Autumnwood Investigation
The Community's Perspective

Concerned Neighbors of Wildomar

Center for Community Action and Environmental Justice (CCAEJ)

September 19, 2014

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During a tour of the homes on March 28, 2013, Ms. Raphael admitted that *"something is going on here. I can feel it in my chest." She went on to say that "we obviously aren't conducting the right tests—we're missing something."*

Legend

- EQMD Testing
- Independent Testing
- Arni Adini
- DTSC
- DTSC Groundwater
- HOA Testing

Above Health Threshold

@ All chemicals in powdery substance are high and above that to be expected in region with Uranium levels 77% higher than western US levels

Outside Air

# Carbon Tetrachloride	Toluene
# Benzene	Chlorobenzene
# Naphthalene	Tetrachloroethylene
# Vinyl Chloride	Vinyl acetate
1,2-dichloroethane	O-Xylene
Ethane	2-propanol
Propane	# Vinyl chloride
Chloromethane	# Carbon Tetrachloride
Bromoethane	# Benzene
Ethanol	# 1,2 –Dichloroethane
Methylene chloride	# Tetrachloroethylene
1,1-dichloroethane	# Ethylbenzene
2- butanone MEK	# Formaldehyde
Chloroform	Chlorobenzene
Bromoform	Chloroform
Ethyl benzene	Chlorobenzene
1,2-dibromoethane	Chloromethane
	Trichloroethylene
	Trichlorofluoromethane

White Powdery Substance in yards @

# Arsenic	Uranium
Barium	Aluminum
Phosophorous	Sulphur
Chromium	Manganese

Inside Air

# 1,2 –Dichloroethane	# Vinyl chloride
# Benzene	# Carbon Tetrachloride
Chloroform	# Benzene
# Tetrachloroethylene	# 1,2 –Dichloroethane
# Ethylbenzene	# Tetrachloroethylene
# Carbon Tetrachloride	# Ethylbenzene
# 1,2,Dibromoethane	# Formaldehyde
1,2-Dichlorobenzene	Chloroethane
1,2-Dichloropropane	2-Butanone
Bromodichloromethane	Mercury

Outside Soil—Soil Gas

Chloroform	Formaldehyde
Toluene	Chloromethane
Chlorobenzene	Trichloroethylene
Trichloroethylene	Benzene
Chloromethane	Chloroform
Trichlorofluoromethane	Toluene
# Benzene	Trichlorofluoromethane
# Ethylbenzene	Ethylbenzene
# Tetrachloromethene	Tetrachloroethene
# Naphthalene	m-p-Xylene
# Chloroform	o-Xylene
Toluene	MTBE
m-p-Xylene	1,2,4-Trimetholbenzene
O-Xylene	1,3,5-Trimetholbenzene
MTBE	Vinyl Chloride
1,2,4-Trimetholbenzene	Naphthalene
1,3,5-Trimetholbenzene	1,2-Dibromoethane
p-Isopropyltoluene	Carbon Tetrachloride

Sub Slab Testing

# Benzene	MTBE
Toluene	m-p-Xylene
# Naphthalene	o-Xylene
Styrene	# Benzene
# Chloroform	Chloroform
# Benzene	Tetrachloroethylene
# Ethylbenzene	Ethylbenzene
# Tetrachloroethene	Chloromethane
Formaldehyde	1,2-Dichloroethane
# Chloroform	Trichloroethylene
Toluene	Trichlorofluoromethane
# Methylene Chloride	Carbon Tetrachloride
1,2,4-Trimetholbenzene	Methylene chloride
1,2,5-Trimethylbenzene	

Park Testing

In the report the Testing Firm commented on finding a "blackish stain at 1.2 feet with a "hydrocarbon odor in ambient air." "The origin of the blackish stain is unknown".

Bromobenzene Bromochloromethane
Bromodichloromethane Bromoform
Bromomethane c-1,2-Dichloroethene
C-1,3-Dichloropropene **Vinyl Chloride**
Carbon tetrachloride **Styrene** Toluene
Hexavalent Chromium **# Arsenic Lead**
Dioxin Chloroform Ethylbenzene
Dibromomethane MTBE **Benzene**
Tetrachlorethene (PCE) Naphthalene
Trichloroethene (TCE) Methylene chloride
1,2-Dibromoethane ETBE
Bis (2-Ethylhexyl) phthalate
nd many more industrial and agricultural chemicals!

