SECOND QUARTER 2001
GROUNDWATER MONITORING RESULTS
B&C Gas Mini Mart
Livermore, California

A06 2001

Prepared by

Conor Pacific
2580 Wyandotte Street, Suite G
Mountain View, California 94043

August 2001

Project BNC 103

Conor Pacific

August 2, 2001
Project No. BNC103

Mr. Balaji Angle
Angle Enterprises
5131 Shattuck Avenue
Oakland, California 94609

Re: Second Quarter 2001 Groundwater Monitoring Results, B&C Gas Mini Mart, 2008 First Street, Livermore, California (Station ID 1689)

Dear Mr. Angle:

Conor Pacific has compiled second quarter 2001 groundwater monitoring results for B&C Gas Mini Mart (B&C), 2008 First Street, Livermore, California (Figure 1). This report includes second quarter 2001 groundwater elevation data, groundwater sampling methods, and results of groundwater chemical analyses. Nine out of the sixteen on- and off-site monitoring wells are scheduled to be sampled during the second quarter. During the second quarter 2001 sampling event, seven of the nine wells were sampled. Wells MW-5 and (MS) MW-1 were not sampled since free product was observed during well purging.

SITE INFORMATION

Site Name & Contact

Mr. Balaji Angle
B&C Gas Mini Mart
2008 First Street
Livermore, California 94550
(510) 654-3461

Site Description

The B&C property is located on the northeast corner of First and South L Streets in Livermore, California, and currently serves as a gasoline station and mini market and is called Valley Gas. From at least 1988 until 1994, Desert Petroleum (DP) owned and operated the site. In January 1994, DP sold the site to the current owner, Mr. Balaji Angle. The following site description has been compiled from reports on file with Alameda County Environmental Health Services (ACEHS) and information provided by the site owner.

Canada
Vancouver
Victoria
Calgary
Edmonton
Saskatoon
Mississauga
Toronto
Ottawa
Halifax
St John s

U.S.
Richmond
Mountain View

The site is located in the Livermore Valley groundwater basin, an area of sedimentary deposition containing braided channel systems with complex interfingering. Subsurface investigations conducted to the west of the B&C site have found an upper unconfined water-bearing zone consisting primarily of gravels with sand and clay. A low-permeability clayey unit is found at depths of approximately 75 to 110 feet below ground surface (bgs). Below the clayey unit, the top of a lower, semi-confined aquifer is found at depths ranging from 110 to 145 feet bgs.[1]

Subsurface work conducted in the B&C area has found predominantly sandy clay, silty sand, silty gravel, and sandy gravel. Over the last eleven years, static water levels have ranged from 68.7 feet bgs (January 1992) to 17.0 feet bgs (February 1997). The groundwater flow generally ranges from west of north during the summer and fall months, to north of west during the winter and spring months.

Previous Work Performed at Site

A preliminary site assessment was conducted in September 1988. Three soil borings were completed; one of which was converted to a monitoring well (MW-1). In March 1994, a 280-gallon waste oil underground storage tank (UST) and 25 cubic yards of soil were removed as part of closing the auto repair shop at the station. Three months later in June, wells MW-2, MW-3, and MW-4 were installed (Figure 2).[2]

In August 1994, free product was encountered in well MW-2, and product removal commenced twice a month. By the end of January 1995, no measurable thickness of product remained, only sheen could be detected.[3] In March 1995, a release was reported to have occurred from the union between a tank subpump and product line. The quantity of the release is unknown.

One gasoline UST at the B&C site failed an integrity test in September 1995. The tank was immediately taken out of commission and ACEHS was notified. In July 1996, further source removal was conducted. Two more gasoline USTs were removed, and new double-walled fiberglass USTs and fiberglass piping with automated leak detection were installed. Other remedial activities included the removal of two hydraulic lifts and approximately 700 cubic yards of impacted soil. Also, one 1,000-gallon UST discovered during excavation activities was closed in place with approval from ACEHS and the Livermore Fire Department by grouting with a cement sand slurry. In October 1995, two additional monitoring wells (off-site well MW-5 and well MW-6) were installed for the B&C site (Figure 2).

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[1] H[+]GCL, Inc. Deep Groundwater Conduit Study, Livermore Arcade Shopping Center, First Street and South P Street, Livermore, California. December 6, 1993.

[2] Remediation Service Int'l. Soil & Groundwater Investigation Report for 2008 First Street, Livermore, California. July 22, 1994.

[3] Product thickness information from Remediation Service, Int'l field records, "Free Product Removal Logs."

Nine downgradient wells (MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, D-1, and D-2) were installed during June and July 1999 to define the downgradient and lateral extent of the plume and provide long-term monitoring locations (Figure 2).[4] Two of the wells, D-1 and D-2, are installed in the semi-confined aquifer below the aquitard. The other wells are installed in the upper water-bearing zone. Table 1 summarizes the well construction details for all on-site and off-site wells installed to date.

The primary constituents of concern are total petroleum hydrocarbons as gasoline (TPH-G); the aromatic compounds benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX); and methyl tertiary-butyl ether (MTBE). Since 1994, concentrations of TPH-G in groundwater have generally decreased.

Interim Remedial Action at Well MW-5

Floating product was first observed in well MW-5 on July 30, 1998 (Table 2). The well is screened from 15 feet to 40 feet bgs, and the depth to groundwater has historically ranged from 18 to 33 feet bgs, well within the screened interval of the well. Due to the presence of floating free product in well MW-5, interim remedial actions were taken to remove the floating product from the well. A passive bailer or absorbent sock was selected to remove product from well MW-5 based on well access, the thickness of the product, and the rate at which the product enters the well as it is removed.

Over the time period monitored, the absorbent socks have removed sufficient product to reduce the free product thickness to a sheen or less. During the four sampling events in 2000, free product was not measured in well MW-5 and sampling was conducted. However, free product was observed during the purging of well MW-5 during the March and June 2001 sampling events. The absorbent sock was replaced in the well and groundwater samples were not collected.

GROUNDWATER SAMPLING AND ANALYSIS

Quarterly sampling activities are reviewed below. Groundwater sampling methods and results are presented and a discussion of historical analytical trends for site monitoring wells is included.

Free Product

During this quarterly sampling event, Conor Pacific checked for free product in all site wells. Of the wells which previously have been reported to contain free product (Wells MW-2, MW-5, and MW-6), MW-5 contained a measurable thickness of product this quarter. In addition, off-site well (MS) MW-1 contained free product that was observed during well purging.

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[4] Einarson, Fowler & Watson, November 5, 1999, Report of Downgradient Investigation, B&C Gas Mini Mart, 2008 First Street, Livermore, California.

Groundwater Elevations

On June 20, 2001, Conor Pacific measured the depth to water in all groundwater monitoring wells. Water levels were measured to the nearest 0.01 foot using a float-activated product probe, according to Conor Pacific's standard measuring protocol,[5] and were recorded on a water level data sheet (Appendix A). Groundwater elevations are calculated by subtracting depth-to-water measurements from the top of well casing elevations, surveyed to Livermore City datum, mean sea level (MSL).

Table 2 summarizes available historical groundwater elevations from August 1990 through the current monitoring event. A groundwater contour map, based on the current water level measurements, is shown in Figure 2. Current groundwater elevations are generally about five feet lower than during the previous quarter. Groundwater flow was generally due west during this quarterly monitoring event and the hydraulic gradient is approximately 0.015 foot per foot. The flow direction and gradient are in accordance with previous results.

A vertically downward gradient was observed between the upper water-bearing zone (MW-11) and the semi-confined aquifer (D-1), as has been observed during previous quarters. This may be the result of the effects of slower recharge to the deeper, semi-confined aquifer compared with more rapid recharge to the upper water-bearing zone. The well pair MW-12 and D-2 had very similar water levels during this quarterly event.

Sampling Methods

Conor Pacific sampled seven monitoring wells on June 20 and 22, 2001, following Conor Pacific's standard protocol. During this quarterly event nine monitoring wells are sampled, when possible. Well MW-5 and off-site well (MS)MW-1 were not sampled this quarter due to the presence of floating product in well MW-5 and free product globules observed during well purging in well (MS)MW-1. Wells were purged using either a submersible pump or a polyvinyl chloride (PVC) bailer. Samples were collected from each well using a disposable PVC bailer. Field measurements of temperature, pH, dissolved oxygen, turbidity, and electrical conductivity were taken and recorded on water sample field data sheets (Appendix A). All purge water was contained in 55-gallon drums and stored on-site pending proper disposal. Purge water with low hydrocarbon concentrations is pumped to the sanitary sewer under City of Livermore Groundwater Discharge Permit # 1514. All samples were properly stored on the day of sampling. Chain-of-custody documentation accompanied the samples through collection and delivery to the analytical laboratory.

[5] Einarson, Fowler & Watson. Third Quarter 1998 Groundwater Monitoring Results, B&C Gas Mini Mart, Livermore, California, Appendix A. September 10, 1998.

Analytical Program

All groundwater analyses were performed by Sequoia Analytical of Petaluma, California, a state-certified laboratory. All groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by U.S. Environmental Protection Agency (EPA) Method 8015M and benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) by EPA Method 8020M. At the request of the ACEHS, the groundwater sample collected from MW-2 was also analyzed by EPA Method 8260B for seven oxygenates including MTBE. Laboratory analyses occurred within specified holding times and within laboratory quality control standards. The certified analytical report is located in Appendix A.

Analytical Results

Over the last eight years of monitoring at the site, concentrations of benzene have steadily decreased in all site wells. Analysis of site groundwater samples for MTBE began in June 1995. Since then, concentrations of MTBE have decreased significantly. During the second quarter 2001, hydrocarbon concentrations increased in wells MW-2, MW-7, and MW-13 when compared to the previous quarter. Well MW-8 had no detectable MTBE concentrations. For the past two year, MTBE concentrations have steadily declined in well MW-8 and this is the first time that MTBE has not been detected. The remaining wells sampled (MW-10, MW-12, and D-2) did not detect hydrocarbon concentrations, consistent with previous results. Table 3 presents a historical summary of groundwater analytical results from the B&C site. Quarterly analytical results for benzene and MTBE are also presented on Figure 3.

SUMMARY

Seven of the nine monitoring wells scheduled for sampling were sampled this quarter. The second quarter 2001 groundwater monitoring results are consistent with previous monitoring results. The furthest downgradient detection of the hydrocarbon plume is seen at well MW-13. Well MW-8, which previously contained MTBE, did not contain MTBE during this sampling event. The concentrations of MTBE at well MW-8 have gradually been decreasing during the past two years.

FUTURE WORK

At the request of the ACEHS, Conor Pacific submitted a workplan proposing the installation of two additional groundwater monitoring wells to better delineate the extent of the MTBE and BTEX plume.[6] The ACEHS approved the workplan in January 2001.[7] Conor Pacific has had discussions with off-site property owners to obtain access for the

[6] Conor Pacific. Workplan Addendum for Additional Downgradient Investigation, B&C Gas Mini Mart, 2008 First Street, Livermore, California. January 2, 2001.

[7] Alameda County Health Care Services. Letter re: Workplan Approval for B&C Gas Mini Mart, 2008 1st Street, Livermore, California. January 5, 2001.

collection of groundwater samples. The off-site property owners are evaluating whether to grant access and it is not known when, or if, access can be obtained.

Third quarter 2001 groundwater monitoring currently is scheduled for September 2001.

If you have any questions regarding this report, please call us at (650) 386-3828.

Sincerely,
Conor Pacific

Mark Smolley, RG 4650
Senior Geologist

x224 - Martha Watson

Attachments:

Tables

Table 1 - Monitoring Well Constructions
Table 2 - Summary of Groundwater Elevations
Table 3 - Historical Groundwater Analytical Results

Figures

Figure 1 - Site Location
Figure 2 - Well Locations and Groundwater Contours (June 2001)
Figure 3 - Groundwater Chemistry (June 2001)

Appendices

Appendix A - Water Sample Field Data Sheets and Certified Analytical Reports

cc: Eva Chu, Alameda County Environmental Health Services
Ms. Carol Mahoney, Alameda Co. Flood Control and Water Cons. District Zone 7
Regional Water Quality Control Board, San Francisco Bay Region LUFT
State Water Resources Control Board, UST Fund

Table 1
Monitoring Well Constructions
B&C Gas Mini Mart
Livermore, California

Well No.	Drilling Method	Date Installed	T.D. Boring (ft.-bgs)	T.D. Well (ft.-bgs)	Borehole Diameter (inches)	Casing Material (PVC)	Casing Diameter (inches)	Screen Size (inches)	Sand Pack Material	Screened Interval (ft.-bgs)	Sand Pack Interval (ft.-bgs)
MW-1	HSA	Sep-88	77	77	8	PVC	2	0.020	#3 sand	27 - 77	25 - 77
MW-2	HSA	Jun-94	60	60	10	PVC	4	0.020	#2/20 sand	30 - 60	27 - 60
MW-3	HSA	Jun-94	60	60	10	PVC	4	0.020	#2/20 sand	30 - 60	27 - 60
MW-4	HSA	Jun-94	60	60	10	PVC	4	0.020	#2/20 sand	30 - 60	27 - 60
MW-5	HSA	Oct-95	42	40	10	PVC	4	0.020	#2 sand	15 - 40	12 - 40
MW-6	HSA	Oct-95	42	40	10	PVC	4	0.020	#2 sand	15 - 40	12 - 40
MW-7	HSA	Jun-99	62	49	8	PVC	2	0.020	#3 sand	29-49	27-51
MW-8	HSA	Jun-99	62	54	8	PVC	2	0.020	#3 sand	34-54	32-54
MW-9	HSA	Jun-99	45	45	8	PVC	2	0.020	#3 sand	25-45	23-45
MW-10	HSA	Jun-99	55	53.5	8	PVC	2	0.020	#3 sand	33.5-53.5	23-55
MW-11	HSA	Jun-99	50	49	8	PVC	2	0.020	#3 sand	29-49	27-49
MW-12	HSA	Jun-99	45	43.5	8	PVC	2	0.020	#3 sand	23.5-43.5	21-45
MW-13	HSA	Jul-99	55	55	8	PVC	2	0.020	#3 sand	35-55	32-55
D-1	HSA	Jun-99	125	125	8	PVC	2	0.020	#3 sand	110-125	104-125
D-2	HSA	Jun-99	115	114	8	PVC	2	0.020	#3 sand	99-114	94-114
(MS)MW-1	HSA	Apr-89	62	60	NA	PVC	2	NA	NA	30-60	NA

HSA Hollow-Stem Auger
T.D. Total Depth
ft.-bgs feet below ground surface
NA Not available
Well construction information for wells MW-2 through MW-6 collected from Remediation Service Int'l boring logs.

Table 2
Summary of Groundwater Elevations
B & C Gas Mini Mart
Livermore, California

Well Number	Top-of-Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Depth to Free product (feet)	Product Thickness (feet)
MW-1	487.00	09/22/88	60.50	426.50		
		08/02/90	43.10	443.90		
		10/10/91	66.39	420.61		
		01/08/92	68.72	418.28		
		05/11/93	34.76	452.24		
		09/21/93	38.70	448.30		
		05/22/94	33.57	453.43		
	484.07	06/19/94	37.51	446.56		
		08/25/94	43.27	440.80		
		11/22/94	40.58	443.49		
		03/13/95	28.06	456.01		
		06/01/95	21.76	462.31		
		02/29/96	18.86	465.21		
		Feb-97	NM	NM		
		07/30/98	25.90	458.17		
		11/05/98	33.23	450.84		
		03/23/99	25.49	458.58		
		06/08/99	27.78	456.29		
		09/27/99	30.65	453.42		
		12/20/99	32.99	451.08		
		03/21/00	23.95	460.12		
		06/21/00	26.55	457.52		
		09/12/00	29.58	454.49		
		12/07/00	30.70	453.37		
		03/21/01	29.80	454.27		
		06/20/01	34.91	449.16		
MW-2	483.86	06/19/94	38.15	445.71		
		08/25/94	44.13	-	43.47	0.66
		11/22/94	40.96	-	40.92	0.04
		03/09/95	29.28	-	28.47	0.81
		03/13/95	28.71	-	28.29	0.42
		06/01/95	22.61	461.25		
		02/29/96	20.05	463.81		
		Feb-97	18.30	465.56		
		07/30/98	25.75	-	25.74	0.01
		11/05/98	33.31	450.55		
		03/23/99	25.51	458.35		
		06/08/99	27.54	456.32		
		09/27/99	30.73	453.13		
		12/20/99	33.02	450.84		
		03/21/00	24.13	459.73		
		06/21/00	26.26	457.60		
		09/12/00	29.40	454.46		
		12/08/00	30.60	453.26		
		03/21/01	29.63	454.23		
		06/20/01	34.68	449.18		

Table 2
Summary of Groundwater Elevations
B & C Gas Mini Mart
Livermore, California

Well Number	Top-of-Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Depth to Free product (feet)	Product Thickness (feet)
MW-3	484.24	06/19/94	37.15	447.09		
		08/25/94	42.31	441.93		
		11/22/94	40.07	444.17		
		03/13/95	27.94	456.30		
		06/01/95	21.31	462.93		
		02/29/96	18.78	465.46		
		Feb-97	16.97	467.27		
		07/30/98	24.88	459.36		
		11/05/98	32.09	452.15		
		03/23/99	24.49	459.75		
		06/08/99	26.77	457.47		
		09/27/99	29.52	454.72		
		12/20/99	31.85	452.39		
		03/21/00	22.95	461.29		
		06/21/00	25.60	458.64		
		09/12/00	28.40	455.84		
		12/07/00	29.56	454.68		
		03/21/01	28.69	455.55		
		06/20/01	33.61	450.63		
MW-4	485.04	06/19/94	37.49	447.55		
		08/25/94	42.25	442.79		
		11/22/94	40.59	444.45		
		03/13/95	28.00	457.04		
		06/01/95	21.51	463.53		
		02/29/96	18.42	466.62		
		Feb-97	17.47	467.57		
		07/30/98	25.47	459.57		
		11/05/98	32.67	452.37		
		03/23/99	25.09	459.95		
		06/08/99	27.43	457.61		
		09/27/99	30.16	454.88		
		12/20/99	32.52	452.52		
		03/21/00	23.43	461.61		
		06/21/00	26.14	458.90		
		09/12/00	29.03	456.01		
		12/07/00	29.15	455.89		
		03/21/01	29.35	455.69		
		06/20/01	34.40	450.64		
MW-5	481.97	02/29/96	19.35	462.62		
		Feb-97	18.19	463.78		
		07/30/98	25.25	456.72	25.24	0.01
		11/05/98	32.70	449.27	32.48	0.22
		03/23/99	25.15	456.82		
		06/08/99	27.27	454.70		
		09/27/99	30.00	451.97		
		12/20/99	32.30	449.67	32.23	0.07
		03/21/00	23.55	458.42		
		06/21/00	26.04	455.93		
		09/12/00	28.90	453.07		
		12/07/00	29.89	452.08		
		03/21/01	29.15	452.82		
		06/20/01	34.04	447.93	33.89	0.15

Table 2
Summary of Groundwater Elevations
B & C Gas Mini Mart
Livermore, California

Well Number	Top-of-Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Depth to Free product (feet)	Product Thickness (feet)
MW-6	483.93	02/29/96	20.32	463.61		
		Feb-97	18.92	465.01		
		07/30/98	25.59	458.34	25.58	0.01
		11/05/98	NM >28.4	NM		
		03/23/99	25.43	458.50		
		06/08/99	27.43	456.50		
		09/27/99	NM >28.6	NM		
		12/20/99	NM >28.7	NM		
		03/21/00	24.02 *	459.91		
		06/21/00	26.04 *	457.89		
		09/12/00	NM >28.7	NM		
		12/07/00	NM >28.6	NM		
		03/21/01	NM >28.7	NM		
		06/20/01	NM >28.7	NM		
MW-7	478.14	7/12/99	28.37	449.77		
		09/27/99	30.20	447.94		
		12/20/99	32.44	445.70		
		03/21/00	24.18	453.96		
		06/21/00	26.70	451.44		
		09/12/00	29.28	448.86		
		12/07/00	30.23	447.91		
		03/21/01	29.39	448.75		
		06/02/01	34.38	443.76		
MW-8	473.23	7/12/99	34.29	438.94		
		09/27/99	37.11	436.12		
		12/20/99	39.79	433.44		
		03/21/00	29.10	444.13		
		06/21/00	31.90	441.33		
		09/12/00	35.75	437.48		
		12/07/00	36.88	436.35		
		03/21/01	35.25	437.98		
		06/02/01	41.78	431.45		
MW-9	477.08	7/12/99	30.71	446.37		
		09/27/99	32.61	444.47		
		12/20/99	34.99	442.09		
		03/21/00	26.75	450.33		
		06/21/00	29.28	447.80		
		09/12/00	31.65	445.43		
		12/07/00	32.67	444.41		
		03/21/01	31.47	445.61		
		06/02/01	37.40	439.68		
MW-10	471.42	7/12/99	34.60	436.82		
		09/27/99	37.62	433.80		
		12/20/99	40.04	431.38		
		03/21/00	29.50	441.92		
		06/21/00	32.19	439.23		
		09/12/00	36.19	435.23		
		12/07/00	37.24	434.18		
		03/21/01	35.77	435.65		
		06/02/01	42.25	429.17		

Table 2
Summary of Groundwater Elevations
B & C Gas Mini Mart
Livermore, California

Well Number	Top-of-Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Depth to Free product (feet)	Product Thickness (feet)
MW-11	464.93	7/12/99	31.00	433.93		
		09/27/99	33.83	431.10		
		12/20/99	35.91	429.02		
		03/21/00	26.41	438.52		
		06/21/00	28.79	436.14		
		09/12/00	32.56	432.37		
		12/07/00	33.40	431.53		
		03/21/01	31.92	433.01		
		06/20/01	38.24	426.69		
MW-12	458.34	7/12/99	25.50	432.84		
		09/27/99	28.28	430.06		
		12/20/99	30.26	428.08		
		03/21/00	20.70	437.64		
		06/21/00	23.11	435.23		
		09/12/00	27.04	431.30		
		12/07/00	27.67	430.67		
		03/21/01	26.24	432.10		
		06/20/01	32.89	425.45		
MW-13	474.79	7/12/99	30.65	444.14		
		09/27/99	32.74	442.05		
		12/20/99	34.98	439.81		
		03/21/00	26.03	448.76		
		06/21/00	28.74	446.05		
		09/12/00	31.62	443.17		
		12/07/00	32.71	442.08		
		03/21/01	31.25	443.54		
		06/20/01	36.55	438.24		
D-1	464.70	7/12/99	30.67	434.03		
		09/27/99	35.32	429.38		
		12/20/99	36.32	428.38		
		03/21/00	27.84	436.86		
		06/21/00	30.40	434.30		
		09/12/00	34.11	430.59		
		12/07/00	33.97	430.73		
		03/21/01	32.32	432.38		
		06/20/01	41.80	422.90		
D-2	457.61	7/12/99	25.72	431.89		
		09/27/99	28.44	429.17		
		12/20/99	29.40	428.21		
		03/21/00	20.91	436.70		
		06/21/00	23.56	434.05		
		09/12/00	27.23	430.38		
		12/07/00	27.98	429.63		
		03/21/01	25.42	432.19		
		06/20/01	34.97	422.64		

Table 2
Summary of Groundwater Elevations
B & C Gas Mini Mart
Livermore, California

Well Number	Top-of-Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Depth to Free product (feet)	Product Thickness (feet)
(MS)MW-1	477.79	07/30/98	30.37	447.42	30.35	0.02
		11/05/98	38.01	439.78	(1)	
		03/23/99	29.44	448.35	(1)	
		06/08/99	31.70	446.09	(1)	
		09/27/99	34.38	443.41		
		12/20/99	37.36	440.43		
		03/21/00	28.22	449.57		
		06/21/00	30.95	446.84		
		09/12/00	33.54	444.25		
		12/07/00	34.56	443.23		
		03/21/01	33.24	444.55	(1)	
		06/20/01	39.35	438.44	(1)	

Notes: Data prior to 1998 from RSI quarterly reports February 1997 date unknown.

