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August 18, 2008

Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Ste. 250
Alameda, California 94502

Subject: **2nd Quarter 2008 Groundwater Monitoring and Sampling Report**
Rolls-Royce Engine Service Test Facility,
6701 Old Earhart Road, Oakland, California
Alameda County Site #RO0002606

On behalf of Rolls-Royce Engine Services-Oakland Inc. (RR), Gettler-Ryan Inc. (GR) has prepared this second quarter 2008 groundwater monitoring and sampling report for the above-referenced property. This report describes the field and analytical methods, provides a summary of groundwater monitoring results, and presents conclusions and recommendations regarding groundwater conditions at the site.

Site Location and Description
The subject site is located at 6701 Old Earhart Road, adjacent to the Metropolitan Oakland International Airport (MOIA)-North Field, Oakland, California (Figure 1). Topography in the vicinity of the subject site is relatively flat at an average elevation of approximately 7.5 feet above mean sea level. The closest surface water is within the tidal wetlands bordering the site to the east.

Pertinent site features consist of six engine test cells with auxiliary structures (sheds, pumphouse, waste water sumps, aboveground oil/water separator, control buildings, gas conditioning facility, air receivers, cooling towers, flare stack, etc), one 30,000-gallon aboveground liquefied petroleum fuel tank, one 10,000-gallon jet A fuel underground storage tank (UST) and two paired 8,000-gallon jet A fuel USTs. Pertinent site features and the location of the USTs are shown on Figure 2.

For site background and previous environmental investigation, please refer to GR report No. 25-948218.07, *Well Installation Report*, dated January 11, 2008

Groundwater Monitoring
On June 26 and July 3, 2008, GR personnel conducted quarterly groundwater monitoring of nineteen wells (MW-1 through MW-15, MW-17, MW-18, NPORD MW-3 and NPORD MW-4). Work at the site included measuring static groundwater levels, evaluating groundwater in the wells for the presence of petroleum hydrocarbons, and purging and sampling the wells for laboratory analysis. Groundwater monitoring and sampling were performed in accordance with GR Field Methods and Procedures, Quarterly Groundwater Sampling (attached).

On June 26, 2008, GR collected depth to groundwater measurements in fifteen wells (MW-1 through MW-7, MW-9 through MW-15 and MW-18) and checked groundwater for the presence of Separate-Phase Hydrocarbons (SPH). Approximately 1.14 ft of SPH were observed in well MW-18.

Approximately 0.125 gallon (16 ounces) of SPH and 1 gallon of water were bailed from well MW-18 and were stored onsite in a 55-gallon DOT approved drum pending disposal. On July 3, 2008, GR personnel collected depth to groundwater measurements in four monitoring wells (MW-8, MW-17, NPORD MW-3 and NPORD MW-4) and checked the groundwater in the wells for the presence of SPH. SPH were not present in any of the four wells. Water level data, groundwater elevations, and SPH thicknesses are presented in attached Table 1. Field data sheets for this event are attached.

Groundwater monitoring wells MW-1 through MW-15, MW-17, MW-18 and NPORD MW-3 and NPORD MW-4 were purged and sampled on the same date they were monitored. Well MW-18 was not sampled due to presence of 1.14 feet of SPH. Groundwater samples were submitted under chain-of-custody protocol to Kiff Analytical (ELAP #2236) of Davis, California. A copy of the laboratory analytical reports and chain-of-custody documents are attached. Purge water generated from the sampling activities was stored onsite in 55-gallons DOT approved drums pending disposal. GR understands that the disposal of water generated will be handled by RR.

Results

Groundwater Gradient

On June 26, 2008, the groundwater flow direction varied with hydraulic gradients ranging between 0.01 ft/ft to 0.02 ft/ft. A Potentiometric Map is presented as Figure 3.

Analytical Results

Groundwater samples were analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg), Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), Methyl-tert Butyl Ether (MtBE), and naphthalene by EPA Method 8260B and for Total Petroleum Hydrocarbons as diesel (TPHd), Total Petroleum Hydrocarbons as motor oil (TPHmo), and Total Petroleum Hydrocarbons as jet fuel (TPHjf) by modified EPA Method 8015. Groundwater chemical analytical results for this event are presented in Table 1.

Concentrations of TPHg, TPHd, TPHmo, TPHjf, BTEX, MtBE and naphthalene were reported below the laboratory method detection limits in groundwater sample collected from well MW-12.

Concentrations of TPHg were detected in water samples collected from wells MW-10 and MW-13, at levels of 120 parts per billion (ppb) and 720 ppb, respectively. Concentrations of TPHg were reported below the laboratory method detection limits in water samples collected from the remaining wells.

TPHd was detected in eleven wells at concentrations ranging from 200 ppb in well MW-13 to 3,300 ppb in well MW-7. Concentrations of TPHmo were detected in ten wells at concentrations ranging from 700 ppb in well NPORD MW-4 to 10,000 ppb in well MW-7. TPHjf was detected in seventeen wells at concentrations ranging from 51 ppb in well MW-1 to 4,100 ppb in well MW-13.

BTEX constituents were reported as below the laboratory method report limit in all of the wells, except for Benzene and Xylenes detected in well MW-13 at concentrations of 2.0 ppb and 0.60 ppb, respectively, and Toluene detected in well MW-3 at 1.7 ppb.

MtBE was detected in wells MW-3, MW-13, MW-14 at concentrations of 0.93 ppb, 3.3 ppb, and 1.4 ppb, respectively. Napthalene was detected in wells MW-10, MW-13, and MW-14 at concentrations of 5.0 ppb, 3.3 ppb, and 3.1 ppb, respectively. TPHg, TPHd, TPHmo and TPHjf concentrations are presented on Figure 4.

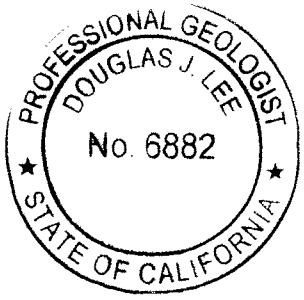
Conclusions and Recommendations
Based on the results of this groundwater monitoring and sampling event, GR concludes and recommends the following:

- Very low to non-detectable concentrations of dissolved petroleum hydrocarbons were present in wells MW-1, MW-2 and MW-12 located along the northeast edge of the site;
- Detectable dissolved concentrations of TPHg appear limited to the areas in the vicinity of wells MW-10, MW-11, MW-13 and MW-14;
- Detectable dissolved concentrations of TPHd, TPHmo and TPHjf were present in a majority of the site wells. The highest concentrations were detected in the northwest portion of the site in the vicinity of Test Cells 5, 6, and 7; and
- GR recommends continuing quarterly groundwater monitoring and sampling of all wells to further evaluate groundwater flow direction, groundwater quality and plume stability over time.

If you have any questions, please feel free to contact our Rancho Cordova office at (916) 631-1300.

Sincerely,
Gettler-Ryan Inc.

Geoffrey D. Risse
Staff Geologist



Douglas J. Lee, P.G. No. 6882
Senior Geologist

Attachments: Table 1, Groundwater Monitoring Results
Figure 1, Vicinity Map
Figure 2, Site Plan
Figure 3, Potentiometric Map
Figure 4, Concentration Map
GR Field Methods and Procedures
Field Data Sheets
Laboratory Analytical Report and Chain of Custody

CC: Dave Goldberg, Rolls-Royce Engine Services-Oakland Inc
Dale Klettke, Port of Oakland

Table 1

Groundwater Monitoring Results

Rolls-Royce Engine Service Test Facility

6701 Old Earhart Road

Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd[1] (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
MW-1	10/3/07	7.17	3.04	0.00	4.13	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	7.17	3.02	0.00	4.15	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**7.17**	**3.38**	**0.00**	**3.79**	**<50**	**<50**	**<100**	**51[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-2	10/3/07	7.03	2.80	0.00	4.23	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	7.03	2.94	0.00	4.09	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**7.03**	**3.32**	**0.00**	**3.71**	**<50**	**<50**	**<100**	**97[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-3	10/2/07	6.73	4.56	0.00	2.17	<50	<50	<100	410	<0.50	<0.50	<0.50	<0.50	1.6[4]	<0.50
	3/14/08	6.73	3.98	0.00	2.75	<50	<50	<100	120[9]	<0.50	<0.50	<0.50	<0.50	0.99	<0.50
	6/26/08	**6.73**	**4.21**	**0.00**	**2.52**	**<50**	**<50**	**<100**	**610[7]**	**<0.50**	**1.7**	**<0.50**	**<0.50**	**0.93**	**<0.50**
MW-4	10/2/07[4]	9.79	5.81	0.00	3.98	<50	86	<100	280	<0.50	0.63	<0.50	<0.50	<0.50	<0.50
	3/14/08	9.79	5.82	0.00	3.97	<50	3,300	2,400	3,400[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**9.79**	**6.08**	**0.00**	**3.71**	**<50**	**2,300**	**1,900**	**2,700[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-5	10/2/07	8.35	4.75	0.00	3.60	<50	5,600	11,000	5,300	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	8.35	4.40	0.00	3.95	<50	1,200[6]	1,700	1,100[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**8.35**	**4.68**	**0.00**	**3.67**	**<50**	**1,400[6]**	**3,200**	**2,000[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**

Table 1

Groundwater Monitoring Results

Rolls-Royce Engine Service Test Facility

6701 Old Earhart Road

Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd[1] (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
MW-6	10/2/07	9.51	5.90	0.00	3.61	<50	3,000[6]	7,700	2,500[7]	<0.50	<0.50	0.86	1.1	<0.50	0.53
	3/14/08	9.51	5.55	0.00	3.96	<50	3,600[10]	7,600	2,800[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**9.51**	**5.80**	**0.00**	**3.71**	**<50**	**3,200[10]**	**9,400**	**3,200[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-7	10/2/07	9.23	5.68	0.00	3.55	<50	12,000[6]	34,000	9,100[7]	<0.50	<0.50	<0.50	<0.50	<0.50	0.76
	3/14/08	9.23	5.32	0.00	3.91	<50	7,900[6]	20,000	5,500[11]	<0.50	<0.50	<0.50	<0.50	<0.50	3.5
	6/26/08	**9.23**	**5.56**	**0.00**	**3.67**	**<50**	**3,300[6]**	**10,000**	**3,300[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-8	9/14/07	8.25	4.65	0.00	3.60	<50	790[3]	2,700	1,000[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland													
	7/3/04	**8.25**	**4.49**	**0.00**	**3.76**	**<50**	**1,200[6]**	**4,400**	**1,800[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-9	10/3/07	9.44	5.81	0.00	3.63	<50	7,700	10,000	6,700	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50
	3/14/08	9.44	5.51	0.00	3.93	<50	6,400	8,000	4,000[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**9.44**	**5.72**	**0.00**	**3.72**	**<50**	**1,600[10]**	**1,800**	**1,800[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-10	10/3/07	7.51	3.89	0.00	3.62	110	4,200	1,300	4,500	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50
	3/14/08	7.51	3.68	0.00	3.83	53	420	270	420[7]	<0.50	<0.50	<0.50	<0.50	<0.50	0.50
	6/26/08	**7.51**	**3.80**	**0.00**	**3.71**	**120**	**1,200**	**1,000**	**2,000**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**5.0**

Table 1

Groundwater Monitoring Results

Rolls-Royce Engine Service Test Facility

6701 Old Earhart Road

Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd[1] (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
MW-11	10/3/07	7.60	4.01	0.00	3.59	80	250	490	610	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50
	3/14/08	7.60	3.71	0.00	3.89	61	410[6]	1,200	520[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**7.60**	**3.92**	**0.00**	**3.68**	**<50**	**2,700[10]**	**7,300**	**3,600[15]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-12	10/3/07	7.32	3.61	0.00	3.71	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50
	3/14/08	7.32	3.35	0.00	3.97	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**7.32**	**3.60**	**0.00**	**3.72**	**<50**	**<50**	**<100**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-13	10/3/07	6.10	2.86	0.00	3.24	160	70[8]	<100	660	<0.50	<0.50	<0.50	<0.50	1.2[4]	1.7
	3/14/08	6.10	1.96	0.00	4.14	350[12]	490	130[13]	1,200	0.89	<0.50	<0.50	<0.50	2.0	8.9
	6/26/08	**6.10**	**2.57**	**0.00**	**3.53**	**720**	**200[8]**	**<100**	**4,100[15]**	**2.0**	**<0.50**	**<0.50**	**0.60**	**3.3**	**3.3**
MW-14	10/2/07	6.42	2.40	0.00	4.02	67	300	870	1,400	<0.50	<0.50	<0.50	<0.50	1.4[4]	6.1
	3/14/08	6.42	2.44	0.00	3.98	50	250[6]	350	500[7]	<0.50	<0.50	<0.50	<0.50	1.7	5.0
	6/26/08	**6.42**	**2.62**	**0.00**	**3.80**	**<50**	**570[10]**	**2,700**	**2,000[15]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.4**	**3.1**
MW-15	10/2/07	7.51	4.85	0.00	2.66	<50	99	<100	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	7.51	4.62	0.00	2.89	<50	<50	<100	88[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	**7.51**	**4.81**	**0.00**	**2.70**	**<50**	**<50**	**<100**	**84[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**

Table 1

Groundwater Monitoring Results

Rolls-Royce Engine Service Test Facility

6701 Old Earhart Road

Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd[1] (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
MW-17	9/14/07	0.04	4.10	0.00	-4.06	<50	<50	220	150[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland													
	7/3/08	**0.04**	**1.98**	**0.00**	**-1.94**	**<50**	**<50**	**<100**	**84[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW-18	10/2/07	7.05	4.15	0.55	3.34**	Not developed or sampled due to presence of FPP									
	3/14/08	7.05	3.62	0.63	3.93**	Not sampled due to presence of FPP									
	6/26/08	**7.05**	**4.11**	**1.14**	**3.85****	**Not sampled due to presence of FPP**									
NPORD MW-3	9/14/07	8.11	4.43	0.00	3.68	<50	<50	<100	64[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland													
	7/3/08	**8.11**	**3.96**	**0.00**	**4.15**	**<50**	**<50**	**<100**	**99[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
NPORD MW-4	9/14/07	10.06	6.48	0.00	3.58	50	1,000[3]	1,400	2,000[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland													
	7/3/08	**10.06**	**6.26**	**0.00**	**3.80**	**<50**	**360[6]**	**700**	**960[7]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
QA	9/14/07	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	10/2/07	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Table 1

Groundwater Monitoring Results

Rolls-Royce Engine Service Test Facility

6701 Old Earhart Road

Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd[1] (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
QA	**6/26/08[14]**	**--**	**--**	**--**	**--**	**<50**	**NA**	**NA**	**NA**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
(con't)	**7/3/08**	**--**	**--**	**--**	**--**	**<50**	**<50**	**<100**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**

Explanation:

TOC = Top of Casing Elevation

DTW = Depth to Water

GWE = Groundwater Elevation

ft = feet

SPH = Separate Phase Hydrocarbons

ppb = parts per billion (µg/L)

NA = Not Analyzed

-- = Not Applicable

QA = Trip Blank

TPHg = Total Petroleum Hydrocarbons as gasoline

TPHd = Total Petroleum Hydrocarbons as diesel

TPHmo = Total Petroleum Hydrocarbons as motor oil

TPHjf = Total Petroleum Hydrocarbons as jet fuel

B = Benzene

T = Toluene

Analytical Laboratory:

Kiff Analytical LLC (ELAP # 2236)

Analytical Methods:

TPHg/BTEX/MtBE/Napthalene by EPA Method 8260B

TPHd/TPHmo/TPHjf by modified EPA Method 8015

Table 1
Groundwater Monitoring Results
Rolls-Royce Engine Service Test Facility
6701 Old Earhart Road
Oakland, California

Explanation: (con't)

E = Ethylbenzene

X = total xylenes

MtBE = Methyl tert-Butyl Ether

** = GWE corrected for the presence of SPH [(TOC-DTW) + (SPH thickness x SPH specific gravity)]. Specific gravity of SPH is assumed to be 0.8.

Notes:

TOC elevations surveyed relative to mean sea level by Morrow Surveying (PLS #5161) on October 8, 2007

[1] With Silica Gel Cleanup

[2] Discrete peaks, higher boiling hydrocarbons present in sample that are atypical for Jet Fuel

[3] Discrete peaks, higher boiling hydrocarbons present in sample that are atypical for Diesel Fuel

[4] Matrix spike/matrix spike duplicate results associated with these samples for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

[5] Due to the formation of an emulsion in this sample, the sample was centrifruged and decanted prior to extraction.

[6] Hydrocarbons present in this sample are higher-boiling than typical Diesel Fuel.

[7] Hydrocarbons present in this sample are higher-boiling than typical Jet Fuel.

[8] Lower boiling hydrocarbons are present in this sample that are atypical for Diesel Fuel.

[9] Discrete peaks present in this sample that are atypical for Jet Fuel.

[10] Some lower-boiling hydrocarbons than Diesel and some higher-boiling hydrocarbons than Diesel are present in this sample.

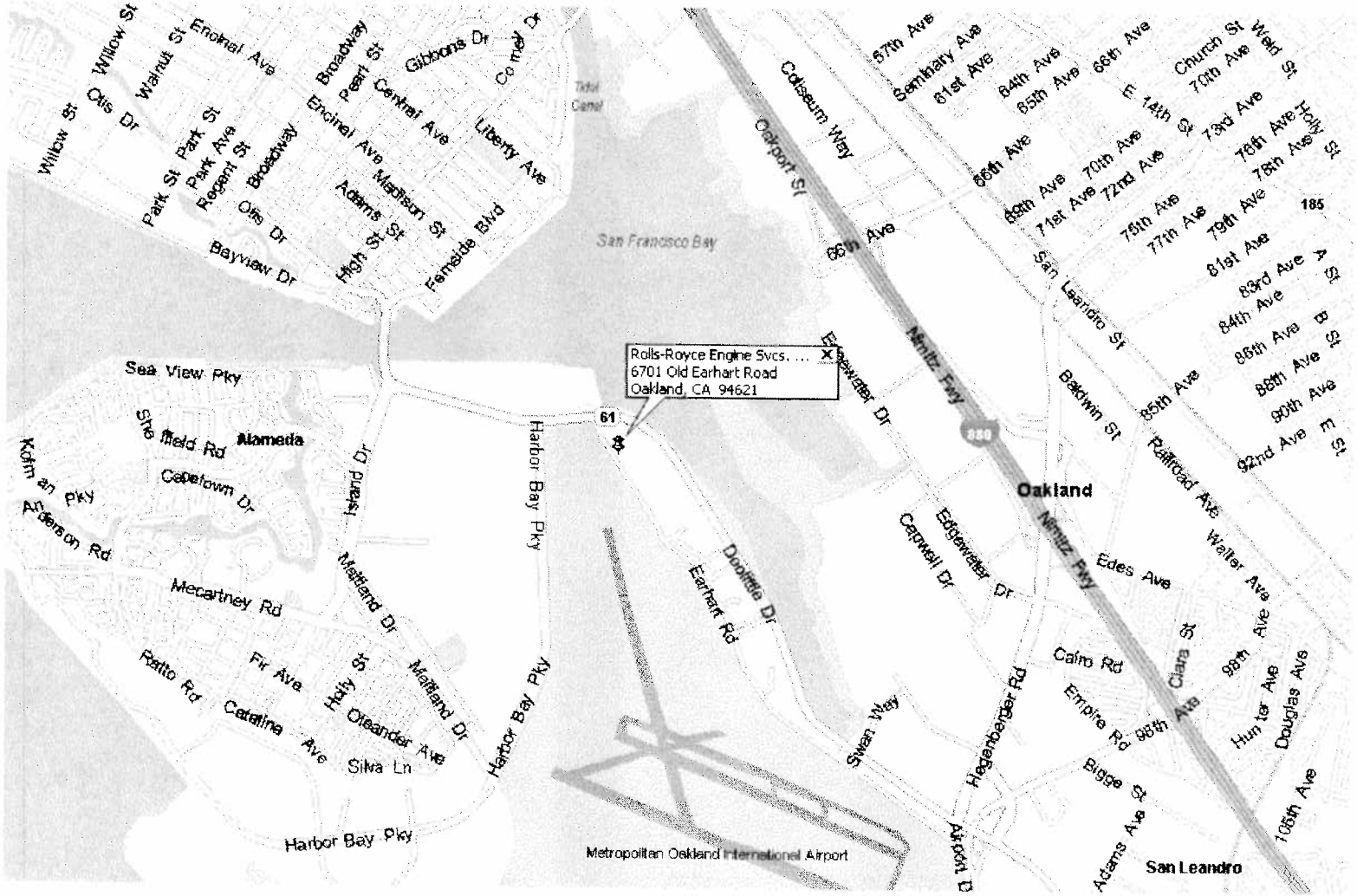
[11] Both lower-boiling and higher-boiling hydrocarbons than Jet Fuel are present in this sample.

[12] Sample contained primarily compounds not found in typical Gasoline.

[13] Hydrocarbons present in this sample are lower-boiling than typical Motor Oil

[14] Sample was analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4-inch in diameter

[15] Lower boiling hydrocarbons are present in this sample that are atypical for Jet Fuel.



GETTLER - RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568 (925) 551-7555

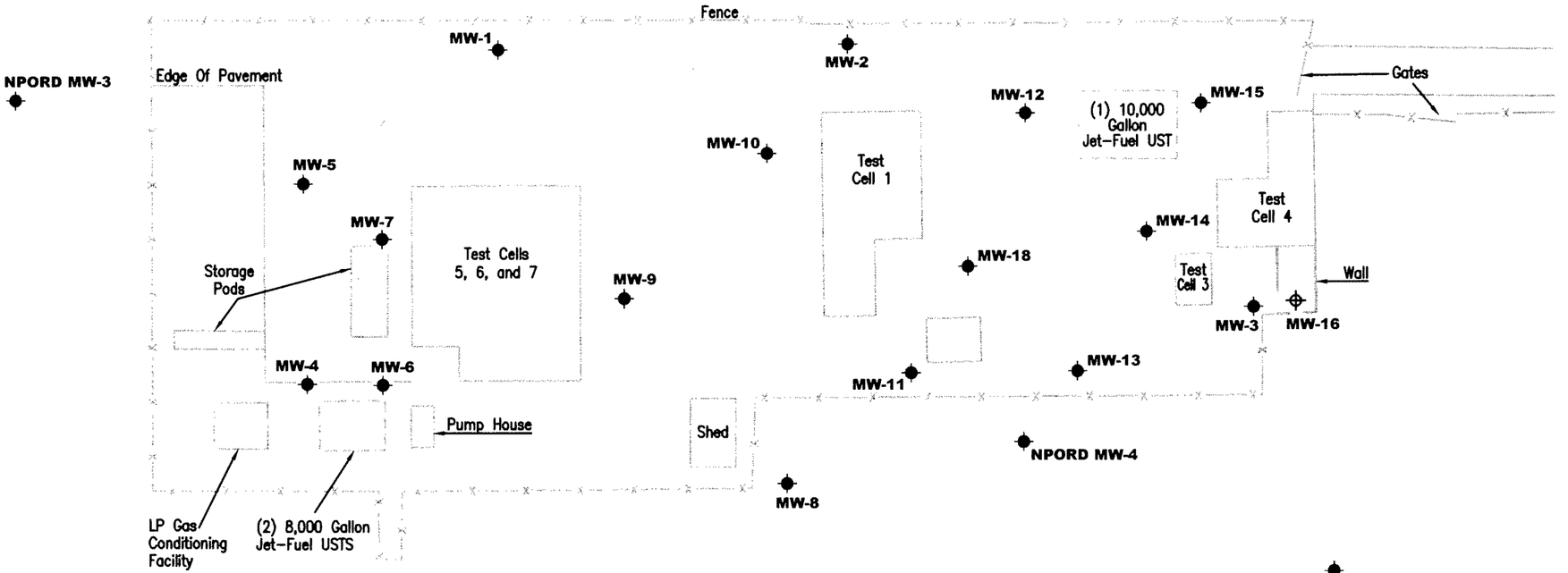
SITE LOCATION MAP
ROLLS-ROYCE ENGINE SERVICES TEST FACILITY
6701 OLD EARHART RD.
OAKLAND, CA

FIGURE
1

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
25-948218.7		11/13/07	

EXPLANATION

- Groundwater monitoring well
- Proposed monitoring well – not installed location inaccessible by drill rig



Source: Figure modified from drawing provided by Morrow Surveying, Dated: 10/8/07.

FIGURE 2

SITE PLAN
Rolls-Royce Engine Services Test Facility
6701 Old Earhart Road
Oakland, CA

REVISED DATE

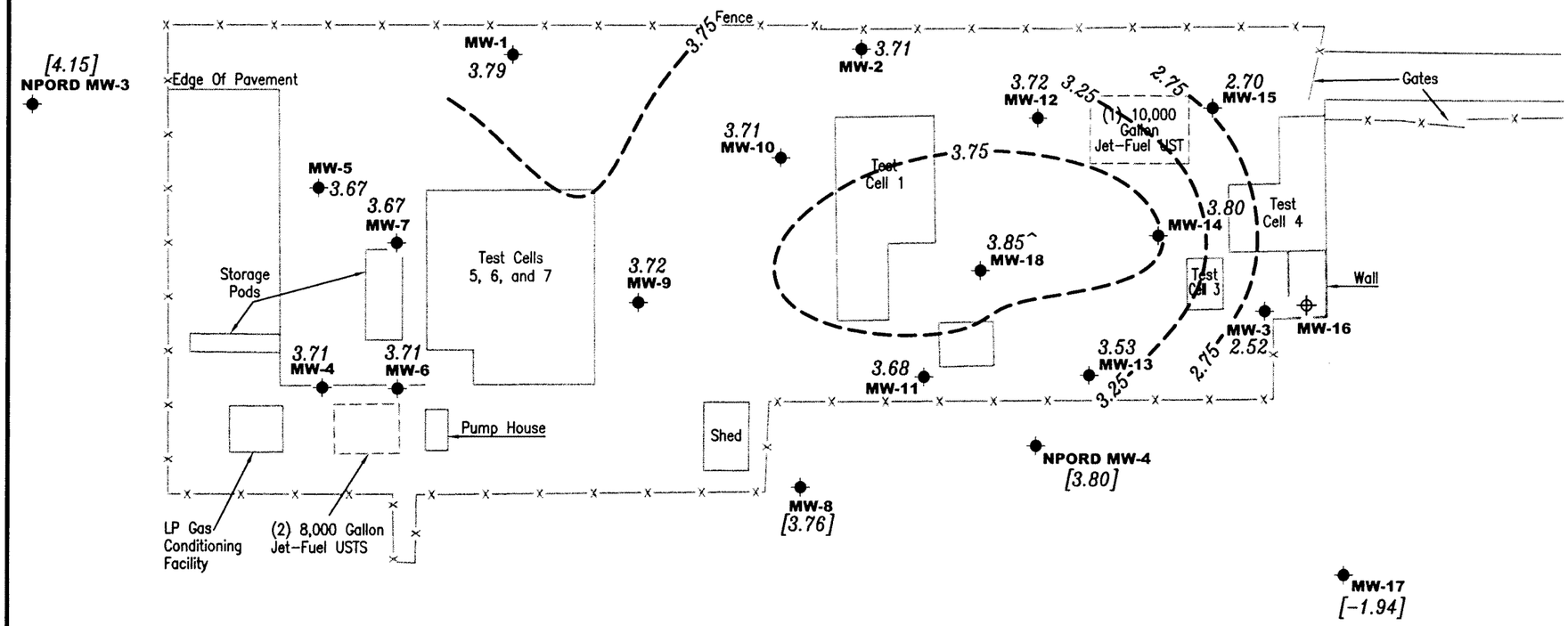
GETTLER-RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551-7555

PROJECT NUMBER 948218.2
REVIEWED BY
DATE 11/07

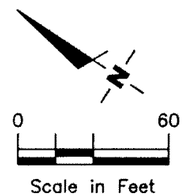
FILE NAME: P:\Enviro\Rolls Royce\Q07-Rolls Royce.dwg | Layout Tab: Site Plan

EXPLANATION

- Groundwater monitoring well
- Proposed monitoring well – not installed location inaccessible by drill rig
- *99.99* Groundwater elevation in feet referenced to Mean Sea Level
- 99.99 Groundwater elevation contour, dashed where inferred
- *[99.99]* Not used in contouring – monitored on July 3, 2008
- ^ Groundwater elevation corrected for the presence of separate-phase hydrocarbons



Groundwater flow direction varies at a gradient of 0.01 to 0.02 Ft./Ft.



Source: Figure modified from drawing provided by Morrow Surveying, Dated: 10/8/07.

POTENTIOMETRIC MAP
Rolls-Royce Engine Services Test Facility
6701 Oakport Road
Oakland, CA

FIGURE 3

REVISED DATE

DATE June 26, 2008

REVIEWED BY

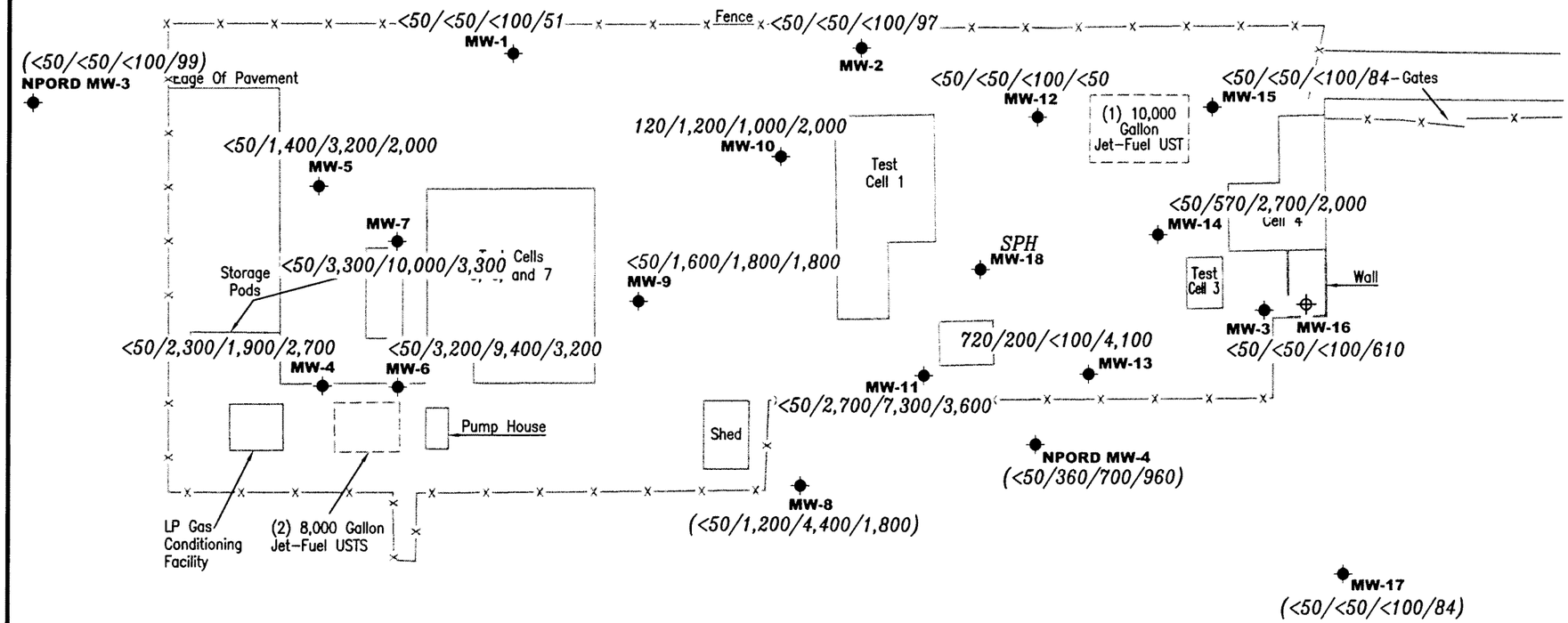
PROJECT NUMBER 948218.2

FILE NAME: P:\Enviro\Rolls Royce\Q08-Rolls Royce.dwg | Layout Tab: Pot2

GETTLER-RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551-7555

EXPLANATION

- ● Groundwater monitoring well
- ⊕ Proposed monitoring well – not installed location inaccessible by drill rig
- *A/B/C/D* Total Petroleum Hydrocarbons TPH as Gasoline/TPH as Diesel/ TPH as Motor Oil/TPH as Jet Fuel concentrations in ppb
- *(A/B/C/D)* Sampled on July 3, 2008
- *SPH* Separate Phase Hydrocarbons



Source: Figure modified from drawing provided by Morrow Surveying, Dated: 10/8/07.

FIGURE 4

CONCENTRATION MAP
Rolls–Royce Engine Services Test Facility
6701 Oil Earhart Road
Oakland, CA

REVISED DATE

DATE June 26, 2008

REVIEWED BY

PROJECT NUMBER 948218.2

FILE NAME: P:\Enviro\Rolls Royce\Q08-Rolls Royce.dwg | Layout Tab: Con2

GETTLER-RYAN INC.
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STANDARD OPERATING PROCEDURE - QUARTERLY GROUNDWATER SAMPLING

Gettler-Ryan field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analyses by the analytical laboratory. Prior to sample collection, the type of analyses to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analyses is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is recorded in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH, and electrical conductivity are measured a minimum of three times during purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include job number, sample identification, collection date and time, analyses, preservative (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4 ^{o}C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivery to the laboratory.

The chain of custody includes the job number, type of preservation, if any, analyses requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory-supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

WELL CONDITION STATUS SHEET

Client/Facility #: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job # 25-948218.1
Event Date: 6/26/08
Sampler: JH

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y / N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-6	OK							N	N	8" Monroe	N
MW-4	OK							N	N	"	N
MW-7	OK							N	N	"	N
MW-5	OK							N	N	"	N
MW-1	OK							N	N	8" Bart Heavy duty	N

Comments

WELL CONDITION STATUS SHEET

Client/Facility #: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job # 25-948218.1
Event Date: 6-26-08
Sampler: AL

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y / N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-9	ok	ok	ok	ok	ok	ok	ok	~	~	8" Morrison	~
MW-10	ok	ok	ok	ok	ok	ok	ok	~	~	8" Morrison	~
MW-11	ok	ok	ok	ok	ok	ok	ok	~	~	8" Morrison	~
MW-12	ok	ok	ok	ok	ok	ok	ok	~	~	8" Morrison	~
MW-2	ok	ok	ok	2 = stripped 1 = ok	ok	ok	ok	~	~	8" Boart Longyear	N

Comments

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/26/08 (inclusive)
Sampler: JH

Well ID: MW- 1
Well Diameter: (2) 4 in.
Total Depth: 7.45 ft.
Depth to Water: 3.38 ft.

Date Monitored: 6/26/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

4.07 xVF .17 = .69 x3 case volume = Estimated Purge Volume: 2.07 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.19

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1255
Sample Time/Date: 1320 / 6/26/08
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 4.07

Weather Conditions: Clear
Water Color: Clay Odor: Y / (N)
Sediment Description: Silty

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (µS))	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)
1258	.75	7.42	out of Range	23.4		
1302	1.5	7.27	↓	23.1		
1305	2.25	7.24	✓	23.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 1	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: AH

Well ID: MW- 2
Well Diameter: 2 in.
Total Depth: 11.80 ft.
Depth to Water: 3.32 ft.

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

8.48 xVF .17 = 1.44 x3 case volume = Estimated Purge Volume: 4.32 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.01

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1310
Sample Time/Date: 1335 / 6-26-08
Approx. Flow Rate: — gpm.
Did well de-water? no If yes, Time: — Volume: — gal.

Weather Conditions: Clear
Water Color: Dark Odor: (Y) / N
Sediment Description: Med. um
DTW @ Sampling: 4.11

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1313	1.5	6.91	UR	23.8		
1316	3	6.96	UR	23.6		
1318	4.5	6.93	UR	23.6		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 2	3 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls-Royce Engine
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: SH

Well ID: MW-3
Well Diameter: 2 / 4 in.
Total Depth: 12.10 ft.
Depth to Water: 4.21 ft.
7.89 xVF .17 = 1.34

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

x3 case volume = Estimated Purge Volume: 4.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.79

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1151
Sample Time/Date: 1220 / 6-26-08
Approx. Flow Rate: — gpm.
Did well de-water? no If yes, Time: — Volume: — gal.

Weather Conditions: Clear
Water Color: Grey Odor: Y / N
Sediment Description: moderate
DTW @ Sampling: 4.98

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1155	1.5	7.21	3062	20.1		
1200	3.0	7.09	3054	20.3		
1206	4.5	7.11	3031	20.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEXMTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/26/08 (inclusive)
Sampler: JH

Well ID: MW-4
Well Diameter: (2) 4 in.
Total Depth: 9.89 ft.
Depth to Water: 6.08 ft.

Date Monitored: 6/26/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

3.81 xVF .17 = .64 x3 case volume = Estimated Purge Volume: 1.94 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.82

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1045
Sample Time/Date: 1110 6/26/08
Approx. Flow Rate: - gpm.
Did well de-water? NO If yes, Time: Volume: gal.

Weather Conditions: Clear
Water Color: Cloudy Odor: Y (N)
Sediment Description: Heavy
DTW @ Sampling: 6.39

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1048	.75	7.39	1207	20.3		
1051	1.5	7.24	1253	20.1		
1054	2.0	7.01	1286	20.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	6 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/26/08 (inclusive)
Sampler: SH

Well ID: MW-5
Well Diameter: (2) 4 in.
Total Depth: 9.90 ft.
Depth to Water: 4.68 ft.

Date Monitored: 6/26/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

5.22 xVF .17 = .88 x3 case volume = Estimated Purge Volume: 2.66 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.72

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1215
Sample Time/Date: 1245 / 6/26/08
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW@ Sampling: 5.04

Weather Conditions: Clear
Water Color: Cloudy Odor: Y / (N)
Sediment Description: Heavy

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1218	.75	7.61	1948	22.6		
1221	1.5	7.35	1977	22.3		
1224	2.5	7.27	1994	22.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/26/08 (inclusive)
Sampler: JH

Well ID: MW-6
Well Diameter: (3)/4 in.
Total Depth: 10.00 ft.
Depth to Water: 5.80 ft.

Date Monitored: 6/26/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

4.20 xVF .17 = .71 x3 case volume = Estimated Purge Volume: 2.14 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.64

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1000
Sample Time/Date: 1020 / 6/26/08
Approx. Flow Rate: — gpm.
Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 6.24

Weather Conditions: clear
Water Color: Cloudy Odor: Y / (N)
Sediment Description: 1, HF

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1003	.75	7.21	2029	20.0		
1006	1.5	7.20	2042	20.1		
1009	2.15	7.13	2063	20.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/26/08 (inclusive)
Sampler: JH

Well ID: MW-7
Well Diameter: 2 4 in.
Total Depth: 10.00 ft.
Depth to Water: 5.56 ft.

Date Monitored: 6/26/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

4.44 xVF .17 = .75 x3 case volume = Estimated Purge Volume: 2.26 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.44

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1135
Sample Time/Date: 1200 / 6/26/08
Approx. Flow Rate: — gpm.
Did well de-water? no If yes, Time: Volume: gal.

Weather Conditions: clear
Water Color: Clear Odor: S / N
Sediment Description: Heavy
DTW @ Sampling: 6.13

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1138	.75	7.52	2709	22.4		
1141	1.5	7.36	2743	22.1		
1144	2.25	7.27	2767	22.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	6 7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/27/08 (inclusive)
Sampler: —

Well ID: MW- 8
Well Diameter: 2 4 in.
Total Depth: 9.79 ft.
Depth to Water: — ft.

Date Monitored:

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

— xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: —

Purge Equipment:
- Disposable Bailer
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other:

Sampling Equipment:
- Disposable Bailer
- Pressure Bailer
- Discrete Bailer
- Peristaltic Pump
- QED Bladder Pump
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge):
Sample Time/Date: /
Approx. Flow Rate: gpm.
Did well de-water? If yes, Time: Volume: gal.

Weather Conditions:
Water Color: Odor: Y / N
Sediment Description:
DTW @ Sampling:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: Not able to access - Per Dave Coldberg

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: AH

Well ID: MW-9
Well Diameter: 2 | 4 in.
Total Depth: ~~8~~ 9.97 ft.
Depth to Water: 5.72 ft.