Acetine	Chloroethane	Toluene	Ethanol	Tetrahydrofuran
Benzene	Chloroform	2,2-dichloropropane	Tert-butyl alcohol	cyclohexane
Bromodichloromethane	Chloromethane	Methylene chloride	Acetonitrile	Methyl methacrylate
Bromomethane	1,1-dichloroethane	Vinyl-acetate	1,4-dioxane	Acrylonitrile
2-butanone	Isopropanol	Iodomethane	Formaldehyde	

As a result of that tour, we requested Ms. Raphael to convene a multi agency committee to advise and add their expertise to the discussion in order to conduct a risk assessment investigation to determine the source of the problem.

CCAEJ had already petitioned ATSDR to investigate the site and suggested California Department of Public Health and Office of Environmental Health Hazard Assessment. Through that process the agencies highlighted some "gaps" in information DTSC offered to conduct testing at Autumnwood.

Figure 2 Proposed Sampling Locations

Wildomar Multi Agency Committee

- We were excited to have ATSDR, CDPH, OEHHA join with DTSC to investigate the situation at Wildomar.
- We were impressed to hear that Theo Johnson who writes DTSC protocol and teaches sampling techniques would be involved in developing the testing workplan.

APPENDIX H REPORTING FORMAT AND PARAMETERS

RECORDKEEPING IN THE MOBILE LABORATORY

The following records concerning calibration standards and QA/QC should be maintained as hard copies in the mobile laboratory:

a) Date of calibration standard receipt;
b) Name of calibration supplier;
c) Calibration lot number;
d) Date of preparation for intermediate standards (dilution from the stock or concentrated solution from supplier);
e) Calibration ID number or other identification data;
f) Name of technician who performed the dilution;
g) Volume of concentrated solution taken for dilution;
h) Final volume after dilution;
i) Calculated concentration after dilution;
j) The latest and current initial calibration data for each instrument used; and
k) The currently-used laboratory standard operating procedures.

REPORTING OF SOIL GAS SAMPLE RESULTS AND QA/QC DATA

1) Report all sample test results for all compounds in the analyte list and QA/QC data. Compounds may be listed by retention time or in alphabetical order. Report any unidentified or tentatively identified peaks. Submit all data in electronic format and raw data, including the chromatograms for samples and standards, as requested.

Concerns and Questions Regarding DTSC Testing

Protocols

- Deviation from Sampling Plan

  ✓Did not test in warmer months as recognized by all parties as the preferred timing.

  ✓Even though Director Raphael emphasized the need to test for things we hadn't tested for, DTSC did not test ENTIRE LIST OF EPA Method 8260 & TO-15 which would have been 108+ chemicals.

  ✓ Created own list of target VOCs for lab analysis: 44 Sub-slab and 43 soil gas

H&P Mobile Geochemistry Inc.

Chain of Custody Record

☒ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
☐ 1855 Coronado Ave., Signal Hill, CA 90755 • ph 800.834.9888

Date: 11/14/13
H&P Project #: AEE111513-11
Outside Lab:

Client: AMEC
Address: Joe [illegible] 121 Innovation Ste 200, Irvine, CA 92617
Email: joseph.[illegible]@amec.com
Collector: T. Taylor
Client Project #: WB0160235P
Location: Palomar St Wildomar, CA
Phone: 951-656-6003
Fax:
Page: 1 of 1
Project Contact: Joe [illegible]
Turn around time: Stnd

Geotracker EDF: Yes ☒ No ☐
Global ID:
Excel EDD: Yes ☒ No ☐

Sample Receipt
Intact: ☒ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☒ N/A
Cold: ☐ Yes ☐ No ☒ N/A
Temperature: RT

Special Instructions: Report VOC list attached.