MSL = mean sea level

NM = not measured

MS = Mill Springs Park

(1) - free product visible in purge or sample water

* Obstruction in well MW-6 at approximately 28.6 feet below top of casing, or as indicated by ">"

** Suspect a measurement error for the water level in well MW-2 on 12/7/00

Table 3
Historical Groundwater Analytical Results
B&C Gas Mini Mart
Livermore, California

Well No.	Sample Date	TPH-G (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-1	Aug-90	24,000	1,300	1,300	400	2,700	NA
	Oct-91	2,000	430	170	100	290	NA
	Jan-92	1,000	200	120	30	150	NA
	May-93	960	66	8	41	90	NA
	Sep-93	1,900	311	118	34	112	NA
	May-94	10,000	690	1,100	340	1,200	NA
	Aug-94	13,000	290	690	120	670	NA
	Nov-94	19,000	400	770	230	130	NA
	Mar-95	6,000	900	100	980	740	NA
	Jun-95	2,400	210	380	53	280	13,000
	Sep-95	7,800	69	1,300	220	1,200	2,000
	Feb-96	120	4.2	1.4	4.7	5.6	14
	Feb-97	NS*	NS*	NS*	NS*	NS*	NS*
	Jul-98	1,400	26	110	57	243	5
	Nov-98	6,000	230	330	240	1,060	<100
	Mar-99	6,600	280	420	240	990	60
	Jun-99	1,630	70	52	55	138	67
	Mar-00	300	17.6	14.2	9.89	40.7	7.84
	Sep-00	1,500	105	50.7	46.5	157	45.4
MW-2	Jun-94	290,000	18,000	36,000	4,600	26,000	NA
	Aug-94	NS**	NS**	NS**	NS**	NS**	NA
	Nov-94	NS**	NS**	NS**	NS**	NS**	NA
	Mar-95	NS**	NS**	NS**	NS**	NS**	NA
	Jun-95	25,000	2,300	3,400	720	3,100	16,000
	Sep-95	NS**	NS**	NS**	NS**	NS**	NS**
	Feb-96	57,000	2,500	650	3,700	3,100	6,500
	Feb-97	20,000	860	1,500	480	1,000	1,300
	Jul-98	NS**	NS**	NS**	NS**	NS**	NS**
	Nov-98	40,000	2,400	2,500	2,100	7,200	1,200
	Mar-99	22,000	780	880	780	1,730	300
	Jun-99	11,200	352	454	540	639	343
	Sep-99	18,000	992	331	901	2,140	225
	Dec-99	19,200	1,340	818	1,050	2,130	579
	Mar-00	6,340	281	184	233	348	90.2
	Jun-00	5,820	128	94.4	155	161	67.8
	Sep-00	18,100	981	926	1,080	2,630	239
	Dec-00	8,010	548	172	453	621	142
	Mar-01	18,800	1,300	790	1,150	2,250	372
	Jun-01	20,000	1,800	750	1,800	2,700	330

Table 3
Historical Groundwater Analytical Results
B&C Gas Mini Mart
Livermore, California

Well No.	Sample Date	TPH-G (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-3	Jun-94	11,000	640	580	270	790	NA
	Aug-94	41,000	1,600	2,300	330	1,800	NA
	Nov-94	18,000	8,000	10,000	900	5,000	NA
	Mar-95	44,000	1,600	1,300	5,000	6,600	NA
	Jun-95	15,000	600	1,900	490	2,600	4,200
	Sep-95	8,000	710	1,100	180	870	2,700
	Feb-96	13,000	260	200	200	1,100	1,500
	Feb-97	11,000	260	550	170	600	900
	Jul-98	25,000	330	1,200	490	1,860	300
	Nov-98	26,000	400	2,100	820	3,600	300
	Mar-99	6,900	100	160	110	265	220
	Jun-99	1,210	5.4	9.0	6.9	4.3	53.3
	Mar-00	465	4.56	1.87	6.20	7.45	15.5
	Sep-00	488	37.3	5.64	7.25	15.9	160
MW-4	Jun-94	810	12	25	<0.5	22	NA
	Aug-94	850	37	51	9.5	35	NA
	Nov-94	1,700	110	110	5.8	58	NA
	Mar-95	1,300	180	8	52	77	NA
	Jun-95	ND	3	1	ND	1	ND
	Sep-95	<50	0.7	<0.5	<0.5	<0.5	<2.5
	Feb-96	87	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-97	<50	<0.5	<0.5	<0.5	<0.5	2.9
	Jul-98	<50	<0.4	0.6	<0.3	0.8	<5
	Nov-98	<50	0.7	<0.3	<0.3	<0.8	27
	Mar-99	<50	<0.4	<0.3	<0.3	<0.8	<5
	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Sep-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-5	Oct-95	120,000	16,000	26,000	3,100	15,000	39,000
	Feb-96	47,000	3,400	4,200	860	4,100	20,000
	Feb-97	28,000	1,300	1,500	480	1,000	2,200
	Jul-98	47,000	1,400	4,000	2,000	8,500	600
	Nov-98	NS**	NS**	NS**	NS**	NS**	NS**
	Mar-99	36,000	1,500	2,400	1,500	5,500	900
	Jun-99	34,500	722	1,980	1,720	7,170	765
	Sep-99	49,100	540	2,500	1,730	8,040	255
	Dec-99	NS**	NS**	NS**	NS**	NS**	NS**
	Mar-00	10,700	217	300	332	1,480	160
	Jun-00	23,000	537	533	1,040	2,590	131***
	Sep-00	41,300	780	551	1,140	3,390	243***
	Dec-00	21,700	600	328	527	1,450	285***
	Mar-01	NS**	NS**	NS**	NS**	NS**	NS**

Table 3
Historical Groundwater Analytical Results
B&C Gas Mini Mart
Livermore, California

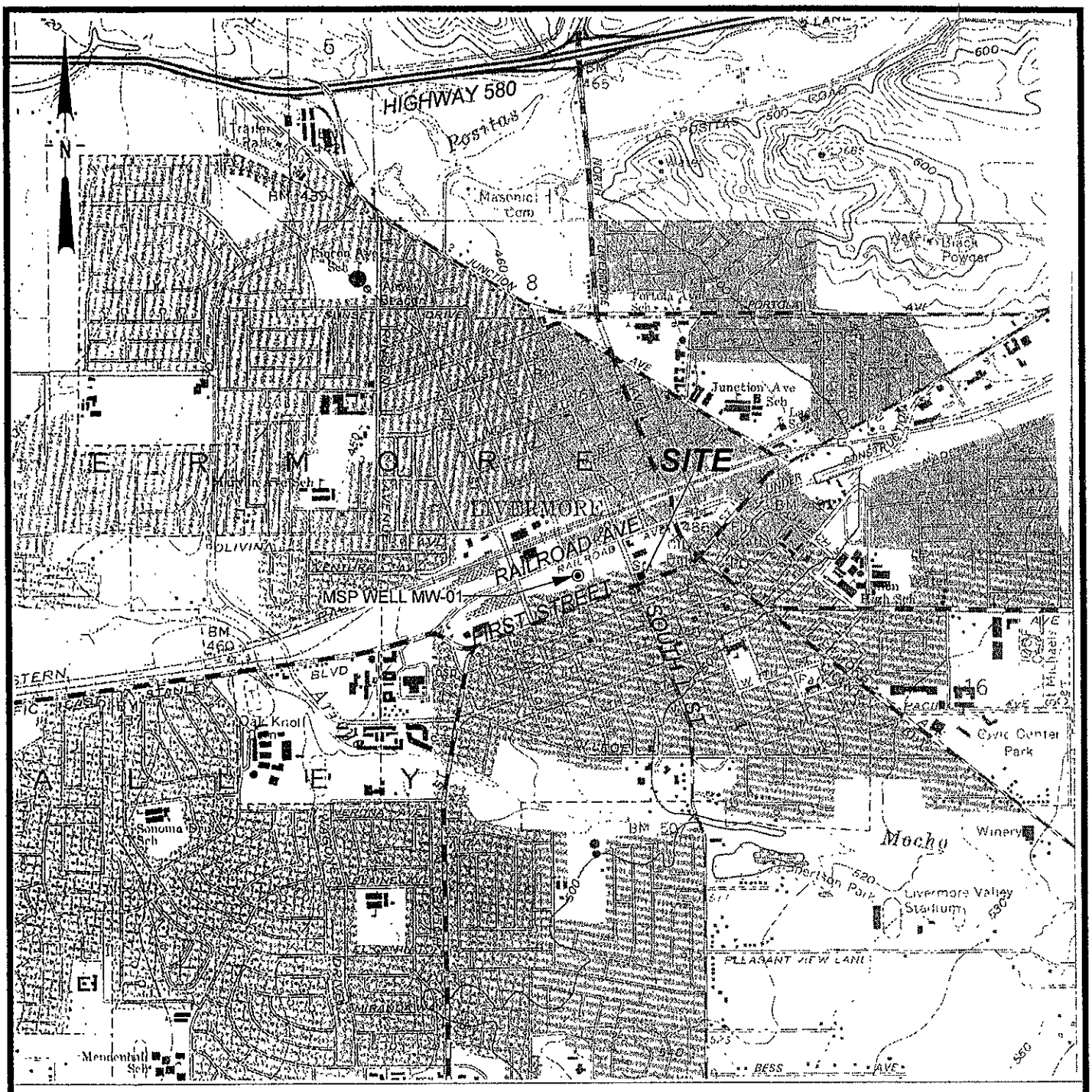
Well No.	Sample Date	TPH-G (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-6	Oct-95	110,000	9,900	22,000	3,200	17,000	47,000
	Feb-96	23,000	2,000	460	2,900	2,600	6,300
	Feb-97	12,000	450	780	200	590	790
	Jul-98	NS**	NS**	NS**	NS**	NS**	NS**
	Nov-98	NS*	NS*	NS*	NS*	NS*	NS*
	Mar-99	5,700	240	260	120	440	150
	Jun-99	7,610	259	334	283	567	275
	Dec-99	NS*	NS*	NS*	NS*	NS*	NS*
	Mar-00	10,100	276	170	200	673	159
	Jun-00	NS*	NS*	NS*	NS*	NS*	NS*
MW-7	Jul-99	5,090	31.9	4.8	60	219	43.6
	Sep-99	2,160	2.8	8.2	5.9	27.3	14.0
	Dec-99	2,630	<2.5	<2.5	13.8	44.9	26.3
	Mar-00	624	<0.5	<0.5	<0.5	1.61	3.87
	Jun-00	435	<0.5	<0.5	0.875	1.28	4.87
	Sep-00	327	<0.5	<0.5	0.602	1.56	3.77
	Dec-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-01	569	<0.5	2.05	0.533	0.701	4.16
	Jun-01	3,900	3.5	14	29	55	18
MW-8	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	88.5
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	52
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	47.3
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	4.65
	Jun-00	<50	<0.5	<0.5	<0.5	<0.5	5.56
	Sep-00	<50	<0.5	<0.5	<0.5	<0.5	14.3
	Dec-00	<50	<0.5	<0.5	<0.5	<0.5	7.83
	Mar-01	<50	<0.5	<0.5	<0.5	<0.5	2.93
	Jun-01	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-9	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Dec-99	NS	NS	NS	NS	NS	NS
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Sep-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-10	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	46.5
	Mar-00	52.7	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Sep-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-01	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-01	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-11	Jun-99	91	0.7	2.0	1.1	2.6	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Sep-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5

Table 3
Historical Groundwater Analytical Results
B&C Gas Mini Mart
Livermore, California

Well No.	Sample Date	TPH-G (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-12	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Sep-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-01	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-01	<50	<0.5	<0.5	<0.5	<0.5	<2.5
MW-13	Jul-99	214	42.8	<0.5	4.5	<0.5	332
	Sep-99	<100	5.8	<1	<1	<1	160
	Dec-99	71	6.7	<0.5	1.4	<0.5	132
	Mar-00	<50	2.32	<0.5	<0.5	<0.5	53.5
	Jun-00	<50	7.83	<0.5	0.732	<0.5	38.8
	Sep-00	<50	6.01	<0.5	<0.5	<0.5	77.4
	Dec-00	<50	1.51	<0.5	<0.5	<0.5	25.0
	Mar-01	83.9	4.92	<0.5	<0.5	1.02	64.7
	Jun-01	190	14	<0.5	4.9	0.91	100
D-1	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Sep-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
D-2	Jun-99	<50	<0.5	<0.5	<0.5	<0.5	<2
	Sep-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-99	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Sep-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Dec-00	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Mar-01	<50	<0.5	<0.5	<0.5	<0.5	<2.5
	Jun-01	<50	<0.5	<0.5	<0.5	<0.5	<2.5
(MS)MW-1	Aug-95	11,000	190	260	110	900	210
	Jul-98	NS**	NS**	NS**	NS**	NS**	NS**
	Nov-98	10,000	260	120	500	1,100	200
	Mar-99	NS**	NS**	NS**	NS**	NS**	NS**
	Jun-99	NS**	NS**	NS**	NS**	NS**	NS**
	Dec-99	661	9.7	3.5	21.7	31.1	7.2
	Mar-00	NS**	NS**	NS**	NS**	NS**	NS**
	Jun-00	NS**	NS**	NS**	NS**	NS**	NS**
	Sep-00	NS**	NS**	NS**	NS**	NS**	NS**
	Dec-00	NS**	NS**	NS**	NS**	NS**	NS**
	Mar-01	NS**	NS**	NS**	NS**	NS**	NS**
	Jun-01	NS**	NS**	NS**	NS**	NS**	NS**

ug/l = micrograms per liter
TPH-G = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary-butyl ether
MS = Mill Springs Park

NA= not analyzed NS= not sampled
* = well inaccessible ** = free product hydrocarbon present
*** = analytical result from EPA method 8260B
ND = not detected above reporting limit, limit not available
< = less than method reporting limit



Base map: USGS 7.5' topography, Livermore, California (1961; photorevised 1980)

I/BNC/103/FIGURES/SITELOC.DSF 4/22/99

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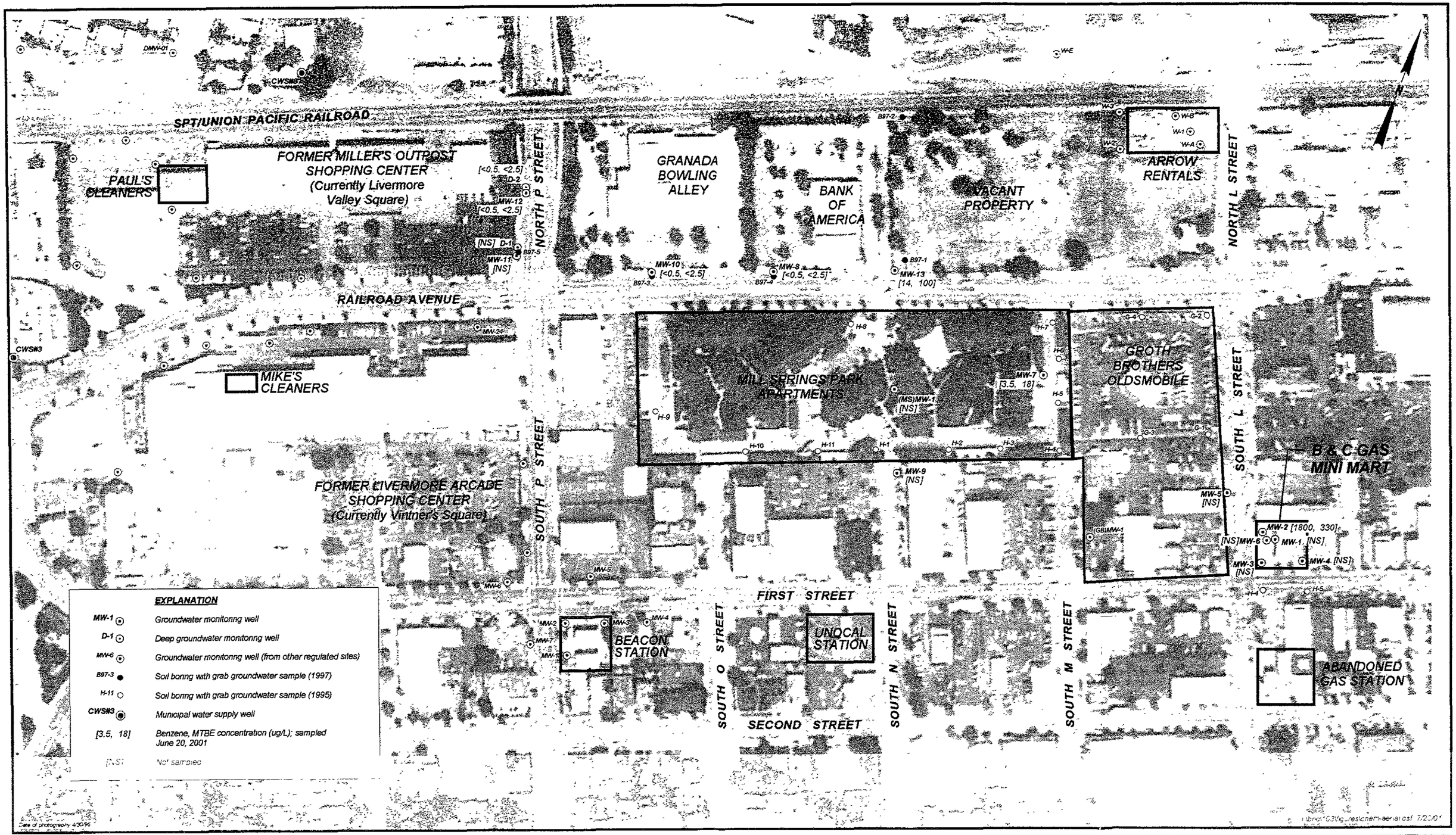
GROUNDWATER MONITORING
B & C GAS MINI MART
LIVERMORE, CALIFORINA