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

4.25 xVF .17 = 0.72 x3 case volume = Estimated Purge Volume: 2.16 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.57

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer: ____
- Stack Pump: ____
- Suction Pump: ____
- Grundfos: ____
- Peristaltic Pump: ____
- QED Bladder Pump: ____
- Other: ____

Sampling Equipment:
- Disposable Bailer: 2
- Pressure Bailer: ____
- Discrete Bailer: ____
- Peristaltic Pump: ____
- QED Bladder Pump: ____
- Other: ____

Time Started: ____ (2400 hrs)
Time Completed: ____ (2400 hrs)
Depth to Product: ____ ft
Depth to Water: ____ ft
Hydrocarbon Thickness: ____ ft
Visual Confirmation/Description: ____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ____ gal
Amt Removed from Well: ____ gal
Water Removed: ____
Product Transferred to: ____

Start Time (purge): 1100
Sample Time/Date: 16-26-08
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: — Volume: — gal.

Weather Conditions: Clear
Water Color: Dark Odor: (Y) N
Sediment Description: Heavy
DTW @ Sampling: 6-11

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (mmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1102	.75	6.61	0.82	22.1		
1104	1.5	6.71	0.80	22.1		
1106	2.25	6.66	0.81	22.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: ____

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: MH

Well ID: MW-10
Well Diameter: 2 1/4 in.
Total Depth: 10.13 ft.
Depth to Water: 3.80 ft.

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.33 xVF .17 = 1.07 x3 case volume = Estimated Purge Volume: 3.22 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.06

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1020
Sample Time/Date: 1045 / 6-26-08
Approx. Flow Rate: — gpm.
Did well de-water? no If yes, Time: — Volume: — gal.

Weather Conditions: clear
Water Color: Dark Odor: Y / (N)
Sediment Description: Heavy
DTW @ Sampling: 3.96

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1023	1.25	6.72	5.55	23.5		
1027	2.25	6.74	5.55	23.5		
1031	3.25	6.77	5.55	23.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: AH

Well ID: MW- 11
Well Diameter: 2 | 4 in.
Total Depth: 10.01 ft.
Depth to Water: 3.92 ft.

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.09 xVF .17 = 1.03 x3 case volume = Estimated Purge Volume: 3.10 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.13

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1145
Sample Time/Date: 1210 / 6-26-08
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 5.00

Weather Conditions: Clear
Water Color: DARK Odor: Y / N
Sediment Description: Heavy

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C F)	D.O. (mg/L)	ORP (mV)
1147	1.25	6.64	11.30	22.4		
1149	2.25	6.67	11.32	22.6		
1151	3.25	6.63	11.36	22.6		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 11	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: AH

Well ID: MW- 12
Well Diameter: 2 1/4 in.
Total Depth: 9.85 ft.
Depth to Water: 3.60 ft.

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.25 xVF .17 = 1.06 x3 case volume = Estimated Purge Volume: 3.18 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.85

Purge Equipment:
Disposable Bailer: 1
Stainless Steel Bailer:
Stack Pump:
Suction Pump:
Grundfos:
Peristaltic Pump:
QED Bladder Pump:
Other:

Sampling Equipment:
Disposable Bailer: 1
Pressure Bailer:
Discrete Bailer:
Peristaltic Pump:
QED Bladder Pump:
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1235
Sample Time/Date: 1300 16-26-08
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: — Volume: — gal.

Weather Conditions: Clear
Water Color: Dark Odor: Y / N
Sediment Description: Heavy
DTW @ Sampling: 4.16

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1237	1.13	6.91	UR	22.8		
1239	2.25	6.90	UR	23.1		
1241	3.25	6.93	UR	22.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 12	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls-Royce Engine
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: SH

Well ID: MW-13
Well Diameter: 2 (4) in.
Total Depth: 9.57 ft.
Depth to Water: 2.57 ft.

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.95 xVF .66 = 4.59 x3 case volume = Estimated Purge Volume: 14 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.96

Purge Equipment:

Disposable Bailer	X
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	X
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1013
Sample Time/Date: 1230 16-26-08
Approx. Flow Rate: — gpm.
Did well de-water? Yes If yes, Time: 1022 Volume: 6 gal. DTW @ Sampling: 3.91

Weather Conditions: Clear
Water Color: Clear Odor (Y) / N
Sediment Description: Light

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1020	5	7.32	outof Range	20.9		
	10					
	14					

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-13	7x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEXMTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls-Royce Engine
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-09 (inclusive)
Sampler: SR

Well ID: MW-14
Well Diameter: (2) 4 in.
Total Depth: 10.00 ft.
Depth to Water: 2.62 ft.
7.38 xVF 0.17 = 1.25

Date Monitored: 6-26-09

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

x3 case volume = Estimated Purge Volume: 4 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.10

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1114
Sample Time/Date: 1140 / 6-26-09
Approx. Flow Rate: — gpm.
Did well de-water? no If yes, Time: — Volume: — gal. DTW @ Sampling: 3.42

Weather Conditions: Clear
Water Color: Gray Odor: Y / N
Sediment Description: heavy

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C) F	D.O. (mg/L)	ORP (mV)
1119	1.5	7.43	OUT of Range	22.3		
1123	3.0	7.46	↓	21.9		
1126	4.0	7.49		21.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-14	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEXMTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls-Royce Engine
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: SH

Well ID: MW-15
Well Diameter: 2 / 4 in.
Total Depth: 9.95 ft.
Depth to Water: 4.81 ft.
5.14 xVF 4.17 = 0.08 x3 case volume = Estimated Purge Volume: 3 gal.

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.87

Purge Equipment:
Disposable Bailer: X
Stainless Steel Bailer:
Stack Pump:
Suction Pump:
Grundfos:
Peristaltic Pump:
QED Bladder Pump:
Other:

Sampling Equipment:
Disposable Bailer: X
Pressure Bailer:
Discrete Bailer:
Peristaltic Pump:
QED Bladder Pump:
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1037
Sample Time/Date: 1105 / 6-26-08
Approx. Flow Rate: gpm.
Did well de-water? No If yes, Time: Volume: gal. DTW @ Sampling: 5.32

Weather Conditions: Clear
Water Color: Tan Odor: Y / (N)
Sediment Description: Heavy

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1041	1	6.93	out of Rang	20.9		
1046	2	6.91	↓	20.7		
1051	3	6.90		20.6		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-15	4 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEXMTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/26/07 (inclusive)
Sampler: ~~SJH~~

Well ID: MW-17
Well Diameter: 2/4 in.
Total Depth: 9.80 ft.
Depth to Water: — ft.

Date Monitored: ~~6/28/07~~

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

— xVF — = — x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: _____

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ gal
Amt Removed from Well: _____ gal
Water Removed: _____
Product Transferred to: _____

Start Time (purge): _____
Sample Time/Date: _____ / _____
Approx. Flow Rate: _____ gpm.
Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Weather Conditions: _____
Water Color: _____ Odor: Y / N _____
Sediment Description: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: Not able to access Ben Dave Gold Berg

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6-26-08 (inclusive)
Sampler: SH

Well ID MW-1D
Well Diameter 2 / 4 in.
Total Depth 9.92 ft.
Depth to Water 4.11 ft.
5.81 xVF _____ = _____

Date Monitored: 6-26-08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: _____

Time Started: 1241 (2400 hrs)
Time Completed: 1300 (2400 hrs)
Depth to Product: 2-97 ft
Depth to Water: 4.11 ft
Hydrocarbon Thickness: 1.14 ft
Visual Confirmation/Description: Black, thick, oily
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ gal
Amt Removed from Well: 16 ~~gal~~ 1.02
Water Removed: 1 gallon
Product Transferred to: Drum

Purge Equipment:
Disposable Bailer X
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Start Time (purge): _____
Sample Time/Date: / _____
Approx. Flow Rate: _____ gpm.
Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Weather Conditions: _____
Water Color: _____ Odor: Y / N _____
Sediment Description: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: SPH

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/26/08 (inclusive)
Sampler:

Well ID: NPORDMW-3
Well Diameter: (2) 4 in.
Total Depth: 16.38 ft.
Depth to Water: ft.

Date Monitored: 6/26/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

xVF = x3 case volume = Estimated Purge Volume: gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge):
Sample Time/Date: /
Approx. Flow Rate: gpm.
Did well de-water? If yes, Time: Volume: gal.

Weather Conditions:
Water Color: Odor: **Y / N**
Sediment Description:
DTW @ Sampling:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
NPORDMW-	x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: Not able to access per Dave Goldberg

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 6/26/08 (inclusive)
Sampler:

Well ID: NPORDMW-21
Well Diameter: 2 in.
Total Depth: 18.23 ft.
Depth to Water: — ft.

Date Monitored:

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

— xVF — = — x3 case volume = Estimated Purge Volume: — gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: —

Purge Equipment:
- Disposable Bailer
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other:

Sampling Equipment:
- Disposable Bailer
- Pressure Bailer
- Discrete Bailer
- Peristaltic Pump
- QED Bladder Pump
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge):
Sample Time/Date: /
Approx. Flow Rate: gpm.
Did well de-water? If yes, Time: Volume: gal.

Weather Conditions:
Water Color: Odor: Y / N
Sediment Description:
DTW @ Sampling:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
NPORDMW-	x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: Not able to access per Dave Gold Bay

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

WELL CONDITION STATUS SHEET

Client/Facility #: **Rolls-Royce Engine Test Facility**
Site Address: **6701 Old Earhart Road**
City: **Oakland, CA**

Job # **25-948218.1**
Event Date: 7/3/07
Sampler: SD

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS *(M) Missing (R) Replaced*	Bolt Flanges *B= Broken S= Stripped R=Retap*	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal *(Deficient) inches from TOC*	Casing *(Condition prevents tight cap seal)*	REPLACE LOCK Y / N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-1	OK							N	N	8" Morrison	N
Non Pur MW-4	OK	N/A			OK			N	N	Stove Pipe	N
MW-8	OK							N	N	8" Morrison	N
Non Pur MW-3	OK							N	N	10" Morrison	N

Comments

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 7/3/08 (inclusive)
Sampler: JH

Well ID: MW-8
Well Diameter: (2) 4 in.
Total Depth: 9.79 ft.
Depth to Water: 4.49 ft.

Date Monitored: 7/3/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

5.30 xVF .17 = .90 x3 case volume = Estimated Purge Volume: 2.70 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.38

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1140
Sample Time/Date: 1220 / 7/3/08
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: _____ Volume: _____ gal.

Weather Conditions: Clear
Water Color: Cloudy Odor: (Y) / N
Sediment Description: Heavy
DTW @ Sampling: 5.30

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) (µS)	Temperature (C) / F	D.O. (mg/L)	ORP (mV)
1143	.75	7.51	2874	23.2		
1150	1.5	7.37	2829	22.7		
1200	2.75	7.20	2853	22.4		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: 12.5 of Fence to the N-NW

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 7/31/08 (inclusive)
Sampler: JH

Well ID: MW-17
Well Diameter: (2) 4 in.
Total Depth: 9.80 ft.
Depth to Water: 1.98 ft.

Date Monitored: 7/31/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.82 xVF .17 = 1.32 x3 case volume = Estimated Purge Volume: 3.98 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.54

Purge Equipment:
- Disposable Bailer: X
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0855
Sample Time/Date: 0950 / 7/31/08
Approx. Flow Rate: — gpm.
Did well de-water? N If yes, Time: _____ Volume: _____ gal.

Weather Conditions: Clear
Water Color: Clear Odor: Y / (N)
Sediment Description: 1.5 HV
DTW @ Sampling: 3.54

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm / (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0900	1.5	7.61	OUT OF Range	23.6		
0904	3.0	7.53	↓	22.9		
0909	4.0	7.36	↓	22.4		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-17	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: Slow Recovery
Water Reacted with HCL in VOA's - bubbled out HCL - sample non-Representative.

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 7/3/08 (inclusive)
Sampler: JH

Well ID: NPORDMW-3
Well Diameter: 2 (4) in.
Total Depth: 16.38 ft.
Depth to Water: 3.96 ft.
12.42 xVF .66 = 8.19

Date Monitored: 7/3/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

x3 case volume = Estimated Purge Volume: 24.59 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.44

Purge Equipment:
- Disposable Bailer: ____
- Stainless Steel Bailer: ____
- Stack Pump: X
- Suction Pump: ____
- Grundfos: ____
- Peristaltic Pump: ____
- QED Bladder Pump: ____
- Other: ____

Sampling Equipment:
- Disposable Bailer: X
- Pressure Bailer: ____
- Discrete Bailer: ____
- Peristaltic Pump: ____
- QED Bladder Pump: ____
- Other: ____

Time Started: ____ (2400 hrs)
Time Completed: ____ (2400 hrs)
Depth to Product: ____ ft
Depth to Water: ____ ft
Hydrocarbon Thickness: ____ ft
Visual Confirmation/Description: ____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ____ gal
Amt Removed from Well: ____ gal
Water Removed: ____
Product Transferred to: ____

Start Time (purge): 1230
Sample Time/Date: 1310 / 7/3/08
Approx. Flow Rate: 1 gpm.
Did well de-water? no If yes, Time: ____ Volume: ____ gal.

Weather Conditions: Clear
Water Color: Clear Odor: Y / (N)
Sediment Description: 1.5 HL
DTW @ Sampling: 6.30

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (µS))	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)
1238	8	7.82	out of Range	23.6		
1246	16	7.54	↓	23.3		
1254	24	7.30	↓	23.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
NPORDMW-3	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: (2) Poly tubes in well - (1) ½" with check valve on it.

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 7/31/08 (inclusive)
Sampler: JH

Well ID: NPORDMW- 4
Well Diameter: (2) 4 in.
Total Depth: 18.23 ft.
Depth to Water: 6.26 ft.
11.97 xVF 117 = 2.03 x3 case volume = Estimated Purge Volume: 6.10 gal.

Date Monitored: 7/31/08

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.65

Purge Equipment:
Disposable Bailer: X
Stainless Steel Bailer:
Stack Pump:
Suction Pump:
Grundfos:
Peristaltic Pump:
QED Bladder Pump:
Other:

Sampling Equipment:
Disposable Bailer: X
Pressure Bailer:
Discrete Bailer:
Peristaltic Pump:
QED Bladder Pump:
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1040
Sample Time/Date: 1110 / 7/31/08
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: Volume: gal.

Weather Conditions: Clear
Water Color: Clear Odor: (Y) N
Sediment Description: 1/2 ft
DTW @ Sampling: 8.34

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) (µS)	Temperature (C) / F	D.O. (mg/L)	ORP (mV)
1045	2	7.37	OUT of Range	23.2		
1050	4	7.26	↓	23.1		
1055	6	7.11		23.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
NPORDMW-	4 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: (2) Poly Tubes in well - (1) 1/2 tube with check valve on it. Water Reacted with Hcl in VOA's - washed out HCL - Samples non-Preserved now

Add/Replaced Lock: Add/Replaced Plug: Add/Replaced Bolt:

KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Geoffrey Risse
Gettler-Ryan Inc.
3140 Gold Camp Dr. Suite 170
Rancho Cordova, CA 95670

Subject : 15 Water Samples
Project Name : Rolls-Royce Engine Test Facility
Project Number : 25-948218.1

Dear Mr. Risse,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Subject : 15 Water Samples
Project Name : Rolls-Royce Engine Test Facility
Project Number : 25-948218.1

Case Narrative

Sample 'QA' was analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4 inch in diameter.

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **QA** Matrix : Water Lab Number : 63507-01
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/02/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	07/02/2008
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	07/02/2008
4-Bromofluorobenzene (Surr)	91.3		% Recovery	EPA 8260B	07/02/2008

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-1** Matrix : Water Lab Number : 63507-02
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/04/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/04/2008
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	07/04/2008
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	07/04/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	07/08/2008
TPH as Jet Fuel	**51**	50	ug/L	M EPA 8015	07/08/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	117		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	81.7		% Recovery	M EPA 8015	07/08/2008

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-2** Matrix : Water Lab Number : 63507-03
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/03/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/03/2008
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/03/2008
4-Bromofluorobenzene (Surr)	112		% Recovery	EPA 8260B	07/03/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/09/2008
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	07/09/2008
TPH as Jet Fuel	**97**	50	ug/L	M EPA 8015	07/09/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	07/09/2008
Octacosane (Silica Gel Surr)	99.3		% Recovery	M EPA 8015	07/09/2008

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-3** Matrix : Water Lab Number : 63507-04
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Toluene	**1.7**	0.50	ug/L	EPA 8260B	07/04/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Methyl-t-butyl ether (MTBE)	**0.93**	0.50	ug/L	EPA 8260B	07/04/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/04/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/04/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/04/2008
4-Bromofluorobenzene (Surr)	112		% Recovery	EPA 8260B	07/04/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	07/08/2008
TPH as Jet Fuel	**610**	50	ug/L	M EPA 8015	07/08/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	81.4		% Recovery	M EPA 8015	07/08/2008

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KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-4** Matrix : Water Lab Number : 63507-05
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/04/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	07/04/2008
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/04/2008
4-Bromofluorobenzene (Surr)	110		% Recovery	EPA 8260B	07/04/2008
TPH as Motor Oil	**1900**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**2300**	50	ug/L	M EPA 8015	07/08/2008
TPH as Jet Fuel	**2700**	50	ug/L	M EPA 8015	07/08/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	101		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	109		% Recovery	M EPA 8015	07/08/2008

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KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-5** Matrix : Water Lab Number : 63507-06
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/04/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	07/04/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/04/2008
4-Bromofluorobenzene (Surr)	109		% Recovery	EPA 8260B	07/04/2008
TPH as Motor Oil	**3200**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**1400**	50	ug/L	M EPA 8015	07/08/2008
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**2000**	50	ug/L	M EPA 8015	07/08/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	111		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	108		% Recovery	M EPA 8015	07/08/2008

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KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-6** Matrix : Water Lab Number : 63507-07
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/02/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
1,2-Dichloroethane-d4 (Surr)	107		% Recovery	EPA 8260B	07/02/2008
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/02/2008
4-Bromofluorobenzene (Surr)	91.7		% Recovery	EPA 8260B	07/02/2008
TPH as Motor Oil	**9400**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**3200**	50	ug/L	M EPA 8015	07/08/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
TPH as Jet Fuel	**3200**	50	ug/L	M EPA 8015	07/08/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	76.9		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	99.6		% Recovery	M EPA 8015	07/08/2008

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Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-7** Matrix : Water Lab Number : 63507-08
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/03/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/03/2008
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	07/03/2008
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	07/03/2008
4-Bromofluorobenzene (Surr)	116		% Recovery	EPA 8260B	07/03/2008
TPH as Motor Oil	**10000**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**3300**	50	ug/L	M EPA 8015	07/08/2008
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**3300**	50	ug/L	M EPA 8015	07/08/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	70.9		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	126		% Recovery	M EPA 8015	07/08/2008

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KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-9** Matrix : Water Lab Number : 63507-09
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/04/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	07/04/2008
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/04/2008
4-Bromofluorobenzene (Surr)	110		% Recovery	EPA 8260B	07/04/2008
TPH as Motor Oil	**1800**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**1600**	50	ug/L	M EPA 8015	07/08/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
TPH as Jet Fuel	**1800**	50	ug/L	M EPA 8015	07/08/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	97.1		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	114		% Recovery	M EPA 8015	07/08/2008

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KIFF Analytical LLC

Report Number : 63507
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Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-10** Matrix : Water Lab Number : 63507-10
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
TPH as Gasoline	**120**	50	ug/L	EPA 8260B	07/02/2008
Naphthalene	**5.0**	0.50	ug/L	EPA 8260B	07/02/2008
1,2-Dichloroethane-d4 (Surr)	99.5		% Recovery	EPA 8260B	07/02/2008
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/02/2008
4-Bromofluorobenzene (Surr)	91.9		% Recovery	EPA 8260B	07/02/2008
TPH as Motor Oil	**1000**	100	ug/L	M EPA 8015	07/09/2008
TPH as Diesel (w/ Silica Gel)	**1200**	50	ug/L	M EPA 8015	07/09/2008
TPH as Jet Fuel	**2000**	50	ug/L	M EPA 8015	07/09/2008
Octacosane (Diesel Surrogate)	78.0		% Recovery	M EPA 8015	07/09/2008
Octacosane (Silica Gel Surr)	80.0		% Recovery	M EPA 8015	07/09/2008

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KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-11** Matrix : Water Lab Number : 63507-11
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/04/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/04/2008
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	07/04/2008
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/04/2008
4-Bromofluorobenzene (Surr)	111		% Recovery	EPA 8260B	07/04/2008
TPH as Motor Oil	**7300**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**2700**	50	ug/L	M EPA 8015	07/08/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
TPH as Jet Fuel	**3600**	50	ug/L	M EPA 8015	07/08/2008
(Note: Lower boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	87.6		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	107		% Recovery	M EPA 8015	07/08/2008

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KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-12** Matrix : Water Lab Number : 63507-12
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/02/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/02/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/02/2008
4-Bromofluorobenzene (Surr)	93.2		% Recovery	EPA 8260B	07/02/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	07/08/2008
TPH as Jet Fuel	**< 50**	50	ug/L	M EPA 8015	07/08/2008
Octacosane (Diesel Surrogate)	109		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	105		% Recovery	M EPA 8015	07/08/2008

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KIFF Analytical LLC

Report Number : 63507
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Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-13** Matrix : Water Lab Number : 63507-13
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**2.0**	0.50	ug/L	EPA 8260B	07/02/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Total Xylenes	**0.60**	0.50	ug/L	EPA 8260B	07/02/2008
Methyl-t-butyl ether (MTBE)	**3.3**	0.50	ug/L	EPA 8260B	07/02/2008
TPH as Gasoline	**720**	50	ug/L	EPA 8260B	07/02/2008
Naphthalene	**3.3**	0.50	ug/L	EPA 8260B	07/02/2008
1,2-Dichloroethane-d4 (Surr)	98.2		% Recovery	EPA 8260B	07/02/2008
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	07/02/2008
4-Bromofluorobenzene (Surr)	96.6		% Recovery	EPA 8260B	07/02/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**200**	50	ug/L	M EPA 8015	07/08/2008
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel)					
TPH as Jet Fuel	**4100**	50	ug/L	M EPA 8015	07/08/2008
(Note: Lower boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	84.7		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	73.2		% Recovery	M EPA 8015	07/08/2008

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KIFF Analytical LLC

Report Number : 63507
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Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-14** Matrix : Water Lab Number : 63507-14
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Methyl-t-butyl ether (MTBE)	**1.4**	0.50	ug/L	EPA 8260B	07/02/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/02/2008
Naphthalene	**3.1**	0.50	ug/L	EPA 8260B	07/02/2008
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/02/2008
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/02/2008
4-Bromofluorobenzene (Surr)	93.5		% Recovery	EPA 8260B	07/02/2008
TPH as Motor Oil	**2700**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**570**	50	ug/L	M EPA 8015	07/08/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
TPH as Jet Fuel	**2000**	50	ug/L	M EPA 8015	07/08/2008
(Note: Lower boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	92.1		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	93.0		% Recovery	M EPA 8015	07/08/2008

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2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63507
Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-15** Matrix : Water Lab Number : 63507-15
Sample Date :06/26/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/02/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/02/2008
1,2-Dichloroethane-d4 (Surr)	109		% Recovery	EPA 8260B	07/02/2008
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/02/2008
4-Bromofluorobenzene (Surr)	95.0		% Recovery	EPA 8260B	07/02/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/08/2008
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	07/08/2008
TPH as Jet Fuel	**84**	50	ug/L	M EPA 8015	07/08/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	95.5		% Recovery	M EPA 8015	07/08/2008

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Report Number : 63507

Date : 07/10/2008

QC Report : Method Blank Data

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/07/2008
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	07/08/2008
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/08/2008
Octacosane (Diesel Surrogate)	118		%	M EPA 8015	07/08/2008
Octacosane (Silica Gel Surr)	89.2		%	M EPA 8015	07/07/2008
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/09/2008
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	07/09/2008
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/09/2008
Octacosane (Diesel Surrogate)	105		%	M EPA 8015	07/09/2008
Octacosane (Silica Gel Surr)	107		%	M EPA 8015	07/09/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/01/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/01/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/01/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/01/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/01/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/01/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	07/01/2008
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	07/01/2008
4-Bromofluorobenzene (Surr)	94.0		%	EPA 8260B	07/01/2008
Toluene - d8 (Surr)	102		%	EPA 8260B	07/01/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/03/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	07/03/2008
4-Bromofluorobenzene (Surr)	112		%	EPA 8260B	07/03/2008
Toluene - d8 (Surr)	99.0		%	EPA 8260B	07/03/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/03/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	07/03/2008
4-Bromofluorobenzene (Surr)	112		%	EPA 8260B	07/03/2008
Toluene - d8 (Surr)	99.9		%	EPA 8260B	07/03/2008

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 63507

QC Report : Method Blank Data

Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/03/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2008
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	07/03/2008
4-Bromofluorobenzene (Surr)	105		%	EPA 8260B	07/03/2008
Toluene - d8 (Surr)	99.6		%	EPA 8260B	07/03/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 63507

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	63507-01	<0.50	39.9	39.5	41.0	40.8	ug/L	EPA 8260B	7/1/08	103	103	0.403	70-130	25
Methyl-t-butyl ether	63507-01	<0.50	39.8	39.4	41.2	36.7	ug/L	EPA 8260B	7/1/08	103	93.1	10.5	70-130	25
Toluene	63507-01	<0.50	39.3	38.9	39.0	38.4	ug/L	EPA 8260B	7/1/08	99.4	98.6	0.720	70-130	25
Benzene	63508-13	<0.50	40.1	40.1	38.6	37.8	ug/L	EPA 8260B	7/3/08	96.1	94.1	2.10	70-130	25
Methyl-t-butyl ether	63508-13	0.59	40.1	40.1	40.4	40.0	ug/L	EPA 8260B	7/3/08	99.3	98.4	0.931	70-130	25
Toluene	63508-13	<0.50	39.5	39.5	38.5	39.1	ug/L	EPA 8260B	7/3/08	97.4	98.8	1.39	70-130	25
Benzene	63563-02	39	40.1	40.1	76.0	75.0	ug/L	EPA 8260B	7/3/08	92.4	89.8	2.91	70-130	25
Methyl-t-butyl ether	63563-02	19	40.1	40.1	60.5	59.9	ug/L	EPA 8260B	7/3/08	103	101	1.50	70-130	25
Toluene	63563-02	1.5	39.5	39.5	40.0	39.4	ug/L	EPA 8260B	7/3/08	97.3	96.0	1.36	70-130	25
Benzene	63563-04	<0.50	40.1	40.1	39.9	39.2	ug/L	EPA 8260B	7/3/08	99.4	97.6	1.84	70-130	25
Methyl-t-butyl ether	63563-04	0.99	40.1	40.1	37.6	37.6	ug/L	EPA 8260B	7/3/08	91.5	91.3	0.204	70-130	25
Toluene	63563-04	<0.50	39.5	39.5	39.7	39.0	ug/L	EPA 8260B	7/3/08	100	98.8	1.73	70-130	25
TPH-D (Si Gel)	BLANK	<50	1000	1000	1060	1050	ug/L	M EPA 8015	7/7/08	106	105	1.74	70-130	25
TPH as Diesel	BLANK	<50	1000	1000	1100	1060	ug/L	M EPA 8015	7/8/08	110	106	3.18	70-130	25
TPH-D (Si Gel)	BLANK	<50	1000	1000	951	992	ug/L	M EPA 8015	7/9/08	95.1	99.2	4.16	70-130	25
TPH as Diesel	BLANK	<50	1000	1000	1050	1040	ug/L	M EPA 8015	7/9/08	105	104	0.586	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 63507

QC Report : Laboratory Control Sample (LCS)

Date : 07/10/2008

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.1	ug/L	EPA 8260B	7/1/08	103	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/1/08	93.8	70-130
Toluene	39.5	ug/L	EPA 8260B	7/1/08	98.8	70-130
Benzene	39.8	ug/L	EPA 8260B	7/3/08	93.8	70-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	7/3/08	102	70-130
Toluene	39.8	ug/L	EPA 8260B	7/3/08	97.4	70-130
Benzene	40.0	ug/L	EPA 8260B	7/3/08	94.1	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/3/08	97.0	70-130
Toluene	40.0	ug/L	EPA 8260B	7/3/08	98.0	70-130
Benzene	40.0	ug/L	EPA 8260B	7/3/08	98.0	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/3/08	97.8	70-130
Toluene	40.0	ug/L	EPA 8260B	7/3/08	100	70-130

Approved By: Joel Kiff

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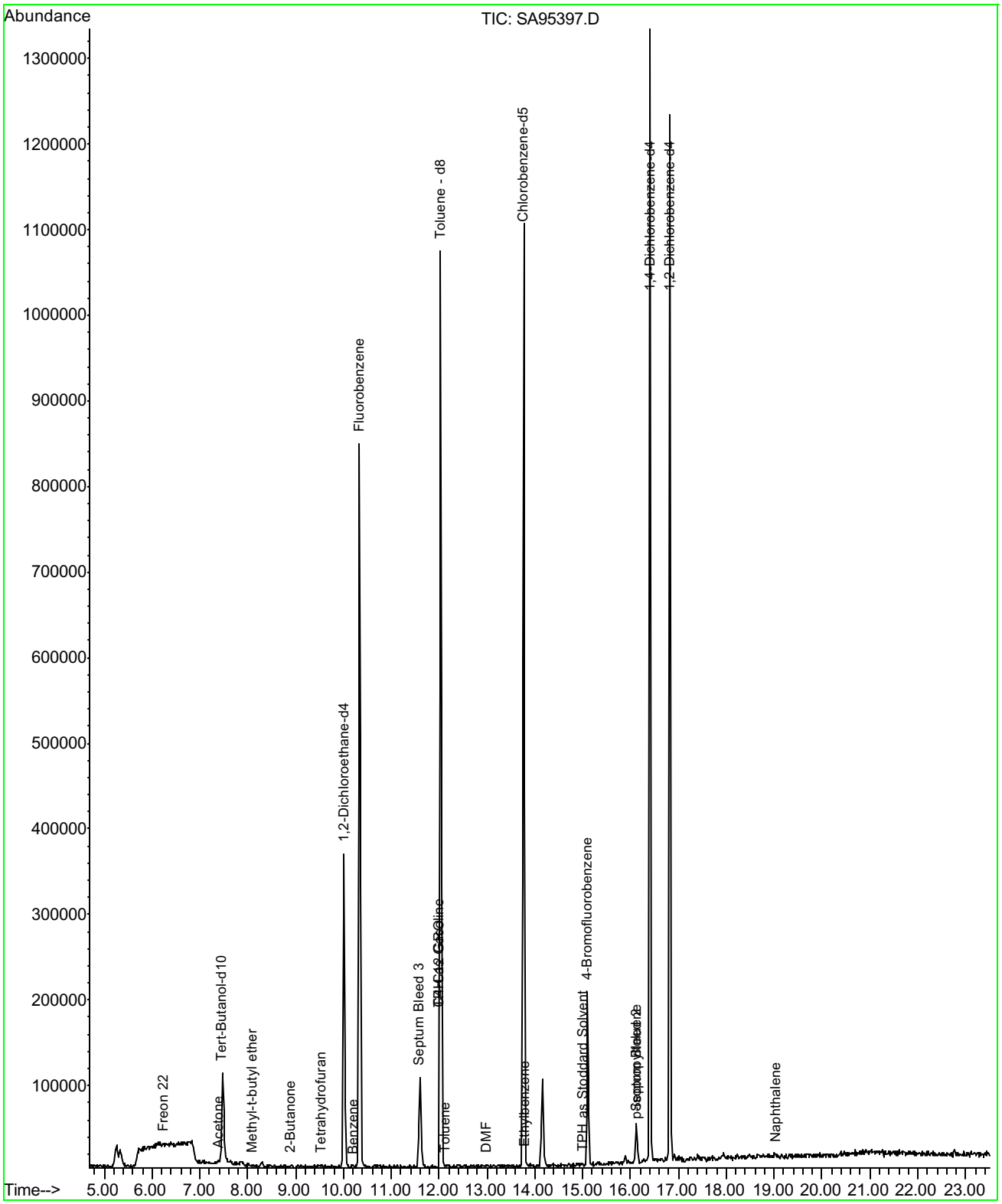
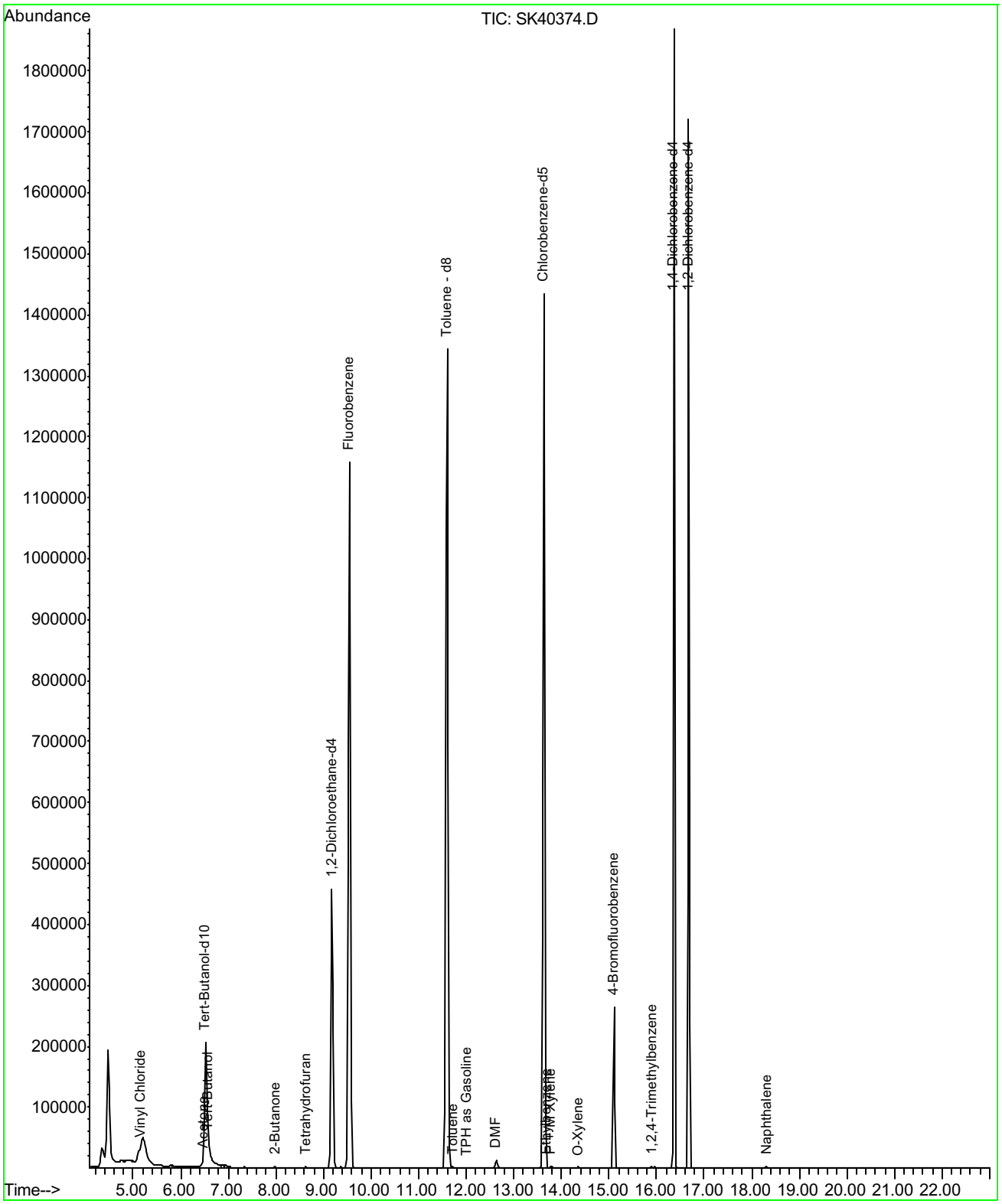
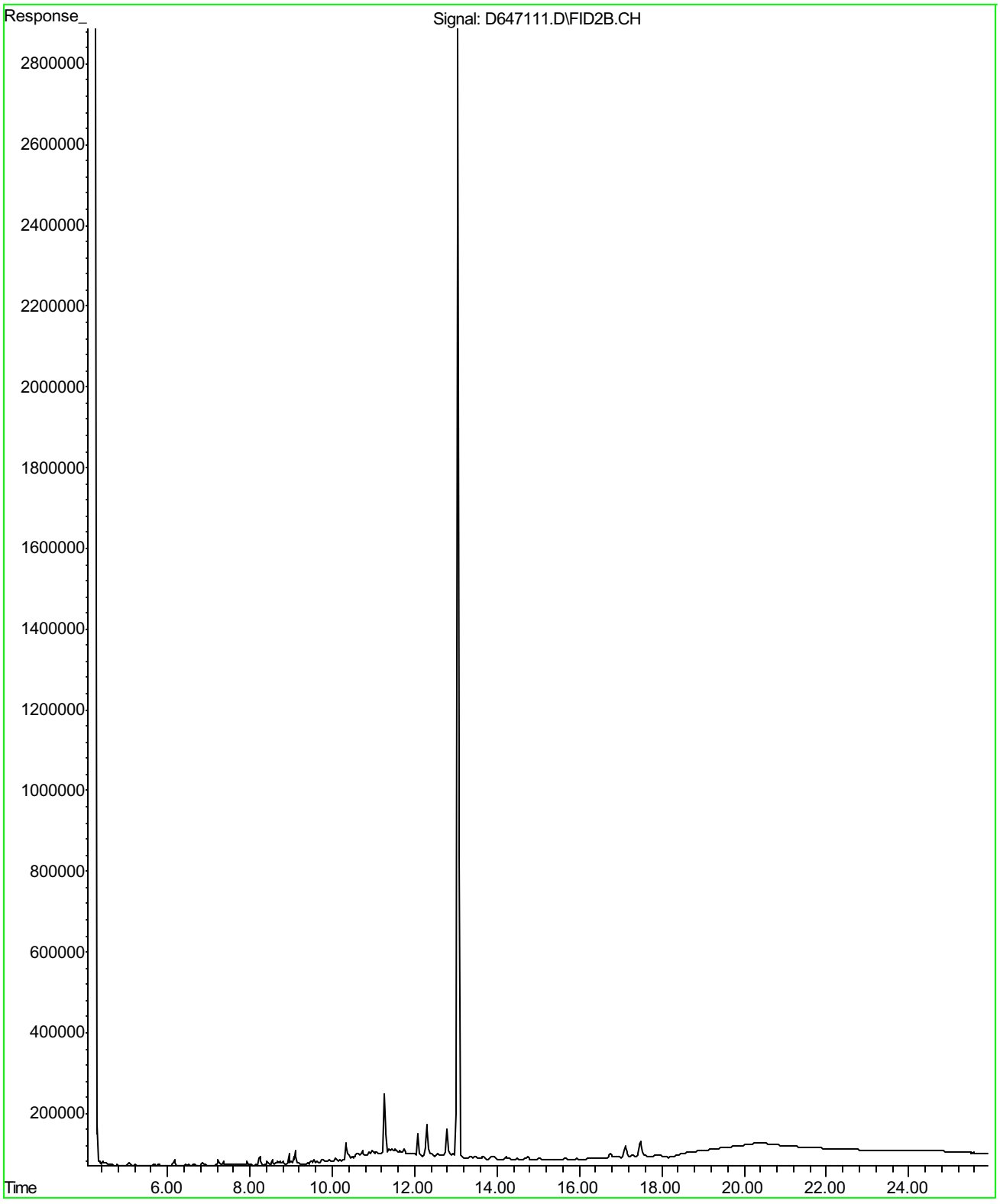
Sample ID : 63507-01 (QA)
Date Analyzed : 07/02/2008
Data File : SA95397
Analysis Method : EPA 8260B



