

Detterman, Mark, Env. Health

From: Henry Pietropaoli [hpietropaoli@stellar-environmental.com]
Sent: Tuesday, August 11, 2015 1:08 PM
To: Detterman, Mark, Env. Health
Cc: Richard Makdisi
Subject: Paramount Laboratory data discussion

Mark,

Below is the discussion we had with the laboratory regarding the TPH in the soil vapor.

Thanks,
Henry

From: Griselda Martinez [mailto:Griselda@mccampbell.com]
Sent: Monday, June 22, 2015 4:50 PM
To: hpietropaoli@stellar-environmental.com
Cc: Angela Rydelius (Angela Rydelius); blake.brown@mccampbell.com; Jennifer Lagerbom (Jennifer Lagerbom)
Subject: RE: WO 1506310

Henry,

Sorry or the delayed response. I understand that due to the soil samples being non detect for VOCs and TPHD, the new findings for the soil vapor samples would be alarming. Although it would make more sense for the gasoline to volatilize and experience higher results in the gas phase (rather than being retained in the soil matrix), it is unlikely for the gas in the soil to volatilize at such a rate that it would yield non detectable results. It is more likely that the soil on the site is inhomogeneous. Perhaps that particular soil collected was not a good representation of the site. I will have a narrative attached with the report.

Griselda

From: Henry Pietropaoli [mailto:hpietropaoli@stellar-environmental.com]
Sent: Monday, June 22, 2015 12:34 PM
To: 'Griselda Martinez'
Cc: 'Angela Rydelius (Angela Rydelius)'; 'Jennifer Lagerbom (Jennifer Lagerbom)'; blake.brown@mccampbell.com
Subject: RE: WO 1506310

Griselda,

I just got the final report which looks good. A discussion or note in the report that the 880,000 ug/TPH gasoline detected in SG6 may consist of various hydrocarbon TICs or is degraded heating oil or diesel, etc or whatever the case may be would be helpful.

The difficult part for me to understand is why soil sample No 1506184-001A that was collected 2 days earlier from the spot (same depth) where soil gas diffuser for SG6 was installed was ND.

Thanks,
Henry

From: Griselda Martinez [<mailto:Griselda@mccampbell.com>]
Sent: Monday, June 22, 2015 11:46 AM
To: hpietropaoli@stellar-environmental.com
Cc: Angela Rydelius (Angela Rydelius); Jennifer Lagerbom (Jennifer Lagerbom); blake.brown@mccampbell.com
Subject: RE: WO 1506310

Henry,

There was no hydrocarbon pattern observed for either VOC or TPHD analysis of WO 1506184-001A. I'm not sure how deep the soil was collected for that analysis. VOCs on Surface soil would yield lower results than those below (6ft for TO15?). As far as the methane in the sample, this could be due to the bacterial biodegradation of gasoline (note high CO2 content was also present). As far as the TICs being quantified, we would need to re run the sample at a larger volume. This would gravely compromise our analytical system and expose other samples to possible contamination. In addition the internal standard analytes used for quantifying the results would be obscured, hence producing only estimated results. I will ask the project managers to include the discussions in the final report.

Griselda Martinez
VOC Department Head
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(925) 252-9262

From: Henry Pietropaoli [<mailto:hpietropaoli@stellar-environmental.com>]
Sent: Friday, June 19, 2015 2:43 PM
To: Griselda@mccampbell.com; McCampbell Analytical, Inc.
Cc: Richard Makdisi
Subject: RE: WO 1506310

Hi Griselda,

Thanks for looking into this in depth. I also want to confirm your that the TO17 sample 1506310-002A is the corresponding sample to the TO15 sample 1506310-001A. Did the soil sample # 1506184-001A collected from the same spot give any info? I notice there was nothing mentioned about the methane detection in TO15 sample 1506310-001A, so I am assuming this wasn't a factor.

Can any of the tics be quantified and reported? Our goal is to be able to compare to residential ESLs. Can we justify disregarding these tics and/or eliminate any potential risk to the property owner and the regulator. If not, what analysis could?

Will we get the final report soon? We would like this discussion be included with the report.