SITE LOCATION MAP

FIGURE 1

PROJECT NO. BNC103



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EFW

SCALE 0 200 400 FEET

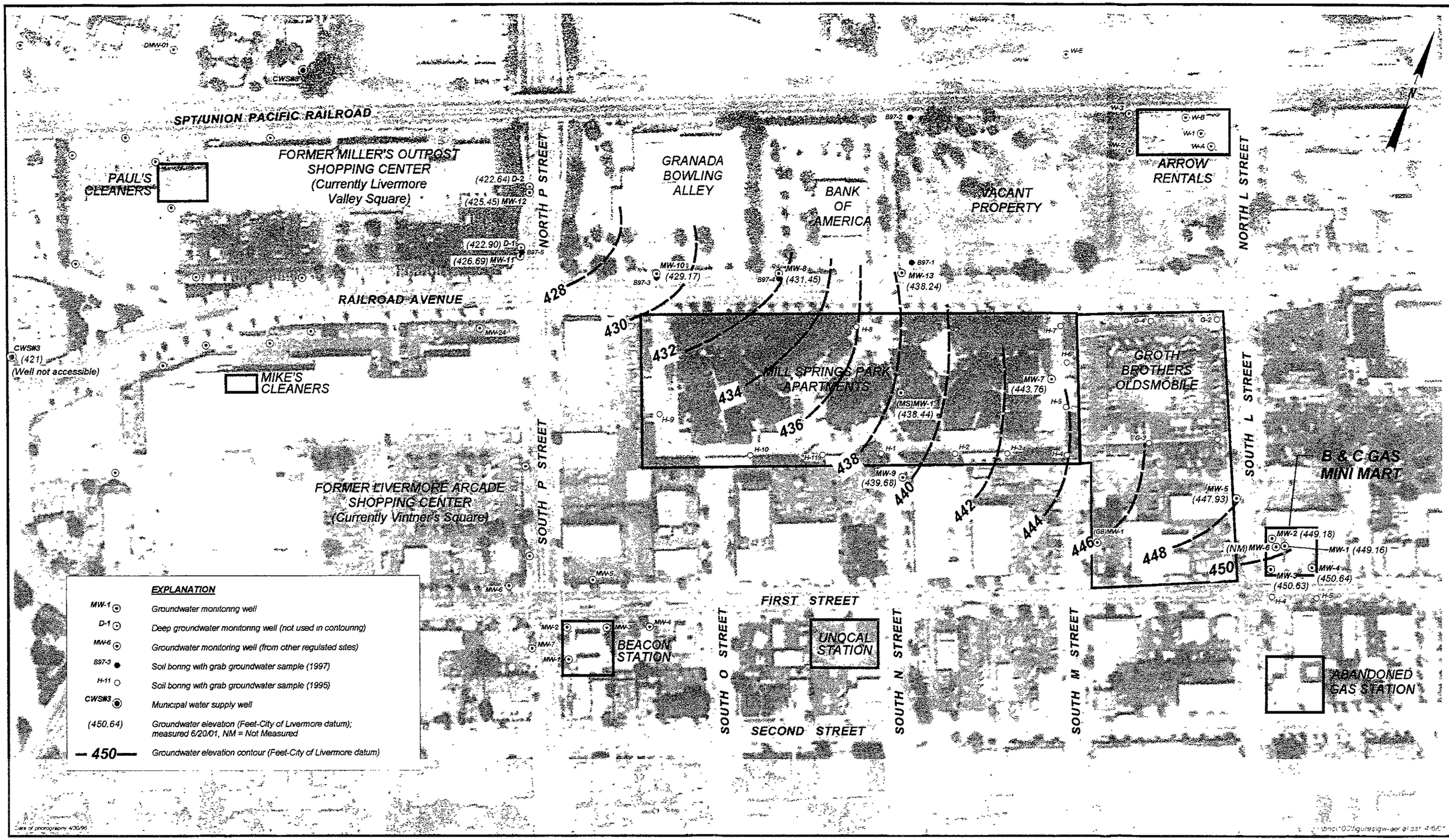
(APPROXIMATE)

GROUNDWATER MONITORING
B & C GAS MINI MART
LIVERMORE, CALIFORNIA

GROUNDWATER CHEMISTRY (JUNE 2001)

FIGURE
3

PROJECT NO
BNC103



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EFW

SCALE 0 200 400 FEET

(APPROXIMATE)

GROUNDWATER MONITORING
B & C GAS MINI MART
LIVERMORE, CALIFORNIA

WELL LOCATIONS AND GROUNDWATER CONTOURS (JUNE 2001)

FIGURE 2

PROJECT NO BNC103

WATER LEVEL DATA SHEET

Conor Pacific

Project: B&C Gas Mini Mart

Project No.: BNC103

Date(s): 6/20/01

Name: NMarks

Weather: Sunny, hot Sounder #: 3001

Well	Date	DTTP (TOC)	DTW (TOC)	Total Depth	Meas. By	Comments
MW-1	6/20/01	—	34.91	74.94	NM	damage to top of well
MW-2			54.68	56.1		
MW-3		—	33.61	57.77		
MW-4		~~34.40~~	34.40	59.89		
MW-5		33.87	34.04	NM	NM	measured with keck
MW-6			dry	23.57		obstructed.
MW-7			34.38	49.0		
MW-8			41.78	53.2		
MW-9			37.40	44.0		
MW-10			42.25	53.8		
MW-11			38.24	48.8		
MW-12			32.89	43.3		
MW-13			36.55	54.3		
D-1			41.80	124.0		
D-2			34.97	111.1		
MS MW01			39.35	NM		brown globules of product

Conor Pacific | **EFW**

WATER SAMPLE FIELD DATA

LOCATION: BhC Gas Mini Mart
SAMPLE ID: MW-2
PROJECT NO: BNC103
SAMPLED BY: NMarkes
CLIENT: BhC Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ✓ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 56.1	Volume in Casing (gal): 14.14
Depth to Water (ft): 34.68	Calculated Purge (volumes / gal.): 14.14
Height of Water Column (ft): 21.42	Actual Pre-Sampling Purge (gal): 14.5

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump ✓ 51' Dedicated____ Other____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1435	5.0	23.2	1020	7.00	gry	mod	Strong odor	/ particulates
1443	10.0	22.3	1030	7.04	gry	↓	↓	
1453	14.5	24.2	1050	6.97	gry	↓	↓	

Purge Date: 6/22/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer 51'
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1515	24.4	1040	6.89	1.50	gry	152	—

Sheen: slight spotty Odor: Strong - hydrocarbon Sample Date: 6/22/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS: 1 casing volume purge. Brown slime is coating exterior of dedicated tubing and pump housing and cable.

SIGNATURE: _____ DATE: 6/22/01

Conor Pacific | **EFW**

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-5
PROJECT NO: BNC103
SAMPLED BY: N. Marks
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY: _____

SAMPLE TYPE: Groundwater ✓ Surface Water _____ Leachate _____ Treatment System _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ___ 4 ✓ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

~~Well Total Depth (ft)~~: DTFP: 33.89
Depth to Water (ft): 34.04
Height of Water Column (ft): ___

Volume in Casing (gal): ___
Calculated Purge (volumes / gal.): ___
Actual Pre-Sampling Purge (gal): ___

PURGE:

Device (Depth of Intake from TOC): S.S. Bailer_____ Teflon Bailer_____ PVC Bailer_____ Disp. Bailer_____
PVC Hand Pump _____ Peristaltic Pump _____ Centrifugal Pump _____ Bladder Pump _____
Pneumatic Displacement Pump_____ Electric Submersible Pump_____ Dedicated_____ Other_____
Purge Water Containment: _____
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: _____

SAMPLE:

Device (Depth of Intake from TOC): S.S. Bailer_____ Teflon Bailer_____ PVC Bailer_____ Disp. Bailer_____
PVC Hand Pump _____ Peristaltic Pump _____ Centrifugal Pump _____ Bladder Pump _____
Pneumatic Displacement Pump_____ Electric Submersible Pump_____ Dedicated_____ Other_____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba _____ Omega _____ QuickCheck _____ D.O. Test Kit _____

REMARKS: Floating product present; no samples collected. Re-installed cage with absorbant sock

SIGNATURE: _____ DATE: 6/20/01

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-7
PROJECT NO: BNC103
SAMPLED BY: NMarks
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 49.0
Volume in Casing (gal): 2.49
Depth to Water (ft): 34.38
Calculated Purge (volumes / gal.): 7.45
Height of Water Column (ft): 14.62
Actual Pre-Sampling Purge (gal): 7.5

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ✓ Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1328	2.5	23.4	960	7.30	brown	high	—	—
1334	5.0	20.7	940	7.15	brown	high	—	—
1340	7.5	20.5	940	7.10	brown	high	—	—

Purge Date: 6/22/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer 44'
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1350	22.0	950	7.19	2.09	brn	7999	—

Sheen: — Odor: — Sample Date: 6/22/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS:

SIGNATURE: [signature] DATE: 6/23/01

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: BNC Gas Mini Mart
SAMPLE ID: MW-3
PROJECT NO: BNC103
SAMPLED BY: NMarks
CLIENT: B & C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 53.2	Volume in Casing (gal): 1.94
Depth to Water (ft): 41.78	Calculated Purge (volumes / gal.): 5.82
Height of Water Column (ft): 11.42	Actual Pre-Sampling Purge (gal): 6.0

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ✓ Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1036	2.0	20.4	1010	7.27	lt brn.	mod	—	—
1044	4.0	20.2	1010	7.19	lt brn	mod/high	—	—
1049	6.0	19.8	1010	7.18	lt brn	mod/high	—	—

Purge Date: 6/21/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer 48'
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1055	21.0°C	1010	7.17	3.23	lt brn	>999	—

Sheen: — Odor: — Sample Date: 6/21/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS:

6/21/01 Calibration: 0916 / T°C 19.2 / pH 7.02 span 10.05 / EC 2060 / Turb 0 / D.O. Auto

SIGNATURE: _____ DATE: 6/21/01

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-10
PROJECT NO: BNC103
SAMPLED BY: MMarks
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 53.8	Volume in Casing (gal): 1.96
Depth to Water (ft): 42.25	Calculated Purge (volumes / gal.): 5.89
Height of Water Column (ft): 11.55	Actual Pre-Sampling Purge (gal): 6.0

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer ✓ Disp. Bailer____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1157	2.0	21.0	970	7.24	brown	high	—	—
1204	4.0	20.3	970	7.15	brown	high	—	—
1209	6.0	19.9°C	980	7.10	brown	high	—	—

Purge Date: 6/21/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer 48'
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1218	21.2	980	7.00	2.86	brown	>999	—

Sheen: — Odor: — Sample Date: ____

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: ____

SIGNATURE: ____ DATE: 6/21/01

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MW-12
PROJECT NO: BNC103
SAMPLED BY: NMarks
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:

SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT: (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 43.3
Depth to Water (ft): 32.89
Height of Water Column (ft): 10.41
Volume in Casing (gal): 1.76
Calculated Purge (volumes / gal.): 5.31
Actual Pre-Sampling Purge (gal): 5.5

PURGE:

Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer 38' Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1332	2.0	22.0	970	7.22	brown	high	—	—
1337	4.0	20.9	980	—	brown	high	—	—
1356	5.5	22.2	1020	7.05	brown	high	—	—

Purge Date: 6/21/01

SAMPLE:

Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer 38'
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1405	22.0	980		3.78	brown	7999	—

Sheen: — Odor: — Sample Date: 6/21/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____

REMARKS: Horiba would read pH. Attempted to recalibrate, to no effect.

SIGNATURE: ____ DATE: 6/21/01

Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas mini mart — SAMPLE ID: MW-13
PROJECT NO: BNC 103 — SAMPLED BY: NMarks
CLIENT: B&C Gas Mini Mart — REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT: (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): ~~Measured~~ 54.3 — Volume in Casing (gal): 3.082
Depth to Water (ft): 36.55 — Calculated Purge (volumes / gal.): 9.06
Height of Water Column (ft): 17.75 — Actual Pre-Sampling Purge (gal): 9.5

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ✓ Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: Drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1405	3.0	22.9	0940	7.28	tan/brown	V. high	floating/coagulating black y lab*	
1420	6.0	21.3	0960	7.16	tan/brown	V high	"	
1430	9.5	20.7	0970	7.10	tan/brown	V. high	"	

Purge Date: 6/20/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer 419
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1440	21.8	0970	7.12	1.50	brown	983	*

Sheen: — Odor: slight Sample Date: 6/20/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS: * floating, coagulating black particles

6/20/01 Calibration: 1113/pH TC 25°C / pH 7.00 span 10.00/EC 2060/DO Auto/Turb 0

SIGNATURE: _____ **DATE:** 6/20/01

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Conor Pacific

EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: D-2
PROJECT NO: BNC103
SAMPLED BY: N Marks
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 111.1	Volume in Casing (gal): 12.94
Depth to Water (ft): 34.97	Calculated Purge (volumes / gal.): 38.82
Height of Water Column (ft): 76.13	Actual Pre-Sampling Purge (gal): 39 gal

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump 100' Dedicated____ Other____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1029	15	22.5	980	7.64	colorless	low	—	—
1039	30	21.5	990	7.36	↓	↓	—	—
1042	39	21.2	990	7.40	↓	↓	—	—

Purge Date: 6/22/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer____ Teflon Bailer____ PVC Bailer____ Disp. Bailer 106'
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump____ Electric Submersible Pump____ Dedicated____ Other____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1101	21.5	980	7.47	5.65	Light brown	162	—

Sheen: — Odor: — Sample Date: 6/22/01

Field Measurement Devices: Horiba ✓ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS:

6/22/01 Calibration 1006/T°C 23.6°C / PH 7.01 spun 10.00 / EC 2060 / DO Auto Turb 0

SIGNATURE: [signature] DATE: 6/22/01

Conor Pacific | EFW

WATER SAMPLE FIELD DATA

LOCATION: B&C Gas Mini Mart
SAMPLE ID: MS MW01
PROJECT NO: BNC103
SAMPLED BY: N Marks
CLIENT: B&C Gas Mini Mart
REGULATORY AGENCY:
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Treatment System ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): NM → 595	Volume in Casing (gal): 3.42
Depth to Water (ft): 39.35	Calculated Purge (volumes / gal.): 10.28
Height of Water Column (ft): 20.15	Actual Pre-Sampling Purge (gal): 10.5

PURGE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer ✓
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: drummed
Field QC Samples Collected at this Well (Equipment or Field Blank): EB-___ FB-___ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1224	0.5					brown	product	present

Purge Date: 6/20/01

SAMPLE:
Device (Depth of Intake from TOC): S.S. Bailer ____ Teflon Bailer ____ PVC Bailer ____ Disp. Bailer ____
PVC Hand Pump ____ Peristaltic Pump ____ Centrifugal Pump ____ Bladder Pump ____
Pneumatic Displacement Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	Electical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other

Sheen: ____ Odor: ____ Sample Date: ____

Field Measurement Devices: Horiba ____ Omega ____ QuickCheck ____ D.O. Test Kit ____
REMARKS: Brown product globules present in 1st and 2nd bailers at start of purge
End purge, no samples collected.

SIGNATURE: ____ DATE: 6/20/01

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
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July 18 , 2001

Mark Smolley
Conor Pacific / EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043
RE: B&C Gas Mini Mart / P106476

Enclosed are the results of analyses for samples received by the laboratory on 06/25/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Michelle M. Portis
Project Manager

CA ELAP Certificate Number 2374

Sequoia Analytical

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Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	**Reported:**
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	P106476-01	Water	06/22/01 15:15	06/25/01 11:00
MW-7	P106476-02	Water	06/22/01 13:50	06/25/01 11:00
MW-8	P106476-03	Water	06/21/01 10:55	06/25/01 11:00
MW-10	P106476-04	Water	06/21/01 12:18	06/25/01 11:00
MW-12	P106476-05	Water	06/21/01 14:05	06/25/01 11:00
MW-13	P106476-06	Water	06/20/01 14:40	06/25/01 11:00
D-2	P106476-07	Water	06/22/01 11:01	06/25/01 11:00

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Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	**Reported:**
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (P106476-01) Water Sampled: 06/22/01 15:15 Received: 06/25/01 11:00									
Gasoline	**20000**	1000	ug/l	20	1060684	06/27/01	06/27/01	EPA 8015M/8020M	
Benzene	**1800**	10	"	"	"	"	"	"	
Toluene	**750**	10	"	"	"	"	"	"	
Ethylbenzene	**1800**	10	"	"	"	"	"	"	
Xylenes (total)	**2700**	10	"	"	"	"	"	"	
Methyl tert-butyl ether	**330**	50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*115 %*	*65-135*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.3 %*	*65-135*		"	"	"	"	
MW-7 (P106476-02) Water Sampled: 06/22/01 13:50 Received: 06/25/01 11:00									
Gasoline	**3900**	250	ug/l	5	1060684	06/27/01	06/27/01	EPA 8015M/8020M	
Benzene	**3.5**	2.5	"	"	"	"	"	"	QR-04
Toluene	**14**	2.5	"	"	"	"	"	"	QR-04
Ethylbenzene	**29**	2.5	"	"	"	"	"	"	
Xylenes (total)	**55**	2.5	"	"	"	"	"	"	
Methyl tert-butyl ether	**18**	12	"	"	"	"	"	"	QR-04
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*65-135*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.7 %*	*65-135*		"	"	"	"	
MW-8 (P106476-03) Water Sampled: 06/21/01 10:55 Received: 06/25/01 11:00									
Gasoline	ND	50	ug/l	1	1060684	06/27/01	06/27/01	EPA 8015M/8020M	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*112 %*	*65-135*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.0 %*	*65-135*		"	"	"	"	

Sequoia Analytical

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Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	**Reported:**
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-10 (P106476-04) Water Sampled: 06/21/01 12:18 Received: 06/25/01 11:00									
Gasoline	ND	50	ug/l	1	1060684	06/27/01	06/27/01	EPA 8015M/8020M	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*111 %*	*65-135*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.7 %*	*65-135*		"	"	"	"	
MW-12 (P106476-05) Water Sampled: 06/21/01 14:05 Received: 06/25/01 11:00									
Gasoline	ND	50	ug/l	1	1060684	06/27/01	06/27/01	EPA 8015M/8020M	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*109 %*	*65-135*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.3 %*	*65-135*		"	"	"	"	
MW-13 (P106476-06) Water Sampled: 06/20/01 14:40 Received: 06/25/01 11:00									
Gasoline	**190**	50	ug/l	1	1060684	06/27/01	06/27/01	EPA 8015M/8020M	
Benzene	**14**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**4.9**	0.50	"	"	"	"	"	"	
Xylenes (total)	**0.91**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**100**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*65-135*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.3 %*	*65-135*		"	"	"	"	

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Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	**Reported:**
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
D-2 (P106476-07) Water Sampled: 06/22/01 11:01 Received: 06/25/01 11:00									
Gasoline	ND	50	ug/l	1	1060684	06/27/01	06/27/01	EPA 8015M/8020M	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*113 %*		*65-135*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.3 %*		*65-135*	"	"	"	"	

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Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	**Reported:**
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (P106476-01RE1) Water Sampled: 06/22/01 15:15 Received: 06/25/01 11:00									
Tert-amyl methyl ether	ND	20	ug/l	20	1070114	07/06/01	07/06/01	EPA 8260B	
Tert-butyl alcohol	ND	400	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	10	"	"	"	"	"	"	
Ethanol	ND	2000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	**240**	10	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*99.2 %*		*88-118*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.2 %*		*81-130*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*84-115*	"	"	"	"	

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Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	**Reported:**
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M - Quality Control
Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060684 - EPA 5030, waters										
Blank (1060684-BLK1)				Prepared & Analyzed: 06/27/01						
Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	*334*		"	*300*		*111*	*65-135*			
Surrogate: 4-Bromofluorobenzene	*295*		"	*300*		*98.3*	*65-135*			
LCS (1060684-BS1)				Prepared & Analyzed: 06/27/01						
Gasoline	2110	50	ug/l	2750		76.7	65-135			
Benzene	32.4	0.50	"	32.0		101	65-135			
Toluene	164	0.50	"	193		85.0	65-135			
Ethylbenzene	45.5	0.50	"	46.0		98.9	65-135			
Xylenes (total)	214	0.50	"	231		92.6	65-135			
Methyl tert-butyl ether	69.7	2.5	"	52.0		134	65-135			
Surrogate: a,a,a-Trifluorotoluene	*340*		"	*300*		*113*	*65-135*			
Surrogate: 4-Bromofluorobenzene	*306*		"	*300*		*102*	*65-135*			
Matrix Spike (1060684-MS1)	**Source: P106476-07**			Prepared & Analyzed: 06/27/01						
Gasoline	2130	50	ug/l	2750	ND	76.1	65-135			
Benzene	34.3	0.50	"	32.0	ND	107	65-135			
Toluene	173	0.50	"	193	ND	89.5	65-135			
Ethylbenzene	47.0	0 50	"	46.0	ND	102	65-135			
Xylenes (total)	229	0.50	"	231	ND	99.1	65-135			
Methyl tert-butyl ether	69.1	2 5	"	52.0	ND	130	65-135			
Surrogate: a,a,a-Trifluorotoluene	*352*		"	*300*		*117*	*65-135*			
Surrogate: 4-Bromofluorobenzene	*292*		"	*300*		*97.3*	*65-135*			

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Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	Reported:
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1060684 - EPA 5030, waters										
Matrix Spike Dup (1060684-MSD1)	**Source: P106476-07**			Prepared & Analyzed: 06/27/01						
Gasoline	2050	50	ug/l	2750	ND	73.2	65-135	3.83	20	
Benzene	33.2	0.50	"	32.0	ND	104	65-135	3.26	20	
Toluene	169	0.50	"	193	ND	87.4	65-135	2.34	20	
Ethylbenzene	47.8	0.50	"	46.0	ND	104	65-135	1.69	20	
Xylenes (total)	227	0.50	"	231	ND	98.3	65-135	0.877	20	
Methyl tert-butyl ether	65.7	2.5	"	52.0	ND	124	65-135	5.04	20	
Surrogate: a,a,a-Trifluorotoluene	*355*		"	*300*		*118*	*65-135*			
Surrogate: 4-Bromofluorobenzene	*290*		"	*300*		*96.7*	*65-135*			

