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Alameda County  
Environmental Health

November 14, 2008

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

**Subject: 3rd 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 third 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 September 25, 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 September 25, 2008, GR collected depth to groundwater measurements in nineteen wells (MW-1 through MW-15, MW-17, MW-18, NPORD MW-3 and NPORD MW-4) and checked groundwater for the presence of Separate-Phase Hydrocarbons (SPH). Approximately 0.56 ft of SPH were observed in well MW-18.

Approximately 0.07 gallon (9 ounces) of SPH and 2 gallon of water were bailed from well MW-18 and were stored onsite in a 55-gallon DOT approved drum pending disposal. 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 0.56 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-gallon DOT approved drums pending disposal. GR understands that the disposal of water generated will be handled by RR.

## **Results**

### Groundwater Gradient

On September 25, 2008, the groundwater flow direction varied with hydraulic gradients ranging between 0.02 ft/ft to 0.03 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 samples collected from wells MW-1 and NPORD MW-3.

TPHg was detected in the water sample collected from well MW-13, at a concentration of 600 parts per billion (ppb). Concentrations of TPHg were reported below the laboratory method detection limits in water samples collected from the remaining wells.

TPHd was detected in nine wells at concentrations ranging from 150 ppb in well NPORD MW-4 to 5,900 ppb in well MW-9. Concentrations of TPHmo were detected in twelve wells at levels ranging from 120 ppb in well MW-17 to 13,000 ppb in well MW-7. TPHjf was detected in sixteen wells at concentrations ranging from 51 ppb in well MW-12 to 6,300 ppb in well MW-9.

BTEX constituents were reported as below the laboratory method report limit in all of the wells, except for benzene detected in well MW-13 at a concentration of 1.2 ppb.

MtBE was detected in wells MW-3, MW-13, MW-14 at concentrations of 1.2 ppb, 2.9 ppb, and 1.0 ppb, respectively. Naphthalene was detected in wells MW-7 and MW-13 at concentrations of 0.98 ppb and 11 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:

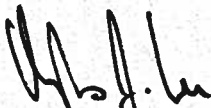
- Very low to non-detectable concentrations of dissolved petroleum hydrocarbons were present in wells MW-1, MW-2, MW-12, and MW-15 located along the northeast edge of the site;
- Detectable dissolved concentrations of TPHg appear limited to the areas in the vicinity of well MW-13;
- Separate-phase hydrocarbons continue to be limited to the vicinity of MW-18;
- 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		GWE (feet)	TPHg (ppb)	TPHd <sup>1</sup> (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
				Thickness (feet)												
<b>MW-1</b>	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 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>7.17</b>	<b>3.03</b>	<b>0.00</b>		<b>4.14</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;100</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-2</b>	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 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>7.03</b>	<b>2.75</b>	<b>0.00</b>		<b>4.28</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;100</b>	<b>410<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-3</b>	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 <sup>4</sup>	<0.50
	3/14/08	6.73	3.98	0.00		2.75	<50	<50	<100	120 <sup>9</sup>	<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 <sup>7</sup>	<0.50	1.7	<0.50	<0.50	0.93	<0.50
	<b>9/25/08</b>	<b>6.73</b>	<b>4.25</b>	<b>0.00</b>		<b>2.48</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;100</b>	<b>650<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>1.2</b>	<b>&lt;0.50</b>
<b>MW-4</b>	10/2/07 <sup>4</sup>	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 <sup>7</sup>	<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 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>9.79</b>	<b>5.98</b>	<b>0.00</b>		<b>3.81</b>	<b>&lt;50</b>	<b>1,600</b>	<b>1,400</b>	<b>2,100<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>

**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 <sup>1</sup> (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
<b>MW-5</b>	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 <sup>6</sup>	1,700	1,100 <sup>7</sup>	<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 <sup>6</sup>	3,200	2,000 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>8.35</b>	<b>4.52</b>	<b>0.00</b>	<b>3.83</b>	<b>&lt;50</b>	<b>670<sup>6</sup></b>	<b>1,200</b>	<b>940<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-6</b>	10/2/07	9.51	5.90	0.00	3.61	<50	3,000 <sup>6</sup>	7,700	2,500 <sup>7</sup>	<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 <sup>10</sup>	7,600	2,800 <sup>7</sup>	<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 <sup>10</sup>	9,400	3,200 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>9.51</b>	<b>5.69</b>	<b>0.00</b>	<b>3.82</b>	<b>&lt;50</b>	<b>3,500<sup>10</sup></b>	<b>8,800</b>	<b>3,800<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-7</b>	10/2/07	9.23	5.68	0.00	3.55	<50	12,000 <sup>6</sup>	34,000	9,100 <sup>7</sup>	<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 <sup>6</sup>	20,000	5,500 <sup>11</sup>	<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 <sup>6</sup>	10,000	3,300 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>9.23</b>	<b>5.46</b>	<b>0.00</b>	<b>3.77</b>	<b>&lt;50</b>	<b>5,300<sup>10</sup></b>	<b>13,000</b>	<b>6,000<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>0.98</b>
<b>MW-8</b>	9/14/07	8.25	4.65	0.00	3.60	<50	790 <sup>3</sup>	2,700	1,000 <sup>2</sup>	<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 <sup>6</sup>	4,400	1,800 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>8.25</b>	<b>4.41</b>	<b>0.00</b>	<b>3.84</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>130</b>	<b>140<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>



**Table 1**  
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Rolls-Royce Engine Service Test Facility  
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Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH		GWE (feet)	TPHg (ppb)	TPHd <sup>1</sup> (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
				Thickness (feet)												
<b>MW-9</b>	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 <sup>4</sup>	<0.50
	3/14/08	9.44	5.51	0.00		3.93	<50	6,400	8,000	4,000 <sup>7</sup>	<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 <sup>10</sup>	1,800	1,800 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>9.44</b>	<b>5.59</b>	<b>0.00</b>		<b>3.85</b>	<b>&lt;50</b>	<b>5,900<sup>10</sup></b>	<b>9,300</b>	<b>6,300<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-10</b>	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 <sup>4</sup>	<0.50
	3/14/08	7.51	3.68	0.00		3.83	53	420	270	420 <sup>7</sup>	<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
	<b>9/25/08</b>	<b>7.51</b>	<b>3.68</b>	<b>0.00</b>		<b>3.83</b>	<b>&lt;50</b>	<b>3,100<sup>10</sup></b>	<b>2,200</b>	<b>3,600</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-11</b>	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 <sup>4</sup>	<0.50
	3/14/08	7.60	3.71	0.00		3.89	61	410 <sup>6</sup>	1,200	520 <sup>7</sup>	<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 <sup>10</sup>	7,300	3,600 <sup>15</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>7.60</b>	<b>3.82</b>	<b>0.00</b>		<b>3.78</b>	<b>&lt;50</b>	<b>2,800<sup>10</sup></b>	<b>5,900</b>	<b>3,800<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-12</b>	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 <sup>4</sup>	<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
	<b>9/25/08</b>	<b>7.32</b>	<b>3.50</b>	<b>0.00</b>		<b>3.82</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;100</b>	<b>51<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>

**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		GWE (feet)	TPHg (ppb)	TPHd <sup>1</sup> (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
				Thickness (feet)	SPH											
<b>MW-13</b>	10/3/07	6.10	2.86	0.00		3.24	160	70 <sup>8</sup>	<100	660	<0.50	<0.50	<0.50	<0.50	1.2 <sup>4</sup>	1.7
	3/14/08	6.10	1.96	0.00		4.14	350 <sup>12</sup>	490	130 <sup>13</sup>	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 <sup>8</sup>	<100	4,100 <sup>15</sup>	2.0	<0.50	<0.50	0.60	3.3	3.3
	<b>9/25/08</b>	<b>6.10</b>	<b>2.48</b>	<b>0.00</b>		<b>3.62</b>	<b>600</b>	<b>&lt;200<sup>17</sup></b>	<b>130<sup>13</sup></b>	<b>1,900<sup>16</sup></b>	<b>1.2</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>2.9</b>	<b>11</b>
<b>MW-14</b>	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 <sup>4</sup>	6.1
	3/14/08	6.42	2.44	0.00		3.98	50	250 <sup>6</sup>	350	500 <sup>7</sup>	<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 <sup>10</sup>	2,700	2,000 <sup>15</sup>	<0.50	<0.50	<0.50	<0.50	1.4	3.1
	<b>9/25/08</b>	<b>6.42</b>	<b>2.58</b>	<b>0.00</b>		<b>3.84</b>	<b>&lt;50</b>	<b>510<sup>10</sup></b>	<b>1,700</b>	<b>1,800<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>1.0</b>	<b>&lt;0.50</b>
<b>MW-15</b>	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 <sup>7</sup>	<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 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>7.51</b>	<b>4.81</b>	<b>0.00</b>		<b>2.70</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;100</b>	<b>53</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>MW-17</b>	9/14/07	0.04	4.10	0.00		-4.06	<50	<50	220	150 <sup>2</sup>	<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 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08<sup>14</sup></b>	<b>0.04</b>	<b>4.77</b>	<b>0.00</b>		<b>-4.73</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>120</b>	<b>110<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>

**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		GWE (feet)	TPHg (ppb)	TPHd <sup>1</sup> (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)	
				Thickness (feet)	Thickness (feet)												
<b>MW-18</b>	10/2/07	7.05	4.15	0.55		3.34**											
	3/14/08	7.05	3.62	0.63		3.93**											
	6/26/08	7.05	4.11	1.14		3.85**											
	<b>9/25/08</b>	<b>7.05</b>	<b>3.77</b>	<b>0.56</b>		<b>3.73**</b>											
<b>NPORD MW-3</b>	9/14/07	8.11	4.43	0.00		3.68	<50	<50	<100	64 <sup>2</sup>	<0.50	<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 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>8.11</b>	<b>4.06</b>	<b>0.00</b>		<b>4.05</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;100</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>NPORD MW-4</b>	9/14/07	10.06	6.48	0.00		3.58	50	1,000 <sup>3</sup>	1,400	2,000 <sup>2</sup>	<0.50	<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 <sup>6</sup>	700	960 <sup>7</sup>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	<b>9/25/08</b>	<b>10.06</b>	<b>6.28</b>	<b>0.00</b>		<b>3.78</b>	<b>&lt;50</b>	<b>150<sup>6</sup></b>	<b>240</b>	<b>820<sup>16</sup></b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
<b>QA</b>	9/14/07	--	--	--		--	<50	NA	NA	NA	<0.50	<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	<0.50
	3/14/08	--	--	--		--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08 <sup>14</sup>	--	--	--		--	<50	NA	NA	NA	<0.50	<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		GWE (feet)	TPHg (ppb)	TPHd <sup>1</sup> (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Napthalene (ppb)
				Thickness (feet)												
QA	7/3/08	--	--	--		--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
(con't)	9/25/08	--	--	--		--	<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

<sup>1</sup> With Silica Gel Cleanup

<sup>2</sup> Discrete peaks, higher boiling hydrocarbons present in sample that are atypical for Jet Fuel

<sup>3</sup> Discrete peaks, higher boiling hydrocarbons present in sample that are atypical for Diesel Fuel

<sup>4</sup> 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.

<sup>5</sup> Due to the formation of an emulsion in this sample, the sample was centrifuged and decanted prior to extraction.

<sup>6</sup> Hydrocarbons present in this sample are higher-boiling than typical Diesel Fuel.

<sup>7</sup> Hydrocarbons present in this sample are higher-boiling than typical Jet Fuel.

<sup>8</sup> Lower boiling hydrocarbons are present in this sample that are atypical for Diesel Fuel.

<sup>9</sup> Discrete peaks present in this sample that are atypical for Jet Fuel.

<sup>10</sup> Some lower-boiling hydrocarbons than Diesel and some higher-boiling hydrocarbons than Diesel are present in this sample.

<sup>11</sup> Both lower-boiling and higher-boiling hydrocarbons than Jet Fuel are present in this sample.

<sup>12</sup> Sample contained primarily compounds not found in typical Gasoline.

<sup>13</sup> Hydrocarbons present in this sample are lower-boiling than typical Motor Oil

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

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

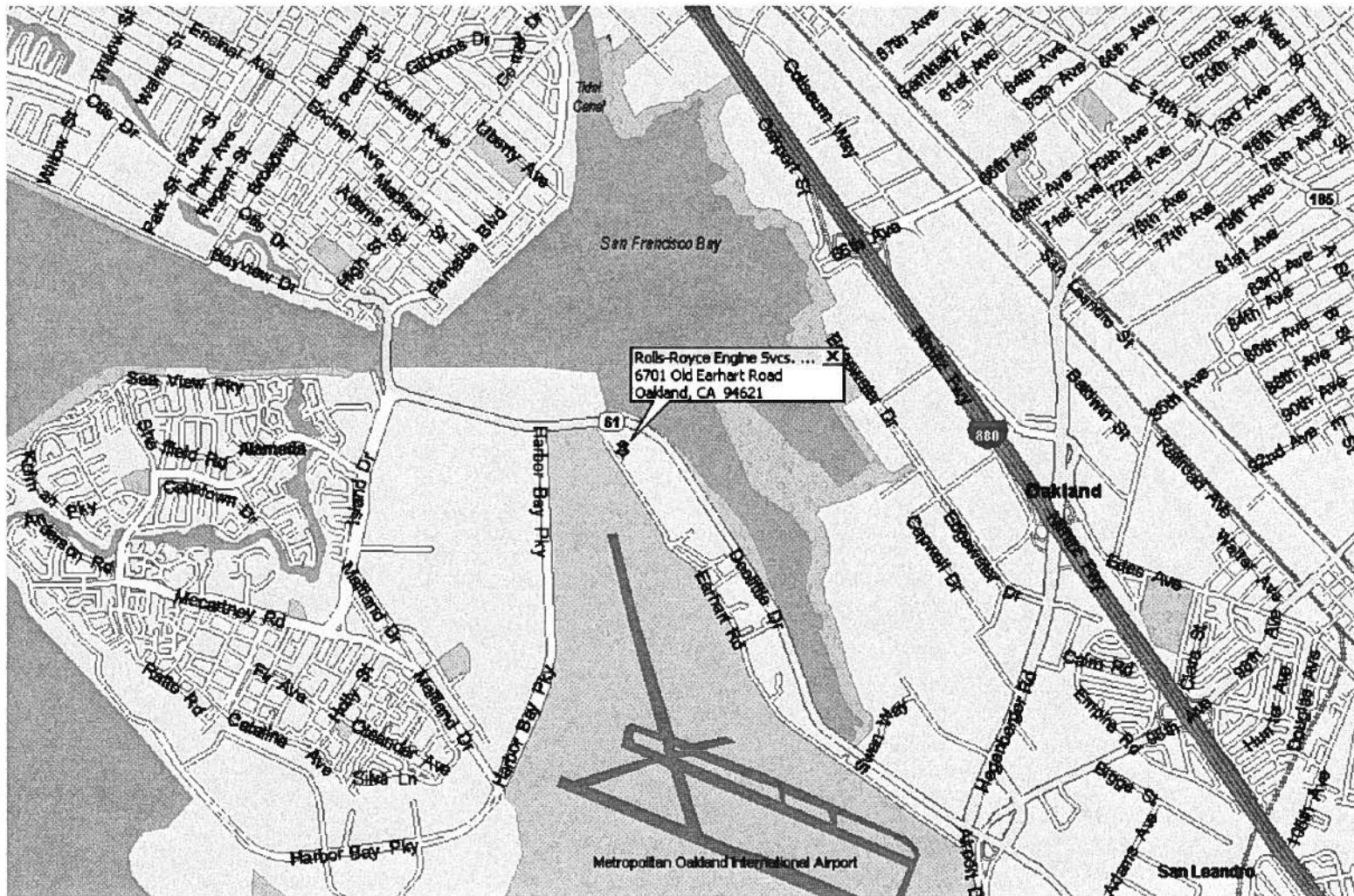
**Notes: (con't)**

<sup>15</sup> Lower boiling hydrocarbons are present in this sample that are atypical for Jet Fuel.

<sup>16</sup> Chromatographic pattern not typical for Jet Fuel.

<sup>17</sup> Diesel method reporting limit for this sample was increased due to interference from Gasoline range hydrocarbons.

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**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  
25-948218.7

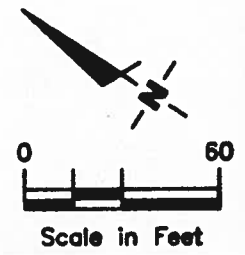
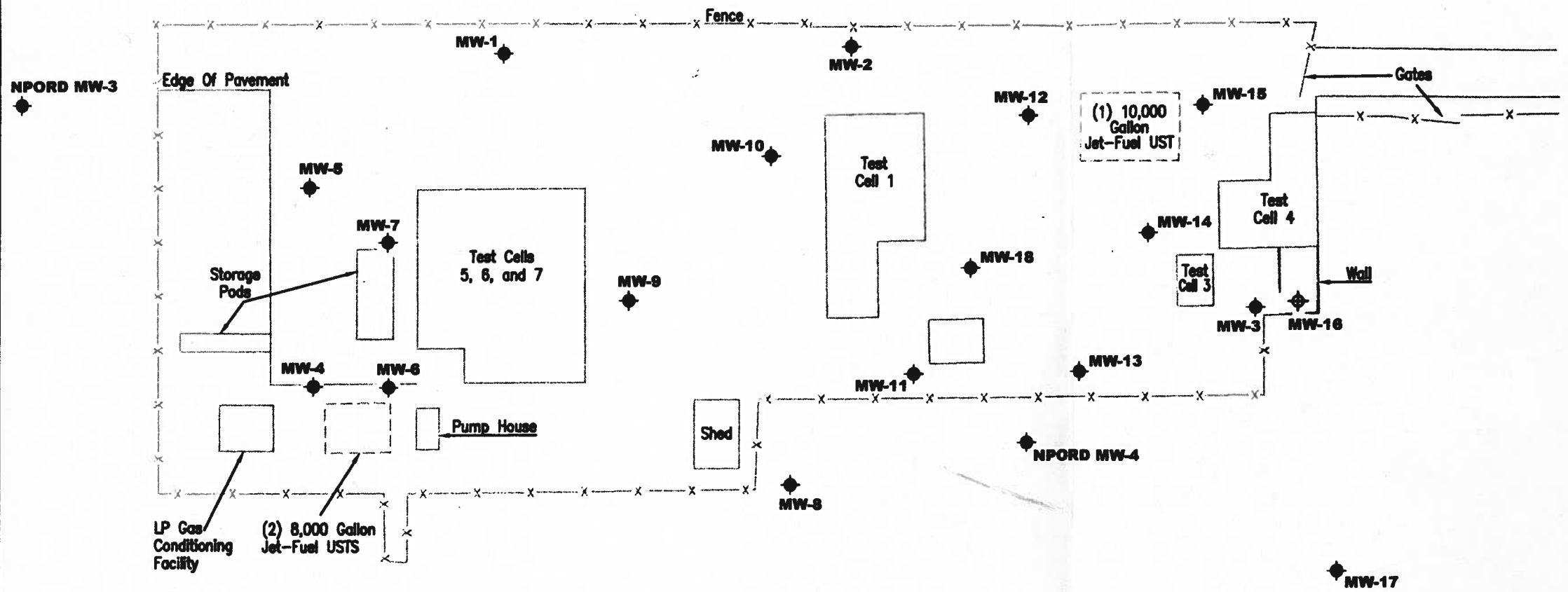
REVIEWED BY

DATE  
11/13/07

REVISED DATE

**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.

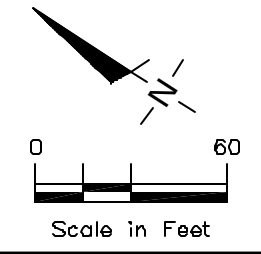
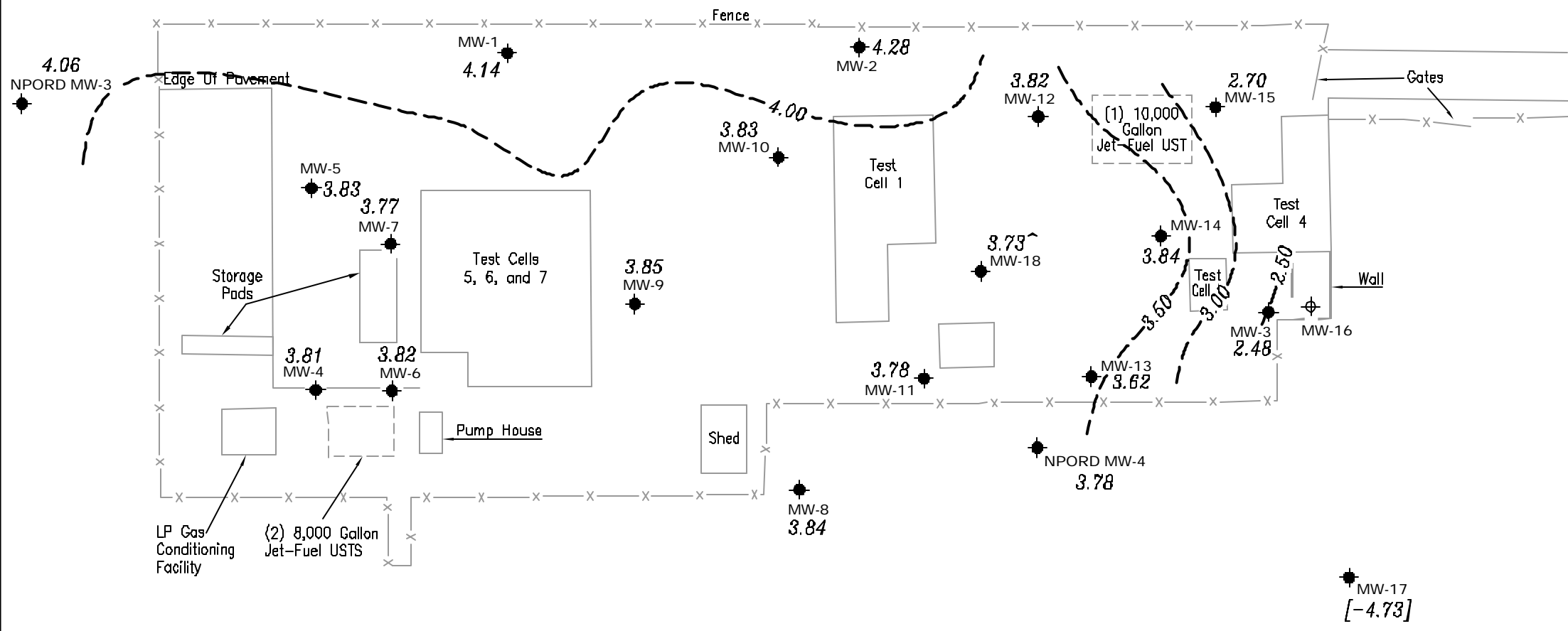
**SITE PLAN**  
 Rolls-Royce Engine Services Test Facility  
 6701 Old Earhart Road  
 Oakland, CA

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

PROJECT NUMBER: 948218.2  
 FILE NAME: P:\Environ\Rolls Royce\007-Rolls Royce.dwg | Layout Tab: Site Plan  
 REVIEWED BY: [Signature]  
 DATE: 11/07  
 REVISED DATE: [Blank]

**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
- ^ Groundwater elevation corrected for the presence of separate-phase hydrocarbons



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

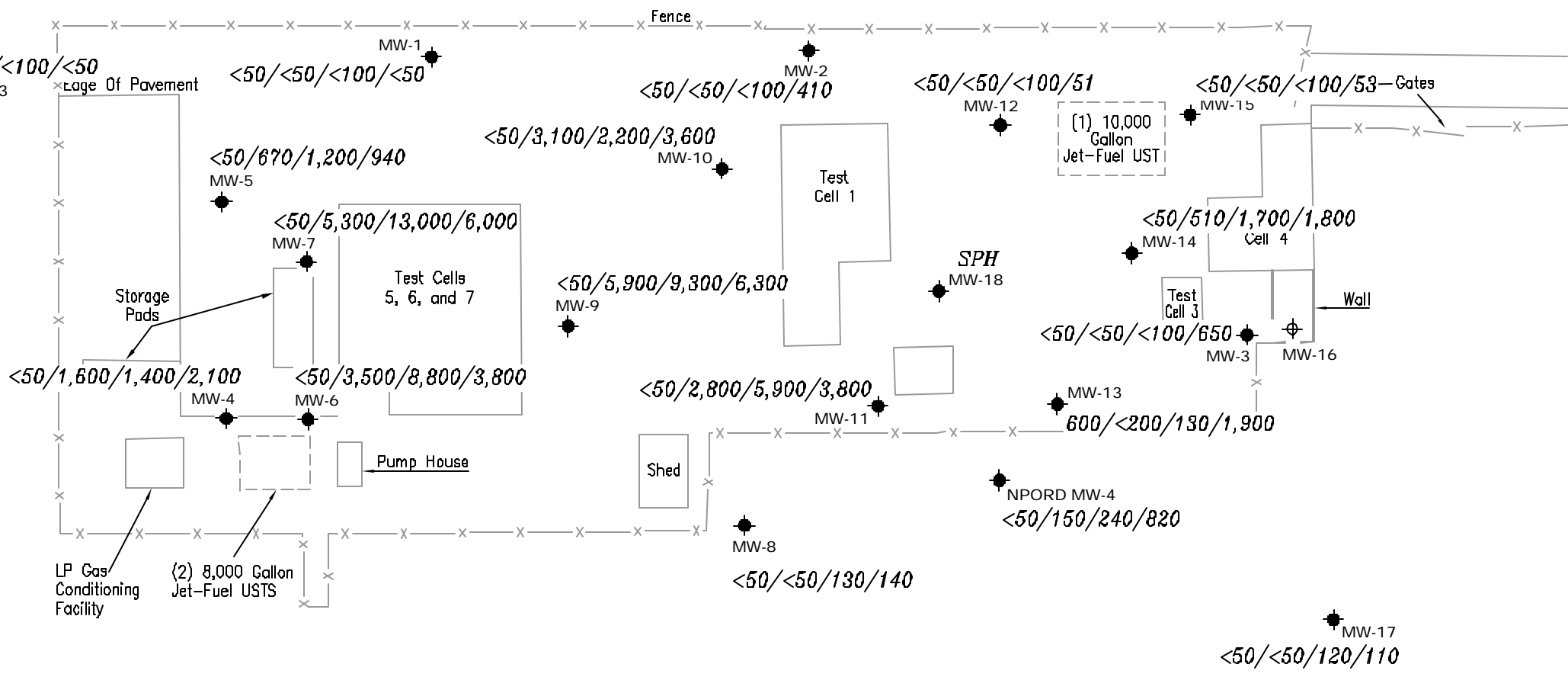
**POTENTIOMETRIC MAP**  
 Rolls-Royce Engine Services Test Facility  
 6701 Old Earhart Road  
 Oakland, CA

**GETTLER - RYAN INC.**  
 8747 Sarra Court, Suite J  
 Dublin, CA 94568 (925) 551-7555

REVIEWED BY: PROJECT NUMBER: 948218.2  
 DATE: September 25, 2008  
 REVISED DATE:

**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
- SPH** Separate Phase Hydrocarbons



**CONCENTRATION MAP**  
Rolls-Royce Engine Services Test Facility  
6701 Old Earhart Road  
Oakland, CA

**GETTLER - RYAN INC.**  
8747 Sierra Court, Suite J  
Dublin, CA 94568  
(925) 551-7555

REVIEWED BY: PROJECT NUMBER: 948218.2  
DATE: September 25, 2008  
REVISED DATE:

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



## 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 °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: 9/25/08  
 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
NPOR (MW-4)	OK	X/A				OK	→	~	~	MORRISON	~
MW-8	OK	←					→	~	~	8" MORRISON	~
NPOR (MW-3)	OK						→	~	~	12" MORRISON	~
MW-4	OK						→	~	~	8" MORRISON	~
MW-5	OK						→	~	~	↓	↓
MW-6	OK						→	~	~		
MW-7	OK						→	~	~		

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: 9-25-08  
 Sampler: MW

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-17	OK						→	N	N	Morrison / 8" / 2	
MW-15	OK						→	N	N	Morrison / 8" / 2	
MW-12	OK						→	N	N	Morrison / 8" / 2	
MW-14	OK						→	N	N	Morrison / 8" / 2	
MW-13	OK						→	N	N	Morrison / 12" / 2	
MW-3	OK	OK	<del>OK</del>	RS	OK		→	N	N	BoatLogyr / 8" / 3	

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: 9-25-08  
 Sampler: [Signature]

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									BL/8"/3	
MW-2	OK			3S	OK					"	
MW-10	OK									Morrison 8"/2	
MW-11	OK									"	
MW-9	OK									"	
MW-18	OK									"	

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: 9-25-08 (inclusive)  
 Sampler: SH

Well ID: MW-1  
 Well Diameter: 214 in.  
 Total Depth: 7.45 ft.  
 Depth to Water: 3.03 ft.

Date Monitored: 9-25-08

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

Check if water column is less than 0.50 ft.

4.42 xVF 11.7 = 0.75 x3 case volume = Estimated Purge Volume: 2.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.91

### 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): 1003  
 Sample Time/Date: 1030 9-25-08  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_

Weather Conditions: Clear  
 Water Color: Clear Odor: Y 1 (N)  
 Sediment Description: log A  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: 3.91

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1010</u>	<u>1</u>	<u>6.93</u>	<u>out of range</u>	<u>17.1</u>	_____	_____
<u>1013</u>	<u>2</u>	<u>7.01</u>	<u>↓</u>	<u>17.3</u>	_____	_____
<u>1017</u>	<u>2.5</u>	<u>7.10</u>	<u>↓</u>	<u>17.2</u>	_____	_____

### LABORATORY INFORMATION

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

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: 9-25-08 (inclusive)  
 Sampler: SH

Well ID: MW-2  
 Well Diameter: 2.4 in.  
 Total Depth: 11.80 ft.  
 Depth to Water: 2.75 ft.

Date Monitored: 9-25-08

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

Check if water column is less than 0.50 ft.

9.05 xVF 1.7 = 1.54 x3 case volume = Estimated Purge Volume: 5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.65

### Purge Equipment:

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

### Sampling Equipment:

Disposable Bailer K  
 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): 1043  
 Sample Time/Date: 1120 9-25-08  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? NO If yes, Time: \_\_\_\_\_

Weather Conditions: clear  
 Water Color: cloudy Odor: Y  
 Sediment Description: heavy  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: 4.60

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
<u>1049</u>	<u>1.5</u>	<u>7.98</u>	<u>out of range</u>	<u>16.6</u>	_____	_____
<u>1054</u>	<u>3.0</u>	<u>7.96</u>	<u>↓</u>	<u>16.3</u>	_____	_____
<u>1059</u>	<u>3.0</u>	<u>7.81</u>	<u>↓</u>	<u>16.5</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- <u>2</u>	<u>7</u> 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: 9-25-08 (inclusive)  
 Sampler: AW

Well ID: MW-3 Date Monitored: 9-25-08  
 Well Diameter: 214 in.  
 Total Depth: 12.10 ft.  
 Depth to Water: 4.25 ft.

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

Depth to Water: 7.85 xVF 1.7 = 1.33 x3 case volume = Estimated Purge Volume: 4.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.82

**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 / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: \_\_\_\_\_ gal  
 Water Removed: \_\_\_\_\_  
 Product Transferred to: \_\_\_\_\_

Start Time (purge): 1230 Weather Conditions: Sunny  
 Sample Time/Date: 1305 / 9-25-08 Water Color: Yellow Odor: Y  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: Clear  
 Did well de-water? N If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 4.67

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm = µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1236</u>	<u>1.5</u>	<u>7.19</u>	<u>3336</u>	<u>23.0</u>		
<u>1242</u>	<u>3.0</u>	<u>7.22</u>	<u>3413</u>	<u>23.2</u>		
<u>1250</u>	<u>4.0</u>	<u>7.24</u>	<u>3450</u>	<u>23.3</u>		

### LABORATORY INFORMATION

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

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: 9/25/08 (inclusive)  
 Sampler: SH

Well ID: MW-4  
 Well Diameter: 3.14 in.  
 Total Depth: 9.89 ft.  
 Depth to Water: 5.98 ft.  
3.91 xVF = .17 = .66

Date Monitored: 9/25/08

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: 1.99 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.76

**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): 1250  
 Sample Time/Date: 1305 / 9/25/08  
 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: light  
 DTW @ Sampling: 6.70

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
<u>1252</u>	<u>.6</u>	<u>7.04</u>	<u>out of range</u>	<u>23.7</u>		
<u>1254</u>	<u>1.2</u>	<u>6.93</u>		<u>23.2</u>		
<u>1256</u>	<u>2</u>	<u>6.87</u>	<u>↓</u>	<u>23.1</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>7</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>KIFF</u>	<u>TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/TPH-G/BTEX/MTBE/NAPHTHALENE(8260)</u>

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: 9/25/08 (inclusive)  
 Sampler: SH

Well ID: MW-5  
 Well Diameter: 214 in.  
 Total Depth: 9.90 ft.  
 Depth to Water: 4.52 ft.  
5.38 xVF = .17 = .91

Date Monitored: 9/25/08

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

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.59  
 x3 case volume = Estimated Purge Volume: 2.74 gal.

### 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): 1325  
 Sample Time/Date: 1350 / 9/25/08  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: clean  
 Water Color: c/w Odor: Y / 1  
 Sediment Description: 1.5 HR  
 DTW @ Sampling: 5.50

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (S))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1327</u>	<u>.9</u>	<u>6.82</u>	<u>out of range</u>	<u>22.4</u>		
<u>1330</u>	<u>1.8</u>	<u>6.80</u>	<u>↓</u>	<u>22.1</u>		
<u>1332</u>	<u>2.75</u>	<u>6.77</u>		<u>22.0</u>		

### LABORATORY INFORMATION

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

COMMENTS: Water Reacted with HCL - HCL Rinse

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: 9/25/08 (inclusive)  
 Sampler: JH

Well ID: MW-6  
 Well Diameter: 214 in.  
 Total Depth: 10.00 ft.  
 Depth to Water: 5.69 ft.

Date Monitored: 9/25/08

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

Check if water column is less than 0.50 ft.

4.31 xVF .17 = .73 x3 case volume = Estimated Purge Volume: 2.19 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.55

### 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): 1220  
 Sample Time/Date: 1240 / 9/25/08  
 Approx. Flow Rate: - gpm.  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: clear  
 Water Color: cloudy Odor: Y 100  
 Sediment Description: light  
 DTW @ Sampling: 6.11

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (S))	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1223</u>	<u>.75</u>	<u>6.90</u>	<u>out of range</u>	<u>23.3</u>		
<u>1226</u>	<u>1.5</u>	<u>6.77</u>	<u>↓</u>	<u>23.1</u>		
<u>1229</u>	<u>2.25</u>	<u>7.72</u>		<u>22.7</u>		

### LABORATORY INFORMATION

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

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: 9/25/08 (inclusive)  
 Sampler: JH

Well ID: MW- 7  
 Well Diameter: 2 1/4 in.  
 Total Depth: 10.60 ft.  
 Depth to Water: 5.46 ft.  
4.54 xVF = .17 = .77

Date Monitored: 9/25/08

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: 2.31 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.23

### 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): 1315  
 Sample Time/Date: 1350 / 9-25-08  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? N If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: Sunny  
 Water Color: Black Odor: Y 10  
 Sediment Description: Heavy  
 DTW @ Sampling: 6.20

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm / µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1320</u>	<u>0.5</u>	<u>6.87</u>	<u>out of range</u>	<u>23.1</u>		
<u>1325</u>	<u>1.0</u>	<u>6.93</u>	<u>↓</u>	<u>21.0</u>		
<u>1335</u>	<u>2.5</u>	<u>6.94</u>		<u>21.1</u>		

### LABORATORY INFORMATION

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

### 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: 9/25/08 (inclusive)  
 Sampler: JH

Well ID: MW-8  
 Well Diameter: 2 1/4 in.  
 Total Depth: 9.79 ft.  
 Depth to Water: 4.41 ft.  
5.38 xVF .17 = .91

Date Monitored: 9/25/08

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

Check if water column is less than 0.50 ft.  
 x3 case volume = Estimated Purge Volume: 2.74 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.48

**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): 1030 Weather Conditions: clear  
 Sample Time/Date: 1100 9/25/08 Water Color: cloudy Odor: Y/N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: 1.5 ft  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 5.26

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1033	.75	7.02	out of range	23.2		
1036	1.5	6.94		23.1		
1039	2.75	6.79		23.0		

### LABORATORY INFORMATION

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

COMMENTS: Water Reached with HCL in VOA's - HCL Rinsed out.

