

Remedial Action Report

**Riverbend - 4304 State Route 530
Arlington, Washington**

January 19, 2016
Project No. 81147145

Prepared for:
A&M Farms LLC
Seattle, Washington

Prepared by:
Terracon Consultants, Inc.
Mountlake Terrace, Washington

Offices Nationwide
Employee-Owned

Established in 1965
terracon.com

Terracon

Geotechnical

Environmental

Construction Materials

Facilities

2.176 001 In132f047n

January 19, 2016

A&M Farms, LLC
c/o Cascadia Law Group
1201 Third Avenue, Suite 320
Seattle, Washington 98101
Attn: Mr. Rodney Brown, Jr.

Re: **Remedial Action Report**
Riverbend
4304 State Route 530
Arlington, Snohomish County, Washington
Terracon Project No. 81147145
Facility ID: 4864
Cleanup Site No: 11772
VCP Project No. NW2999

Dear Mr. Brown:

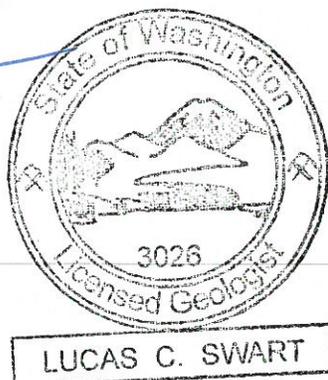
Terracon is pleased to submit this Remedial Action Report for the above referenced site. The services described herein were performed in accordance with our proposal P81140311, dated November 25, 2014, and in accordance with Chapter 173-340 Washington Administrative Code (WAC), the Model Toxics Control Act.

We appreciate the opportunity to perform these services for A&M Farms, LLC. Please contact one of the undersigned at (425) 771-3304 if you have questions regarding the information provided in the report.

Sincerely,

Terracon Consultants, Inc.


Lucas C. Swart, L.G.
Project Manager



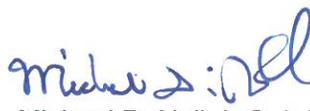

Michael D. Noll, L.G., L.H.G.
Senior Project Manager

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**Remedial Action Report
Riverbend – 4304 State Route 530
Arlington, Washington
Terracon Project No. 81147145
January 19, 2016**

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) was retained by A&M Farms, LLC, to provide project management, soil sampling to confirm the potential presence or absence of petroleum contaminated soil (PCS) in shallow soils, and oversight during the removal of PCS inside a metal storage building. The Site and former boring locations from Terracon's previous investigations are outlined on Exhibit 2, provided in Appendix A.

The PCS removal work was performed as an independent remedial action to protect human health and the environment, in accordance with the requirements of the Washington State Model Toxics Control Act (MTCA) and its implementing regulations, Chapter 173-340 Washington Administrative Code (WAC). The remedial action work was performed in accordance with the *Guidance for Remediation of Petroleum Contaminated Sites*, Washington State Department of Ecology (Ecology) Publication No. 10-09-057 dated September 2011. The independent remedial action was the substantial equivalent of an Ecology-conducted or supervised remedial action, in accordance with WAC 173-340-545(2).

1.1 Site Description

The site is located at 4304 State Route 530 in Arlington, Snohomish County, Washington, and consists of Snohomish County Tax parcels 01052900000100, -0200, -0300, -0500 to -1500. The subject property consists of approximately 140 acres improved with a residential structure and outbuildings, a six-bay carport, an equestrian barn, and agricultural fields.

The Site is bound to the north by SR 530, beyond which lie residential structures and the Stillaguamish River. The Site is bound to the east, south and west by agricultural land and residential structures.

1.2 Site History and Previous Investigations

In April 2011, Terracon performed a Limited Site Investigation (LSI) (Project 81117022) for the site. As part of the scope of work for that project, Terracon reviewed the following environmental reports previously prepared for the site by others:

- Phase I Environmental Site Assessment (ESA) dated March 29, 2004, and prepared by Environmental Associates, Inc (EAI).
- Tank Closure Assessment & Remedial Actions report dated June 9, 2004, and prepared by EAI.
- Phase I ESA dated November 9, 2010 and prepared by Krazan & Associates, Inc. (Krazan).

Phase I Environmental Site Assessment (March 2004)

The ESA identified one 500-gallon gasoline underground storage tank (UST) and one 1,200-gallon diesel UST as recognized environmental conditions (RECs). Both USTs were reportedly installed in 1975, and the remaining product in the USTs was removed in 2003. EAI recommended the USTs be removed and that soil samples be collected in the vicinity of the USTs in order to assess the potential for on-site impacts resulting from undocumented releases from the USTs.

Tank Closure Assessment & Remedial Actions (June 2004)

The report documented the removal of two USTs identified in the March 2004 ESA. The two USTs were removed from the site by AAA Tank Service Company in April 2004. The report and Ecology records indicate that the diesel UST was a 1,500-gallon tank. Both USTs were single-walled steel tanks. Significant corrosion was reportedly observed on the exterior surfaces of the tanks; however, only the gasoline UST was observed to contain visible holes. Upon removal, impacted soil was reportedly identified in the gasoline UST cavity. Approximately 40 tons of impacted soil were reportedly removed from the gasoline UST cavity and stockpiled on-site for future off-site disposal. Soil impacts reportedly extended to approximately 9 feet below the ground surface (bgs). Groundwater was reportedly not observed during excavation activities.

Four soils samples were collected from the diesel UST cavity and analyzed for diesel- and oil-range total petroleum hydrocarbons (TPH). The sample results were below the laboratory reporting limits, with the exception of one sample collected from the east sidewall of the excavation, which contained diesel-range TPH at a concentration of 39 milligrams per kilogram (mg/kg), well below the MTCA Method A cleanup level for diesel-range TPH in soil established at 2,000 mg/kg.

Five soil samples were collected from the gasoline UST cavity after remedial excavation activities and analyzed for gasoline-range TPH, and for benzene, toluene, ethylbenzene, and total xylenes (BTEX). Gasoline-range TPH and benzene were not identified in the soil samples above laboratory reporting limits. Toluene, ethylbenzene, and xylenes were identified in one soil sample at concentrations of 0.05 mg/kg, 0.05 mg/kg, and 0.15 mg/kg, respectively. Xylenes were identified in a second soil sample at a concentration of 0.08 mg/kg. The identified concentrations of toluene, ethylbenzene, and xylenes were below the MTCA Method A cleanup

levels for soil, established at 7 mg/kg, 6 mg/kg, and 9 mg/kg, respectively. One soil sample collected from the gasoline UST cavity was also analyzed for lead. The soil sample contained lead at a concentration of 6.1 mg/kg, which is well below the MTCA Method A cleanup level for lead in soil, established at 250 mg/kg.

A composite soil sample collected from a stockpile of shallow soil removed from above the USTs was analyzed for diesel-, oil-, and gasoline-range TPH, BTEX, and lead. The analytes were not identified above laboratory reporting limits. This stockpiled soil was used as backfill material for the UST cavities.

Additional stock-piled soil which was impacted with gasoline-range TPH and benzene at concentrations above the 2004 MTCA Method A cleanup levels was reportedly left on-site. EAI indicated in their report that the petroleum-impacted soil would be staged on-site for planned future transport to an off-site landfill or thermal desorption treatment facility. No further documentation pertaining to the off-site disposition of petroleum-impacted soil stockpile was provided to Terracon for review. During Terracon's initial site visit for the April 2011 LSI, Terracon interviewed the site owner (Mr. Randy Faber) regarding documentation that may exist for the off-site disposition of the petroleum-impacted soil stockpile. Mr. Faber informed Terracon that AAA Tank Services had removed the stockpiled soil for off-site disposal, but was unaware of where the soil was disposed and could not provide soil disposal documentation for Terracon to review.

Phase I Environmental Site Assessment (November 2010)

The Phase I ESA identified the following RECs:

- An accident involving a truck towing a tractor occurred on the stretch of Highway 530 near the site in July 1992. As a result of the accident, the tractor ended up on its side on-site near the driveway to the residence on Lot 1. Approximately 100 gallons of diesel fuel was released from the tractor to the site soils. Approximately 20 cubic yards of impacted soil were reportedly removed from the site; however, Krazan was unable to locate documentation for the disposition of the impacted soil and confirmation soil sampling results in the Snohomish County Health District file (Terracon followed up with SCHD in 2012. Records older than six years were purged and no records were on file for the 1992 spill);
- Soil with petroleum staining was observed in a metal storage building on Lot 3 in the vicinity of some farm machinery. The staining was reportedly related to on-site storage and maintenance of the farm machinery within the building;
- A manure lagoon was previously located on an adjoining property near the east end of Riverbend Lot 4. Krazan indicated that groundwater in the vicinity of the former manure lagoon might contain elevated concentrations of nitrates.

Krazan recommended that soil testing be completed in the vicinity of the on-site diesel spill and the areas of observed soil staining in order to assess the extent of soil impacts. Krazan also recommended that water from existing on-site water wells be tested to assess compliance with State and Federal drinking water standards for public consumption.

Limited Site Investigation (June 2011)

Terracon's April 2011 LSI work, documented in our June 2011 report, included advancing eight soil borings (B-1 through B-8) in the vicinity of the former USTs, the reported UST excavation soil stockpile location, the historical diesel spill location near State Route 530, and the area of the stained soils inside of the metal storage building. The results of the sampling indicated the presence of petroleum hydrocarbons in shallow soil at concentrations exceeding the MTCA Method A cleanup levels in the vicinity of the stained soil area inside the metal storage building (labelled "Equipment Outbuilding" on Exhibit 2).

Soil samples collected from borings advanced in the areas of the former USTs, UST excavation soil stockpile location, and the July 1992 traffic accident spill along State Route 530 did not identify petroleum hydrocarbons above laboratory reporting limits. Two groundwater samples collected from temporary monitoring wells installed in the vicinity of the former USTs identified low levels of diesel-range TPH; however, the laboratory indicated that the chromatograms were not representative of a diesel petroleum product, and may be associated with non-petroleum organics in the samples.

Based on the results of our LSI, and since soil contamination associated with the former USTs had not previously been reported to Ecology, Terracon recommended in an Opinion Letter dated June 28, 2011 that the June 2004 EAI report and Terracon's June 2011 LSI report be submitted to Ecology in order to satisfy the regulatory reporting requirements listed in WAC 173-340-300.

In 2012, Hearthstone Inc. submitted environmental reports prepared by Terracon and others and enrolled the site into Ecology's Voluntary Cleanup Program (VCP). Following formal enrollment of the site in the VCP (Facility I.D. 4864, Cleanup Site I.D. 11772), Ecology issued an Opinion Letter, dated March 22, 2012, regarding the work performed at the site. In the letter, the Ecology VCP site manager (Mr. Dale Myers) indicated that Ecology had determined that further remedial action was necessary at the site.

The Ecology determination that further remedial action was required was based on the lack of documentation for the disposition of the petroleum-impacted soils associated with the removal and excavation of the USTs and the traffic accident diesel spill along State Route 530. Further, Ecology concluded that the contaminated soil identified inside the storage building would need to be remediated. As a result, the site was listed in the Confirmed and Suspected Contaminated Sites List (CSCSL) database.

In December 2014, Terracon was retained by A&M Farms LLC to assist in obtaining a No Further Action (NFA) determination for the site from Ecology. After Hearthstone, Inc. un-enrolled the site from the VCP, Terracon assisted in re-enrolling the site in the VCP on behalf of A&M Farms, LLC (VCP No. NW2999).

Based on Ecology's March 2012 Opinion Letter, which stated that further remedial action would be required in order to achieve an NFA for the site, and given that there is no record of disposal of the petroleum contaminated soils (PCS) generated from the UST excavation, Terracon facilitated discussions with the site owner and Ecology to determine how best to address the data gaps associated with the PCS from the UST excavation.

Terracon prepared a Sampling and Analysis Plan (SAP), dated February 19, 2015, to evaluate for the potential presence of PCS which may have been stockpiled or left on the site, and submitted the SAP to Ecology for review and approval. The SAP focused on sampling two areas of the site: the approximate location of the PCS stockpile in the vicinity of the former USTs and a large stockpile of soil on the western boundary of the site which reportedly originated from dredging the former manure lagoon in 2004. A total of 26 samples were proposed to be collected from shallow soils between approximately ½ and one foot bgs. The results of the soil sampling are presented below in Section 3.0., Terracon received an Opinion Letter from Ecology, dated September 30, 2015, stating that the SAP was sufficient in scope to determine if any contamination remains on the site. A copy of Ecology's Opinion Letter is included in Appendix D.

Following completion of the soil sampling, Terracon coordinated with the client to complete remedial excavation of PCS in the vicinity of the stained soil area inside the Equipment Outbuilding. The results of the Remedial Excavation are presented in Section 4.0.

1.3 Geology and Hydrogeologic Conditions

Soils types observed during intrusive activities completed for Terracon's June 2011 LSI and during the soil sampling and remedial excavation activities described herein generally consisted of brown silt with sand underlain by brown to gray silty sand to sandy silt with varying amounts of gravel to depths of approximately 20 feet bgs. Soils were generally found to be in a moist condition. Based on the observations of the explorations completed onsite, groundwater was encountered at approximately 15 feet bgs during the 2011 LSI.

1.4 Scope of Work

Terracon provided oversight for the removal and proper disposal of the PCS known to exist on the site. Specifically, the work performed included:

- Collection of site assessment soil samples in two areas: the approximate location of the PCS stockpile in the vicinity of the former USTs and a large stockpile of soil on the western boundary of the site;
- Providing oversight and guidance for the removal and proper offsite disposal of the excavated PCS;
- Collection of confirmation soil samples from the limits of the PCS removal excavation to evaluate residual soil quality in the excavation bottom and sidewalls.
- Preparation of a Remedial Action Report.

1.5 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. The remedial action performed was completed based on information obtained during previous investigations performed by others and Terracon, and was consistent with general industry standards and practices. Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These services were performed in general accordance with the scope of work agreed with the client, as reflected in our proposal.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information was subject to change over time. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.6 Reliance

This report has been prepared for the exclusive use and reliance of A&M Farms, LLC, its subsidiaries, affiliates and their successors, assigns and grantees. Use or reliance by any other party is prohibited without the written authorization of A&M Farms, LLC and Terracon.

Reliance on this report by the client and all authorized parties will be subject to the terms, conditions and limitations stated in this report and Terracon's agreement for services. The

limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

2.0 METHODOLOGY

2.1 Contaminants of Concern

Based on the results of our 2011 LSI, and given our understanding of the history of the site and on our discussions with Ecology, the contaminants of concern (COCs) identified at the site consist of gasoline- and diesel-range TPH in soil.

2.2 MTCA Cleanup Standards

MTCA cleanup levels are concentrations of hazardous substances that have been determined to be protective of human health and the environment under specific exposure conditions. Applicable cleanup levels under MTCA can be developed using either default Method A tabulated values or using Method B site-specific, risk-based formulations. Although both Method A and Method B cleanup levels allow for unrestricted land use (including residential use), Method A cleanup levels are the most conservative and protective of human health and the environment.

For the purposes of this independent cleanup action, MTCA Method A cleanup levels for soil were utilized. The MTCA Method A cleanup level for gasoline-range TPH in soil is 100 mg/kg when benzene is not present. The MTCA Method A cleanup level for diesel-range TPH in soil is 2,000 mg/kg.

2.3 Potential Exposure Pathways

In addition to the elements of MTCA cleanup standards, potential exposure pathways for the site and potential downgradient receptors for COCs detected at the site were evaluated as part of the selection process for a cleanup action alternative. A discussion of potential exposure pathways is included below.

2.3.1 Soil-to-Groundwater Pathway

Based upon information provided in previous investigations, groundwater was encountered at approximately 15 feet bgs. However, the intervals where contaminated soil had previously been identified did not extend below approximately 9 feet. No groundwater impacts were previously identified and all PCS identified at the site has been removed and addressed. As a result, there is no potential exposure through the soil-to-groundwater pathway.

2.3.2 Direct-Contact Pathway

Direct contact with soil and groundwater exhibiting concentrations of petroleum hydrocarbons in excess of MTCA Method A cleanup levels is limited to human receptors who come into close contact with the media via direct exposure, including dermal contact or ingestion of excavated soil. The standard point of compliance for soil contamination beneath a site is approximately 15 feet bgs, which represents a reasonable estimate of the depth that could be accessed during normal site redevelopment activities (WAC 173-340-740[6][d]). Since remediation activities have been undertaken and the contaminated soil within 15 feet of the ground surface has been removed from the site, the direct contact pathway has been addressed and is no longer an exposure risk.

2.3.3 Vapor Intrusion Pathway

Volatile COCs, such as benzene, have not been identified at the site. Furthermore, all known PCS at the site has been successfully removed; therefore, the vapor intrusion pathway is not an exposure risk.

3.0 GRID SOIL SAMPLING

3.1 Sampling Location Rationale

As detailed in Terracon's February 2015 Sampling and Analysis Plan, two areas of the site were identified for evaluation for the potential presence of PCS associated with the former UST excavation. Specifically, we infer that if the PCS stockpile was not removed for offsite disposal, it might have either been spread out in the vicinity of the former UST excavation and associated soil stockpile location, or have been relocated to the stockpile of dredged soils from the manure lagoon located on the western portion of the site.

3.2 Soil Sampling

On October 22, 2015, Terracon mobilized to the site to complete soil sampling in the selected areas of the site.

A total of 26 soil samples were collected during field activities, at the locations depicted on Exhibit 3 in Appendix A. Samples were collected from depths of approximately ½ to one foot bgs in the areas proposed in the SAP. Samples S-1 through S-6 were collected from the manure lagoon dredged soil stockpile. Samples S-7 through S-26 were collected from the area of the former USTs excavation.

Soil samples were extracted by hand from sampling locations excavated using hand tools. The samples were collected using disposable gloves and placed directly into laboratory supplied glassware. Sampling equipment was cleaned using an Alconox® wash and potable water rinse prior to the beginning of the project and before collecting each soil sample.

Each sample container was labeled with the project number, date, time, and sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently transported to the analytical laboratory by Terracon under strict chain-of-custody procedures.

3.3 Soil Analytical Results

Collected soil samples were submitted for laboratory analysis by Friedman & Bruya, Inc. (FBI), a Washington State-accredited laboratory. The samples were submitted for laboratory analysis for the following:

- Gasoline-range TPH using Northwest Method NWTPH-Gx;
- Diesel-range TPH using Northwest Method NWTPH-Dx.

Soil sample analytical results are presented in Table 1. COCs were not detected at concentrations above laboratory reporting limits in the soil samples. The executed chain-of-custody forms and laboratory analytical certificates are provided in Appendix C

4.0 REMEDIAL EXCAVATION

4.1 Remedial Excavation

Terracon mobilized to the site on December 18, 2015 to oversee the excavation of PCS in the stained soil area within the Equipment Outbuilding. Excavation was performed using a backhoe and the PCS was placed directly into a dump truck for off-site disposal. Trucking and disposal were handled by R Transport of Arlington, Washington under contract to A&M Farms, LLC. The PCS was disposed at a licensed landfill. A total of 8.23 tons of PCS were excavated and exported for off-site disposition at Waste Management in Seattle, Washington. Copies of the disposal documentation are included in Appendix D.

The excavation extended to an approximately 9 foot by 9 foot area in the vicinity of former Terracon soil boring B-8, and continued to a depth of approximately 2½ feet bgs. At the limits of the excavation, Terracon collected soil samples, which were field-screened using a MiniRAE 3000 photoionization detector (PID). Samples were screened by first segregating, at a minimum, one ounce of soil into a sealed plastic bag. The samples were placed into the plastic bag and set aside to allow potential volatilization from the sample to accumulate. Headspace analysis was performed by subsequently puncturing each plastic bag with the probe of the PID

to estimate the concentration of volatile components partitioned into the atmosphere (“headspace”) within the bag.

The PID was calibrated with isobutylene gas (100 parts per million [ppm]) prior to sampling. The highest digital readout value displayed by the instrument for each sample was recorded in the field notebook. The value recorded for the PID indicates the total vapor concentration of volatile organic compounds (VOCs) with ionization potentials less than the energy produced by the ionizing radiation source (ultraviolet lamp) of the PID. These compounds include numerous volatile constituents of petroleum hydrocarbons. Soil samples screened using the PID did not exhibit elevated concentrations. As a result, five soil samples were collected from the extents of the excavation at depths ranging from 1.5 to 2.5 feet bgs to confirm that impacted soils had been successfully removed.

Soil samples were extracted by hand and/or from sampling hand tools using disposable gloves and placed directly into laboratory supplied glassware. Each sample container was labeled with the project number, date, time, and a sample number with approximate location and depth. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently transported to the analytical laboratory by Terracon under strict chain-of-custody procedures.

One soil sample was collected from each excavation sidewall at approximately 1.5 feet bgs, and one soil sample was collected from the bottom of the excavation at approximately 2.5 feet bgs. Approximate sample locations are depicted on Exhibit 4.

4.2 Analytical Results

Soil samples were delivered to FBI for laboratory analysis for the following:

- Gasoline-range TPH via Northwest Method NWTPH-Gx;
- Diesel-range TPH via Northwest Method NWTPH-Dx.

The executed chain-of-custody forms and laboratory analytical certificates are provided in Appendix C.

Gasoline-range TPH

Based on the analytical results, gasoline-range TPH was not detected at concentrations above the laboratory reporting limit in the samples collected from the PCS excavation.

Diesel-range TPH

Diesel-range TPH was detected at a concentration of 74 mg/kg in soil sample BOT-2.5, collected from the bottom of the excavation at approximately 2.5 feet bgs. This concentration is well below the MTCA Method A cleanup level of 2,000 mg/kg.

4.3 Quality Assurance/Quality Control Results

The analytical results for the current investigation were checked for completeness immediately upon receipt from the laboratory to ensure that data and QA/QC information requested were present. Data quality was assessed by considering hold times, surrogate recovery, method blanks, matrix spike and matrix spike duplicate (MS/MSD) recovery, and detection limits. QA/QC review was completed using guidance described in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (Draft Final, USEPA, 2005). Our evaluation assumes that the QA/QC is correct as reported by the laboratory, and merely provides an interpretation of the QA/QC results.

Hold Times. Analyses were completed within specified hold times.

Surrogate Recoveries. Surrogate recoveries were within laboratory limits.

Method Blanks. Analytes were not detected in the laboratory method blanks.

MS/MSD Results. MS and MSD recoveries were all within laboratory limits, and Relative Percent Differences (RPDs) between MS and MSD recoveries were all within laboratory limits.

Laboratory Reporting Limits. Reporting limits were below relevant MTCA cleanup levels. Based upon our interpretation of quality control information provided by the laboratory, it is our opinion that the overall dataset is useable as qualified for the purposes of this report.

5.0 FINDINGS AND CONCLUSIONS

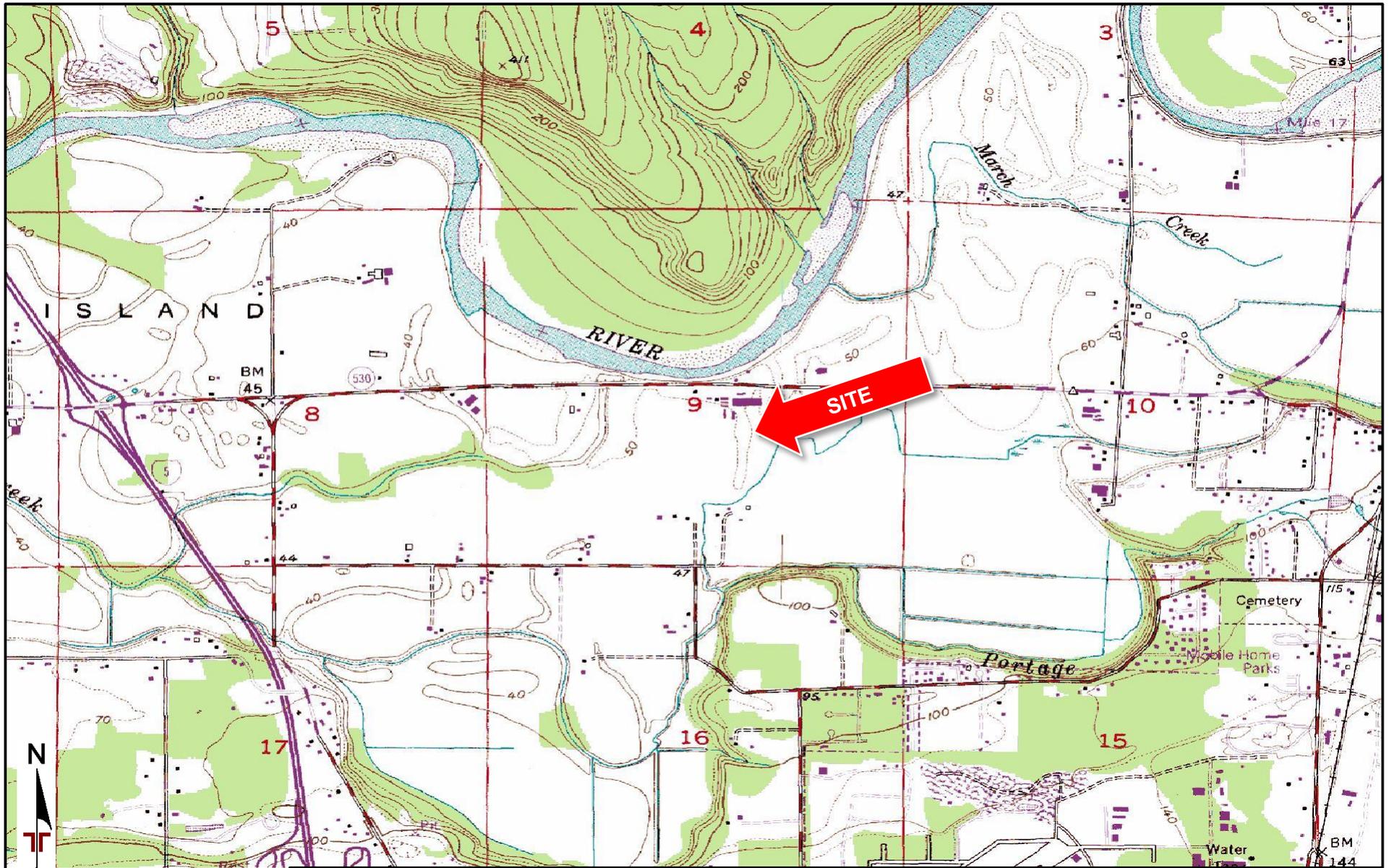
Terracon has completed this Remedial Action Report in support of documenting the potential presence of residual PCS from the 2004 UST excavation, and the removal and offsite disposal of PCS from within the Equipment Outbuilding on the site.