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Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	**Reported:**
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1070114 - EPA 5030 waters										
Blank (1070114-BLK1)				Prepared & Analyzed: 07/06/01						
Tert-amyl methyl ether	ND	1.0	ug/l							
Tert-butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	1.0	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	0.50	"							
Surrogate: Dibromofluoromethane	*4.82*		"	*5.00*		*96.4*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*4.70*		"	*5.00*		*94.0*	*81-130*			
Surrogate: Toluene-d8	*5.06*		"	*5.00*		*101*	*84-115*			
LCS (1070114-BS1)				Prepared & Analyzed: 07/06/01						
Methyl tert-butyl ether	5.91	0.50	ug/l	5.00		118	79-118			
Surrogate: Dibromofluoromethane	*4.99*		"	*5.00*		*99.8*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*4.97*		"	*5.00*		*99.4*	*81-130*			
Surrogate: Toluene-d8	*5.04*		"	*5.00*		*101*	*84-115*			
Matrix Spike (1070114-MS1)		**Source: P106476-01**		Prepared & Analyzed: 07/06/01						
Methyl tert-butyl ether	374	10	ug/l	100	240	134	79-118			QM-07
Surrogate: Dibromofluoromethane	*5.35*		"	*5.00*		*107*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*4.88*		"	*5.00*		*97.6*	*81-130*			
Surrogate: Toluene-d8	*5.18*		"	*5.00*		*104*	*84-115*			
Matrix Spike Dup (1070114-MSD1)		**Source: P106476-01**		Prepared & Analyzed: 07/06/01						
Methyl tert-butyl ether	378	10	ug/l	100	240	138	79-118	1.06	20	QM-07
Surrogate: Dibromofluoromethane	*5.04*		"	*5.00*		*101*	*88-118*			
Surrogate: 1,2-Dichloroethane-d4	*4.86*		"	*5.00*		*97.2*	*81-130*			
Surrogate: Toluene-d8	*5.19*		"	*5.00*		*104*	*84-115*			

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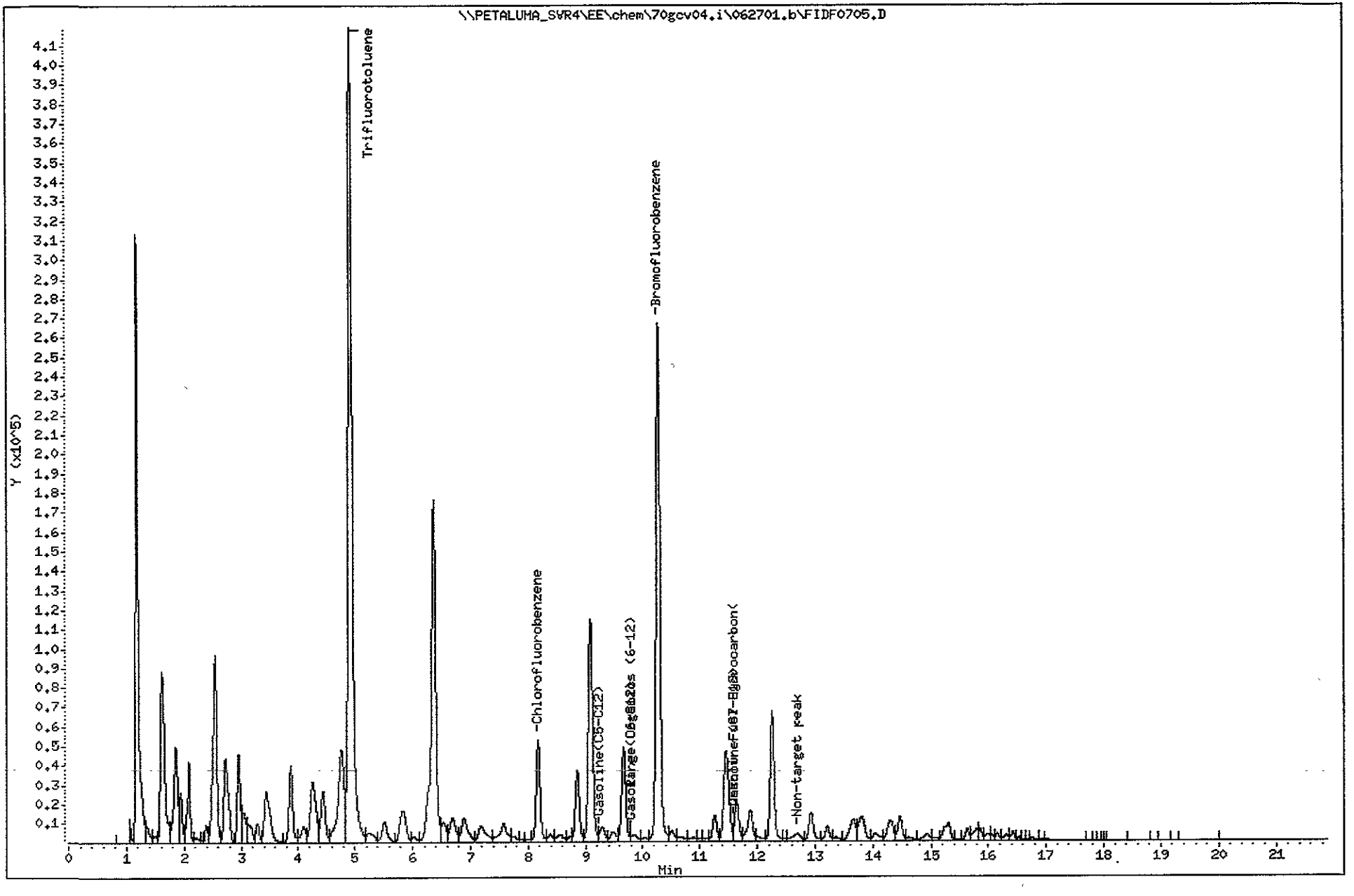
Conor Pacific / EFW	Project: B&C Gas Mini Mart	
2580 Wyandotte St., Suite G	Project Number: BNC103	**Reported:**
Mountain View CA, 94043	Project Manager: Mark Smolley	07/18/01 15:38

Notes and Definitions

QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR-04	The results between the primary and confirmation columns varied by greater than 40% RPD. The results may still be useful for their intended purpose.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Data File: \\PETALUMA_SVR4\EE\chem\70gcv04.i\062701.b\FIDF0705.D
Date : 27-JUN-2001 08:23
Client ID: VSTD1000GC
Lab Sample ID: VSTD1000GC
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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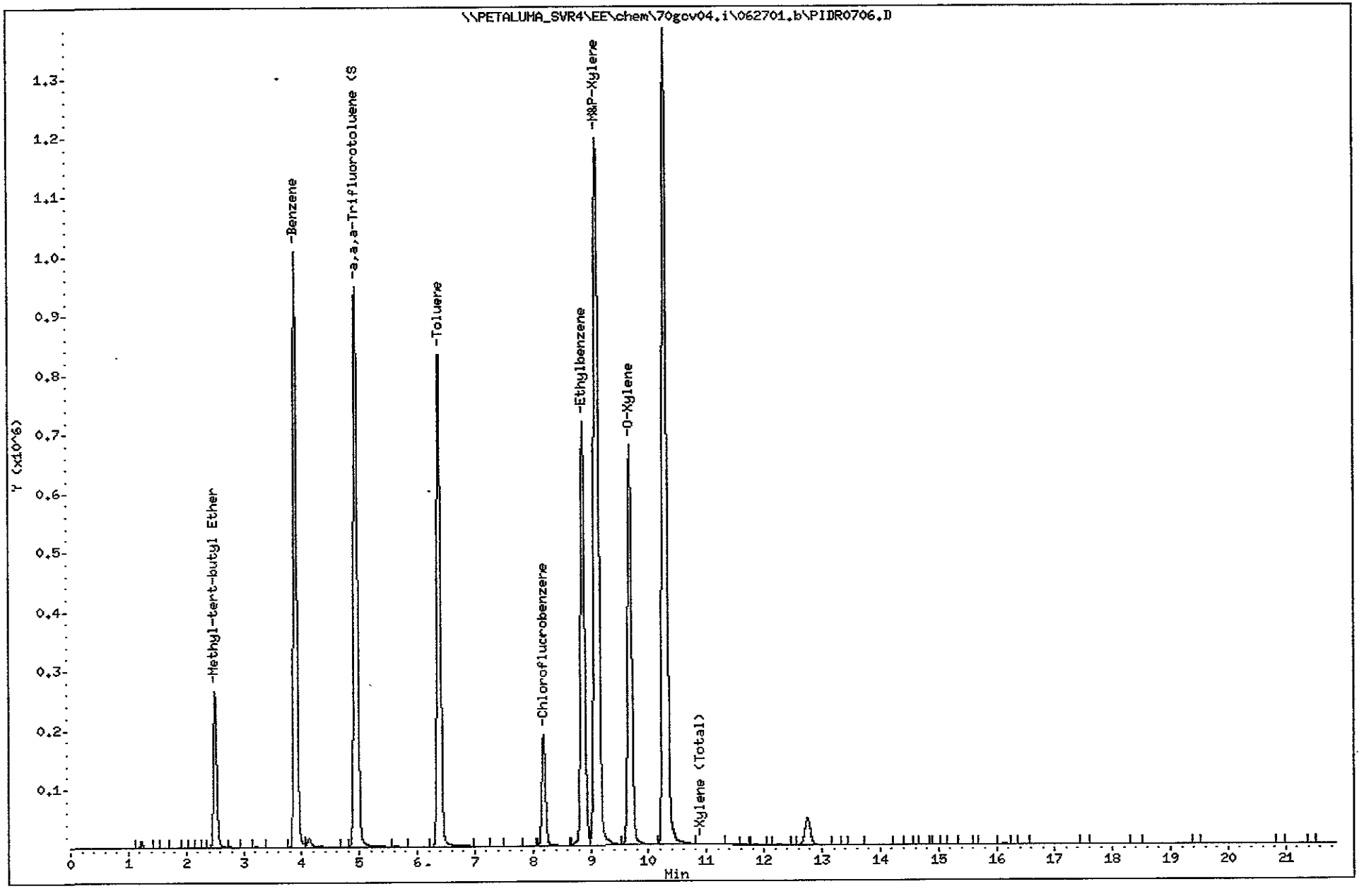
Date : 27-JUN-2001 08:50
Client ID: VSTD100BC
Lab Sample ID: VSTD100BC
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



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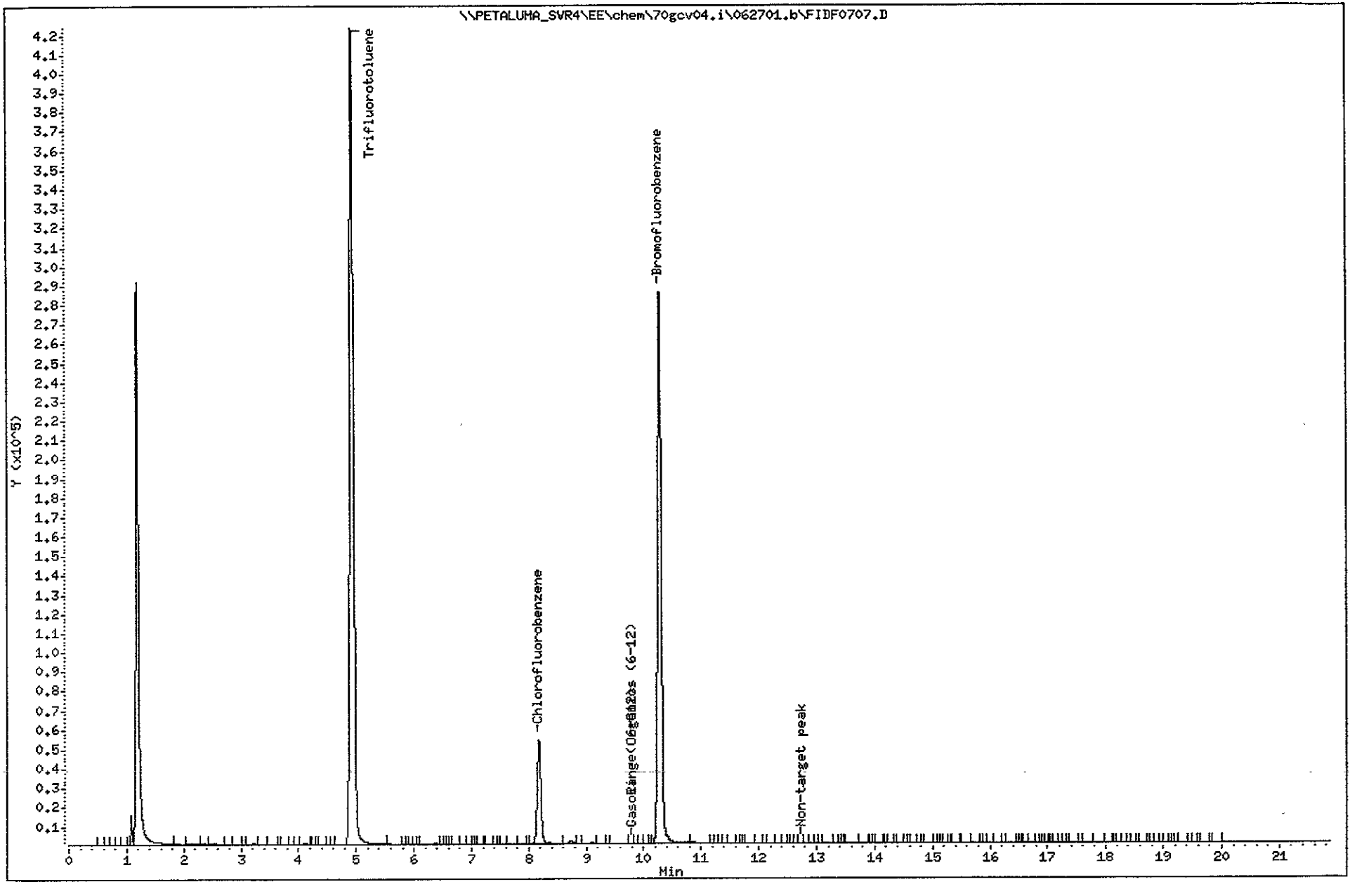
Client ID: BLK
Lab Sample ID: 1060684-BLK1
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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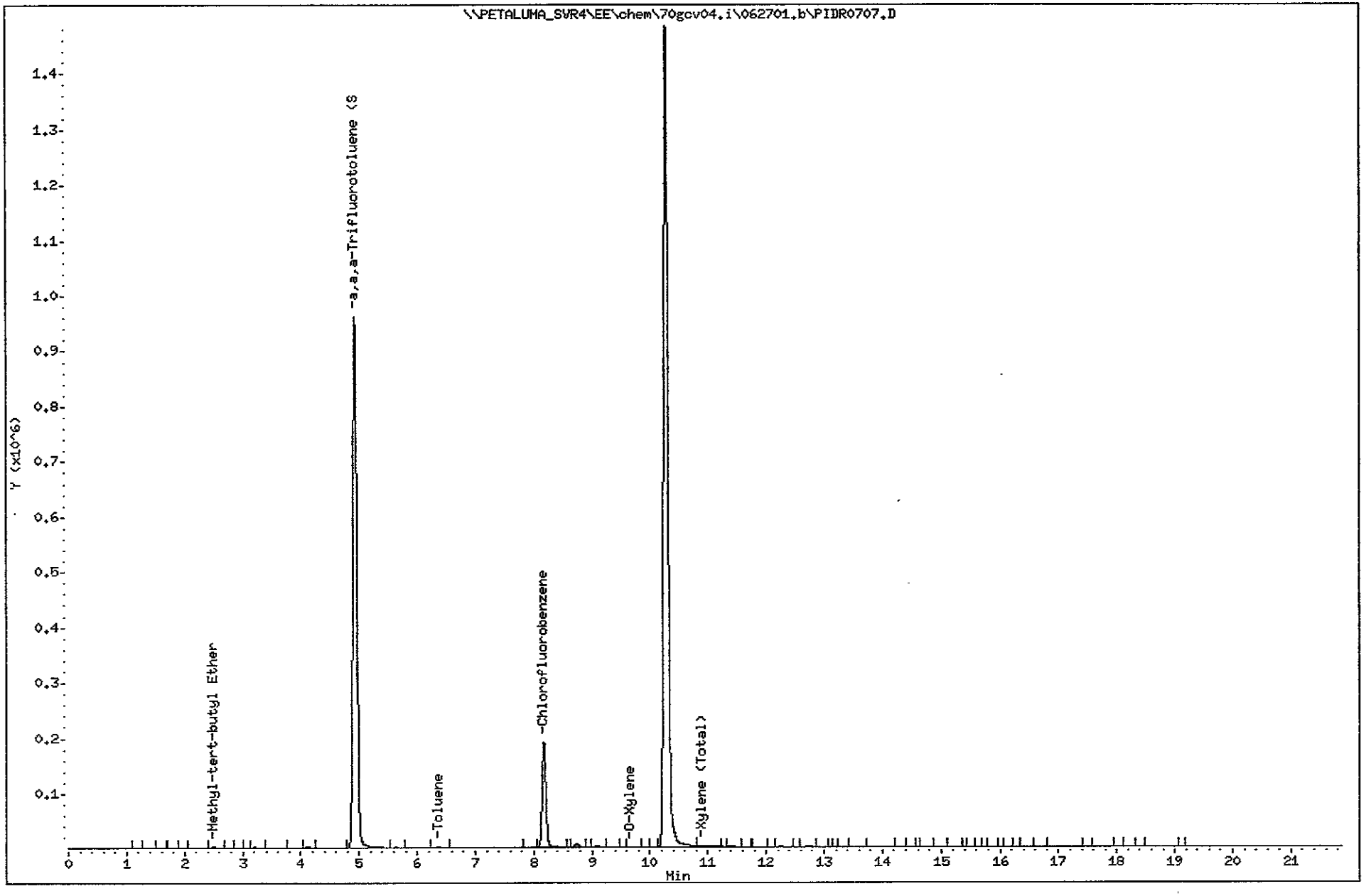
Client ID: BLK
Lab Sample ID: 1060684-BLK1
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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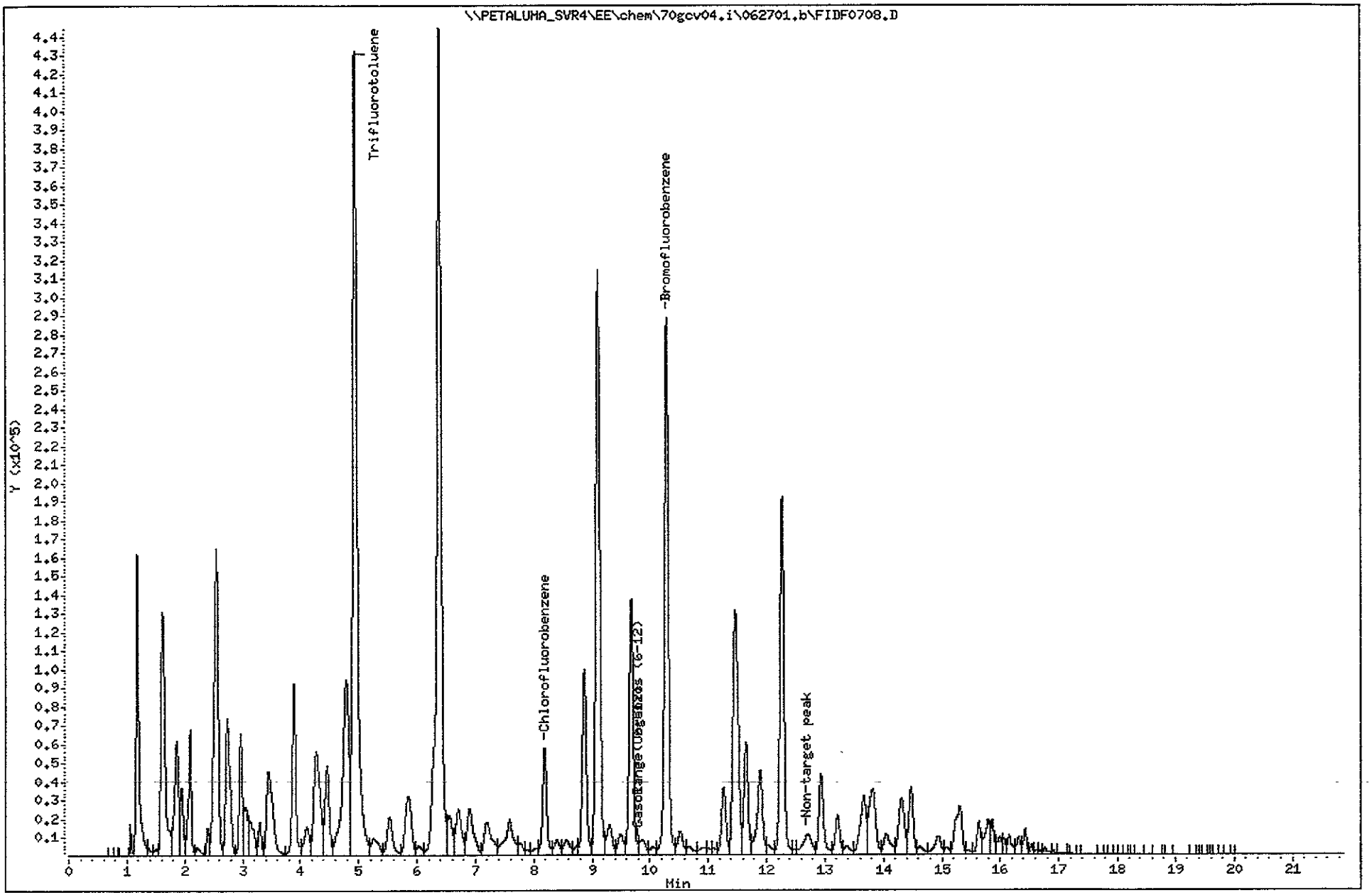
Client ID: BLKLCS
Lab Sample ID: 1060684-BS1
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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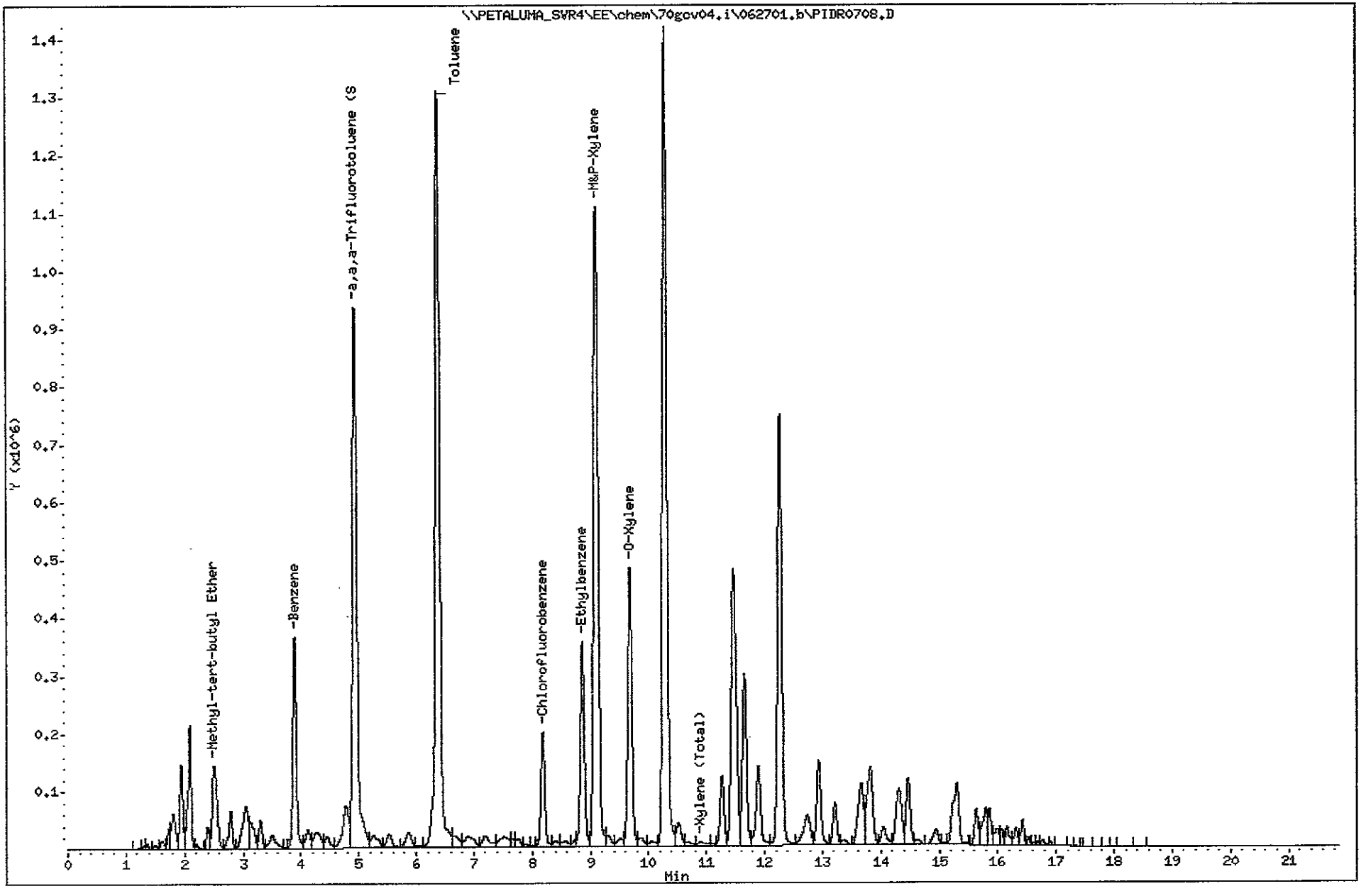
Client ID: BLKLCS
Lab Sample ID: 1060684-BS1
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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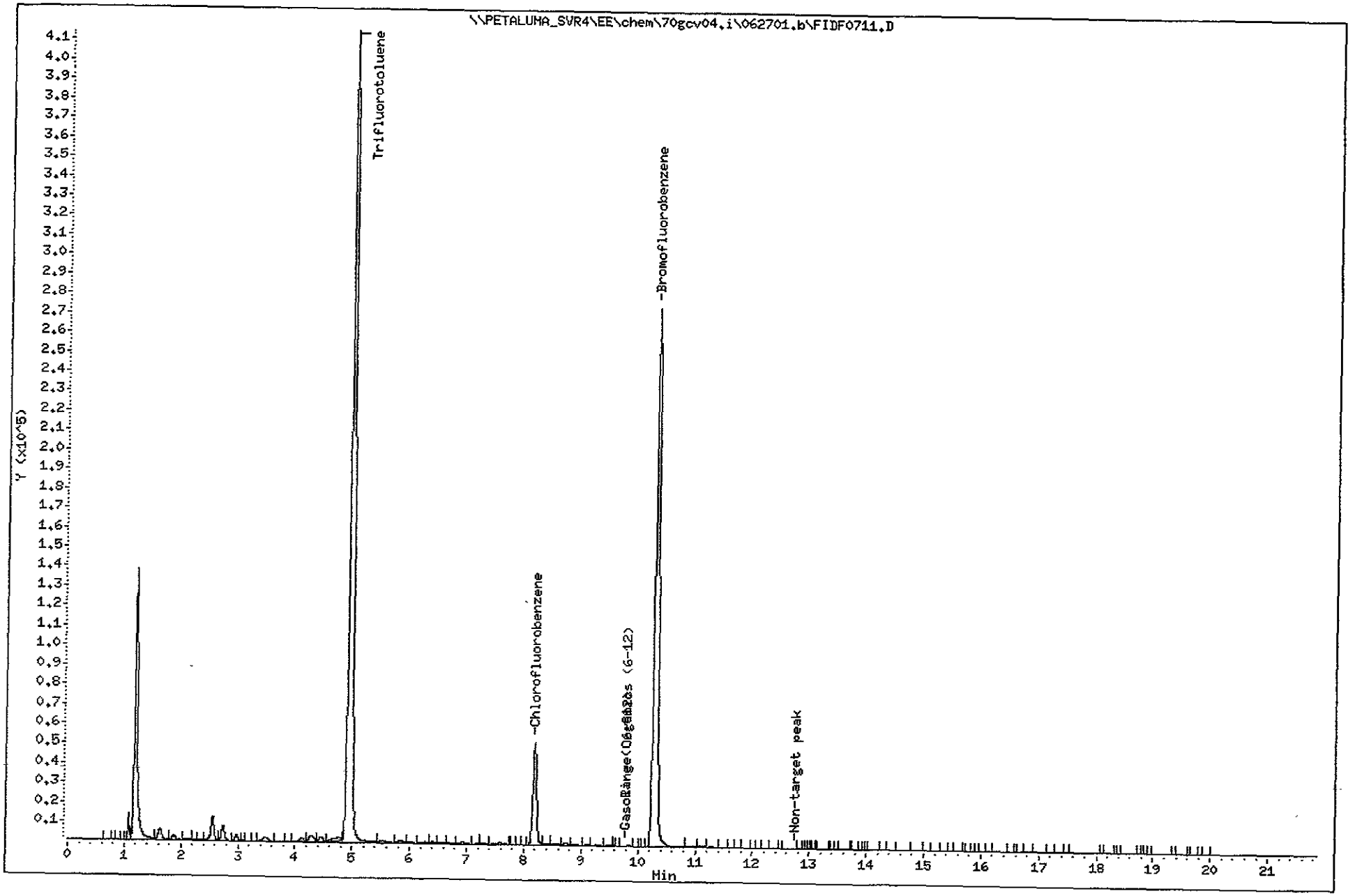
Client ID: D-2
Lab Sample ID: P106476-07
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