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: 9-25-08 (inclusive)  
 Sampler: SH

Well ID: MW-9 Date Monitored: 9-25-08  
 Well Diameter: 214 in.  
 Total Depth: 9.97 ft.  
 Depth to Water: 5.59 ft.  Check if water column is less than 0.50 ft.  
4.38 xVF .17 = 0.75 x3 case volume = Estimated Purge Volume: 2.5 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.47

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

**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): -1253 Weather Conditions: clear  
 Sample Time/Date: 1320 9-25-08 Water Color: Gray Odor: YIB  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: Moderate  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 6.2

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm @ 25°C)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)
<u>1256</u>	<u>1</u>	<u>7.61</u>	<u>2143</u>	<u>20.7</u>		
<u>1259</u>	<u>2</u>	<u>7.47</u>	<u>2107</u>	<u>17.5</u>		
<u>1304</u>	<u>2.9</u>	<u>7.39</u>	<u>2096</u>	<u>18.3</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- <u>9</u>	<u>7</u> x 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: 9-25-08 (inclusive)  
 Sampler: SH

Well ID: MW-10  
 Well Diameter: 2.4 in.  
 Total Depth: 10.13 ft.  
 Depth to Water: 3.68 ft.

Date Monitored: 9-25-08

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

Check if water column is less than 0.50 ft.  
6.45 xVF 1.17 = 1.10 x3 case volume = Estimated Purge Volume: 3.5 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.97

### 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:	_____ gal
Product Transferred to:	_____

Start Time (purge): 1132 Weather Conditions: clear  
 Sample Time/Date: 1200 / 9-25-08 Water Color: Grey Odor: Y (N)  
 Approx. Flow Rate: - gpm. Sediment Description: moderate  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 463

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1136</u>	<u>1</u>	<u>7.16</u>	<u>2523</u>	<u>17.7</u>	_____	_____
<u>1140</u>	<u>2</u>	<u>7.77</u>	<u>2567</u>	<u>17.3</u>	_____	_____
<u>1144</u>	<u>3.5</u>	<u>7.77</u>	<u>2506</u>	<u>17.1</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-10</u>	<u>2</u> x vial	<u>YES</u>	<u>HCL</u>	<u>KIFF</u>	<u>TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)</u>

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 Job Number: 25-948218.1  
 Site Address: 6701 Old Earhart Road Event Date: 9-25-08 (inclusive)  
 City: Oakland, CA Sampler: SH

Well ID: MW- 11 Date Monitored: 9-25-08  
 Well Diameter: 21.4 in.  
 Total Depth: 10.01 ft.  
 Depth to Water: 3.87 ft.  Check if water column is less than 0.50 ft.  
6.19 xVF .17 = 1.05 x3 case volume = Estimated Purge Volume: 3.5 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.06

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

**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): 1210 Weather Conditions: clear  
 Sample Time/Date: 1240 9-25-08 Water Color: Dark Gray Odor: 81N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 4.73

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - 15)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1217</u>	<u>1</u>	<u>7.36</u>	<u>3035</u>	<u>18.1</u>		
<u>1223</u>	<u>2</u>	<u>7.41</u>	<u>3033</u>	<u>17.6</u>		
<u>1224</u>	<u>3.5</u>	<u>7.52</u>	<u>3088</u>	<u>17.4</u>		

### 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: 9-25-08 (inclusive)  
 Sampler: AW

Well ID: MW-12  
 Well Diameter: 2 1/4 in.  
 Total Depth: 9.85 ft.  
 Depth to Water: 3.50 ft.  
6.35 xVF .17 = 1.08

Date Monitored: 9-25-08

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

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.77 gal.

**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): 10:50  
 Sample Time/Date: 11:15 / 9-25-08  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? N If yes, Time: \_\_\_\_\_

Weather Conditions: Sunny  
 Water Color: Cloudy Odor: Y 10  
 Sediment Description: Cloudy  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: 3.96

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (F))	Temperature (F)	D.O. (mg/L)	ORP (mV)
<u>1054</u>	<u>1.0</u>	<u>7.14</u>	<u>Out of range</u>	<u>22.8</u>		
<u>1058</u>	<u>2.0</u>	<u>7.25</u>	<u>↓</u>	<u>23.7</u>		
<u>1103</u>	<u>3.5</u>	<u>7.32</u>		<u>24.2</u>		

### LABORATORY INFORMATION

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

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: 9-25-08 (inclusive)  
 Sampler: AW

Well ID: MW-13  
 Well Diameter: 2 1/4 in.  
 Total Depth: 9.52 ft.  
 Depth to Water: 2.48 ft.

Date Monitored: 9-25-08

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

Depth to Water 7.04 xVF 1.66 = 11.67 x3 case volume = Estimated Purge Volume: 14.0 gal.  
 Check if water column is less than 0.50 ft.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.88

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): 1200 Weather Conditions: Sunny  
 Sample Time/Date: 1220 | 9-25-08 Water Color: yellow Odor: DN Slight  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: clear  
 Did well de-water?  If yes, Time: 1210 Volume: 6.0 gal. DTW @ Sampling: 3.88

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1200</u>	<u>5.0</u>	<u>7.03</u>	<u>out of range</u>	<u>23.5</u>		
	<u>10.0</u>					
	<u>14.0</u>					

### LABORATORY INFORMATION

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

COMMENTS: H<sub>2</sub>O reactive with HCL. Rinsed HCL from VOA.

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: 9-25-08 (inclusive)  
 Sampler: AW

Well ID: MW-14  
 Well Diameter: (2) 4 in.  
 Total Depth: 10.00 ft.  
 Depth to Water: 2.58 ft.  
7.42 xVF .17 = 1.26

Date Monitored: 9-25-08

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

Check if water column is less than 0.50 ft.  
 Estimated Purge Volume: 4.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.06

**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): 1125  
 Sample Time/Date: 1150 / 9-25-08  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? N If yes, Time: \_\_\_\_\_

Weather Conditions: Sunny  
 Water Color: Dark Odor: Y 100  
 Sediment Description: Cloudy  
 Volume: \_\_\_\_\_ gal. DTW @ Sampling: 3.03

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) <u>(S)</u>	Temperature (° F)	D.O. (mg/L)	ORP (mV)
<u>1130</u>	<u>1.5</u>	<u>7.69</u>	<u>out of range</u>	<u>23.5</u>	_____	_____
<u>1135</u>	<u>3.0</u>	<u>7.72</u>	<u>↓</u>	<u>23.6</u>	_____	_____
<u>1140</u>	<u>4.0</u>	<u>7.75</u>	<u>↓</u>	<u>23.7</u>	_____	_____

### LABORATORY INFORMATION

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

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: 9-25-08 (inclusive)  
 Sampler: AW

Well ID: MW-15  
 Well Diameter: 2.4 in.  
 Total Depth: 9.95 ft.  
 Depth to Water: 4.81 ft.  
5.14 xVF .17 = 0.87

Date Monitored: 9-25-08

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

Check if water column is less than 0.50 ft.

Estimated Purge Volume: 3.0 gal.  
 x3 case volume = 5.84  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.84

**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): 0955 Weather Conditions: Sunny  
 Sample Time/Date: 1010 / 9-25-08 Water Color: Cloudy Odor: Y10  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: Cloudy  
 Did well de-water? N If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 5.63

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - FS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>0953</u>	<u>1.0</u>	<u>6.92</u>	<u>out of range</u>	<u>24.1</u>	_____	_____
<u>0956</u>	<u>2.0</u>	<u>7.06</u>	<u>↓</u>	<u>24.3</u>	_____	_____
<u>0959</u>	<u>2.0</u>	<u>7.08</u>	<u>↓</u>	<u>24.4</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-15</u>	<u>7</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>KIFF</u>	<u>TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)</u>

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: 9-25-08 (inclusive)  
 Sampler: AW

Well ID: MW-17  
 Well Diameter: 214 in.  
 Total Depth: 9.80 ft.  
 Depth to Water: 4.77 ft.  
5.03 xVF 17 = 0.85  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.78

Date Monitored: 9-25-08

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

Check if water column is less than 0.50 ft.  
 x3 case volume = Estimated Purge Volume: 3.0 gal.

**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): 1015 Weather Conditions: Sunny  
 Sample Time/Date: 1040 / 9-25-08 Water Color: Yellow Odor: 01 N Slight sulfur  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: clear  
 Did well de-water? N If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 5.78

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm @ 25)	Temperature (F)	D.O. (mg/L)	ORP (mV)
<u>1020</u>	<u>1.0</u>	<u>7.24</u>	<u>out of range</u>	<u>22.4</u>		
<u>1025</u>	<u>2.0</u>	<u>7.26</u>	<u>↓</u>	<u>22.6</u>		
<u>1030</u>	<u>3.0</u>	<u>7.26</u>		<u>22.8</u>		

### LABORATORY INFORMATION

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

COMMENTS: H<sub>2</sub>O reactive with HCl

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: 9-25-07 (inclusive)  
 Sampler: SH

Well ID: MW-18  
 Well Diameter: 214 in.  
 Total Depth: 9.2 ft.  
 Depth to Water: 3.77 ft.

Date Monitored: 9-25-08

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

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7

**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: 1330 (2400 hrs)  
 Time Completed: 1350 (2400 hrs)  
 Depth to Product: 3.21 ft  
 Depth to Water: 3.77 ft  
 Hydrocarbon Thickness: 0.56 ft  
 Visual Confirmation/Description:  
Oil like, Black thurt  
 Skimmer / Absorbent Sock (circle one)  
 Amt Removed from Skimmer: \_\_\_\_\_ gal  
 Amt Removed from Well: 9 gal  
 Water Removed: 2 gal  
 Product Transferred to: ON-SITE Dam

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: \_\_\_\_\_ Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. 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 vop 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: 9/25/08 (inclusive)  
 Sampler: JH

Well ID: ~~MW-NPORDMU-3~~  
 Well Diameter: 3/4 in.  
 Total Depth: 16.38 ft.  
 Depth to Water: 4.06 ft.  
12.32 xVF .66 = 8.13  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.52

Date Monitored: 9/25/08

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

Check if water column is less than 0.50 ft.  
 x3 case volume = Estimated Purge Volume: 24.39 gal.

**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): 1120 Weather Conditions: clean  
 Sample Time/Date: 1200 / 9/25/08 Water Color: clean Odor: Y 1 (N)  
 Approx. Flow Rate: 1 gpm. Sediment Description: None  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 6.44

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (S))	Temperature (° F)	D.O. (mg/L)	ORP (mV)
<u>1128</u>	<u>8</u>	<u>6.76</u>	<u>out of range</u>	<u>22.7</u>		
<u>1136</u>	<u>16</u>	<u>6.70</u>	<u>↓</u>	<u>22.2</u>		
<u>1144</u>	<u>24</u>	<u>6.59</u>	<u>↓</u>	<u>22.1</u>		

### LABORATORY INFORMATION

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

COMMENTS: (2) Tubes in Well

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: 9/25/08 (inclusive)  
 Sampler: SH

Well ID: ~~100~~ NPORDMW-4  
 Well Diameter: (2) 4 in.  
 Total Depth: 18.23 ft.  
 Depth to Water: 6.28 ft.  
11.95 xVF .17 = 2.03

Date Monitored: 9/25/08

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

Check if water column is less than 0.50 ft.  
 x3 case volume = Estimated Purge Volume: 6.09 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.67

### 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): 0950  
 Sample Time/Date: 1015 / 9/25/08  
 Approx. Flow Rate: \_\_\_\_\_ gpm.  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

Weather Conditions: clear  
 Water Color: cloudy Odor: DN  
 Sediment Description: 1.5 ft  
 DTW @ Sampling: 8.01

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) (µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>0955</u>	<u>2</u>	<u>6.84</u>	<u>OUT OF RANGE</u>	<u>22.4</u>		
<u>1000</u>	<u>4</u>	<u>6.79</u>	<u>↓</u>	<u>22.2</u>		
<u>1005</u>	<u>6</u>	<u>6.62</u>	<u>↓</u>	<u>22.0</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<del>100</del> <u>NPORDMW-4</u>	<u>7</u> x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-D w/sg(8015)/ TPH-G/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: (2) Tubes in well

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



Report Number : 65028

Date : 10/03/2008

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

Subject : 19 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,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 65028

Date : 10/03/2008

Subject : 19 Water Samples  
Project Name : Rolls-Royce Engine Test Facility  
Project Number : 25-948218.1

## Case Narrative

Sample MW-17 was analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4 inch in diameter.

Matrix Spike/Matrix Spike Duplicate results associated with sample NPORDMW-4 for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-1**

Matrix : Water

Lab Number : 65028-01

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	09/30/2008
<b>TPH as Jet Fuel</b>	< 50	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Motor Oil</b>	< 100	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	89.7		% Recovery	M EPA 8015	09/30/2008
Octacosane (Diesel Surrogate)	102		% Recovery	M EPA 8015	10/01/2008

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

Project Number : **25-948218.1**

Sample : **MW-2**

Matrix : Water

Lab Number : 65028-02

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	98.5		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	10/02/2008
<b>TPH as Jet Fuel</b>	<b>410</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	< 100	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	108		% Recovery	M EPA 8015	10/02/2008
Octacosane (Diesel Surrogate)	113		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-3**

Matrix : Water

Lab Number : 65028-03

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>1.2</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>&lt; 50</b>	50	ug/L	M EPA 8015	09/30/2008
<b>TPH as Jet Fuel</b>	<b>650</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>&lt; 100</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	98.8		% Recovery	M EPA 8015	09/30/2008
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-4**

Matrix : Water

Lab Number : 65028-04

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>1600</b>	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Jet Fuel</b>	<b>2100</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>1400</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	106		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	113		% Recovery	M EPA 8015	10/01/2008





Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-6**

Matrix : Water

Lab Number : 65028-05

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>3500</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
<b>TPH as Jet Fuel</b>	<b>3800</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>8800</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	109		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-7**

Matrix : Water

Lab Number : 65028-06

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	<b>0.98</b>	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>5300</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
<b>TPH as Jet Fuel</b>	<b>6000</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>13000</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	108		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	76.2		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-9**

Matrix : Water

Lab Number : 65028-07

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	98.3		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>5900</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
<b>TPH as Jet Fuel</b>	<b>6300</b>	100	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>9300</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	118		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	98.6		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-10**

Matrix : Water

Lab Number : 65028-08

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>3100</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
<b>TPH as Jet Fuel</b>	<b>3600</b>	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Motor Oil</b>	<b>2200</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	97.1		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	112		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-11**

Matrix : Water

Lab Number : 65028-09

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>2800</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
<b>TPH as Jet Fuel</b>	<b>3800</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>5900</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	106		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	98.5		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-12**

Matrix : Water

Lab Number : 65028-10

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Jet Fuel</b>	<b>51</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	< 100	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	99.8		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	99.8		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-14**

Matrix : Water

Lab Number : 65028-11

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>1.0</b>	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	99.8		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>510</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
<b>TPH as Jet Fuel</b>	<b>1800</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>1700</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	109		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-15**

Matrix : Water

Lab Number : 65028-12

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	99.5		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Jet Fuel</b>	<b>53</b>	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Motor Oil</b>	< 100	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	10/01/2008



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

Project Number : **25-948218.1**

Sample : **NPORDMW-3**

Matrix : Water

Lab Number : 65028-13

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	97.2		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Jet Fuel</b>	< 50	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Motor Oil</b>	< 100	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	98.7		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	100		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **NPORDMW-4**

Matrix : Water

Lab Number : 65028-14

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< <b>0.50</b>	0.50	ug/L	EPA 8260B	10/02/2008
<b>Toluene</b>	< <b>0.50</b>	0.50	ug/L	EPA 8260B	10/02/2008
<b>Ethylbenzene</b>	< <b>0.50</b>	0.50	ug/L	EPA 8260B	10/02/2008
<b>Total Xylenes</b>	< <b>0.50</b>	0.50	ug/L	EPA 8260B	10/02/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< <b>0.50</b>	0.50	ug/L	EPA 8260B	10/02/2008
<b>TPH as Gasoline</b>	< <b>50</b>	50	ug/L	EPA 8260B	10/02/2008
<b>Naphthalene</b>	< <b>0.50</b>	0.50	ug/L	EPA 8260B	10/02/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	10/02/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/02/2008
4-Bromofluorobenzene (Surr)	86.1		% Recovery	EPA 8260B	10/02/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>150</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
<b>TPH as Jet Fuel</b>	<b>820</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>240</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	100		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **QA**

Matrix : Water

Lab Number : 65028-15

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	10/01/2008
<b>Naphthalene</b>	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	10/01/2008
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	10/02/2008
<b>TPH as Jet Fuel</b>	< 50	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Motor Oil</b>	< 100	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	118		% Recovery	M EPA 8015	10/02/2008
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-5**

Matrix : Water

Lab Number : 65028-16

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>TPH as Gasoline</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	09/29/2008
<b>Naphthalene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
1,2-Dichloroethane-d4 (Surr)	99.2		% Recovery	EPA 8260B	09/29/2008
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	09/29/2008
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	09/29/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>670</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
<b>TPH as Jet Fuel</b>	<b>940</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>1200</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	100		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	10/01/2008

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

Project Number : **25-948218.1**

Sample : **MW-8**

Matrix : Water

Lab Number : 65028-17

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	09/29/2008
<b>Naphthalene</b>	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	09/29/2008
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	09/29/2008
4-Bromofluorobenzene (Surr)	106		% Recovery	EPA 8260B	09/29/2008
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Jet Fuel</b>	<b>140</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>130</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-13**

Matrix : Water

Lab Number : 65028-18

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>1.2</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>Ethylbenzene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>Total Xylenes</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>Methyl-t-butyl ether (MTBE)</b>	<b>2.9</b>	0.50	ug/L	EPA 8260B	09/29/2008
<b>TPH as Gasoline</b>	<b>600</b>	50	ug/L	EPA 8260B	09/29/2008
<b>Naphthalene</b>	<b>11</b>	0.50	ug/L	EPA 8260B	09/29/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	09/29/2008
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	09/29/2008
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	09/29/2008
<b>TPH as Diesel (Silica Gel)</b>	<b>&lt; 200</b>	200	ug/L	M EPA 8015	10/01/2008
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
<b>TPH as Jet Fuel</b>	<b>1900</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>130</b>	100	ug/L	M EPA 8015	10/01/2008
(Note: Hydrocarbons are lower-boiling than typical Motor Oil)					
Octacosane (Silica Gel Surr)	99.7		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	10/01/2008



Report Number : 65028

Date : 10/03/2008

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

Project Number : **25-948218.1**

Sample : **MW-17**

Matrix : Water

Lab Number : 65028-19

Sample Date :09/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	09/27/2008
<b>Naphthalene</b>	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	09/27/2008
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	09/27/2008
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	09/27/2008
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	10/01/2008
<b>TPH as Jet Fuel</b>	<b>110</b>	50	ug/L	M EPA 8015	10/01/2008
(Note: Chromatographic pattern not typical for Jet Fuel.)					
<b>TPH as Motor Oil</b>	<b>120</b>	100	ug/L	M EPA 8015	10/01/2008
Octacosane (Silica Gel Surr)	99.6		% Recovery	M EPA 8015	10/01/2008
Octacosane (Diesel Surrogate)	101		% Recovery	M EPA 8015	10/01/2008

Report Number : 65028

Date : 10/03/2008

**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 (Silica Gel)	< 50	50	ug/L	M EPA 8015	09/30/2008
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	09/30/2008
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	09/30/2008
Octacosane (Diesel Surrogate)	99.9		%	M EPA 8015	09/30/2008
Octacosane (Silica Gel Surr)	97.8		%	M EPA 8015	09/30/2008
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	10/02/2008
Octacosane (Silica Gel Surr)	105		%	M EPA 8015	10/02/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/01/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	99.6		%	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	87.2		%	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	101		%	EPA 8260B	10/01/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/27/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	09/27/2008
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	09/27/2008
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	09/27/2008
Toluene - d8 (Surr)	99.6		%	EPA 8260B	09/27/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/29/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	09/29/2008
4-Bromofluorobenzene (Surr)	98.7		%	EPA 8260B	09/29/2008
Toluene - d8 (Surr)	99.3		%	EPA 8260B	09/29/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/30/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/30/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/30/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/30/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/30/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/30/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	09/30/2008
1,2-Dichloroethane-d4 (Surr)	99.2		%	EPA 8260B	09/30/2008
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	09/30/2008
Toluene - d8 (Surr)	99.0		%	EPA 8260B	09/30/2008

KIFF ANALYTICAL, LLC

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



Report Number : 65028

Date : 10/03/2008

**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
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/29/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	09/29/2008
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	09/29/2008
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	09/29/2008
Toluene - d8 (Surr)	99.6		%	EPA 8260B	09/29/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/01/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	99.1		%	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	98.6		%	EPA 8260B	10/01/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/01/2008
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	10/01/2008
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	10/01/2008
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	10/01/2008
Toluene - d8 (Surr)	98.2		%	EPA 8260B	10/01/2008

**QC Report : Matrix Spike/ Matrix Spike Duplicate**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	933	1000	ug/L	M EPA 8015	9/30/08	93.3	100	7.16	70-130	25
TPH as Diesel	BLANK	<50	1000	1000	855	944	ug/L	M EPA 8015	9/30/08	85.5	94.4	9.88	70-130	25
Benzene	65047-04	<0.50	40.1	40.1	43.5	39.7	ug/L	EPA 8260B	10/1/08	108	99.0	8.96	70-130	25
Methyl-t-butyl ether	65047-04	380	39.6	39.6	430	397	ug/L	EPA 8260B	10/1/08	127	46.5	93.0	70-130	25
Toluene	65047-04	<0.50	39.5	39.5	41.5	38.3	ug/L	EPA 8260B	10/1/08	105	96.8	8.05	70-130	25
Benzene	64978-06	<0.50	40.1	40.1	40.6	39.7	ug/L	EPA 8260B	9/27/08	101	98.8	2.44	70-130	25
Methyl-t-butyl ether	64978-06	<0.50	40.1	40.1	38.6	38.7	ug/L	EPA 8260B	9/27/08	96.4	96.6	0.159	70-130	25
Toluene	64978-06	0.59	39.5	39.5	40.8	39.8	ug/L	EPA 8260B	9/27/08	102	99.1	2.57	70-130	25
Benzene	64995-04	<0.50	40.1	40.1	39.4	39.3	ug/L	EPA 8260B	9/29/08	98.1	98.0	0.169	70-130	25
Methyl-t-butyl ether	64995-04	0.60	40.1	40.1	41.6	41.4	ug/L	EPA 8260B	9/29/08	102	102	0.616	70-130	25
Toluene	64995-04	<0.50	39.5	39.5	39.7	39.7	ug/L	EPA 8260B	9/29/08	100	100	0.00886	70-130	25
Benzene	65037-01	<0.50	40.1	40.1	40.9	40.1	ug/L	EPA 8260B	9/30/08	102	100	1.84	70-130	25
Methyl-t-butyl ether	65037-01	<0.50	39.6	39.6	41.9	41.6	ug/L	EPA 8260B	9/30/08	106	105	0.645	70-130	25
Toluene	65037-01	<0.50	39.5	39.5	40.7	40.7	ug/L	EPA 8260B	9/30/08	103	103	0.0182	70-130	25
Benzene	65008-04	<0.50	40.1	40.1	38.4	37.4	ug/L	EPA 8260B	9/29/08	95.6	93.2	2.56	70-130	25
Methyl-t-butyl ether	65008-04	15	40.1	40.1	55.8	53.9	ug/L	EPA 8260B	9/29/08	100	95.8	4.76	70-130	25
Toluene	65008-04	0.53	39.5	39.5	38.2	37.2	ug/L	EPA 8260B	9/29/08	95.3	92.8	2.56	70-130	25

**QC Report : Matrix Spike/ Matrix Spike Duplicate**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
Benzene	65034-04	<0.50	40.1	40.1	38.5	37.8	ug/L	EPA 8260B	9/30/08	95.9	94.2	1.75	70-130	25
Methyl-t-butyl ether	65034-04	8.2	39.6	39.6	51.6	50.7	ug/L	EPA 8260B	9/30/08	109	107	1.94	70-130	25
Toluene	65034-04	<0.50	39.5	39.5	37.9	37.0	ug/L	EPA 8260B	9/30/08	95.8	93.5	2.47	70-130	25
Benzene	65060-12	<0.50	40.1	40.1	38.7	37.0	ug/L	EPA 8260B	10/1/08	96.4	92.1	4.54	70-130	25
Methyl-t-butyl ether	65060-12	<0.50	39.6	39.6	43.1	42.4	ug/L	EPA 8260B	10/1/08	109	107	1.64	70-130	25
Toluene	65060-12	<0.50	39.5	39.5	38.3	36.4	ug/L	EPA 8260B	10/1/08	96.9	92.2	4.95	70-130	25
TPH-D (Si Gel)	BLANK	<50	1000	1000	1050	1050	ug/L	M EPA 8015	10/2/08	105	105	0.381	70-130	25

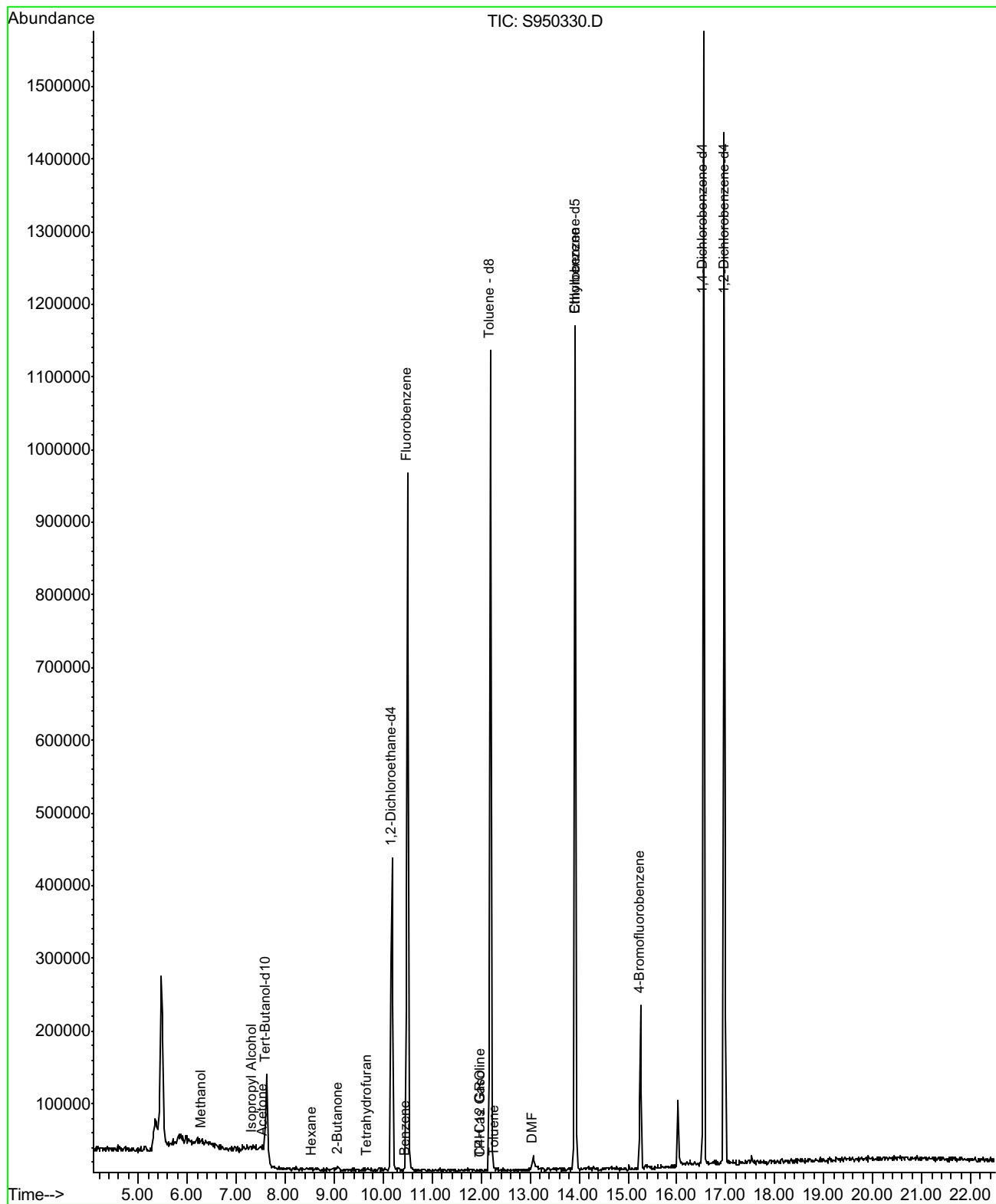
**QC Report : Laboratory Control Sample (LCS)**Project Name : **Rolls-Royce Engine Test**Project Number : **25-948218.1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	10/1/08	110	70-130
Methyl-t-butyl ether	39.6	ug/L	EPA 8260B	10/1/08	96.5	70-130
Toluene	40.0	ug/L	EPA 8260B	10/1/08	108	70-130
Benzene	39.8	ug/L	EPA 8260B	9/27/08	99.9	70-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	9/27/08	93.4	70-130
Toluene	39.8	ug/L	EPA 8260B	9/27/08	102	70-130
Benzene	39.8	ug/L	EPA 8260B	9/29/08	102	70-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	9/29/08	99.9	70-130
Toluene	39.8	ug/L	EPA 8260B	9/29/08	103	70-130
Benzene	39.9	ug/L	EPA 8260B	9/30/08	103	70-130
Methyl-t-butyl ether	39.5	ug/L	EPA 8260B	9/30/08	102	70-130
Toluene	39.9	ug/L	EPA 8260B	9/30/08	105	70-130
Benzene	40.0	ug/L	EPA 8260B	9/29/08	97.5	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	9/29/08	105	70-130
Toluene	40.0	ug/L	EPA 8260B	9/29/08	97.5	70-130
Benzene	40.2	ug/L	EPA 8260B	9/30/08	96.8	70-130

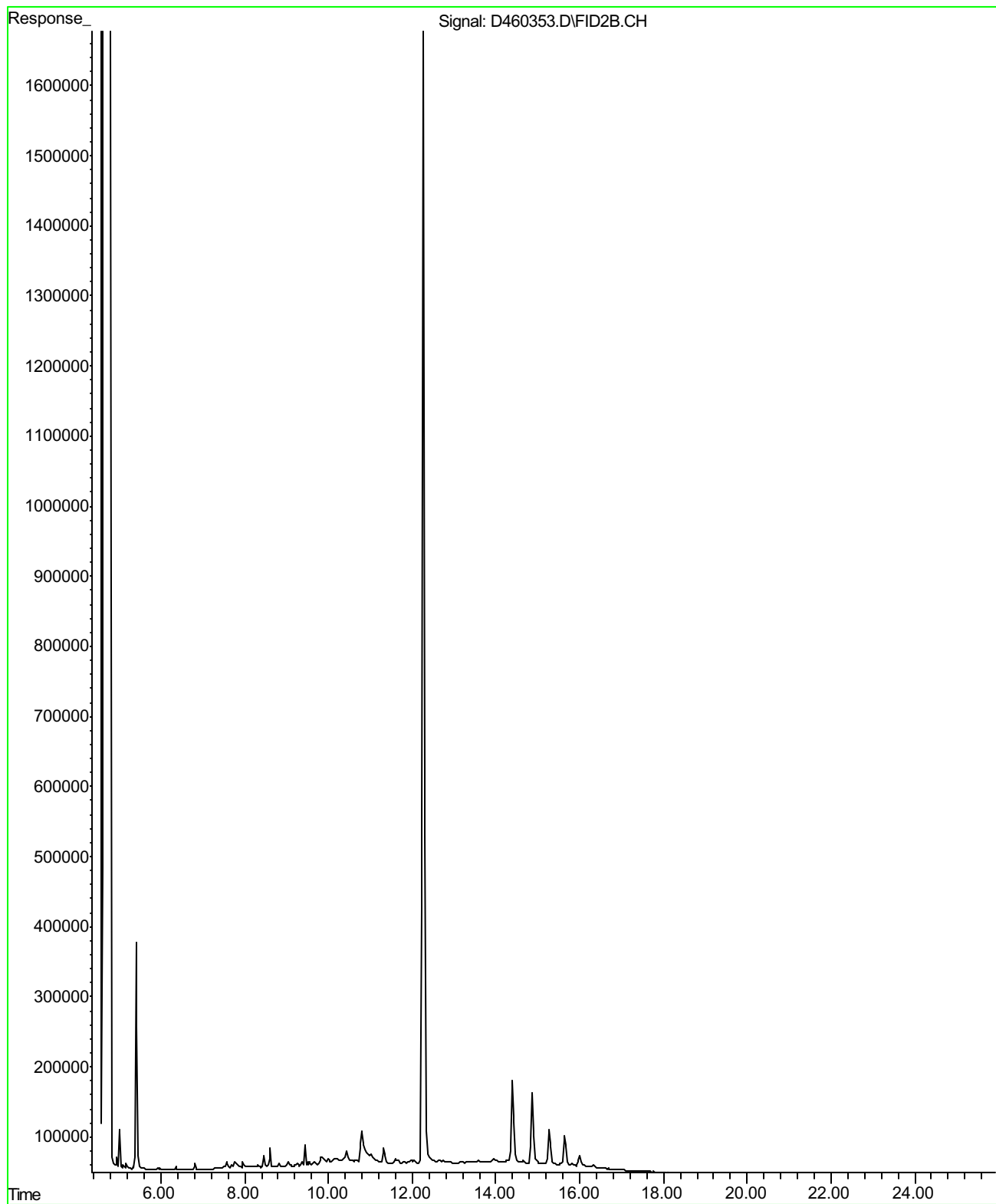
**QC Report : Laboratory Control Sample (LCS)**Project Name : **Rolls-Royce Engine Test**Project Number : **25-948218.1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Methyl-t-butyl ether	39.8	ug/L	EPA 8260B	9/30/08	107	70-130
Toluene	40.2	ug/L	EPA 8260B	9/30/08	96.8	70-130
Benzene	40.2	ug/L	EPA 8260B	10/1/08	98.4	70-130
Methyl-t-butyl ether	39.8	ug/L	EPA 8260B	10/1/08	105	70-130
Toluene	40.2	ug/L	EPA 8260B	10/1/08	97.7	70-130

