INDEPENDENT REMEDIAL ACTION

AMEX TAX & DUTY FREE SHOPS WEST VCP # NW0363
BLAINE, WASHINGTON

Prepared For:

Ultra Tank Services
P.O. Box 664
Bellingham, WA 98227

BEK ENGINEERING, INC.

2138 Humboldt Street
Bellingham, WA 98225
(360) 676-9589 (800) 859-5597
Fax (360) 676-4625

BEK ENGINEERING, INC.

BELLINGHAM • EVERETT

CIVIL • GEOTECHNICAL • ENVIRONMENTAL • WETLANDS

360-676-9589 • 425-258-2059
800-859-5597 • 800-835-4971
FAX 360-676-4625 • 425-258-5046

October 25, 1999

Ultra Tank Services
P.O. Box 664
Bellingham, WA 98227

Attn: George Willet

Re: **Independent Remedial Action Report – Voluntary Cleanup Program**
Leaking Underground Storage Tank
Amex Tax and Duty Free Shops West (Ecology UST Site ID #11177)
253 C Street
Blaine, Washington

Dear Mr. Willet:

BEK Engineering is pleased to present this Independent Remedial Action report regarding the cleanup of contaminated soil related to the release of hydrocarbon products from underground storage tanks and associated pump islands at a gasoline service station at the above referenced property in Blaine, Washington. A copy of this report including all appendices and attachments has been transmitted to John Lillie in the Voluntary Cleanup Program at the Northwest Regional Office of the Washington State Department of Ecology (Ecology). We are requesting No Further Action for this site.

This report was completed in general accordance with Ecology's *Model Toxics Control Act Cleanup Regulation* (MTCA, Chapter 173-340 WAC).

SCOPE OF SERVICES

Our scope of services for this project included:

1. Supervised the excavation of hydrocarbon contaminated soil derived from underground storage tanks and adjacent pump islands at the subject property.
2. Completed field-testing and the collection of soil samples to confirm that all hydrocarbon contaminated soil had been removed.
3. Logged the subsurface geologic conditions encountered in the excavation.
4. Arranged for the transport of soil samples to the laboratory using proper chain-of-custody procedures.
5. Arranged for the analysis of soil for gasoline range hydrocarbons, BTEX and Lead using accepted methods at an Ecology accredited laboratory.
6. Completed this report, the *Request for Assistance Form*, and the *Site Summary* forms in accordance with the reporting requirements of Ecology's the *Voluntary Cleanup Program*.

ENTERED 5/22/00

DEPARTMENT OF ECOLOGY
NWRO/TCP TANKS UNIT

INTERIM CLEANUP REPORT ☐
SITE CHARACTERIZATION ☐
FINAL CLEANUP REPORT ☒
OTHER _____ ☐
AFFECTED MEDIA: SOIL ☒
OTHER _____ GW ☒
INSPECTOR (INIT.) AB DATE 5/22/00

BEK ENGINEERING, INC.
2138 HUMBOLDT STREET
BELLINGHAM, WA 98225

BEK McDONNELL ENGINEERING, INC.
2733 COLBY AVENUE
EVERETT, WA 98201

INTRODUCTION

Four underground storage tanks (UST's) were removed from a single UST pit on August 9, 1999 by Ultra Tank Services, Inc. of Bellingham, Washington. The tanks had been used to store gasoline for a gasoline service station located at Amex Duty Free Shops West in Blaine, Washington. Following removal of the tanks, qualitative field testing and analytical results indicated that gasoline contaminated soil was present under the west part of the former pump island and within the tank pit.

This report provides a summary of our field observations during cleanup and removal of gasoline contaminated soil, and the analytical results for soil samples collected from the UST pit and adjacent pump islands to confirm that cleanup has been completed.

A report prepared by our firm entitled *Site Check / Site Assessment* (dated October 25, 1999) for Amex Tax and Duty Free Shops West discusses the closure by removal of the tanks and associated pump islands.

SITE VICINITY CHARACTERISTICS

The subject property is located at 253 C Street, in the City of Blaine (Figure 1 and Figure 2). The property lies approximately 1000 feet northeast of Semiahmoo Bay, at an elevation of approximately 50 feet MSL. The vicinity of the subject property is zoned UR-4, urban residential four units per acre. C Street and residential properties bound the subject property to the north. Second Street and commercial properties bound the subject property to the west. Denny's Restaurant bounds the subject property to the south. A motel bounds the subject property to the east.

The geologic conditions in the vicinity of the subject property are described in the *Geologic Map of the Bellingham 1:100,000 Quadrangle, Washington* (Pringle et al., 1994). According to that map, the subject property is underlain by a former outwash plain of the Sumas Stade. Deposits in the outwash plain consist of boulders, cobbles, and gravel near the Canadian border, grading southwestward to sand near Lynden. These sediments were deposited in outwash streams when the terminus of the continental icesheet was in the vicinity of Sumas, Washington. The outwash plain of the Sumas Stade forms a thin mantle over the thicker and more continuous silts and clays of the Bellingham Drift. The Bellingham Drift is derived from sediments melted out of floating glacial ice and deposited on the sea-floor, at a time when relative sea-level was higher than the present. In general, the Bellingham Drift (Drift) consists of poorly sorted and unstratified clayey silt, gravelly clay, and gravelly, sandy silt, with some cobbles and rare boulders. The upper part of the Drift (generally 0 feet to 15 feet below the ground surface) is commonly in a generally stiff condition, while the lower part of the Drift (generally greater than 15 feet below the ground surface) is commonly in a generally soft condition. In general, the Drift has low permeability, although permeability increases within the upper Drift due to desiccation cracks, and within coarser-grained lenses found throughout the drift.

FIELD OBSERVATIONS

BEK Engineering personnel were called to the site on August 9, 1999 to complete the site check/site assessment. At the time of our arrival the fuel pumps had already been removed, and the top of the UST's were exposed. We observed the removal of four UST's from the tank pit. The tanks were observed to be in good condition, with no visual evidence for pitting or corrosion.

Following removal of the tanks, the UST pit was observed to contain water. The water level was approximately 5.0 feet below the ground surface (Figure 3 and Figure 4). A hydrocarbon sheen was observed on the top of the water. Based on the presence of the sheen, Ultra Tank Services contracted

with Mar-Vac of Seattle to remove and properly dispose of the water from the tank pit. Approximately 24,400 gallons of water was removed from the pit by Mar-Vac on August 24 through August 26.

Following removal of the water, the tank pit backfill material was observed to consist of imported sandy gravel with some clay and silt. Approximately 1.5 feet of pea gravel was located at the bottom of the pit as bedding material for the tanks. The tank pit was inspected to evaluate the sidewall soil conditions. The upper 1.5 to 2.0 feet consisted of imported sandy gravel fill soil as a base course for the asphalt pavement. The fill soil was underlain to a total depth of approximately 6.0 feet by native, brown to gray silt with sand and clay that was observed to be in a damp condition. The silt was underlain by moist gray-blue silty clay to the base of the pit at approximately 14.0 feet.

Gasoline contaminated soil was removed by Ultra Tank Services on August 24 through August 27. Contaminated soil was limited to the granular soil used to backfill the pit, less than one foot of native soil from the pit sidewalls and floor, a small area below a catch basin, and granular fill and approximately two feet of native soil below the west part of the pump island. The extents of the excavation are indicated in Figure 2. Approximately 703 cubic yards of contaminated soil was removed and treated by thermal desorption by CSR Associated in Everett, Washington.

Confirmation sampling was completed on August 8 through August 27. Sample locations are indicated on Figure 2.

Two soil samples (080999-4 and –5) were collected from the east side of the dispenser pad at approximately 2.0 to 2.1 feet bgs. Three soil samples (082499-4, -5 and -6) were collected from excavated areas under the west part of the former pump island at approximately 5.5 to 6.5 feet bgs. Twelve soil samples (082699-1 through -9 and 082799-1 through -3) were collected from various locations inside the tank pit.

Based on the presence of water within the tank pit, we suspected that the pit intersected a shallow aquifer. However, no ground water was observed to be seeping into the pit (Figure 5 and Figure 6). The pit remained dry from the morning of August 26 through the evening of August 28. Based on these observations and the presence of relatively impermeable native soil in the pit sidewalls, we conclude that the pit did not intersect a shallow aquifer. Water in the tank pit apparently originated by infiltration through manways, through cracks in the overlying asphalt pavement, and through seams between asphalt pavement and concrete pavement.

ANALYTICAL RESULTS

Soil samples were collected from the UST pit and adjacent pump island at the locations indicated in Figure 2. Samples 080999-4 and -5 were analyzed for gasoline, BTEX and Lead by CCI Analytical Laboratories, Inc. (Everett, Washington), using the NWTPH-GX, EPA 8021 and EPA 7420 methods, respectively. The remaining samples were analyzed for gasoline range hydrocarbons and BTEX exclusively. The complete laboratory reports are included in Appendix II and the results are summarized in Table 1.

TABLE 1
Analytical Results – Soil
Samples Collected 8/9/99 – 8/2699 – 8/27/99

Sample #	Sample Location	Depth (feet)	Field Screening Results		Fate	Lead (mg/kg)	Gasoline (mg/kg)	Volatile Aromatic Hydrocarbons (mg/kg)			
			Headspace Vapors (ppm)	Sheen				B	T	E	X
080999-4	E. Pump Is.	2.1	5	NA	Residual	3	ND	ND<0.1	ND<0.1	ND<0.1	ND<0.3
080999-5	E. Pump Is.	2.0	2	NA	Residual	2	ND	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082499-4	Mid. Pump Is.	6.5	ND	NA	Residual	NA	ND	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082499-5	W. Pump Is.	5.5	ND	NA	Residual	NA	ND	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082499-6	W. Pump Is.	6.0	ND	NA	Residual	NA	ND	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-1	Pit Floor	14.0	ND	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-2	W. Sidewall	10.0	ND	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-3	Pit Floor	14.0	ND	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-4	S. Sidewall	10.5	10	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-5	S. Sidewall	10.0	5	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-6	N. Sidewall	9.0	ND	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-7	Pit Floor	14.5	ND	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-8	S. Sidewall	10.5	ND	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082699-9	N. Sidewall	9.0	ND	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082799-1	E. Sidewall	9.5	5	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082799-2	Pit Floor	13.0	3	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
082799-3	N. Sidewall	10.5	ND	NA	Residual	NA	ND<5	ND<0.1	ND<0.1	ND<0.1	ND<0.3
Method A Cleanup Standard						250	100	0.5	40	20	20

Shaded analytical results exceed the Model Toxics Control Act Cleanup Regulation Method A recommended cleanup standards; mg/kg = parts-per-million; NA = not analyzed. B= Benzene, T= Toluene, E= Ethylbenzene, X= Xylene.

Sheen: NS – No Sheen
LS – Light Sheen
MS – Moderate Sheen
HS – Heavy Sheen

Gasoline range hydrocarbon products and BTEX were not detected in any of the cleanup confirmation samples. Cleanup standards in the State of Washington are regulated under the *Model Toxics Control Act Cleanup Regulation* (MTCA, Chapter 173-340 WAC). Method A recommended cleanup standards as defined in the MTCA are generally applied to hydrocarbon products. The Method A cleanup standard for gasoline range hydrocarbon products is 100 mg/kg.

CONCLUSIONS

During removal of four UST's, a strong gasoline odor was encountered in the associated tank pit. A gasoline sheen was also observed on ponded water in the tank pit. Approximately 24,400 gallons of contaminated water was removed from the tank pit and disposed by Mar-Vac of Seattle, Washington. No ground water seeps were observed from the walls of the pit, and we conclude that the pit did not intersect a shallow water table and that ground water has not been impacted by the release. Approximately 703 cubic yards of contaminated soil was treated by thermal desorption at CSR Associated in Everett, Washington. Soil samples were collected from the tank pit and beneath the former pump island, and analytical results indicate that all petroleum contaminated soil has been removed.

Based on these analytical results, we conclude that independent cleanup efforts have successfully removed and treated the contaminated soil, and that the subject property does not present a threat to human health or the environment. We are therefore requesting a determination of "No Further Action" for this site.

INDEMNIFICATION AND LIMITATIONS

The analytical results, conclusions and recommendations within this report are based on the soil samples collected from the indicated locations at the time this report was prepared, and should not be construed as a warranty of the subsurface conditions throughout the site. No environmental investigation can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. An environmental investigation is intended to reduce, but not eliminate, uncertainty regarding the existence of recognized environmental conditions.

Within the limitations of scope, schedule and budget for our work, we warrant that our work has been done in accordance with our proposal and generally accepted environmental assessment practices followed in this area at the time the report was prepared. No other warranty, express or implied, is made.

We appreciate the opportunity to be of service to you. Should you have any questions concerning this report or require further information, please contact our office at (360)-676-9589 or (800)-859-5597.

Sincerely,

BEK ENGINEERING, INC.

Jon M. Einarsen, Ph.D., Principal
Geologist
WA UST Assessor and Decommissioning License #32-US-000684

Attach: APPENDIX I

Figure 1 – Site Vicinity Map
Figure 2 – Generalized Site Plan and Sample Locations
Figures 3 to 6 – Site Photographs

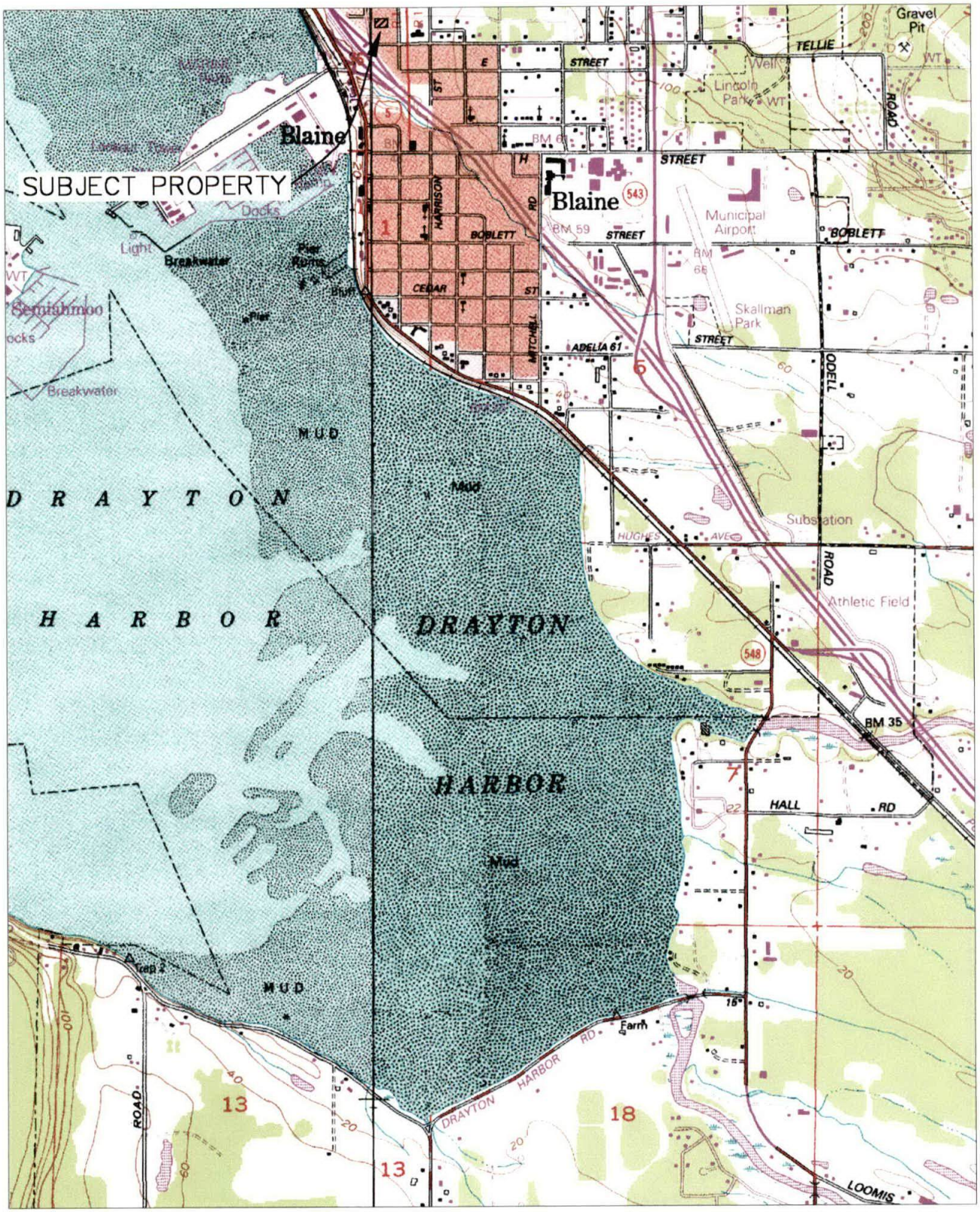
APPENDIX II

Laboratory Reports
Release of Liability / Certificate of Disposal

Attach: Voluntary Cleanup Program *Request for Assistance Form*
Voluntary Cleanup Program *Site Summary*

APPENDIX I

Figure 1 – Site Vicinity Map
Figure 2 – Generalized Site Plan & Sample Locations
Figures 3 to 6 – Site Photographs



GRAPHIC SCALE

2000 0 2000 4000

1 INCH = 2000 FEET

REFERENCE: BLAINE QUADRANGLE (U.S.G.S. 1952, REVISED 1994)
REFERENCE: BIRCH POINT QUADRANGLE (U.S.G.S. 1962, REVISED 1994)

JOB NO.:	99269
DESIGNED BY/DRAWN BY:	gtk
CHECKED BY:	jme
DWG FILE:	birchpoint- blaine

BEK ENGINEERING, INC.

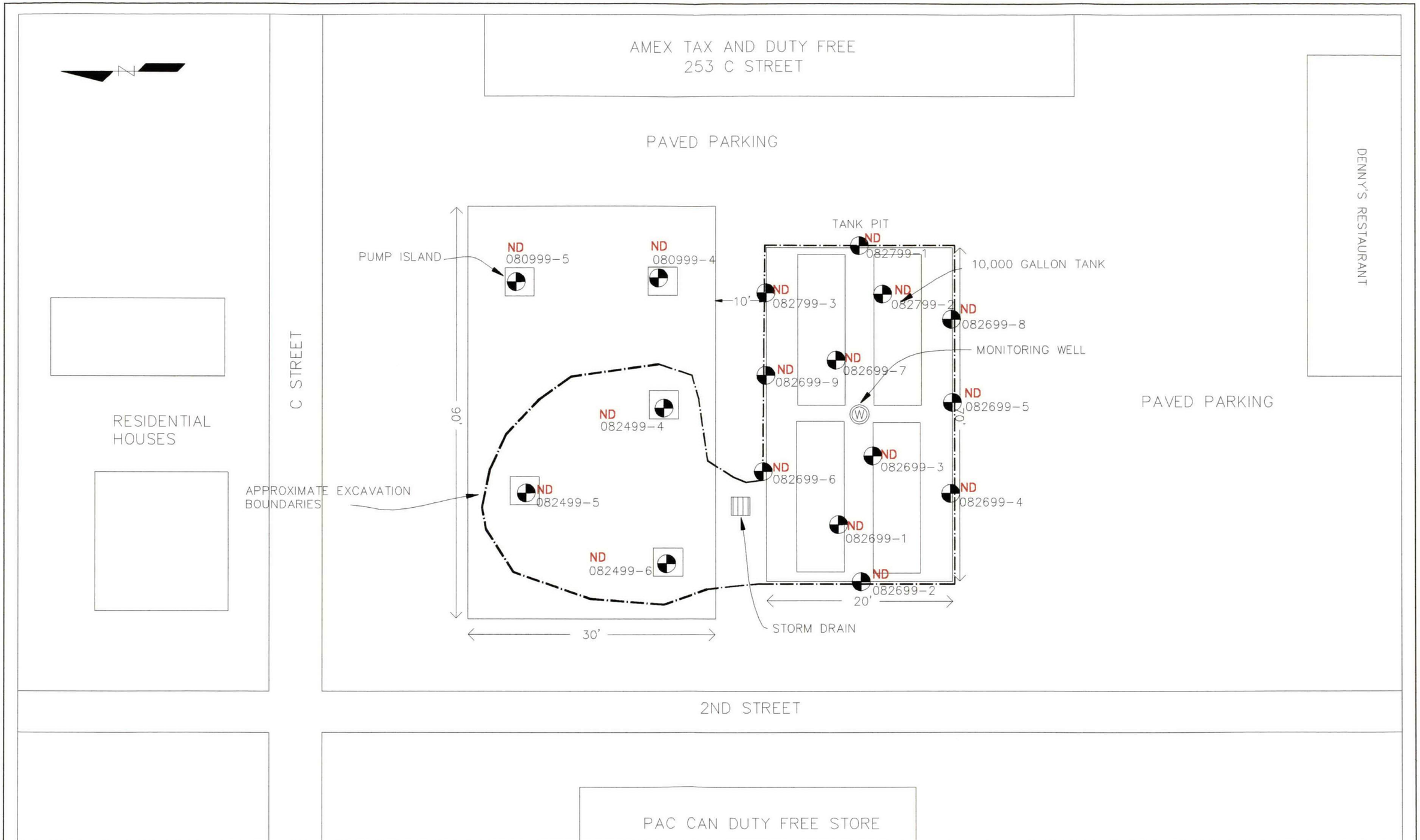
CIVIL GEOTECHNICAL
ENVIRONMENTAL WETLANDS

2138 Humboldt Street
Bellingham, WA 98225
Ph: (360) 676-9589
Ph: (800) 859-5597
Fax: (360) 676-4625

FIGURE 1
SITE VICINITY MAP
AMEX TAX & DUTY FREE SHOPS WEST – 253 C STREET

DATE: 9/99

SCALE: H: 1:24,000 V: n/a



SAMPLES COLLECTED 8-24-99 AND 8-26-99
082499-1 SAMPLE NUMBER
TOTAL GASOLINE (NWTPH-GX, MG/KG)

DRAWING IS NOT TO SCALE

BEK ENGINEERING, INC.
CIVIL GEOTECHNICAL ENVIRONMENTAL WETLANDS
2138 Humboldt Street
Bellingham, WA 98225
Ph: (360) 676-9589
Ph: (800) 859-5597
Fax: (360) 676-4625

JOB NO.: 99269	FIGURE 2
DESIGNED BY /DRAWN BY: GTK	GENERALIZED SITE PLAN
CHECKED BY: JME	AMEX TAX & DUTY FREE – BLAINE, WASHIGTON
DRAWING FILE: 99233 SITE PLAN	DATE: 10/99 SCALE: H: N/A V: N/A

Figure 3. Subject property view to the west. Water in tank pit is approximately 5.0 feet below ground surface in this photograph.