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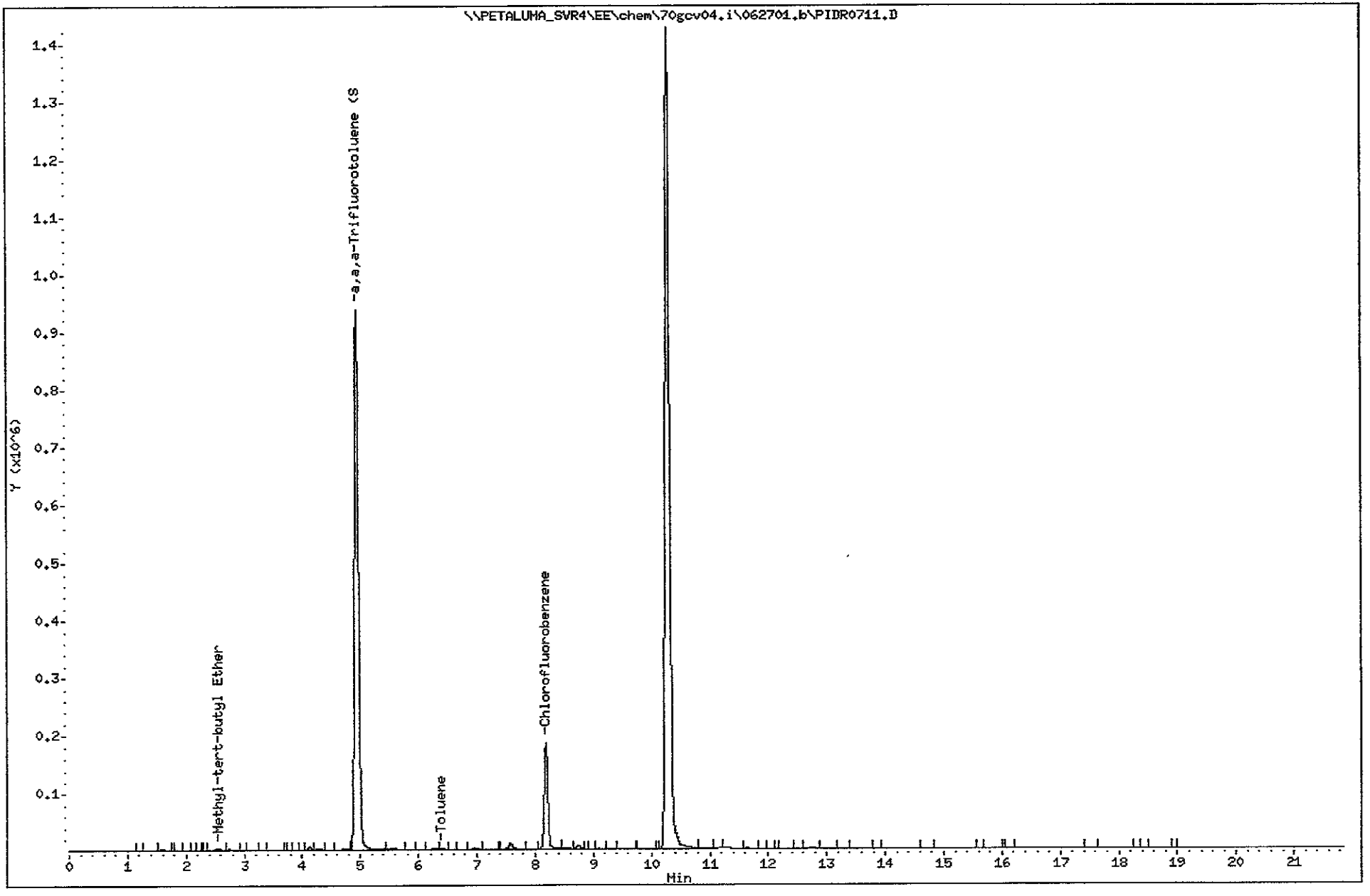
Lab Sample ID: P106476-07
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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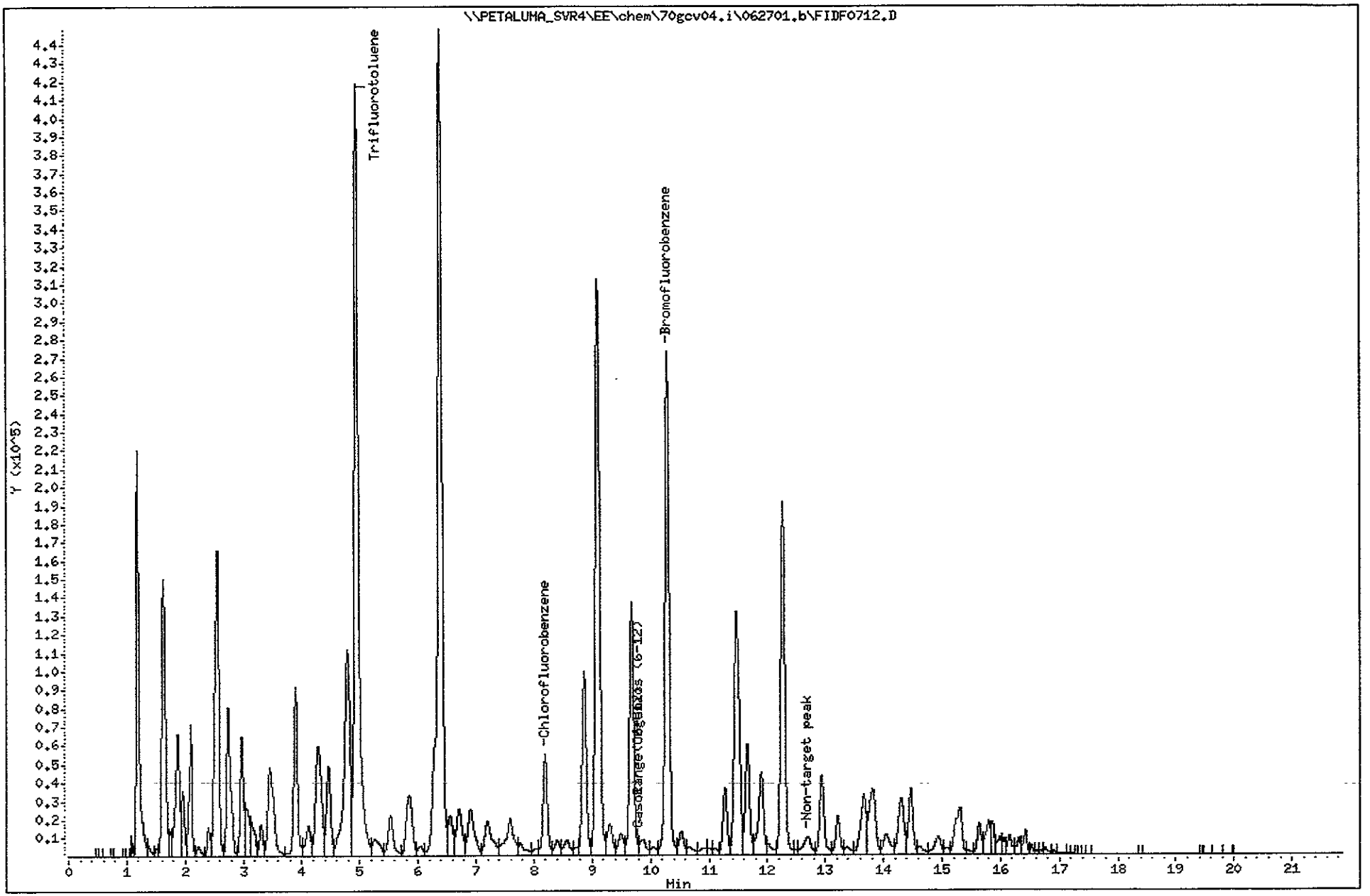
Client ID: D-2MS
Lab Sample ID: 1060684-MS1
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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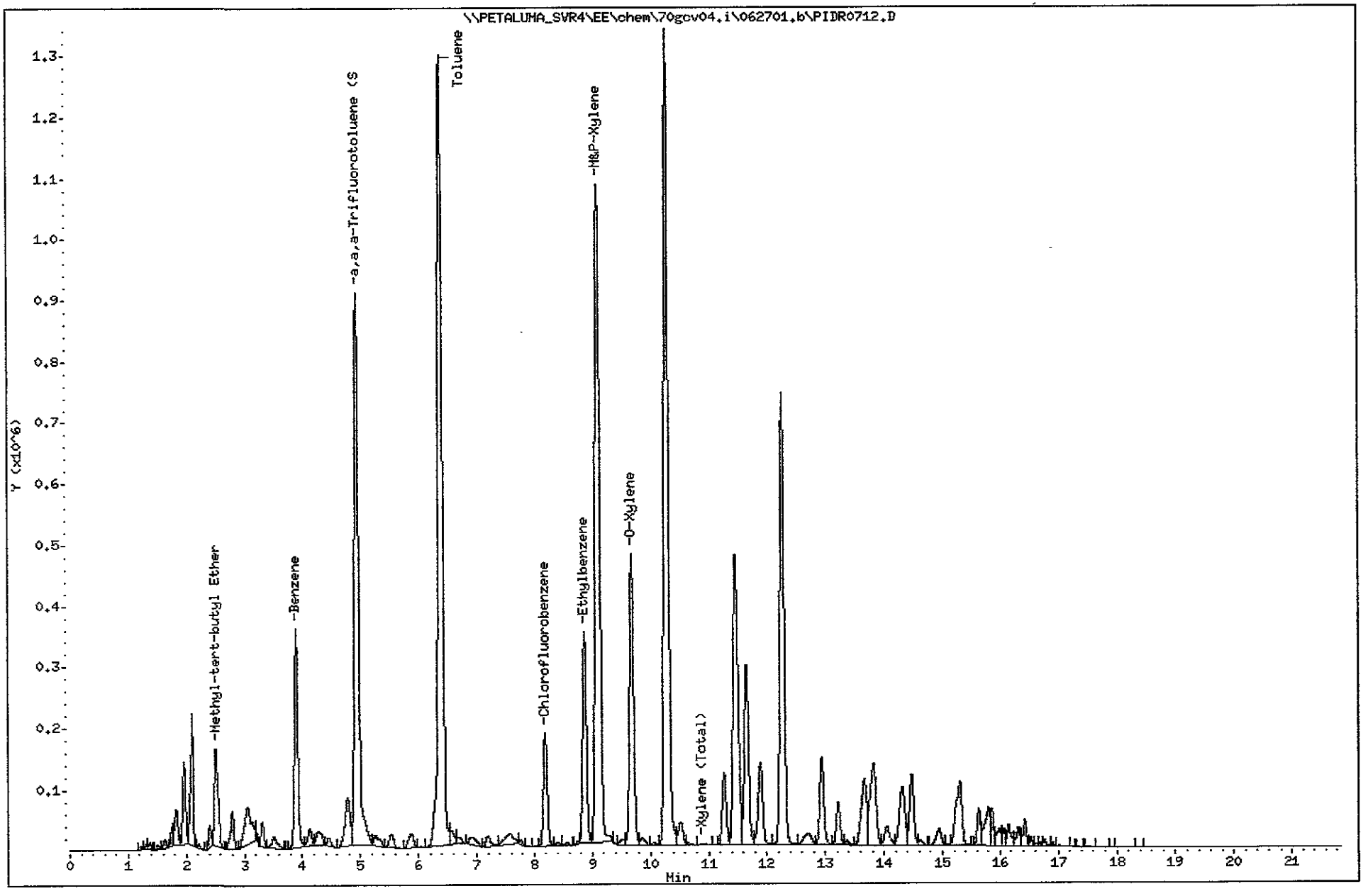
Lab Sample ID: 1060684-MS1
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