Lab Work Order #: E311062

Sample Name	Canister (Field Point Name)	Purge Vol	Time	Date	Sample Type	Container Type	Total # of containers	VOC's: Full List (TO-15)	Other (Methanol, TO-15)	Leak Check Compound (1,1 DFA)	VAC Gauge # 1116
146-SV	268	7.1	1129	11/14	Vapor	Summa	1	X	YES	X	-3.6
148-SV	030	↓	1139	↓	↓	↓	↓	X	↓	X	-2.8
3B-SV	460	↓	1357	↓	↓	↓	↓	X	↓	X	-0.9
3B-SV = [illegible]	021	↓	1410	↓	↓	↓	↓	X	↓	X	-4.9
106-SV	244	↓	1518	↓	↓	↓	↓	X	↓	X	-1.5
108-SV	066	↓	1526	↓	↓	↓	↓	X	↓	X	-1.8
108-SV REP	272	4.1	1534	↓	↓	↓	↓	X	↓	X	-2.5

Analysis options: SOIL/GW: 8260B Full List; 8260B ☐ BTEX/OXY ☐ TPH gas; 8015M TPH ☐ g ☐ d ☐ ext; 418.1 TRPH. SOIL VAPOR/AIR ANALYSIS: VOC's: Full List ~~☒ 8260B~~ ☒ TO-15; VOC's: Short List/DTSC ☐ 8260B ☐ TO-15; VOC's: SAM, 8260B ☐ SAM A ☐ SAM B; Naphthalene ☐ 8260B ☐ TO-15; Oxygenates ☐ 8260B ☐ TO-15; TPHv gas ☐ 8260B ☐ TO-15; Ketones ☐ 8260B ☐ TO-15; Other Methanol ☐ 8260B ☒ TO-15; Leak Check Compound ☒ 1,1 DFA ☐ OTHER; Methane; Fixed Gases ☐ CO2 ☐ O2 ☐ N2

Relinquished by (Signature)	(company)	Received by (Signature)	(company)	Date	Time
[signature]	AMEC	[signature]	H&P	11/14/13	1729
[signature]	H&P	[signature]	H&P	11/15/13	0931

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☐ Disposal ☐ Return to client ☐ Pickup

108+

1,1,1-trifluoroethane; Propene; 1,1,1,2-; Tetrafluoroethane; 1,1-Difluoroethane; Dichlorodifluoromethane; Chloromethane; Dichlorotetrafluoroethane; Vinyl Chloride; 1,3-Butadiene; Bromomethane; Chloroethane, Ethanol; Acetone; Isopropanol; Trichlorofluoromethane; 1,1-Dichloroethene; tert-Butanol; Methylene chloride; 1,1,2-Trichlorotribluoethane; Carbon Disulfide; trans-1,2-Dichloroethene; 1.1-Dichloroethane; Methyl-tert-Butyl Ether; Vinyl Acetate; 2-Butanone; cis-1,2-Dichloroethene; Ethyl Acetate; Diisopropyl Ether; Hexane; Chloroform; 2,2 Dichloropropane; Tetrahydrofurna; Ethyl-tert-Butyl Ether; 1,2- Dichloroethane; 1,1,1-Trichloroethane; Benzene; 1,1-Dichloropropene; Carbon Tetrachloride; Cyclohexane; tert-Amyl Methy Ether; Dibromomethane; 1.2-Dichloropropane; Bromodichloromethane; 1.4-Dioxane; Trichloroethene; 2,2,4 Trimethylpentane; Heptane; cis-1,3-Dichloropropene; 1,1,2-Trichloroethane; Toluene; 1.3 Dichloropropane; 2-Hexanone; Dibromochloromethane; 1,2-Dibromoethane (EDB); Tetrachloroethene; 1,1,1,2-Tetrachloroethane; Chlorobenzene; Ethylbenzene; m,p-Xylene; Bromoform; Styrene; 1,1,2,2-Tetrachloroethane; o-Xylene; 1,2,3-Trichloropropane; Isopropylbenzene; Bromobenzene; 2-Chlorotoluene; n-Propylbenzene; 4-Chlorotoluene; 4-Ethyltoluene; 1,3,5-Trimethylbenzene; Naphthalene; tert-Butylbenzene; 1,2,4-Trimethylbenzene; Benzyl Chloride; 1,3-Dichlorobenzene; 1,4-Dichlorobenzene; sec-Butylbenzene; p-Isopropyltoluene; 1,2 –Dichlorobenzene; n-Butylbenzene; 1,2 Dibromo-3-chloropr..; 1,2,4 Trichlorobenzene; 1,2,3-Trichlorbenzene; Hexachlorobutadiene