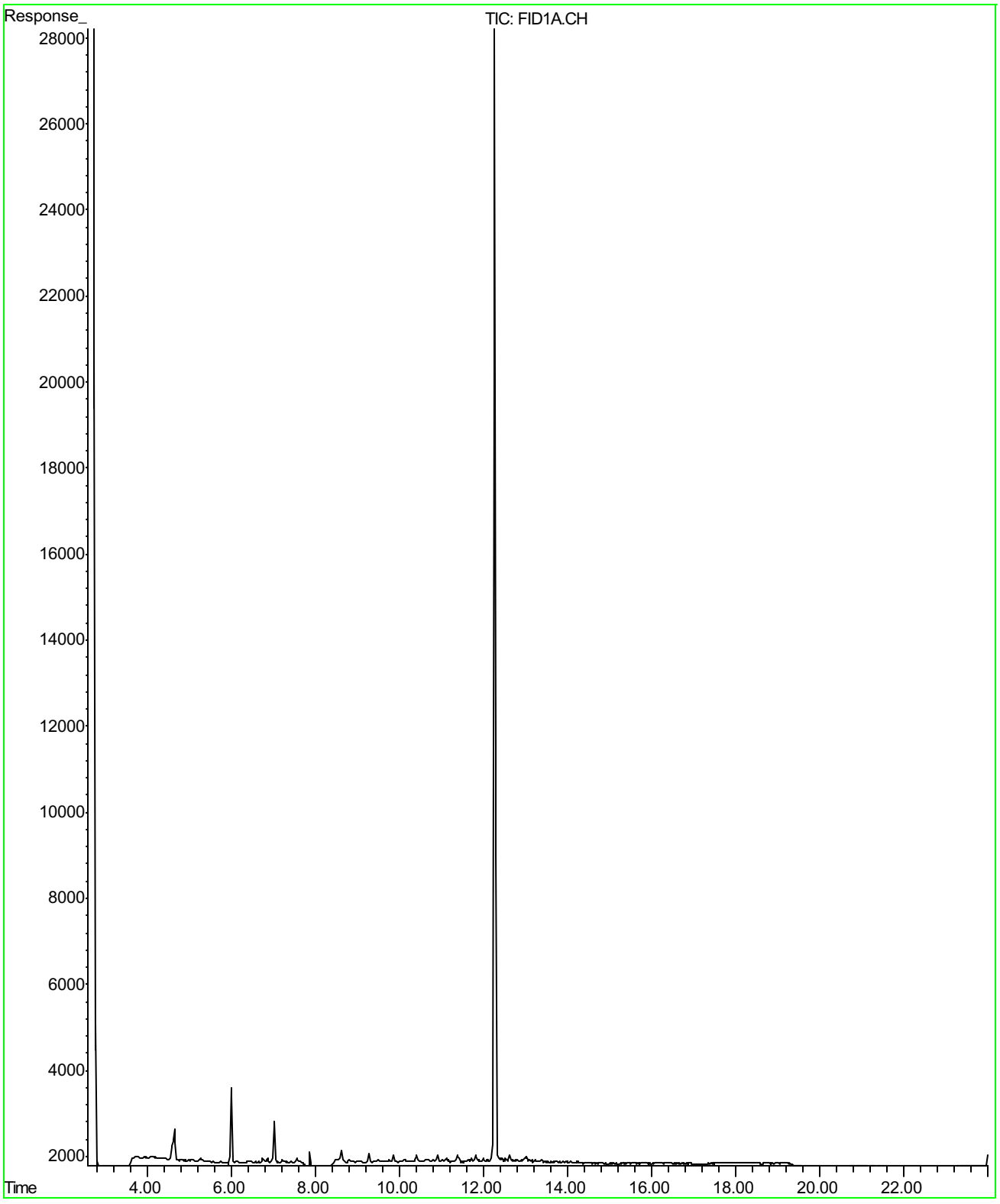
Sample ID : 63507-02 (MW-1)
Date Analyzed : 07/04/2008
Data File : SK40374
Analysis Method : EPA 8260B



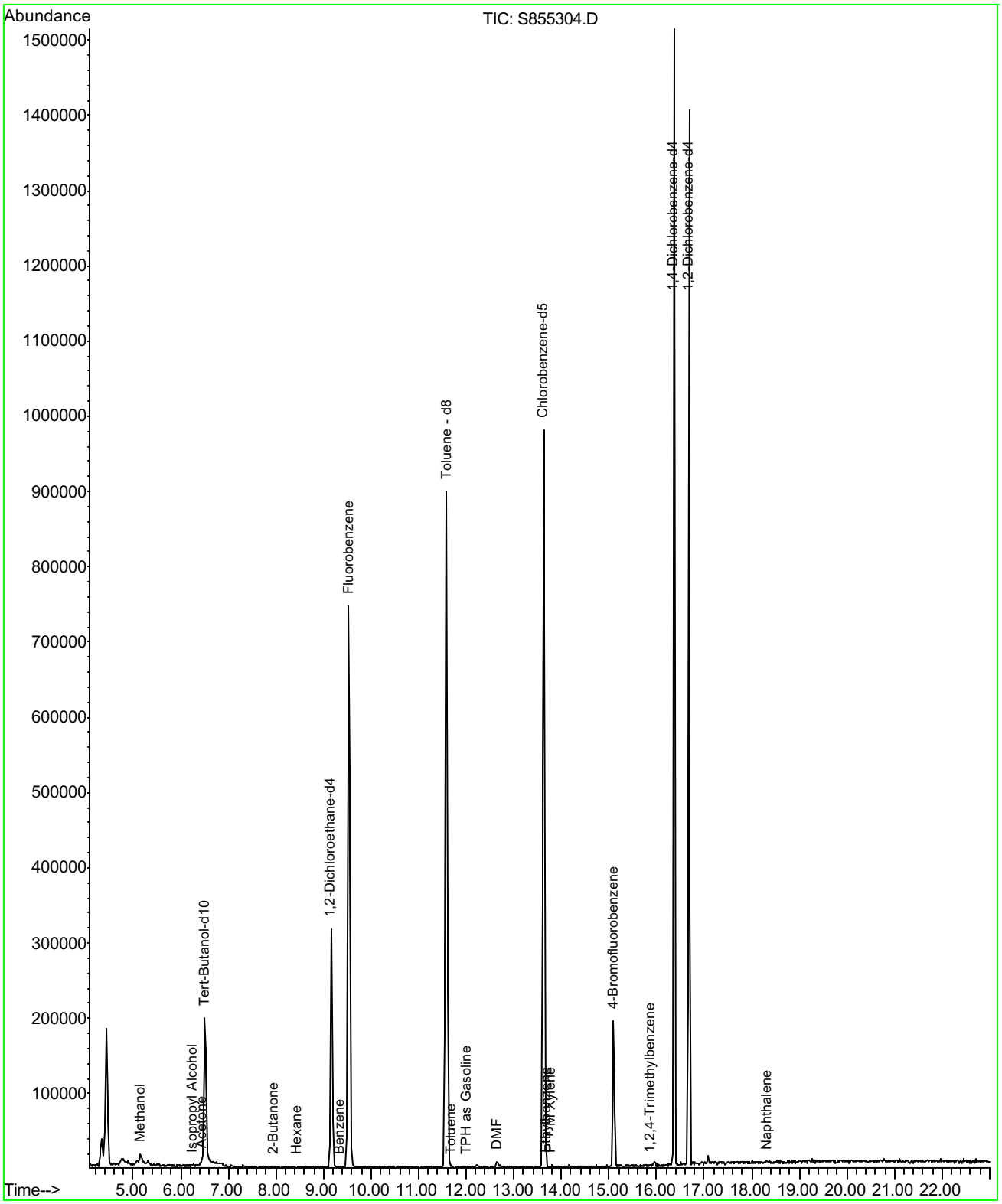
Sample ID : 63507-02 (MW-1)
Date Analyzed : 07/08/2008
Data File : D647111
Analysis Method : M EPA 8015



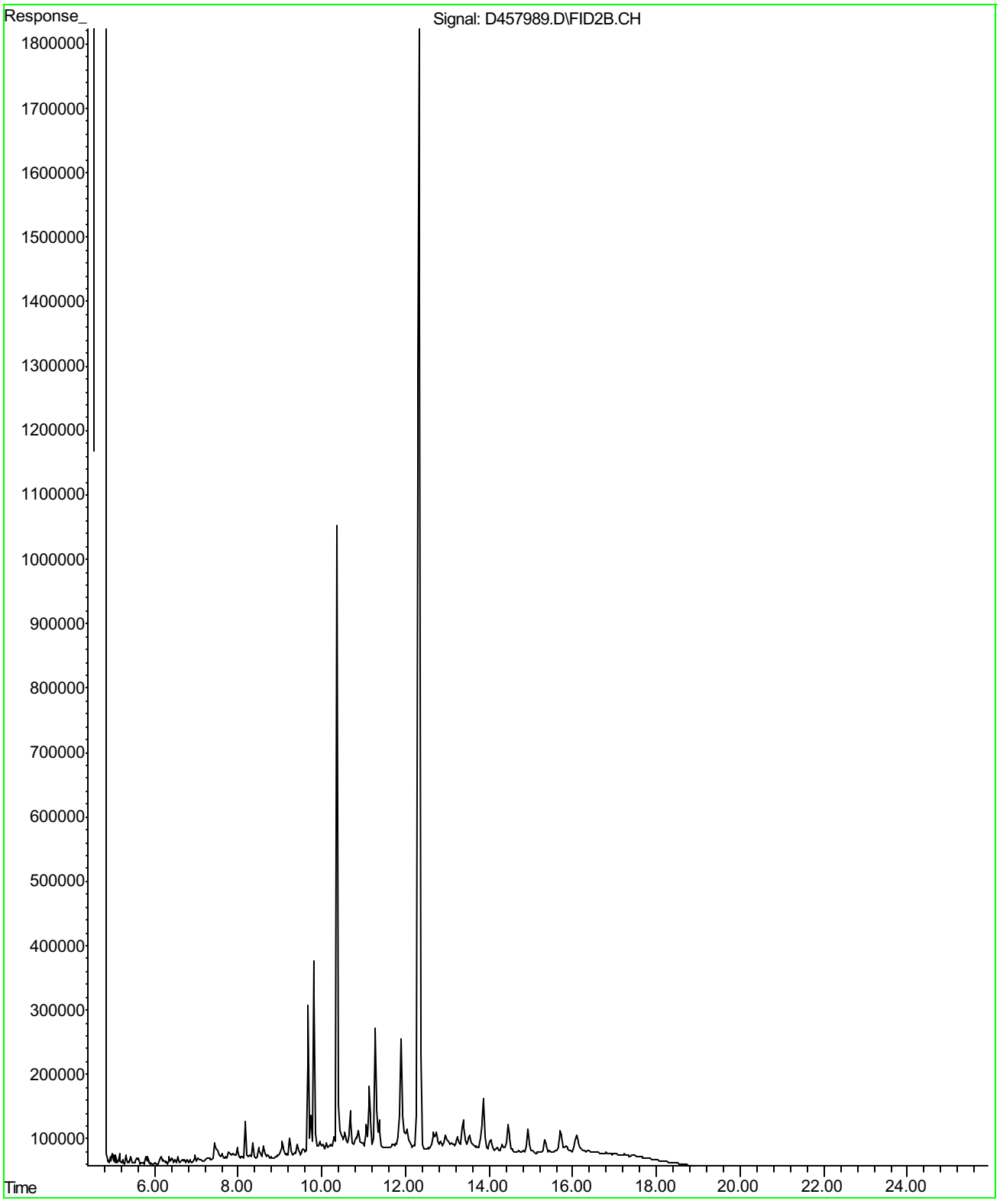
Sample ID : 63507-02 SI (MW-1)
Date Analyzed : 07/08/2008
Data File : D280990
Analysis Method : M EPA 8015



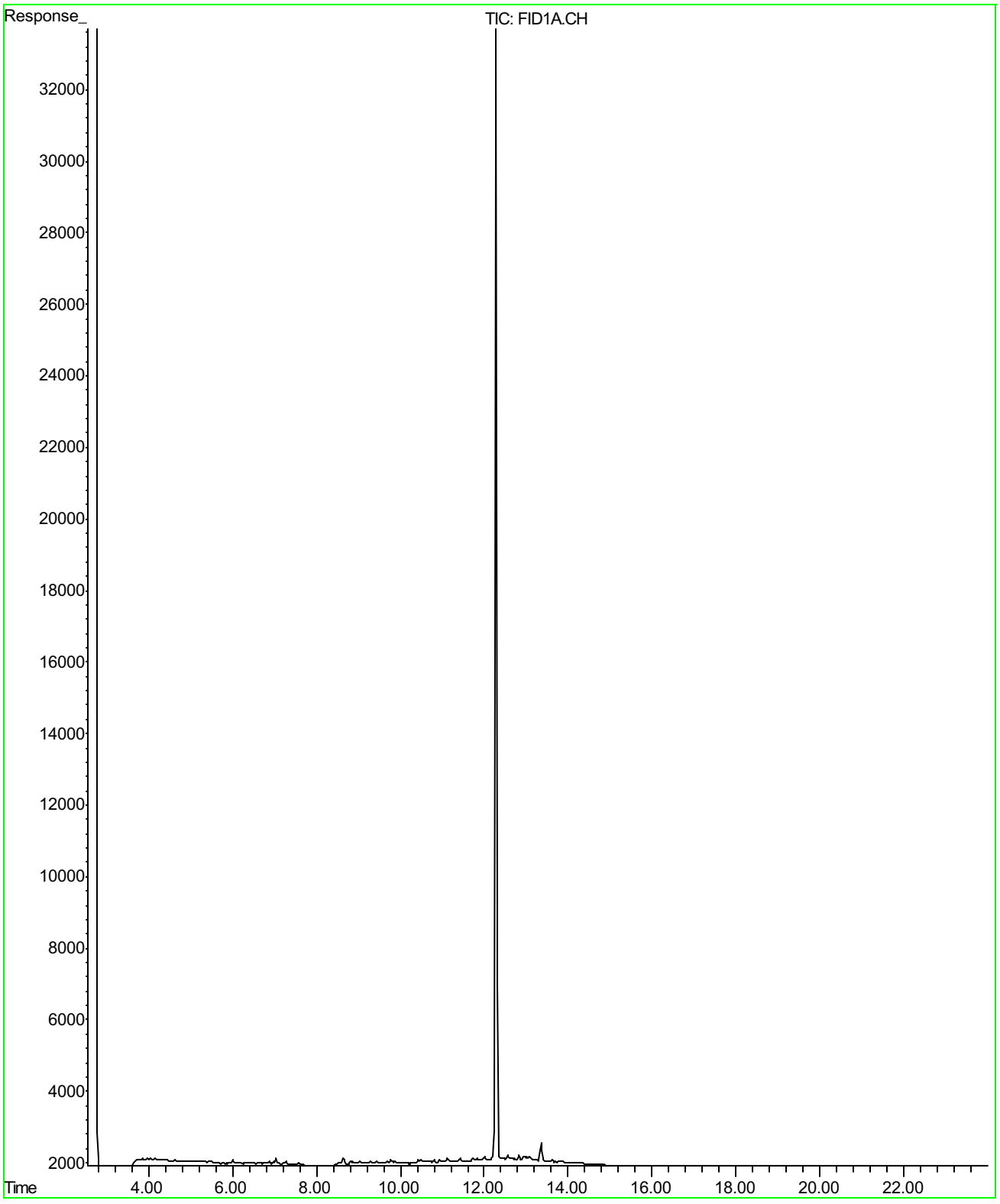
Sample ID : 63507-03 (MW-2)
Date Analyzed : 07/03/2008
Data File : S855304
Analysis Method : EPA 8260B



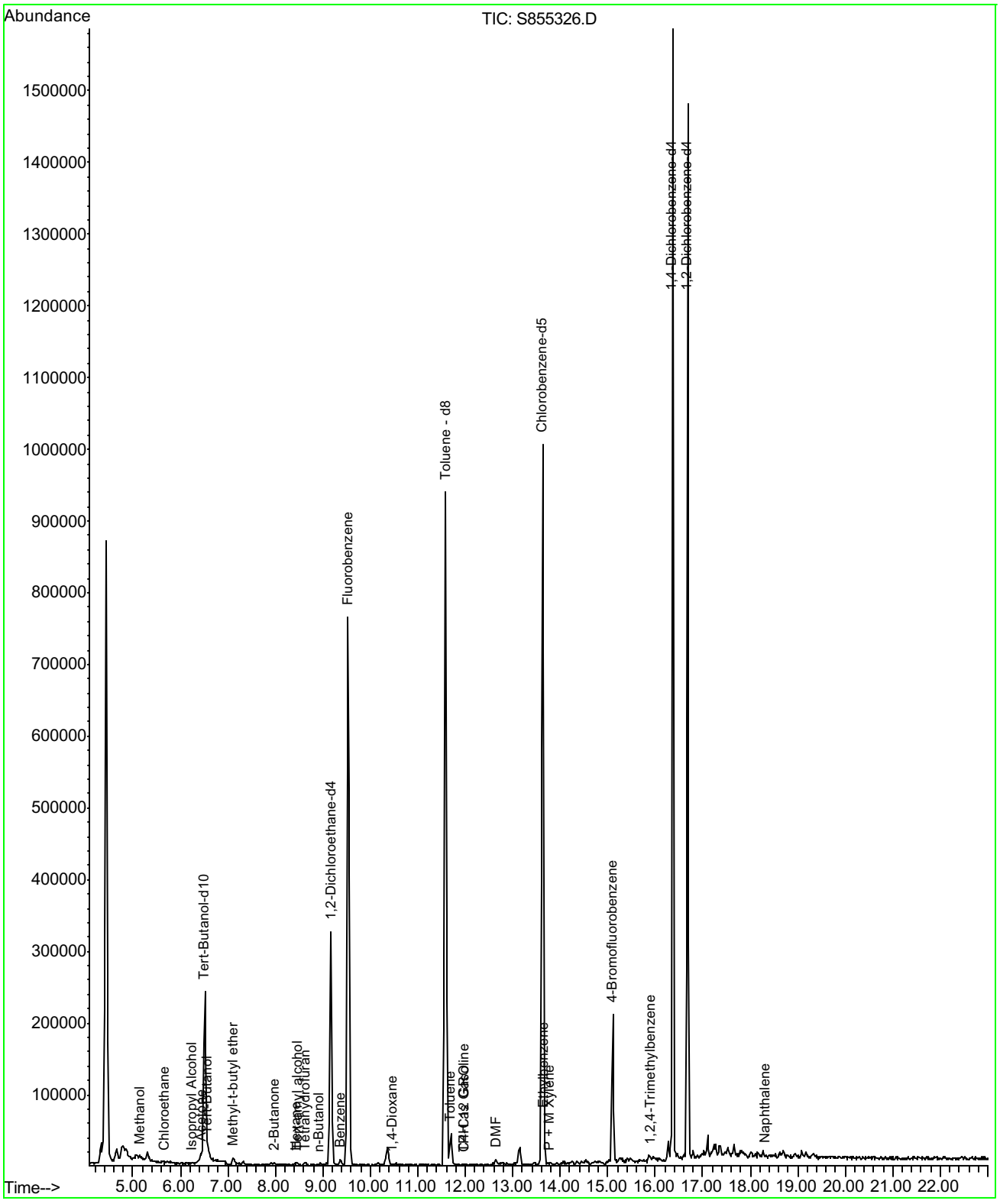
Sample ID : 63507-03 (MW-2)
Date Analyzed : 07/09/2008
Data File : D457989
Analysis Method : M EPA 8015



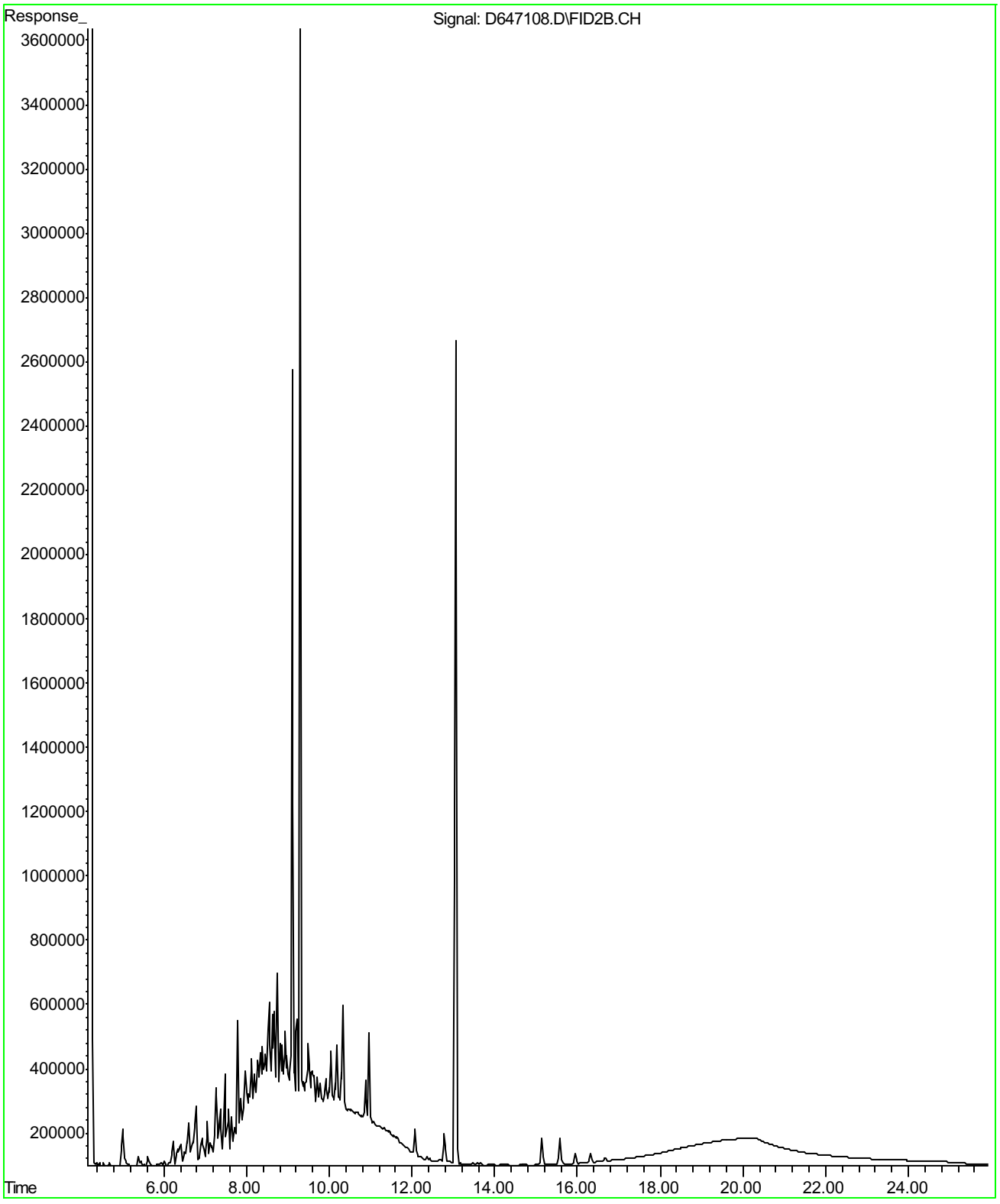
Sample ID : 63507-03 SI (MW-2)
Date Analyzed : 07/09/2008
Data File : D281048
Analysis Method : M EPA 8015



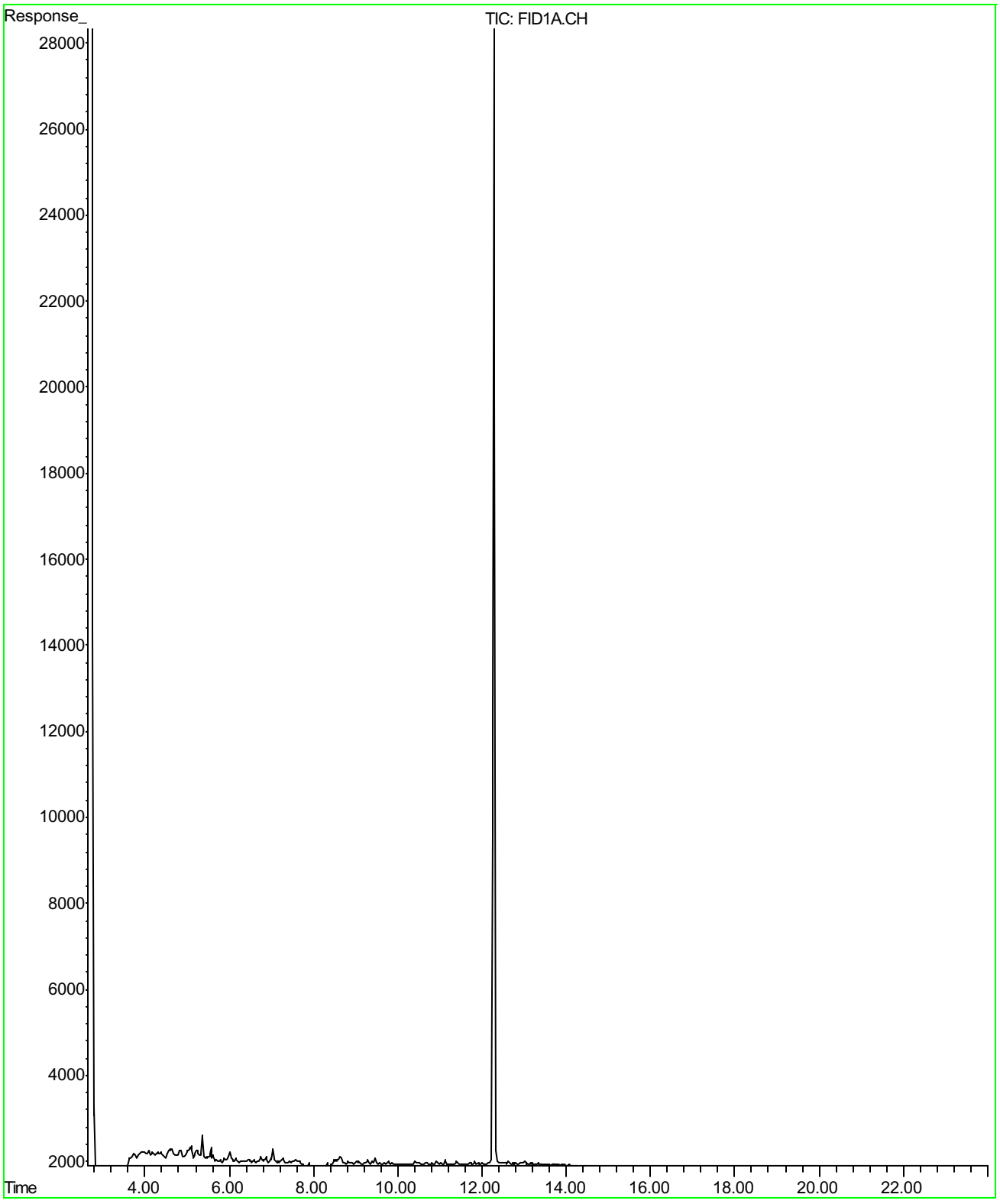
Sample ID : 63507-04 (MW-3)
Date Analyzed : 07/04/2008
Data File : S855326
Analysis Method : EPA 8260B



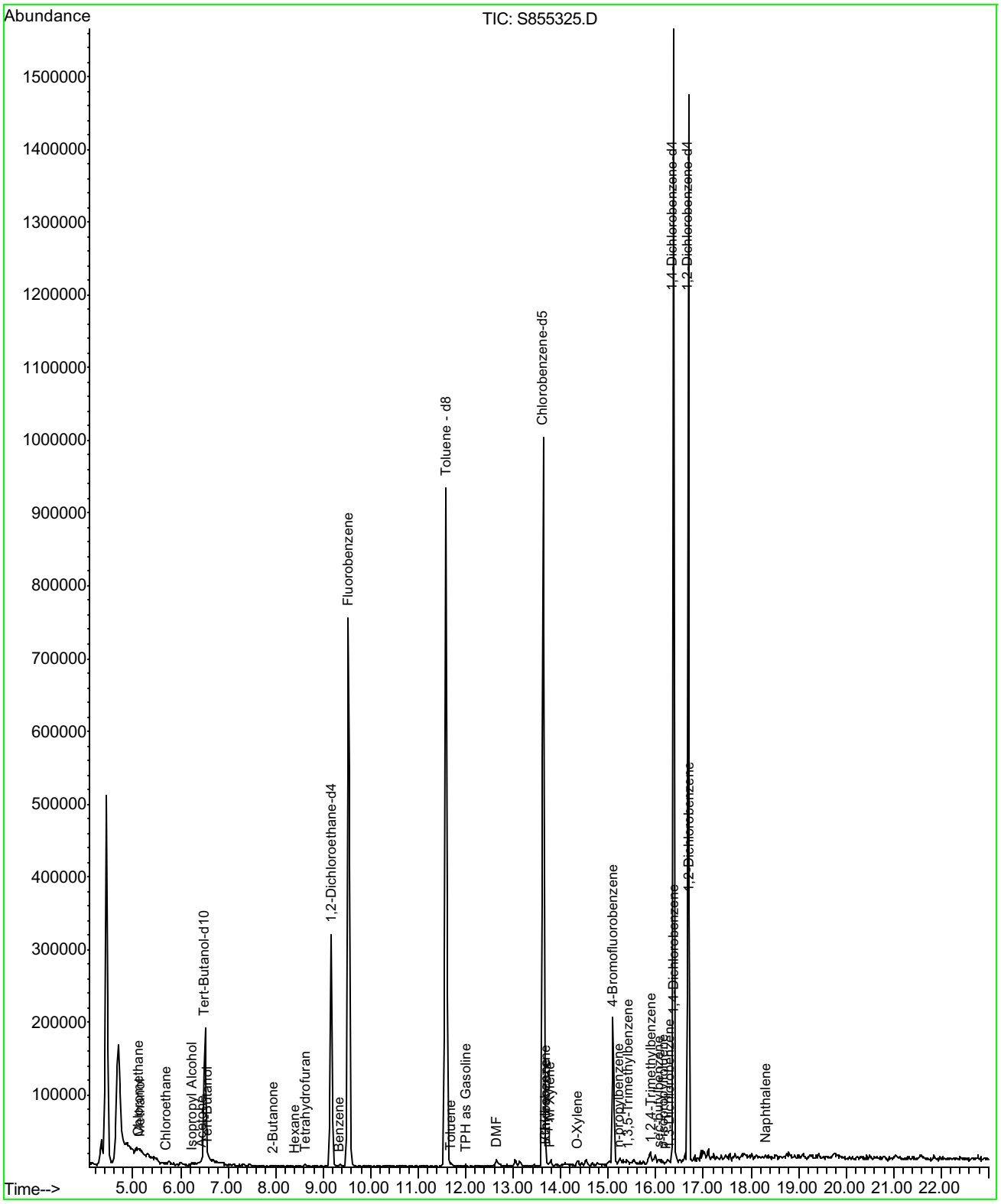
Sample ID : 63507-04 (MW-3)
Date Analyzed : 07/08/2008
Data File : D647108
Analysis Method : M EPA 8015



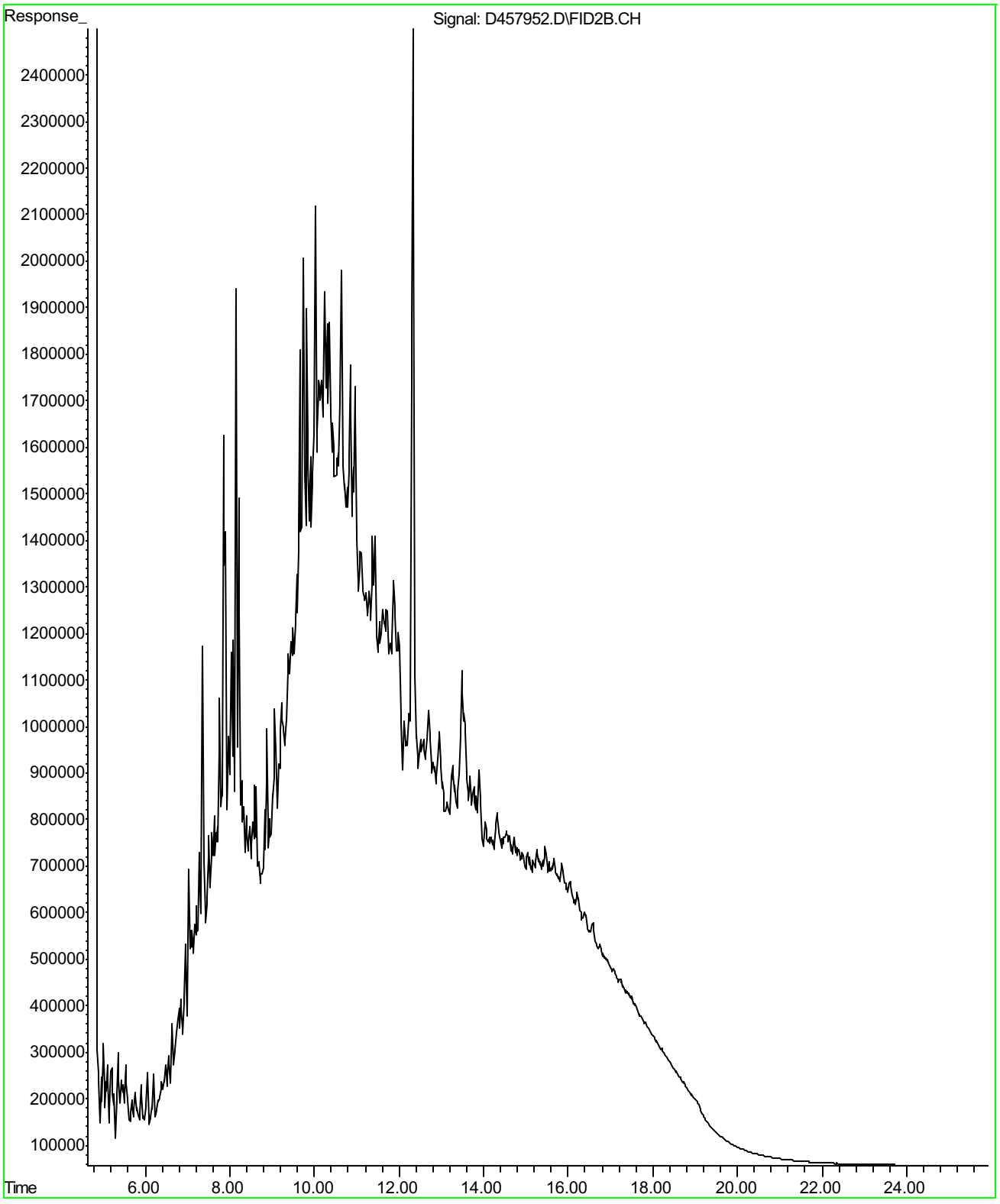
Sample ID : 63507-04 SI (MW-3)
Date Analyzed : 07/08/2008
Data File : D280991
Analysis Method : M EPA 8015



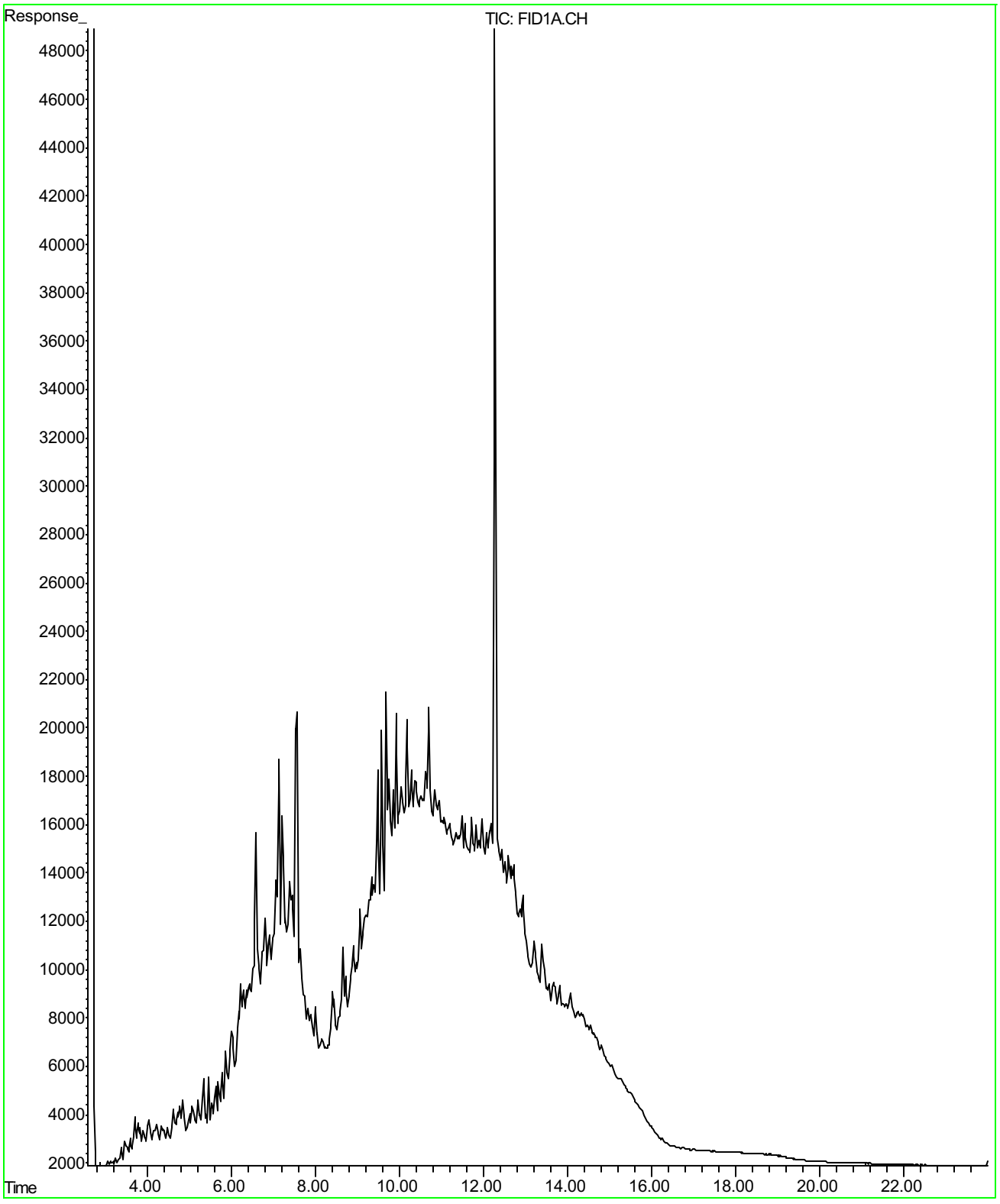
Sample ID : 63507-05 (MW-4)
Date Analyzed : 07/04/2008
Data File : S855325
Analysis Method : EPA 8260B



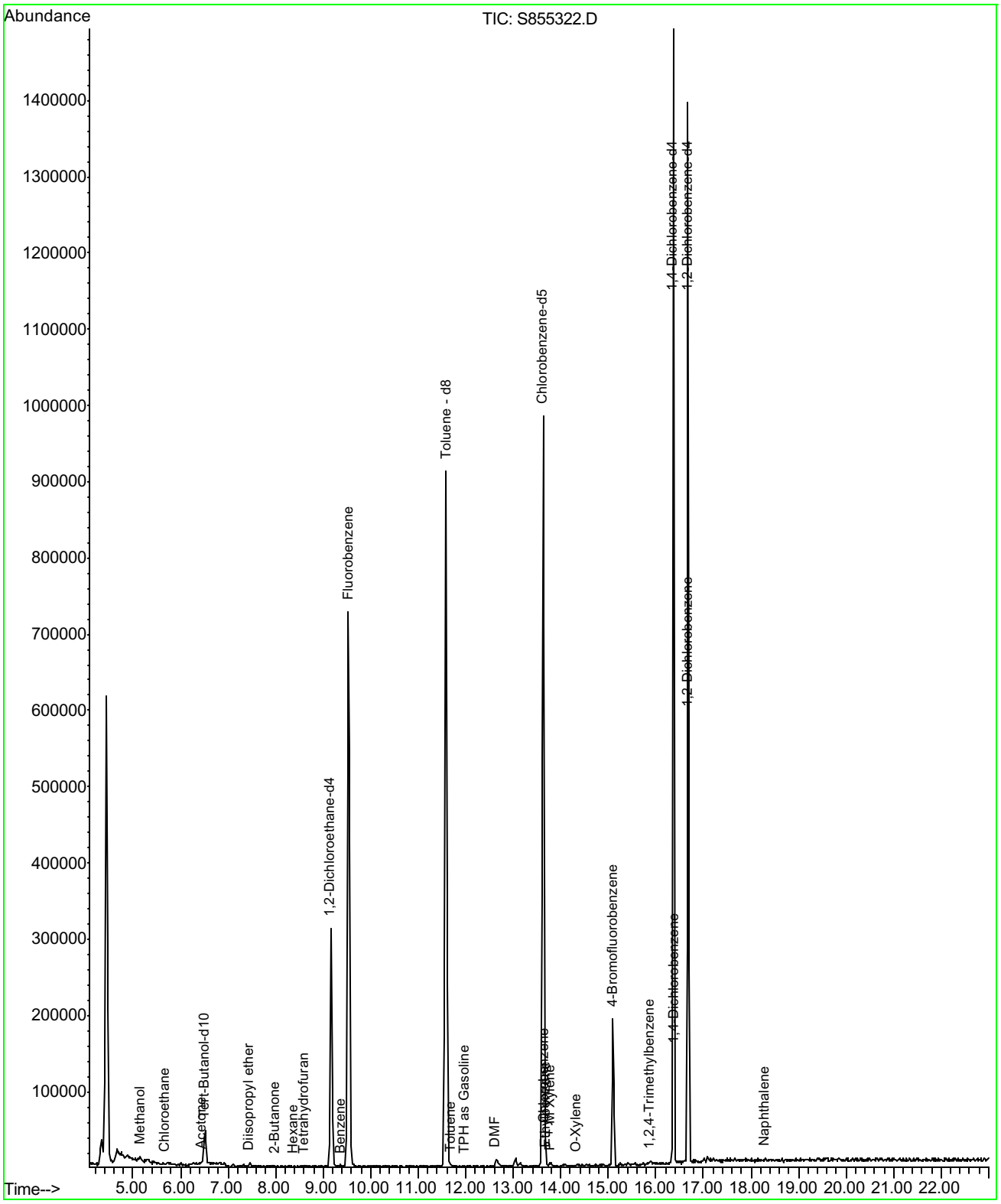
Sample ID : 63507-05 (MW-4)
Date Analyzed : 07/08/2008
Data File : D457952
Analysis Method : M EPA 8015