Thanks,
Henry

From: Richard Makdisi [<mailto:Rmakdisi@stellar-environmental.com>]
Sent: Friday, June 19, 2015 1:33 PM
To: Henry Pietropaoli
Subject: FW: WO 1506310

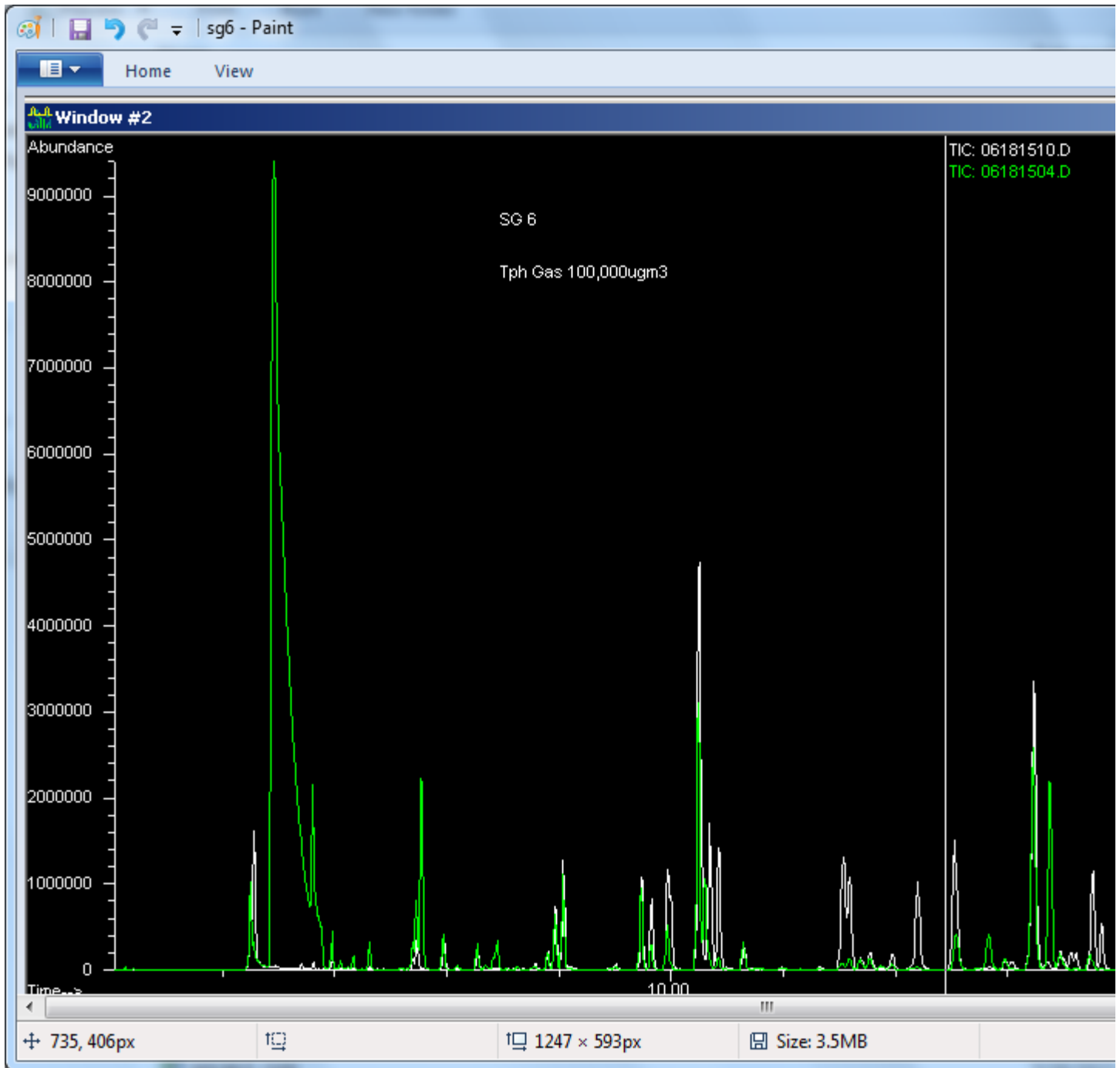
FYI--R

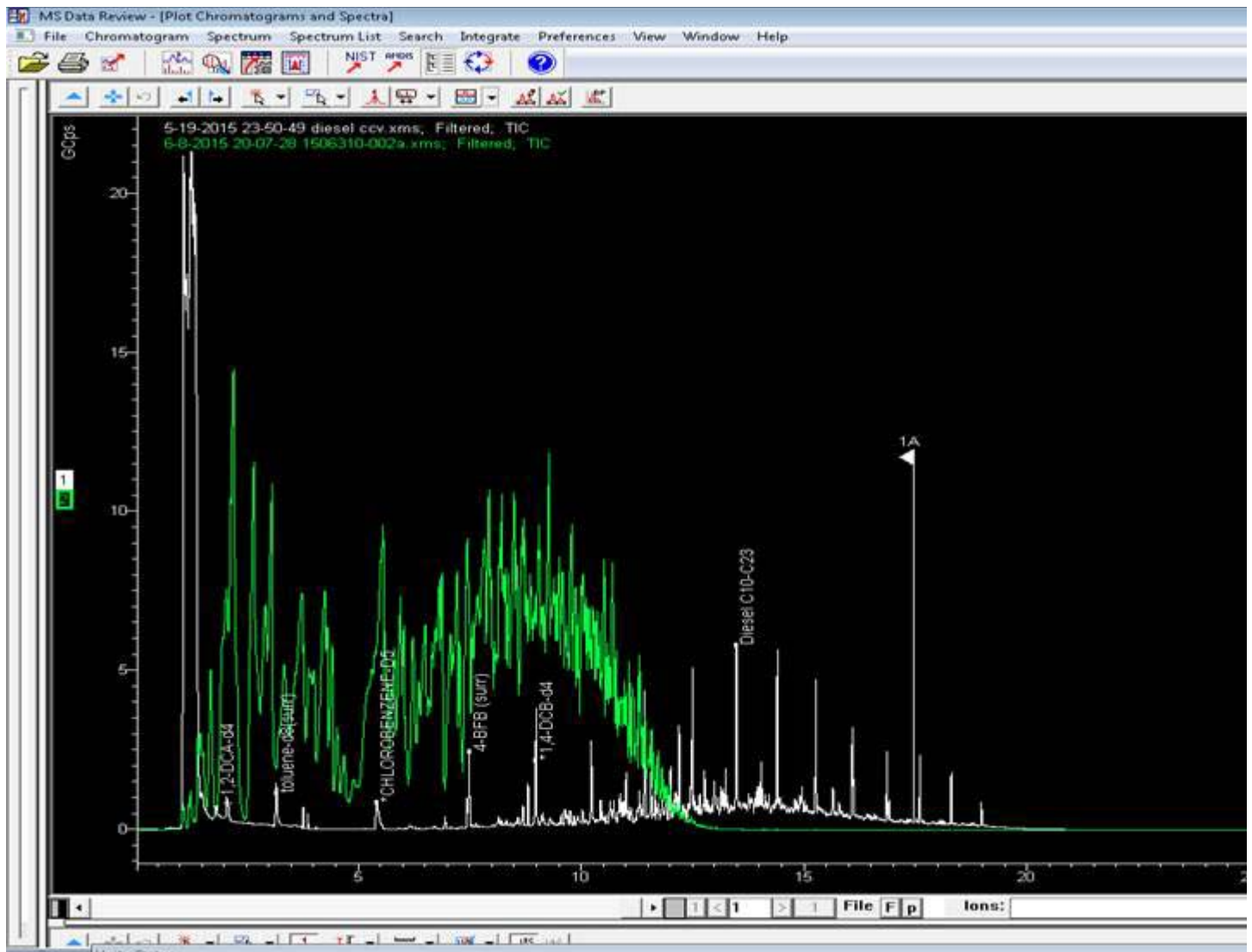
From: Griselda Martinez [<mailto:Griselda@mccampbell.com>]
Sent: Friday, June 19, 2015 10:07 AM
To: Rmakdisi@stellar-environmental.com
Cc: Angela Rydelius (Angela Rydelius); blake.brown@mccampbell.com; Jennifer Lagerbom (Jennifer Lagerbom)
Subject: RE: WO 1506310