All PCS above the MTCA Method A cleanup levels has been removed from the site and disposed of off-site. Remedial activities consisting of the excavation and off-site disposal of residual petroleum contaminated soils were successful in cleaning up gasoline-range TPH and diesel-range TPH from soils on the site.

Based on the results of this independent cleanup action, Terracon recommends that an unrestricted No Further Action (NFA) determination be sought from Ecology for the site.

APPENDIX A

Exhibits



TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: ARLINGTON WEST, WA (1/1/1981).

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

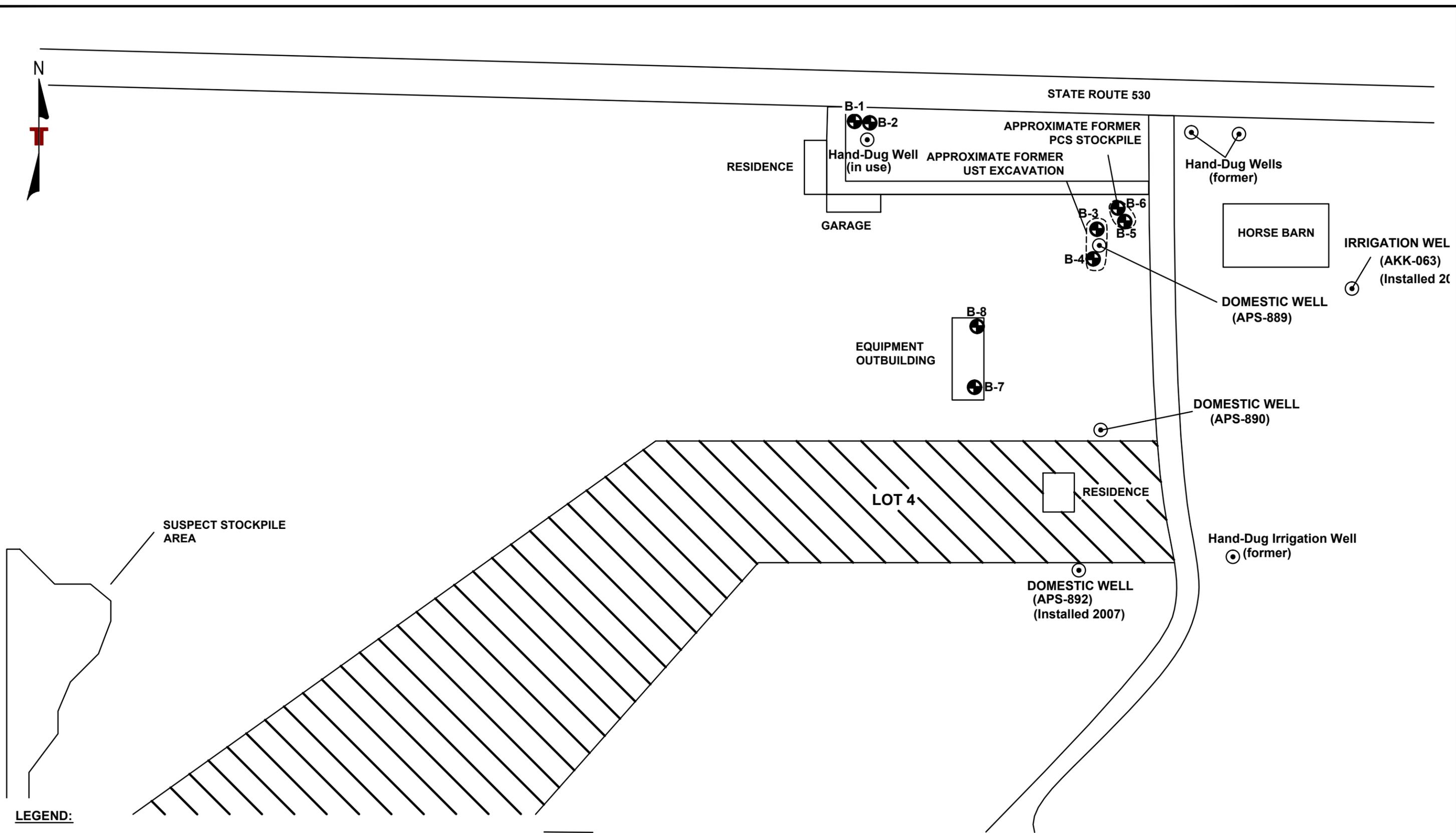
Project Manager: LCS	Project No. 81147145
Drawn by: LCS	Scale: 1:24,000
Checked by: LCS	File Name: Fig
Approved by: MYW	Date: 2-12-15

Terracon
 21905 64th Ave W Suite 100
 Mountlake Terrace, WA 98043

TOPOGRAPHIC MAP

Riverbend
 4304 State Route 530
 Arlington, Washington

Exhibit
 1



LEGEND:

- **B-1** BORING NUMBER AND APPROXIMATE LOCATION
- ⊙
WELL APPROXIMATE WELL LOCATION
- PROPOSED BORING LOCATION
- ⊙
 NOT PART OF SITE

Project Mgr:	MYW	Project No.:	81147145
Drawn By:	LCS	Scale:	Not To Scale
Checked By:	LCS	File No.:	.dwg
Approved By:	MYW	Date:	January 2016

Terracon
 Consulting Engineers and Scientists
21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043
 PH. (425) 771-3304 FAX. (425) 771-3549

SITE DIAGRAM
 Riverbend
 4304 State Route 530
 Arlington, Washington



STATE ROUTE 530

B-1
● B-2

RESIDENCE

GARAGE

S-7

S-8

S-9

S-10

S-11

B-6

S-12

HORSE BARN

B-5

B-3

B-4

S-17

SEE FIGURE 4 - REMEDIAL EXCAVATION DETAIL

S-13

S-14

S-15

S-16

CROP / FIELD

B-8

S-19

S-20

S-21

S-22

EQUIPMENT OUTBUILDING

S-18

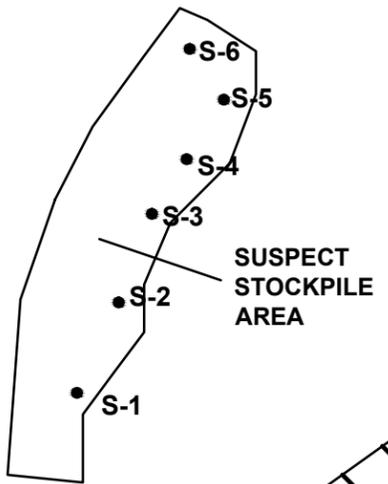
S-23

B-7

S-24

S-25

S-26



SUSPECT STOCKPILE AREA

LOT 4

RESIDENCE

LEGEND:

● B-1 BORING NUMBER AND APPROXIMATE LOCATION

● S-6 SHALLOW SOIL SAMPLE NUMBER AND APPROXIMATE LOCATION

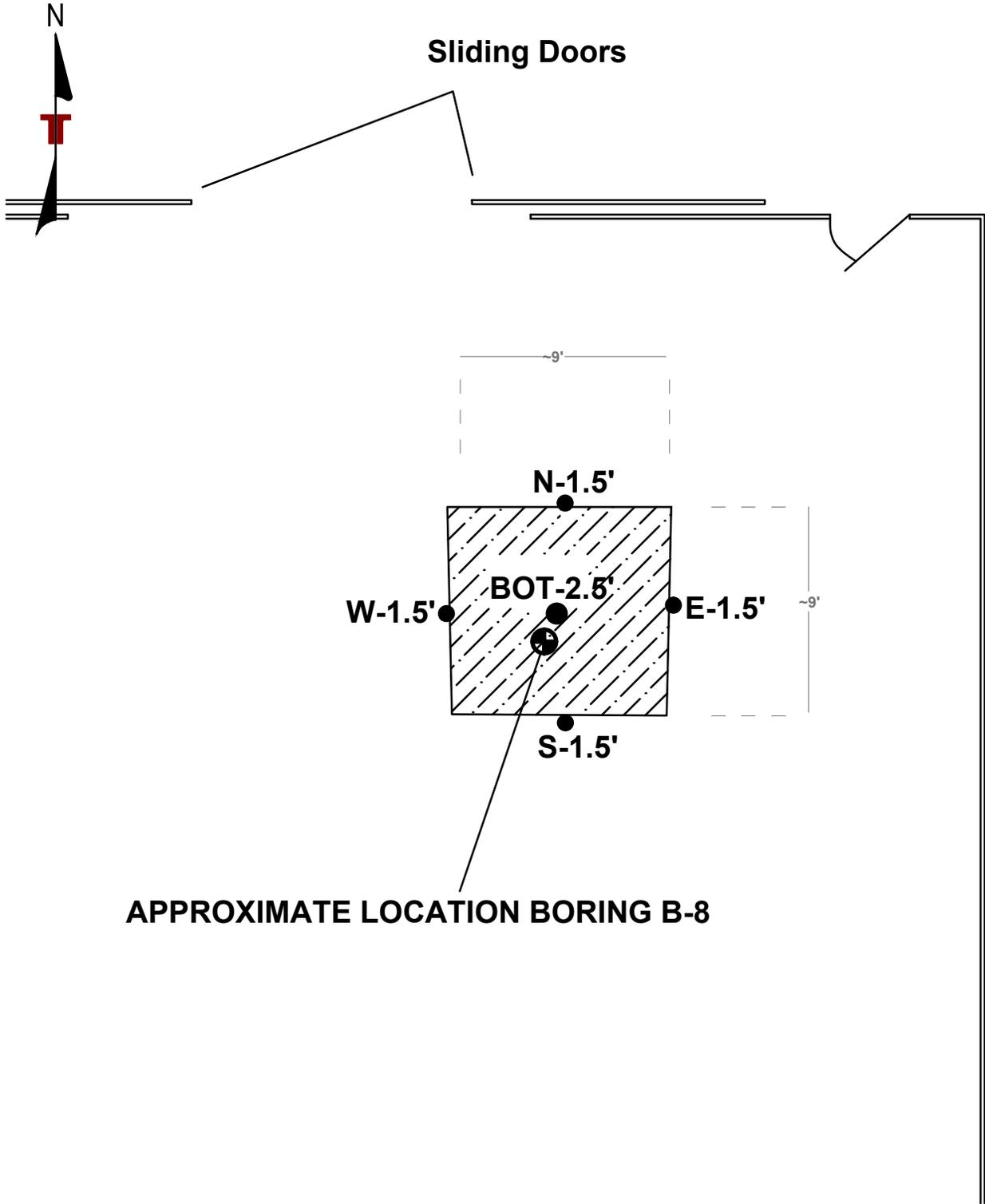
▨ NOT PART OF SITE

Project Mng:	LCS	Project No.	81147145
Drawn By:	LCS/AAS	Scale:	Not To Scale
Checked By:	LCS	File No.	81147145Figures.dwg
Approved By:	MYW	Date:	January 2016

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SITE AND EXPLORATION PLAN
Riverbend
4304 State Route 530
Arlington, Washington

EXHIBIT
3



APPROXIMATE LOCATION BORING B-8

LEGEND:

-  APPROXIMATE BORING LOCATION
-  **N-1.5'** CONFIRMATION SAMPLE NUMBER AND APPROXIMATE LOCATION
-  APPROXIMATE REMEDIAL EXCAVATION EXTENTS

Project Mngr:	LCS	Project No.	81147145	Terracon Consulting Engineers and Scientists	REMEDIAL EXCAVATION DETAIL	Riverbend 4304 State Route 530 Arlington, Washington	EXHIBIT
Drawn By:	AAS	Scale:	Not to Scale				
Checked By:	LCS	File No.	81147145Figures.dwg	21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043			4
Approved By:	MYW	Date:	January 2016	PH. (425) 771-3304 FAX. (425) 771-3549			

APPENDIX B

Tables

Table 1 : Summarized Soil Analytical Results
 4304 SR 530 Arlington, Snohomish County, Washington
 Terracon Consultants Inc. (2015)

Sample ID	Date	Depth (feet)	TPH	
			Gasoline-Range	Diesel-Range
S-1	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-2	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-3	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-4	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-5	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-6	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-7	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-8	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-9	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-10	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-11	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-12	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-13	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-14	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-15	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-16	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-17	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-18	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-19	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-20	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-21	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-22	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-23	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-24	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-25	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
S-26	10/22/2015	0.5 - 1	ND (<2)	ND (<50)
MTCA Cleanup Level (Method A)			100	2,000

All concentrations presented in parts per million (mg/kg)
 TPH - Total petroleum hydrocarbons

Table 2 : Remedial Excavation Soil Results
 4304 SR 530 Arlington, Snohomish County, Washington
 Terracon Consultants Inc. (2015)

Sample ID	Date	Depth (feet)	TPH	
			Gasoline-Range	Diesel-Range
N-1.5	12/18/2015	1.5	ND (<2)	ND (<50)
S-1.5	12/18/2015	1.5	ND (<2)	ND (<50)
E-1.5	12/18/2015	1.5	ND (<2)	ND (<50)
W-1.5	12/18/2015	1.5	ND (<2)	ND (<50)
BOT-2.5	12/18/2015	2.5	ND (<2)	74
MTCAs Cleanup Level (Method A)			100	2,000

All concentrations presented in parts per million (mg/kg)
 TPH - Total petroleum hydrocarbons

APPENDIX C

Analytical Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 30, 2015

Lucas Swart, Project Manager
Terracon
Pacific Cascade Building
21905 64th Ave. W., Suite 100
Mountlake Terrace, WA 98043

Dear Mr. Swart:

Included is the amended report from the testing of material submitted on October 22, 2015 from the 81147145, F&BI 510348 project. Per your request, the NWTPH-Dx analysis was corrected to diesel only.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRC1028R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 28, 2015

Lucas Swart, Project Manager
Terracon
Pacific Cascade Building
21905 64th Ave. W., Suite 100
Mountlake Terrace, WA 98043

Dear Mr. Swart:

Included are the results from the testing of material submitted on October 22, 2015 from the 81147145, F&BI 510348 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRC1028R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 22, 2015 by Friedman & Bruya, Inc. from the Terracon 81147145, F&BI 510348 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Terracon</u>
510348 -01	S-1
510348 -02	S-2
510348 -03	S-3
510348 -04	S-4
510348 -05	S-5
510348 -06	S-6
510348 -07	S-7
510348 -08	S-8
510348 -09	S-9
510348 -10	S-10
510348 -11	S-11
510348 -12	S-12
510348 -13	S-13
510348 -14	S-14
510348 -15	S-15
510348 -16	S-16
510348 -17	S-17
510348 -18	S-18
510348 -19	S-19
510348 -20	S-20
510348 -21	S-21
510348 -22	S-22
510348 -23	S-23
510348 -24	S-24
510348 -25	S-25
510348 -26	S-26

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15

Date Received: 10/22/15

Project: 81147145, F&BI 510348

Date Extracted: 10/23/15

Date Analyzed: 10/23/15, 10/24/15 and 10/26/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
S-1 510348-01	<2	95
S-2 510348-02	<2	95
S-3 510348-03	<2	96
S-4 510348-04	<2	94
S-5 510348-05	<2	95
S-6 510348-06	<2	95
S-7 510348-07	<2	96
S-8 510348-08	<2	97
S-9 510348-09	<2	97
S-10 510348-10	<2	97
S-11 510348-11	<2	93

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15
Date Received: 10/22/15
Project: 81147145, F&BI 510348
Date Extracted: 10/23/15
Date Analyzed: 10/23/15, 10/24/15 and 10/26/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
S-12 510348-12	<2	95
S-13 510348-13	<2	95
S-14 510348-14	<2	96
S-15 510348-15	<2	96
S-16 510348-16	<2	96
S-17 510348-17	<2	97
S-18 510348-18	<2	96
S-19 510348-19	<2	96
S-20 510348-20	<2	94
S-21 510348-21	<2	96
S-22 510348-22	<2	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15
Date Received: 10/22/15
Project: 81147145, F&BI 510348
Date Extracted: 10/23/15
Date Analyzed: 10/23/15, 10/24/15 and 10/26/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
S-23 510348-23	<2	96
S-24 510348-24	<2	96
S-25 510348-25	<2	95
S-26 510348-26	<2	96
Method Blank 05-2171 MB	<2	98
Method Blank 05-2172 MB	<2	96

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15
Date Received: 10/22/15
Project: 81147145, F&BI 510348
Date Extracted: 10/23/15
Date Analyzed: 10/23/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
S-1 510348-01	<50	105
S-2 510348-02	<50	120
S-3 510348-03	<50	112
S-4 510348-04	<50	118
S-5 510348-05	<50	95
S-6 510348-06	<50	94
S-7 510348-07	<50	95
S-8 510348-08	<50	94
S-9 510348-09	<50	94
S-10 510348-10	<50	86
S-11 510348-11	<50	121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15
Date Received: 10/22/15
Project: 81147145, F&BI 510348
Date Extracted: 10/23/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL
USING METHOD NWTPH-D_x**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
S-12 510348-12	<50	102
S-13 510348-13	<50	87
S-14 510348-14	<50	83
S-15 510348-15	<50	89
S-16 510348-16	<50	94
S-17 510348-17	<50	88
S-18 510348-18	<50	89
S-19 510348-19	<50	92
S-20 510348-20	<50	87
S-21 510348-21	<50	98
S-22 510348-22	<50	105

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15
Date Received: 10/22/15
Project: 81147145, F&BI 510348
Date Extracted: 10/23/15
Date Analyzed: 10/23/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
S-23 510348-23	<50	97
S-24 510348-24	<50	101
S-25 510348-25	<50	96
S-26 510348-26	<50	103
Method Blank 05-2187 MB	<50	116
Method Blank 05-2188 MB	<50	108

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15

Date Received: 10/22/15

Project: 81147145, F&BI 510348

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR TPH AS GASOLINE
USING METHOD NWTPH-Gx**

Laboratory Code: 510348-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	110	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15

Date Received: 10/22/15

Project: 81147145, F&BI 510348

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR TPH AS GASOLINE
USING METHOD NWTPH-Gx**

Laboratory Code: 510361-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	105	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15

Date Received: 10/22/15

Project: 81147145, F&BI 510348

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL
SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL USING METHOD NWTPH-Dx**

Laboratory Code: 510348-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel	mg/kg (ppm)	5,000	<50	115	114	64-133	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel	mg/kg (ppm)	5,000	114	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/28/15

Date Received: 10/22/15

Project: 81147145, F&BI 510348

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL
SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL USING METHOD NWTPH-Dx**

Laboratory Code: 510348-21 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel	mg/kg (ppm)	5,000	<50	116	116	63-146	0

Laboratory Code: Laboratory Control Sample

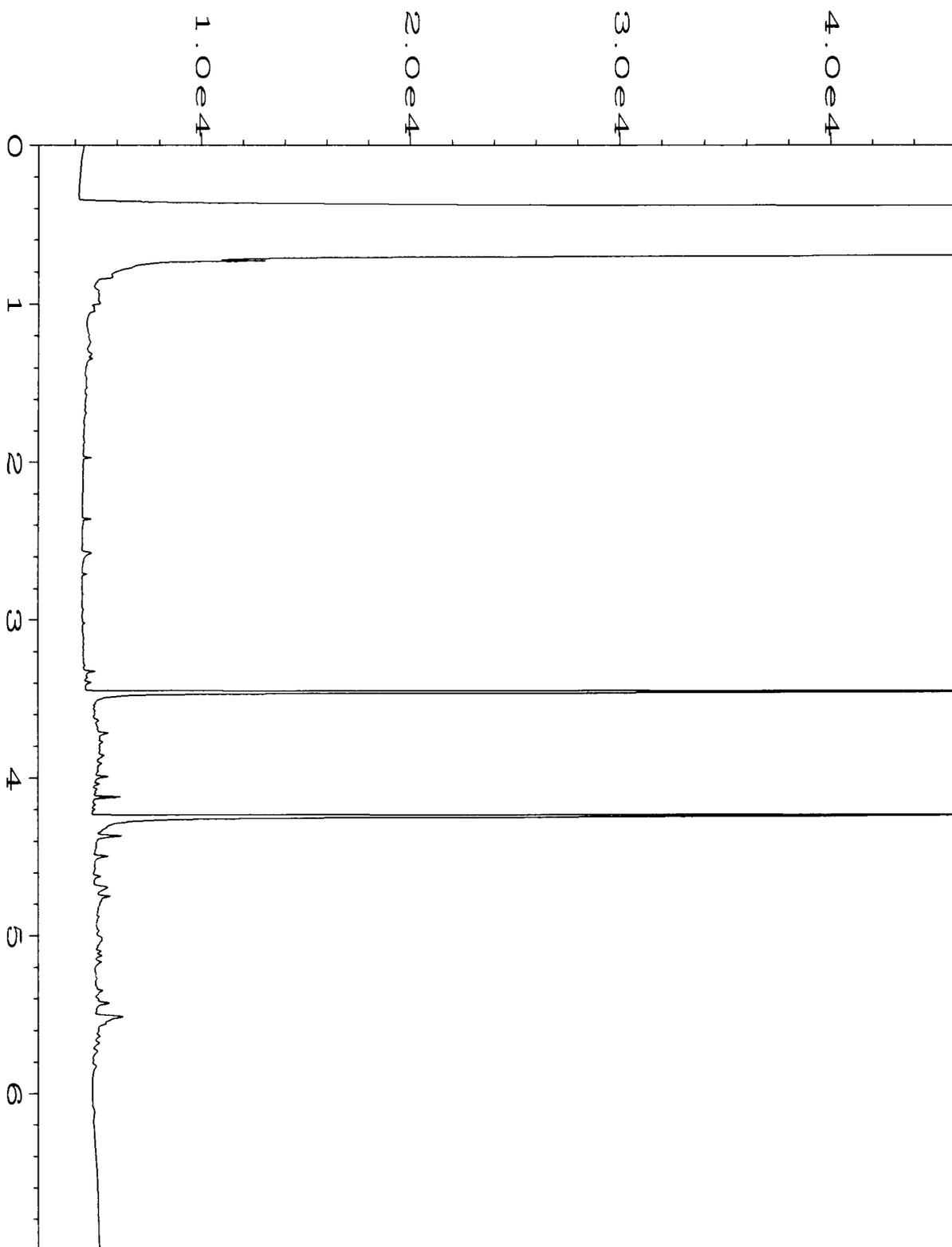
Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel	mg/kg (ppm)	5,000	104	79-144

FRIEDMAN & BRUYA, INC.