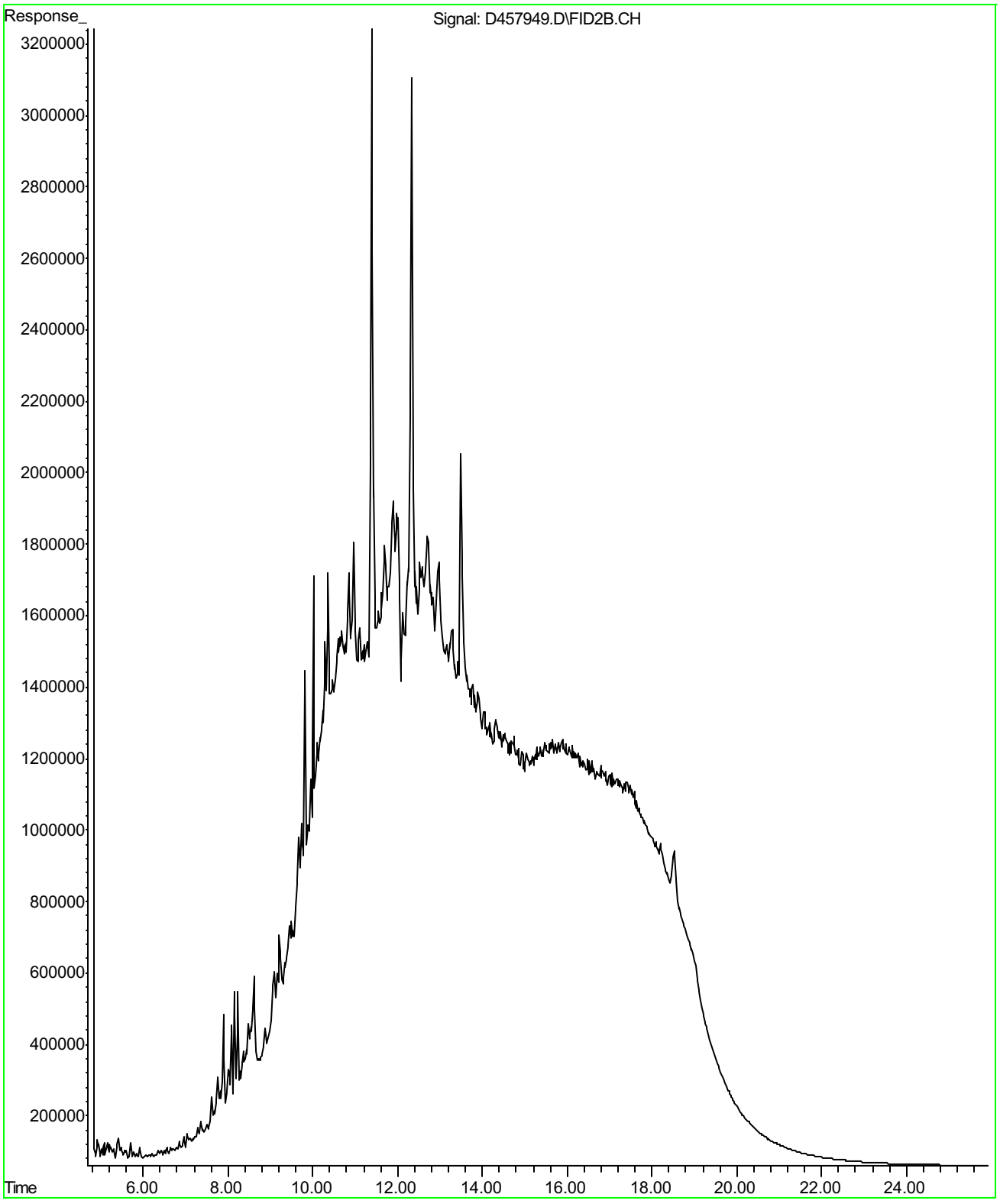
Sample ID : 63507-05 SI (MW-4)
Date Analyzed : 07/08/2008
Data File : D280992
Analysis Method : M EPA 8015



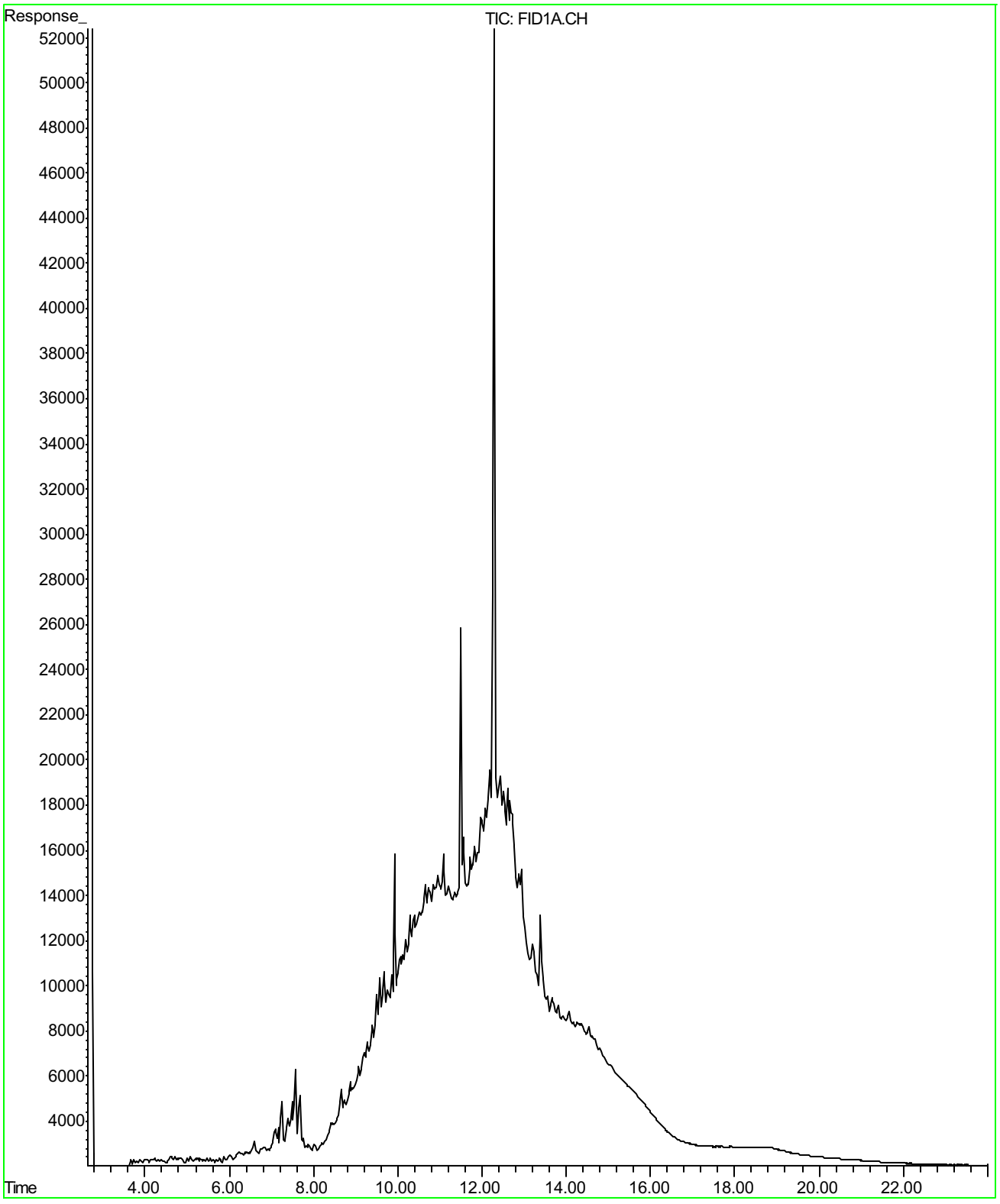
Sample ID : 63507-06 (MW-5)
Date Analyzed : 07/04/2008
Data File : S855322
Analysis Method : EPA 8260B



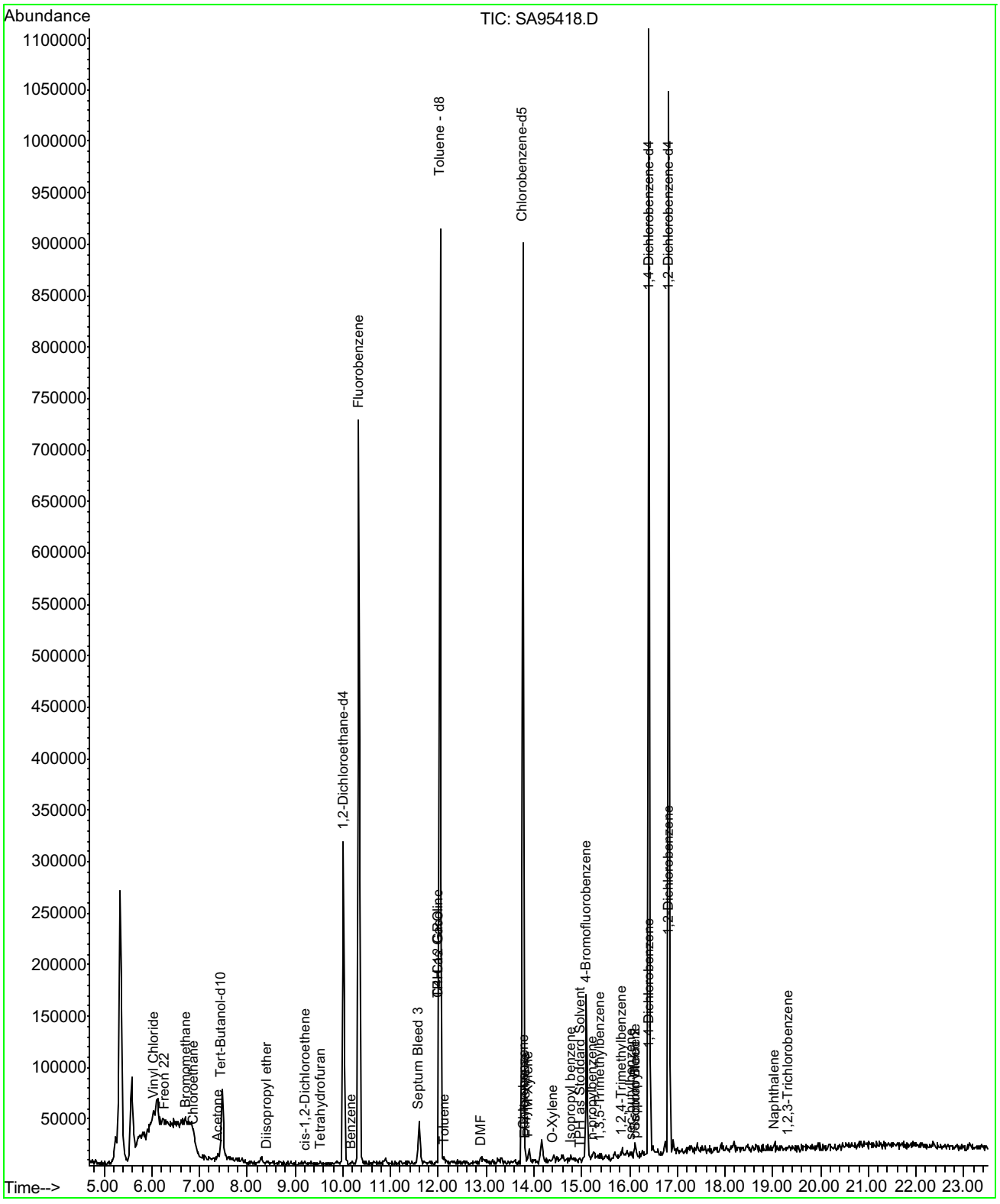
Sample ID : 63507-06 (MW-5)
Date Analyzed : 07/08/2008
Data File : D457949
Analysis Method : M EPA 8015



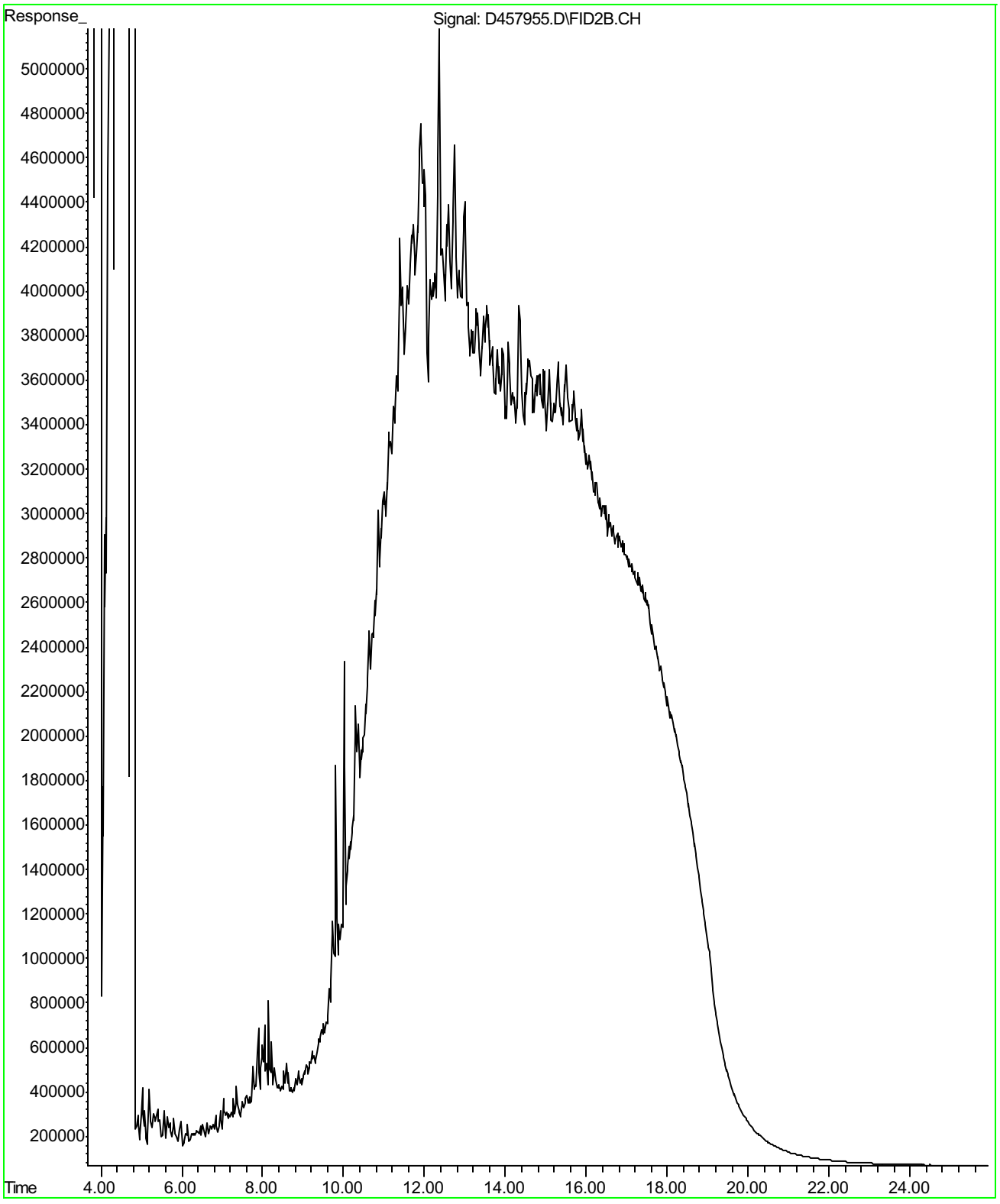
Sample ID : 63507-06 SI (MW-5)
Date Analyzed : 07/08/2008
Data File : D280993
Analysis Method : M EPA 8015



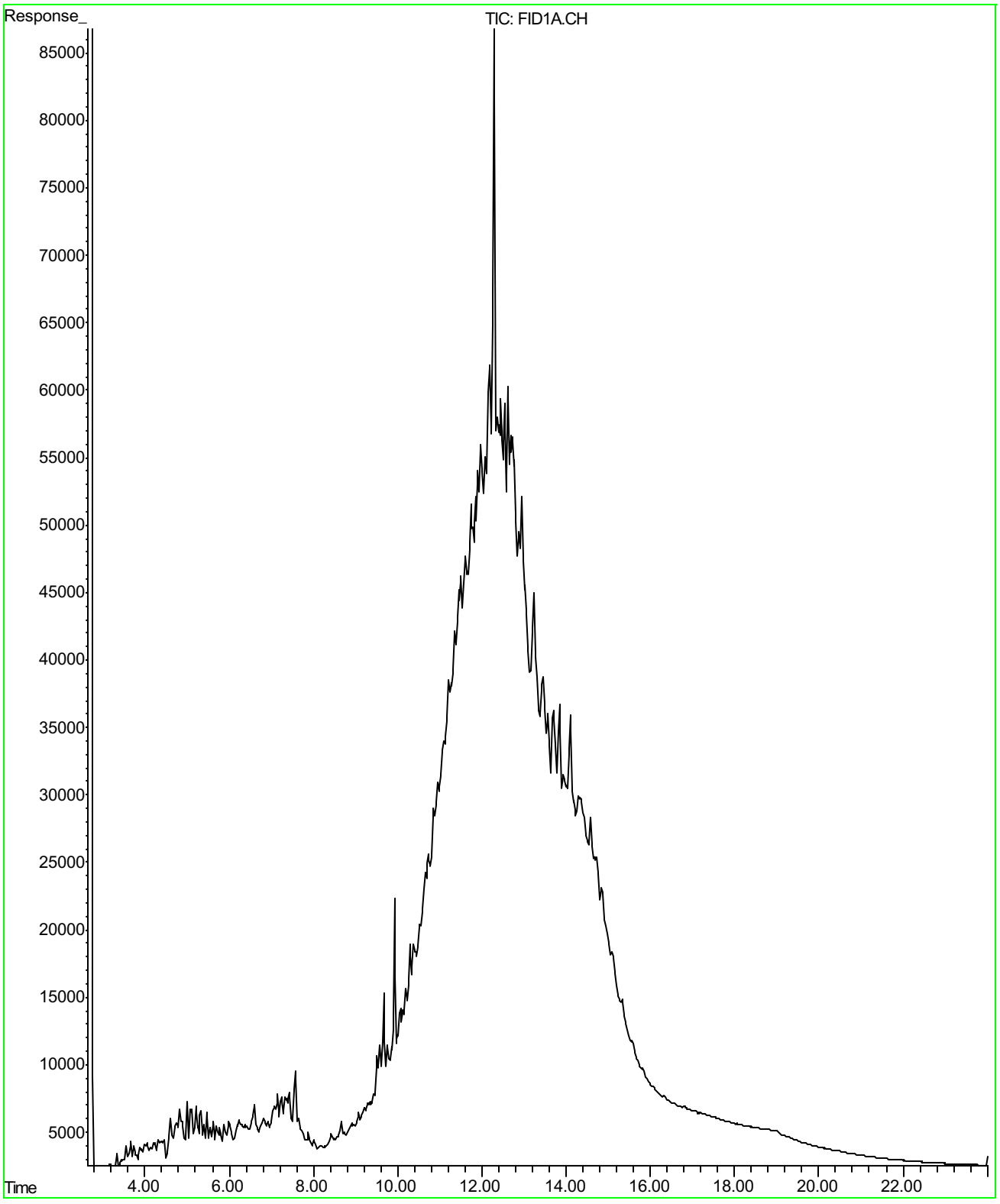
Sample ID : 63507-07 (MW-6)
Date Analyzed : 07/02/2008
Data File : SA95418
Analysis Method : EPA 8260B



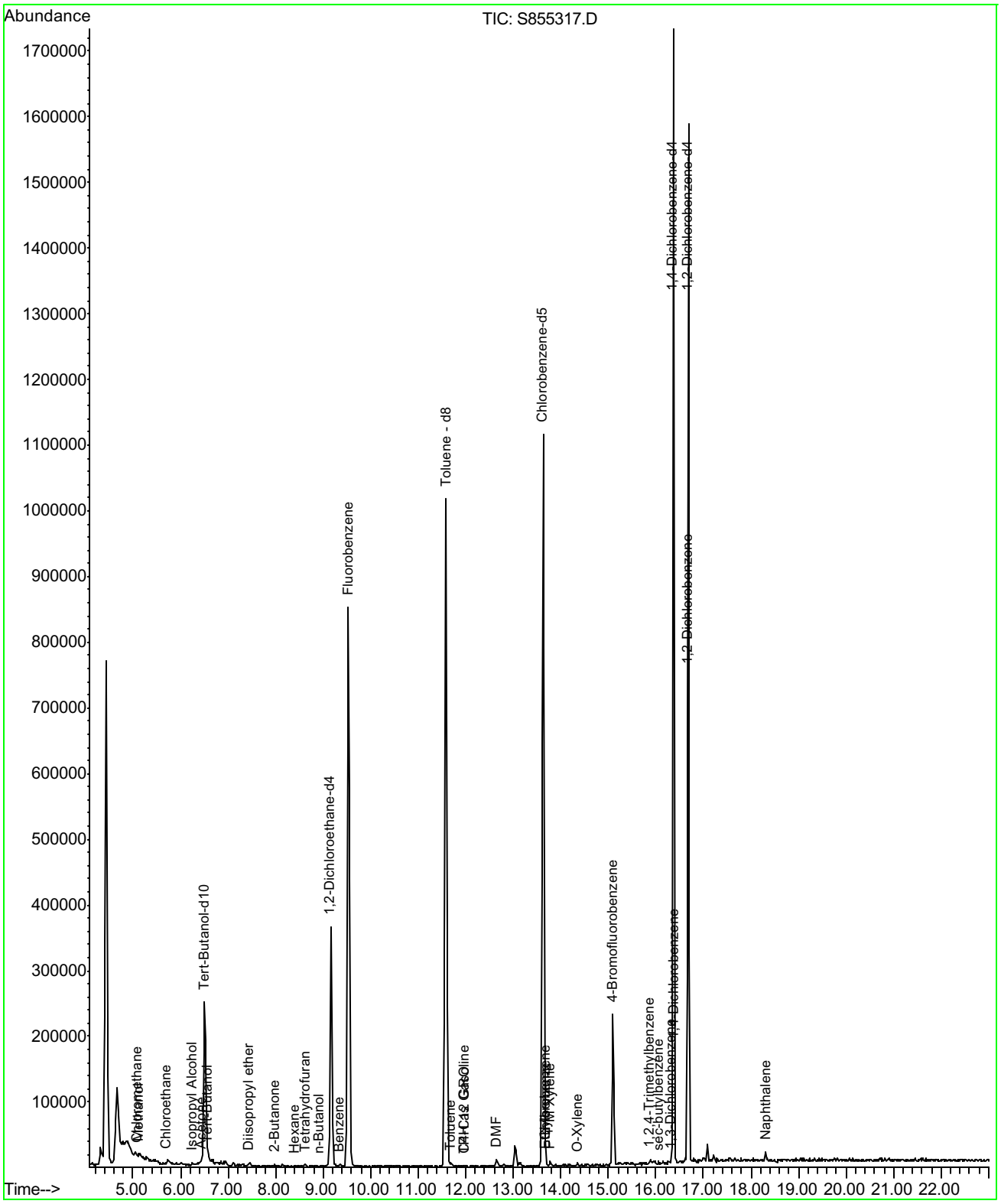
Sample ID : 63507-07 (MW-6)
Date Analyzed : 07/08/2008
Data File : D457955
Analysis Method : M EPA 8015



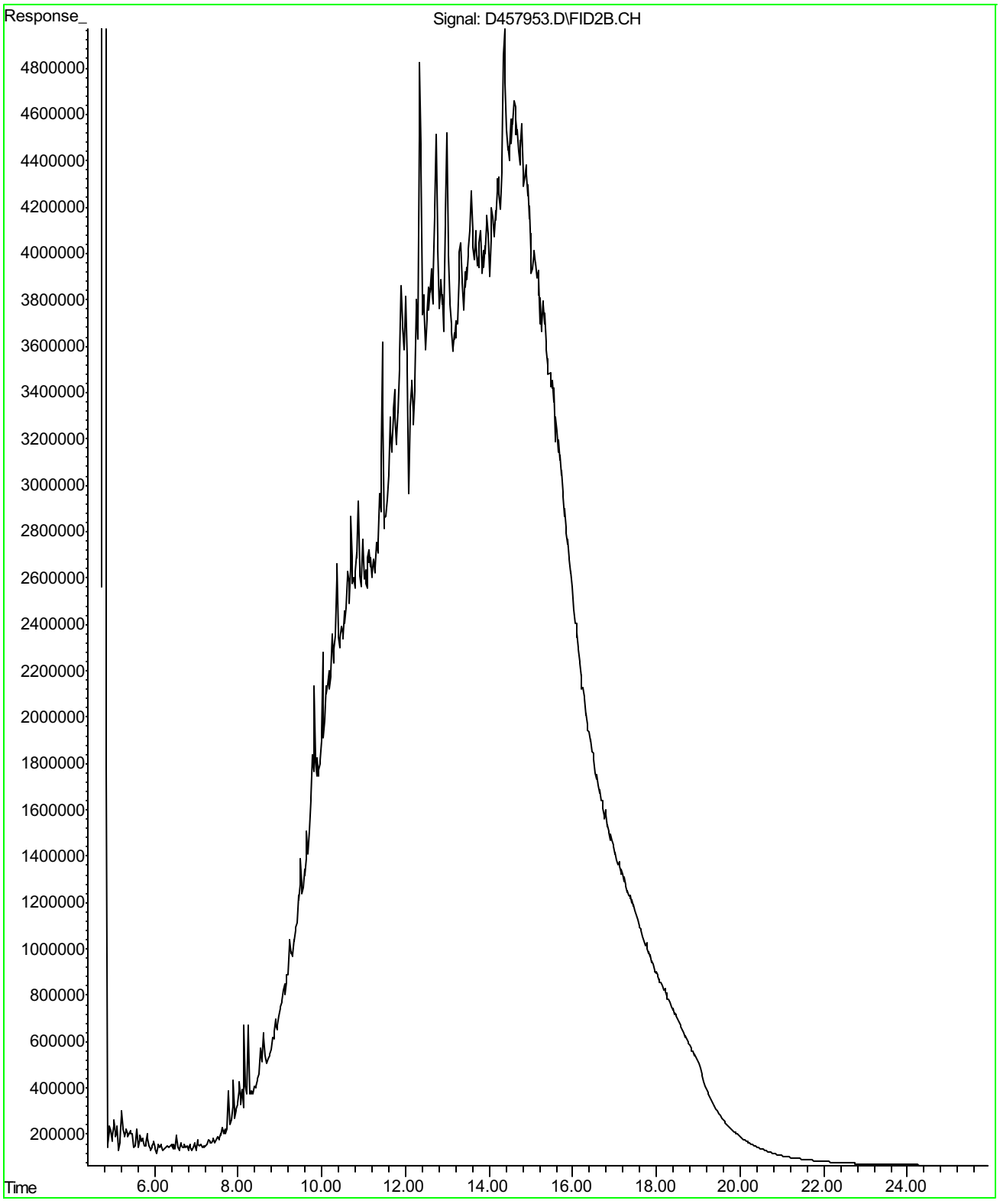
Sample ID : 63507-07 SI (MW-6)
Date Analyzed : 07/08/2008
Data File : D280994
Analysis Method : M EPA 8015



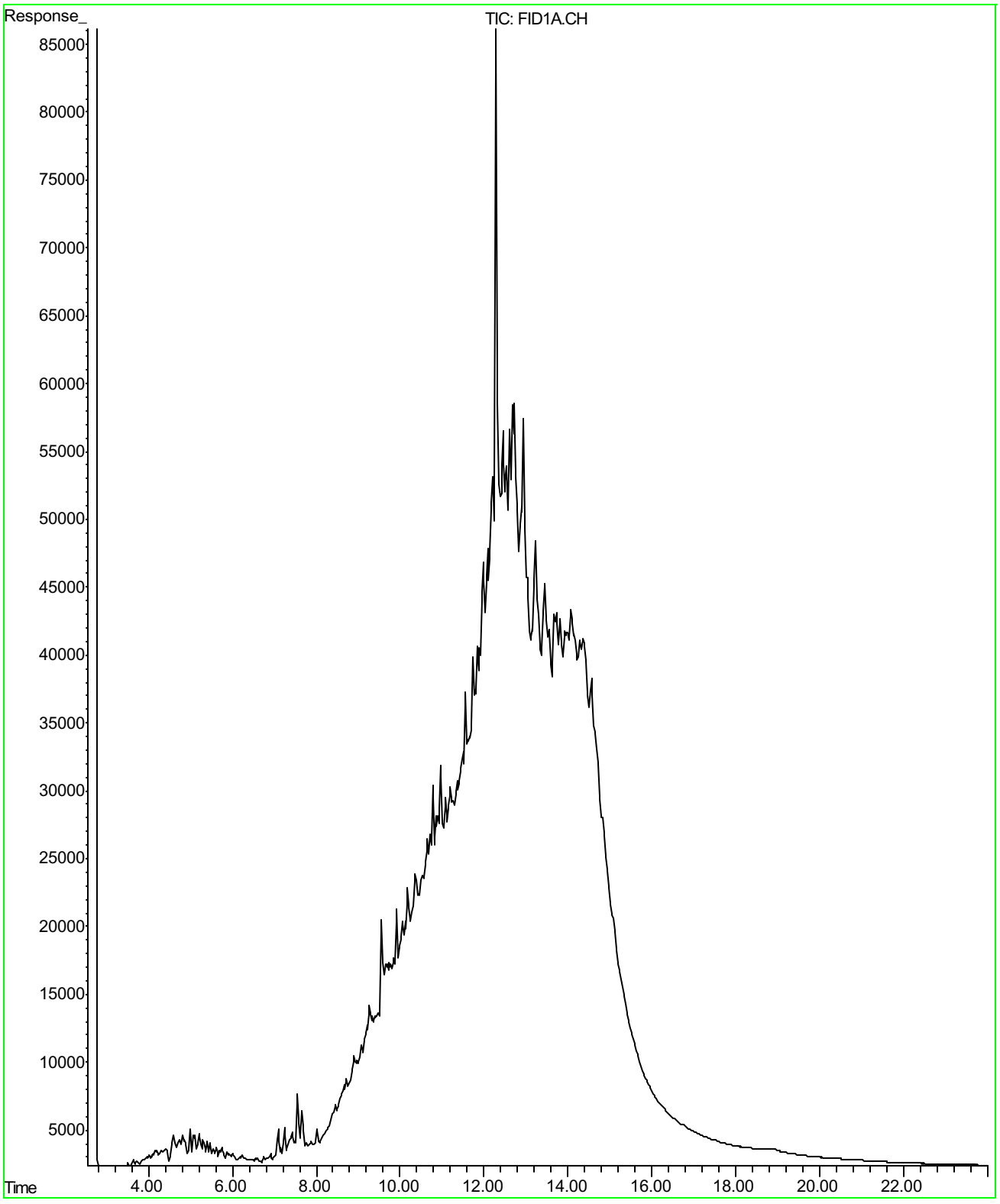
Sample ID : 63507-08 (MW-7)
Date Analyzed : 07/03/2008
Data File : S855317
Analysis Method : EPA 8260B



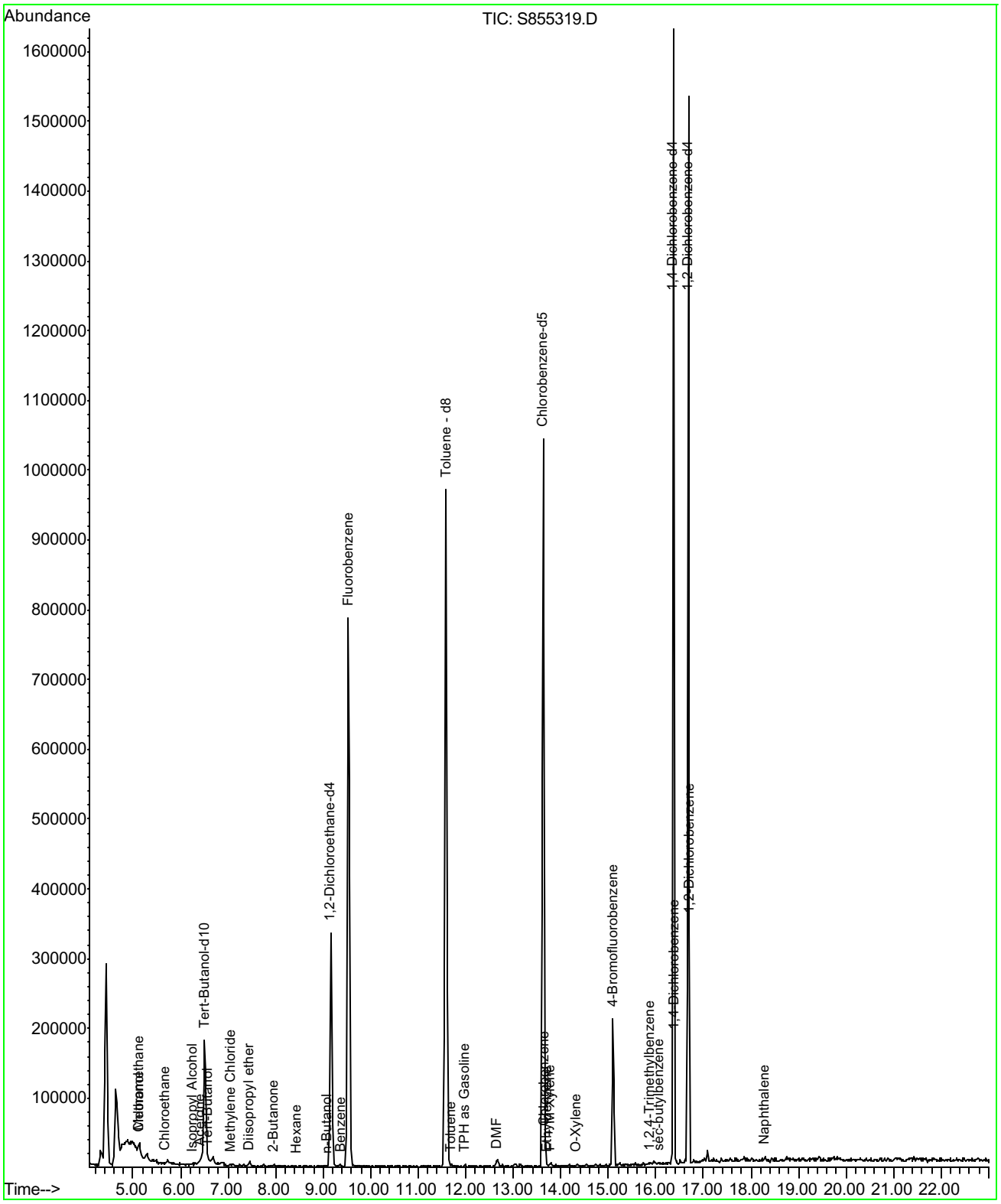
Sample ID : 63507-08 (MW-7)
Date Analyzed : 07/08/2008
Data File : D457953
Analysis Method : M EPA 8015



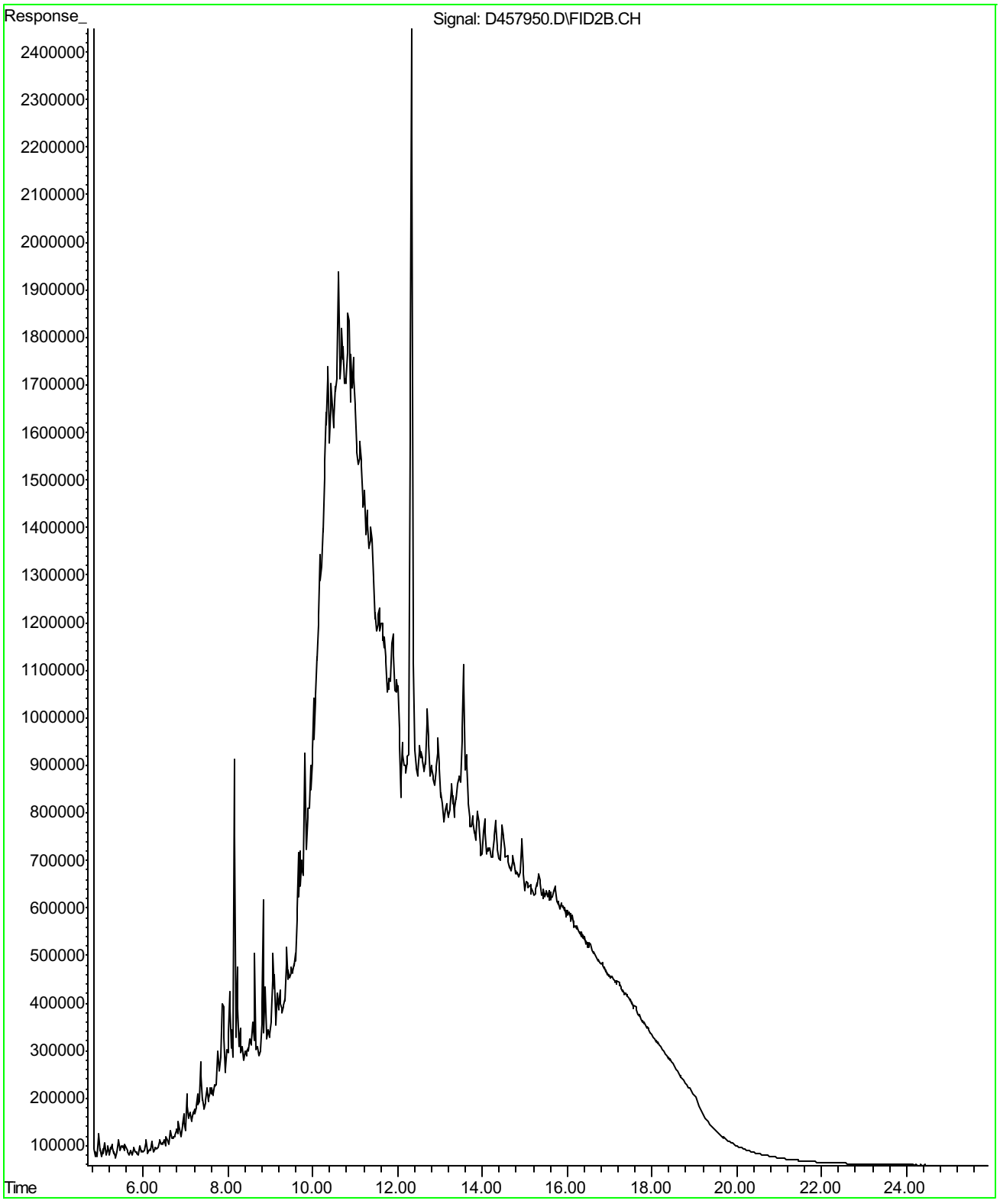
Sample ID : 63507-08 SI (MW-7)
Date Analyzed : 07/08/2008
Data File : D280995
Analysis Method : M EPA 8015