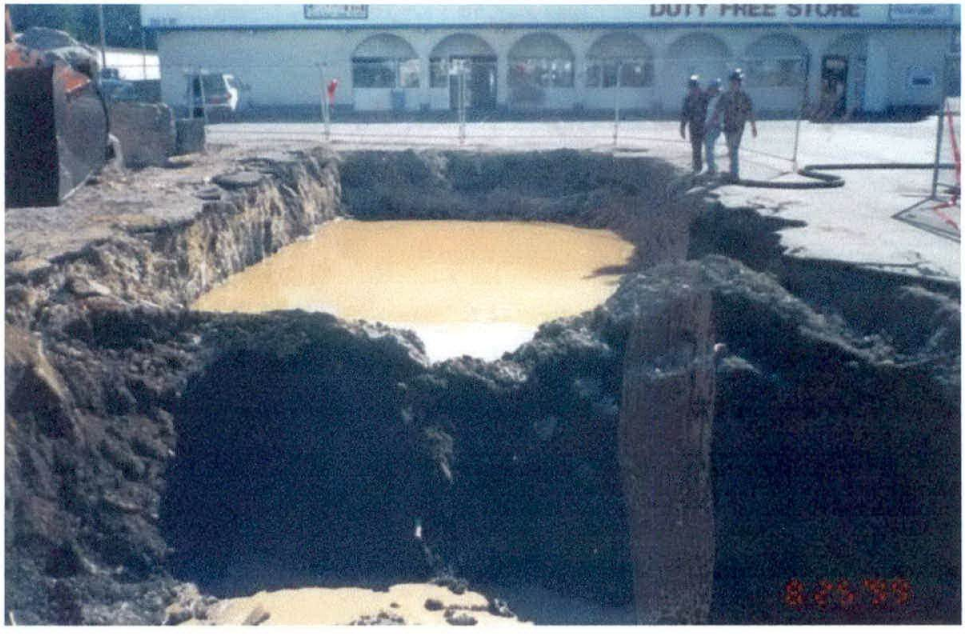


Figure 4. Subject property view to the east. Photograph of water in the tank pit. Water in the foreground is at a deeper elevation due to a clay wall that was created to aid in excavation.

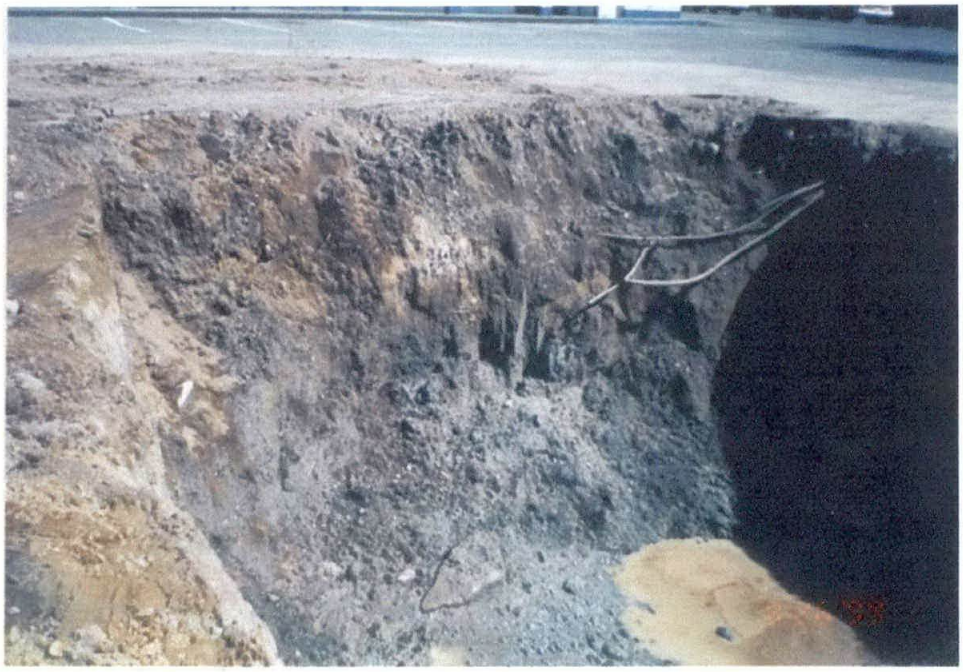


Figure 5. Photograph of west wall of tank pit after water was pumped out. Water at the bottom of the excavation originated from a 1.5 foot thick layer of pea gravel that was underlain by native blue clay.

Figure 6. Photograph of the south wall of the excavation. Depth to pit bottom was approximately 14.0 feet.

APPENDIX II

Laboratory Reports
Release of Liability / Certificate of Disposal

CC tical ator
3229 Pine Street
Everett, WA 98201
Phone (425) 252-2620
(206) 292-9059 Seattle
(425) 259-6289 Fax

ain Cu dy
Laboratory Analysis Request

CCI Job# (Laboratory Use Only)

Date 4/2/99 Page 1 Of 1

PROJECT ID: 99233
REPORT TO COMPANY: BEK Engineering
PROJECT MANAGER: Dan Carson
ADDRESS: 2135 Humboldt St
Bellingham WA 98225
PHONE: 360-671-9449 FAX:
INVOICE TO COMPANY:
ATTENTION:
ADDRESS: Same
P.O. NUMBER: CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. 032499-2	4/1/99			
2. 032499-4	4/1/99			
3. 032499-5	4/1/99			
4. 032499-6	4/1/99			
5. ~~032499~~				
6.				
7.				
8.				
9.				
10.				

ANALYSIS REQUESTED

WTPH-G	WTPH-D ☐ 8015 MODIFIED ☐	WTPH-418.1	BTEX	WTPH-HCID	EPA 8020 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8240 ☐ 624 ☐ 8260 ☐	EPA 8270 ☐ 625 ☐	EPA 8080 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)

OTHER (Specify)

TCLP Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herb ☐												NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
	AUTEH-G	TEX											
1.	X	X											
2.	X	X											
3.	X	X											
4.	X	X											
5.													
6.													
7.													
8.													
9.													
10.													

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, and Time):

1. Relinquished By: [signature] 14:30
Received By:
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
10 Standard | 5 | 3 | 2 | 1 | Same Day

Fuels & Hydrocarbon Analysis
5 Standard | 3 | 1 | Same Day

OTHER:
Specify:

* Turnaround Requests less than standard may incur Rush Charges.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/1/99
CCIL JOB #: 908099
CCIL SAMPLE #: 2
DATE RECEIVED: 8/25/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082499-4 8/24/99 13:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/1/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/1/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/1/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/1/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/1/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: C.J.W.

3229 Pine St. • Everett, WA 98201 • 425 252-2620 • FAX 425 259-6289 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/1/99
CCIL JOB #: 908099
CCIL SAMPLE #: 3
DATE RECEIVED: 8/25/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082499-5 8/24/99 13:15

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/1/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/1/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/1/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/1/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/1/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

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APPROVED BY: _____

3229 Pine St. • Everett, WA 98201 • 425 252-2620 • FAX 425 259-6289 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/1/99
CCIL JOB #: 908099
CCIL SAMPLE #: 4
DATE RECEIVED: 8/25/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082499-6 8/24/99 13:30

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/1/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/1/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/1/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/1/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/1/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: _____

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2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/1/99
CCIL JOB #: 908099

DATE RECEIVED: 8/25/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
908099-01	NWTPH-GX	TFT	67
908099-01	EPA-8021	TFT	91
908099-02	NWTPH-GX	TFT	52
908099-02	EPA-8021	TFT	66
908099-03	NWTPH-GX	TFT	56
908099-03	EPA-8021	TFT	74
908099-04	NWTPH-GX	TFT	55
908099-04	EPA-8021	TFT	70

APPROVED BY: _____

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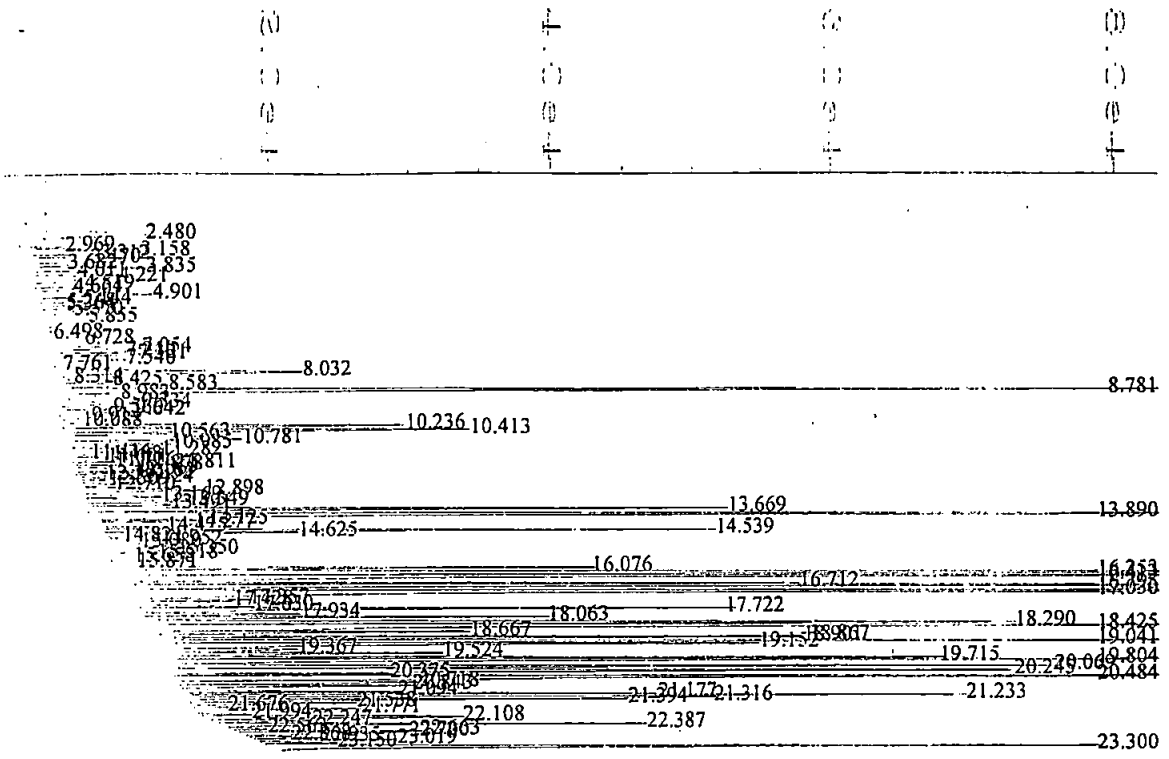


External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29083001\011R0301.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 11
Sample Name	: 908099-1 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 30 Aug 99 03:22 PM	Instrument Method	: TPHG0699.MTH
Report Created on	: 30 Aug 99 03:46 PM	Analysis Method	: BTEX2899.MTH
Last Recalib on	: 18 AUG 99 01:03 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in D:\HPCHEM\2\DATA\29083001\011R0301.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.054	36859	VV	0.086	1	0.189	Benzene
8.781	452719	VV	0.074	1	9.086	TFT surrogate
10.781	82765	VV	0.092	1	0.416	Toluene
13.669	217590	VV	0.069	1	1.561	Ethylbenzene
13.890	587173	VV	0.074	1	2.753	M+P-Xylene
14.539	167280	VV	0.057	1	0.924	O-Xylene

$10 \times 100 = 91\%$

B.T, <0.1mg/kg

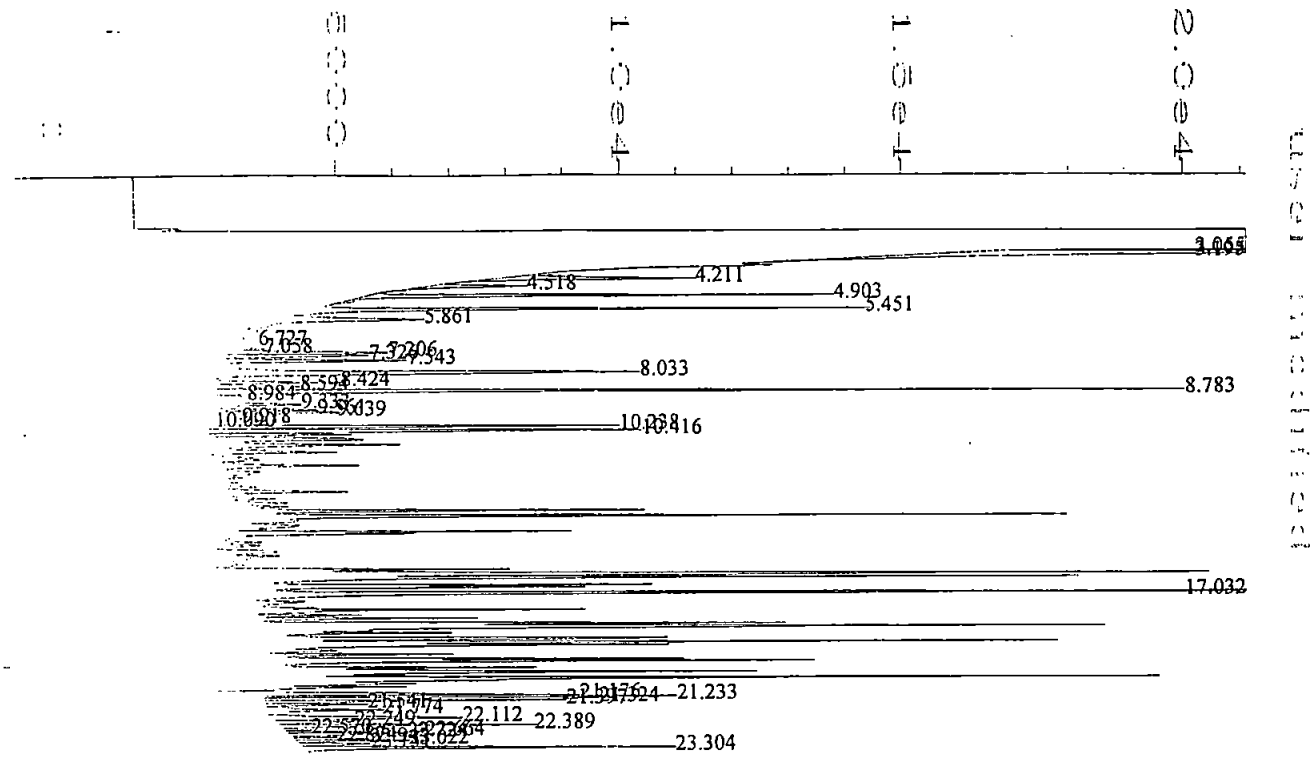
Dry wt = 5.7g

$= 1.561\ \mu g/L \times \frac{5mL}{0.1mL} \times \frac{0.01L}{5.7g} = 0.1\ mg/kg$

$= <0.3mg/kg$ 0.3

REVIEWED BY 9-1-99

SC 9-1-99 11 H



External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29083001\011F0301.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 11
Sample Name	: 908099-1 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 30 Aug 99 03:22 PM	Instrument Method	: TPHG0699.MTH
Report Created on	: 01 Sep 99 02:04 PM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29083001\011F0301.D

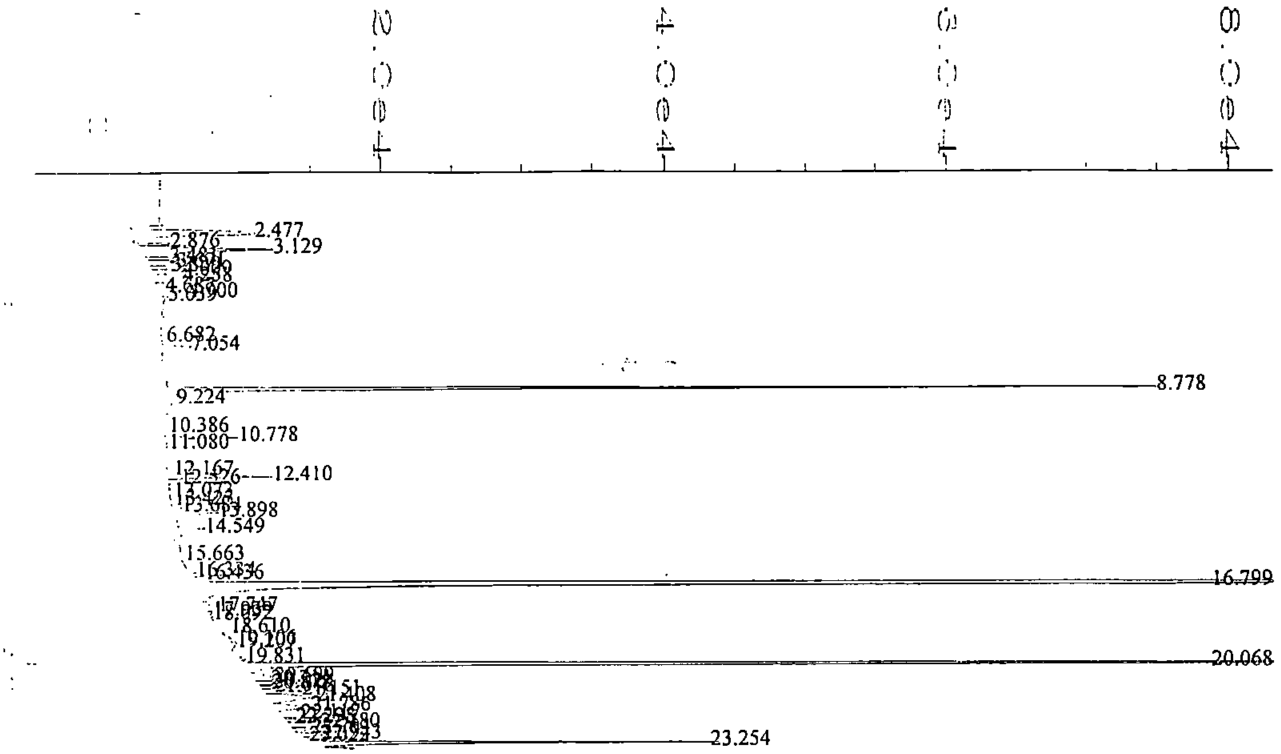
Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.783	83671	VV	0.073	1	6.712	TFT-surrogate $\frac{1}{10} \times 100 = 67\%$
17.032	1633465	MM	0.814	1	230.756	gasoline envelop

User Modified

$\text{Gas} = 230.756\,\text{ug/L} \times \frac{5\,\text{mL}}{0.01\,\text{mL}} \times \frac{0.01\,\text{L}}{5.7\,\text{g}} = 20\,\text{mg/kg}$ weathered gasoline

9-1-99

9-1-99 LH



External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29083101\027R1401.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 27
Sample Name	: 908099-2 100UL	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 14
Acquired on	: 01 Sep 99 01:36 AM	Instrument Method	: TPHG0899.MTH
Report Created on	: 01 Sep 99 02:00 AM	Analysis Method	: BTEX2899.MTH
Last Recalib on	: 18 AUG 99 01:03 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in D:\HPCHEM\2\DATA\29083101\027R1401.D

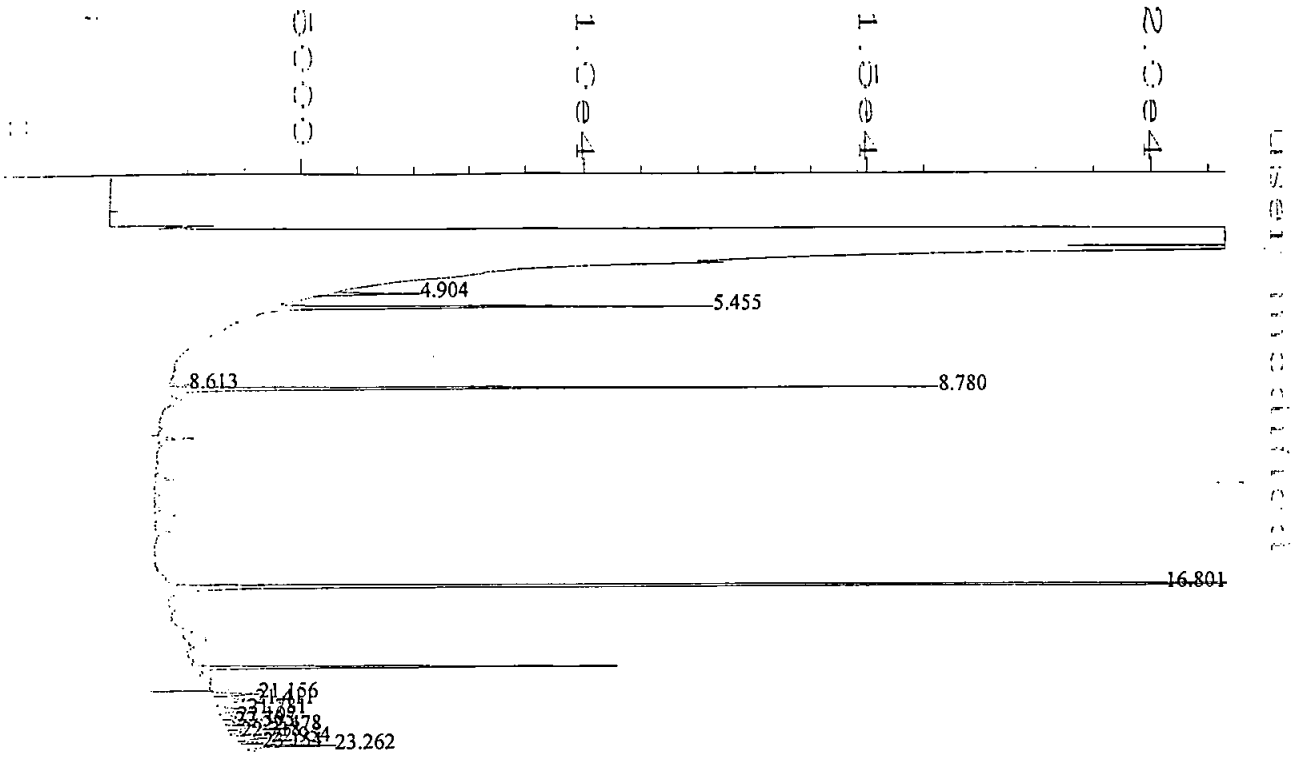
Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.054	12462	VV	0.093	1	0.0637	Benzene
8.778	337617	BV	0.073	1	6.640	TFT surrogate ÷10 x100=66%
10.778	21940	BV	0.064	1	0.110	Toluene
13.684	3084	PV	0.072	1	0.0191	Ethylbenzene
13.898	19879	VV	0.092	1	0.0801	M+P-Xylene
14.549	11208	BV	0.085	1	0.0619	O-Xylene

