.0 U	2.0 UJ	2.0 UJ	20 U
1,1-Dichloroethane	75-34-3	50	1.0 U	1.0 U	1.0 U	10 U
1,2-Dichloroethane	107-06-2	2	1.0 U	1.0 U	1.0 U	*10* U
1,1-Dichloroethene	75-35-4	1	**1.2**	**1.7**	**1.1**	*10* U
cis-1,2-Dichloroethene	156-59-2	70	**143**	**235**	**228**	**1,580**
trans-1,2-Dichloroethene	156-60-5	100	55.2	25.1	26.1	34.0
1,2-Dichloropropane	78-87-5	1	1.0 U	1.0 U	1.0 U	*10* U
cis-1,3-Dichloropropene*	10061-01-5	NS	1.0 U	1.0 U	1.0 U	10 U
trans-1,3-Dichloropropene*	10061-02-6	NS	1.0 U	1.0 U	1.0 U	10 U
1,4-Dioxane	123-91-1	10	*130* U	*130* U	*130* U	*1,300* U
Ethyl Ether	60-29-7	1,000	NA	1.0 U	1.0 U	10 U
Ethylbenzene	100-41-4	700	1.0 U	1.0 U	1.0 U	10 U
Freon 113	76-13-1	NS	2.0 U	2.0 U	2.0 U	20 U
2-Hexanone[a]	591-78-6	300	5.0 U	5.0 U	5.0 U	50 U
Isopropylbenzene	98-82-8	700	1.0 U	NA	NA	NA
Methyl Acetate	79-20-9	7,000	5.0 U	5.0 U	5.0 U	50 U
Methylcyclohexane	108-87-2	NS	5.0 U	0.27 J	0.26 J	50 U
Methyl Tert Butyl Ether	1634-04-4	70	1.0 U	1.0 U	1.0 U	10 U
4-Methyl-2-pentanone(MIBK)	108-10-1	NS	5.0 U	5.0 U	5.0 U	50 U
Methylene chloride	75-09-2	3	1.0 U	1.0 U	1.0 U	*10* U
Styrene	100-42-5	100	2.0 U	2.0 U	2.0 U	20 U
1,1,2,2-Tetrachloroethane	79-34-5	1	1.0 U	1.0 U	1.0 U	*10* U
Tetrachloroethene	127-18-4	1	1.0 U	1.0 U	1.0 U	*10* U
Toluene	108-88-3	600	1.0 U	1.0 U	1.0 U	10 U
1,2,3-Trichlorobenzene	87-61-6	NS	2.0 U	2.0 U	2.0 U	20 U
1,2,4-Trichlorobenzene	120-82-1	9	2.0 U	2.0 U	2.0 U	*20* U
1,1,1-Trichloroethane	71-55-6	30	1.0 U	1.0 U	1.0 U	10 U
1,1,2-Trichloroethane	79-00-5	3	1.0 U	1.0 U	1.0 U	*10* U
Trichloroethene	79-01-6	1	**1,650**	**280**	**272**	**72.8**
Trichlorofluoromethane	75-69-4	2,000	2.0 U	2.0 U	2.0 U	20 U
Vinyl chloride	75-01-4	1	**23.6**	**20**	**19.8**	**22.6**
Xylene (total)	1330-20-7	1,000	1.0 U	1.0 U	1.0 U	10 U
Total Targeted VOC Concentration		NS	1,873	564	549	1,709
Total Number of TICs		NS	0	0	0	0
Total Concentrations of TICs		NS	0	0	0	0
Total VOC and TIC Concentrations		NS	1,873	564	549	1,709

Footnotes are on last page of this table

Table 8
VOC Analytical Results for Groundwater
Ortho Clinical Diagnostics
Raritan, New Jersey

			Area South of Building J			
Sample ID			D121213[1]	MW-47(22.5)[2]	MW-47(27.75)[2]	MW-47(32.25)[2]
Sampling Depth (ft)		Higher of	14 - 34	21.8 - 23.3	27 - 28.5	31.5 - 33
Lab ID	CAS No.	PQL and	JB55683-10	JB55683-7	JB55683-8	JB55683-13
Sample Date		GQS	12/12/2013	12/12/2013	12/12/2013	12/12/2013
Dilution Factor			10	10	10	10
VOLATILE ORGANIC COMPOUNDS (ug/L)						
Acetone	67-64-1	6,000	50 U	50 U	50 U	50 U
Benzene	71-43-2	1	*10* U	*10* U	*10* U	*10* U
Bromochloromethane	74-97-5	NS	10 U	10 U	10 U	10 U
Bromodichloromethane	75-27-4	1	*10* U	*10* U	*10* U	*10* U
Bromoform	75-25-2	4	*10* U	*10* U	*10* U	*10* U
Bromomethane	74-83-9	10	10 U	10 U	10 U	10 U
2-Butanone (MEK)	78-93-3	300	50 U	50 U	50 U	50 U
Carbon disulfide	75-15-0	700	10 U	10 U	10 U	10 U
Carbon tetrachloride	56-23-5	1	*10* U	*10* U	*10* U	*10* U
Chlorobenzene	108-90-7	50	10 U	10 U	10 U	10 U
Chloroethane[b]	75-00-3	5	*10* U	*10* U	*10* U	*10* U
Chloroform	67-66-3	70	10 U	10 U	10 U	10 U
Chloromethane	74-87-3	NS	10 U	10 U	10 U	10 U
Cumene	98-82-8	700	10 U	10 U	10 U	10 U
Cyclohexane	110-82-7	NS	20 U	20 U	20 U	20 U
1,2-Dibromo-3-chloropropane	96-12-8	0.02	*20* U	*20* U	*20* U	*20* U
Dibromochloromethane	124-48-1	1	*10* U	*10* U	*10* U	*10* U
1,2-Dibromoethane	106-93-4	0.03	*10* U	*10* U	*10* U	*10* U
1,2-Dichlorobenzene	95-50-1	600	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	541-73-1	600	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	106-46-7	75	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	75-71-8	1,000	20 U	20 U	20 U	20 U
1,1-Dichloroethane	75-34-3	50	10 U	10 U	10 U	10 U
1,2-Dichloroethane	107-06-2	2	*10* U	*10* U	*10* U	*10* U
1,1-Dichloroethene	75-35-4	1	*10* U	*10* U	*10* U	*10* U
cis-1,2-Dichloroethene	156-59-2	70	**1,560**	**1,380**	**1,330**	**1,670**
trans-1,2-Dichloroethene	156-60-5	100	32.8	36.3	31.0	36.1
1,2-Dichloropropane	78-87-5	1	*10* U	*10* U	*10* U	*10* U
cis-1,3-Dichloropropene*	10061-01-5	NS	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene*	10061-02-6	NS	10 U	10 U	10 U	10 U
1,4-Dioxane	123-91-1	10	*1,300* U	*1,300* U	*1,300* U	*1,300* U
Ethyl Ether	60-29-7	1,000	10 U	10 U	10 U	10 U
Ethylbenzene	100-41-4	700	10 U	10 U	10 U	10 U
Freon 113	76-13-1	NS	20 U	20 U	20 U	20 U
2-Hexanone[a]	591-78-6	300	50 U	50 U	50 U	50 U
Isopropylbenzene	98-82-8	700	NA	NA	NA	NA
Methyl Acetate	79-20-9	7,000	50 U	50 U	50 U	50 U
Methylcyclohexane	108-87-2	NS	50 U	50 U	50 U	50 U
Methyl Tert Butyl Ether	1634-04-4	70	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone(MIBK)	108-10-1	NS	50 U	50 U	50 U	50 U
Methylene chloride	75-09-2	3	*10* U	*10* U	*10* U	*10* U
Styrene	100-42-5	100	20 U	20 U	20 U	20 U
1,1,2,2-Tetrachloroethane	79-34-5	1	*10* U	*10* U	*10* U	*10* U
Tetrachloroethene	127-18-4	1	*10* U	*10* U	*10* U	*10* U
Toluene	108-88-3	600	10 U	10 U	10 U	10 U
1,2,3-Trichlorobenzene	87-61-6	NS	20 U	20 U	20 U	20 U
1,2,4-Trichlorobenzene	120-82-1	9	*20* U	*20* U	*20* U	*20* U
1,1,1-Trichloroethane	71-55-6	30	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	79-00-5	3	*10* U	*10* U	*10* U	*10* U
Trichloroethene	79-01-6	1	**81.9**	**9.7 J**	**19.5**	**24.0**
Trichlorofluoromethane	75-69-4	2,000	20 U	20 U	20 U	20 U
Vinyl chloride	75-01-4	1	**21.6**	**21.8**	**20.5**	**22.4**
Xylene (total)	1330-20-7	1,000	10 U	10 U	10 U	10 U
Total Targeted VOC Concentration		NS	1,696	1,448	1,401	1,753
Total Number of TICs		NS	13	0	0	0
Total Concentrations of TICs		NS	909	0	0	0
Total VOC and TIC Concentrations		NS	2,605	1,448	1,401	1,753

Footnotes are on last page of this table

Table 8
VOC Analytical Results for Groundwater
Ortho Clinical Diagnostics
Raritan, New Jersey

			Area South of Building J			
Sample ID			MW-47(021914)	D021914[1]	MW-47 Q214	MW-47 Q314
Sampling Depth (ft)		Higher of	14 - 34	14 - 34	14 - 34	14 - 34
Lab ID	CAS No.	PQL and	JB60182-2	JB60182-8	C1416410-1	C1424014-1
Sample Date		GQS	2/19/2014	2/19/2014	6/11/2014	8/27/2014
Dilution Factor			1 and 10	1 and 10	1 and 5	1
VOLATILE ORGANIC COMPOUNDS (ug/L)						
Acetone	67-64-1	6,000	4.2 J	5.0 U	NA	NA
Benzene	71-43-2	1	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	74-97-5	NS	1.0 U	1.0 U	NA	NA
Bromodichloromethane	75-27-4	1	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	75-25-2	4	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	74-83-9	10	1.0 U	1.0 U	1.0 U	2.0 U
2-Butanone (MEK)	78-93-3	300	5.0 U	5.0 U	NA	NA
Carbon disulfide	75-15-0	700	0.78 J	0.74 J	NA	NA
Carbon tetrachloride	56-23-5	1	1.0 U	1.0 U	1.0 U	*2.0* U
Chlorobenzene	108-90-7	50	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane[b]	75-00-3	5	1.0 U	1.0 U	1.0 U	3.0 U
Chloroform	67-66-3	70	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	74-87-3	NS	1.0 U	1.0 U	1.0 U	1.0 U
Cumene	98-82-8	700	0.25 J	0.21 J	NA	NA
Cyclohexane	110-82-7	NS	2.0 U	2.0 U	NA	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.02	*2.0* U	*2.0* U	NA	NA
Dibromochloromethane	124-48-1	1	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	106-93-4	0.03	*1.0* U	*1.0* U	NA	NA
1,2-Dichlorobenzene	95-50-1	600	1.0 U	1.0 U	NA	NA
1,3-Dichlorobenzene	541-73-1	600	1.0 U	1.0 U	NA	NA
1,4-Dichlorobenzene	106-46-7	75	1.0 U	1.0 U	NA	NA
Dichlorodifluoromethane	75-71-8	1,000	2.0 U	2.0 U	1.0 U	2.0 U
1,1-Dichloroethane	75-34-3	50	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	107-06-2	2	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	75-35-4	1	**2.1**	**2.0**	**2.9**	**1.5 J**
cis-1,2-Dichloroethene	156-59-2	70	**762**	**781**	**690**	**300 E**
trans-1,2-Dichloroethene	156-60-5	100	47.4	46.9	43	15
1,2-Dichloropropane	78-87-5	1	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene*	10061-01-5	NS	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene*	10061-02-6	NS	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	123-91-1	10	*130* U	*130* U	NA	NA
Ethyl Ether	60-29-7	1,000	1.0 U	1.0 U	1.0 U	2.0 U
Ethylbenzene	100-41-4	700	0.24 J	0.21 J	1.0 U	1.0 U
Freon 113	76-13-1	NS	2.0 U	2.0 U	NA	NA
2-Hexanone*	591-78-6	300	5.0 U	5.0 U	NA	NA
Isopropylbenzene	98-82-8	700	NA	NA	NA	NA
Methyl Acetate	79-20-9	7,000	5.0 U	5.0 U	NA	NA
Methylcyclohexane	108-87-2	NS	0.39 J	0.27 J	NA	NA
Methyl Tert Butyl Ether	1634-04-4	70	1.0 U	1.0 U	NA	NA
4-Methyl-2-pentanone(MIBK)	108-10-1	NS	5.0 U	5.0 U	NA	NA
Methylene chloride	75-09-2	3	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100-42-5	100	2.0 U	2.0 U	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	1	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	127-18-4	1	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	108-88-3	600	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	87-61-6	NS	2.0 U	2.0 U	NA	NA
1,2,4-Trichlorobenzene	120-82-1	9	2.0 U	2.0 U	NA	NA
1,1,1-Trichloroethane	71-55-6	30	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	79-00-5	3	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	79-01-6	1	**16.9**	**15.9**	**4.4**	**7.5**
Trichlorofluoromethane	75-69-4	2,000	2.0 U	2.0 U	1.0 U	2.0 U
Vinyl chloride	75-01-4	1	**24.7**	**24.1**	**28**	**17**
Xylene (total)	1330-20-7	1,000	1.0 U	1.0 U	1.0 U[3]	1.0 U[3]
Total Targeted VOC Concentration		NS	859	871	769	342
Total Number of TICs		NS	13	13	0	0
Total Concentrations of TICs		NS	983	475	0	0
Total VOC and TIC Concentrations		NS	1,842	1,346	769	342

Footnotes are on last page of this table

Table 8
VOC Analytical Results for Groundwater
Ortho Clinical Diagnostics
Raritan, New Jersey

			Area South of Building J			Field Blanks
Sample ID			MW-47 Q314	MW-47(082814)	MW-47 Q414	FB080613
Sampling Depth (ft)		Higher of	14 - 34	14 - 34	14 - 34	-
Lab ID	CAS No.	PQL and	08527-002	JB75245-3	11848-012	JB44086-5
Sample Date		GQS	8/27/2014	8/28/2014	12/8/2014	8/6/2013
Dilution Factor			2	1 and 10	5	1
VOLATILE ORGANIC COMPOUNDS (ug/L)						
Acetone	67-64-1	6,000	NA	5.0 U	NA	5.0 U
Benzene	71-43-2	1	1.0 U	1.0 U	*5.0* U	1.0 U
Bromochloromethane	74-97-5	NS	NA	1.0 U	NA	1.0 U
Bromodichloromethane	75-27-4	1	1.0 U	1.0 U	*5.0* U	1.0 U
Bromoform	75-25-2	4	2.0 U	1.0 U	*5.0* U	1.0 U
Bromomethane	74-83-9	10	1.0 U	1.0 U	5.0 U	1.0 U
2-Butanone (MEK)	78-93-3	300	NA	5.0 U	NA	5.0 U
Carbon disulfide	75-15-0	700	NA	1.0 U	NA	1.0 U
Carbon tetrachloride	56-23-5	1	1.0 U	1.0 U	*5.0* U	1.0 U
Chlorobenzene	108-90-7	50	1.0 U	1.0 U	5.0 U	1.0 U
Chloroethane[b]	75-00-3	5	1.0 U	1.0 U	5.0 U	1.0 U
Chloroform	67-66-3	70	1.0 U	1.0 U	5.0 U	1.0 U
Chloromethane	74-87-3	NS	1.0 U	1.0 U	5.0 U	1.0 U
Cumene	98-82-8	700	NA	1.0 U	NA	1.0 U
Cyclohexane	110-82-7	NS	NA	0.24 J	NA	2.0 U
1,2-Dibromo-3-chloropropane	96-12-8	0.02	NA	*2.0* U	NA	*2.0* U
Dibromochloromethane	124-48-1	1	1.0 U	1.0 U	*5.0* U	1.0 U
1,2-Dibromoethane	106-93-4	0.03	NA	*1.0* U	NA	*1.0* U
1,2-Dichlorobenzene	95-50-1	600	NA	1.0 U	NA	1.0 U
1,3-Dichlorobenzene	541-73-1	600	NA	1.0 U	NA	1.0 U
1,4-Dichlorobenzene	106-46-7	75	NA	1.0 U	NA	1.0 U
Dichlorodifluoromethane	75-71-8	1,000	1.0 U	2.0 U	5.0 U	2.0 U
1,1-Dichloroethane	75-34-3	50	1.0 U	1.0 U	5.0 U	1.0 U
1,2-Dichloroethane	107-06-2	2	1.0 U	1.0 U	*5.0* U	1.0 U
1,1-Dichloroethene	75-35-4	1	**1.3**	**1.6 J**	*5.0* U	1.0 U
cis-1,2-Dichloroethene	156-59-2	70	**356**	**300**	**800**	1.0 U
trans-1,2-Dichloroethene	156-60-5	100	13.7	24.4	28.1	1.0 U
1,2-Dichloropropane	78-87-5	1	1.0 U	1.0 U	*5.0* U	1.0 U
cis-1,3-Dichloropropene*	10061-01-5	NS	1.0 U	1.0 U	5.0 U	1.0 U
trans-1,3-Dichloropropene*	10061-02-6	NS	1.0 U	1.0 U	5.0 U	1.0 U
1,4-Dioxane	123-91-1	10	NA	*130* U	NA	*130* U
Ethyl Ether	60-29-7	1,000	1.0 U	1.0 U	5.0 U	NA
Ethylbenzene	100-41-4	700	1.0 U	1.0 U	5.0 U	1.0 U
Freon 113	76-13-1	NS	NA	2.0 U	NA	2.0 U
2-Hexanone[a]	591-78-6	300	NA	5.0 U	NA	5.0 U
Isopropylbenzene	98-82-8	700	NA	1.0 U	NA	1.0 U
Methyl Acetate	79-20-9	7,000	NA	5.0 U	NA	5.0 U
Methylcyclohexane	108-87-2	NS	NA	0.29 J	NA	5.0 U
Methyl Tert Butyl Ether	1634-04-4	70	NA	1.0 U	NA	1.0 U
4-Methyl-2-pentanone(MIBK)	108-10-1	NS	NA	5.0 U	NA	5.0 U
Methylene chloride	75-09-2	3	2.0 U	1.0 U	*10.0* U	1.0 U
Styrene	100-42-5	100	NA	2.0 U	NA	2.0 U
1,1,2,2-Tetrachloroethane	79-34-5	1	1.0 U	1.0 U	*5.0* U	1.0 U
Tetrachloroethene	127-18-4	1	1.0 U	1.0 U	*5.0* U	1.0 U
Toluene	108-88-3	600	1.0 U	1.0 U	5.0 U	1.0 U
1,2,3-Trichlorobenzene	87-61-6	NS	NA	2.0 U	NA	2.0 U
1,2,4-Trichlorobenzene	120-82-1	9	NA	2.0 U	NA	2.0 U
1,1,1-Trichloroethane	71-55-6	30	1.0 U	1.0 U	5.0 U	1.0 U
1,1,2-Trichloroethane	79-00-5	3	1.0 U	1.0 U	*5.0* U	1.0 U
Trichloroethene	79-01-6	1	**6.7**	**4.0**	**14.0**	1.0 U
Trichlorofluoromethane	75-69-4	2,000	5.0 U	2.0 U	5.0 U	2.0 U
Vinyl chloride	75-01-4	1	**20.5**	**20.9**	**148**	1.0 U
Xylene (total)	1330-20-7	1,000	1.0 U[3]	1.0 U	10.0 U	1.0 U
Total Targeted VOC Concentration		NS	399	351	990	0
Total Number of TICs		NS	0	0	0	0
Total Concentrations of TICs		NS	0	0	0	0
Total VOC and TIC Concentrations		NS	399	351	990	0

Footnotes are on last page of this table

Table 8
VOC Analytical Results for Groundwater
Ortho Clinical Diagnostics
Raritan, New Jersey

			Field Blanks			
Sample ID			FB090913	FB121213	FB021914	FB082814
Sampling Depth (ft)		Higher of	-	-	-	-
Lab ID	CAS No.	PQL and	JB46934-4	JB55683-11	JB60182-7	JB75245-9
Sample Date		GQS	9/9/2013	12/12/2013	2/19/2014	8/28/2014
Dilution Factor			1	1	1	1
VOLATILE ORGANIC COMPOUNDS (ug/L)						
Acetone	67-64-1	6,000	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	71-43-2	1	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	74-97-5	NS	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	75-27-4	1	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	75-25-2	4	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	74-83-9	10	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	78-93-3	300	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	75-15-0	700	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	56-23-5	1	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	108-90-7	50	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane[b]	75-00-3	5	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	67-66-3	70	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	74-87-3	NS	1.0 U	1.0 U	1.0 U	1.0 U
Cumene	98-82-8	700	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	110-82-7	NS	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromo-3-chloropropane	96-12-8	0.02	*2.0* U	*2.0* U	*2.0* U	*2.0* U
Dibromochloromethane	124-48-1	1	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	106-93-4	0.03	*1.0* U	*1.0* U	*1.0* U	*1.0* U
1,2-Dichlorobenzene	95-50-1	600	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	541-73-1	600	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	106-46-7	75	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	75-71-8	1,000	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	75-34-3	50	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	107-06-2	2	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	75-35-4	1	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	156-59-2	70	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	156-60-5	100	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	78-87-5	1	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene*	10061-01-5	NS	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene*	10061-02-6	NS	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	123-91-1	10	*130* U	*130* U	*130* U	*130* U
Ethyl Ether	60-29-7	1,000	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	100-41-4	700	1.0 U	1.0 U	1.0 U	1.0 U
Freon 113	76-13-1	NS	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone[a]	591-78-6	300	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	98-82-8	700	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	79-20-9	7,000	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	108-87-2	NS	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Tert Butyl Ether	1634-04-4	70	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone(MIBK)	108-10-1	NS	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	75-09-2	3	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100-42-5	100	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	79-34-5	1	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	127-18-4	1	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	108-88-3	600	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	87-61-6	NS	2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	120-82-1	9	2.0 U	2.0 U	2.0 U	2.0 U
1,1,1-Trichloroethane	71-55-6	30	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	79-00-5	3	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	79-01-6	1	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	75-69-4	2,000	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	75-01-4	1	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (total)	1330-20-7	1,000	1.0 U	1.0 U	1.0 U	1.0 U
Total Targeted VOC Concentration		NS	0	0	0	0
Total Number of TICs		NS	0	0	0	0
Total Concentrations of TICs		NS	0	0	0	0
Total VOC and TIC Concentrations		NS	0	0	0	0

Footnotes are on last page of this table

Table 8
VOC Analytical Results for Groundwater
Ortho Clinical Diagnostics
Raritan, New Jersey

			Trip Blanks			
Sample ID			TB090913	TB121213	TB021914	TB082814
Sampling Depth (ft)		Higher of	-	-	-	-
Lab ID	CAS No.	PQL and	JB46934-5	JB55683-12	JB60182-9	JB75245-10
Sample Date		GQS	9/9/2013	12/12/2013	2/19/2014	8/28/2014
Dilution Factor			1	1	1	1
VOLATILE ORGANIC COMPOUNDS (ug/L)						
Acetone	67-64-1	6,000	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	71-43-2	1	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	74-97-5	NS	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	75-27-4	1	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	75-25-2	4	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	74-83-9	10	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	78-93-3	300	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	75-15-0	700	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	56-23-5	1	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	108-90-7	50	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane[b]	75-00-3	5	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	67-66-3	70	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	74-87-3	NS	1.0 U	1.0 U	1.0 U	1.0 U
Cumene	98-82-8	700	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	110-82-7	NS	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromo-3-chloropropane	96-12-8	0.02	*2.0* U	*2.0* U	*2.0* U	*2.0* U
Dibromochloromethane	124-48-1	1	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	106-93-4	0.03	*1.0* U	*1.0* U	*1.0* U	*1.0* U
1,2-Dichlorobenzene	95-50-1	600	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	541-73-1	600	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	106-46-7	75	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	75-71-8	1,000	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	75-34-3	50	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	107-06-2	2	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	75-35-4	1	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	156-59-2	70	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	156-60-5	100	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	78-87-5	1	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene*	10061-01-5	NS	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene*	10061-02-6	NS	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	123-91-1	10	*130* U	*130* U	*130* U	*130* U
Ethyl Ether	60-29-7	1,000	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	100-41-4	700	1.0 U	1.0 U	1.0 U	1.0 U
Freon 113	76-13-1	NS	2.0 U	2.0 U	2.0 U	2.0 U
2-Hexanone[a]	591-78-6	300	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	98-82-8	700	1.0 U	1.0 U	1.0 U	1.0 U
Methyl Acetate	79-20-9	7,000	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	108-87-2	NS	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Tert Butyl Ether	1634-04-4	70	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone(MIBK)	108-10-1	NS	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	75-09-2	3	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	100-42-5	100	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	79-34-5	1	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	127-18-4	1	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	108-88-3	600	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	87-61-6	NS	2.0 U	2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	120-82-1	9	2.0 U	2.0 U	2.0 U	2.0 U
1,1,1-Trichloroethane	71-55-6	30	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	79-00-5	3	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	79-01-6	1	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	75-69-4	2,000	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	75-01-4	1	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (total)	1330-20-7	1,000	1.0 U	1.0 U	1.0 U	1.0 U
Total Targeted VOC Concentration		NS	0	0	0	0
Total Number of TICs		NS	0	0	0	0
Total Concentrations of TICs		NS	0	0	0	0
Total VOC and TIC Concentrations		NS	0	0	0	0

Footnotes are on last page of this table

Footnotes:

VOC: Volatile Organic Compounds
CAS No.: Chemical Abstract Service Number
TIC: Tentatively Identified Compound. All TIC concentrations are estimates
GQS: NJDEP Class IIA Groundwater Quality Standard (7/22/10)
PQL: Practical Quantitation Level
NS: Criteria not specified
NA: Not analyzed for specific compound
-: Not Applicable
ug/L: micrograms per liter
Bold outline: Indicates concentration exceeding NJDEP Criteria
Italics: Indicates reporting limit is above NJDEP Criteria
U: Analyte was not detected above the referenced reporting limit
J: Estimated concentration at or below the reporting limit
E: Estimated value above high calibration standard
[a]: Corresponding value listed is the Interim Specific Groundwater Quality Criteria
[b]: Corresponding value listed is the Interim Generic Groundwater Quality Criteria
[1]: Sample is a duplicate of preceding sample
[2]: Sample was collected using the Passive Diffusion Bag method. All other samples were collected using the volume-averaged purge method
[3]: m,p-Xylenes and o-Xylene were not detected in the sample and the reporting limit for Total Xylenes is from these individual compounds
*: Values listed reflect the combined standards for cis/trans-1,3-Dichloropropene

Table 9
SVOC Analytical Results for Groundwater
Ortho Clinical Diagnostics
Raritan, New Jersey

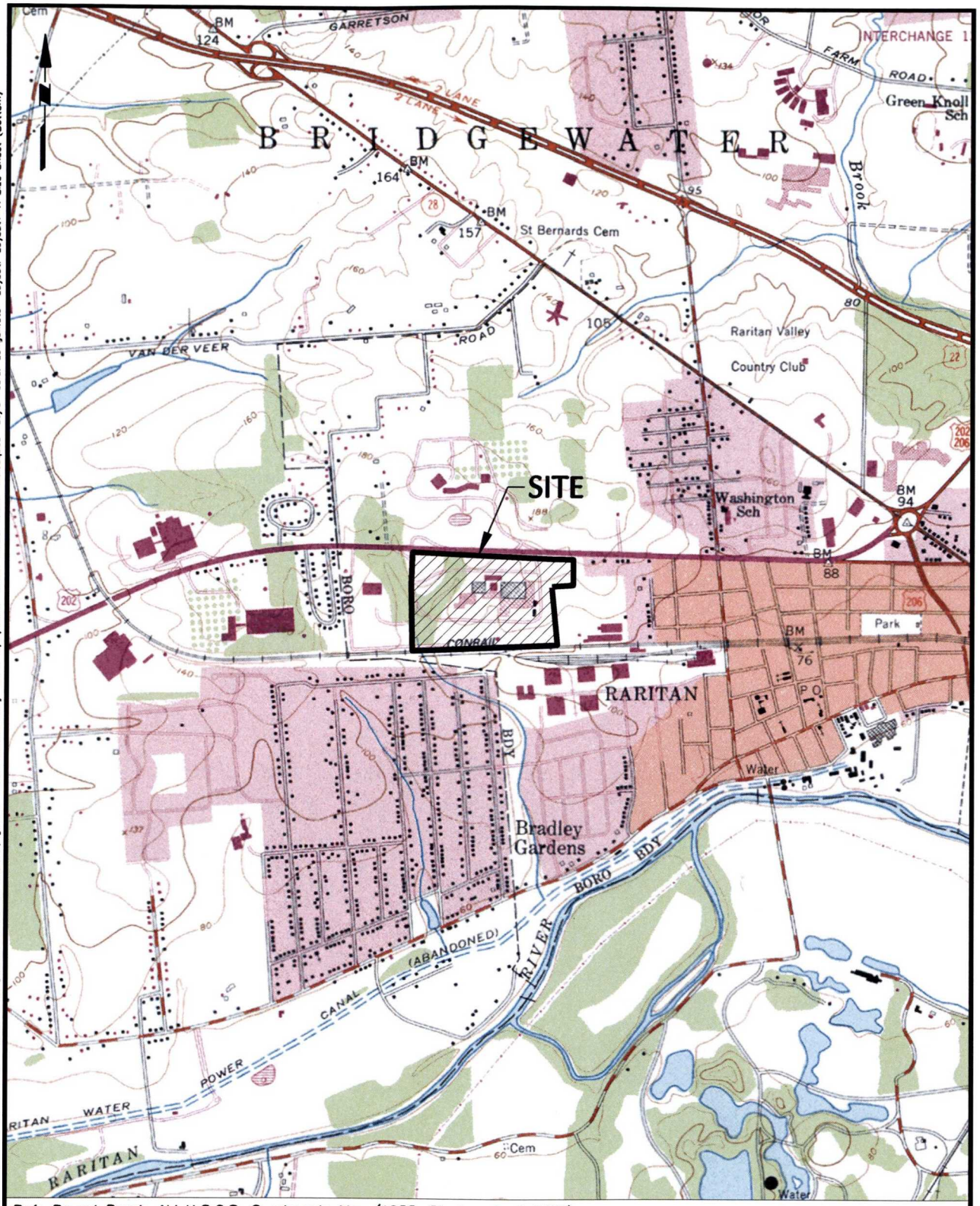
			Area South of Building J	Field Blank
Sample ID			MW-47(082814)	FB082814
Sampling Depth (ft)		Higher of	14 - 34	-
Lab ID	CAS No.	PQL and	JB75245-3	JB75245-9
Sample Date		GQS	8/28/2014	8/28/2014
Dilution Factor			1 and 10	1
SEMI-VOLATILE ORGANIC COMPOUNDS (ug/L)				
1,1'-Biphenyl	92-52-4	400	1.0 U	1.1 U
1,2,4,5-Tetrachlorobenzene	95-94-3	NS	2.0 U	2.2 U
2,3,4,6-Tetrachlorophenol	58-90-2	200	5.0 U	5.6 U
2,4,5-Trichlorophenol	95-95-4	700	5.0 U	5.6 U
2,4,6-Trichlorophenol	88-06-2	20	5.0 U	5.6 U
2,4-Dichlorophenol	120-83-2	20	2.0 U	2.2 U
2,4-Dimethylphenol	105-67-9	100	5.0 U	5.6 U
2,4-Dinitrophenol	51-28-5	40	20.0 U	22 U
2,4-Dinitrotoluene	121-14-2	NS	1.0 U	1.1 U
2,6-Dinitrotoluene	606-20-2	NS	1.0 U	1.1 U
2-Chloronaphthalene	91-58-7	600	2.0 U	2.2 U
2-Chlorophenol	95-57-8	40	5.0 U	5.6 U
2-Methylnaphthalene	91-57-6	30[a]	1.0 U	1.1 U
2-Methylphenol	95-48-7	NS	2.0 U	2.2 U
2-Nitroaniline	88-74-4	NS	5.0 U	5.6 U
2-Nitrophenol	88-75-5	NS	5.0 U	5.6 U
3&4-Methylphenol	NS	NS	2.0 U	2.2 U
3,3'-Dichlorobenzidine	91-94-1	30	2.0 U	2.2 U
3-Nitroaniline	99-09-2	NS	5.0 U	5.6 U
4,6-Dinitro-o-cresol	534-52-1	1[a]	20.0 U	22 U
4-Bromophenyl phenyl ether	101-55-3	NS	2.0 U	2.2 U
4-Chloro-3-methyl phenol	59-50-7	100[a]	5.0 U	5.6 U
4-Chloroaniline	106-47-8	30	5.0 UJ	5.6 U
4-Chlorophenyl phenyl ether	7005-72-3	NS	2.0 U	2.2 U
4-Nitroaniline	100-01-6	NS	5.0 U	5.6 U
4-Nitrophenol	100-02-7	NS	10.0 U	11 U
Acenaphthene	83-32-9	400	0.1 U	0.11 U
Acenaphthylene	208-96-8	100[a]	0.1 U	0.11 U
Acetophenone	98-86-2	700	2.0 U	2.2 U
Anthracene	120-12-7	2000	0.1 U	0.11 U
Atrazine	1912-24-9	3	2.0 U	2.2 U
Benzaldehyde	100-52-7	NS	5.0 U	5.6 U
Benzo(a)anthracene	56-55-3	0.1	0.1 U	*0.11* U
Benzo(a)pyrene	50-32-8	0.1	0.1 U	*0.11* U
Benzo(b)fluoranthene	205-99-2	0.2	0.1 U	0.11 U
Benzo(g,h,i)perylene	191-24-2	100[a]	0.1 U	0.11 U
Benzo(k)fluoranthene	207-08-9	0.5	0.1 U	0.11 U
bis(2-Chloroethoxy)methane	111-91-1	NS	2.0 U	2.2 U
bis(2-Chloroethyl)ether	111-44-4	7	2.0 U	2.2 U
bis(2-Chloroisopropyl)ether	108-60-1	300	2.0 U	2.2 U
bis(2-Ethylhexyl)phthalate	117-81-7	3	**11.1**	2.2 U
Butyl benzyl phthalate	85-68-7	100	2.0 U	2.2 U
Caprolactam	105-60-2	5000[a]	2.0 U	2.2 U
Carbazole	86-74-8	NS	1.0 U	1.1 U
Chrysene	218-01-9	5	0.1 U	0.11 U
Dibenzo(a,h)anthracene	53-70-3	0.3	0.1 U	0.11 U
Dibenzofuran	132-64-9	NS	5.0 U	5.6 U
Diethyl phthalate	84-66-2	6000	2.0 U	2.2 U
Dimethyl phthalate	131-11-3	100[a]	2.0 U	2.2 U
Di-n-butyl phthalate	84-74-2	700	13.7 B	5.8 B
Di-n-octyl phthalate	117-84-0	100	2.0 U	2.2 U
Fluoranthene	206-44-0	300	0.1 U	0.11 U
Fluorene	86-73-7	300	0.1 U	0.11 U
Hexachlorobenzene	118-74-1	0.02	0.02 U	*0.022* U
Hexachlorobutadiene	87-68-3	1	1.0 U	*1.1* U
Hexachlorocyclopentadiene	77-47-4	40	10.0 UJ	11 U
Hexachloroethane	67-72-1	7	2.0 U	2.2 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.2	0.1 U	0.11 U
Isophorone	78-59-1	40	2.0 U	2.2 U
Naphthalene	91-20-3	300	0.1 U	0.11 U
Nitrobenzene	98-95-3	6	2.0 U	2.2 U
N-Nitroso-di-n-propylamine	621-64-7	10	2.0 U	2.2 U
N-Nitrosodiphenylamine	86-30-6	10	5.0 U	5.6 U
Pentachlorophenol	87-86-5	0.3	0.3 U	*0.34* U
Phenanthrene	85-01-8	100[a]	0.1 U	0.11 U
Phenol	108-95-2	2000	2.0 U	2.2 U
Pyrene	129-00-0	200	0.1 U	0.11 U
Total Targeted SVOC Concentration		NS	40	5.8
Total Number of TICs		NS	21	1
Total Concentrations of TICs		NS	1,335	7.8
Total SVOC and TIC Concentrations		NS	1,375	13.6

Footnotes are on last page of this table

Table 9
SVOC Analytical Results for Groundwater
Ortho Clinical Diagnostics
Raritan, New Jersey

Footnotes:
SVOC: Semi-Volatile Organic Compounds
CAS No.: Chemical Abstract Service Number
GQS: NJDEP Class IIA Groundwater Quality Standard (7/22/10)
PQL: Practical Quantitation Level
U: Analyte was not detected above the referenced reporting limit
J: Estimated concentration at or below the reporting limit
B: Indicates analyte found in associated method blank
TIC: Tentatively Identified Compound. All TIC concentrations are estimates
ug/L: micrograms per liter
NS: Criteria not specified
-: Not Applicable
[a]: Corresponding value listed is the Interim Groundwater Quality Criteria
[1]: Sample is a duplicate of preceding sample
Bold outline: Indicates concentration exceeding NJDEP Criteria
Italics: Indicates reporting limit is above NJDEP Criteria

Figures



Ref: Bound Brook, NJ U.S.G.S. Quadrangle Map (1955, Photorevised 1977)

LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

Mailing Address:
P.O. Box 1569
Doylestown, PA 18901-0219
T: 215.491 6500 F: 215.491 6501

Shipping Address:
2700 Kelly Road, Suite 200
Warrington, PA 18976
www.langan.com

NEW JERSEY **PENNSYLVANIA** NEW YORK CONNECTICUT FLORIDA NEVADA

NJ Certificate of Authorization No: 24GA27996400

Project

SITE LOCATION MAP
ORTHO-CLINICAL DIAGNOSTICS

RARITAN

SOMERSET COUNTY NEW JERSEY

Project No.	Date	Scale	Figure
3568401	03/06/15	1" = 2,000'	1

© 2008 Langan Engineering & Environmental Services Inc.

Filename: \\langan.com\data\DT\data4\3568401\Cadd Data - 3568401\Dwg\2015 LNAPL IRM Report\Figure 1-1_Site Location.dwg Date: 3/6/2015 Time: 15:20 User: rvelazquez Style Table: Langan.stb Layout: Layout1-A Size Sheet (Bottom)

LEGEND

- ORTHO CLINICAL DIAGNOSTICS (OCD) PROPERTY BOUNDARY
- TRIBUTARY/STREAM
- PROPERTY BOUNDARY / OUTLINE OF LAND USE AREA

NOTES

1. NEW JERSEY 2012 HIGH RESOLUTION ORTHOPHOTOGRAPHY WAS PROVIDED BY THE NJ OFFICE OF INFORMATION TECHNOLOGY (NJOIT), OFFICE OF GEOGRAPHIC INFORMATION SYSTEMS (OGIS).
2. TAX PARCEL INFORMATION AND PROPERTY BOUNDARIES ARE BASED ON ON NJ PARCEL MAP ONLINE (2015).
3. TRIBUTARIES AND STREAMS ARE BASED ON THE SURFACE WATER QUALITY STANDARDS OF NEW JERSEY GIS SHAPEFILE (EDITION 200812), PUBLISHED BY THE NJDEP IN 2009

300 0 150 300
SCALE IN FEET

LANGAN
Stone Manor Corporate Center, 2700 Kelly Road, Suite 200
Warrington, PA 18976
T: 215.491.6500 F: 215.491.6501 www.langan.com
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan International LLC
Collectively known as Langan

SURROUNDING LAND USE MAP

ORTHO-CLINICAL DIAGNOSTICS
RARITAN, NEW JERSEY

Project No.	Date	Scale	Figure
3568401	03/24/15	1" = 300'	2

© 2007 Langan Engineering and Environmental Services Inc.

Filename: \\langan.com\data\DT\data4\3568401\Cadd Data - 3568401\Dwg\2015 LNAPL IRM Report\Figure 2_Surrounding Land Use Map.dwg Date: 3/25/2015 Time: 18:33 User: rvelazquez Style Table: Langan.stb Layout: B-Size

REFERENCES

1. APPROXIMATE LOCATIONS OF EXISTING SITE FEATURES ARE BASED ON A COMPILATION OF FIGURES WITH VARYING DATES AND TITLES PREPARED BY McLAREN/HART, INC. AND ORTHO CLINICAL DIAGNOSTICS.
2. APPROXIMATE EXTENT OF PARCEL BOUNDARY BASED ON SOMERSET COUNTY GEOGRAPHICAL INFORMATION SYSTEM (GIS) DIGITAL DATASET.

200 0 100 200

SCALE IN FEET

LEGEND

- APPROXIMATE SITE BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- FENCE LINE
- EDGE OF ASPHALT PAVEMENT
- DRAINAGE DITCH
- GUARD RAIL
- SOLAR PANELS
- TREE LINE
- RAILROAD TRACKS
- BUILDING OUTLINE
- OR TREES
- E SITE BUILDING LABEL
- SHALLOW MONITORING WELL
- INTERMEDIATE MONITORING WELL
- DEEP MONITORING WELL
- MONITORING WELL WITH LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL)

LANGAN

Stone Manor Corporate Center, 2700 Kelly Road, Suite 200
Warrington, PA 18976
T: 215.491.6500 F: 215.491.6501 www.langan.com

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan International LLC

Collectively known as Langan

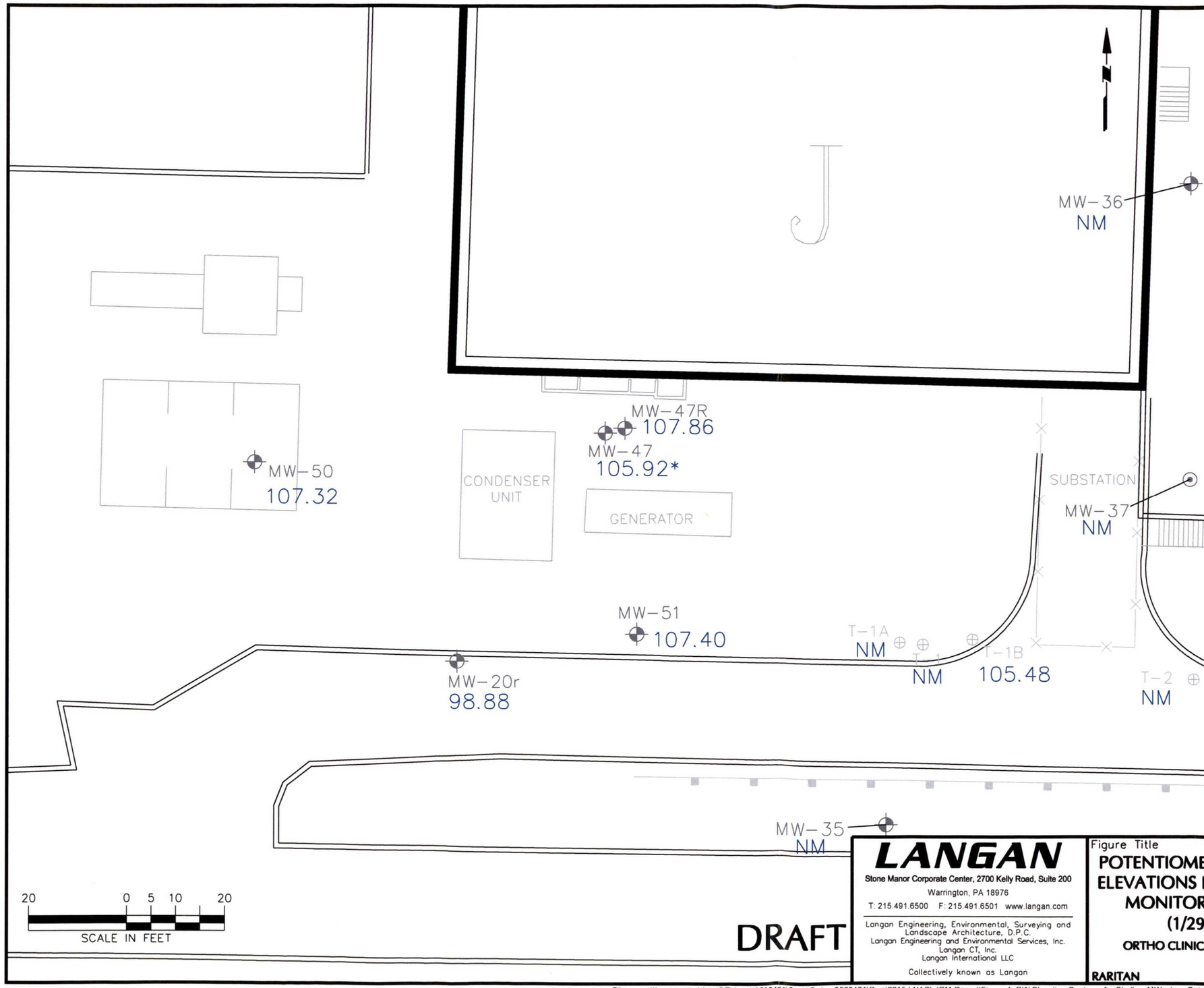
SITE LAYOUT

ORTHO-CLINICAL DIAGNOSTICS
RARITAN, NEW JERSEY

Project No.	Date	Scale	Figure
3568401	06/18/14	1" = 200'	3

© 2007 Langan Engineering and Environmental Services Inc.

Filename: \\langan.com\data\DT\data\3568401\Cadd Data - 3568401\Dwg\2015 LNAPL IRM Report\Fig 3_Site Layout.dwg Date: 3/24/2015 Time: 16:24 User: rvelazquez Style Table: Langan.stb Layout: Figure 1



LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- T-SERIES WELL
- 107.86 — POTENTIOMETRIC SURFACE ELEVATION (FEET)
- NM — NOT MEASURED
- * — POTENTIOMETRIC SURFACE ELEVATION WAS CORRECTED TO ACCOUNT FOR LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) ON TOP OF WATER TABLE (LNAPL SPECIFIC GRAVITY WAS ASSUMED TO BE 0.85)
- EDGE OF ASPHALT PAVEMENT
- J — SITE BUILDING LABEL

NOTE

POTENTIOMETRIC SURFACE CONTOURS ARE NOT DRAWN ON THIS FIGURE BECAUSE OF THE HIGHLY VARIABLE AND NON-UNIFORM NATURE OF THE POTENTIOMETRIC SURFACE ELEVATIONS IN THE SHALLOW BEDROCK WELLS

LANGAN
Stone Manor Corporate Center, 2700 Kelly Road, Suite 200
Warrington, PA 18976
T: 215.491.6500 F: 215.491.6501 www.langan.com
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan CT, Inc.
Langan International LLC
Collectively known as Langan

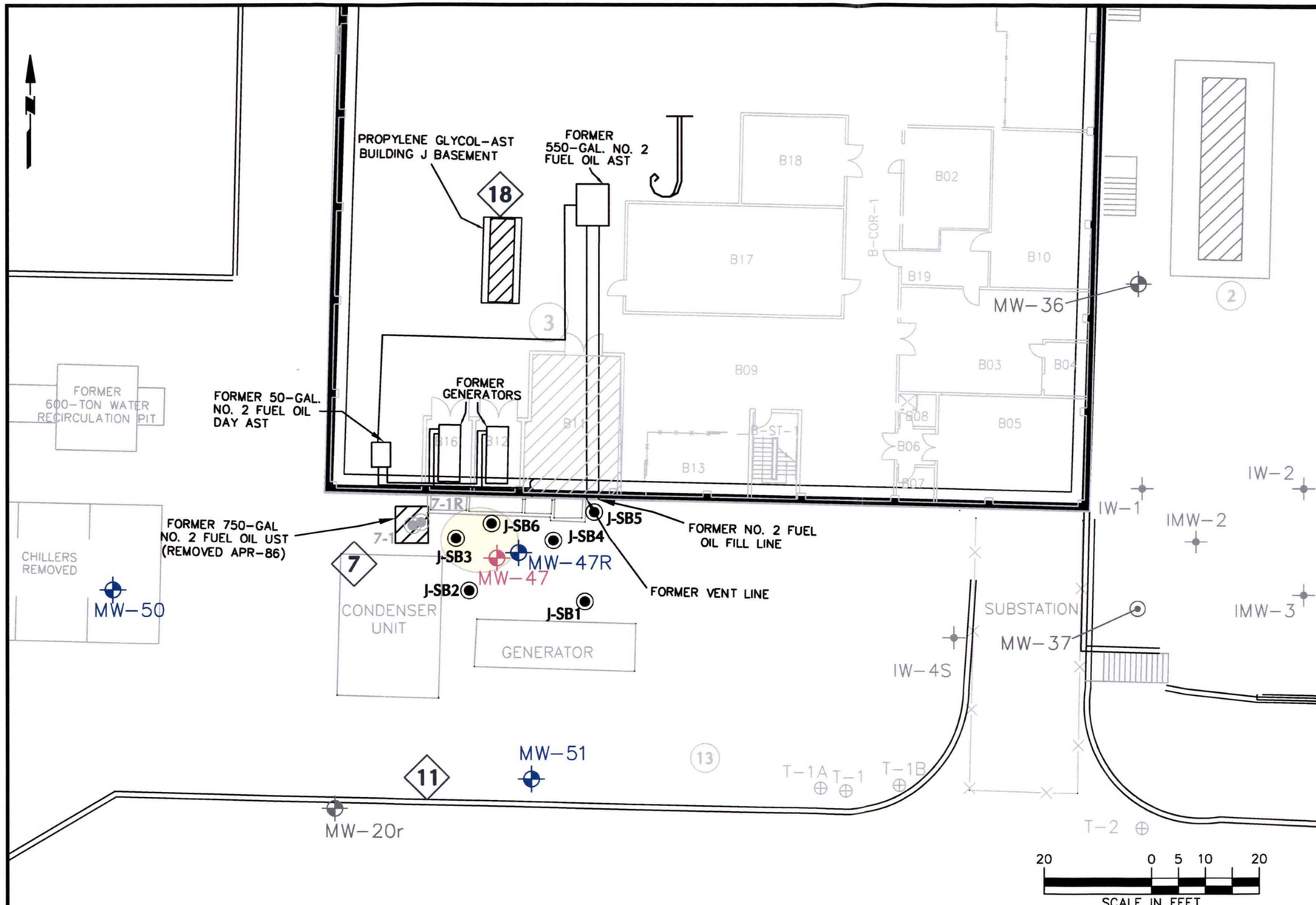
Figure Title
POTENTIOMETRIC SURFACE ELEVATIONS FOR SHALLOW MONITORING WELLS (1/29/2015)
ORTHO CLINICAL DIAGNOSTICS
RARITAN NEW JERSEY

Project No.	3568401
Date	03/25/15
Scale	1"=20'
Drawn By	RV
Checked By	RL

Figure 4

© 2013 Langan

Filename: \\langan.com\data\DT\data4\3568401\Cadd Data - 3568401\Dwg\2015 LNAPL IRM Report\Figure 4_GW Elevation Contours for Shallow MWs.dwg Date: 3/25/2015 Time: 11:57 User: rvelazquez Style Table: Langan.stb Layout: Figure 2-Sample Results



LEGEND

- SOIL SAMPLE LOCATION
- AREA OF OBSERVED HYDROCARBON IMPACTS
- EDGE OF ASPHALT PAVEMENT
- GUARD RAIL
- FENCE
- B17 — BUILDING ROOM NUMBER
- J — SITE BUILDING LABEL
- SHALLOW MONITORING WELL
- SHALLOW MONITORING WELL WHERE LNAPL WAS DETECTED
- SHALLOW MONITORING WELL INSTALLED AFTER THE DISCOVERY OF LNAPL IN MW-47
- INTERMEDIATE MONITORING WELL
- DEEP MONITORING WELL
- T-SERIES WELL
- INJECTION WELL
- 3 — SOLID WASTE MANAGEMENT UNIT (SWMU) DESIGNATION
- 7 — AREA OF CONCERN (AOC) DESIGNATION
- 7-1 — 2004 FILL CHARACTERIZATION SAMPLE LOCATION WITH CONCENTRATIONS BELOW THE NJDEP SCC
- 7-1R — 2006-2008 SUPPLEMENTAL RFI SOIL SAMPLE LOCATION WITH CONCENTRATIONS BELOW THE NJDEP SCC
- STAIRS
- AST — ABOVEGROUND STORAGE TANK
- LNAPL — LIGHT NON-AQUEOUS PHASE LIQUID*
- * — FINGERPRINT ANALYSIS INDICATES LNAPL IS A "WEATHERED MIDDLE DISTILLATE" WHICH IS LIKELY A WINTER DIESEL FUEL

REFERENCES

1. APPROXIMATE LOCATIONS OF EXISTING SITE FEATURES ARE BASED ON A COMPILATION OF FIGURES WITH VARYING DATES AND TITLES PREPARED BY McLAREN/HART, INC. AND ORTHO-CLINICAL DIAGNOSTICS.
2. APPROXIMATE LOCATIONS OF BUILDING J GENERATORS, FUEL LINES, 50-GAL. DAY TANK, AND 550-GAL TANK ARE BASED ON "#2 FUEL OIL LINES AND #6 FUEL OIL LINES" FIGURE PREPARED BY ORTHO-CLINICAL DIAGNOSTICS.