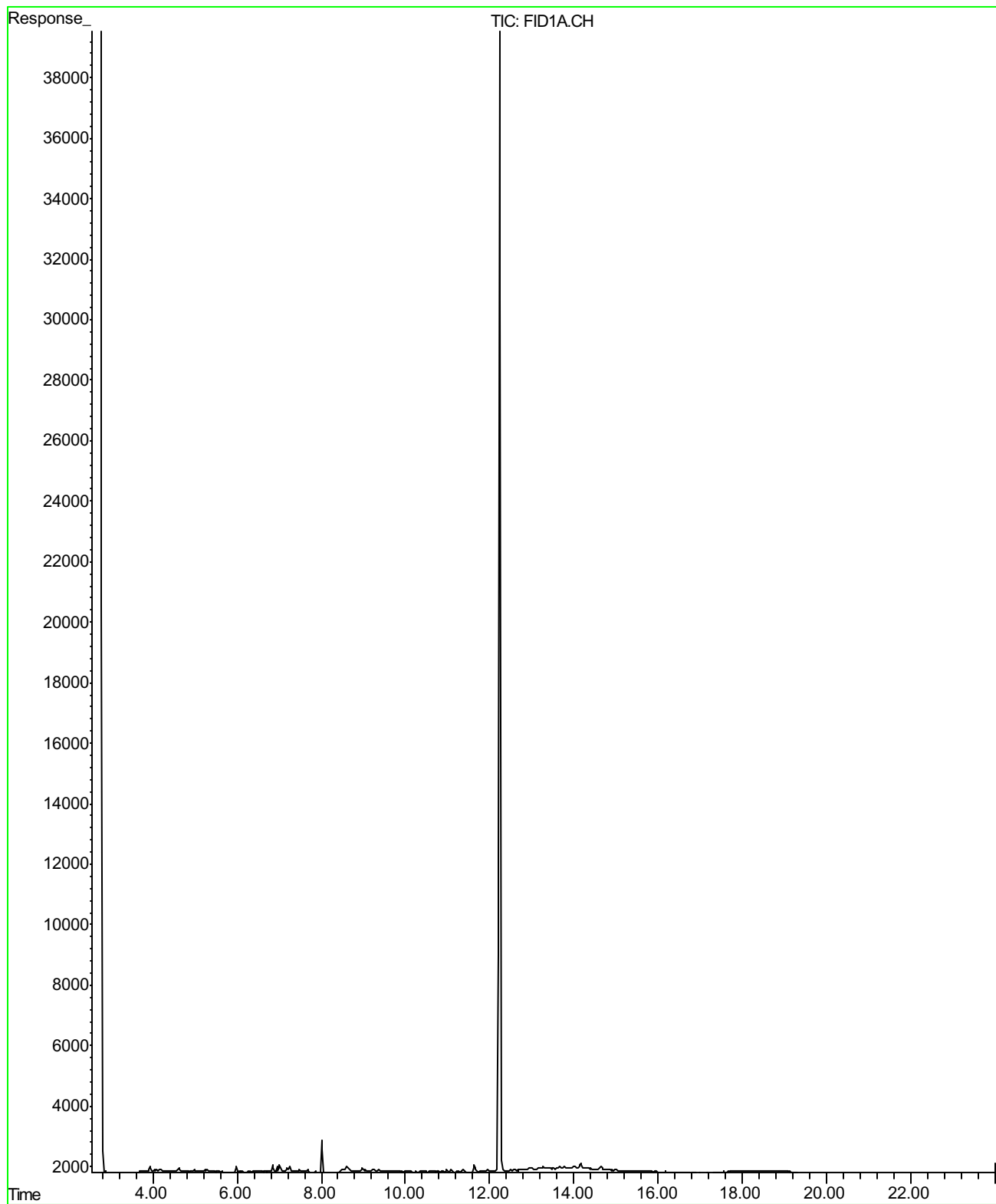
Sample ID : 65028-01 (MW-1)  
Date Analyzed : 10/01/2008  
Data File : S950330  
Analysis Method : EPA 8260B



Sample ID : 65028-01 (MW-1)  
Date Analyzed : 10/01/2008  
Data File : D460353  
Analysis Method : M EPA 8015

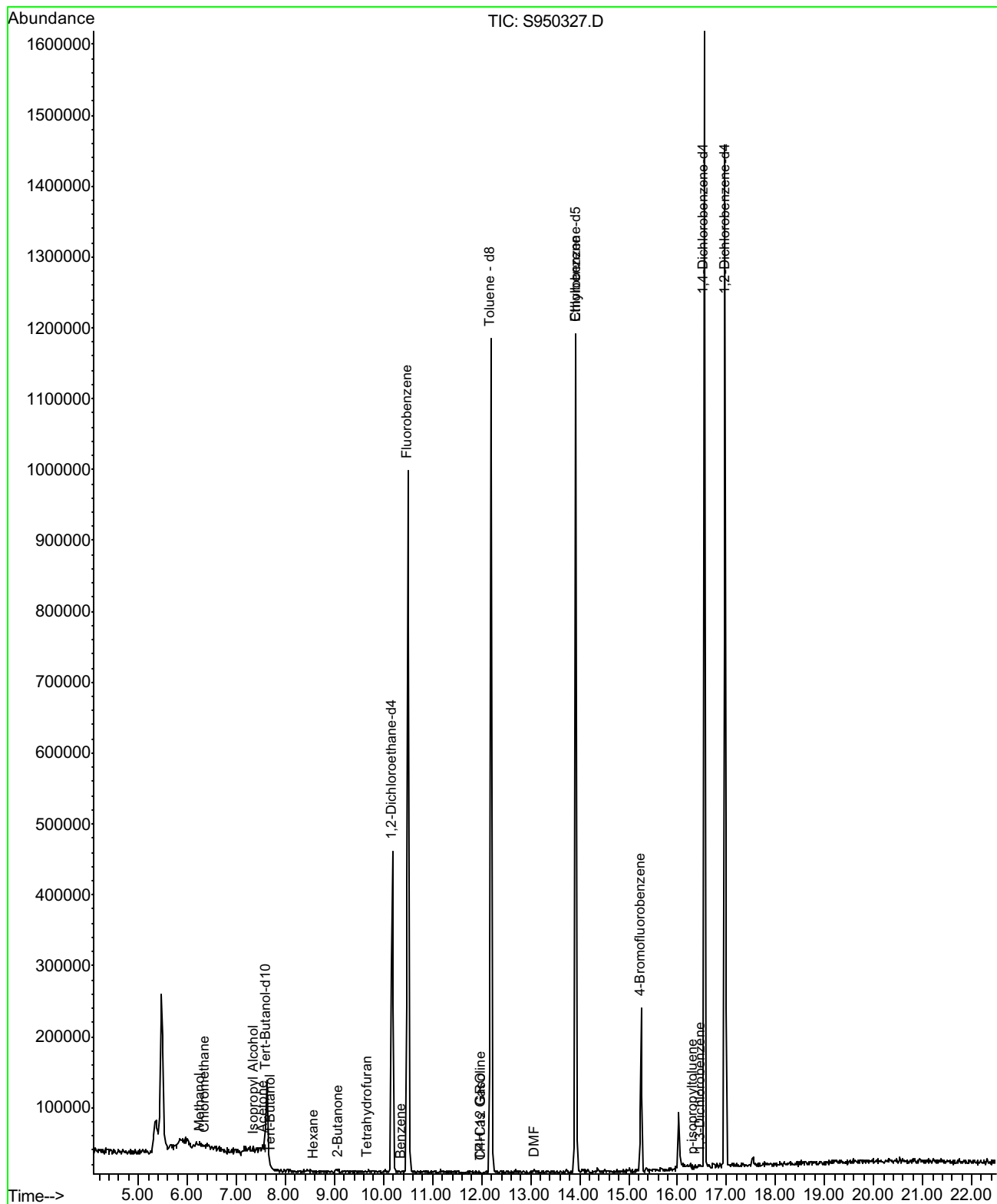


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Date Analyzed : 09/30/2008  
Data File : D283157  
Analysis Method : M EPA 8015

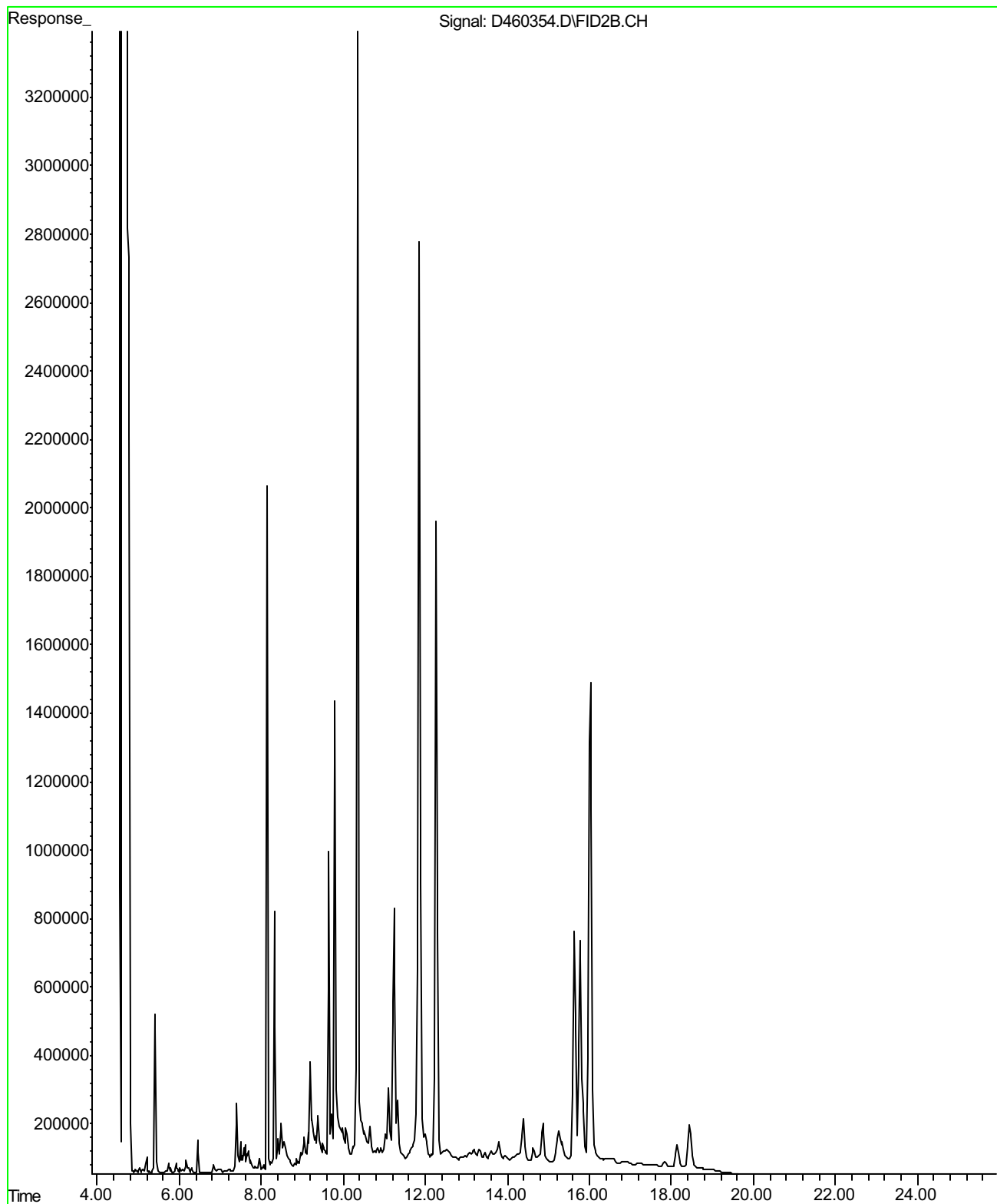




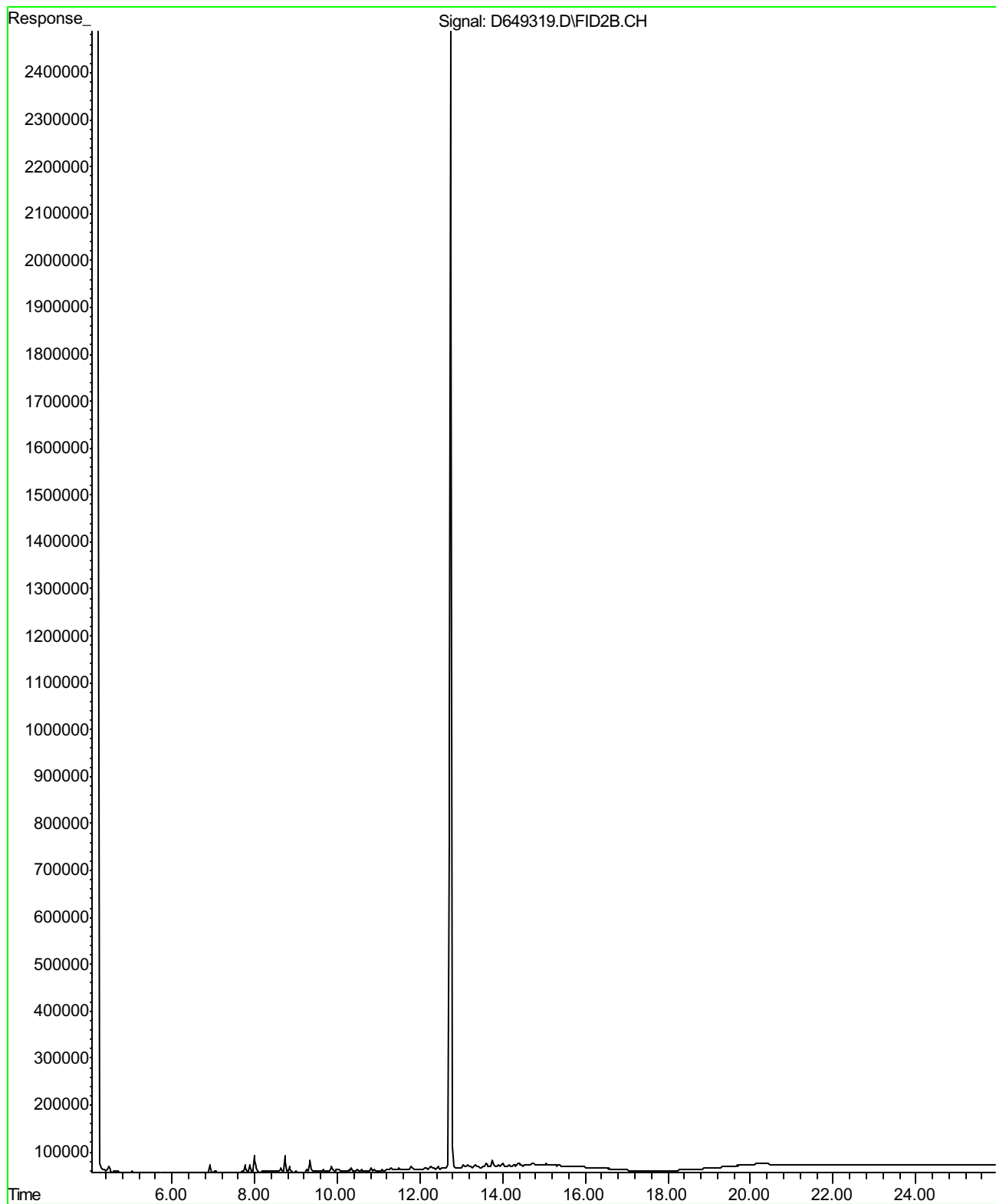
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Data File : S950327  
Analysis Method : EPA 8260B



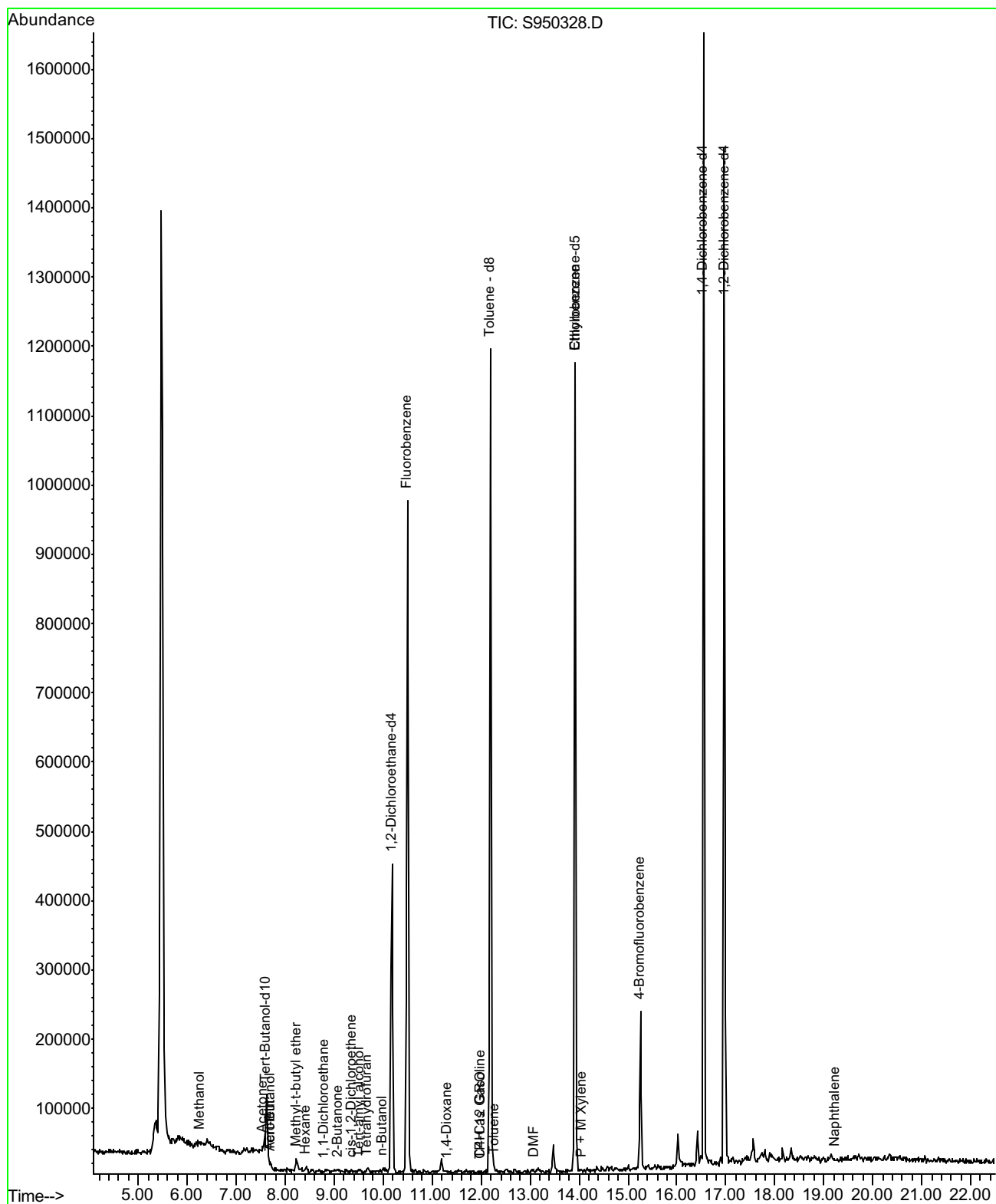
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Date Analyzed : 10/01/2008  
Data File : D460354  
Analysis Method : M EPA 8015



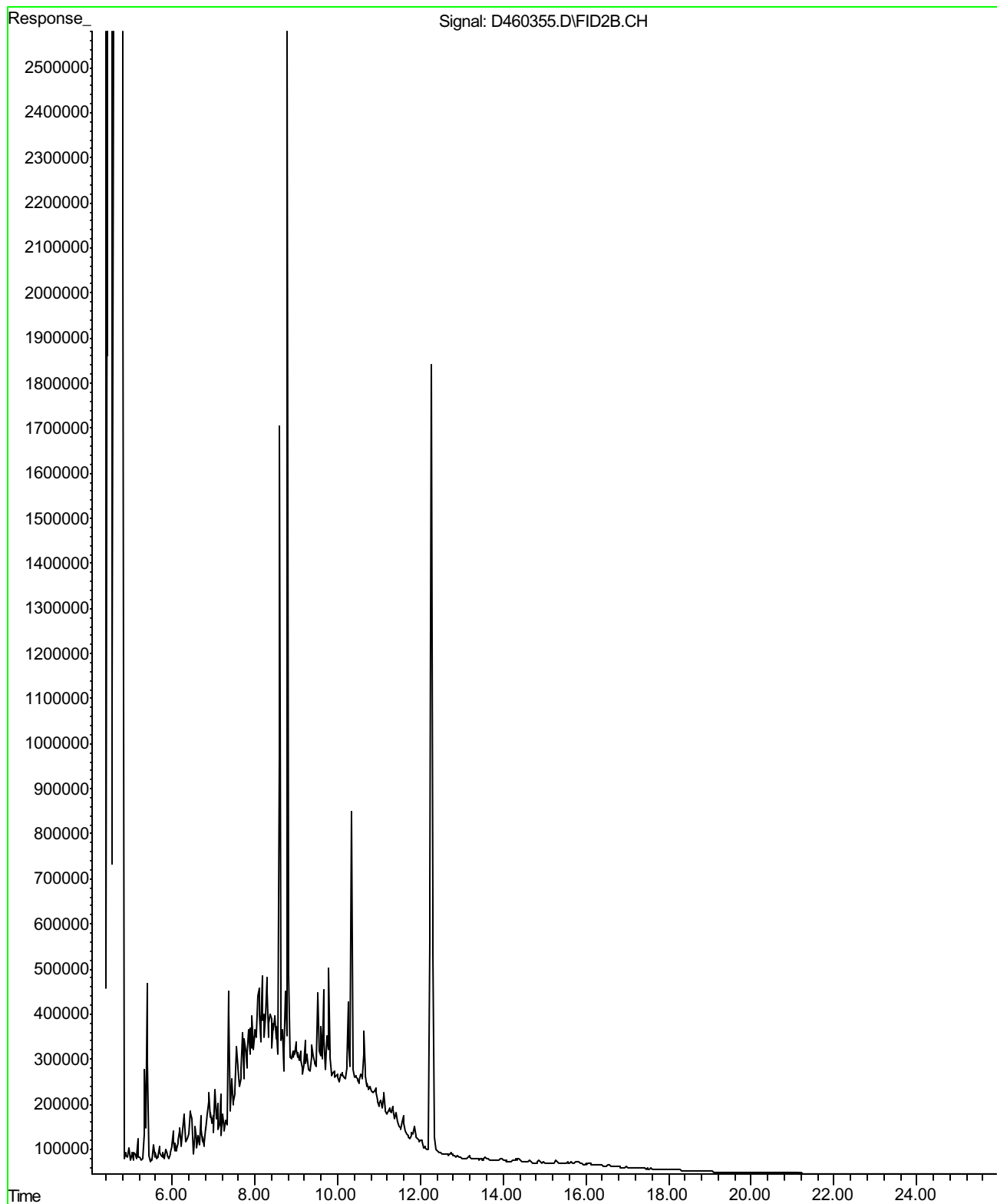
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Date Analyzed : 10/02/2008  
Data File : D649319  
Analysis Method : M EPA 8015



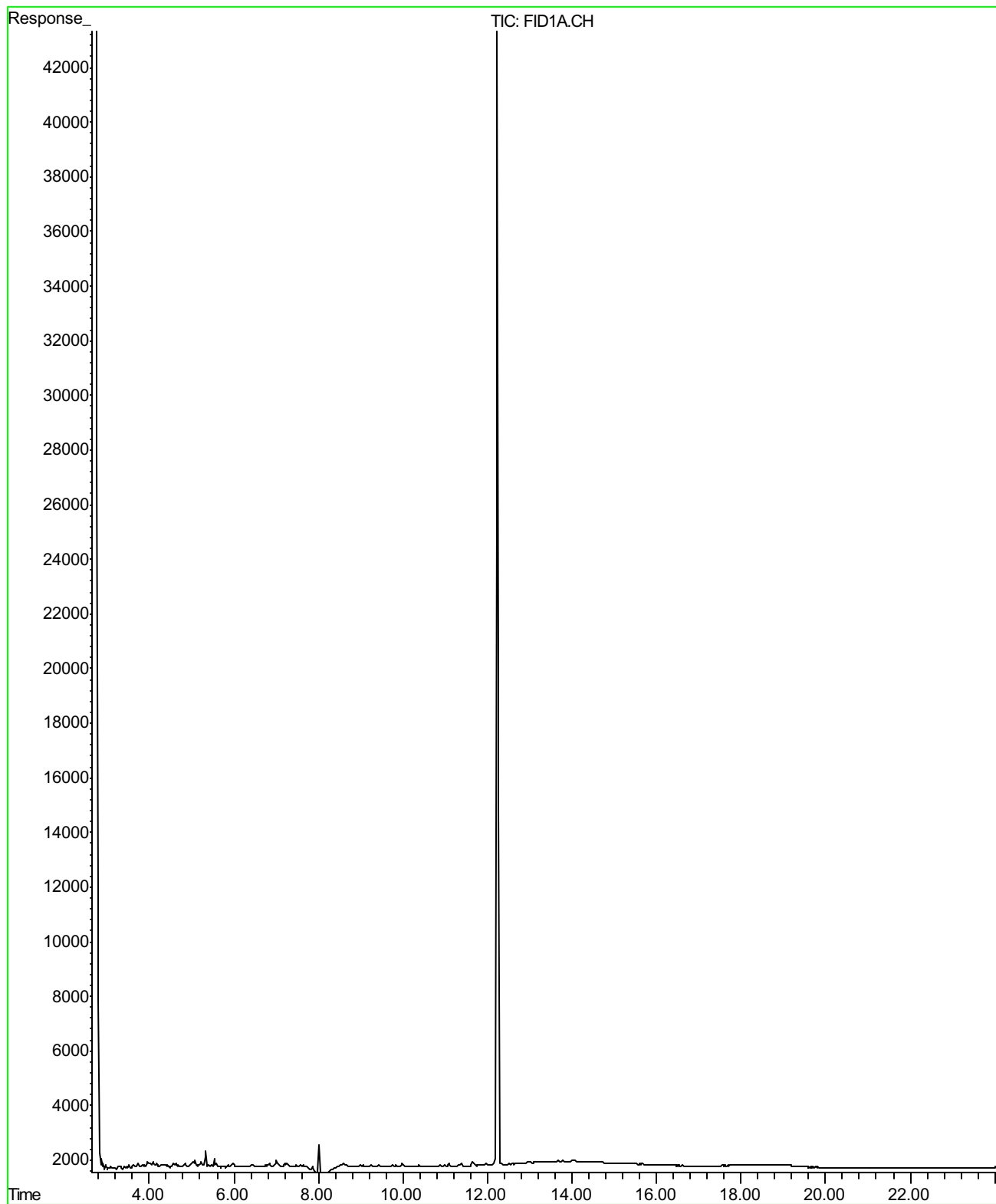
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Date Analyzed : 10/01/2008  
Data File : S950328  
Analysis Method : EPA 8260B



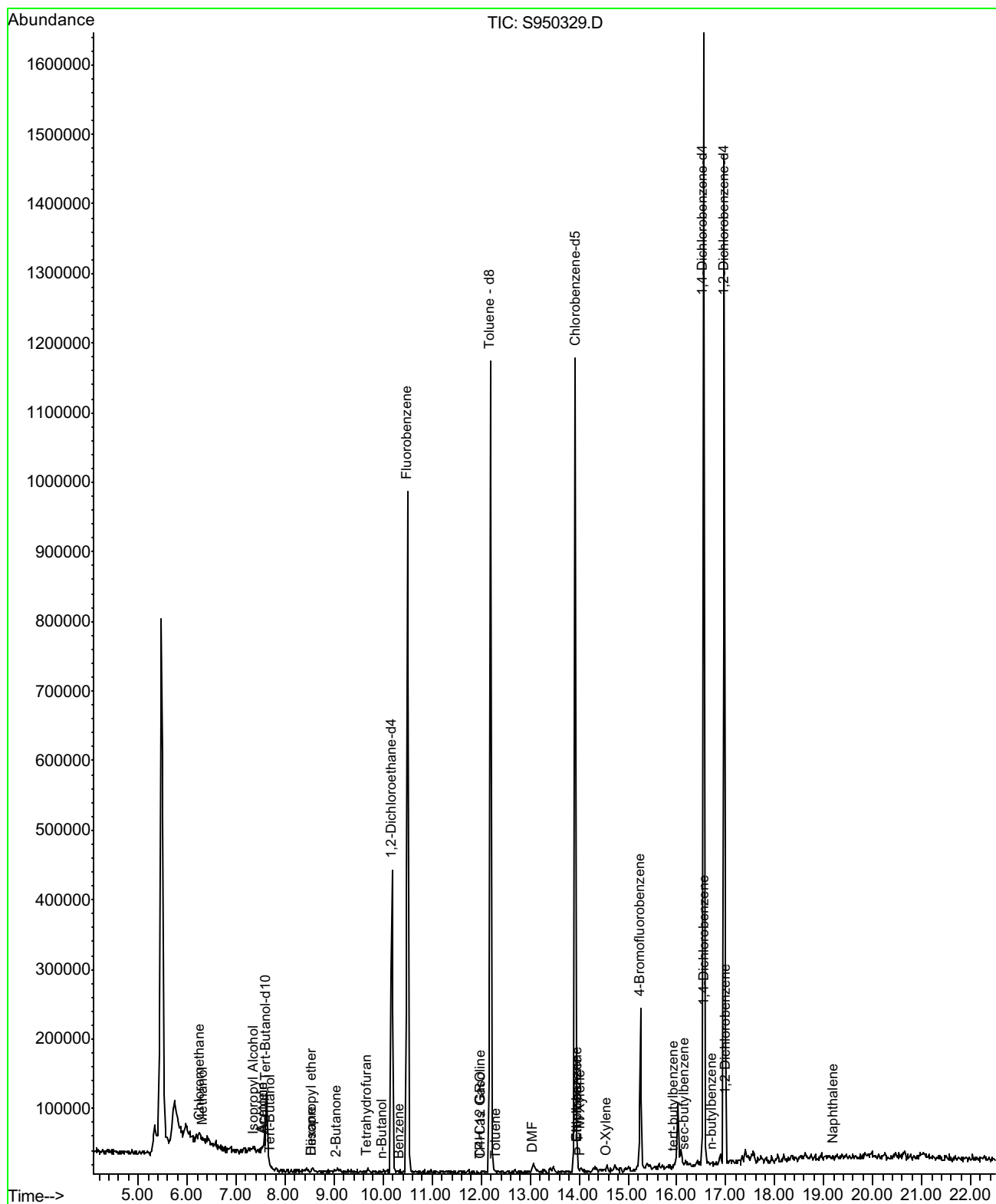
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Date Analyzed : 10/01/2008  
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Analysis Method : M EPA 8015



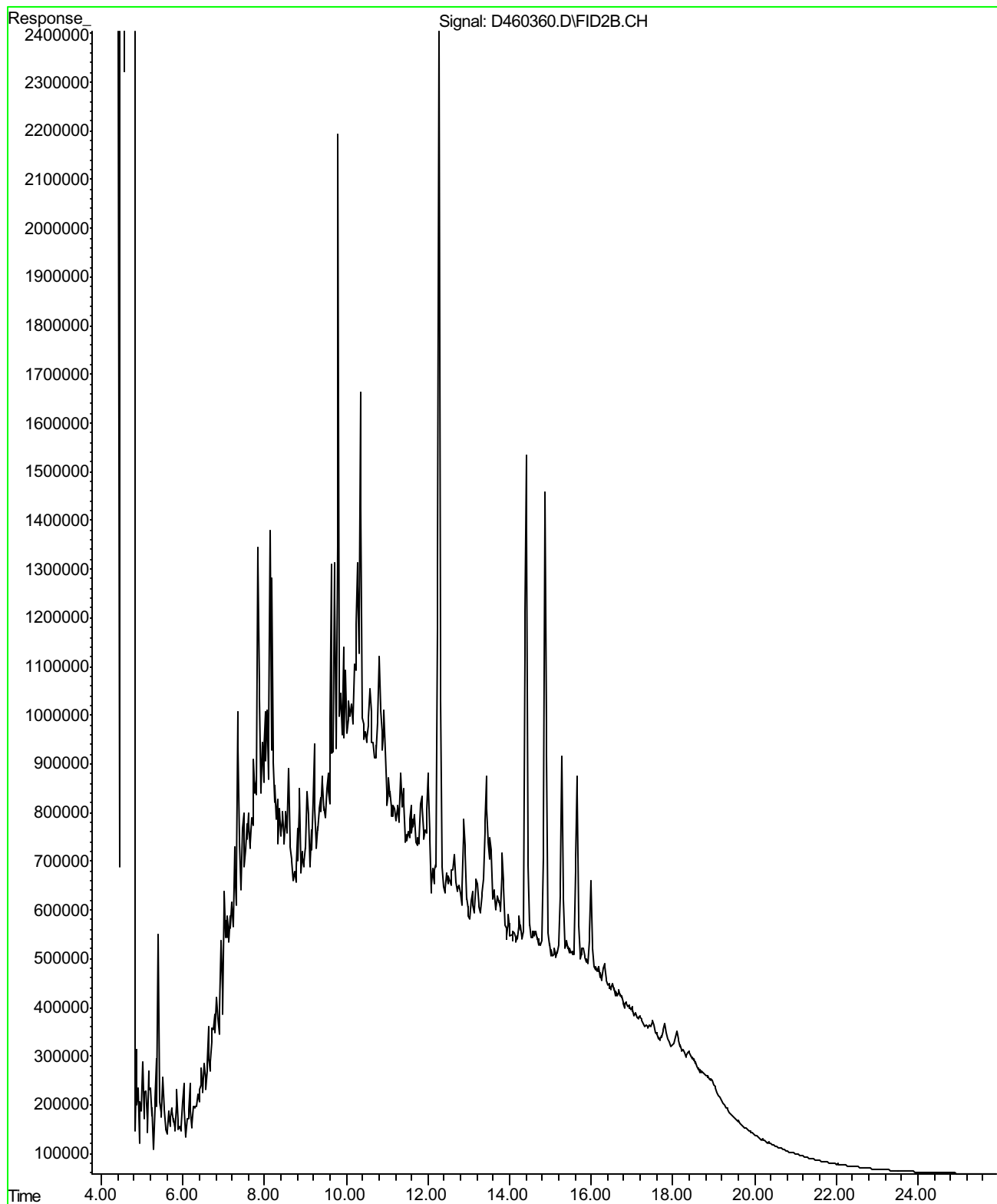
Sample ID : 65028-03 SI (MW-3)  
Date Analyzed : 09/30/2008  
Data File : D283159  
Analysis Method : M EPA 8015



Sample ID : 65028-04 (MW-4)  
Date Analyzed : 10/01/2008  
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Analysis Method : EPA 8260B

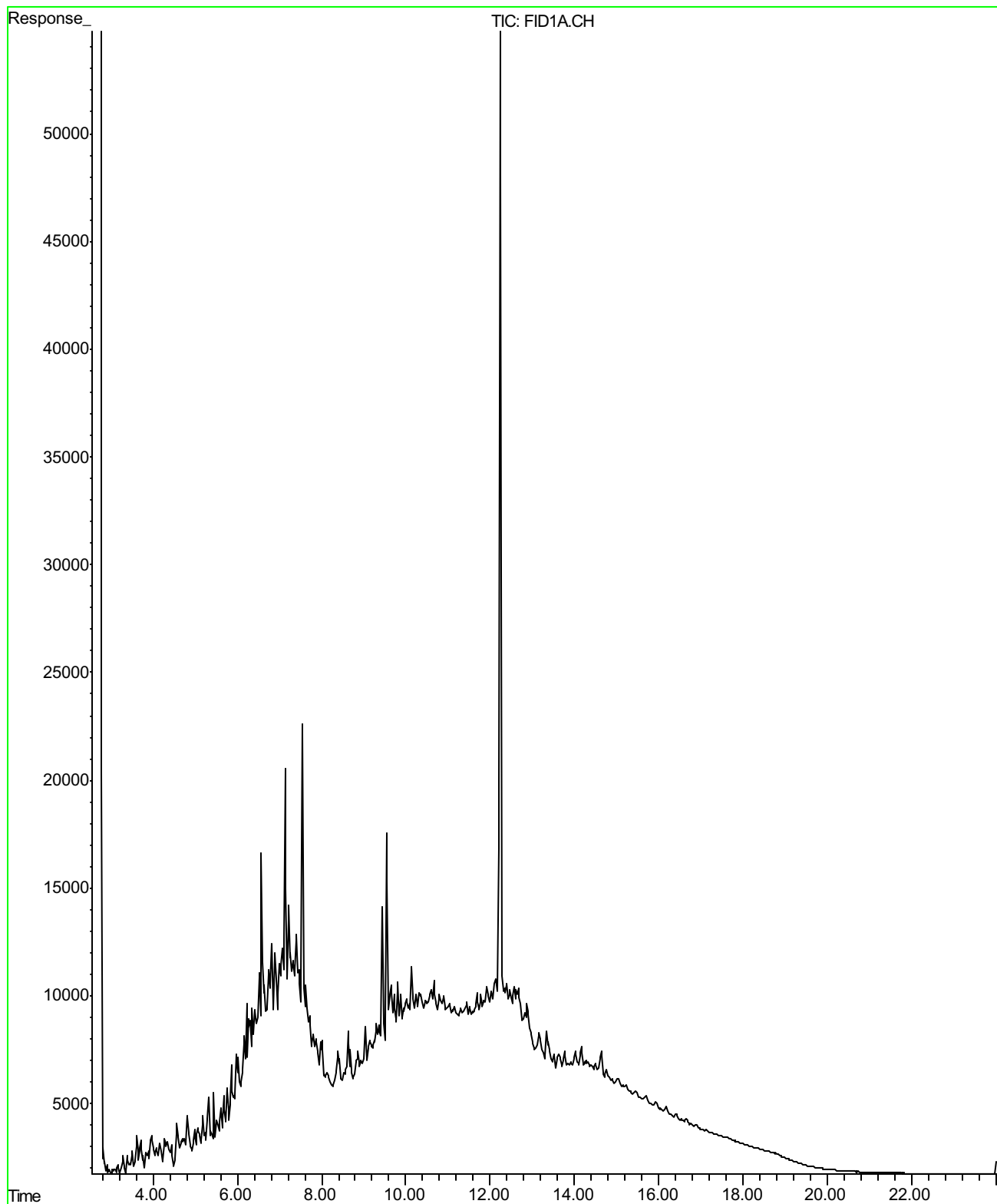


Sample ID : 65028-04 (MW-4)  
Date Analyzed : 10/01/2008  
Data File : D460360  
Analysis Method : M EPA 8015