BTE < 0.1 mg/kg

X < 0.3 mg/kg

Dry wt= 5.5g

BY 9-1-99



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29083101\027F1401.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 27
Sample Name	: 908099-2 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 14
Acquired on	: 01 Sep 99 01:36 AM	Instrument Method:	TPHG0899.MTH
Report Created on:	01 Sep 99 02:02 PM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29083101\027F1401.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.780	64478	VF	0.072	1	5.173	TFT-surrogate 110×160=52%
16.801	435808	MM	0.160	1	37.018	gasoline envelop

Manually Modified

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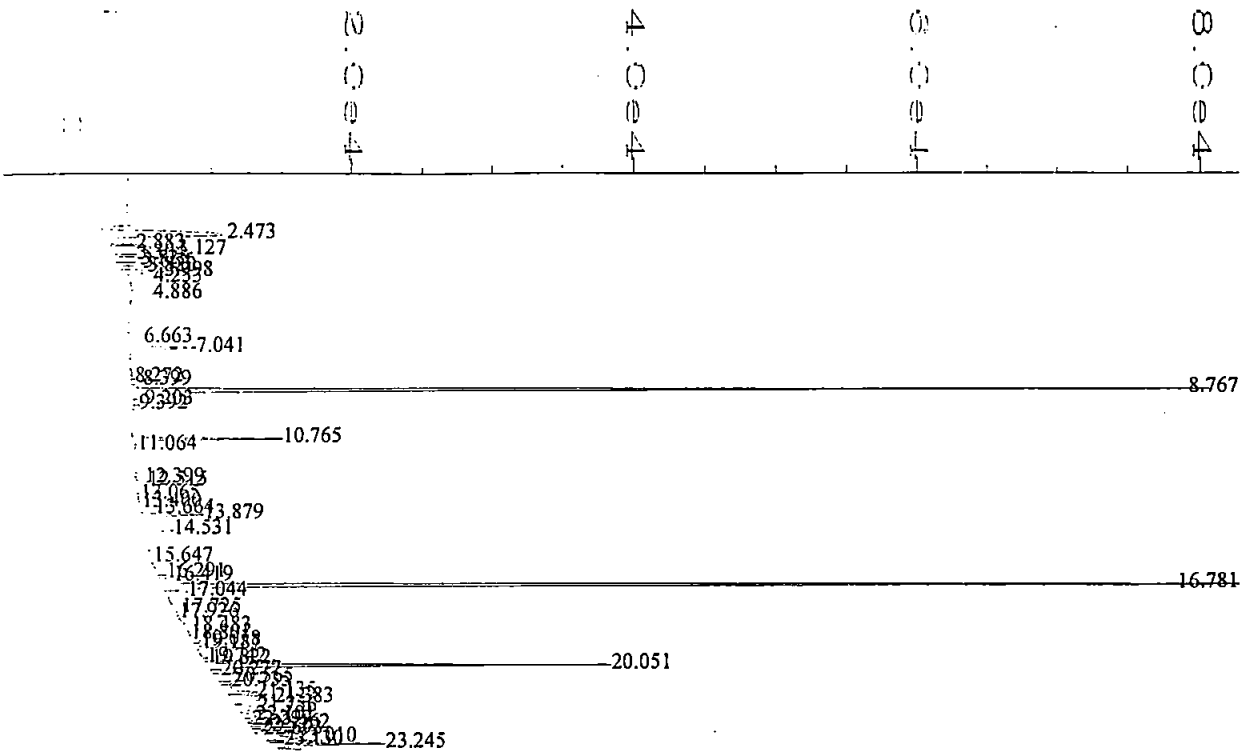
Gas < 5.0 mg/kg

9-1-99



External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29083101\029R1401.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 29
Sample Name	: 908099-3 100UL	Injection Number	: 1
In Time Bar Code:		Sequence Line	: 14
Acquired on	: 01 Sep 99 02:40 AM	Instrument Method:	TPHG0899.MTH
Report Created on:	01 Sep 99 03:03 AM	Analysis Method	: BTEX2899.MTH
Last Recalib on	: 18 AUG 99 01:03 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

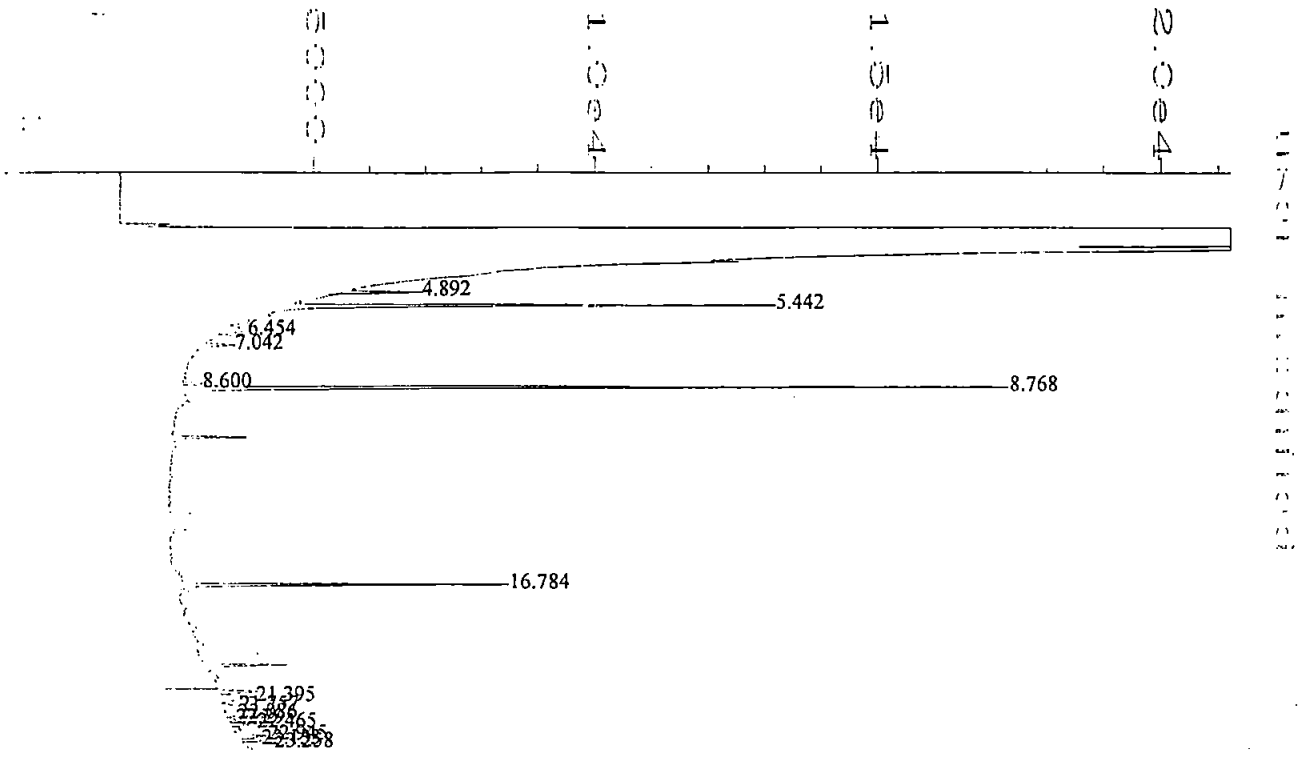
Rg. 2 in D:\HPCHEM\2\DATA\29083101\029R1401.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.041	25214	VV	0.082	1	0.129	Benzene
8.767	374707	VV	0.074	1	7.428	TFT surrogate 7.4/10 x100 = 74%
10.765	44341	PV	0.062	1	0.223	Toluene
13.664	4692	PV	0.066	1	0.0290	Ethylbenzene
13.879	28262	VV	0.090	1	0.114	M+P-Xylene
14.531	13382	VV	0.091	1	0.0739	O-Xylene

BTE < 0.1 mg/kg

X < 0.3 mg/kg 9-9-99

Dry wt = 5.13g



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29083101\029F1401.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 29
Sample Name	: 908099-3 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 14
Acquired on	: 01 Sep 99 02:40 AM	Instrument Method:	TPHG0899.MTH
Report Created on:	01 Sep 99 02:03 PM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29083101\029F1401.D

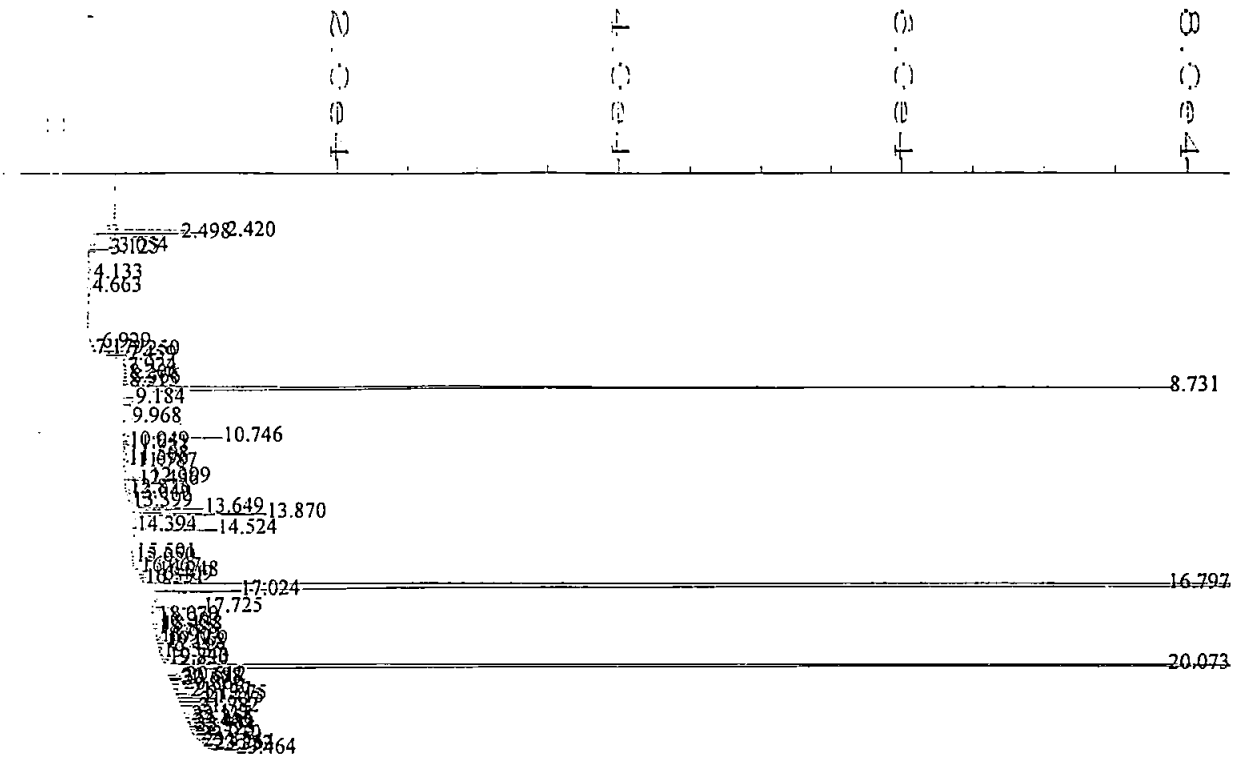
Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.768	69263	VF	0.072	1	5.557	TFT-surrogate $\frac{5.557}{10} \times 100 = 56\%$
16.784	225943	MM	0.608	1	19.192	gasoline envelop

User Modified

==========

Gas < 5.0 mg/kg

9-1-99



External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29090101\006R0201.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 6
Sample Name	: 908099-4 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 01 Sep 99 03:06 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 01 Sep 99 03:30 PM	Analysis Method	: BTEX2899.MTH
Last Recalib on	: 18 AUG 99 01:03 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in D:\HPCHEM\2\DATA\29090101\006R0201.D

Rt Time	Area	Type	Width	Ref#	ug/l	Name
7.179	1615	VV	0.117	1	0.00826	Benzene
8.731	353497	VV	0.072	1	6.978	TFT surrogate
10.746	29799	PV	0.063	1	0.150	Toluene
13.649	21864	BV	0.061	1	0.135	Ethylbenzene
13.870	44058	VV	0.067	1	0.178	M+P-Xylene
14.524	24378	VV	0.060	1	0.135	O-Xylene

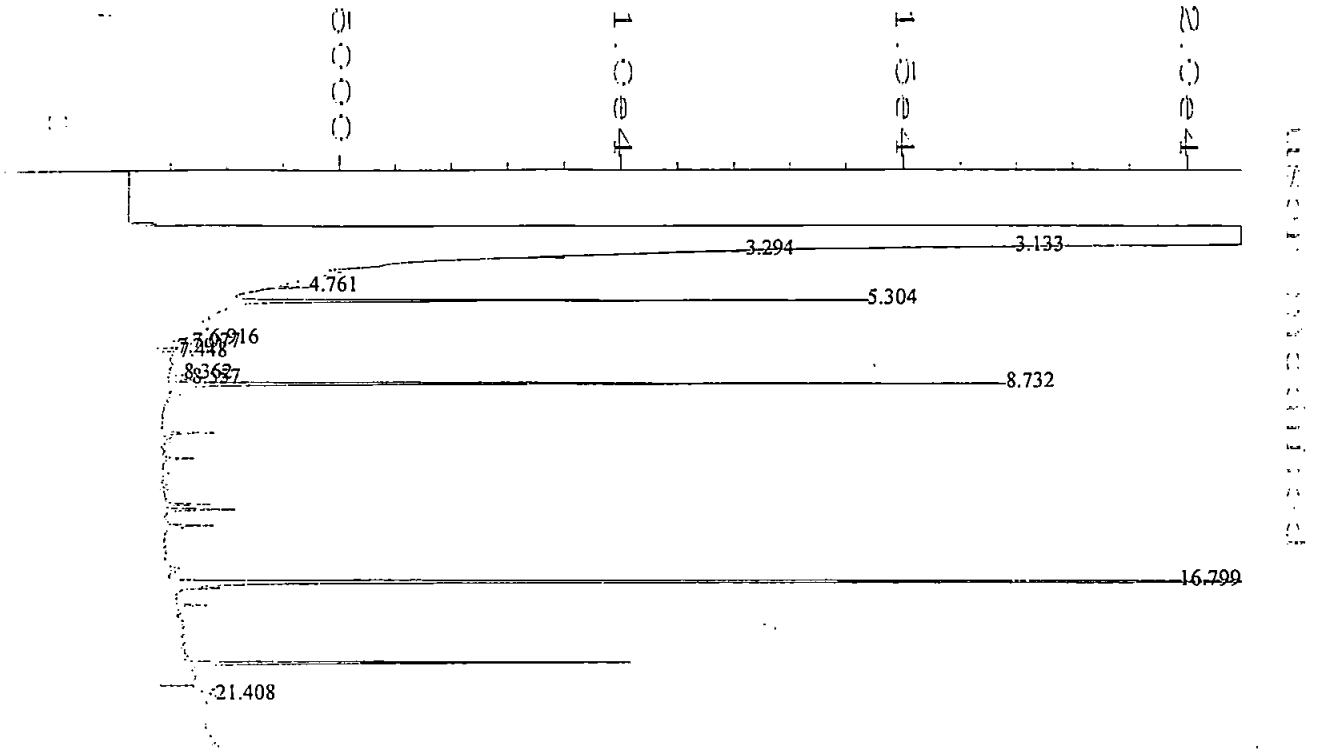
$\frac{6.978}{10} \times 100 = 70\%$

BTE < 0.1 mg/kg

X < 0.3 mg/kg

9-14-99

Dry wt = 5.06g



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29090101\006F0201.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 6
Sample Name	: 908099-4 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 01 Sep 99 03:06 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 01 Sep 99 03:31 PM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29090101\006F0201.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.732	67969	VF	0.070	1	5.453	TFT-surrogate 10X100=55%
16.799	387175	MM	0.145	1	32.887	gasoline envelop

User Modified

==========

Gas = 5.0 mg/kg

9/9/99

C lytic: irato :.
3229 Pine Street
Everett, WA 98201
Phone (425) 252-2620
(206) 292-9059 Seattle
(425) 259-6289 Fax

Chain of Custody / Laboratory Analysis Request

CC rator Only

Date 8/26/99 Page 1 Of 1

PROJECT ID: 99273
REPORT TO COMPANY: BEK Engineering
PROJECT MANAGER: Tom Einarsen
ADDRESS: 2138 Humboldt St.
Bellingham WA 98226
PHONE: 360-676-9559 FAX: 360-676-4125
INVOICE TO COMPANY:
ATTENTION: Same ↑
ADDRESS:
P.O. NUMBER: CCI QUOTE:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	WTPH-G	WTPH-D ☐ 8015 MODIFIED ☐	WTPH-418.1	BTEX	WTPH-HCID	EPA 8020 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8240 ☐ 624 ☐ 8260 ☐	EPA 8270 ☐ 625 ☐	EPA 8080 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herb ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. 082699-1	8/26/99	10:00	Soil					X										X	
2. " -2		10:45																	
3. " -3		11:00																	
4. " -4		11:45																	
5. " -5		12:15																	
6. " -6		12:45																	
7. " -7		13:00																	
8. " -8		13:30																	
9. " -9	↓	13:45	↓					↓									✓		
10.																			

ANALYSIS REQUESTED / OTHER (Specify)

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, and Time):

1. Relinquished By: [signature] BEK Engineering 8/26/99 15:00
Received By:
2. Relinquished By:
Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | Same Day

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | Same Day

OTHER:
Specify:

* Turnaround Requests less than standard may incur Rush Charges.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 1
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-1 8/26/99 10:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/2/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/2/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/2/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/2/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/2/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 2
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-2 8/26/99 10:45

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/2/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/2/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/2/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/2/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/2/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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APPROVED BY: _____

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CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 3
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-3 8/26/99 11:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/2/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/2/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/2/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/2/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/2/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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APPROVED BY: CKA

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 4
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-4 8/26/99 11:45

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/2/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/2/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/2/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/2/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/2/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 5
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-5 8/26/99 12:15

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/2/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/2/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/2/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/2/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/2/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 6
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-6 8/26/99 12:45

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/2/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/2/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/2/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/2/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/2/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 7
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-7 8/26/99 13:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/2/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/2/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/2/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/2/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/2/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 8
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-8 8/26/99 13:30

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/3/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/3/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/3/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/3/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/3/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: _____

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112
CCIL SAMPLE #: 9
DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082699-9 8/26/99 13:45

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/2/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/2/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/2/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/2/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/2/99	LAH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLL(
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: CVd

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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/3/99
CCIL JOB #: 908112

DATE RECEIVED: 8/27/99
WDOE ACCREDITATION #: C142

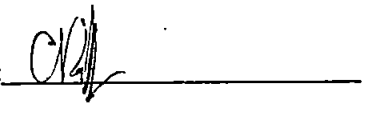
CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
908112-01	NWTPH-GX	TFT	74
908112-01	EPA-8021	TFT	96
908112-02	NWTPH-GX	TFT	71
908112-02	EPA-8021	TFT	91
908112-03	NWTPH-GX	TFT	67
908112-03	EPA-8021	TFT	86
908112-04	NWTPH-GX	TFT	69
908112-04	EPA-8021	TFT	89
908112-05	NWTPH-GX	TFT	73
908112-05	EPA-8021	TFT	95
908112-06	NWTPH-GX	TFT	64
908112-06	EPA-8021	TFT	81
908112-07	NWTPH-GX	TFT	58
908112-07	EPA-8021	TFT	73
908112-08	NWTPH-GX	TFT	69
908112-08	EPA-8021	TFT	89
908112-09	NWTPH-GX	TFT	68
908112-09	EPA-8021	TFT	87

APPROVED BY: 

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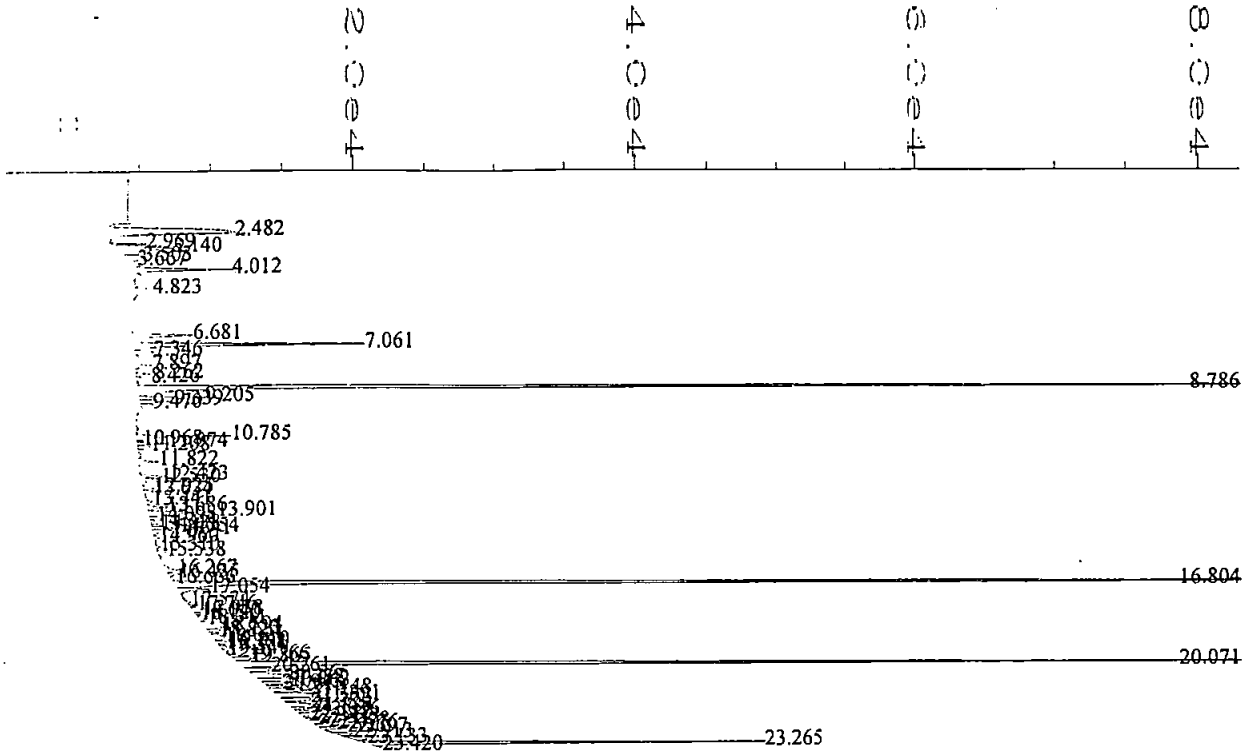