LANGAN
Stone Manor Corporate Center, 2700 Kelly Road, Suite 200
Warrington, PA 18976
T: 215.491.6500 F: 215.491.6501 www.langan.com
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan CT, Inc.
Langan International LLC
Collectively known as Langan

Figure Title

APPROXIMATE EXTENT OF OBSERVED HYDROCARBON IMPACTS
ORTHO CLINICAL DIAGNOSTICS

RARITAN NEW JERSEY

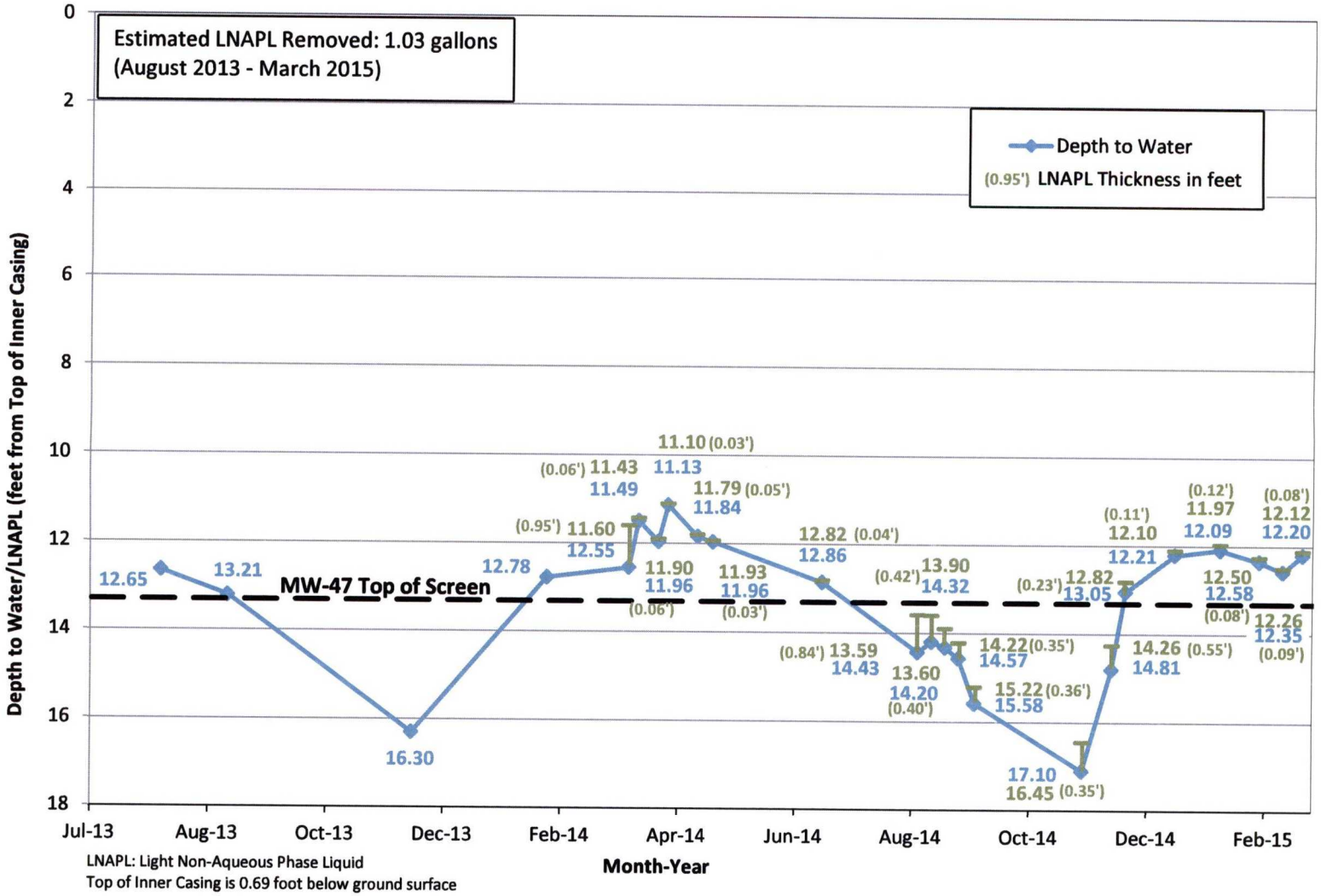
Project No.	3568401
Date	03/25/15
Scale	1"=20'
Drawn By	BK
Checked By	RL

Figure 5

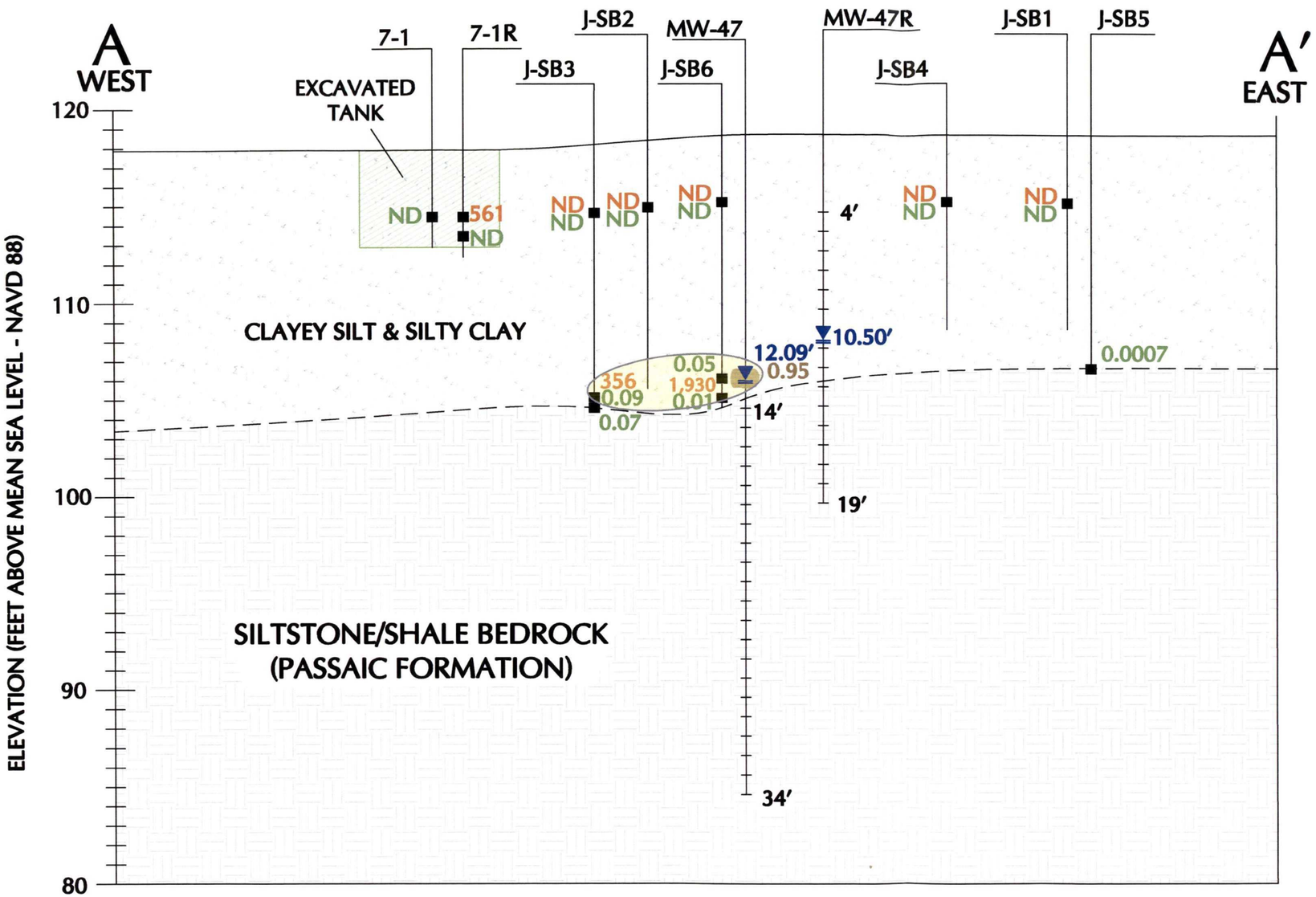
© 2013 Langan

Filename: \\langan.com\data\DT\data4\3568401\Cadd Data - 3568401\Dwg\2015 LNAPL IRM Report\Figure 5_Approximate Extent of Observed Hydrocarbon Impacts.dwg Date: 3/25/2015 Time: 19:05 User: rvelazquez Style Table: Langan.stb Layout: Without Utilities

Figure 6
LNAPL Monitoring Trends for MW-47
Ortho Clinical Diagnostics
Raritan, New Jersey



LNAPL: Light Non-Aqueous Phase Liquid
Top of Inner Casing is 0.69 foot below ground surface

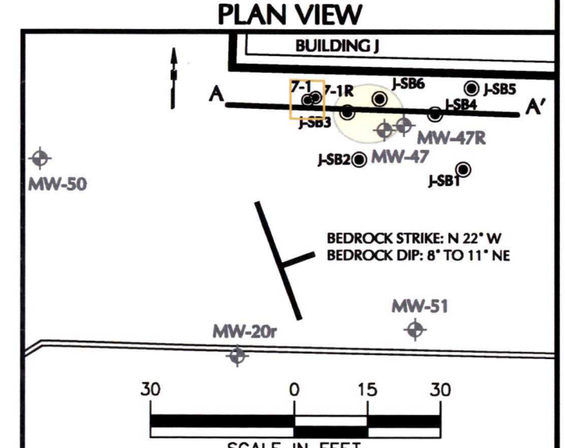


LEGEND

- SHALLOW BEDROCK MONITORING WELL
- SOIL BORING LOCATION
- AREA WITH HYDROCARBON ODOR AND/OR HIGH PID READINGS RECORDED DURING INVESTIGATIVE ACTIVITIES
- SOIL SAMPLE LOCATION
- 356 — EXTRACTABLE PETROLEUM HYDROCARBON (EPH) OR TOTAL PETROLEUM HYDROCARBON (TPH) CONCENTRATION IN SOIL IN MILLIGRAMS PER KILOGRAM (MG/KG)
- 0.05 — TCE CONCENTRATION IN SOIL (MG/KG) (ALL CONCENTRATIONS ARE BELOW THE 1999 NJDEP SCC FOR TCE)
- 5.52 — DEPTH TO WATER IN FEET (MEASURED ON 1/29/15)
- THICKEST LNAPL MEASUREMENT IN FEET (RECORDED ON 4/2/14)
- 0.95 — MONITORING WELL SCREEN INTERVAL
- ND — NOT DETECTED
- NJDEP — NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
- SCC — SOIL CLEANUP CRITERIA (1999)
- TCE — TRICHLOROETHENE
- LNAPL — LIGHT NON-AQUEOUS PHASE LIQUID*
- * — FINGERPRINT ANALYSIS INDICATES LNAPL IS A "WEATHERED MIDDLE DISTILLATE WHICH IS LIKELY A WINTER DIESEL FUEL

ELEVATION REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

PLAN VIEW



6 0 3 6
SCALE IN FEET
(NO EXAGGERATION)

LANGAN
Stone Manor Corporate Center, 2700 Kelly Road, Suite 200
Warrington, PA 18976
T: 215.491.6500 F: 215.491.6501 www.langan.com
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan CT, Inc.
Langan International LLC
Collectively known as Langan

Figure Title

CROSS-SECTION THROUGH AREA OF HYDROCARBON IMPACTS

ORTHO CLINICAL DIAGNOSTICS

RARITAN NEW JERSEY

Project No.	3568401
Date	03/25/15
Scale	AS SHOWN
Drawn By	MS
Checked By	EP

Figure 7

© 2014 Langan

Filename: \\langan.com\data\DT\data4\3568401\Cadd Data - 3568401\Dwg\2015 LNAPL IRM Report\Figure 8_Cross-Section Through Area of Hydrocarbon Impacts.dwg Date: 3/25/2015 Time: 18:41 User: rvelazquez Style Table: Langan.stb Layout: New Cross Section

Appendix A
Confirmed Discharge Notification Form and LNAPL Reporting Form
(60 Day)

LANGAN

TRANSMITTAL

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To:

Bureau of Case Assign. & Initial Notice
Site Remediation Program
NJ Department of Env. Protection
401-05H, P.O. Box 420
Trenton, NJ 08625-0420

Phone No:

Date:

April 4, 2014

Project No.

3568401

Re:

Confirmed Discharge Notification Form
Ortho Clinical Diagnostics, Raritan, NJ
SRP PI No. 005882
Case No. NJD068715424

Via:

- ☐ Fed Ex: ☐ Priority ☐ Standard ☐ 2-Day
- ☐ UPS: ☐ Priority ☐ Standard ☐ 2-Day
- ☒ 1st Class Mail ☐ Hand Delivery ☐ Eastern Delivery (Inter-Office)

Items:

- ☐ Prints ☐ Letter ☐ Other
- ☐ Sepia ☐ Drawings ☐ Reports
- ☒ Other **FORM**

Copies:	Date:	Description:
1	4/3/14	Confirmed Discharge Notification Form
1	4/3/14	CD Containing an Electronic Copy of the Confirmed Discharge Notification Form

- ☐ For Your Information ☒ For Your Use ☐ As Requested By:
- ☐ For Review and Comment ☐ For Approval ☐ Other:

Remarks:

Enclosed please find one hard copy and one electronic copy of the Confirmed Discharge Notification Form for the Ortho Clinical Diagnostics (OCD) Site located at 1001 US Route 202 in Raritan, NJ. Please note that this site is a federal-lead RCRA Corrective Action site that has an existing case management team from NJDEP and USEPA. Please do not hesitate to contact Keith Wojciechowski at 908-704-3973 if you have any questions.

Copies To:

S. Urbanik, NJDEP
C. Ng, USEPA
K. Wojciechowski, OCD
S. Beitler, Langan

From:

Richard P. LoCastro

Richard P. LoCastro, P.G.

New Jersey Department of Environmental Protection
Site Remediation Program

CONFIRMED DISCHARGE NOTIFICATION

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882

Case Tracking Number(s): NJD 068715424

Date Remediation Initiated Pursuant to N.J.A.C. 7:26C-2. 09/19/1988

State Plane Coordinates for a central location at the site: Easting: 450362 Northing: 633499

Municipal Block(s) and Lot(s):

Block # 31	Lot # 4	Block #	Lot #
Block #	Lot #	Block #	Lot #
Block #	Lot #	Block #	Lot #
Block #	Lot #	Block #	Lot #

SECTION B. DISCHARGE BEING REPORTED WITH THIS SUBMISSION

Incident Number/Com. Center Number for the discharge being reported with this submission: 14-04-03-0956-05

Is there an existing remedial case at the site? ☒ Yes ☐ No

If "Yes," would you like to combine this incident number with the existing case? ☒ Yes ☐ No

Provide the Tracking Number for the existing remedial case would you like to combine this incident number with: NJD 068715424

SECTION C. CURRENT OWNER OF THE SITE

Affiliation/Name of Organization: Ortho Clinical Diagnostics

First Name of Contact: Keith Last Name of Contact: Wojciechowski

Title: Sr. Environmental Engineer

Phone Number: (908) 704-3973 Ext: Fax:

Mailing Address: 1001 US Route 202

City/Town: Raritan State: NJ Zip Code: 08869

Email Address: KWojciec@its.jnj.com

SECTION D. SITE USE

Current Site Use (check all that apply)

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☐ Agricultural
- ☐ Park or recreational use
- ☐ Vacant
- ☐ Government
- ☐ Other:

Intended Future Site Use, if known (check all that apply)

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☐ Park or recreational use
- ☐ Vacant
- ☐ Government
- ☐ Future site use unknown

SECTION E. DESCRIPTION OF DISCHARGE

Date Discharge Occurred: Unknown Date NJDEP Hotline called: 4/3/14

Media Contaminated:

☐ Soil ☒ Groundwater ☐ Surface Water Receiving Water: _____

☐ Historic Fill only

Description of Discharge:

Light Non-Aqueous Phase Liquid (LNAPL) was identified in an onsite monitoring well (MW-47). The suspected source of the LNAPL is a former 750-gallon No. 2 fuel oil underground storage tank (UST) system located in the vicinity of the monitoring well.

SECTION F. FEDERAL RELEASE

Is this discharge related to a release from a Federally regulated UST? ☐ Yes ☒ No

If "Yes," please answer the following questions:

Tank ID (from Registration): _____ Tank System Size: _____

Contents: _____

Source of Federal Release (check appropriate category):

- ☐ Dispenser
- ☐ Vent Pipe
- ☐ Fill Port/Fill Lines
- ☐ Piping (Upgraded)
- ☐ Piping (Not Upgraded)
- ☐ Spill Bucket
- ☐ Tank (Upgraded)
- ☐ Tank (Not Upgraded)
- ☐ Vapor System Recovery
- ☐ Submersible Turbine Pump Area
- ☐ Other (Specify) _____
- ☐ Delivery Problem
- ☐ Unknown

Cause of Federal Release (check appropriate category):

- ☐ Spill
- ☐ Overfill
- ☐ Physical/Mechanical Damage
- ☐ Loose Fittings
- ☐ Installation Problem
- ☐ Vapor Release
- ☐ Other (Specify) _____
- ☐ Corrosion
- ☐ Unknown

SECTION G. CASE TYPE: (check all that apply)

- ☐ Administrative Consent Order (ACO)
- ☐ Brownfield Development Area (BDA)
- ☐ Child Care Facility
- ☐ Chrome Site (Chromate chemical production waste)
- ☐ Coal Gas
- ☐ Due Diligence with RAO
- ☐ Hazardous Discharge Remediation Fund (HDSRF) Grant/Loan
- ☐ Historic Pesticides
- ☐ ISRA
- ☐ Landfill (SRP subject only)
- ☐ Regulated Underground Storage Tank (UST)
- ☐ Remediation Agreement (RA)
- ☐ School Development Authority (SDA)
- ☐ School facility
- ☐ Spill Act Defense – Government Entity
- ☐ Spill Act Discharge
- ☐ UST Grant/Loan
- ☐ Other (explain): _____

Federal Case (check all that apply)

☒ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE** ☐ TSCA

SECTION H. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Ortho Clinical Diagnostics

Representative First Name: Keith Representative Last Name: Wojciechowski

Title: Sr. Environmental Engineer

Phone Number: (908) 704-3973 Ext: Fax:

Mailing Address: 1001 US Route 202

City/Town: Raritan State: NJ Zip Code: 08869

Email Address: KWojciec@its.jnj.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Keith Wojciechowski Date: 4-3-2014

Name/Title: Keith Wojciechowski/Sr. Environmental Engineer

No Changes To Contact Information Since Last Submittal ☒

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

LANGAN

TRANSMITTAL

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To:

Bureau of Case Assign. & Initial Notice
Site Remediation Program
NJ Department of Env. Protection
401-05H, P.O. Box 420
Trenton, NJ 08625-0420

Phone No:

Date: June 2, 2014

Project No. 3568401

Re: LNAPL Reporting Form
Ortho Clinical Diagnostics,
Raritan, NJ
SRP PI No. 005882
Case No. NJD068715424

Via:

- ☐ Fed Ex: ☐ Priority ☐ Standard ☐ 2-Day
- ☐ UPS: ☐ Priority ☐ Standard ☐ 2-Day
- ☒ 1st Class Mail ☐ Hand Delivery ☐ Eastern Delivery (Inter-Office)

Items:

- ☐ Prints ☐ Letter ☐ Other
- ☐ Sepia ☐ Drawings ☐ Reports
- ☒ Other **Form**

Copies:	Date:	Description:
1	5/30/14	Light Non-Aqueous Phase Liquid (LNAPL) Reporting Form

- ☐ For Your Information
- ☐ For Review and Comment
- ☒ For Your Use
- ☐ For Approval
- ☐ As Requested By:
- ☐ Other:

Remarks:

Enclosed please find one hard copy of the Light Non-Aqueous Phase Liquid (LNAPL) Reporting Form for the Ortho Clinical Diagnostics (OCD) Site located at 1001 US Route 202 in Raritan, NJ. Please note that this site is a federal-lead RCRA Corrective Action site that has an existing case management team from NJDEP and USEPA. Please do not hesitate to contact Keith Wojciechowski at 908-704-3973 if you have any questions.

Copies To:

S. Urbanik, NJDEP
C. Ng, USEPA
K. Wojciechowski
S. Beitler, Langan

From:

Richard P. LoCastro

Richard P. LoCastro, P.G.

\\langan.com\data\DT\data4\3568401\Office Data\Correspondence\Letters\NJDEP\2014\2014JUN02_LNAPL Reporting Form.docx

New Jersey Department of Environmental Protection
Site Remediation Program

LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) REPORTING FORM

Date Stamp
(For Department use only)

This form is to be used to report to the Department the presence of Light Non-Aqueous Phase Liquid (LNAPL) and to document initial LNAPL recovery efforts. (Note: Submittal of this form does not substitute for notifying the Department of a discharge pursuant to N.J.A.C. 7:26E-1.4.) In addition, this same form is used to accompany the report submittal that document actions taken for initial LNAPL recovery efforts and implementation of the interim remedial measure for LNAPL following completion of a focused remedial investigation conducted to determine the extent of LNAPL.

Submittal Type: ☒ Initial LNAPL Discovery ☐ 1-Year LNAPL Reporting Submission

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 U.S. Route 202

Municipality: Raritan Borough (Township, Borough or City)

County Somerset Zip Code 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD 068715424

Date Remediation Initiated Pursuant to N.J.A.C.26C-2:

State Plane Coordinates for a central location at the site: Easting: 450510 Northing: 633227

Municipal Block(s) and Lot(s):

Block # 31	Lot # 4	Block #	Lot #
Block #	Lot #	Block #	Lot #
Block #	Lot #	Block #	Lot #
Block #	Lot #	Block #	Lot #

SECTION B. NJDEP CASE MANAGER

Do you have an assigned Case Manager? ☒ Yes ☐ No

If "Yes," please list the Case Manager: Steve Urbanik

SECTION C. ACTIONS BEING REPORTED

1. ☐ **LNAPL Discovery Date:** 04/02/2014

Type of LNAPL (Check all that apply)

☐ Gasoline ☐ Diesel Fuel ☐ #2 Fuel Oil ☐ #4 Fuel Oil ☐ #6 Fuel Oil ☐ Jet Fuel

☐ Lubricating Oil ☐ Hydraulic Fluid ☐ Waste Oil ☐ Kerosene ☐ Unknown

☒ Other, list: Fingerprint results: Extremely weathered middle distillate, either kerosene, jet fuel or something similar

List source(s) of LNAPL release (put unknown if source not identified) Unknown

Was an ongoing release discovered? ☐ Yes ☒ No

Was any ongoing release stopped? ☐ Yes ☐ No

If "No," explain:

LNAPL Thickness: 0.95 foot

How was LNAPL discovered?

☒ In Monitoring Well ☐ In Excavation ☐ In Utility, list type:

☐ On Surface Water ☐ Seep ☐ Within a sump

☐ Other, explain:

Initial LNAPL Recovery Efforts. (check all that apply)

☐ Bailing ☐ Sorbent material (socks, pads, etc.)

☐ Skimmers ☐ Ejector pumps

☐ Single or Dual-Phase Vacuum Extraction ☐ Technically Impracticable

☒ Other, explain: Used peristaltic pump to remove LNAPL

List frequency of action: Once on 04/03/14. Checked 8 additional times but thickness was less than 0.06'.

2. ☐ LNAPL Interim Remedial Measure (IRM)

a. Is the focused remedial investigation (delineation) for LNAPL complete? ☐ Yes ☐ No

If "No," explain: _____

b. Is LNAPL still present at the site following initial recovery efforts? ☐ Yes ☐ No

If "No," skip to 2.g. below.

c. Is the LNAPL present offsite? ☐ Yes ☐ No ☐ Unknown

d. Has a LNAPL IRM been implemented at this site? ☐ Yes ☐ No

If "No," explain: _____

If "Yes," provide date IRM implemented: _____

List type of IRM: _____

e. Does any monitoring data, information or observations indicate that the LNAPL is migrating horizontally (i.e. aerial extent of LNAPL is expanding)? ☐ Yes ☐ No

If "Yes." is the IRM designed to prevent further migration? ☐ Yes ☐ No

g. Has the LNAPL response (Initial recovery, RI, IRM and reporting, as applicable) been performed following the "Light Non-Aqueous Phase Liquid (LNAPL) Initial Recovery and Interim Remedial Measures Guidance (LNAPL Guidance)"? ☐ Yes ☐ No

If "No", define any variance from the LNAPL Guidance. _____

Note: Whenever a narrative explanation is requested, attach additional sheets as need to provide a complete response. Attach reports documenting all remedial investigation and initial/interim remedial measure activities related to LNAPL including plans for operational monitoring. See the LNAPL Guidance for suggested report format.

SECTION D . VARIANCE FROM REGULATIONS

If the Licensed Site Remediation Professional has varied from the Technical Rules, provide the citation(s) from which the remediation varied and the page(s) in the attached document where the rationale for the variance is provided.

N.J.A.C. 7:26E- _____ Page _____

N.J.A.C. 7:26E- _____ Page _____

N.J.A.C. 7:26E- _____ Page _____

SECTION E. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: Ortho Clinical Diagnostics

Representative First Name: Keith Representative Last Name: Wojciechowski

Title: Sr. Environmental Engineer

Phone Number: (908) 704-3973 Ext: Fax:

Mailing Address: 1001 US Route 202

City/Town: Raritan State: NJ Zip Code: 08869

Email Address: KWojciec@its.jnj.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Date: 5/30/14

Name/Title: Keith Wojciechowski/Sr. Environmental Engineer **No Changes Since Last Submittal** ☒

SECTION F. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: _____

First Name: _____ Last Name: _____

Phone Number: _____ Ext: _____ Fax: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Email Address: _____

This statement shall be signed by the LSRP who is submitting this notification in accordance with SRRA Section 16 d. and Section 30 b.2.

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☐ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: _____ Date: _____

LSRP Name/Title: _____ **No Changes Since Last Submittal** ☐

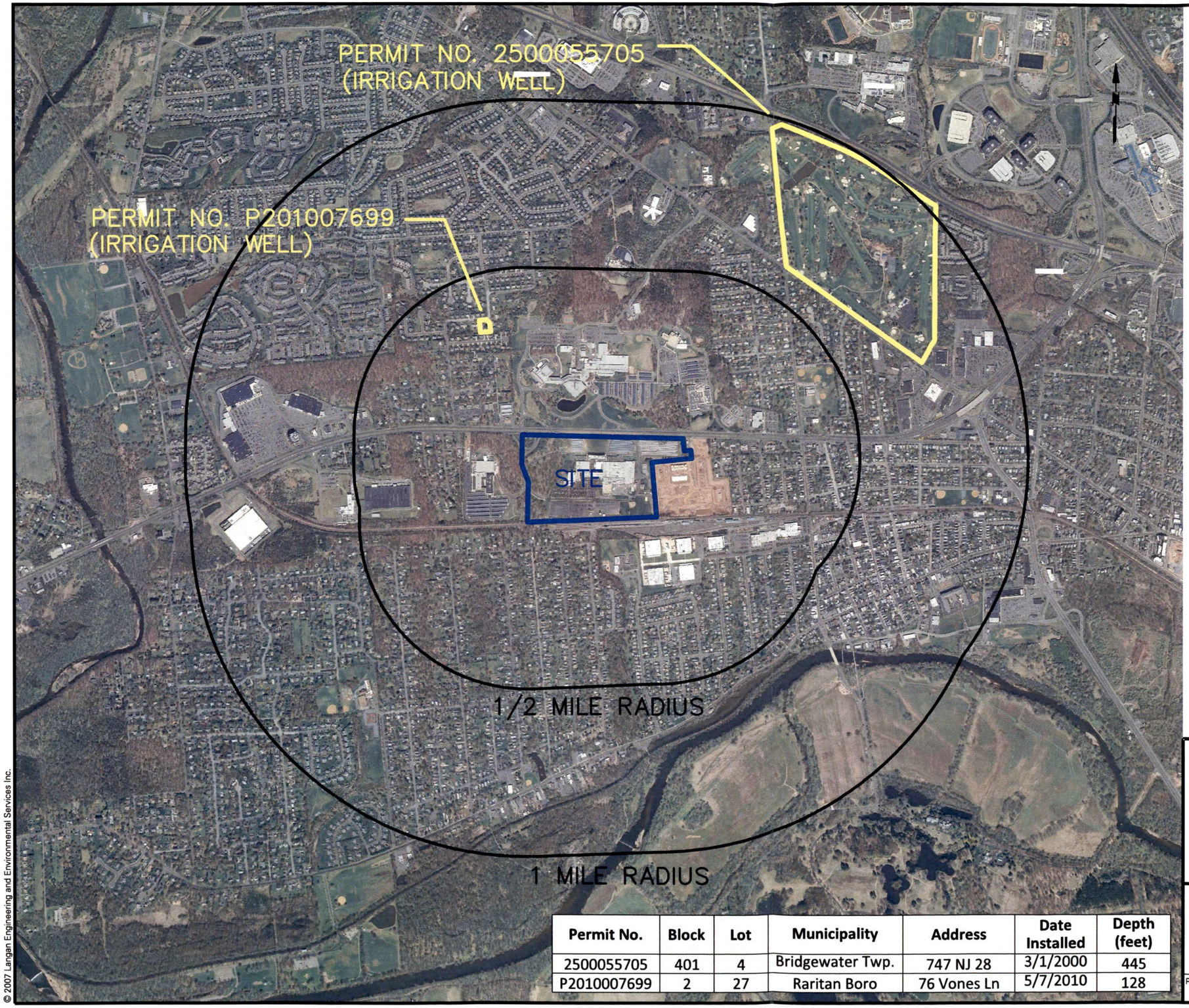
Company Name: _____

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

Ortho Clinical Diagnostics is a federal-lead RCRA Corrective Action site with an NJDEP Case Manager.

Appendix B
Well Search Update



Permit No.	Block	Lot	Municipality	Address	Date Installed	Depth (feet)
2500055705	401	4	Bridgewater Twp.	747 NJ 28	3/1/2000	445
P2010007699	2	27	Raritan Boro	76 Vones Ln	5/7/2010	128

LEGEND

- APPROXIMATE SITE BOUNDARY
- WELL SEARCH RADII
- PARCELS IDENTIFIED WITH WELL INSTALLED WITHIN THE SEARCH RADII SINCE 2000 WELL SEARCH*

* THE WELL SEARCH WAS CONDUCTED ON MARCH 19, 2015 USING NJDEP'S DATA MINER TO IDENTIFY DOMESTIC WELLS WITHIN A HALF MILE OF THE SITE BOUNDARY AND INDUSTRIAL AND IRRIGATION WELLS WITHIN ONE MILE OF THE SITE BOUNDARY. ALTHOUGH PERIODIC WELL SEARCH UPDATES HAVE BEEN CONDUCTED, WELL SEARCH RESULTS HAVE NOT BEEN REPORTED SINCE 2000.

REFERENCES

1. NEW JERSEY 2012 HIGH RESOLUTION ORTHOPHOTOGRAPHY WAS PROVIDED BY THE NJ OFFICE OF INFORMATION TECHNOLOGY (NJOIT), OFFICE OF GEOGRAPHIC INFORMATION SYSTEMS (OGIS)
2. APPROXIMATE EXTENT OF PARCEL BOUNDARIES BASED ON SOMERSET COUNTY GEOGRAPHICAL INFORMATION SYSTEM (GIS) DIGITAL DATASET.

1,500 0 750 1,500

SCALE IN FEET

LANGAN

Stone Manor Corporate Center, 2700 Kelly Road, Suite 200
Warrington, PA 18976
T: 215.491.6500 F: 215.491.6501 www.langan.com

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan International LLC
Collectively known as Langan

WELL SEARCH UPDATE FIGURE

ORTHO-CLINICAL DIAGNOSTICS, RARITAN, NEW JERSEY

Project No.	Date	Scale	Figure
3568401	03/26/15	1" = 1,500'	B-1

© 2007 Langan Engineering and Environmental Services Inc.

Filename: \\langan.com\data\DT\data4\3568401\Cadd Data - 3568401\Dwg\2015 LNAPL IRM Report\Fig B-1_Well Search Update.dwg Date: 3/27/2015 Time: 14:25 User: rvelazquez Style Table: Langan.stb Layout: Figure 1

Appendix C
Well Construction Logs

LANGAN

WELL CONSTRUCTION SUMMARY

Well No. MW-47

Well Permit No. E201307353

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: Raritan, NJ	Elevation And Datum: 118.60 feet AMSL NAVD 88
Drilling Agency: AmeriDrill, Inc.	Date Started: 7/16/2013 / Date Finished: 7/17/2013
Drilling Equipment: Ingersoll-Rand/T-3	Driller: Martin Vergara, AmeriDrill
Size And Type of Bit: 6-inch diameter air rotary	Inspector: Tovah Karl and Rocco Mercuri

Method of Installation

A 6-inch diameter hole was drilled by the air rotary method to 35 feet below ground surface (bgs). No. 2 Morie well sand was poured into the boring from 35 feet bgs to 34 feet bgs. A 2-inch diameter PVC riser connected to a 20-foot length of 0.020 PVC screen was then installed into the 6-inch borehole. The screen was set from 14 to 34 feet bgs. No. 2 Morie well sand was emplaced in the annular space between the screen and the borehole from 34 feet to 12 feet bgs. A bentonite seal was added from 12 feet to 10 feet bgs. Following development of the well, a cement-bentonite grout was added from 10 feet to 0.8 feet bgs. The well was completed with a locking cap and a flush-mount manhole cover cemented in place.

Method of Well Development

The well was developed for a total of 30 minutes using a submersible pump. The well was pumped until all of the water was evacuated. The well was allowed to recharge and then the well was evacuated again. Total volume purged was approximately 25 gallons.

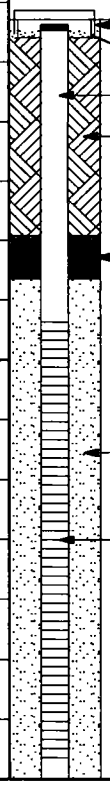
Type of Casing: PVC	Diameter: 2-inch	Type of Backfill Material: Cement-Bentonite Grout	
Type of Screen: PVC	Diameter: 2-inch	Type of Seal Material: Bentonite	
Borehole Diameter: 6-inch		Type of Filter Material: No. 2 Sand	

	Elevation	Depth
Top of Casing	117.91'	0.69' bgs
Top of Seal	108.60'	10' bgs
Top of Filter	106.60'	12' bgs
Top of Screen	104.60'	14' bgs
Bottom of Filter	84.60'	34' bgs
Bottom of Well	83.60'	35' bgs
Screen Length	20.0'	Slot Size 0.020-inch

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
101.71'	16.20'	7/17/2013
105.46'	12.45'	7/22/2013
105.26'	12.65'	8/5/2013
104.70'	13.21'	9/9/2013

Well Details



Soil / Rock Classification

TOPSOIL between 0' & 0.2'
Red brown weathered SILTSTONE from 0.2'
Weathered red brown SILTSTONE
Red brown SILTSTONE
Gray SILTSTONE
Red brown SILTSTONE

Depth (ft): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34

\\LANGAN.COM\DATA\DT\DATA\43568401\BORINGLOGS\MW-45_MW-45D_MW-46_MW-47 WELL LOGS.GPJ ... 3/27/2015 3:47:41 PM ... Report: Log - LANGAN_WELL_CONSTRUCTION_SUMMARY ...Template TEMPLATE.GDT

LANGAN

Log of Boring **MW-47** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: Raritan, NJ	Elevation and Datum: 118.6 feet AMSL NAVD 88
Drilling Company: AmeriDrill, Inc.	Date Started: 7/16/13 — Date Finished: 7/17/13
Drilling Equipment: Ingersoll-Rand/T-3	Completion Depth: 35 ft — Rock Depth: 10' bgs
Size and Type of Bit: 6-inch diameter air rotary	Number of Samples: Disturbed NA — Undisturbed NA — Core NA
Casing Diameter (in): 2-inch PVC casing — Casing Depth (ft): 14' bgs	Water Level (ft.): First NA — Completion NA — 24 HR. 16.2
Casing Hammer: NA — Weight (lbs): NA — Drop (in): NA	Drilling Foreman: Martin Vergara, AmeriDrill
Sampler: NA	Inspecting Engineer: Tovah Karl and Rocco Mercuri, Langan Engineering
Sampler Hammer: NA — Weight (lbs): NA — Drop (in): NA	

Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
+118.6			0						
+118.4	TOPSOIL; grass and organic material								
	Weathered SILTSTONE (Red brown sandy silt, some clay and f-m angular gravel)								
	Weathered SILTSTONE (Red brown sandy silt, some f-m angular gravel, trace clay)	0	5						Water was introduced during the drilling of MW-47 for dust suppression
+108.6	Red brown SILTSTONE		10						
		12.3	15						Odor observed at 15 feet bgs
			20						2"-diameter PVC well screen set from 14 to 34 feet below grade
		10.1	25						
	Gray SILTSTONE	11.6	30						
	Red brown SILTSTONE								Minor bedrock fractures were noticed during the drilling of MW-47 at 27 feet bgs and 31 feet bgs
+83.6	End of Boring at 35 feet bgs	3.2	35						
			40						

\\LANGAN.COM\DATA\DT\DATA\3568401\BORINGLOGS\MW-45_MW-45D_MW-46_MW-47 WELL LOGS.GPJ ... 3/27/2015 3:50:01 PM ... Report: Log - LANGAN ... Template TEMPLATE.GDT

LANGAN

WELL CONSTRUCTION SUMMARY

Well No. MW-47R

Well Permit No. E201416354

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: Raritan, NJ	Elevation And Datum: 118.67 feet AMSL NAVD 88
Drilling Agency: SGS	Date Started: 1/8/2015 — Date Finished: 1/9/2015
Drilling Equipment: Air Rotary Rig	Driller: Matt Tomcok, SGS
Size And Type of Bit: 7 3/4" Diameter Hammer	Inspector: Rocco Mercuri, Langan

Method of Installation

The borehole was first soft dug to 5 feet below ground surface (bgs) for subsurface utility clearance. An 8-inch diameter hole was then drilled using an air rotary rig to 19 feet bgs. A 10-inch diameter steel casing shoe, 7 feet-long, was used during drilling to manage drill cuttings. A 4-inch diameter PVC riser connected to a 15-foot length of 0.020-inch PVC screen was then installed into the 8-inch borehole. The screen was set from 4 to 19 feet bgs. No. 2 Morie well sand was added to the annular space between the screen and the borehole from 2 feet to 19 feet bgs. A bentonite seal was added from 1 foot to 2 feet bgs. Cement-bentonite grout was added from 0.8 feet to 1 foot bgs. The well was completed with a locking cap and a flush-mount manhole cover cemented in place.

Method of Well Development

The well was developed for a total of 5 minutes using a submersible pump and surge block. The well was pumped until all of the water was evacuated. The well was allowed to recharge and then the well was evacuated again. Total volume purged was approximately 5 gallons.

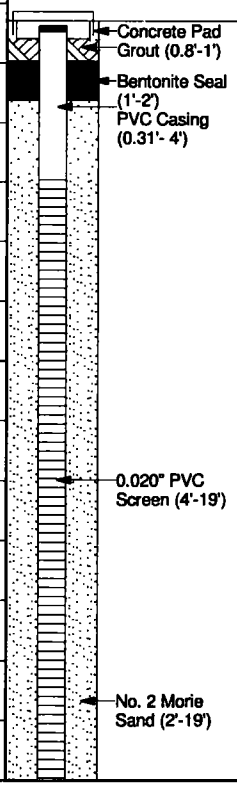
Type of Casing: PVC	Diameter: 4-inch	Type of Backfill Material: Cement-Bentonite Grout	
Type of Screen: PVC	Diameter: 4-inch	Type of Seal Material: Bentonite	
Borehole Diameter: 8-inch		Type of Filter Material: No. 2 Morie Sand	

	Elevation	Depth
Top of Casing	118.36'	0.31' bgs
Top of Seal	117.67'	1' bgs
Top of Filter	116.67'	2' bgs
Top of Screen	114.67'	4' bgs
Bottom of Filter	99.67'	19' bgs
Bottom of Well	99.67'	19' bgs
Screen Length	15.0'	Slot Size 0.020-inch

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
103.41'	14.95'	1/12/2015

Well Details



Soil / Rock Classification

Fill: CLAYEY SILT

Red brown weathered SILTSTONE

Gray SILTSTONE

Red brown SILTSTONE

Depth (ft): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

\\LANGAN.COM\DATA\DT\DATA4\3568401\BORINGLOGS\MW-45_MW-45D_MW-46_MW-47 WELL LOGS.GPJ ... 3/27/2015 3:47:41 PM ... Report: Log - LANGAN_WELL_CONSTRUCTION_SUMMARY ...Template TEMPLATE.GDT

LANGAN

Log of Boring **MW-47R** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: Raritan, NJ	Elevation and Datum: 118.67 feet AMSL NAVD 88
Drilling Company: SGS	Date Started: 1/8/15 / Date Finished: 1/9/15
Drilling Equipment: Air Rotary Rig	Completion Depth: 19 ft / Rock Depth: 10' bgs
Size and Type of Bit: 7 3/4" Diameter Hammer	Number of Samples: Disturbed NA / Undisturbed NA / Core NA
Casing Diameter (in): / Casing Depth (ft):	Water Level (ft.): First NE / Completion NE / 24 HR. NE
Casing Hammer: NA / Weight (lbs): NA / Drop (in): NA	Drilling Foreman: Matt Tomcok, SGS
Sampler: NA	Inspecting Engineer: Rocco Mercuri, Langan Engineering
Sampler Hammer: NA / Weight (lbs): NA / Drop (in): NA	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
	+118.7	Fill: Red brown CLAYEY SILT and yellow SILTY SAND (dry)		0						
	+116.7	Red-brown weathered SILTSTONE, trace yellow-grey quartz siltstone (Red brown SANDY c subangular GRAVEL, trace clay) (dry)	0	2, 4, 6, 8						Boring Air Knifed and vacuum extracted from 0-5 feet bgs
	+108.7	Gray competent SILTSTONE (gray SANDY c subangular GRAVEL) (dry)	0	10, 12, 14						Platy chips observed at 10'
	+99.7	Red-brown competent SILTSTONE (red brown c subangular GRAVEL) (dry)	0	16, 18						Injected drilling water at 15' for dust suppression
		End of Boring at 19 feet bgs		20, 22, 24, 25						

\\LANGAN.COM\DATA\DT\DATA4\3568401\BORINGLOGS\MW-45_MW-45D_MW-46_MW-47 WELL LOGS.GPJ ... 3/27/2015 3:50:02 PM ... Report: Log - LANGAN ...Template TEMPLATE.GDT

LANGAN

WELL CONSTRUCTION SUMMARY

Well No. MW-50

Well Permit No. E201416352

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: Raritan, NJ	Elevation And Datum: 116.19 feet AMSL NAVD 88
Drilling Agency: SGS	Date Started: 1/6/2015 — Date Finished: 1/9/2015
Drilling Equipment: Air Rotary Rig	Driller: Matt Tomcok, SGS
Size And Type of Bit: 5 3/4" Diameter Hammer	Inspector: Rocco Mercuri and Ben Kutz, Langan

Method of Installation

The borehole was first soft dug to 5 feet below ground surface (bgs) for subsurface utility clearance. A 6-inch diameter hole was then drilled using an air rotary rig to 30 feet bgs. A 6-inch diameter steel casing shoe, 7-feet long, was used during drilling to manage drill cuttings. A 2-inch diameter PVC riser connected to a 25-foot length of 0.020-inch PVC screen was installed into the 6-inch borehole. The screen was set from 5 to 30 feet bgs. No. 2 Morie well sand was added to the annular space between the screen and the borehole from 3 feet to 30 feet bgs. A bentonite seal was added from 2 feet to 3 feet bgs. Cement-bentonite grout was added from 0.5 feet to 2 feet bgs. The well was completed with a locking cap and a flush-mount manhole cover cemented in place. (Note: the well was originally installed with a 20-foot screen on January 7, 2015, however the well was over-drilled and re-installed with a 25-foot screen on January 9, 2015 so the screen would straddel the groundwater table)

Method of Well Development

The well was developed for a total of 25 minutes using a submersible pump. Total volume purged was approximately 25 gallons.

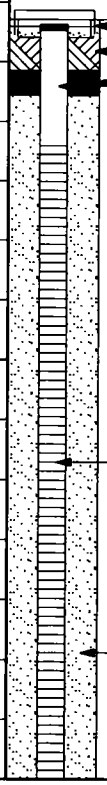
Type of Casing: PVC	Diameter: 2-inch	Type of Backfill Material: Cement-Bentonite Grout	
Type of Screen: PVC	Diameter: 2-inch	Type of Seal Material: Bentonite	
Borehole Diameter: 6-inch		Type of Filter Material: No. 2 Morie Sand	

	Elevation	Depth
Top of Casing	115.90'	0.29' bgs
Top of Seal	114.19'	2' bgs
Top of Filter	113.19'	3' bgs
Top of Screen	111.19'	5' bgs
Bottom of Filter	86.19'	30' bgs
Bottom of Well	86.19'	30' bgs
Screen Length	25.0'	Slot Size 0.020-inch

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
110.60'	5.3'	1/6/2015
111.30'	4.6'	1/7/2015
110.09'	5.81'	1/12/2015

Well Details



Soil / Rock Classification

Red brown weathered SILTSTONE

Red brown SILTSTONE

Gray SILTSTONE

Red brown SILTSTONE

Depth (ft): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30

\\LANGAN.COM\DATA\DT\DATA4\3568401\BORINGLOGS\MW-45_MW-45D_MW-46_MW-47 WELL LOGS.GPJ ... 3/27/2015 3:47:42 PM ... Report: Log - LANGAN_WELL_CONSTRUCTION_SUMMARY ...Template TEMPLATE.GDT

LANGAN

Log of Boring **MW-50** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: Raritan, NJ	Elevation and Datum: 116.19 feet AMSL NAVD 88
Drilling Company: SGS	Date Started: 1/6/15 / Date Finished: 1/9/15
Drilling Equipment: Air Rotary Rig	Completion Depth: 30 ft / Rock Depth: 15' bgs
Size and Type of Bit: 5 3/4" Diameter Hammer	Number of Samples: Disturbed NA / Undisturbed NA / Core NA
Casing Diameter (in): / Casing Depth (ft):	Water Level (ft.): First ▽ NE / Completion ▼ 5.3 / 24 HR. ▼ 4.6
Casing Hammer: NA / Weight (lbs): NA / Drop (in): NA	Drilling Foreman: Matt Tomcok, SGS
Sampler: NA	Inspecting Engineer: Rocco Mercuri and Ben Kutz, Langan Engineering
Sampler Hammer: NA / Weight (lbs): NA / Drop (in): NA	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
	+116.2	Red-brown very weathered SILTSTONE (red brown SANDY SILT, some clay, some f-m subangular gravel) (dry)		0						
				2						Boring Air Knifed and vacuum extracted from 0-5 feet bgs
				4						
			0	6						
				8						
			0	10						
				12						
				14						
	+101.2	Red-brown competent SILTSTONE (red-brown SANDY c subangular GRAVEL) (dry)	0	16						Platy chips observed at 15'. changed to more competent lithology
				18						
		Gray competent SILTSTONE (red brown SAND and c subangular GRAVEL) (dry)	0	20						Inject drilling water at 20' for dust suppression
				22						
				24						
		Red-brown competent SILTSTONE (red brown SANDY c subangular GRAVEL) (dry)	0	26						Observed coarser cuttings due to posible fracture encountered between 25' and 30'
				28						
	+86.2	End of Boring at 30 feet bgs		30						
				32						
				34						
				35						

\\LANGAN.COM\DATA\DT\DATA4\3568401\BORINGLOGS\MW-45_MW-45D_MW-46_MW-47 WELL LOGS.GPJ ... 3/27/2015 3:50:03 PM ... Report: Log - LANGAN ...Template TEMPLATE.GDT

LANGAN

WELL CONSTRUCTION SUMMARY

Well No. MW-51

Well Permit No. E201416353

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: Raritan, NJ	Elevation And Datum: 116.41 feet AMSL NAVD 88
Drilling Agency: SGS	Date Started: 1/7/2015 — Date Finished: 1/9/2015
Drilling Equipment: Air Rotary Rig	Driller: Matt Tomcok, SGS
Size And Type of Bit: 5 3/4" Diameter Hammer	Inspector: Rocco Mercuri, Langan

Method of Installation

The borehole was first soft dug to 5 feet below ground surface (bgs) for subsurface utility clearance. A 6-inch diameter hole was then drilled using an air rotary rig to 25 feet below ground surface (bgs). A 6-inch diameter steel casing shoe, 7-feet long, was used during drilling to manage drill cuttings. A 2-inch diameter PVC riser connected to a 20-foot length of 0.020-inch PVC screen was then installed into the 6-inch borehole. The screen was set from 5 to 25 feet bgs. No. 2 Morie well sand was added to the annular space between the screen and the borehole from 4 feet to 25 feet bgs. A bentonite seal was added from 4 feet to 5 feet bgs. Cement-bentonite grout was added from 0.7 feet to 4 feet bgs. The well was completed with a locking cap and a flush-mount manhole cover cemented in place.

Method of Well Development

The well was developed for a total of 15 minutes using a submersible pump. Total volume purged was approximately 15 gallons.

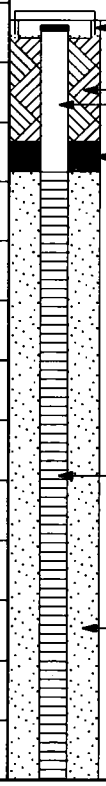
Type of Casing: PVC	Diameter: 2-inch	Type of Backfill Material: Cement-Bentonite Grout	
Type of Screen: PVC	Diameter: 2-inch	Type of Seal Material: Bentonite	
Borehole Diameter: 6-inch		Type of Filter Material: No. 2 Morie Sand	

	Elevation	Depth
Top of Casing	115.83'	0.58' bgs
Top of Seal	112.41'	4' bgs
Top of Filter	111.41'	5' bgs
Top of Screen	111.40'	5.01' bgs
Bottom of Filter	91.41'	25' bgs
Bottom of Well	91.41'	25' bgs
Screen Length	20.0'	Slot Size 0.020-inch

GROUNDWATER ELEVATIONS (ft)
(Measured from the Top of Casing)

Elevation	DTW	Date
99.63'	16.2'	1/7/2015
110.33'	5.5'	1/8/2015
110.33'	5.5'	1/9/2015

Well Details



Soil / Rock Classification

Red brown weathered SILTSTONE

Red brown SILTSTONE

Depth (ft): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

\\LANGAN.COM\DATA\DT\DATA4\3568401\BORINGLOGS\MW-45_MW-45D_MW-46_MW-47 WELL LOGS.GPJ ... 3/27/2015 3:47:42 PM ... Report: Log - LANGAN_WELL_CONSTRUCTION_SUMMARY ...Template TEMPLATE.GDT

LANGAN

Log of Boring **MW-51** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: Raritan, NJ	Elevation and Datum: 116.41 feet AMSL NAVD 88
Drilling Company: SGS	Date Started: 1/7/15 / Date Finished: 1/9/15
Drilling Equipment: Air Rotary Rig	Completion Depth: 30 ft / Rock Depth: 18' bgs
Size and Type of Bit: 5 3/4" Diameter Hammer	Number of Samples: Disturbed NA / Undisturbed NA / Core NA
Casing Diameter (in): / Casing Depth (ft):	Water Level (ft.): First 25 / Completion 16.2 / 24 HR. 5.5
Casing Hammer: NA / Weight (lbs): NA / Drop (in): NA	Drilling Foreman: Matt Tomcok, SGS
Sampler: NA	Inspecting Engineer: Rocco Mercuri, Langan Engineering
Sampler Hammer: NA / Weight (lbs): NA / Drop (in): NA	

Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
+116.4	Red brown very weathered SILTSTONE 9red brown SILTY SAND, some clay, some fine subangular gravel) (dry)		0						
			2						Boring Air Knifed and vacuum extracted from 0-5 feet bgs
			4						
		0	6						
			8						
		0	10						
			12						
			14						
		0	16						
+98.4	Red brown SILTSTONE (red brown SANDY m-c subangular GRAVEL) (dry)		18						Platy chips observed at 18'
		0	20						
			22						
			24						
+91.4	End of Boring at 25 feet bgs		26						
			28						
			30						

\\LANGAN.COM\DATA\D7\DATA4\3568401\BORINGLOGS\MW-45_MW-45D_MW-46_MW-47 WELL LOGS.GPJ ... 3/27/2015 3:50:03 PM ... Report: Log - LANGAN ...Template TEMPLATE.GDT

Appendix D
Monitoring Well Forms A and B

New Jersey Department of Environmental Protection
Site Remediation Program

MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD 068715424

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Ortho Clinical Diagnostics, Inc.
2. Well Location (Street Address) 1001 US Route 202
3. Well Location (Municipal Block and Lot) Block# 31 Lot # 4

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):..	E201307353
2. Site Well Number as shown on application or plans):	MW-47
3. Well Completion Date:	07/17/13
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	0.69'
5. Total Depth of Well to the nearest ½ foot:	34.0'
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):.....	13.31'
7. Screen Length (or length of open hole) in feet:	20.0'
8. Screen or Slot Size:	0.020"
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2"
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	16.20'
13. Yield (gallons per minute):	< 1 gpm
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	30 minutes

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics, Inc.