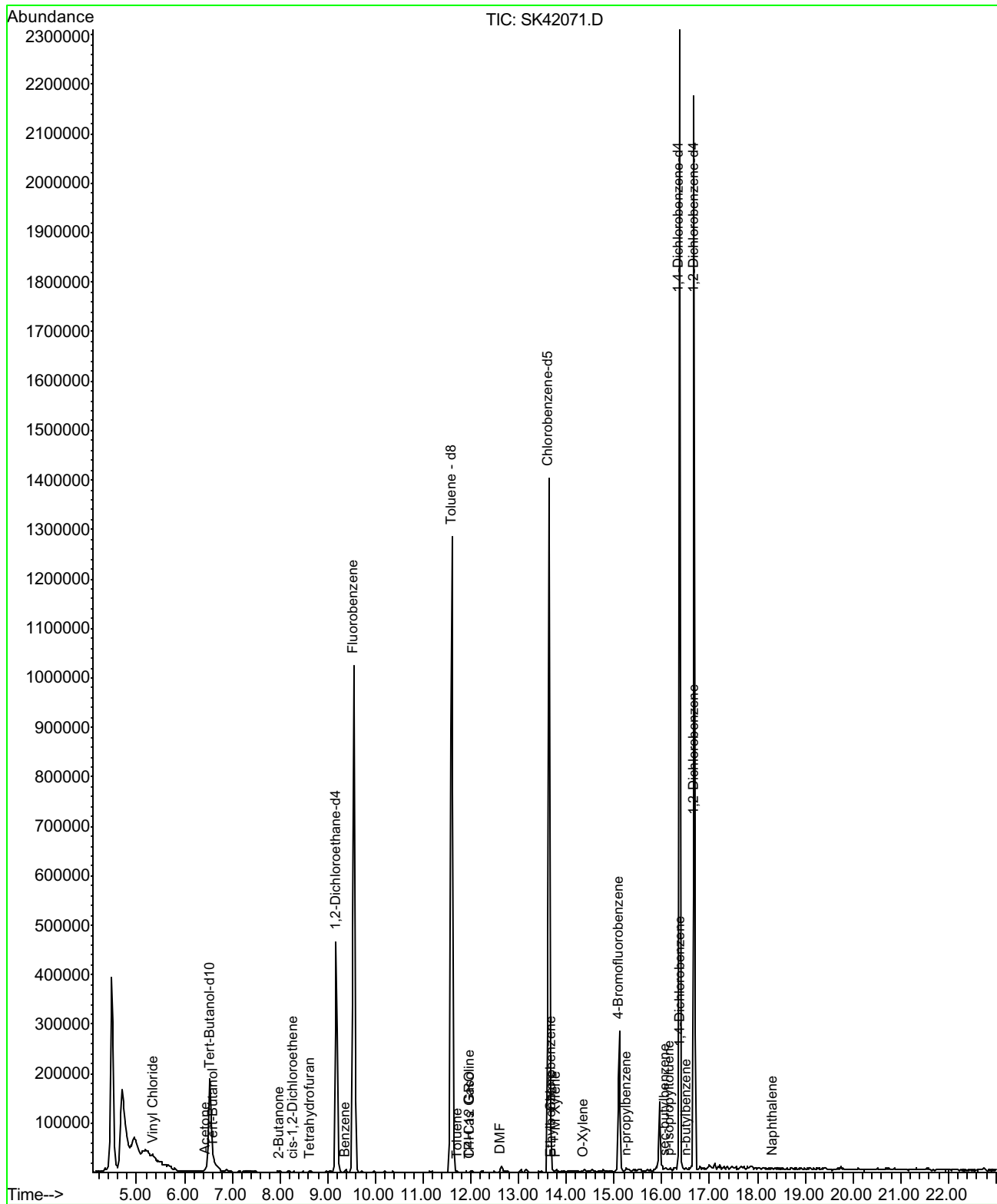




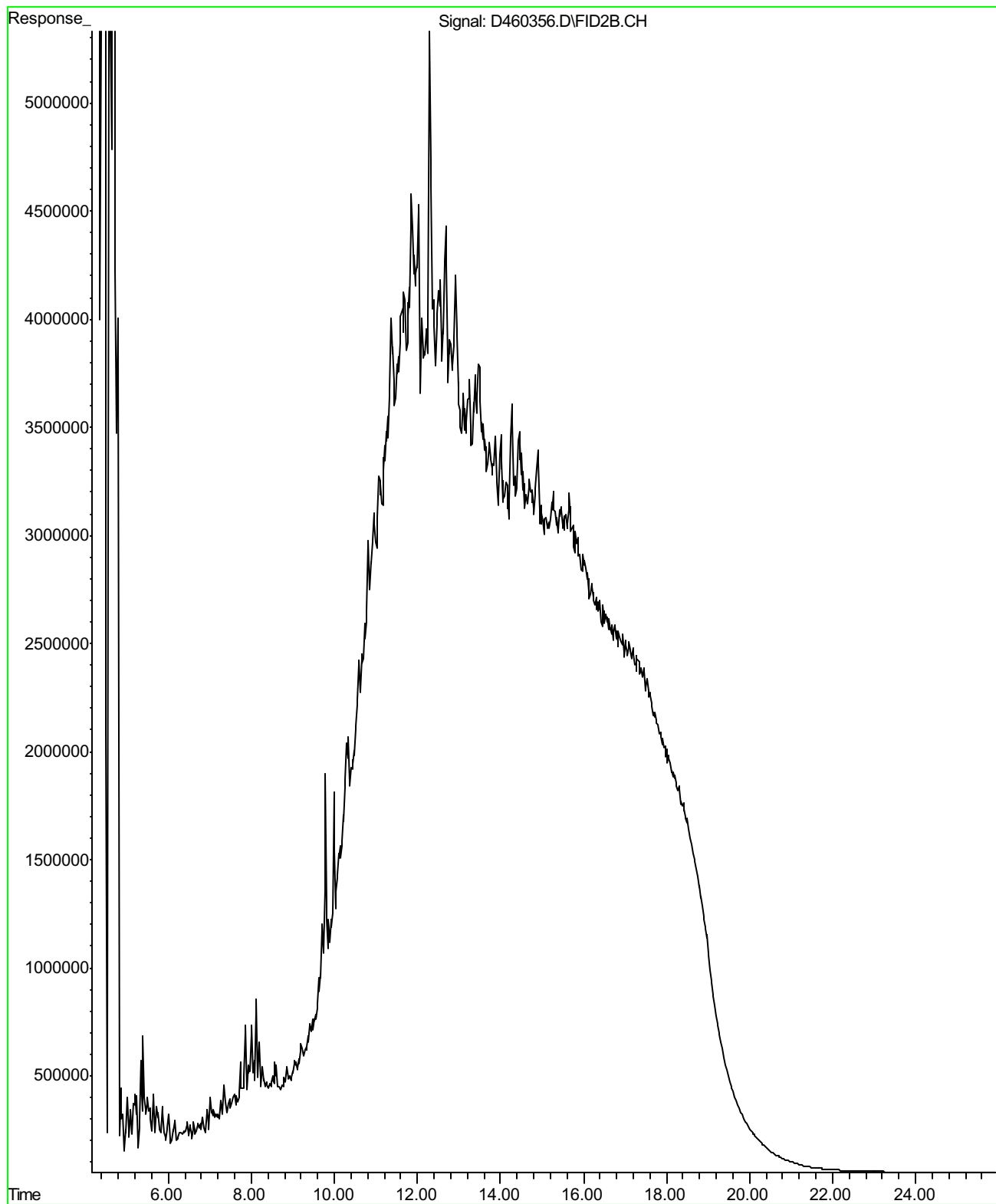
Sample ID : 65028-04 SI (MW-4)  
Date Analyzed : 10/01/2008  
Data File : D283160  
Analysis Method : M EPA 8015



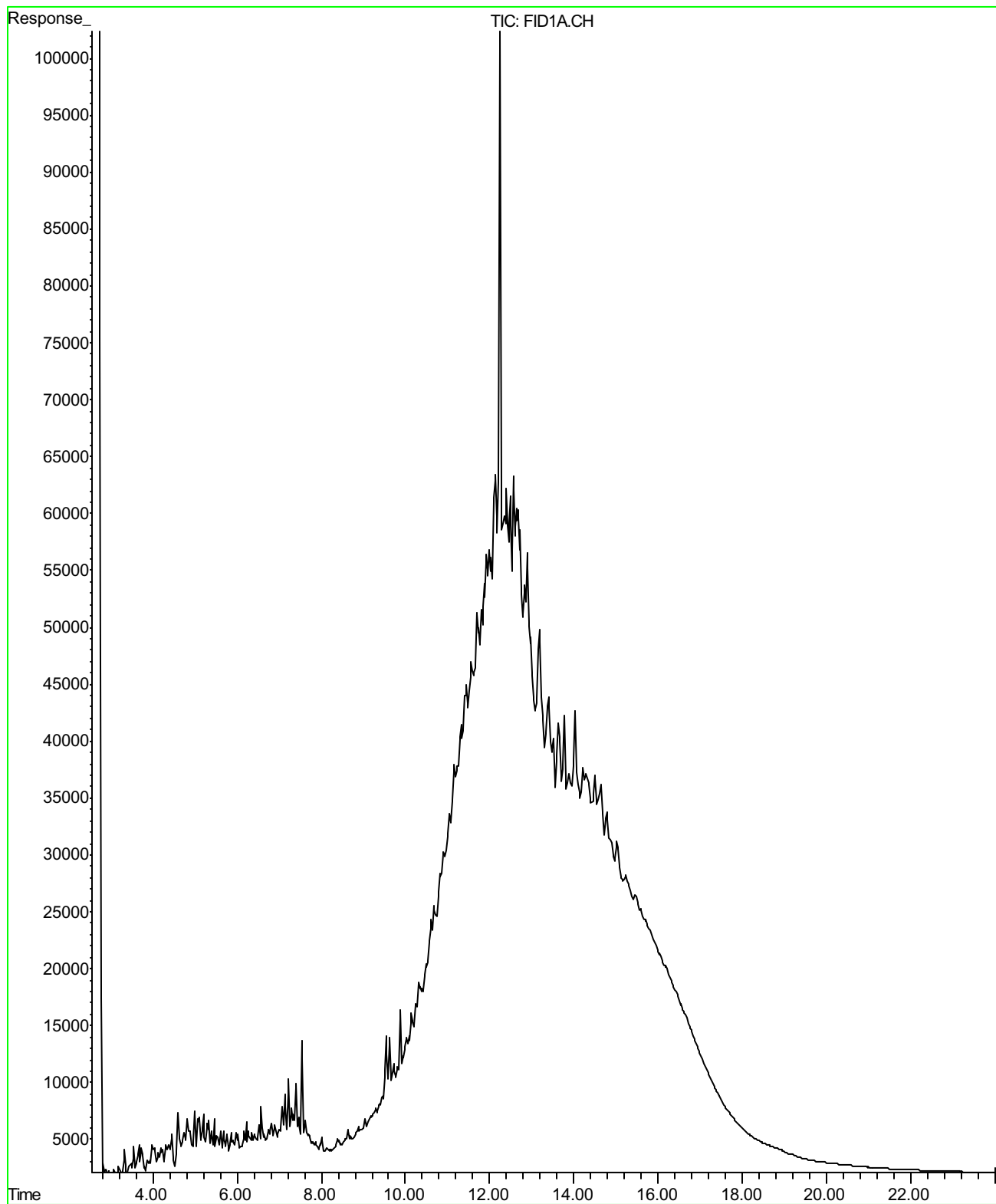
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Date Analyzed : 10/01/2008  
Data File : SK42071  
Analysis Method : EPA 8260B



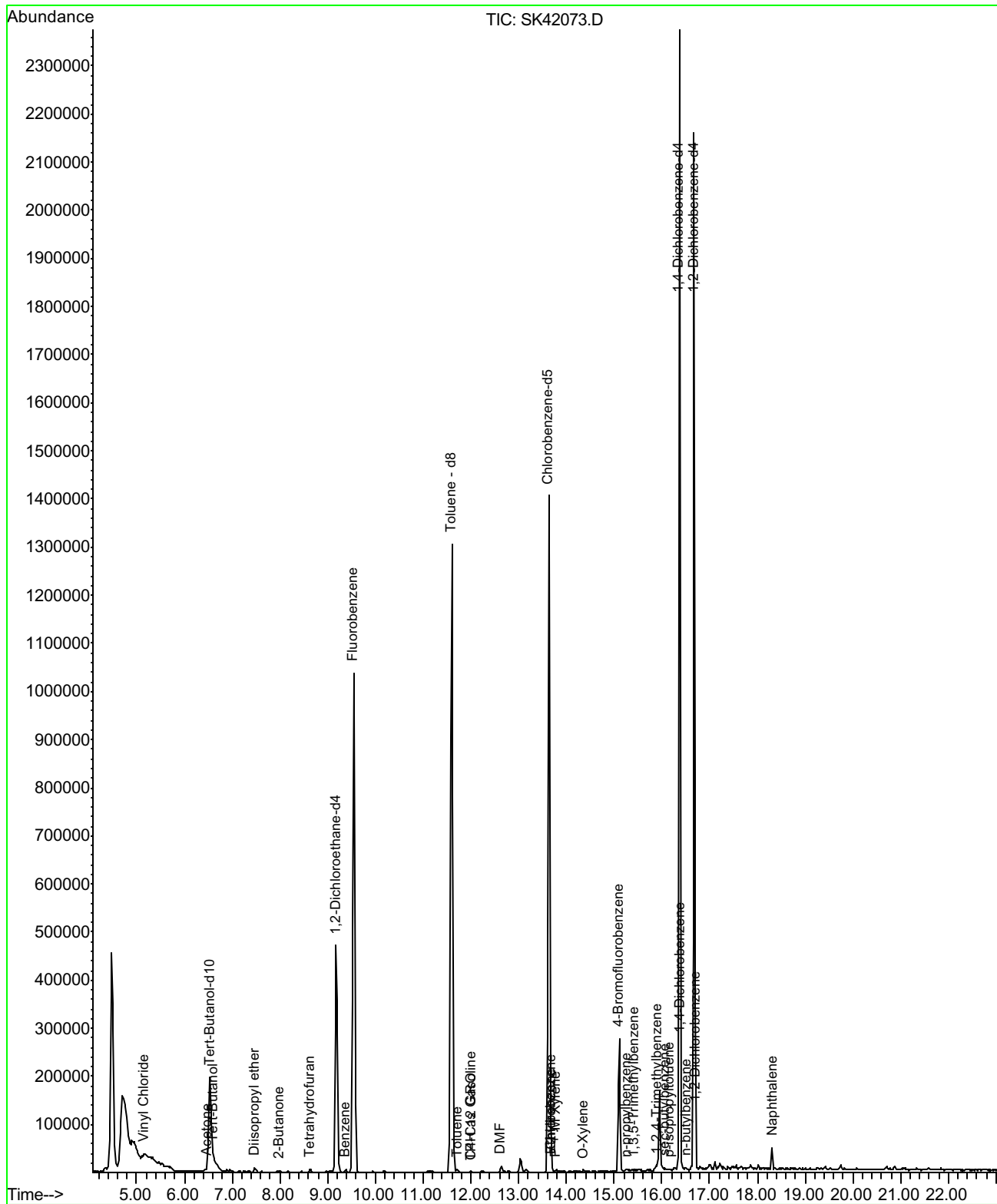
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Date Analyzed : 10/01/2008  
Data File : D460356  
Analysis Method : M EPA 8015



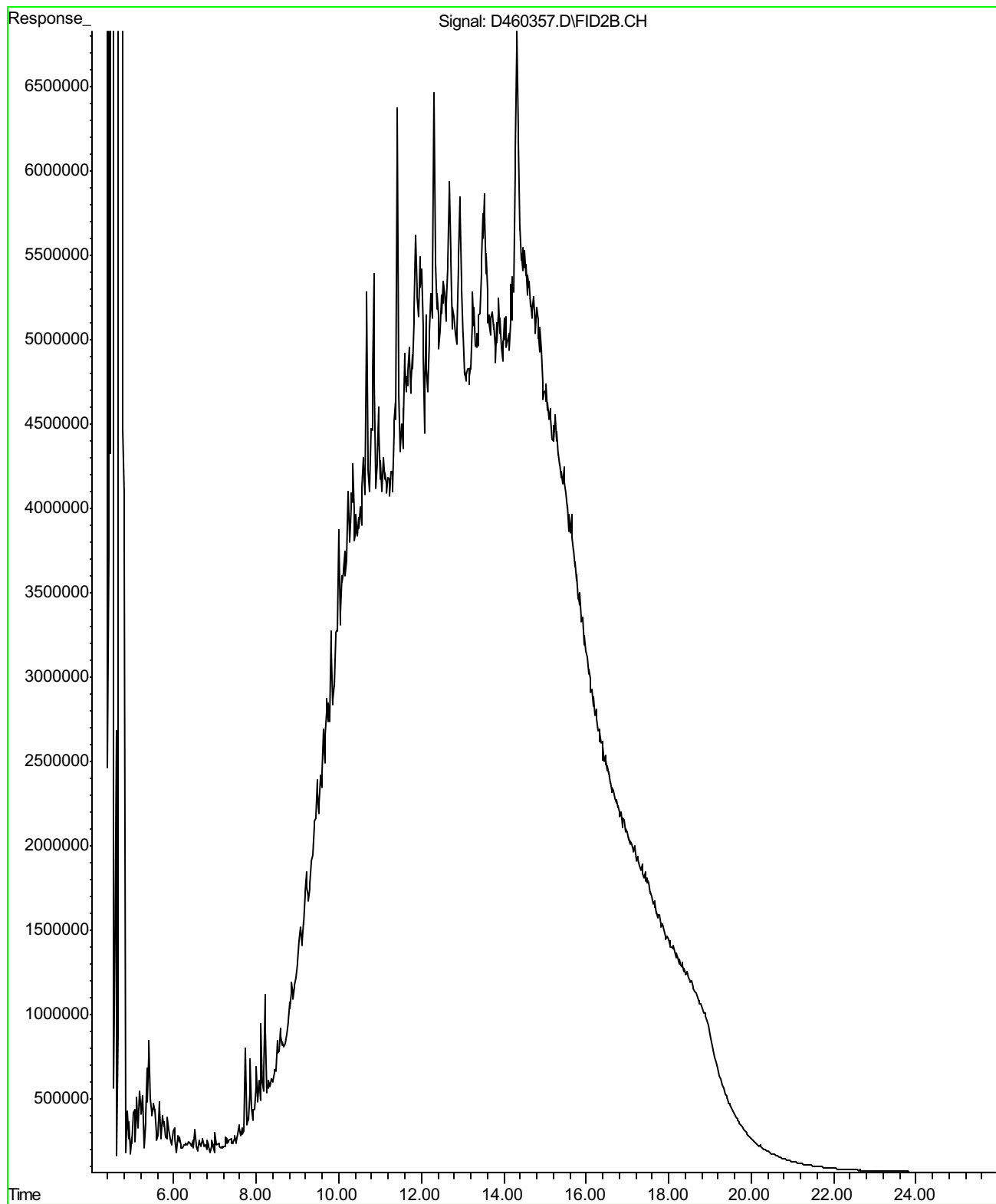
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Date Analyzed : 10/01/2008  
Data File : D283161  
Analysis Method : M EPA 8015



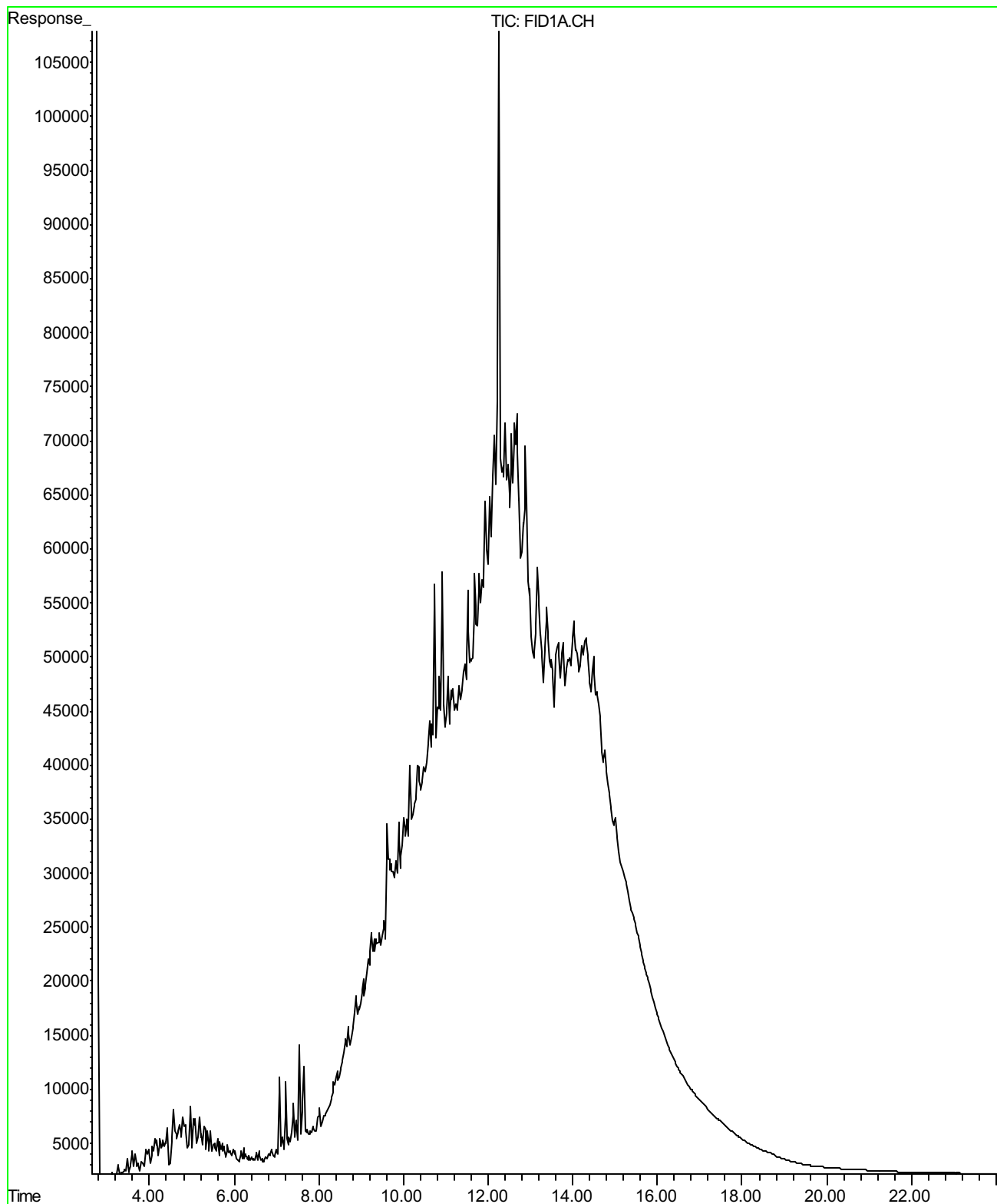
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Date Analyzed : 10/01/2008  
Data File : SK42073  
Analysis Method : EPA 8260B



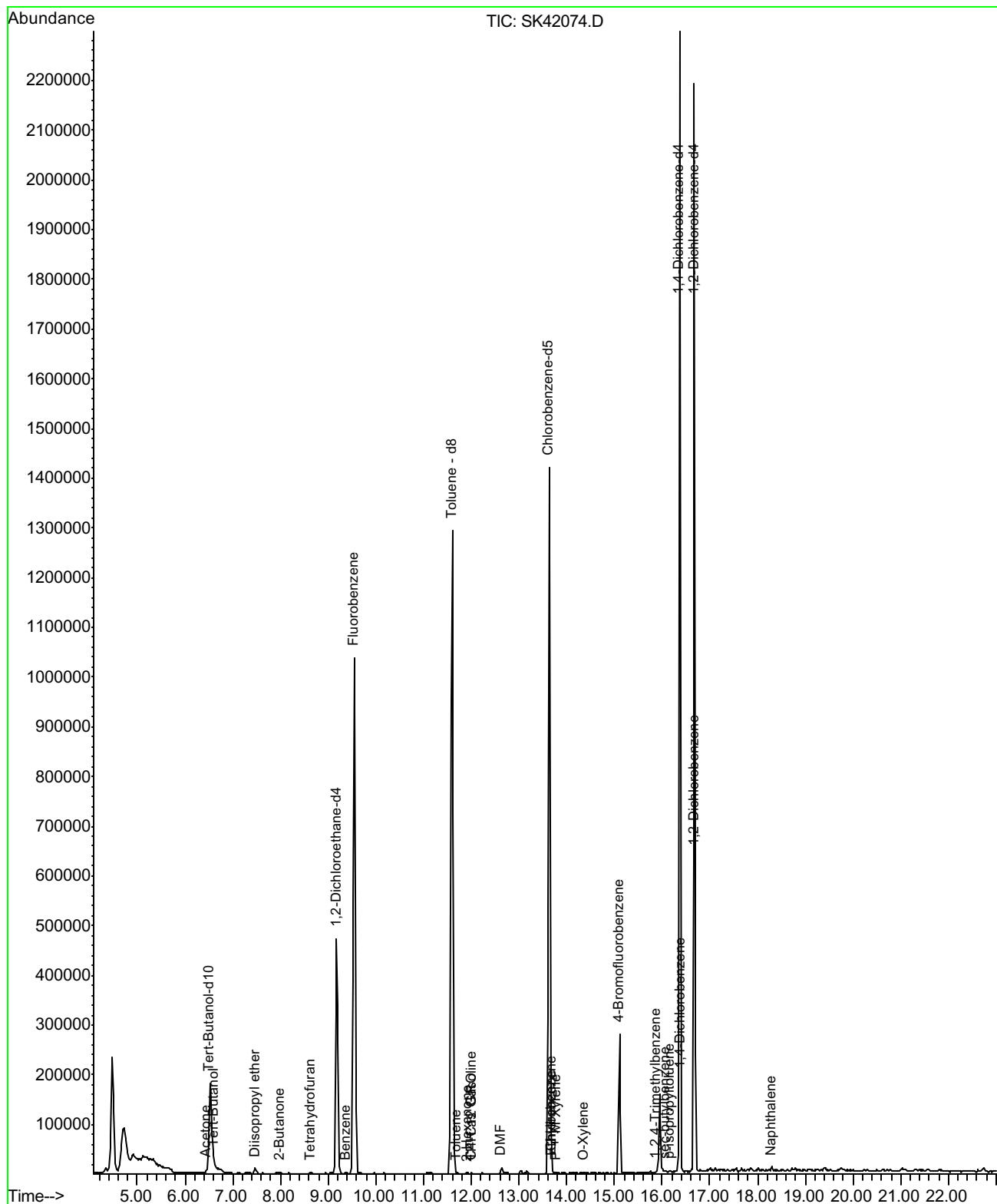
Sample ID : 65028-06 (MW-7)  
Date Analyzed : 10/01/2008  
Data File : D460357  
Analysis Method : M EPA 8015



Sample ID : 65028-06 SI (MW-7)  
Date Analyzed : 10/01/2008  
Data File : D283162  
Analysis Method : M EPA 8015

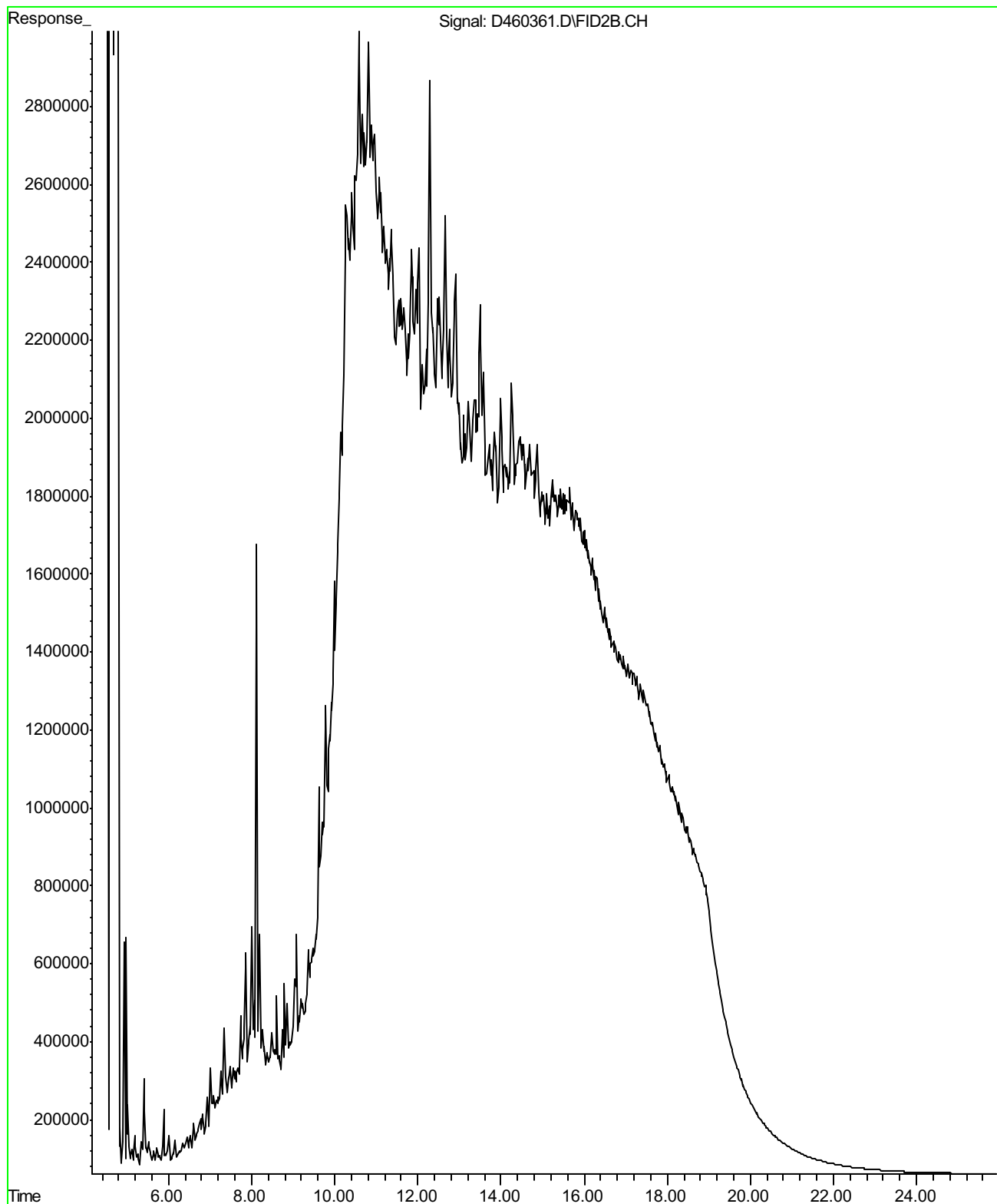


Sample ID : 65028-07 (MW-9)  
Date Analyzed : 10/01/2008  
Data File : SK42074  
Analysis Method : EPA 8260B