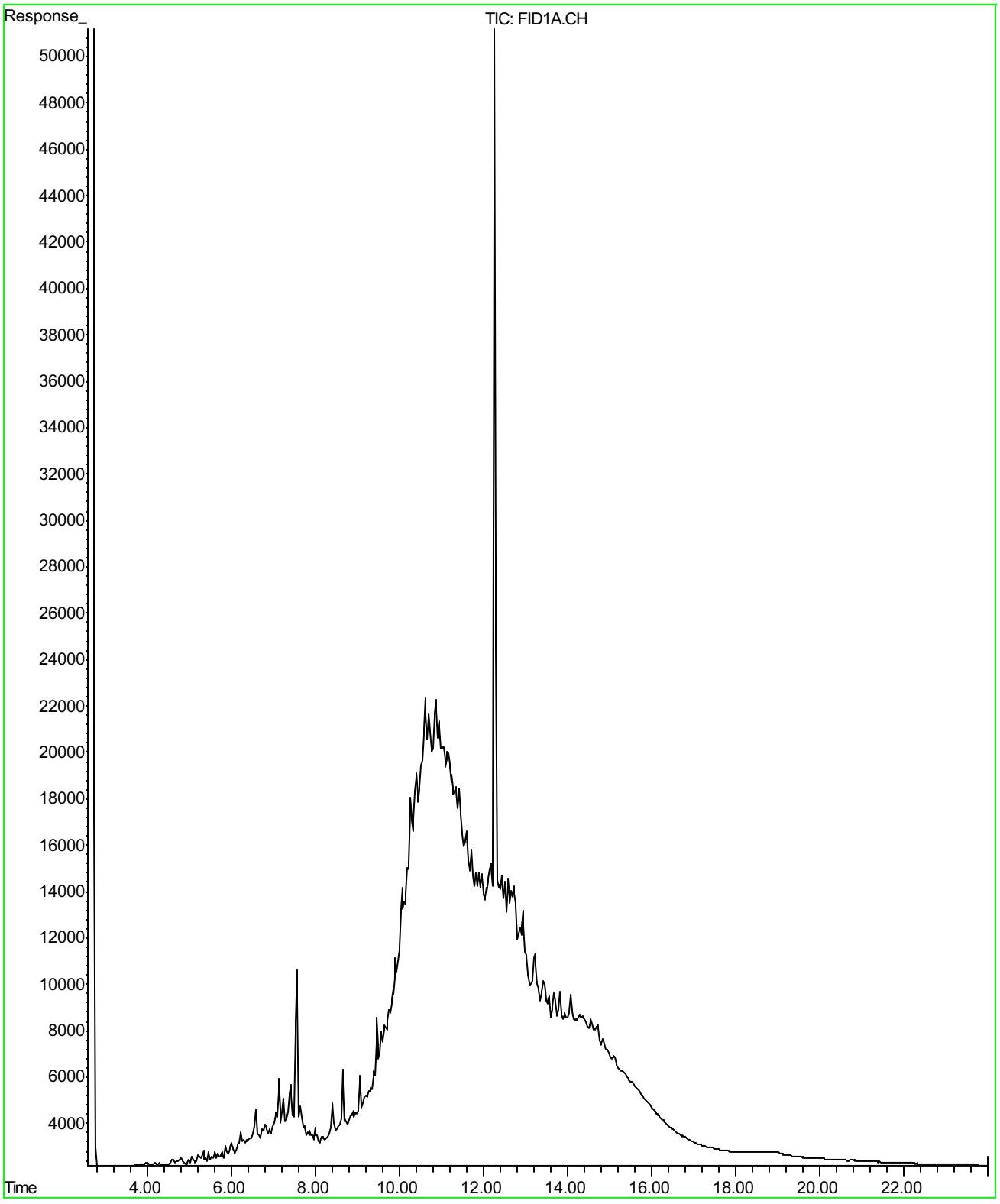
Sample ID : 63507-09 (MW-9)
Date Analyzed : 07/04/2008
Data File : S855319
Analysis Method : EPA 8260B



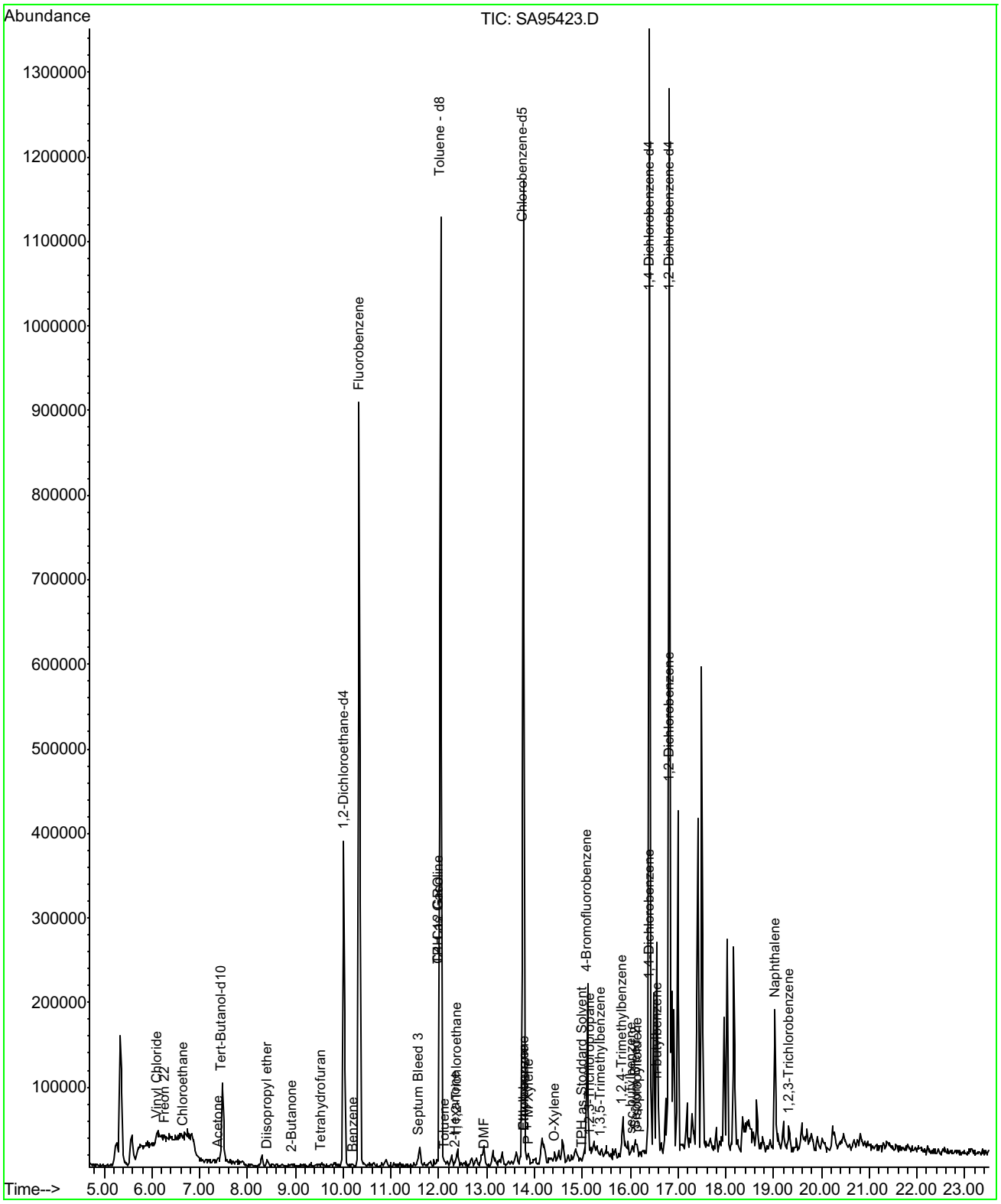
Sample ID : 63507-09 (MW-9)
Date Analyzed : 07/08/2008
Data File : D457950
Analysis Method : M EPA 8015



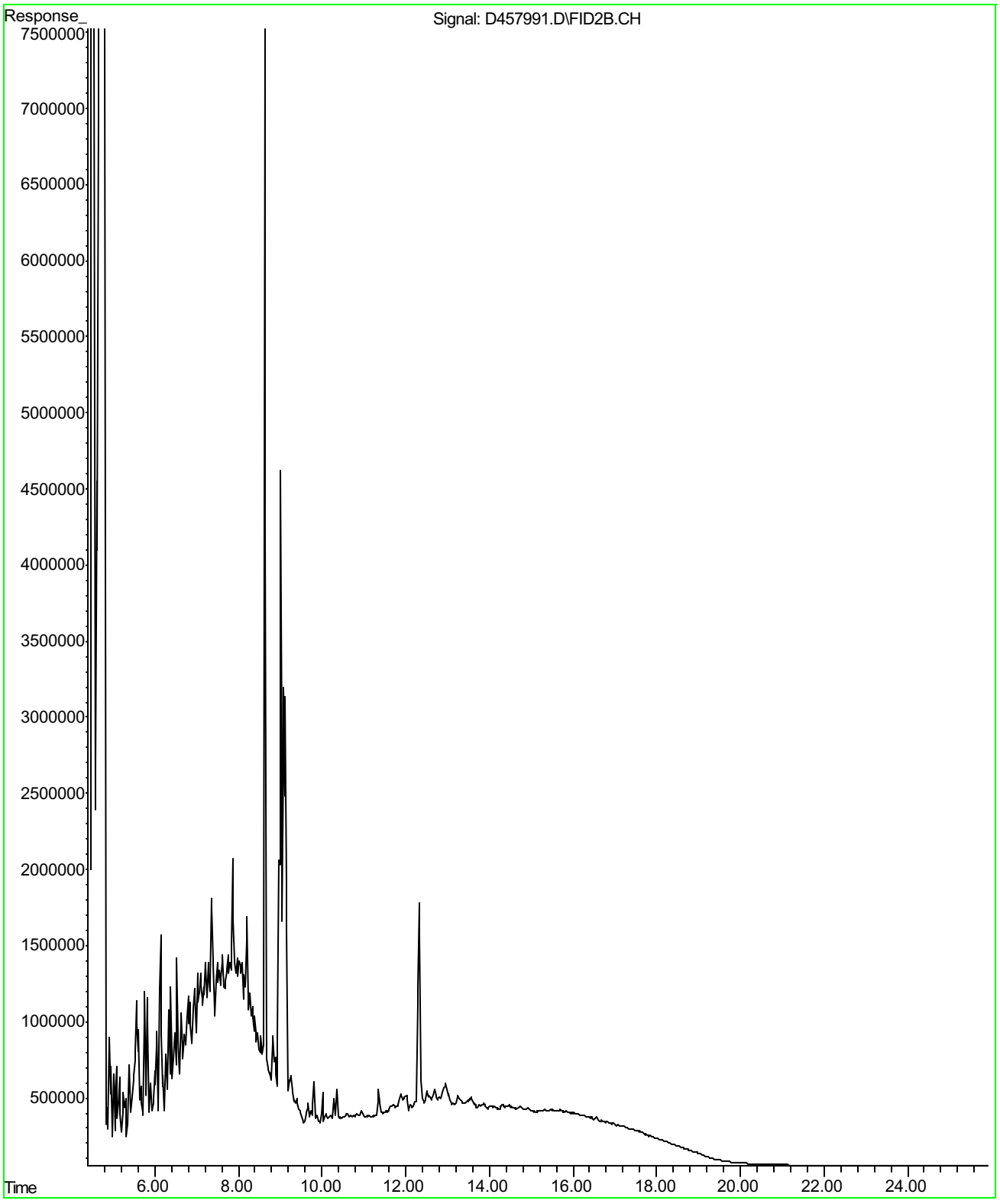
Sample ID : 63507-09 SI (MW-9)
Date Analyzed : 07/08/2008
Data File : D280996
Analysis Method : M EPA 8015



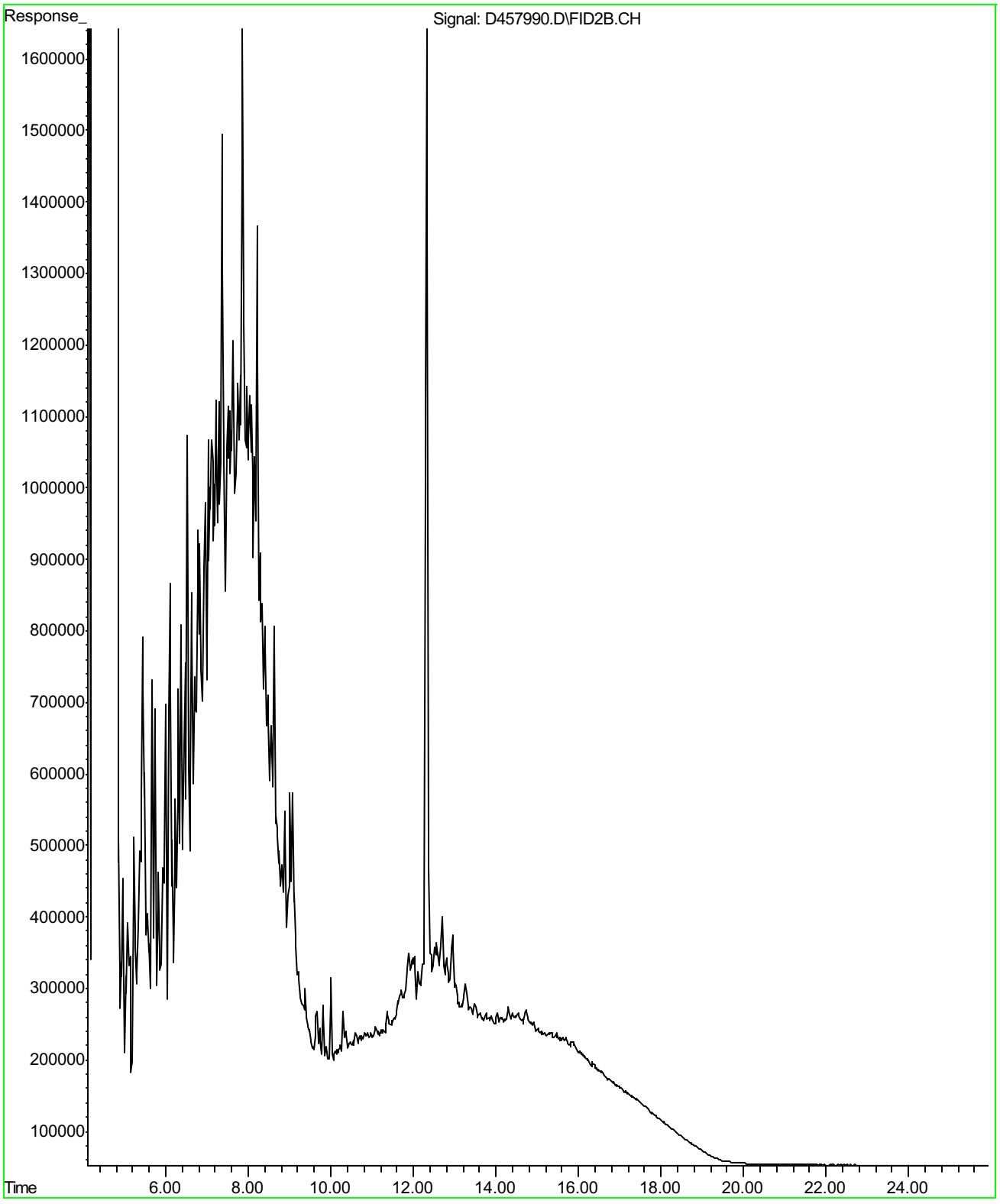
Sample ID : 63507-10 (MW-10)
Date Analyzed : 07/02/2008
Data File : SA95423
Analysis Method : EPA 8260B



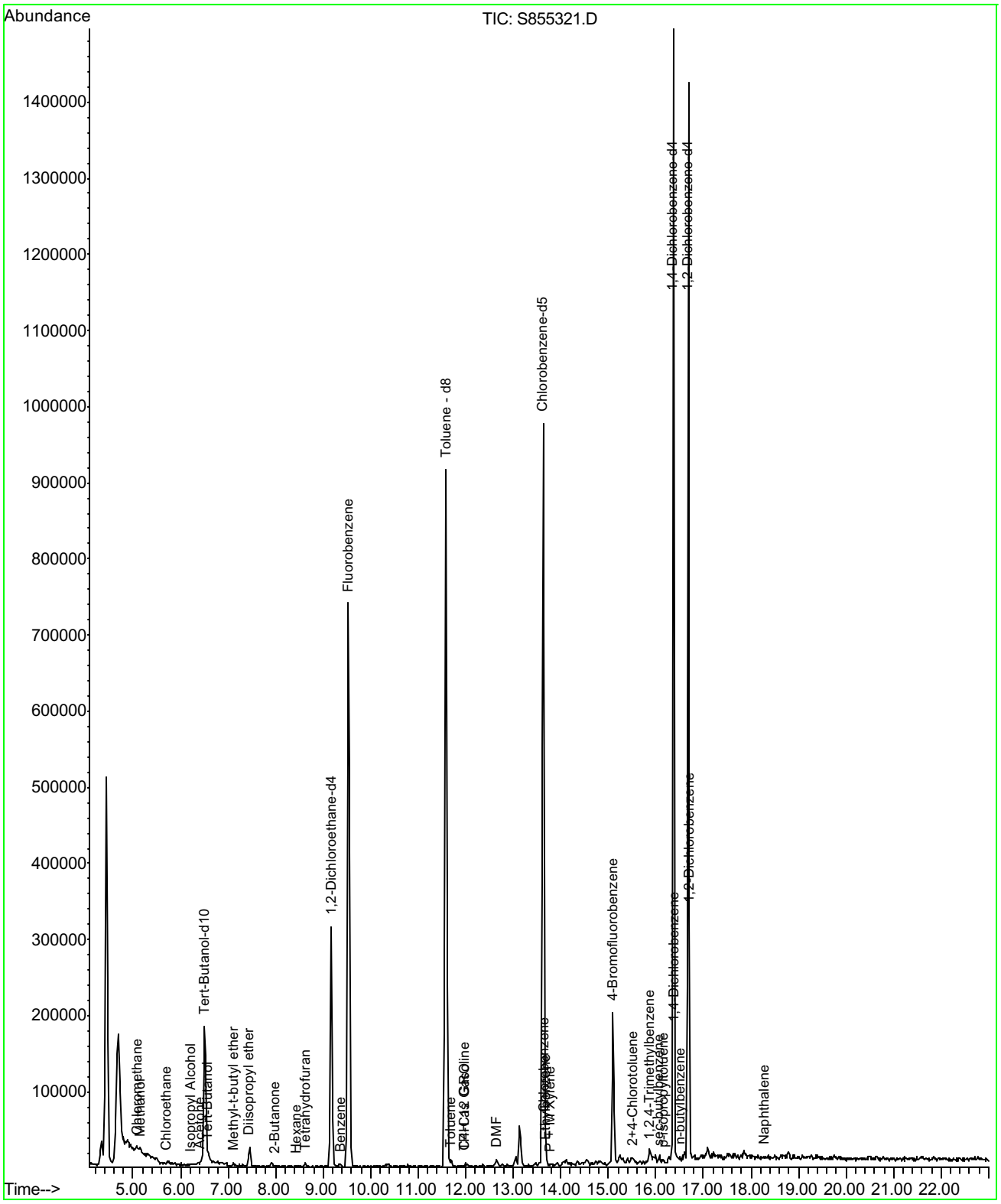
Sample ID : 63507-10 (MW-10)
Date Analyzed : 07/09/2008
Data File : D457991
Analysis Method : M EPA 8015



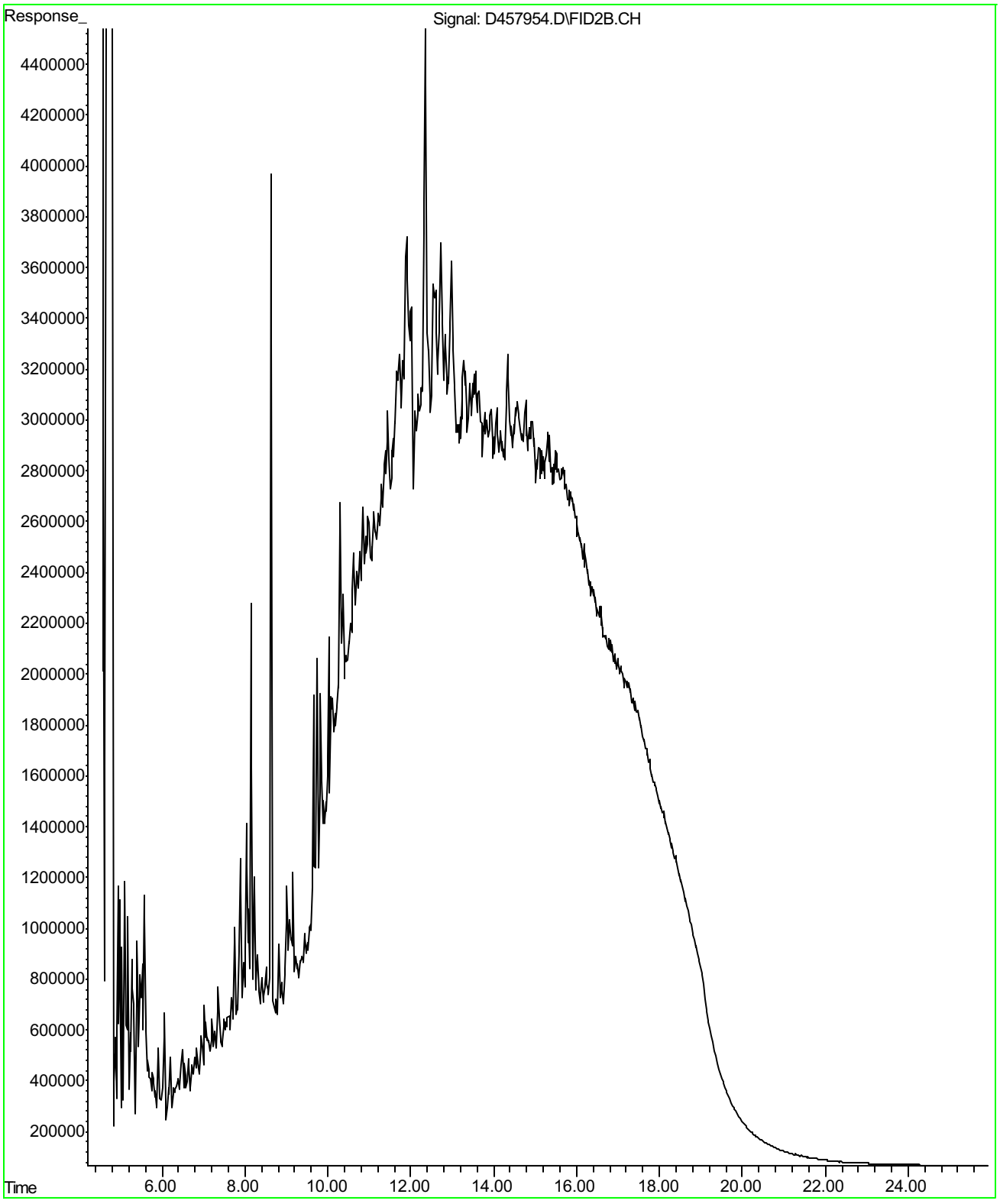
Sample ID : 63507-10 SI (MW-10)
Date Analyzed : 07/09/2008
Data File : D457990
Analysis Method : M EPA 8015



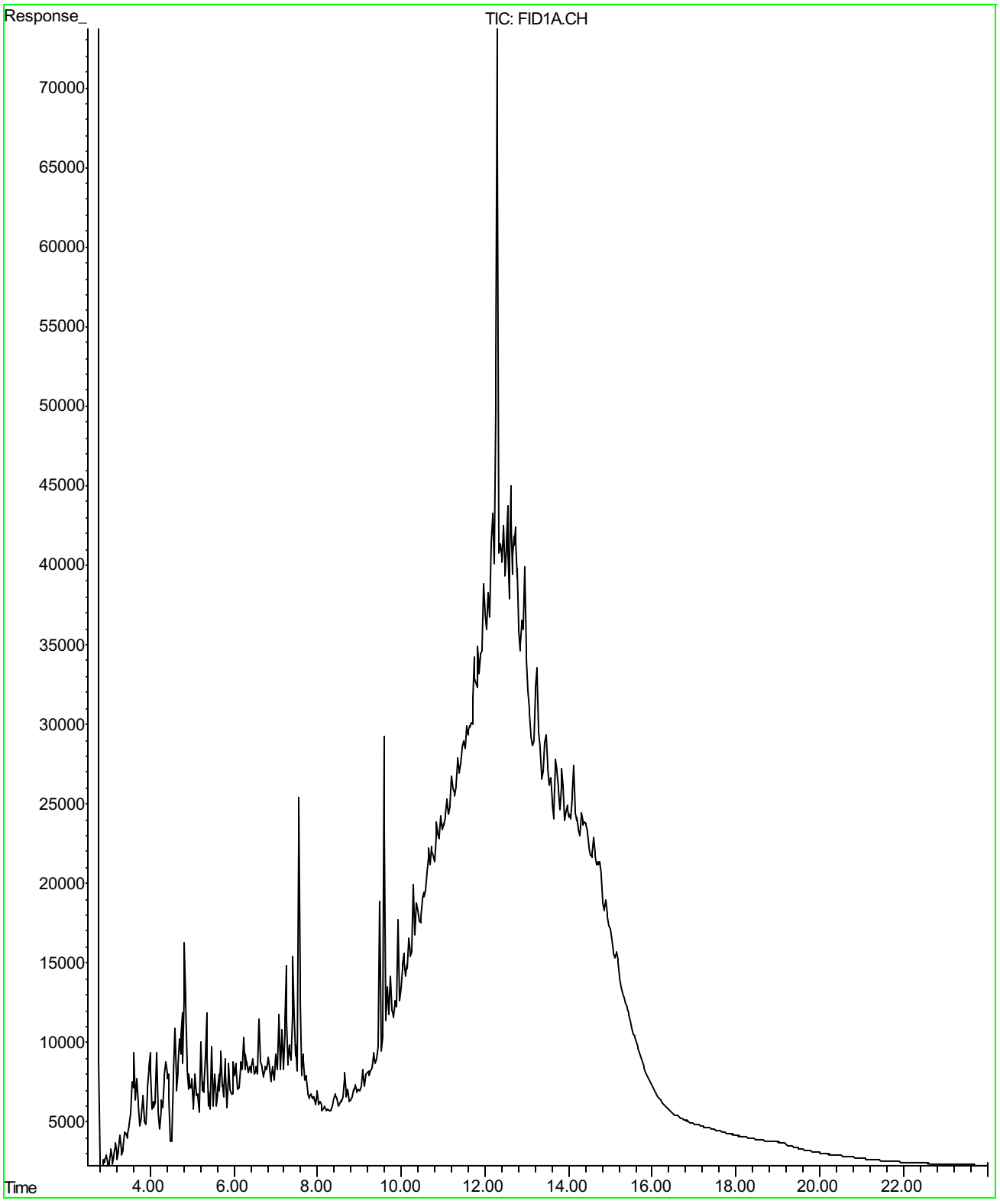
Sample ID : 63507-11 (MW-11)
Date Analyzed : 07/04/2008
Data File : S855321
Analysis Method : EPA 8260B



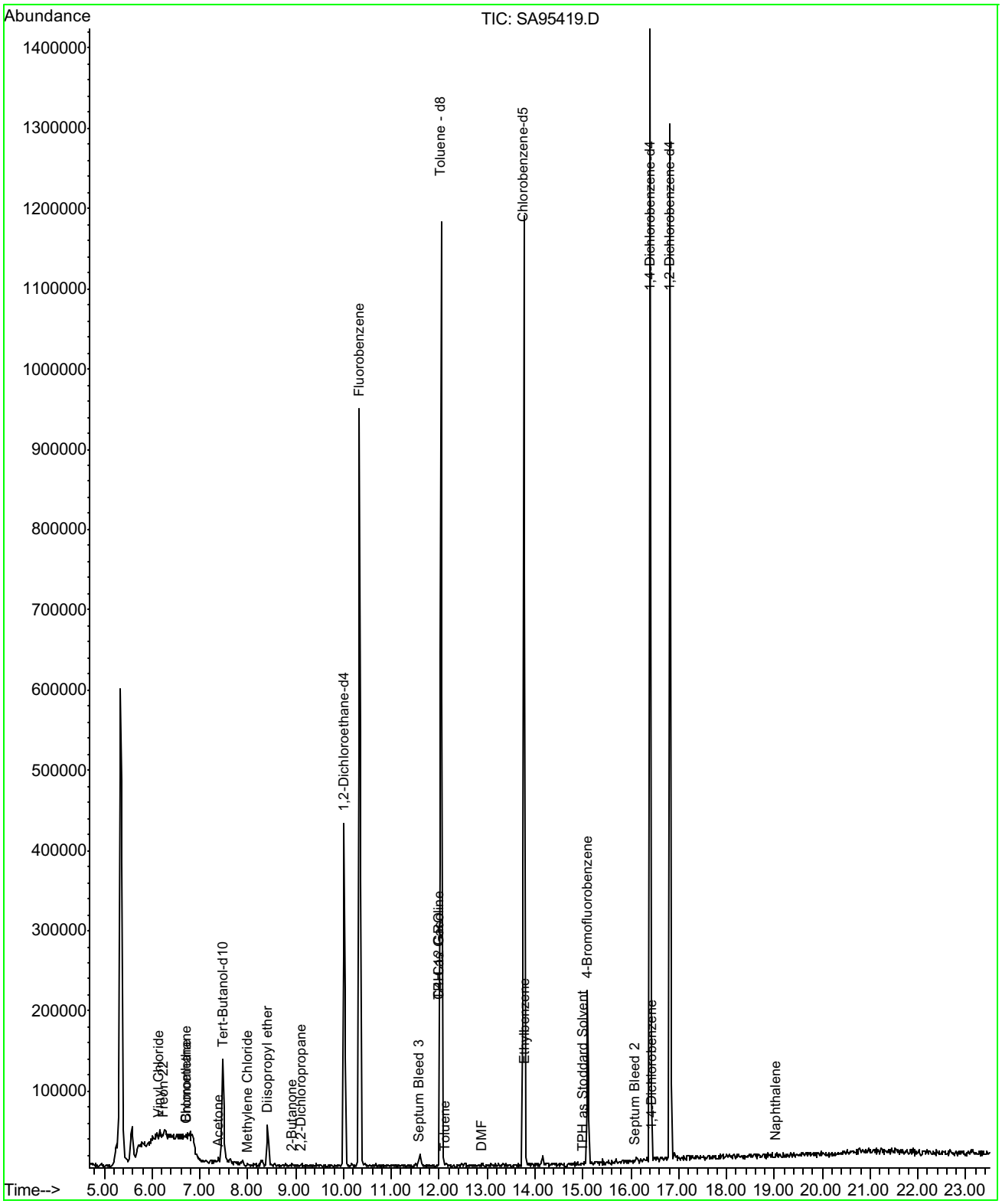
Sample ID : 63507-11 (MW-11)
Date Analyzed : 07/08/2008
Data File : D457954
Analysis Method : M EPA 8015



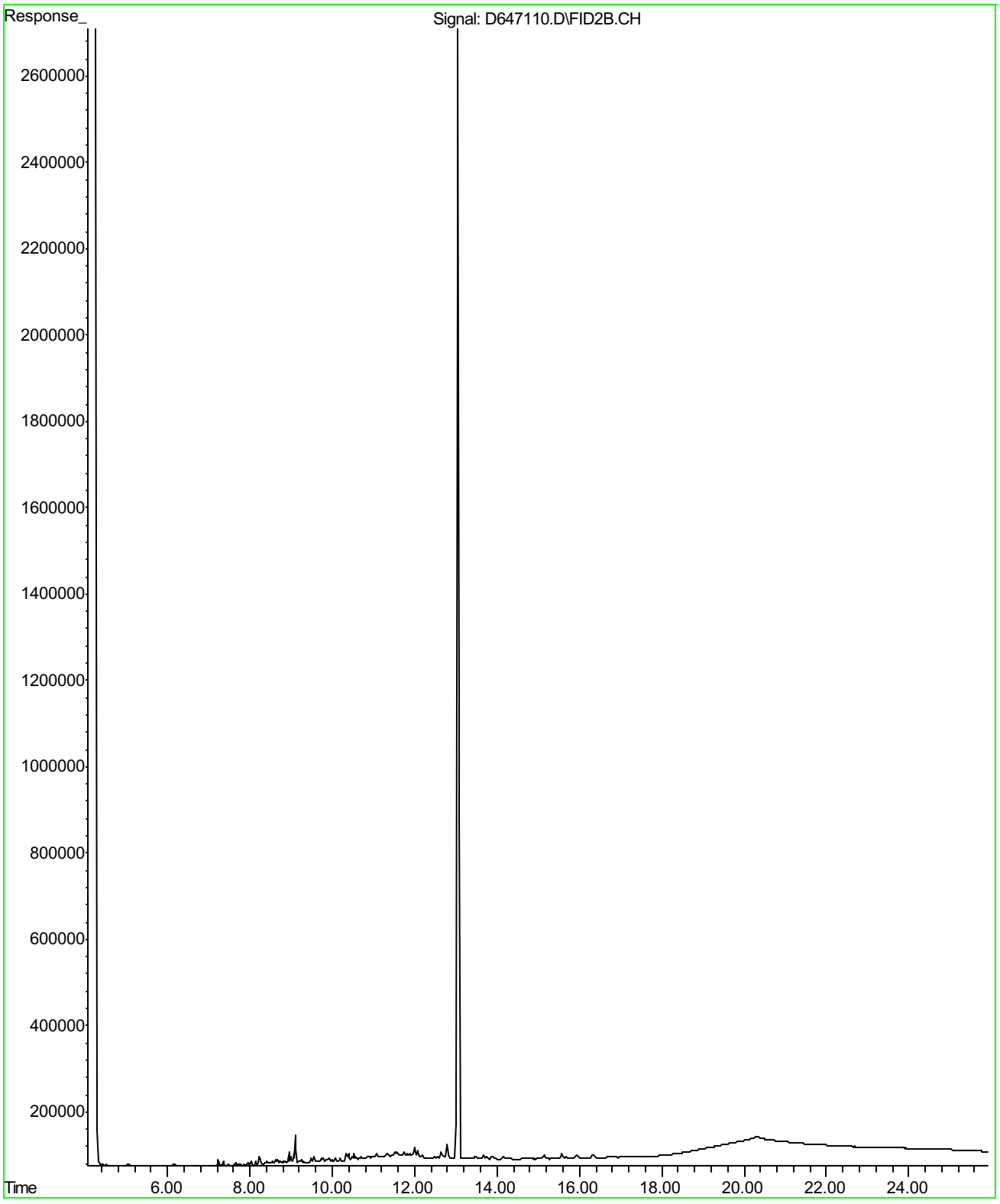
Sample ID : 63507-11 SI (MW-11)
Date Analyzed : 07/08/2008
Data File : D280998
Analysis Method : M EPA 8015



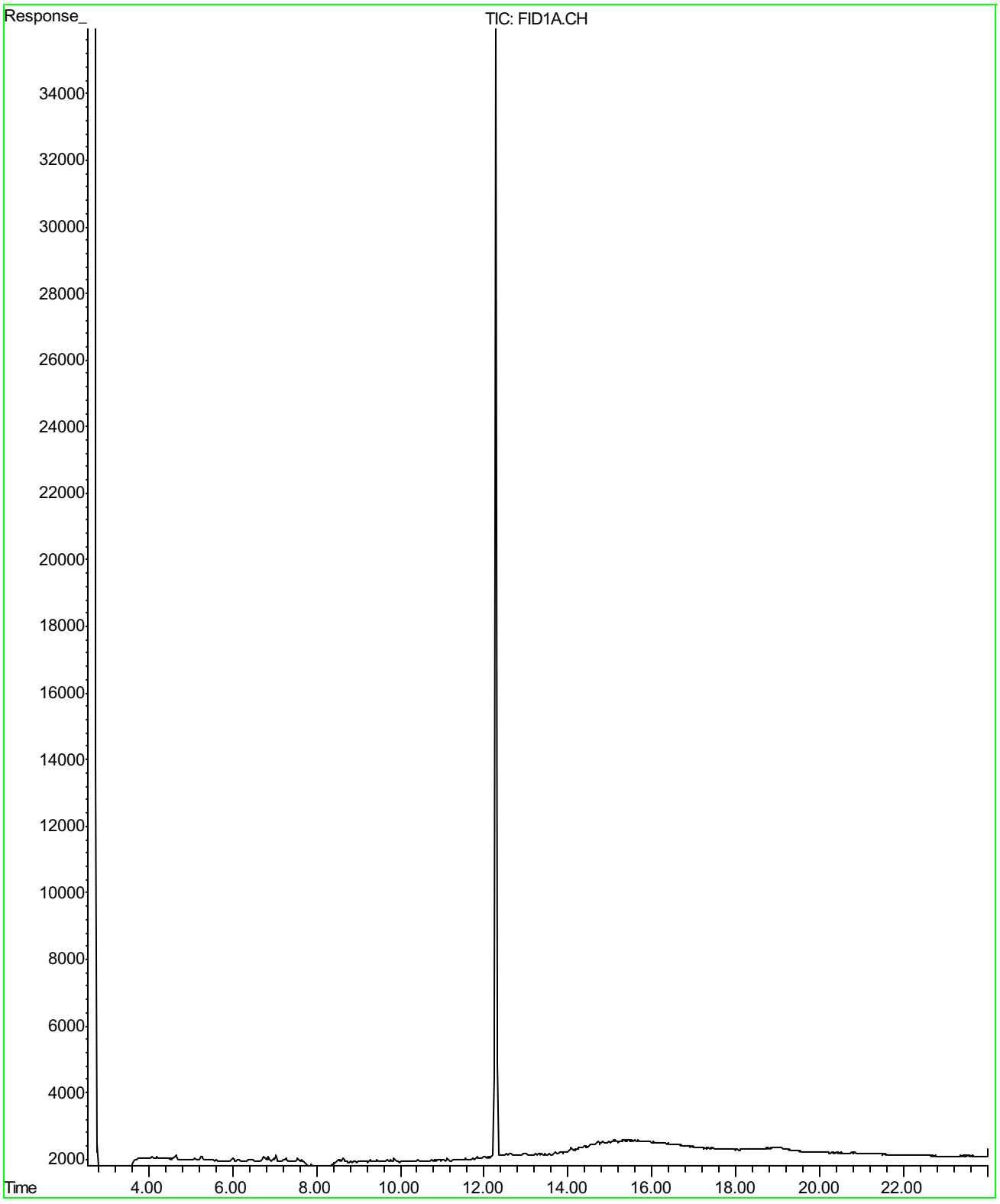
Sample ID : 63507-12 (MW-12)
Date Analyzed : 07/02/2008
Data File : SA95419
Analysis Method : EPA 8260B