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD068715424

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Ortho Clinical Diagnostics, Inc.
2. Well Location (Street Address) 1001 US Route 202
3. Well Location (Municipal Block and Lot) Block# 31 Lot # 4

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201307353
2. Site Well Number (As shown on application or plans): MW-47
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 40 34 18.36 Longitude: West 74 38 59.31
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 633227 East 450510
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 117.91
   Elevation Top of Outer casing: 118.49 Elevation of ground: 118.60
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

SEAL

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature: Date 3-6-14

Surveyor's Name: Joseph E. Romano License Number: 36273

Firm Name: Langan Engineering and Environmental Services Certificate of Authorization #: 24GA27996400

Mailing Address 619 River Drive Center 1

City/Town: Elmwood Park State New Jersey Zip Code: 07407

Phone Number 201-665-6414 Ext.: 4618 Fax: 201-794-0366

New Jersey Department of Environmental Protection
Site Remediation Program

MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics, Inc.

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD 068715424

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Ortho Clinical Diagnostics, Inc.
2. Well Location (Street Address) 1001 US Route 202
3. Well Location (Municipal Block and Lot) Block# 31 Lot # 4

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):.. E201416354
2. Site Well Number as shown on application or plans): MW-47R
3. Well Completion Date: 1/9/2015
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): ..... 0.31'
5. Total Depth of Well to the nearest ½ foot: ..... 19'
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 4'
7. Screen Length (or length of open hole) in feet: ..... 15'
8. Screen or Slot Size: ..... 0.020"
9. Screen or Slot Material: ..... PVC
10. Casing Material (PVC, steel, or other – specify): ..... PVC
11. Casing Diameter (inches): ..... 4"
12. Static Water Level from top of casing at the time of installation (nearest 0.01'): ..... Not Encountered
13. Yield (gallons per minute): ..... 1 gpm
14. Development Techinque (specify): ..... Surge and Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes): ..... 5 minutes

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics, Inc.

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD068715424

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Ortho Clinical Diagnostics, Inc.
2. Well Location (Street Address) 1001 US Route 202
3. Well Location (Municipal Block and Lot) Block# 31 Lot # 4

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201416354
2. Site Well Number (As shown on application or plans): MW-47R
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 40 34 18.38 Longitude: West 74 38 59.25
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 633,229 East 450,515
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 118.36
   Elevation Top of Outer casing: 118.7 Elevation of ground: 118.67
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

SEAL

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature: Date 3-31-2015

Surveyor's Name: Gary A. Veenstra License Number: 24GS03721300

Firm Name: Langan Engineering and Environmental Services Certificate of Authorization #: 24GA27996400

Mailing Address 619 River Drive Center 1

City/Town: Elmwood Park State New Jersey Zip Code: 07407

Phone Number 201-794-6900 Ext.: 4629 Fax: 201-794-0366

New Jersey Department of Environmental Protection
Site Remediation Program

MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics, Inc.

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD 068715424

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Ortho Clinical Diagnostics, Inc.
2. Well Location (Street Address) 1001 US Route 202
3. Well Location (Municipal Block and Lot) Block# 31 Lot # 4

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):.. E201416352
2. Site Well Number as shown on application or plans): MW-50
3. Well Completion Date: 1/9/2015
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): ..... 0.29'
5. Total Depth of Well to the nearest ½ foot: ..... 30'
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 5'
7. Screen Length (or length of open hole) in feet: ..... 25'
8. Screen or Slot Size: ..... 0.020"
9. Screen or Slot Material: ..... PVC
10. Casing Material (PVC, steel, or other – specify): ..... PVC
11. Casing Diameter (inches): ..... 2"
12. Static Water Level from top of casing at the time of installation (nearest 0.01'): ..... 4.6'
13. Yield (gallons per minute): ..... 1 gpm
14. Development Techinque (specify): ..... Surge and Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes): ..... 25 minutes

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics, Inc.

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD068715424

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Ortho Clinical Diagnostics, Inc.
2. Well Location (Street Address) 1001 US Route 202
3. Well Location (Municipal Block and Lot) Block# 31 Lot # 4

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201416352
2. Site Well Number (As shown on application or plans): MW-50
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 40 34 18.30 Longitude: West 74 39 0.24
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 633,221 East 450,439
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 115.90
   Elevation Top of Outer casing: 116.27 Elevation of ground: 116.19
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: Date 3-31-2015

Surveyor's Name: Gary A. Veenstra License Number: 24GS03721300

Firm Name: Langan Engineering and Environmental Services Certificate of Authorization #: 24GA27996400

Mailing Address 619 River Drive Center 1

City/Town: Elmwood Park State New Jersey Zip Code: 07407

Phone Number 201-794-6900 Ext.: 4629 Fax: 201-794-0366

New Jersey Department of Environmental Protection
Site Remediation Program

MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics, Inc.

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD 068715424

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Ortho Clinical Diagnostics, Inc.
2. Well Location (Street Address) 1001 US Route 202
3. Well Location (Municipal Block and Lot) Block# 31 Lot # 4

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):.. E201416353
2. Site Well Number as shown on application or plans): MW-51
3. Well Completion Date: 1/9/2015
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): ..... 0.58'
5. Total Depth of Well to the nearest ½ foot: ..... 25'
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 5'
7. Screen Length (or length of open hole) in feet: ..... 20'
8. Screen or Slot Size: ..... 0.020"
9. Screen or Slot Material: ..... PVC
10. Casing Material (PVC, steel, or other – specify): ..... PVC
11. Casing Diameter (inches): ..... 2"
12. Static Water Level from top of casing at the time of installation (nearest 0.01'): ..... 5.52'
13. Yield (gallons per minute): ..... 1 gpm
14. Development Techinque (specify): ..... Surge and Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes): ..... 15 minutes

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ortho Clinical Diagnostics, Inc.

List all AKAs: Ortho Diagnostics Inc., Ortho Diagnostic Systems, Inc.

Street Address: 1001 US Route 202

Municipality: Raritan Borough (Township, Borough or City)

County: Somerset Zip Code: 08869

Program Interest (PI) Number(s): 005882 Case Tracking Number(s): NJD068715424

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Ortho Clinical Diagnostics, Inc.
2. Well Location (Street Address) 1001 US Route 202
3. Well Location (Municipal Block and Lot) Block# 31 Lot # 4

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201416353
2. Site Well Number (As shown on application or plans): MW-51
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 40 34 17.96 Longitude: West 74 38 59.24
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 633,186 East 450,516
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 115.83
   Elevation Top of Outer casing: 116.37 Elevation of ground: 116.41
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
7. Significant observations and notes:

SECTION D. LAND SURVEYOR'S CERTIFICATION

SEAL

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature: Date 3-31-2015

Surveyor's Name: Gary A. Veenstra License Number: 24GS03721300

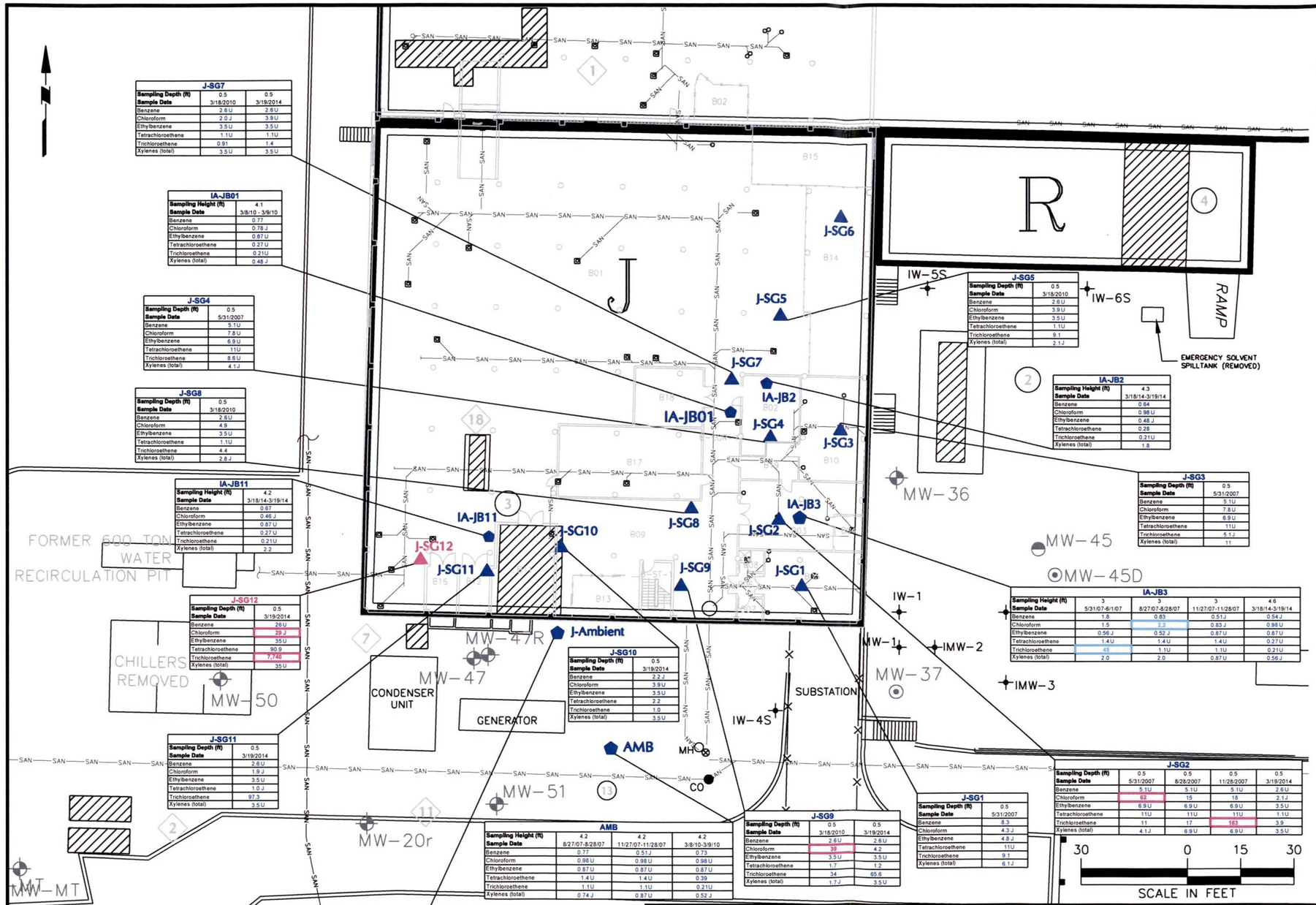
Firm Name: Langan Engineering and Environmental Services Certificate of Authorization #: 24GA27996400

Mailing Address 619 River Drive Center 1

City/Town: Elmwood Park State New Jersey Zip Code: 07407

Phone Number 201-794-6900 Ext.: 4629 Fax: 201-794-0366

Appendix E
Vapor Intrusion Documentation



J-SG7		
Sampling Depth (ft)	0.5	0.5
Sample Date	3/18/2010	3/19/2014
Benzene	2.6U	2.6U
Chloroform	2.0 J	3.9U
Ethylbenzene	3.5U	3.5U
Tetrachloroethene	1.1U	1.1U
Trichloroethene	0.91	1.4
Xylenes (total)	3.5U	3.5U

IA-JB01	
Sampling Height (ft)	4.1
Sample Date	3/8/10 - 3/9/10
Benzene	0.77
Chloroform	0.78 J
Ethylbenzene	0.87U
Tetrachloroethene	0.27U
Trichloroethene	0.21U
Xylenes (total)	0.48 J

J-SG4	
Sampling Depth (ft)	0.5
Sample Date	5/31/2007
Benzene	5.1U
Chloroform	7.8U
Ethylbenzene	6.9U
Tetrachloroethene	11U
Trichloroethene	8.6U
Xylenes (total)	4.1J

J-SG8	
Sampling Depth (ft)	0.5
Sample Date	3/18/2010
Benzene	2.6U
Chloroform	4.9
Ethylbenzene	3.5U
Tetrachloroethene	1.1U
Trichloroethene	4.4
Xylenes (total)	2.8 J

IA-JB11	
Sampling Height (ft)	4.2
Sample Date	3/18/14-3/19/14
Benzene	0.67
Chloroform	0.46 J
Ethylbenzene	0.87U
Tetrachloroethene	0.27U
Trichloroethene	0.21U
Xylenes (total)	2.2

J-SG12	
Sampling Depth (ft)	0.5
Sample Date	3/19/2014
Benzene	26U
Chloroform	29 J
Ethylbenzene	35U
Tetrachloroethene	90.9
Trichloroethene	7,740
Xylenes (total)	35U

J-SG11	
Sampling Depth (ft)	0.5
Sample Date	3/19/2014
Benzene	2.6U
Chloroform	1.9 J
Ethylbenzene	3.5U
Tetrachloroethene	1.0 J
Trichloroethene	97.3
Xylenes (total)	3.5U

J-SG10	
Sampling Depth (ft)	0.5
Sample Date	3/19/2014
Benzene	2.2 J
Chloroform	3.9U
Ethylbenzene	3.5U
Tetrachloroethene	2.2
Trichloroethene	1.0
Xylenes (total)	3.5U

J-SG5	
Sampling Depth (ft)	0.5
Sample Date	3/18/2010
Benzene	2.6U
Chloroform	3.9U
Ethylbenzene	3.5U
Tetrachloroethene	1.1U
Trichloroethene	9.1
Xylenes (total)	2.1J

IA-JB2	
Sampling Height (ft)	4.3
Sample Date	3/18/14-3/19/14
Benzene	0.64
Chloroform	0.98 U
Ethylbenzene	0.48 J
Tetrachloroethene	0.28
Trichloroethene	0.21U
Xylenes (total)	1.8

J-SG3	
Sampling Depth (ft)	0.5
Sample Date	5/31/2007
Benzene	5.1U
Chloroform	7.8U
Ethylbenzene	6.9U
Tetrachloroethene	11U
Trichloroethene	5.1J
Xylenes (total)	11

IA-JB3				
Sampling Height (ft)	3	3	3	4.6
Sample Date	5/31/07-6/1/07	8/27/07-8/28/07	11/27/07-11/28/07	3/18/14-3/19/14
Benzene	1.8	0.83	0.51J	0.54J
Chloroform	1.5	2.2	0.83 J	0.98 U
Ethylbenzene	0.56 J	0.52 J	0.87U	0.87U
Tetrachloroethene	1.4U	1.4U	1.4U	0.27U
Trichloroethene	45	1.1U	1.1U	0.21U
Xylenes (total)	2.0	2.0	0.87U	0.56 J

J-SG2				
Sampling Depth (ft)	0.5	0.5	0.5	0.5
Sample Date	5/31/2007	8/28/2007	11/28/2007	3/19/2014
Benzene	5.1U	5.1U	5.1U	2.6U
Chloroform	62	15	18	2.1J
Ethylbenzene	6.9U	6.9U	6.9U	3.5U
Tetrachloroethene	11U	11U	11U	1.1U
Trichloroethene	11	17	163	3.9
Xylenes (total)	4.1J	6.9U	6.9U	3.5U

J-SG1	
Sampling Depth (ft)	0.5
Sample Date	5/31/2007
Benzene	8.3
Chloroform	4.3 J
Ethylbenzene	4.8 J
Tetrachloroethene	11U
Trichloroethene	9.1
Xylenes (total)	6.1J

J-SG9		
Sampling Depth (ft)	0.5	0.5
Sample Date	3/18/2010	3/19/2014
Benzene	2.6U	2.6U
Chloroform	39	4.2
Ethylbenzene	3.5U	3.5U
Tetrachloroethene	1.7	1.2
Trichloroethene	34	65.6
Xylenes (total)	1.7 J	3.5U

AMB			
Sampling Height (ft)	4.2	4.2	4.2
Sample Date	8/27/07-8/28/07	11/27/07-11/28/07	3/8/10-3/9/10
Benzene	0.77	0.51J	0.73
Chloroform	0.98U	0.98U	0.98U
Ethylbenzene	0.87U	0.87U	0.87U
Tetrachloroethene	1.4U	1.4U	0.39
Trichloroethene	1.1U	1.1U	0.21U
Xylenes (total)	0.74 J	0.87U	0.52 J

J-Ambient			
Sampling Height (ft)	3	5.75	5.75
Sample Date	5/31/07-6/1/07	12/18/13-12/19/13	3/18/14-3/19/14
Benzene	0.64	1.2	0.51J
Chloroform	0.98U	0.98U	0.98U
Ethylbenzene	0.48 J	0.52 J	0.87U
Tetrachloroethene	1.4U	0.27U	0.27U
Trichloroethene	5.4	0.21U	0.21U
Xylenes (total)	1.8	2.3	0.87U

LEGEND

- BELOW GROUND SANITARY SEWER LINE
- EDGE OF ASPHALT PAVEMENT
- GUARD RAIL
- FENCE
- FLOOR DRAINS
- CLEAN OUT OR RISER
- B17 — BUILDING ROOM NUMBER
- G — SITE BUILDING LABEL
- SHALLOW MONITORING WELL
- INTERMEDIATE MONITORING WELL
- DEEP MONITORING WELL
- INJECTION WELL/INJECTION MONITORING WELL
- (3) — SOLID WASTE MANAGEMENT UNIT (SWMU) DESIGNATION
- (7) — AREA OF CONCERN (AOC) DESIGNATION
- SUB-SLAB SOIL GAS SAMPLE LOCATION WITH RESULTS EXCEEDING THE NJDEP NON-RESIDENTIAL SOIL GAS SCREENING LEVELS (SGSLs) DURING THE MOST RECENT SAMPLING EVENT
- SUB-SLAB SOIL GAS SAMPLE LOCATION WITH RESULTS BELOW THE NJDEP NON-RESIDENTIAL SGSLs DURING THE MOST RECENT SAMPLING EVENT
- INDOOR AIR OR AMBIENT AIR SAMPLE LOCATION WITH RESULTS BELOW THE NON-RESIDENTIAL INDOOR AIR SCREENING LEVELS (IASLs) DURING THE MOST RECENT SAMPLING EVENT
- 6.8 — CONCENTRATION EXCEEDS NJDEP NON-RESIDENTIAL SGSLs
- 1.8 — CONCENTRATION EXCEEDS NJDEP NON-RESIDENTIAL IASLs
- 1.8 — CONCENTRATION IS BELOW THE NJDEP NON-RESIDENTIAL SGSLs OR IASLs
- LOCATION OF FORMER LYOPHILIZER
- STAIRS
- J — ESTIMATED CONCENTRATION AT OR BELOW REPORTING LIMIT
- U — NOT DETECTED ABOVE REFERENCED REPORTING LIMIT

ALL SUB-SLAB SOIL GAS AND INDOOR AIR/AMBIENT AIR RESULTS ARE PRESENTED IN MICROGRAMS PER CUBIC METER (UG/M3)

REFERENCES

1. APPROXIMATE LOCATIONS OF EXISTING SITE FEATURES AND UTILITIES ARE BASED ON A COMPILATION OF FIGURES WITH VARYING DATES AND TITLES PREPARED BY McLAREN/HART, INC. AND ORTHO-CLINICAL DIAGNOSTICS.

LANGAN

Stone Manor Corporate Center, 2700 Kelly Road, Suite 200
Warrington, PA 18976
T: 215.491.6500 F: 215.491.6501 www.langan.com

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan CT, Inc.
Langan International LLC
Collectively known as Langan

Project: ORTHO CLINICAL DIAGNOSTICS

RARITAN NEW JERSEY

Figure Title: VAPOR INTRUSION INVESTIGATION SUMMARY

Project No.	3568401
Date	3/9/15
Scale	1"=30'
Drawn By	BK
Checked By	SB

FIGURE 1

© 2013 Langan

Filename: \\langan.com\data\DT\data4\3568401\Cadd Data - 3568401\Dwg\Indoor Air Investigation\2013-2014 Investigation\2013 VI Investigation Results_Building J Only_2014APR07NEW.dwg Date: 3/19/2015 Time: 16:16 User: rvelazquez Style Table: Langan.stb
Layout: ANSIB-BL

Table 1
Summary of Sub-Slab Soil Gas Sample Results
Ortho-Clinical Diagnostics
Raritan, New Jersey

Sample ID	CAS #	NJDEP March 2013 Soil Gas Screening Levels		Building J					
Lab ID				J-SG1	J-SG2	J-SG2(8-07)	J-SG2(11-07)	J-SG3	J-SG4
Sample Date				J62600-1	J62600-2	J70083-1	J77609-7	J62600-3	J62600-4
Dilution Factor		Residential	Non-Residential	5/31/2007	5/31/2007	8/28/2007	11/28/2007	5/31/2007	5/31/2007
				1	1	1	1	1	1
VOLATILE ORGANIC COMPOUNDS (ug/m^3)									
1,1,1-Trichloroethane	71-55-6	260,000	1,100,000	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U
1,1,2,2-Tetrachloroethane	79-34-5	34	34	11 U	11 U	11 U	11 U	11 U	11 U
1,1,2-Trichloroethane	79-00-5	27	38	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U
1,1-Dichloroethane	75-34-3	76	380	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
1,1-Dichloroethene	75-35-4	10,000	44,000	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U
1,2,4-Trichlorobenzene	120-82-1	100	440	12 U	12 U	12 U	12 U	12 U	12 U
1,2,4-Trimethylbenzene	95-63-6	NS	NS	7.9 U	7.9 U	7.9 U	7.9 U	6.4 J	7.9 U
1,2-Dibromoethane	106-93-4	38	38	12 U	12 U	12 U	12 U	12 U	12 U
1,2-Dichloroethane	107-06-2	20	24	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
1,2-Dichloropropane	78-87-5	23	61	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
1,3,5,-Trimethylbenzene	108-67-8	NS	NS	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U
1,3-Butadiene	106-99-0	11	20	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
1,4-Dioxane	123-91-1	NS	NS	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U
2,2,4-Trimethylpentane	540-84-1	NS	NS	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U
2-Chlorotoluene	95-49-8	NS	NS	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
2-Hexanone	591-78-6	NS	NS	19	8.6	6.5 U	6.5 U	13	7.4
3-Chloropropene	107-05-1	20	100	5.0 U	5.0 U	5.0 U	5 U	5.0 U	5.0 U
4-Ethyltoluene	622-96-8	NS	NS	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U
Acetone	67-64-1	1,600,000	6,800,000	670	254	78.6	4.8	523	432
Benzene	71-43-2	16	79	8.3	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
Benzyl Chloride	100-44-7	NS	NS	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U
Bromodichloromethane	75-27-4	34	34	11 U	11 U	11 U	11 U	11 U	11 U
Bromoethene	593-60-2	22	22	7.0 U	7.0 U	7.0 U	7 U	7.0 U	7.0 U
Bromoform	75-25-2	110	560	17 U	17 U	17 U	17 U	17 U	17 U
Bromomethane	74-83-9	260	1,100	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U
Carbon disulfide	75-15-0	36,000	150,000	5.0 U	5.0 U	5.0 U	5 U	5.0 U	5.0 U
Carbon tetrachloride	56-23-5	31	100	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	108-90-7	2,600	11,000	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
Chloroethane	75-00-3	520,000	2,200,000	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
Chloroform	67-66-3	24	27	4.3 J	**62**	15	18	7.8 U	7.8 U
Chloromethane	74-87-3	4,700	20,000	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
cis-1,2-Dichloroethene	156-59-2	NS	NS	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U
cis-1,3-Dichloropropene*	10061-01-5	30	150	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
Cyclohexane	110-82-7	310,000	1,300,000	7.6	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
Dibromochloromethane	124-48-1	43	43	14 U	14 U	14 U	14 U	14 U	14 U
Dichlorodifluoromethane	75-71-8	5,200	22,000	9.9	27	6.4 J	6.9 J	11	6.9 J
Ethanol	64-17-5	NS	NS	45.9	35.9	17	7.5 U	45.0	67.5
Ethyl Acetate	141-78-6	NS	NS	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U
Ethylbenzene	100-41-4	49	250	4.8 J	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
Freon 113	76-13-1	1,600,000	6,600,000	12 U	12 U	12 U	12 U	12 U	12 U
Freon 114	76-14-2	NS	NS	11 U	11 U	11 U	11 U	11 U	11 U
Heptane	142-82-5	NS	NS	6.1 J	13	7 U	6.6 U	5.7 J	6.6 U
Hexachlorobutadiene	87-68-3	53	53	17 U	17 U	17 U	17 U	17 U	17 U
Hexane	110-54-3	38,000	150,000	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
Isopropyl Alcohol	67-63-0	NS	NS	513	239	3.9 U	13	638	427
m,p-Xylene	NS	NS	NS	6.1 J	4.1 J	6.9 U	6.9 U	5.6 J	4.1 J
m-Dichlorobenzene	541-73-1	NS	NS	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U
Methyl ethyl ketone	78-93-3	260,000	1,100,000	34.8	19	4.7 U	4.7 U	34.5	30.1
Methyl Isobutyl Ketone	108-10-1	160,000	660,000	31	9.8	6.6 U	6.6 U	37	16
Methyl Tert Butyl Ether	1634-04-4	470	2,400	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U
Methylene chloride	75-09-2	4,800	61,000	5.6 U	5.6 U	5.6 U	5.6 U	3.4 J	5.6 U
Methylmethacrylate	80-62-6	NS	NS	NA	NA	NA	NA	NA	NA
o-Dichlorobenzene	95-50-1	10,000	44,000	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U
o-Xylene	95-47-6	NS	NS	6.9 U	6.9 U	6.9 U	6.9 U	5.2 J	6.9 U
p-Dichlorobenzene	106-46-7	30	56	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U	9.6 U
Propylene	115-07-1	NS	NS	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
Styrene	100-42-5	52,000	220,000	4.3 J	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
Tertiary Butyl Alcohol	75-65-0	NS	NS	4.9 U	6.4	4.9 U	4.9 U	23	28
Tetrachloroethene	127-18-4	470	2,400	11 U	11 U	11 U	11 U	11 U	11 U
Tetrahydrofuran	109-99-9	NS	NS	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Toluene	108-88-3	260,000	1,100,000	76.5	3.6 J	6.0 U	6.0 U	11	12
trans-1,2-Dichloroethene	156-60-5	3,100	13,000	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U
trans-1,3-Dichloropropene*	10061-02-6	30	150	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
Trichloroethene	79-01-6	27	150	9.1	11	17	**163**	5.1 J	8.6 U
Trichlorofluoromethane	75-69-4	36,000	150,000	9.0 U	9.0 U	9.0 U	9.0 U	5.6 J	9.0 U
Vinyl acetate	108-05-4	NS	NS	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
Vinyl chloride	75-01-4	13	140	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Xylenes (total)	1330-20-7	5,200	22,000	6.1 J	4.1 J	6.9 U	6.9 U	11	4.1 J

ug/m^3: micrograms per cubic meter
NS: Not specified
U: Not detected above referenced reporting limit
J: Estimated concentration at or below reporting limit
E: Value exceeds calibration range
Bold outline: Indicates concentration exceeds the applicable NJDEP Screening Level
*: Value listed reflected the combined standard for cis-1,3-dichloropropene and trans-1,2-dichloropropene
NA: Not analyzed for specific compound
Italics: Referenced reporting limit exceeds most stringent soil gas screening level

Table 1
Summary of Sub-Slab Soil Gas Sample Results
Ortho-Clinical Diagnostics
Raritan, New Jersey

Sample ID Lab ID Sample Date Dilution Factor	CAS #	NJDEP March 2013 Soil Gas Screening Levels		Building J				
				J-SG5 JA42298-4 3/18/2010 1	J-SG7 JA42298-5 3/18/2010 1	J-SG8 JA-42298-6 3/18/2010 1	J-SG9 JA42298-7 3/18/2010 1	J-SG2(031914) JB62501-9 3/19/2014 1
		Residential	Non-Residential					
VOLATILE ORGANIC COMPOUNDS (ug/m^3)								
1,1,1-Trichloroethane	71-55-6	260,000	1,100,000	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
1,1,2,2-Tetrachloroethane	79-34-5	34	34	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
1,1,2-Trichloroethane	79-00-5	27	38	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U
1,1-Dichloroethane	75-34-3	76	380	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
1,1-Dichloroethene	75-35-4	10,000	44,000	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
1,2,4-Trichlorobenzene	120-82-1	100	440	5.9 U	5.9 U	5.9 U	5.9 U	5.9 U
1,2,4-Trimethylbenzene	95-63-6	NS	NS	2.6 J	3.9 U	3.9 U	3.9 U	3.9 U
1,2-Dibromoethane	106-93-4	38	38	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U
1,2-Dichloroethane	107-06-2	20	24	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
1,2-Dichloropropane	78-87-5	23	61	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
1,3,5,-Trimethylbenzene	108-67-8	NS	NS	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
1,3-Butadiene	106-99-0	11	20	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
1,4-Dioxane	123-91-1	NS	NS	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
2,2,4-Trimethylpentane	540-84-1	NS	NS	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
2-Chlorotoluene	95-49-8	NS	NS	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
2-Hexanone	591-78-6	NS	NS	8.6	3.3	12	1.7 J	3.3 U
3-Chloropropene	107-05-1	20	100	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Ethyltoluene	622-96-8	NS	NS	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Acetone	67-64-1	1,600,000	6,800,000	78.4	186	458	96.0	28.3
Benzene	71-43-2	16	79	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Benzyl Chloride	100-44-7	NS	NS	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Bromodichloromethane	75-27-4	34	34	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
Bromoethene	593-60-2	22	22	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Bromoform	75-25-2	110	560	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Bromomethane	74-83-9	260	1,100	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Carbon disulfide	75-15-0	36,000	150,000	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon tetrachloride	56-23-5	31	100	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Chlorobenzene	108-90-7	2,600	11,000	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
Chloroethane	75-00-3	520,000	2,200,000	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Chloroform	67-66-3	24	27	3.9 U	2.0 J	4.9	**39**	2.1 J
Chloromethane	74-87-3	4,700	20,000	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
cis-1,2-Dichloroethene	156-59-2	NS	NS	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
cis-1,3-Dichloropropene*	10061-01-5	30	150	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Cyclohexane	110-82-7	310,000	1,300,000	21	2.8 U	6.9	5.9	2.8 U
Dibromochloromethane	124-48-1	43	43	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U
Dichlorodifluoromethane	75-71-8	5,200	22,000	16	3.9 J	4.2	4.6	4 U
Ethanol	64-17-5	NS	NS	22.2	13	25.4	11	7.2
Ethyl Acetate	141-78-6	NS	NS	2.9 U	2.9 U	2.9 U	8.3	2.9 U
Ethylbenzene	100-41-4	49	250	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Freon 113	76-13-1	1,600,000	6,600,000	6.1 U	6.1 U	6.1 U	6.1 U	6.1 U
Freon 114	76-14-2	NS	NS	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
Heptane	142-82-5	NS	NS	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Hexachlorobutadiene	87-68-3	53	53	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U
Hexane	110-54-3	36,000	150,000	1.4 J	2.8 U	2.8 U	2.8 U	2.8 U
Isopropyl Alcohol	67-63-0	NS	NS	36.9	15	54.3	14	18
m,p-Xylene	NS	NS	NS	2.1 J	3.5 U	2.8 J	1.7 J	3.5 U
m-Dichlorobenzene	541-73-1	NS	NS	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Methyl ethyl ketone	78-93-3	260,000	1,100,000	17	7.4	19	3.2	1.9 J
Methyl Isobutyl Ketone	108-10-1	160,000	660,000	3.0 J	3.3 U	3.1 J	3.3 U	3.3 U
Methyl Tert Butyl Ether	1634-04-4	470	2,400	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Methylene chloride	75-09-2	4,800	61,000	4.5	5.9	10	3.2	4.2
Methylmethacrylate	80-62-6	NS	NS	NA	NA	NA	NA	3.3 U
o-Dichlorobenzene	95-50-1	10,000	44,000	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
o-Xylene	95-47-6	NS	NS	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
p-Dichlorobenzene	106-46-7	30	56	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Propylene	115-07-1	NS	NS	3.4 U	3.1 J	3.4 U	3.4 U	3.4 U
Styrene	100-42-5	52,000	220,000	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Tertiary Butyl Alcohol	75-65-0	NS	NS	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Tetrachloroethene	127-18-4	470	2,400	1.1 U	1.1 U	1.1 U	1.7	1.1 U
Tetrahydrofuran	109-99-9	NS	NS	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Toluene	108-88-3	260,000	1,100,000	3.6	2.0 J	4.5	2.9 J	24
trans-1,2-Dichloroethene	156-60-5	3,100	13,000	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
trans-1,3-Dichloropropene*	10061-02-6	30	150	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Trichloroethene	79-01-6	27	150	9.1	0.91	4.4	**34**	3.9
Trichlorofluoromethane	75-69-4	36,000	150,000	2.4 J	4.5 U	4.5 U	4.5 U	4.5 U
Vinyl acetate	108-05-4	NS	NS	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Vinyl chloride	75-01-4	13	140	2.0 U	2.0 U	2.0 U	2.0 U	2 U
Xylenes (total)	1330-20-7	5,200	22,000	2.1 J	3.5 U	2.8 J	1.7 J	3.5 U

ug/m^3: micrograms per cubic meter
NS: Not specified
U: Not detected above referenced reporting limit
J: Estimated concentration at or below reporting limit
E: Value exceeds calibration range
Bold outline: Indicates concentration exceeds the applicable NJDEP Screening Level
*: Value listed reflected the combined standard for cis-1,3-dichloropropene and trans-1,2-dichloropropene
NA: Not analyzed for specific compound
Italics: Referenced reporting limit exceeds most stringent soil gas screening level

Table 1
Summary of Sub-Slab Soil Gas Sample Results
Ortho-Clinical Diagnostics
Raritan, New Jersey

Sample ID Lab ID Sample Date Dilution Factor	CAS #	NJDEP March 2013 Soil Gas Screening Levels		Building J				
				J-SG7(031914) JB62501-10 3/19/2014 1	J-SG9(031914) JB62501-8 3/19/2014 1	J-SG10(031914) JB62501-5 3/19/2014 1	J-SG11(031914) JB62501-6 3/19/2014 1	J-SG12(031914) JB62501-7 3/19/2014 1
		Residential	Non-Residential					
VOLATILE ORGANIC COMPOUNDS (ug/m^3)								
1,1,1-Trichloroethane	71-55-6	260,000	1,100,000	4.4 U	4.4 U	4.4 U	4.4 U	44 U
1,1,2,2-Tetrachloroethane	79-34-5	34	34	5.5 U	5.5 U	5.5 U	5.5 U	*55* U
1,1,2-Trichloroethane	79-00-5	27	38	4.4 U	4.4 U	4.4 U	4.4 U	*44* U
1,1-Dichloroethane	75-34-3	76	380	3.2 U	3.2 U	3.2 U	3.2 U	32 U
1,1-Dichloroethene	75-35-4	10,000	44,000	3.2 U	3.2 U	3.2 U	3.2 U	32 U
1,2,4-Trichlorobenzene	120-82-1	100	440	5.9 U	5.9 U	5.9 U	5.9 U	59 U
1,2,4-Trimethylbenzene	95-63-6	NS	NS	3.9 U	3.9 U	3.9 U	3.9 U	39 J
1,2-Dibromoethane	106-93-4	38	38	6.1 U	6.1 U	6.1 U	6.1 U	*61* U
1,2-Dichloroethane	107-06-2	20	24	3.2 U	3.2 U	3.2 U	3.2 U	*32* U
1,2-Dichloropropane	78-87-5	23	61	3.7 U	3.7 U	3.7 U	3.7 U	*37* U
1,3,5,-Trimethylbenzene	108-67-8	NS	NS	3.9 U	3.9 U	3.9 U	3.9 U	39 U
1,3-Butadiene	106-99-0	11	20	1.8 U	1.8 U	1.8 U	1.8 U	*18* U
1,4-Dioxane	123-91-1	NS	NS	2.9 U	2.9 U	2.9 U	2.9 U	29 U
2,2,4-Trimethylpentane	540-84-1	NS	NS	3.7 U	3.7 U	3.7 U	3.7 U	37 U
2-Chlorotoluene	95-49-8	NS	NS	4.1 U	4.1 U	4.1 U	4.1 U	41 U
2-Hexanone	591-78-6	NS	NS	3.3 U	3.3 U	1.8 J	3.3 U	33 U
3-Chloropropene	107-05-1	20	100	2.5 U	2.5 U	2.5 U	2.5 U	*25* U
4-Ethyltoluene	622-96-8	NS	NS	3.9 U	3.9 U	3.9 U	3.9 U	39 U
Acetone	67-64-1	1,600,000	6,800,000	14	131	109	46.3	19 U
Benzene	71-43-2	16	79	2.6 U	2.6 U	2.2 J	2.6 U	*26* U
Benzyl Chloride	100-44-7	NS	NS	4.1 U	4.1 U	4.1 U	4.1 U	41 U
Bromodichloromethane	75-27-4	34	34	5.4 U	5.4 U	5.4 U	5.4 U	*54* U
Bromoethene	593-60-2	22	22	3.5 U	3.5 U	3.5 U	3.5 U	*35* U
Bromoform	75-25-2	110	560	8.3 U	8.3 U	8.3 U	8.3 U	83 U
Bromomethane	74-83-9	260	1,100	3.1 U	3.1 U	3.1 U	3.1 U	31 U
Carbon disulfide	75-15-0	36,000	150,000	2.5 U	2.5 U	2.5 U	2.5 U	25 U
Carbon tetrachloride	56-23-5	31	100	5.0 U	5 U	5 U	5 U	*50* U
Chlorobenzene	108-90-7	2,600	11,000	3.7 U	3.7 U	3.7 U	3.7 U	37 U
Chloroethane	75-00-3	520,000	2,200,000	2.1 U	2.1 U	2.1 U	2.1 U	21 U
Chloroform	67-66-3	24	27	3.9 U	4.2	3.9 U	1.9 J	*29* J
Chloromethane	74-87-3	4,700	20,000	0.87 J	1.7 U	2.9	1.7 U	17 U
cis-1,2-Dichloroethene	156-59-2	NS	NS	2.7 J	3.2 U	3.2 U	6.7	567
cis-1,3-Dichloropropene*	10061-01-5	30	150	3.6 U	3.6 U	3.6 U	3.6 U	*36* U
Cyclohexane	110-82-7	310,000	1,300,000	2.8 U	2.8 U	4.8	2.8 U	28 U
Dibromochloromethane	124-48-1	43	43	6.8 U	6.8 U	6.8 U	6.8 U	*68* U
Dichlorodifluoromethane	75-71-8	5,200	22,000	2.3 J	4 U	3.6 J	4 U	40 U
Ethanol	64-17-5	NS	NS	7.3	14	49.4	3.8 U	38 U
Ethyl Acetate	141-78-6	NS	NS	1.8 J	11	2.9 U	9.7	29 U
Ethylbenzene	100-41-4	49	250	3.5 U	3.5 U	3.5 U	3.5 U	35 U
Freon 113	76-13-1	1,600,000	6,600,000	6.1 U	6.1 U	6.1 U	6.1 U	61 U
Freon 114	76-14-2	NS	NS	5.6 U	5.6 U	5.6 U	5.6 U	56 U
Heptane	142-82-5	NS	NS	3.3 U	3.3 U	3.3 U	3.3 U	33 U
Hexachlorobutadiene	87-68-3	53	53	8.5 U	8.5 U	8.5 U	8.5 U	*85* U
Hexane	110-54-3	36,000	150,000	2.8 U	2.8 U	1.9 J	2.8 U	28 U
Isopropyl Alcohol	67-63-0	NS	NS	32.7	71.3	86	30	25.1
m,p-Xylene	NS	NS	NS	3.5 U	3.5 U	3.5 U	3.5 U	35 U
m-Dichlorobenzene	541-73-1	NS	NS	4.8 U	4.8 U	4.8 U	4.8 U	48 U
Methyl ethyl ketone	78-93-3	260,000	1,100,000	1.1 J	12	16	1.4 J	24 U
Methyl Isobutyl Ketone	108-10-1	160,000	660,000	3.3 U	3.3 U	3.3 U	3.3 U	33 U
Methyl Tert Butyl Ether	1634-04-4	470	2,400	2.9 U	2.9 U	2.9 U	1.9 J	29 U
Methylene chloride	75-09-2	4,800	61,000	4.9	2.8 U	4.5	3.5	28 U
Methylmethacrylate	80-62-6	NS	NS	3.3 U	3.3 U	3.3 U	3.3 U	33 U
o-Dichlorobenzene	95-50-1	10,000	44,000	4.8 U	4.8 U	4.8 U	4.8 U	48 U
o-Xylene	95-47-6	NS	NS	3.5 U	3.5 U	3.5 U	3.5 U	35 U
p-Dichlorobenzene	106-46-7	30	56	4.8 U	4.8 U	4.8 U	4.8 U	*48* U
Propylene	115-07-1	NS	NS	3.4 U	3.4 U	3.4 U	3.4 U	34 U
Styrene	100-42-5	52,000	220,000	3.4 U	3.4 U	3.4 U	3.4 U	34 U
Tertiary Butyl Alcohol	75-65-0	NS	NS	2.4 U	2.4 U	2.4 U	2.4 U	24 U
Tetrachloroethene	127-18-4	470	2,400	1.1 U	1.2	2.2	1 J	90.9
Tetrahydrofuran	109-99-9	NS	NS	2.4 U	2.4 U	2.4 U	2.4 U	24 U
Toluene	108-88-3	260,000	1,100,000	23	21	2 J	3 U	30 U
trans-1,2-Dichloroethene	156-60-5	3,100	13,000	3.2 U	3.2 U	3.2 U	2.6 J	70.2
trans-1,3-Dichloropropene*	10061-02-6	30	150	3.6 U	3.6 U	3.6 U	3.6 U	*36* U
Trichloroethene	79-01-6	27	150	1.4	**65.6**	1.0	**97.3**	**7,740**
Trichlorofluoromethane	75-69-4	36,000	150,000	4.5 U	4.5 U	4.5 U	3.4 J	45 U
Vinyl acetate	108-05-4	NS	NS	2.8 U	2.8 U	2.8 U	2.8 U	28 U
Vinyl chloride	75-01-4	13	140	2.0 U	2 U	2 U	2 U	*20* U
Xylenes (total)	1330-20-7	5,200	22,000	3.5 U	3.5 U	3.5 U	3.5 U	35 U

ug/m^3: micrograms per cubic meter
NS: Not specified
U: Not detected above referenced reporting limit
J: Estimated concentration at or below reporting limit
E: Value exceeds calibration range
Bold outline: Indicates concentration exceeds the applicable NJDEP Screening Level
*: Value listed reflected the combined standard for cis-1,3-dichloropropene and trans-1,2-dichloropropene
NA: Not analyzed for specific compound
Italics: Referenced reporting limit exceeds most stringent soil gas screening level

Table 2
Summary of Indoor Air Sample Results
Ortho-Clinical Diagnostics
Raritan, New Jersey

Sample ID Lab ID Sample Date Dilution Factor	CAS #	NJDEP March 2013 Indoor Air Screening Levels		Building J Basement (Indoor Air)			
				J-B-03 J62602-4 5/31/07-6/1/07 1	JB-3(8-07) J70084-1 8/27/07-8/28/07 1	JB-3(11-07) J77609-2 11/27/07-11/28/07 1	IA-JB01 JA41431-4 3/8/2010-3/9/2010 1
		Residential	Non-Residential				
VOLATILE ORGANIC COMPOUNDS (ug/m^3)							
1,1,1-Trichloroethane	71-55-6	5,200	22,000	1.1	1.1 U	1.1 U	1.1 U
1,1,2,2-Tetrachloroethane	79-34-5	3	3	1.4 U	1.4 U	1.4 U	1.4 U
1,1,2-Trichloroethane	79-00-5	3	3	1.1 U	1.1 U	1.1 U	1.1 U
1,1-Dichloroethane	75-34-3	2	8	0.81 U	0.81 U	0.81 U	0.81 U
1,1-Dichloroethene	75-35-4	210	880	0.79 U	0.79 U	0.79 U	0.79 U
1,2,4-Trichlorobenzene	120-82-1	4	9	1.5 U	1.5 U	1.5 U	1.5 U
1,2,4-Trimethylbenzene	95-63-6	NS	NS	0.98 U	0.64 J	0.98 U	0.98 U
1,2-Dibromoethane	106-93-4	4	4	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dichloroethane	107-06-2	2	2	0.81 U	0.81 U	0.81 U	0.81 U
1,2-Dichloropropane	78-87-5	2	2	0.92 U	0.92 U	0.92 U	0.92 U
1,3,5,-Trimethylbenzene	108-67-8	NS	NS	0.98 U	0.98 U	0.98 U	0.98 U
1,3-Butadiene	106-99-0	1	1	0.44 U	0.44 U	0.44 U	0.44 U
1,4-Dioxane	123-91-1	NS	NS	0.72 U	0.72 U	0.72 U	0.72 U
2,2,4-Trimethylpentane	540-84-1	NS	NS	0.93 U	0.89 J	0.93 U	0.93 U
2-Chlorotoluene	95-49-8	NS	NS	1.0 U	1.0 U	1 U	1.0 U
2-Hexanone	591-78-6	NS	NS	0.82 U	0.82 U	0.82 U	0.82 U
3-Chloropropene	107-05-1	2	2	0.63 U	0.63 U	0.63 U	0.63 U
4-Ethyltoluene	622-96-8	NS	NS	0.98 U	0.98 U	0.98 U	0.98 U
Acetone	67-64-1	32,000	140,000	14	15	9.7	13
Benzene	71-43-2	2	2	1.8	0.83	0.51 J	0.77
Benzyl Chloride	100-44-7	NS	NS	1.0 U	1.0 U	1 U	1.0 U
Bromodichloromethane	75-27-4	3	3	1.3 U	1.3 U	1.3 U	1.3 U
Bromoethene	593-60-2	2	2	0.87 U	0.87 U	0.87 U	0.87 U
Bromoform	75-25-2	5	11	2.1 U	2.1 U	2.1 U	2.1 U
Bromomethane	74-83-9	5	22	0.78 U	0.78 U	0.78 U	0.78 U
Carbon disulfide	75-15-0	730	3,100	0.62 U	0.62 U	0.62 U	0.62 U
Carbon tetrachloride	56-23-5	3	3	1.3 U	1.3 U	0.62 J	1.3 U
Chlorobenzene	108-90-7	52	220	0.92 U	0.92 U	0.92 U	0.92 U
Chloroethane	75-00-3	10,000	44,000	0.53 U	0.53 U	0.53 U	0.53 U
Chloroform	67-66-3	2	2	1.5	**2.2**	0.83 J	0.78 J
Chloromethane	74-87-3	94	390	1.3	1.4	1.2	1.5
cis-1,2-Dichloroethene	156-59-2	NS	NS	0.79 U	0.79 U	0.79 U	0.79 U
cis-1,3-Dichloropropene*	10061-01-5	2	3	0.91 U	0.91 U	0.91 U	0.91 U
Cyclohexane	110-82-7	6,300	26,000	0.69 U	0.69 U	0.69 U	0.69 U
Dibromochloromethane	124-48-1	4	4	1.7 U	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane	75-71-8	100	440	15	5.4	4.9	5.4
Ethanol	64-17-5	NS	NS	13	134 E	0.94 U	167 E
Ethyl Acetate	141-78-6	NS	NS	0.72 U	0.72 U	0.72 U	4.7
Ethylbenzene	100-41-4	2	5	0.56 J	0.52 J	0.87 U	0.87 U
Freon 113	76-13-1	31,000	130,000	1.8	1.5 U	1.5 U	1.5 U
Freon 114	76-14-2	NS	NS	1.4 U	1.4 U	1.4 U	1.4 U
Heptane	142-82-5	NS	NS	2	0.82 U	0.82 U	0.82 U
Hexachlorobutadiene	87-68-3	5	5	2.1 U	2.1 U	2.1 U	2.1 U
Hexane	110-54-3	730	3,100	0.70 U	0.70 U	0.7 U	0.53 J
Isopropyl Alcohol	67-63-0	NS	NS	152 E	75	9.1	104 E
m,p-Xylene	NS	NS	NS	1.5	1.4	0.87 U	0.48 J
m-Dichlorobenzene	541-73-1	NS	NS	1.2 U	1.2 U	1.2 U	1.2 U
Methyl ethyl ketone	78-93-3	5,200	22,000	1.9	1.7	0.59 U	1.2
Methyl Isobutyl Ketone	108-10-1	3,100	13,000	0.82 U	0.82 U	0.82 U	0.82 U
Methyl Tert Butyl Ether	1634-04-4	9	47	0.72 U	0.72 U	0.72 U	0.72 U
Methylene chloride	75-09-2	96	1,200	1.2	1.4	0.73	3.8
Methylmethacrylate	80-62-6	NS	NS	NA	NA	NA	NA
o-Dichlorobenzene	95-50-1	210	880	1.2 U	1.2 U	1.2 U	1.2 U
o-Xylene	95-47-6	NS	NS	0.48 J	0.52 J	0.87 U	0.87 U
p-Dichlorobenzene	106-46-7	3	3	1.2 U	1.2 U	1.2 U	1.2 U
Propylene	115-07-1	NS	NS	0.86 U	0.86 U	0.86 U	0.86 U
Styrene	100-42-5	1,000	4,400	0.85 U	0.85 U	0.85 U	0.85 U
Tertiary Butyl Alcohol	75-65-0	NS	NS	0.61 U	0.61 U	0.61 U	0.61 U
Tetrachloroethene	127-18-4	9	47	1.4 U	1.4 U	1.4 U	0.27 U
Tetrahydrofuran	109-99-9	NS	NS	1.5	0.59 U	0.59 U	0.59 U
Toluene	108-88-3	5,200	22,000	2	2.8	0.94	1.9
trans-1,2-Dichloroethene	156-60-5	63	260	0.79 U	0.79 U	0.79 U	0.79 U
trans-1,3-Dichloropropene*	10061-02-6	2	3	0.91 U	0.91 U	0.91 U	0.91 U
Trichloroethene	79-01-6	3	3	**45**	1.1 U	1.1 U	0.21 U
Trichlorofluoromethane	75-69-4	730	3,100	2.8	2.4	1.9	1.9
Vinyl acetate	108-05-4	NS	NS	0.70 U	0.70 U	0.7 U	0.70 U
Vinyl chloride	75-01-4	1	3	0.51 U	0.51 U	0.51 U	0.51 U
Xylenes (total)	1330-20-7	100	440	2.0	2.0	0.87 U	0.48 J

ug/m^3: micrograms per cubic meter
NS: Not specified
NA: Not analyzed for specific compound
U: Not detected above referenced reporting limit
J: Estimated concentration at or below reporting limit
E: Value exceeds calibration range
*: Value listed reflected the combined standard for cis-1,3-dichloropropene and trans-1,2-dichloropropene
Bold outline: Indicates concentration exceeds the applicable NJDEP Screening Level

Table 2
Summary of Indoor Air Sample Results
Ortho-Clinical Diagnostics
Raritan, New Jersey