External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29090201\015R0801.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 15
Sample Name	: 908112-1 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 02 Sep 99 06:43 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 02 Sep 99 07:07 PM	Analysis Method	: BTEX2899.MTH
Last Recalib on	: 18 AUG 99 01:03 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in D:\HPCHEM\2\DATA\29090201\015R0801.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.061	89824	BV	0.084	1	0.459	Benzene
8.786	476002	VV	0.073	1	9.581	TFT surrogate ÷ 10 X 100 = 96 %
10.785	31963	BV	0.069	1	0.161	Toluene
13.686	7970	VV	0.082	1	0.0493	Ethylbenzene
13.901	25772	VV	0.077	1	0.104	M+P-Xylene
14.554	8542	VV	0.064	1	0.0472	O-Xylene

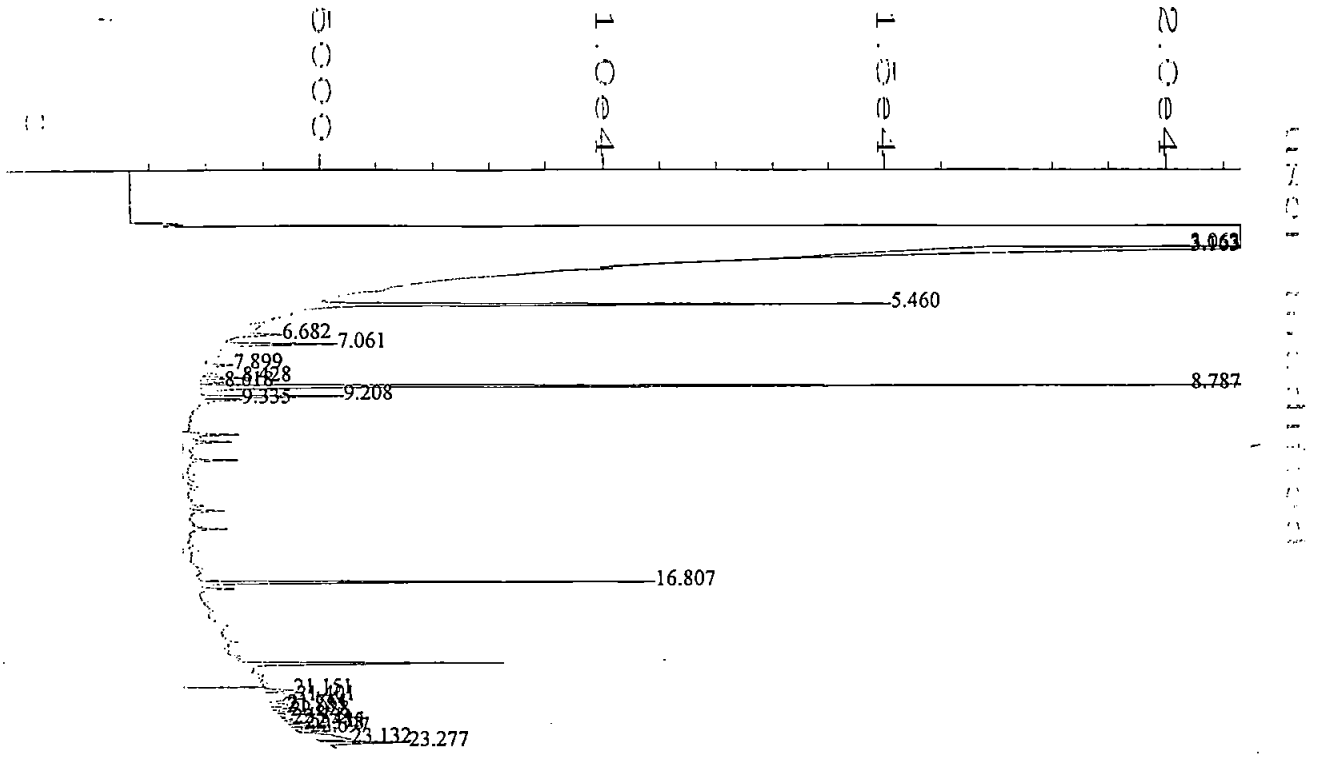
BTE < 0.1 mg/kg

X < 0.3 mg/kg

Dry wt = 5.5 g

9-3996

A-2-99 1H



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29090201\015F0801.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 15
Sample Name	: 908112-1 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 02 Sep 99 06:43 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 03 Sep 99 08:39 AM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29090201\015F0801.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.787	92241	VV	0.072	1	7.400	TFT-surrogate 10×100=74%
16.807	323849	MM	0.646	1	27.508	gasoline envelop

User Modified

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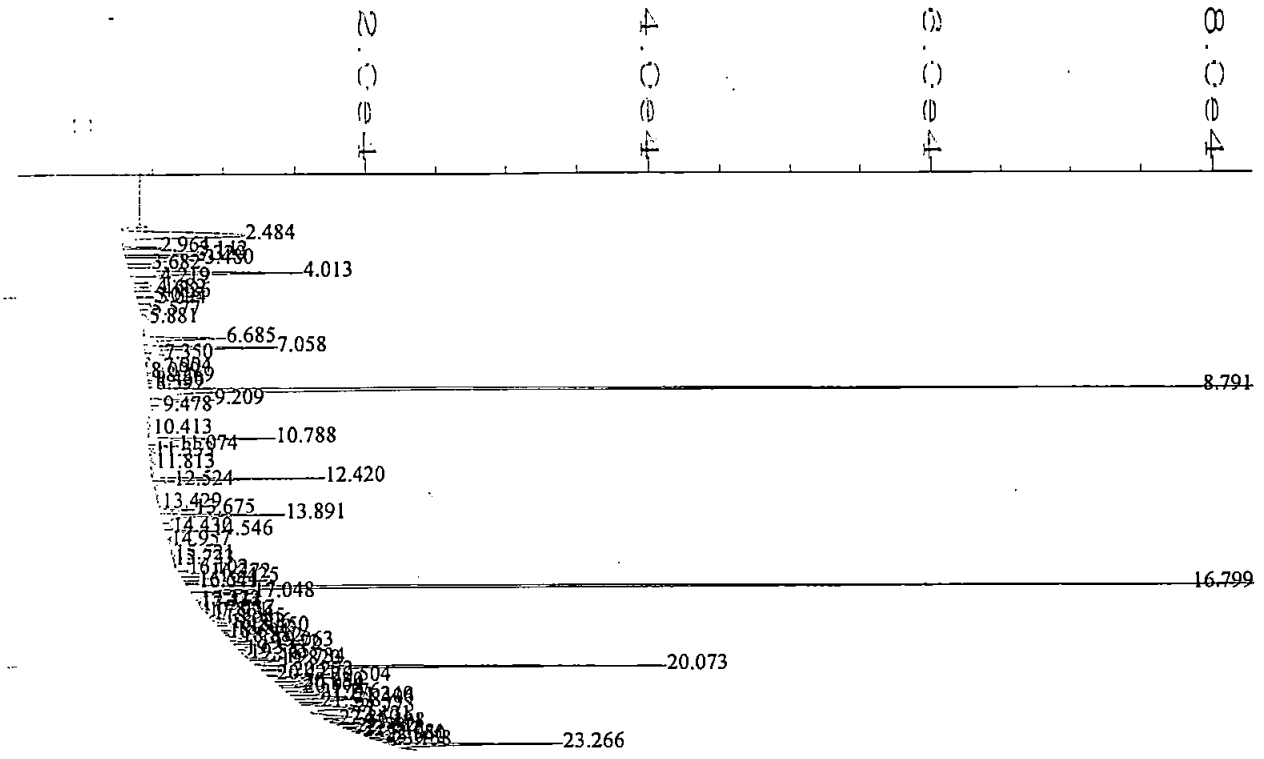
Gas < 5.0 mg/kg

9-3-99

9-3-99LH



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External Standard Report

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ıta File Name	: D:\HPCHEM\2\DATA\29090201\016R0801.D		
Operator	: LAH	Page Number	: 1
ıstrument	: GAS/BTEX	Vial Number	: 16
ımple Name	: 908112-2 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
:quired on	: 02 Sep 99 07:15 PM	Instrument Method:	TPHG0899.MTH
:port Created on:	02 Sep 99 07:39 PM	Analysis Method	: BTEX2899.MTH
Last Recalib on	: 18 AUG 99 01:03 PM	Sample Amount	: 0
ıltiplier	: 1	ISTD Amount	:

Sig. 2 in D:\HPCHEM\2\DATA\29090201\016R0801.D

:t Time	Area	Type	Width	Ref#	ug/l	Name
7.058	59998	VV	0.097	1	0.307	Benzene
8.791	453800	VV	0.073	1	9.109	TFT surrogate 116×100=91%
10.788	41918	PV	0.068	1	0.211	Toluene
13.675	11571	VV	0.068	1	0.0716	Ethylbenzene
13.891	47738	VV	0.078	1	0.192	M+P-Xylene
14.546	20353	VV	0.084	1	0.112	O-Xylene

==========

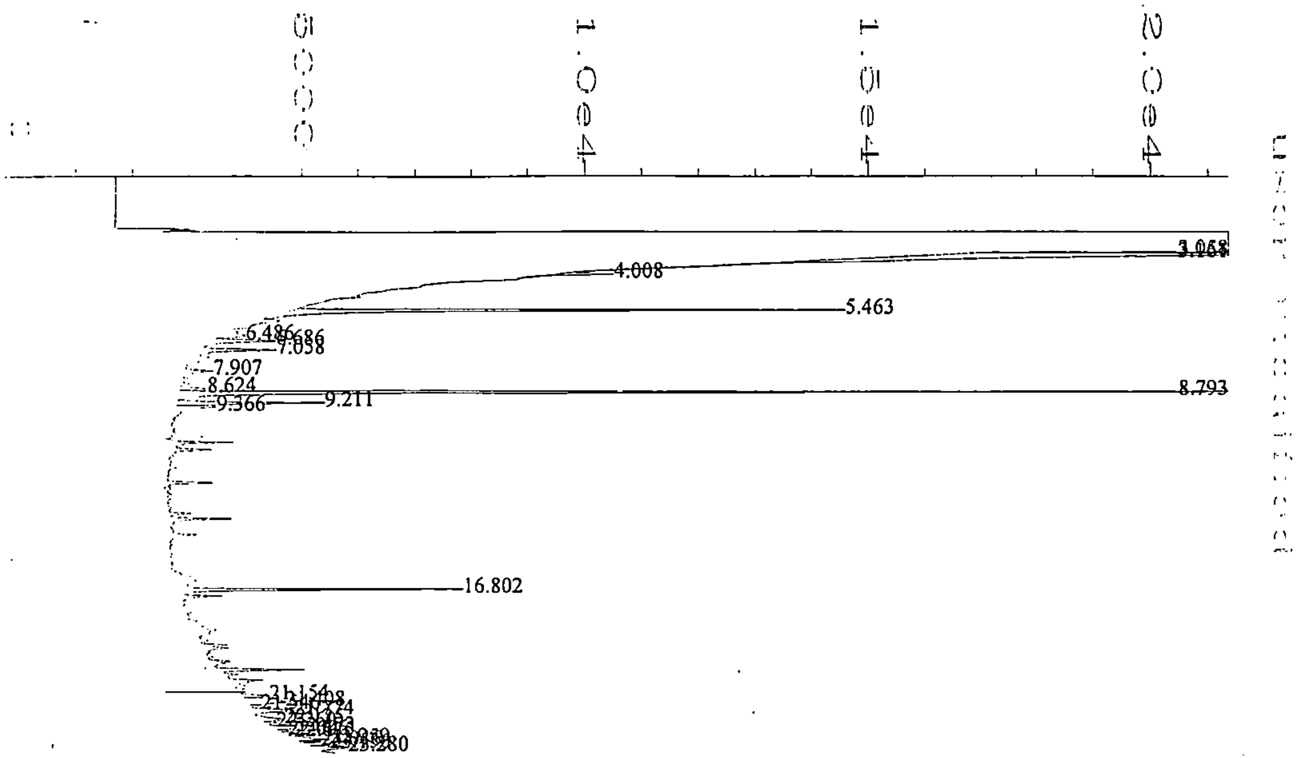
BTE <0.1mg/kg

X <0.3mg/kg

Dry wt=4.7g

<1ug/L × 5mL/0.1mL × 0.01L/4.7g <0.1mg/kg

9-399H



External Standard Report

ta File Name	: D:\HPCHEM\2\DATA\29090201\016F0801.D			
Operator	: LAH	Page Number	:	1
strument	: GAS/BTEX	Vial Number	:	16
mple Name	: 908112-2 100UL	Injection Number	:	1
Run Time Bar Code:		Sequence Line	:	8
quired on	: 02 Sep 99 07:15 PM	Instrument Method:		TPHG0899.MTH
port Created on:	03 Sep 99 08:40 AM	Analysis Method	:	TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	:	0
ltiplier	: 1	ISTD Amount	:	

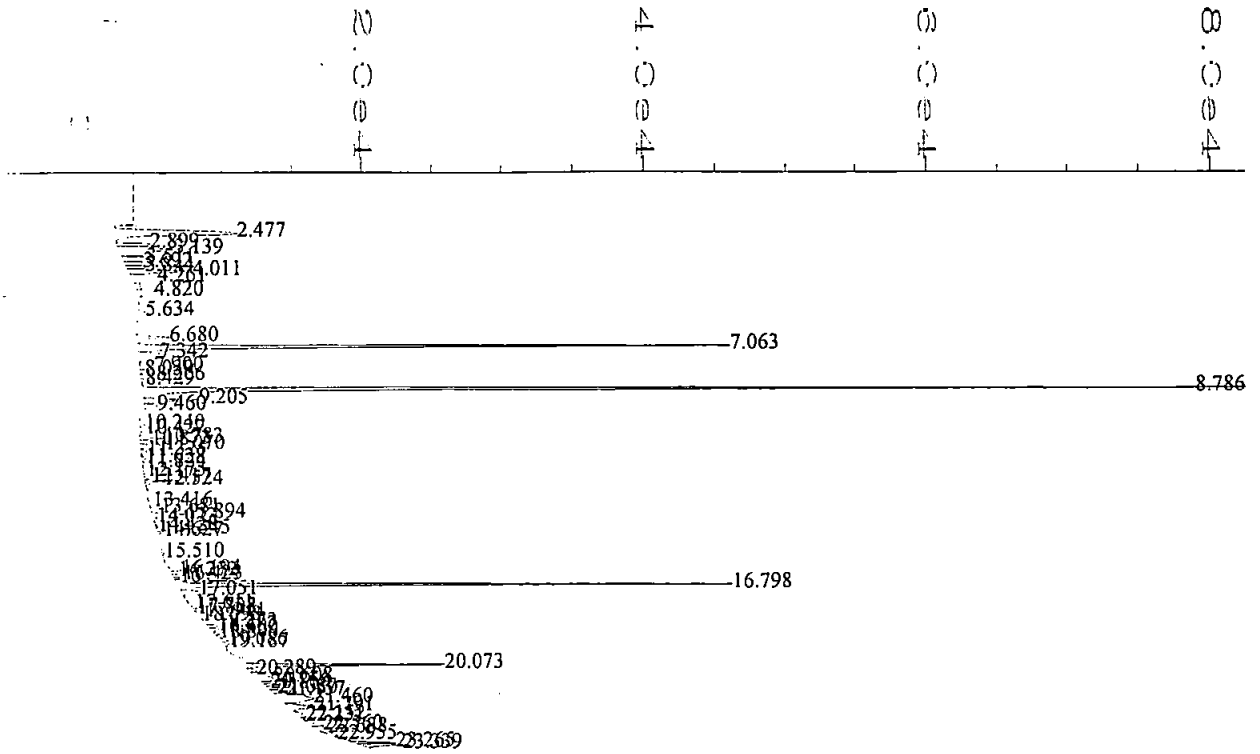
Sig. 1 in D:\HPCHEM\2\DATA\29090201\016F0801.D

et Time	Area	Type	Width	Ref#	ug/l	Name
8.793	88444	VV	0.072	1	7.095	TFT-surrogate ÷10×100=71%
16.802	292617	MM	0.918	1	24.855	gasoline envelop

ser Modified

Gas <5.0mg/kg

9.3.99



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29090201\019R0801.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 19
Sample Name	: 908112-3 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 02 Sep 99 08:50 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 02 Sep 99 09:14 PM	Analysis Method	: BTEX2899.MTH
Last Recalib on	: 18 AUG 99 01:03 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in D:\HPCHEM\2\DATA\29090201\019R0801.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.063	221881	VV	0.080	1	1.251	Benzene
8.786	429074	PV	0.074	1	8.584	TFT surrogate 10 x 100 = 86%
10.783	6485	BV	0.060	1	0.0326	Toluene
13.681	3259	VV	0.070	1	0.0202	Ethylbenzene
13.894	12425	VV	0.076	1	0.0501	M+P-Xylene
14.545	3912	VV	0.059	1	0.0216	O-Xylene

==========

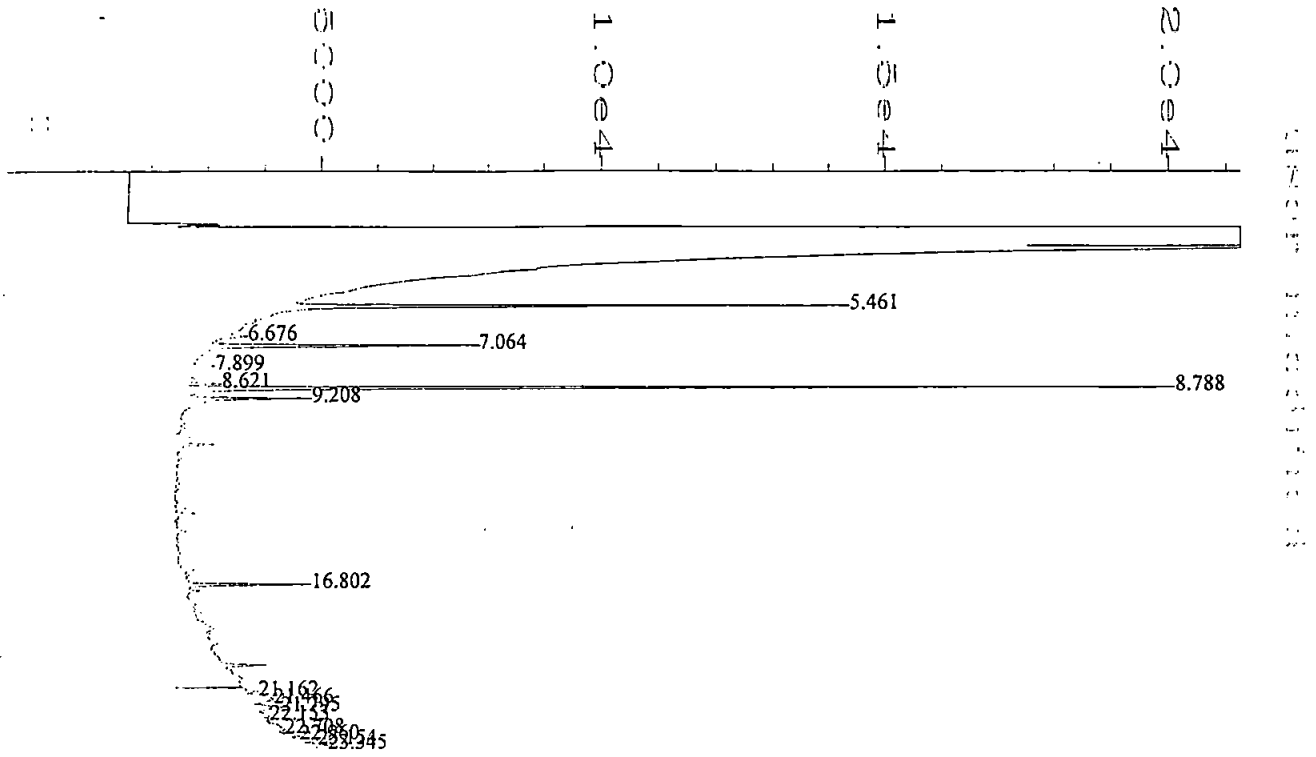
BTE <0.1mg/kg

X <0.3mg/kg

Dry wt = 5.7

9-3994

9.2.99/H



External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29090201\019F0801.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 19
Sample Name	: 908112-3 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 02 Sep 99 08:50 PM	Instrument Method:	TPHG0899.MTH
Report Created on:	03 Sep 99 08:42 AM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29090201\019F0801.D