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Dichlorodifluoromethane; Vinyl Chloride; Bromomethane; Chloroethane; Trichlorofluoromethane; 1,1-Dichloroethene; Methylene chloride (Dichloromethane); 1,1,2-Trichlorotrigluoroethane (F113); trans-1,2,-Dichloroethene; 1,1-Dichloroethane; cis-1,2-Dichloroethene; Chloroform; 1,2-Dichloroethane (EDC); 1.1.1-Trichloroethane; Carbon Tetrachloride; Bromodichloromethane; Trichloroethene; 1,1,2-Trichloroethane; Tetrachloroethene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Bromochloromethane – not available; Benzene; Toluene; Ethylbenzene; m,p-Xylene; o-Xylene; Isopropylbenzene (Cumene); n-Propylbenzene; 1,3,5- Trimethylbenzene; 1,2,4-Trimethylbenzene; tert-Butylbenzene; 1,4-Dichlorocenzene; sec-"Butyl benzene; p-Isopropyltoluene; n-Butylbenzene; 1,2,4-Trichlorobenzene; Naphthalene;
Tertiary-butyl alcohol; Methyl tertiary-butyl ether (MTBE); Diisopropyl ether (DIPE); Ethyl tertiary-butyl ether(ETBE); Tertiary-amyl methly ether (TAME);

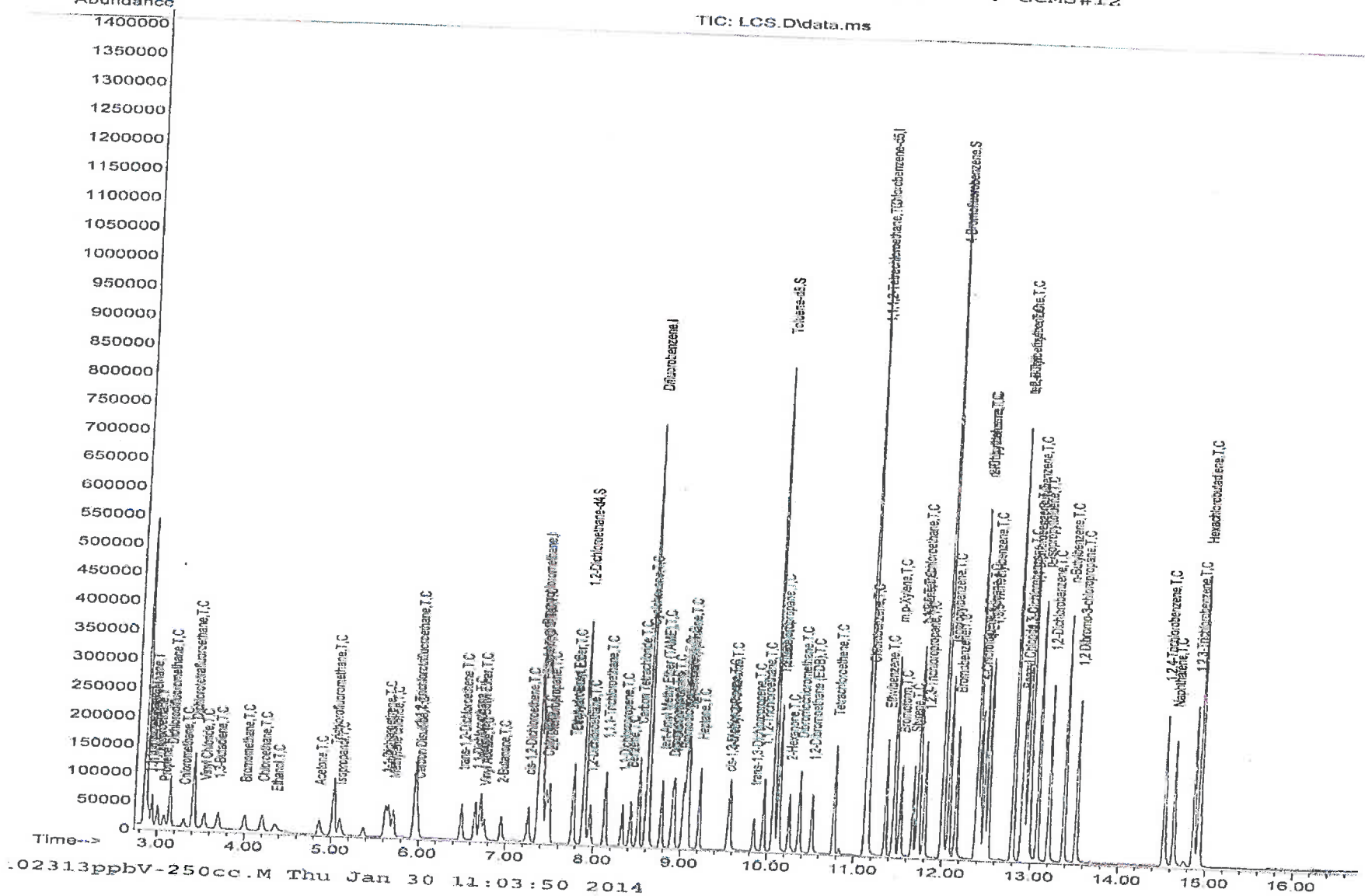
Quantitation Report (QT Reviewed)