Sample ID Lab ID Sample Date Dilution Factor	CAS #	NJDEP March 2013 Indoor Air Screening Levels		Building J Basement (Indoor Air)		
				IA-JB2(031814) JB62501-1 3/18/14-3/19/14 1	IA-JB3(031814) JB62501-2 3/18/14-3/19/14 1	IA-JB11(031814) JB62501-3 3/18/14-3/19/14 1
		Residential	Non-Residential			
VOLATILE ORGANIC COMPOUNDS (ug/m³)						
1,1,1-Trichloroethane	71-55-6	5,200	22,000	1.1 U	1.1 U	1.1 U
1,1,2,2-Tetrachloroethane	79-34-5	3	3	1.4 U	1.4 U	1.4 U
1,1,2-Trichloroethane	79-00-5	3	3	1.1 U	1.1 U	1.1 U
1,1-Dichloroethane	75-34-3	2	8	0.81 U	0.81 U	0.81 U
1,1-Dichloroethene	75-35-4	210	880	0.79 U	0.79 U	0.79 U
1,2,4-Trichlorobenzene	120-82-1	4	9	1.5 U	1.5 U	1.5 U
1,2,4-Trimethylbenzene	95-63-6	NS	NS	0.98 U	0.98 U	1.1
1,2-Dibromoethane	106-93-4	4	4	1.5 U	1.5 U	1.5 U
1,2-Dichloroethane	107-06-2	2	2	0.81 U	0.81 U	0.81 U
1,2-Dichloropropane	78-87-5	2	2	0.92 U	0.92 U	0.92 U
1,3,5,-Trimethylbenzene	108-67-8	NS	NS	0.98 U	0.98 U	0.98 U
1,3-Butadiene	106-99-0	1	1	0.44 U	0.44 U	0.44 U
1,4-Dioxane	123-91-1	NS	NS	0.72 U	0.72 U	0.72 U
2,2,4-Trimethylpentane	540-84-1	NS	NS	0.93 U	0.93 U	0.93 U
2-Chlorotoluene	95-49-8	NS	NS	1 U	1 U	1 U
2-Hexanone	591-78-6	NS	NS	0.82 U	0.82 U	0.82 U
3-Chloropropene	107-05-1	2	2	0.63 U	0.63 U	0.63 U
4-Ethyltoluene	622-96-8	NS	NS	0.98 U	0.98 U	0.98 U
Acetone	67-64-1	32,000	140,000	30.9	14	20
Benzene	71-43-2	2	2	0.64	0.54 J	0.67
Benzyl Chloride	100-44-7	NS	NS	1 U	1 U	1 U
Bromodichloromethane	75-27-4	3	3	1.3 U	1.3 U	1.3 U
Bromoethene	593-60-2	2	2	0.87 U	0.87 U	0.87 U
Bromoform	75-25-2	5	11	2.1 U	2.1 U	2.1 U
Bromomethane	74-83-9	5	22	0.78 U	0.78 U	0.78 U
Carbon disulfide	75-15-0	730	3,100	0.62 U	0.62 U	2.2
Carbon tetrachloride	56-23-5	3	3	1.3 U	1.3 U	1.3 U
Chlorobenzene	108-90-7	52	220	0.92 U	0.92 U	0.92 U
Chloroethane	75-00-3	10,000	44,000	0.53 U	0.53 U	0.53 U
Chloroform	67-66-3	2	2	0.98 U	0.98 U	0.46 J
Chloromethane	74-87-3	94	390	0.41 U	1.1	1.1
cis-1,2-Dichloroethene	156-59-2	NS	NS	0.79 U	0.79 U	0.79 U
cis-1,3-Dichloropropene*	10061-01-5	2	3	0.91 U	0.91 U	0.91 U
Cyclohexane	110-82-7	6,300	26,000	0.69 U	0.69 U	1.3
Dibromochloromethane	124-48-1	4	4	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane	75-71-8	100	440	2	2	2.1
Ethanol	64-17-5	NS	NS	13	11	30.5
Ethyl Acetate	141-78-6	NS	NS	2.7	0.72 U	0.72 U
Ethylbenzene	100-41-4	2	5	0.48 J	0.87 U	0.87 U
Freon 113	76-13-1	31,000	130,000	13	0.75 J	1.5 U
Freon 114	76-14-2	NS	NS	1.4 U	1.4 U	1.4 U
Heptane	142-82-5	NS	NS	0.82 U	0.82 U	1.3
Hexachlorobutadiene	87-68-3	5	5	2.1 U	2.1 U	2.1 U
Hexane	110-54-3	730	3,100	7.8	0.63 J	2
Isopropyl Alcohol	67-63-0	NS	NS	96.6	117 E	725 E
m,p-Xylene	NS	NS	NS	1.3	0.56 J	1.6
m-Dichlorobenzene	541-73-1	NS	NS	1.2 U	1.2 U	1.2 U
Methyl ethyl ketone	78-93-3	5,200	22,000	1.9	0.71	2.3
Methyl Isobutyl Ketone	108-10-1	3,100	13,000	0.82 U	0.82 U	0.82 U
Methyl Tert Butyl Ether	1634-04-4	9	47	0.72 U	0.72 U	0.72 U
Methylene chloride	75-09-2	96	1,200	21	1.4	1.4
Methylmethacrylate	80-62-6	NS	NS	0.82 U	0.82 U	0.82 U
o-Dichlorobenzene	95-50-1	210	880	1.2 U	1.2 U	1.2 U
o-Xylene	95-47-6	NS	NS	0.43 J	0.87 U	0.61 J
p-Dichlorobenzene	106-46-7	3	3	1.2 U	1.2 U	1.2 U
Propylene	115-07-1	NS	NS	0.86 U	0.86 U	0.86 U
Styrene	100-42-5	1,000	4,400	0.85 U	0.85 U	0.85 U
Tertiary Butyl Alcohol	75-65-0	NS	NS	0.55 J	0.61 U	0.61 U
Tetrachloroethene	127-18-4	9	47	0.28	0.27 U	0.27 U
Tetrahydrofuran	109-99-9	NS	NS	0.47 J	0.41 J	4.1
Toluene	108-88-3	5,200	22,000	5.3	1.1	4.5
trans-1,2-Dichloroethene	156-60-5	63	260	0.79 U	0.79 U	2
trans-1,3-Dichloropropene*	10061-02-6	2	3	0.91 U	0.91 U	0.91 U
Trichloroethene	79-01-6	3	3	0.21 U	0.21 U	0.21 U
Trichlorofluoromethane	75-69-4	730	3,100	1.6	1.4	2
Vinyl acetate	108-05-4	NS	NS	0.7 U	0.7 U	0.7 U
Vinyl chloride	75-01-4	1	3	0.51 U	0.51 U	0.51 U
Xylenes (total)	1330-20-7	100	440	1.8	0.56 J	2.2

ug/m³: micrograms per cubic meter
NS: Not specified
NA: Not analyzed for specific compound
U: Not detected above referenced reporting limit
J: Estimated concentration at or below reporting limit
E: Value exceeds calibration range
*: Value listed reflected the combined standard for cis-1,3-dichloropropene and trans-1,2-dichloropropene
Bold outline: Indicates concentration exceeds the applicable NJDEP Screening Level

Table 3
Summary of Ambient Air Sample Results
Ortho-Clinical Diagnostics
Raritan, New Jersey

Sample ID	CAS #	NJDEP March 2013 Indoor Air Screening Levels		Ambient Air				
Lab ID				J-AMBIENT	AMB(8-07)	AMB(11-07)	AA030810	AA(121813)
Sample Date				J62602-5	J70084-4	J77609-3	JA41431-2	JB56247-2
Dilution Factor		Residential	Non-Residential	5/31/07-6/1/07	8/27/07-8/28/07	11/27/07-11/28/07	3/8/2010-3/9/2010	12/18/13-12/19/13
				1	1	1	1	1.7
VOLATILE ORGANIC COMPOUNDS (ug/m³)								
1,1,1-Trichloroethane	71-55-6	5,200	22,000	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1,2,2-Tetrachloroethane	79-34-5	3	3	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
1,1,2-Trichloroethane	79-00-5	3	3	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1-Dichloroethane	75-34-3	2	8	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
1,1-Dichloroethene	75-35-4	210	880	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
1,2,4-Trichlorobenzene	120-82-1	4	9	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2,4-Trimethylbenzene	95-63-6	NS	NS	0.98 U	0.98 U	0.98 U	0.98 U	0.69 J
1,2-Dibromoethane	106-93-4	4	4	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dichloroethane	107-06-2	2	2	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
1,2-Dichloropropane	78-87-5	2	2	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,3,5,-Trimethylbenzene	108-67-8	NS	NS	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
1,3-Butadiene	106-99-0	1	1	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,4-Dioxane	123-91-1	NS	NS	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
2,2,4-Trimethylpentane	540-84-1	NS	NS	0.93 U	0.84 J	0.93 U	0.93 U	0.93 U
2-Chlorotoluene	95-49-8	NS	NS	1.0 U	1.0 U	1 U	1.0 U	1 U
2-Hexanone	591-78-6	NS	NS	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
3-Chloropropene	107-05-1	2	2	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
4-Ethyltoluene	622-96-8	NS	NS	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
Acetone	67-64-1	32,000	140,000	24.7	12	2.9	6.7	89.1
Benzene	71-43-2	2	2	0.64	0.77	0.51 J	0.73	1.2
Benzyl Chloride	100-44-7	NS	NS	1.0 U	1.0 U	1 U	1.0 U	1 U
Bromodichloromethane	75-27-4	3	3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Bromoethene	593-60-2	2	2	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U
Bromoform	75-25-2	5	11	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Bromomethane	74-83-9	5	22	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Carbon disulfide	75-15-0	730	3,100	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
Carbon tetrachloride	56-23-5	3	3	0.63 J	1.3 U	1.3 U	1.3 U	1.3 U
Chlorobenzene	108-90-7	52	220	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
Chloroethane	75-00-3	10,000	44,000	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
Chloroform	67-66-3	2	2	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
Chloromethane	74-87-3	94	390	1.5	1.4	0.93	1.4	1.2
cis-1,2-Dichloroethene	156-59-2	NS	NS	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
cis-1,3-Dichloropropene*	10061-01-5	2	3	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Cyclohexane	110-82-7	6,300	26,000	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Dibromochloromethane	124-48-1	4	4	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane	75-71-8	100	440	3.1	3.9	3.1	2.7	2.6
Ethanol	64-17-5	NS	NS	14	3.2	3.8	4.3	9.2
Ethyl Acetate	141-78-6	NS	NS	2.4	0.72 U	0.72 U	2.3	0.72 U
Ethylbenzene	100-41-4	2	5	0.48 J	0.87 U	0.87 U	0.87 U	0.52 J
Freon 113	76-13-1	31,000	130,000	2.5	1.5 U	1.5 U	1.5 U	1.5 U
Freon 114	76-14-2	NS	NS	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Heptane	142-82-5	NS	NS	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Hexachlorobutadiene	87-68-3	5	5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Hexane	110-54-3	730	3,100	0.7 U	0.7 U	0.7 U	0.70 U	41.6
Isopropyl Alcohol	67-63-0	NS	NS	44.5	8.4	1.3	1.5	9.3
m,p-Xylene	NS	NS	NS	1.3	0.74 J	0.87 U	0.52 J	1.7
m-Dichlorobenzene	541-73-1	NS	NS	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Methyl ethyl ketone	78-93-3	5,200	22,000	2.9	1.4	0.59 U	0.65	1.3
Methyl Isobutyl Ketone	108-10-1	3,100	13,000	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
Methyl Tert Butyl Ether	1634-04-4	9	47	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
Methylene chloride	75-09-2	96	1,200	0.97	1.1	0.69 U	4.5	4.9
Methylmethacrylate	80-62-6	NS	NS	NA	NA	NA	NA	0.82 U
o-Dichlorobenzene	95-50-1	210	880	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
o-Xylene	95-47-6	NS	NS	0.48 J	0.87 U	0.87 U	0.87 U	0.61 J
p-Dichlorobenzene	106-46-7	3	3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Propylene	115-07-1	NS	NS	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U
Styrene	100-42-5	1,000	4,400	0.85 U	0.85 U	0.85 U	0.85 U	0.68 J
Tertiary Butyl Alcohol	75-65-0	NS	NS	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
Tetrachloroethene	127-18-4	9	47	1.4 U	1.4 U	1.4 U	0.39	0.27 U
Tetrahydrofuran	109-99-9	NS	NS	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Toluene	108-88-3	5,200	22,000	2.8	2.1	0.68 J	1.1	40.3
trans-1,2-Dichloroethene	156-60-5	63	260	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
trans-1,3-Dichloropropene*	10061-02-6	2	3	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Trichloroethene	79-01-6	3	3	5.4	1.1 U	1.1 U	0.21 U	0.21 U
Trichlorofluoromethane	75-69-4	730	3,100	1.9	2.2	1.7	1.5	1.2
Vinyl acetate	108-05-4	NS	NS	0.70 U	0.70 U	0.7 U	0.70 U	0.7 U
Vinyl chloride	75-01-4	1	3	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Xylenes (total)	1330-20-7	100	440	1.8	0.74 J	0.87 U	0.52 J	2.3

ug/m³: micrograms per cubic meter
NS: Not specified
NA: Not analyzed for specific compound
U: Not detected above referenced reporting limit
J: Estimated concentration at or below reporting limit
*: Value listed reflected the combined standard for cis-1,3-dichloropropene and trans-1,2-dichloropropene

Table 3
Summary of Ambient Air Sample Results
Ortho-Clinical Diagnostics
Raritan, New Jersey

Sample ID Lab ID Sample Date Dilution Factor	CAS #	NJDEP March 2013 Indoor Air Screening Levels		Ambient Air AA(031814) JB62501-4 3/18/14-3/19/14 1
		Residential	Non-Residential	
VOLATILE ORGANIC COMPOUNDS (ug/m^3)				
1,1,1-Trichloroethane	71-55-6	5,200	22,000	1.1 U
1,1,2,2-Tetrachloroethane	79-34-5	3	3	1.4 U
1,1,2-Trichloroethane	79-00-5	3	3	1.1 U
1,1-Dichloroethane	75-34-3	2	8	0.81 U
1,1-Dichloroethene	75-35-4	210	880	0.79 U
1,2,4-Trichlorobenzene	120-82-1	4	9	1.5 U
1,2,4-Trimethylbenzene	95-63-6	NS	NS	0.98 U
1,2-Dibromoethane	106-93-4	4	4	1.5 U
1,2-Dichloroethane	107-06-2	2	2	0.81 U
1,2-Dichloropropane	78-87-5	2	2	0.92 U
1,3,5,-Trimethylbenzene	108-67-8	NS	NS	0.98 U
1,3-Butadiene	106-99-0	1	1	0.44 U
1,4-Dioxane	123-91-1	NS	NS	0.72 U
2,2,4-Trimethylpentane	540-84-1	NS	NS	0.93 U
2-Chlorotoluene	95-49-8	NS	NS	1 U
2-Hexanone	591-78-6	NS	NS	0.82 U
3-Chloropropene	107-05-1	2	2	0.63 U
4-Ethyltoluene	622-96-8	NS	NS	0.98 U
Acetone	67-64-1	32,000	140,000	6.7
Benzene	71-43-2	2	2	0.51 J
Benzyl Chloride	100-44-7	NS	NS	1 U
Bromodichloromethane	75-27-4	3	3	1.3 U
Bromoethene	593-60-2	2	2	0.87 U
Bromoform	75-25-2	5	11	2.1 U
Bromomethane	74-83-9	5	22	0.78 U
Carbon disulfide	75-15-0	730	3,100	0.62 U
Carbon tetrachloride	56-23-5	3	3	1.3 U
Chlorobenzene	108-90-7	52	220	0.92 U
Chloroethane	75-00-3	10,000	44,000	0.53 U
Chloroform	67-66-3	2	2	0.98 U
Chloromethane	74-87-3	94	390	1.1
cis-1,2-Dichloroethene	156-59-2	NS	NS	0.79 U
cis-1,3-Dichloropropene*	10061-01-5	2	3	0.91 U
Cyclohexane	110-82-7	6,300	26,000	0.69 U
Dibromochloromethane	124-48-1	4	4	1.7 U
Dichlorodifluoromethane	75-71-8	100	440	2
Ethanol	64-17-5	NS	NS	6.2
Ethyl Acetate	141-78-6	NS	NS	0.72 U
Ethylbenzene	100-41-4	2	5	0.87 U
Freon 113	76-13-1	31,000	130,000	1.5 U
Freon 114	76-14-2	NS	NS	1.4 U
Heptane	142-82-5	NS	NS	0.82 U
Hexachlorobutadiene	87-68-3	5	5	2.1 U
Hexane	110-54-3	730	3,100	0.7 U
Isopropyl Alcohol	67-63-0	NS	NS	2.7
m,p-Xylene	NS	NS	NS	0.87 U
m-Dichlorobenzene	541-73-1	NS	NS	1.2 U
Methyl ethyl ketone	78-93-3	5,200	22,000	0.59 U
Methyl Isobutyl Ketone	108-10-1	3,100	13,000	0.82 U
Methyl Tert Butyl Ether	1634-04-4	9	47	0.72 U
Methylene chloride	75-09-2	96	1,200	1.1
Methylmethacrylate	80-62-6	NS	NS	0.82 U
o-Dichlorobenzene	95-50-1	210	880	1.2 U
o-Xylene	95-47-6	NS	NS	0.87 U
p-Dichlorobenzene	106-46-7	3	3	1.2 U
Propylene	115-07-1	NS	NS	0.86 U
Styrene	100-42-5	1,000	4,400	0.85 U
Tertiary Butyl Alcohol	75-65-0	NS	NS	0.61 U
Tetrachloroethene	127-18-4	9	47	0.27 U
Tetrahydrofuran	109-99-9	NS	NS	0.59 U
Toluene	108-88-3	5,200	22,000	0.57 J
trans-1,2-Dichloroethene	156-60-5	63	260	0.79 U
trans-1,3-Dichloropropene*	10061-02-6	2	3	0.91 U
Trichloroethene	79-01-6	3	3	0.21 U
Trichlorofluoromethane	75-69-4	730	3,100	1.2
Vinyl acetate	108-05-4	NS	NS	0.7 U
Vinyl chloride	75-01-4	1	3	0.51 U
Xylenes (total)	1330-20-7	100	440	0.87 U

ug/m^3: micrograms per cubic meter
NS: Not specified
NA: Not analyzed for specific compound
U: Not detected above referenced reporting limit
J: Estimated concentration at or below reporting limit
*: Value listed reflected the combined standard for cis-1,3-dichloropropene and trans-1,2-dichloropropene

APPENDIX F

LNAPL Hydrocarbon Identification Report for MW-47 – Torkelson Geochemistry, Inc

LANGAN

Torkelson Geochemistry, Inc.
2528 South Columbia Place, Tulsa, Oklahoma 74114-3233
Voice 918-749-8441, Fax 918-749-6005

April 23, 2014

Shelly Beitler
Langan Engineering and Environmental Services
2700 Kelly Rd.
Suite 200
Warrington, PA 18976

Subject: Analysis and evaluation of one product sample from the Ortho Clinical Diagnostics site, 1001 Route 202, Raritan, NJ.

Introduction

One product sample was submitted to Torkelson Geochemistry by Langan Engineering and Environmental Services for gas chromatography analysis and evaluation of the results see chain of custody (Figure 1)..

The following are my interpretations and opinions of the data. Please keep in mind that these interpretations are made without any hands on knowledge of the site or specific location from which the sample came or other analyses done on the sample. In addition, the sample has probably been weathered which can make an accurate interpretation of product type somewhat more difficult since some of the key features of the product(s) may have been altered or removed by evaporation, water washing or bacterial processes.

Discussion of Results

The MW-47 (LNAPL) product sample appears to be an extremely weathered middle distillate, either kerosene, jet fuel or something similar. The gas chromatogram of the MW-47 (LNAPL) sample (Figures 2 and 4) shows a series of peaks that starts at about normal nonane (nC9) and continues to about nC20 and an associated unresolved hump that starts at about nC10 reaches a maximum at about nC14 and continues to about nC20. The range, types and relative proportion of the peaks and the unresolved hump are typical of a weathered middle distillate, either kerosene, jet fuel or something similar like winter diesel fuel. The weathering appears to be primarily biodegradation, the preferential reduction in size of the normal paraffin peaks (labeled nC7 to nC20) relative to the more biodegradation resistant isoprenoid peaks (labeled IP13, IP14, IP15, IP16, IP18, Pristane and Phytane). Using a technique first developed by Christensen and Larsen (1993) and later verified and expanded upon by Schmidt, Beckmann, and Torkelson (1999) and Hurst and Schmidt (2005) the MW-47 (LNAPL) sample is estimated to be at least 20 +/-2 years old and could be older.

Please let me know if you have any questions regarding this interpretation.

Bruce Torkelson

Bruce Torkelson

Christensen, L. B. and Larsen, T. H., "Method for Determining the Age of Diesel Oil Spills in the Soil", Ground Water Monitoring and Remediation," Vol.. 13, No. 4, pp. 142-149 (1993).

Schmidt, G.W., Beckmann, D.D., and Torkelson, B.E., "Advances in Correlation and Age Dating of Petroleum Products Released to Soils and Groundwater", proceedings of the IPEC meeting, Houston, TX, November, 1999.

Hurst, R.W. and Schmidt, G.W., "Age significance of nC17/Pr ratios in MW-47 (LNAPL) investigations of refined product and crude oil releases", Environmental Geosciences, Vol 12, No. 3, September 2005, pp. 177-192.

Torkelson Geochemistry, Inc.

2528 S. Columbia Place
Tulsa, OK 74114-3233
Phone: 918-749-8441
Fax: 918-749-6005
e-mail: BTorkelson@torkelsongeochemistry.com

CHAIN-OF-CUSTODY RECORD

Project: Ortho Clinical Diagnostics
Location: 1001 Route 202
Raritan, NJ

Proj. No.: 3568401
P.O.:
Sampled By: Ben Kutz

Report/Bill To: Langan Eng & Env. Services
Address: 2700 Kelly Rd Suite 200
Warrington, PA 18976

Phone: 215-491-6554
Fax: 215-491-6501
e-mail: sbeitler@langan.com

Additional Instructions

Requested Turn-Around Time: 48 hours

ITEM NO.	SAMPLE DESCRIPTION	DATE	MATRIX	LAB NO.	Total # OF Vials	PRESERVATIVES: None					ANALYSES REQUESTED: GC Characterization	Density	Viscosity	Water Surface Tension	NAPL Surface Tension	NAPL/Water Interfac Tens	Lead	Sulfur	LNAPL Fingerprinting					REMARKS
1	MW-47 (LNAPL)	4/3/2014	GW		1	1													X					Please Provide Type, Weathering, and Date
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								

RELINQUISHED BY	DATE	TIME	ACCEPTED BY	DATE	TIME
[illegible]	4/8/14	15:40	[illegible]	4/8/14	15:40
[illegible]	4/9/14	10:18	Bruce Torkelson	4/15-14	16:25

B. [illegible] 4/10

Torkelson Geochemistry, Inc.

Ortho Clinical Diagnostics, 1001 Route 202, Raritan, NJ
Sample ID : MW-47
Acquired : Apr 16, 2014 10:05:18

c:\ezchrom\chrom\14047\mw-47 – Channel A

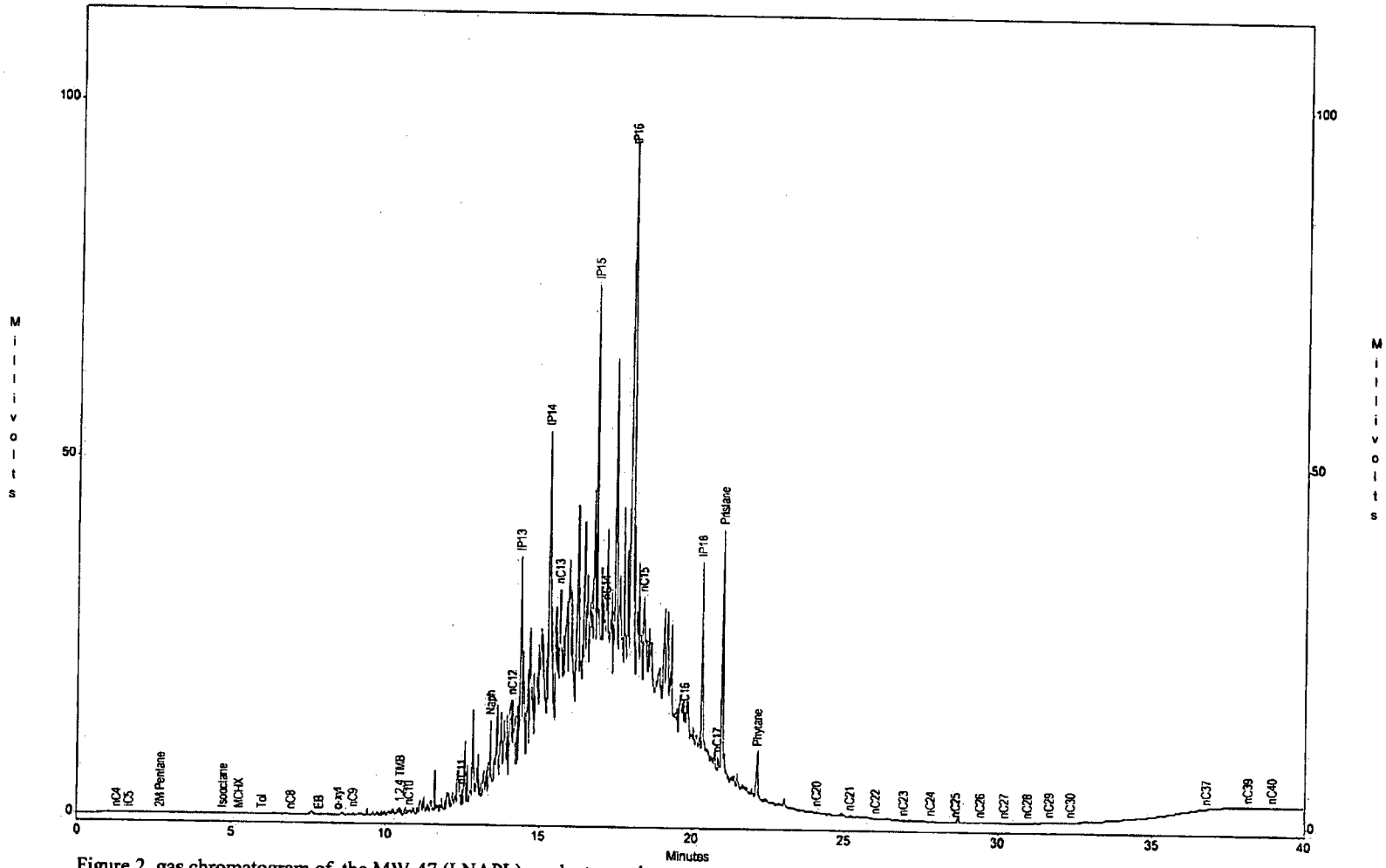


Figure 2, gas chromatogram of the MW-47 (LNAPL) product sample.

Torkelson Geochemistry, Inc.

Ortho Clinical Diagnostics, 1001 Route 202, Raritan, NJ
Sample ID : Gas/Dies/Wax std
Acquired : Apr 16, 2014 09:15:41

c:\ezchrom\chrom\14047\gadiwax2 – Channel A

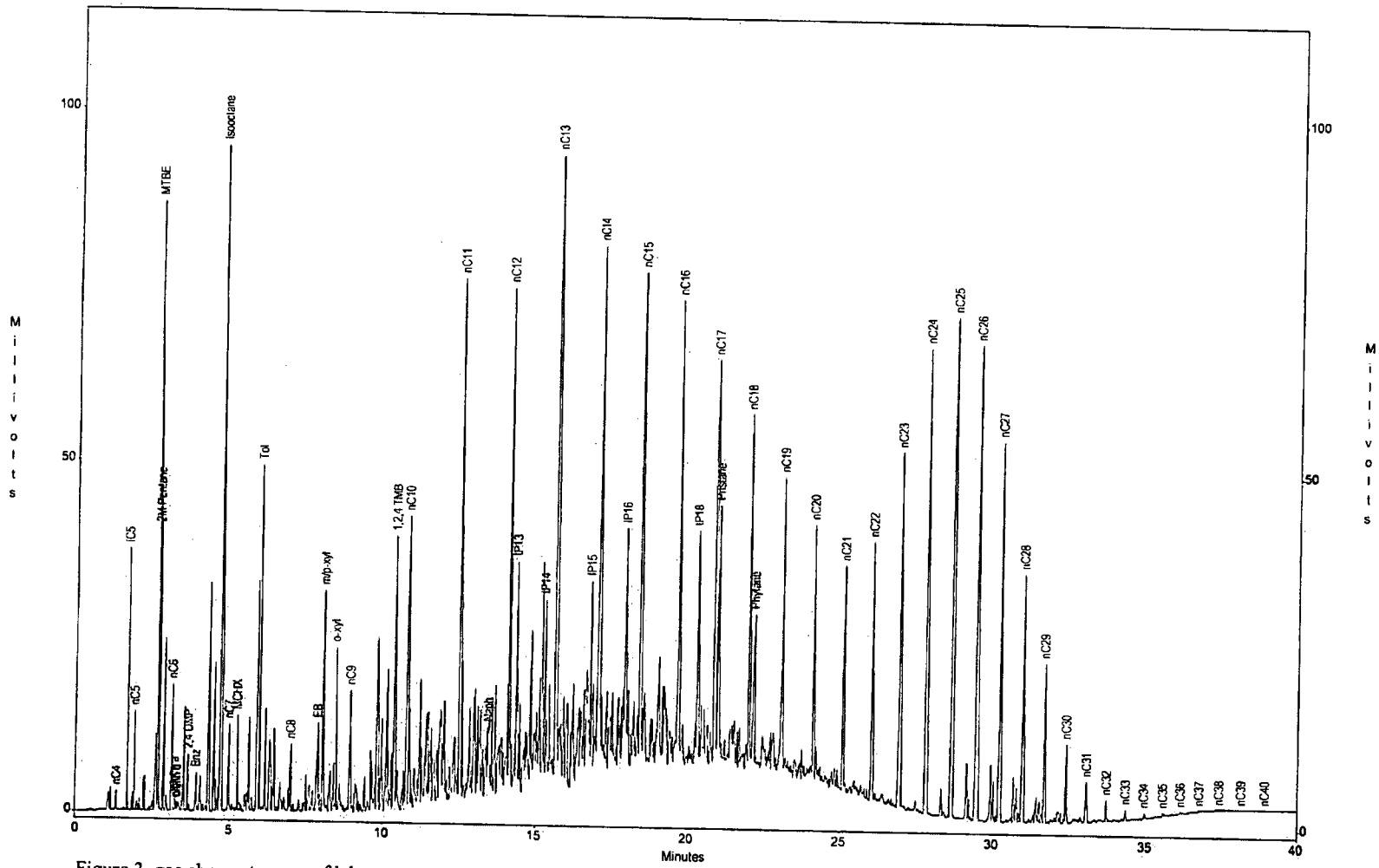
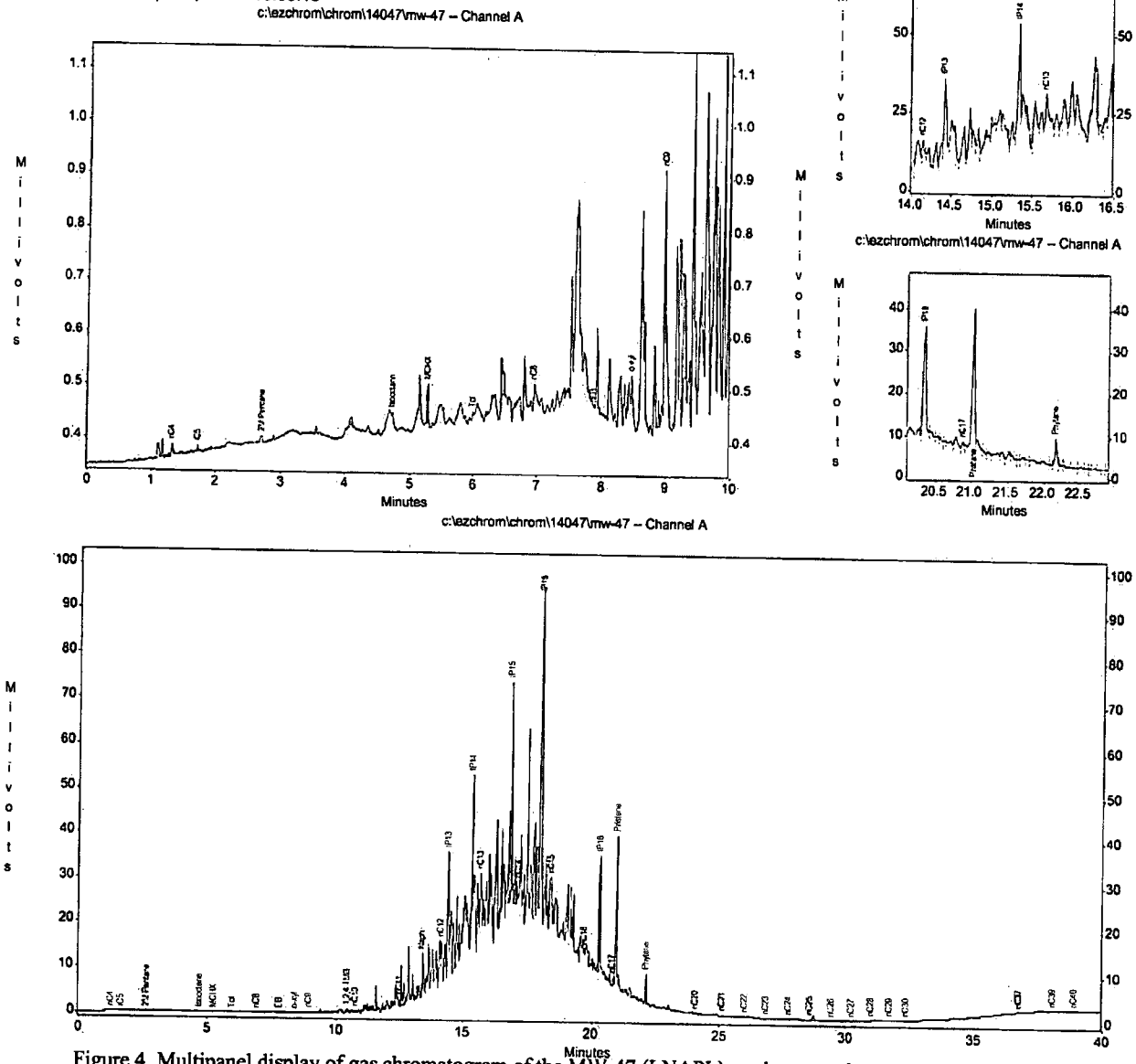


Figure 3, gas chromatogram of laboratory standard (gasoline/diesel/wax mixture).

Torkelson Geochemistry, Inc.

Ortho Clinical Diagnostics, 1001 Route 202, Raritan, NJ
Sample ID : MW-47
Acquired : Apr 16, 2014 10:05:18



Channel A Results

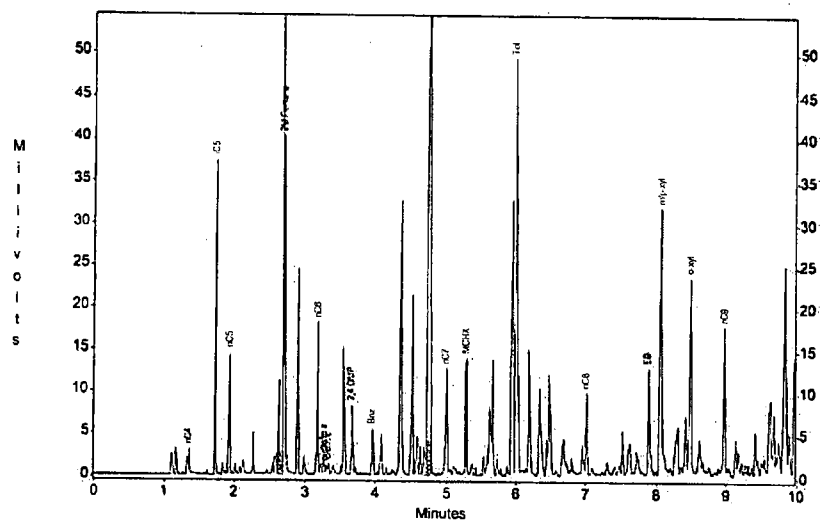
Peak	Area	Height
nC4	25	24
nC5	13	15
nC5	0	0
MTBE	0	0
2M Pentane	12	12
nC6	0	0
olefin a	0	0
olefin b	0	0
olefin c	0	0
2,4 DMP	0	0
Bnz	0	0
Isooctane	50	31
nC7	0	0
MCHX	100	76
Tol	18	15
nC8	86	53
EB	51	38
m/p-xyl	0	0
o-xyl	154	107
nC9	757	498
1,2,4 TMB	2642	1154
nC10	212	124
nC11	3684	2065
Naph	22035	9301
nC12	21732	9933
IP13	64970	28571
IP14	97730	41699
nC13	55142	17982
IP15	107166	50385
nC14	10682	7329
IP16	163901	73360
nC15	59100	10423
nC16	9937	3696
IP18	61320	26327
nC17	3832	1966
Pristane	83005	34337
nC18	0	0
Phytane	14452	6763
nC19	0	0
nC20	980	301
nC21	363	98
nC22	148	59
nC23	207	41
nC24	104	59
nC25	114	54
nC26	149	52
nC27	113	38
nC28	123	36
nC29	171	28
nC30	32	13
nC31	0	0
nC32	0	0
nC33	0	0
nC34	0	0
nC35	0	0
nC36	0	0
nC37	554	31
nC38	0	0
nC39	18	7
nC40	24	17

Figure 4, Multipanel display of gas chromatogram of the MW-47 (LNAPL) product sample.

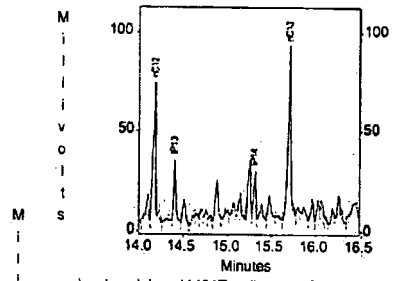
Torkelson Geochemistry, Inc.

Ortho Clinical Diagnostics, 1001 Route 202, Raritan, NJ
Sample ID : Gas/Dies/Wax std
Acquired : Apr 16, 2014 09:15:41

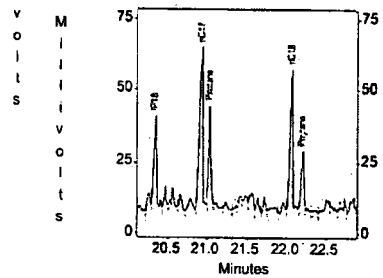
c:\ezchrom\chrom\14047\gadiwax2 – Channel A



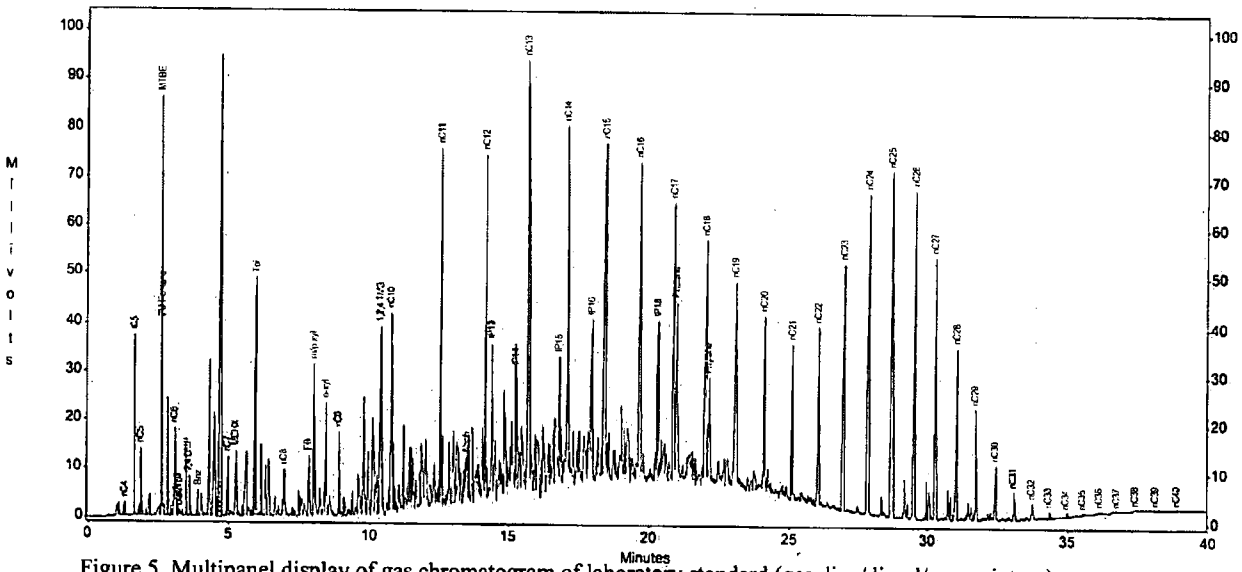
c:\ezchrom\chrom\14047\gadiwax2 – Channel A



c:\ezchrom\chrom\14047\gadiwax2 – Channel A



c:\ezchrom\chrom\14047\gadiwax2 – Channel A



Channel A Results

Peak	Area	Height
nC4	2325	2980
iC5	25583	37299
nC5	11108	14333
MTBE	74115	86600
2M Pentane	36868	40061
nC6	18235	18223
olefin a	2735	2282
olefin b	1370	1248
olefin c	1882	1422
2,4 DMP	8824	8306
Benz	7311	5566
Isooctane	140574	94593
nC7	15931	12655
MCHx	17805	13849
Tol	66629	49233
nC8	12427	9822
EB	18869	12795
m/p-xyl	62408	31685
o-xyl	35742	23584
nC9	25814	17593
1,2,4 TMB	69749	39057
nC10	67997	41731
nC11	139758	73833
Naph	33346	9640
nC12	141946	69858
IP13	54036	31016
IP14	47734	27547
nC13	208036	90644
IP15	104726	30425
nC14	261076	77965
IP16	115560	38231
nC15	194391	74652
nC16	210043	70946
IP18	125546	38572
nC17	191443	63054
Pristane	113130	42388
nC18	169001	55497
Phytane	75316	27274
nC19	173216	46945
nC20	101916	40456
nC21	77451	34873
nC22	95613	38628
nC23	135071	51631
nC24	199192	66412
nC25	222752	71043
nC26	210322	67365
nC27	103897	53802
nC28	83708	35279
nC29	43548	22727
nC30	18082	10758
nC31	10340	5616
nC32	5365	3170
nC33	2964	1627
nC34	1671	914
nC35	859	495
nC36	525	312
nC37	952	184
nC38	790	104
nC39	225	64
nC40	157	45

Figure 5, Multipanel display of gas chromatogram of laboratory standard (gasoline/diesel/wax mixture).

APPENDIX G

LNAPL Hydrocarbon Identification Report for MW-47 – META Environmental, Inc

LANGAN

META Environmental, Inc.

115 Dean Avenue
Suite 300
Franklin MA, 02038
508-541-9146
www.metaenv.com

October 2, 2014

Erik Person
Langan Engineering
2700 Kelly Road, Suite 200
Warrington, PA 18976-3653

RE: Fingerprinting and Age-Date Results: Project Ortho Clinical Diagnostics
SDG # MC33435

Dear Eric:

Enclosed please find the final report for the GC/FID fingerprinting for sample MW-47 (LNAPL).

Based on the GC/FID chromatogram (Figure 1), the LNAPL was a weathered light fuel oil with a boiling range between kerosene and No. 2 fuel oil. The total hydrocarbons concentration was 960,000 mg/kg (96%), indicating nearly pure fuel oil.

No normal alkanes were detected indicating that the fuel had been biologically weathered and likely had been in the subsurface for several years. Petroleum products with these characteristics include weathered kerosene, Jet A (jet fuel), and winter diesel.

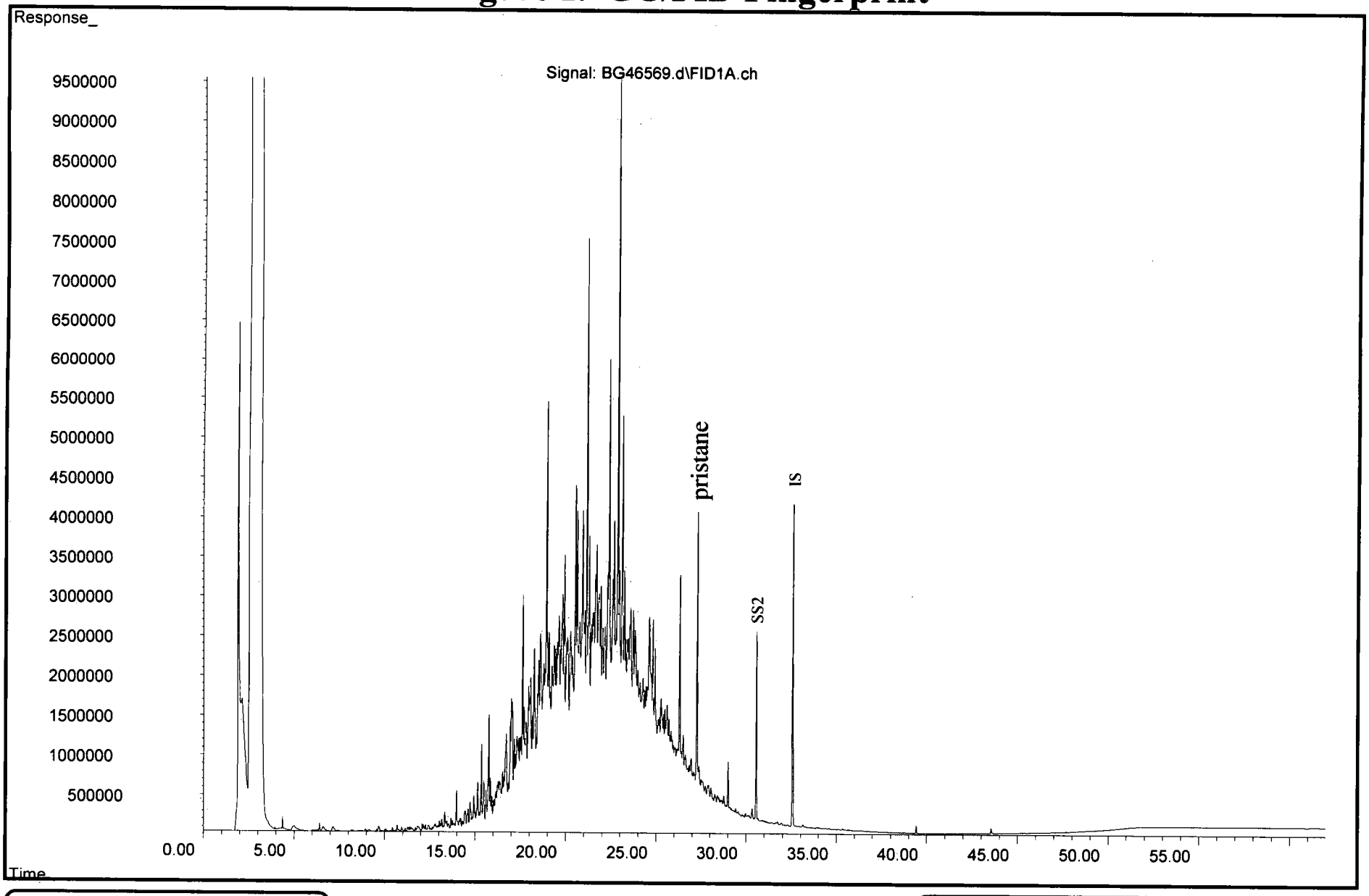
Please let me know if you have any questions or need additional services.

Sincerely,

David M. Mauro
President, Senior Scientist

Figures

Figure 1. GC/FID Fingerprint



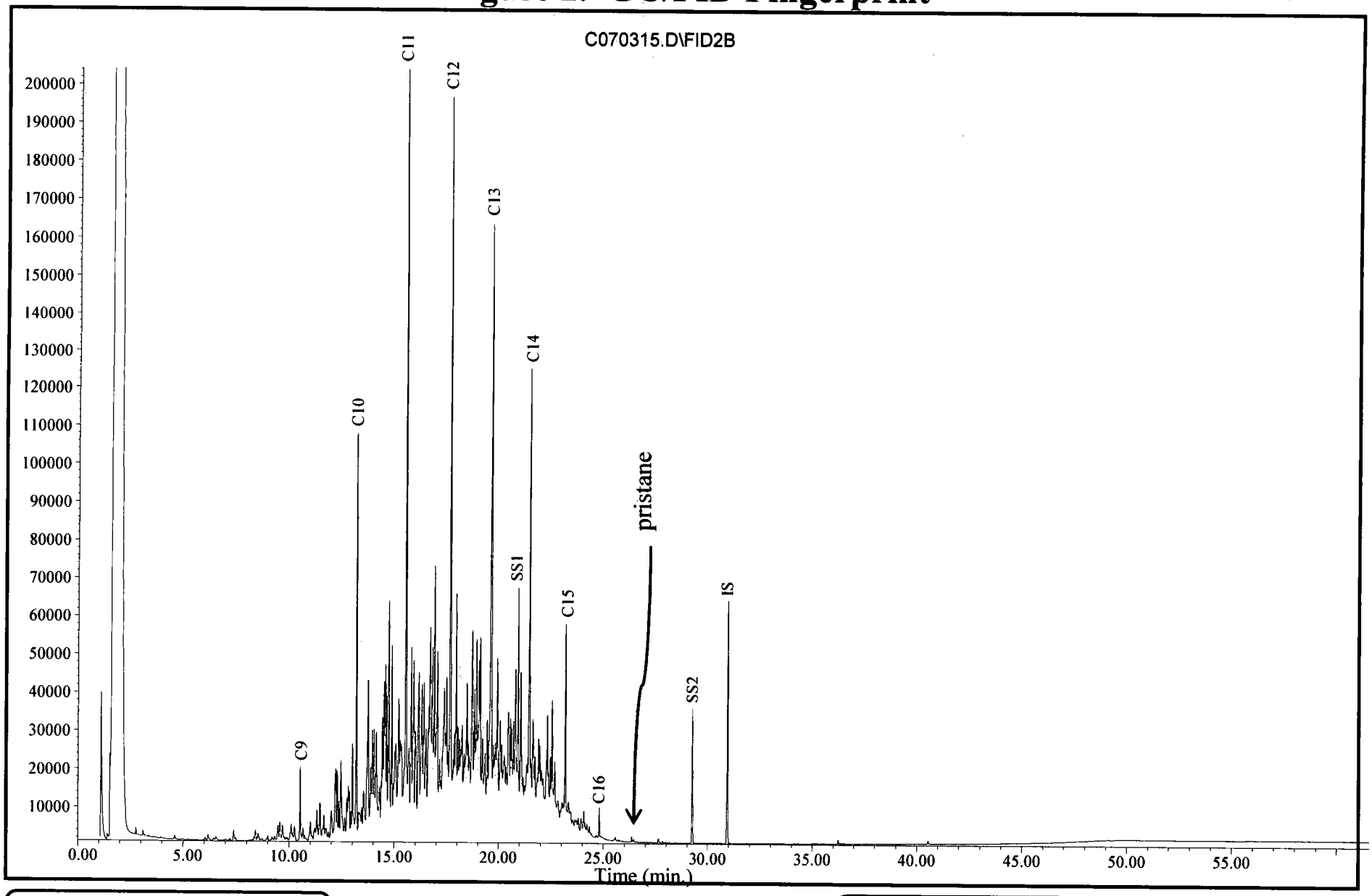
Analysis Date: 09/24/2014

IS – 5a-androstane
SS2 – o-terphenyl

Field ID: **MW-47 (LNAPL)**
Laboratory ID: MC33435-1
Method: EPA 8015M

META

Figure 2. GC/FID Fingerprint



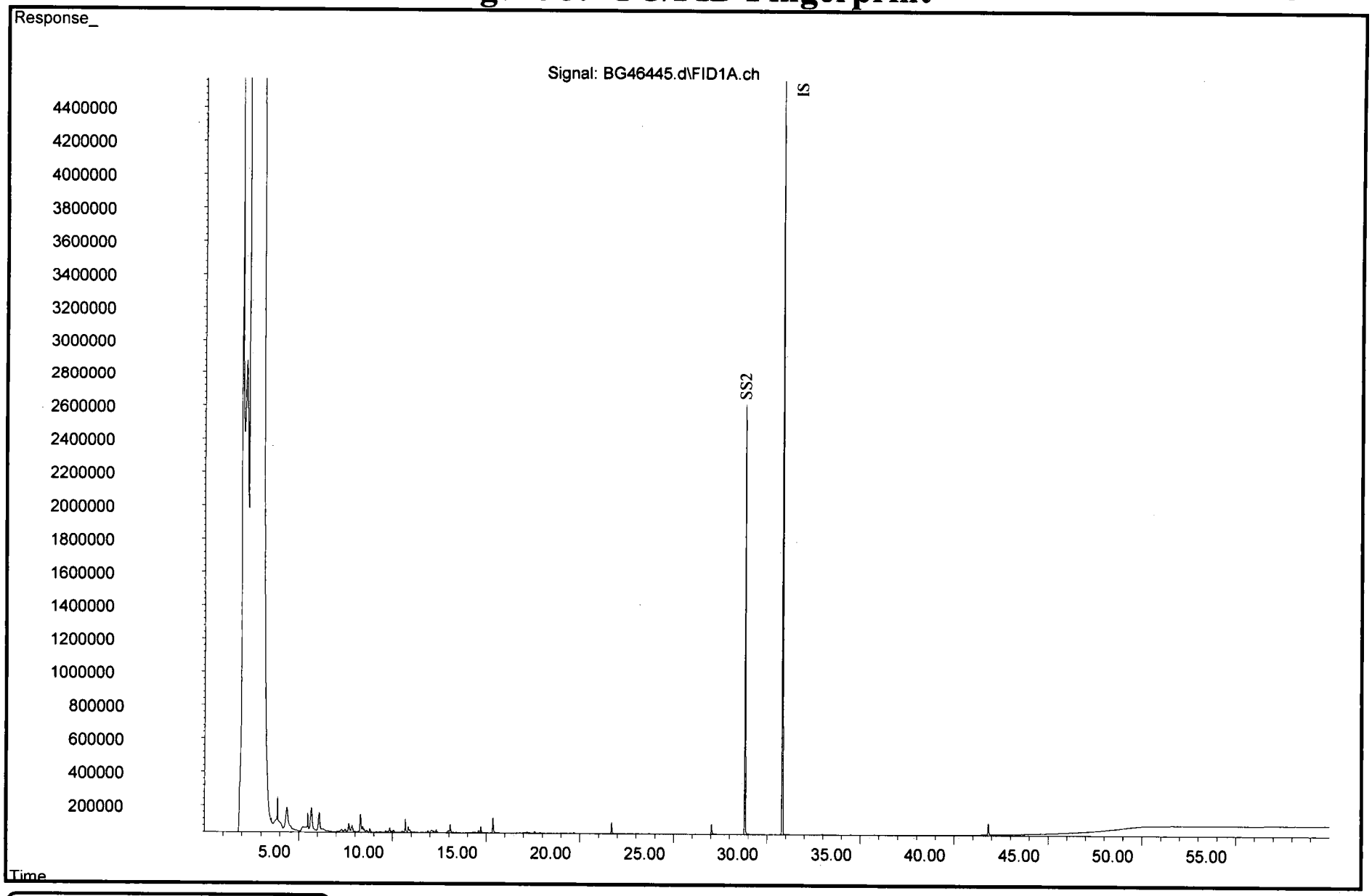
Analysis Date: 11/21/2007

IS – 5a-androstane
SS2 – o-terphenyl

Field ID: **Kerosene**
Laboratory ID: A502
Method: EPA 8015M

META

Figure 3. GC/FID Fingerprint



Analysis Date: 09/24/2014

IS – 5a-androstane
SS2 – o-terphenyl

Field ID: **Method Blank**
Laboratory ID: OP39822-MB
Method: EPA 8015M

META

New England
ACCUTEST
LABORATORIES

10/02/14

Technical Report for

META Environmental, Inc.

Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Accutest Job Number: MC33435

Sampling Date: 09/04/14

Report to:

META Environmental, Inc.
115 Dean Avenue Suite 300
Franklin MA 02038, MA 02038
dmauro@metaenv.com

ATTN: Dave Mauro

Total number of pages in report: 27

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

Reza Tand
Lab Director

Client Service contact: Matthew Morrell 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Table of Contents

-1-

Sections: 1 2 3 4 5 6 7

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **5**
Section 4: Sample Results **6**
4.1: MC33435-1: MW-47 (LNAPL) 7
Section 5: Misc. Forms **9**
5.1: Chain of Custody 10
Section 6: GC Semi-volatiles - QC Data Summaries **12**
6.1: Method Blank Summary 13
6.2: Blank Spike Summary 15
6.3: Duplicate Summary 17
6.4: Surrogate Recovery Summaries 19
Section 7: GC Semi-volatiles - Raw Data **20**
7.1: Samples 21
7.2: Method Blanks 25

Sample Summary

META Environmental, Inc.

Job No: MC33435

Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC33435-1	09/04/14	07:55	BK	09/10/14	SO	Oil	MW-47 (LNAPL)

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

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	META Environmental, Inc.	**Job No**	MC33435
Site:	Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA	**Report Date**	10/2/2014 12:23:51 PM

1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 09/04/2014 and were received at Accutest on 09/10/2014 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of MC33435. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method ASTM D3328-06

Matrix: SO **Batch ID:** OP39822

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC33435-1DUP were used as the QC samples indicated.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC33435).

Summary of Hits

Job Number: MC33435
Account: META Environmental, Inc.
Project: Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA
Collected: 09/04/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC33435-1	**MW-47 (LNAPL)**					
2,6,10-trimethyldodecane (1380)		11800	150		mg/kg	ASTM D3328-06
2,6,10-trimethyltridecane (1470)		15100	150		mg/kg	ASTM D3328-06
2,6,10-trimethylpentadecane (1650)		4790	150		mg/kg	ASTM D3328-06
Pristane		7080	150		mg/kg	ASTM D3328-06
Phytane		1280	150		mg/kg	ASTM D3328-06
TPH (C8-C40)		960000	15000		mg/kg	ASTM D3328-06

New England ACCUTEST LABORATORIES

4

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-47 (LNAPL)		
Lab Sample ID:	MC33435-1	**Date Sampled:**	09/04/14
Matrix:	SO - Oil	**Date Received:**	09/10/14
Method:	ASTM D3328-06 SW846 3580A	**Percent Solids:**	n/a
Project:	Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG46569.D	1	09/24/14	JO	09/16/14	OP39822	GBG1770
Run #2							

	Initial Weight	Final Volume
Run #1	0.0136 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	C-8	ND	150	mg/kg	
	C-9	ND	150	mg/kg	
	C-10	ND	150	mg/kg	
	C-11	ND	150	mg/kg	
	C-12	ND	150	mg/kg	
	C-13	ND	150	mg/kg	
3891-98-3	2,6,10-trimethyldodecane (138	11800	150	mg/kg	
	C-14	ND	150	mg/kg	
3891-99-4	2,6,10-trimethyltridecane (147	15100	150	mg/kg	
	C-15	ND	150	mg/kg	
	C-16	ND	150	mg/kg	
3892-00-0	2,6,10-trimethylpentadecane (1	4790	150	mg/kg	
	C-17	ND	150	mg/kg	
1921-70-6	Pristane	7080	150	mg/kg	
	C-18	ND	150	mg/kg	
638-36-8	Phytane	1280	150	mg/kg	
	C-19	ND	150	mg/kg	
	C-20	ND	150	mg/kg	
	C-21	ND	150	mg/kg	
	C-22	ND	150	mg/kg	
	C-23	ND	150	mg/kg	
	C-24	ND	150	mg/kg	
	C-25	ND	150	mg/kg	
	C-26	ND	150	mg/kg	
	C-27	ND	150	mg/kg	
	C-28	ND	150	mg/kg	
	C-29	ND	150	mg/kg	
	C-30	ND	150	mg/kg	
	C-31	ND	150	mg/kg	
	C-32	ND	150	mg/kg	
	C-33	ND	150	mg/kg	
	C-34	ND	150	mg/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-47 (LNAPL)		
Lab Sample ID:	MC33435-1	**Date Sampled:**	09/04/14
Matrix:	SO - Oil	**Date Received:**	09/10/14
Method:	ASTM D3328-06 SW846 3580A	**Percent Solids:**	n/a
Project:	Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA		

4.1

CAS No.	Compound	Result	RL	Units	Q
	C-35	ND	150	mg/kg	
	C-36	ND	150	mg/kg	
	C-37	ND	150	mg/kg	
	C-38	ND	150	mg/kg	
	C-39	ND	150	mg/kg	
	C-40	ND	150	mg/kg	
	TPH (C8-C40)	960000	15000	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	107%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

MC33435

CHAIN OF CUSTODY RECORD

PROJECT Ortho Clinical Diagnostics
CONTACT Shelly Bettler
COMPANY Langan Engineering + Environmental
ADDRESS 2700 Kelly Rd. Suite 200

EMAIL SBETTLER@LANGAN.COM
PHONE 215-491-6581 **FAX** 215-491-6501
SAMPLED BY
Print Name: Ben Kutz Sign:

Turn Around Time
Standard [X]
If Authorized *
1 Week [ ]
Other [ ]

META Environmental, Inc.
115 Dean Avenue Suite 300 Franklin MA 02038
Tel (508) 541-9146 - Fax (508) 541-1035 - www.metaenv.com

Parameters: GC/FID Fingerprint TPH/Alkane

Samp #	Date	Time	Field Sample ID	Container Size	G/P	Grab	Composite	# of Containers	Matrix	Preserv.	GC/FID Fingerprint TPH/Alkane	Comments
-1	9/4/14	7:55	MW-47 (LNAPL)	~~250ml~~	G	X		3	GWD	None		
												200

Relinquished by	Date & Time	Relinquished by	Date & Time	Relinquished by	Date & Time
	9/9/14 1420				
Received by: FedEx	9-10-14 9:20	Received by		Received by	

Shipping Info.
Remarks
Temp °C 1.8°
* Surcharges may apply

5.1 5

MC33435: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC33435 **Client:** LANGAN ENG **Immediate Client Services Action Required:** No

Date / Time Received: 9/10/2014 **Delivery Method:** **Client Service Action Required at Login:** No

Project: ORTHO **No. Coolers:** 1 **Airbill #'s:**

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

Cooler Temperature	Y	or N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	Infared gun	
3. Cooler media:	Ice (bag)	

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

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

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

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

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

5.1

MC33435: Chain of Custody
Page 2 of 2

New England ACCUTEST LABORATORIES

GC Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC33435
Account: METAMAW META Environmental, Inc.
Project: Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39822-MB	BG46445.D	1	09/16/14	RP	09/16/14	OP39822	GBG1765

The QC reported here applies to the following samples: **Method:** ASTM D3328-06

MC33435-1

CAS No.	Compound	Result	RL	Units	Q
	C-8	ND	200	mg/kg	
	C-9	ND	200	mg/kg	
	C-10	ND	200	mg/kg	
	C-11	ND	200	mg/kg	
	C-12	ND	200	mg/kg	
	C-13	ND	200	mg/kg	
3891-98-3	2,6,10-trimethyldodecane (138	ND	200	mg/kg	
	C-14	ND	200	mg/kg	
3891-99-4	2,6,10-trimethyltridecane (147	ND	200	mg/kg	
	C-15	ND	200	mg/kg	
	C-16	ND	200	mg/kg	
3892-00-0	2,6,10-trimethylpentadecane (1	ND	200	mg/kg	
	C-17	ND	200	mg/kg	
1921-70-6	Pristane	ND	200	mg/kg	
	C-18	ND	200	mg/kg	
638-36-8	Phytane	ND	200	mg/kg	
	C-19	ND	200	mg/kg	
	C-20	ND	200	mg/kg	
	C-21	ND	200	mg/kg	
	C-22	ND	200	mg/kg	
	C-23	ND	200	mg/kg	
	C-24	ND	200	mg/kg	
	C-25	ND	200	mg/kg	
	C-26	ND	200	mg/kg	
	C-27	ND	200	mg/kg	
	C-28	ND	200	mg/kg	
	C-29	ND	200	mg/kg	
	C-30	ND	200	mg/kg	
	C-31	ND	200	mg/kg	
	C-32	ND	200	mg/kg	
	C-33	ND	200	mg/kg	
	C-34	ND	200	mg/kg	
	C-35	ND	200	mg/kg	
	C-36	ND	200	mg/kg	
	C-37	ND	200	mg/kg	
	C-38	ND	200	mg/kg	

Method Blank Summary

Job Number: MC33435
Account: METAMAW META Environmental, Inc.
Project: Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39822-MB	BG46445.D	1	09/16/14	RP	09/16/14	OP39822	GBG1765

The QC reported here applies to the following samples: **Method:** ASTM D3328-06

MC33435-1

CAS No.	Compound	Result	RL	Units	Q
	C-39	ND	200	mg/kg	
	C-40	ND	200	mg/kg	
	TPH (C8-C40)	ND	20000	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	105%	40-140%

6.1.1

6

Blank Spike Summary

Job Number: MC33435
Account: METAMAW META Environmental, Inc.
Project: Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39822-BS1	BG46447.D	1	09/16/14	RP	09/16/14	OP39822	GBG1765

The QC reported here applies to the following samples: **Method:** ASTM D3328-06

MC33435-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	C-8	5000	5930	119	40-140
	C-9	5000	5820	116	40-140
	C-10	5000	5610	112	40-140
	C-11	5000	5530	111	40-140
	C-12	5000	5460	109	40-140
	C-13	5000	5390	108	40-140
3891-98-3	2,6,10-trimethyldodecane (138		ND		40-140
	C-14	5000	5310	106	40-140
3891-99-4	2,6,10-trimethyltridecane (147		ND		40-140
	C-15	5000	5240	105	40-140
	C-16	5000	5190	104	40-140
3892-00-0	2,6,10-trimethylpentadecane (1		ND		40-140
	C-17	5000	5150	103	40-140
1921-70-6	Pristane	5000	5150	103	40-140
	C-18	5000	5320	106	40-140
638-36-8	Phytane	5000	5140	103	40-140
	C-19	5000	5070	101	40-140
	C-20	5000	5040	101	40-140
	C-21	5000	4980	100	40-140
	C-22	5000	4960	99	40-140
	C-23	5000	4890	98	40-140
	C-24	5000	4880	98	40-140
	C-25	5000	4850	97	40-140
	C-26	5000	4870	97	40-140
	C-27	5000	4850	97	40-140
	C-28	5000	4820	96	40-140
	C-29	5000	4800	96	40-140
	C-30	5000	4760	95	40-140
	C-31	5000	4710	94	40-140
	C-32	5000	4620	92	40-140
	C-33	5000	4510	90	40-140
	C-34	5000	4400	88	40-140
	C-35	5000	4310	86	40-140
	C-36	5000	4150	83	40-140
	C-37	5000	4030	81	40-140
	C-38	5000	3890	78	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33435
Account: METAMAW META Environmental, Inc.
Project: Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39822-BS1	BG46447.D	1	09/16/14	RP	09/16/14	OP39822	GBG1765

The QC reported here applies to the following samples: **Method:** ASTM D3328-06

MC33435-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	C-39	5000	3750	75	40-140
	C-40	5000	3530	71	40-140
	TPH (C8-C40)		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	106%	40-140%

* = Outside of Control Limits.

6.2.1

6

Duplicate Summary

Job Number: MC33435
Account: METAMAW META Environmental, Inc.
Project: Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39822-DUP4	BG46571.D	1	09/24/14	JO	09/16/14	OP39822	GBG1770
MC33435-1	BG46569.D	1	09/24/14	JO	09/16/14	OP39822	GBG1770

The QC reported here applies to the following samples: **Method:** ASTM D3328-06

MC33435-1

CAS No.	Compound	MC33435-1 mg/kg	Q	DUP mg/kg	Q	RPD	Limits
	C-8	ND		ND		nc	30
	C-9	ND		ND		nc	30
	C-10	ND		ND		nc	30
	C-11	ND		ND		nc	30
	C-12	ND		ND		nc	30
	C-13	ND		ND		nc	30
3891-98-3	2,6,10-trimethyldodecane (138	11800		12100		3	30
	C-14	ND		ND		nc	30
3891-99-4	2,6,10-trimethyltridecane (147	15100		15600		3	30
	C-15	ND		ND		nc	30
	C-16	ND		ND		nc	30
3892-00-0	2,6,10-trimethylpentadecane (1	4790		4900		2	30
	C-17	ND		ND		nc	30
1921-70-6	Pristane	7080		7190		2	30
	C-18	ND		ND		nc	30
638-36-8	Phytane	1280		1330		4	30
	C-19	ND		ND		nc	30
	C-20	ND		ND		nc	30
	C-21	ND		ND		nc	30
	C-22	ND		ND		nc	30
	C-23	ND		ND		nc	30
	C-24	ND		ND		nc	30
	C-25	ND		ND		nc	30
	C-26	ND		ND		nc	30
	C-27	ND		ND		nc	30
	C-28	ND		ND		nc	30
	C-29	ND		ND		nc	30
	C-30	ND		ND		nc	30
	C-31	ND		ND		nc	30
	C-32	ND		ND		nc	30
	C-33	ND		ND		nc	30
	C-34	ND		ND		nc	30
	C-35	ND		ND		nc	30
	C-36	ND		ND		nc	30
	C-37	ND		ND		nc	30
	C-38	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: MC33435
Account: METAMAW META Environmental, Inc.
Project: Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39822-DUP4	BG46571.D	1	09/24/14	JO	09/16/14	OP39822	GBG1770
MC33435-1	BG46569.D	1	09/24/14	JO	09/16/14	OP39822	GBG1770

The QC reported here applies to the following samples: **Method:** ASTM D3328-06

MC33435-1

CAS No.	Compound	MC33435-1 mg/kg	Q	DUP mg/kg	Q	RPD	Limits
	C-39	ND		ND		nc	30
	C-40	ND		ND		nc	30
	TPH (C8-C40)	960000		985000		3	30

CAS No.	Surrogate Recoveries	DUP	MC33435-1	Limits
84-15-1	o-Terphenyl	116%	107%	40-140%

6.3.1

6

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: MC33435
Account: METAMAW META Environmental, Inc.
Project: Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA

Method: ASTM D3328-06 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC33435-1	BG46569.D	107
OP39822-BS1	BG46447.D	106
OP39822-DUP4	BG46571.D	116
OP39822-MB	BG46445.D	105

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	40-140%

(a) Recovery from GC signal #1

6.4.1

6

New England ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Sample Results: BG46569.D

Manual Integrations APPROVED (compounds with "m" flag)
James Roush
10/02/14 11:42

Quantitation Report (QT Reviewed)

Data File: G:\1\data\BG140923\BG46569.d
Sample : MC33435-1, MW-47 (LNAPL)
Misc : OP39822,GBG1770,0.0136,,,2,1
ALS Vial : 42 Sample Multiplier: 1
Acq On : 24 Sep 2014 12:30 pm Operator: JACLYNO

Quant Time: Oct 02 10:52:37 2014
Quant Method : G:\1\methods\BG140723ALK-Front.m
Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5a-Androstane	32.548	114911609	50.000 µg/mLm
System Monitoring Compounds				
2) S	o-Terphenyl	30.554	62130545	26.777 µg/mLm
Spiked Amount	25.000		Recovery =	107.11%
Target Compounds				
9) J2	2,6,10-trimethyldodec...	21.129	155767350	80.578 µg/mLm
11) J2	2,6,10-trimethyltride...	22.838	205137188	102.648 µg/mLm
14) J2	2,6,10-trimethylpenta...	26.281	67926348	32.550 µg/mLm
16)	Pristane	27.275	102610223	48.168 µg/mLm
18)	Phytane	29.004	16413694	8.673 µg/mLm
41) H	TPH (C8-C40)	30.449	14528664093	6529.394 µg/mLm

SemiQuant Compounds - Not Calibrated on this Instrument

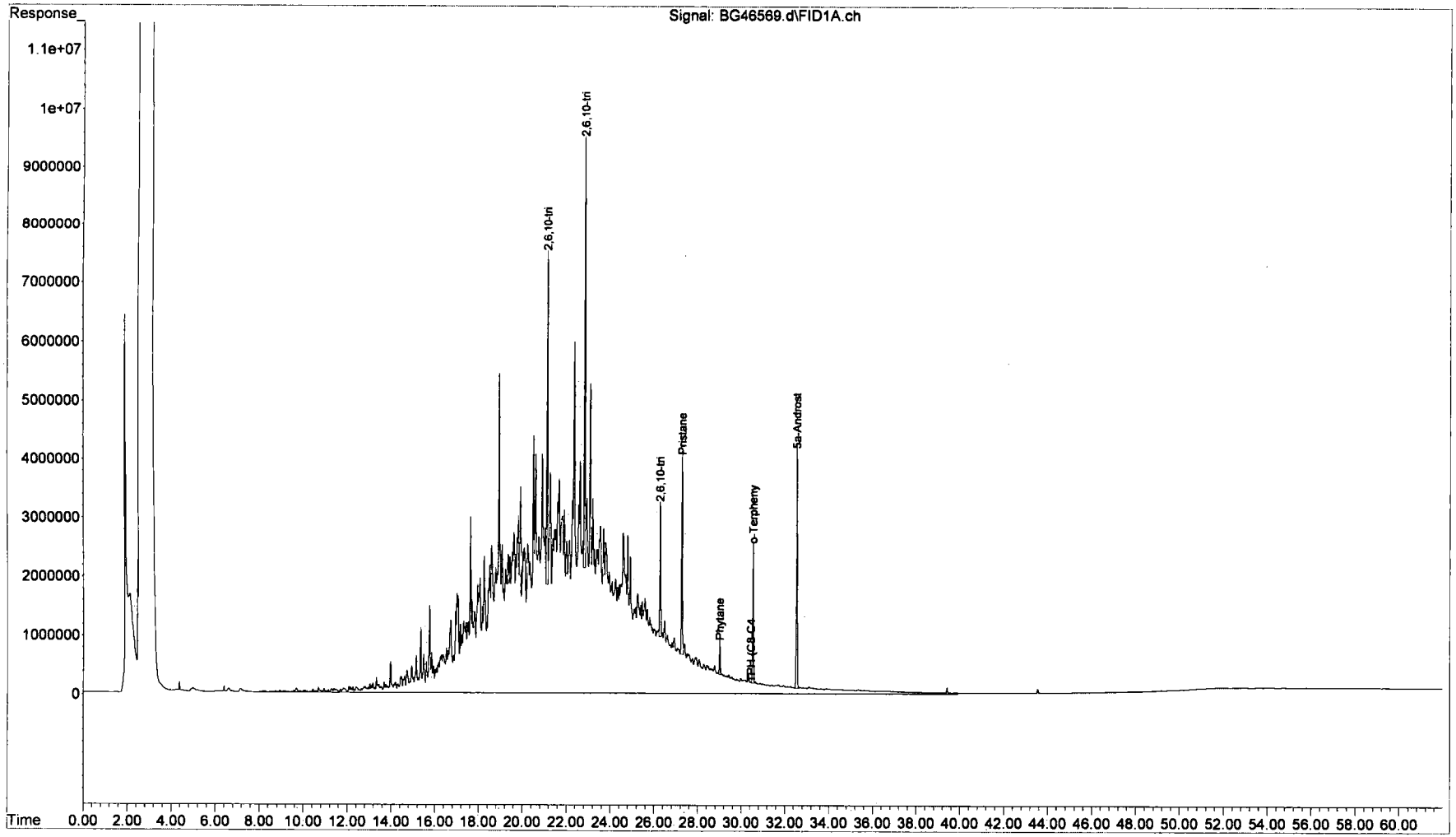
(f)=RT Delta > 1/2 Window (m)=manual int.

7.1.1 7

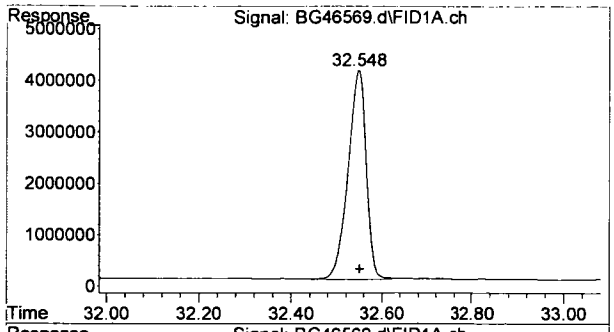
Quantitation Report (QT Reviewed)

Data File: G:\1\data\BG140923\BG46569.d
Sample : MC33435-1, MW-47 (LNAPL)
Misc : OP39822,GBG1770,0.0136,,,2,1
ALS Vial : 42 Sample Multiplier: 1
Acq On : 24 Sep 2014 12:30 pm Operator: JACLYNO

Quant Time: Oct 02 10:52:37 2014
Quant Method : G:\1\methods\BG140723ALK-Front.m
Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

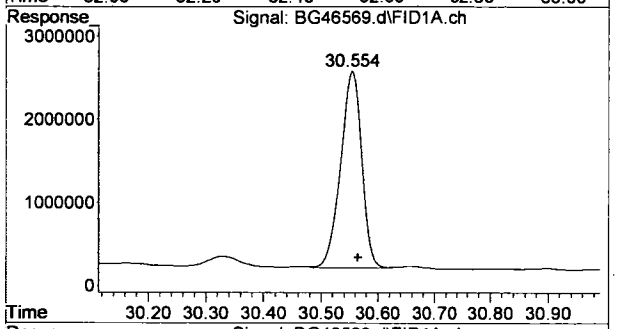


Sample Results: BG46569.D



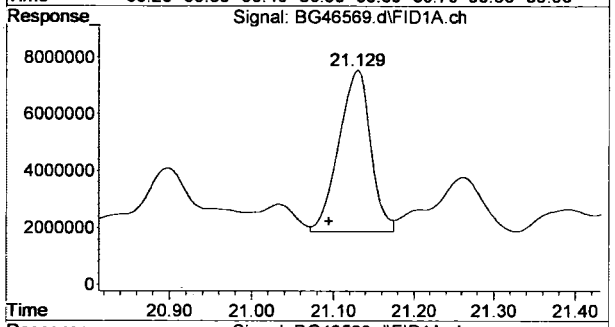
#1 5a-Androstane

R.T.: 32.548 min
Delta R.T.: -0.003 min
Response: 114911609
Conc: 50.00 µg/mL m



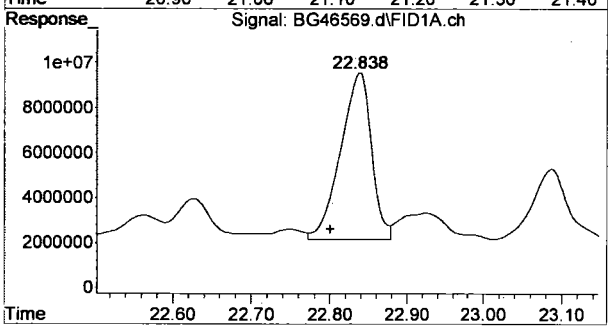
#2 o-Terphenyl

R.T.: 30.554 min
Delta R.T.: -0.010 min
Response: 62130545
Conc: 26.78 µg/mL m



#9 2,6,10-trimethyldodecane (1380)

R.T.: 21.129 min
Delta R.T.: 0.035 min
Response: 155767350
Conc: 80.58 µg/mL m



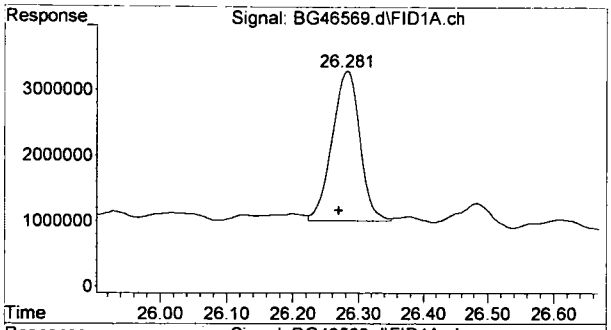
#11 2,6,10-trimethyltridecane (1470)

R.T.: 22.838 min
Delta R.T.: 0.038 min
Response: 205137188
Conc: 102.65 µg/mL m

7.1.1

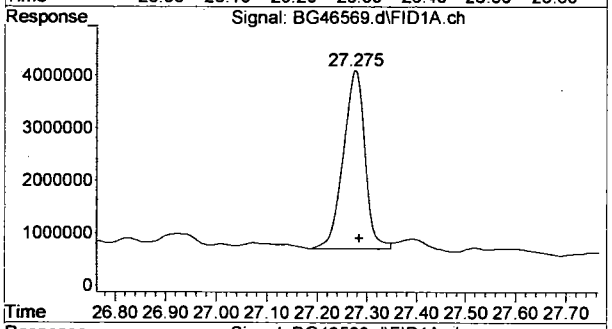
7

Sample Results: BG46569.D



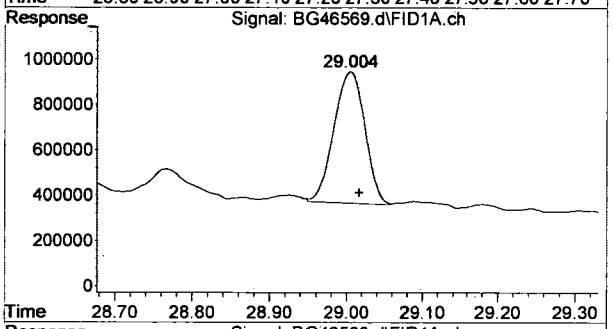
#14 2,6,10-trimethylpentadecane (1650)

R.T.: 26.281 min
Delta R.T.: 0.012 min
Response: 67926348
Conc: 32.55 µg/mL m



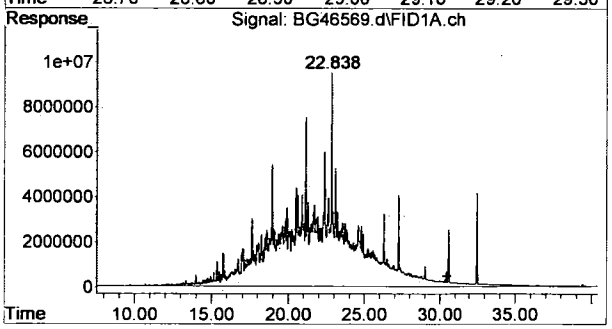
#16 Pristane

R.T.: 27.275 min
Delta R.T.: -0.008 min
Response: 102610223
Conc: 48.17 µg/mL m



#18 Phytane

R.T.: 29.004 min
Delta R.T.: -0.012 min
Response: 16413694
Conc: 8.67 µg/mL m



#41 TPH (C8-C40)

R.T.: 30.449 min
Delta R.T.: 0.000 min
Response: 14528664093
Conc: 6529.39 µg/mL m

7.1.1

Quantitation Report (QT Reviewed)

Data File: G:\1\data\BG140916\BG46445.d
Sample : OP39822-MB, Method Blank
Misc : OP39822,GBG1765,0.01,,,2,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 16 Sep 2014 5:40 pm Operator: RubenP

Quant Time: Sep 22 13:28:54 2014
Quant Method : G:\1\methods\BG140723ALK-Front.m
Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Compound	R.T.	Response	Conc Units
Internal Standards			
1) I 5a-Androstane	30.832	118734867	50.000 µg/mL
System Monitoring Compounds			
2) S o-Terphenyl	28.837	63185178	26.355 µg/mL
Spiked Amount 25.000		Recovery =	105.42%
Target Compounds			
41) H TPH (C8-C40)	28.874	58828010	25.587 µg/mLm

SemiQuant Compounds - Not Calibrated on this Instrument

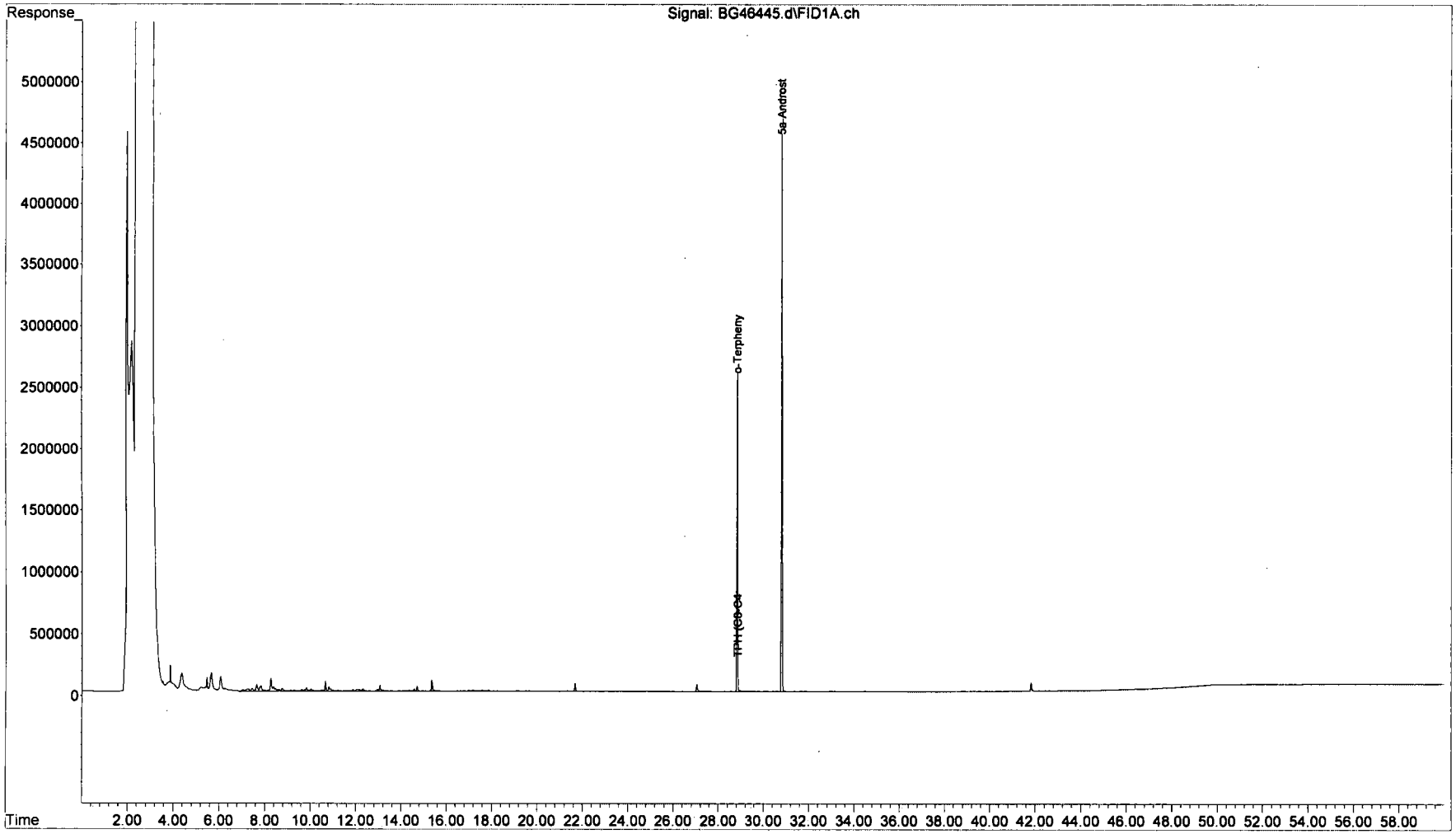
(f)=RT Delta > 1/2 Window (m)=manual int.

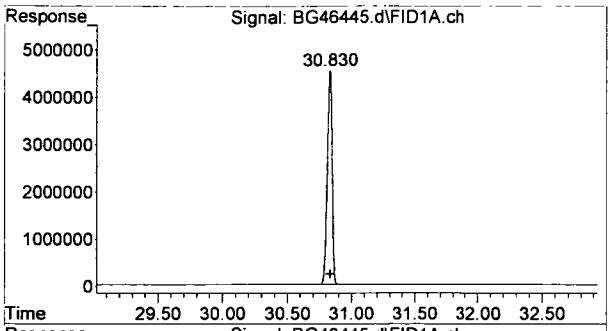
7.2.1

Quantitation Report (QT Reviewed)

Data File: G:\1\data\BG140916\BG46445.d
Sample : OP39822-MB, Method Blank
Misc : OP39822,GBG1765,0.01,,,2,1
ALS Vial : 10 Sample Multiplier: 1
Acq On : 16 Sep 2014 5:40 pm Operator: RubenP

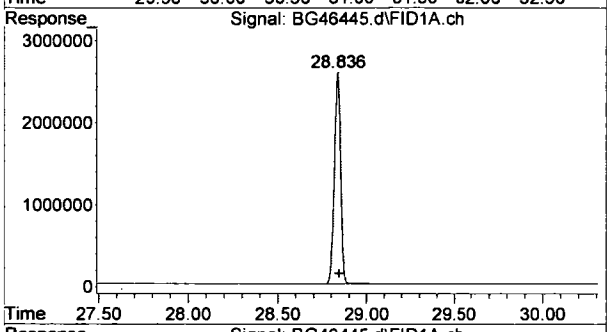
Quant Time: Sep 22 13:28:54 2014
Quant Method : G:\1\methods\BG140723ALK-Front.m
Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids





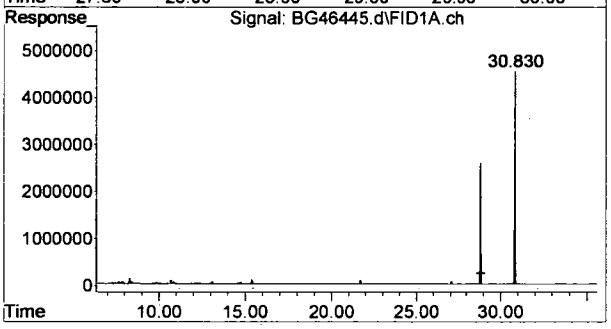
#1 5a-Androstane

R.T.: 30.832 min
Delta R.T.: 0.000 min
Response: 118734867
Conc: 50.00 µg/mL



#2 o-Terphenyl

R.T.: 28.837 min
Delta R.T.: -0.006 min
Response: 63185178
Conc: 26.35 µg/mL



#41 TPH (C8-C40)

R.T.: 28.874 min
Delta R.T.: 0.000 min
Response: 58828010
Conc: 25.59 µg/mL m

7.2.1

7

Appendix H
Soil Boring Logs

LANGAN

Log of Boring **J-SB1** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: 1001 Route 202	Elevation and Datum: Not Surveyed
Drilling Company: Foresight Enviroprobe, Inc.	Date Started: 5/15/14 — Date Finished: 5/15/14
Drilling Equipment: Track Mounted Geoprobe Rig	Completion Depth: 10 ft — Rock Depth: Not Encountered
Size and Type of Bit: 2" Diameter Macrocore	Number of Samples: Disturbed 0, Undisturbed 0, Core 2
Casing Diameter (in): NA — Casing Depth (ft): NA	Water Level (ft.): First NA, Completion NA, 24 HR. NA
Casing Hammer: NA — Weight (lbs): NA — Drop (in): NA	Drilling Foreman: Frank Goss, FEI
Sampler: Macrocore with Acetate Liner	Inspecting Engineer: Rocco Mercuri and Ben Kutz, Langan Engineering
Sampler Hammer: NA — Weight (lbs): NA — Drop (in): NA	

Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
	Dark red brown f SANDY SILT, organic (Dry)	0	0						
	Dark red brown CLAYEY SILT, trace f-c angular weathered siltstone fragments (Moist)	0	1						
	Dark red brown SILTY CLAY, trace f-c angular weathered siltstone fragments (Moist)	0	2	1	MACROCORE	53			
	Dark red brown SILTY CLAY, trace f-m angular weathered siltstone fragments and f-m sand (Moist)	0	3					J-SB1(3.5-4)	Collected J-SB1 for TCL VOCs, EPH Cat. 1, and Naphthalene and 2-Methylnaphthalene
	Red brown SILTY CLAY, trace f-c angular weathered siltstone fragments (Moist)	0	4						
	Brown f-m SAND, trace c sand and c subrounded gravel and silt (Moist to Wet)	0	5						
	Red brown with slight purple CLAY, trace silt and f-c angular weathered siltstone fragments (Moist)	0	6	2	MACROCORE	52			
		0	7						
		0	8						
		0	9						
	End of Boring at 10 feet.	0	10						
			11						
			12						
			13						
			14						
			15						
			16						
			17						
			18						
			19						
			20						

\\LANGAN.COM\DATA\OT\DATA\43568401\BORINGLOGS\BUILDING E AND J BORINGS.GPJ ... 3/27/2015 3:46:31 PM ... Report: Log - LANGAN ...Template TEMPLATE.GDT

LANGAN

Log of Boring **J-SB2** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: 1001 Route 202	Elevation and Datum: Not Surveyed
Drilling Company: Foresight Enviroprobe, Inc.	Date Started: 5/15/14 / Date Finished: 5/15/14
Drilling Equipment: Track Mounted Geoprobe Rig	Completion Depth: 13 ft / Rock Depth: Not Encountered
Size and Type of Bit: 2" Diameter Macrocore	Number of Samples: Disturbed 0, Undisturbed 0, Core 3
Casing Diameter (in): NA / Casing Depth (ft): NA	Water Level (ft.): First NA, Completion NA, 24 HR. NA
Casing Hammer: NA / Weight (lbs): NA / Drop (in): NA	Drilling Foreman: Frank Goss, FEI
Sampler: Macrocore with Acetate Liner	Inspecting Engineer: Rocco Mercuri and Ben Kutz, Langan Engineering
Sampler Hammer: NA / Weight (lbs): NA / Drop (in): NA	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		FILL: Dark gray gravel (Dry)	0	0						
		FILL: Red brown f-c angular weathered siltstone fragments, some silty clay (Dry)	0	1						
			0	2	1	MACROCORE	49			
			0	3						
			0	4					J-SB2	Collected sample J-SB2(3.5-4) for TCL VOCs, Naphthalene and 2-Methylnaphthalene, and EPH Cat. 1
			0	5						
			0	6						
		FILL: Gray f-c concrete fragments (Moist)	0	7	2	MACROCORE	48			
		FILL: Yellow brown m-c sand (Moist)	0	8						
			0	9						
		Brown SILTY CLAY, trace f-m angular weathered siltstone fragments (Moist)	0	10						
			0	11	3	MACROCORE	36			
		Red brown SILTY CLAY, some m-c angular weathered siltstone fragments (Moist)	0	12						
		Refusal at 13 feet.	0	13						
				14						
				15						
				16						
				17						
				18						
				19						
				20						

\\LANGAN.COM\DATA\DT\DATA4\3568401\BORINGLOGS\BUILDING E AND J BORINGS.GPJ ... 3/27/2015 3:46:32 PM ... Report: Log - LANGAN ...Template TEMPLATE.GDT

LANGAN

Log of Boring **J-SB3** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: 1001 Route 202	Elevation and Datum: Not Surveyed
Drilling Company: Foresight Enviroprobe, Inc.	Date Started: 5/15/14 / Date Finished: 5/15/14
Drilling Equipment: Track Mounted Geoprobe Rig	Completion Depth: 14 ft / Rock Depth: Not Encountered
Size and Type of Bit: 2" Diameter Macrocore	Number of Samples: Disturbed 0, Undisturbed 0, Core 3
Casing Diameter (in): NA / Casing Depth (ft): NA	Water Level (ft.): First NA, Completion NA, 24 HR. NA
Casing Hammer: NA / Weight (lbs): NA / Drop (in): NA	Drilling Foreman: Frank Goss, FEI
Sampler: Macrocore with Acetate Liner	Inspecting Engineer: Rocco Mercuri and Ben Kutz, Langan Engineering
Sampler Hammer: NA / Weight (lbs): NA / Drop (in): NA	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		FILL: Red brown clayey silt, some f-c angular weathered siltstone fragments (Dry)	0	0						
			0	1						
			0	2						
		FILL: Red brown silty clay, trace f-c angular weathered siltstone fragments (Moist)	0		1	MACROCORE	30			
			0	3						
			0						J-SB3(3.5-4)	Collected sample J-SB(3.5-4) and D051514 for TCL VOCs, EPH Cat. 1, and Naphthalene and 2-Methylnaphthalene
			0	4						
			0	5						
		FILL: Red brown clayey silt, some f-c angular weathered siltstone fragments (Moist)	0							
			0	6						
			0	7						
		FILL: Tan and yellow f-c sand, trace black subangular gravel (Dry)	0		2	MACROCORE	33			
			0	8						
			0	9						
		Red brown and slightly gray CLAY (Moist)	0							
			0	10						
			5.5							
			9	11						
			13.8							
			21.2	12	3	MACROCORE	36			
			4.7							
		Red brown CLAYEY SILT, trace f-m angular gravel (Moist)	18							
			99.1	13					J-SB3(13-13.5)	Collected sample J-SB(13-13.5) for TCL VOCs, EPH Cat. 1, and Naphthalene and 2-Methylnaphthalene Hydrocarbon-like odor. Collected sample J-SB(13.5-14) for TCE
			12.6						J-SB3(13.5-14)	
		Refusal at 14 feet.		14						
				15						
				16						
				17						
				18						
				19						
				20						

\\LANGAN.COM\DATA\DT\DATA\43568401\BORINGLOGS\BUILDING E AND J BORINGS.GPJ ... 3/27/2015 3:46:34 PM ... Report: Log - LANGAN ...Template TEMPLATE.GDT

LANGAN

Log of Boring **J-SB4** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: 1001 Route 202	Elevation and Datum: Not Surveyed
Drilling Company: Foresight Enviroprobe, Inc.	Date Started: 5/15/14 — Date Finished: 5/15/14
Drilling Equipment: Track Mounted Geoprobe Rig	Completion Depth: 10 ft — Rock Depth: Not Encountered
Size and Type of Bit: 2" Diameter Macrocore	Number of Samples: Disturbed 0 — Undisturbed 0 — Core 2
Casing Diameter (in): NA — Casing Depth (ft): NA	Water Level (ft.): First NA — Completion NA — 24 HR. NA
Casing Hammer: NA — Weight (lbs): NA — Drop (in): NA	Drilling Foreman: Frank Goss, FEI
Sampler: Macrocore with Acetate Liner	Inspecting Engineer: Rocco Mercuri and Ben Kutz, Langan Engineering
Sampler Hammer: NA — Weight (lbs): NA — Drop (in): NA	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		FILL: Brown f-m sand, trace c sand and c subrounded gravel and silt (Moist to Wet)	0	0						
		FILL: Yellow f-c sand (Dry to Moist)	0	1						
			0	2	1	MACROCORE	34			
			0	3						
		FILL: Red brown silty clay, trace f angular gravel (Dry to Moist)	0	4					J-SB4(3.5-4)	Collected J-SB4(3.5-4) for TCL VOCs, EPH Cat. 1, and Naphthalene and 2-Methylnaphthalene
		FILL: Asphalt fragments	0	5						
		Red brown CLAYEY SILT, trace f-m angular weathered siltstone (Dry)	0	6						
		Red brown CLAYEY SILT, some f-m angular weathered siltstone (Dry)	0	7	2	MACROCORE	60			
		Red brown CLAYEY SILT, trace f-m angular weathered siltstone (Dry)	0	8						
		Dark red brown CLAY, trace silt (Moist)	0	9						
		End of Boring at 10 feet.	0	10						
				11						
				12						
				13						
				14						
				15						
				16						
				17						
				18						
				19						
				20						

\\LANGAN.COM\DATA\DT\DATA4\3568401\BORINGLOGS\BUILDING E AND J BORINGS.GPJ ... 3/27/2015 3:46:35 PM ... Report: Log - LANGAN ...Template TEMPLATE.GDT

LANGAN

Log of Boring **J-SB5** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: 1001 Route 202	Elevation and Datum: Not Surveyed
Drilling Company: Foresight Enviroprobe, Inc.	Date Started: 5/15/14 / Date Finished: 5/15/14
Drilling Equipment: Track Mounted Geoprobe Rig	Completion Depth: 12 ft / Rock Depth: Not Encountered
Size and Type of Bit: 2" Diameter Macrocore	Number of Samples: Disturbed 0, Undisturbed 0, Core 3
Casing Diameter (in): NA / Casing Depth (ft): NA	Water Level (ft.): First NA, Completion NA, 24 HR. NA
Casing Hammer: NA / Weight (lbs): NA / Drop (in): NA	Drilling Foreman: Frank Goss, FEI
Sampler: Macrocore with Acetate Liner	Inspecting Engineer: Rocco Mercuri and Ben Kutz, Langan Engineering
Sampler Hammer: NA / Weight (lbs): NA / Drop (in): NA	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		No Recovery		0–5	1	MACROCORE	0			
		FILL: Yellow brown m-c sand, some f-c subrounded pea gravel (Moist)	0	5–10	2	MACROCORE	12			
		Red brown SILTY CLAY, trace f-c angular weathered siltstone fragments (Moist)	0	10–12	3	MACROCORE	24		J-SB5(11.5-12)	Collected J-SB5(11.5-12) for TCL VOCs
		End of Boring at 12 feet.		12						

Depth Scale: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

\\LANGAN.COM\DATA\DT\DATA4\3568401\BORINGLOGS\BUILDING E AND J BORINGS.GPJ ... 3/27/2015 3:46:36 PM ... Report: Log - LANGAN ... Template TEMPLATE.GDT

LANGAN

Log of Boring **J-SB6** Sheet 1 of 1

Project: Ortho Clinical Diagnostics	Project No.: 3568401
Location: 1001 Route 202	Elevation and Datum: Not Surveyed
Drilling Company: Foresight Enviroprobe, Inc.	Date Started: 5/15/14 / Date Finished: 5/15/14
Drilling Equipment: Track Mounted Geoprobe Rig	Completion Depth: 14 ft / Rock Depth: Not Encountered
Size and Type of Bit: 2" Diameter Macrocore	Number of Samples: Disturbed 0, Undisturbed 0, Core 3
Casing Diameter (in): NA / Casing Depth (ft): NA	Water Level (ft.): First NA, Completion NA, 24 HR. NA
Casing Hammer: NA / Weight (lbs): NA / Drop (in): NA	Drilling Foreman: Frank Goss, FEI
Sampler: Macrocore with Acetate Liner	Inspecting Engineer: Rocco Mercuri and Ben Kutz, Langan Engineering
Sampler Hammer: NA / Weight (lbs): NA / Drop (in): NA	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Env ID	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		FILL: Red brown silty f-m sand, some f-c subangular gravel, organic (Dry)	0	0						
		FILL: Red brown clayey silt, some f-c angular weathered siltstone fragments (Dry)	0	1						
			0	2	1	MACROCORE	45			
			0	3						
			0						J-SB6(3.5-4)	Collected sample J-SB6(3.5-4) for TCL VOCs, EPH Cat. 1, Naphthalene and 2-Methylnaphthalene
			0	4						
			0							
			0	5						
		FILL: Red brown silty clay, trace f-c angular gravel (Moist)	0							
			0	6						
			0							
		FILL: f-c angular quartz fragments (Dry)	0	7	2	MACROCORE	32			
		Dense red-brown CLAYEY SILT, trace f-c angular weathered siltstone fragments (Moist)	0						J-SB6(7.5-8)	
			0	8						
			0							
			0	9						
			0							
			0	10						
			0							
			2.8	11						
			1.7							
			4.6	12	3	MACROCORE	48			
			20.5							
			100.4	13					J-SB6(12.5-13)	Collected sample J-SB6(12.5-13) for TCL VOCs, EPH Cat. 1, Naphthalene and 2-Methylnaphthalene Hydrocarbon-like odor.
			15.5							
			85.2						J-SB6(13.5-14)	Collected sample J-SB6(13.5-14) for TCE Hydrocarbon-like odor.
		Refusal at 14 feet.		14						
				15						
				16						
				17						
				18						
				19						
				20						

\\LANGAN.COM\DATA\UDT\DATA4\3568401\BORINGLOGS\BUILDING E AND J BORINGS.GPJ ... 3/27/2015 3:46:38 PM ... Report: Log - LANGAN ...Template TEMPLATE.GDT

Appendix I
Chain-of-Custody Records

Please note that these chains of custody include groundwater samples that are not included in this report but that will be included in forthcoming reports and submissions

Chain of Custody
(Soil)

ACCUTEST LABORATORIES

SLL
SO
FB

CHAIN OF CUSTODY

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

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB67244

Client / Reporting Information

Company Name: Langan Engineering + Environmental
Street Address: 2700 Kelly Rd.
City: Warrington State: PA Zip: 18976
Project Contact: Rich LoCastro E-mail: rlocastro@langan.com
Phone #: 215-491-6500 Fax #: 215-491-6501
Sampler(s) Name(s): Ben Kitz, Rocco Merzi Phone #:

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 1001 Route 202
City: Raritan State: NJ
Project #: 356840.1
Client Purchase Order #:
Project Manager:

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

Requested Analysis (see TEST CODE sheet)

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOCs +15 (method 8260B)	Naphthalene + 2-Methylnaphthalene (8270D)	EPH	SPLP VOCs (Hold)	SPLP Naphthalene + 2-Methylnaphthalene (Hold)	TCL VOCs +15 (Hold)	EPH (Hold)	Naphthalene + 2-Methylnaphthalene (Hold)				LAB USE ONLY
1	J-SB1(3.5-4)		5/15/14	9:35	RM	SO	6					1			5	X	X	X	H	H							B5
2	J-SB1(7.5-8)			9:48	RM														H	H	H	H	H				1414
3	J-SB4(3.5-4)			10:10	RM											X	X	X	H	H							40105
4	J-SB4(7.5-8)			10:25	RM														H	H	H	H	H				
5	J-SB5(11.5-12)			11:12	RM														H	H	H	H	H				V367
6	J-SB5(9.5-10)			11:15	BK														H	H	H	H	H				
7	J-SB3(3.5-4)			11:40	BK											X	X	X	H	H							
8	J-SB3(7.5-8)			11:50	RM														H	H	H	H	H				
9	J-SB3(13-13.5)			12:18	RM											X	X	X	H	H							
10	J-SB3(13.5-14)			12:24	RM														H	H	H	H	H				
11	DOS1514			12:10	BK											X	X	X	H	H							
12	J-SB2(3.5-4)			13:05	RM											X	X	X	H	H							

Turnaround Time (Business days)
- Std. 10 Business Days
- (X) 5 Day RUSH
- 3 Day EMERGENCY
- 2 Day EMERGENCY
- 1 Day EMERGENCY
- other

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Rec'd at Exton Service Center
5/16 1146

Data Deliverable Information
- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- FULLT1 (Level 3+4)
- (X) NJ Reduced
- Commercial "C"

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

- NYASP Category A
- NYASP Category B
- State Forms
- (X) EDD Format EQuIS
- Other

Comments / Special Instructions

* Reporting limits must meet NJDEP's latest standards for Direct Contact or Impact to Groundwater. If additional analysis are required, please advise.
H - HOLD ANALYSIS

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	5/16/14 11:46	1	2	5/16/14 1515	2
3	5/16/14 1810	3	4		4
5		5			

Custody Seal #: Intact / Not intact
Preserved where applicable
On Ice
Cooler Temp: 1.1 C-1P

3ANIY

3-5 gram encores

5.1 5

JB67244: Chain of Custody
Page 1 of 11

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

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

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB67244

Client / Reporting Information

Company Name: Langan Engineering + Environmental
Street Address: 2700 Kelly Rd.
City / State / Zip: Warrington PA 18976
Project Contact / E-mail: Rich LoCurto rlocurto@langan.com
Phone # / Fax #: 215-491-6500 215-491-6501
Sampler(s) Name(s) / Phone #: Rocco Mercuri, Ben Kotz

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 1001 Route 202
City / State: Raritan NJ
Project #: 3568401
Client Purchase Order #:
Project Manager:

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

Requested Analysis (see TEST CODE sheet)

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOCs + 15 (method 8260B)	Naphthalene + 2-Methylnaphthalene (8270D)	EPA	SPLP VOCs (Hold)	SPLP Naphthalene + 2-methylnaphthalene (Hold)	TCL VOCs + 15 (Hold)	EPH (Hold)	Naphthalene + 2-Methylnaphthalene (Hold)	PAHs (Method 8270)	PAHs (Hold)		LAB USE ONLY
13	J-SB2 (7.5-8)		5/15/14	13:10	RM	SO	6					1			5				H	H	H	H	H				
14	J-SB2 (12.5-13)			13:18	RM		6					1			5				H	H	H	H	H				
15	J-SB6 (13.5-14)			14:10	RM		6					1			5				H	H	H	H	H				
16	J-SB6 (3.5-4)			14:15	BK		6					1			5	X	X	X	H	H							
17	J-SB6 (7.5-8)			14:25	BK		6					1			5				H	H	H	H	H				
18	J-SB6 (12.5-13)			14:35	BK		6					1			5	X	X	X	H	H							
19	EEP-30 (1.5-2)			14:50	RM		1					1												X			
20	DOS15 14-1			14:52	RM		1					1												X			
21	EEP-30 (3.5-4)			14:54	RM		1					1													H		
22	EEP-30 (5.5-6)			14:56	RM		1					1													H		
23	EEP-31 (2-2.5)			15:00	RM		1					1												X			
24	EEP-31 (4-4.5)			15:03	RM		1					1													H		

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☒ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☐ other _____

Emergency & Rush T/A data available VIA Labink

Approved By (Accutest PM): / Date:

Rec'd ~~at Exton Service Center~~ 5/16/14

Data Deliverable Information

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

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

Comments / Special Instructions

* Reporting limits must meet latest NJDEP Standards for Direct Contact of Impact to Groundwater. If additional analyses are required, please advise.
H-HOLD ANALYSIS

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Received By:
1 RM	5/16/14 11:46	1 [signature]	2 [signature] 5/16/14 1515	2
Relinquished by Sampler: 3	5/16/14 1810	Received By: 3	Relinquished By: 4	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ☐ Intact ☐ Not intact	Preserved where applicable ☐

On Ice ☒ Cooler Temp: 1.9 C-IG 1.1 C-IP

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

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

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB67244

Client / Reporting Information

Company Name: Langan Engineering + Environmental
Street Address: 2700 Kelly Rd
City: Warrington State: PA Zip: 18976
Project Contact: Rich LoCastro E-mail: rlocastro@langan.com
Phone #: 215-491-6500 Fax #: 215-491-6501
Sampler(s) Name(s): Rocco Marvin, Ben Kyle

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 1004 Route 202
City: Raritan State: NJ
Project #: 3568401
Client Purchase Order #:
Project Manager:

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

Requested Analysis (see TEST CODE sheet)

Matrix Codes

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	PAHs (Method 8270)	PAHs (Hold)	TIL VOCs + 15 (Method 8260B)	LAB USE ONLY
25	EEP-32(1.5-2)		5/15/14	15:20	RM	SO	1					1				X			
26	EEP-32(3.5-4)			15:23	RM		1					1					H		
27	EEP-32(5.5-6)			15:25	RM		1					1					H		
28	EEP-33(1.5-2)			15:47	RM		1					1					H		
29	EEP-33(3.5-4)			15:50	RM		1					1					H		
30	EEP-33(6.5-6)			15:53	RM		1					1					H		
31	EEP-34(1.5-2)			15:50	BK		1					1					H		
32	EEP-34(3.5-4)			15:55	BK		1					1					H		
33	EEP-34(5.5-6)			16:00	BK		1					1					H		
34	FB051514			16:20	BK	FB	2	2										X	

Number of preserved Bottles

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☒ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☐ other _____

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Rec'd at Exton Service Center
5/16 1146

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULL T1 (Level 3+4)
- ☒ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☒ EDD Format EBWIS
- ☐ Other _____

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

Comments / Special Instructions

* Reporting limits must meet latest NJDEP Standards for Direct Contact or Impact to Groundwater.
If additional analyses are required, please advise
H-HOLD ANALYSIS

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	[signature]	5/16/14 11:46	1 [signature]	2 [signature]	5/16/14 1515	2
3	Relinquished by Sampler:	Date Time: 5/16/14 1410	Received By: 3 [signature]	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal # ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 1.9 C-IG 1.1 C-IP

5.1 5

JB67244: Chain of Custody
Page 3 of 11

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

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

PAGE 4 OF 4

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB67244

Client / Reporting Information

Company Name: Langan Engineering + Environmental
Street Address: 2700 Kelly Rd.
City: Warrington State: PA Zip: 18976
Project Contact: Rich LoCastro E-mail: rlocastro@langan.com
Phone #: 215-491-6500 Fax #: 215-491-6501
Sampler(s) Name(s): Ben Kutz, Rocco Merani Phone #:

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 1001 Route 202
City: Raritan State: NJ
Project #: 3583401
Client Purchase Order #:
Project Manager:

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

Requested Analysis (see TEST CODE sheet)

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY

DID NOT REC.