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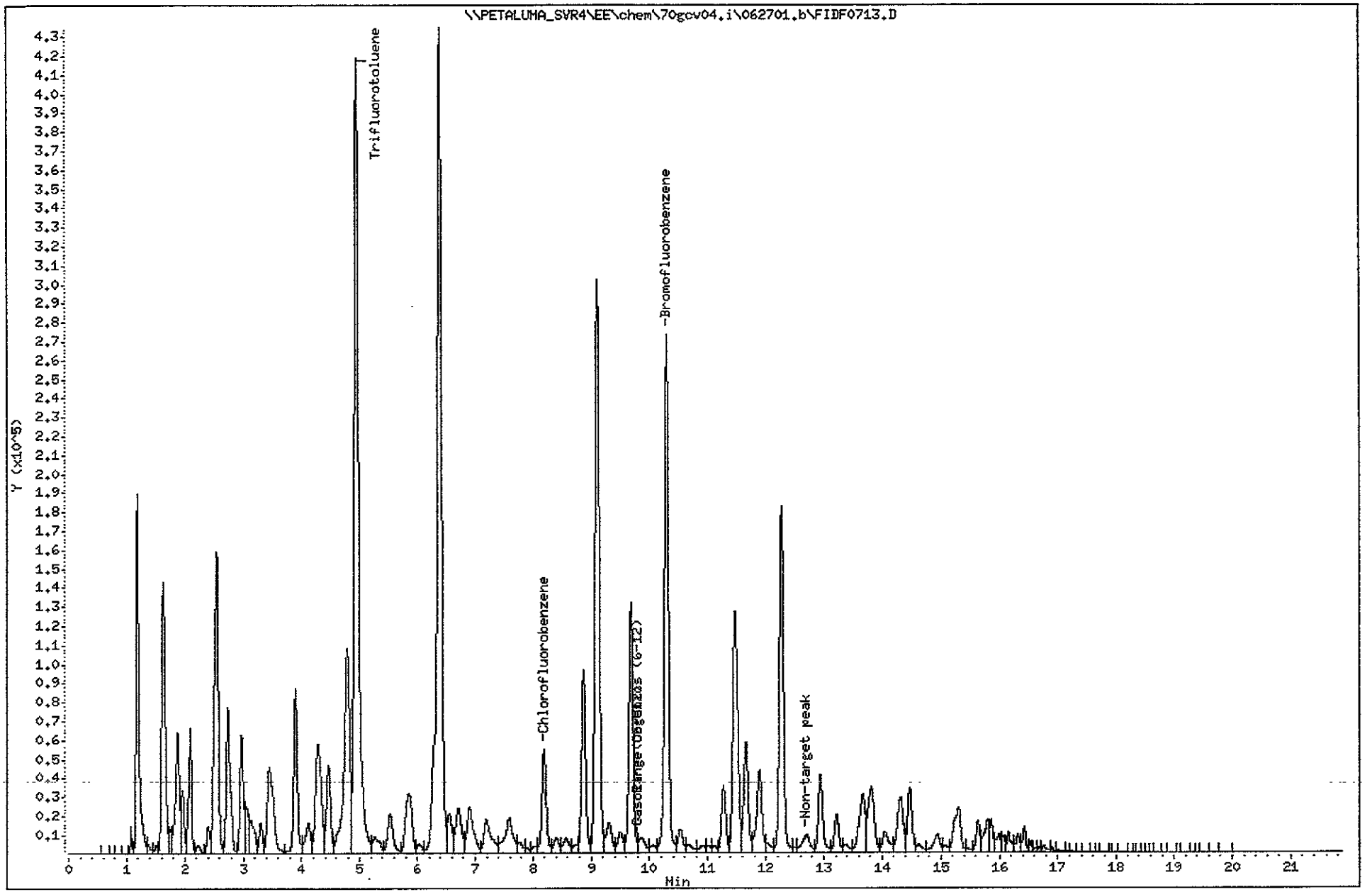
Client ID: D-2MSD
Lab Sample ID: 1060684-MSD1
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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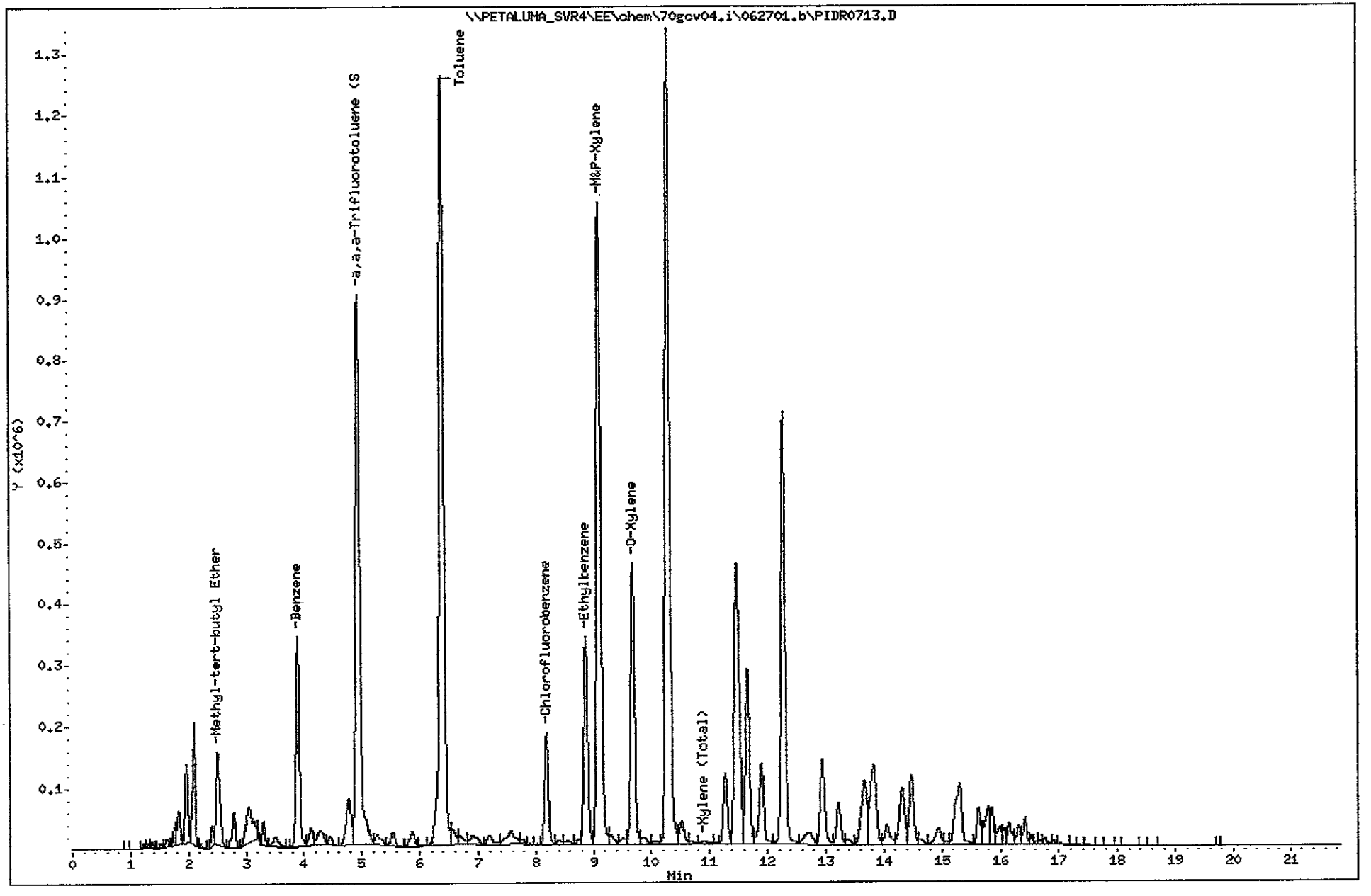
Client ID: D-2MSD
Lab Sample ID: 1060684-MSD1
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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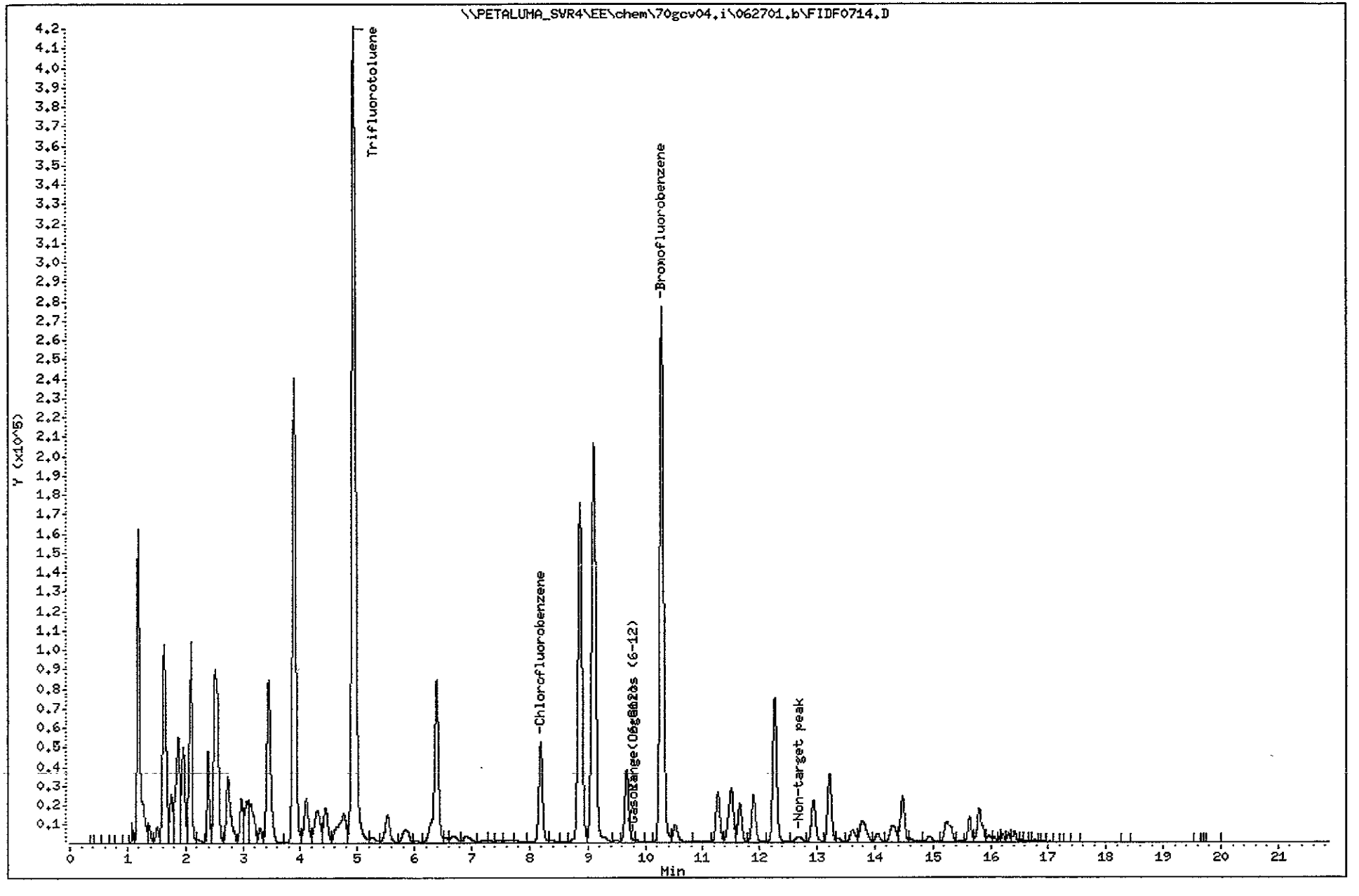
Date : 27-JUN-2001 12:57
Client ID: MW-2
Lab Sample ID: P106476-01
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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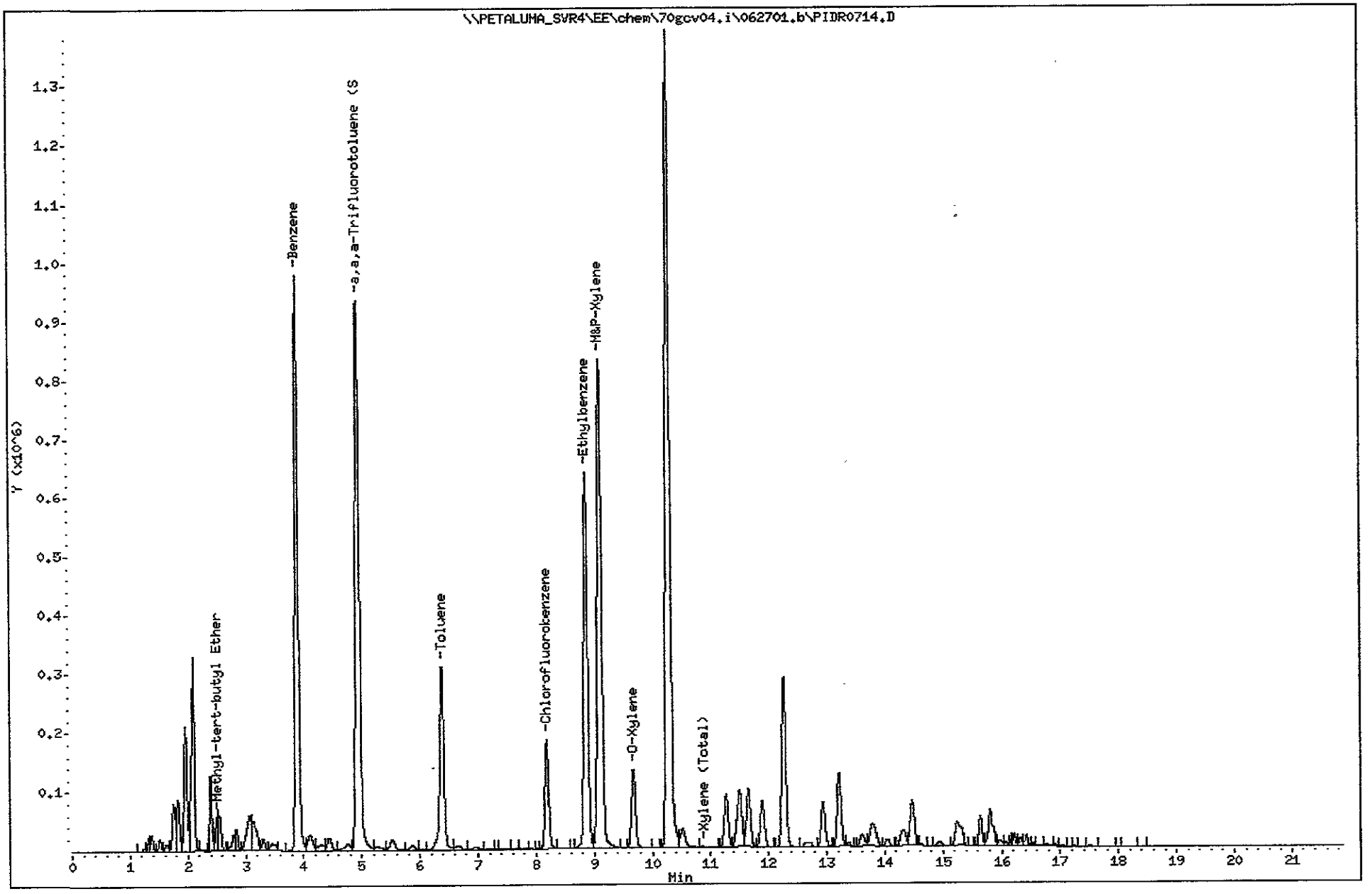
Client ID: MW-2
Lab Sample ID: P106476-01
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i

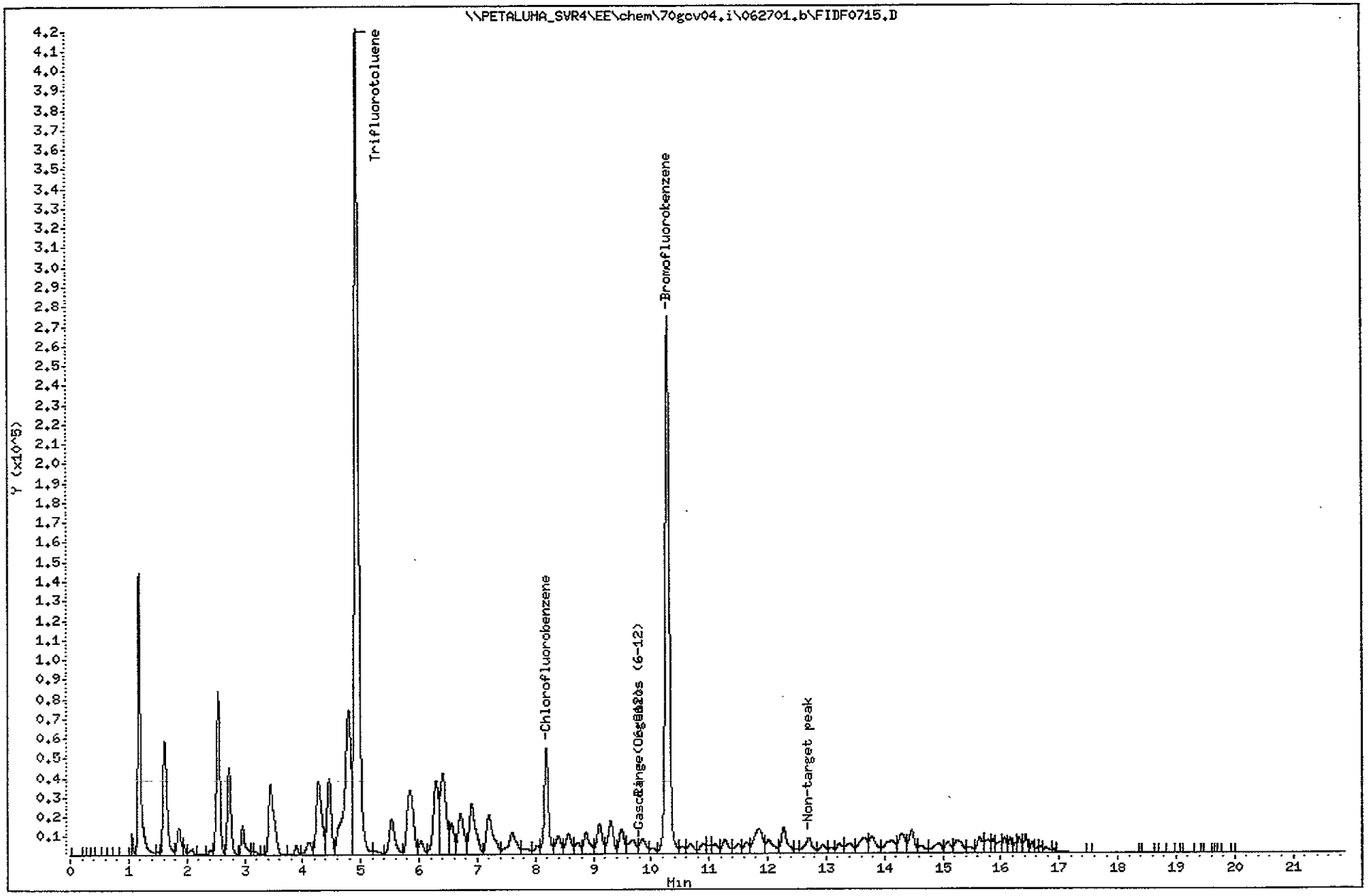
Operator: CWC
Column diameter: 0.53



Data File: \\PETALUMA_SVR4\EE\chem\70gcv04.i\062701.b\FIDF0715.D
Date : 27-JUN-2001 13:25
Client ID: MW-7
Lab Sample ID: P106476-02
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



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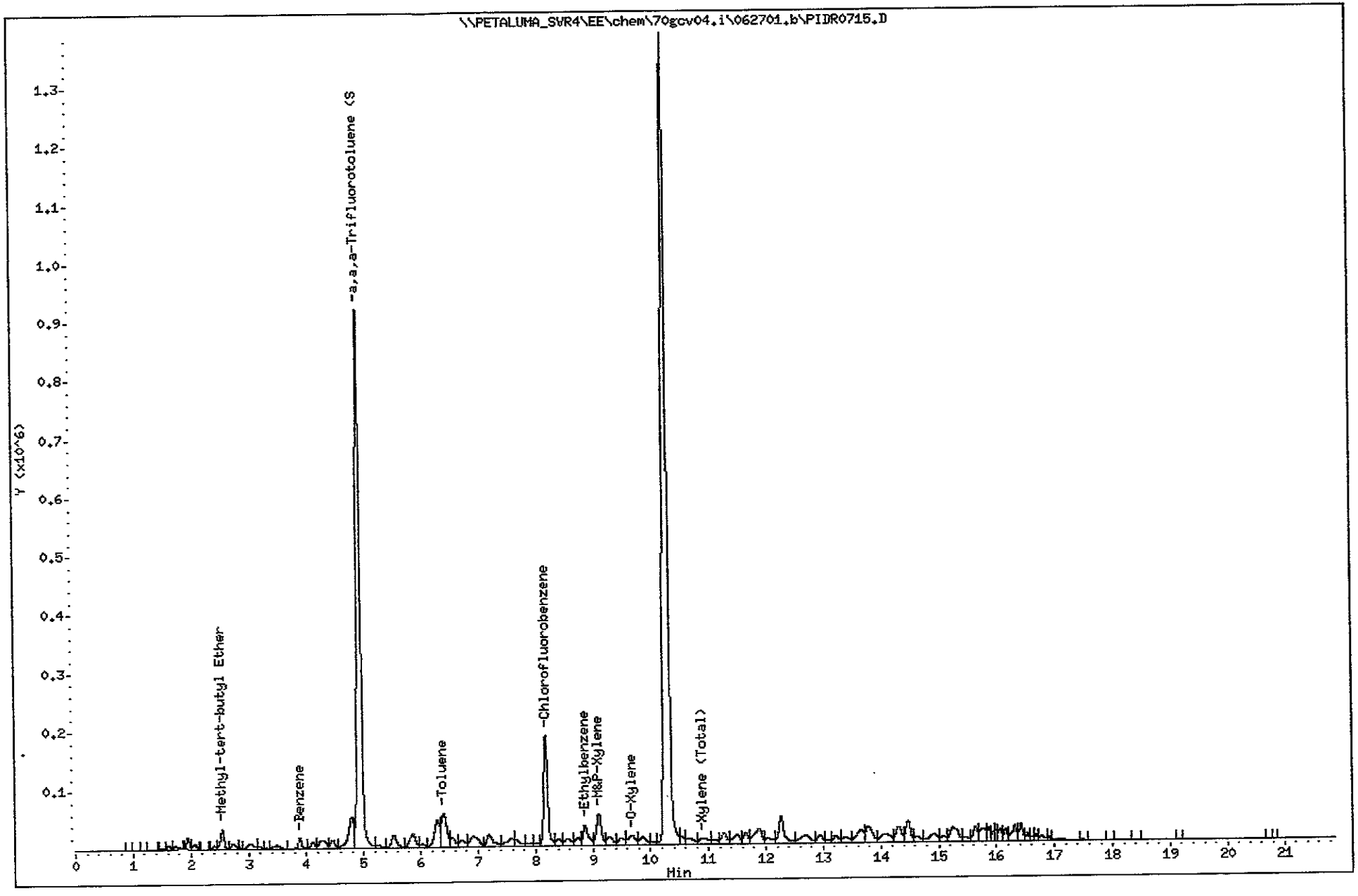
Date : 27-JUN-2001 13:25
Client ID: MW-7
Lab Sample ID: P106476-02
Purge Volume: 5.0
Column phase: DB-624