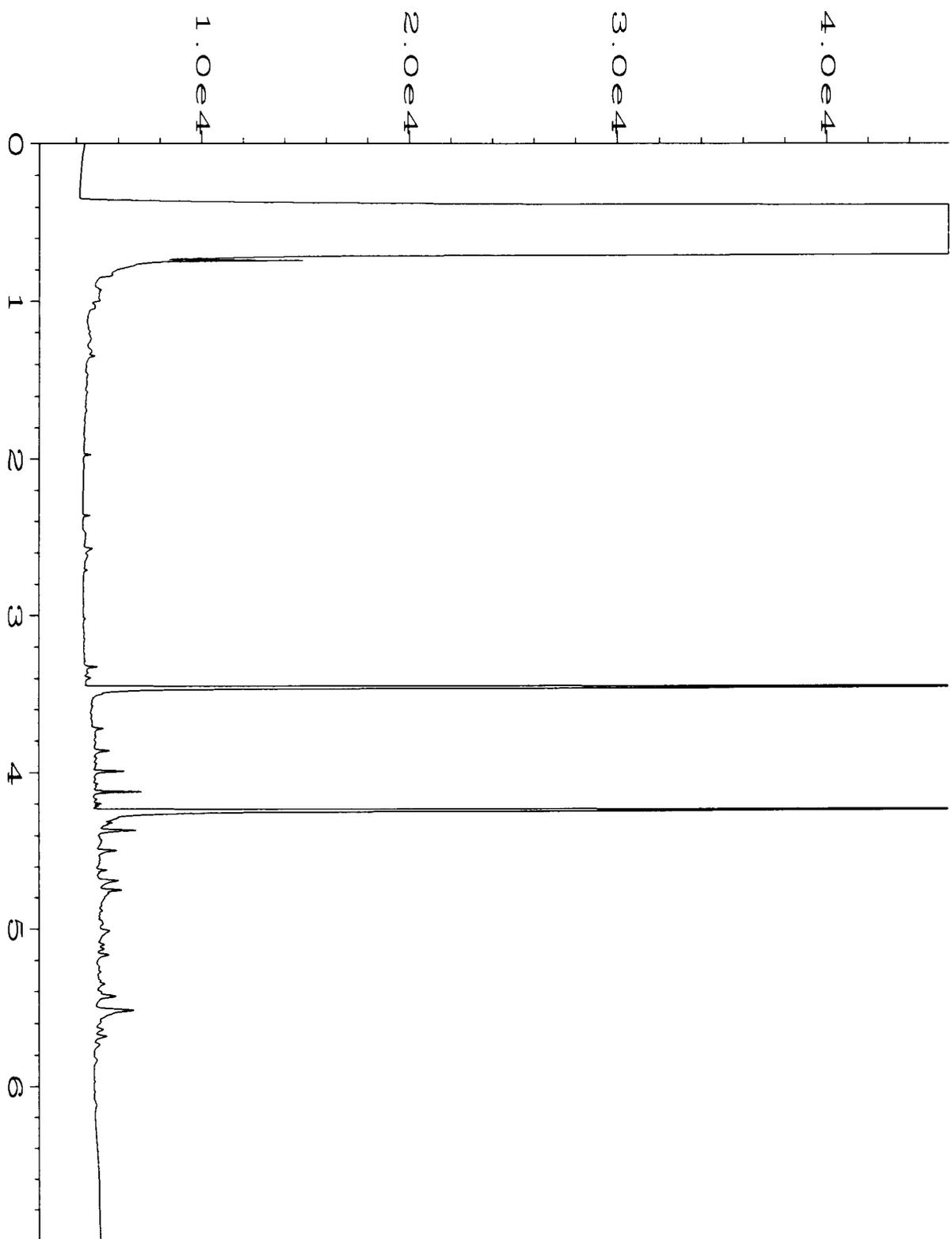
ENVIRONMENTAL CHEMISTS

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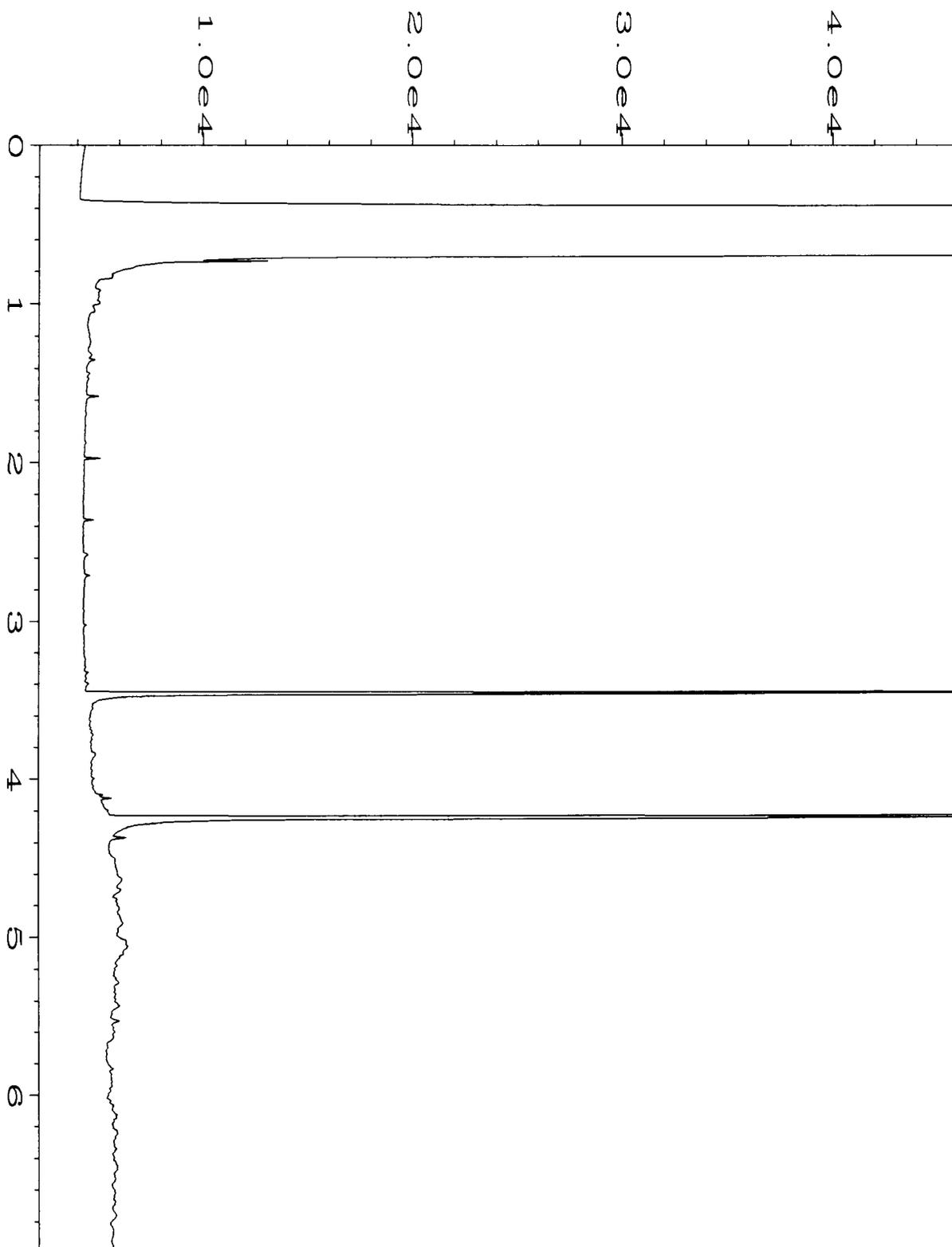
- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



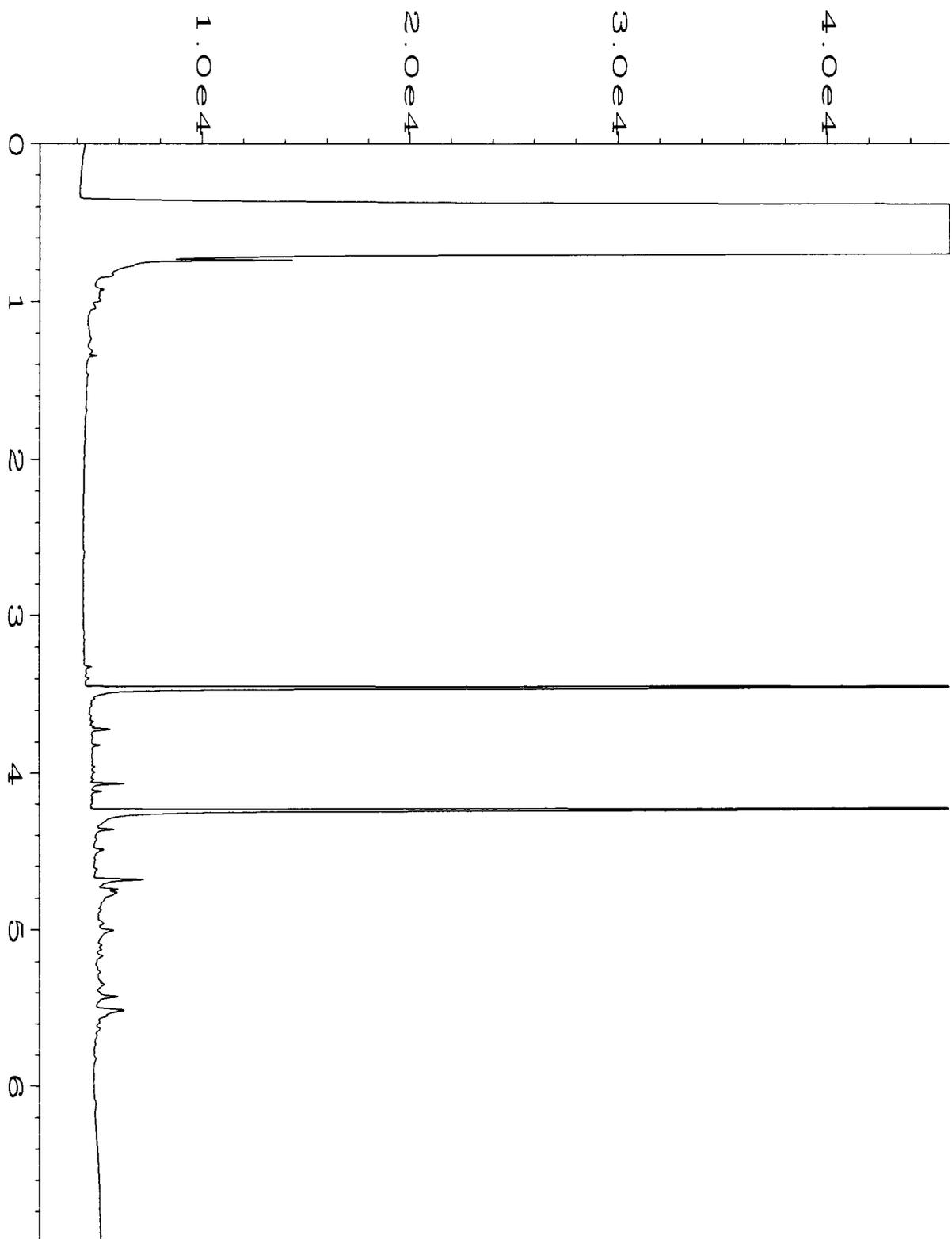
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Sample Name	: 510348-01	Sequence Line	: 3
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Acquired on	: 23 Oct 15 12:50 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:37 AM		



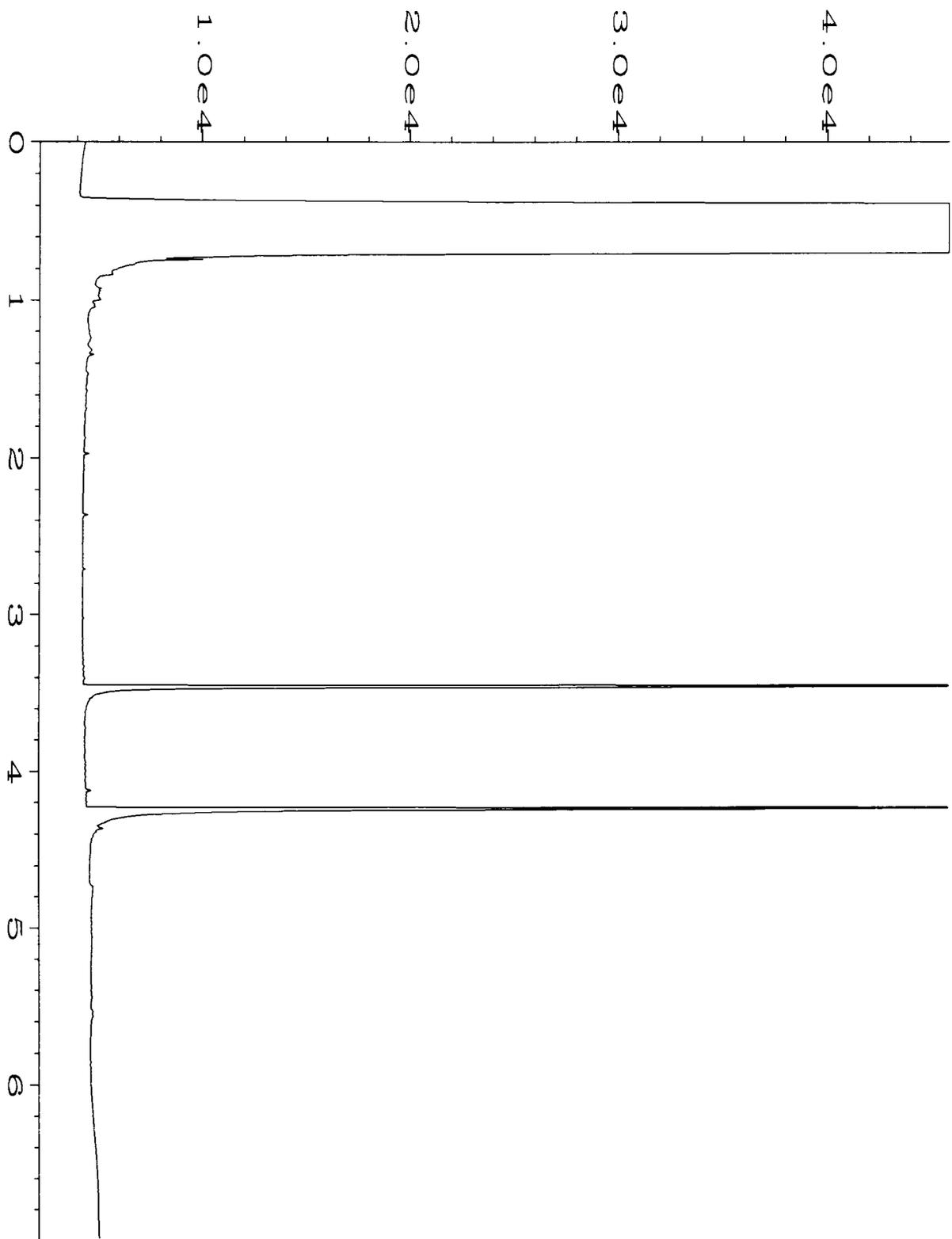
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Acquired on	: 23 Oct 15 01:01 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:37 AM		



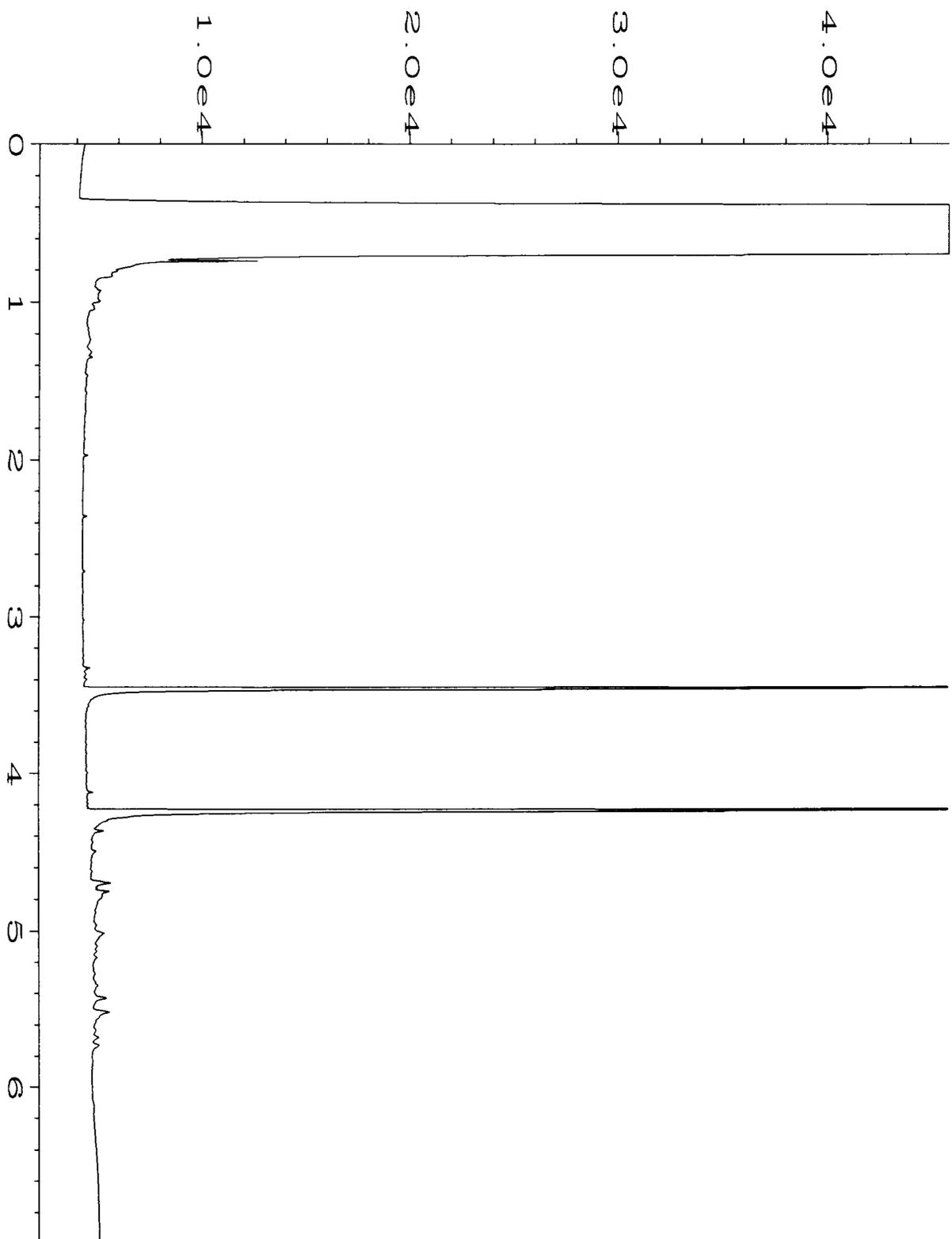
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Sample Name	: 510348-03	Sequence Line	: 6
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Acquired on	: 23 Oct 15 05:56 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:39 AM		



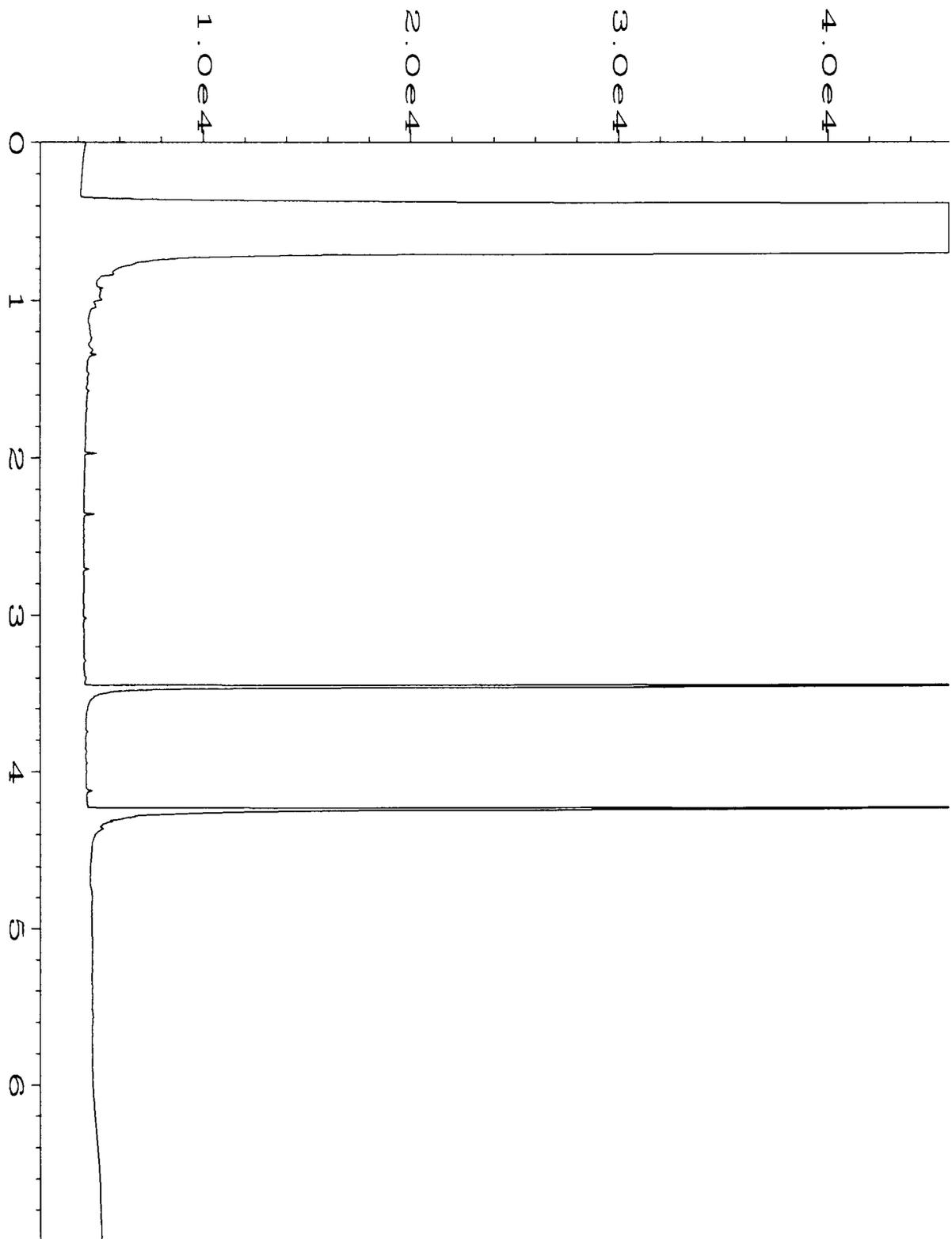
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Sample Name	: 510348-04	Sequence Line	: 3
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Acquired on	: 23 Oct 15 01:22 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



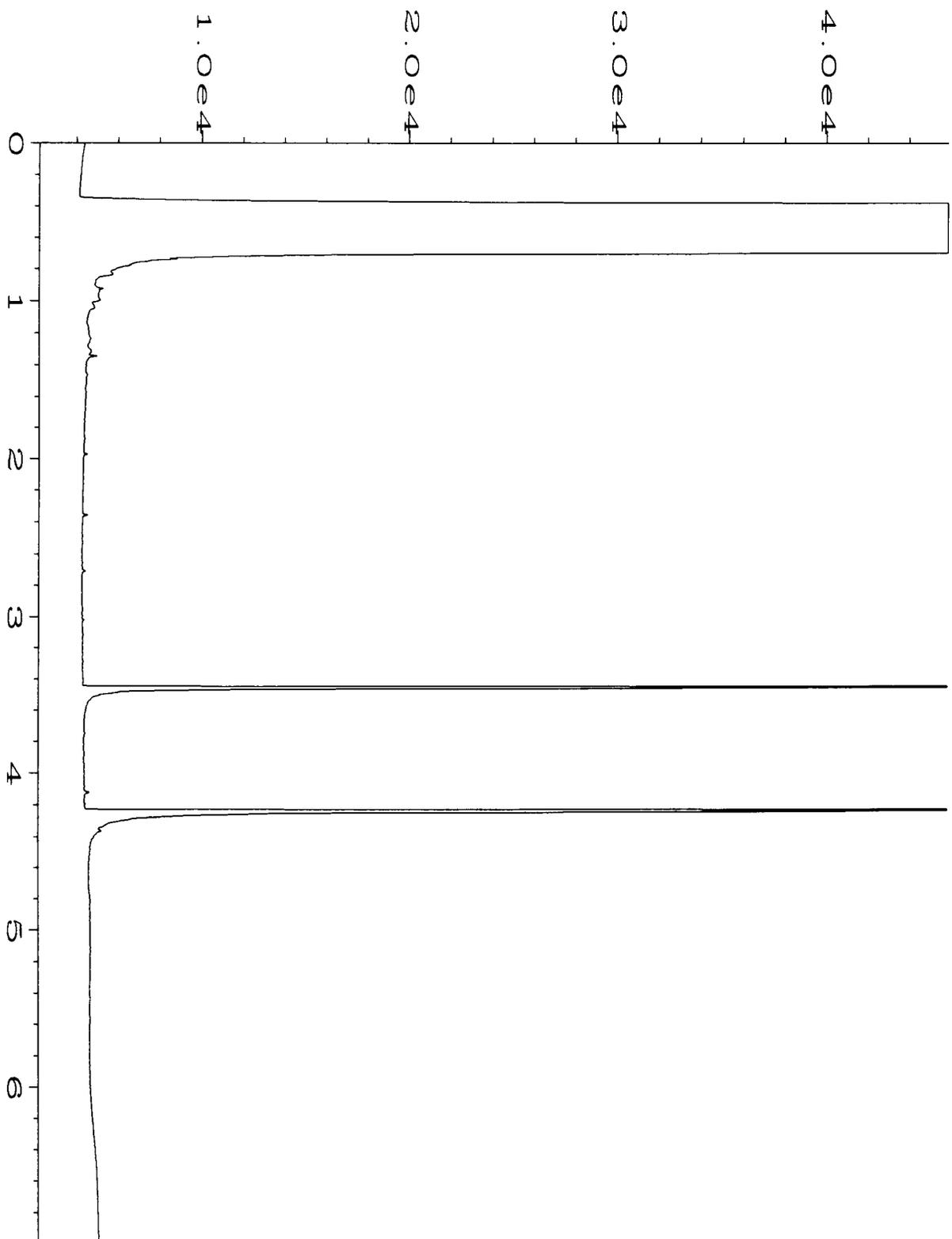
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Acquired on	: 23 Oct 15 01:33 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