Richard,

We've looked into your concerns regarding soil vapor sample SG 6. Although there were no VOC target analytes above the detection limits a large pattern in the gasoline range C6-C12 was present at concentrations well above the calibration range (pattern is mainly made of branched and unbranched hydrocarbons). I reviewed the analytical run and found small concentrations below our DL for benzene (150 ug/m3), Toluene(20 ug/m3), Ethyl benzene (50 ug/m3) and Xylenes (100 ug/m3). I've added the chromatogram (TO15). The chromatogram shows an overlay of the Tph gas standard (green) and sample (white). Although I'm not sure this was the corresponding sample to the TO15, I have also added a chromatogram of the TO17 sample 1506310-002A. This is an overlay of the sample with a TPH diesel standard. The pattern in the sample is clearly in a different carbon range than that of the standard. Higher concentrations of the pattern are observed in the TO17 analysis because of the larger sample volume introduced into the analytical system (about 1L). The BTEX compounds were well above the detection limit for the TO17 sample (although only estimated values may be obtained due to interference of high organic content). The BTEX compounds may have been simply diluted out of the TO15 analysis. I hope this information is helpful, feel free to contact me for any further questions.

Griselda Martinez
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From: Angela Rydelius [<mailto:angela@mccampbell.com>]
Sent: Thursday, June 18, 2015 4:53 PM
To: griselda@mccampbell.com
Subject: FW: WO 1506310

Regards,
Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.
P: 925-252-9262 ext. 14
F: 925-252-9270

***McC Campbell Analytical, Inc. will be CLOSED on Friday, July 3, 2015 in observation of Independence Day. Have a happy and safe holiday!**

From: Richard Makdisi [<mailto:Rmakdisi@stellar-environmental.com>]
Sent: Thursday, June 18, 2015 1:53 PM
To: 'Blake Brown'; Angela Rydelius
Cc: hpietropaoli@stellar-environmental.com
Subject: RE: WO 1506310

Hi Blake and Angela,

The explanation Blake gave Henry of the results for sample SG6 containing gas are really hard to believe since this is an investigation of a residential heating oil tank from the 1930's that used diesel/heating oil, not gas .
Also If there is such a high TPH-gas, why no detection of BTEX?

We notice that methane was detected in SG6. could this be a factor in the chromatograph pattern?
Also, we appreciate you correcting the RL for this sample, however the revised RL of 250 µg/m3 for SG6 totally misses the residential ESL for all analytes and the data as is for this sample is still useless.

Maybe you can find a clue in the results for sample No 1506184-001A, which is a soil sample collected 2 days earlier from the spot in which the soil gas diffuser was set for the collection of soil gas sample SG6. No detections of anything were in this soil sample in addition to no field PID response, odor or visual sign of contamination. Should we run TPH-gas on this soil to see if something is there?

We can collect another soil gas sample if necessary. Do you have any suggestions on how soil-gas in this this sample can be analyzed to meet the residential ESLs?

Regards--Richard

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From: Blake Brown [<mailto:blake.brown@mcccampbell.com>]
Sent: Thursday, June 18, 2015 12:15 PM
To: hpietropaoli@stellar-environmental.com
Cc: 'Jennifer Lagerbom'; 'Angela Rydelius'
Subject: WO 1506310

Henry-

I am having the chemist analyze your summa samples for TPH-gas. We looked at the chromatograph for -001A by 8260 and although none of the analyte you requested were positive, there was very high TPH-gas pattern, in fact it was towards the upper calibration range of the instrumentation.

We cannot analyze sample -001A by TO-15 because the gas pattern would interfere with the surrogates and internal standards to such an extent that the data would be useless. I am having the 8260 data revised as the canister was not pressurized and therefore the reporting limits should not have been doubled. The new reporting limits for -001A will be 250ug/m³ across the board.

Additionally, I found some errors in your invoice from the quote that I sent you last month. I will make those revisions and email with the revised report.

Thanks,
Blake Brown
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