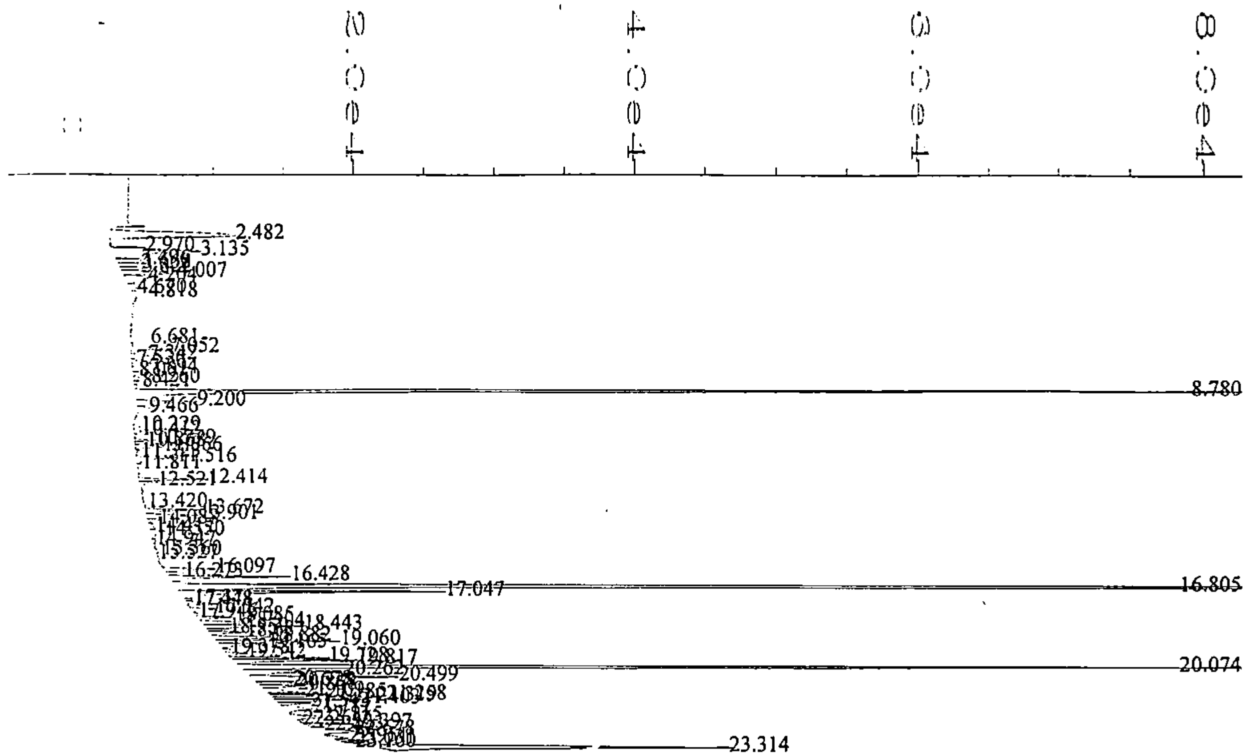
Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.788	83972	VV	0.073	1	6.737	TFT-surrogate 6.737/100 = 67%
16.802	202156	MM	1.398	1	17.171	gasoline envelop

User Modified

Gas <5.0 mg/kg

9-3-99

9-3-99 LH



External Standard Report

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Data File Name    : D:\HPCHEM\2\DATA\29090201\017R0801.D
Operator          : LAH                          Page Number        : 1
Instrument        : GAS/BTEX                     Vial Number        : 17
Sample Name       : 908112-4 100UL               Injection Number   : 1
Run Time Bar Code:                               Sequence Line      : 8
Acquired on       : 02 Sep 99   07:47 PM         Instrument Method: TPHG0899.MTH
Report Created on: 02 Sep 99   08:10 PM          Analysis Method    : BTEX2899.MTH
Last Recalib on   : 18 AUG 99 01:03 PM           Sample Amount      : 0
Multiplier        : 1                            ISTD Amount        :
```

Sig. 2 in D:\HPCHEM\2\DATA\29090201\017R0801.D

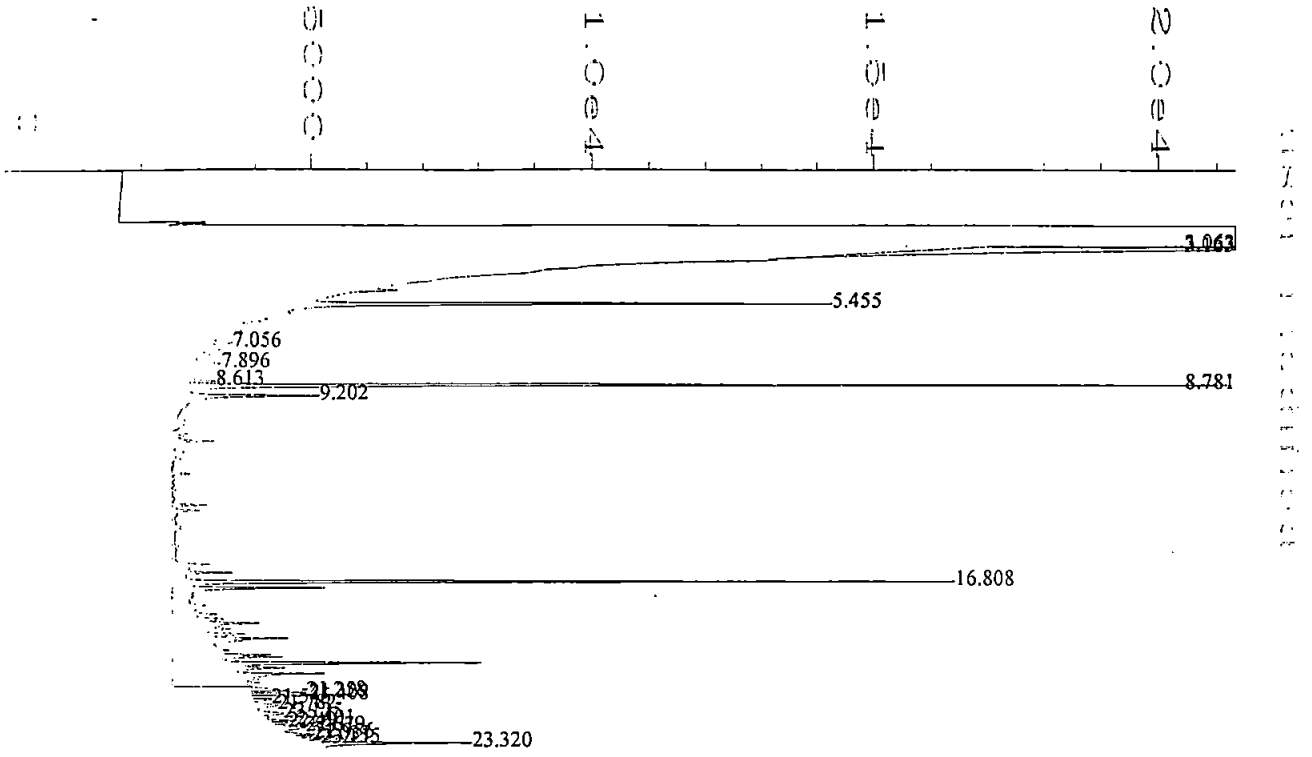
Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.052	18051	VV	0.096	1	0.0923	Benzene
8.780	442524	VV	0.072	1	8.869	TFT surrogate ÷10 x100=89%
10.779	5882	PV	0.059	1	0.0295	Toluene
13.672	19282	VV	0.066	1	0.119	Ethylbenzene
13.901	20110	VV	0.077	1	0.0811	M+P-Xylene
14.550	9192	VV	0.120	1	0.0508	O-Xylene

BTE < 0.1mg/kg
X < 0.3mg/kg

Dry wt = ~~5.95g~~ 5.90g

9.3994

0-3-99111



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External Standard Report

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I ta File Name	: D:\HPCHEM\2\DATA\29090201\017F0801.D		
Operator	: LAH	Page Number	: 1
⁻ strument	: GAS/BTEX	Vial Number	: 17
: mple Name	: 908112-4 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
; quired on	: 02 Sep 99 07:47 PM	Instrument Method:	TPHG0899.MTH
l port Created on:	03 Sep 99 08:57 AM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
l ltiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29090201\017F0801.D

t Time	Area	Type	Width	Ref#	ug/l	Name
8.781	85488	VV	0.071	1	6.858	TFT-surrogate 1.5=69
16.808	354637	MM	0.424	1	30.123	gasoline envelop

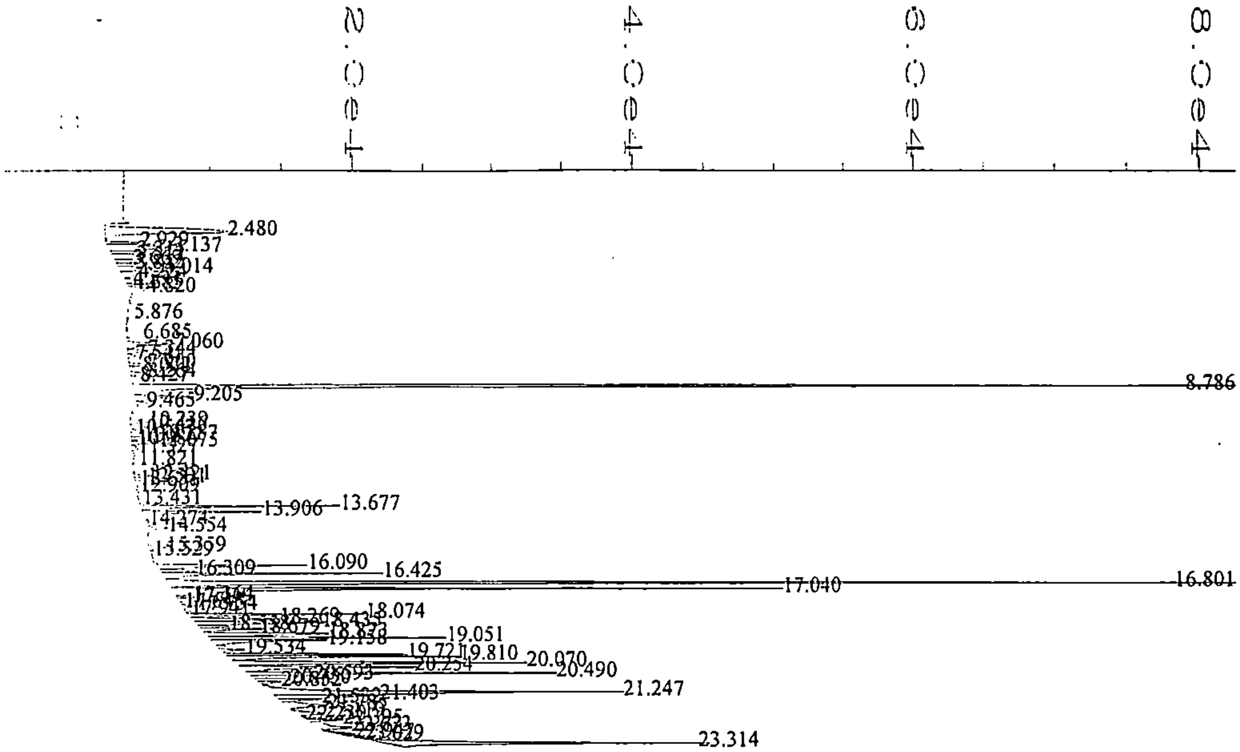
⁻ er Modified

==========

Gas < 5.0mg/kg

9-3-99

9-3-99LH



External Standard Report

D ta File Name : D:\HPCHEM\2\DATA\29090201\018R0801.D
Operator : LAH
I strument : GAS/BTEX
S nple Name : 908112-5 100UL
Run Time Bar Code:
A quired on : 02 Sep 99 08:18 PM
R port Created on: 02 Sep 99 08:42 PM
Last Recalib on : 18 AUG 99 01:03 PM
M ltiplier : 1

Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 8
Instrument Method: TPHG0899.MTH
Analysis Method : BTEX2899.MTH
Sample Amount : 0
ISTD Amount :

Sig. 2 in D:\HPCHEM\2\DATA\29090201\018R0801.D

R t Time	Area	Type	Width	Ref#	ug/l	Name
7.060	21816	VV	0.096	1	0.112	Benzene
8.786	471463	PV	0.073	1	9.484	TFT surrogate ÷10×100=95%
10.787	7799	PV	0.061	1	0.0392	Toluene
13.677	58509	PV	0.061	1	0.362	Ethylbenzene
13.906	45452	VV	0.077	1	0.183	M+P-Xylene
14.554	8437	VV	0.083	1	0.0466	O-Xylene

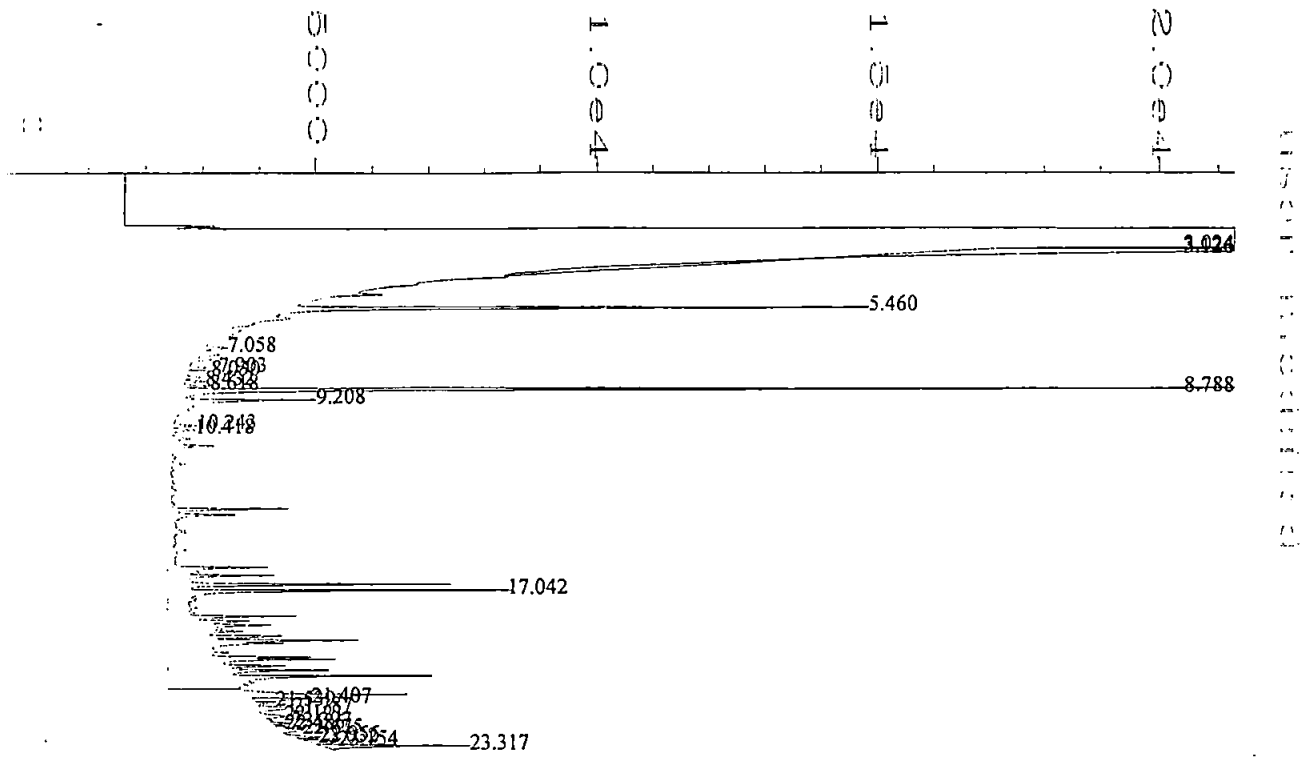
BTE <0.1mg/kg
X <0.3mg/kg

Dry wt = 4.83g

9-3-99

.1ug/1 x 5ml/.1 x 0.01L/4.83 = <0.1mg/kg

6-3-99 H



External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29090201\018F0801.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 18
Sample Name	: 908112-5 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 02 Sep 99 08:18 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 03 Sep 99 08:41 AM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

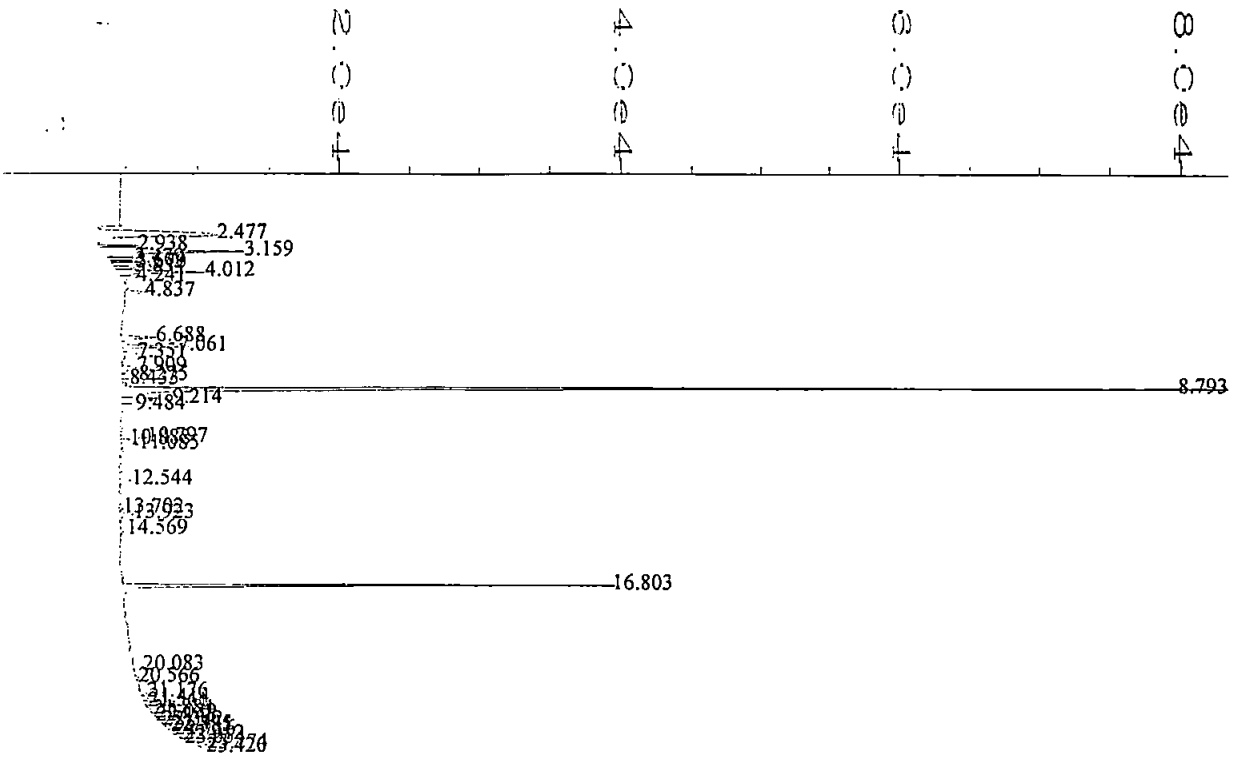
Sig. 1 in D:\HPCHEM\2\DATA\29090201\018F0801.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.788	91486	VV	0.072	1	7.339	TFT-surrogate 7.10 X100=73%
17.042	413735	MM	1.115	1	35.143	gasoline envelop

User Modified

Gas < 5.0mg/kg

9.3.99 LH



External Standard Report

Data File Name : D:\HPCHEM\2\DATA\29090201\021R1001.D
Operator : LAH
Instrument : GAS/BTEX
Sample Name : 908112-6 100UL
Run Time Bar Code:
Acquired on : 02 Sep 99 09:56 PM
Report Created on: 02 Sep 99 10:20 PM
Last Recalib on : 18 AUG 99 01:03 PM
Multiplier : 1

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHG0899.MTH
Analysis Method : BTEX2899.MTH
Sample Amount : 0
ISTD Amount :

Sig. 2 in D:\HPCHEM\2\DATA\29090201\021R1001.D

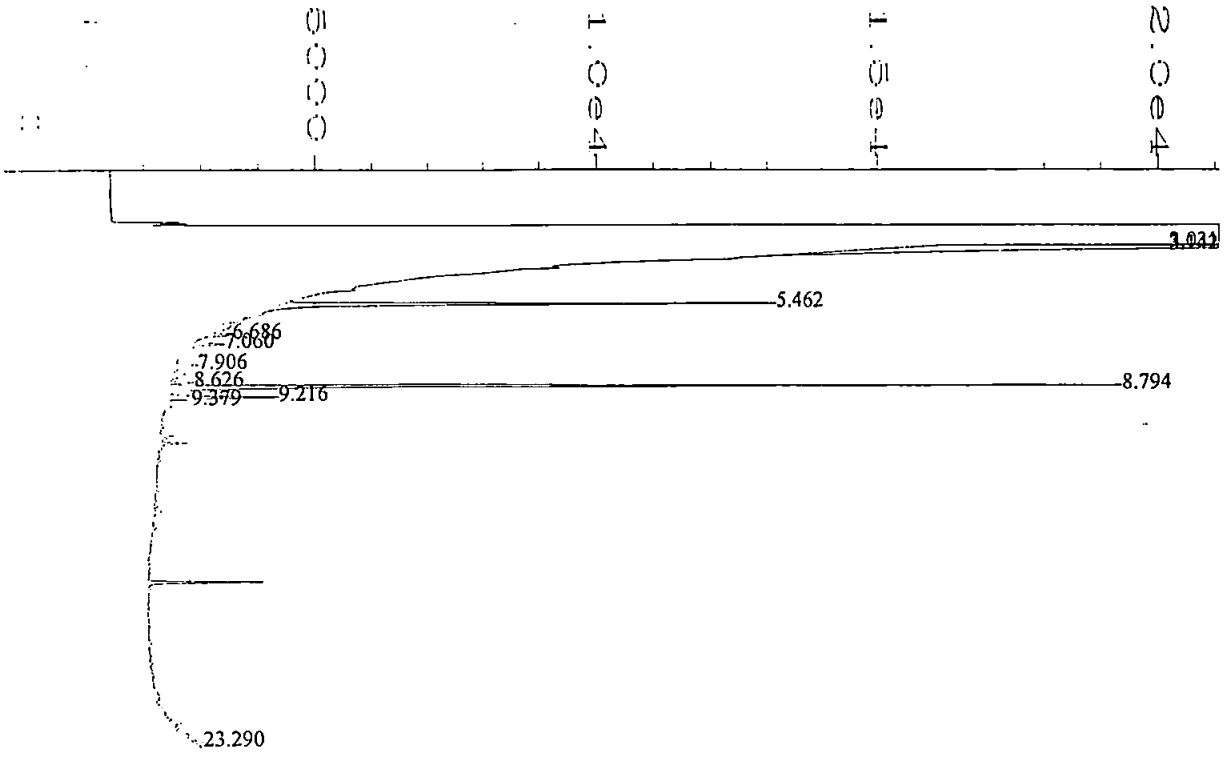
Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.061	24487	VV	0.093	1	0.125	Benzene
8.793	407545	VV	0.074	1	8.126	TFT surrogate 101%100-81%
10.797	7149	BV	0.058	1	0.0359	Toluene
13.702	1540	PV	0.075	1	0.00953	Ethylbenzene
13.923	7053	VB	0.098	1	0.0284	M+P-Xylene
14.569	2597	BB	0.082	1	0.0143	O-Xylene

BTE <0.1mg/kg
X <0.3mg/kg

9.399H

Dry wt = 4.70g

9.299H



External Standard Report

Data File Name	: D:\HPCHEM\2\DATA\29090201\021F1001.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 21
Sample Name	: 908112-6 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 02 Sep 99 09:56 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 03 Sep 99 08:42 AM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29090201\021F1001.D

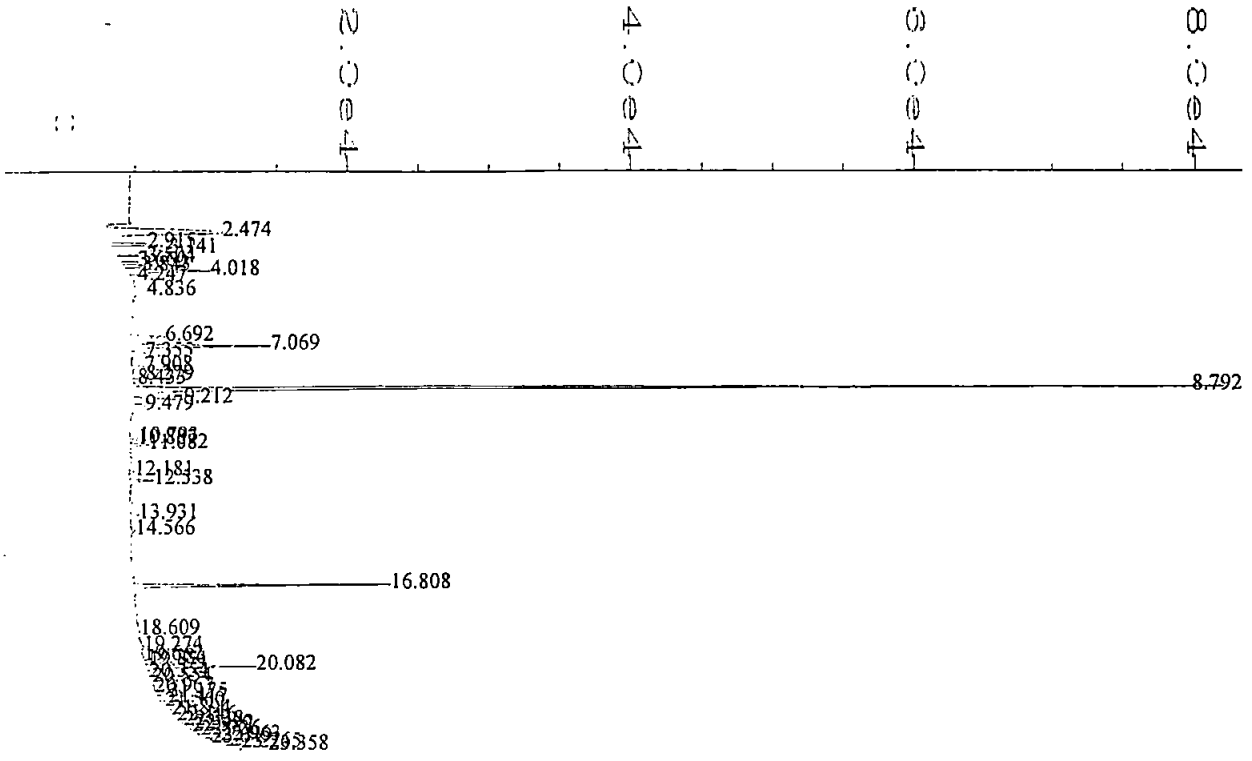
Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.794	79668	VV	0.072	1	6.391	TFT-surrogate
16.802	* not found *			1		gasoline envelop

$\frac{6.391}{10} \times 100 = 64\%$

Not all calibrated peaks were found

Gas <5.0 mg/kg 9-3-99

9-3-99 LH



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29090201\023R1201.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 23
Sample Name	: 908112-7 100UL	Injection Number	: 1
In Time Bar Code:		Sequence Line	: 12
Acquired on	: 02 Sep 99 11:03 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 02 Sep 99 11:26 PM	Analysis Method	: BTEX2899.MTH
Last Recalib on	: 18 AUG 99 01:03 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Peak. 2 in D:\HPCHEM\2\DATA\29090201\023R1201.D

Ret Time		Area	Type	Width	Ref#	ug/l	Name
7.069		53405	BV	0.082	1	0.273	Benzene
8.792		368705	VV	0.073	1	7.301	TFT surrogate : 10 X100=73%
10.793		2394	BV	0.058	1	0.0120	Toluene
13.643	* not found *				1		Ethylbenzene
13.931		4070	BV	0.099	1	0.0164	M+P-Xylene
14.566		778	PV	0.052	1	0.00430	O-Xylene

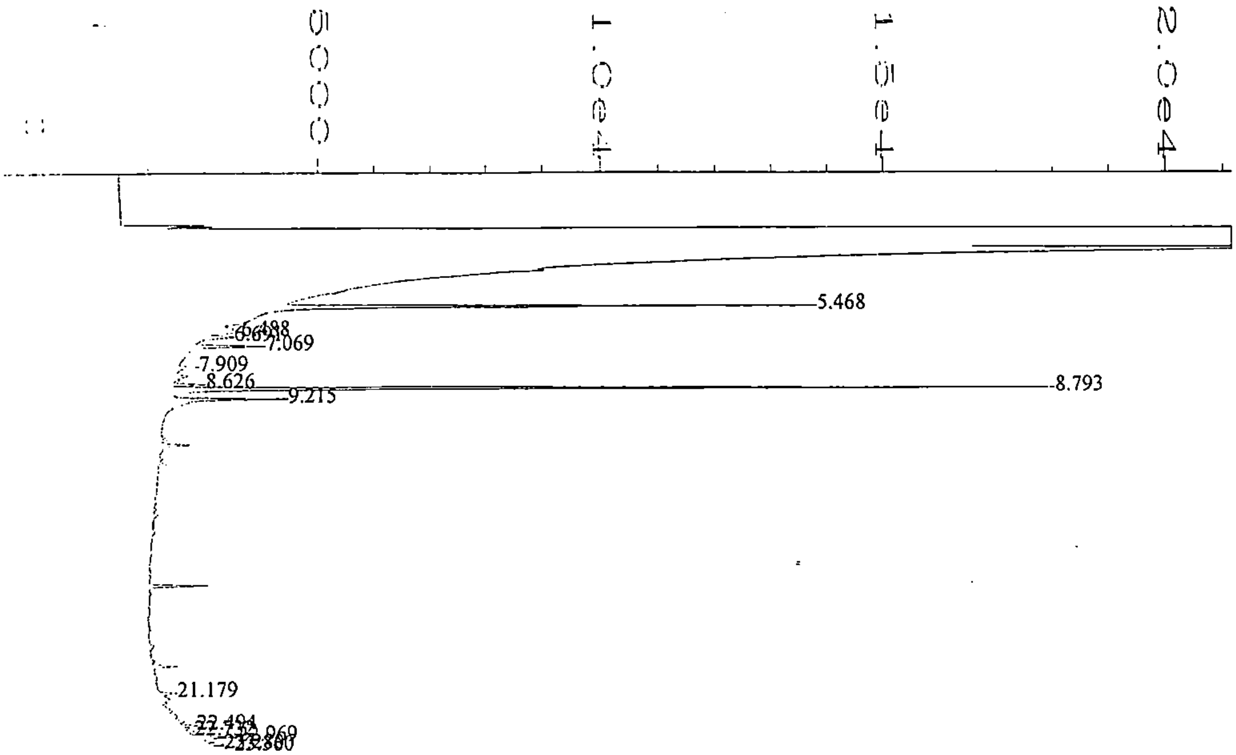
Not all calibrated peaks were found

BTE =<0.1mg/kg

X =<0.3mg/kg

9.344

Dry wt = 4.82g



External Standard Report

Data File Name : D:\HPCHEM\2\DATA\29090201\023F1201.D

Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 23
Sample Name	: 908112-7 100UL	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 12
Acquired on	: 02 Sep 99 11:03 PM	Instrument Method	: TPHG0899.MTH
Report Created on	: 03 Sep 99 08:43 AM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

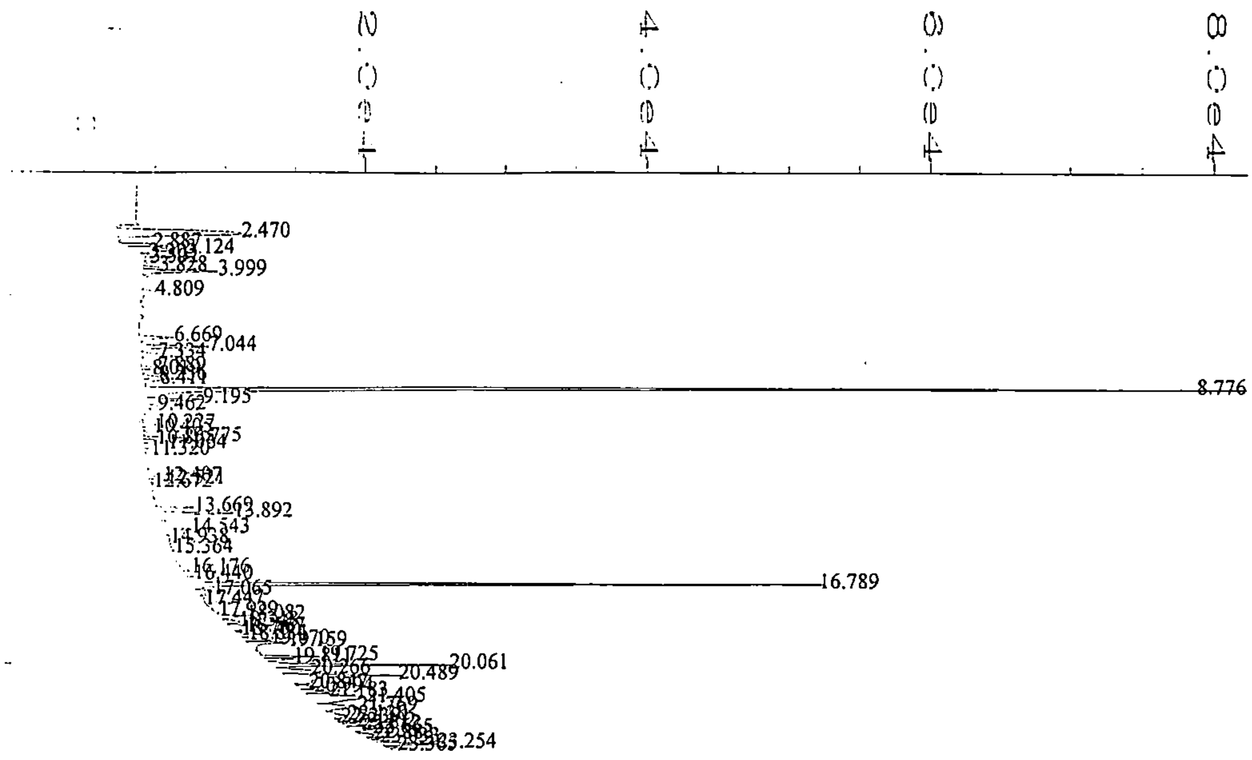
Sig. 1 in D:\HPCHEM\2\DATA\29090201\023F1201.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.793	72875	VV	0.072	1	5.846	TFT-surrogate ÷10 X100=58%
16.802	* not found *			1		gasoline envelop

Not all calibrated peaks were found

Gas < 5.0 mg/kg 9-3-99

9-3-99



External Standard Report

Data File Name : D:\HPCHEM\2\DATA\29090201\026R1201.D
Operator : LAH
Instrument : GAS/BTEX
Sample Name : 908112-8 100UL
Run Time Bar Code:
Acquired on : 03 Sep 99 00:38 AM
Report Created on: 03 Sep 99 01:01 AM
Last Recalib on : 18 AUG 99 01:03 PM
Multiplier : 1

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 12
Instrument Method: TPHG0899.MTH
Analysis Method : BTEX2899.MTH
Sample Amount : 0
ISTD Amount :

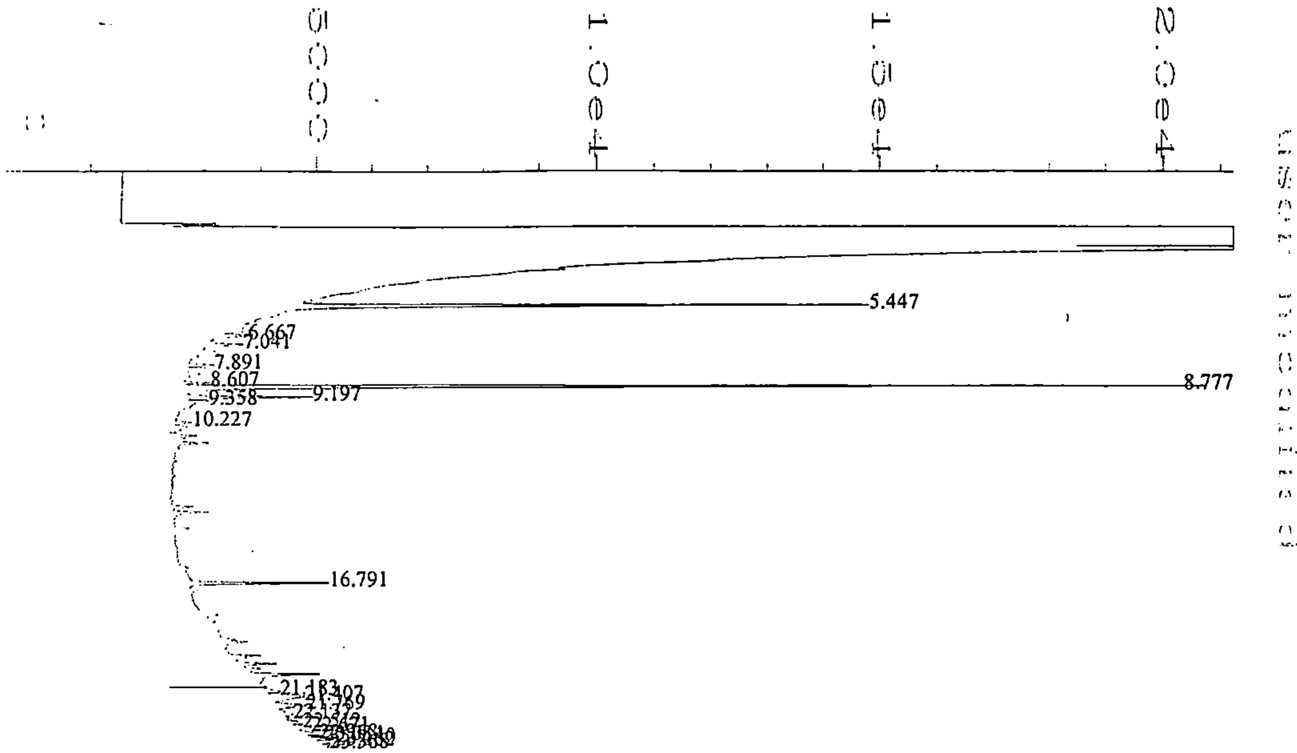
Sig. 2 in D:\HPCHEM\2\DATA\29090201\026R1201.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.044	28319	VV	0.090	1	0.145	Benzene
8.776	444033	BV	0.073	1	8.901	TFT surrogate ÷10 x 100 = 89%
10.775	10652	PV	0.058	1	0.0535	Toluene
13.669	12198	PV	0.066	1	0.0755	Ethylbenzene
13.892	34511	VV	0.091	1	0.139	M+P-Xylene
14.543	16386	VV	0.111	1	0.0905	O-Xylene

BTE < 0.1 mg/kg
X < 0.3 mg/kg

9.3.99

9-3-99 LH



External Standard Report