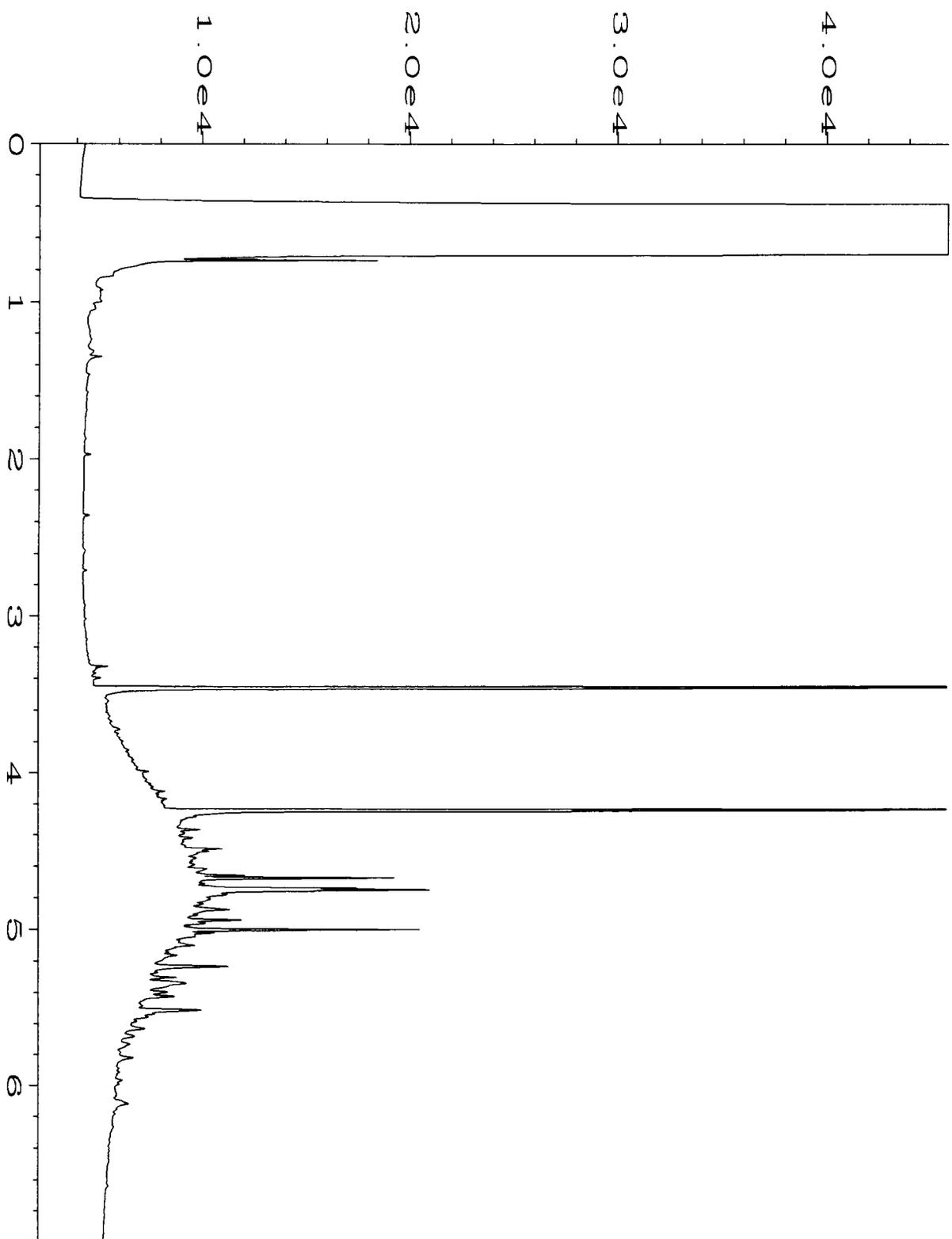
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Acquired on	: 23 Oct 15 01:44 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



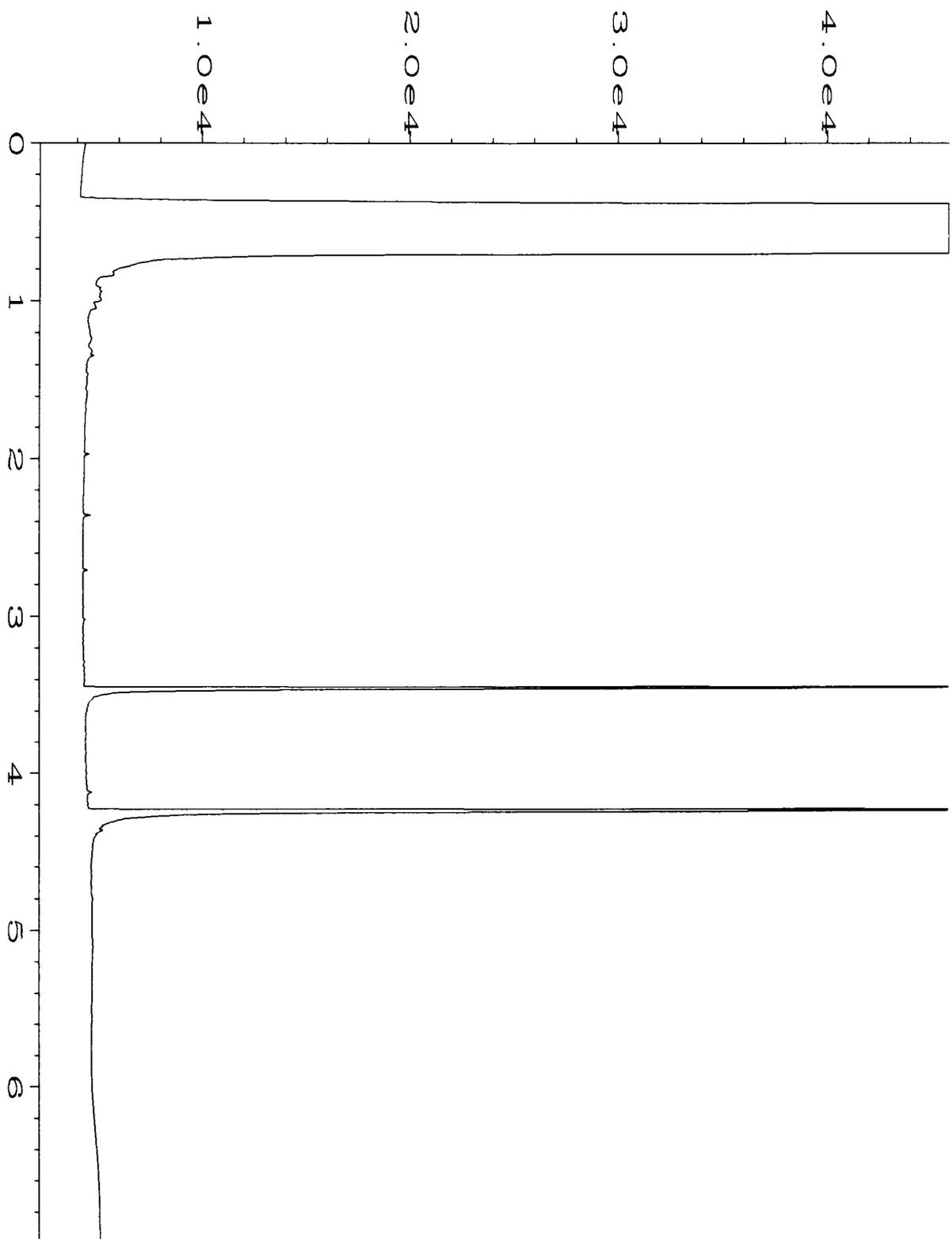
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Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 01:55 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



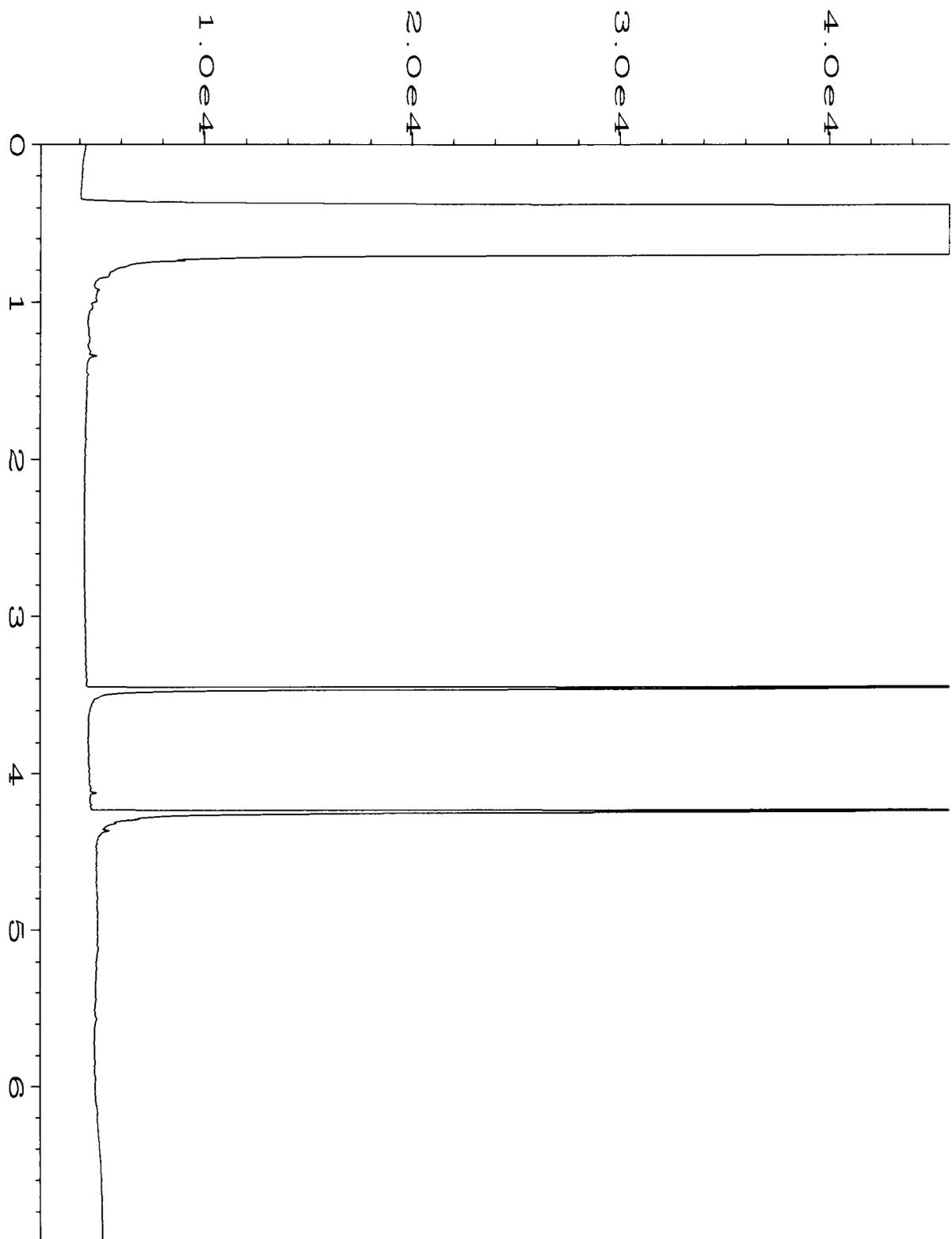
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Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-08	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 02:06 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



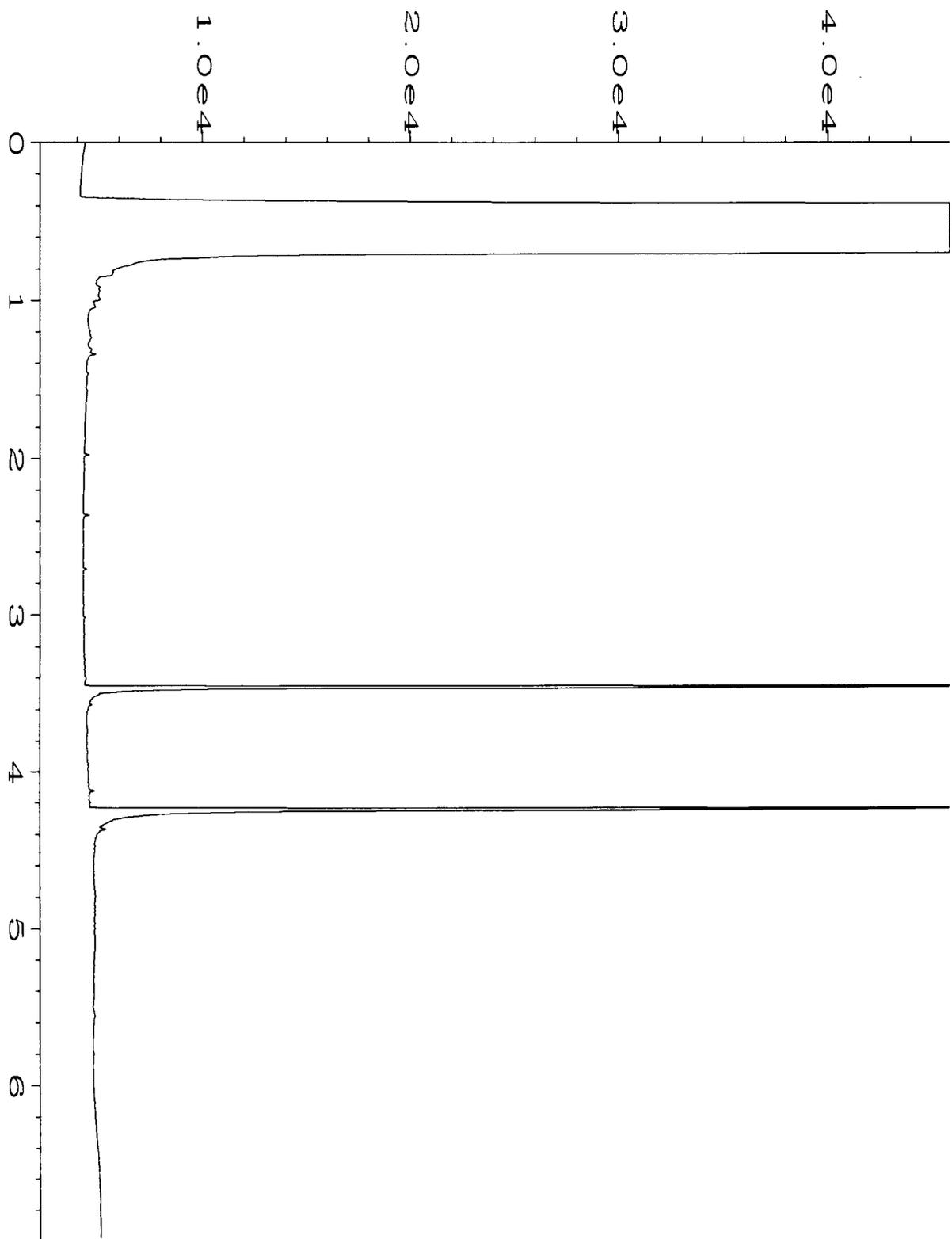
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Operator	: sp	Vial Number	: 30
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-09	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 02:16 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



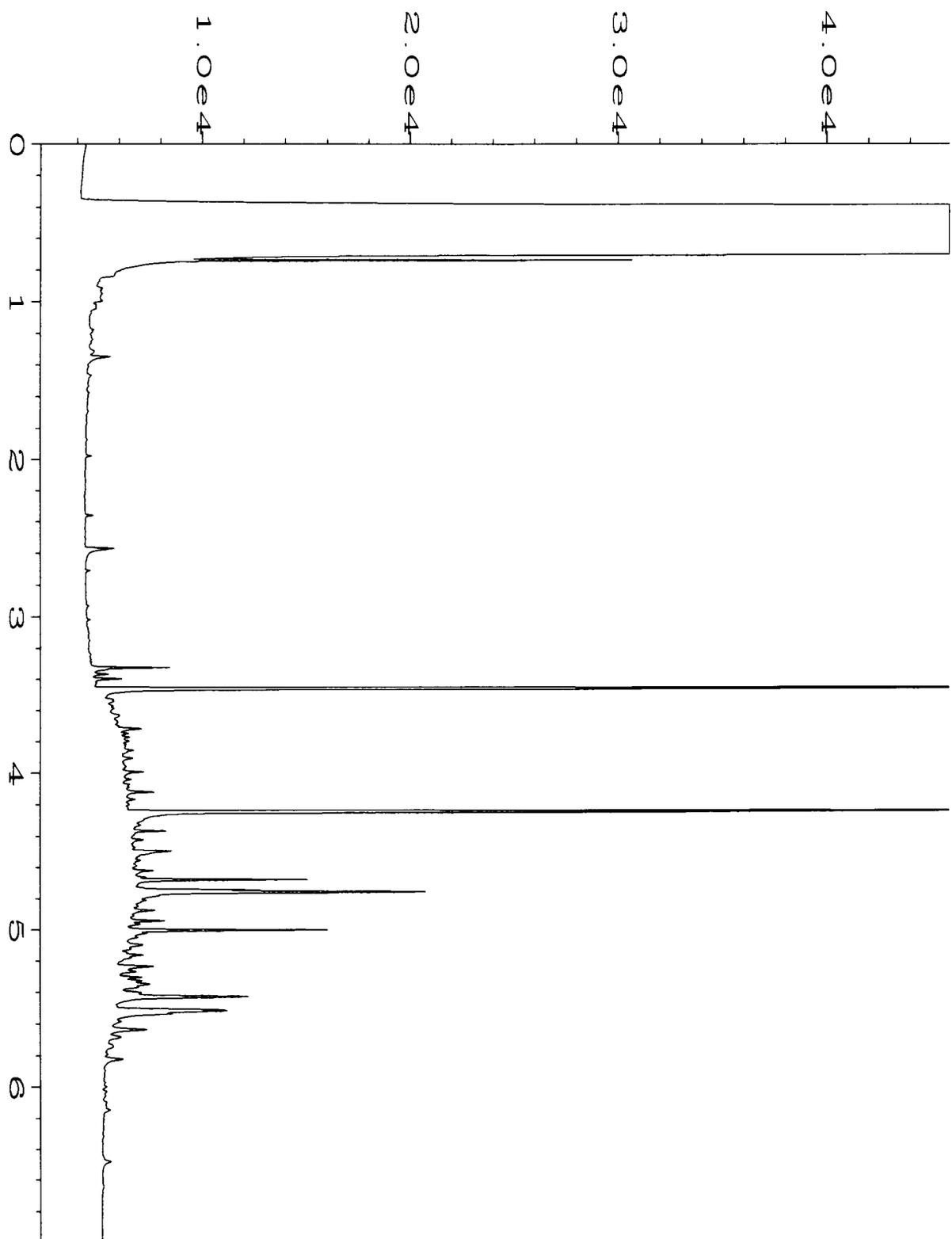
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\031F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 31
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-10	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 02:27 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



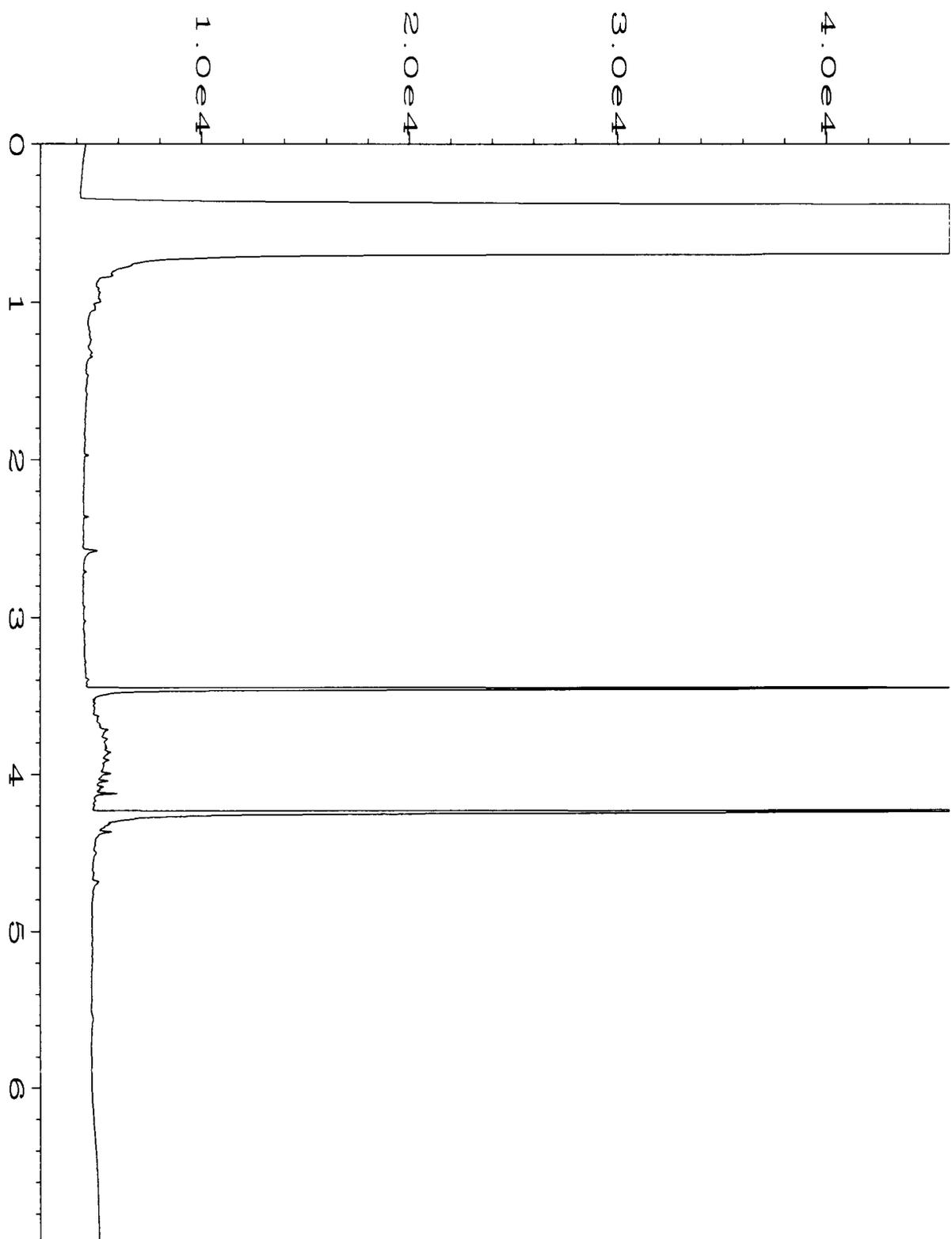
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\032F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 32
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-11	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 03:24 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



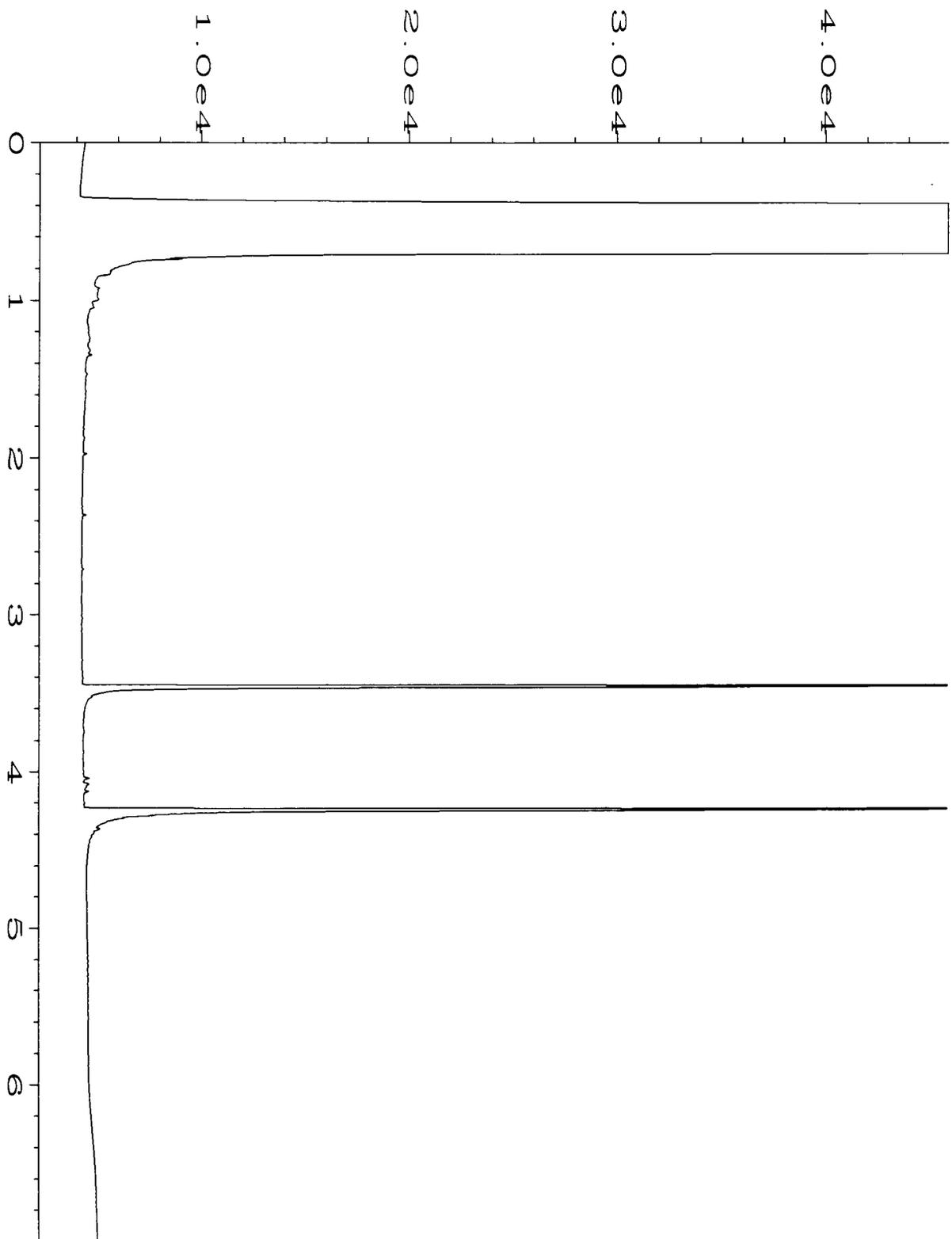
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\033F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 33
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-12	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 03:33 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