Turnaround Time (Business days):
- Std. 10 Business Days
- 5 Day RUSH
- 3 Day EMERGENCY
- 2 Day EMERGENCY
- 1 Day EMERGENCY
- other

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Rec'd at Exton Service Center
5/16/14

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

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

Comments / Special Instructions:
* Returning 20 5-gram En-Cores
* Returning 14 25-gram En-Cores

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

	Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1		5/16/14 11:46	1	2	5/16/14 1515	2
3		5/16/14 1810	3	4		4
5			5			

Custody Seal #: intact / Not intact
Preserved where applicable
On Ice: X
Cooler Temp: MC-1G 1.1 C-1P

5.1 5

JB67244: Chain of Custody
Page 4 of 11

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB67244 **Client:** _____ **Project:** _____

Date / Time Received: 5/16/2014 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted): #1: (1.7/1.7); #2: (1.1/1.1); 0

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

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	IR Gun
3. Cooler media:	Ice (Bag)
4. No. Coolers:	2

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

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

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

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

Comments

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www.accutest.com

5.1

5

JB67244: Chain of Custody
Page 5 of 11

ACCUTEST LABORATORIES

Job Change Order: JB67244

Requested Date:	5/23/2014	**Received Date:**	5/16/2014
Account Name:	Langan Engineering & Environme	**Due Date:**	5/23/2014
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	mariem	**TAT (Days):**	14

Sample #: JB67244-5
Dept:
Change: Please take off hold and login for V8260TCL11+ and %SOL.

J-SB5(11.5-12)

Sample #: JB67244-9A
Dept:
Change: Please delete ZHESPLPHOLD, and add ZHESPLP25G, V8260SPLPTCE, SPLPRATIOV.

J-SB3(13-13.5)

Sample #: JB67244-10
Dept:
Change: Please take off hold and login for V8260TCE and %SOL.

J-SB3(13.5-14)

Sample #: JB67244-10A
Dept:
Change: Please delete ZHESPLPHOLD, and add ZHESPLP25G, V8260SPLPTCE, SPLPRATIOV.

J-SB3(13.5-14)

Above Changes Per: R. Mercuri **Date/Time:** 5/23/2014 5:06:20 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

ACCUTEST LABORATORIES

Job Change Order: JB67244

Requested Date:	5/23/2014	**Received Date:**	5/16/2014
Account Name:	Langan Engineering & Environme	**Due Date:**	5/23/2014
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	mariem	**TAT (Days):**	14

Sample #: JB67244-15
Dept:
Change:
Please take off hold and login for V8260TCE and %SOL.

J-SB6(13.5-14)

Sample #: JB67244-15A
Dept:
Change:
Please delete ZHESPLPHOLD, and add ZHESPLP25G, V8260SPLPTCE, SPLPRATIOV.

J-SB6(13.5-14)

Sample #: JB67244-18A
Dept:
Change:
Please delete ZHESPLPHOLD, and add ZHESPLP25G, V8260SPLPTCE, SPLPRATIOV.

J-SB6(12.5-13)

Sample #: JB67244-18
Dept:
Change:
Please analyze for BNJEPHCAT2FO; only Cat 1 initially extracted - please advise if BNJEPH is needed in order to get the fractionation.

J-SB6(12.5-13)

Above Changes Per: R. Mercuri **Date/Time:** 5/23/2014 5:06:20 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

ACCUTEST LABORATORIES

Job Change Order: JB67244

Requested Date:	5/23/2014	**Received Date:**	5/16/2014
Account Name:	Langan Engineering & Environme	**Due Date:**	5/23/2014
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	mariem	**TAT (Days):**	14

Sample #: JB67244-1A to 4A, 6A to 8A, 11A to 14A, 16A, 17A

Change:

Please cancel ZHESPLPHOLD.

Dept:

Above Changes Per: R. Mercuri

Date/Time: 5/23/2014 5:06:20 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

5.1

ACCUTEST LABORATORIES

Job Change Order: JB67244

Requested Date:	5/29/2014	**Received Date:**	5/16/2014
Account Name:	Langan Engineering & Environme	**Due Date:**	5/23/2014
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	mayurp	**TAT (Days):**	14

Sample #: JB67244-18R

Dept:

Change:
Please cancel BNJEPHCAT2FO

J-SB6(12.5-13)

Above Changes Per: Rocco

Date/Time: 5/29/2014 9:26:54 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

ACCUTEST LABORATORIES

Job Change Order: JB67244

Requested Date:	6/5/2014	**Received Date:**	5/16/2014
Account Name:	Langan Engineering & Environme	**Due Date:**	5/23/2014
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	mayurp	**TAT (Days):**	14

Sample #: JB67244-18

Dept:

Change:
Relog/reanalyze V8260SPLPTCE, SPLPRATIOV
GP 80365 done 5/27

J-SB6(12.5-13)

Sample #: JB67244-18

Dept:

Change:
Please Releach/reanalyze from 2nd Encore. Ok to proceed out of HOLD.
V8260SPLPTCE, SPLPRATIOV

J-SB6(12.5-13)

Above Changes Per: Rocco Mercuri

Date/Time: 6/5/2014 2:37:59 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

ACCUTEST LABORATORIES

Job Change Order: JB67244

Requested Date:	6/9/2014	**Received Date:**	5/16/2014
Account Name:	Langan Engineering & Environme	**Due Date:**	5/23/2014
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	mariem	**TAT (Days):**	14

Sample #: JB67244-5A

Dept:

J-SB5(11.5-12)

Change:
Please delete ZHESPLPHOLD; the sample is out of holdtime.

Above Changes Per:

Date/Time: 6/9/2014 8:40:05 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

5.1 5

Chains of Custody
(Groundwater)

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

UP

PAGE 1 OF 1 PN

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

WFD GW

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB44086

Client / Reporting Information

Company Name: Langan Engineering
Street Address: 2700 Kelly Road
City, State, Zip: Warrington, PA 18976
Project Contact, E-mail: Shelly Beitler
Phone #: 215-491-6500 Fax #:
Sampler(s) Name(s), Phone #: Meagan Patrick

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 1001 U.S. 202
City, State: Raritan NJ
Project #: 3568401
Client Purchase Order #:
Project Manager: Kristin Beebe

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

Requested Analysis (see TEST CODE sheet)

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOCs + TICs	TCL SVOCs + TICS	Ethylene Glycol	LAB USE ONLY
1	FB080513		8/5/13	8:45	MP	WW	6	2				4				X	X	X	
2	MW-45(080513)		8/5/13	11:55	MP	GW	3	3								X			
3	MW-46(080613)		8/6/13	8:45	MP	GW	5	3				2				X	X		
4	DO80613A		8/6/13	8:47	MP	GW	5	3				2				X	X		
5	FB080613		8/6/13	9:25	MP	WW	6	2				4				X	X	X	
6	MW-47(080613)		8/6/13	9:50	MP	GW	6	3				3				X		X	E16
7	DO80613B		8/6/13	9:57	MP	GW	3					3						X	885

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

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

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

Comments / Special Instructions

Rec'd at Exton Service Center 8/6/13

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

Relinquished by Sampler	Date Time	Received By:	Relinquished By:	Date Time	Received By:
1	8/6/13 13:30	1	2	8/6/13 1530	2
3	8/6/13 1750	3	4		4
Relinquished by:	Date Time:	5			

Custody Seal # ☐ Intact ☐ Not intact

Preserved where applicable ☐

On Ice ☑ Cooler Temp. 6.3 C-IA

2A

5.1 5

JB44086: Chain of Custody
Page 1 of 5

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB44086 | Client: LANGAN ENGINEERING | Project: ORTHO CLINICAL DIAGNOSTIC

Date Time Received: 8/6/2013 | Delivery Method: Accutest Courier | Airbill #:

Cooler Temp (Initial/Adjusted): #1: (5.3/5.3); 0

Cooler Security

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

Cooler Temperature

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

Quality Control Preservation

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

Sample Integrity - Documentation

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

Sample Integrity - Condition

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

Sample Integrity - Instructions

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

Comments -2. RECEIVED 2 1000 ML AM LABELED MW45(080513) WITH THE TIME OF 8:45. NO EXTRACTION VOLUME REQUESTED FOR -2. COULD BE THE MISSING EXTRACTION VOLUME FOR - 3?
-3. NO EXT. VOLUME RECEIVED
-5. NO UNPRESEVED VOC RECEIVED

Accutest Laboratories
V.732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

5.1

5

JB44086: Chain of Custody
Page 2 of 5

ACCUTEST LABORATORIES

Sample □e□eipt S□mmar□ - □r□blem □e□□l□t□n

A□□□te□t J□b □□mber□ JB44086

□S□□ Kristin Beebe **□e□p□n□e Date□** 8/13/2013

□e□p□n□e□ -2. RECEIVED 2 1000 ML AM LABELED MW45(080513) WITH THE TIME OF 8:45. NO EXTRACTION VOLUME REQUESTED FOR -2. COULD BE THE MISSING EXTRACTION VOLUME FOR - 3?

-3. NO EXT. VOLUME RECEIVED
Extraction volume received labeled as MW-45 should have been for MW-46 (sample JB44086-3). Bottle labels were incorrect.

-5. NO UNPRESEVED VOC RECEIVED
Please proceed with other analyses, so EGLY needed.

5.1 5

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB44086: Chain of Custody
Page 3 of 5

ACCUTEST LABORATORIES

Job Change Order: JB44086

Requested Date:	8/16/2013	**Received Date:**	8/6/2013
Account Name:	Langan Engineering & Environme	**Due Date:**	8/9/2013
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	kristinb	**TAT (Days):**	14

Sample #: JB44086-3

Dept:

MW-46 (080613)

Change:
Please do not report / NO OUT data for AB8270NJTCL11+ and AB8270SIMNJ.

Sample #: JB44086-6

Dept:

MW-47 (080613)

Change:
Please revise D8260 test to D8260SIMPGLY. Ethylene glycol not needed.

Above Changes Per: Client / Meagan Patrick **Date:** 8/16/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

ACCUTEST LABORATORIES

Job Change Order: JB44086

Requested Date:	8/21/2013	**Received Date:**	8/6/2013
Account Name:	Langan Engineering & Environme	**Due Date:**	8/9/2013
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	kristinb	**TAT (Days):**	14

Sample #: JB44086-1, -4, -5

Dept:

Change:
Please NO OUT all AB8270NJTCL11+ and AB8270SIMNJ data.

Sample #: JB44086-1, -7

Dept:

Change:
Please do not report EGLY. Please revise test code to D8260SIMPGLY. OK to report without QC as was done for sample -6 on this job.

Above Changes Per: Client / Shelly Beitler

Date: 8/21/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

ACCUTEST LABORATORIES

GW
FB
WB

CHAIN OF CUSTODY

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

PAGE 1 OF 1

FED-EX Tracking #:
Accutest Quote #:
Bottle Order Control #:
Accutest Job #: JB46934

Client / Reporting Information

Company Name: Langan Engineering
Street Address: Suite 200, 2700 Kelly Road
City, State, Zip: Warrington, PA
Project Contact: Shelly Beitler sbeitler@langan.com
E-mail:
Phone #: 215-491-6500
Fax #:
Sampler(s) Name(s): Meagan Patrick
Phone #:

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 100 US. 202
City, State: Raritan NJ
Project #: 3568401
Client Purchase Order #:
Project Manager: Kristin Beebe

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

Requested Analysis (see TEST CODE sheet)

Matrix Codes

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	None	DI Water	MEOH	ENCORE	TCL VOCs + TICS	Propylene Glycol	LAB USE ONLY
1	MW-46(090913)		9/9/13	10:47	MP	GW	3	3								X		
2	MW-47(090913)		9/9/13	13:32	MP	GW	6	3				3				X	X	904
3	D090913		9/9/13	13:34	MP	GW	6	3				3				X	X	
4	FB090913		9/9/13	14:20	MP	WW	4	2				2				X	X	SUB
5	TB090913		9/9/13	—	—	WW	2	2								X		
6	MW-45(090913)		9/9/13	17:02	MP	GW	3	3								X		

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [x] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

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

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

Comments / Special Instructions

~~Rec'd at Exton Service Center~~
9/10 1015

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Received By:
1	9/10/13 10:15	1	2 9/10/13 1535	2
3	9/10/13 1728	3	4	4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # [ ] Intact [ ] Not intact	Preserved where applicable [ ]

On Ice [x] Cooler Temp. 5.6 C-IA

2B

5.1

JB46934: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB46934 **Client:** **Project:**

Date / Time Received: 9/10/2013 **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (5.6/5.6): 0

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

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	IR Gun
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

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

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

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

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

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www.accutest.com

5.1

5

JB46934: Chain of Custody
Page 2 of 2

ACCUTEST LABORATORIES

WFB
WTB
GW

CHAIN OF CUSTODY

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

PAGE 1 OF 2

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB55683

Client / Reporting Information

Company Name: Langan
Street Address: 2700 Kelly Road
City: Warrington State: PA Zip: 18976
Project Contact: Shelly Beitler E-mail:
Phone #: 215 491 6500 Fax #:
Sampler(s) Name(s): Ryan Velazquez, ~~Ann Kutz~~ Tough Kapp Phone #:

Project Information

Project Name: Ortho-Clinical Diagnostics
Street: 001 US route 202
City: Raritan State: NJ
Project #: 356 8401
Client Purchase Order #:
Project Manager:

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

Requested Analysis (see TEST CODE sheet)

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOCs +TICs	LAB USE ONLY
1	mw-45 (53.5)		12-12-13	8:05	TK	GW	3	3								X	
2	mw-45 (58.5)			8:18	TK											X	
3	mw-46 (11.5)			9:05	TK											X	
4	mw-46 (16.8)			9:15	TK											X	
5	mw-46 (22.3)			9:30	TK											X	936
6	mw-46 (121213)			11:20	RV											X	
7	mw-47 (22.5)			10:30	TK											X	
8	mw-47 (27.78)			10:35	TK											X	
9	mw-47 (121213)			14:05	RV											X	
10	D121213			14:07	—	~~AK~~										X	
11	FB121213			15:05	RV	WW	2	2								X	
12	TB121213		—	—	—	WW	2	2								X	

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

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

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

Comments / Special Instructions

Reporting limits must meet NJDEP GQS

Rec'd at Exton Service Center 12/13 940

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

Relinquished by Sampler	Date Time	Received By	Relinquished by	Date Time	Received By
1	12/13/13 9:40	1	2	12/13/13 1702	2
3	12/13/13 FAV	3	4		4
5		5			

Custody Seal # 258 Intact / Not intact — Preserved where applicable — On Ice — Cooler Temp. 2.0 C 1.5 C JK

5.1

JB55683: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

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

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: 3655683

Client / Reporting Information

Company Name: Langan Engineering
Street Address: 2700 Kelly Rd.
City, State, Zip: Warrington PA 18976
Project Contact: Rich Locastro
E-mail:
Phone #: 215-491-6521
Fax #:
Sampler(s) Name(s): Tarah Kori, Ryan Lebarauer
Phone #:

Project Information

Project Name: Ortho-Clinical Diagnostics
Street: 1001 US Route 202
City, State: Raritan NJ
Project #: 356840.01
Client Purchase Order #:
Project Manager:

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

Requested Analysis (see TEST CODE sheet): TCL VOCs + TICs

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOCs + TICs	LAB USE ONLY
13	MW-4D (32.25)		12/12/13	11:00	TK	GW	3	3								X	

Turnaround Time (Business days)

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

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

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

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

Comments / Special Instructions

Reporting limits must meet NJDEP GQS

Rec'd at Exton Service Center
12/13 940

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 TK	12/13/13 9:40	1	2	12/13/13 1140	2
3	12/13/13 1540	3	4		4
5		5			

Custody Seal #: 258 [ ] Intact [ ] Not Intact
Preserved where applicable [ ]
On Ice [x]
Cooler Temp: 3.0 GTG 1.5 GTG

JB55683: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB55683 **Client:** **Project:**

Date / Time Received: 12/13/2013 **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #: (1.5/1.5); #1: (3/3); 0

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

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:		
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

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

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

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

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

Comments

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

5.1

5

JB55683: Chain of Custody
Page 3 of 3

ACCUTEST LABORATORIES

GW
FB
WTB

CHAIN OF CUSTODY

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

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB60182

Client / Reporting Information

Company Name: Langan Eng + Env. Service
Street Address: 300 Kelly Rd
City / State / Zip: Warrington PA 18976
Project Contact / E-mail: Rich LaCostte
Phone #: 215-491-6500 Fax #:
Sampler(s) Name(s): Ryan Velazquez, Rich Kutz Phone #:

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 1001 Route 202
City / State: Raritan NJ
Project #: 365949
Client Purchase Order #:
Project Manager:

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

Requested Analysis (see TEST CODE sheet): TCL VOC + Methylene

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOC + Methylene	LAB USE ONLY
1	MW-45 (021914)		2/19/14	12:20	RV	GW	3	3								X	V421
2	MW-47 (021914)		2/19/14	14:42	RV	GW	3	3								X	
3	MW-45D-1 (021914)		2/19/14	13:55	BK	GW	3	3								X	
4	MW-45D-2 (021914)		2/19/14	14:12	BK	GW	3	3								X	
5	MW-45D-3 (021914)		2/19/14	14:22	BK	GW	3	3								X	
6	MW-45D-4 (021914)		2/19/14	14:32	BK	GW	3	3								X	
7	FB021914		2/19/14	15:35	BK	FB	2	2								X	
8	DO21914		2/19/14	19:44	RV	GW	3	3								X	
9	TB021914		2/19/14	—	—	TB	2	2								X	

Turnaround Time (Business days)

- Approved By (Accutest PM): / Date:
- ☐ Std. 10 Business Days
- ☒ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☐ other
- Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☒ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☒ EDD Format Equis
- ☐ Other
- Commercial "A" = Results Only
- Commercial "B" = Results + QC Summary
- NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Reporting limits must meet NJDEP GQS

Rec'd at Exton Service Center 2/20/2014

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Ryan Nancy	2-20-14 9:25	1	2	2/20/14 1510	2
Relinquished by Sampler: 3	Date Time: 2/20/14 1125	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 632 ☒ Intact ☐ Not intact	Preserved where applicable ☒	On Ice ☐ Cooler Temp. 1.5 C-IC

1 B

JB60182: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB60182 **Client:** _____ **Project:** _____

Date / Time Received: 2/20/2014 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted): #1: (1.5/1.5); 0

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

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

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

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

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

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

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www.accutest.com

5.1

5

JB60182: Chain of Custody
Page 2 of 2

S2C2 inc. MOBILE LABORATORIES

CHAIN OF CUSTODY RECORD

Fixed Base Location:
5 Johnson Drive, Suite 12
Raritan, New Jersey 08869
(908) 253-3200
(908) 253-9797 (fax)

Client: OCD	Project Manager: Rich LoCastro	Date: 6/11/14	Chain of Custody Number: 002275
Address: 1001 US Highway 202	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 2
City: Raritan; State: NJ; Zip Code: 08869	Site Contact	Lab Contact	Project Name/Number

FOR LABORATORY USE ONLY
Laboratory Project No.: _____
Storage Refrigerator ID: _____
Secured: Yes ____ No ____
Analysis(es) Requested
Sample Condition upon Receipt: _____

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Aqueous	Sed.	Soil		8260B - OCA	#	Cont. Type	For Laboratory Use Only Laboratory ID
1. MW-14 Q2 14	6/11/14	11:00	X				X	3	V	C14/164/01
2. MW-32 Q2 14		14:50	X				X	3		02
3. MW-34 Q2 14		10:40	X				X	3		03
4. MW-36s Q2 14		11:40	X				X	3		04
5. MW-36d Q2 14		11:45	X				X	3		05
6. MW-39 Q2 14		13:30	X				X	3		06
7. MW-42 Q2 14		17:25	X				X	3		07
8. MW-43 Q2 14		17:15	X				X	3		08
9. MW-46 Q2 14		15:00	X				X	3		09
10. MW-47 Q2 14		15:30	X				X	3		10
11. MW-29Dr Q2 14		14:20	X				X	2		11
12. MW-29Dr Dup Q2 14		14:20	X				X	2		12

Sample Archive/Disposal: __ Laboratory Standard ✓ Other _____
Conatiner Types: E= En Core, V= VOA, A= Amber, G= Glass Jar, M= Moisture Content, O= Other _____

Turn Around Time Required: __ 24 Hours __ 48 Hours ✓ 7 Days __ 21 Days __ Other _____
QC Requirements (Specify)

1. Relinquished By: Steven B Sell	Date: 6/11/14	Time: 18:00	1. Received By: [signature]	Date: 6-11-14	Time: 1805
2. Relinquished By	Date	Time	2. Received By	Date	Time

Instructions/Comments:
Cooler Temp.:

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

S2 C2 inc. **MOBILE LABORATORIES**

CHAIN OF CUSTODY RECORD

Fixed Base Location:

5 Johnson Drive, Suite 12
Raritan, New Jersey 08869
(908) 253-3200
(908) 253-9797 (fax)

Client: OCD	Project Manager: Rich LoCastro	Date: 6/11/14	Chain of Custody Number: 002276
Address: 1001 US Highway 202	Telephone Number (Area Code)/Fax Number	Lab Number	Page 2 of 2
City: Raritan; State: NJ; Zip Code: 08869	Site Contact	Lab Contact	Project Name/Number

FOR LABORATORY USE ONLY
Laboratory Project No.: _____
Storage Refrigerator ID: _____

Secured: Yes ____ No ____

Analysis(es) Requested

Sample Condition upon Receipt: _____

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Aqueous	Sed.	Soil		8260B - OCD											#	Cont. Type	For Laboratory Use Only Laboratory ID
1. MW-45 (42.8 - 44.3) Q2 14	6/11/14	Noon	X				X											3	V	C14/164/13
2. MW-45 (47.8 - 49.3) Q2 14	↓	12:05	X				X											3	↓	14
3. MW-45 (57.8 - 59.3) Q2 14	↓	12:10	X				X											3	↓	15
4. FB-61114	↓	—	X				X											2	↓	16
5. TB-61114	↓	—	X				X											2	↓	17
6. IMW-2	6/11/14	11:20	X				X											3	V	18
7.																				
8.																				
9.																				
10.																				
11.																				
12.																				

Sample Archive/Disposal: __ Laboratory Standard ✓ Other _____

Conatiner Types: E= En Core, V= VOA, A= Amber, G= Glass Jar, M= Moisture Content, O= Other _____

Turn Around Time Required:
__ 24 Hours __ 48 Hours ✓ 7 Days __ 21 Days __ Other _____

QC Requirements (Specify)

1. Relinquished By: Steven B Mell	Date: 6/11/14	Time: 18:00	1. Received By: [signature]	Date: 6-11-14	Time: 1805
2. Relinquished By	Date	Time	2. Received By	Date	Time

Instructions/Comments:

Cooler Temp.:

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

S2 C2 inc. MOBILE LABORATORIES

CHAIN OF CUSTODY RECORD

Fixed Base Location:
5 Johnson Drive, Suite 12
Raritan, New Jersey 08869
(908) 253-3200
(908) 253-9797 (fax)

Client: OCD	Project Manager: Rich Lacastro	Date: 8-27 / 8-28	Chain of Custody Number: 002277
Address: 1001 US Highway 202	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 2
City: Raritan NJ State: Zip Code: 08869	Site Contact	Lab Contact	Project Name/Number

FOR LABORATORY USE ONLY
Laboratory Project No.: 08527
Storage Refrigerator ID:
Secured: Yes ___ No ___
Analysis(es) Requested

Sample Condition upon Receipt:

	Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Aqueous	Sed.	Soil		8260B	#	Cont. Type	For Laboratory Use Only: ~~TALL~~ Laboratory ID
	1. TB 82714	8-27-14	1050	✓				✓	2	V	08527-1
2x	2. MW-47 Q314	↓		✓				✓	2		-2
	3. MW-14r Q314	8-28-14	1130	✓				✓	2		-3
	4. MW-34 Q314		11:00	✓				✓	2		-4
10x	5. MW-36s Q314		12:10	✓				✓	2		-5
10x	6. MW-36d Q314		12:15	✓				✓	3		-6
	7. MW-39 Q314		14:15	✓				✓	2		-7
	8. MW-28 Dr Q314		10:00	✓				✓	2		-8
	9. MW-29 Dr Q314		10:30	✓				✓	2		-9
	10. MW-29 Dr Dup Q314		1030	✓				✓	2		-10
	11. MW-34D Q314		1050	✓				✓	2		-11
	12. MW-41D Q314		1445	✓				✓	2		-12

Sample Archive/Disposal: ___ Laboratory Standard ___ Other ___
Conatiner Types: E= En Core, V= VOA, A= Amber, G= Glass Jar, M= Moisture Content, O= Other ___

Turn Around Time Required: ___ 24 Hours ___ 48 Hours ___ 7 Days ___ 21 Days ___ Other ___
QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 8-28-14	Time: 8:50	1. Received By: [signature]	Date: 9/8/14	Time: 9:30
2. Relinquished By:	Date	Time	2. Received By	Date	Time

Instructions/Comments:
Cooler Temp.: 4°C

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

S2 C2 inc. **MOBILE LABORATORIES**

CHAIN OF CUSTODY RECORD

Fixed Base Location:
5 Johnson Drive, Suite 12
Raritan, New Jersey 08869
(908) 253-3200
(908) 253-9797 (fax)

Client: OCD	Project Manager: Rich Lacomstro	Date: 9-28	Chain of Custody Number: 002277
Address: 100 West Highway 202	Telephone Number (Area Code)/Fax Number	Lab Number	Page 2 of 2
City: Raritan NJ State: Zip Code: 08869	Site Contact	Lab Contact	Project Name/Number

FOR LABORATORY USE ONLY
Laboratory Project No.: 08527
Storage Refrigerator ID:
Secured: Yes ___ No ___
Analysis(es) Requested: RCRA B
Sample Condition upon Receipt:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Aqueous	Sed.	Soil	#	Cont. Type	For Laboratory Use Only: IAL# Laboratory ID
10X 1. IMW-2 Q314	8/28	1245	✓			2		8527 / -13
2. FB 8-28-14	↓		✓			2		-14
3. TB 8-28-14	↓		✓			2		-15
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								

Sample Archive/Disposal: ___ Laboratory Standard ___ Other ___
Conatiner Types: E= En Core, V= VOA, A= Amber, G= Glass Jar, M= Moisture Content, O= Other ___
Turn Around Time Required: ___ 24 Hours ___ 48 Hours ___ 7 Days ___ 21 Days ___ Other ___
QC Requirements (Specify)

1. Relinquished By: [signature]	Date: 8-8-14	Time: 9:50	1. Received By: [signature]	Date: 9/8/14	Time: 9:30
2. Relinquished By	Date	Time	2. Received By	Date	Time

Instructions/Comments:
Cooler Temp.: 4°C

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

ACCUTEST LABORATORIES

GW
FB
WB

CHAIN OF CUSTODY

PAGE 1 OF 1

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

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB75245

Client / Reporting Information

Company Name: Stetter Langer Engineering
Street Address: 2700 Kelly Rd. Suite 200
City / State / Zip: Warrington PA 18976
Project Contact / E-mail: sbetter@langer.com sbetter@langer.com
Phone #: 215-491 Fax #: 215-491-6501
Sampler(s) Name(s) / Phone #: Ben Kutz Matt Strensel

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 1001 US Route 202
City / State: Raritan NJ
Project #: 3848401
Client Purchase Order #:
Project Manager: Marie Medwoff

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

Requested Analysis (see TEST CODE sheet)

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOCs+15 + Dichlorbenzene	TCL SVOCs	LAB USE ONLY
1	T-1B(082814)		8/28/14	11:45	BK	GW	5	3				2				X	X	E18
2	D082814			11:47	BK	GW	5	3				2				X	X	V462
3	MW-47(082814)			14:10	BK	GW	5	3				2				X	X	
4	MW-45D-1(082814)			1114	MS	GW	3	3								X		
5	MW-45D-2(082814)			1131	MS	GW	3	3								X		
6	MW-45D-3(082814)			1144	MS	GW	3	3								X		
7	MW-45D-4(082814)			1153	MS	GW	3	3								X		
8	MW-9(082814)			1344	MS	GW	3	3								X		
9	FB082814			1230	MS	GW	3	3				2				X	X	
10	TB082814			—	—	TB	2	2								X		

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

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

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

Comments / Special Instructions

* All reporting limits not meet NJDEP GWQS

Sample Custody must be documented below each time samples change possession, including courier delivery. 16:45

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 [signature]	8/28/14 15:45	1 [signature]	2 [signature]	8-28-14	2 [signature]
3		3	4		4
5		5			

Custody Seal # — Intact / Not intact — Preserved where applicable — On Ice — Cooler Temp. 14.2C

1B

JB75245: Chain of Custody
Page 1 of 4

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB75245 **Client:** _____ **Project:** _____

Date / Time Received: 8/28/2014 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted): #1: (4.2/4.2); 0

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

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	IR Gun
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

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

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

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

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

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www.accutest.com

5.1

JB75245: Chain of Custody
Page 2 of 4

ACCUTEST LABORATORIES

Job Change Order: JB75245

Requested Date:	9/2/2014	**Received Date:**	8/28/2014
Account Name:	Langan Engineering & Environme	**Due Date:**	9/11/2014
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	mayurp	**TAT (Days):**	7

Sample #: JB75245-ALL

Dept:

Change:
Please revise the TAT to 7 Days.

Above Changes Per: Shelly Beitler

Date/Time: 9/2/2014 3:11:12 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

ACCUTEST LABORATORIES

Job Change Order: JB75245

Requested Date:	9/2/2014	**Received Date:**	8/28/2014
Account Name:	Langan Engineering & Environme	**Due Date:**	9/11/2014
Project Description:	Ortho-Clinical Diagnostics, 1001 US Route 202, Rar	**Deliverable:**	REDT2
CSR:	mayurp	**TAT (Days):**	7

Sample #: JB75245-ALL

Dept:

Change:
Please revise the TAT to 7 Days.

Above Changes Per: Shelly Beitler

Date/Time: 9/2/2014 3:11:12 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

5.1 5

JB75245: Chain of Custody
Page 4 of 4

IAL Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 97[illegible]-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: S2C2 Inc.
Address: 5 Johnson Dr. Suite 12
Raritan, NJ 08869
Telephone #: 908 625-3192
Fax #:
Project Manager: Steve Gelb
EMAIL Address: sgelb@S2C2inc.com
Project Name: OCD
Project Location (State): NJ
Bottle Order #:
☑ "Report to"/"Invoice To" same as above
Sampled by:
COMPLETED BY IAL: Print Name/Date | Signature/Initials

Reporting Information

Address:
Attn:
FAX #
Address:
Attn:
PO #
Quote #
Purchase Number:

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify); OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

"Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ GUIDE: ☐ Results Only ☑ Reduced ☐ Regulatory/Full*
DV: ☐ ASP Category A ☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☑ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected: Low / Med / High

These samples have been previously analyzed by IAL: ☑ YES ☑ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
*Rush/date needed only if pre-approved)**
Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED
☐ NJ EPH-ORD - Category 1
☐ NJ EPH-C40 - Category 2
☑ NJ EPH-Fractionated - Cat 2
☐ DRO/GRO
TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey: ☑ GWQS ☐ IGW ☐ SRS ☐ Ecological ☐ DW ☐ SPLP
New York: ☐ AWQS (TOGS Table 1) ☐ GWEL (TOGS Table 5) ☐ Part 375-6.8(a) - Unrestricted ☐ Part 375-6.8(b) - Restricted ☐ CP-51 Table 2 or 3 (selection required)
OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent): 8260C

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	8260C	Sample Specific Notes:
MW-14r Q414		12/8/14	11:10	GW	2	1	✓	
MW-29Dr Q414			15:10		2	2	✓	
MW-29Dr DUP Q414			15:10		2	3	✓	
MW-32 Q414			14:45		2	4	✓	
MW-34 Q414			10:45		2	5	✓	
* MW-36S Q414			Noon		3	6	✓	may require dilution
* MW-36d Q414			12:45		3	7	✓	"
MW-39 Q414			13:45		2	8	✓	

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other
Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore
Preservative (use code):
Container Type (use code):

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day (samples rec'd at lab > 5PM). BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one): ☐ IAL Courier ☑ Client Courier ☐ FedEx/UPS***
Tracking #:

Special Instructions/QC Requirements & Comments:
Equis EZ EDD, Excel Summary, project-specific VOC list attached.
* may require dilution

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
Steven B. Gelb / S2C2	12/8/14	17:00	[signature]	12/9/14	11:20
Steven B. Gelb	12/9/14	11:20			

FOR LAB USE ONLY
SDG #: 11848
Cooler Temp: 4 °C

IAL Rev 2/2014

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

IAL
Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 97[illegible]1-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: S2C2 Inc.
Address: 5 Johnson Dr. Suite 12
Raritan, NJ 08869
Telephone #: 908 625-3192
Fax #:
Project Manager: Steve Gelb
EMAIL Address:
Project Name: OCD
Project Location (State):
Bottle Order #:
☑ "Report to"/"Invoice To" same as above
Sampled by:

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Rush TAT Charge: 24 hr - 100%... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day - 10%

Deliverables: NJ, CT, PA: ☐ Results Only ☑ Reduced ☐ Regulatory/Full*; NY: ☐ ASP Category A ☐ ASP Category B*

EDDs: ☐ NJ SRP ☐ NYSDEC EQuIS ☑ lab approved custom EDD ☐ NO EDD REQ'D

Concentrations Expected: Low / Med / High

These samples have been previously analyzed by IAL: ☑ YES ☑ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush date needed (only if pre-approved)**
Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☑ NJ EPH Fractionated - Cat 2 ☐ DRO-8015
TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey: ☑ GWQS ☐ IGW ☐ SRS ☐ Ecological ☐ DW ☐ SPLP
☐ AWQS (TOGS Table 1)
☐ GWEL (TOGS Table 5)
☐ Part 375-6.8(a) - Unrestricted
☐ Part 375-6.8(b) - Restricted
☐ CP-51 Table 2 or 3 (selection required)
OTHER Reg. [illegible]

COMPLETED BY IAL: Field Sampling — Equipment Rental

Sample Matrix: DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify); OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent): 8260C

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	8260C	Sample Specific Notes:
MW-42 Q4 14		12/8/14	16:30	GW	2	9	✓	
MW-43 Q4 14			16:20		2	16	✓	
MW-46 Q4 14			14:55		2	4	✓	
* MW-47 Q4 14			15:30		2	12	✓	may require dilution
MW-45 Q4 14			15:20		2	13	✓	
IMW-2 Q4 14			11:30		2	14	✓	
TB-12414				Water	2	15	✓	
FB-12414				Water	2	16	✓	

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other
Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore
Preservative (use code)
Container Type (use code)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day (samples rec'd at lab > 5PM). BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one): ☐ IAL Courier ☑ Client Courier ☐ FedEx/UPS***
***Tracking #:

Special Instructions/QC Requirements & Comments:

Equis EZ EDD, Excel Summary, project-specific VOC list.
* may require dilution

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
Steven B. Gelb / S2C2	12/8/14	17:00	[signature]	12/9/14	11:20
Steven B. Gelb	12/9/14	11:20			

FOR LAB USE ONLY
SDG #: 11848
Cooler Temp: 4 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0698); NJ (14751); NY (11402); PA (68-00773).

Chains of Custody
(LNAPL)

Torkelson Geochemistry, Inc.

2528 S. Columbia Place
Tulsa, OK 74114-3233
Phone: 918-749-8441
Fax: 918-749-6005
e-mail: BTorkelson@torkelsongeochemistry.com

CHAIN-OF-CUSTODY RECORD

Project: Ortho Clinical Diagnostics
Location: 1001 Route 202
Raritan, NJ

Proj. No.: 3568401
P.O.:
Sampled By: Ben Kutz

Report/Bill To: Langan Eng. & Env. Services
Address: 2700 Kelly Rd. Suite 200
Warrington, PA 18976

Phone: 215-491-6554
Fax: 215-491-6501
e-mail: sbeitler@langan.com

Additional Instructions

Requested Turn-Around Time: 48 hours

ITEM NO.	SAMPLE DESCRIPTION	DATE	MATRIX	LAB NO.	Total # Of Vials	PRESERVATIVES: None					ANALYSES REQUESTED: GC Characterization	Density	Viscosity	Water Surface Tension	NAPL Surface Tension	NAPL/Water Interfac. Tens.	Lead	Sulfur	LNAPL Fingerprinting					REMARKS
1	MW-47 (LNAPL)	4/3/2014	GW		1	1													X					Please Provide Type, Weathering, and Date
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								

RELINQUISHED BY	DATE	TIME	ACCEPTED BY	DATE	TIME
[illegible]	4/8/14	15:40	[illegible]	4/8/14	15:40
[illegible]	4/9/14	10:18	[illegible]	4/9/14	16:25

B. Kutz 4/10

Figure 1, Chain of Custody.

ACCUTEST LABORATORIES

OIL

CHAIN OF CUSTODY

PAGE 1 OF 1 PN

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

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JB64210

Client / Reporting Information

Company Name: Langan Eng. + Env. Services
Street Address: 2700 Kelly Rd. Suite 200
City, State, Zip: Warrington, PA 18976
Project Contact: Shelly Beitler
E-mail:
Phone #: 215-491-6554
Fax #: 215-491-6501
Sampler(s) Name(s): Ben Kutz
Phone #: 215-491-6500 ext. 4450

Project Information

Project Name: Ortho Clinical Diagnostics
Street: 1001 Route 202
City: Raritan
State: NJ
Project #: 3568401
Client Purchase Order #:
Project Manager: Rich LoCastro

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

Requested Analysis (see TEST CODE sheet): TCL VOCs (method 8260)

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCL VOCs (method 8260)	LAB USE ONLY
1	MW-47 (LNAPL)		4/3/14	14:10	BK	~~GW~~ OI	2					2				X	52A1

Turnaround Time (Business days)

- Approved By (Accutest PM): / Date:
- ☐ Std. 10 Business Days
- ☒ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☐ other
- Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

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

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

Comments / Special Instructions

Rec'd at Exton Service Center
4/4 14:00

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	4/8/14 16:07	1	2	4/9/14 10:55	2
Relinquished by Sampler: 3	4/9/14 1415	Received By: 3	Relinquished By: 4	Date Time: 4/9/14 1140	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☑ Cooler Temp. 3.9 C/G

H

5.1

JB64210: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB64210 **Client:** LANGAN **Project:** ORTH CLINICAL

Date Time Received: 4/9/2014 1740 **Delivery Method:** Accutest Courier **Airbill #:**

Cooler Temp (Initial/Adjusted): #1: (3.8/3.8); 0

Cooler Security

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

Cooler Temperature

	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	IR Gun
3. Cooler media:	Ice (Bag)
4. No. Coolers	1

Quality Control Preservation

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

Sample Integrity - Documentation

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

Sample Integrity - Condition

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

Sample Integrity - Instructions

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

Comments Rec'd 1 N/P VOC vials. One vial is 100% oil, Second vial is 80% oil on top of water. Please verify only oil is to be run

5.1

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB64210: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES

Sample □e□elpt S□mmar□ - □r□blem □e□□i□t□n

A□□□te□t J□b □□mber□ JB64210

Initiat□r□ ANDREWS

□S□□ Marie

□e□p□n□e Date□ 4/10/2014

□e□p□n□e□ Only the oil (floating layer) is to be analyzed. Please use the 2nd vial as backup only.

5.1

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB64210: Chain of Custody
Page 3 of 3

MC33435

CHAIN OF CUSTODY RECORD

PROJECT Ortho Clinical Diagnostics
CONTACT Shelly Bettler
COMPANY Langan Engineering + Environmental
ADDRESS 2700 Kelly Rd. Suite 200

EMAIL SBettler@Langan.com
PHONE 215-491-6591 **FAX** 215-491-6501
SAMPLED BY
Print Name: Ben Katz Sign: [signature]

Turn Around Time	
Standard	X
If Authorized *	
1 Week	
Other	

META Environmental, Inc.
115 Dean Avenue Suite 300 Franklin MA 02038
Tel (508) 541-9146 - Fax (508) 541-1035 - www.metaenv.com

Parameters: GC/FID Fingerprint TPH/Alkane

Samp #	Date	Time	Field Sample ID	Container Size	G/P	Grab	Composite	# of Containers	Matrix	Preserv.	GC/FID Fingerprint TPH/Alkane	Comments
-1	9/4/14	7:55	MW-47 (LNAPL)	~~250ml~~	G	X		3	GW	None		
												200

Relinquished by	Date & Time	Relinquished by	Date & Time	Relinquished by	Date & Time
[signature]	9/9/14 1400			[signature]	[signature]
Received by: FEDEX	Date & Time: 9-10-14 9:20	Received by: [signature]	Date & Time	Received by	Date & Time

Shipping Info:
Remarks:
Temp °C 1.8°C
* Surcharges may apply

5.1 5

MC33435: Chain of Custody
Page 1 of 2

Appendix J
Analytical Data Summary Sheets (Form 1s)

Form 1s
(Soil)

Raw Data: A205732.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.1 4

Client Sample ID:	J-SB1(3.5-4)		
Lab Sample ID:	JB67244-1	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	85.2
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A205732.D	1	05/20/14	OTR	05/17/14 08:00	n/a	VA7759
Run #2							

	Initial Weight
Run #1	6.3 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.0093	0.0042	mg/kg	
71-43-2	Benzene	ND	0.00093	0.00012	mg/kg	
74-97-5	Bromochloromethane	ND	0.0047	0.00048	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0047	0.00026	mg/kg	
75-25-2	Bromoform	ND	0.0047	0.00024	mg/kg	
74-83-9	Bromomethane	ND	0.0047	0.00045	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.0093	0.0041	mg/kg	
75-15-0	Carbon disulfide	ND	0.0047	0.00013	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0047	0.00023	mg/kg	
108-90-7	Chlorobenzene	ND	0.0047	0.00018	mg/kg	
75-00-3	Chloroethane	ND	0.0047	0.00093	mg/kg	
67-66-3	Chloroform	ND	0.0047	0.00024	mg/kg	
74-87-3	Chloromethane	ND	0.0047	0.00032	mg/kg	
110-82-7	Cyclohexane	ND	0.0047	0.00024	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0093	0.0012	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0047	0.00023	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.00093	0.00051	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0047	0.00031	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0047	0.00020	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0047	0.00023	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0047	0.00033	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0047	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00093	0.00030	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0047	0.00027	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0047	0.00019	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0047	0.00039	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0047	0.00041	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0047	0.00021	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0047	0.00025	mg/kg	
123-91-1	1,4-Dioxane	ND	0.12	0.071	mg/kg	
100-41-4	Ethylbenzene	ND	0.00093	0.00016	mg/kg	
76-13-1	Freon 113	ND	0.0047	0.00041	mg/kg	

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

Report of Analysis

Client Sample ID:	J-SB1(3.5-4)		
Lab Sample ID:	JB67244-1	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	85.2
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0047	0.0017	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0047	0.00014	mg/kg	
79-20-9	Methyl Acetate	ND	0.0047	0.0016	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0047	0.00015	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.00093	0.00032	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0047	0.0012	mg/kg	
75-09-2	Methylene chloride	ND	0.0047	0.0016	mg/kg	
100-42-5	Styrene	ND	0.0047	0.00022	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0047	0.00032	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0047	0.00038	mg/kg	
108-88-3	Toluene	ND	0.00093	0.00013	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0047	0.00019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0047	0.00017	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0047	0.00027	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0047	0.00076	mg/kg	
79-01-6	Trichloroethene	ND	0.0047	0.00033	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0047	0.00021	mg/kg	
75-01-4	Vinyl chloride	ND	0.0047	0.00032	mg/kg	
	m,p-Xylene	ND	0.00093	0.00045	mg/kg	
95-47-6	o-Xylene	ND	0.00093	0.00017	mg/kg	
1330-20-7	Xylene (total)	ND	0.00093	0.00017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		59-130%
17060-07-0	1,2-Dichloroethane-D4	93%		65-123%
2037-26-5	Toluene-D8	113%		77-125%
460-00-4	4-Bromofluorobenzene	101%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	
	Total Alkanes		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: M104546.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.1

Client Sample ID:	J-SB1(3.5-4)		
Lab Sample ID:	JB67244-1	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8270D SW846 3546	Percent Solids:	85.2
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M104546.D	1	05/22/14	SP	05/20/14	OP74940A	EM4280
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	2.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	0.15	0.039	mg/kg	
91-20-3	Naphthalene	ND	0.15	0.023	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	103%		40-140%
84-15-1	o-Terphenyl	104%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 4Y30160.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.1 4

Client Sample ID:	J-SB1(3.5-4)		
Lab Sample ID:	JB67244-1	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	NJDEP EPH SW846 3546	Percent Solids:	85.2
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Y30160.D	1	05/20/14	GD	05/20/14	OP74940	G4Y947
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	ND	7.6	2.7	mg/kg	
	EPH (> C28-C40)	ND	7.6	3.3	mg/kg	
	Total EPH (C9-C40)	ND	7.6	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		40-140%
3386-33-2	1-Chlorooctadecane	105%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	J-SB2(3.5-4)		
Lab Sample ID:	JB67244-12	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	84.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A205763.D	1	05/20/14	OTR	05/17/14 09:00	n/a	VA7760
Run #2							

	Initial Weight
Run #1	6.4 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.0092	0.0042	mg/kg	
71-43-2	Benzene	ND	0.00092	0.00012	mg/kg	
74-97-5	Bromochloromethane	ND	0.0046	0.00048	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0046	0.00026	mg/kg	
75-25-2	Bromoform	ND	0.0046	0.00024	mg/kg	
74-83-9	Bromomethane	ND	0.0046	0.00044	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.0092	0.0041	mg/kg	
75-15-0	Carbon disulfide	ND	0.0046	0.00013	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0046	0.00023	mg/kg	
108-90-7	Chlorobenzene	ND	0.0046	0.00018	mg/kg	
75-00-3	Chloroethane	ND	0.0046	0.00092	mg/kg	
67-66-3	Chloroform	ND	0.0046	0.00023	mg/kg	
74-87-3	Chloromethane	ND	0.0046	0.00032	mg/kg	
110-82-7	Cyclohexane	ND	0.0046	0.00024	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0092	0.0012	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0046	0.00022	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.00092	0.00051	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0046	0.00031	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0046	0.00020	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0046	0.00023	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0046	0.00033	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0046	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00092	0.00030	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0046	0.00027	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0046	0.00019	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0046	0.00039	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0046	0.00040	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0046	0.00021	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0046	0.00025	mg/kg	
123-91-1	1,4-Dioxane	ND	0.12	0.071	mg/kg	
100-41-4	Ethylbenzene	ND	0.00092	0.00016	mg/kg	
76-13-1	Freon 113	ND	0.0046	0.00040	mg/kg	

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

Report of Analysis

Client Sample ID:	J-SB2(3.5-4)		
Lab Sample ID:	JB67244-12	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	84.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0046	0.0016	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0046	0.00014	mg/kg	
79-20-9	Methyl Acetate	ND	0.0046	0.0015	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0046	0.00015	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.00092	0.00032	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0046	0.0012	mg/kg	
75-09-2	Methylene chloride	ND	0.0046	0.0016	mg/kg	
100-42-5	Styrene	ND	0.0046	0.00021	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0046	0.00032	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0046	0.00038	mg/kg	
108-88-3	Toluene	ND	0.00092	0.00013	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0046	0.00019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0046	0.00017	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0046	0.00027	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0046	0.00076	mg/kg	
79-01-6	Trichloroethene	ND	0.0046	0.00032	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0046	0.00021	mg/kg	
75-01-4	Vinyl chloride	ND	0.0046	0.00032	mg/kg	
	m,p-Xylene	ND	0.00092	0.00045	mg/kg	
95-47-6	o-Xylene	ND	0.00092	0.00016	mg/kg	
1330-20-7	Xylene (total)	ND	0.00092	0.00016	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		59-130%
17060-07-0	1,2-Dichloroethane-D4	93%		65-123%
2037-26-5	Toluene-D8	112%		77-125%
460-00-4	4-Bromofluorobenzene	100%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	8.72	.0064	mg/kg	J
	unknown	9.47	.011	mg/kg	J
	Total TIC, Volatile		.0174	mg/kg	J
	Total Alkanes		0	mg/kg	