```
I ta File Name     : D:\HPCHEM\2\DATA\29090201\026F1201.D
Operator           : LAH                       Page Number          : 1
I-strument         : GAS/BTEX                  Vial Number          : 26
S mple Name        : 908112-8 100UL            Injection Number     : 1
Run Time Bar Code:                             Sequence Line        : 12
A quired on        : 03 Sep 99   00:38 AM      Instrument Method: TPHG0899.MTH
R port Created on: 03 Sep 99   08:46 AM        Analysis Method   : TPHG0899.MTH
Last Recalib on    : 31 AUG 99 08:52 AM        Sample Amount        : 0
M ltiplier         : 1                         ISTD Amount          :
```

Sig. 1 in D:\HPCHEM\2\DATA\29090201\026F1201.D

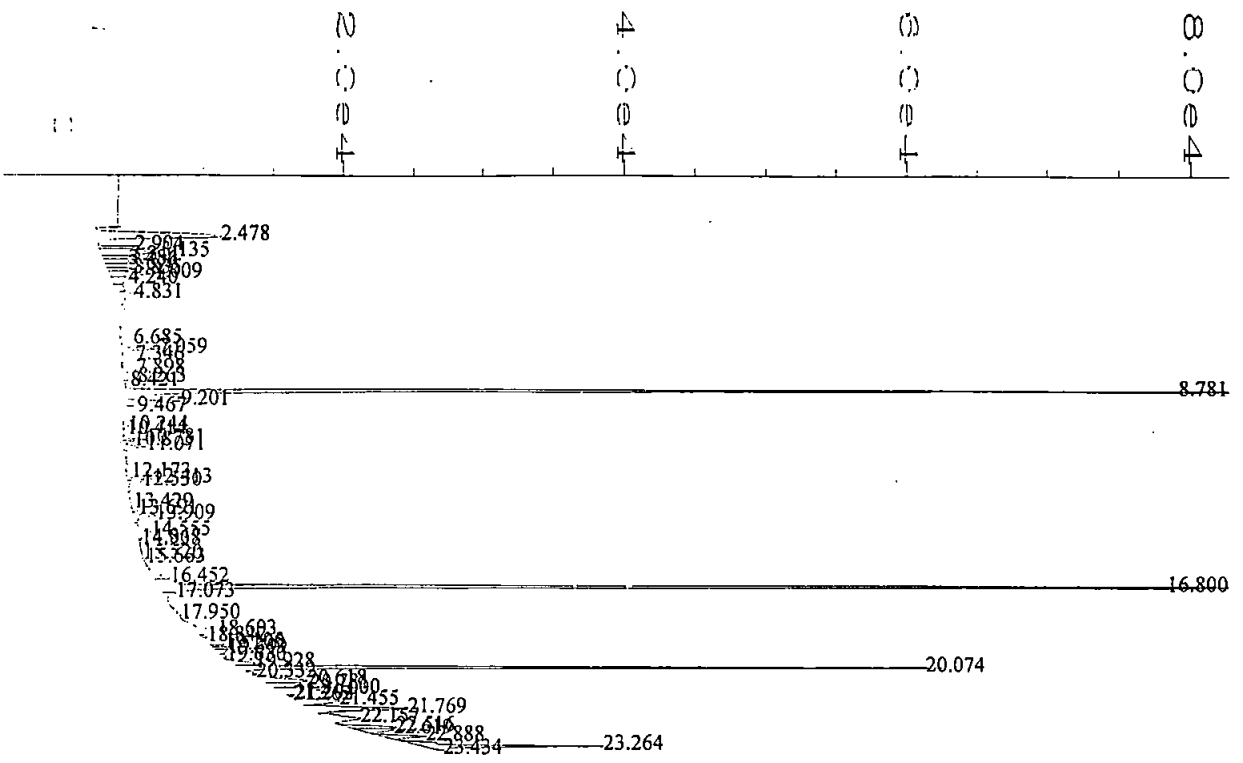
Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.777	86046	VV	0.072	1	6.903	TFT-surrogate ÷10×100=69%
16.791	314422	MM	1.825	1	26.707	gasoline envelop

User Modified

Gas < 50 mg/kg

9-3-99

9-3-99



External Standard Report

Data File Name : D:\HPCHEM\2\DATA\29090201\024R1201.D
Operator : LAH
Instrument : GAS/BTEX
Sample Name : 908112-9 100UL
Bin Time Bar Code:
Acquired on : 02 Sep 99 11:35 PM
Report Created on: 02 Sep 99 11:58 PM
Last Recalib on : 18 AUG 99 01:03 PM
Multiplier : 1

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 12
Instrument Method: TPHG0899.MTH
Analysis Method : BTEX2899.MTH
Sample Amount : 0
ISTD Amount :

Rg. 2 in D:\HPCHEM\2\DATA\29090201\024R1201.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.059	14307	BV	0.084	1	0.0732	Benzene
8.781	434162	VV	0.073	1	8.692	TFT surrogate 4.10 x 100 = 87%
10.781	6227	BV	0.061	1	0.0313	Toluene
13.691	2053	BV	0.070	1	0.0127	Ethylbenzene
13.909	12516	VV	0.112	1	0.0504	M+P-Xylene
14.555	14251	VV	0.177	1	0.0787	O-Xylene

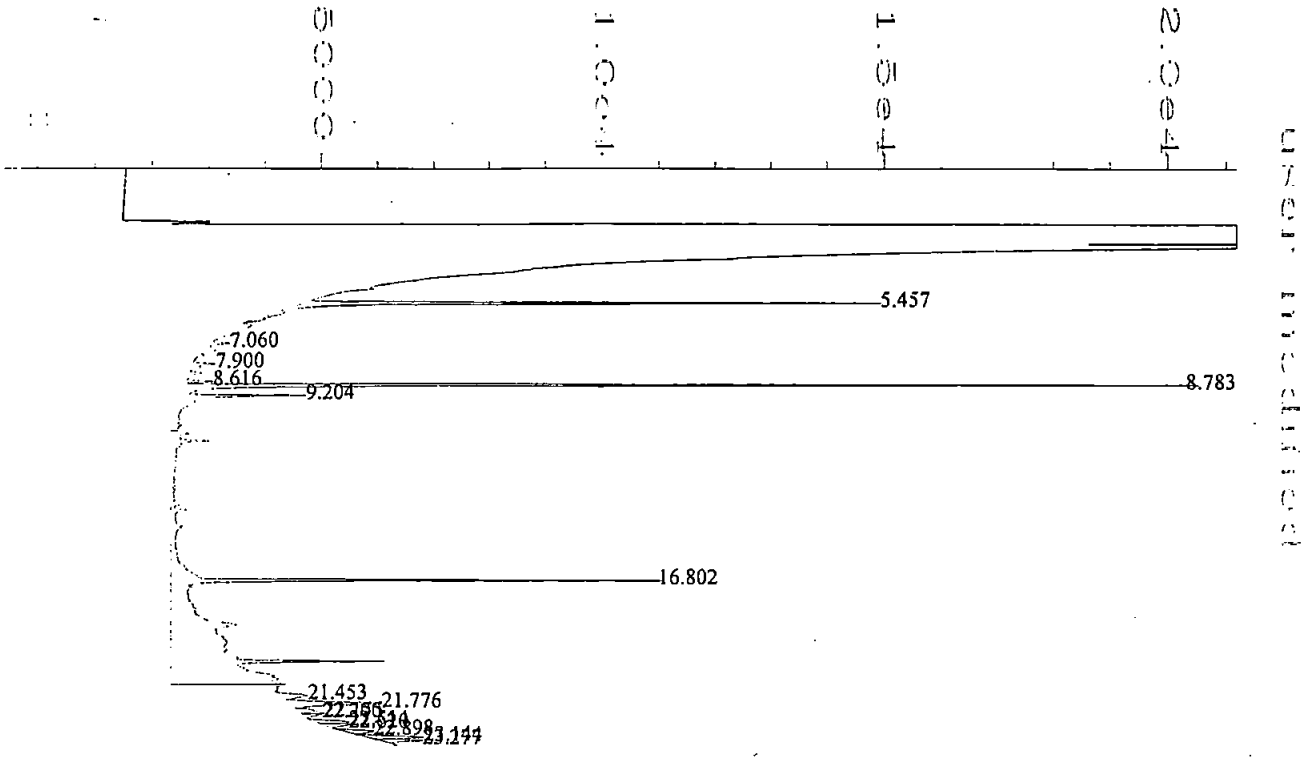
BTE <0.1mg/kg
X <0.3mg/kg

9.3994g

Dry wt = 4.68g

1mg/L x 5mL x 0.01L / 4.68g = <0.1 mg/kg

9-3-99 / H



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29090201\024F1201.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 24
Sample Name	: 908112-9 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 12
Acquired on	: 02 Sep 99 11:35 PM	Instrument Method:	TPHG0899.MTH
Report Created on:	03 Sep 99 08:44 AM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29090201\024F1201.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.783	84456	VV	0.072	1	6.775	TFT-surrogate 10/100 = 68%
16.802	314307	MM	0.596	1	26.698	gasoline envelop

User Modified

==========

Gas < 5.0 mg/kg

9-3991

9-3-99 LP

C... alytic ...orat... c.
3229 Pine Street
Everett, WA 98201
Phone (425) 252-2620
(206) 292-9059 Seattle
(425) 259-6289 Fax

...hai... of Cus...ody
Laboratory Analysis Request

C... ...orato... Only

Date 8/30/99 Page 1 Of 1

PROJECT ID: 19235
REPORT TO COMPANY: REK Engineering
PROJECT MANAGER: Jon Cimarusti
ADDRESS: 2135 Humboldt St.
Bellingham, WA 98225
PHONE: [illegible] FAX: [illegible]-671-1125
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

P.O. NUMBER: CCI QUOTE:

ANALYSIS REQUESTED / OTHER (Specify)

	SAMPLE I.D.	DATE	TIME	TYPE	LAB#	WTPH-G	WTPH-D ☐ 8015 MODIFIED ☐	WTPH-418.1	BTEX	WTPH-HCID	EPA 8020 ☐ 602 ☐	EPA 8010 ☐ 601 ☐	EPA 8240 ☐ 624 ☐ 8260 ☐	EPA 8270 ☐ 625 ☐	EPA 8080 ☐ 608 ☐ PCB only ☐ Pest only ☐	Metals Priority Pollutant ☐ RCRA ☐ TAL ☐	Metals Other (Specify)	TCLP Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herb ☐	NWTPH [illegible]									NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1.	082799-1	8/27/99	~~8:0~~ 8:00	Soil															X									1	
2.	082799-2	↓	8:30	↓															X									1	
3.	082799-3	↓	8:45	↓															X									1	
4.																													
5.																													
6.																													
7.																													
8.																													
9.																													
10.																													

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, and Time):

1. Relinquished By: [signature] REK Engineering, 8/30/99, 10:00

Received By:

2. Relinquished By:

Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis

10 (Standard) | 5 | 3 | 2 | 1 | Same Day

Fuels & Hydrocarbon Analysis

~~5~~ (Standard) | 3 | 1 | Same Day

OTHER:

Specify:

* Turnaround Requests less than standard may incur Rush Charges.

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/8/99
CCIL JOB #: 908122
CCIL SAMPLE #: 1
DATE RECEIVED: 8/31/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082799-1 8/27/99 8:00

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/8/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/8/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/8/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/8/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/8/99	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG		9/2/99	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
MOTOR OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: _____

3229 Pine St. • Everett, WA 98201 • 425 252-2620 • FAX 425 259-6289 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/8/99
CCIL JOB #: 908122
CCIL SAMPLE #: 2
DATE RECEIVED: 8/31/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082799-2 8/27/99 8:30

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/8/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/8/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/8/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/8/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/8/99	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG		9/2/99	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
MOTOR OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: _____

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ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/8/99
CCIL JOB #: 908122
CCIL SAMPLE #: 3
DATE RECEIVED: 8/31/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233
CLIENT SAMPLE ID: 082799-3 8/27/99 8:45

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG		9/8/99	LAH
BENZENE	EPA-8021	ND(<0.1)	MG/KG	.5MG/KG	9/8/99	LAH
TOLUENE	EPA-8021	ND(<0.1)	MG/KG	40MG/KG	9/8/99	LAH
ETHYLBENZENE	EPA-8021	ND(<0.1)	MG/KG	20MG/KG	9/8/99	LAH
XYLENES	EPA-8021	ND(<0.3)	MG/KG	20MG/KG	9/8/99	LAH
TPH-SEMIVOLATILE RANGE	NWTPH-DX	ND	MG/KG		9/2/99	CMH

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT CONCENTRATION ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 5 MG/KG
DIESEL RANGE REPORTING LIMIT IS 25 MG/KG
MOTOR OIL RANGE REPORTING LIMIT IS 50 MG/KG

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY. THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: CP

3229 Pine St. • Everett, WA 98201 • 425 252-2620 • FAX 425 259-6289 • Seattle 206 292-9059

CCI
ANALYTICAL
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: BEK ENGINEERING
2138 HUMBOLDT ST.
BELLINGHAM, WA 98225

DATE: 9/8/99
CCIL JOB #: 908122

DATE RECEIVED: 8/31/99
WDOE ACCREDITATION #: C142

CLIENT CONTACT: JON EINARSEN

CLIENT PROJECT ID: 99233

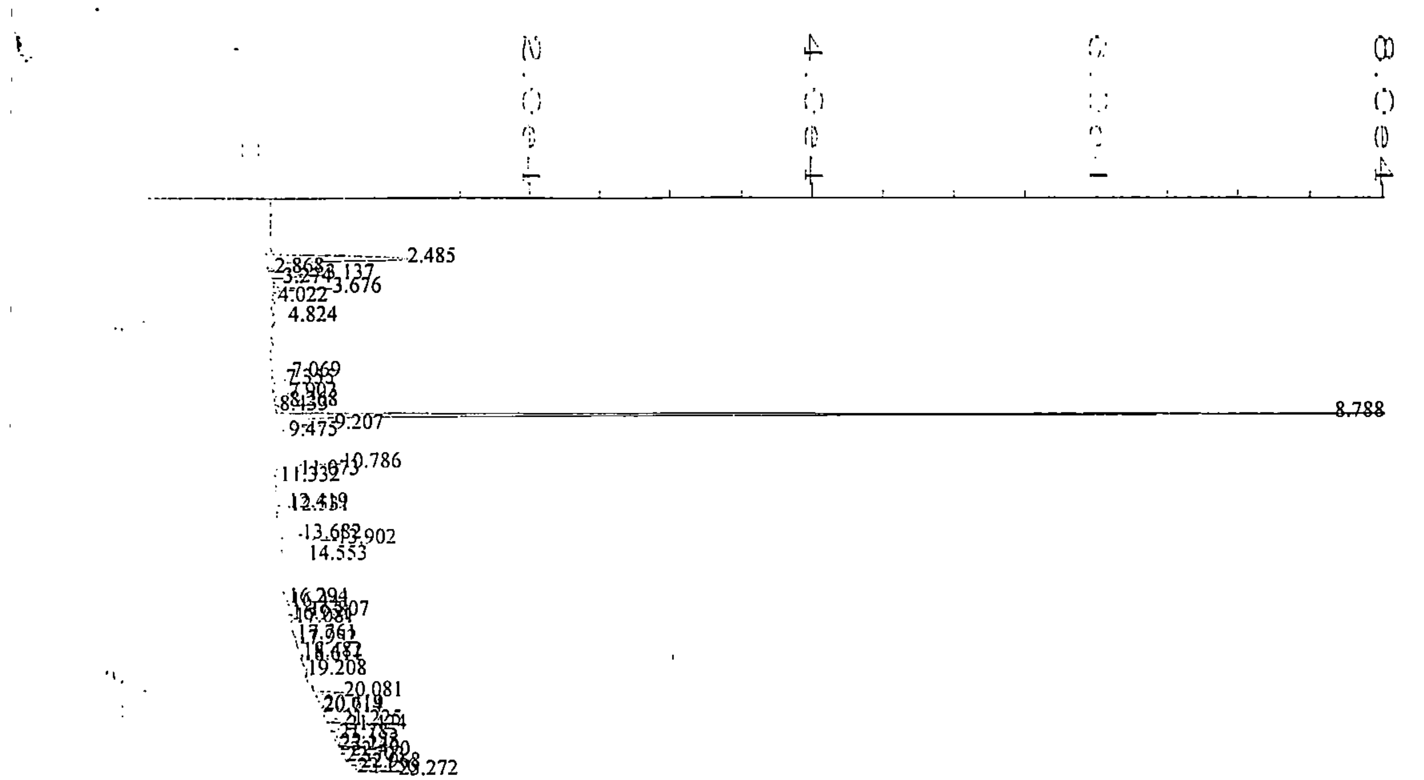
QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
908122-01	NWTPH-GX	TFT	72
908122-01	EPA-8021	TFT	100
908122-01	NWTPH-DX	C25	97
908122-02	NWTPH-GX	TFT	75
908122-02	EPA-8021	TFT	107
908122-02	NWTPH-DX	C25	101
908122-03	NWTPH-GX	TFT	73
908122-03	EPA-8021	TFT	104
908122-03	NWTPH-DX	C25	100