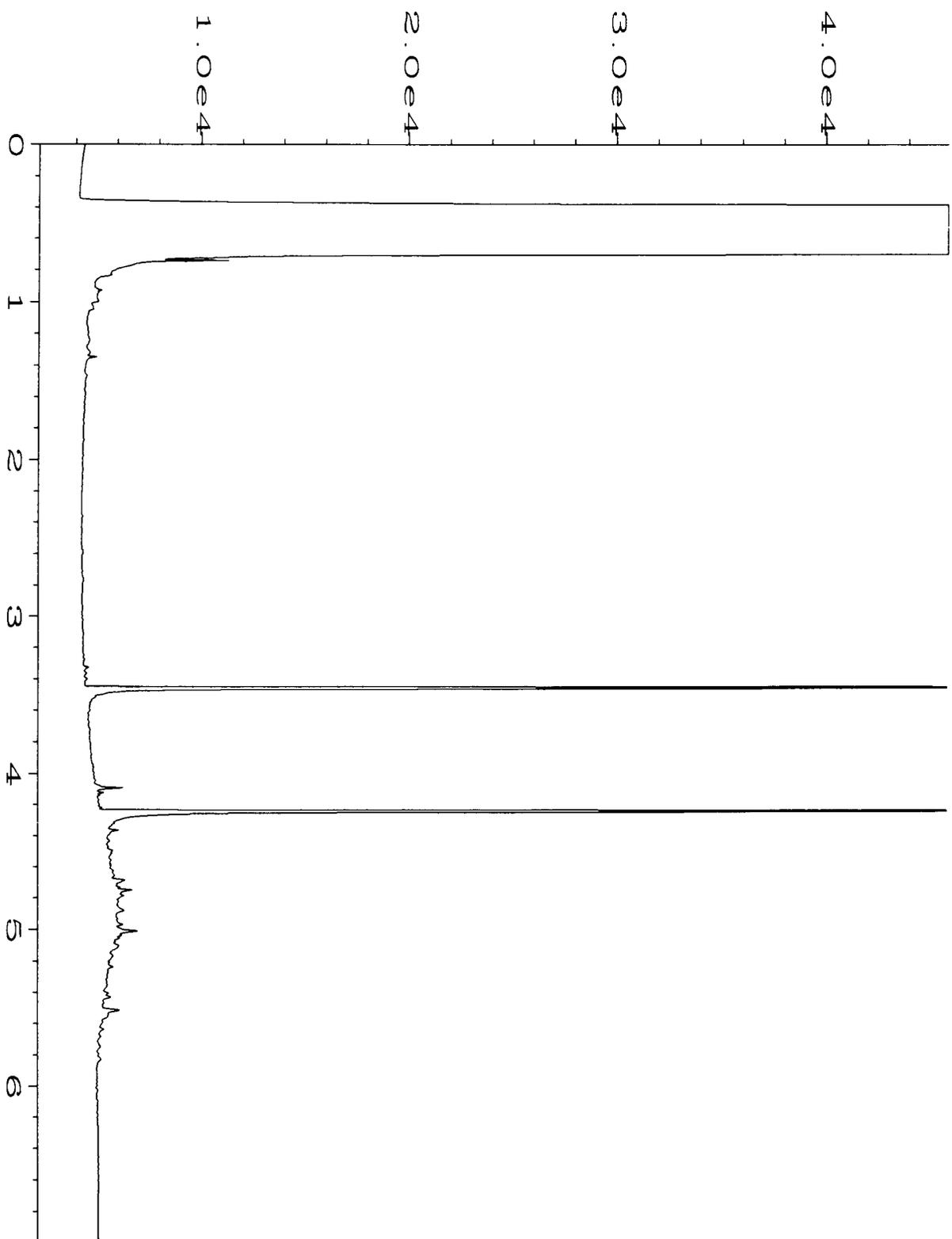
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\034F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 34
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-13	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 03:44 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



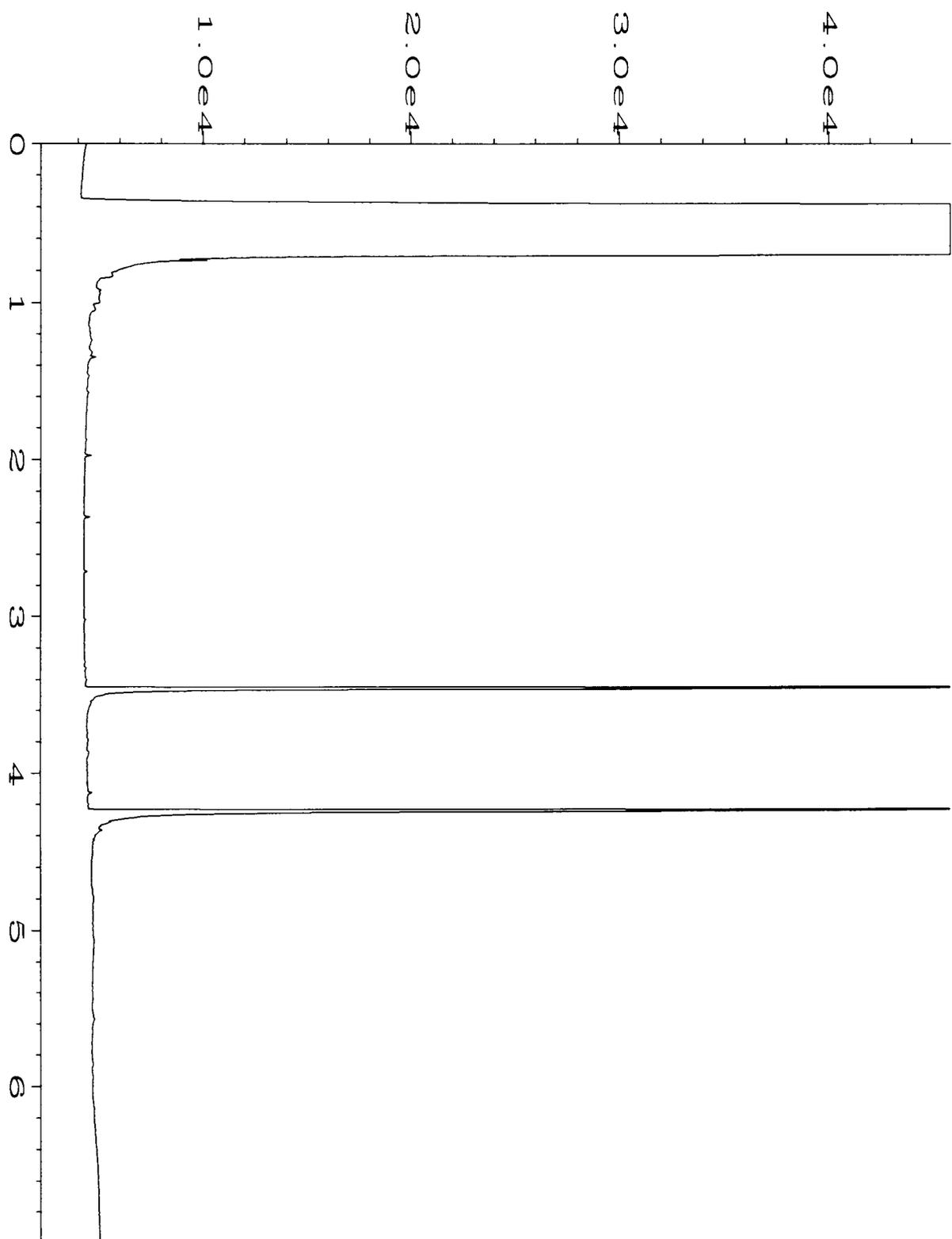
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\035F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 35
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-14	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 03:55 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



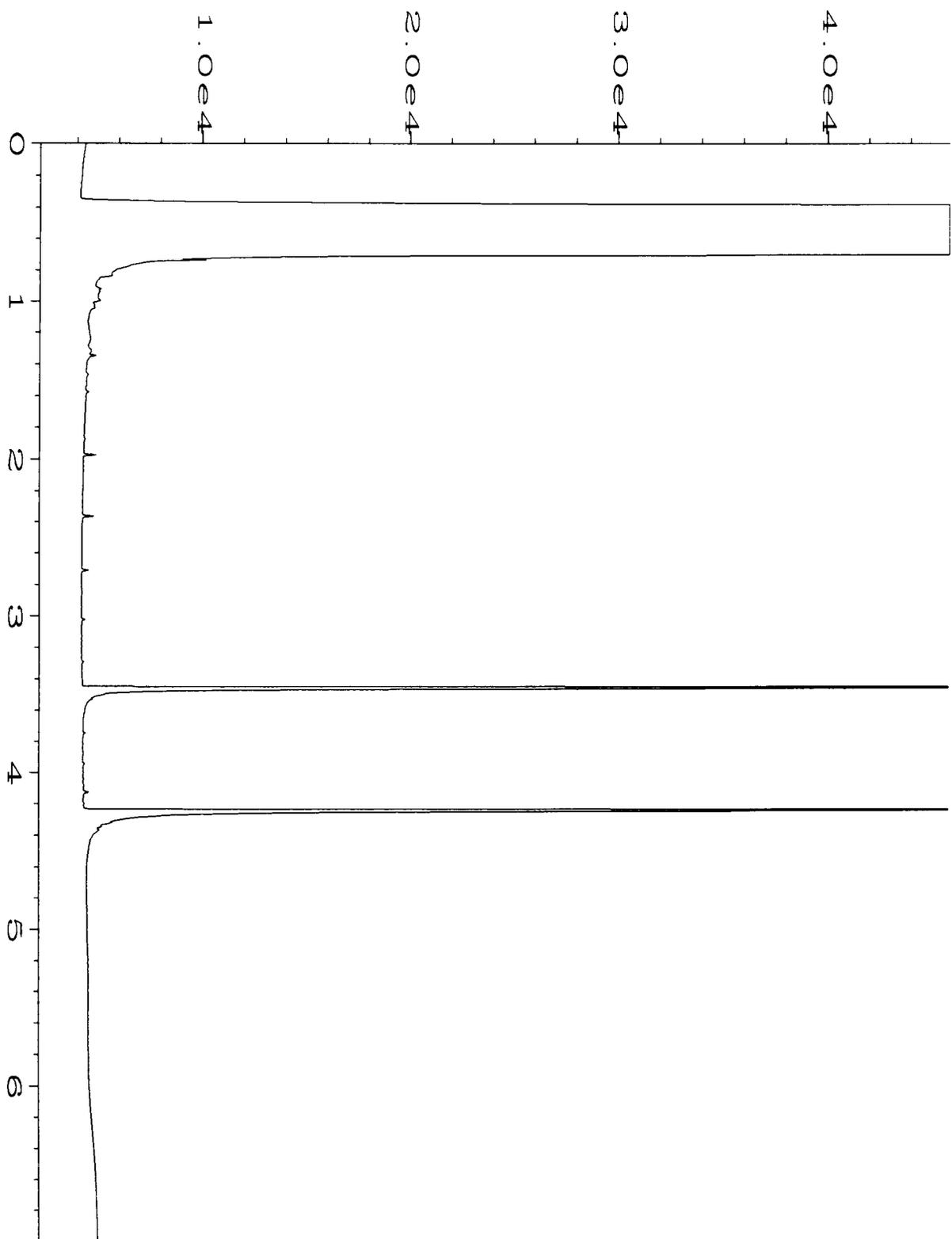
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\036F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 36
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-15	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 04:05 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:38 AM		



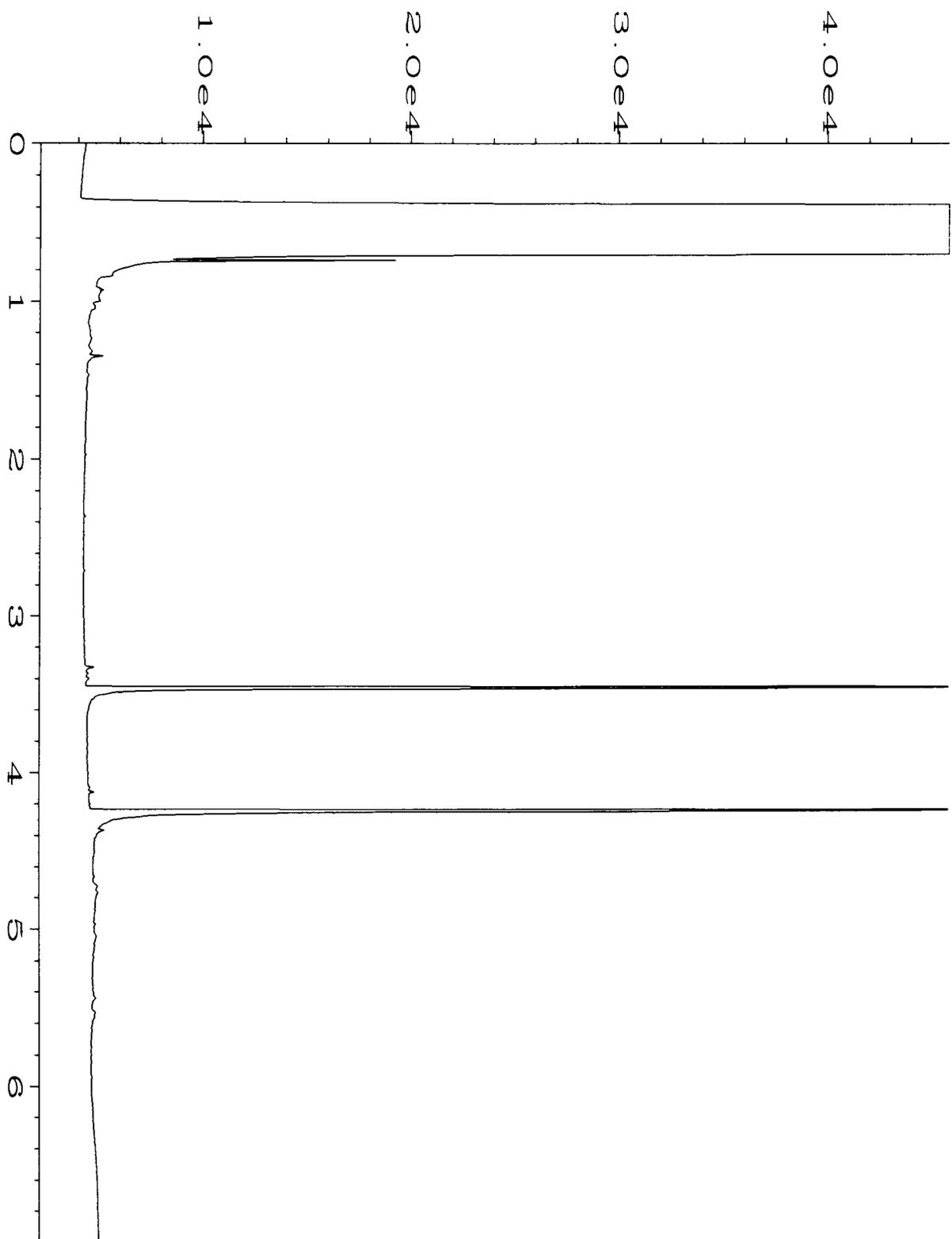
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\037F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 37
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-16	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 04:17 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:39 AM		



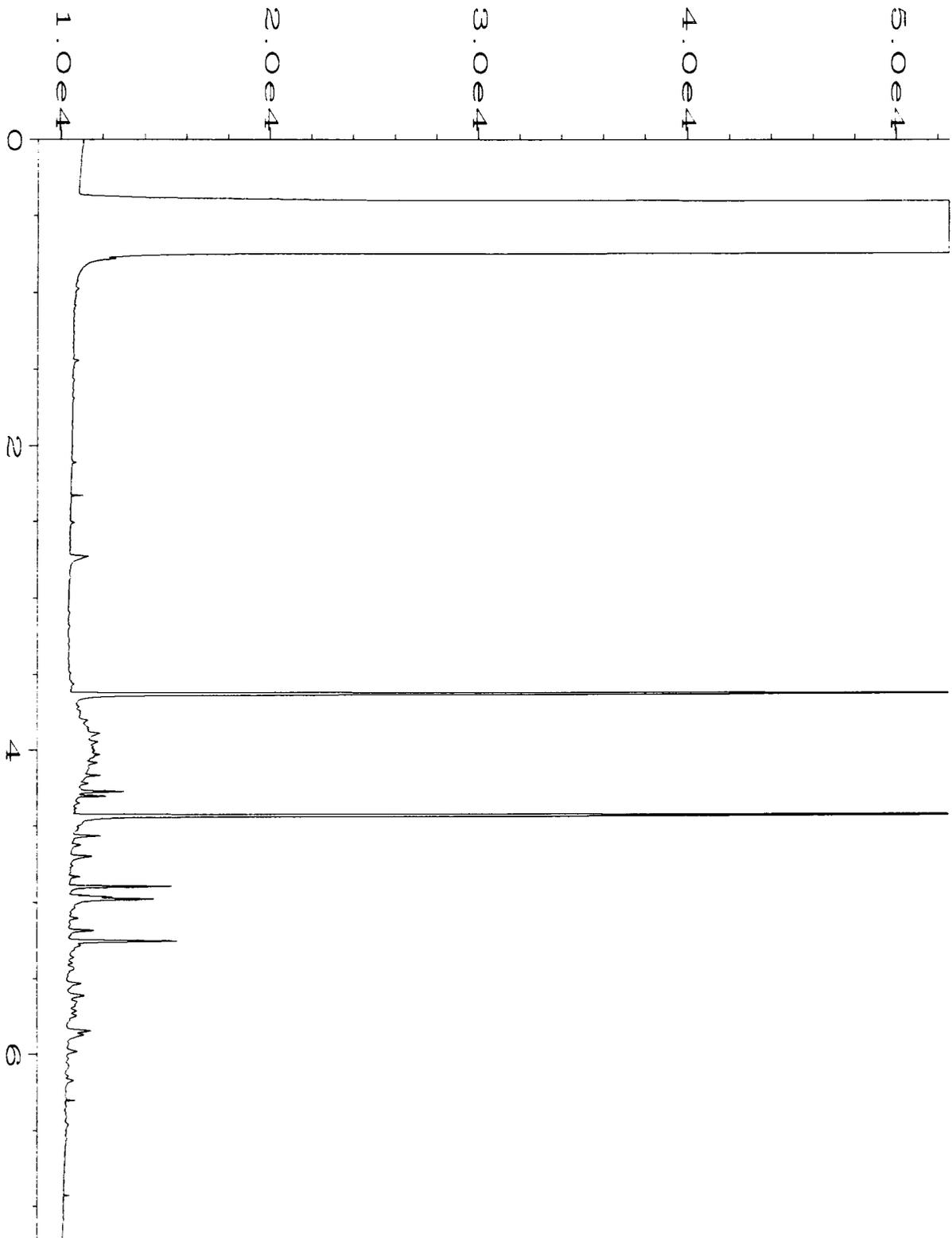
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\038F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 38
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-17	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 04:28 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:39 AM		



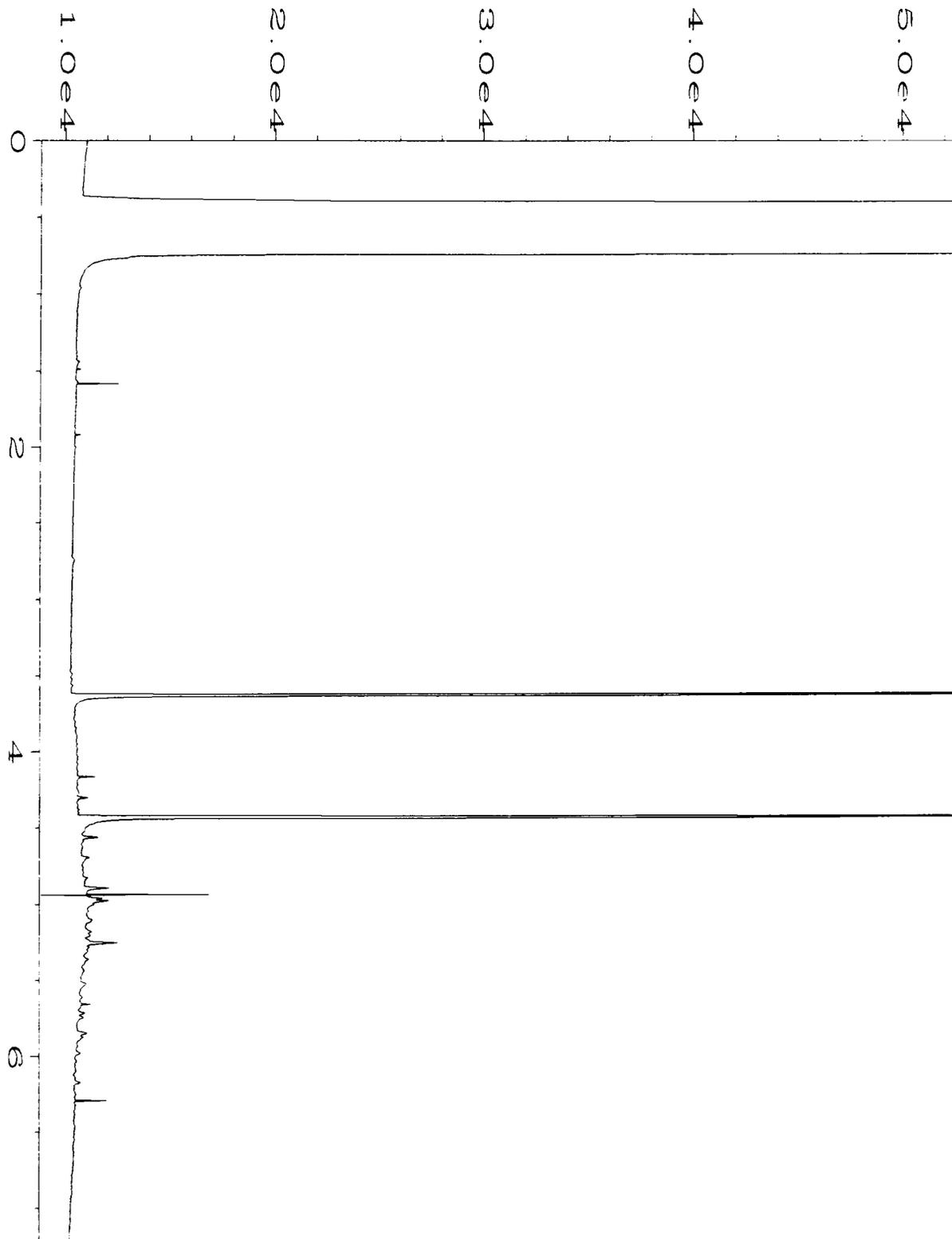
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\039F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 39
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-18	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 04:39 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:39 AM		