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

Raw Data: M104551.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.10

Client Sample ID:	J-SB2(3.5-4)		
Lab Sample ID:	JB67244-12	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8270D SW846 3546	Percent Solids:	84.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M104551.D	1	05/22/14	SP	05/20/14	OP74940A	EM4280
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	2.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	0.16	0.040	mg/kg	
91-20-3	Naphthalene	ND	0.16	0.023	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	95%		40-140%
84-15-1	o-Terphenyl	97%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 4Z28923.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.10

Client Sample ID:	J-SB2(3.5-4)		
Lab Sample ID:	JB67244-12	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	NJDEP EPH SW846 3546	Percent Solids:	84.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Z28923.D	1	05/20/14	GD	05/20/14	OP74940	G4Z883
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	ND	7.8	2.8	mg/kg	
	EPH (> C28-C40)	ND	7.8	3.4	mg/kg	
	Total EPH (C9-C40)	ND	7.8	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		40-140%
3386-33-2	1-Chlorooctadecane	86%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	J-SB3(3.5-4)		
Lab Sample ID:	JB67244-7	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	86.1
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A205734.D	1	05/20/14	OTR	05/17/14 09:00	n/a	VA7759
Run #2							

	Initial Weight
Run #1	6.4 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.0091	0.0041	mg/kg	
71-43-2	Benzene	ND	0.00091	0.00011	mg/kg	
74-97-5	Bromochloromethane	ND	0.0045	0.00047	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0045	0.00025	mg/kg	
75-25-2	Bromoform	ND	0.0045	0.00024	mg/kg	
74-83-9	Bromomethane	ND	0.0045	0.00044	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.0091	0.0040	mg/kg	
75-15-0	Carbon disulfide	ND	0.0045	0.00013	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0045	0.00023	mg/kg	
108-90-7	Chlorobenzene	ND	0.0045	0.00018	mg/kg	
75-00-3	Chloroethane	ND	0.0045	0.00090	mg/kg	
67-66-3	Chloroform	ND	0.0045	0.00023	mg/kg	
74-87-3	Chloromethane	ND	0.0045	0.00031	mg/kg	
110-82-7	Cyclohexane	ND	0.0045	0.00023	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0091	0.0012	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0045	0.00022	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.00091	0.00050	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0045	0.00031	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0045	0.00020	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0045	0.00023	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0045	0.00032	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0045	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00091	0.00029	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0045	0.00026	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0045	0.00019	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0045	0.00038	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0045	0.00040	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0045	0.00021	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0045	0.00024	mg/kg	
123-91-1	1,4-Dioxane	ND	0.11	0.069	mg/kg	
100-41-4	Ethylbenzene	ND	0.00091	0.00016	mg/kg	
76-13-1	Freon 113	ND	0.0045	0.00039	mg/kg	

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

Report of Analysis

Client Sample ID:	J-SB3(3.5-4)		
Lab Sample ID:	JB67244-7	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	86.1
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0045	0.0016	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0045	0.00013	mg/kg	
79-20-9	Methyl Acetate	ND	0.0045	0.0015	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0045	0.00015	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.00091	0.00031	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0045	0.0012	mg/kg	
75-09-2	Methylene chloride	ND	0.0045	0.0015	mg/kg	
100-42-5	Styrene	ND	0.0045	0.00021	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0045	0.00031	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0045	0.00037	mg/kg	
108-88-3	Toluene	ND	0.00091	0.00013	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0045	0.00019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0045	0.00016	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0045	0.00026	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0045	0.00074	mg/kg	
79-01-6	Trichloroethene	ND	0.0045	0.00032	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0045	0.00020	mg/kg	
75-01-4	Vinyl chloride	ND	0.0045	0.00031	mg/kg	
	m,p-Xylene	ND	0.00091	0.00044	mg/kg	
95-47-6	o-Xylene	ND	0.00091	0.00016	mg/kg	
1330-20-7	Xylene (total)	ND	0.00091	0.00016	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		59-130%
17060-07-0	1,2-Dichloroethane-D4	96%		65-123%
2037-26-5	Toluene-D8	113%		77-125%
460-00-4	4-Bromofluorobenzene	101%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	
	Total Alkanes		0	mg/kg	

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

Raw Data: M104548.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.4

Client Sample ID:	J-SB3(3.5-4)		
Lab Sample ID:	JB67244-7	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8270D SW846 3546	Percent Solids:	86.1
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M104548.D	1	05/22/14	SP	05/20/14	OP74940A	EM4280
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	2.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	0.15	0.038	mg/kg	
91-20-3	Naphthalene	ND	0.15	0.022	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	105%		40-140%
84-15-1	o-Terphenyl	100%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 4Y30162.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.4

Client Sample ID:	J-SB3(3.5-4)		
Lab Sample ID:	JB67244-7	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	NJDEP EPH SW846 3546	Percent Solids:	86.1
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Y30162.D	1	05/20/14	GD	05/20/14	OP74940	G4Y947
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	ND	7.4	2.6	mg/kg	
	EPH (> C28-C40)	ND	7.4	3.2	mg/kg	
	Total EPH (C9-C40)	ND	7.4	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		40-140%
3386-33-2	1-Chlorooctadecane	112%		40-140%

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

Raw Data: A205762.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.9 4

Client Sample ID:	D051514		
Lab Sample ID:	JB67244-11	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	84.8
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A205762.D	1	05/20/14	OTR	05/17/14 09:00	n/a	VA7760
Run #2							

	Initial Weight
Run #1	6.8 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.0087	0.0040	mg/kg	
71-43-2	Benzene	ND	0.00087	0.00011	mg/kg	
74-97-5	Bromochloromethane	ND	0.0043	0.00045	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0043	0.00024	mg/kg	
75-25-2	Bromoform	ND	0.0043	0.00023	mg/kg	
74-83-9	Bromomethane	ND	0.0043	0.00042	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.0087	0.0038	mg/kg	
75-15-0	Carbon disulfide	ND	0.0043	0.00012	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0043	0.00022	mg/kg	
108-90-7	Chlorobenzene	ND	0.0043	0.00017	mg/kg	
75-00-3	Chloroethane	ND	0.0043	0.00086	mg/kg	
67-66-3	Chloroform	ND	0.0043	0.00022	mg/kg	
74-87-3	Chloromethane	ND	0.0043	0.00030	mg/kg	
110-82-7	Cyclohexane	ND	0.0043	0.00022	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0087	0.0012	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0043	0.00021	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.00087	0.00048	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0043	0.00029	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0043	0.00019	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0043	0.00022	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0043	0.00031	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0043	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00087	0.00028	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0043	0.00025	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0043	0.00018	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0043	0.00037	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0043	0.00038	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0043	0.00020	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0043	0.00023	mg/kg	
123-91-1	1,4-Dioxane	ND	0.11	0.066	mg/kg	
100-41-4	Ethylbenzene	ND	0.00087	0.00015	mg/kg	
76-13-1	Freon 113	ND	0.0043	0.00038	mg/kg	

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

Report of Analysis

4.9 4

Client Sample ID:	D051514		
Lab Sample ID:	JB67244-11	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	84.8
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0043	0.0015	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0043	0.00013	mg/kg	
79-20-9	Methyl Acetate	ND	0.0043	0.0014	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0043	0.00014	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.00087	0.00030	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0043	0.0011	mg/kg	
75-09-2	Methylene chloride	ND	0.0043	0.0015	mg/kg	
100-42-5	Styrene	ND	0.0043	0.00020	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0043	0.00030	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0043	0.00036	mg/kg	
108-88-3	Toluene	ND	0.00087	0.00012	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0043	0.00018	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0043	0.00016	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0043	0.00025	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0043	0.00071	mg/kg	
79-01-6	Trichloroethene	ND	0.0043	0.00030	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0043	0.00020	mg/kg	
75-01-4	Vinyl chloride	ND	0.0043	0.00030	mg/kg	
	m,p-Xylene	ND	0.00087	0.00042	mg/kg	
95-47-6	o-Xylene	ND	0.00087	0.00015	mg/kg	
1330-20-7	Xylene (total)	ND	0.00087	0.00015	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		59-130%
17060-07-0	1,2-Dichloroethane-D4	93%		65-123%
2037-26-5	Toluene-D8	113%		77-125%
460-00-4	4-Bromofluorobenzene	102%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	8.72	.0059	mg/kg	J
	unknown	9.52	.0098	mg/kg	J
	Total TIC, Volatile		.0157	mg/kg	J
	Total Alkanes		0	mg/kg	

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

Raw Data: M104550.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.9

Client Sample ID:	D051514		
Lab Sample ID:	JB67244-11	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8270D SW846 3546	Percent Solids:	84.8
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M104550.D	1	05/22/14	SP	05/20/14	OP74940A	EM4280
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	2.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	0.16	0.041	mg/kg	
91-20-3	Naphthalene	ND	0.16	0.023	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	100%		40-140%
84-15-1	o-Terphenyl	101%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

ACCUTEST LABORATORIES
JB67244

Raw Data: 4Z28922.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.9 4

Client Sample ID:	D051514		
Lab Sample ID:	JB67244-11	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	NJDEP EPH SW846 3546	Percent Solids:	84.8
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Z28922.D	1	05/20/14	GD	05/20/14	OP74940	G4Z883
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	ND	7.8	2.8	mg/kg	
	EPH (> C28-C40)	ND	7.8	3.4	mg/kg	
	Total EPH (C9-C40)	ND	7.8	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		40-140%
3386-33-2	1-Chlorooctadecane	93%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	J-SB3(13-13.5)		
Lab Sample ID:	JB67244-9	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	90.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A205735.D	1	05/20/14	OTR	05/17/14 09:00	n/a	VA7759
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0061	0.010	0.0046	mg/kg	J
71-43-2	Benzene	ND	0.0010	0.00013	mg/kg	
74-97-5	Bromochloromethane	ND	0.0050	0.00052	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0050	0.00028	mg/kg	
75-25-2	Bromoform	ND	0.0050	0.00026	mg/kg	
74-83-9	Bromomethane	ND	0.0050	0.00048	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.010	0.0044	mg/kg	
75-15-0	Carbon disulfide	ND	0.0050	0.00014	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0050	0.00025	mg/kg	
108-90-7	Chlorobenzene	ND	0.0050	0.00020	mg/kg	
75-00-3	Chloroethane	ND	0.0050	0.0010	mg/kg	
67-66-3	Chloroform	ND	0.0050	0.00025	mg/kg	
74-87-3	Chloromethane	ND	0.0050	0.00034	mg/kg	
110-82-7	Cyclohexane	ND	0.0050	0.00026	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.010	0.0013	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0050	0.00024	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0010	0.00055	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0050	0.00034	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0050	0.00022	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0050	0.00025	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0050	0.00035	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0050	0.00032	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00032	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0050	0.00029	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0013	0.0050	0.00021	mg/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0050	0.00042	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0050	0.00044	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0050	0.00023	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0050	0.00027	mg/kg	
123-91-1	1,4-Dioxane	ND	0.13	0.077	mg/kg	
100-41-4	Ethylbenzene	ND	0.0010	0.00018	mg/kg	
76-13-1	Freon 113	ND	0.0050	0.00044	mg/kg	

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

Report of Analysis

Client Sample ID:	J-SB3(13-13.5)		
Lab Sample ID:	JB67244-9	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	90.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0050	0.0018	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0050	0.00015	mg/kg	
79-20-9	Methyl Acetate	ND	0.0050	0.0017	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0050	0.00016	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0010	0.00034	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0050	0.0013	mg/kg	
75-09-2	Methylene chloride	ND	0.0050	0.0017	mg/kg	
100-42-5	Styrene	ND	0.0050	0.00023	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0050	0.00034	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0050	0.00041	mg/kg	
108-88-3	Toluene	ND	0.0010	0.00014	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0050	0.00021	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0050	0.00018	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0050	0.00029	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0050	0.00082	mg/kg	
79-01-6	Trichloroethene	0.0912	0.0050	0.00035	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0050	0.00023	mg/kg	
75-01-4	Vinyl chloride	ND	0.0050	0.00034	mg/kg	
	m,p-Xylene	ND	0.0010	0.00049	mg/kg	
95-47-6	o-Xylene	ND	0.0010	0.00018	mg/kg	
1330-20-7	Xylene (total)	ND	0.0010	0.00018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		59-130%
17060-07-0	1,2-Dichloroethane-D4	96%		65-123%
2037-26-5	Toluene-D8	114%		77-125%
460-00-4	4-Bromofluorobenzene	101%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene decahydro- isomer	17.26	.073	mg/kg	J
	Naphthalene decahydro-methyl- isomer	18.20	.12	mg/kg	J
	alkene	18.66	.063	mg/kg	J
	Naphthalene decahydro-dimethyl- isomer	18.78	.1	mg/kg	J
	unknown	18.88	.091	mg/kg	J
	unknown	18.95	.072	mg/kg	J
	unknown	19.02	.1	mg/kg	J
	unknown	19.43	.18	mg/kg	J
	unknown	19.52	.15	mg/kg	J

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

Report of Analysis

Client Sample ID:	J-SB3(13-13.5)		
Lab Sample ID:	JB67244-9	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	90.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	19.83	.16	mg/kg	J
	unknown	20.03	.085	mg/kg	J
	Total TIC, Volatile		1.194	mg/kg	J
	Total Alkanes		.626	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: M104549.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.5 4

Client Sample ID:	J-SB3(13-13.5)		
Lab Sample ID:	JB67244-9	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8270D SW846 3546	Percent Solids:	90.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M104549.D	1	05/22/14	SP	05/20/14	OP74940A	EM4280
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	2.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	0.14	0.037	mg/kg	
91-20-3	Naphthalene	ND	0.14	0.021	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	103%		40-140%
84-15-1	o-Terphenyl	98%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

ACCUTEST LABORATORIES
JB67244

Raw Data: 4Z28927.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.5

Client Sample ID:	J-SB3(13-13.5)		
Lab Sample ID:	JB67244-9	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	NJDEP EPH SW846 3546	Percent Solids:	90.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Z28927.D	1	05/20/14	GD	05/20/14	OP74940	G4Z883
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	356	7.1	2.5	mg/kg	
	EPH (> C28-C40)	ND	7.1	3.1	mg/kg	
	Total EPH (C9-C40)	356	7.1	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		40-140%
3386-33-2	1-Chlorooctadecane	94%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: X147146.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.7

Client Sample ID:	J-SB3(13.5-14)		
Lab Sample ID:	JB67244-10	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	89.6
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X147146.D	1	05/27/14	KC	05/17/14 09:00	n/a	VX6364
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.0698	0.0050	0.00035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		59-130%
17060-07-0	1,2-Dichloroethane-D4	90%		65-123%
2037-26-5	Toluene-D8	115%		77-125%
460-00-4	4-Bromofluorobenzene	97%		71-132%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: A205733.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.2 4

Client Sample ID:	J-SB4(3.5-4)		
Lab Sample ID:	JB67244-3	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	90.4
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A205733.D	1	05/20/14	OTR	05/17/14 09:00	n/a	VA7759
Run #2							

	Initial Weight
Run #1	7.2 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.0077	0.0035	mg/kg	
71-43-2	Benzene	ND	0.00077	0.000097	mg/kg	
74-97-5	Bromochloromethane	ND	0.0038	0.00040	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0038	0.00022	mg/kg	
75-25-2	Bromoform	ND	0.0038	0.00020	mg/kg	
74-83-9	Bromomethane	ND	0.0038	0.00037	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.0077	0.0034	mg/kg	
75-15-0	Carbon disulfide	ND	0.0038	0.00011	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0038	0.00019	mg/kg	
108-90-7	Chlorobenzene	ND	0.0038	0.00015	mg/kg	
75-00-3	Chloroethane	ND	0.0038	0.00076	mg/kg	
67-66-3	Chloroform	ND	0.0038	0.00020	mg/kg	
74-87-3	Chloromethane	ND	0.0038	0.00026	mg/kg	
110-82-7	Cyclohexane	ND	0.0038	0.00020	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0077	0.0010	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0038	0.00019	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.00077	0.00042	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0038	0.00026	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0038	0.00017	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0038	0.00019	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0038	0.00027	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0038	0.00024	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00077	0.00025	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0038	0.00022	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0038	0.00016	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0038	0.00032	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0038	0.00033	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0038	0.00017	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0038	0.00021	mg/kg	
123-91-1	1,4-Dioxane	ND	0.096	0.059	mg/kg	
100-41-4	Ethylbenzene	ND	0.00077	0.00013	mg/kg	
76-13-1	Freon 113	ND	0.0038	0.00033	mg/kg	

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

Report of Analysis

Client Sample ID:	J-SB4(3.5-4)		
Lab Sample ID:	JB67244-3	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	90.4
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0038	0.0014	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0038	0.00011	mg/kg	
79-20-9	Methyl Acetate	ND	0.0038	0.0013	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0038	0.00013	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.00077	0.00026	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0038	0.0010	mg/kg	
75-09-2	Methylene chloride	ND	0.0038	0.0013	mg/kg	
100-42-5	Styrene	ND	0.0038	0.00018	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0038	0.00026	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0038	0.00031	mg/kg	
108-88-3	Toluene	ND	0.00077	0.00011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0038	0.00016	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0038	0.00014	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0038	0.00022	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0038	0.00063	mg/kg	
79-01-6	Trichloroethene	ND	0.0038	0.00027	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0038	0.00017	mg/kg	
75-01-4	Vinyl chloride	ND	0.0038	0.00026	mg/kg	
	m,p-Xylene	ND	0.00077	0.00037	mg/kg	
95-47-6	o-Xylene	ND	0.00077	0.00014	mg/kg	
1330-20-7	Xylene (total)	ND	0.00077	0.00014	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		59-130%
17060-07-0	1,2-Dichloroethane-D4	93%		65-123%
2037-26-5	Toluene-D8	111%		77-125%
460-00-4	4-Bromofluorobenzene	102%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	9.54	.004	mg/kg	J
	Total TIC, Volatile		.004	mg/kg	J
	Total Alkanes		0	mg/kg	

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

Raw Data: M104547.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.2 4

Client Sample ID:	J-SB4(3.5-4)		
Lab Sample ID:	JB67244-3	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8270D SW846 3546	Percent Solids:	90.4
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M104547.D	1	05/22/14	SP	05/20/14	OP74940A	EM4280
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	2.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	0.14	0.036	mg/kg	
91-20-3	Naphthalene	ND	0.14	0.021	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	101%		40-140%
84-15-1	o-Terphenyl	104%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 4Y30161.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.2

Client Sample ID:	J-SB4(3.5-4)		
Lab Sample ID:	JB67244-3	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	NJDEP EPH SW846 3546	Percent Solids:	90.4
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Y30161.D	1	05/20/14	GD	05/20/14	OP74940	G4Y947
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	ND	6.9	2.5	mg/kg	
	EPH (> C28-C40)	ND	6.9	3.0	mg/kg	
	Total EPH (C9-C40)	ND	6.9	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		40-140%
3386-33-2	1-Chlorooctadecane	110%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

ACCUTEST LABORATORIES
JB67244

Raw Data: X147145.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.3 4

Client Sample ID:	J-SB5(11.5-12)		
Lab Sample ID:	JB67244-5	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	86.8
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X147145.D	1	05/27/14	KC	05/17/14 09:00	n/a	VX6364
Run #2							

	Initial Weight
Run #1	6.6 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0055	0.0087	0.0040	mg/kg	J
71-43-2	Benzene	ND	0.00087	0.00011	mg/kg	
74-97-5	Bromochloromethane	ND	0.0044	0.00045	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0044	0.00025	mg/kg	
75-25-2	Bromoform	ND	0.0044	0.00023	mg/kg	
74-83-9	Bromomethane	ND	0.0044	0.00042	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.0087	0.0038	mg/kg	
75-15-0	Carbon disulfide	ND	0.0044	0.00012	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0044	0.00022	mg/kg	
108-90-7	Chlorobenzene	ND	0.0044	0.00017	mg/kg	
75-00-3	Chloroethane	ND	0.0044	0.00087	mg/kg	
67-66-3	Chloroform	ND	0.0044	0.00022	mg/kg	
74-87-3	Chloromethane	ND	0.0044	0.00030	mg/kg	
110-82-7	Cyclohexane	ND	0.0044	0.00022	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0087	0.0012	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0044	0.00021	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.00087	0.00048	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0044	0.00030	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0044	0.00019	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0044	0.00022	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0044	0.00031	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0044	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00087	0.00028	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0044	0.00025	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0044	0.00018	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0044	0.00037	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0044	0.00038	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0044	0.00020	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0044	0.00024	mg/kg	
123-91-1	1,4-Dioxane	ND	0.11	0.067	mg/kg	
100-41-4	Ethylbenzene	ND	0.00087	0.00015	mg/kg	
76-13-1	Freon 113	ND	0.0044	0.00038	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.3 4

Client Sample ID:	J-SB5(11.5-12)		
Lab Sample ID:	JB67244-5	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	86.8
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0044	0.0016	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0044	0.00013	mg/kg	
79-20-9	Methyl Acetate	ND	0.0044	0.0015	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0044	0.00014	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.00087	0.00030	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0044	0.0012	mg/kg	
75-09-2	Methylene chloride	ND	0.0044	0.0015	mg/kg	
100-42-5	Styrene	ND	0.0044	0.00020	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0044	0.00030	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0044	0.00036	mg/kg	
108-88-3	Toluene	ND	0.00087	0.00012	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0044	0.00018	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0044	0.00016	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0044	0.00025	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0044	0.00072	mg/kg	
79-01-6	Trichloroethene	0.00070	0.0044	0.00031	mg/kg	J
75-69-4	Trichlorofluoromethane	ND	0.0044	0.00020	mg/kg	
75-01-4	Vinyl chloride	ND	0.0044	0.00030	mg/kg	
	m,p-Xylene	ND	0.00087	0.00042	mg/kg	
95-47-6	o-Xylene	ND	0.00087	0.00016	mg/kg	
1330-20-7	Xylene (total)	ND	0.00087	0.00016	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		59-130%
17060-07-0	1,2-Dichloroethane-D4	90%		65-123%
2037-26-5	Toluene-D8	116%		77-125%
460-00-4	4-Bromofluorobenzene	98%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	
	Total Alkanes		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	J-SB6(3.5-4)		
Lab Sample ID:	JB67244-16	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	86.7
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A205764.D	1	05/20/14	OTR	05/17/14 09:00	n/a	VA7760
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.0093	0.0042	mg/kg	
71-43-2	Benzene	ND	0.00093	0.00012	mg/kg	
74-97-5	Bromochloromethane	ND	0.0047	0.00048	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0047	0.00026	mg/kg	
75-25-2	Bromoform	ND	0.0047	0.00024	mg/kg	
74-83-9	Bromomethane	ND	0.0047	0.00045	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.0093	0.0041	mg/kg	
75-15-0	Carbon disulfide	ND	0.0047	0.00013	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0047	0.00023	mg/kg	
108-90-7	Chlorobenzene	ND	0.0047	0.00018	mg/kg	
75-00-3	Chloroethane	ND	0.0047	0.00093	mg/kg	
67-66-3	Chloroform	ND	0.0047	0.00024	mg/kg	
74-87-3	Chloromethane	ND	0.0047	0.00032	mg/kg	
110-82-7	Cyclohexane	ND	0.0047	0.00024	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0093	0.0012	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0047	0.00023	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.00093	0.00051	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0047	0.00031	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0047	0.00020	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0047	0.00023	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0047	0.00033	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0047	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00093	0.00030	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0047	0.00027	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0047	0.00019	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0047	0.00039	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0047	0.00041	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0047	0.00021	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0047	0.00025	mg/kg	
123-91-1	1,4-Dioxane	ND	0.12	0.071	mg/kg	
100-41-4	Ethylbenzene	ND	0.00093	0.00016	mg/kg	
76-13-1	Freon 113	ND	0.0047	0.00040	mg/kg	

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

Report of Analysis

Client Sample ID:	J-SB6(3.5-4)		
Lab Sample ID:	JB67244-16	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	86.7
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0047	0.0017	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0047	0.00014	mg/kg	
79-20-9	Methyl Acetate	ND	0.0047	0.0016	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0047	0.00015	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.00093	0.00032	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0047	0.0012	mg/kg	
75-09-2	Methylene chloride	ND	0.0047	0.0016	mg/kg	
100-42-5	Styrene	ND	0.0047	0.00022	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0047	0.00032	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0047	0.00038	mg/kg	
108-88-3	Toluene	ND	0.00093	0.00013	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0047	0.00019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0047	0.00017	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0047	0.00027	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0047	0.00076	mg/kg	
79-01-6	Trichloroethene	ND	0.0047	0.00033	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0047	0.00021	mg/kg	
75-01-4	Vinyl chloride	ND	0.0047	0.00032	mg/kg	
	m,p-Xylene	ND	0.00093	0.00045	mg/kg	
95-47-6	o-Xylene	ND	0.00093	0.00017	mg/kg	
1330-20-7	Xylene (total)	ND	0.00093	0.00017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		59-130%
17060-07-0	1,2-Dichloroethane-D4	95%		65-123%
2037-26-5	Toluene-D8	111%		77-125%
460-00-4	4-Bromofluorobenzene	99%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	9.55	.0078	mg/kg	J
	Total TIC, Volatile		.0078	mg/kg	J
	Total Alkanes		0	mg/kg	

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

Raw Data: M104552.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.13 4

Client Sample ID:	J-SB6(3.5-4)		
Lab Sample ID:	JB67244-16	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8270D SW846 3546	Percent Solids:	86.7
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M104552.D	1	05/22/14	SP	05/20/14	OP74940A	EM4280
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	2.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	0.15	0.039	mg/kg	
91-20-3	Naphthalene	ND	0.15	0.022	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	92%		40-140%
84-15-1	o-Terphenyl	96%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 4Z28924.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.13 4

Client Sample ID:	J-SB6(3.5-4)		
Lab Sample ID:	JB67244-16	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	NJDEP EPH SW846 3546	Percent Solids:	86.7
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Z28924.D	1	05/20/14	GD	05/20/14	OP74940	G4Z883
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	ND	7.4	2.7	mg/kg	
	EPH (> C28-C40)	ND	7.4	3.3	mg/kg	
	Total EPH (C9-C40)	ND	7.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%
3386-33-2	1-Chlorooctadecane	83%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: A205739.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.14 4

Client Sample ID:	J-SB6(12.5-13)		
Lab Sample ID:	JB67244-18	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	87.9
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A205739.D	1	05/20/14	OTR	05/17/14 10:00	n/a	VA7759
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0142	0.0095	0.0043	mg/kg	
71-43-2	Benzene	ND	0.00095	0.00012	mg/kg	
74-97-5	Bromochloromethane	ND	0.0047	0.00049	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0047	0.00027	mg/kg	
75-25-2	Bromoform	ND	0.0047	0.00025	mg/kg	
74-83-9	Bromomethane	ND	0.0047	0.00046	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.0095	0.0042	mg/kg	
75-15-0	Carbon disulfide	ND	0.0047	0.00013	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0047	0.00024	mg/kg	
108-90-7	Chlorobenzene	ND	0.0047	0.00019	mg/kg	
75-00-3	Chloroethane	ND	0.0047	0.00094	mg/kg	
67-66-3	Chloroform	ND	0.0047	0.00024	mg/kg	
74-87-3	Chloromethane	ND	0.0047	0.00033	mg/kg	
110-82-7	Cyclohexane	ND	0.0047	0.00024	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0095	0.0013	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0047	0.00023	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.00095	0.00052	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0047	0.00032	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0047	0.00021	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0047	0.00024	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0047	0.00033	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0047	0.00030	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00095	0.00030	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0047	0.00027	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0086	0.0047	0.00020	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.0048	0.0047	0.00040	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0047	0.00041	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0047	0.00022	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0047	0.00026	mg/kg	
123-91-1	1,4-Dioxane	ND	0.12	0.072	mg/kg	
100-41-4	Ethylbenzene	ND	0.00095	0.00017	mg/kg	
76-13-1	Freon 113	ND	0.0047	0.00041	mg/kg	

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

Report of Analysis

Client Sample ID:	J-SB6(12.5-13)		
Lab Sample ID:	JB67244-18	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8260B SW846 5035	Percent Solids:	87.9
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	0.0047	0.0017	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0047	0.00014	mg/kg	
79-20-9	Methyl Acetate	ND	0.0047	0.0016	mg/kg	
108-87-2	Methylcyclohexane	ND	0.0047	0.00016	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.00095	0.00033	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	0.0047	0.0013	mg/kg	
75-09-2	Methylene chloride	ND	0.0047	0.0016	mg/kg	
100-42-5	Styrene	ND	0.0047	0.00022	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0047	0.00032	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0047	0.00039	mg/kg	
108-88-3	Toluene	ND	0.00095	0.00013	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0047	0.00020	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0047	0.00017	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0047	0.00027	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0047	0.00078	mg/kg	
79-01-6	Trichloroethene	0.0509	0.0047	0.00033	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0047	0.00021	mg/kg	
75-01-4	Vinyl chloride	ND	0.0047	0.00032	mg/kg	
	m,p-Xylene	ND	0.00095	0.00046	mg/kg	
95-47-6	o-Xylene	ND	0.00095	0.00017	mg/kg	
1330-20-7	Xylene (total)	ND	0.00095	0.00017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		59-130%
17060-07-0	1,2-Dichloroethane-D4	94%		65-123%
2037-26-5	Toluene-D8	113%		77-125%
460-00-4	4-Bromofluorobenzene	102%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	8.69	.0061	mg/kg	J
	unknown	9.44	.0079	mg/kg	J
	Naphthalene decahydro-methyl- isomer	18.20	.0057	mg/kg	J
	unknown	19.43	.0087	mg/kg	J
	unknown	19.82	.0063	mg/kg	J
	unknown	20.02	.0049	mg/kg	J
	Total TIC, Volatile		.0396	mg/kg	J
	Total Alkanes		.0197	mg/kg	J

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

Raw Data: M104553.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.14

Client Sample ID:	J-SB6(12.5-13)		
Lab Sample ID:	JB67244-18	Date Sampled:	05/15/14
Matrix:	SO - Soil	Date Received:	05/16/14
Method:	SW846 8270D SW846 3546	Percent Solids:	87.9
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M104553.D	1	05/22/14	SP	05/20/14	OP74940A	EM4280
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	2.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	0.15	0.038	mg/kg	
91-20-3	Naphthalene	ND	0.15	0.022	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	95%		40-140%
84-15-1	o-Terphenyl	86%		40-140%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Form 1s
(Groundwater)

Raw Data: 3V1400.D 3V1448.D

Accutest LabLink@841300 08:05 06-Mar-2015

Report of Analysis

4.6 4

Client Sample ID:	MW-47 (080613)		
Lab Sample ID:	JB44086-6	**Date Sampled:**	08/05/13
Matrix:	AQ - Ground Water	**Date Received:**	08/06/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V1400.D	1	08/08/13	TDN	n/a	n/a	V3V49
Run #2	3V1448.D	20	08/09/13	TDN	n/a	n/a	V3V51

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	0.34	1.0	0.22	ug/l	J
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	1.2	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	143	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	55.2	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	

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

Report of Analysis

Client Sample ID:	MW-47 (080613)		
Lab Sample ID:	JB44086-6	**Date Sampled:**	08/05/13
Matrix:	AQ - Ground Water	**Date Received:**	08/06/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.13	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	1650 [a]	20	3.7	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	23.6	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	116%	95%	73-125%
2037-26-5	Toluene-D8 (SUR)	99%	98%	85-115%
460-00-4	4-Bromofluorobenzene (SUR)	91%	88%	83-114%
1868-53-7	Dibromofluoromethane (S)	109%	101%	84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	3.14	420	ug/l	JNB
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

(a) Result is from Run# 2

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

Report of Analysis

4.6

Client Sample ID:	MW-47 (080613)		
Lab Sample ID:	JB44086-6	Date Sampled:	08/05/13
Matrix:	AQ - Ground Water	Date Received:	08/06/13
Method:	DAI BY GC/MS 8260SIM	Percent Solids:	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H103257.D	1	08/10/13	KLS	n/a	n/a	EH4563
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
57-55-6	Propylene Glycol	ND	0.50	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	73%		50-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.7

Client Sample ID:	D080613B		
Lab Sample ID:	JB44086-7	Date Sampled:	08/05/13
Matrix:	AQ - Ground Water	Date Received:	08/06/13
Method:	DAI BY GC/MS 8260SIM	Percent Solids:	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H103258.D	1	08/10/13	KLS	n/a	n/a	EH4563
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
57-55-6	Propylene Glycol	ND	0.50	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	98%		50-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: T189362.D T189453.D

Accutest LabLink@841300 08:05 06-Mar-2015

Report of Analysis

4.2 4

Client Sample ID:	MW-47 (090913)		
Lab Sample ID:	JB46934-2	**Date Sampled:**	09/09/13
Matrix:	AQ - Ground Water	**Date Received:**	09/10/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T189362.D	1	09/13/13	LD	n/a	n/a	VT7683
Run #2	T189453.D	10	09/16/13	ET	n/a	n/a	VT7688

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	1.7	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	235 [a]	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	25.1	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

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

Report of Analysis

Client Sample ID:	MW-47 (090913)		
Lab Sample ID:	JB46934-2	**Date Sampled:**	09/09/13
Matrix:	AQ - Ground Water	**Date Received:**	09/10/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	0.27	5.0	0.13	ug/l	J
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	280 [a]	10	1.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	20.0	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	114%	100%	73-125%
2037-26-5	Toluene-D8 (SUR)	101%	98%	85-115%
460-00-4	4-Bromofluorobenzene (SUR)	92%	96%	83-114%
1868-53-7	Dibromofluoromethane (S)	104%	100%	84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

(a) Result is from Run# 2

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

Report of Analysis

4.2

Client Sample ID:	MW-47 (090913)		
Lab Sample ID:	JB46934-2	Date Sampled:	09/09/13
Matrix:	AQ - Ground Water	Date Received:	09/10/13
Method:	DAI BY GC/MS 8260SIM	Percent Solids:	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H103392.D	1	09/11/13	KLS	n/a	n/a	EH4569
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
57-55-6	Propylene Glycol	ND	0.50	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	92%		50-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: T189363.D T189454.D

Accutest LabLink@841300 08:05 06-Mar-2015

Report of Analysis

4.3 4

Client Sample ID:	D090913		
Lab Sample ID:	JB46934-3	**Date Sampled:**	09/09/13
Matrix:	AQ - Ground Water	**Date Received:**	09/10/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T189363.D	1	09/13/13	LD	n/a	n/a	VT7683
Run #2	T189454.D	10	09/16/13	ET	n/a	n/a	VT7688

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	1.1	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	228 [a]	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	26.1	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D090913		
Lab Sample ID:	JB46934-3	**Date Sampled:**	09/09/13
Matrix:	AQ - Ground Water	**Date Received:**	09/10/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

4.3 4

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	0.26	5.0	0.13	ug/l	J
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	272 [a]	10	1.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	19.8	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	116%	99%	73-125%
2037-26-5	Toluene-D8 (SUR)	99%	100%	85-115%
460-00-4	4-Bromofluorobenzene (SUR)	92%	95%	83-114%
1868-53-7	Dibromofluoromethane (S)	104%	99%	84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

(a) Result is from Run# 2

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

Report of Analysis

4.3

Client Sample ID:	D090913		
Lab Sample ID:	JB46934-3	Date Sampled:	09/09/13
Matrix:	AQ - Ground Water	Date Received:	09/10/13
Method:	DAI BY GC/MS 8260SIM	Percent Solids:	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H103393.D	1	09/11/13	KLS	n/a	n/a	EH4569
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
57-55-6	Propylene Glycol	ND	0.50	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	101%		50-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 2C115018.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.9 4

Client Sample ID:	MW-47(121213)		
Lab Sample ID:	JB55683-9	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C115018.D	10	12/21/13	DR	n/a	n/a	V2C5287
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	36	ug/l	
71-43-2	Benzene	ND	10	2.2	ug/l	
74-97-5	Bromochloromethane	ND	10	3.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	0.95	ug/l	
75-25-2	Bromoform	ND	10	1.6	ug/l	
74-83-9	Bromomethane	ND	10	2.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	15	ug/l	
75-15-0	Carbon disulfide	ND	10	1.7	ug/l	
56-23-5	Carbon tetrachloride	ND	10	1.4	ug/l	
108-90-7	Chlorobenzene	ND	10	1.8	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	10	1.1	ug/l	
74-87-3	Chloromethane	ND	10	2.7	ug/l	
98-82-8	Cumene	ND	10	1.8	ug/l	
110-82-7	Cyclohexane	ND	20	2.1	ug/l	
124-48-1	Dibromochloromethane	ND	10	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.3	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	8.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	2.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	1.9	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	1.9	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	2.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.6	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	2.8	ug/l	
156-59-2	cis-1,2-Dichloroethene	1580	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	34.0	10	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	1.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	1.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	1.4	ug/l	
123-91-1	1,4-Dioxane	ND	1300	300	ug/l	
60-29-7	Ethyl Ether	ND	10	2.3	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.9 4

Client Sample ID:	MW-47(121213)		
Lab Sample ID:	JB55683-9	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	10	1.8	ug/l	
76-13-1	Freon 113	ND	20	5.5	ug/l	
591-78-6	2-Hexanone	ND	50	15	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	4.5	ug/l	
75-09-2	Methylene chloride	ND	10	1.8	ug/l	
79-20-9	Methyl Acetate	ND	50	15	ug/l	
108-87-2	Methylcyclohexane	ND	50	1.3	ug/l	
100-42-5	Styrene	ND	20	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	1.9	ug/l	
108-88-3	Toluene	ND	10	1.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	1.5	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	1.4	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.5	ug/l	
79-01-6	Trichloroethene	72.8	10	1.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	2.0	ug/l	
75-01-4	Vinyl chloride	22.6	10	1.5	ug/l	
	m,p-Xylene	ND	10	4.4	ug/l	
95-47-6	o-Xylene	ND	10	1.4	ug/l	
1330-20-7	Xylenes (total)	ND	10	1.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	105%		73-125%
2037-26-5	Toluene-D8 (SUR)	100%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	100%		83-114%
1868-53-7	Dibromofluoromethane (S)	100%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

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

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	D121213		
Lab Sample ID:	JB55683-10	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C115019.D	10	12/21/13	DR	n/a	n/a	V2C5287
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	36	ug/l	
71-43-2	Benzene	ND	10	2.2	ug/l	
74-97-5	Bromochloromethane	ND	10	3.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	0.95	ug/l	
75-25-2	Bromoform	ND	10	1.6	ug/l	
74-83-9	Bromomethane	ND	10	2.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	15	ug/l	
75-15-0	Carbon disulfide	ND	10	1.7	ug/l	
56-23-5	Carbon tetrachloride	ND	10	1.4	ug/l	
108-90-7	Chlorobenzene	ND	10	1.8	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	10	1.1	ug/l	
74-87-3	Chloromethane	ND	10	2.7	ug/l	
98-82-8	Cumene	ND	10	1.8	ug/l	
110-82-7	Cyclohexane	ND	20	2.1	ug/l	
124-48-1	Dibromochloromethane	ND	10	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.3	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	8.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	2.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	1.9	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	1.9	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	2.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.6	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	2.8	ug/l	
156-59-2	cis-1,2-Dichloroethene	1560	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	32.8	10	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	1.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	1.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	1.4	ug/l	
123-91-1	1,4-Dioxane	ND	1300	300	ug/l	
60-29-7	Ethyl Ether	ND	10	2.3	ug/l	

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

Report of Analysis

Client Sample ID:	D121213		
Lab Sample ID:	JB55683-10	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	10	1.8	ug/l	
76-13-1	Freon 113	ND	20	5.5	ug/l	
591-78-6	2-Hexanone	ND	50	15	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	4.5	ug/l	
75-09-2	Methylene chloride	ND	10	1.8	ug/l	
79-20-9	Methyl Acetate	ND	50	15	ug/l	
108-87-2	Methylcyclohexane	ND	50	1.3	ug/l	
100-42-5	Styrene	ND	20	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	1.9	ug/l	
108-88-3	Toluene	ND	10	1.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	1.5	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	1.4	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.5	ug/l	
79-01-6	Trichloroethene	81.9	10	1.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	2.0	ug/l	
75-01-4	Vinyl chloride	21.6	10	1.5	ug/l	
	m,p-Xylene	ND	10	4.4	ug/l	
95-47-6	o-Xylene	ND	10	1.4	ug/l	
1330-20-7	Xylenes (total)	ND	10	1.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		73-125%
2037-26-5	Toluene-D8 (SUR)	100%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	97%		83-114%
1868-53-7	Dibromofluoromethane (S)	100%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene decahydro-methyl	17.07	41	ug/l	J
	unknown	17.12	40	ug/l	J
	unknown	17.64	40	ug/l	J
	unknown	18.01	71	ug/l	J
	unknown	18.14	160	ug/l	J
	unknown	18.36	71	ug/l	J
	unknown	18.45	41	ug/l	J
	unknown	18.59	42	ug/l	J

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

Report of Analysis

Client Sample ID:	D121213		
Lab Sample ID:	JB55683-10	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	19.56	92	ug/l	J
	unknown	19.63	100	ug/l	J
	unknown	19.75	67	ug/l	J
	unknown	19.88	57	ug/l	J
	unknown	20.48	87	ug/l	J
	Total TIC, Volatile		909	ug/l	J
	Total Alkanes		219	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 2C115010.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.7 4

Client Sample ID:	MW-47(22.5)		
Lab Sample ID:	JB55683-7	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C115010.D	10	12/21/13	DR	n/a	n/a	V2C5287
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	36	ug/l	
71-43-2	Benzene	ND	10	2.2	ug/l	
74-97-5	Bromochloromethane	ND	10	3.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	0.95	ug/l	
75-25-2	Bromoform	ND	10	1.6	ug/l	
74-83-9	Bromomethane	ND	10	2.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	15	ug/l	
75-15-0	Carbon disulfide	ND	10	1.7	ug/l	
56-23-5	Carbon tetrachloride	ND	10	1.4	ug/l	
108-90-7	Chlorobenzene	ND	10	1.8	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	10	1.1	ug/l	
74-87-3	Chloromethane	ND	10	2.7	ug/l	
98-82-8	Cumene	ND	10	1.8	ug/l	
110-82-7	Cyclohexane	ND	20	2.1	ug/l	
124-48-1	Dibromochloromethane	ND	10	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.3	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	8.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	2.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	1.9	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	1.9	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	2.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.6	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	2.8	ug/l	
156-59-2	cis-1,2-Dichloroethene	1380	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	36.3	10	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	1.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	1.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	1.4	ug/l	
123-91-1	1,4-Dioxane	ND	1300	300	ug/l	
60-29-7	Ethyl Ether	ND	10	2.3	ug/l	

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

Report of Analysis

Client Sample ID:	MW-47(22.5)		
Lab Sample ID:	JB55683-7	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

4.7

4

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	10	1.8	ug/l	
76-13-1	Freon 113	ND	20	5.5	ug/l	
591-78-6	2-Hexanone	ND	50	15	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	4.5	ug/l	
75-09-2	Methylene chloride	ND	10	1.8	ug/l	
79-20-9	Methyl Acetate	ND	50	15	ug/l	
108-87-2	Methylcyclohexane	ND	50	1.3	ug/l	
100-42-5	Styrene	ND	20	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	1.9	ug/l	
108-88-3	Toluene	ND	10	1.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	1.5	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	1.4	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.5	ug/l	
79-01-6	Trichloroethene	9.7	10	1.9	ug/l	J
75-69-4	Trichlorofluoromethane	ND	20	2.0	ug/l	
75-01-4	Vinyl chloride	21.8	10	1.5	ug/l	
	m,p-Xylene	ND	10	4.4	ug/l	
95-47-6	o-Xylene	ND	10	1.4	ug/l	
1330-20-7	Xylenes (total)	ND	10	1.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		73-125%
2037-26-5	Toluene-D8 (SUR)	101%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	101%		83-114%
1868-53-7	Dibromofluoromethane (S)	101%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

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

Raw Data: 2C115017.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.8 4

Client Sample ID:	MW-47(27.75)		
Lab Sample ID:	JB55683-8	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C115017.D	10	12/21/13	DR	n/a	n/a	V2C5287
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	36	ug/l	
71-43-2	Benzene	ND	10	2.2	ug/l	
74-97-5	Bromochloromethane	ND	10	3.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	0.95	ug/l	
75-25-2	Bromoform	ND	10	1.6	ug/l	
74-83-9	Bromomethane	ND	10	2.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	15	ug/l	
75-15-0	Carbon disulfide	ND	10	1.7	ug/l	
56-23-5	Carbon tetrachloride	ND	10	1.4	ug/l	
108-90-7	Chlorobenzene	ND	10	1.8	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	10	1.1	ug/l	
74-87-3	Chloromethane	ND	10	2.7	ug/l	
98-82-8	Cumene	ND	10	1.8	ug/l	
110-82-7	Cyclohexane	ND	20	2.1	ug/l	
124-48-1	Dibromochloromethane	ND	10	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.3	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	8.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	2.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	1.9	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	1.9	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	2.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.6	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	2.8	ug/l	
156-59-2	cis-1,2-Dichloroethene	1330	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	31.0	10	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	1.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	1.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	1.4	ug/l	
123-91-1	1,4-Dioxane	ND	1300	300	ug/l	
60-29-7	Ethyl Ether	ND	10	2.3	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-47(27.75)		
Lab Sample ID:	JB55683-8	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	10	1.8	ug/l	
76-13-1	Freon 113	ND	20	5.5	ug/l	
591-78-6	2-Hexanone	ND	50	15	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	4.5	ug/l	
75-09-2	Methylene chloride	ND	10	1.8	ug/l	
79-20-9	Methyl Acetate	ND	50	15	ug/l	
108-87-2	Methylcyclohexane	ND	50	1.3	ug/l	
100-42-5	Styrene	ND	20	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	1.9	ug/l	
108-88-3	Toluene	ND	10	1.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	1.5	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	1.4	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.5	ug/l	
79-01-6	Trichloroethene	19.5	10	1.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	2.0	ug/l	
75-01-4	Vinyl chloride	20.5	10	1.5	ug/l	
	m,p-Xylene	ND	10	4.4	ug/l	
95-47-6	o-Xylene	ND	10	1.4	ug/l	
1330-20-7	Xylenes (total)	ND	10	1.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	104%		73-125%
2037-26-5	Toluene-D8 (SUR)	101%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	100%		83-114%
1868-53-7	Dibromofluoromethane (S)	102%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

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

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	MW-47(32.25)		
Lab Sample ID:	JB55683-13	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C115020.D	10	12/21/13	DR	n/a	n/a	V2C5287
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	36	ug/l	
71-43-2	Benzene	ND	10	2.2	ug/l	
74-97-5	Bromochloromethane	ND	10	3.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	0.95	ug/l	
75-25-2	Bromoform	ND	10	1.6	ug/l	
74-83-9	Bromomethane	ND	10	2.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	15	ug/l	
75-15-0	Carbon disulfide	ND	10	1.7	ug/l	
56-23-5	Carbon tetrachloride	ND	10	1.4	ug/l	
108-90-7	Chlorobenzene	ND	10	1.8	ug/l	
75-00-3	Chloroethane	ND	10	2.5	ug/l	
67-66-3	Chloroform	ND	10	1.1	ug/l	
74-87-3	Chloromethane	ND	10	2.7	ug/l	
98-82-8	Cumene	ND	10	1.8	ug/l	
110-82-7	Cyclohexane	ND	20	2.1	ug/l	
124-48-1	Dibromochloromethane	ND	10	1.4	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.3	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	8.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	2.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	1.9	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	1.9	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	2.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.6	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	2.8	ug/l	
156-59-2	cis-1,2-Dichloroethene	1670	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	36.1	10	2.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	1.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	1.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	1.4	ug/l	
123-91-1	1,4-Dioxane	ND	1300	300	ug/l	
60-29-7	Ethyl Ether	ND	10	2.3	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-47(32.25)		
Lab Sample ID:	JB55683-13	**Date Sampled:**	12/12/13
Matrix:	AQ - Ground Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	10	1.8	ug/l	
76-13-1	Freon 113	ND	20	5.5	ug/l	
591-78-6	2-Hexanone	ND	50	15	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	4.5	ug/l	
75-09-2	Methylene chloride	ND	10	1.8	ug/l	
79-20-9	Methyl Acetate	ND	50	15	ug/l	
108-87-2	Methylcyclohexane	ND	50	1.3	ug/l	
100-42-5	Styrene	ND	20	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	1.9	ug/l	
108-88-3	Toluene	ND	10	1.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	1.5	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	1.4	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.5	ug/l	
79-01-6	Trichloroethene	24.0	10	1.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	2.0	ug/l	
75-01-4	Vinyl chloride	22.4	10	1.5	ug/l	
	m,p-Xylene	ND	10	4.4	ug/l	
95-47-6	o-Xylene	ND	10	1.4	ug/l	
1330-20-7	Xylenes (total)	ND	10	1.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		73-125%
2037-26-5	Toluene-D8 (SUR)	101%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	100%		83-114%
1868-53-7	Dibromofluoromethane (S)	101%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

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

Raw Data: T195068.D T195069.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.2 4

Client Sample ID:	MW-47(021914)		
Lab Sample ID:	JB60182-2	**Date Sampled:**	02/19/14
Matrix:	AQ - Ground Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T195068.D	1	02/22/14	LD	n/a	n/a	VT7943
Run #2	T195069.D	10	02/22/14	LD	n/a	n/a	VT7943

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.2	5.0	3.6	ug/l	J
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	0.78	1.0	0.17	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	0.25	1.0	0.18	ug/l	J
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	2.1	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	762 [a]	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	47.4	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

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

Report of Analysis

4.2 4

Client Sample ID:	MW-47(021914)		
Lab Sample ID:	JB60182-2	**Date Sampled:**	02/19/14
Matrix:	AQ - Ground Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	0.24	1.0	0.18	ug/l	J
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	0.39	5.0	0.13	ug/l	J
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	16.9	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	24.7	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%	101%	73-125%
2037-26-5	Toluene-D8 (SUR)	97%	99%	85-115%
460-00-4	4-Bromofluorobenzene (SUR)	98%	95%	83-114%
1868-53-7	Dibromofluoromethane (S)	100%	97%	84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene decahydro-methyl	16.96	52	ug/l	J
	unknown	17.03	46	ug/l	J
	Naphthalene decahydro-methyl	17.21	150	ug/l	J
	unknown	17.28	48	ug/l	J
	alkene	17.53	57	ug/l	J
	unknown	17.64	63	ug/l	J
	Naphthalene decahydro-dimethyl	17.76	65	ug/l	J
	unknown	17.87	55	ug/l	J

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

Report of Analysis

Client Sample ID:	MW-47(021914)		
Lab Sample ID:	JB60182-2	**Date Sampled:**	02/19/14
Matrix:	AQ - Ground Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	18.01	47	ug/l	J
	alkene	18.08	120	ug/l	J
	alkene	18.39	67	ug/l	J
	unknown	18.47	120	ug/l	J
	unknown	18.97	93	ug/l	J
	Total TIC, Volatile		983	ug/l	J
	Total Alkanes		259	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: T195070.D T195071.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.8 4

Client Sample ID:	D021914		
Lab Sample ID:	JB60182-8	**Date Sampled:**	02/19/14
Matrix:	AQ - Ground Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T195070.D	1	02/22/14	LD	n/a	n/a	VT7943
Run #2	T195071.D	10	02/22/14	LD	n/a	n/a	VT7943

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	0.74	1.0	0.17	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	0.21	1.0	0.18	ug/l	J
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	2.0	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	781 [a]	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	46.9	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

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

Report of Analysis

Client Sample ID:	D021914		
Lab Sample ID:	JB60182-8	**Date Sampled:**	02/19/14
Matrix:	AQ - Ground Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

4.8 4

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	0.21	1.0	0.18	ug/l	J
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	0.27	5.0	0.13	ug/l	J
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	15.9	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	24.1	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	100%	100%	73-125%
2037-26-5	Toluene-D8 (SUR)	98%	100%	85-115%
460-00-4	4-Bromofluorobenzene (SUR)	97%	96%	83-114%
1868-53-7	Dibromofluoromethane (S)	99%	97%	84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene decahydro-methyl	17.21	24	ug/l	J
	unknown	17.64	24	ug/l	J
	alkene	17.76	26	ug/l	J
	unknown	17.87	22	ug/l	J
	unknown	17.93	22	ug/l	J
	unknown	18.01	26	ug/l	J
	unknown	18.07	94	ug/l	J
	unknown	18.39	32	ug/l	J

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

Report of Analysis

Client Sample ID:	D021914		
Lab Sample ID:	JB60182-8	**Date Sampled:**	02/19/14
Matrix:	AQ - Ground Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	18.47	75	ug/l	J
	unknown	18.78	29	ug/l	J
	unknown	18.96	50	ug/l	J
	alkene	19.24	25	ug/l	J
	alkene	19.85	26	ug/l	J
	Total TIC, Volatile		475	ug/l	J
	Total Alkanes		118	ug/l	J