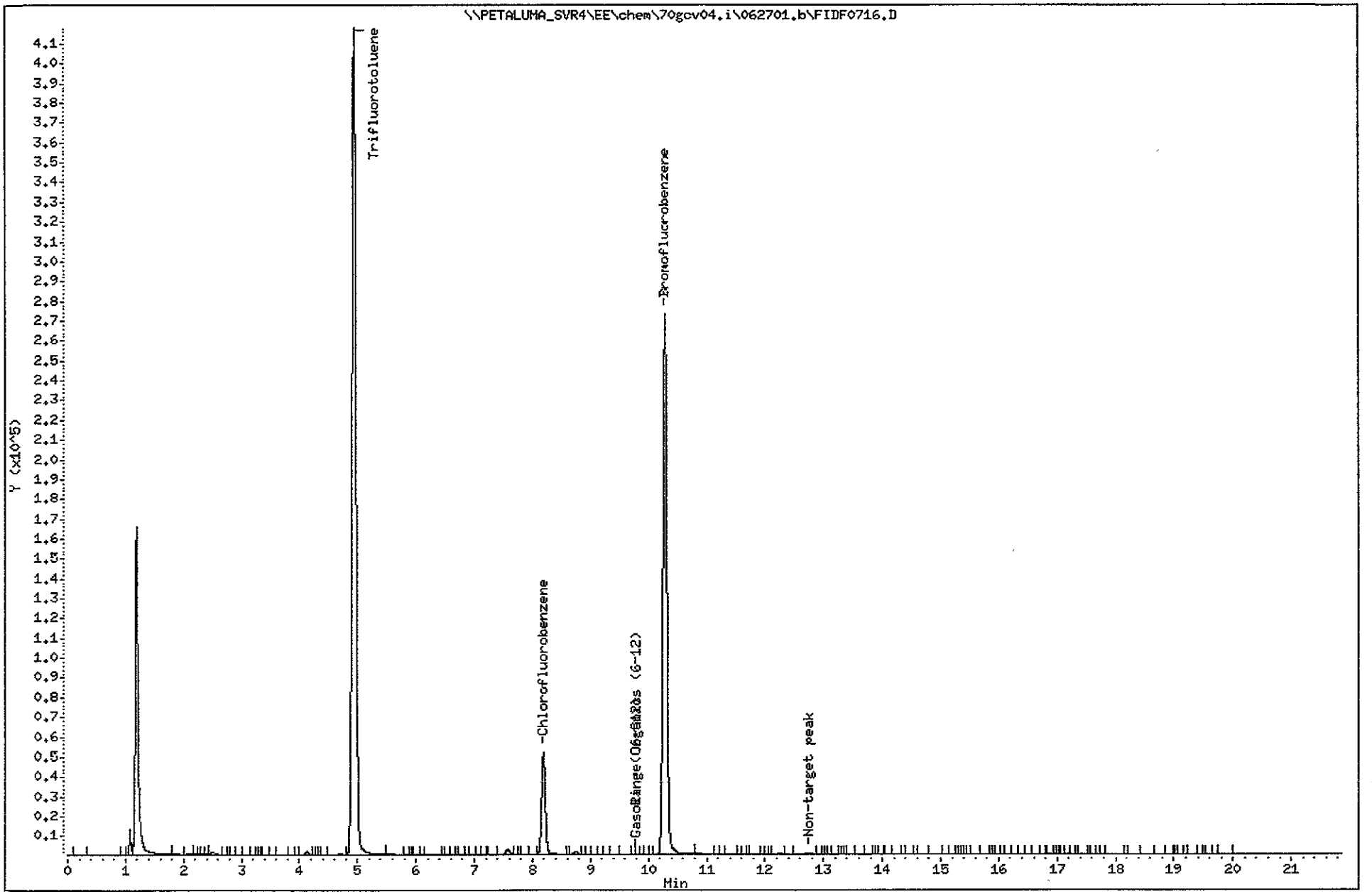
Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



Data File: \\PETALUMA_SVR4\EE\chem\70gcv04.i\062701.b\FIDF0716.D
Date : 27-JUN-2001 13:52
Client ID: MW-8
Lab Sample ID: P106476-03
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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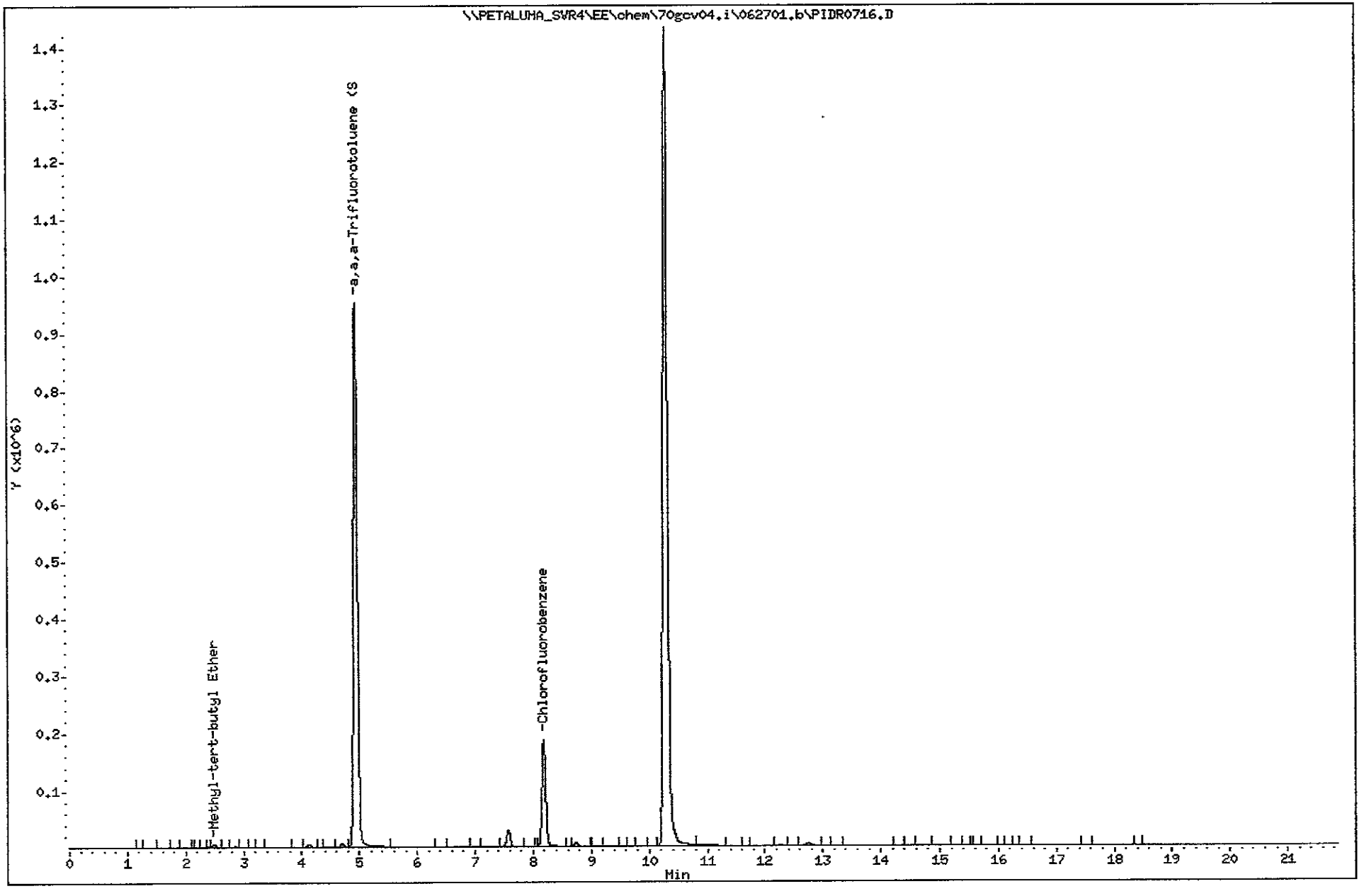
Lab Sample ID: P106476-03
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



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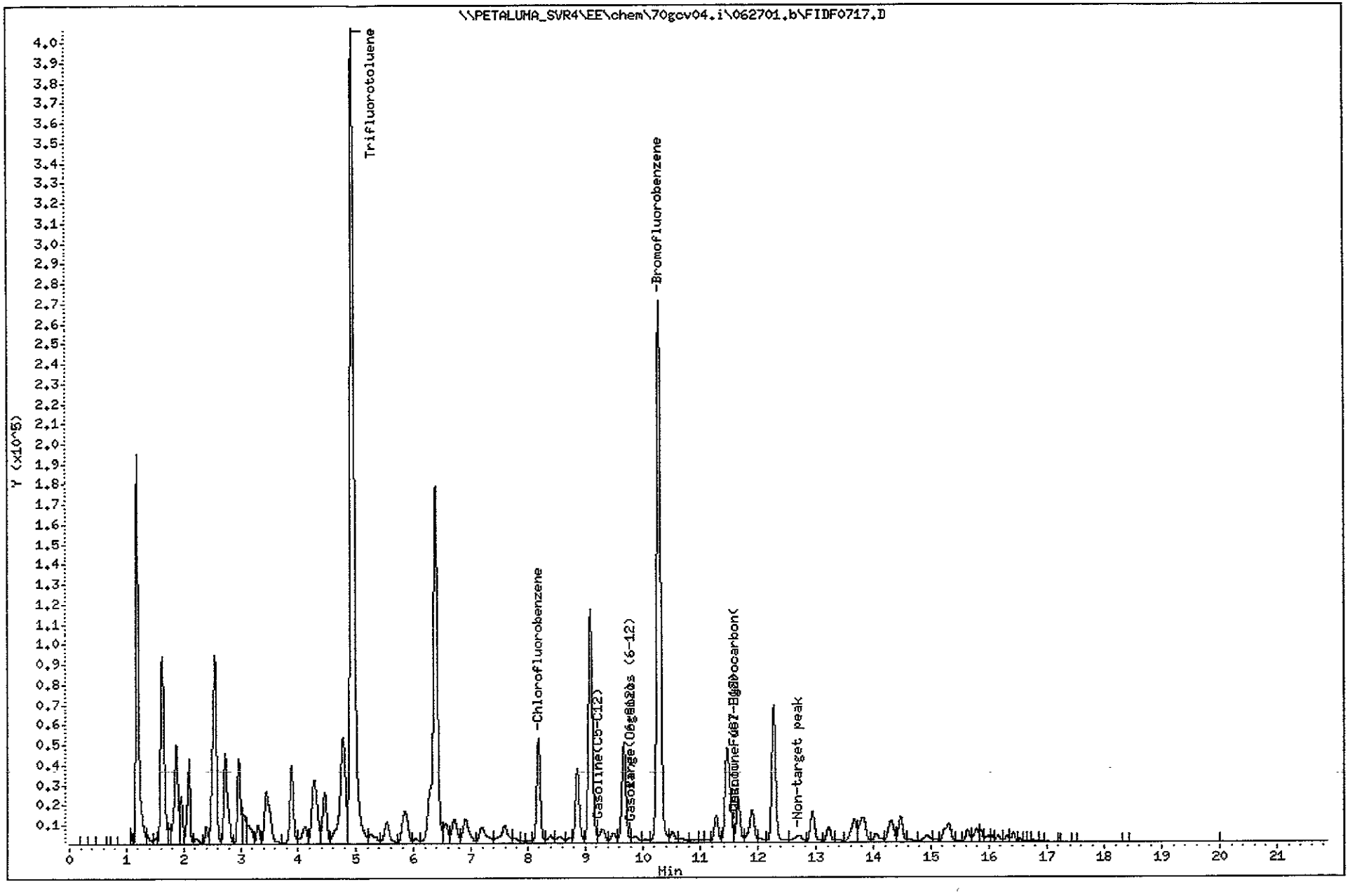
Lab Sample ID: VSTD1000GC
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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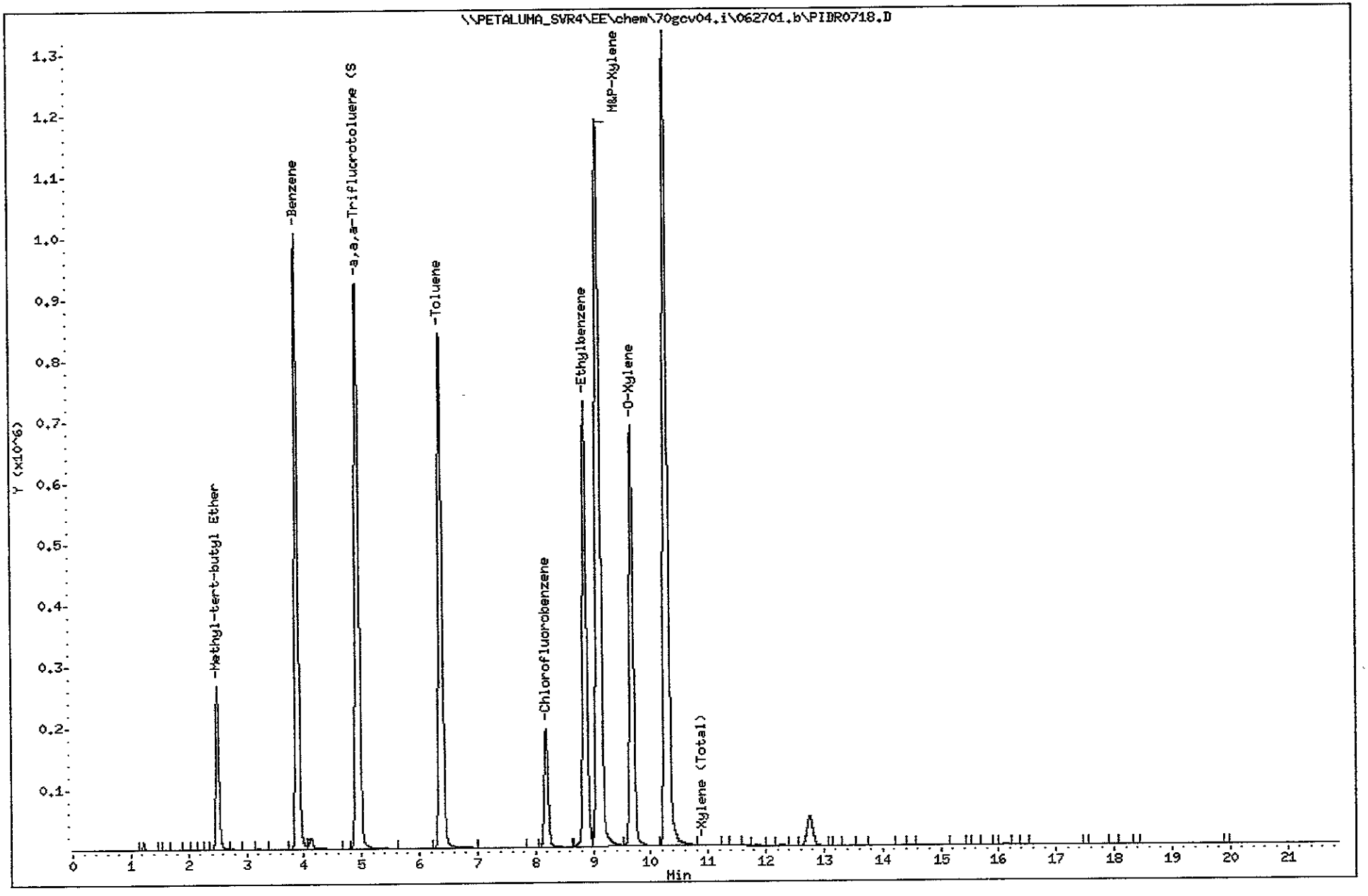
Lab Sample ID: VSTD100BC
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



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Date : 27-JUN-2001 15:34
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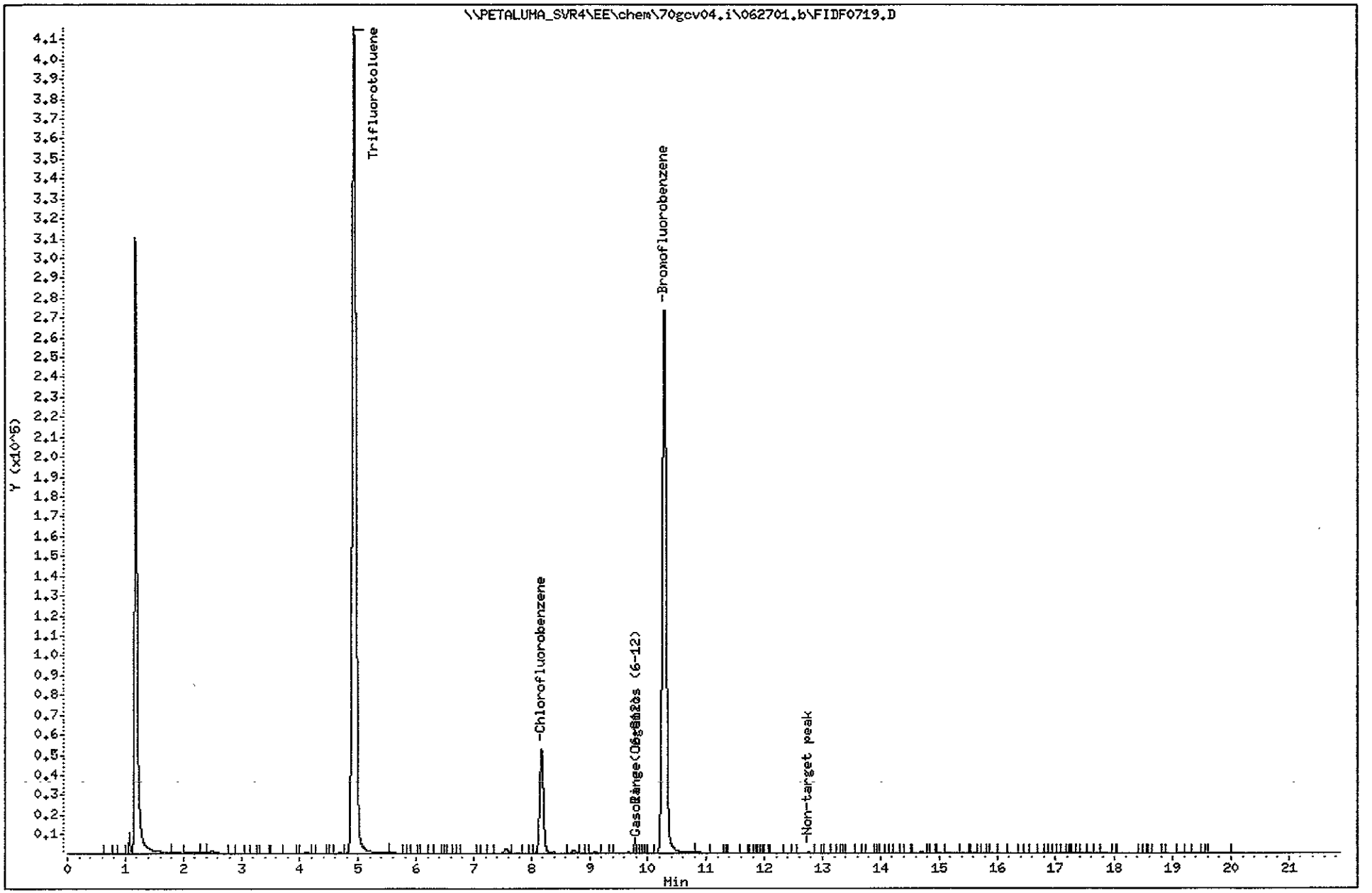
Lab Sample ID: P106476-04
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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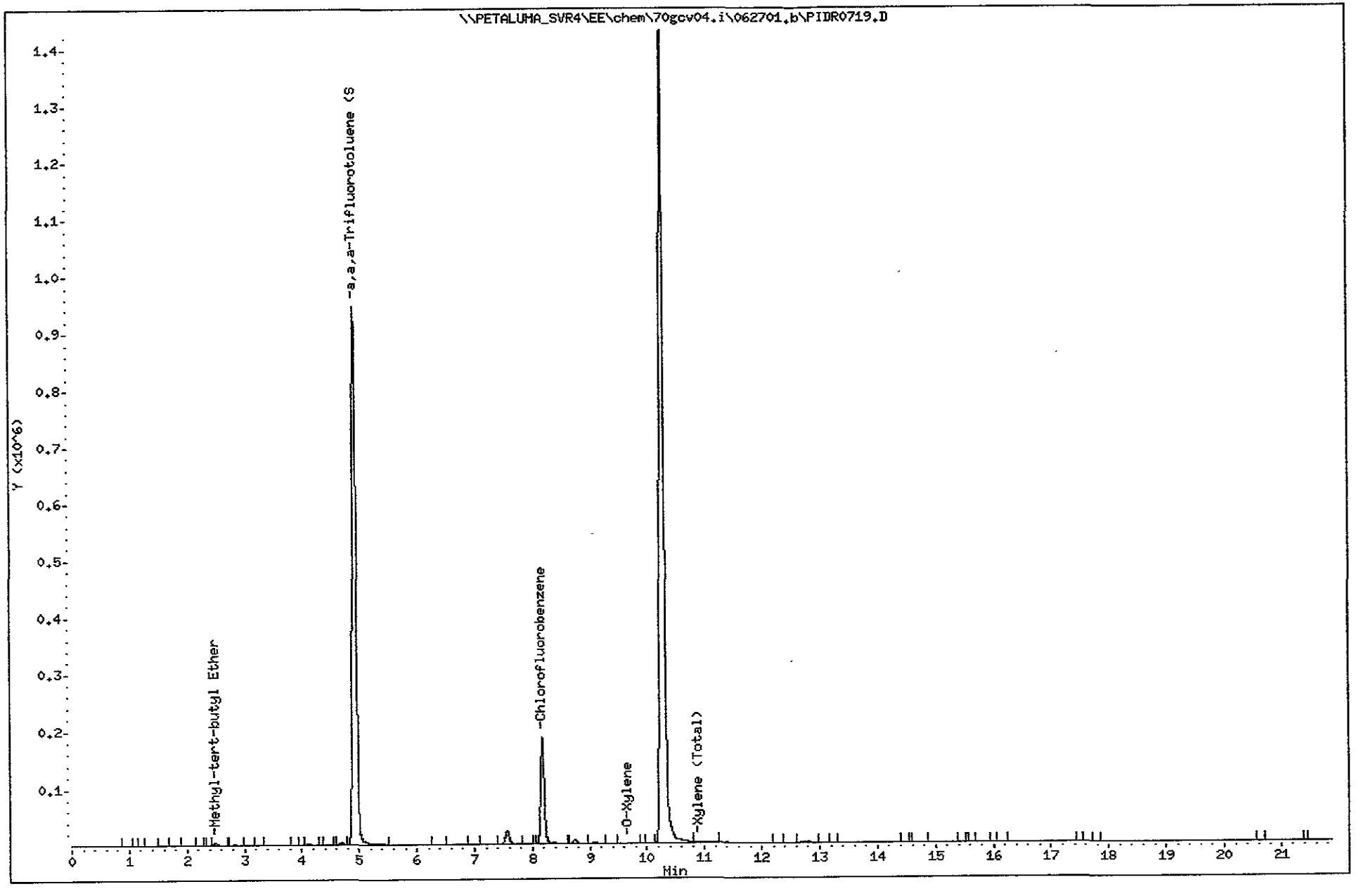
Column phase: DB-624

Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



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Date : 27-JUN-2001 16:01
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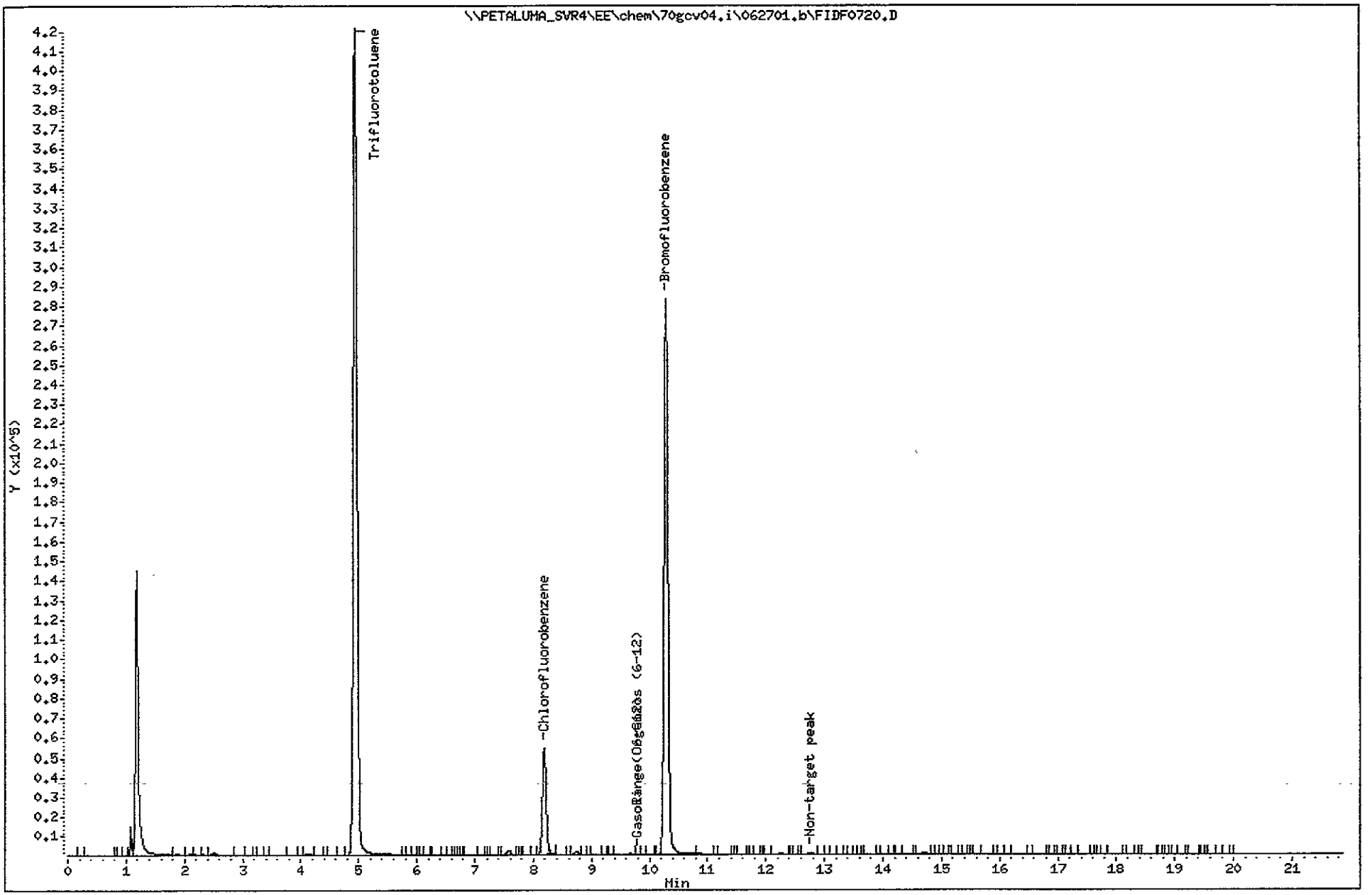
Lab Sample ID: P106476-05
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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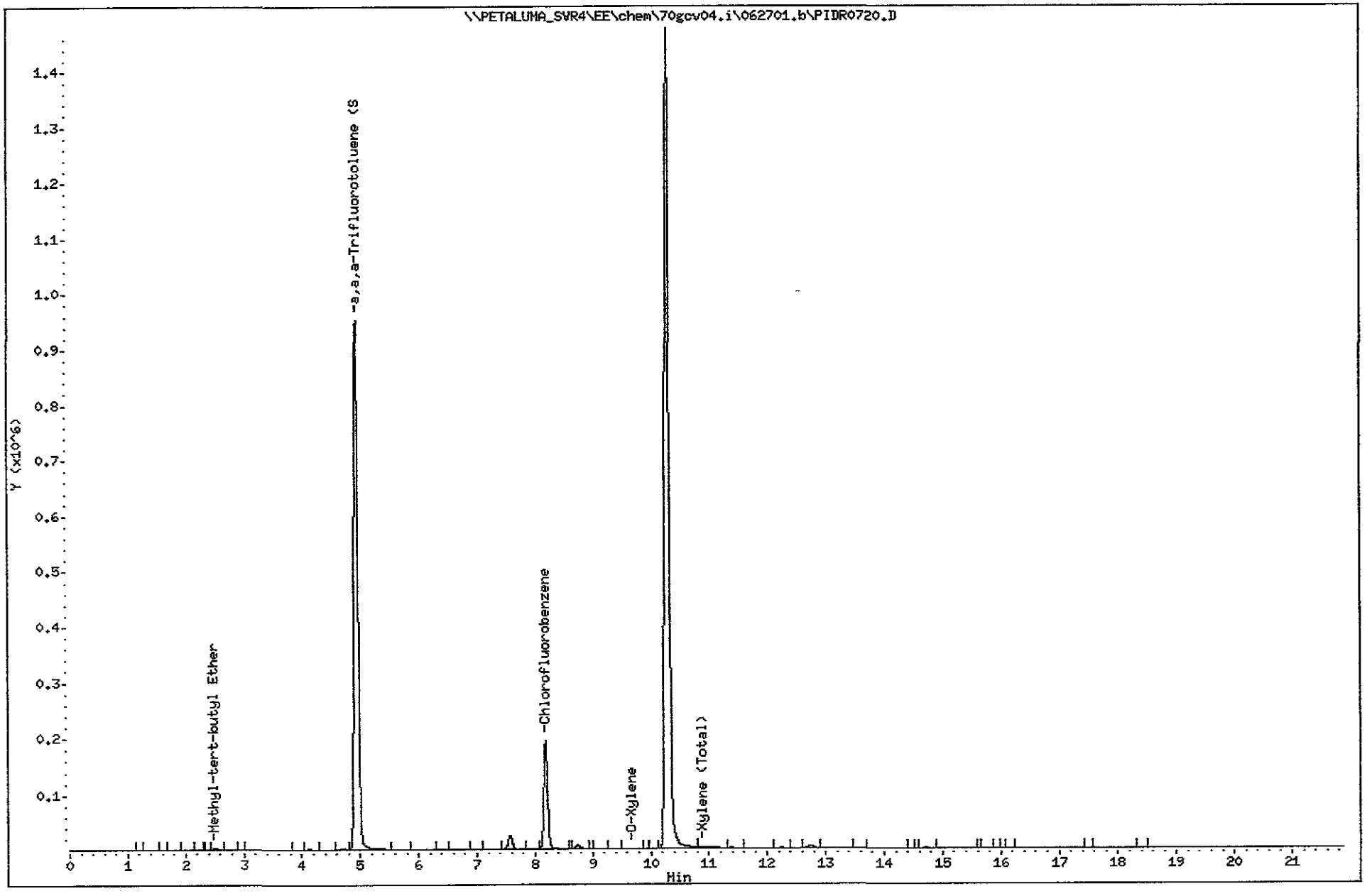
Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



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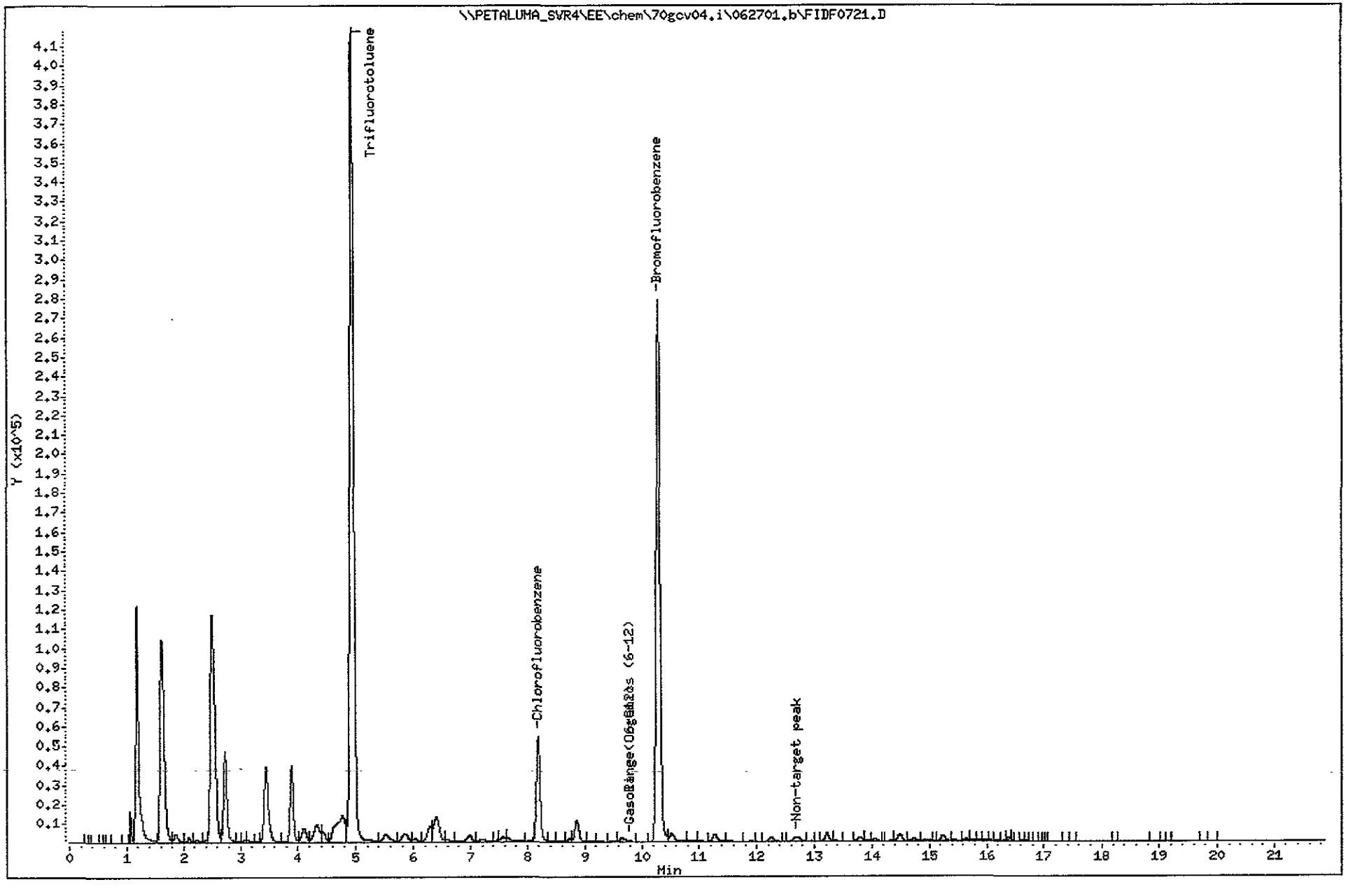
Date : 27-JUN-2001 16:29
Client ID: MW-13
Lab Sample ID: P106476-06
Purge Volume: 5.0
Column phase: HP-1

Instrument: 70gcv04.i
Operator: CWC
Column diameter: 0.53



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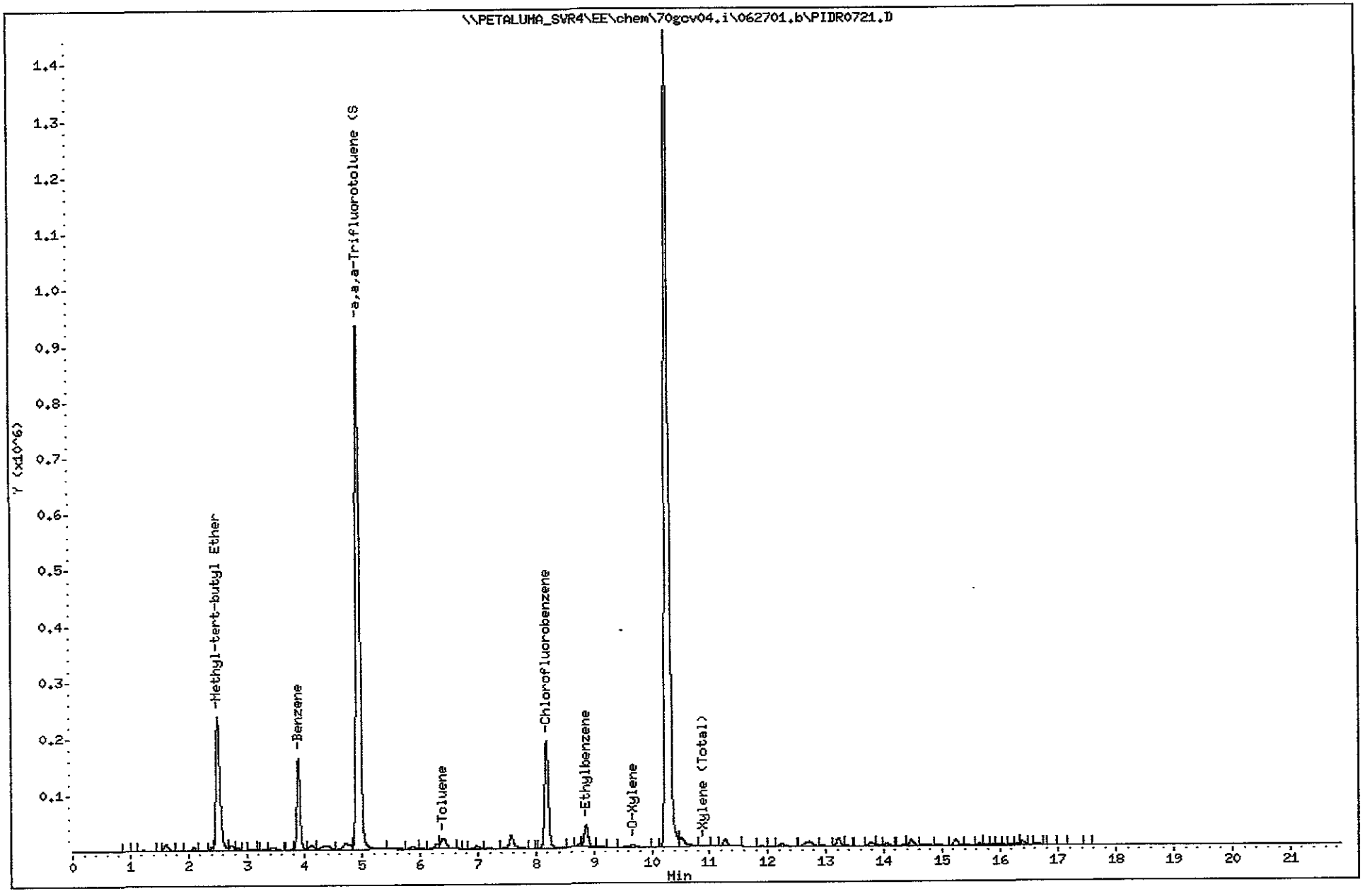
Purge Volume: 5.0
Column phase: DB-624

Instrument: 70gcv04.i

Operator: CWC
Column diameter: 0.53



Conor Pacific | **EFW**

CHAIN OF CUSTODY

Page 1 of 1

Quotation No. _____

PROJECT NO.:	SITE NAME:
BNC103	B&C Gas Mini Mart

SAMPLER(S): N Marks _____ (printed) _____ (signature)

CONTRACT LABORATORY: Sequoia - Petaluma

TURN-AROUND TIME: Standard

EDD required? ☑ Yes ☐ No

ANALYSES: TPH gas, BTEX, MTBE; QA/QC 1st hr EPA 8260

Sample I.D.	Lab I.D.	Collection Date	Collection Time	Matrix	Depth	Container Info: Type/Vol.	Filter	Preserv.	TPH gas, BTEX, MTBE; QA/QC 1st hr EPA 8260	Cont. Qty.	Remarks
						SOA 40 / VOA 40	N / N	HCl / HCl			
MW-2		6/22/01	1515	water		3 / 3			P106476-01	6	
MW-5											
MW-7		6/22/01	1350			3			2	3	
MW-8		6/21/01	1055			3			3	3	
MW-10		6/21/01	1218			3			4	3	
MW-12		6/21/01	1405			3			5	3	
MW-13		6/20/01	1440			3			6	3	
D-2		6/22/01	1101			3			7	3	
MS MW01											

COOLER TEMPERATURE 3.0

☐ NOT INTACT

☐ COOLER CUSTODY SEALS INTACT

Relinquished by: (signature)	Received by: (signature)	Date/Time:
		6-25-01 1100
Relinquished by: (signature)	Received by: (signature)	Date/Time:
Relinquished by: (signature)	Received by: (signature)	Date/Time:

SEND RESULTS TO:
Attn: Mark Smolley
Conor Pacific/EFW
2580 Wyandotte St., Suite G
Mountain View, CA 94043
Phone (650) 386-3828
Fax (650) 386-3815

white: lab copy yellow: project file