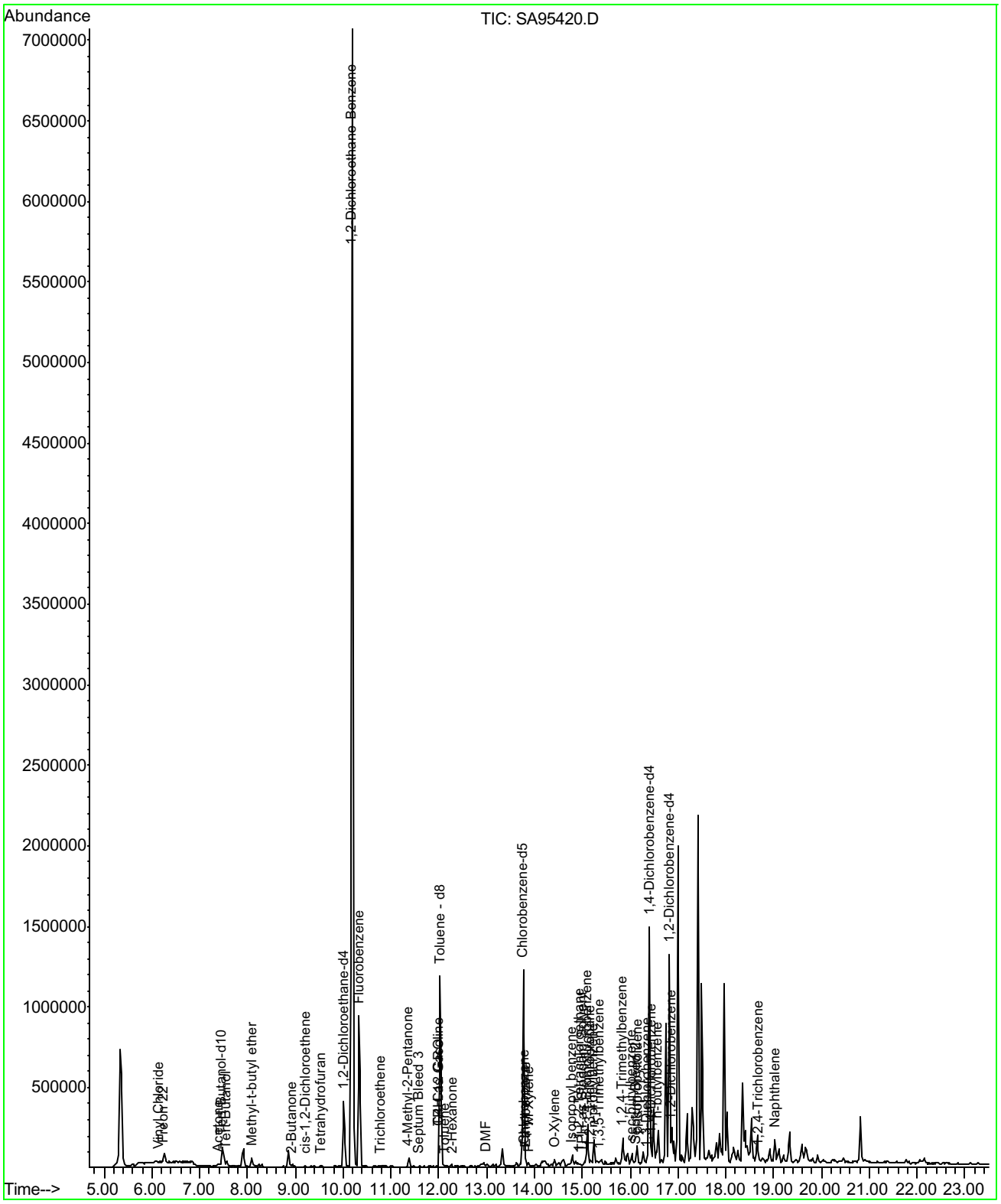
Sample ID : 63507-12 (MW-12)
Date Analyzed : 07/08/2008
Data File : D647110
Analysis Method : M EPA 8015



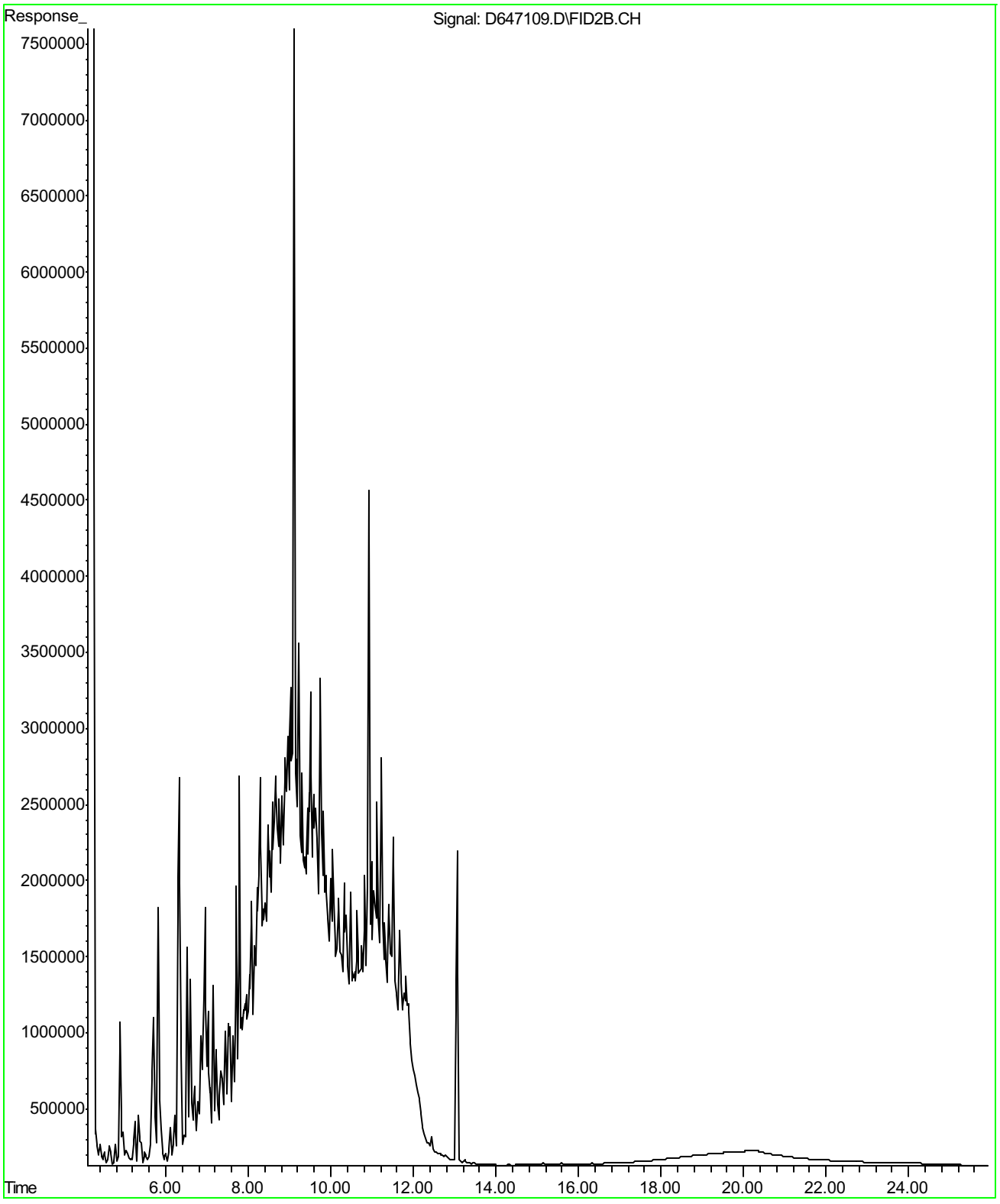
Sample ID : 63507-12 SI (MW-12)
Date Analyzed : 07/08/2008
Data File : D280999
Analysis Method : M EPA 8015



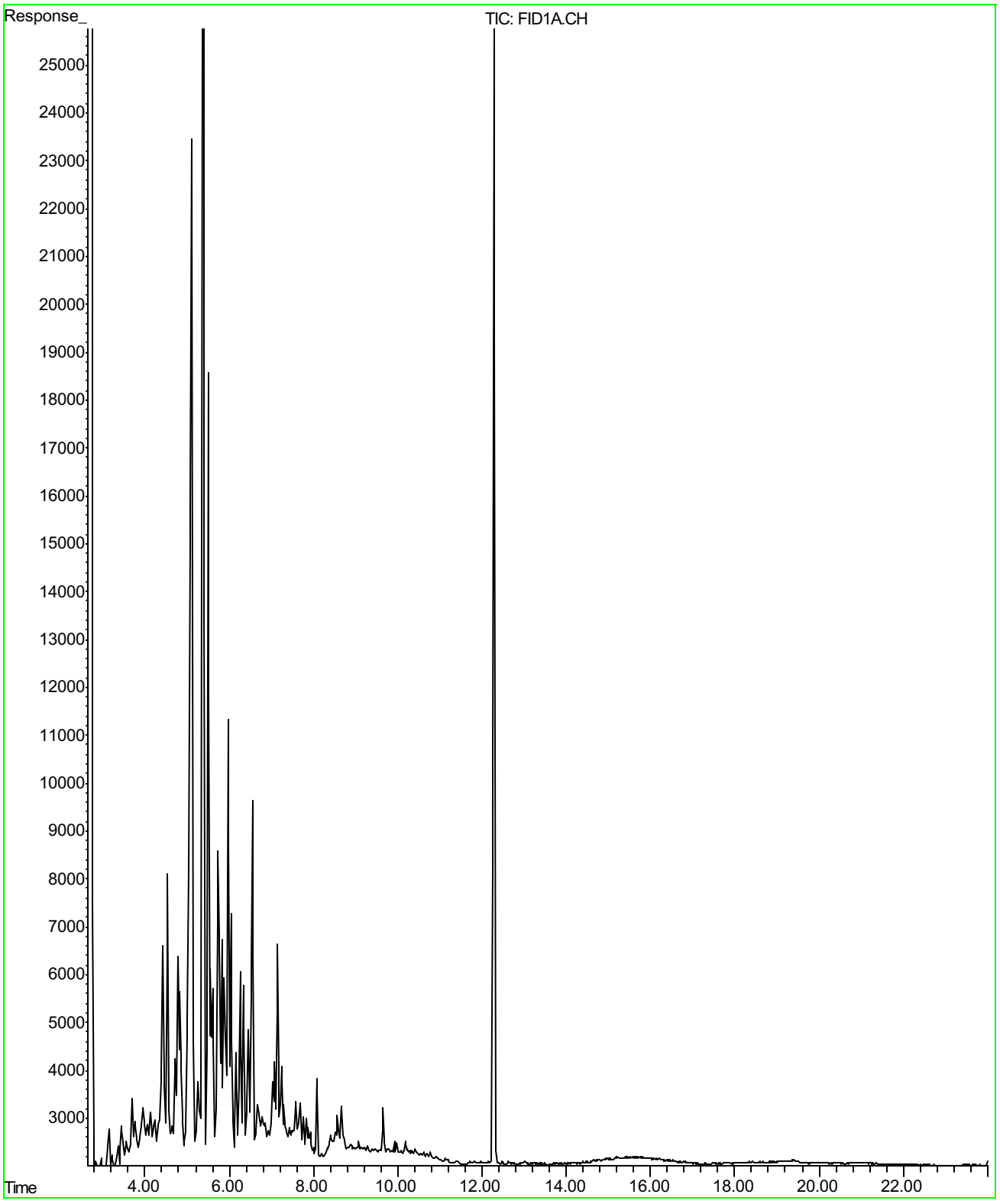
Sample ID : 63507-13 (MW-13)
Date Analyzed : 07/02/2008
Data File : SA95420
Analysis Method : EPA 8260B



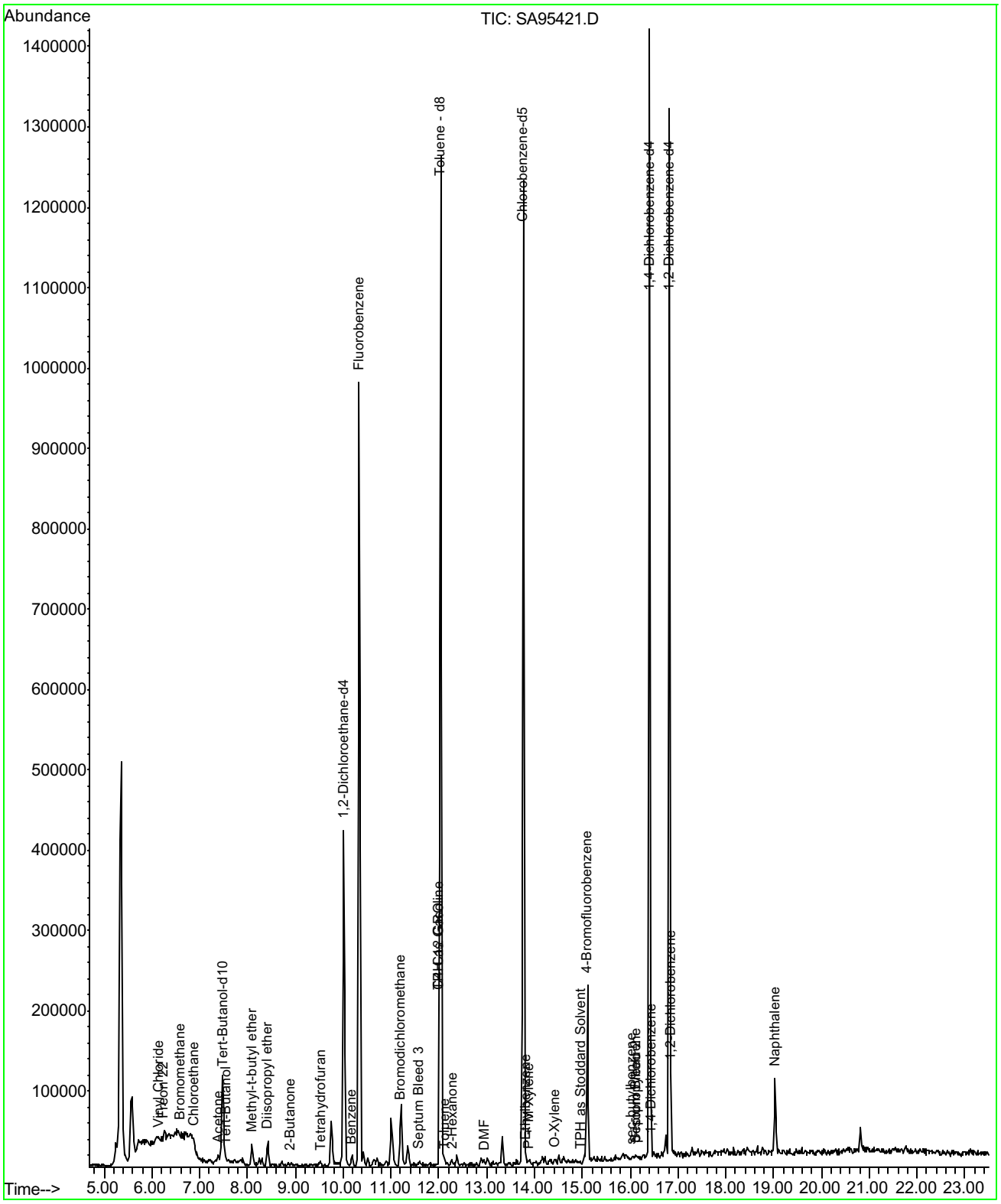
Sample ID : 63507-13 (MW-13)
Date Analyzed : 07/08/2008
Data File : D647109
Analysis Method : M EPA 8015



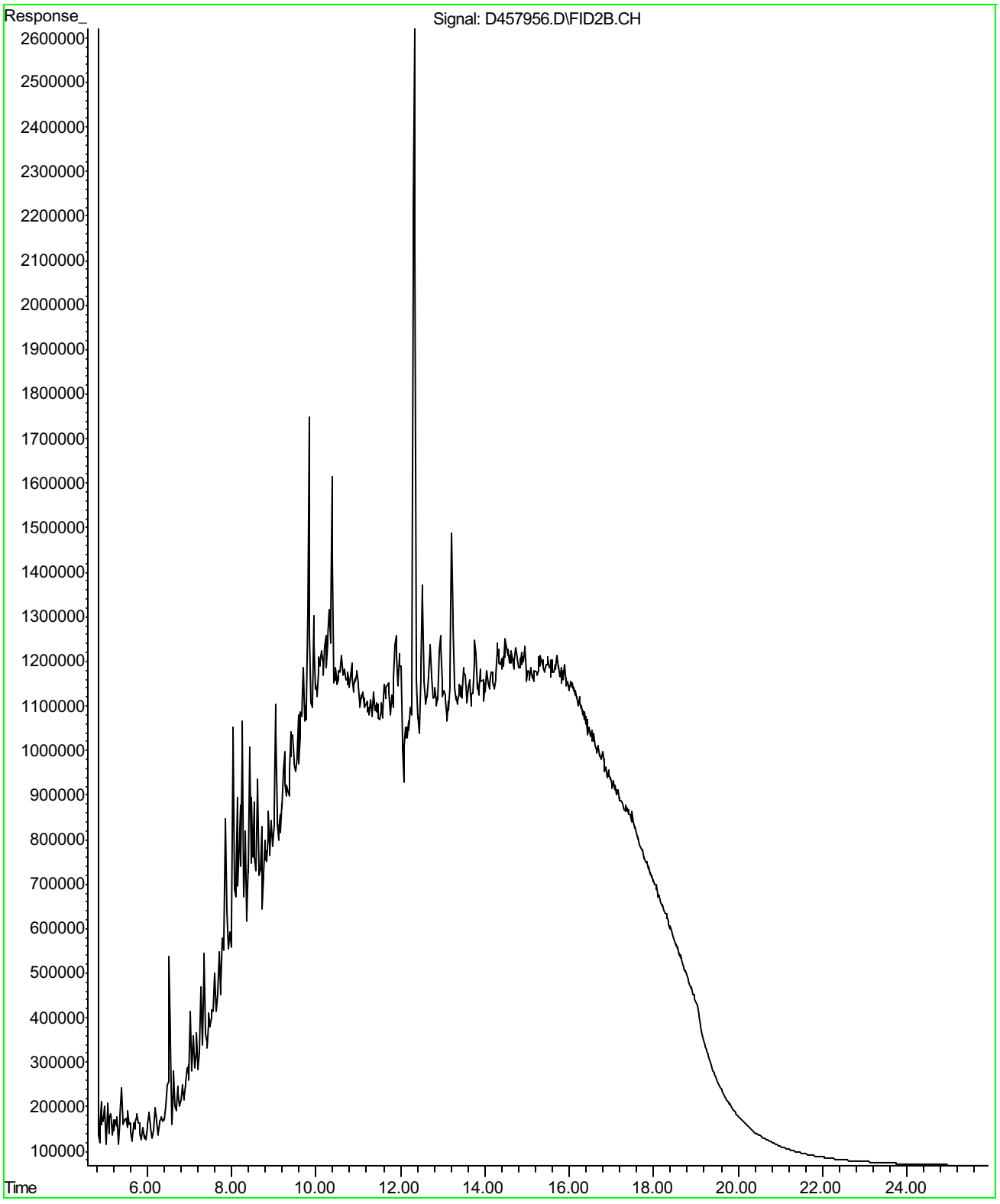
Sample ID : 63507-13 SI (MW-13)
Date Analyzed : 07/08/2008
Data File : D281000
Analysis Method : M EPA 8015



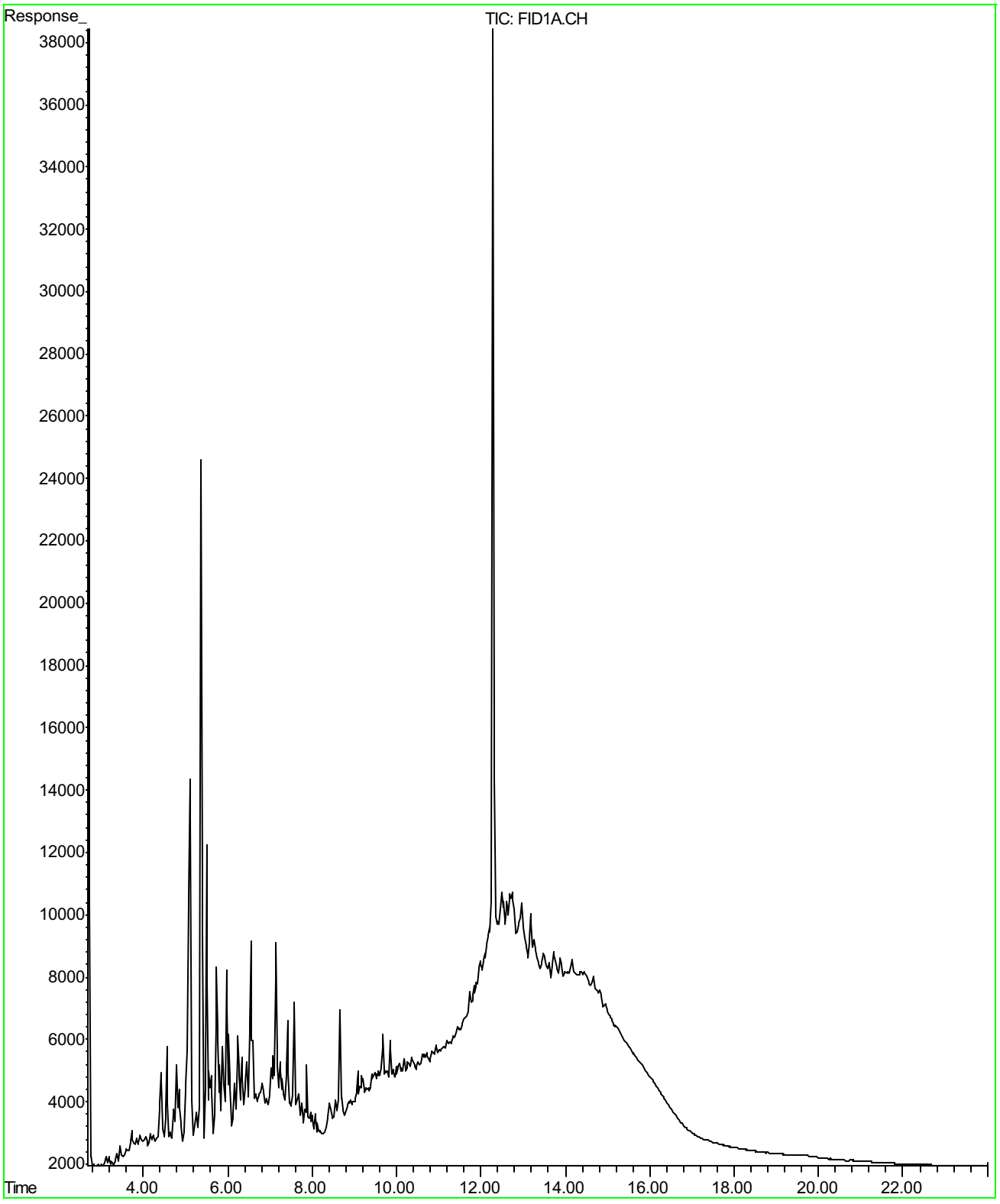
Sample ID : 63507-14 (MW-14)
Date Analyzed : 07/02/2008
Data File : SA95421
Analysis Method : EPA 8260B



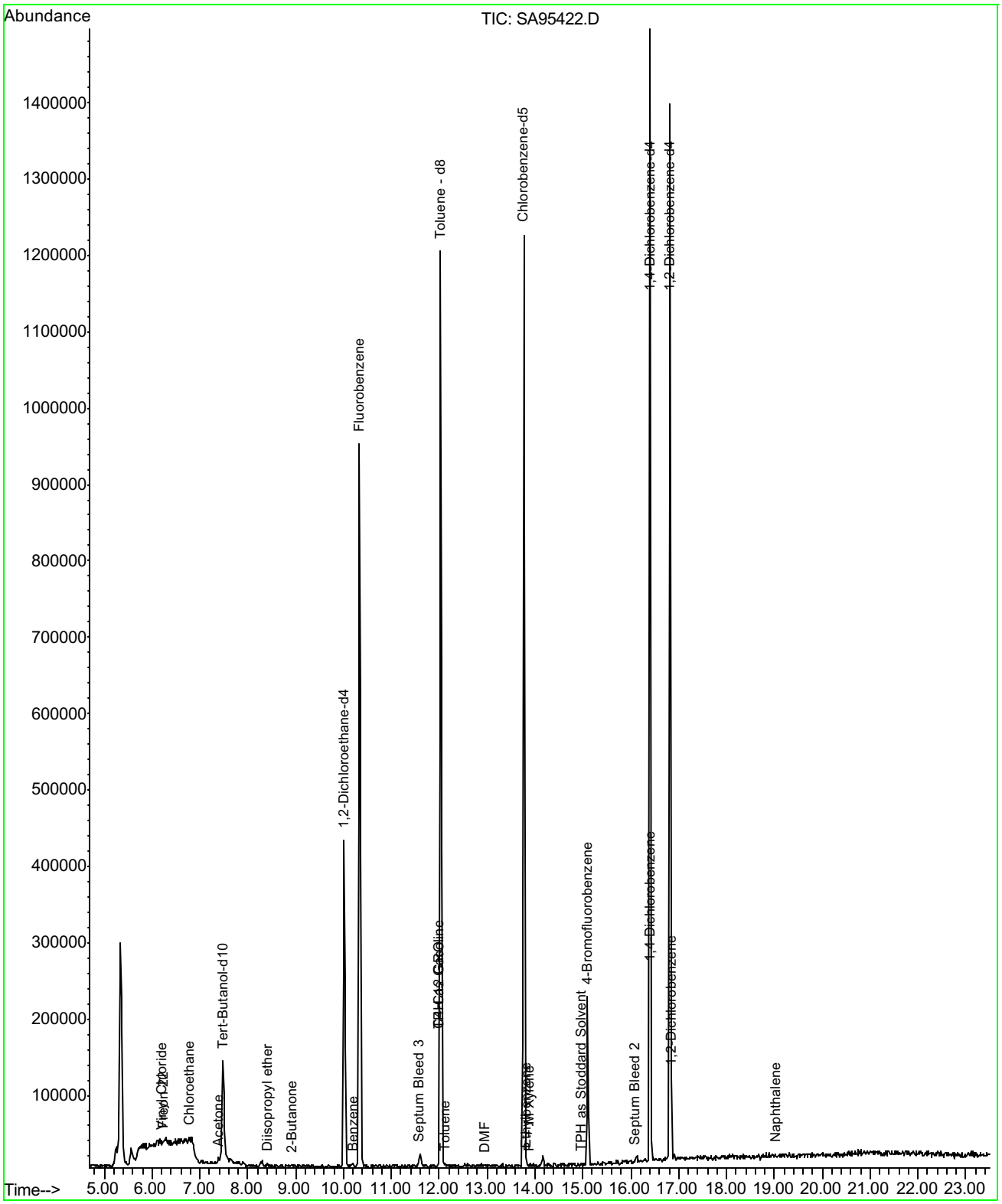
Sample ID : 63507-14 (MW-14)
Date Analyzed : 07/08/2008
Data File : D457956
Analysis Method : M EPA 8015



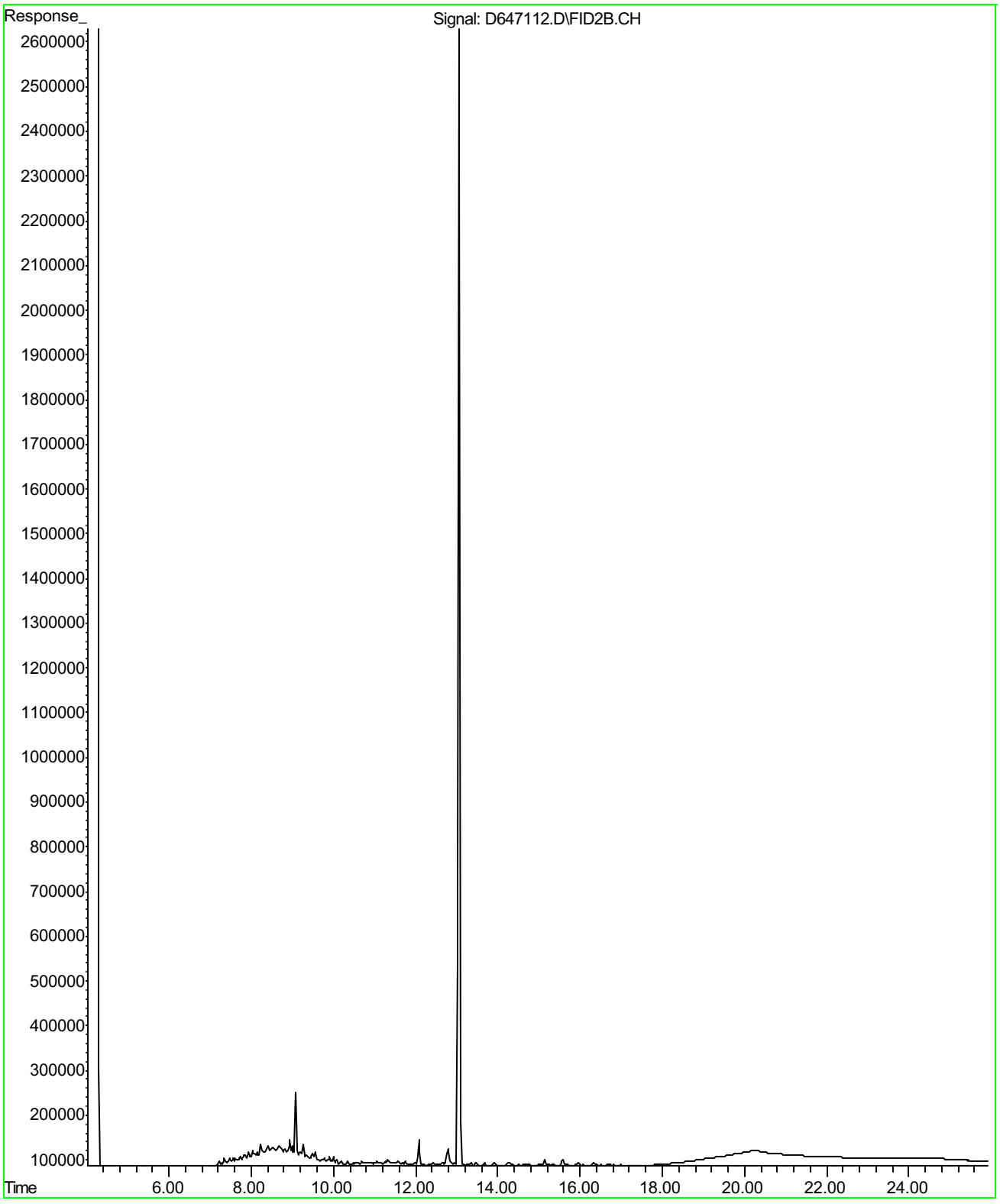
Sample ID : 63507-14 SI (MW-14)
Date Analyzed : 07/08/2008
Data File : D281012
Analysis Method : M EPA 8015



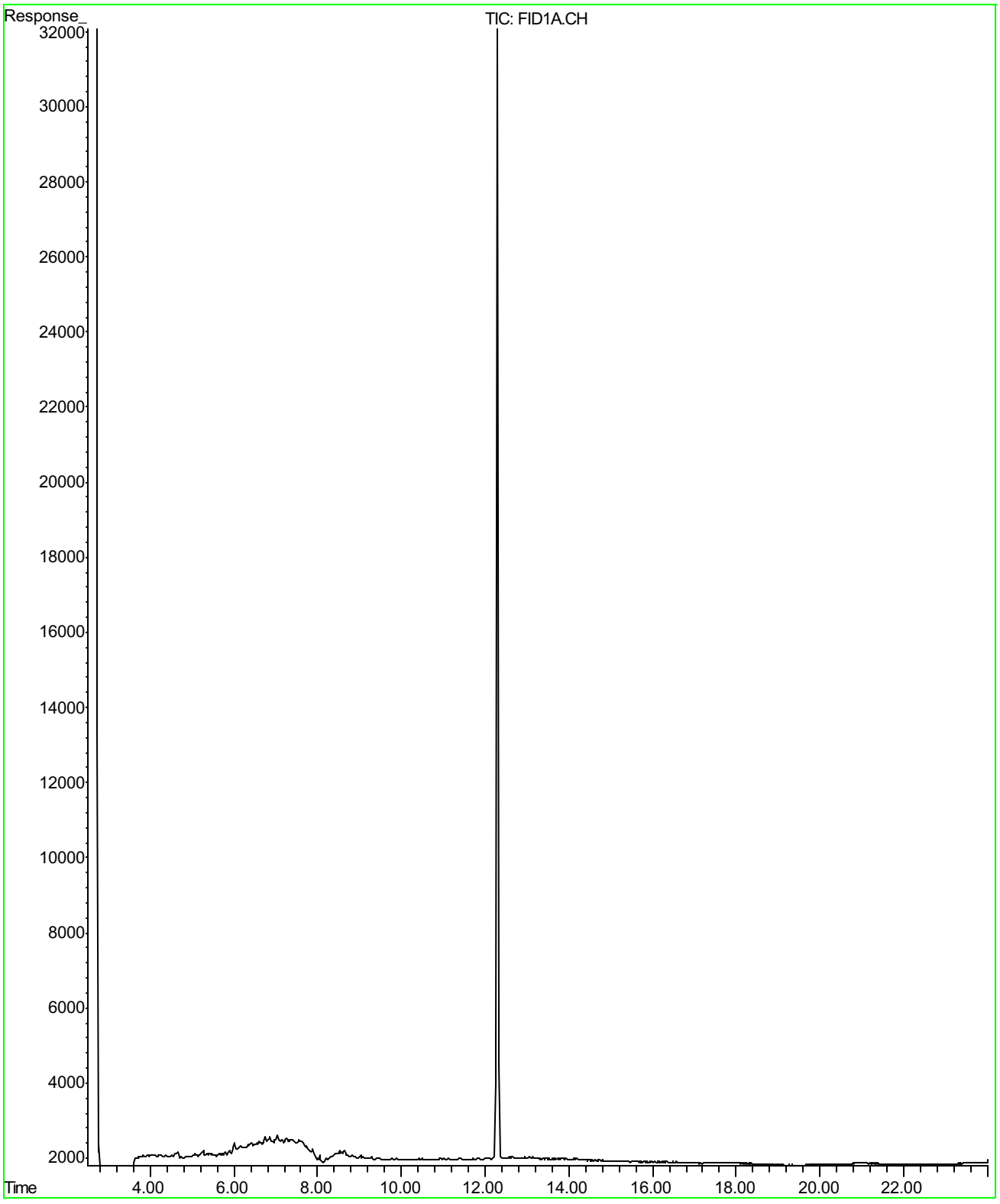
Sample ID : 63507-15 (MW-15)
Date Analyzed : 07/02/08
Data File : SA95422
Analysis Method : EPA 8260B



Sample ID : 63507-15 (MW-15)
Date Analyzed : 07/08/08
Data File : D647112
Analysis Method : M EPA 8015



Sample ID : 63507-15 SI (MW-15)
Date Analyzed : 07/08/08
Data File : D281011
Analysis Method : M EPA 8015



63507

☐ Yes
☐ No

Chain-of-Custody-Record

Direct Bill To:
Geoffrey Risse
Gettler-Ryan Inc.
3140 Gold Camp Dr.
Rancho Cordova, CA
95670

Facility: Rolls-Royce Engine Test Facility
Facility Address: 6701 Old Earhart Road, Oakland, CA
Consultant Project #: 25-948218.1
Consultant Name: GETTLER-RYAN INC.
Address: 3140 Gold Camp Dr., Suite 170, Rancho Cordova, CA 95670
Project Contact: (Name) Geoffrey Risse e-mail grisse@grinc.com
(Phone) 916-631-1300x12 (Fax) 916-631-1317

(Name) Geoffrey Risse
(Phone) 916-631-1300x12
Laboratory Name: Kiff Analytical
Laboratory Service Order:
Laboratory Service Code:
Samples Collected by: (Name) Jim Herron
Signature:

State Method: ☑ CA ☐ OR ☐ WA ☐ NW Series ☐ CO ☐ UT ☐ ID

	Sample I.D.	Number of Containers	Matrix S=Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	TPH-Jet A Fuel (8015) (HCL)	TPH-MO (8015) (HCL)	TPH-D with Silica Gel Cleanup (8015) (HCL)	TPH-G/BTEX/MTBE/ Naphthalene (8260) (HCL)	Remarks / Lab Sample No.
									1 of 2
1	QA	2	W	6/26/08				X	01
2	MW-1	7	W	1320	X	X	X	X	02
3	MW-2	7	W	1335	X	X	X	X	03
4	MW-3	7	W	1220	X	X	X	X	04
5	MW-4	7	W	1110	X	X	X	X	05
6	MW-5	7	W	1245	X	X	X	X	06
7	MW-6	7	W	1020	X	X	X	X	07
8	MW-7	7	W	1200	X	X	X	X	08
9	MW-9	7	W	[illegible]	X	X	X	X	09
10	MW-10	7	W	1045	X	X	X	X	10
11	MW-11	7	W	1210	X	X	X	X	11
12	MW-12	7	W	1300	X	X	X	X	12
13	MW-13	7	W	1230	X	X	X	X	13
14	MW-14	7	W	1140	X	X	X	X	14

SAMPLE RECEIPT
Temp °C 2.6 Therm. ID# IR-1
Initial NVP Date 063008
Time 1339 Coolant present: (Yes) / No

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	GR. INC	6/26/08 1000		GR INC	06-30-08 1000	✓
	GR INC	06-30-08 1000		Organization	Date/Time	Iced (Y/N)
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	Iced (Y/N)
			Kiff Analytical		063008 1003	4

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
10 Days
(As Contracted)

63507

Chain-of-Custody-Record

☐ Yes
☐ No

Direct Bill To:
Geoffrey Risse
Gettler-Ryan Inc.
3140 Gold Camp Dr.
Rancho Cordova, CA
95670

Facility: Rolls-Royce Engine Test Facility
Facility Address: 6701 Old Earhart Road, Oakland, CA
Consultant Project #: 25-948218.1
Consultant Name: GETTLER-RYAN INC.
Address: 3140 Gold Camp Dr., Suite 170, Rancho Cordova, CA 95670
Project Contact: (Name) Geoffrey Risse e-mail grisse@grinc.com
(Phone) 916-631-1300x12 (Fax) 916-631-1317

(Name) Geoffrey Risse
(Phone) 916-631-1300x12
Laboratory Name: Kiff Analytical
Laboratory Service Order:
Laboratory Service Code:
Samples Collected by: (Name) Sim Herron
Signature:

State Method: ☑ CA ☐ OR ☐ WA ☐ NW Series ☐ CO ☐ UT ☐ ID

Sample I.D.	Number of Containers	Matrix S=Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	TPH-Jet A Fuel (8015) (HCL)	TPH-MO (8015) (HCL)	TPH-D with Silica Gel Cleanup (8015) (HCL)	TPH-G/BTEX/MTBE/ Naphthalene (8260) (HCL)	Remarks	Lab Sample No.
MW-15	7	W	6/26/08 1105	X	X	X	X	2 of 2	K

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	GR inc	6/26/08 1800		GR INC	06-30-08 1000	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	GR INC	06-30-08 1000				
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	Iced (Y/N)
			Kiff Analytical		063008 1003	Y

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
10 Days
(As Contracted)

KIFF Analytical LLC

Report Number : 63600
Date : 07/14/2008

Geoffrey Risse
Gettler-Ryan Inc.
3140 Gold Camp Dr. Suite 170
Rancho Cordova, CA 95670

Subject : 5 Water Samples
Project Name : Rolls-Royce Engine Test Facility
Project Number : 25-948218.1

Dear Mr. Risse,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

KIFF Analytical LLC

Report Number : 63600
Date : 07/14/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-8** Matrix : Water Lab Number : 63600-01
Sample Date :07/03/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/08/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	07/08/2008
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	07/08/2008
Toluene - d8 (Surr)	95.2		% Recovery	EPA 8260B	07/08/2008
TPH as Motor Oil	**4400**	100	ug/L	M EPA 8015	07/10/2008
TPH as Diesel (w/ Silica Gel)	**1200**	50	ug/L	M EPA 8015	07/09/2008
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**1800**	50	ug/L	M EPA 8015	07/10/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	07/10/2008
Octacosane (Silica Gel Surr)	121		% Recovery	M EPA 8015	07/09/2008

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63600
Date : 07/14/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-17** Matrix : Water Lab Number : 63600-02
Sample Date :07/03/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/08/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
4-Bromofluorobenzene (Surr)	108		% Recovery	EPA 8260B	07/08/2008
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	07/08/2008
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	07/08/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/10/2008
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	07/09/2008
TPH as Jet Fuel	**84**	50	ug/L	M EPA 8015	07/10/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	07/10/2008
Octacosane (Silica Gel Surr)	93.8		% Recovery	M EPA 8015	07/09/2008

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63600
Date : 07/14/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **NPORDMW-3** Matrix : Water Lab Number : 63600-03
Sample Date :07/03/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/08/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
4-Bromofluorobenzene (Surr)	109		% Recovery	EPA 8260B	07/08/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/08/2008
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/08/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/10/2008
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	07/09/2008
TPH as Jet Fuel	**99**	50	ug/L	M EPA 8015	07/10/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	111		% Recovery	M EPA 8015	07/10/2008
Octacosane (Silica Gel Surr)	97.5		% Recovery	M EPA 8015	07/09/2008