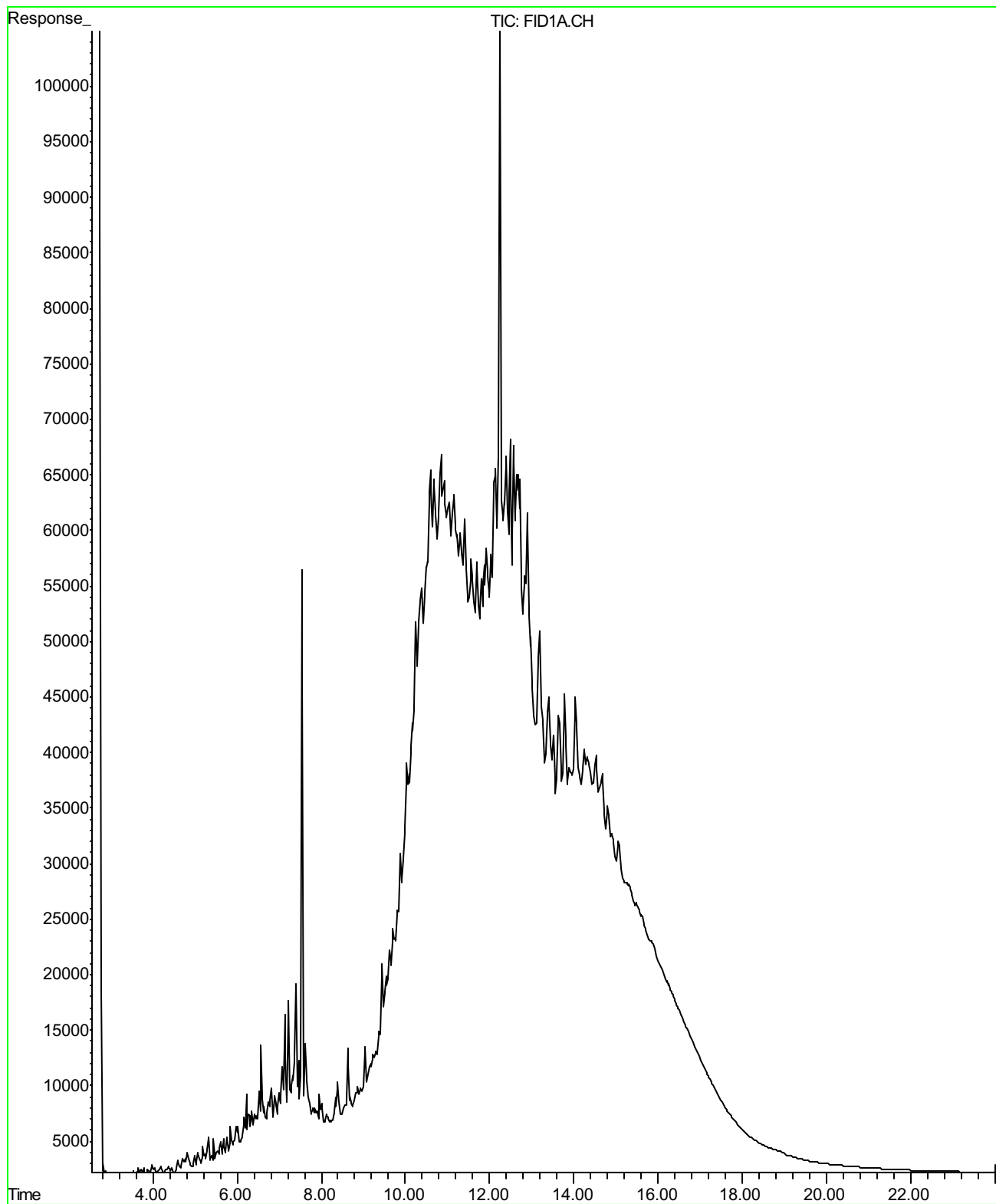




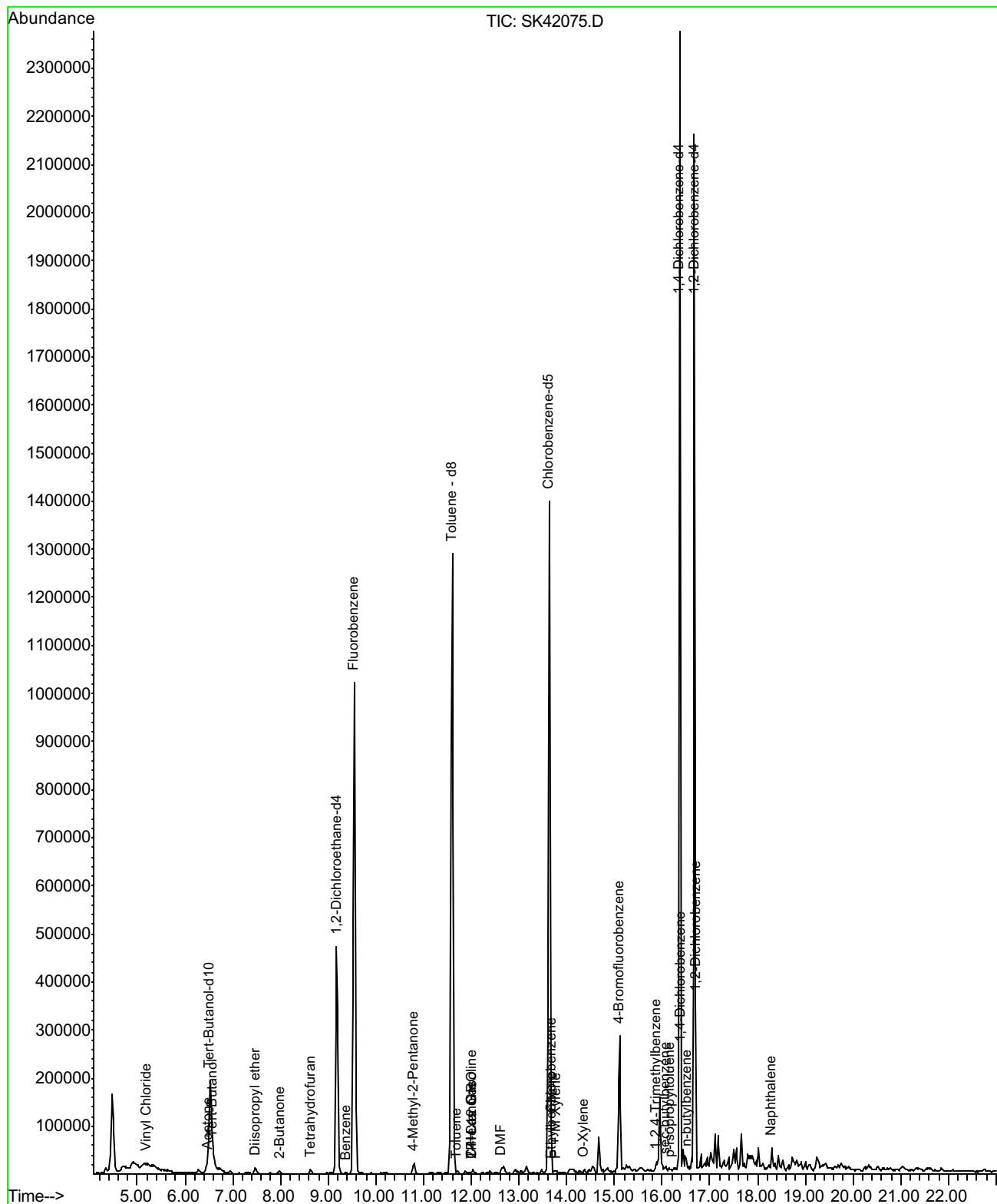
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Date Analyzed : 10/01/2008  
Data File : D460361  
Analysis Method : M EPA 8015



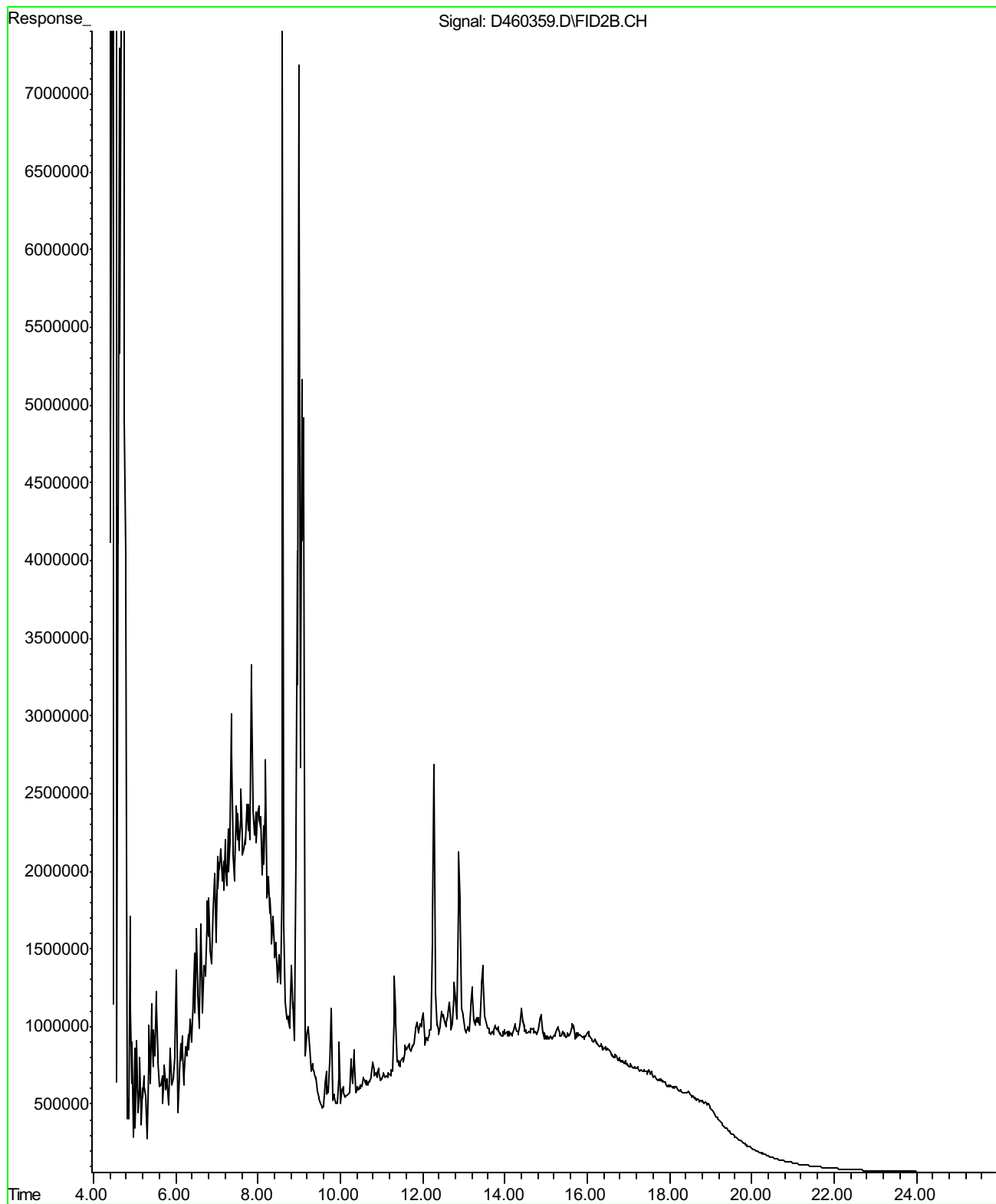
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Date Analyzed : 10/01/2008  
Data File : D283163  
Analysis Method : M EPA 8015



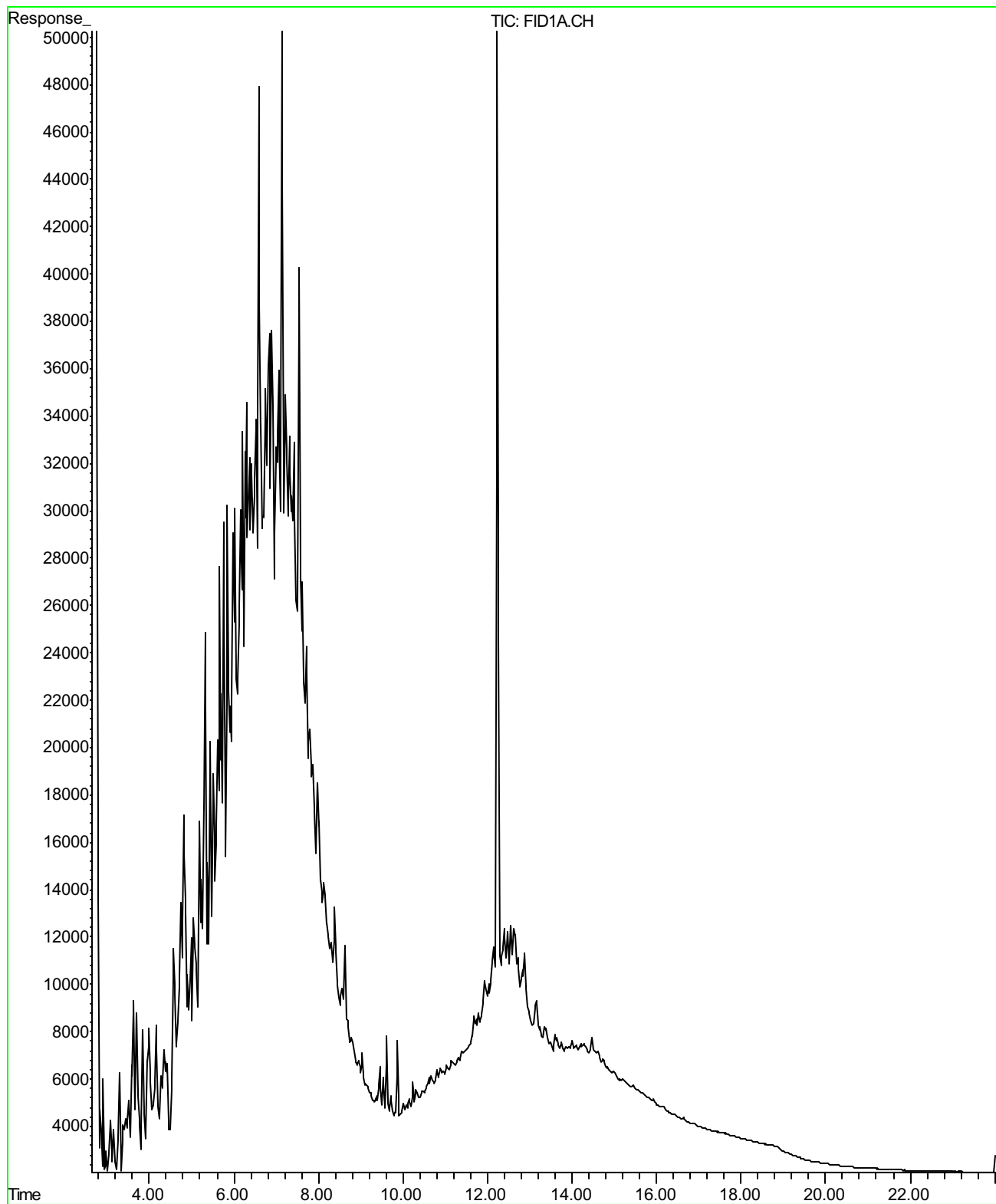
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Date Analyzed : 10/01/2008  
Data File : SK42075  
Analysis Method : EPA 8260B



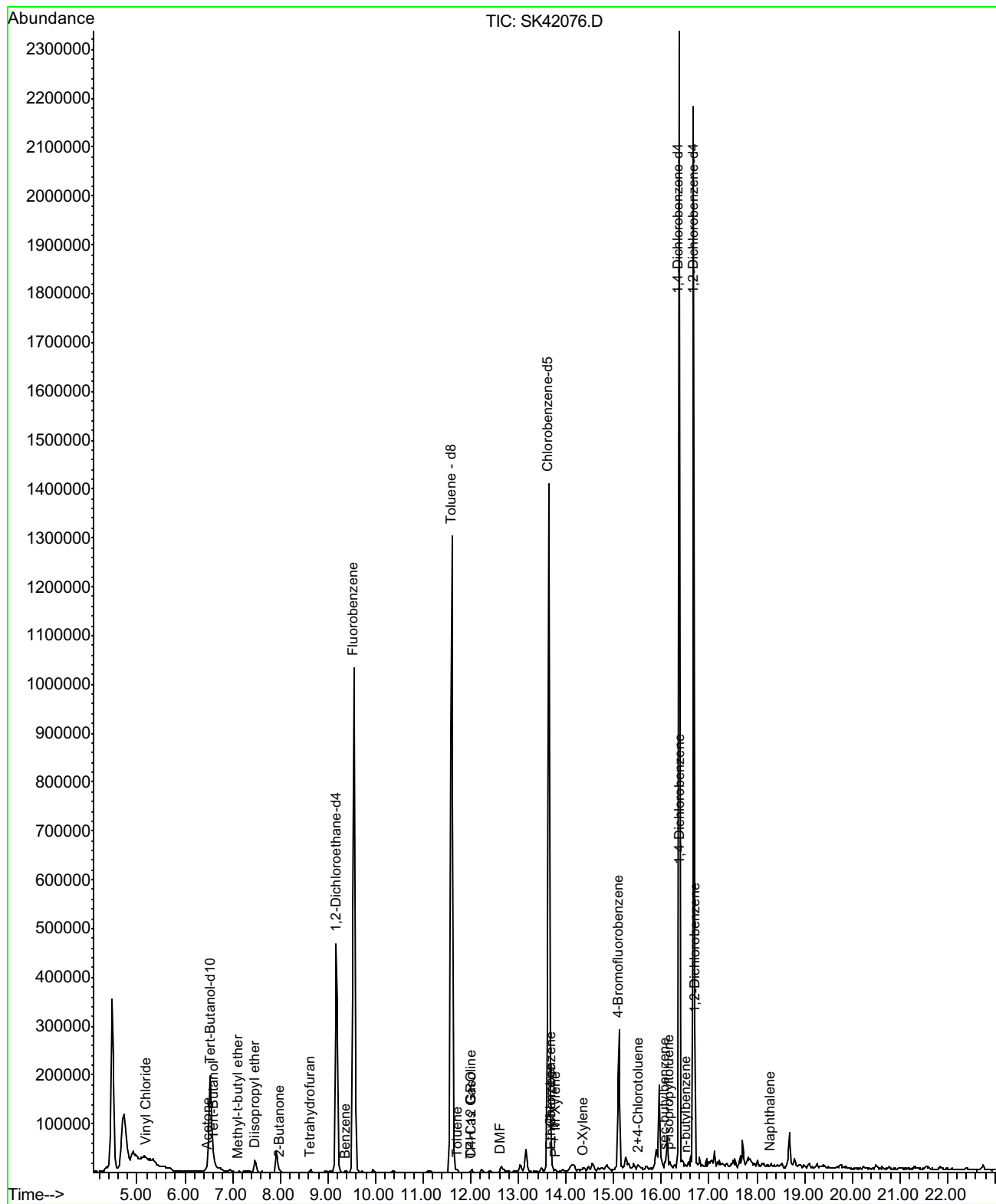
Sample ID : 65028-08 (MW-10)  
Date Analyzed : 10/01/2008  
Data File : D460359  
Analysis Method : M EPA 8015



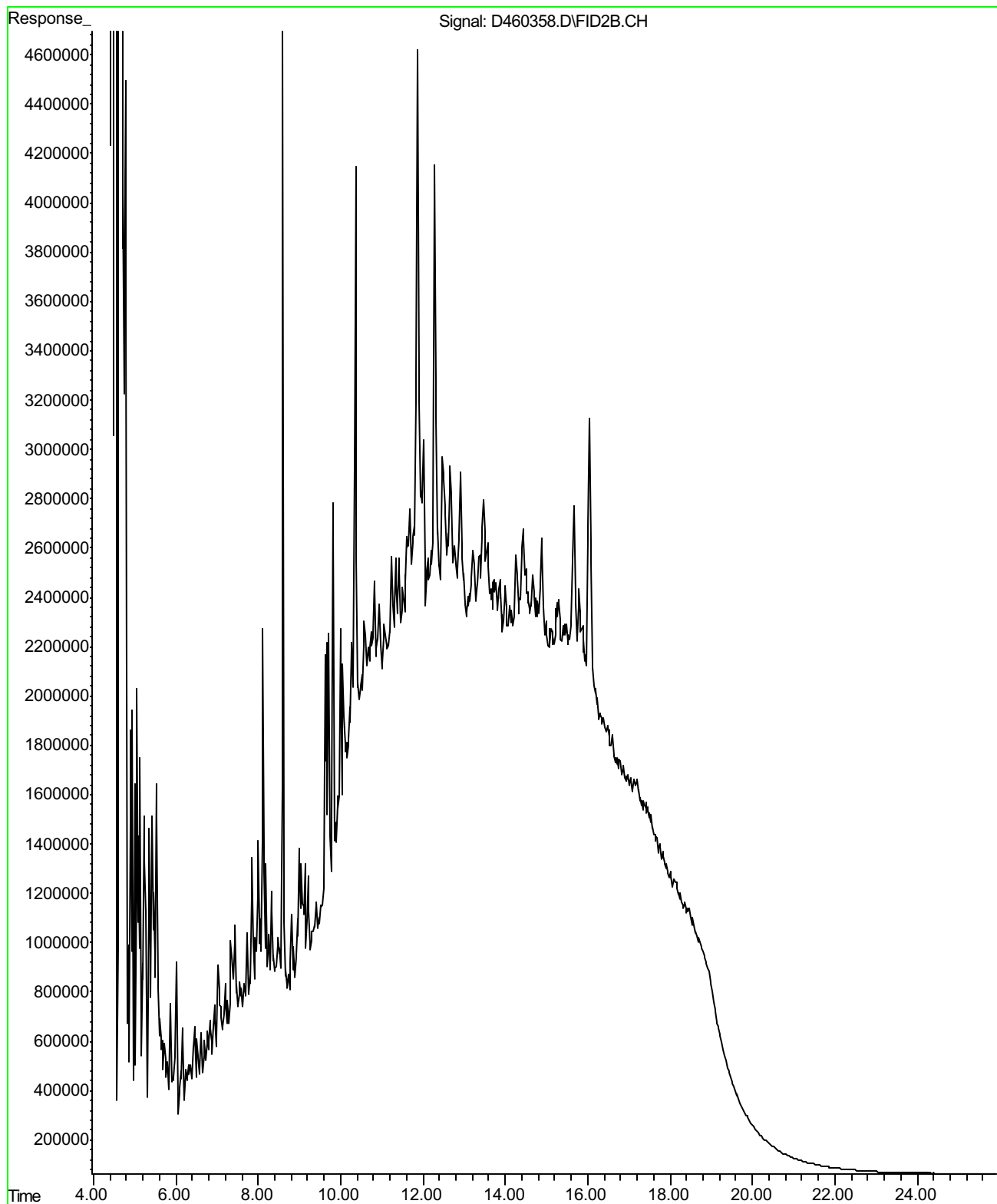
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Date Analyzed : 10/01/2008  
Data File : D283164  
Analysis Method : M EPA 8015



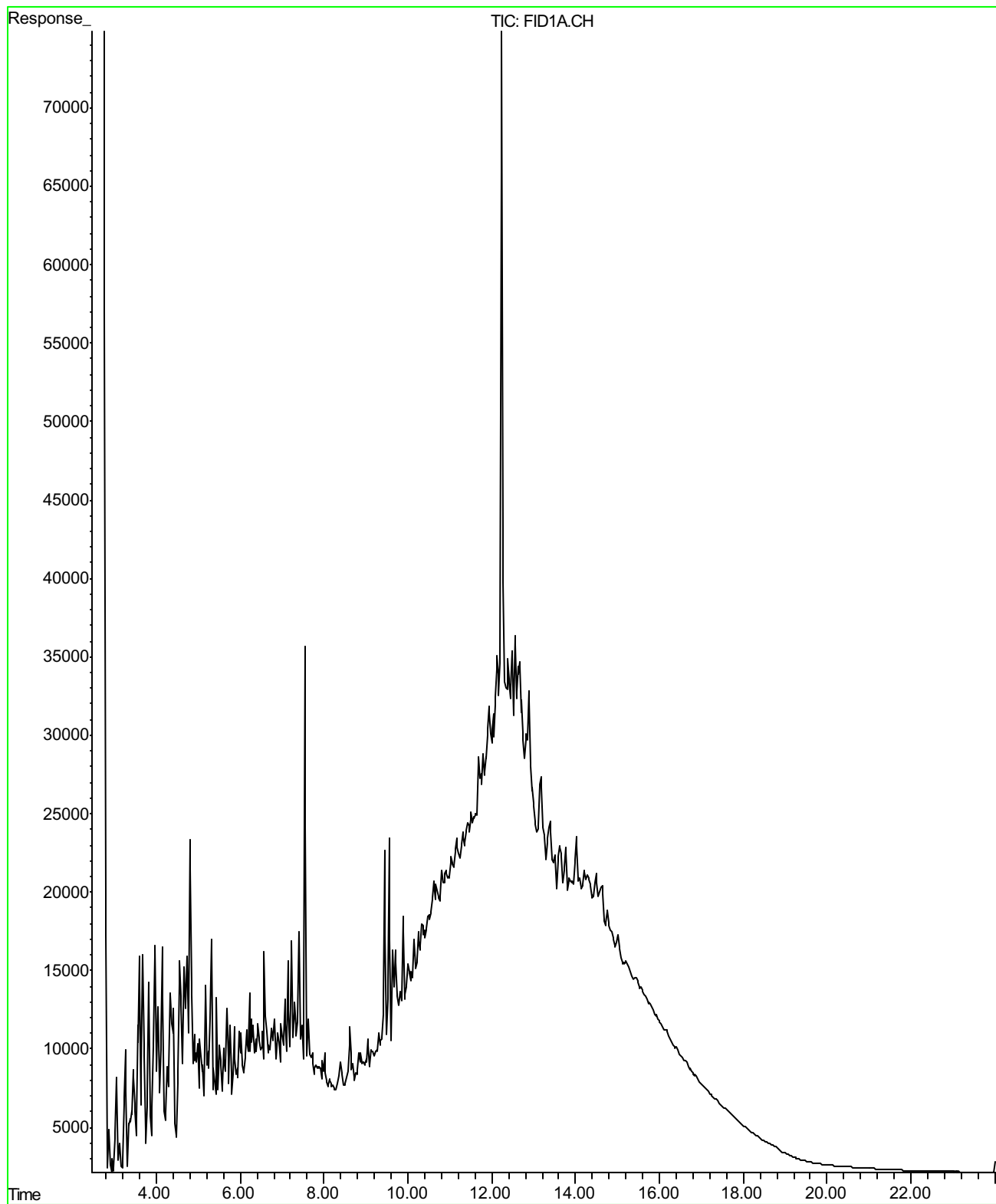
Sample ID : 65028-09 (MW-11)  
Date Analyzed : 10/01/2008  
Data File : SK42076  
Analysis Method : EPA 8260B



Sample ID : 65028-09 (MW-11)  
Date Analyzed : 10/01/2008  
Data File : D460358  
Analysis Method : M EPA 8015

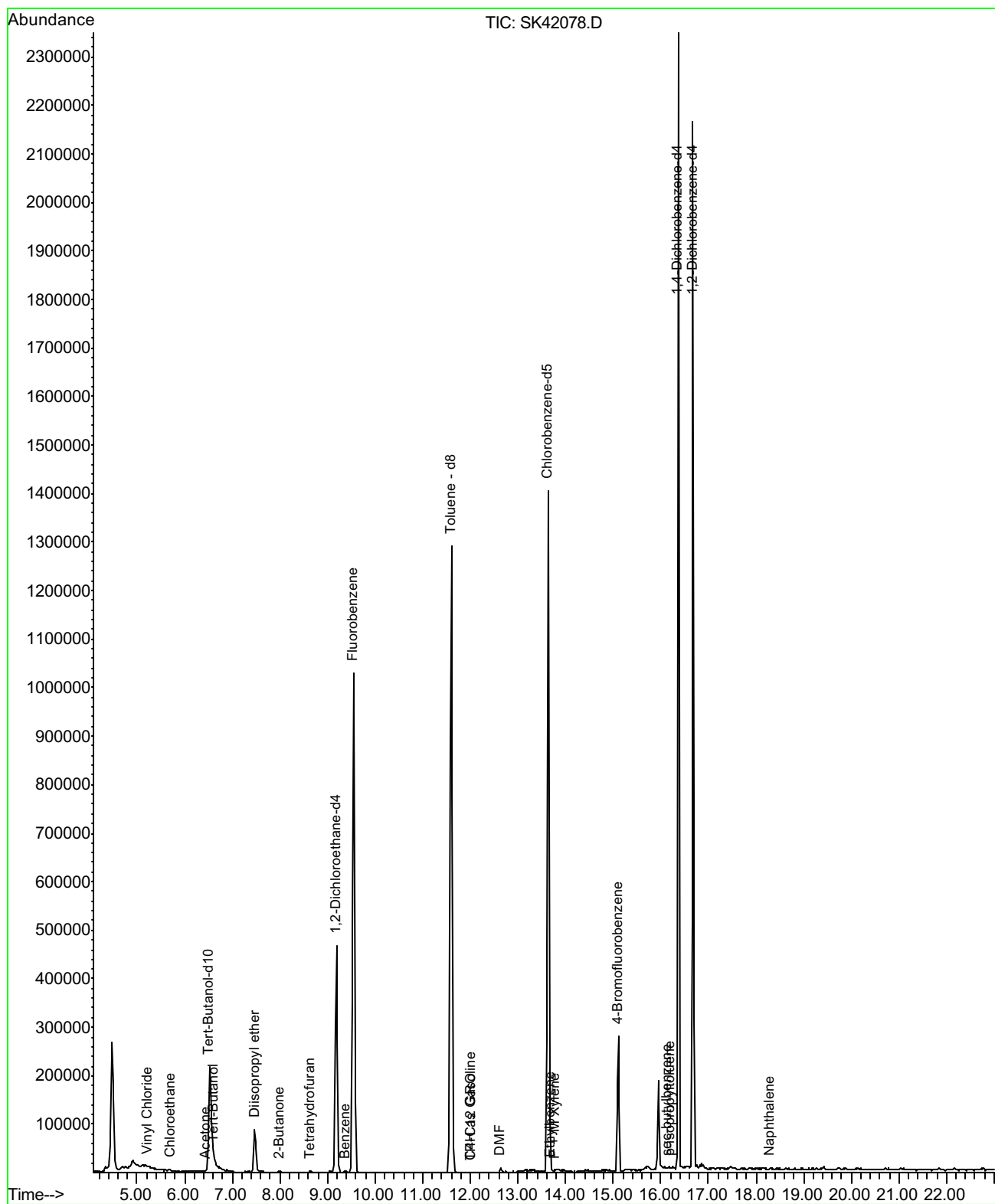


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Date Analyzed : 10/01/2008  
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Analysis Method : M EPA 8015

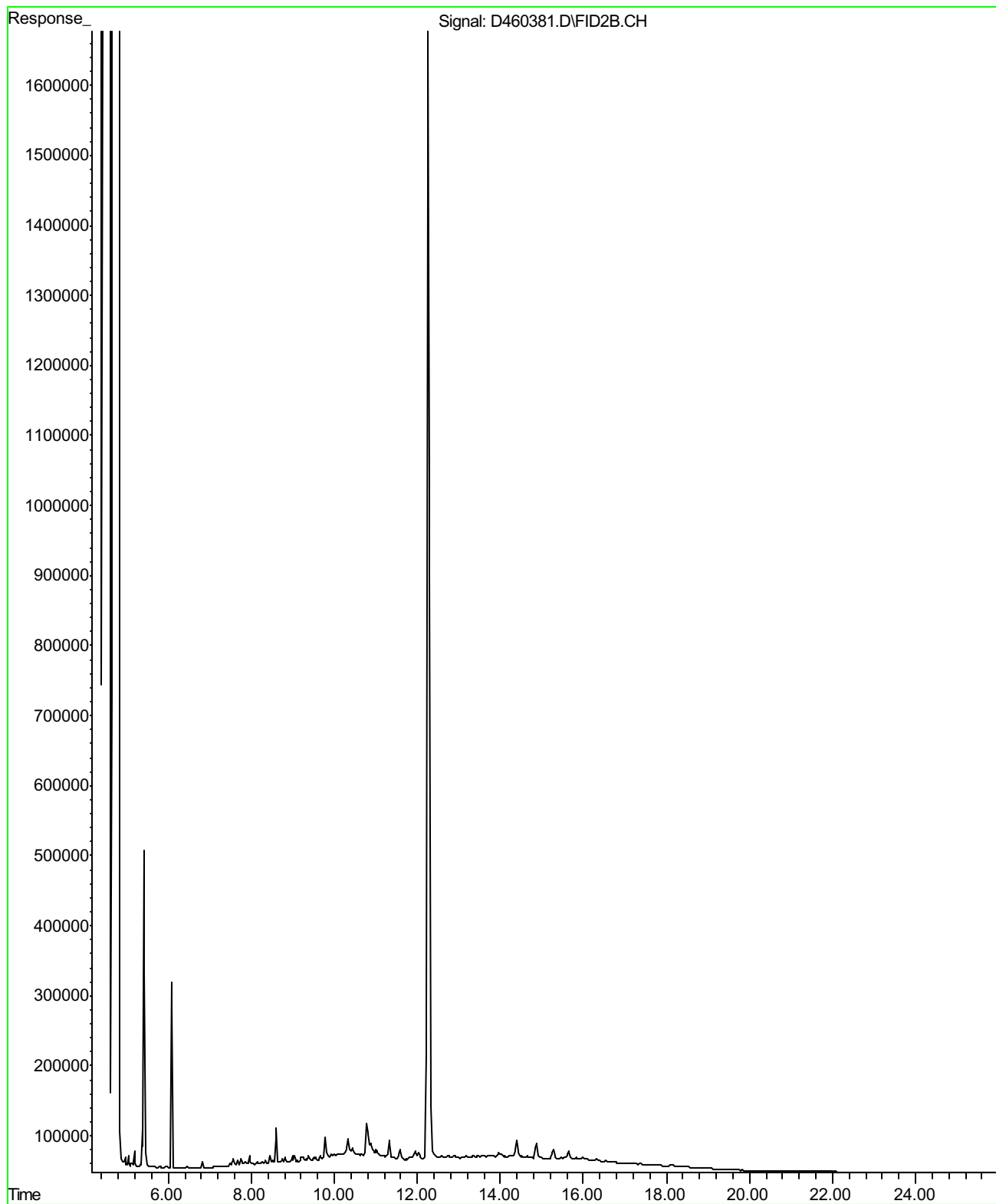




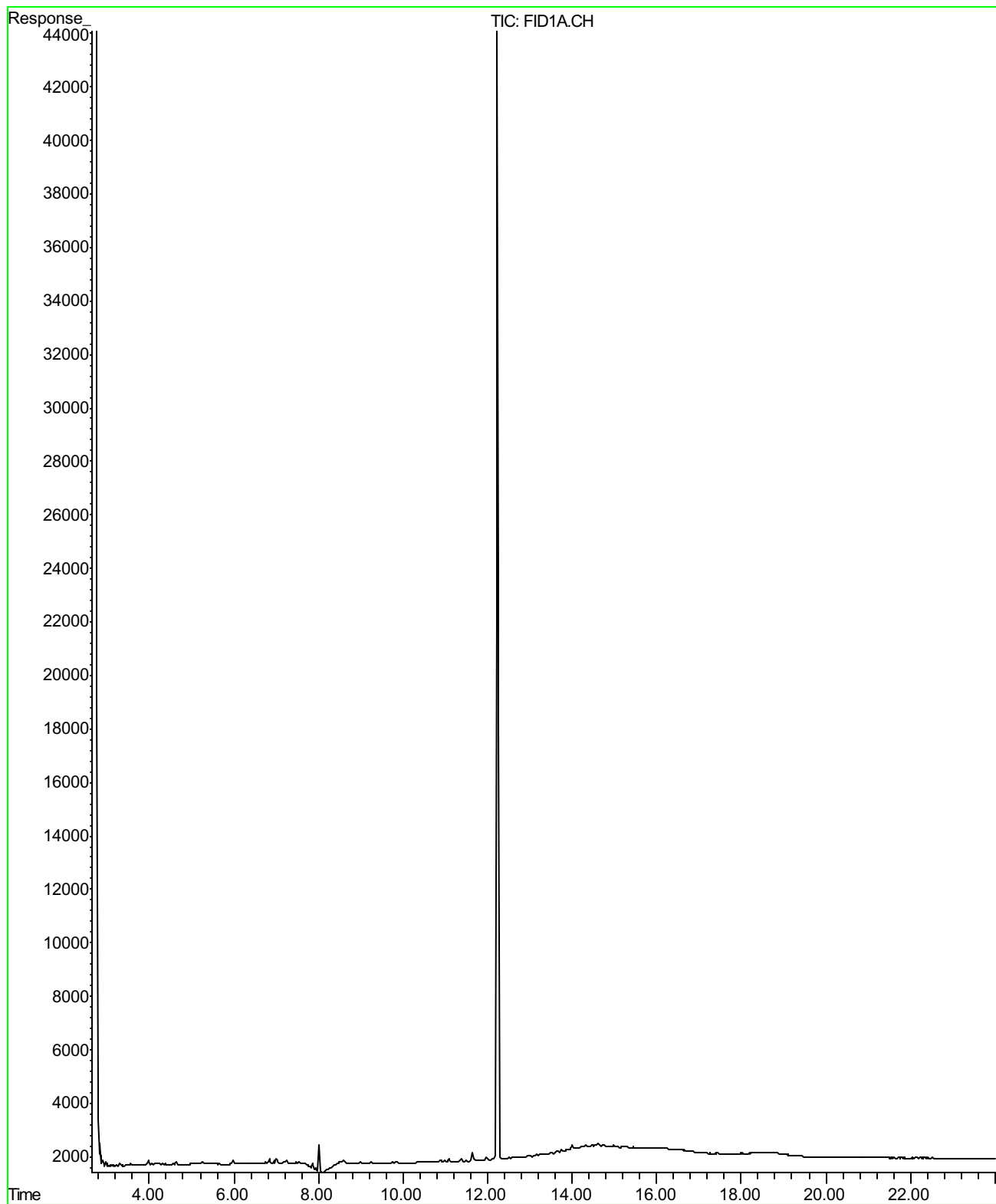
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Date Analyzed : 10/01/2008  
Data File : SK42078  
Analysis Method : EPA 8260B



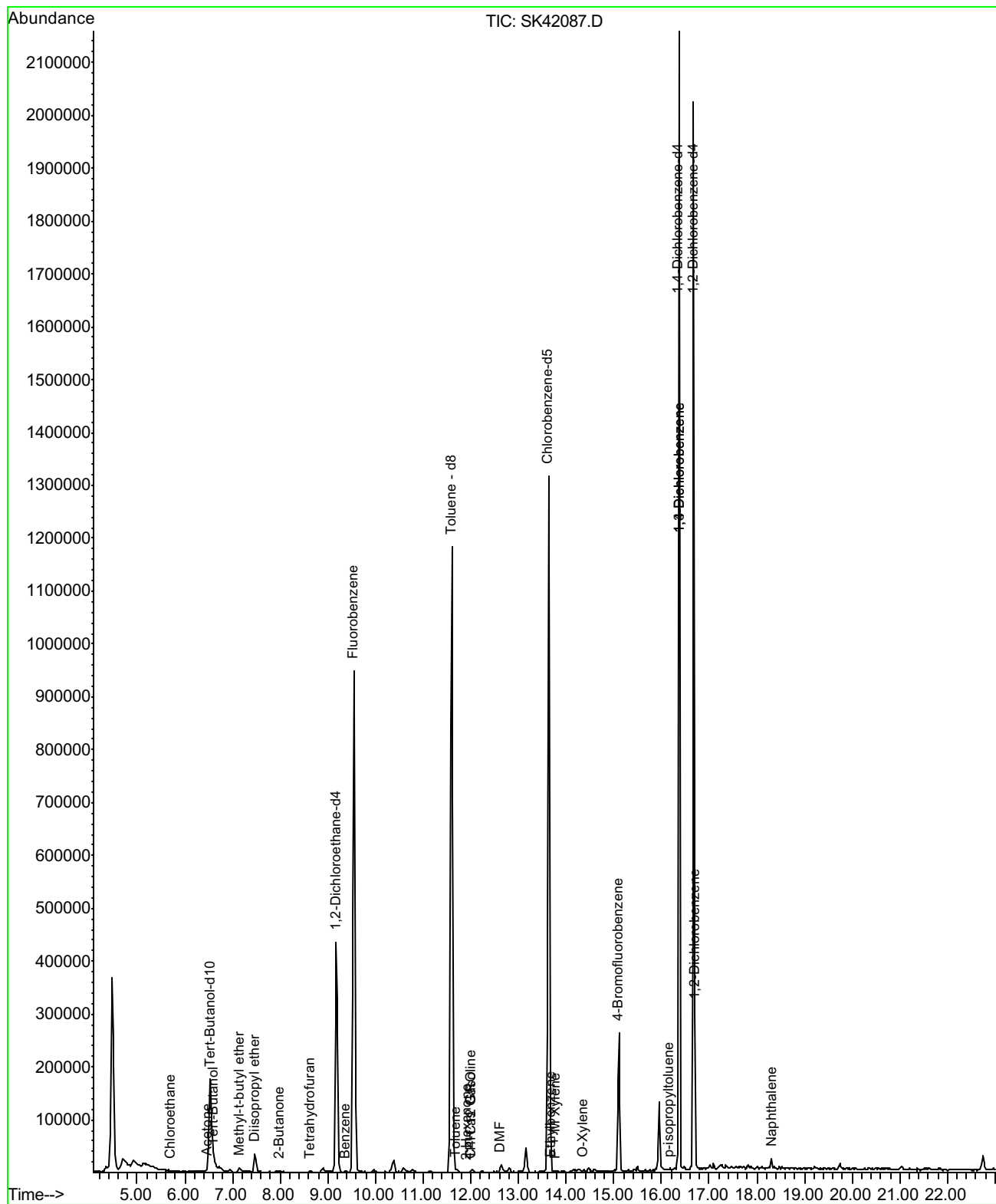
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Date Analyzed : 10/01/2008  
Data File : D460381  
Analysis Method : M EPA 8015



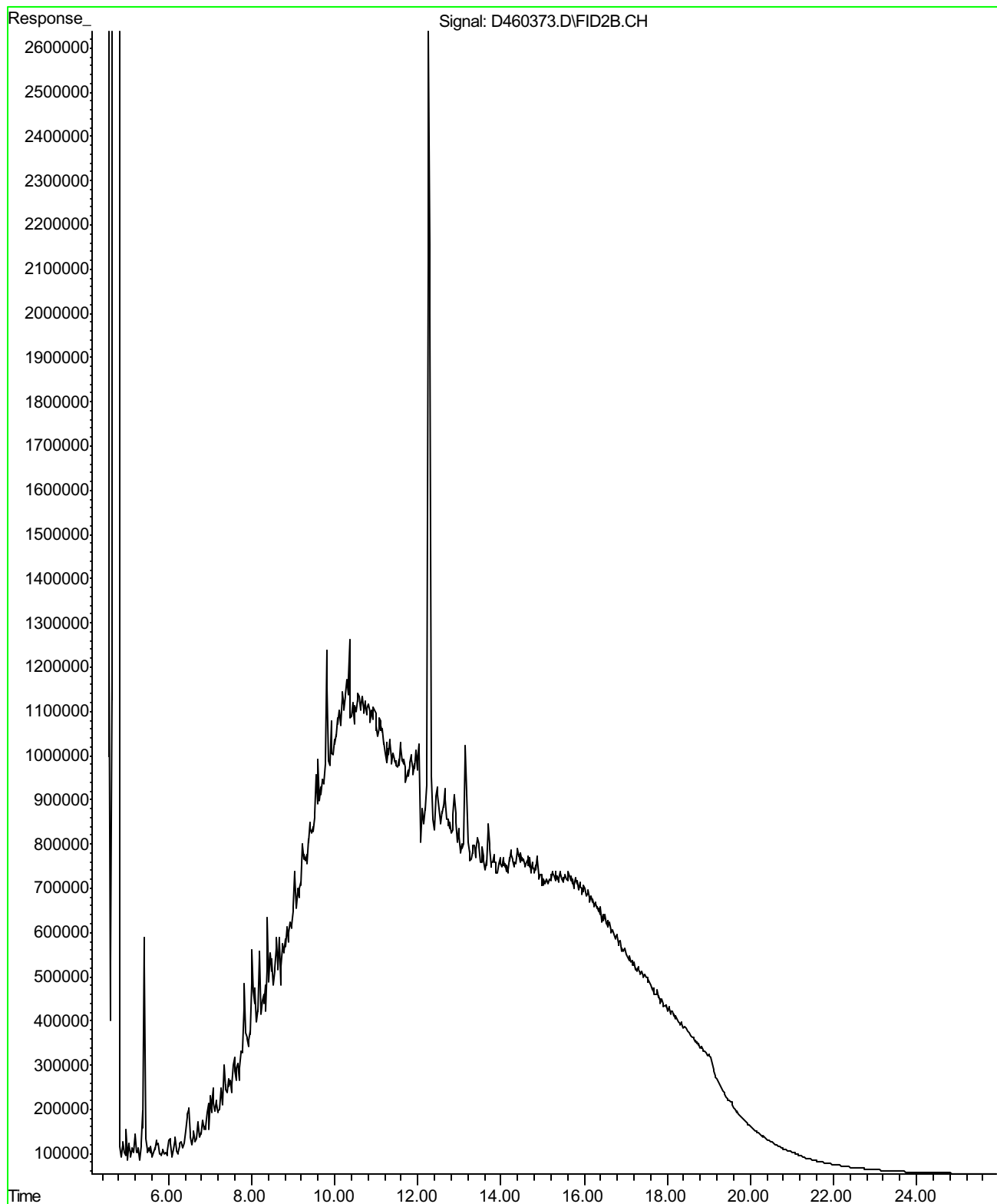
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Date Analyzed : 10/01/2008  
Data File : D283166  
Analysis Method : M EPA 8015



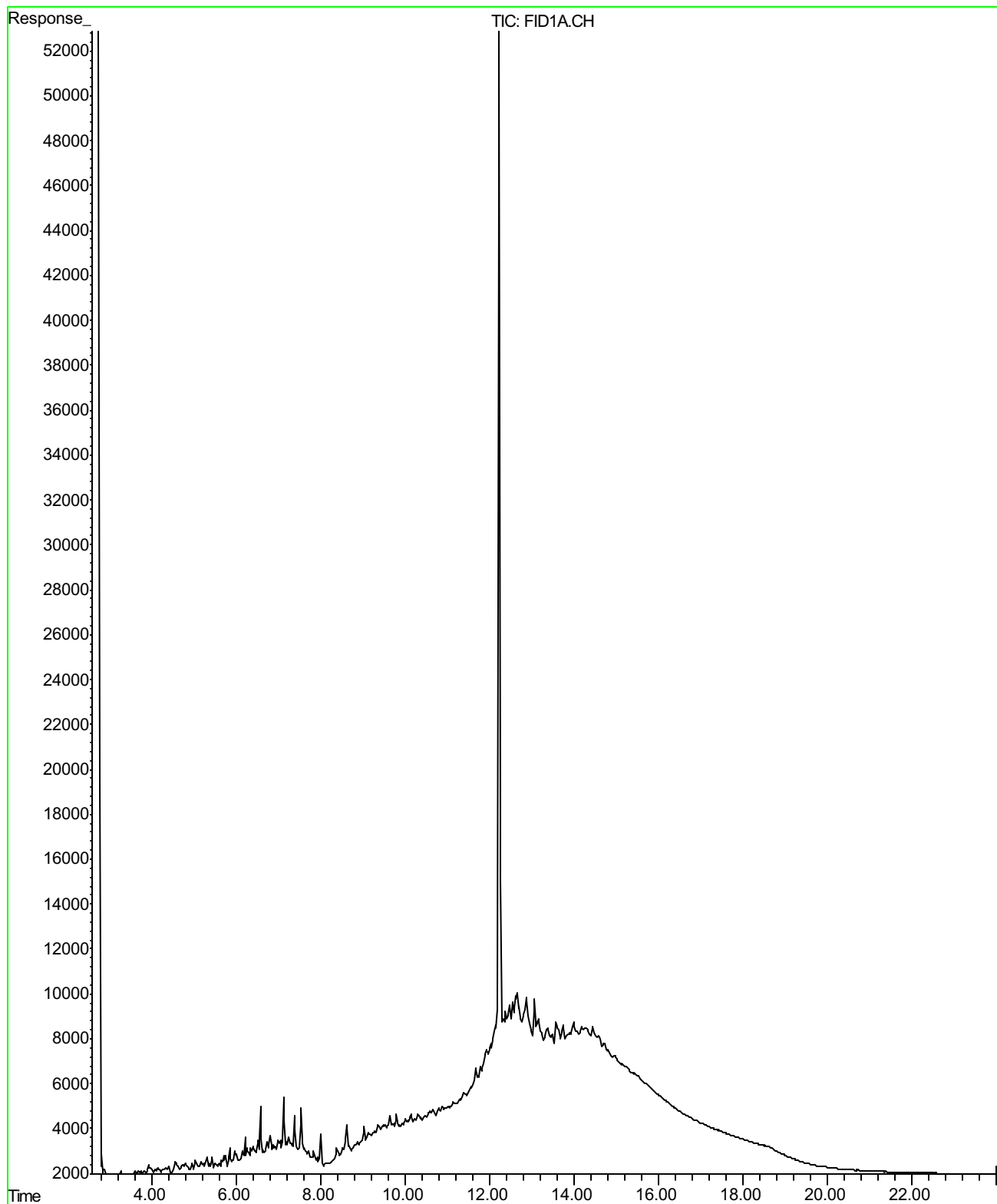
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Date Analyzed : 10/01/2008  
Data File : SK42087  
Analysis Method : EPA 8260B



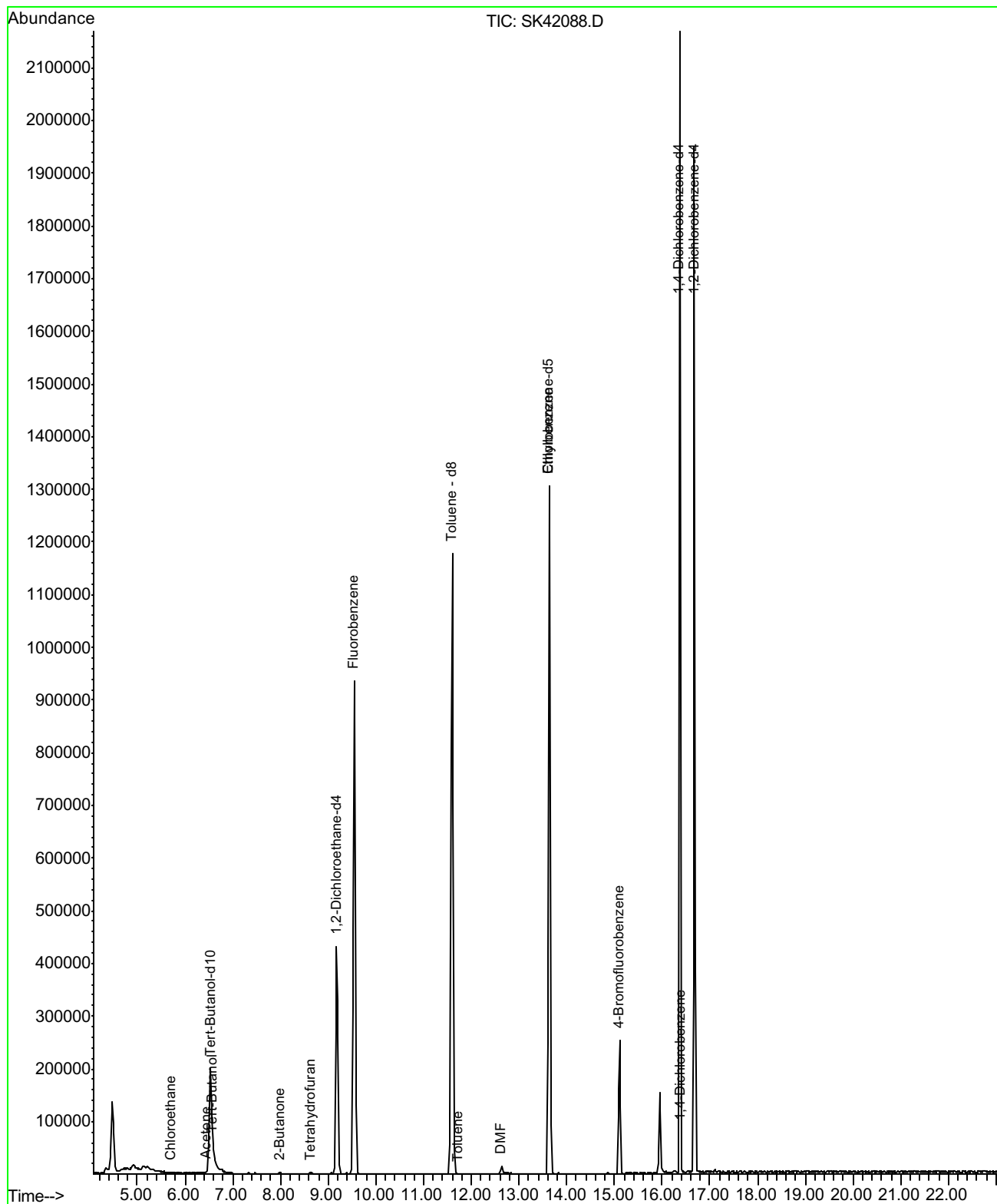
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Date Analyzed : 10/01/2008  
Data File : D460373  
Analysis Method : M EPA 8015



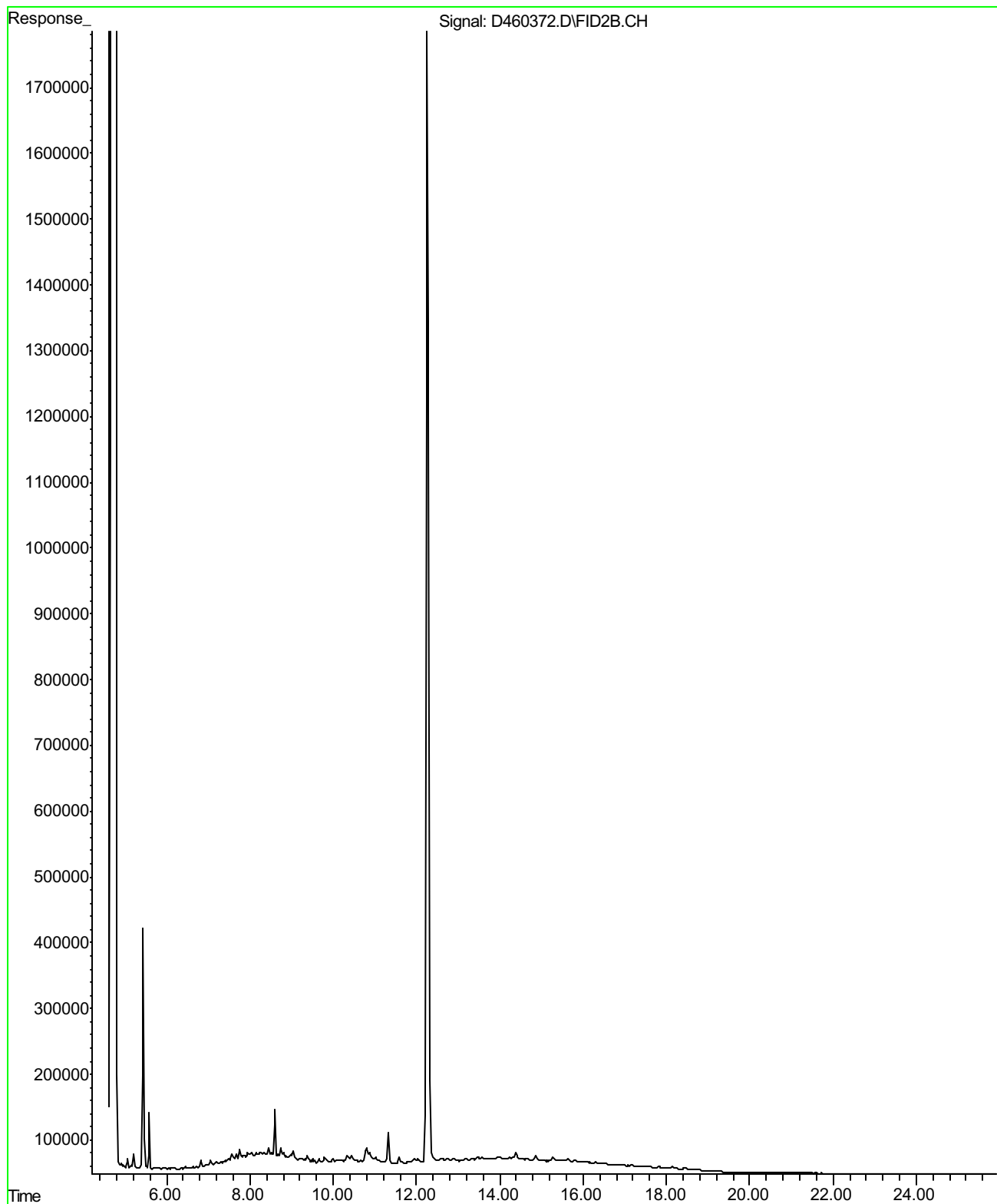
Sample ID : 65028-11 SI (MW-14)  
Date Analyzed : 10/01/2008  
Data File : D283167  
Analysis Method : M EPA 8015



Sample ID : 65028-12 (MW-15)  
Date Analyzed : 10/01/2008  
Data File : SK42088  
Analysis Method : EPA 8260B

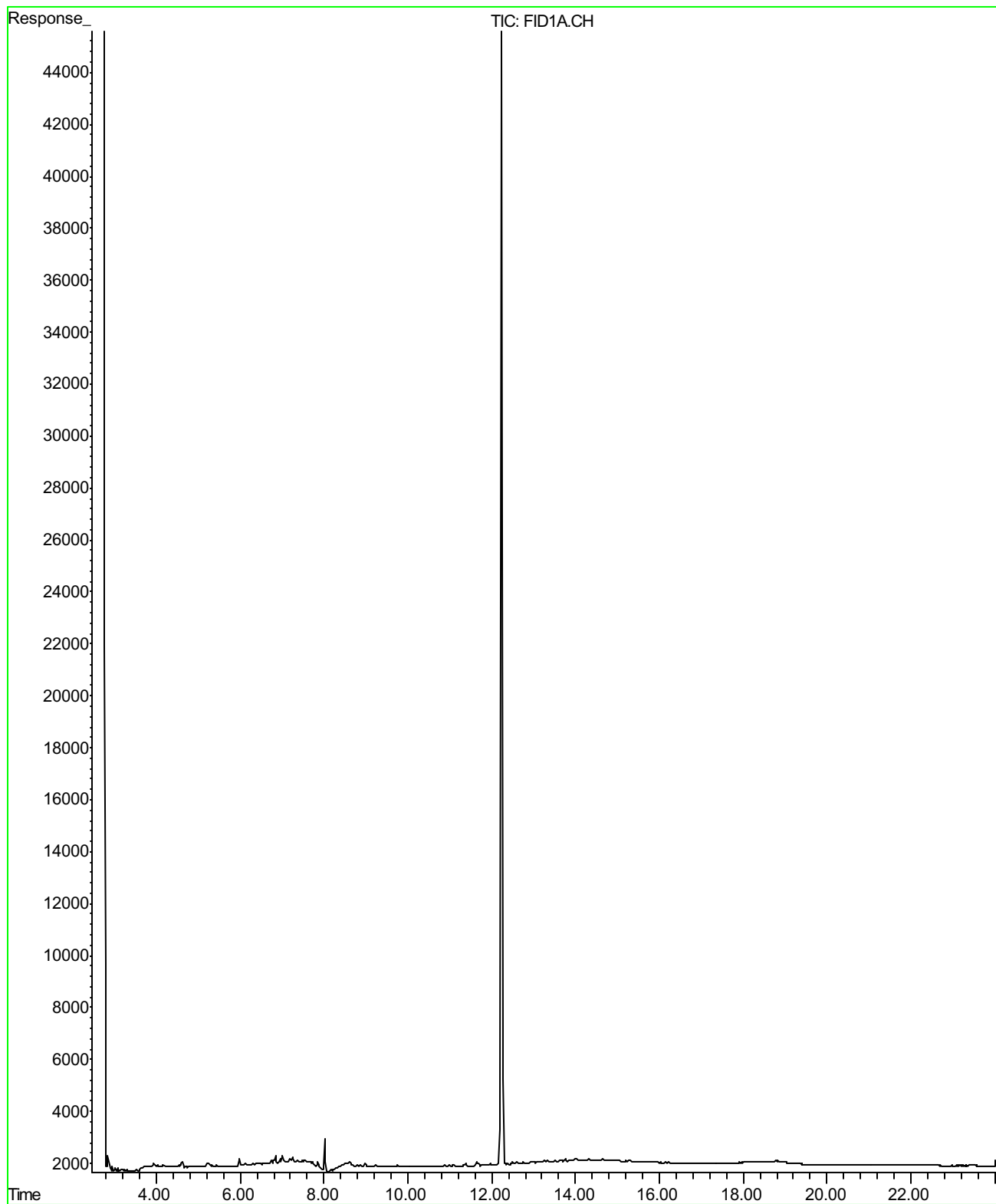


Sample ID : 65028-12 (MW-15)  
Date Analyzed : 10/01/2008  
Data File : D460372  
Analysis Method : M EPA 8015

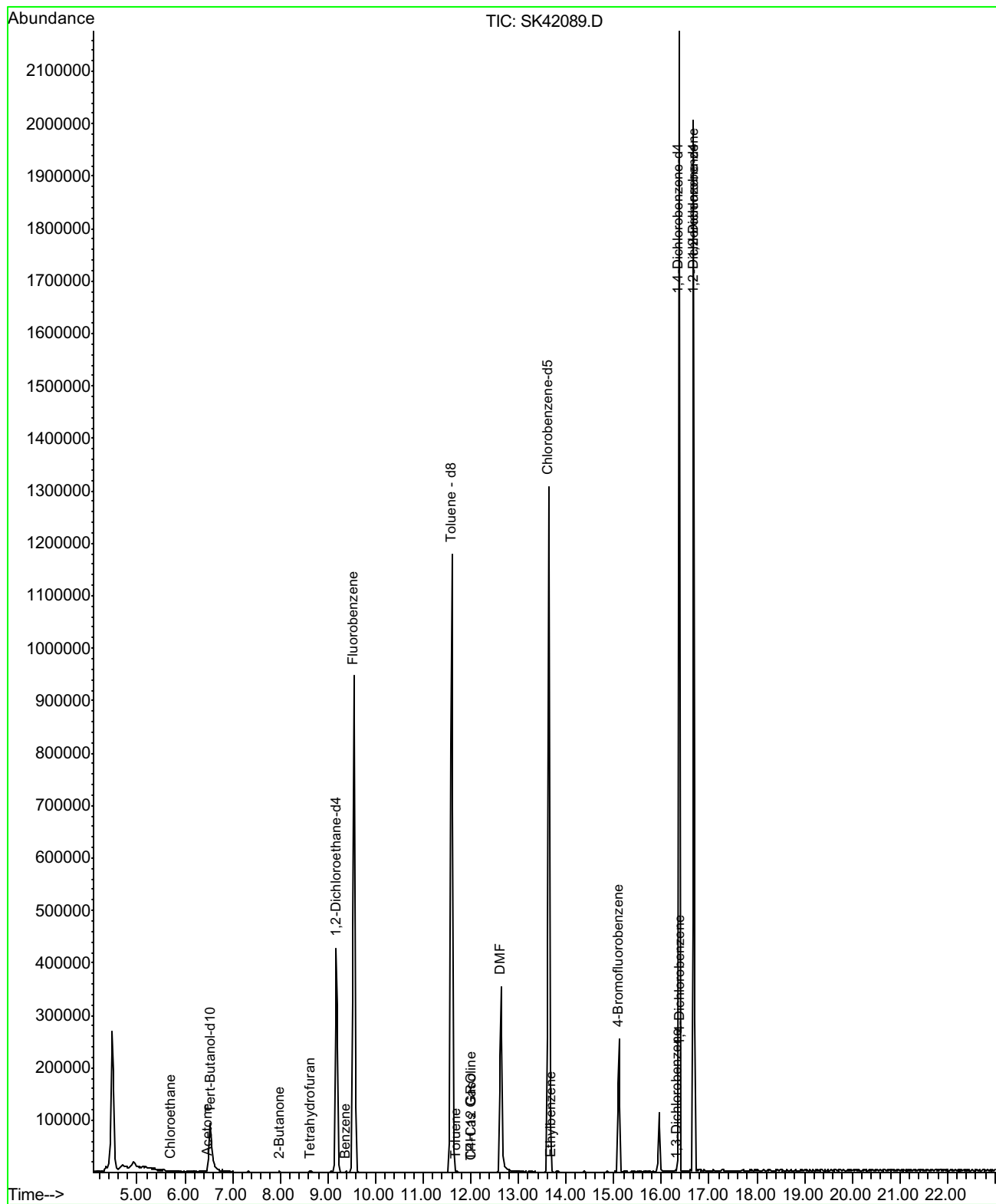




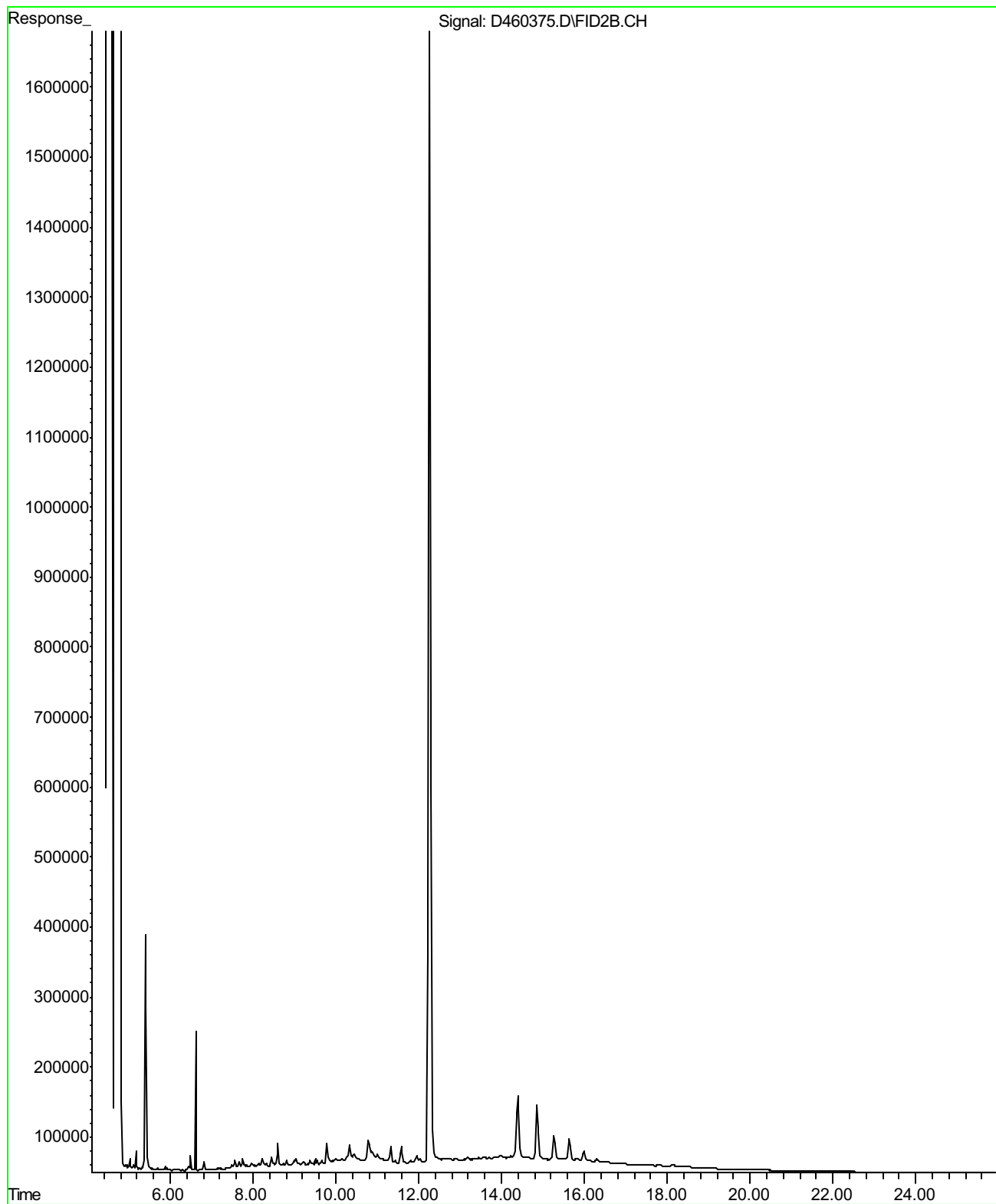
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Date Analyzed : 10/01/2008  
Data File : D283168  
Analysis Method : M EPA 8015



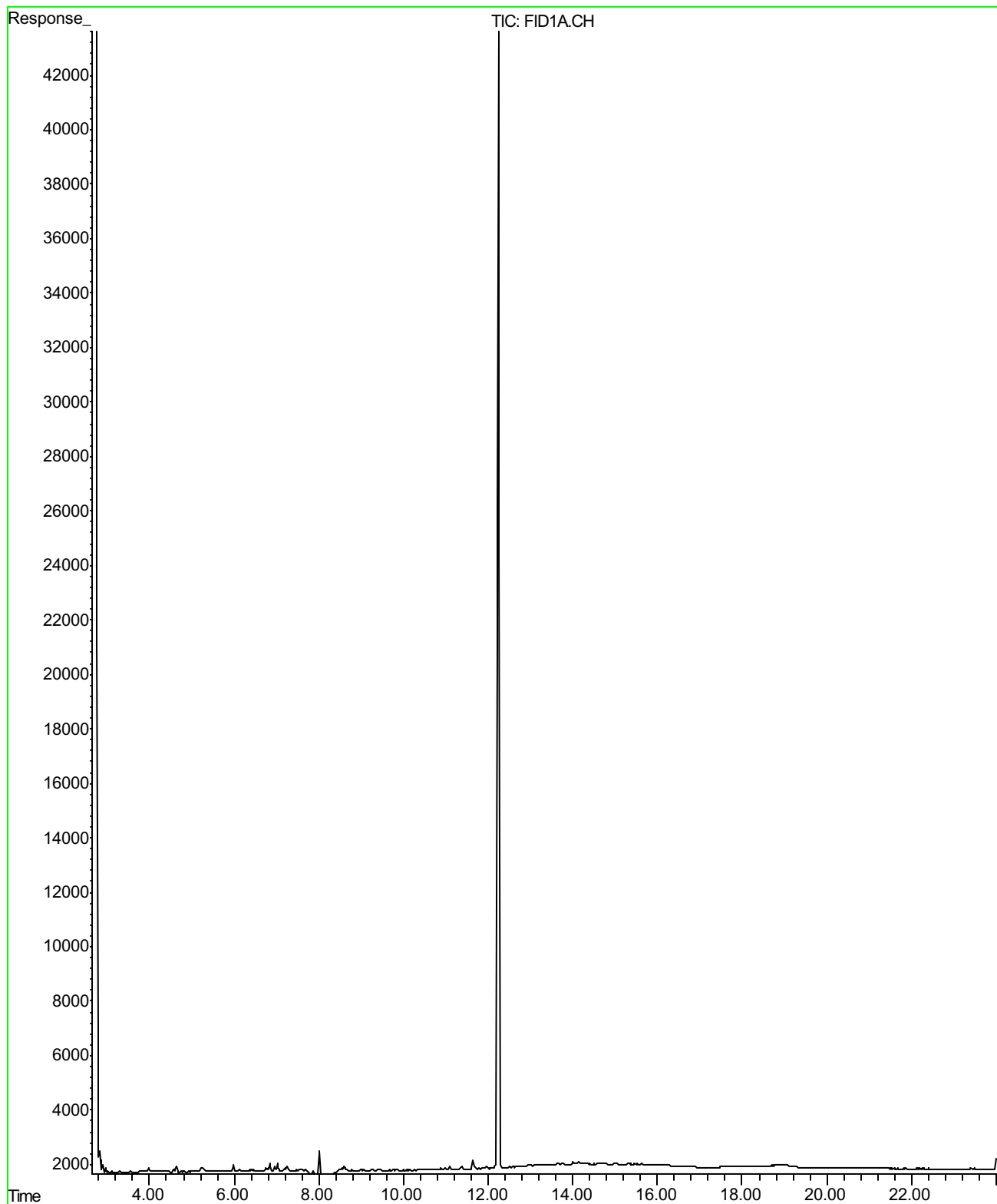
Sample ID : 65028-13 (NPORDMW-3)  
Date Analyzed : 10/01/2008  
Data File : SK42089  
Analysis Method : EPA 8260B



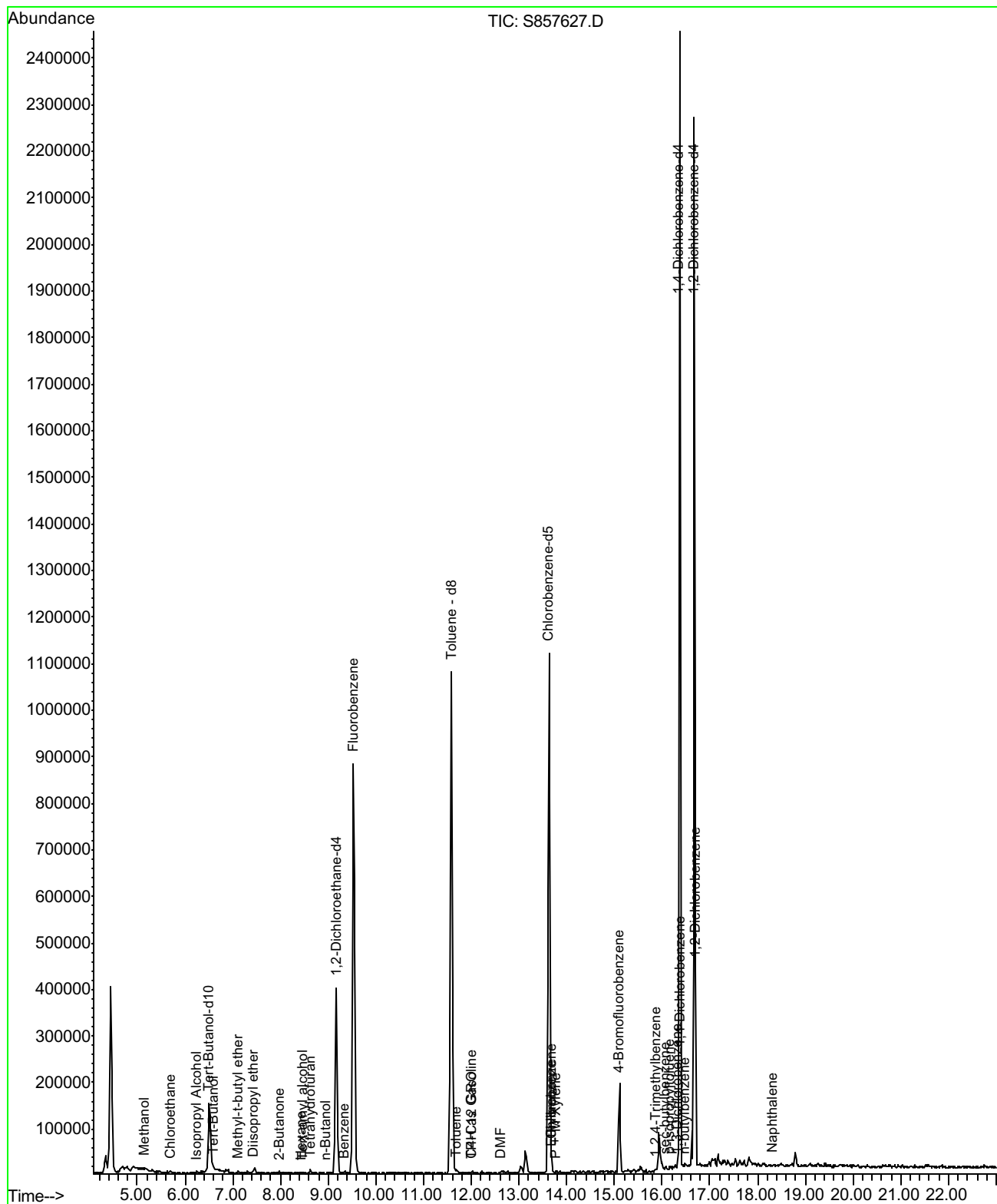
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Date Analyzed : 10/01/2008  
Data File : D460375  
Analysis Method : M EPA 8015



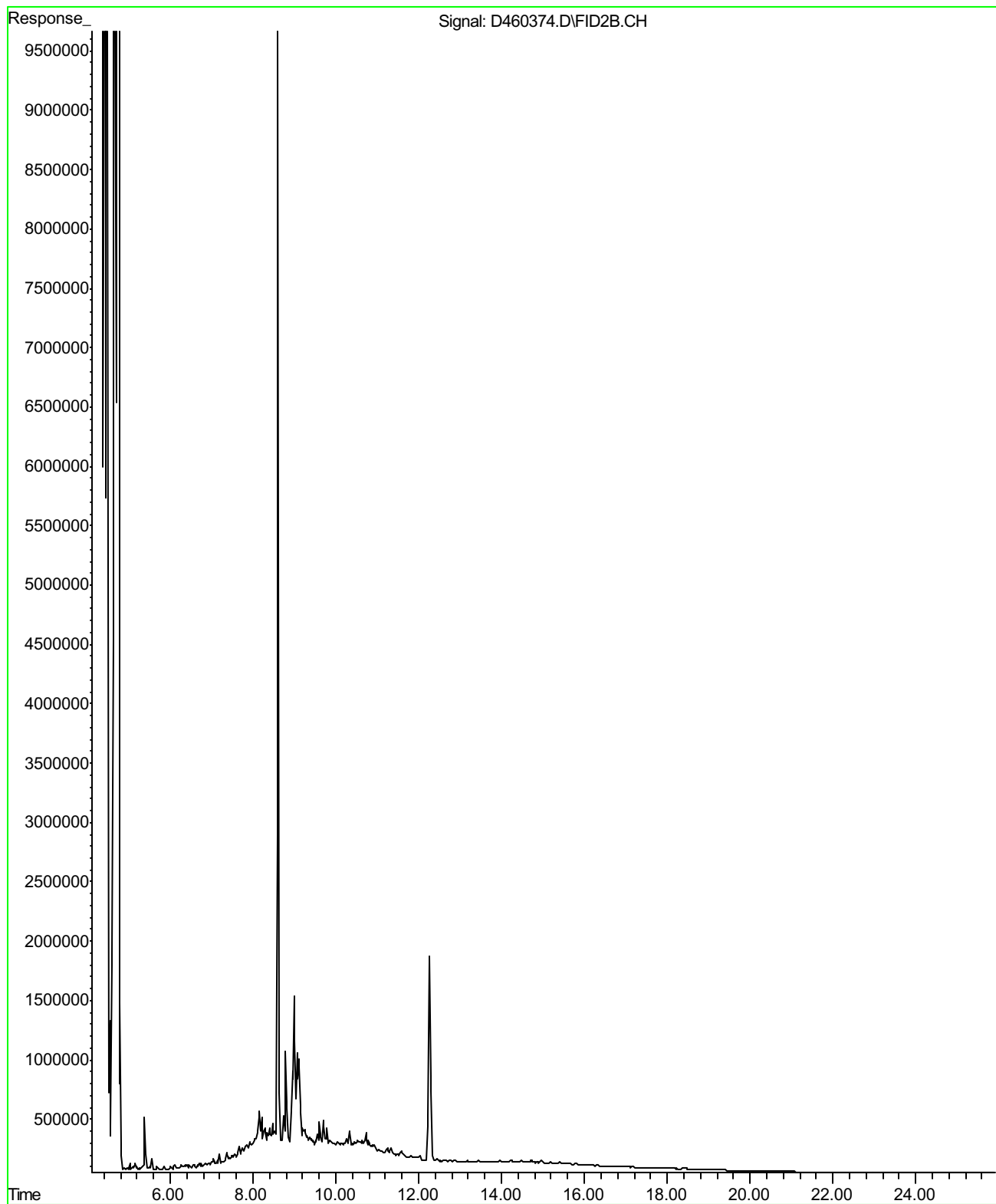
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Date Analyzed : 10/01/2008  
Data File : D283169  
Analysis Method : M EPA 8015



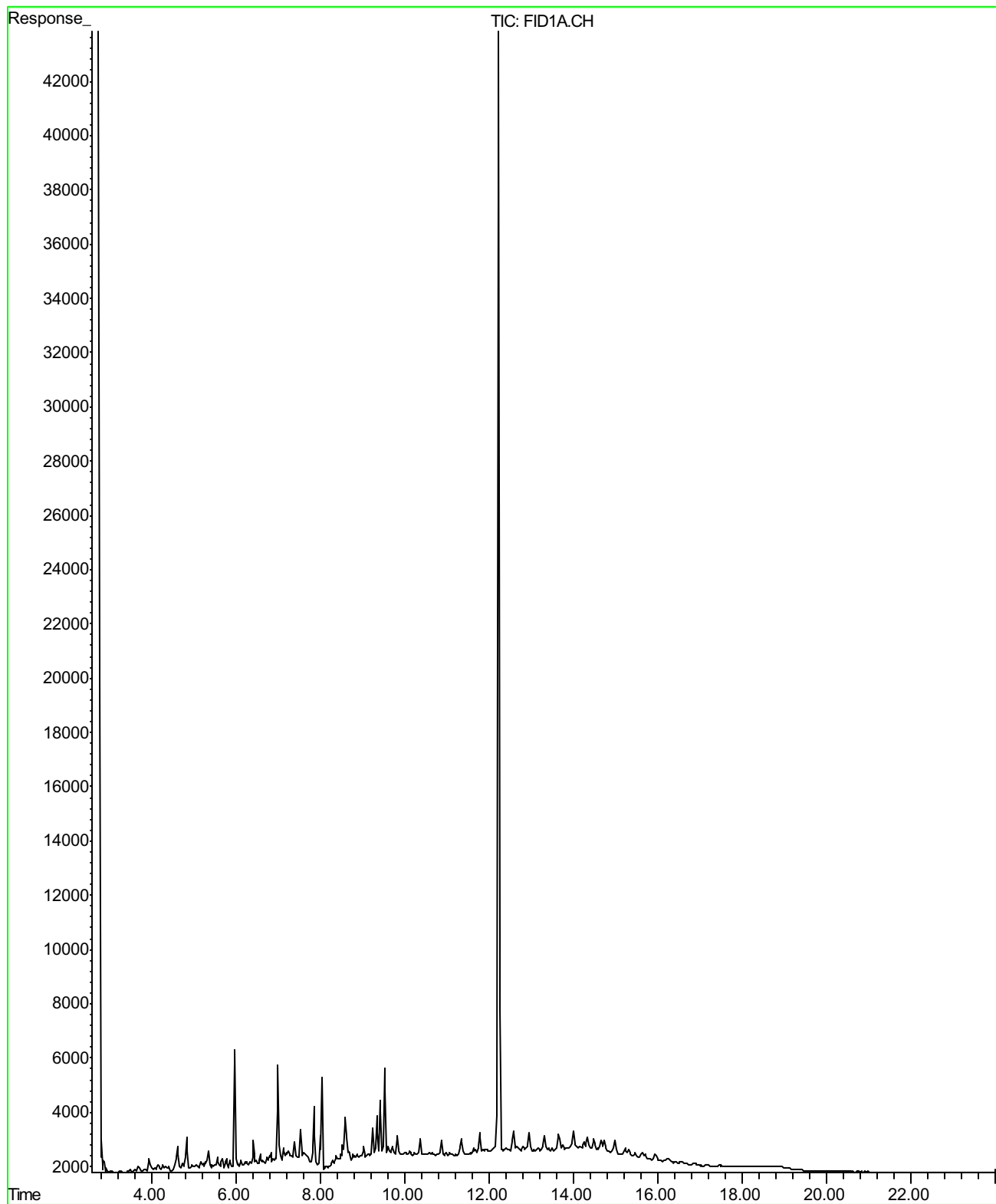
Sample ID : 65028-14 (NPORDMW-4)  
Date Analyzed : 10/02/2008  
Data File : S857627  
Analysis Method : EPA 8260B



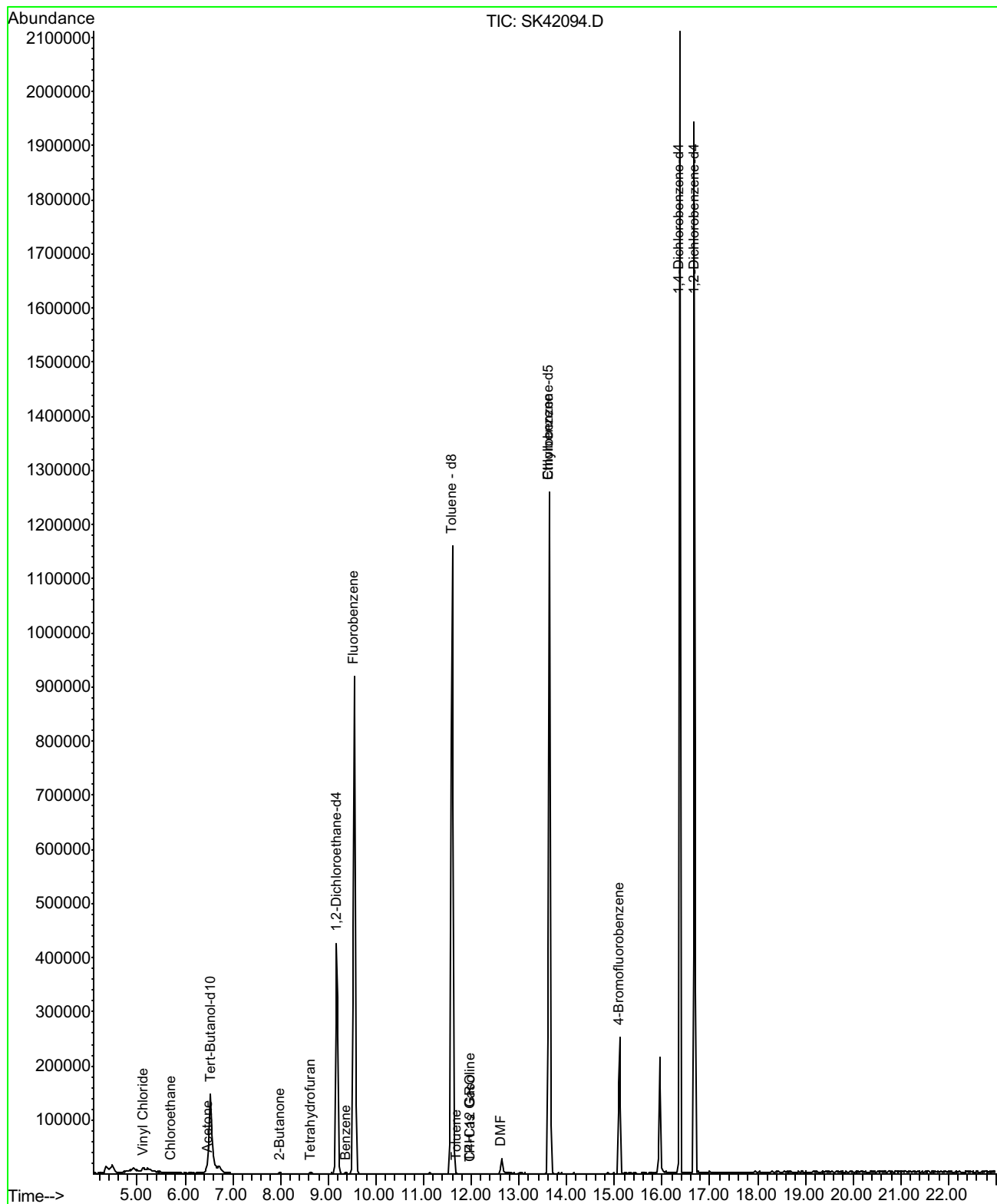
Sample ID : 65028-14 (NPORDMW-4)  
Date Analyzed : 10/01/2008  
Data File : D460374  
Analysis Method : M EPA 8015



Sample ID : 65028-14 SI (NPORDMW-4)  
Date Analyzed : 10/01/2008  
Data File : D283173  
Analysis Method : M EPA 8015

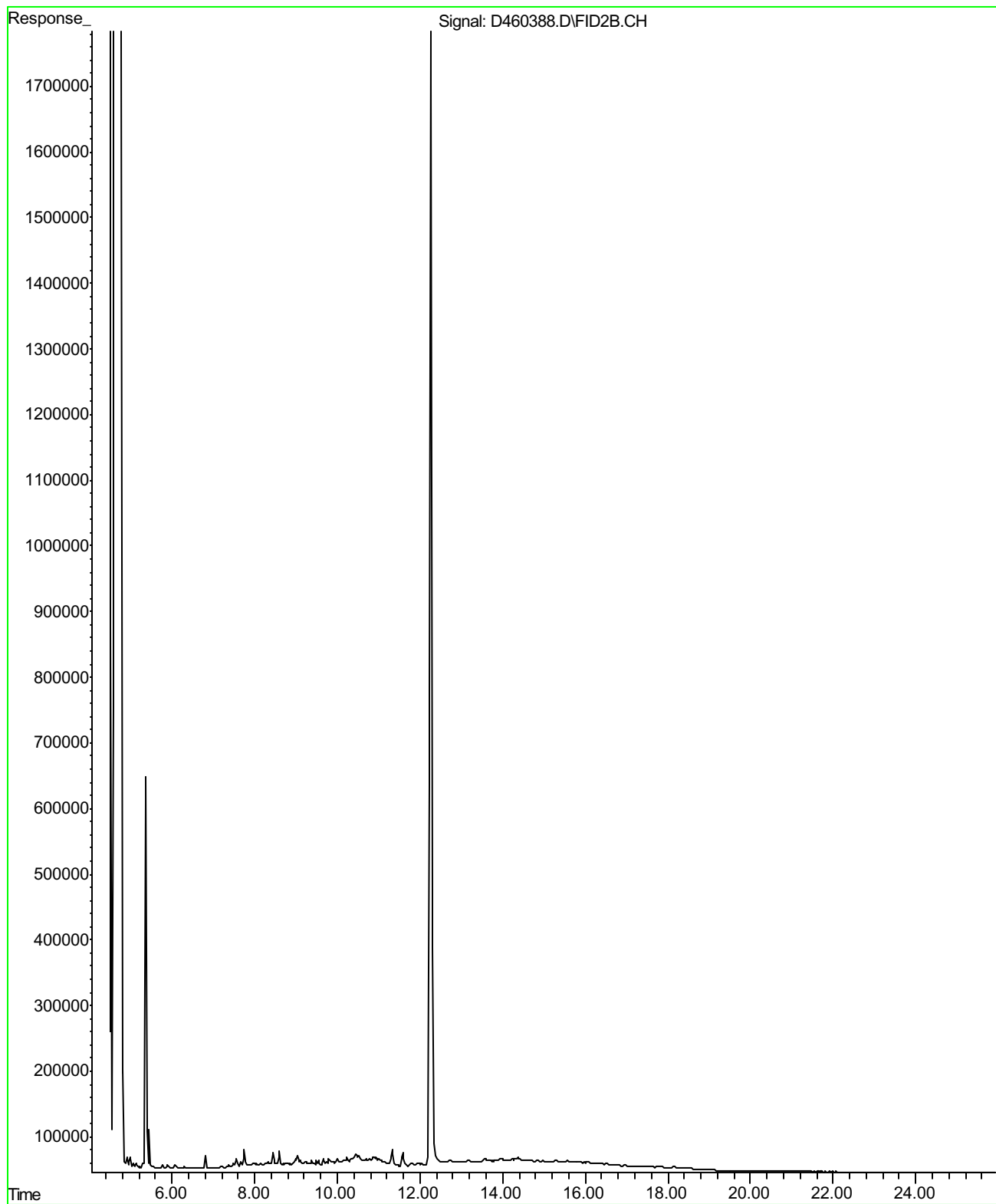


Sample ID : 65028-15 (QA)  
Date Analyzed : 10/01/2008  
Data File : SK42094  
Analysis Method : EPA 8260B

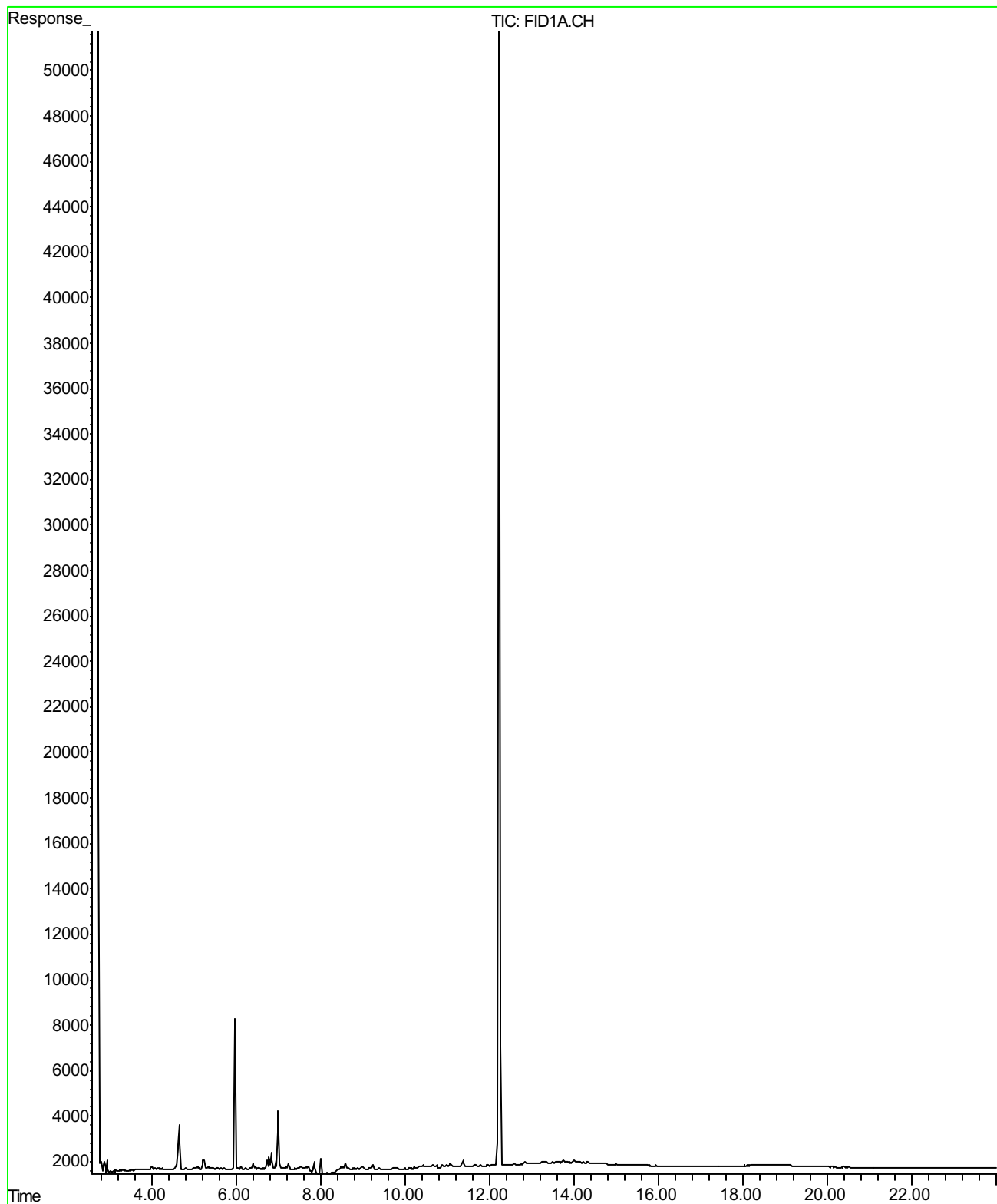




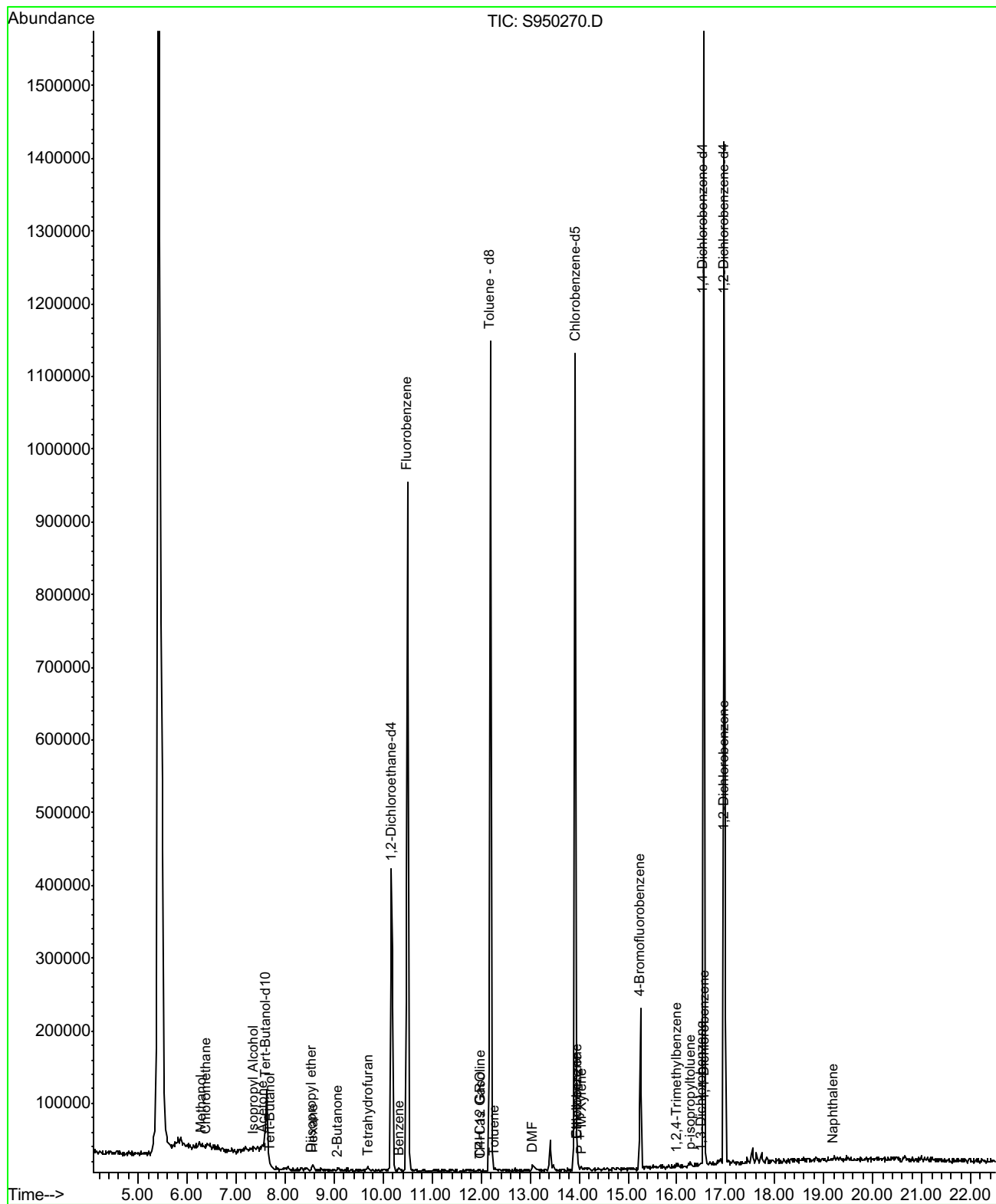
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Date Analyzed : 10/01/2008  
Data File : D460388  
Analysis Method : M EPA 8015



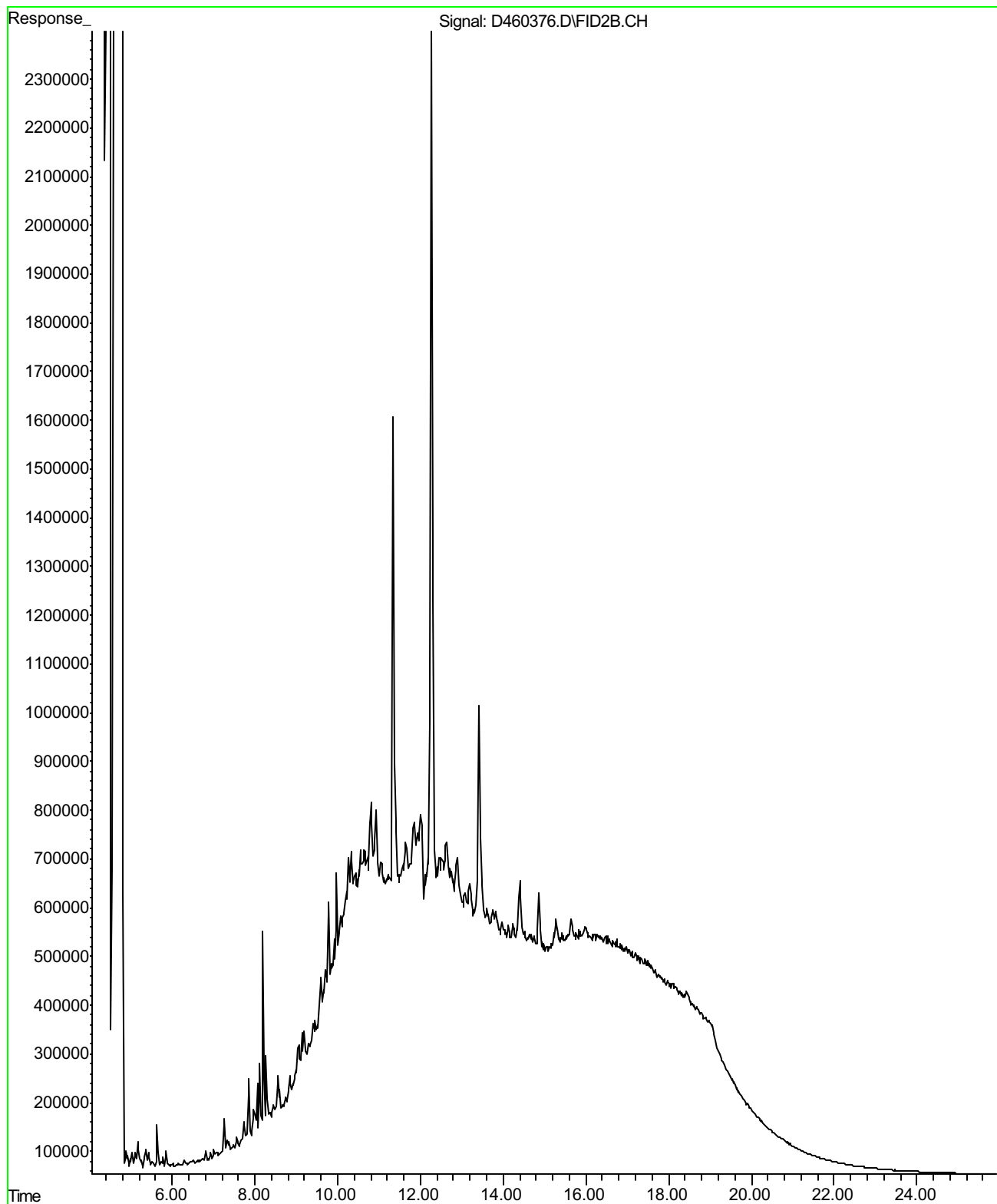
Sample ID : 65028-15 SI (QA)  
Date Analyzed : 10/02/2008  
Data File : D283236  
Analysis Method : M EPA 8015



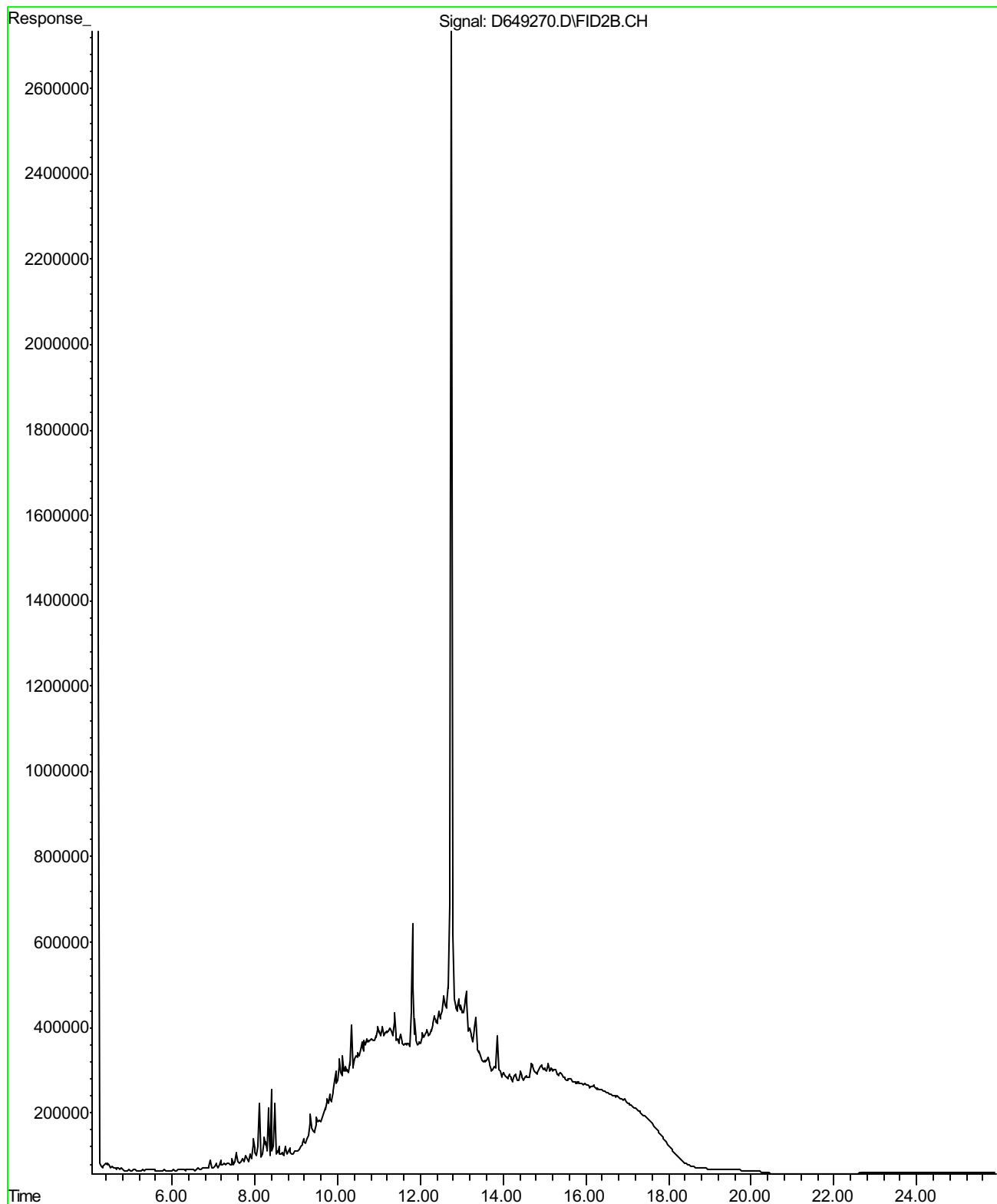
Sample ID : 65028-16 (MW-5)  
Date Analyzed : 09/29/2008  
Data File : S950270  
Analysis Method : EPA 8260B



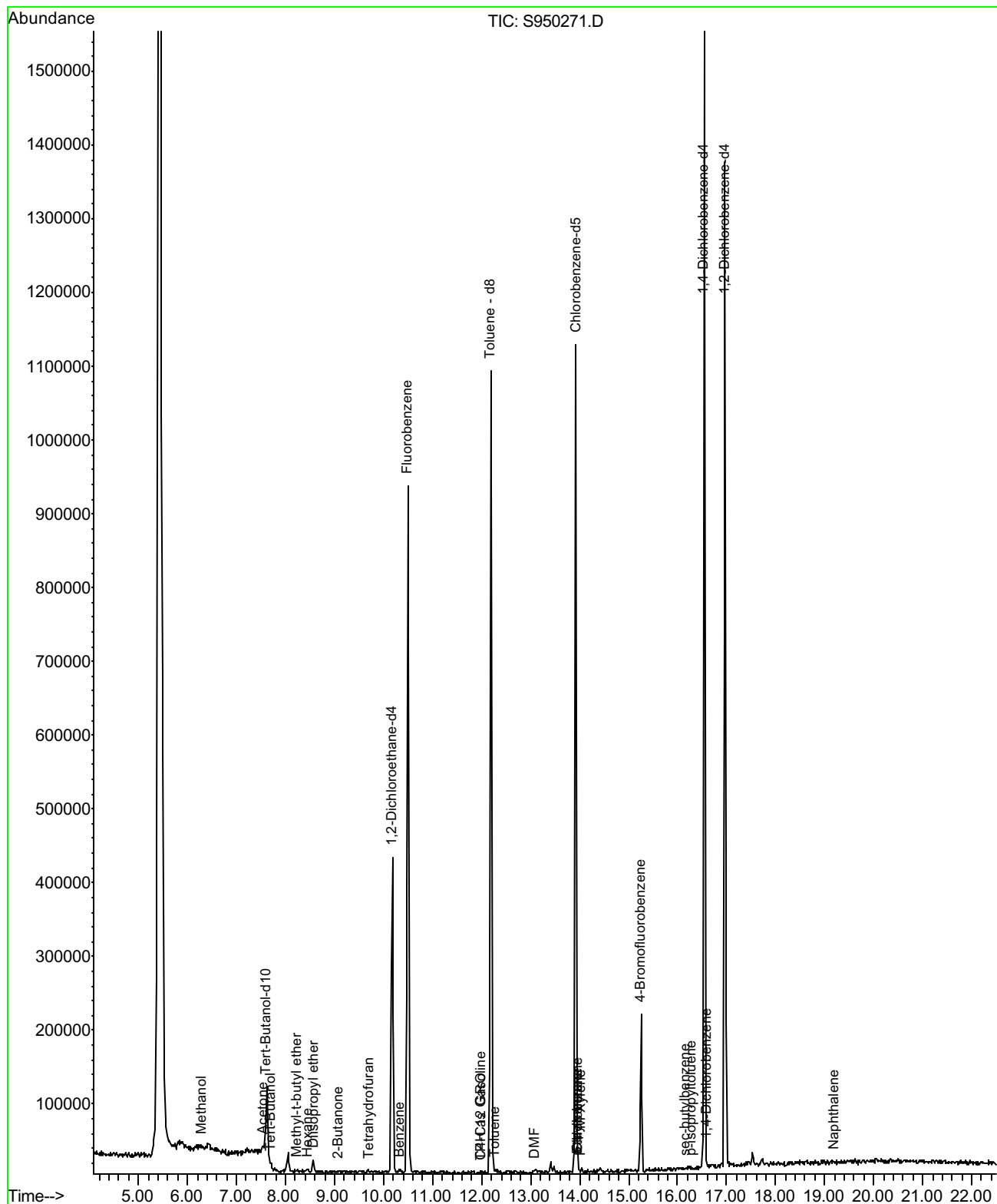
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Date Analyzed : 10/01/2008  
Data File : D460376  
Analysis Method : M EPA 8015



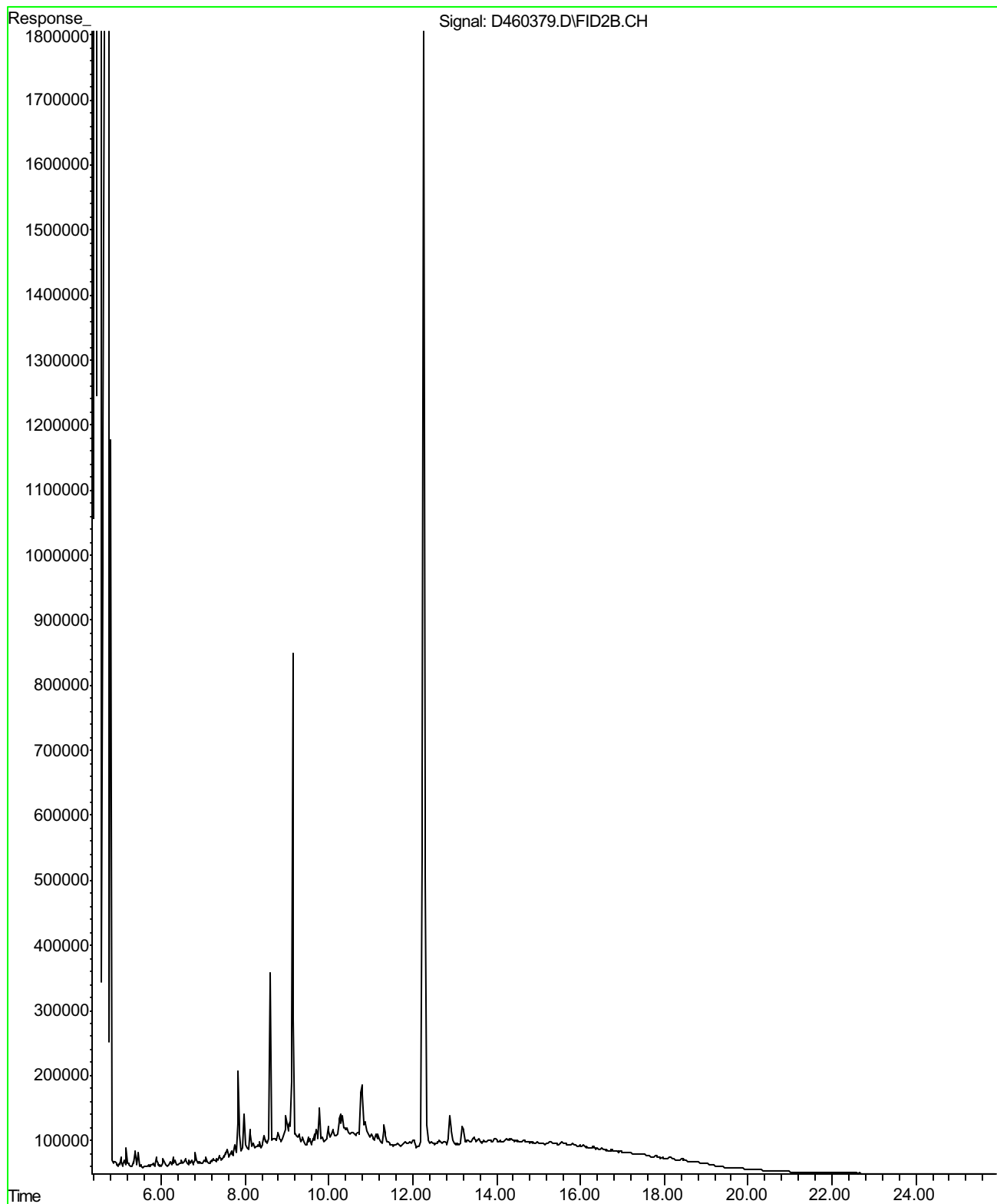
Sample ID : 65028-16 SI (MW-5)  
Date Analyzed : 10/01/2008  
Data File : D649270  
Analysis Method : M EPA 8015



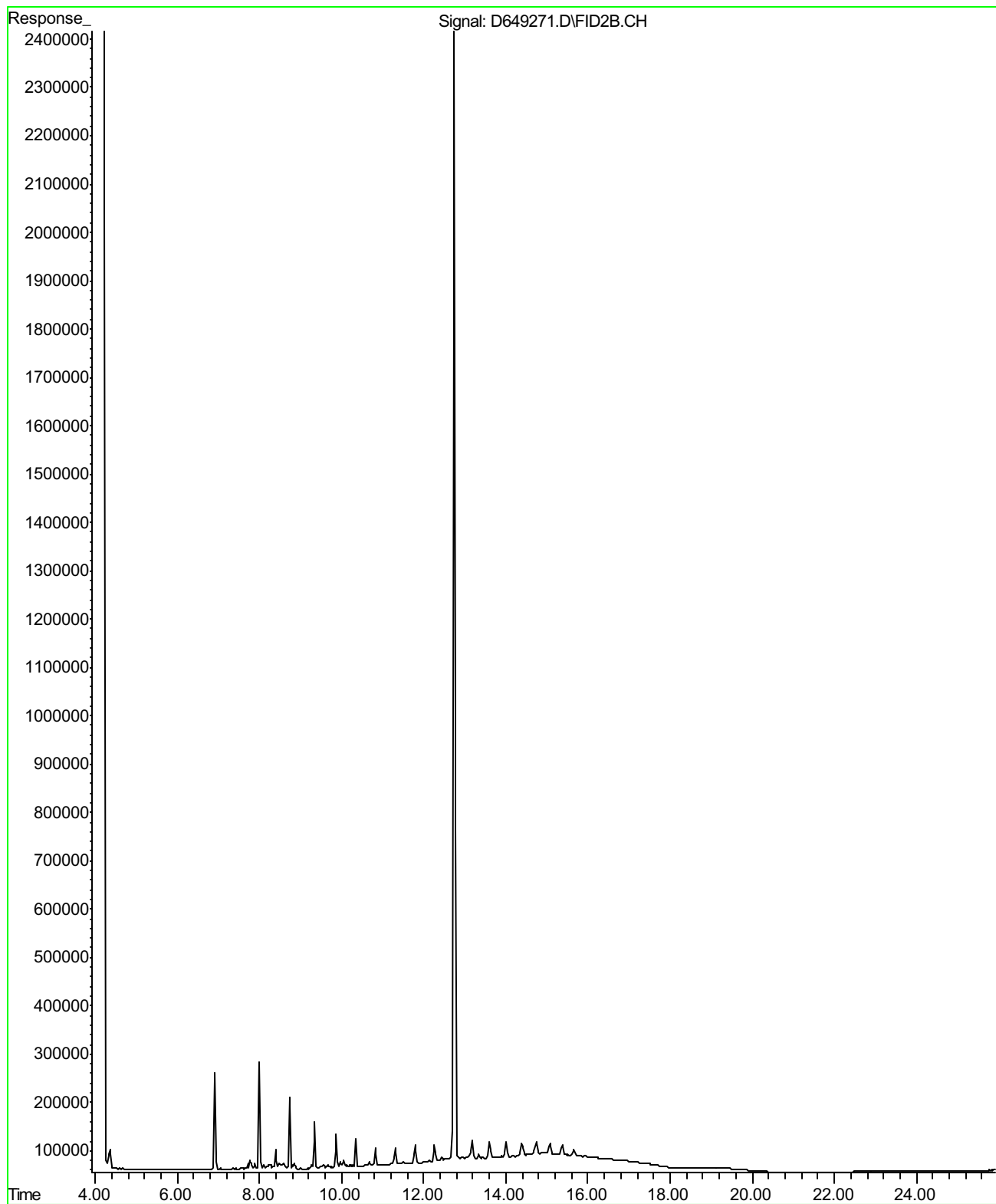
Sample ID : 65028-17 (MW-8)  
Date Analyzed : 09/29/2008  
Data File : S950271  
Analysis Method : EPA 8260B



Sample ID : 65028-17 (MW-8)  
Date Analyzed : 10/01/2008  
Data File : D460379  
Analysis Method : M EPA 8015

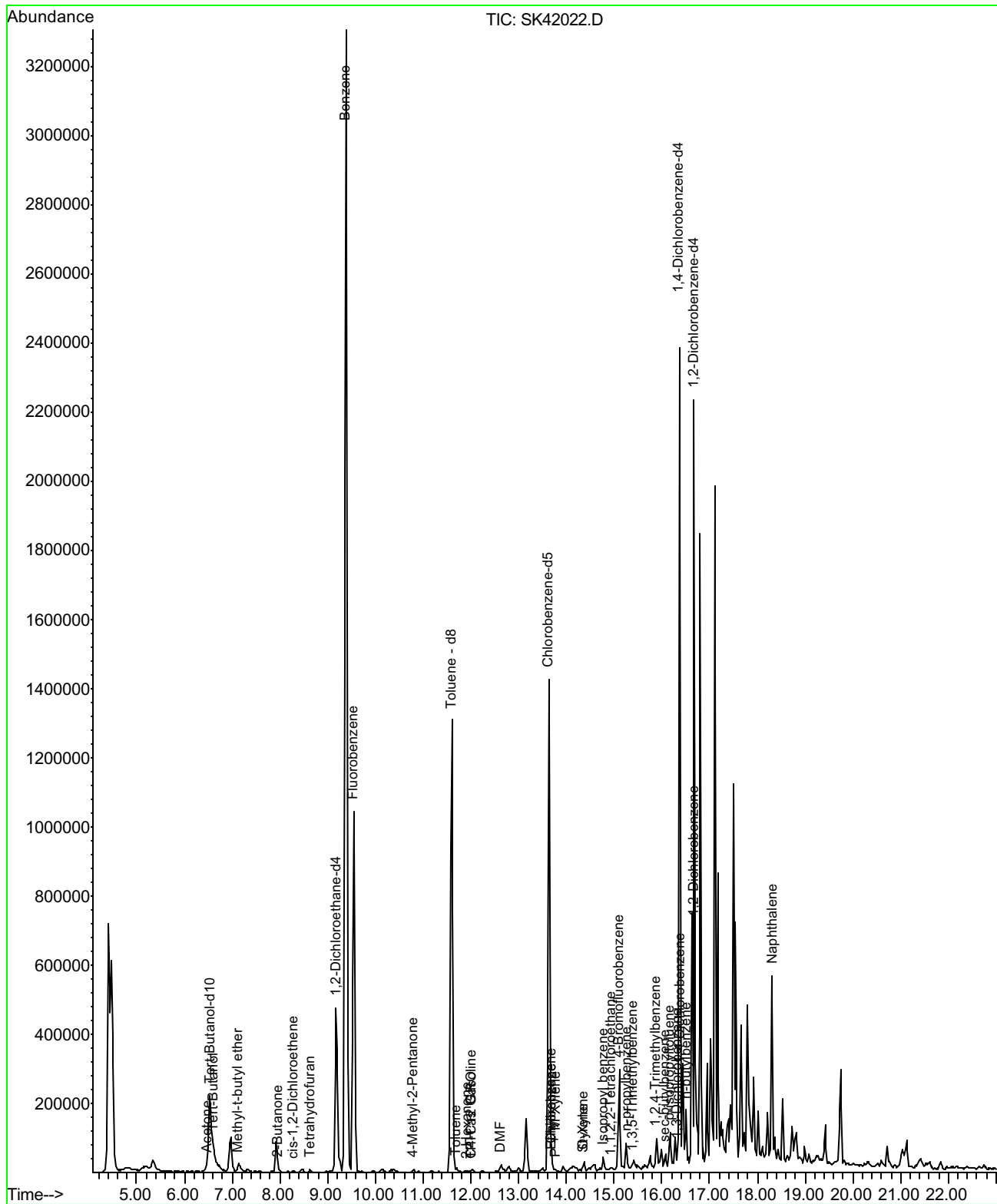


Sample ID : 65028-17 SI (MW-8)  
Date Analyzed : 10/01/2008  
Data File : D649271  
Analysis Method : M EPA 8015

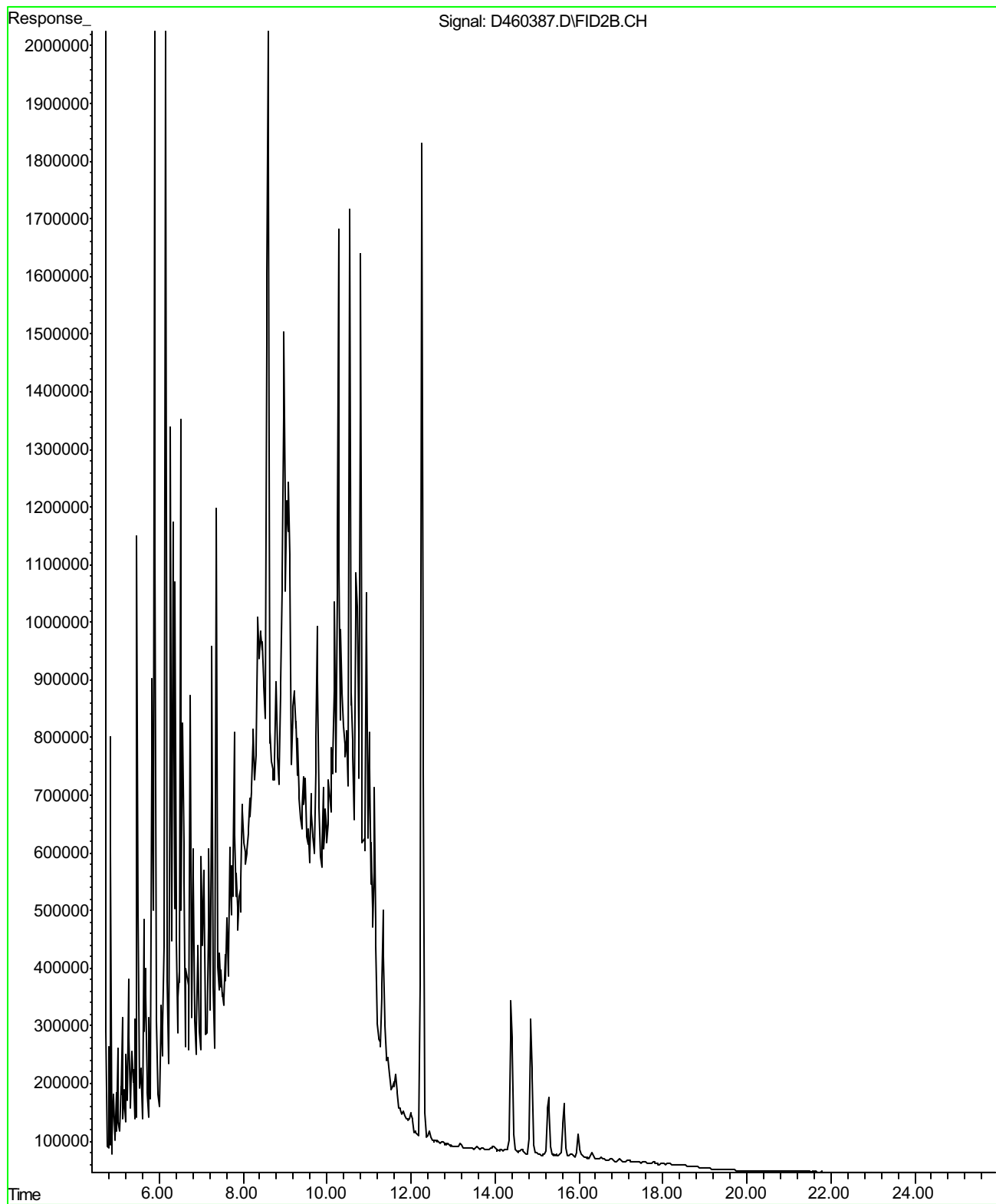




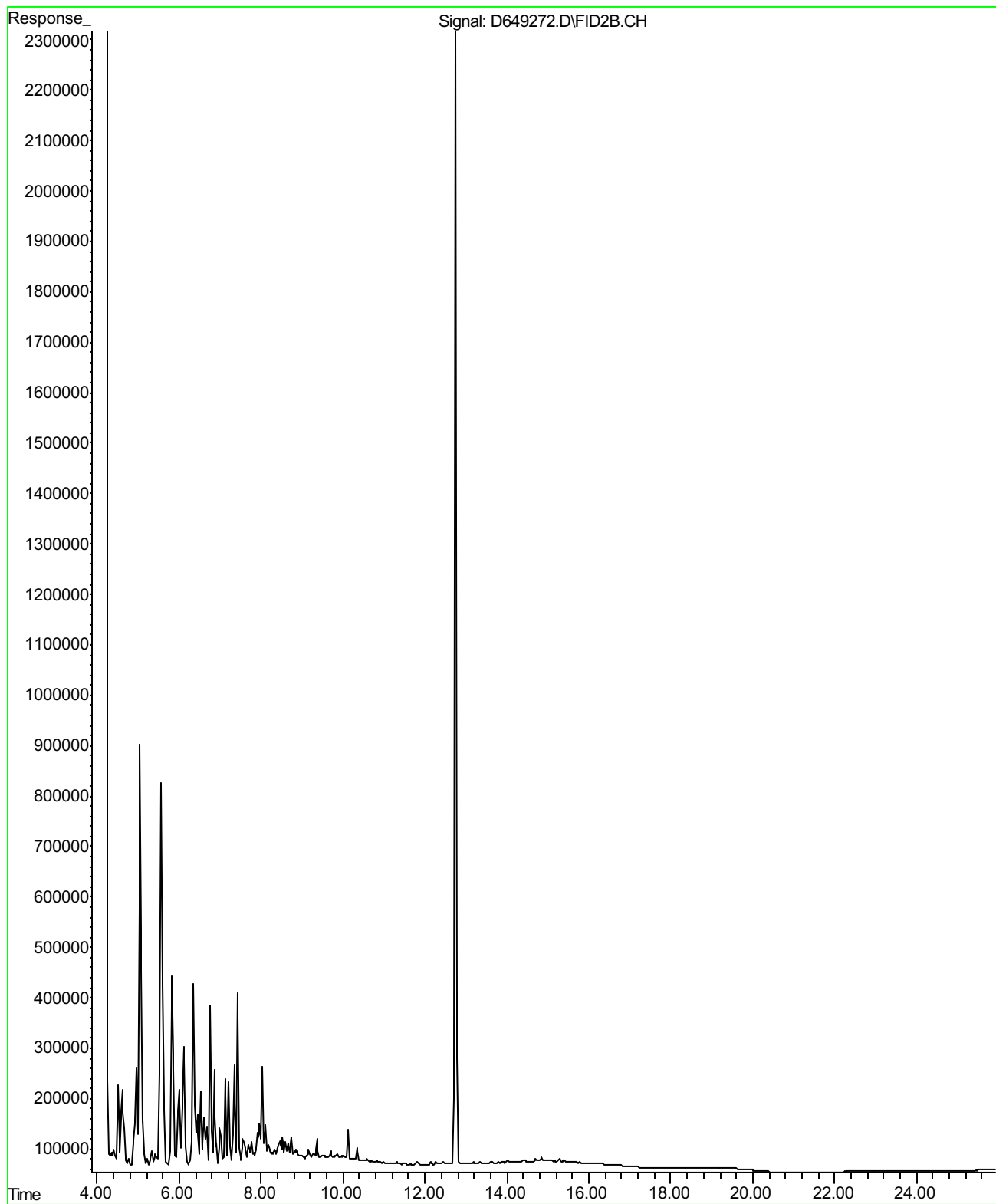
Sample ID : 65028-18 (MW-13)  
Date Analyzed : 09/29/2008  
Data File : SK42022  
Analysis Method : EPA 8260B



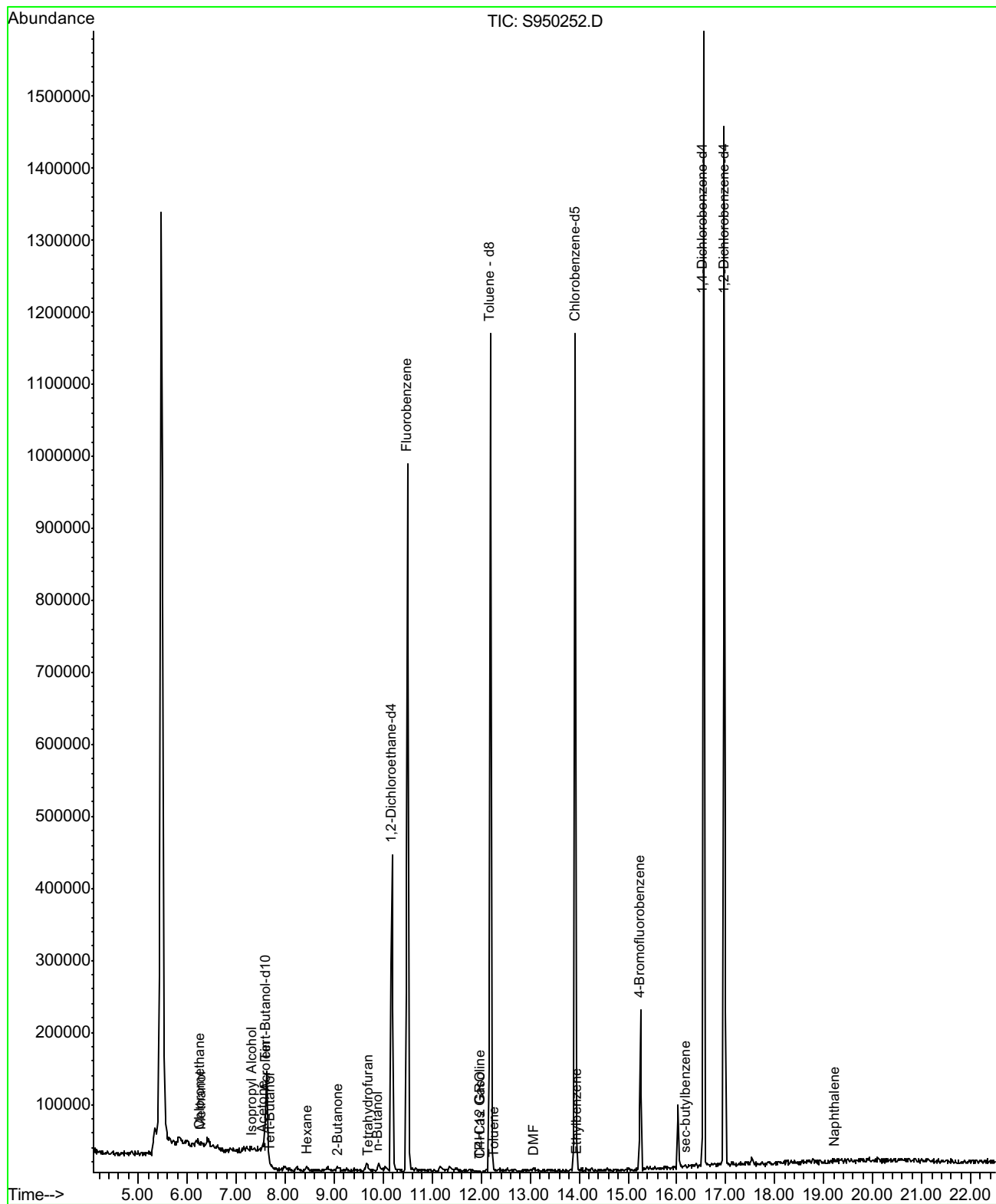
Sample ID : 65028-18 (MW-13)  
Date Analyzed : 10/01/2008  
Data File : D460387  
Analysis Method : M EPA 8015



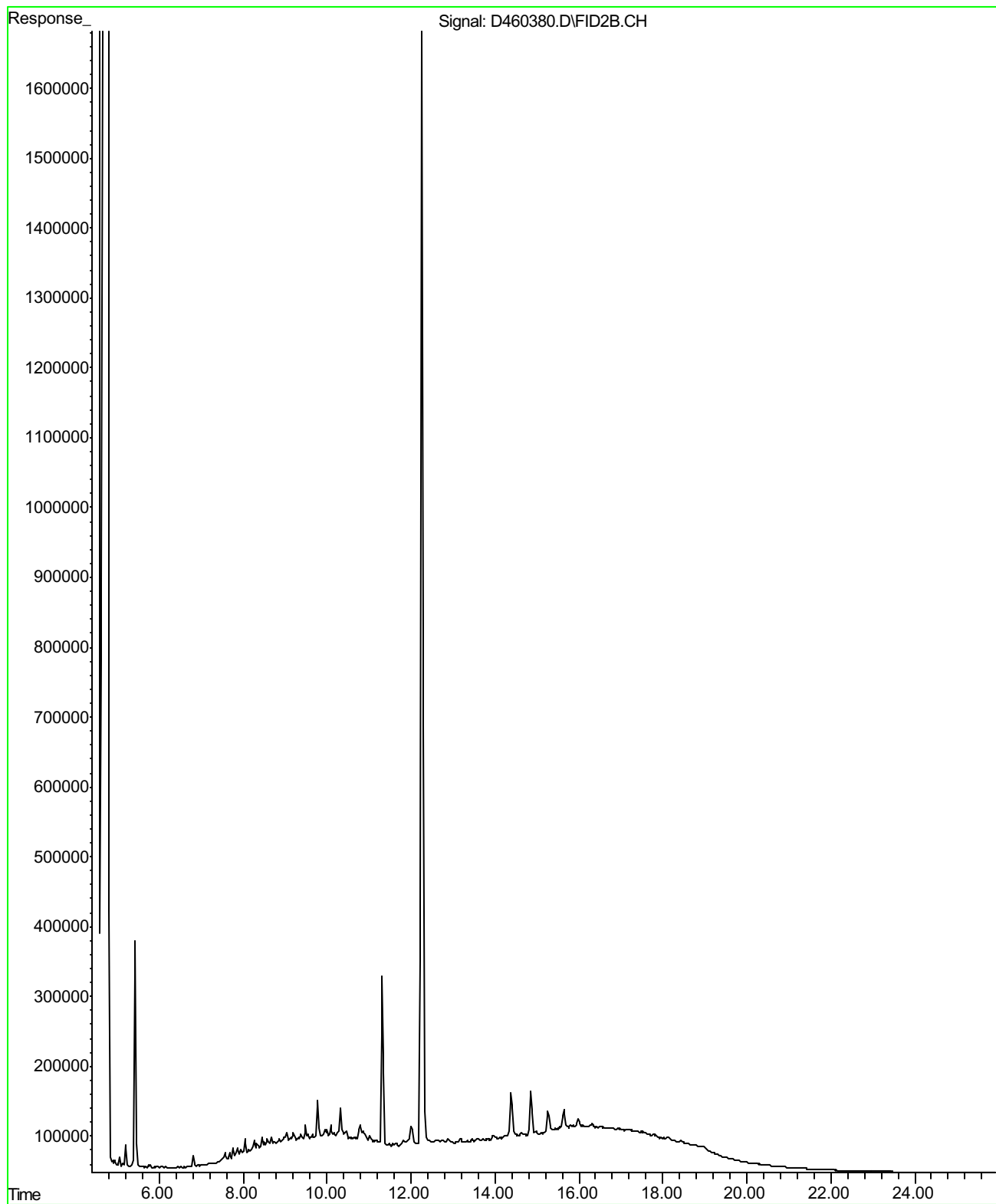
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Date Analyzed : 10/01/2008  
Data File : D649272  
Analysis Method : M EPA 8015



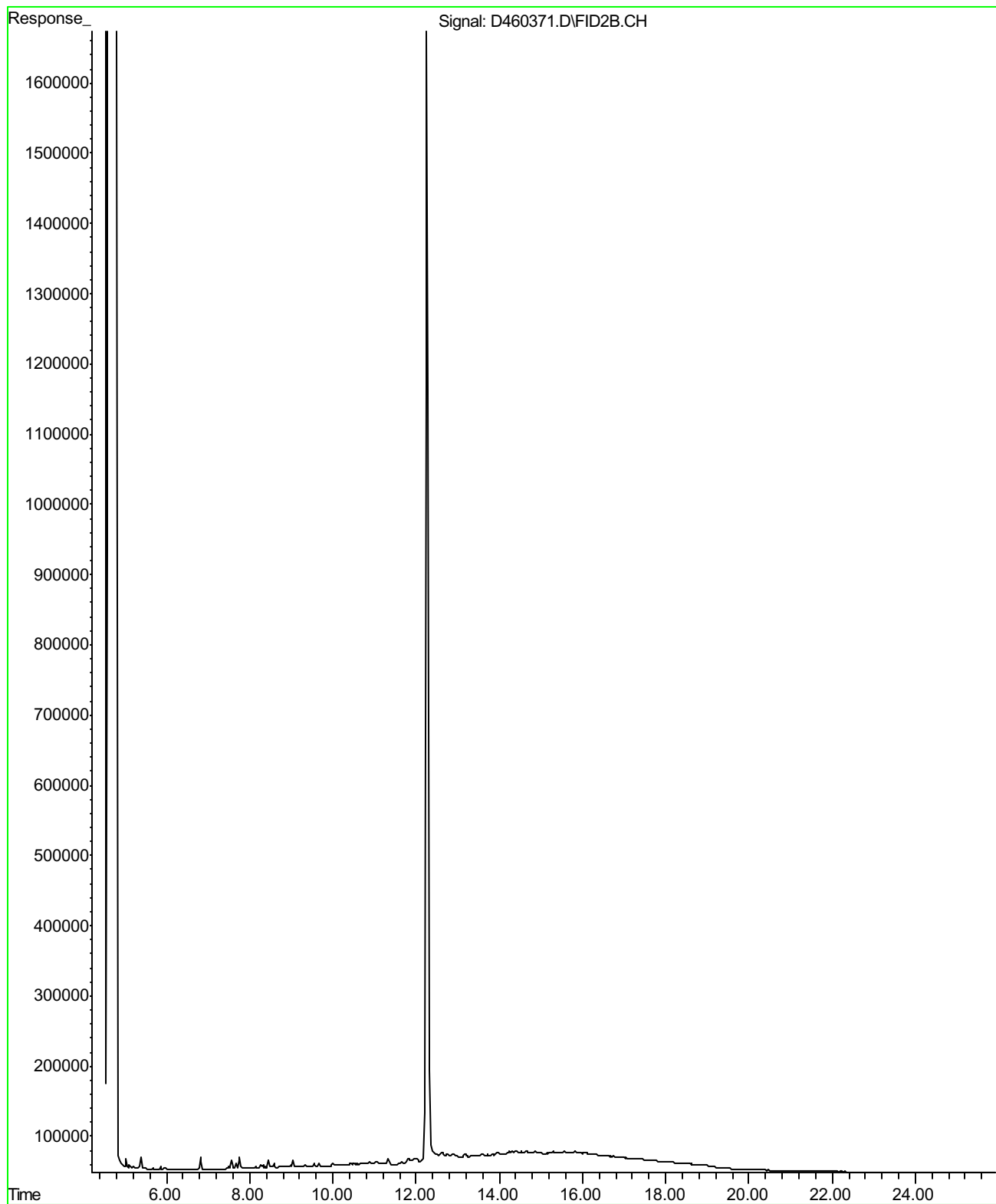
Sample ID : 65028-19 (MW-17)  
Date Analyzed : 09/27/2008  
Data File : S950252  
Analysis Method : EPA 8260B



Sample ID : 65028-19 (MW-17)  
Date Analyzed : 10/01/2008  
Data File : D460380  
Analysis Method : M EPA 8015



Sample ID : 65028-19 SI (MW-17)  
Date Analyzed : 10/01/2008  
Data File : D460371  
Analysis Method : M EPA 8015



65028

Yes  
 No

# Chain-of-Custody-Record

Direct Bill To: Geoffrey Risse Gettler-Ryan Inc. 3140 Gold Camp Dr. Rancho Cordova, CA 95670	Facility <u>Rolls-Royce Engine Test Facility</u> Facility Address: <u>6701 Old Earhart Road, Oakland, CA</u> Consultant Project #: <u>25-948218.1</u> Consultant Name: <u>GETTLER-RYAN INC.</u> Address: <u>3140 Gold Camp Dr., Suite 170, Rancho Cordova, CA 95670</u> Project Contact: (Name) <u>Geoffrey Risse</u> e-mail <u>grisse@grinc.com</u> (Phone) <u>916-631-1300x12</u> (Fax) <u>916-631-1317</u>	(Name) <u>Geoffrey Risse</u> (Phone) <u>916-631-1300x12</u> Laboratory Name: <u>Kiff Analytical</u> Laboratory Service Order: _____ Laboratory Service Code: _____ Samples Collected by: (Name) <u>Jim Heenan</u> Signature: _____
---	---	--

Sample I.D.	Number of Containers	Matrix S=Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	State Method: <input checked="" type="checkbox"/> CA <input type="checkbox"/> OR <input type="checkbox"/> WA <input type="checkbox"/> NW Series <input type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> ID												Remarks			
				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)												
MW-1	7	W	9/26/08 1030	X	X	X	X											1052	01
MW-2	7	W	1120	X	X	X	X												02
MW-3	7	W	1305	X	X	X	X												03
MW-4	7	W	1305	X	X	X	X												04
MW-6	7	W	1240	X	X	X	X												05
MW-7	7	W	1350	X	X	X	X												06
MW-9	7	W	1320	X	X	X	X												07
MW-10	7	W	1200	X	X	X	X												08
MW-11	7	W	1240	X	X	X	X												09
MW-12	7	W	1115	X	X	X	X												10
MW-14	7	W	1150	X	X	X	X												11
MW-15	7	W	1010	X	X	X	X												12
NPURL MW-3	7	W	1200	X	X	X	X												13
NPURL MW-4	7	W	1015	X	X	X	X												14

Relinquished By (Signature) 	Organization GR INC	Date/Time 9/26/08 1700	Received By (Signature) 	Organization GR INC	Date/Time 09-26-08 1030	Iced (Y/N)	Turn Around Time (Circle Choice)  24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature) 	Organization GR INC	Date/Time 09-26-08 1030	Received By (Signature) _____	Organization _____	Date/Time _____	Iced (Y/N)	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) 	Organization Kiff Analytical	Date/Time 092608 1230	Iced (Y/N)	

65028

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: \_\_\_\_\_

Sample I.D.	Number of Containers	MATRIX S=Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	State Method: <input checked="" type="checkbox"/> CA <input type="checkbox"/> OR <input type="checkbox"/> WA <input type="checkbox"/> NW								Series <input type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> ID				Remarks	
				TPH-Jet A Fuel (8015)	TPH-MO (8015)	TPH-D with Silica Gel Cleanup (8015)	TPH-G/BTEX/MTBE/Naphthalene (8260)										
QA	2	W	9/25/08	X	X	X	X										2 of 2
MW-5	7	W	1350	X	X	X	X										15
MW-8	7	W	1100	X	X	X	X										16
MW-13	7	W	1220	X	X	X	X										17
MW-17	7	W	1040	X	X	X	X										18
																	19

SAMPLE RECEIPT  
Therm ID# 191  
Date 092608  
Time 1750 Consultant present:  Yes /  No

Relinquished By (Signature) 	Organization <u>GR INC</u>	Date/Time <u>9/25/08 1750</u>	Received By (Signature) 	Organization <u>GR INC</u>	Date/Time <u>09-26-08 1030</u>	Iced (Y/N)
Relinquished By (Signature) 	Organization <u>GR INC</u>	Date/Time <u>09-26-08 1030</u>	Received By (Signature) 	Organization <u>GR INC</u>	Date/Time <u>09-26-08 1030</u>	Iced (Y/N)
Relinquished By (Signature) 	Organization <u>GR INC</u>	Date/Time <u>09-26-08 1030</u>	Received For Laboratory By (Signature) 	Organization <u>Kiff Analytical</u>	Date/Time <u>092608 1230</u>	Iced (Y/N)

Turn Around Time (Circle Choice)

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