APPROVED BY: _____

3229 Pine St. • Everett, WA 98201 • 425 252-2620 • FAX 425 259-6289 • Seattle 206 292-9059



External Standard Report

ata File Name	: D:\HPCHEM\2\DATA\29090801\005R0201.D		
Operator	: LAH	Page Number	: 1
nstrument	: GAS/BTEX	Vial Number	: 5
mple Name	: 908122-1 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
cquired on	: 08 Sep 99 10:06 AM	Instrument Method:	TPHG0899.MTH
eport Created on:	08 Sep 99 10:29 AM	Analysis Method	: BTEX0999.MTH
Last Recalib on	: 07 SEP 99 08:38 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

Sig. 2 in D:\HPCHEM\2\DATA\29090801\005R0201.D

et Time	Area	Type	Width	Ref#	ug/l	Name
7.069	7785	VV	0.083	1	0.0545	Benzene
8.788	464546	BV	0.072	1	10.048	TFT surrogate 10/10.0=100%
10.786	23145	BV	0.070	1	0.173	Toluene
13.682	7185	BV	0.066	1	0.0607	Ethylbenzene
13.902	24447	VV	0.086	1	0.0913	M+P-Xylene
14.553	9816	VV	0.076	1	0.0521	O-Xylene

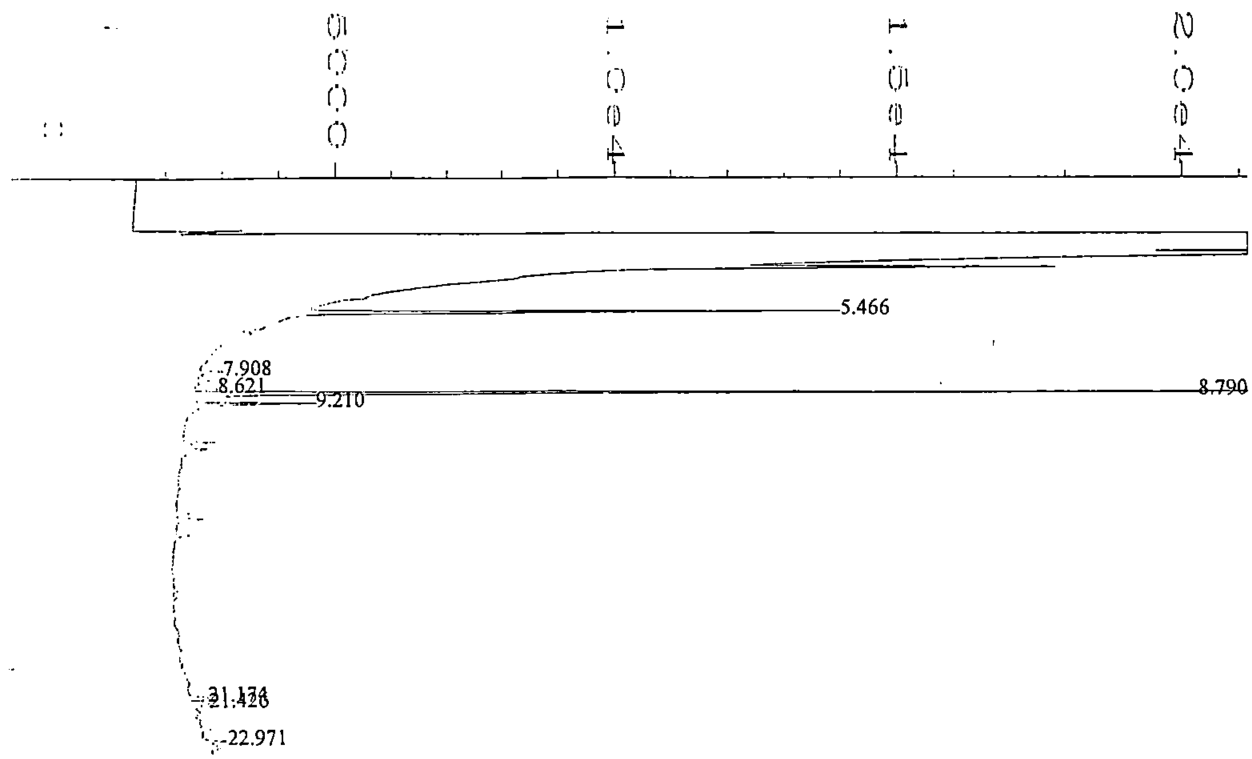
BTE <0.1mg/kg
X <0.3mg/kg

Dry wt = 4.7? g

REVIEWED BY & DATE 9-8-99

= 0.1ug/L × 5mL/0.01mL × 0.01L/4.79 = <0.1mg/kg

9-8-99 //



External Standard Report

ta File Name	: D:\HPCHEM\2\DATA\29090801\005F0201.D				
Operator	: LAH	Page Number	: 1		
Instrument	: GAS/BTEX	Vial Number	: 5		
mple Name	: 908122-1 100UL	Injection Number	: 1		
Run Time Bar Code:		Sequence Line	: 2		
quired on	: 08 Sep 99 10:06 AM	Instrument Method:	TPHG0899.MTH		
port Created on:	08 Sep 99 10:30 AM	Analysis Method	: TPHG0899.MTH		
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0		
ltiplier	: 1	ISTD Amount	:		

Sig. 1 in D:\HPCHEM\2\DATA\29090801\005F0201.D

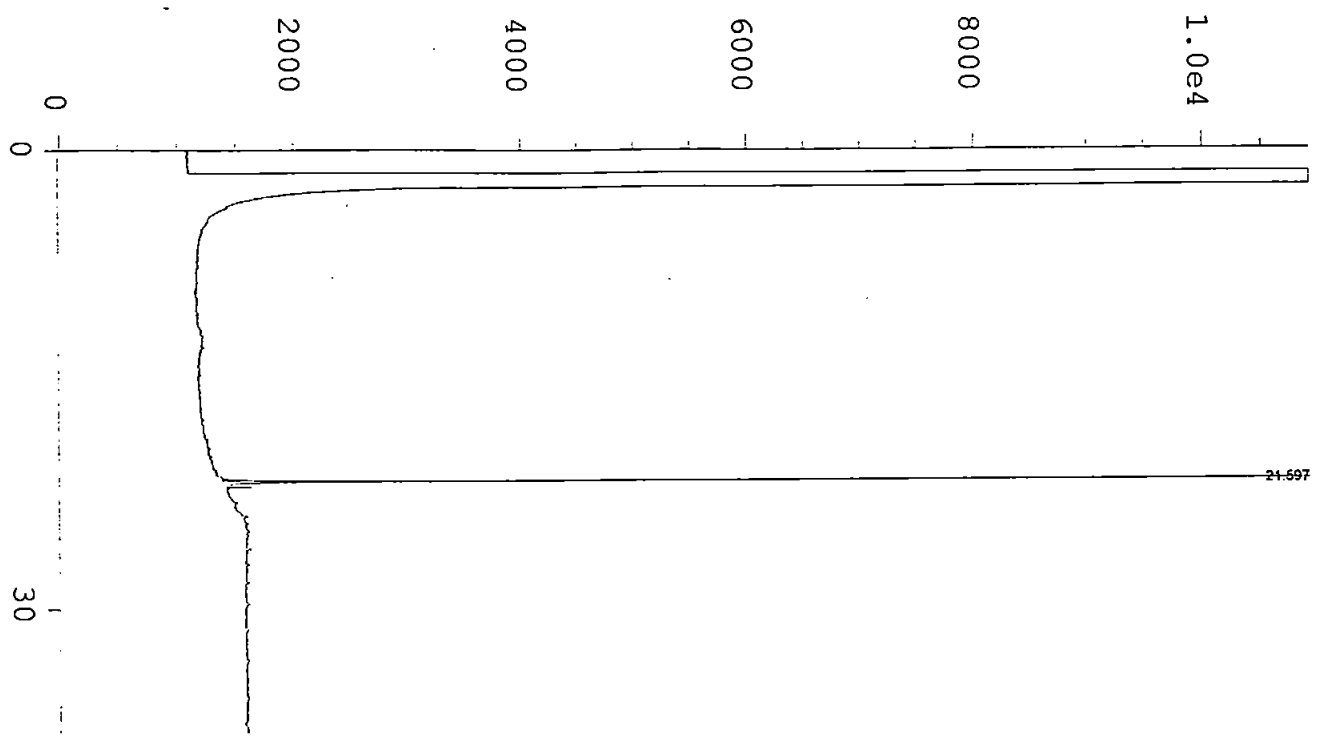
et Time	Area	Type	Width	Ref#	ug/l	Name
8.790	89217	VV	0.071	1	7.157	TFT-surrogate %REC = 72%
16.802	* not found *			1		gasoline envelop

ot all calibrated peaks were found

REV 9-9-99

Gas <5.6 mg/kg

9-8-99/A



External Standard Report

Data File Name : D:\HPCHEM\1\DATA\19090201\011F0201.D
Operator : CMH
Instrument : DIESEL #1
Sample Name : 908122-1
Run Time Bar Code:
Acquired on : 02 Sep 99 02:30 PM
Report Created on: 03 Sep 99 01:25 PM
Last Recalib on : 26 APR 99 11:54 AM
Multiplier : 1

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 2
Instrument Method: TDMO0899.MTH
Analysis Method : TPHD0899.MTH
Sample Amount : 0
ISTD Amount :

Sig. 1 in D:\HPCHEM\1\DATA\19090201\011F0201.D

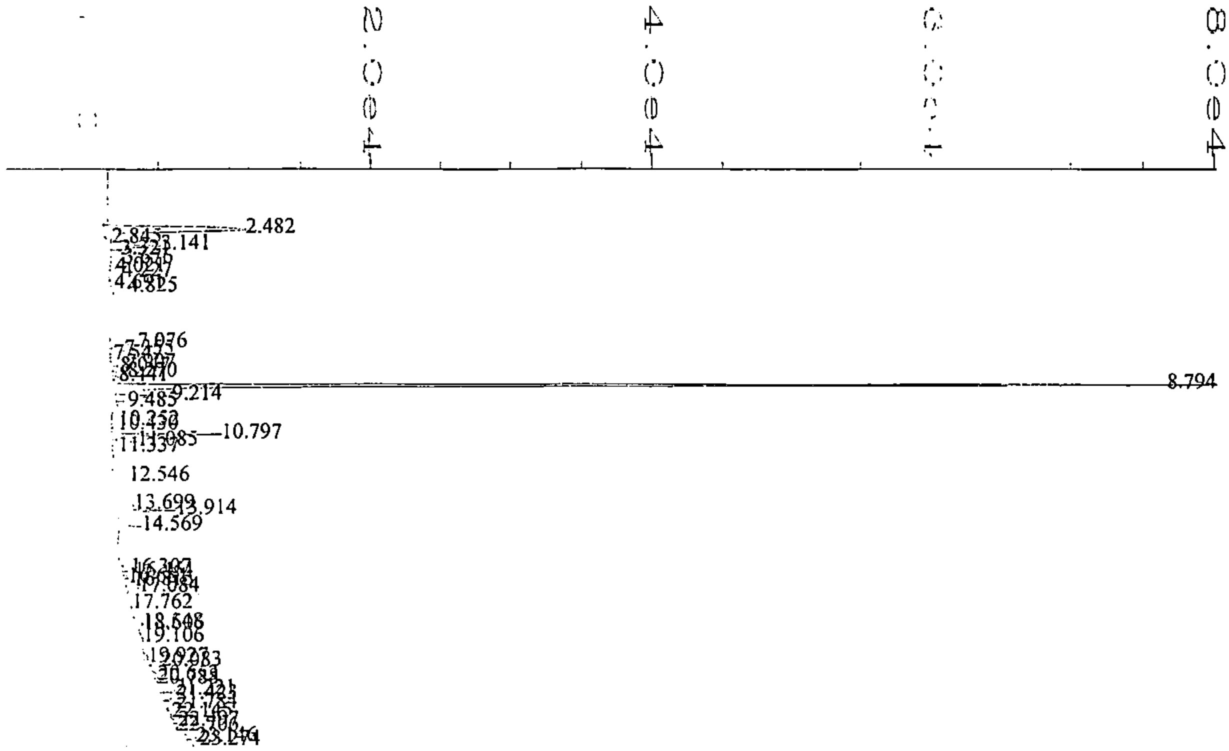
Ret Time	Area	Type	Width	Ref#	ug/ml	Name
11.824	* not found *			1		Diesel #2
21.597	38314	BB	0.036	1	9.727	nC-25 surrogate ÷ 10X100 = 97%

Not all calibrated peaks were found 9.8.99CH

Dry wt. = 19.6%

D = 425 mg/kg

9.3.99CH



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29090801\006R0201.D				
Operator	: LAH	Page Number	: 1		
Instrument	: GAS/BTEX	Vial Number	: 6		
Sample Name	: 908122-2 100UL	Injection Number	: 1		
Run Time Bar Code:		Sequence Line	: 2		
Acquired on	: 08 Sep 99 10:37 AM	Instrument Method:	TPHG0899.MTH		
Report Created on:	08 Sep 99 11:01 AM	Analysis Method	: BTEX0999.MTH		
Last Recalib on	: 07 SEP 99 08:38 AM	Sample Amount	: 0		
Multiplier	: 1	ISTD Amount	:		

Sig. 2 in D:\HPCHEM\2\DATA\29090801\006R0201.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
7.076	11574	VV	0.087	1	0.0810	Benzene
8.794	495063	VV	0.073	1	10.672	TFT surrogate %REC = 107%
10.797	35727	PV	0.068	1	0.267	Toluene
13.699	5848	BV	0.066	1	0.0494	Ethylbenzene
13.914	22829	VB	0.081	1	0.0853	M+P-Xylene
14.569	8056	BV	0.072	1	0.0428	O-Xylene

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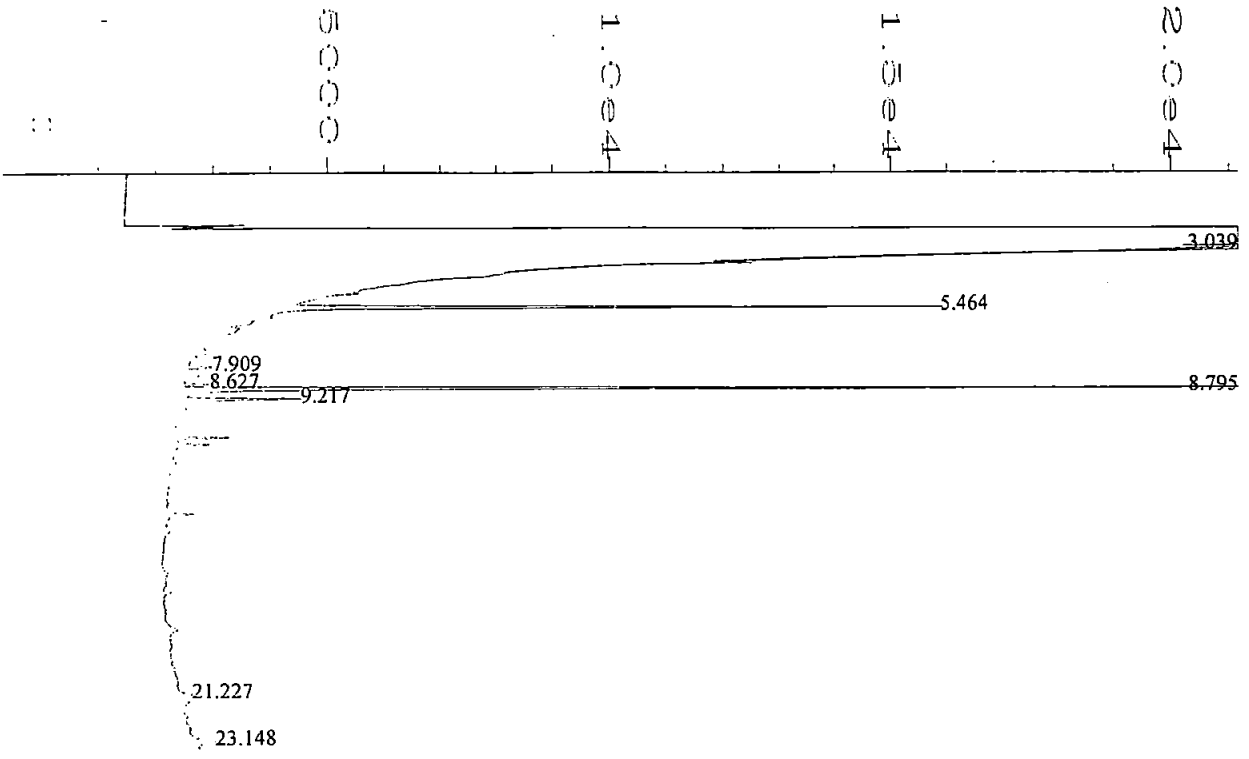
BTE <0.1mg/kg [illegible] 9499

X <0.3mg/kg

Dry wt = 5[illegible]

9-8-99LH



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External Standard Report

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Data File Name	: D:\HPCHEM\2\DATA\29090801\006F0201.D		
Operator	: LAH	Page Number	: 1
Instrument	: GAS/BTEX	Vial Number	: 6
Sample Name	: 908122-2 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 08 Sep 99 10:37 AM	Instrument Method:	TPHG0899.MTH
Report Created on:	08 Sep 99 11:02 AM	Analysis Method	: TPHG0899.MTH
Last Recalib on	: 31 AUG 99 08:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\2\DATA\29090801\006F0201.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
8.795	93984	VV	0.071	1	7.540	TFT-surrogate
16.802	* not found *			1		gasoline envelop

Not all calibrated peaks were found

94%

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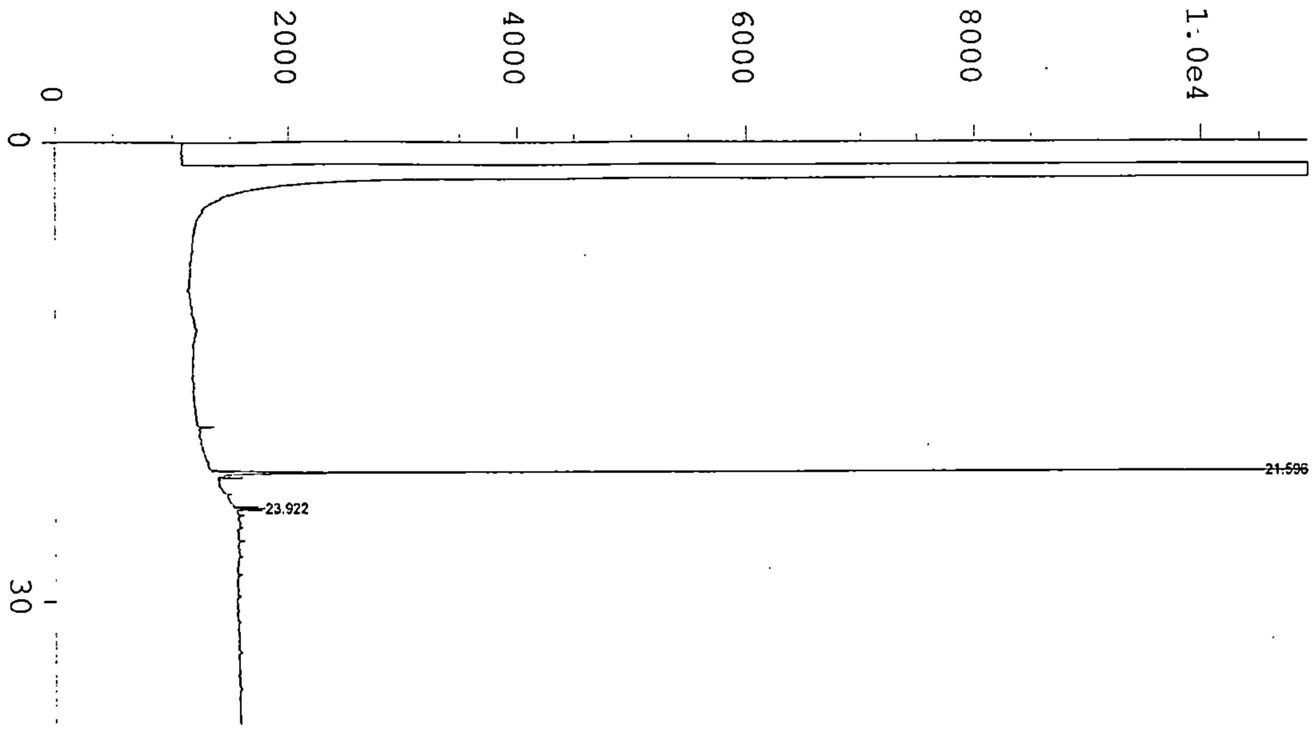
Gas <5.0 mg/kg

00491



External Standard Report

D :a File Name : D:\HPCHEM\1\DATA\19090201\012F0201.D

Operator	: CMH	Page Number	: 1
Instrument	: DIESEL #1	Vial Number	: 12
Sample Name	: 908122-2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 02 Sep 99 03:14 PM	Instrument Method:	TDMO0899.MTH
Report Created on:	03 Sep 99 01:25 PM	Analysis Method	: TPHD0899.MTH
Last Recalib on	: 26 APR 99 11:54 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in D:\HPCHEM\1\DATA\19090201\012F0201.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
11.824	* not found *			1		Diesel #2
21.596	39872	BV	0.034	1	10.116	nC-25 surrogate ÷10 X100 = 101%

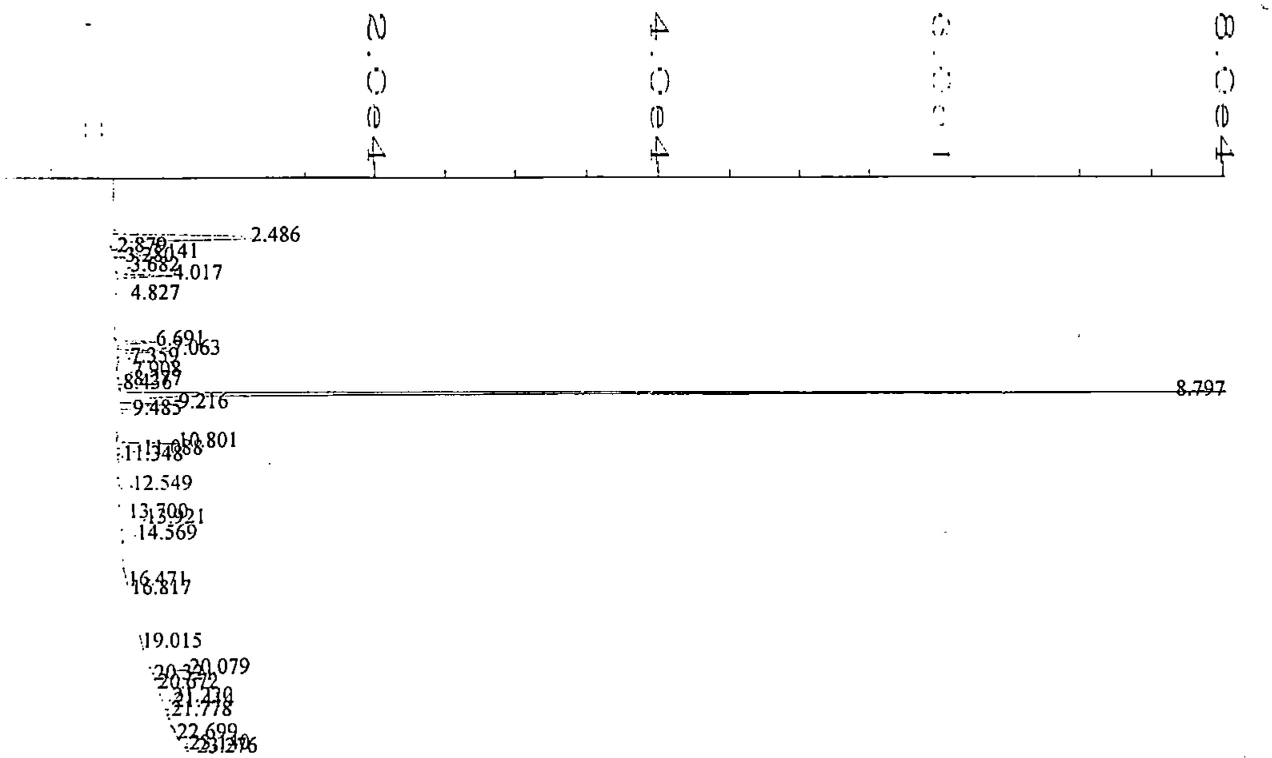
Not all calibrated peaks were found

9.6994 (?)

Dry wt. = 20.05g (?)

D = <25 mg/kg

9.3.99 CH



External Standard Report

I ta File Name	: D:\HPCHEM\2\DATA\29090801\007R0201.D		
Operator	: LAH	Page Number	: 1
I strument	: GAS/BTEX	Vial Number	: 7
S mple Name	: 908122-3 100UL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
quired on	: 08 Sep 99 11:09 AM	Instrument Method:	TPHG0899.MTH
F port Created on:	08 Sep 99 11:32 AM	Analysis Method	: BTEX0999.MTH
Last Recalib on	: 07 SEP 99 08:38 AM	Sample Amount	: 0
M ltiplier	: 1	ISTD Amount	:

Sig. 2 in D:\HPCHEM\2\DATA\29090801\007R0201.D

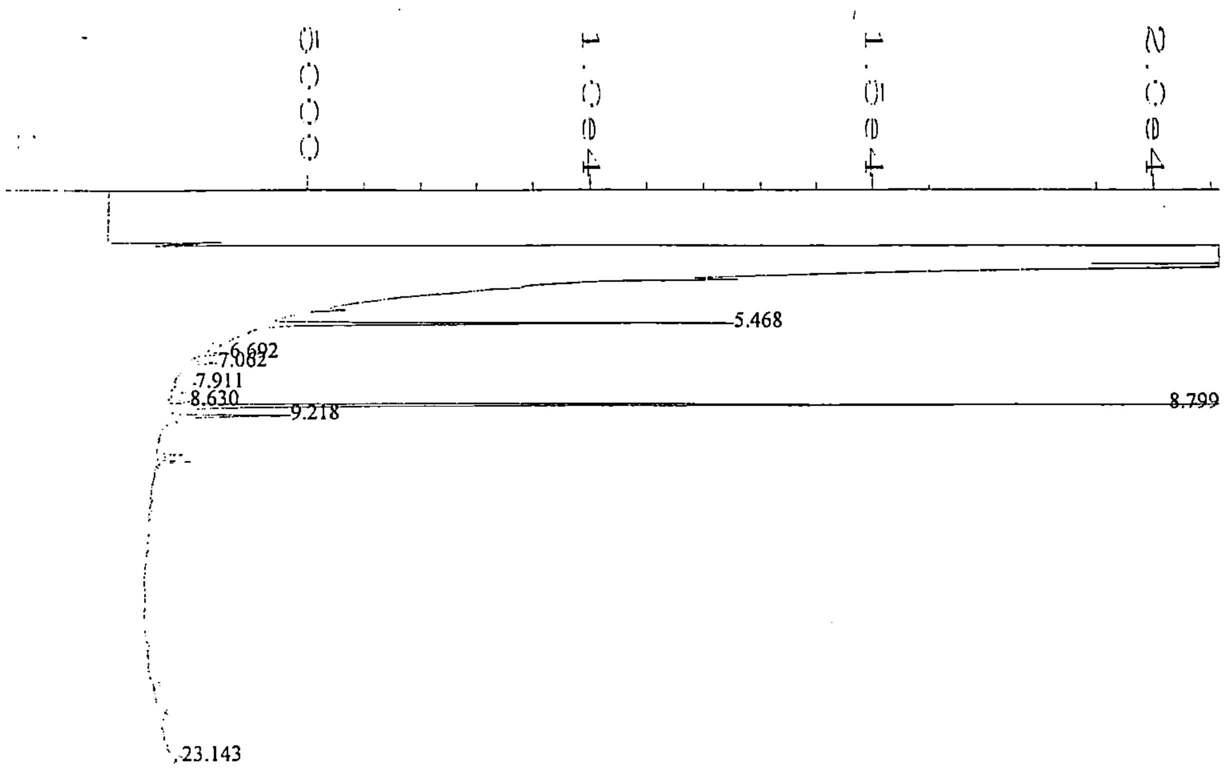
R t Time	Area	Type	Width	Ref#	ug/l	Name
7.063	22250	BV	0.090	1	0.156	Benzene
8.797	481610	VV	0.073	1	10.397	TFT surrogate =10.4X10=104%
10.801	21167	PV	0.071	1	0.158	Toluene
13.700	2927	BV	0.072	1	0.0247	Ethylbenzene
13.921	11838	VV	0.094	1	0.0442	M+P-Xylene
14.569	6035	VB	0.081	1	0.0320	O-Xylene

BTE <0.1mg/kg
X <0.3mg/kg

Dry wt=5.17g

9-6-99

a0491d



External Standard Report

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I ta File Name     : D:\HPCHEM\2\DATA\29090801\007F0201.D
Operator           : LAH                          Page Number       : 1
I strument         : GAS/BTEX                     Vial Number       : 7
S mple Name        : 908122-3 100UL               Injection Number  : 1
Run Time Bar Code:                                Sequence Line     : 2
A quired on        : 08 Sep 99   11:09 AM         Instrument Method: TPHG0899.MTH
R port Created on: 08 Sep 99   11:33 AM           Analysis Method   : TPHG0899.MTH
Last Recalib on    : 31 AUG 99 08:52 AM           Sample Amount     : 0
M ltiplier         : 1                            ISTD Amount       :

Sig. 1 in D:\HPCHEM\2\DATA\29090801\007F0201.D
R t Time      Area     Type Width Ref#   ug/l              Name
-------|------------|----|-----|-----|--------|--------------------------------|
  8.799        90759 VV   0.072  1        7.281 TFT-surrogate %rec=73%
 16.802 * not found *            1              gasoline envelop

N t all calibrated peaks were found
```
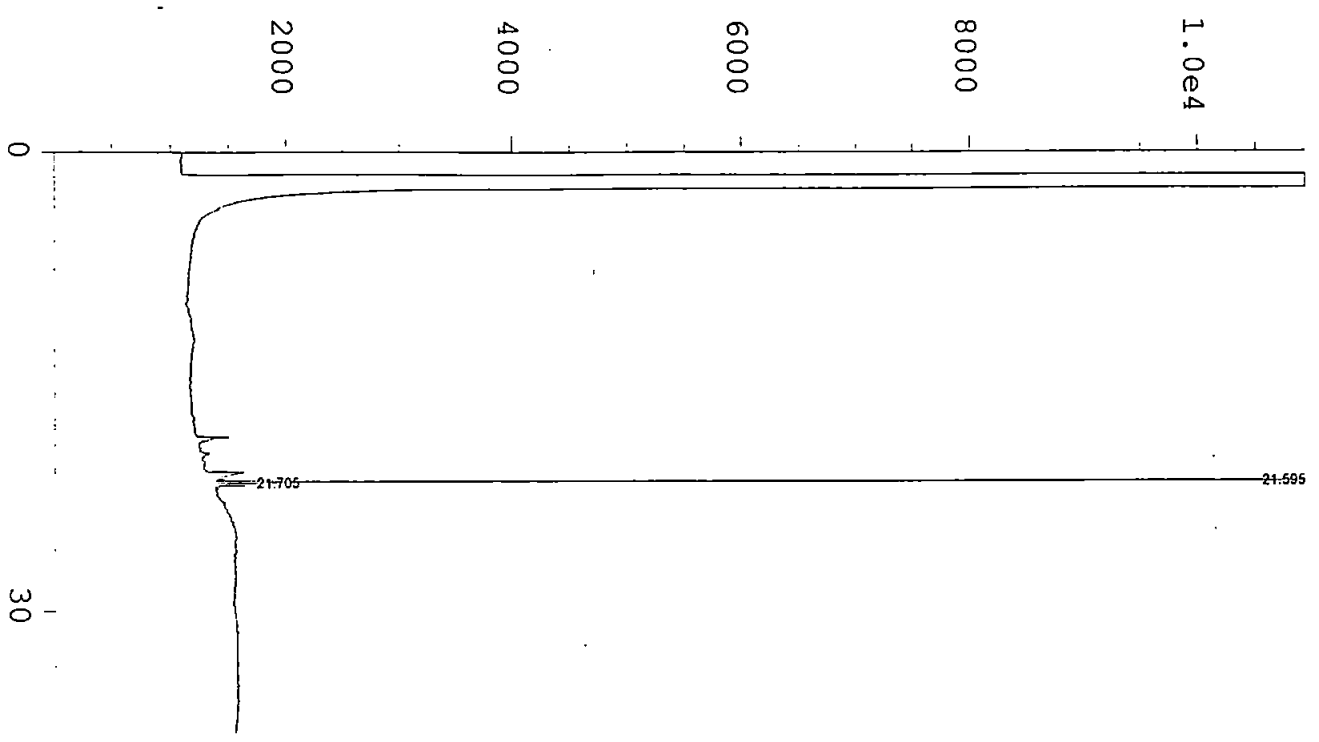