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-47 Q2 14

Lab Name: S2C2 Inc. Contract: 8260B

Lab Code: 18015 Case No.: NA SAS No.: NA SDG No.: C14164

Matrix: (soil/water) WATER Lab Sample ID: C1416410-1

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: JUNE052.D

Level: (low/med) LOW Date Received: 6/11/2014

% Moisture: not dec. Date Analyzed: 6/13/2014

GC Column: Restek V ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl Chloride	28	
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	3.0	U
75-69-4	Trichlorofluoromethane	1.0	U
60-29-7	Diethyl Ether	1.0	U
75-35-4	1,1-Dichloroethene	2.9	
107-02-8	Acrolein	6.0	U
75-09-2	Methylene Chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	43	
75-34-3	1,1-Dichloroethane	1.0	U
107-13-1	Acrylonitrile	2.0	U
156-59-2	cis-1,2-Dichloroethene	600	E
67-66-3	Chloroform	3.0	U
56-23-5	Carbon Tetrachloride	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
71-43-2	Benzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
79-01-6	Trichloroethene	4.4	
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	3.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	1.0	U
127-18-4	Tetrachloroethene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
124-48-1	Dibromochloromethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
108-38-3	m&p-Xylenes	1.0	U
95-47-6	o-Xylene	1.0	U
75-25-2	Bromoform	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-47 Q2 14

Lab Name: S2C2 Inc. Contract: 8260B

Lab Code: 18015 Case No.: NA SAS No.: NA SDG No.: C14164

Matrix: (soil/water) WATER Lab Sample ID: C1416410-1

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: JUNE052.D

Level: (low/med) LOW Date Received: 6/11/2014

% Moisture: not dec. Date Analyzed: 6/13/2014

GC Column: Restek V ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Raw Data: N238389.D N238390.D

Accutest LabLink@841309 08:30 06-Mar-2015

Report of Analysis

4.3 4

Client Sample ID:	MW-47(082814)		
Lab Sample ID:	JB75245-3	**Date Sampled:**	08/28/14
Matrix:	AQ - Ground Water	**Date Received:**	08/28/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N238389.D	1	09/02/14	DC	n/a	n/a	VN10116
Run #2	N238390.D	10	09/02/14	DC	n/a	n/a	VN10116

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.12	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.29	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.15	ug/l	
74-83-9	Bromomethane	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.2	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.12	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.16	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.12	ug/l	
75-00-3	Chloroethane	ND	1.0	0.45	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.16	ug/l	
98-82-8	Cumene	ND	1.0	0.23	ug/l	
110-82-7	Cyclohexane	0.24	2.0	0.19	ug/l	J
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.86	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.11	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.11	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.12	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.46	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.15	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.17	ug/l	
75-35-4	1,1-Dichloroethene	1.6	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	300 [a]	10	2.3	ug/l	
156-60-5	trans-1,2-Dichloroethene	24.4	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.17	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
123-91-1	1,4-Dioxane	ND	130	89	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.48	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-47(082814)		
Lab Sample ID:	JB75245-3	**Date Sampled:**	08/28/14
Matrix:	AQ - Ground Water	**Date Received:**	08/28/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

4.3 4

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.093	ug/l	
76-13-1	Freon 113	ND	2.0	0.42	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.95	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.20	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	0.29	5.0	0.15	ug/l	J
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.26	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	4.0	1.0	0.17	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.31	ug/l	
75-01-4	Vinyl chloride	20.9	1.0	0.13	ug/l	
	m,p-Xylene	ND	1.0	0.19	ug/l	
95-47-6	o-Xylene	ND	1.0	0.12	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	100%	99%	71-128%
2037-26-5	Toluene-D8 (SUR)	98%	104%	79-117%
460-00-4	4-Bromofluorobenzene (SUR)	98%	99%	81-114%
1868-53-7	Dibromofluoromethane (S)	96%	96%	78-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		13.6	ug/l	J

(a) Result is from Run# 2

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

Raw Data: 3E64634.D 3E64685.D

Accutest LabLink@841309 08:30 06-Mar-2015

Report of Analysis

4.3 4

Client Sample ID:	MW-47(082814)		
Lab Sample ID:	JB75245-3	**Date Sampled:**	08/28/14
Matrix:	AQ - Ground Water	**Date Received:**	08/28/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E64634.D	1	09/04/14	ALS	09/03/14	OP77740	E3E2770
Run #2 [a]	3E64685.D	5	09/05/14	HK	09/03/14	OP77740	E3E2773

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

ABN TCL List without PAH

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	1.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	6.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	1.3	ug/l	
	3&4-Methylphenol	ND	2.0	1.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	10	0.91	ug/l	
108-95-2	Phenol	ND	2.0	0.55	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.5	ug/l	
98-86-2	Acetophenone	ND	2.0	0.36	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.25	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.22	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.27	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.34	ug/l	
106-47-8	4-Chloroaniline [b]	ND	5.0	0.30	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.41	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.42	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.38	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.32	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.26	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.56	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.23	ug/l	

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

Report of Analysis

4.3 4

Client Sample ID:	MW-47(082814)		
Lab Sample ID:	JB75245-3	**Date Sampled:**	08/28/14
Matrix:	AQ - Ground Water	**Date Received:**	08/28/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

ABN TCL List without PAH

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	13.7	2.0	0.58	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	2.0	0.25	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.26	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	11.1	2.0	0.55	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.39	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.48	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.29	ug/l	
78-59-1	Isophorone	ND	2.0	0.34	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.32	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.26	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.30	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.52	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.38	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.21	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%	51%	10-110%
4165-62-2	Phenol-d5	38%	38%	10-110%
118-79-6	2,4,6-Tribromophenol	96%	94%	29-139%
4165-60-0	Nitrobenzene-d5	86%	81%	28-131%
321-60-8	2-Fluorobiphenyl	95%	108%	30-121%
1718-51-0	Terphenyl-d14	80%	82%	16-147%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.07	87	ug/l	J
	unknown	5.28	45	ug/l	J
	unknown	6.17	70	ug/l	J
	unknown	6.28	41	ug/l	J
	unknown	6.54	70	ug/l	J
	unknown	6.60	49	ug/l	J
	unknown	6.64	83	ug/l	J
	unknown	6.68	49	ug/l	J
	unknown	6.85	49	ug/l	J
	unknown	6.90	76	ug/l	J
	unknown	6.98	83	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-47(082814)		
Lab Sample ID:	JB75245-3	**Date Sampled:**	08/28/14
Matrix:	AQ - Ground Water	**Date Received:**	08/28/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

ABN TCL List without PAH

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	7.19	110	ug/l	J
	unknown	7.25	61	ug/l	J
	unknown	7.29	58	ug/l	J
	unknown	7.33	58	ug/l	J
	unknown	7.37	42	ug/l	J
	unknown	7.49	40	ug/l	J
	unknown	7.56	57	ug/l	J
	Decahydro-pentamethyl...	7.60	100	ug/l	J
	unknown	7.88	95	ug/l	J
	unknown	8.41	58	ug/l	J
	unknown	9.46	41	ug/l	J
	Total TIC, Semi-Volatile		1335	ug/l	J
	Total Alkanes		872	ug/l	J

(a) Confirmation run for internal standard areas.
(b) This compound in BS is outside in house QC limits bias low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 3M49386.D 3M49409.D

Accutest LabLink@841309 08:30 06-Mar-2015

Report of Analysis

4.3 4

Client Sample ID:	MW-47(082814)		
Lab Sample ID:	JB75245-3	**Date Sampled:**	08/28/14
Matrix:	AQ - Ground Water	**Date Received:**	08/28/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M49386.D	1	09/06/14	AD	09/03/14	OP77740A	E3M2242
Run #2 [a]	3M49409.D	1	09/06/14	AD	09/03/14	OP77740A	E3M2243

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	0.30	0.10	ug/l	
83-32-9	Acenaphthene	ND	0.10	0.020	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.024	ug/l	
120-12-7	Anthracene	ND	0.10	0.020	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.012	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.012	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.010	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.016	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.015	ug/l	
218-01-9	Chrysene	ND	0.10	0.012	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.017	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.013	ug/l	
86-73-7	Fluorene	ND	0.10	0.017	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.017	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.014	ug/l	
91-20-3	Naphthalene	ND	0.10	0.036	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.021	ug/l	
129-00-0	Pyrene	ND	0.10	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	18%	19%	10-110%
4165-62-2	Phenol-d5	22%	22%	10-110%
118-79-6	2,4,6-Tribromophenol	85%	85%	10-157%
4165-60-0	Nitrobenzene-d5	41%	44%	23-131%
321-60-8	2-Fluorobiphenyl	76%	77%	24-120%
1718-51-0	Terphenyl-d14	87%	91%	10-125%

(a) Confirmation run for internal standard areas.

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

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 08527-002
Client ID: MW-47_Q314
Date Received: 09/08/2014
Date Analyzed: 09/09/2014
Data file: E7552.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.720
Chloromethane	ND		1.00	0.638
Vinyl chloride	20.5		1.00	0.490
Bromomethane	ND		1.00	0.602
Chloroethane	ND		1.00	0.637
Trichlorofluoromethane	ND		5.00	0.730
Acrolein	ND		20.0	2.86
1,1-Dichloroethene	1.34		1.00	0.568
Methylene chloride	ND		2.00	1.99
Acrylonitrile	ND		20.0	2.89
trans-1,2-Dichloroethene	13.7		1.00	0.480
1,1-Dichloroethane	ND		1.00	0.457
cis-1,2-Dichloroethene	318	E	1.00	0.447
Chloroform	ND		1.00	0.736
1,1,1-Trichloroethane	ND		1.00	0.528
Carbon tetrachloride	ND		1.00	0.746
1,2-Dichloroethane (EDC)	ND		1.00	0.393
Benzene	ND		1.00	0.458
Trichloroethene	6.71		1.00	0.456
1,2-Dichloropropane	ND		1.00	0.491
Bromodichloromethane	ND		1.00	0.493
2-Chloroethyl vinyl ether	ND		5.00	0.469
cis-1,3-Dichloropropene	ND		1.00	0.465
Toluene	ND		1.00	0.289
trans-1,3-Dichloropropene	ND		1.00	0.463
1,1,2-Trichloroethane	ND		1.00	0.478
Tetrachloroethene	ND		1.00	0.498
Dibromochloromethane	ND		1.00	0.409
Chlorobenzene	ND		1.00	0.546
Ethylbenzene	ND		1.00	0.489
Total Xylenes	ND		2.00	1.20
Bromoform	ND		1.00	0.526
1,1,2,2-Tetrachloroethane	ND		1.00	0.464
Total Target Compounds (33):	360	E		

D — Dilution Performed
J — Value Less than RL & greater than MDL
E — Exceeds upper level of Calibration curve

B — Compound detected in Blank
C — Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 08527-2DL
Client ID: MW-47_Q314
Date Received: 09/08/2014
Date Analyzed: 09/10/2014
Data file: E7583.D

GC/MS Column: DB-624
Sample wt/vol: 2.5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 2
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		2.00	1.44
Chloromethane	ND		2.00	1.28
Vinyl chloride	21.9	D	2.00	0.980
Bromomethane	ND		2.00	1.20
Chloroethane	ND		2.00	1.27
Trichlorofluoromethane	ND		10.0	1.46
Acrolein	ND		40.0	5.72
1,1-Dichloroethene	ND		2.00	1.14
Methylene chloride	ND		4.00	3.98
Acrylonitrile	ND		40.0	5.79
trans-1,2-Dichloroethene	15.3	D	2.00	0.960
1,1-Dichloroethane	ND		2.00	0.914
cis-1,2-Dichloroethene	356	D	2.00	0.894
Chloroform	ND		2.00	1.47
1,1,1-Trichloroethane	ND		2.00	1.06
Carbon tetrachloride	ND		2.00	1.49
1,2-Dichloroethane (EDC)	ND		2.00	0.786
Benzene	ND		2.00	0.916
Trichloroethene	7.37	D	2.00	0.912
1,2-Dichloropropane	ND		2.00	0.982
Bromodichloromethane	ND		2.00	0.986
2-Chloroethyl vinyl ether	ND		10.0	0.938
cis-1,3-Dichloropropene	ND		2.00	0.930
Toluene	ND		2.00	0.578
trans-1,3-Dichloropropene	ND		2.00	0.926
1,1,2-Trichloroethane	ND		2.00	0.956
Tetrachloroethene	ND		2.00	0.996
Dibromochloromethane	ND		2.00	0.818
Chlorobenzene	ND		2.00	1.09
Ethylbenzene	ND		2.00	0.978
Total Xylenes	ND		4.00	2.40
Bromoform	ND		2.00	1.05
1,1,2,2-Tetrachloroethane	ND		2.00	0.928
Total Target Compounds (33):	401	D		

D — Dilution Performed
J — Value Less than RL & greater than MDL
E — Exceeds upper level of Calibration curve

B — Compound detected in Blank
C — Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 11848-012
Client ID: MW-47_Q414
Date Received: 12/09/2014
Date Analyzed: 12/16/2014
Data file: K8036.D

GC/MS Column: DB-624
Sample wt/vol: 1mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		5.00	3.60
Chloromethane	ND		5.00	3.19
Vinyl chloride	148	D	5.00	2.45
Bromomethane	ND		5.00	3.01
Chloroethane	ND		5.00	3.19
Trichlorofluoromethane	ND		5.00	3.65
Acrolein	ND		100	14.3
1,1-Dichloroethene	ND		5.00	2.84
Methylene chloride	ND		10.0	9.95
Acrylonitrile	ND		100	14.5
trans-1,2-Dichloroethene	28.1	D	5.00	2.40
1,1-Dichloroethane	ND		5.00	2.29
cis-1,2-Dichloroethene	800	D	5.00	2.24
Chloroform	ND		5.00	3.68
1,1,1-Trichloroethane	ND		5.00	2.64
Carbon tetrachloride	ND		5.00	3.73
1,2-Dichloroethane (EDC)	ND		5.00	1.97
Benzene	ND		5.00	2.29
Trichloroethene	14.0	D	5.00	2.28
1,2-Dichloropropane	ND		5.00	2.46
Bromodichloromethane	ND		5.00	2.47
2-Chloroethyl vinyl ether	ND		25.0	2.35
cis-1,3-Dichloropropene	ND		5.00	2.33
Toluene	ND		5.00	1.45
trans-1,3-Dichloropropene	ND		5.00	2.32
1,1,2-Trichloroethane	ND		5.00	2.39
Tetrachloroethene	ND		5.00	2.49
Dibromochloromethane	ND		5.00	2.05
Chlorobenzene	ND		5.00	2.73
Ethylbenzene	ND		5.00	2.45
Total Xylenes	ND		10.0	6.00
Bromoform	ND		5.00	2.63
1,1,2,2-Tetrachloroethane	ND		5.00	2.32
m,p-Xylene	ND		10.0	6.04
o-Xylene	ND		5.00	3.02
Total Target Compounds (35):	990	D		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 11848-012
Client ID: MW-47_Q414
Date Received: 12/09/2014
Date Analyzed: 12/16/2014
Date File: K8036.D

GC/MS Column: DB-624
Sample wt/vol: 1mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 5
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time
60-29-7	Diethyl Ether	ND		

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

Form 1s
(LNAPL)

Raw Data: D219646.D

Accutest LabLink@841309 08:28 06-Mar-2015

Report of Analysis

4.1

Client Sample ID:	MW-47(LNAPL)		
Lab Sample ID:	JB64210-1	**Date Sampled:**	04/03/14
Matrix:	SO - Oil	**Date Received:**	04/09/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	D219646.D	1	04/14/14	CM	n/a	n/a	VD8989
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	10.0 ml	50.0 ul
Run #2			

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2.0	0.91	mg/kg	
71-43-2	Benzene	ND	0.20	0.025	mg/kg	
74-97-5	Bromochloromethane	ND	1.0	0.10	mg/kg	
75-27-4	Bromodichloromethane	ND	1.0	0.056	mg/kg	
75-25-2	Bromoform	ND	1.0	0.052	mg/kg	
74-83-9	Bromomethane	ND	1.0	0.096	mg/kg	
78-93-3	2-Butanone (MEK)	ND	2.0	0.88	mg/kg	
75-15-0	Carbon disulfide	ND	1.0	0.028	mg/kg	
56-23-5	Carbon tetrachloride	ND	1.0	0.050	mg/kg	
108-90-7	Chlorobenzene	ND	1.0	0.039	mg/kg	
75-00-3	Chloroethane	ND	1.0	0.20	mg/kg	
67-66-3	Chloroform	ND	1.0	0.051	mg/kg	
74-87-3	Chloromethane	ND	1.0	0.069	mg/kg	
110-82-7	Cyclohexane	0.616	1.0	0.051	mg/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.27	mg/kg	
124-48-1	Dibromochloromethane	ND	1.0	0.048	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.20	0.11	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.068	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.044	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.050	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.071	mg/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.063	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.20	0.064	mg/kg	
75-35-4	1,1-Dichloroethene	0.166	1.0	0.057	mg/kg	J
156-59-2	cis-1,2-Dichloroethene	26.8	1.0	0.041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	3.05	1.0	0.085	mg/kg	
78-87-5	1,2-Dichloropropane	ND	1.0	0.087	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.045	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.054	mg/kg	
123-91-1	1,4-Dioxane	ND	25	15	mg/kg	
100-41-4	Ethylbenzene	0.220	0.20	0.035	mg/kg	
76-13-1	Freon 113	ND	1.0	0.087	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-47(LNAPL)		
Lab Sample ID:	JB64210-1	**Date Sampled:**	04/03/14
Matrix:	SO - Oil	**Date Received:**	04/09/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	1.0	0.36	mg/kg	
98-82-8	Isopropylbenzene	0.762	1.0	0.029	mg/kg	J
79-20-9	Methyl Acetate	ND	1.0	0.33	mg/kg	
108-87-2	Methylcyclohexane	3.48	1.0	0.033	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.20	0.069	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	1.0	0.26	mg/kg	
75-09-2	Methylene chloride	ND	1.0	0.34	mg/kg	
100-42-5	Styrene	ND	1.0	0.046	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.068	mg/kg	
127-18-4	Tetrachloroethene	0.102	1.0	0.082	mg/kg	J
108-88-3	Toluene	0.0469	0.20	0.028	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.041	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.036	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.057	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.16	mg/kg	
79-01-6	Trichloroethene	26.4	1.0	0.070	mg/kg	
75-69-4	Trichlorofluoromethane	ND	1.0	0.045	mg/kg	
75-01-4	Vinyl chloride	0.143	1.0	0.068	mg/kg	J
	m,p-Xylene	0.132	0.20	0.097	mg/kg	J
95-47-6	o-Xylene	0.101	0.20	0.036	mg/kg	J
1330-20-7	Xylene (total)	0.232	0.20	0.036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		59-130%
17060-07-0	1,2-Dichloroethane-D4	98%		65-123%
2037-26-5	Toluene-D8	97%		77-125%
460-00-4	4-Bromofluorobenzene	109%		71-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene decahydro-methyl	17.29	54	mg/kg	J
281-23-2	Adamantane	17.84	42	mg/kg	JN
	unknown	17.98	53	mg/kg	J
	unknown	18.04	47	mg/kg	J
	unknown	18.18	19	mg/kg	J
	unknown	18.22	39	mg/kg	J
	unknown	18.31	22	mg/kg	J
	alkene	18.63	31	mg/kg	J
	unknown	18.90	65	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-47(LNAPL)		
Lab Sample ID:	JB64210-1	**Date Sampled:**	04/03/14
Matrix:	SO - Oil	**Date Received:**	04/09/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

4.1

VOA TCL List (SOM0 1.1)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	18.98	23	mg/kg	J
	unknown	19.06	44	mg/kg	J
	unknown	19.46	56	mg/kg	J
	unknown	19.56	26	mg/kg	J
	unknown	19.73	20	mg/kg	J
	Total TIC, Volatile		541	mg/kg	J
	Total Alkanes		35	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-47 (LNAPL)		
Lab Sample ID:	MC33435-1	**Date Sampled:**	09/04/14
Matrix:	SO - Oil	**Date Received:**	09/10/14
Method:	ASTM D3328-06 SW846 3580A	**Percent Solids:**	n/a
Project:	Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG46569.D	1	09/24/14	JO	09/16/14	OP39822	GBG1770
Run #2							

	Initial Weight	Final Volume
Run #1	0.0136 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	C-8	ND	150	mg/kg	
	C-9	ND	150	mg/kg	
	C-10	ND	150	mg/kg	
	C-11	ND	150	mg/kg	
	C-12	ND	150	mg/kg	
	C-13	ND	150	mg/kg	
3891-98-3	2,6,10-trimethyldodecane (138	11800	150	mg/kg	
	C-14	ND	150	mg/kg	
3891-99-4	2,6,10-trimethyltridecane (147	15100	150	mg/kg	
	C-15	ND	150	mg/kg	
	C-16	ND	150	mg/kg	
3892-00-0	2,6,10-trimethylpentadecane (1	4790	150	mg/kg	
	C-17	ND	150	mg/kg	
1921-70-6	Pristane	7080	150	mg/kg	
	C-18	ND	150	mg/kg	
638-36-8	Phytane	1280	150	mg/kg	
	C-19	ND	150	mg/kg	
	C-20	ND	150	mg/kg	
	C-21	ND	150	mg/kg	
	C-22	ND	150	mg/kg	
	C-23	ND	150	mg/kg	
	C-24	ND	150	mg/kg	
	C-25	ND	150	mg/kg	
	C-26	ND	150	mg/kg	
	C-27	ND	150	mg/kg	
	C-28	ND	150	mg/kg	
	C-29	ND	150	mg/kg	
	C-30	ND	150	mg/kg	
	C-31	ND	150	mg/kg	
	C-32	ND	150	mg/kg	
	C-33	ND	150	mg/kg	
	C-34	ND	150	mg/kg	

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

Report of Analysis

Client Sample ID:	MW-47 (LNAPL)		
Lab Sample ID:	MC33435-1	**Date Sampled:**	09/04/14
Matrix:	SO - Oil	**Date Received:**	09/10/14
Method:	ASTM D3328-06 SW846 3580A	**Percent Solids:**	n/a
Project:	Langan Engineering & Environmental: Ortho Clinical Diagnostics, PA		

4.1

CAS No.	Compound	Result	RL	Units	Q
	C-35	ND	150	mg/kg	
	C-36	ND	150	mg/kg	
	C-37	ND	150	mg/kg	
	C-38	ND	150	mg/kg	
	C-39	ND	150	mg/kg	
	C-40	ND	150	mg/kg	
	TPH (C8-C40)	960000	15000	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	107%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Form 1s
(Field Blanks and Trip Blanks)

Raw Data: 3V1389.D

Accutest LabLink@841300 08:05 06-Mar-2015

Report of Analysis

4.5 4

Client Sample ID:	FB080613		
Lab Sample ID:	JB44086-5	**Date Sampled:**	08/05/13
Matrix:	AQ - Field Blank Water	**Date Received:**	08/06/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V1389.D	1	08/08/13	TDN	n/a	n/a	V3V49
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB080613		
Lab Sample ID:	JB44086-5	**Date Sampled:**	08/05/13
Matrix:	AQ - Field Blank Water	**Date Received:**	08/06/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.13	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	116%		73-125%
2037-26-5	Toluene-D8 (SUR)	100%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	90%		83-114%
1868-53-7	Dibromofluoromethane (S)	112%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	3.14	50	ug/l	JNB
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: T189359.D

Accutest LabLink@841300 08:05 06-Mar-2015

Report of Analysis

4.4 4

Client Sample ID:	FB090913		
Lab Sample ID:	JB46934-4	**Date Sampled:**	09/09/13
Matrix:	AQ - Field Blank Water	**Date Received:**	09/10/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T189359.D	1	09/13/13	LD	n/a	n/a	VT7683
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.4 4

Client Sample ID:	FB090913		
Lab Sample ID:	JB46934-4	**Date Sampled:**	09/09/13
Matrix:	AQ - Field Blank Water	**Date Received:**	09/10/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.13	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	117%		73-125%
2037-26-5	Toluene-D8 (SUR)	101%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	91%		83-114%
1868-53-7	Dibromofluoromethane (S)	105%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

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

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	FB121213		
Lab Sample ID:	JB55683-11	**Date Sampled:**	12/12/13
Matrix:	AQ - Field Blank Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C115008.D	1	12/21/13	DR	n/a	n/a	V2C5287
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB121213		
Lab Sample ID:	JB55683-11	**Date Sampled:**	12/12/13
Matrix:	AQ - Field Blank Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.13	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	102%		73-125%
2037-26-5	Toluene-D8 (SUR)	100%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	104%		83-114%
1868-53-7	Dibromofluoromethane (S)	99%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

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

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	FB021914		
Lab Sample ID:	JB60182-7	**Date Sampled:**	02/19/14
Matrix:	AQ - Field Blank Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T195052.D	1	02/21/14	LD	n/a	n/a	VT7943
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.7 4

Client Sample ID:	FB021914		
Lab Sample ID:	JB60182-7	**Date Sampled:**	02/19/14
Matrix:	AQ - Field Blank Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.13	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		73-125%
2037-26-5	Toluene-D8 (SUR)	98%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	99%		83-114%
1868-53-7	Dibromofluoromethane (S)	102%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		5.2	ug/l	J

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

Raw Data: 3D99239.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.20 4

Client Sample ID:	FB051514		
Lab Sample ID:	JB67244-34	**Date Sampled:**	05/15/14
Matrix:	AQ - Field Blank Soil	**Date Received:**	05/16/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D99239.D	1	05/20/14	CM	n/a	n/a	V3D4273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.28	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	2.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.18	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
123-91-1	1,4-Dioxane	ND	130	73	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.77	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB051514		
Lab Sample ID:	JB67244-34	**Date Sampled:**	05/15/14
Matrix:	AQ - Field Blank Soil	**Date Received:**	05/16/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.15	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
100-42-5	Styrene	ND	2.0	0.30	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		79-120%
17060-07-0	1,2-Dichloroethane-D4	94%		72-123%
2037-26-5	Toluene-D8	100%		78-119%
460-00-4	4-Bromofluorobenzene	94%		74-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: N238395.D

Accutest LabLink@841309 08:30 06-Mar-2015

Report of Analysis

4.9 4

Client Sample ID:	FB082814		
Lab Sample ID:	JB75245-9	**Date Sampled:**	08/28/14
Matrix:	AQ - Field Blank Water	**Date Received:**	08/28/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N238395.D	1	09/02/14	DC	n/a	n/a	VN10116
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.12	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.29	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.15	ug/l	
74-83-9	Bromomethane	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.2	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.12	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.16	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.12	ug/l	
75-00-3	Chloroethane	ND	1.0	0.45	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.16	ug/l	
98-82-8	Cumene	ND	1.0	0.23	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.86	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.11	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.11	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.12	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.46	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.15	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.17	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.23	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.17	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
123-91-1	1,4-Dioxane	ND	130	89	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.48	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

4.9 4

Client Sample ID:	FB082814		
Lab Sample ID:	JB75245-9	**Date Sampled:**	08/28/14
Matrix:	AQ - Field Blank Water	**Date Received:**	08/28/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.093	ug/l	
76-13-1	Freon 113	ND	2.0	0.42	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.95	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.20	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.15	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.26	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.17	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.31	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.13	ug/l	
	m,p-Xylene	ND	1.0	0.19	ug/l	
95-47-6	o-Xylene	ND	1.0	0.12	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	97%		71-128%
2037-26-5	Toluene-D8 (SUR)	99%		79-117%
460-00-4	4-Bromofluorobenzene (SUR)	97%		81-114%
1868-53-7	Dibromofluoromethane (S)	94%		78-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

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

Report of Analysis

4.9 4

Client Sample ID:	FB082814		
Lab Sample ID:	JB75245-9	Date Sampled:	08/27/14
Matrix:	AQ - Field Blank Water	Date Received:	08/28/14
Method:	SW846 8270D SW846 3510C	Percent Solids:	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E64635.D	1	09/04/14	ALS	09/03/14	OP77740	E3E2770
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

ABN TCL List without PAH

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	1.4	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	1.5	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.2	1.8	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.6	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	7.3	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.2	1.4	ug/l	
	3&4-Methylphenol	ND	2.2	1.2	ug/l	
88-75-5	2-Nitrophenol	ND	5.6	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.0	ug/l	
108-95-2	Phenol	ND	2.2	0.61	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.6	1.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.6	1.9	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	1.7	ug/l	
98-86-2	Acetophenone	ND	2.2	0.41	ug/l	
1912-24-9	Atrazine	ND	2.2	0.48	ug/l	
100-52-7	Benzaldehyde	ND	5.6	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.28	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.31	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.39	ug/l	
106-47-8	4-Chloroaniline [a]	ND	5.6	0.34	ug/l	
86-74-8	Carbazole	ND	1.1	0.19	ug/l	
105-60-2	Caprolactam	ND	2.2	0.46	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.47	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.46	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.36	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.29	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.63	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.26	ug/l	

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

Report of Analysis

4.9 4

Client Sample ID:	FB082814		
Lab Sample ID:	JB75245-9	Date Sampled:	08/27/14
Matrix:	AQ - Field Blank Water	Date Received:	08/28/14
Method:	SW846 8270D SW846 3510C	Percent Solids:	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

ABN TCL List without PAH

CAS No.	Compound	Result	RL	MDL	Units	Q
84-74-2	Di-n-butyl phthalate	5.8	2.2	0.65	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	2.2	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.29	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.62	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.44	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	0.54	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.32	ug/l	
78-59-1	Isophorone	ND	2.2	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.33	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.36	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.34	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.58	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.23	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		10-110%
4165-62-2	Phenol-d5	35%		10-110%
118-79-6	2,4,6-Tribromophenol	87%		29-139%
4165-60-0	Nitrobenzene-d5	76%		28-131%
321-60-8	2-Fluorobiphenyl	81%		30-121%
1718-51-0	Terphenyl-d14	86%		16-147%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.07	110	ug/l	J
	system artifact	3.18	4.7	ug/l	J
	unknown	10.25	7.8	ug/l	J
	Total TIC, Semi-Volatile		7.8	ug/l	J
	Total Alkanes		0	ug/l	

(a) This compound in BS is outside in house QC limits bias low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB082814		
Lab Sample ID:	JB75245-9	Date Sampled:	08/27/14
Matrix:	AQ - Field Blank Water	Date Received:	08/28/14
Method:	SW846 8270D BY SIM SW846 3510C	Percent Solids:	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M49387.D	1	09/06/14	AD	09/03/14	OP77740A	E3M2242
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	0.34	0.11	ug/l	
83-32-9	Acenaphthene	ND	0.11	0.023	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.027	ug/l	
120-12-7	Anthracene	ND	0.11	0.023	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.11	0.013	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.014	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.11	0.011	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.018	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.017	ug/l	
218-01-9	Chrysene	ND	0.11	0.013	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.015	ug/l	
86-73-7	Fluorene	ND	0.11	0.019	ug/l	
118-74-1	Hexachlorobenzene	ND	0.022	0.019	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.016	ug/l	
91-20-3	Naphthalene	ND	0.11	0.040	ug/l	
85-01-8	Phenanthrene	ND	0.11	0.023	ug/l	
129-00-0	Pyrene	ND	0.11	0.017	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	33%		10-110%
4165-62-2	Phenol-d5	41%		10-110%
118-79-6	2,4,6-Tribromophenol	86%		10-157%
4165-60-0	Nitrobenzene-d5	71%		23-131%
321-60-8	2-Fluorobiphenyl	78%		24-120%
1718-51-0	Terphenyl-d14	95%		10-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: T189360.D

Accutest LabLink@841300 08:05 06-Mar-2015

Report of Analysis

4.5 4

Client Sample ID:	TB090913		
Lab Sample ID:	JB46934-5	**Date Sampled:**	09/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/10/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T189360.D	1	09/13/13	LD	n/a	n/a	VT7683
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB090913		
Lab Sample ID:	JB46934-5	**Date Sampled:**	09/09/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/10/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.13	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	118%		73-125%
2037-26-5	Toluene-D8 (SUR)	103%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	92%		83-114%
1868-53-7	Dibromofluoromethane (S)	108%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

Client Sample ID:	TB121213		
Lab Sample ID:	JB55683-12	**Date Sampled:**	12/12/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C115009.D	1	12/21/13	DR	n/a	n/a	V2C5287
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB121213		
Lab Sample ID:	JB55683-12	**Date Sampled:**	12/12/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/13/13
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.13	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		73-125%
2037-26-5	Toluene-D8 (SUR)	100%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	103%		83-114%
1868-53-7	Dibromofluoromethane (S)	101%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: T195053.D

Accutest LabLink@841300 08:06 06-Mar-2015

Report of Analysis

4.9 4

Client Sample ID:	TB021914		
Lab Sample ID:	JB60182-9	**Date Sampled:**	02/19/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T195053.D	1	02/21/14	LD	n/a	n/a	VT7943
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.30	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.095	ug/l	
75-25-2	Bromoform	ND	1.0	0.16	ug/l	
74-83-9	Bromomethane	ND	1.0	0.25	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.5	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.17	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.14	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.18	ug/l	
75-00-3	Chloroethane	ND	1.0	0.25	ug/l	
67-66-3	Chloroform	ND	1.0	0.11	ug/l	
74-87-3	Chloromethane	ND	1.0	0.27	ug/l	
98-82-8	Cumene	ND	1.0	0.18	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.21	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.14	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.81	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.23	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.19	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.21	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.14	ug/l	
123-91-1	1,4-Dioxane	ND	130	30	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB021914		
Lab Sample ID:	JB60182-9	**Date Sampled:**	02/19/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/20/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

4.9

4

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.18	ug/l	
76-13-1	Freon 113	ND	2.0	0.55	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.45	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.18	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.13	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.19	ug/l	
108-88-3	Toluene	ND	1.0	0.18	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.19	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.44	ug/l	
95-47-6	o-Xylene	ND	1.0	0.14	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	107%		73-125%
2037-26-5	Toluene-D8 (SUR)	100%		85-115%
460-00-4	4-Bromofluorobenzene (SUR)	96%		83-114%
1868-53-7	Dibromofluoromethane (S)	100%		84-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: N238396.D

Accutest LabLink@841309 08:30 06-Mar-2015

Report of Analysis

4.10 4

Client Sample ID:	TB082814		
Lab Sample ID:	JB75245-10	**Date Sampled:**	08/28/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/28/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N238396.D	1	09/02/14	DC	n/a	n/a	VN10116
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.4	ug/l	
71-43-2	Benzene	ND	1.0	0.12	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.29	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.18	ug/l	
75-25-2	Bromoform	ND	1.0	0.15	ug/l	
74-83-9	Bromomethane	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.2	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.12	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.16	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.12	ug/l	
75-00-3	Chloroethane	ND	1.0	0.45	ug/l	
67-66-3	Chloroform	ND	1.0	0.14	ug/l	
74-87-3	Chloromethane	ND	1.0	0.16	ug/l	
98-82-8	Cumene	ND	1.0	0.23	ug/l	
110-82-7	Cyclohexane	ND	2.0	0.19	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.86	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.11	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.11	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.12	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.46	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.15	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.17	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.24	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.23	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.17	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.16	ug/l	
123-91-1	1,4-Dioxane	ND	130	89	ug/l	
60-29-7	Ethyl Ether	ND	1.0	0.48	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB082814		
Lab Sample ID:	JB75245-10	**Date Sampled:**	08/28/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/28/14
Method:	EPA 624	**Percent Solids:**	n/a
Project:	Ortho-Clinical Diagnostics, 1001 US Route 202, Raritan, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.093	ug/l	
76-13-1	Freon 113	ND	2.0	0.42	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.95	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.20	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.1	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.15	ug/l	
100-42-5	Styrene	ND	2.0	0.14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.26	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.16	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.12	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.17	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.31	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.13	ug/l	
	m,p-Xylene	ND	1.0	0.19	ug/l	
95-47-6	o-Xylene	ND	1.0	0.12	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		71-128%
2037-26-5	Toluene-D8 (SUR)	100%		79-117%
460-00-4	4-Bromofluorobenzene (SUR)	98%		81-114%
1868-53-7	Dibromofluoromethane (S)	97%		78-115%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

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

Appendix K
QA/QC Review Documentation

Data Usability Evaluation Worksheet	
Project Name :	Ortho-Clinical Diagnostics
Laboratory :	Integrated Analytical Laboratories LLC
Sample Delivery Group :	E14-11848, JB75245, JB46934
Date Samples Were Collected :	12/8/2014, 8/28/14, 9/3/13
Reviewer :	K. Nelson
Describe the intended use of the data :	
Nonconformance DQA Review Elements	**Briefly Summarize DQA Nonconformances**
Laboratory Report Inspection	Reviewed and found acceptable
Reasonable Confidence Evaluation	Reviewed and found acceptable
Chain of Custody Evaluation	Reviewed and found acceptable
Sample Result Evaluation	Reviewed and found acceptable
Sample Preservation and Holding Time Evaluation	Reviewed and found acceptable
Blank Evaluation	Reviewed and found acceptable
Laboratory Control Samples	**JB75245:** The LCS for semi-volatiles analysis recovered below the control limits (i.e. <38%) for 4-chloroaniline; the associated non-detects have been qualified as "UJ". The LCS/LCSD pair for semi-volatiles analysis exhibited percent relative percent differences greater than the control limits (i.e. 12% and 11%) for 1,1-dichloroethene and tetrachloroethene; the associated sample results have been qualified as "J".
Surrogates	Reviewed and found acceptable
Site Specific Matrix Spikes and Matrix Spike Duplicates	Reviewed and found acceptable
Tentatively Identified Compounds	Reviewed and found acceptable
Other QC Data	**JB75245:** The continuing calibration on 9/3/14 at 10:15p.m. for instrument "MS3E" exhibited a percent difference greater than the control limit for hexachlorocyclopentadiene (-45.0%); the associated non-detects were qualified as "UJ".
	JB46934: The continuing calibration on 9/13/13 at 9:03a.m. for instument "MST" exhibited a percent difference greater than the control limits for dichlorodifluoromethane (-23.9%); the associated non-detections were qualified as "UJ".

Summary Statement:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Data Usability Evaluation Worksheet	
Project Name :	Ortho-Clinical Diagnostics
Laboratory :	Accutest Laboratories
Sample Delivery Group :	JB67244
Date Samples Were Collected :	5/15/2014
Reviewer :	K. Nelson
Describe the intended use of the data :	
Nonconformance DQA Review Elements	**Briefly Summarize DQA Nonconformances**
Laboratory Report Inspection	Reviewed and found acceptable
Reasonable Confidence Evaluation	Reviewed and found acceptable
Chain of Custody Evaluation	Reviewed and found acceptable
Sample Result Evaluation	Reviewed and found acceptable
Sample Preservation and Holding Time Evaluation	Reviewed and found acceptable
Blank Evaluation	Reviewed and found acceptable
Laboratory Control Samples	Reviewed and found acceptable
Surrogates	Reviewed and found acceptable
Site Specific Matrix Spikes and Matrix Spike Duplicates	Reviewed and found acceptable
Tentatively Identified Compounds	Reviewed and found acceptable
Other QC Data	The lab duplicate sample for JB67244-18 exhibited a relative percent difference greater than the control limits (i.e. >25%) for EPH (C9-C28) and total EPHs; the associated results have been qualified as "J".

Summary Statement:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Data Quality Assessment Worksheet 1

PROJECT:	**Ortho-Clinical Diagnostics (Post-October 2014)**			**FILE:**	**December 2014 Groundwater**		
LABORATORY WORKORDER:	**11848**			**REVIEWER:**	**K. Nelson**	**DATE:**	**3/18/2015**
BLANKS		**Compound**	**Compound**	**Compound**	**Compound**	**Compound**	**Notes**
Method Blank, VOCs							Acceptable
Field Blank							Acceptable
Trip Blank							Acceptable
LCS	**SV**	**Low Bias**	**High Bias**	**Compound**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs							Acceptable
Surrogates	**SV**	**Low Bias**	**High Bias**	**Compound**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs							Acceptable
MS/MSDs	**SV**	**Low Bias**	**High Bias**	**Compounds**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs							Acceptable
FIELD DUPLICATE		**Soil**	**Water**	**Compounds**	**Lab Sample Number**	**RPD (%)**	**Notes**
VOCs							Acceptable
NOTES							

DKQ Status Achieved? Yes Significant QC Variances Noted? No

Preservation Requirements Met? Yes Holding Time Requirements Met? Yes

Abbreviations: LCS = Laboratory Control Sample; SV = Significant QC Variance; RPD = Relative Percent Difference; VOC = Volatile Organic Compound; MS/MSD = Matrix Spike/Matrix Spike Duplicate; QC = Quality Control; DKQ = Data of Known Quality

Data Quality Assessment Worksheet 2

Project: Ortho-Clinical Diagnostics (Post-October 2014)
File: December 2014 Groundwater
Reviewer: K. Nelson
Date: 3/18/2015

Sample Number(s)	Compound(s)	CAS Registry #	Quality Control Nonconformance	Percent Recovery	Relative Percent Difference	High/Low or Indeterminate Bias	Comments
No qualification necessary							

Notes:
Bias High: Reported result may be lower. Reporting Limit (RL) is acceptable as reported.
Bias Low: Reported results may be higher. Reporting Limit (RL) may be higher than reported.
Bias Indeterminate: Reported result may be biased; however, it's unclear whether the results may be biased low or high.

Other QC Nonconformances:

Data Quality Assessment Worksheet 1

PROJECT:	**Ortho-Clinical Diagnostics (Pre-October 2014)**			**FILE:**	**September 2013 Groundwater**		
LABORATORY WORKORDER:	**JB46934**			**REVIEWER:**	**K. Nelson**	**DATE:**	**3/17/2015**
BLANKS		**Compound**	**Compound**	**Compound**	**Compound**	**Compound**	**Notes**
Method Blank, VOCs (EPA 624)							Acceptable
Field Blank							Acceptable
Trip Blank							Acceptable
LCS	**SV**	**Low Bias**	**High Bias**	**Compound**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs (EPA 624)			>UCL (150%)	Propylene Glycol	172	NA	Applies to JB46934-2, 3 and 4; all ND
Surrogates	**SV**	**Low Bias**	**High Bias**	**Compound**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs (EPA 624)							Acceptable
MS/MSDs	**SV**	**Low Bias**	**High Bias**	**Compounds**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs (EPA 624)							No site samples analyzed
FIELD DUPLICATE		**Soil**	**Water**	**Compounds**	**Lab Sample Number**	**RPD (%)**	**Notes**
VOCs (EPA 624)							Acceptable
NOTES							

Significant QC Variances Noted? No

Preservation Requirements Met? Yes Holding Time Requirements Met? Yes

Abbreviations: LCS = Laboratory Control Sample; SV = Significant QC Variance; RPD = Relative Percent Difference; VOC = Volatile Organic Compound; MS/MSD = Matrix Spike/Matrix Spike Duplicate; UCL = Upper Control Limit; ND = Non-Detect; NA = Not Applicable; QC = Quality Control

Data Quality Assessment Worksheet 2

Project: Ortho-Clinical Diagnostics (Pre-October 2014)
File: September 2013 Groundwater
Reviewer: K. Nelson
Date: 3/17/2015

Sample Number(s)	Compound(s)	CAS Registry #	Quality Control Nonconformance	Percent Recovery	Relative Percent Difference	High/Low or Indeterminate Bias	Comments
MW-46 (090913)	Dichlorodifluoromethane	75-71-8	Continuing Calibration	NA	-23.9	Low	UJ
MW-47 (090913)	Dichlorodifluoromethane	75-71-8	Continuing Calibration	NA	-23.9	Low	UJ
D090913	Dichlorodifluoromethane	75-71-8	Continuing Calibration	NA	-23.9	Low	UJ
FB090913	Dichlorodifluoromethane	75-71-8	Continuing Calibration	NA	-23.9	Low	UJ
TB090913	Dichlorodifluoromethane	75-71-8	Continuing Calibration	NA	-23.9	Low	UJ
MW-45 (090913)	Dichlorodifluoromethane	75-71-8	Continuing Calibration	NA	-23.9	Low	UJ

Notes:
Bias High: Reported result may be lower. Reporting Limit (RL) is acceptable as reported.
Bias Low: Reported results may be higher. Reporting Limit (RL) may be higher than reported.
Bias Indeterminate: Reported result may be biased; however, it's unclear whether the results may be biased low or high.

Other QC Nonconformances:
The continuing calibration on 9/13/13 at 9:03a.m. for instument "MST" exhibited a percent difference greater than the control limits for dichlorodifluoromethane (-23.9%); the associated non-detections were qualified as "UJ".

Data Quality Assessment Worksheet 1

PROJECT:	**Ortho-Clinical Diagnostics (Pre-October 2014)**			**FILE:**	**May 2014 Soil**		
LABORATORY WORKORDER:	**JB67244**			**REVIEWER:**	**K. Nelson**	**DATE:**	**3/18/2015**
BLANKS		**Compound**	**Compound**	**Compound**	**Compound**	**Compound**	**Notes**
Method Blank, VOCs							Acceptable
Method Blank, SVOCs							Acceptable
Method Blank, EPH							Acceptable
Field Blank							Acceptable
LCS	**SV**	**Low Bias**	**High Bias**	**Compound**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs							Acceptable
SVOCs							Acceptable
EPHs							Acceptable
Surrogates	**SV**	**Low Bias**	**High Bias**	**Compound**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs							Acceptable
SVOCs							Acceptable
EPHs							Acceptable
MS/MSDs	**SV**	**Low Bias**	**High Bias**	**Compounds**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs							No site samples analyzed
SVOCs							No site samples analyzed
EPHs							No site samples analyzed
FIELD DUPLICATE		**Soil**	**Water**	**Compounds**	**Lab Sample Number**	**RPD (%)**	**Notes**
VOCs							Acceptable
SVOCs							Acceptable
EPHs							Acceptable
LAB DUPLICATE		**Soil**	**Water**	**Compounds**	**Lab Sample Number**	**RPD (%)**	**Notes**
EPHs		RPD>25%		EPH (C9-C-28)	JB67244-18	44	Applies to JB67244-1, 2, 3, 7, 9, 11, 12, 16, 18
		RPD>25%		Total EPH (C9-C40)	JB67244-18	44	Applies to JB67244-1, 2, 3, 7, 9, 11, 12, 16, 18
NOTES							

Significant QC Variances Noted? No

Preservation Requirements Met? Yes Holding Time Requirements Met? Yes

Abbreviations: LCS = Laboratory Control Sample; RPD = Relative Percent Difference; VOC = Volatile Organic Compound; SVOC = Semi-volatile Organic Compound; EPH = Extractable Petroleum Hydrocarbon; MS/MSD = Matrix Spike/Matrix Spike Duplicate; QC = Quality Control

Data Quality Assessment Worksheet 2

Project: Ortho-Clinical Diagnostics (Pre-October 2014)
File: May 2014 Soil
Reviewer: K. Nelson
Date: 3/18/2015

Sample Number(s)	Compound(s)	CAS Registry #	Quality Control Nonconformance	Percent Recovery	Relative Percent Difference	High/Low or Indeterminate Bias	Comments
J-SB3 (13-13.5)	EPH (C9-C28)	NA	Lab Duplicate RPD	NA	44	Indeterminate	J
J-SB3 (13-13.5)	Total EPH (C9-C40)	NA	Lab Duplicate RPD	NA	44	Indeterminate	J
J-SB6 (12.5-13)	EPH (C9-C28)	NA	Lab Duplicate RPD	NA	44	Indeterminate	J
J-SB6 (12.5-13)	Total EPH (C9-C40)	NA	Lab Duplicate RPD	NA	44	Indeterminate	J

Notes:
Bias High: Reported result may be lower. Reporting Limit (RL) is acceptable as reported.
Bias Low: Reported results may be higher. Reporting Limit (RL) may be higher than reported.
Bias Indeterminate: Reported result may be biased; however, it's unclear whether the results may be biased low or high.

Other QC Nonconformances:

Data Quality Assessment Worksheet 1

PROJECT:	**Ortho-Clinical Diagnostics**			**FILE:**	**August 2014 Groundwater**		
LABORATORY WORKORDER:	**JB75245**			**REVIEWER:**	**K. Nelson**	**DATE:**	**3/17/2015**
BLANKS		**Compound**	**Compound**	**Compound**	**Compound**	**Compound**	**Notes**
Method Blank, VOCs (EPA 624)							Acceptable
Method Blank, SVOCs							Acceptable
Field Blank							Acceptable
Trip Blank							Acceptable
LCS	**SV**	**Low Bias**	**High Bias**	**Compound**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs (EPA 624)							Acceptable
SVOCs		>10% & <LCL (38%)		4-chloroaniline	36	NA	Applies to JB75245-1, 2, 3, 9
Surrogates	**SV**	**Low Bias**	**High Bias**	**Compound**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs (EPA 624)							Acceptable
SVOCs							Acceptable
MS/MSDs	**SV**	**Low Bias**	**High Bias**	**Compounds**	**Recovery (%)**	**RPD (%)**	**Notes**
VOCs (EPA 624)			>UCL (141%)	bromoform	172	24	Applies to all samples
				chlorobenzene	NA	11	Applies to all samples
				chloroethane	NA	20	Applies to all samples
				cumene	NA	14	Applies to all samples
			>UCL (133%)	1,2-dibromoethane	135, 139	NA	Applies to all samples
			>UCL (139%)	1,2-dibromo-3-chloropropane	153	NA	Applies to all samples
				1,2-dichlorobenzene	NA	11	Applies to all samples
				1,3-dichlorobenzene	NA	11	Applies to all samples
				1,4-dichlorobenzene	NA	11	Applies to all samples
				1,1,-dichloroethene	NA	13	Applies to all samples
			>UCL (136%)	trans-1,3-dichloropropene	139	NA	Applies to all samples
			>UCL (157%)	1,4-dioxane	165	22	Applies to all samples
				ethylbenzene	NA	14	Applies to all samples
			>UCL (147%)	4-methyl-2-pentanone	149	NA	Applies to all samples
				methyl acetate	NA	20	Applies to all samples
				styrene	NA	11	Applies to all samples
			>UCL (134%)	1,1,2,2-tetrachloroethane	136	NA	Applies to all samples
				tetrachloroethene	NA	13	Applies to all samples
			>UCL (142%)	1,2,4-trichlorobenzene	144	15	Applies to all samples
			>UCL (148%)	1,2,3-trichlorobenzene	166	16	Applies to all samples
			>UCL (134%)	1,1,2-trichloroethane	140	NA	Applies to all samples
				m,p-xylene	NA	14	Applies to all samples
				o-xylene	NA	12	Applies to all samples
				total xylenes	NA	13	Applies to all samples
SVOCs							No site samples analyzed
FIELD DUPLICATE		**Soil**	**Water**	**Compounds**	**Lab Sample Number**	**RPD (%)**	**Notes**
VOCs (EPA 624)							Acceptable
SVOCs							Acceptable
NOTES							

Significant QC Variances Noted? No

Preservation Requirements Met? Yes Holding Time Requirements Met? Yes

Abbreviations: LCS = Laboratory Control Sample; SV = Significant QC Variance; RPD = Relative Percent Difference; VOC = Volatile Organic Compound; SVOC = Semi-volatile Organic Compound; MS/MSD = Matrix Spike/Matrix Spike Duplicate; UCL = Upper Control Limit; LCL = Lower Control Limit; NA = Not Applicable; QC = Quality Control

Data Quality Assessment Worksheet 2

Project: Ortho-Clinical Diagnostics
File: August 2014 Groundwater
Reviewer: K. Nelson
Date: 3/17/2015

Sample Number(s)	Compound(s)	CAS Registry #	Quality Control Nonconformance	Percent Recovery	Relative Percent Difference	High/Low or Indeterminate Bias	Comments
T1B (082814)	Hexachlorocyclopentadiene	77-47-4	Continuing calibration	NA	-45	Low	UJ
D082814	Hexachlorocyclopentadiene	77-47-4	Continuing calibration	NA	-45	Low	UJ
MW-47 (082814)	Hexachlorocyclopentadiene	77-47-4	Continuing calibration	NA	-45	Low	UJ
FB082814	Hexachlorocyclopentadiene	77-47-4	Continuing calibration	NA	-45	Low	UJ
T1B (082814)	4-Chloroaniline	106-47-8	LCS Recovery	36	NA	Low	UJ
D082814	4-Chloroaniline	106-47-8	LCS Recovery	36	NA	Low	UJ
MW-47 (082814)	4-Chloroaniline	106-47-8	LCS Recovery	36	NA	Low	UJ
FB082814	4-Chloroaniline	106-47-8	LCS Recovery	36	NA	Low	UJ
MW-47 (082814)	1,1-Dichloroethene	75-35-4	MS/MSD RPD	NA	13	High	J
MW-9 (082814)	Tetrachloroethene	127-18-4	MS/MSD RPD	NA	13	High	J

Notes:
Bias High: Reported result may be lower. Reporting Limit (RL) is acceptable as reported.
Bias Low: Reported results may be higher. Reporting Limit (RL) may be higher than reported.
Bias Indeterminate: Reported result may be biased; however, it's unclear whether the results may be biased low or high.

Other QC Nonconformances:
The internal standards phenanthrene-d10 and chrysene-d12 were below the lower control limit (i.e. <50%); these low areas were were confirmed by a second run
The continuing calibration on 9/3/14 at 10:15p.m. for instrument "MS3E" exhibited a percent difference greater than the control limit for hexachlorocyclopentadiene (-45.0%); the associated non-detects were qualified as "UJ".