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63600
Date : 07/14/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **NPORDMW-4** Matrix : Water Lab Number : 63600-04
Sample Date :07/03/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/08/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/08/2008
4-Bromofluorobenzene (Surr)	110		% Recovery	EPA 8260B	07/08/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	07/08/2008
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	07/08/2008
TPH as Motor Oil	**700**	100	ug/L	M EPA 8015	07/10/2008
TPH as Diesel (w/ Silica Gel)	**360**	50	ug/L	M EPA 8015	07/09/2008
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**960**	50	ug/L	M EPA 8015	07/10/2008
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	118		% Recovery	M EPA 8015	07/10/2008
Octacosane (Silica Gel Surr)	129		% Recovery	M EPA 8015	07/09/2008

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 63600
Date : 07/14/2008

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **QA** Matrix : Water Lab Number : 63600-05
Sample Date :07/03/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/07/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/07/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/07/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/07/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/07/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/07/2008
Naphthalene	**< 0.50**	0.50	ug/L	EPA 8260B	07/07/2008
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	07/07/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/07/2008
Toluene - d8 (Surr)	96.0		% Recovery	EPA 8260B	07/07/2008
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	07/10/2008
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	07/09/2008
TPH as Jet Fuel	**< 50**	50	ug/L	M EPA 8015	07/10/2008
Octacosane (Diesel Surrogate)	120		% Recovery	M EPA 8015	07/10/2008
Octacosane (Silica Gel Surr)	117		% Recovery	M EPA 8015	07/09/2008

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 63600

Date : 07/14/2008

QC Report : Method Blank Data

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/09/2008
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	07/09/2008
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/09/2008
Octacosane (Diesel Surrogate)	105		%	M EPA 8015	07/09/2008
Octacosane (Silica Gel Surr)	107		%	M EPA 8015	07/09/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/07/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
1,2-Dichloroethane-d4 (Surr)	99.7		%	EPA 8260B	07/07/2008
4-Bromofluorobenzene (Surr)	111		%	EPA 8260B	07/07/2008
Toluene - d8 (Surr)	101		%	EPA 8260B	07/07/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/07/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	07/07/2008
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	07/07/2008
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	07/07/2008
Toluene - d8 (Surr)	95.3		%	EPA 8260B	07/07/2008

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 63600

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 07/14/2008

Project Name : **Rolls-Royce Engine Test**

Project Number : **25-948218.1**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH-D (Si Gel)	BLANK	<50	1000	1000	951	992	ug/L	M EPA 8015	7/9/08	95.1	99.2	4.16	70-130	25
TPH as Diesel	BLANK	<50	1000	1000	1050	1040	ug/L	M EPA 8015	7/9/08	105	104	0.586	70-130	25
Benzene	63571-04	<0.50	40.1	40.1	38.4	36.3	ug/L	EPA 8260B	7/7/08	95.6	90.5	5.52	70-130	25
Methyl-t-butyl ether	63571-04	<0.50	40.1	40.1	42.0	38.6	ug/L	EPA 8260B	7/7/08	105	96.4	8.38	70-130	25
Toluene	63571-04	<0.50	39.5	39.5	39.1	36.0	ug/L	EPA 8260B	7/7/08	99.0	91.0	8.44	70-130	25
Benzene	63580-02	<0.50	40.1	40.1	39.6	38.6	ug/L	EPA 8260B	7/7/08	98.6	96.1	2.56	70-130	25
Methyl-t-butyl ether	63580-02	<0.50	40.1	40.1	30.5	30.5	ug/L	EPA 8260B	7/7/08	76.1	76.2	0.0588	70-130	25
Toluene	63580-02	<0.50	39.5	39.5	37.3	36.2	ug/L	EPA 8260B	7/7/08	94.3	91.6	2.92	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 63600

QC Report : Laboratory Control Sample (LCS)

Date : 07/14/2008

Project Name : **Rolls-Royce Engine Test**

Project Number : **25-948218.1**

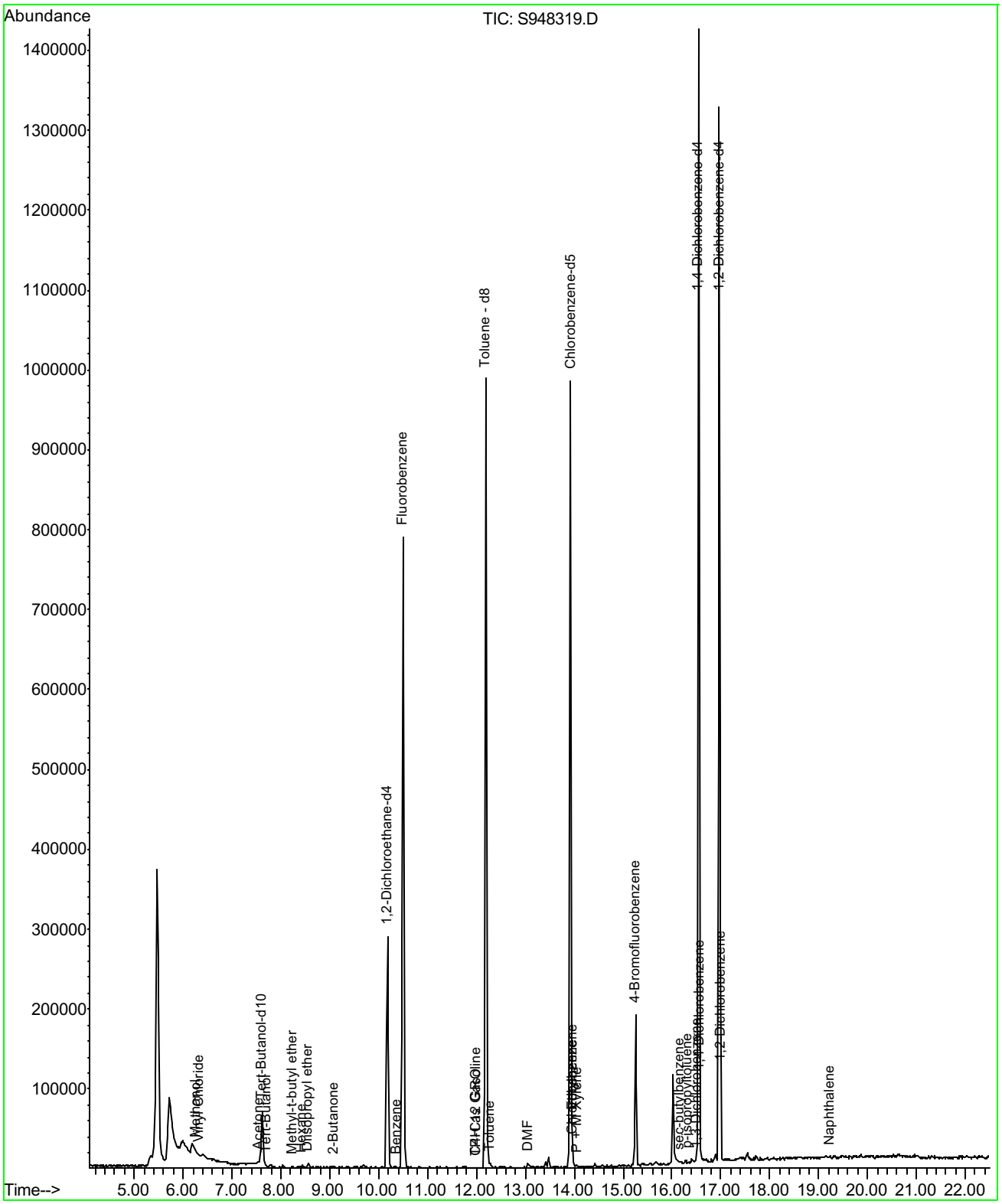
Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	7/7/08	94.1	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/7/08	98.5	70-130
Toluene	40.0	ug/L	EPA 8260B	7/7/08	97.5	70-130
Benzene	40.1	ug/L	EPA 8260B	7/7/08	98.7	70-130
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	7/7/08	80.9	70-130
Toluene	40.1	ug/L	EPA 8260B	7/7/08	94.2	70-130

Approved By: Joel Kiff

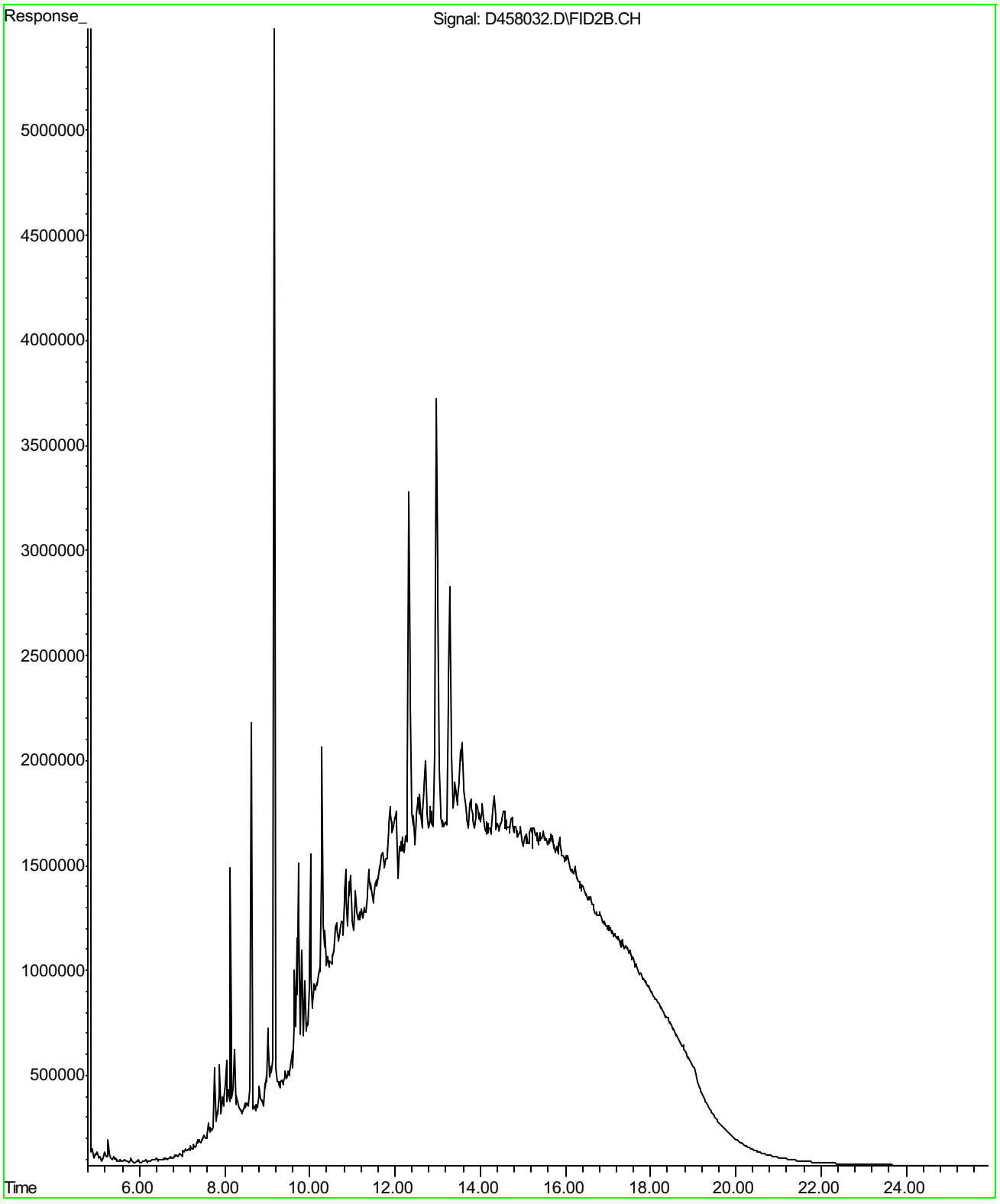
KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

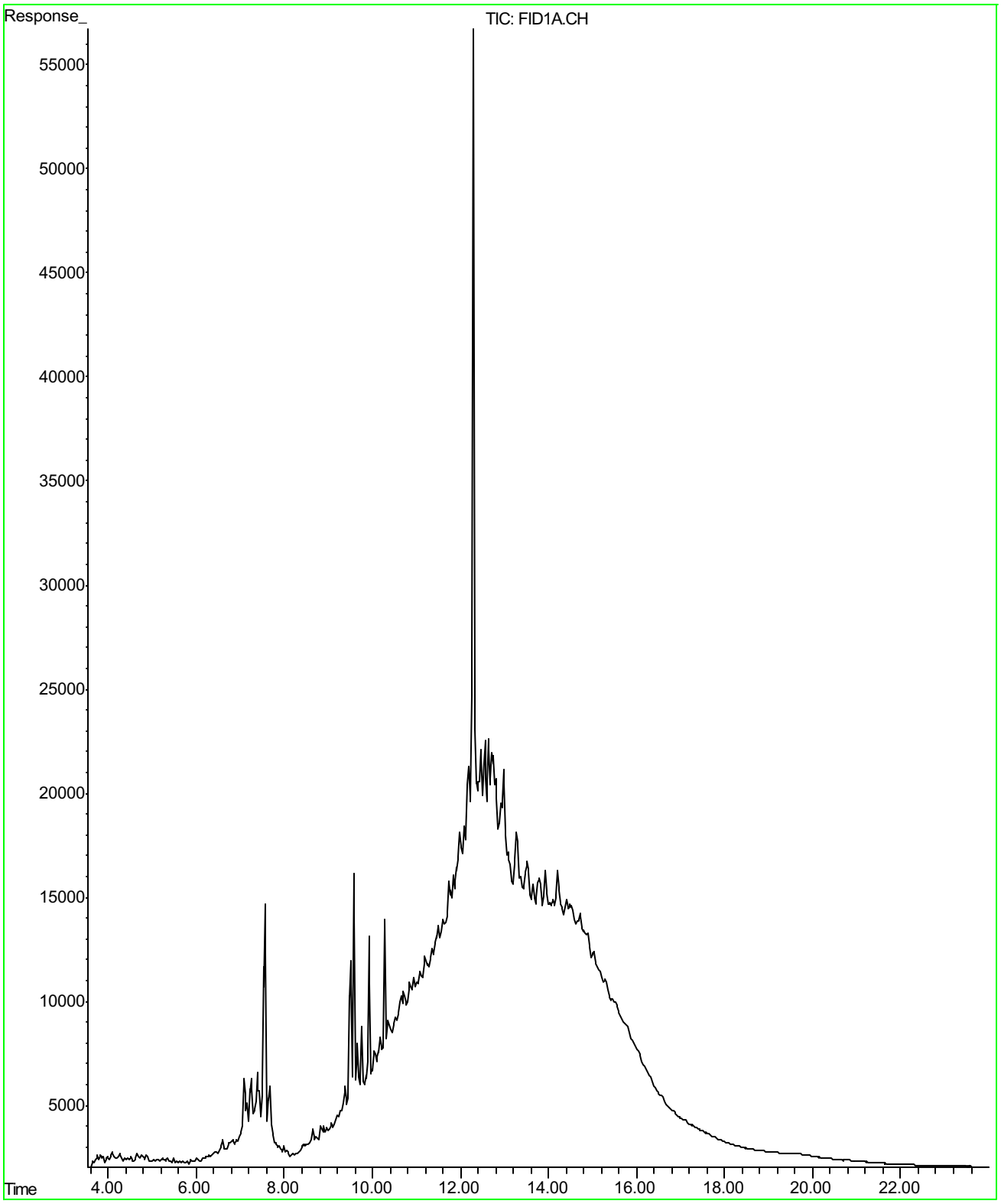
Sample ID : 63600-01 (MW-8)
Date Analyzed : 07/08/08
Data File : S948319
Analysis Method : EPA 8260B



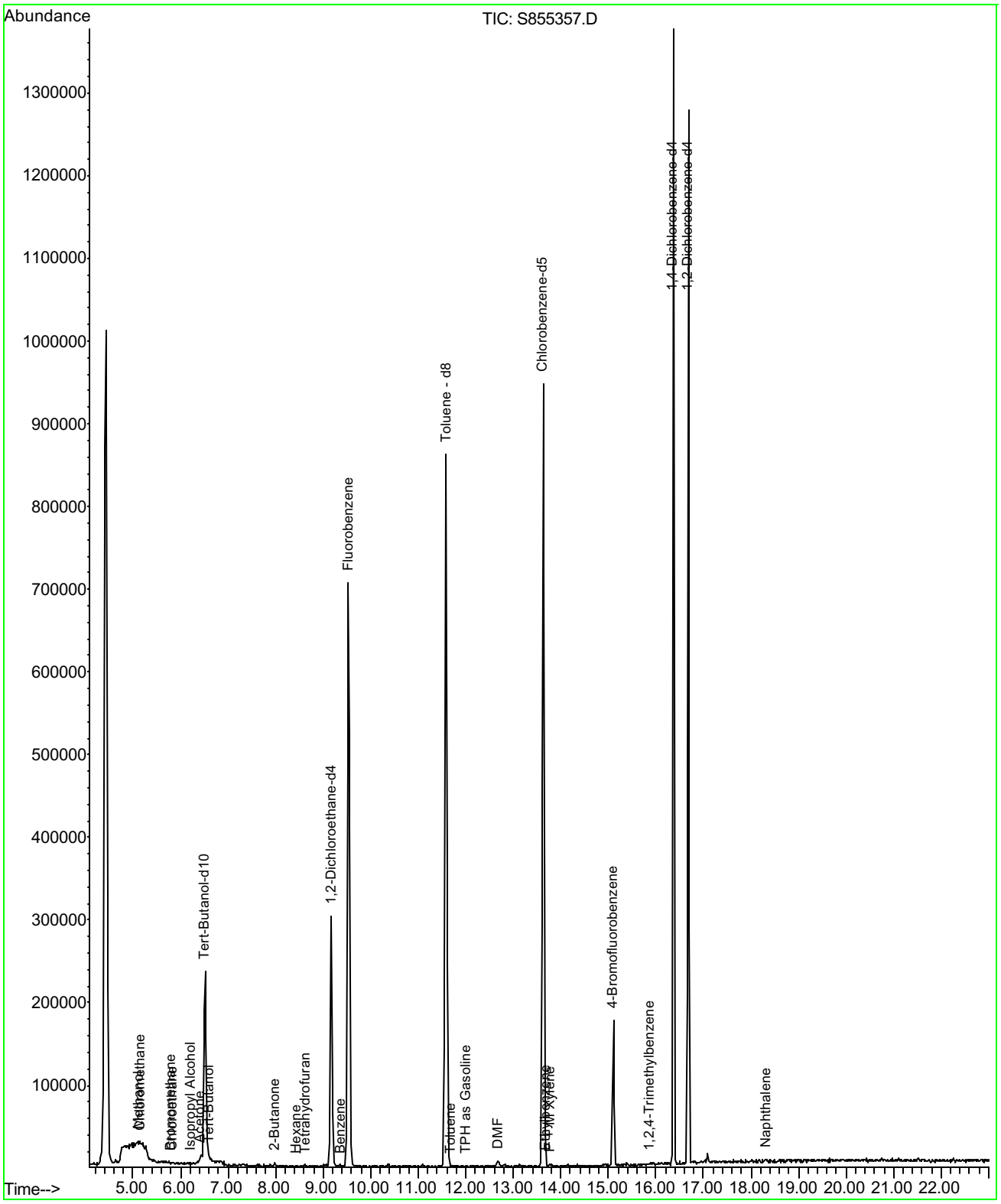
Sample ID : 63600-01 (MW-8)
Date Analyzed : 07/10/08
Data File : D458032
Analysis Method : M EPA 8015



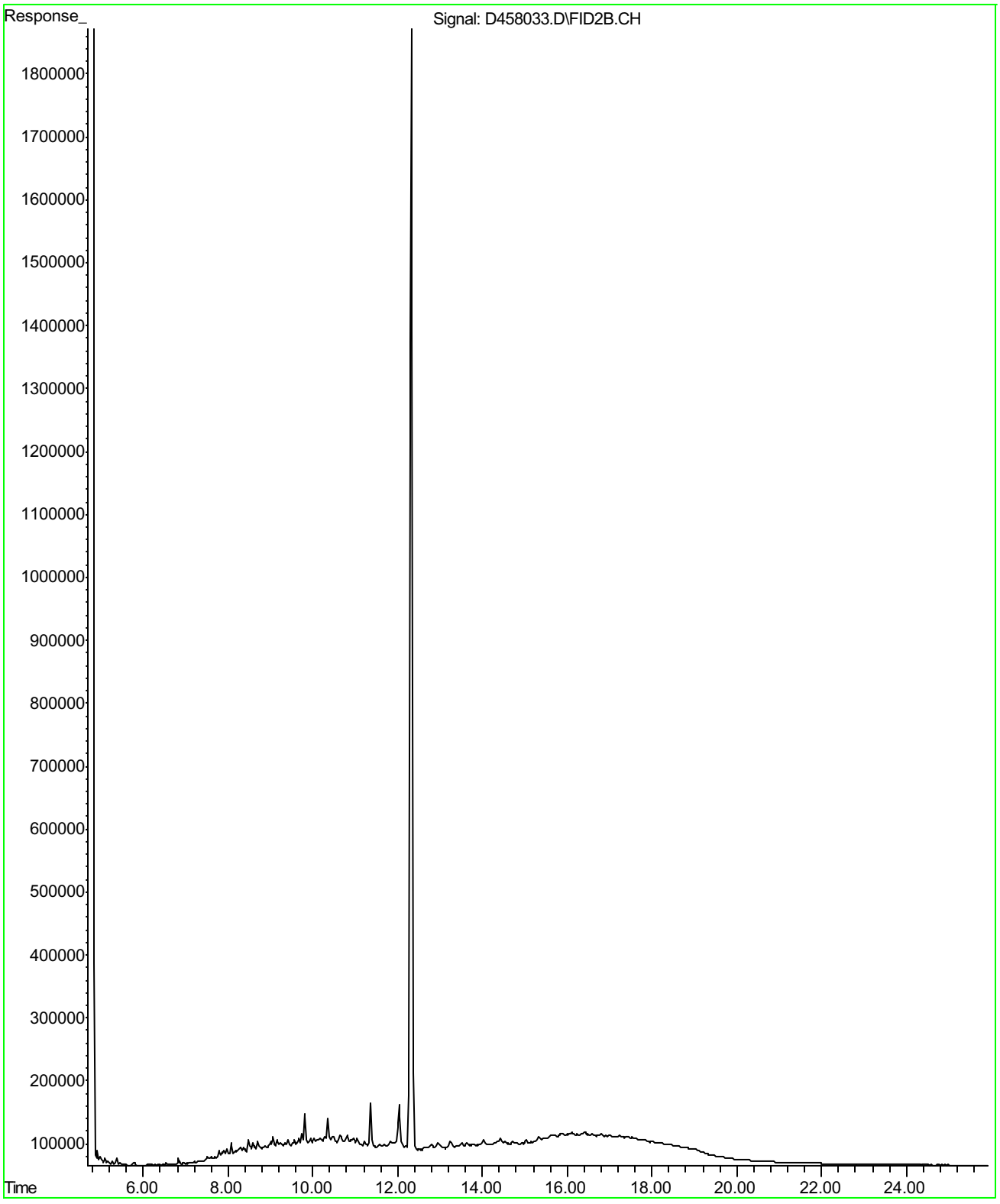
Sample ID : 63600-01 Silica Gel (MW-8)
Date Analyzed : 07/09/08
Data File : D281063
Analysis Method : M EPA 8015



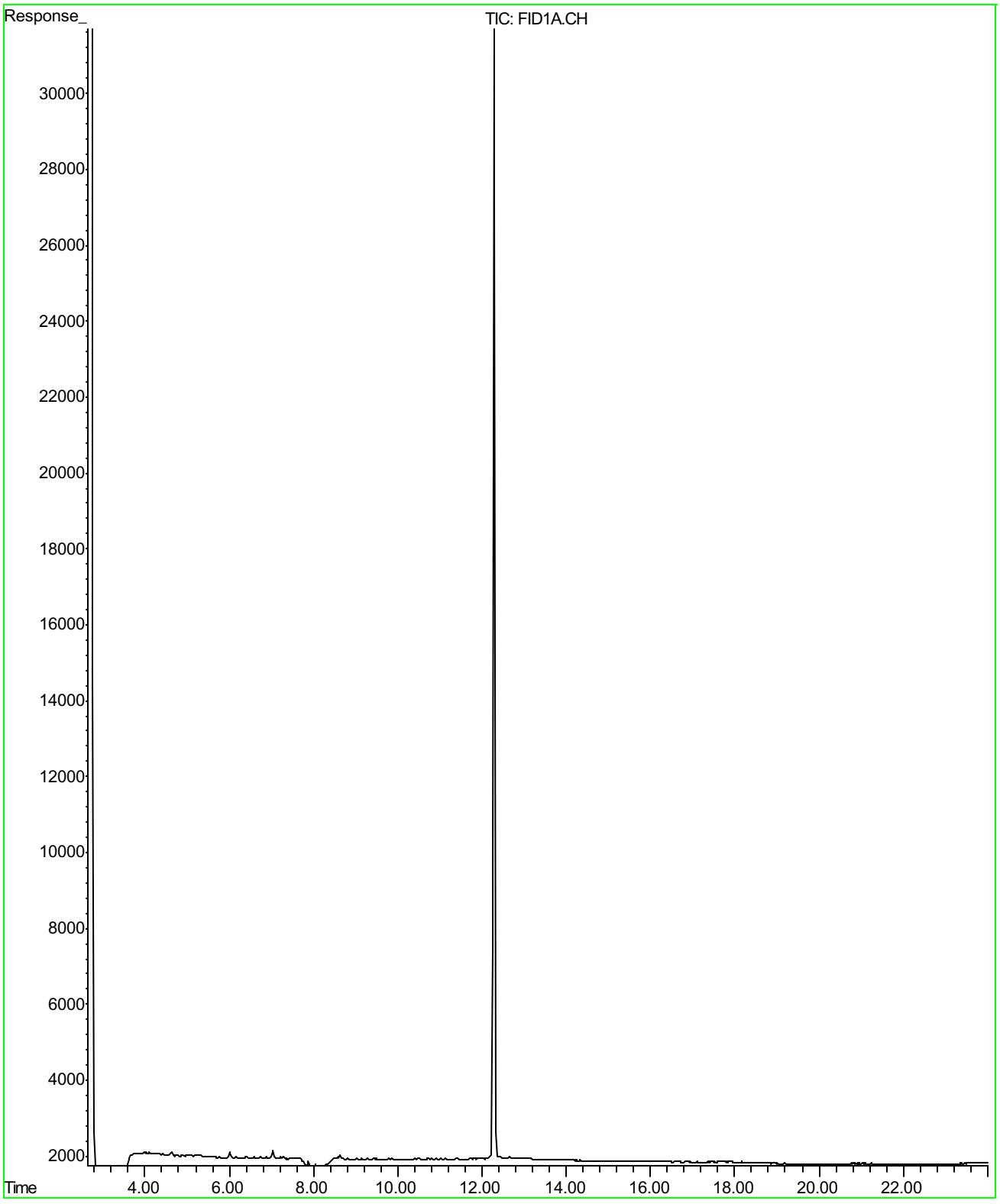
Sample ID : 63600-02 (MW-17)
Date Analyzed : 07/08/08
Data File : S855357
Analysis Method : EPA 8260B



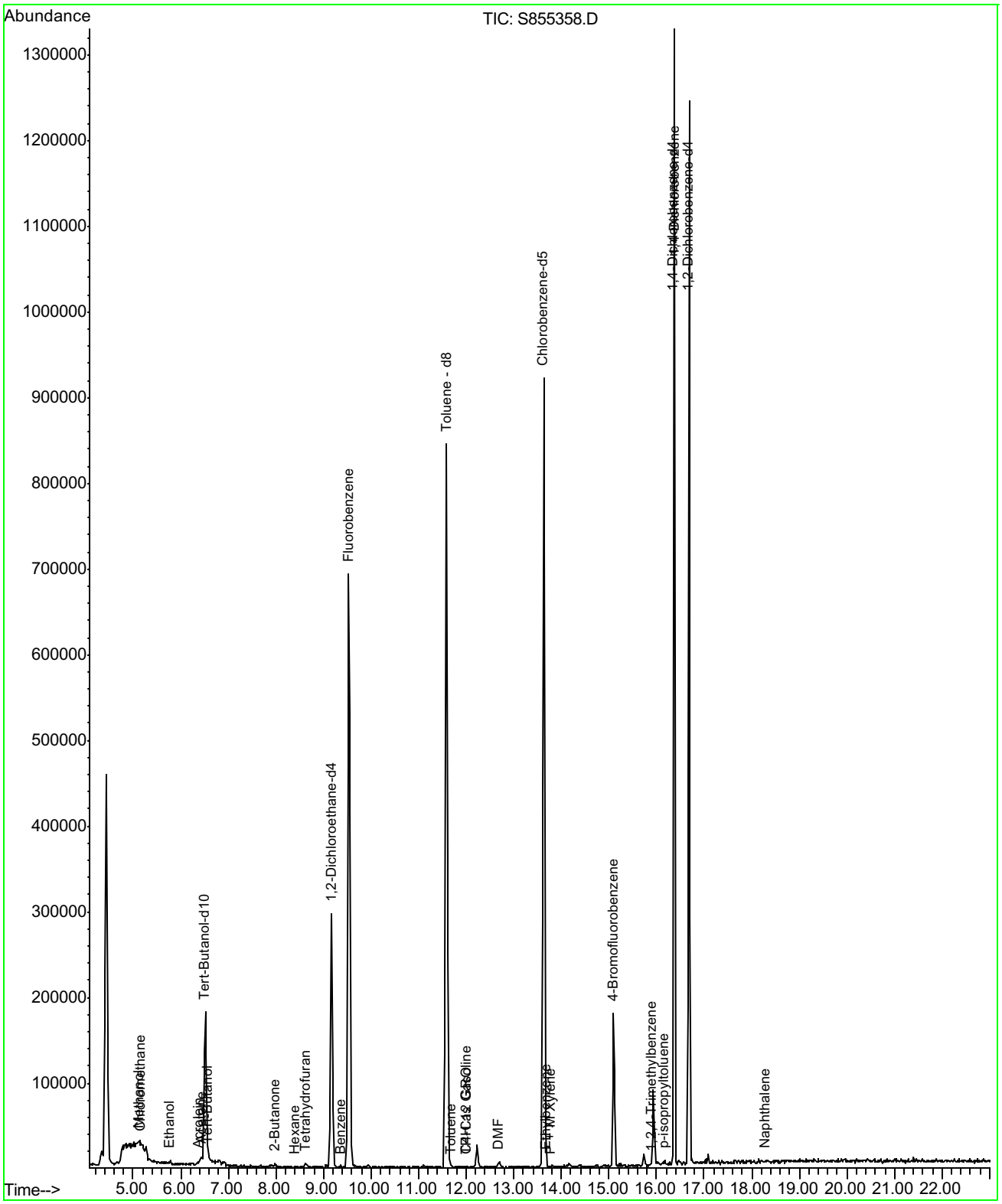
Sample ID : 63600-02 (MW-17)
Date Analyzed : 07/10/08
Data File : D458033
Analysis Method : M EPA 8015



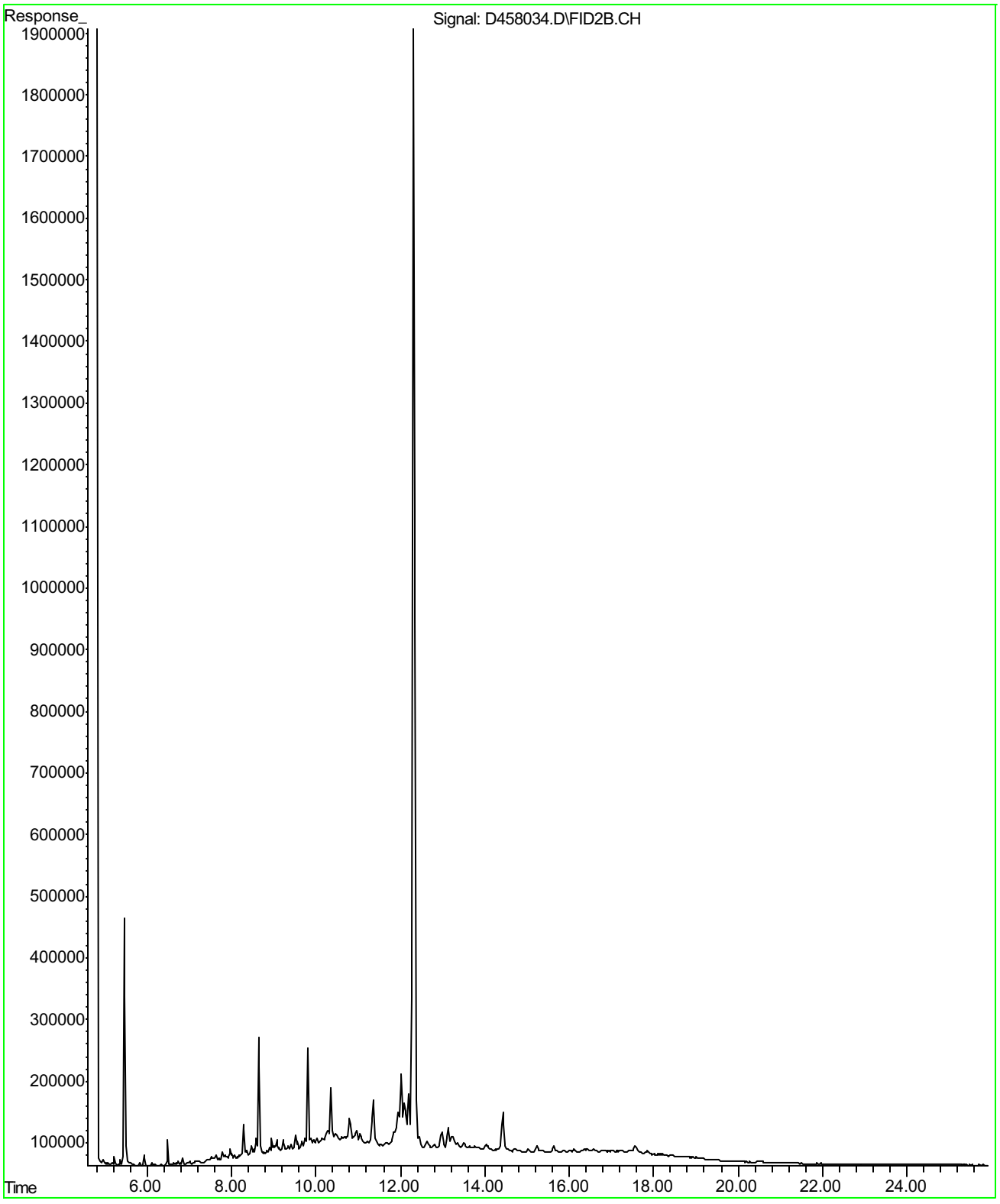
Sample ID : 63600-02 Silica Gel (MW-17)
Date Analyzed : 07/09/08
Data File : D281059
Analysis Method : M EPA 8015



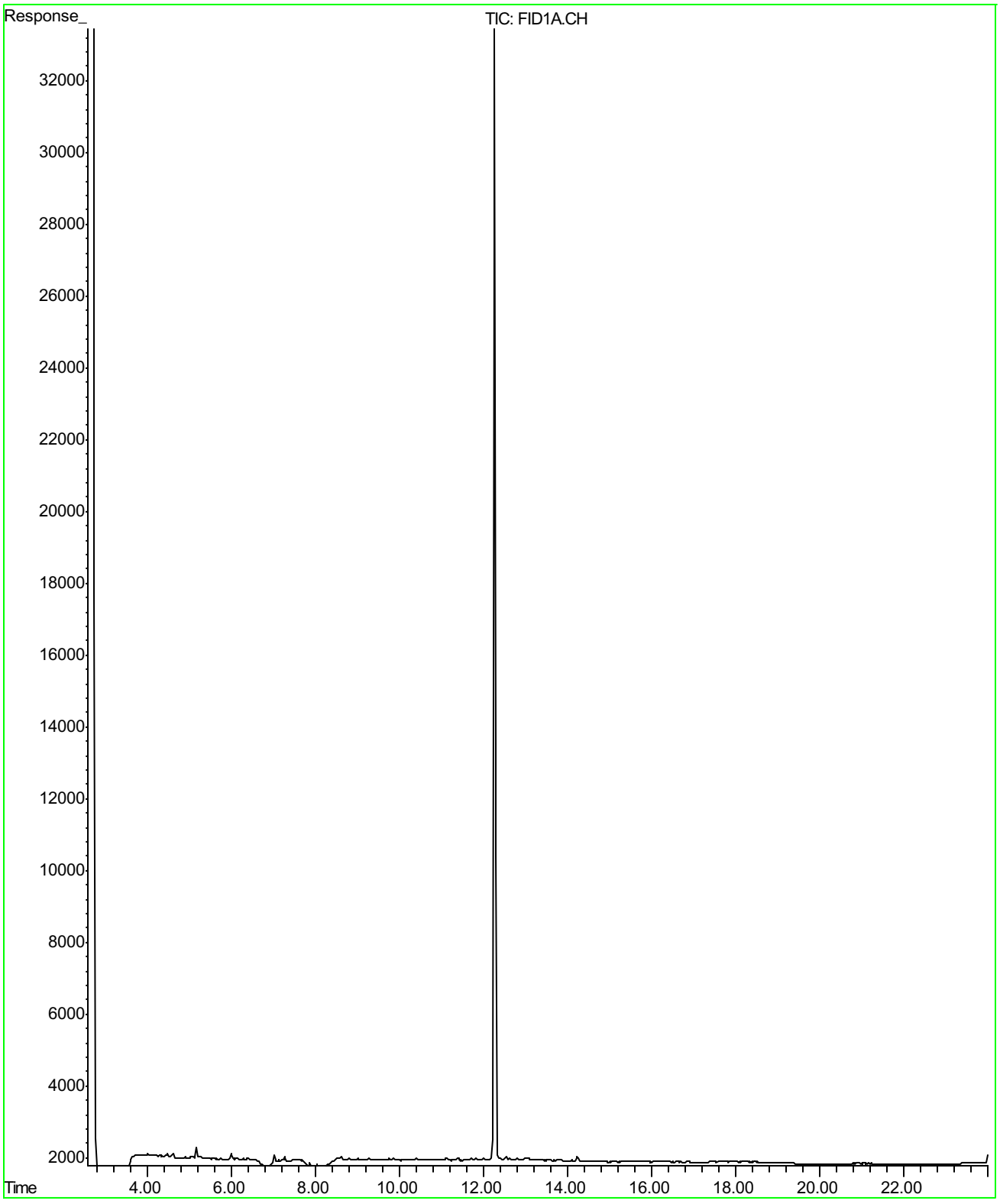
Sample ID : 63600-03 (NPORDMW-3)
Date Analyzed : 07/08/08
Data File : S855358
Analysis Method : EPA 8260B