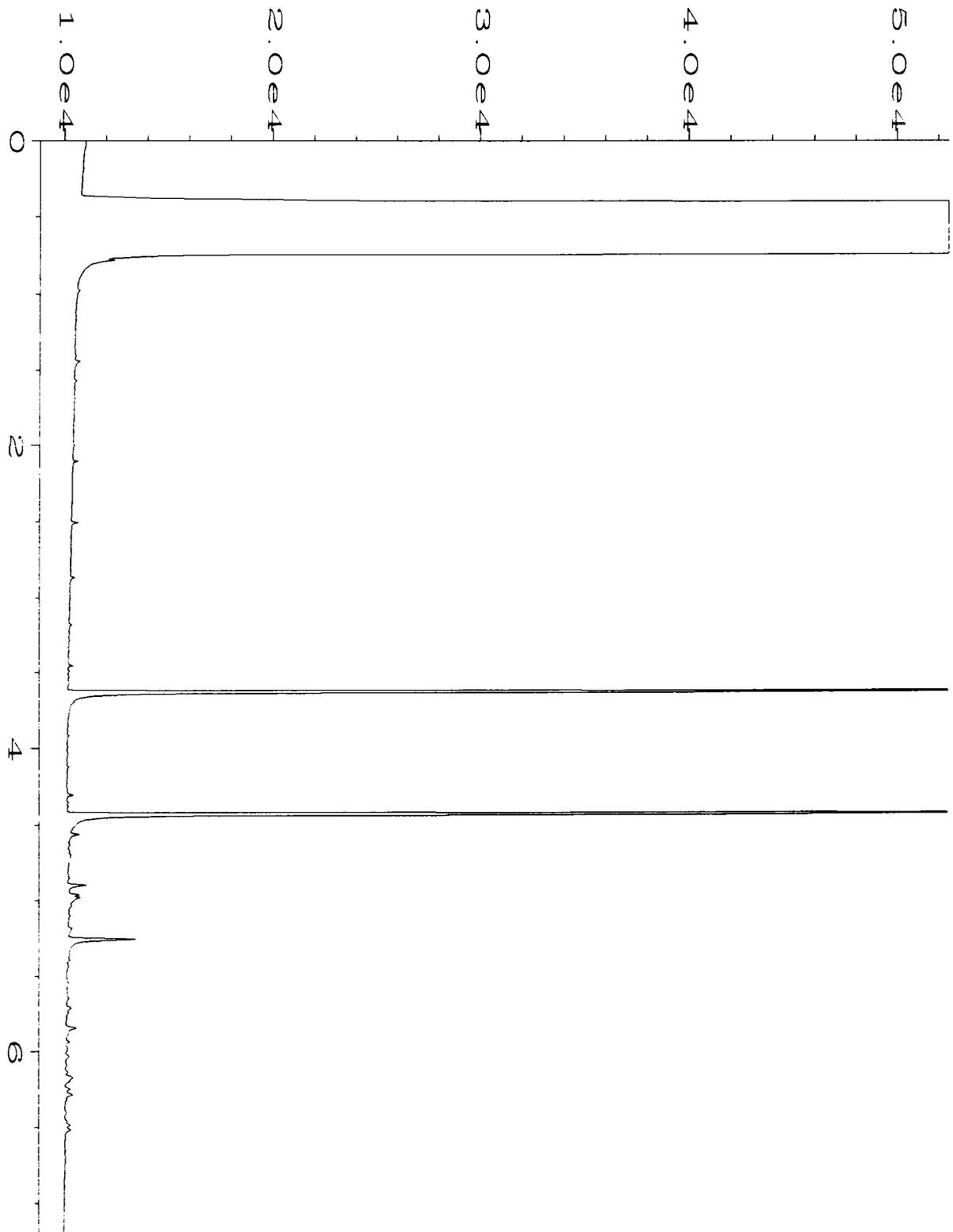
Data File Name	: C:\HPCHEM\6\DATA\10-23-15\040F0501.D	Page Number	: 1
Operator	: sp	Vial Number	: 40
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 510348-19	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 04:50 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 09:39 AM		



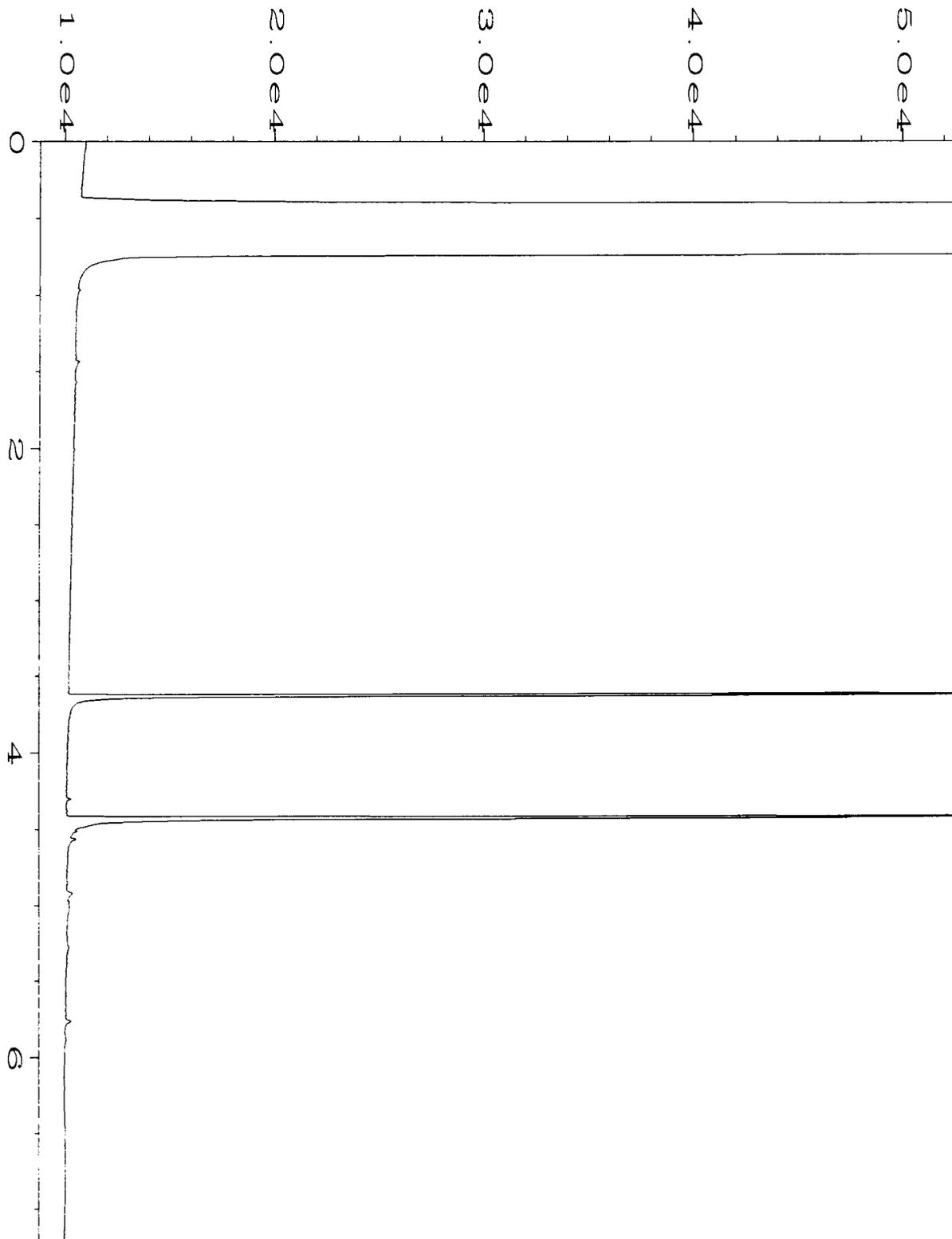
Data File Name	: C:\HPCHEM\1\DATA\10-23-15\024F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 24
Instrument	: GC1	Injection Number	: 1
Sample Name	: 510348-20	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 12:15 PM	Analysis Method	: DX.MTH
Report Created on:	23 Oct 15 12:59 PM		



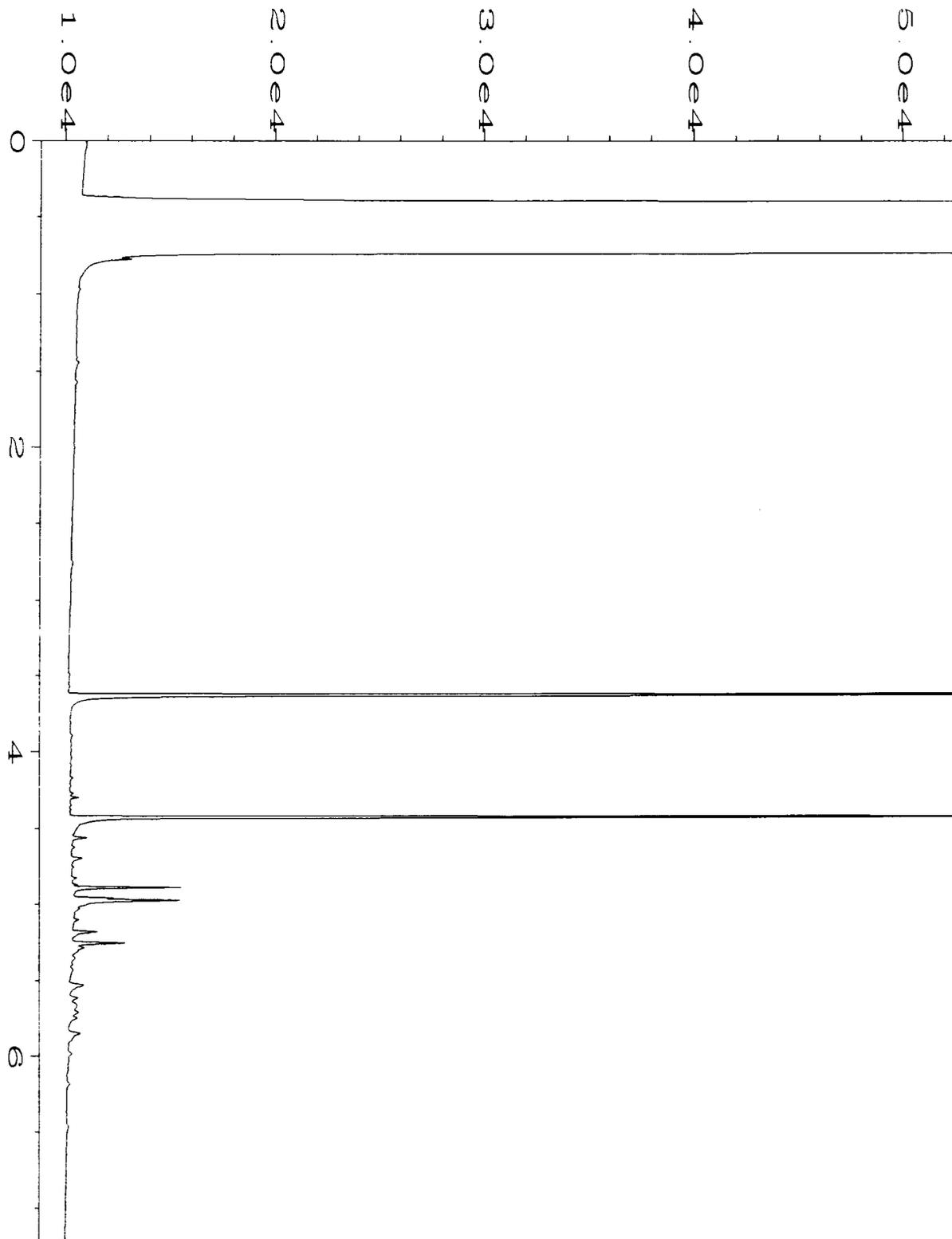
Data File Name	: C:\HPCHEM\1\DATA\10-23-15\025F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 25
Instrument	: GC1	Injection Number	: 1
Sample Name	: 510348-21	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 12:26 PM	Analysis Method	: DX.MTH
Report Created on:	23 Oct 15 01:00 PM		



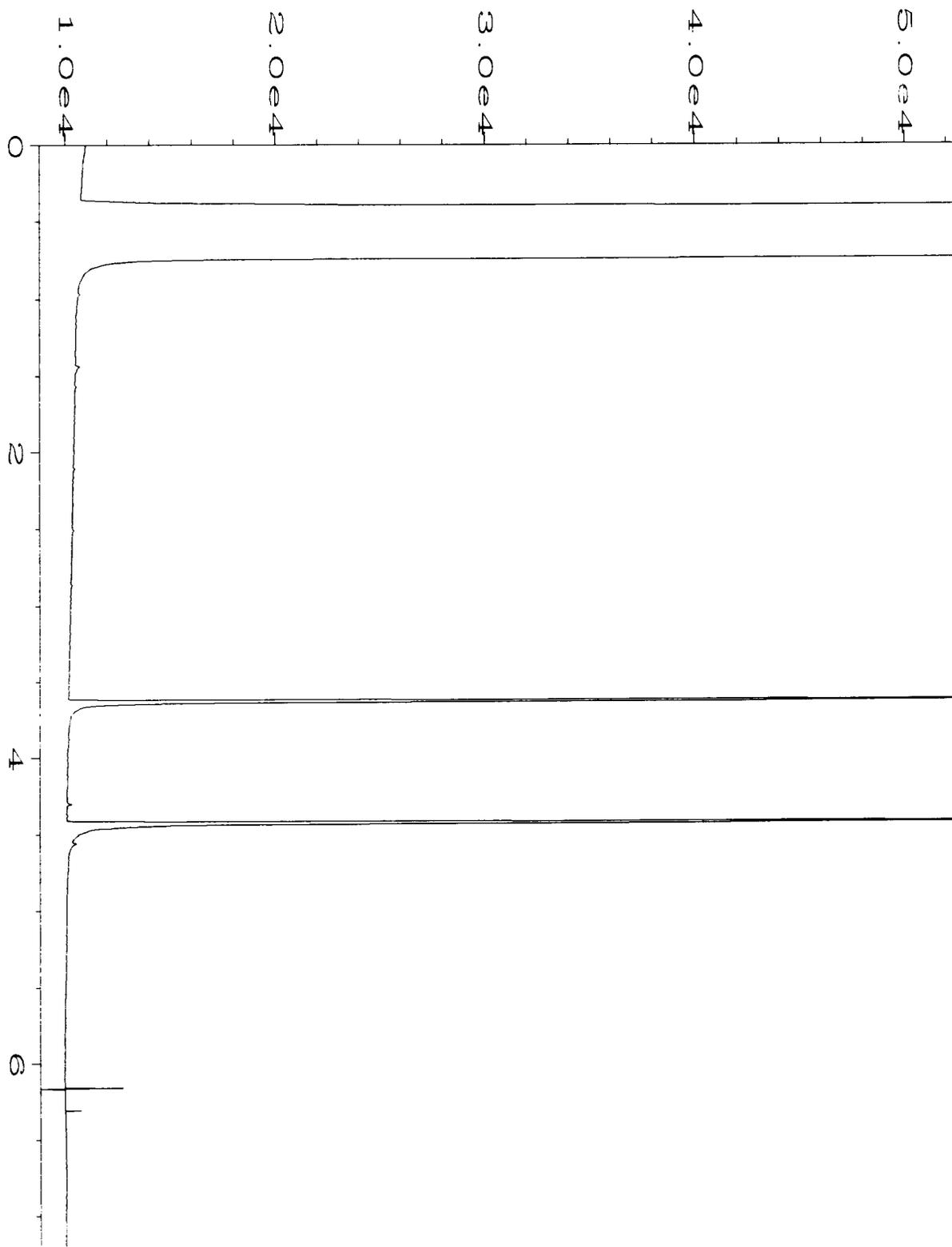
Data File Name	: C:\HPCHEM\1\DATA\10-23-15\026F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 26
Instrument	: GC1	Injection Number	: 1
Sample Name	: 510348-22	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 12:37 PM	Analysis Method	: DX.MTH
Report Created on:	23 Oct 15 01:00 PM		



Data File Name	: C:\HPCHEM\1\DATA\10-23-15\027F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 27
Instrument	: GC1	Injection Number	: 1
Sample Name	: 510348-23	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 12:48 PM	Analysis Method	: DX.MTH
Report Created on:	23 Oct 15 01:00 PM		

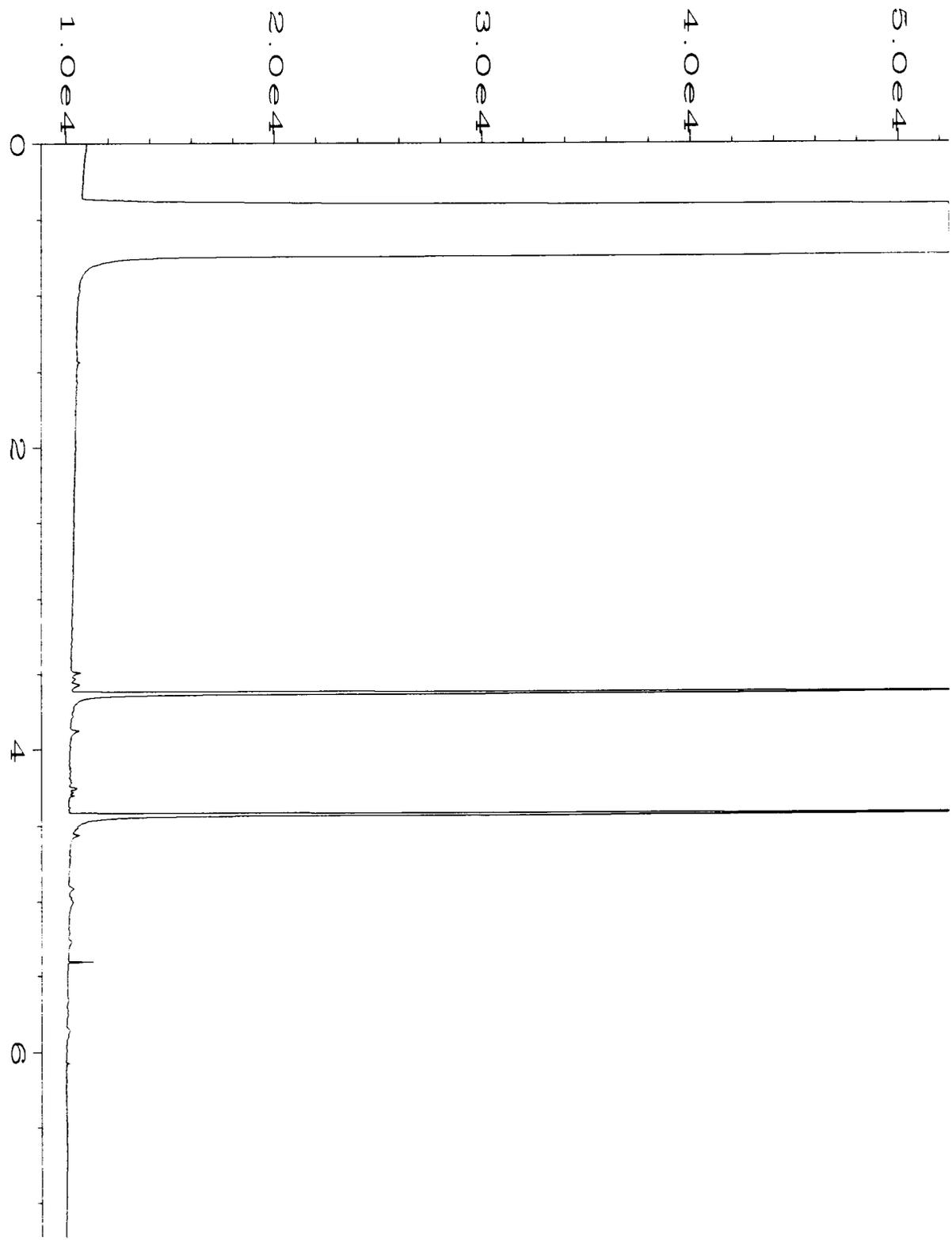


Data File Name	: C:\HPCHEM\1\DATA\10-23-15\028F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 28
Instrument	: GC1	Injection Number	: 1
Sample Name	: 510348-24	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 12:59 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 10:25 AM		



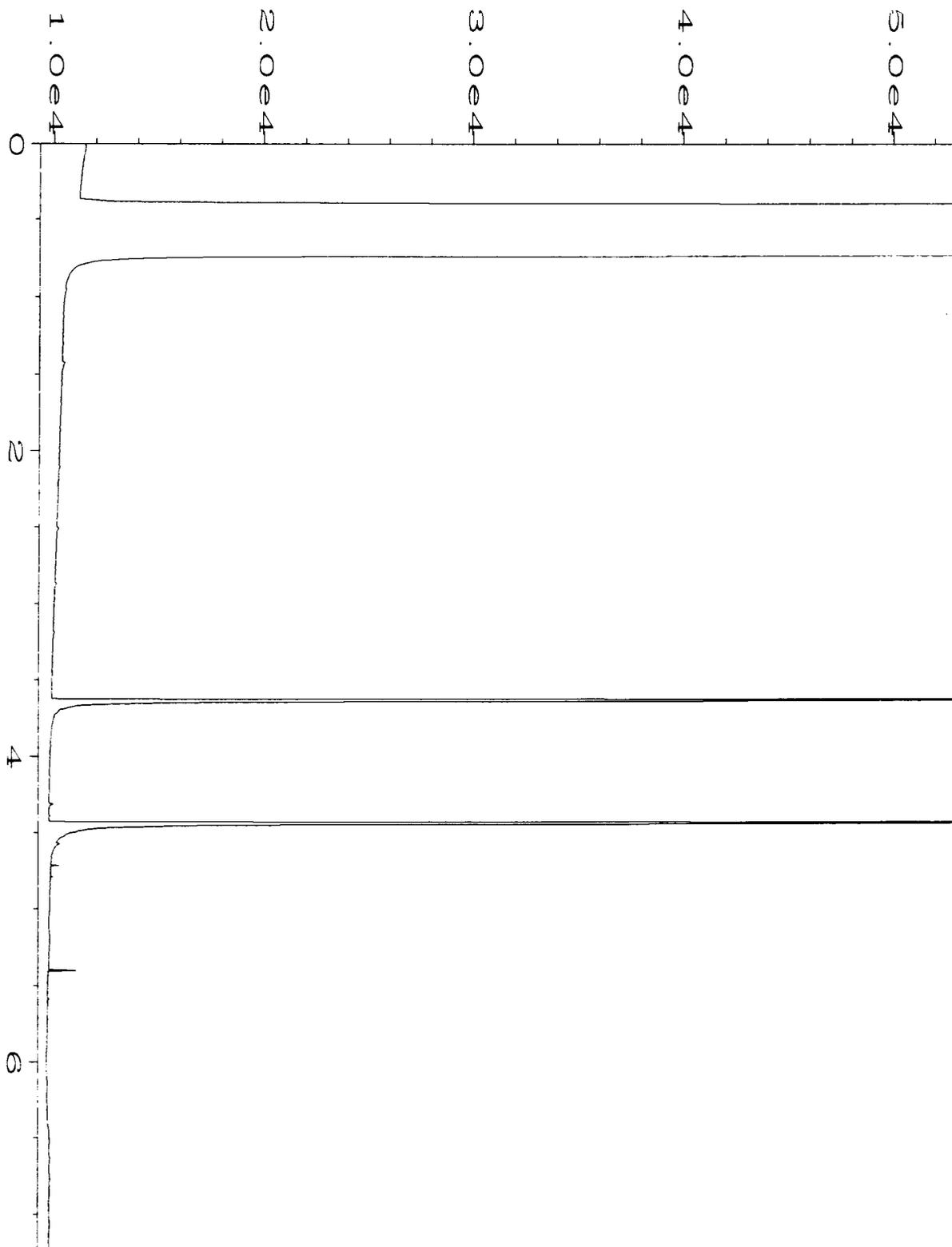
Data File Name	: C:\HPCHEM\1\DATA\10-23-15\029F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 29
Instrument	: GC1	Injection Number	: 1
Sample Name	: 510348-25	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 01:10 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 10:25 AM		

REP-101

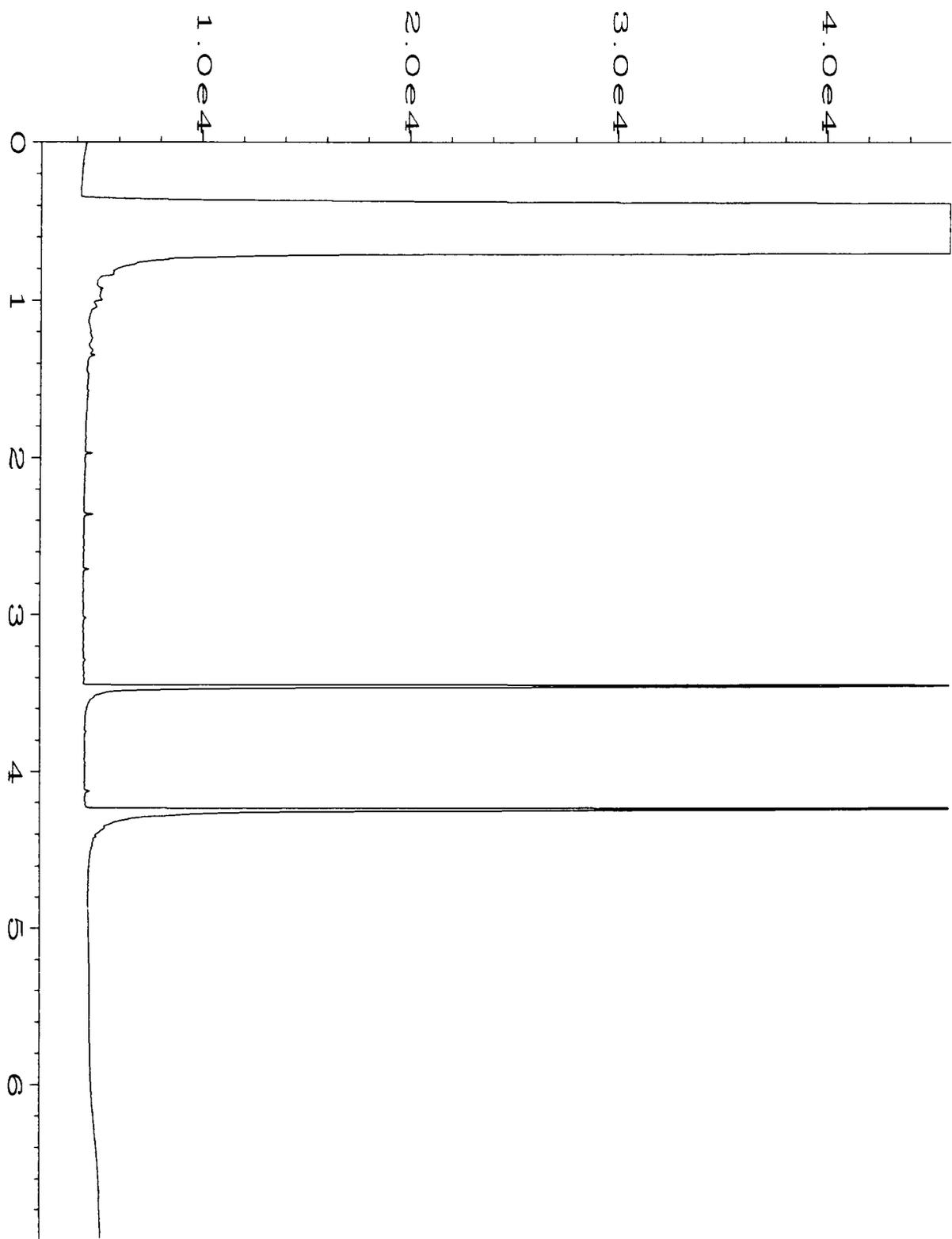


Data File Name	: C:\HPCHEM\1\DATA\10-23-15\030F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 30
Instrument	: GC1	Injection Number	: 1
Sample Name	: 510348-26	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 01:21 PM	Analysis Method	: DX.MTH
Report Created on:	26 Oct 15 10:25 AM		