9.8991

Gas <5.0 mg/kg

n-0-GGIH



External Standard Report

Data File Name : D:\HPCHEM\1\DATA\19090201\013F0201.D
Operator : CMH
Instrument : DIESEL #1
Sample Name : 908122-3
Run Time Bar Code:
Acquired on : 02 Sep 99 03:58 PM
Report Created on: 03 Sep 99 01:25 PM
Last Recalib on : 26 APR 99 11:54 AM
Multiplier : 1

Page Number : 1
Vial Number : 13
Injection Number : 1
Sequence Line : 2
Instrument Method: TDMO0899.MTH
Analysis Method : TPHD0899.MTH
Sample Amount : 0
ISTD Amount :

Sig. 1 in D:\HPCHEM\1\DATA\19090201\013F0201.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
11.824	* not found *			1		Diesel #2
21.595	39444	PV	0.031	1	10.009	nC-25 surrogate

÷10 X100 = 100%

Not all calibrated peaks were found

9.4.99

Dry Wt. = 23.98g

D= <25 mg/Kg

9.3.99 CH

CSR Associated

Release of Liability/Certificate of Disposal

ULTRA TANK SERVICES INC. AND THEIR CLEINT: are released from liability for all petroleum contaminated soil originating from:

JOB # 99233, WORLD WIDE DUTY FREE
253 C STREET
BLAINE WA.

and transported to:

CSR - Associated Sand & Gravel Company Inc.
6300 Glenwood Ave.
Everett WA 98203

On 08/25/1999 THROUGH 08/27/1999

A total of 917.50 tons of class 3 petroleum contaminated soil were transported to the above facility. The material was treated and disposed of in the following manner:

Thermal Desorption/Landfill for Reclamation

Treatment/Disposal of the contaminated soil was performed in accordance with all applicable federal, state, and local laws and regulations.

Signed: Date 09/01/1999

Larry W. Baker

Larry W. Baker

Operations Manager,
Soil Remediation Division