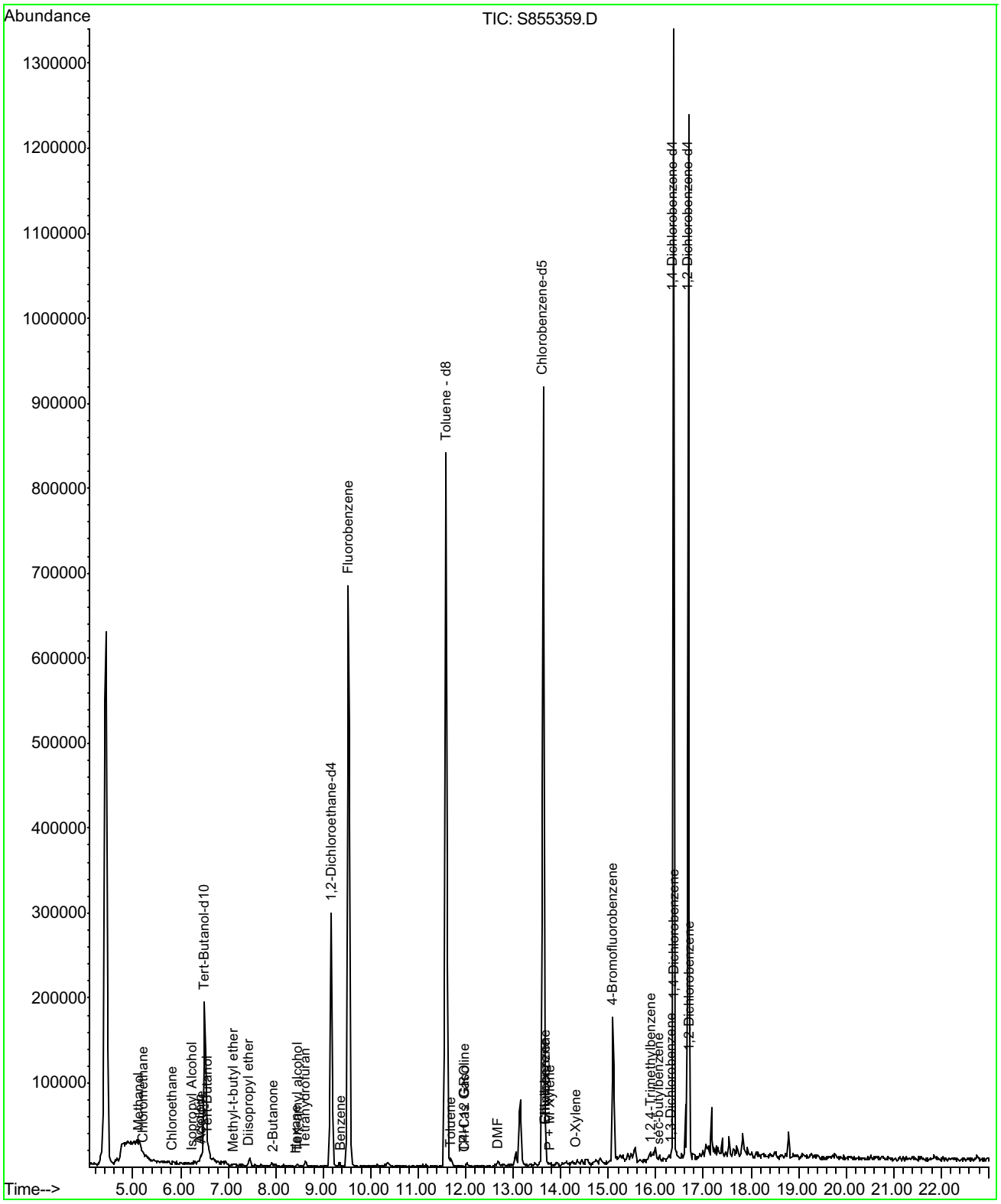
Sample ID : 63600-03 (NPORDMW-3)
Date Analyzed : 07/10/08
Data File : D458034
Analysis Method : M EPA 8015



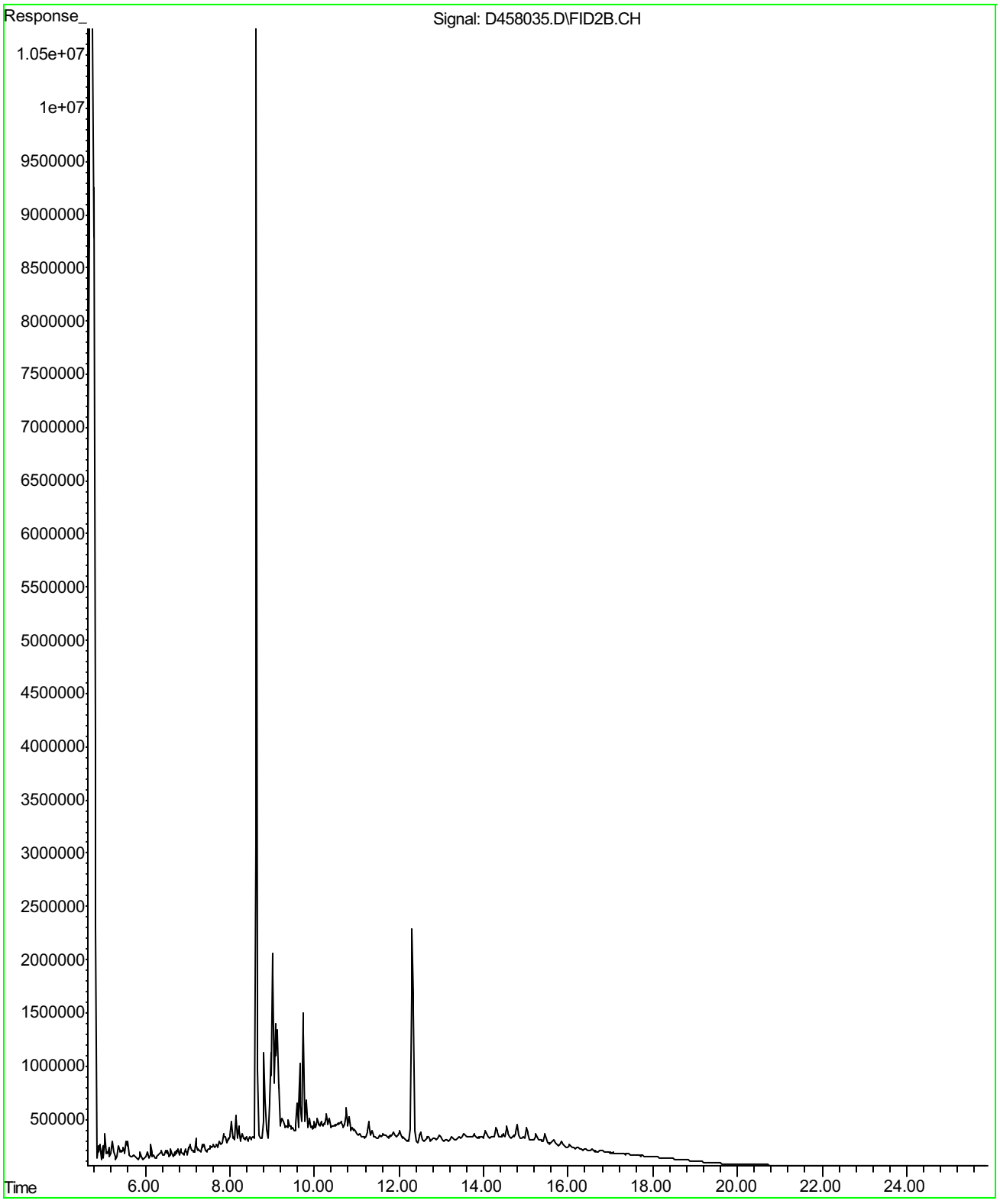
Sample ID : 63600-03 Silica Gel (NPORDMW-3)
Date Analyzed : 07/09/08
Data File : D281060
Analysis Method : M EPA 8015



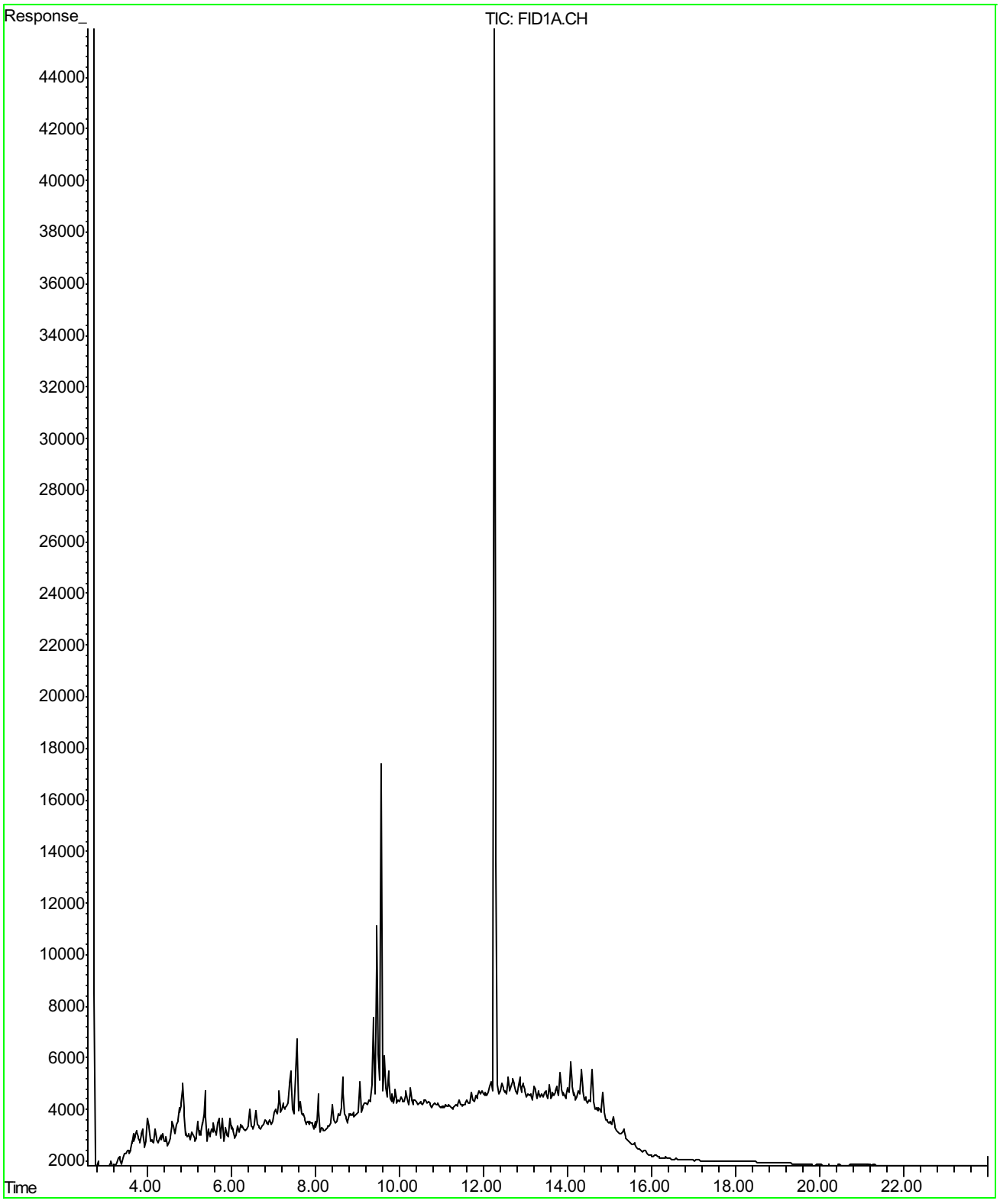
Sample ID : 63600-04 (NPORDMW-4)
Date Analyzed : 07/08/08
Data File : S855359
Analysis Method : EPA 8260B



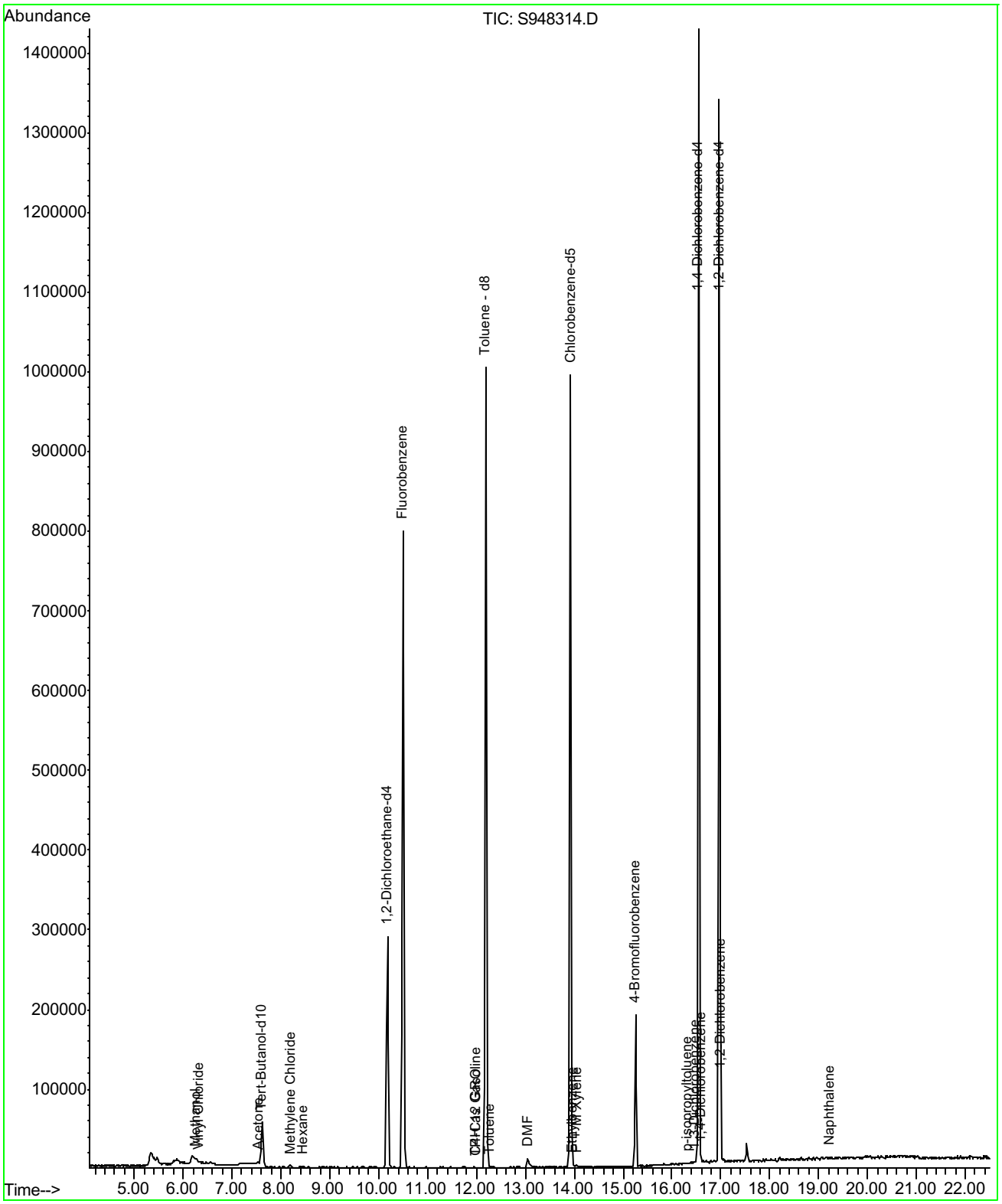
Sample ID : 63600-04 (NPORDMW-4)
Date Analyzed : 07/10/08
Data File : D458035
Analysis Method : M EPA 8015



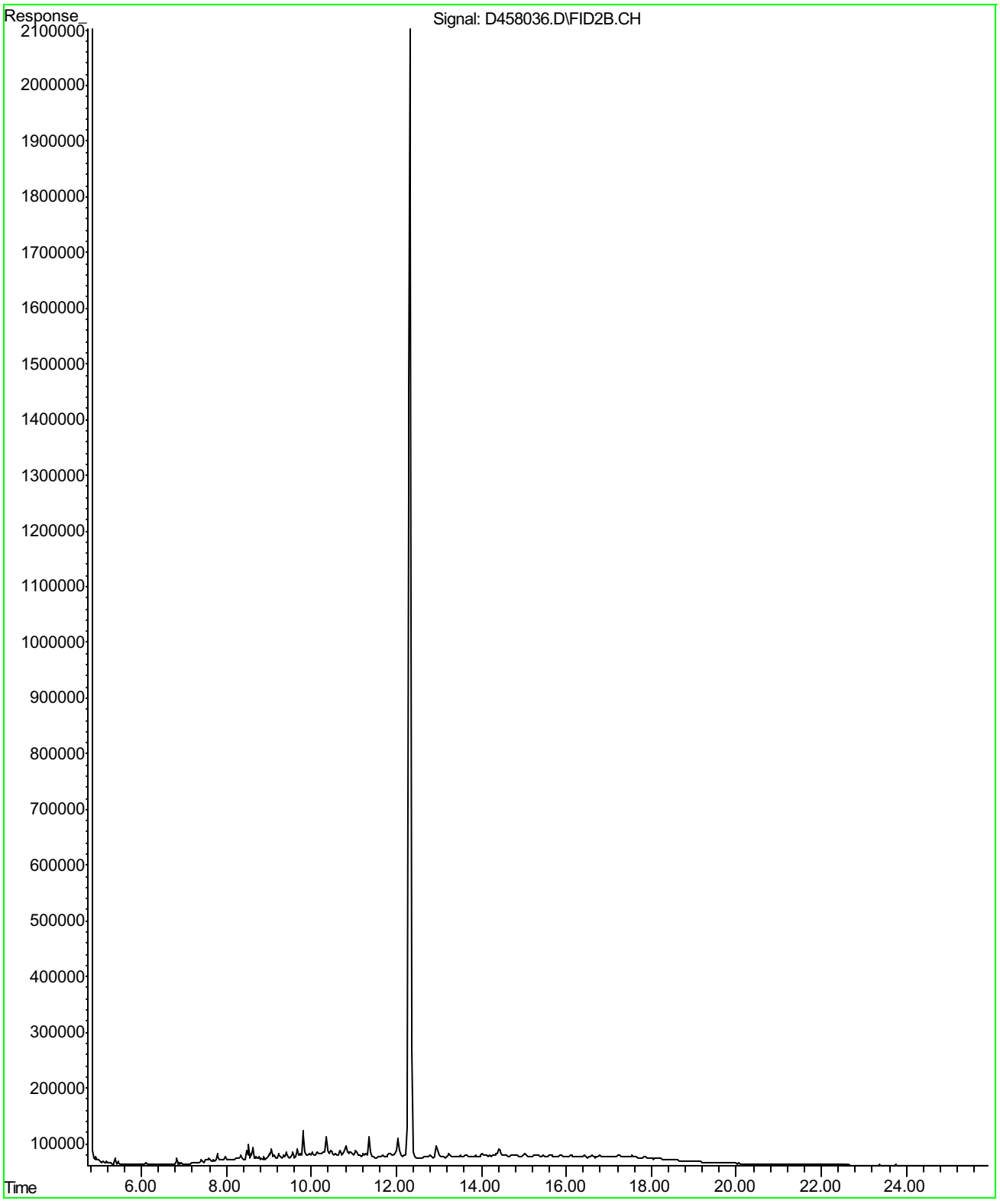
Sample ID : 63600-04 Silica Gel (NPORDMW-4)
Date Analyzed : 07/09/08
Data File : D281061
Analysis Method : M EPA 8015



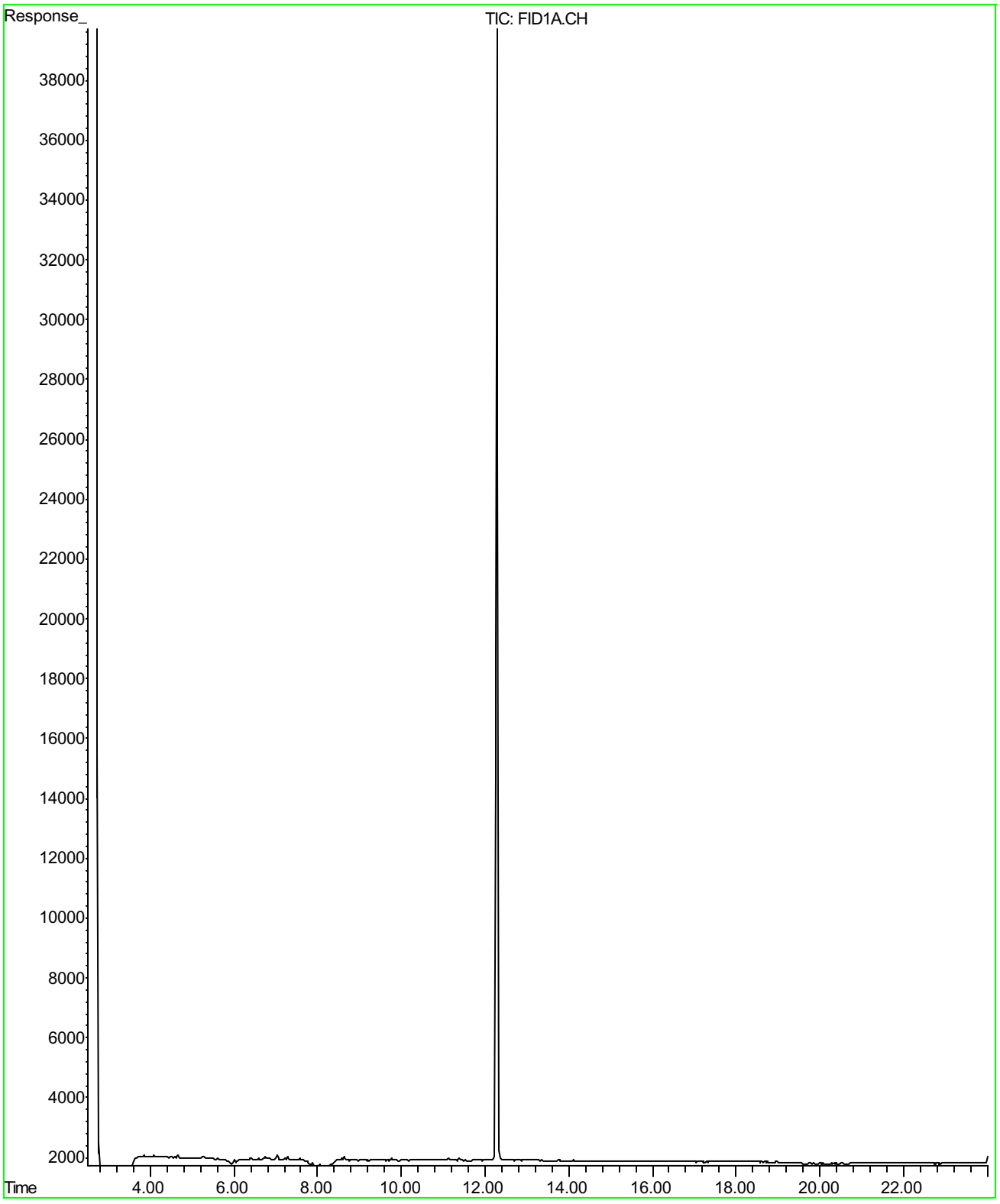
Sample ID : 63600-05 (QA)
Date Analyzed : 07/07/08
Data File : S948314
Analysis Method : EPA 8260B



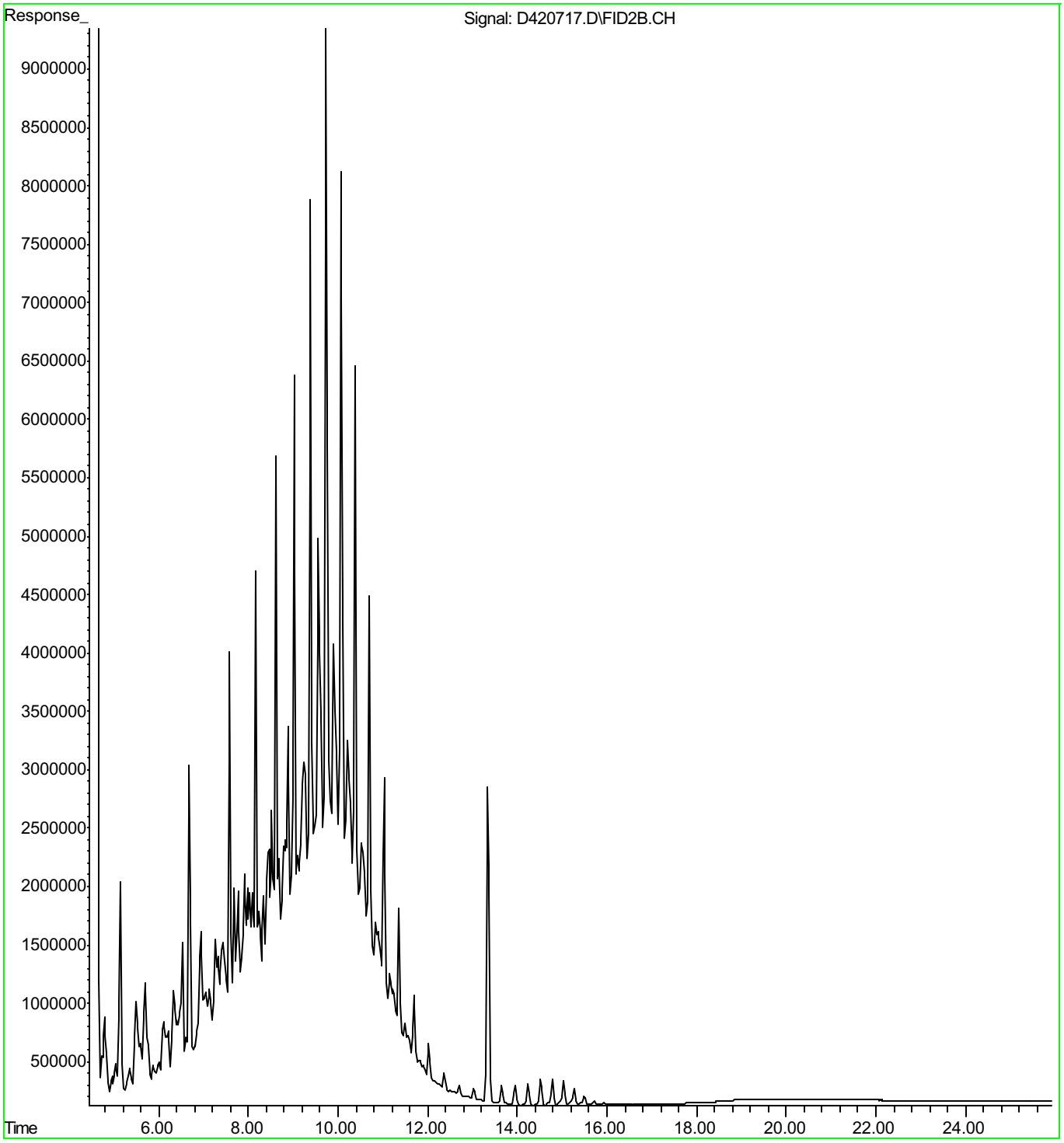
Sample ID : 63600-05 (QA)
Date Analyzed : 07/10/08
Data File : D458036
Analysis Method : M EPA 8015



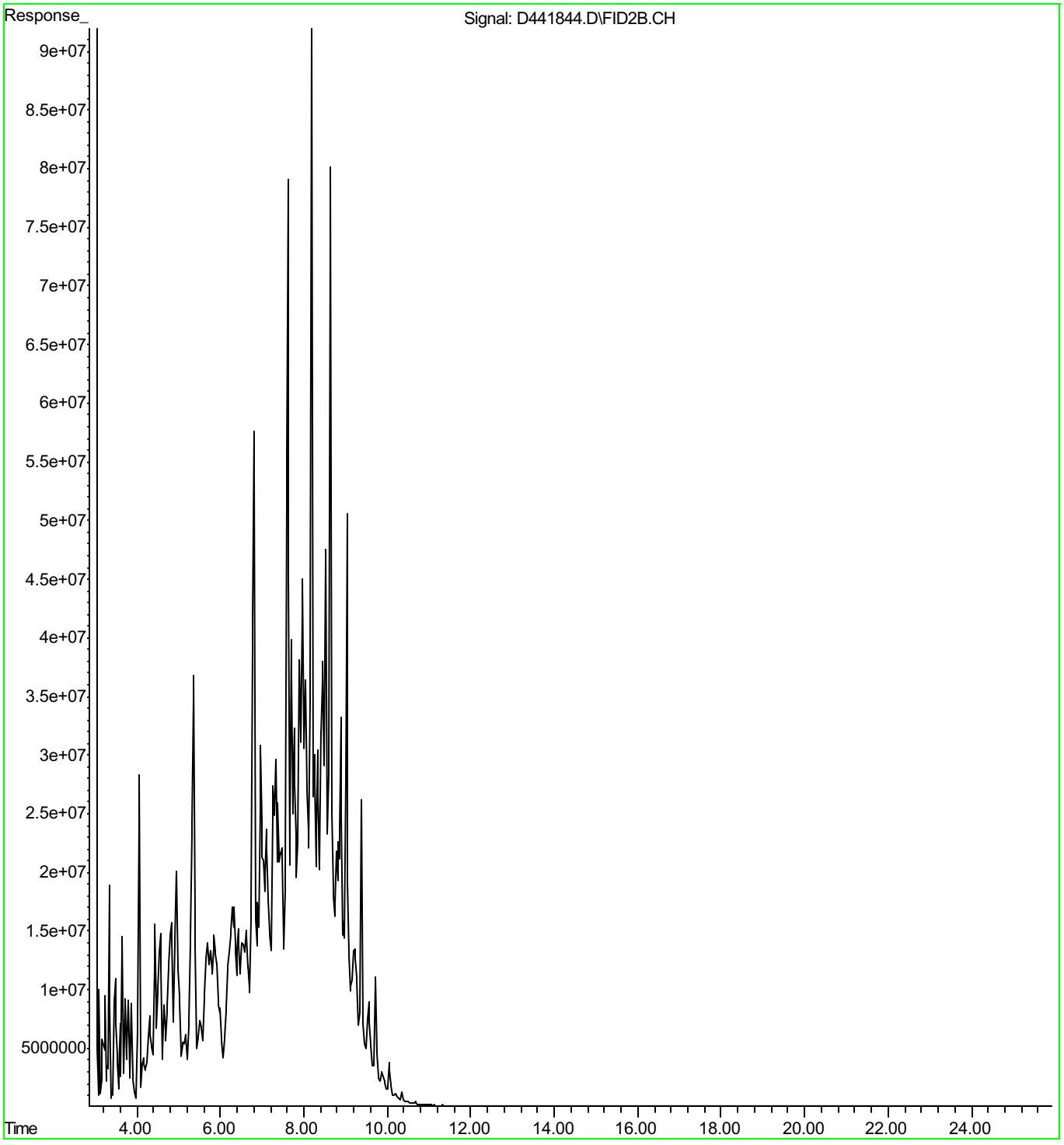
Sample ID : 63600-05 Silica Gel (QA)
Date Analyzed : 07/09/08
Data File : D281062
Analysis Method : M EPA 8015



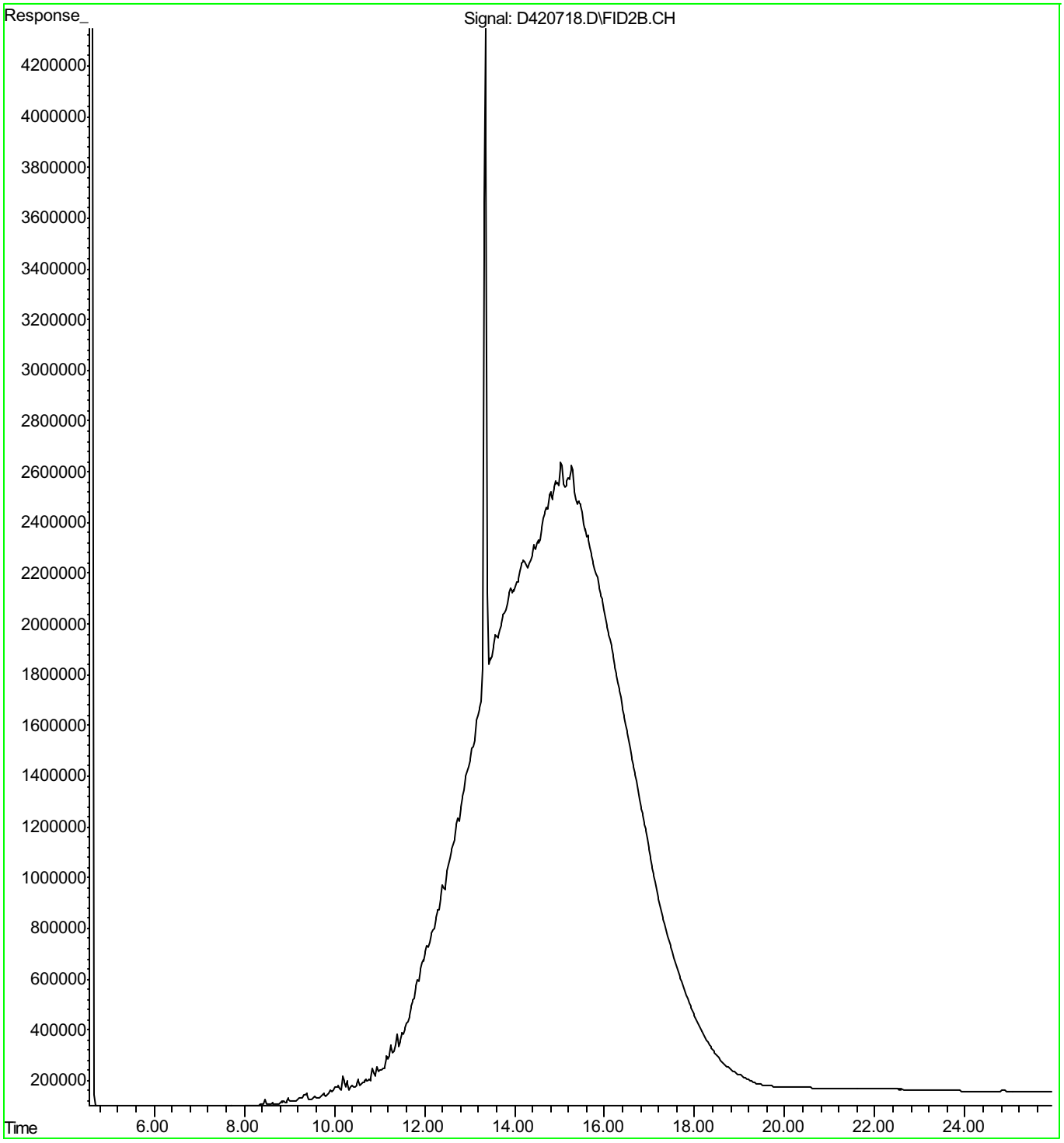
File : C:\DATAFO~1\D420717.D
Operator : CTD
Acquired : 07 Jun 2004 7:54 am using AcqMethod BOTH.M
Instrument : Diesel2
Sample Name: Diesel Standard
Misc Info :
Vial Number: 96



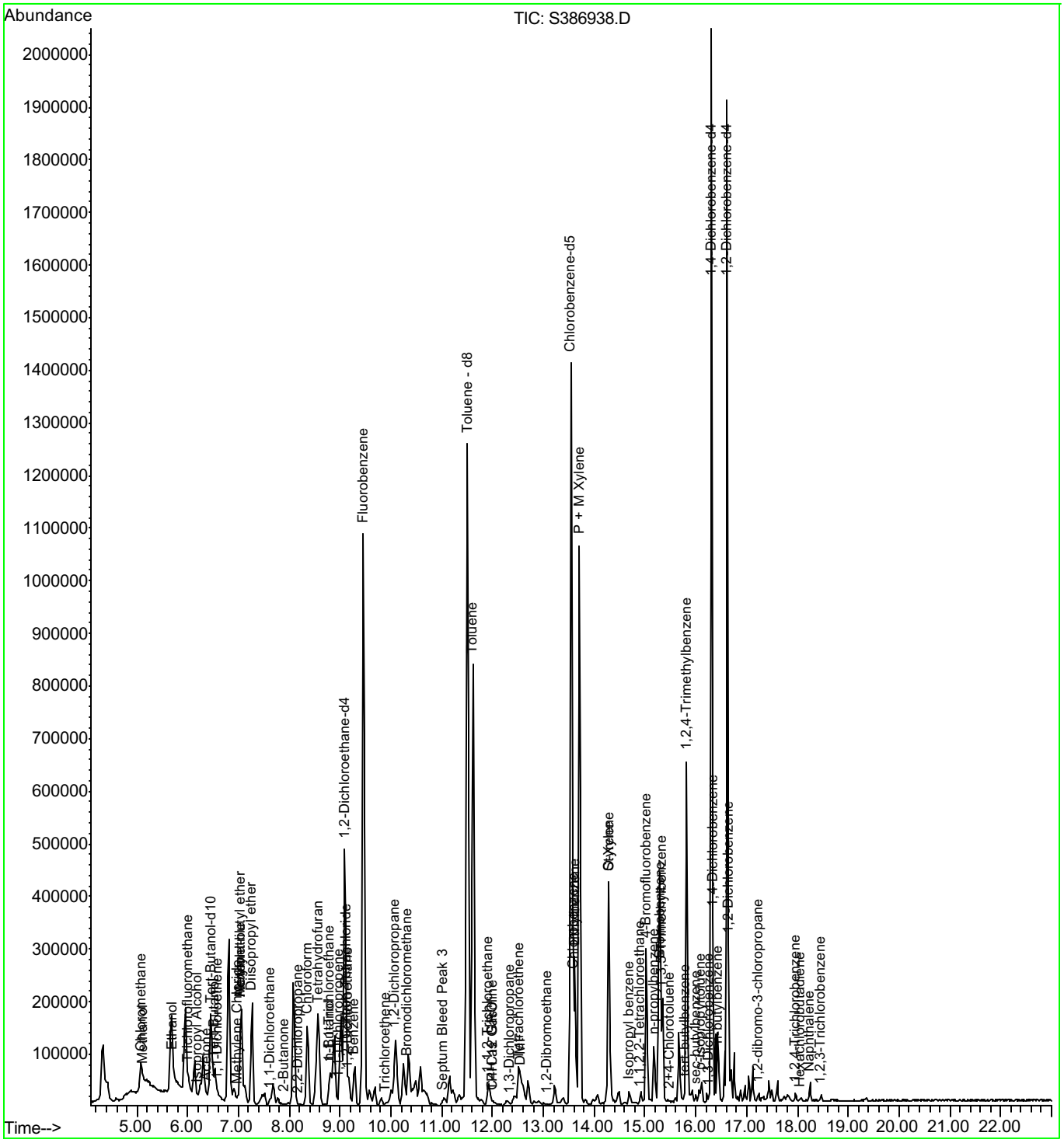
File : C:\DATAFO~1\D441844.D
Operator : DRM
Acquired : 04 Dec 2006 1:34 pm using AcqMethod BOTH.M
Instrument : Diesel #2
Sample Name: Jet Fuel Standard
Misc Info :
Vial Number: 100



File : C:\DATAFO~1\D420718.D
Operator : CTD
Acquired : 07 Jun 2004 8:31 am using AcqMethod BOTH.M
Instrument : Diesel2
Sample Name: Motor Oil Standard
Misc Info :
Vial Number: 97



File : o:\hpchem\S386938.D
Operator : TTH
Acquired : 10 Apr 2008 6:38 pm using AcqMethod VOA
Instrument : GC/MS Ins
Sample Name: Gasoline Standard
Misc Info :
Vial Number: 12



63600

Chain-of-Custody-Record

☐ Yes
☐ No

Direct Bill To:
Geoffrey Risse
Gettler-Ryan Inc.
3140 Gold Camp Dr.
Rancho Cordova, CA
95670

Facility: Rolls-Royce Engine Test Facility
Facility Address: 6701 Old Earhart Road, Oakland, CA
Consultant Project #: 25-948218.1
Consultant Name: GETTLER-RYAN INC.
Address: 3140 Gold Camp Dr., Suite 170, Rancho Cordova, CA 95670
Project Contact: (Name) Geoffrey Risse e-mail grisse@grinc.com
(Phone) 916-631-1300x12 (Fax) 916-631-1317

(Name) Geoffrey Risse
(Phone) 916-631-1300x12
Laboratory Name: Kiff Analytical
Laboratory Service Order:
Laboratory Service Code:
Samples Collected by: (Name) Jim Herren
Signature:

State Method: ☑ CA ☐ OR ☐ WA ☐ NW Series ☐ CO ☐ UT ☐ ID

Sample I.D.	Number of Containers	Matrix S=Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	TPH-Jet A Fuel (8015) (HCL)	TPH-MO (8015) (HCL)	TPH-D with Silica Gel Cleanup (8015) (HCL)	TPH-G/BTEX/MTBE/ Naphthalene (8260) (HCL)		Remarks	Lab Sample No.
MW-8	7	W	7/3/08 1220	X	X	X	X	*HCL RINSED OUT, NOW NP	Samples MW-8 & NPOR2MW-4 NO HCL IN VOA'S	01
MW-17	7	W	0950	X	X	X	X			02
NPORDMW-3	7	W	1310	X	X	X	X			03
NPOR2MW-4	7	W	1110	X	X	X	X	*HCL RINSED OUT, NOW NP		04
QA	2	W	07-03-08	X	X	X	X			05

SAMPLE RECEIPT
Temp °C 1.8 Therm. ID# IR-1
Initial RLM Date 070708
Time 1400 Coolant present: (Yes) No

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	GRinc	7/3/08 1600		G-R INC	07-07-08 1110	
	GR-INC	07-07-08 1110				
			Received For Laboratory By (Signature): Kiff Analytical		Date/Time 070708 1115	Iced (Y) N

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted