

Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Friday, September 11, 2015 3:24 PM
To: 'hpietropaoli@stellar-environmental.com'
Cc: Richard Makdisi; Amitai Schwartz; Mark Jacobson
Subject: RE: sample 1506310-001A RO3143 vapor analysis

Henry and all,

To help resolve this mystery, and based on a detailed review of the chromatograph, it appears that it would be important to request a full VOC analysis of the soil vapor. There appear to be a significant number of chlorinated VOCs associated with the GRO / TPHg vapor detection. To focus on the GRO connection may be a mistake, if the issue is with chlorinated compounds, which could be a potentially higher health risk for vapor inhalation at the residence.

I am sorry for the continued change, but in order to attempt to eliminate health risks, and to hopefully get this to closure quicker or focused on the "correct problem", it appears appropriate and reasonable to request the data.

I will look forward to reviewing the data and resolving the issue.

As always, let me know if you have questions.

Thanks,

Mark Detterman
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PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: Henry Pietropaoli [mailto:hpietropaoli@stellar-environmental.com]
Sent: Friday, September 11, 2015 2:57 PM
To: Detterman, Mark, Env. Health
Cc: Richard Makdisi; Amitai Schwartz; Mark Jacobson
Subject: FW: sample 1506310-001A RO3143 vapor analysis

Mark,

If your curious, below is the comment from Griselda at McCampbell Lab, who is in generally in agreement with including testing for TPHd and naphthalene.

Thanks,

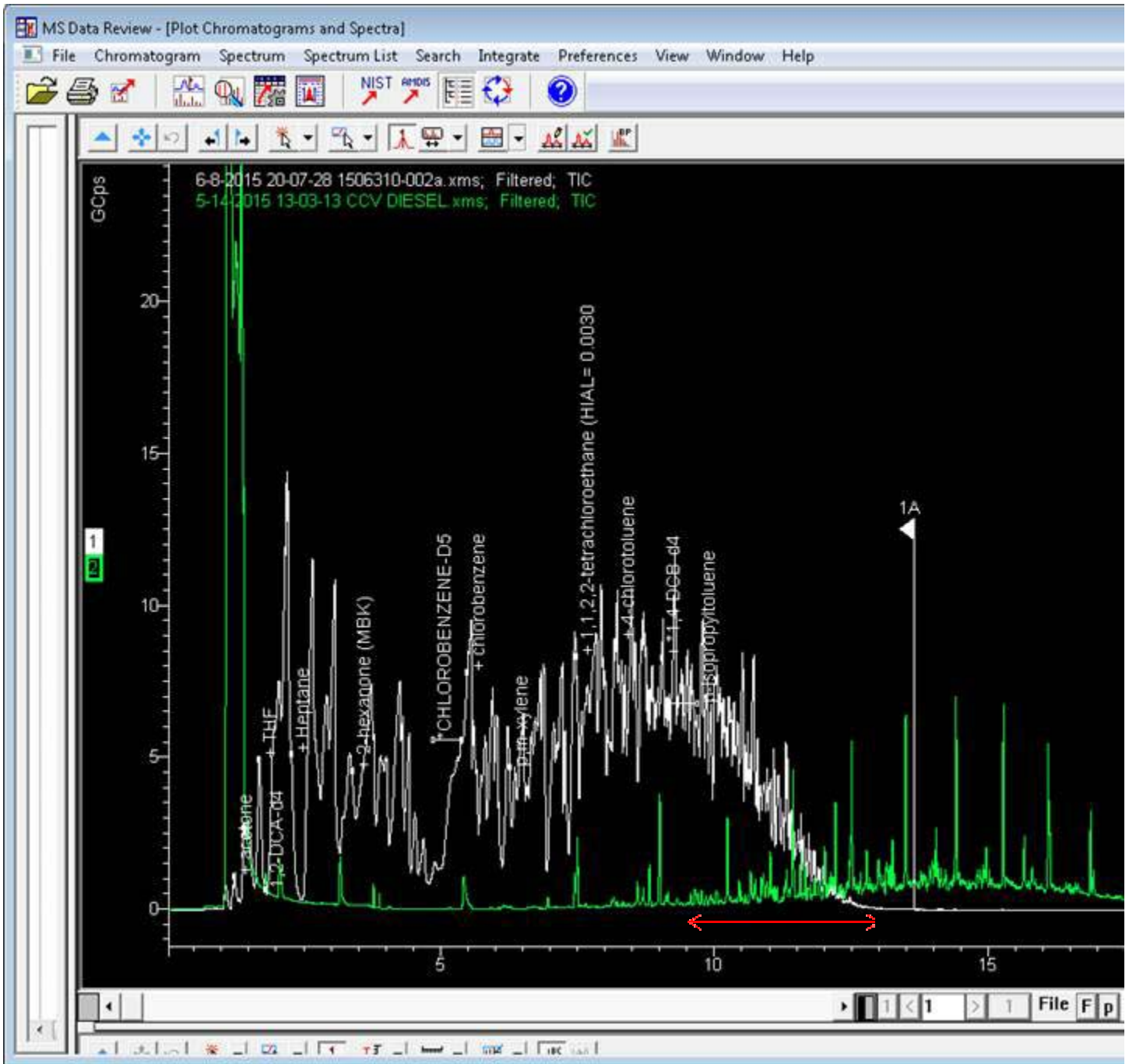
Henry

From: Griselda Martinez [mailto:Griselda@mccampbell.com]
Sent: Friday, September 11, 2015 12:34 PM
To: hpietropaoli@stellar-environmental.com
Cc: blake.brown@mccampbell.com
Subject: RE: sample 1506310-001A

Henry,

It looks like the large gas value is in the gas range C6-C12. You can observe in the chromatographic overlay of the sample (white) vs the Diesel standard (green), that diesel elutes later C10-C23. The ranges do overlap C10-C12 (indicated by red arrows) so this sample would probably be positive for diesel, though it may not be diesel at all.

Griselda



From: Henry Pietropaoli [<mailto:hpietropaoli@stellar-environmental.com>]

Sent: Friday, September 11, 2015 11:11 AM

To: 'McC Campbell Analytical, Inc.'; Griselda@mccampbell.com; blake.brown@mccampbell.com

Cc: Richard Makdisi

Subject: RE: sample 1506310-001A

Hi Blake and Griselda,

This sample analysis reported 800,000 ug/m³ TPH-gasoline. Is there any chance that this was diesel? We also analyzed the sample for naphthalene by TO-17 and it was ND. I am trying to determine if there is any justification to adding a TPH-diesel analysis by TO-17.

Thanks,
Henry

From: McC Campbell Analytical, Inc. [<mailto:main@mccampbell.com>]

Sent: Thursday, September 10, 2015 6:16 PM

To: hpietropaoli@stellar-environmental.com; Griselda@mccampbell.com

Cc: main@mccampbell.com

Subject: RE: sample 1506310-001A

Henry-

We can analyze TPH-diesel by TO-17. Diesel is too heavy to be analyzed by TO-15 or 8260. Do you need us to send you a TO-17 tube with a canister for Helium leak check?

Thanks,
Blake

From: Henry Pietropaoli [<mailto:hpietropaoli@stellar-environmental.com>]

Sent: Thursday, September 10, 2015 1:24 PM

To: Griselda@mccampbell.com; McC Campbell Analytical, Inc.

Subject: FW: sample 1506310-001A

Hi Griselda,

Regarding this project, in addition to the TO15/8260 analysis for gasoline-range organics (GRO) that we discussed below, the County is also requesting we add vapor analysis for mid-range (diesel-or heating oil ranged organic or DRO). We previously analyzed by TO17 for naphthalene, so I am not sure what else they want here. Can you recommend a method/analysis for this?

Thanks, I appreciate your help
Henry

From: Griselda Martinez [<mailto:Griselda@mccampbell.com>]

Sent: Friday, September 04, 2015 1:42 PM

To: hpietropaoli@stellar-environmental.com

Cc: Jennifer Lagerbom (Jennifer Lagerbom); blake.brown@mccampbell.com

Subject: RE: sample 1506310-001A

Henry,

I sent you the wrong RL for naphthalene it is actually 20ug/m³ not 50ug/m³. The low level analytes are highlighted.

Analyte Summas by 8260	CAS	RL ug/m3
tert-Amyl methyl ether (TAME)	994-05-8	2.0E+02
1,1,1,2-Tetrachloroethane_scsim	630-20-6	2.0E+01
1,1,1-Trichloroethane	71-55-6	2.0E+02
1,1,1,2-Tetrachloroethane_scsim	79-34-5	2.0E+01
1,1,2-Trichloroethane_scsim	79-00-5	2.0E+01
1,1-Dichloroethane	75-34-3	2.0E+02
1,1-Dichloroethene_scsim	75-35-4	2.0E+02
1,1-Dichloropropene	563-58-6	2.0E+02
1,2,3-Trichlorobenzene	87-61-6	2.0E+02
1,2,3-Trichloropropane_scsim	96-18-4	2.0E+01
1,2,4-Trichlorobenzene	120-82-1	2.0E+02
1,2,4-Trimethylbenzene	95-63-6	2.0E+02
1,2-Dibromo-3-chloropropane_scsim	96-12-8	2.0E+01
1,2-Dibromoethane (EDB)_scsim	106-93-4	1.0E+01
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	2.0E+02
1,2-Dichlorobenzene	95-50-1	2.0E+02
1,2-Dichloroethane (1,2-DCA)_scsim	107-06-2	5.0E+01
1,2-Dichloropropane_scsim	78-87-5	2.0E+01
1,3,5-Trimethylbenzene	108-67-8	2.0E+02
1,3-Dichlorobenzene	541-73-1	2.0E+02
1,3-Dichloropropane	142-28-9	2.0E+02
1,4-Dichlorobenzene_scsim	106-46-7	5.0E+01
2,2-Dichloropropane	594-20-7	2.0E+02
2-Chlorotoluene	95-49-8	2.0E+02
4-Chlorotoluene	106-43-4	2.0E+02
4-Isopropyl toluene	99-87-6	2.0E+02
Benzene_scsim	71-43-2	2.0E+01
Bromobenzene	108-86-1	2.0E+02
Bromochloromethane	74-97-5	2.0E+02
Bromodichloromethane_scsim	75-27-4	2.0E+01
Bromoform	75-25-2	2.0E+02
Bromomethane	74-83-9	2.0E+02
Carbon Disulfide	75-15-0	2.0E+02
Carbon Tetrachloride_scsim	56-23-5	2.0E+01
Chlorobenzene	108-90-7	2.0E+02
Chloroethane	75-00-3	2.0E+02
Chloroform_scsim	67-66-3	2.0E+02
Chloromethane	74-87-3	2.0E+02
cis-1,2-Dichloroethene	156-59-2	2.0E+02
cis-1,3-Dichloropropene	10061-01-5	2.0E+02
Dibromochloromethane	124-48-1	2.0E+02
Dibromomethane	74-95-3	2.0E+02

Dichlorodifluoromethane	75-71-8	2.0E+02
Diisopropyl ether (DIPE)	108-20-3	2.0E+02
Ethyl tert-butyl ether (ETBE)	637-92-3	2.0E+02
Ethylbenzene	100-41-4	2.0E+02
Freon 113	76-13-1	2.0E+02
Hexachlorobutadiene	87-68-3	2.0E+02
Hexachloroethane	67-72-1	2.0E+02
Isopropylbenzene	98-82-8	2.0E+02
Methylene chloride	75-09-2	2.0E+02
Methyl-t-butyl ether (MTBE)	1634-04-4	2.0E+02
Naphthalene_scsim	91-20-3	2.0E+01
n-Butyl benzene	104-51-8	2.0E+02
n-Propyl benzene	103-65-1	2.0E+02
sec-Butyl benzene	135-98-8	2.0E+02
Styrene	100-42-5	2.0E+02
tert-Butyl benzene	98-06-6	2.0E+02
tetrachloroethene_scsim	127-18-4	2.0E+02
Toluene	108-88-3	2.0E+02
trans-1,2-Dichloroethene	156-60-5	2.0E+02
trans-1,3-Dichloropropene	10061-02-6	2.0E+02
Trichloroethene	79-01-6	2.0E+02
Trichlorofluoromethane	75-69-4	2.0E+02
TPH(g)	8006-61-9	5.0E+04
Vinyl Chloride_scsim	75-01-4	1.0E+01
Xylenes, Total	1330-20-7	6.0E+02

From: Henry Pietropaoli [<mailto:hpietropaoli@stellar-environmental.com>]

Sent: Friday, September 04, 2015 9:51 AM

To: 'Griselda Martinez'

Cc: 'Jennifer Lagerbom (Jennifer Lagerbom)'; blake.brown@mccampbell.com; 'Angela Rydelius (Angela Rydelius)'

Subject: RE: sample 1506310-001A

Hi Griselda,

OK, I will include your discussion in the workplan and the regulator has indicated that he will accept the data as long as it is an approved laboratory method and meets the residential ESLs. I will flag the sample on the chain of custody.

And I will tell the clients, that given your experience with the previous subject sample and being alerted ahead of time that this next sample round will potentially be as hot or maybe hotter, you think the your lab we will be able meet the

residential ESLs. We will also be using the Helium shroud and need the He analyzed so will the 1 L summa still be enough?

Thanks for your help and have a good weekend,

Henry

From: Griselda Martinez [<mailto:Griselda@mccampbell.com>]
Sent: Thursday, September 03, 2015 5:56 PM
To: hpietropaoli@stellar-environmental.com
Cc: Jennifer Lagerbom (Jennifer Lagerbom); blake.brown@mccampbell.com; Angela Rydelius (Angela Rydelius)
Subject: RE: sample 1506310-001A

Henry,

We recommend sampling in a standard 1L summa canister. The RLs of course will depend on whether the samples need to be diluted. We've recently set up a method to analyze TO15 by 8260. This method is preferred for samples which we cannot analyze by TO15 due to high organic/gas content in the samples. Because the to15 by 8260 method acquires data for the samples in sim/scan mode, we should still be able to meet the ESL.

Griselda

From: Henry Pietropaoli [<mailto:hpietropaoli@stellar-environmental.com>]
Sent: Wednesday, September 02, 2015 2:34 PM
To: Griselda@mccampbell.com; angela@mccampbell.com; blake.brown@mccampbell.com
Subject: sample 1506310-001A

Hi Griselda, Angela and Blake,

Alameda County has requested additional soil-gas sampling to evaluate the TPHg detection that was reported in sample 1506310-001A. We need to be able to quantify any potential contaminants and be able to compare the results to residential ESLs, particularly for benzene and naphthalene in which the RLs exceeded the ESL.

Can you recommend what sampling technique, analytical methods, summa size to use, etc, that we should do to accomplish this so we get usable data.

Thanks,
Henry

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