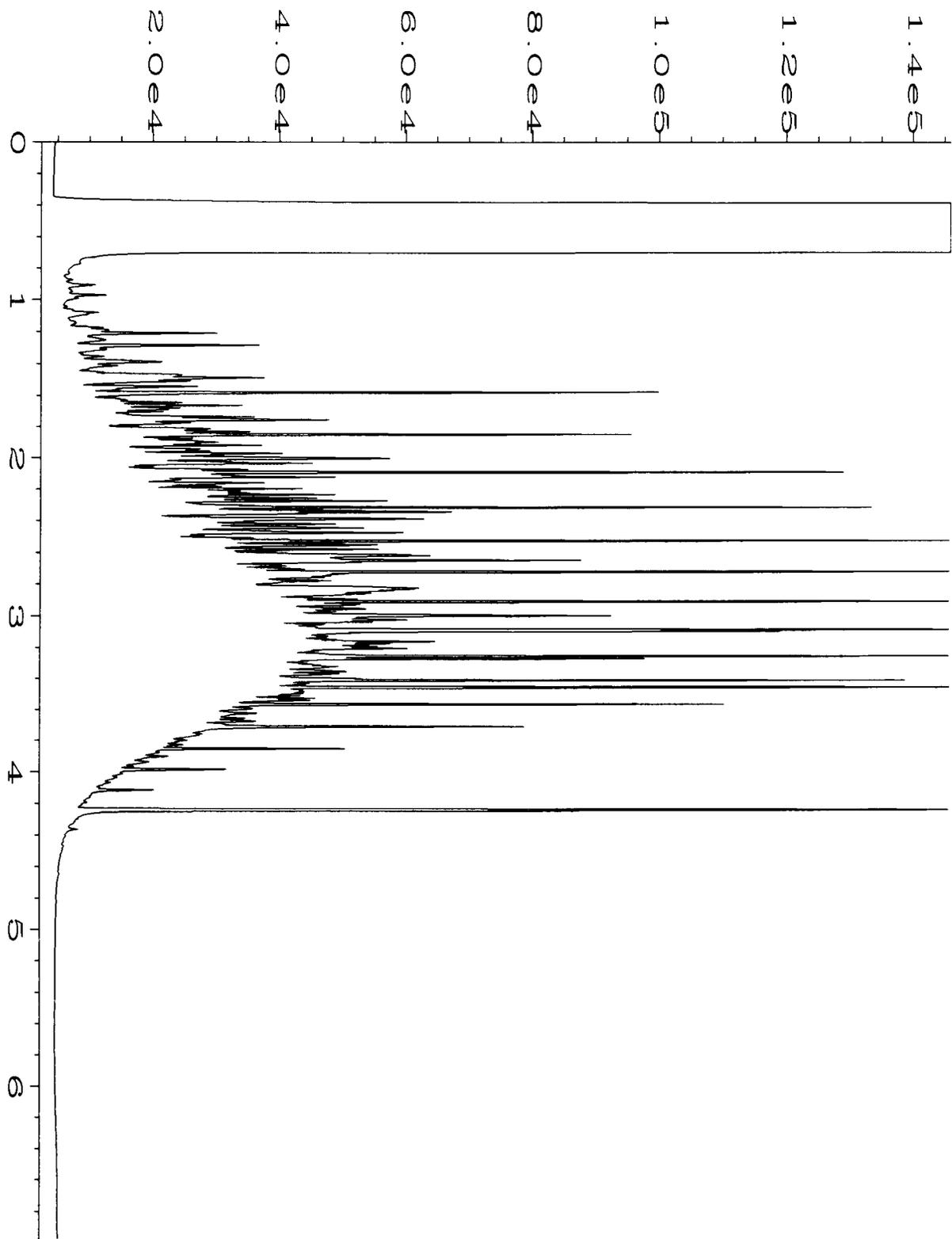
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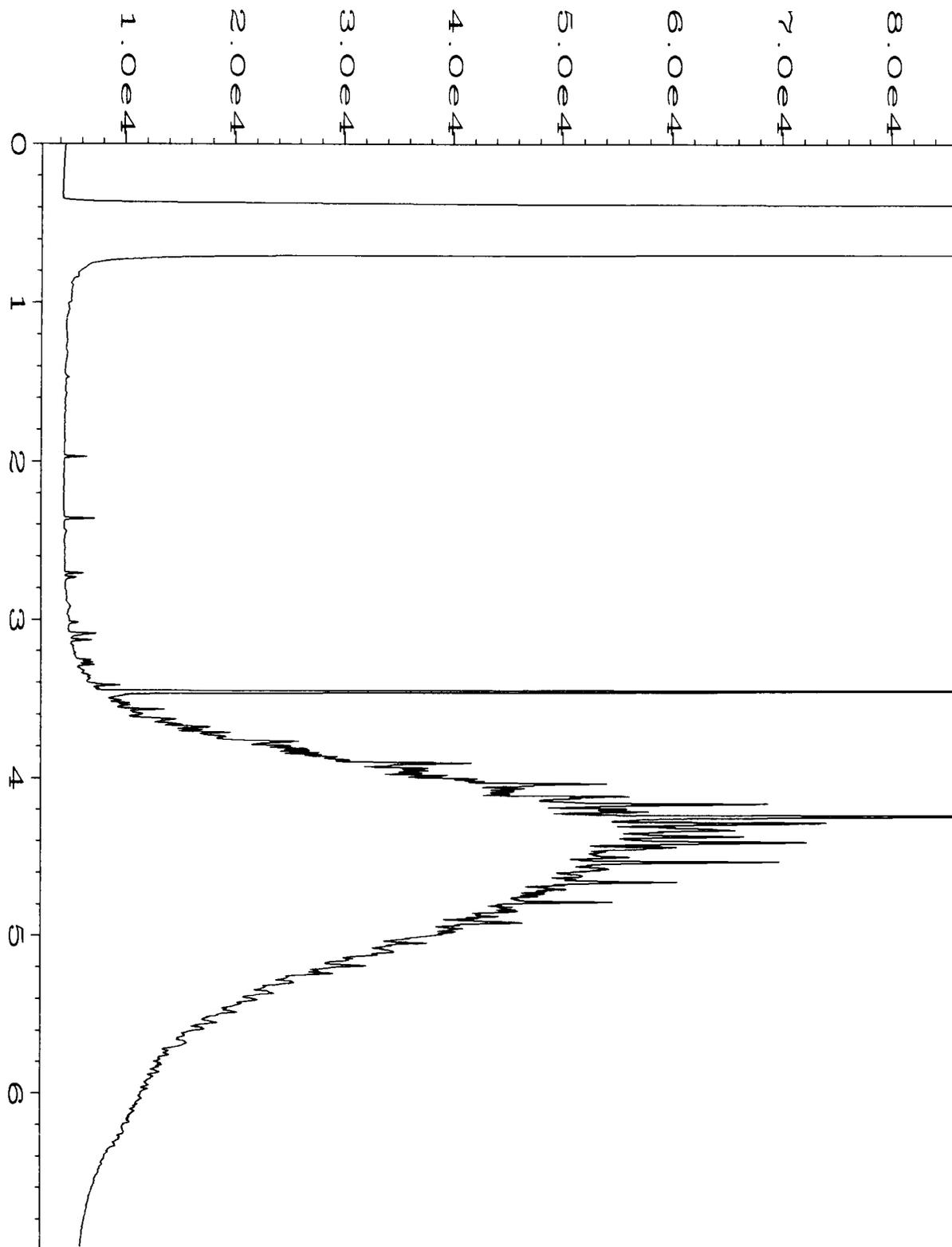
Data File Name	: C:\HPCHEM\1\DATA\10-23-15\007F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 7
Instrument	: GC1	Injection Number	: 1
Sample Name	: 05-2188 mb	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 09:10 AM	Analysis Method	: DX.MTH
Report Created on:	23 Oct 15 12:59 PM		



Data File Name	: C:\HPCHEM\6\DATA\10-23-15\018F0301.D	Page Number	: 1
Operator	: sp	Vial Number	: 18
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 05-2187 mb	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 12:07 PM	Analysis Method	: END.MTH
Report Created on:	23 Oct 15 12:49 PM		



Data File Name	: C:\HPCHEM\6\DATA\10-23-15\003F0201.D	Page Number	: 1
Operator	: sp	Vial Number	: 3
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 500 Dx 45-182D	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 08:41 AM	Analysis Method	: END.MTH
Report Created on:	23 Oct 15 12:49 PM		



Data File Name	: C:\HPCHEM\6\DATA\10-23-15\002F0201.D	Page Number	: 1
Operator	: sp	Vial Number	: 2
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 500 MO 45-49G	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Oct 15 08:23 AM	Analysis Method	: END.MTH
Report Created on:	23 Oct 15 12:49 PM		

510348

SAMPLE CHAIN OF CUSTODY

ME 10/22/15

VS3 / 3405

Send Report To Lucas Swart

Company Terracon

Address 21905 64th Ave W Ste. 200

City, State, ZIP Newcastle Terrace, WA 98013

Phone # 425-771-5504 Fax # _____

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. 81147145

PO#

Page # 1 of 3

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	
S-1	61-A-E	10/22/15	08:25	Soil	5	X	X	X	X	X		
S-2	62		08:30			X	X	X	X	X		
S-3	63		08:40			X	X	X	X	X		
S-4	64		08:45			X	X	X	X	X		
S-5	65		08:55			X	X	X	X	X		
S-6	66		09:00			X	X	X	X	X		
S-7	67		09:50			X	X	X	X	X		
S-8	68		09:58			X	X	X	X	X		
S-9	69		10:00			X	X	X	X	X		
S-10	70		10:12			X	X	X	X	X		

Samples received at 24°C

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\CCOC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	S. Kyle Long	Terracon	10/22/15	14:15
<u>[Signature]</u>	LUCAS SWART	"	"	"
<u>[Signature]</u>	LUCAS SWART	"	"	1620
<u>[Signature]</u>	Elizabeth Rodford	F&B	10/22/15	16:20

10/22/15

510348

SAMPLE CHAIN OF CUSTODY

ME 10/22/15

V53/1405

Send Report To same as

Company same as

Address Page 1

City, State, ZIP Page 1

Phone # Fax #

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. PO#

8147145

REMARKS

SAMPLERS (signature)	
PROJECT NAME/NO.	PO#
REMARKS	

Page # 2 of 3

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED					Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270		HFS
S-11	11A-E	10/22/15	10:20	Soil	5	X	X	X	X	X		
S-12	12		10:24			X	X	X	X	X		
S-13	13		10:57			X	X	X	X	X		
S-14	14		10:51			X	X	X	X	X		
S-15	15		10:44			X	X	X	X	X		
S-16	16		10:38			X	X	X	X	X		
S-17	17		10:30			X	X	X	X	X		
S-18	18		11:03			X	X	X	X	X		
S-19	19		11:11			X	X	X	X	X		
S-20	20		11:17			X	X	X	X	X		Sample received at 94°C

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	Silyle Long	Terracon	10/22/15	14:15
<u>[Signature]</u>	Lucas Swans	"	"	"
<u>[Signature]</u>	Lucas Swans	"	"	16:28
<u>[Signature]</u>	Elizabeth Rafferty	F&B	"	16:20

510348

SAMPLE CHAIN OF CUSTODY

ME 10/22/15

US3 / 3/008

Send Report To same as
 Company same as
 Address same as
 City, State, ZIP Page 1
 Phone # _____ Fax # _____

SAMPLERS (signature) [Signature]
 PROJECT NAME/NO. 81147145
 PO# _____
 REMARKS _____

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS		
S-21	2145	10/22/15	11:22	Soil	5	X	X	X					
S-22	22		11:28			X	X	X					
S-23	23		11:51			X	X	X					
S-24	24		11:45			X	X	X					
S-25	25		11:41			X	X	X					
S-26	26		11:35			X	X	X					

Samples received at 94°C

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS/COC/COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	S. Kyle Long	TERRACON	10/22/15	14:15
<u>[Signature]</u>	LUAS SWART	"	"	"
<u>[Signature]</u>	LUAS SWART	"	"	16:20
<u>[Signature]</u>	Elizabeth Roford	FBI	"	16:20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

December 23, 2015

Lucas Swart, Project Manager
Terracon
Pacific Cascade Building
21905 64th Ave. W., Suite 100
Mountlake Terrace, WA 98043

Dear Mr. Swart:

Included are the results from the testing of material submitted on December 18, 2015 from the River Bend, 81147145 PO, F&BI 512356 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRC1223R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 18, 2015 by Friedman & Bruya, Inc. from the Terracon River Bend, 81147145 PO, F&BI 512356 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Terracon</u>
512356 -01	N-1.5
512356 -02	S-1.5
512356 -03	E-1.5
512356 -04	W-1.5
512356 -05	BoT-2.5

The NWTPH-Dx matrix spike and matrix spike duplicate relative percent difference exceeded the acceptance criteria. The laboratory control sample met the acceptance criteria, therefore the results were likely due to matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/23/15
Date Received: 12/18/15
Project: River Bend, 81147145 PO, F&BI 512356
Date Extracted: 12/21/15
Date Analyzed: 12/21/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
N-1.5 512356-01	<2	95
S-1.5 512356-02	<2	95
E-1.5 512356-03	<2	96
W-1.5 512356-04	<2	96
BoT-2.5 512356-05	<2	95
Method Blank 05-2569 MB	<2	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/23/15

Date Received: 12/18/15

Project: River Bend, 81147145 PO, F&BI 512356

Date Extracted: 12/21/15

Date Analyzed: 12/21/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 53-144)
N-1.5 512356-01	<50	<250	102
S-1.5 512356-02	<50	<250	98
E-1.5 512356-03	<50	<250	94
W-1.5 512356-04	<50	<250	106
BoT-2.5 512356-05	74	<250	94
Method Blank 05-2586 MB	<50	<250	86

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/23/15

Date Received: 12/18/15

Project: River Bend, 81147145 PO, F&BI 512356

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR TPH AS GASOLINE
USING METHOD NWTPH-Gx**

Laboratory Code: 512274-04 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	90	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/23/15

Date Received: 12/18/15

Project: River Bend, 81147145 PO, F&BI 512356

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL
SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 512352-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	490	81	105	63-146	26 vo

Laboratory Code: Laboratory Control Sample

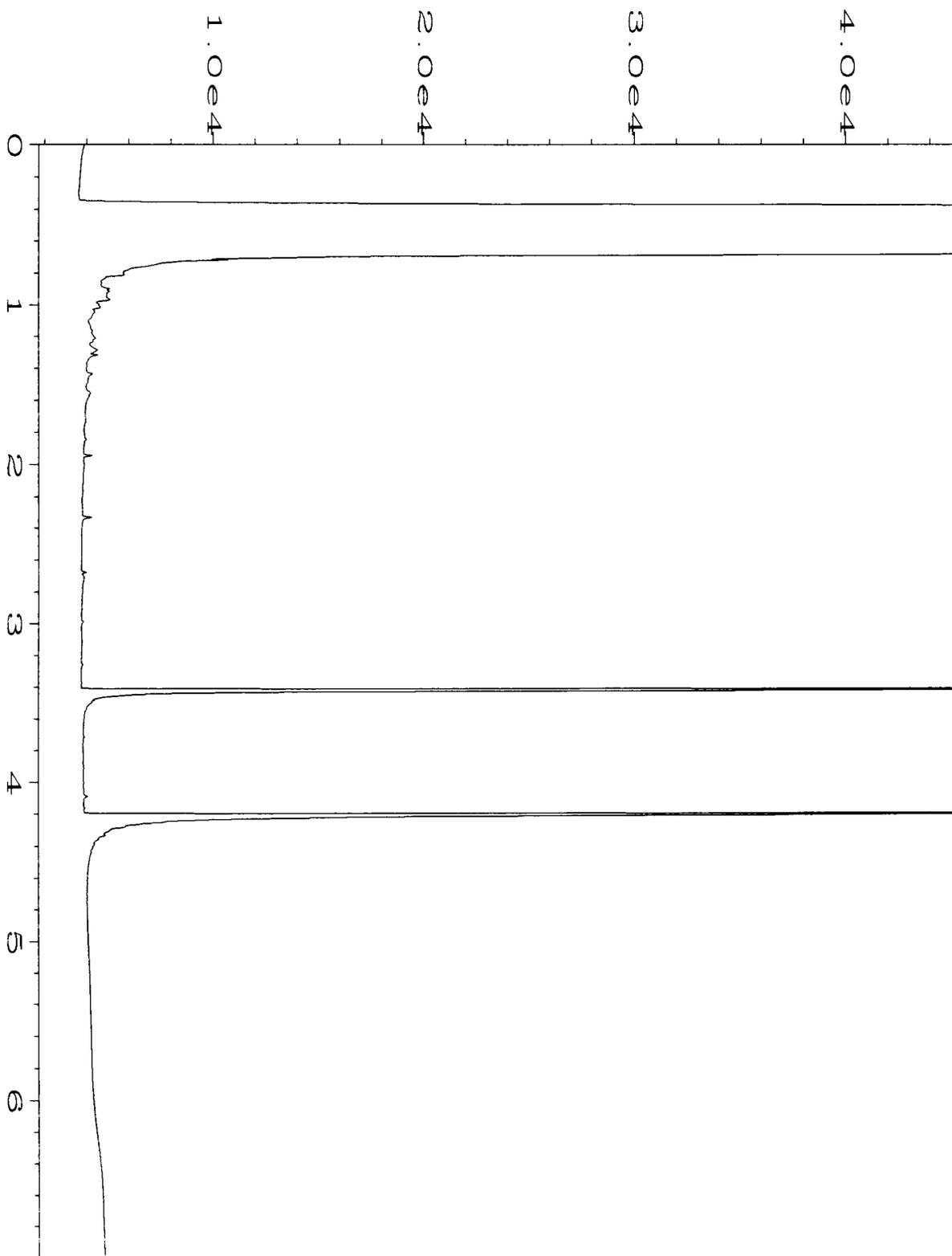
Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	79-144

FRIEDMAN & BRUYA, INC.

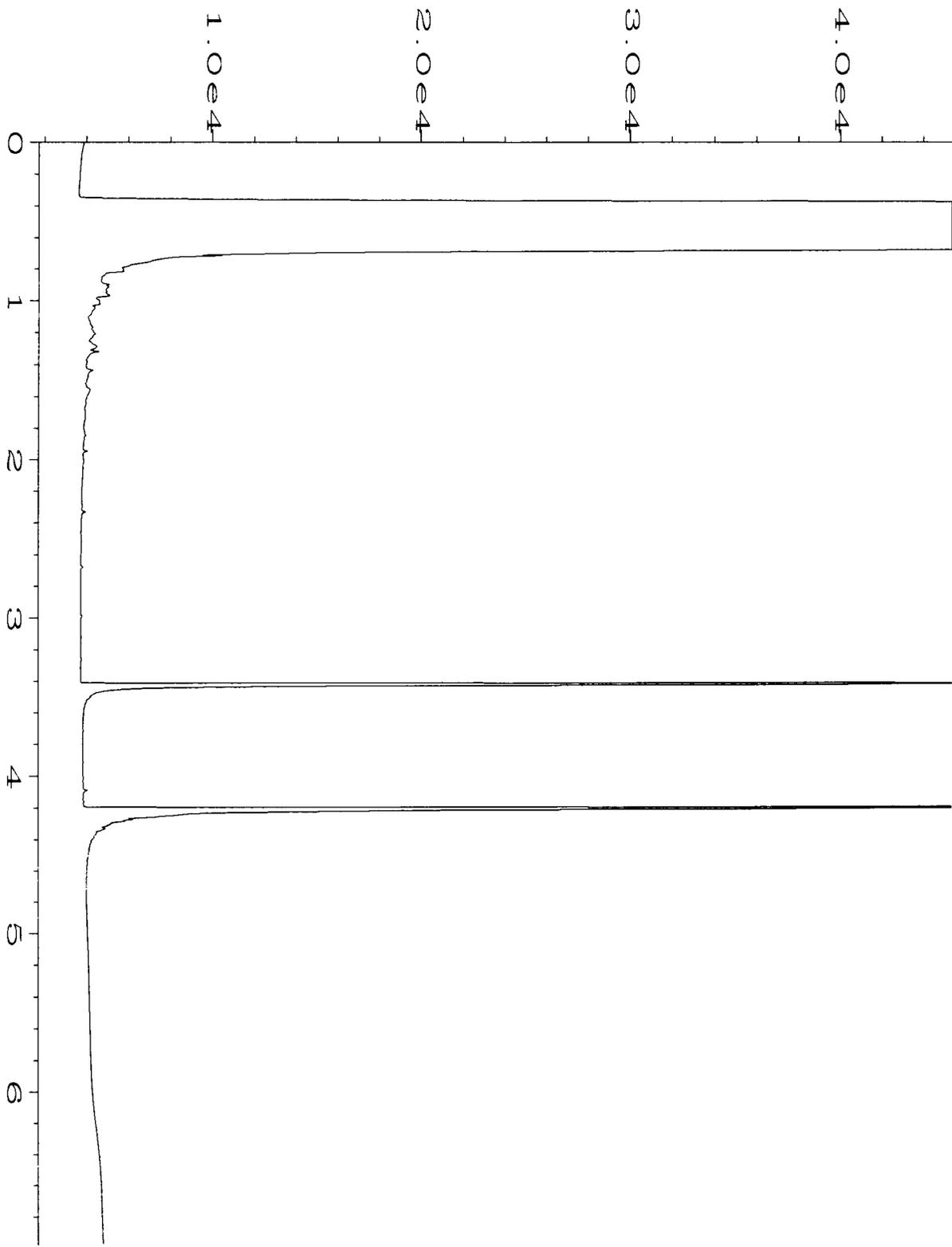
ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

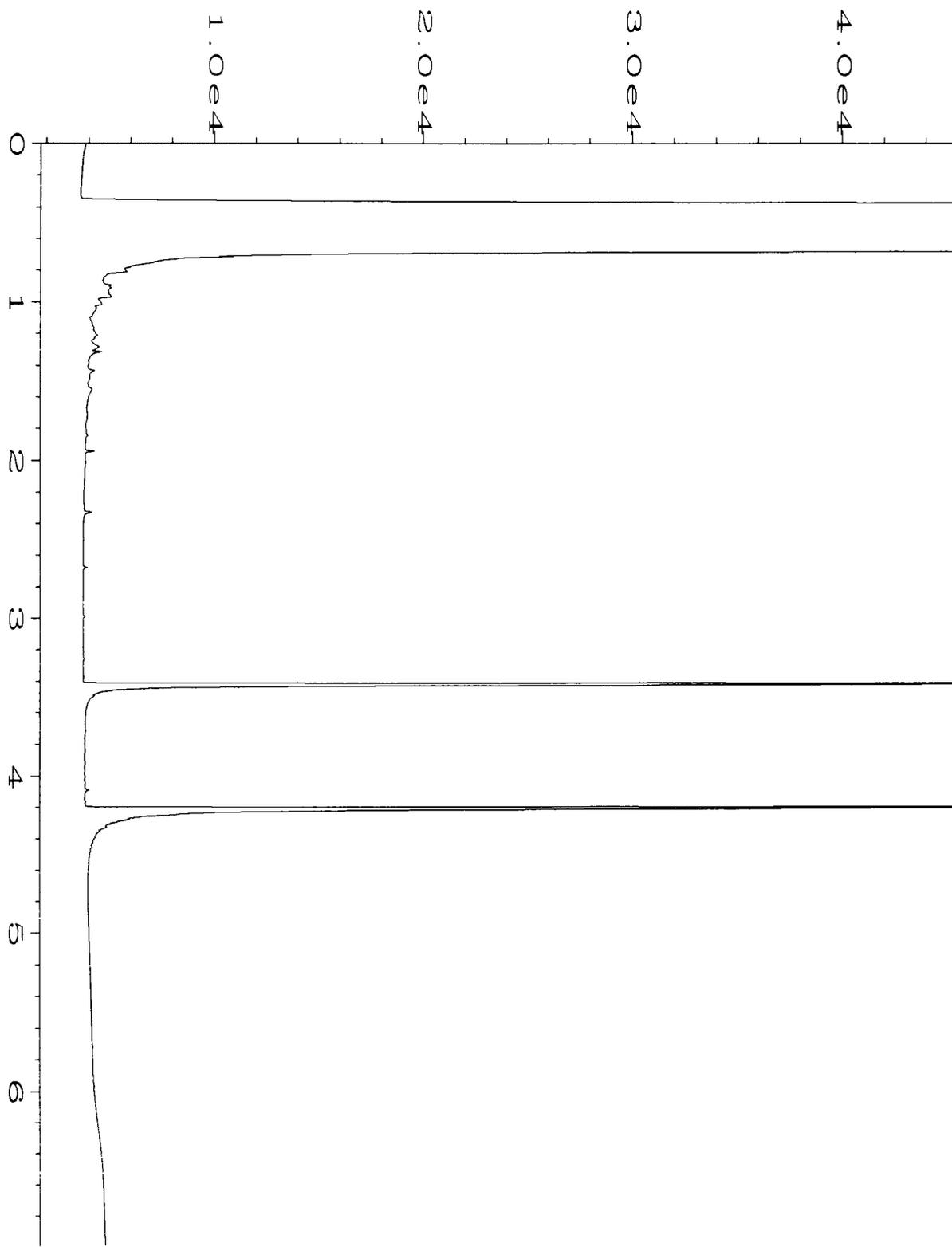
- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



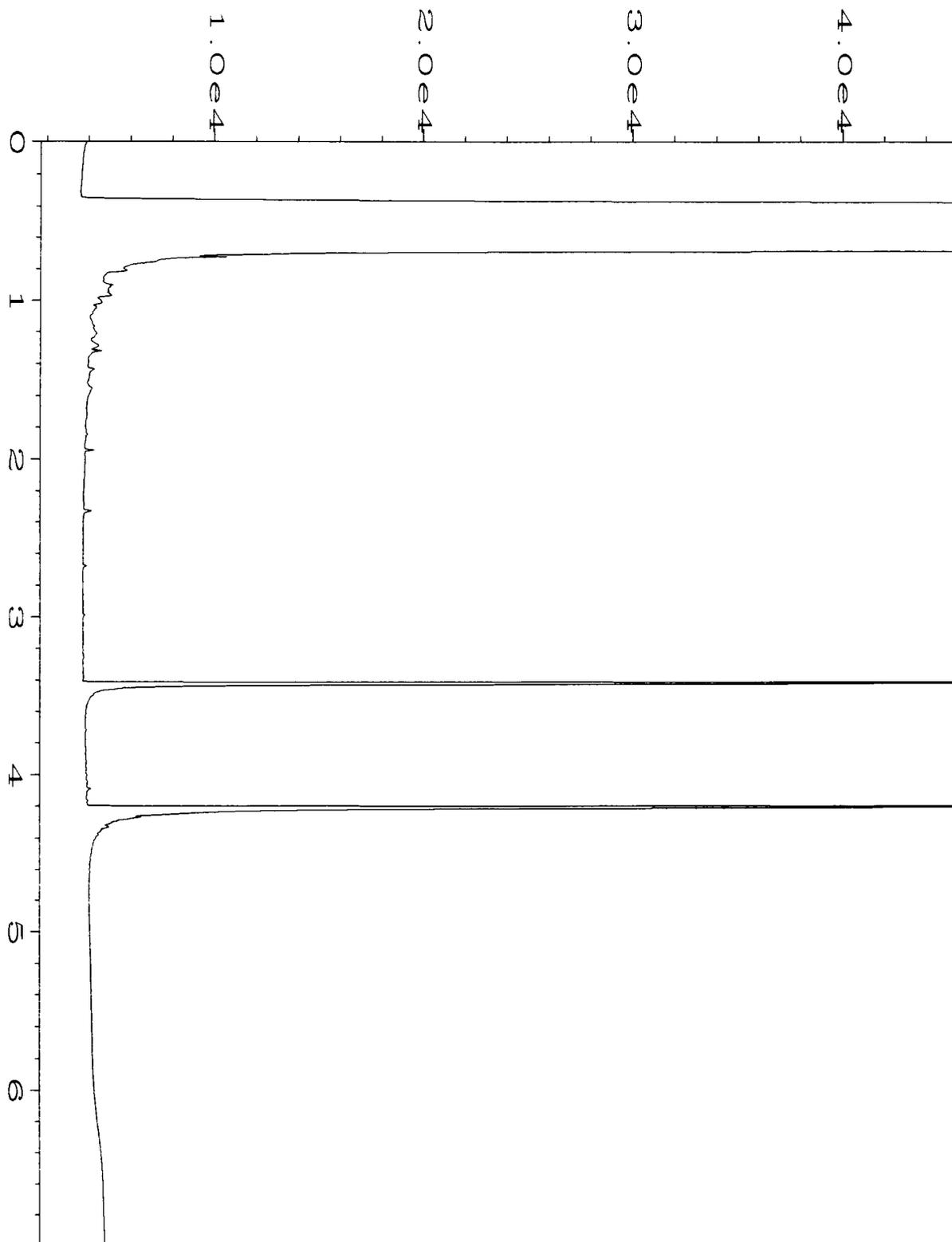
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Instrument	: GC #6	Injection Number	: 1
Sample Name	: 512356-01	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 21 Dec 15 03:16 PM	Analysis Method	: DX.MTH
Report Created on:	22 Dec 15 09:20 AM		



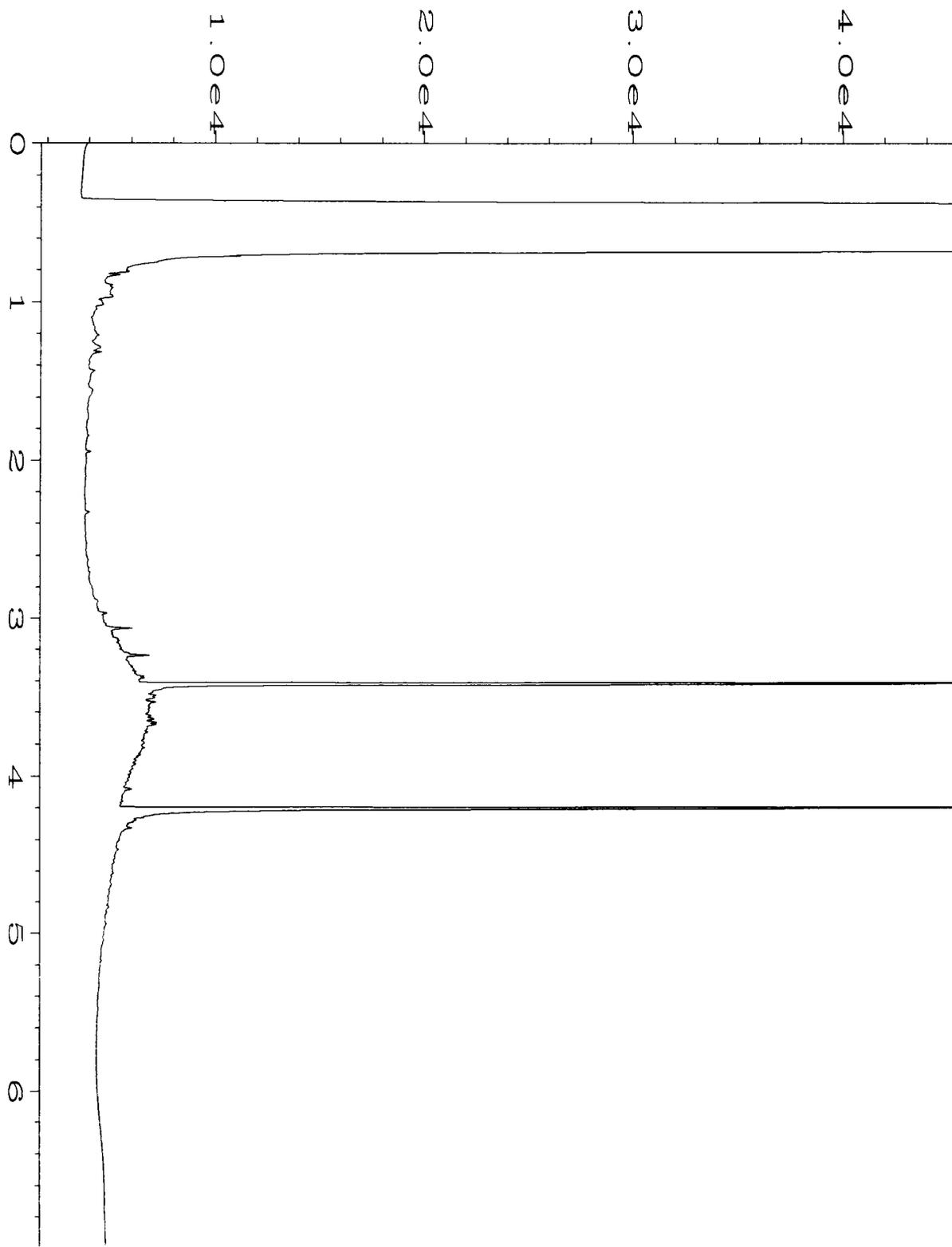
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Instrument	: GC #6	Injection Number	: 1
Sample Name	: 512356-02	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 21 Dec 15 03:27 PM	Analysis Method	: DX.MTH
Report Created on:	22 Dec 15 09:20 AM		



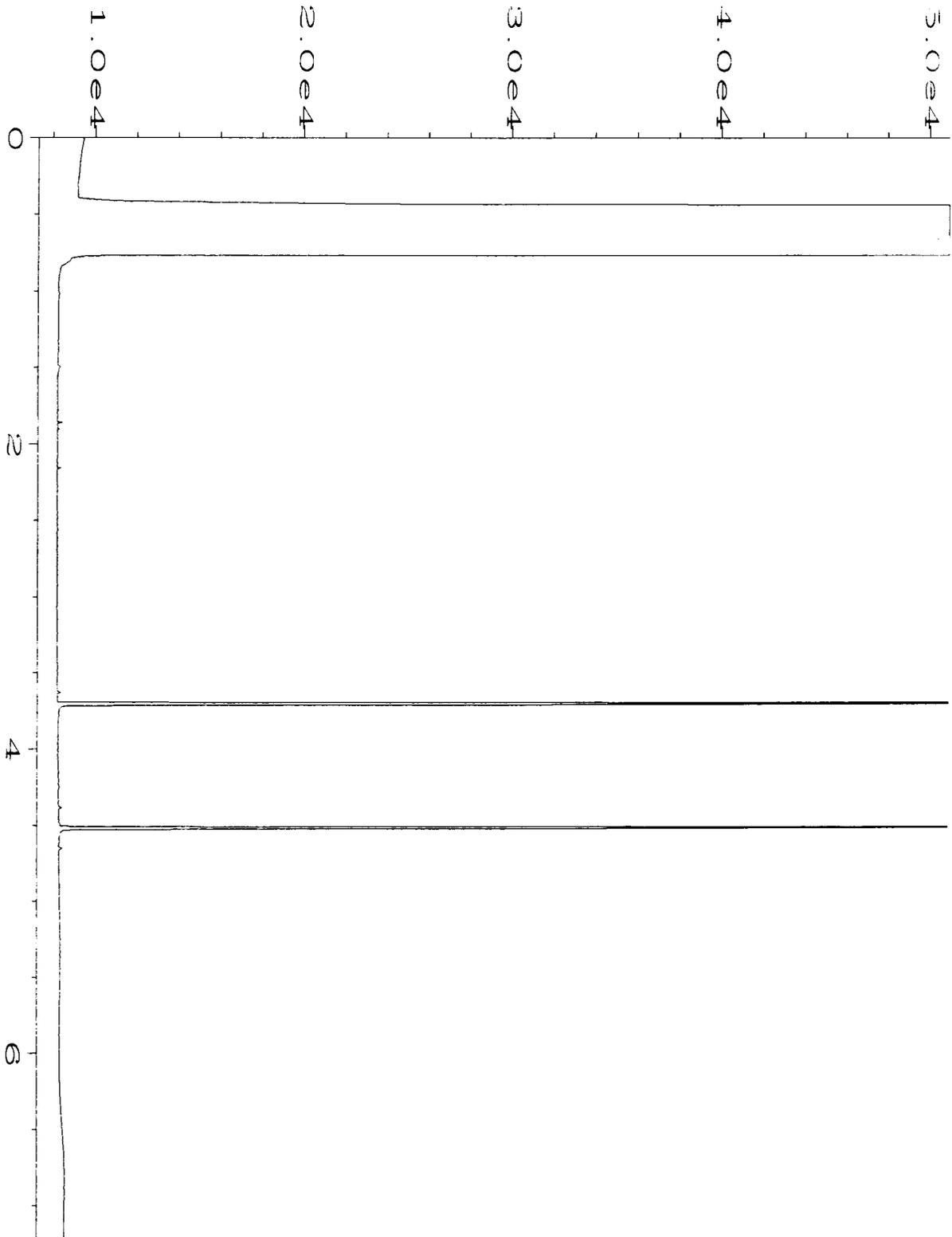
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Sample Name	: 512356-03	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
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Report Created on:	22 Dec 15 09:20 AM		



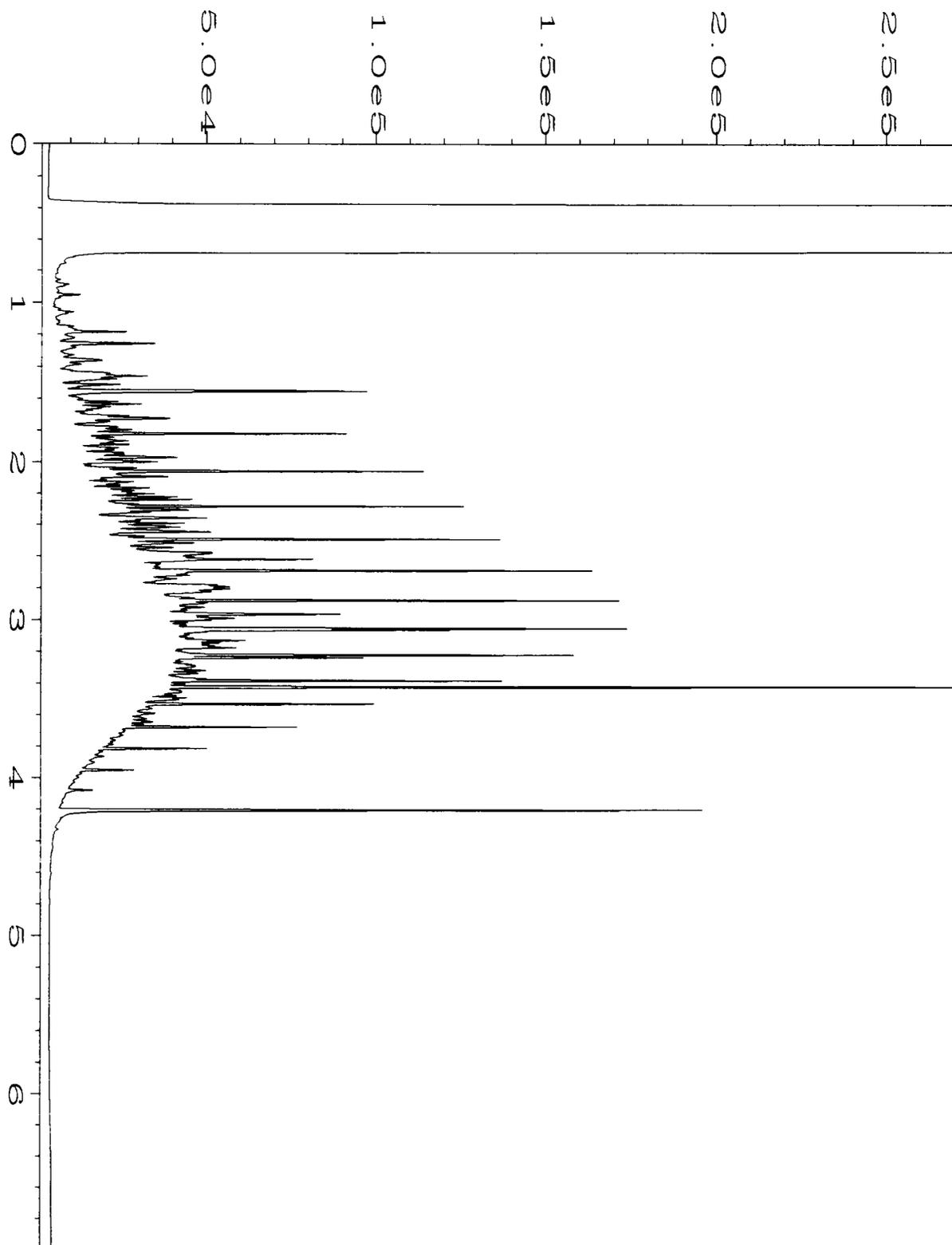
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Instrument	: GC #6	Injection Number	: 1
Sample Name	: 512356-04	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 21 Dec 15 03:49 PM	Analysis Method	: DX.MTH
Report Created on:	22 Dec 15 09:20 AM		



Data File Name	: C:\HPCHEM\6\DATA\12-21-15\028F0501.D	Page Number	: 1
Operator	: mp	Vial Number	: 28
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 512356-05	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 21 Dec 15 03:59 PM	Analysis Method	: DX.MTH
Report Created on:	22 Dec 15 09:20 AM		



Data File Name	: C:\HPCHEM\1\DATA\12-21-15\006F0301.D	Page Number	: 1
Operator	: mp	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 05-2586 mb	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 21 Dec 15 09:54 AM	Analysis Method	: DX.MTH
Report Created on:	22 Dec 15 09:31 AM		



Data File Name	: C:\HPCHEM\6\DATA\12-21-15\003F0201.D	Page Number	: 1
Operator	: mp	Vial Number	: 3
Instrument	: GC #6	Injection Number	: 1
Sample Name	: 500 Dx 45-182D	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 21 Dec 15 08:32 AM	Analysis Method	: DX.MTH
Report Created on:	22 Dec 15 09:21 AM		

APPENDIX D

Supplemental Documentation



Alaska Street
 70 S Alaska Street
 Seattle, WA, 98134

Ph: 206 763 5025

Reprint
 Ticket# 114283

Customer Name R TRANSPORT R TRANSPORT
 Ticket Date 12/18/2015
 Payment Type Credit Account
 Manual Ticket#
 Route AK
 Hauling Ticket#
 Destination
 PO# 1201060R

Carrier SELF HAULER *
 Vehicle# R65
 Container
 Driver BRANDON LLOYD
 Check#
 Billing# 0000432
 Grid

Volume

Time
 In 12/18/2015 10:49:55
 Out 12/18/2015 10:49:55

Scale
 SCALE 1

Operator
 lmercer
 lmercer
 *Manual Weight

Inbound

Gross 42620 lb
 Tare 26160 lb
 Net 16460 lb
 Tons 8.23

Comments RTRANS-KF

Product	LDX	Gty	UOM	Rate	Tax	Amount	Origin
1 Daily Cover-PCS-Tons-Pet	100	8.23	Tons				
2 FEA-FUEL, ENV, ADMIN	100	8.23	Tons				SNOHOMISH
3 GONDOLA T/10T MIN-GONDOL	100	8.23	Tons				

203 WM

Driver's Signature

Total Tax
 Total Ticket



18128 67th Ave NE
Arlington, WA 98223
Phone (360) 435-2869
Fax (360) 435-2869

54235

Company **R TRANSPORT**
Driver **BRANDON**

transport

Date **12/18/15** Shipper **R65** Type **Solo** Truck Hours **4**

Consignee **WASTE MANAGEMENT** Driver Hours

ALASKA ST Demurrage

SEATTLE WA Rate **\$110.00 PER HR**

Load # Manifest # Profile # **170106 OR** Weight Net

Special Handling **R #**

1) 114283 8.23 **START 830**

STOP 1230

Receiver _____ Date _____

Signature _____ Print or Type Name _____

Driver Signature **BRANDON** Date **12/18/15**

Signature of this truck invoice will be considered your notice of our intent to lien this project, if necessary.
Interest @ 1.5% per month will be charged on all past due accounts. Charges due by the tenth of the month following date of this billing.



Non-Hazardous WAM Approval

Requested Management Facility: Columbia Ridge Landfill

Profile Number 1201060R

Waste Approval Expiration Date: 12/17/2016

APPROVAL DETAILS

Approval Decision Approved Not Approved

Profile Renewal Yes No

Management Method Alternate Daily Cover (ADC)

Generator Name: Porterra Riverbend Investment LLC

Material Name: Fuel Oil Impacted Soil/Debris

Management Facility Precautions, Special Handling Procedures or Limitation on approval:

Generator Conditions

- Shall not contain free liquids.
- Shipment must be scheduled into the disposal facility at least 24 hours in advance. Contact information will be provided by your TSR.
- Waste manifest or applicable shipping document must accompany load.
- The waste profile number must appear on the shipping papers.

VIA ALASKA STREET, 70 S. ALASKA STREET, SEATTLE

PLEASE CALL TO SCHEDULE AT 206-763-5025

Facility Conditions

BULK, ADC

WM Authorization Name: Kristin Castner

Title: Waste Approval Manager

WM Authorization Signature: [Signature]

Date: 12/17/2015

Agency Authorization (if Required) _____

Date: _____

THINK GREEN.

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

Last Revised April 11, 2014
©2014 Waste Management



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

September 30, 2015

Ms. Michelle Connor
Forterra
901 Fifth Avenue, Suite 2200
Seattle, WA 98164

Re: Opinion Pursuant to WAC 173-340-515(5) on Sampling and Analysis Plan:

- **Site Name:** Riverbend Investment Co
- **Site Address:** 4304 State Route 530 NE, Arlington, WA
- **Facility/Site No.:** 4864
- **Cleanup Site No.:** 11772
- **VCP Project No.:** NW2999

Dear Ms. Connor:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your Sampling Analysis Plan for the Riverbend Investment Co facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding a review of submitted documents/reports pursuant to requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release at the Site:

- Gasoline range petroleum hydrocarbons (tph-g) and diesel range petroleum hydrocarbons (tph-d) into the Soil.

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on Ecology.



Ms. Michelle Connor
September 30, 2015
Page 2

Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed remedial actions:

1. Phase I Environmental Site Assessment, dated March 29, 2004, prepared by Environmental Associates, Inc.
2. Tank Closure Assessment & Remedial Actions, dated June 9, 2004, prepared by Environmental Associates, Inc.
3. Union Bank Log No. 10-1137 Phase I Environmental Site Assessment, dated November 9, 2010, prepared by Krazan & Associates, Inc.
4. Limited Site Investigation, dated June 29, 2011, prepared by Terracon.
5. Sampling and Analysis Plan, dated February 19, 2015, prepared by Terracon.

The reports listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Appointments can be made by calling the NWRO resource contact at (425) 649-7235 or sending an email to nwro_public_request@ecy.wa.gov.

The Site is defined by the extent of contamination caused by the following release:

- Tph-g and tph-d into the Soil.

Based on a review of supporting documentation listed above, pursuant to **requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following releases at the Site, Ecology has determined:**

- The Sampling and Analysis Plan is sufficient in scope to determine if any contamination remains on the Property.
- In July 1992 an accident involving a truck towing a tractor occurred on the stretch of Highway 530 near the Site. As a result of the accident, the tractor ended up on its side on-site near the driveway to the residence on Lot 1 and approximately 100-gallons of diesel fuel from the tractor was released to site soils. Approximately 20 cubic yards of impacted soil was stockpiled on the Property for future disposal; however, no documentation exists that these soils were removed from the Site.
- In June 2004 two USTs were removed from the site. The USTs consisted of a 1,500-gallon diesel tank and a 500-gallon gasoline tank. Soil impacts extended to

approximately nine feet below the ground surface (bgs). Approximately 40 tons of impacted soil was removed from the gasoline UST cavity and stockpiled on-Site for future off-Site disposal; however, again no documentation exists that these soils were removed from the Site.

- Since no documentation can be found detailing the off-Site disposal of the stockpiled contaminated soil, it is Ecology's opinion that these soils were likely land-farmed on the Property.
- Ground water was not observed during any excavation activities. Ground water is encountered at a depth of 20 feet bgs. There are three domestic drinking water wells which pull from this water bearing zone. Analytical results from samples taken from these wells show that the releases of tph-g and tph-d have not impacted groundwater at this Site.
- The Site does not qualify for the Terrestrial Ecological Evaluation Exclusion. Therefore, the Terrestrial ecological evaluation procedures as defined in WAC 173-340-7490 need to be performed.
- Once the confirmational sampling as documented in the Sampling Analysis Plan is completed, the Final Cleanup Report should be a "Stand Alone" document that includes the following: Site discovery and regulatory status; Site and property location and neighborhood setting; all environmental investigations and interim actions; property development and history; natural conditions; brief description of the surface water system; description of geological conditions; ground water description and occurrence; natural resources and ecological receptors; contaminant occurrence and movement; conceptual Site model; and applicable cleanup standards.

This opinion does not represent a determination by Ecology that a proposed remedial action will be sufficient to characterize and address the specified contamination at the Site or that no further remedial action will be required at the Site upon completion of the proposed remedial action. To obtain either of these opinions, you must submit appropriate documentation to Ecology and request such an opinion under the VCP. **This letter also does not provide an opinion regarding the sufficiency of any other remedial action proposed for or conducted at the Site.**

Please note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

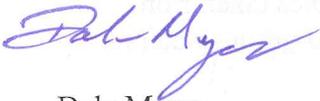
The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or

Ms. Michelle Connor
September 30, 2015
Page 4

employees may arise from any act or omission in providing this opinion. Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (425) 649-4446, or email at damy461@ecy.wa.gov.

Sincerely,



Dale Myers
Site Manager
Toxics Cleanup Program

cc: Lucas Swart, Terracon Consultants, Inc.
Sonia Fernandez, VCP Coordinator, Ecology