SUBSLAB LIBRARY

Data Path : D:\DATA\111913.1p\
Data File : LCS.D
Acq On : 19 Nov 2013 7:30 pm
Operator : slc
Misc :
ALS Vial : 11 Sample Multiplier: 5

Quant Time: Nov 20 14:22:05 2013
Quant Method : C:\msdchem\1\METHODS\102313ppbv-250cc.M
Quant Title : EPA TO-15 GC/MS #12
QLast Update : Thu Oct 24 09:35:58 2013
Sample : EK31912-BS1

Inst : GCMS#12



102313ppbv-250cc.M Thu Jan 30 11:03:50 2014

✓EXCLUDED from Sub-Slab Testing:

- 1, 2-Dibromoethane;
- Styrene;
- Chloromethane, &
- Chlorobenzene

✓EXCLUDED from soil gas and groundwater:

- Methanol

✓EXCLUDED testing for URANIUM

The Subslab RL were set higher than CHHSLs:

Chemical	CHHSL	RL
Benzene	1.7	3.2
Carbon Tetrachloride	1.2	6.4
1,2-Dichloroethane	2.3	4.1
Naphthalene	1.4	5.3

✓ Did not test for URANIUM

✓ Did not used PID across soil borings to detect highest concentrations along the rod

Inferior Methods

- TO-15 vs. TO-17 for Naphthalene biased low concentrations

Sample Collection

- Disposed of 3 samples – Location 12 @ 15 ft. & documentation/field log record
- Excessive leaking of soil gas during collection at PV1 – 470; PV3— 93,000; PV 10 – 15,000
  —398 PID reading then device recalibrated.
- AMEC staff redirected from standard sampling protocols by DTSC as indicated by strikeouts on record and notation "per Theo"
- Mishandling of soil boring samples causing reduction in VOC concentrations

Draft Report

- Johnson & Edinger Model not appropriate for site-specific conditions, i.e.

  moisture; lateral water flow; slab defects; voids, water touching slabs

- Methanol in Subslab of 540 ug/m3 - DTSC estimates 27 ug/m3 as indoor air concentration.

- Methanol metabolizes into formaldehyde

Formaldehyde

From previous testing, OEHHA, CDPH and ATSDR identified Formaldehyde levels as an acute contaminate of concern and recommended further testing.

DTSC was refused to test for formaldehyde. Residents had to fight to get the other agencies' recommendation included. As a result of including Formaldehyde in the testing workplan, form was found in the Subslab, soil gas at 10 and 25 feet from homes, as well as being found in ambient air and groundwater - indicating its coming from a source outside the homes.

Despite recognition that formaldehyde poses an acute health hazard, after more than a year, no public health referrals have been made for local residents!

QUALITY CONTROL SAMPLE RESULTS

1. FORMALDEHYDE GW #13 DUPL.
2. FORMALDEHYDE SV # 60-SV-15 < 3.76
3. BENZENE 6 SV-15 .02 BENZENE

TABLE 6

QUALITY CONTROL SAMPLE RESULTS
Autumnwood Development
Wildomar, California

Soil Samples				
Soil Sample ID		6-SS-9-11	60-SS-9-11	
Analyte	Reporting Limits (mg/kg)	(primary)	(duplicate)	RPD
Title 22 Metals				
Antimony	0.750	<0.750	<0.750	--
Arsenic	0.750	0.815	0.822	1
Barium	0.500	93.0	101	8
Beryllium	0.250	0.308	0.326	6
Cadmium	0.500	<0.500	<0.500	--
Chromium	0.250	13.5	13.7	1
Cobalt	0.250	13.7	14.3	4
Copper	0.500	13.9	15.1	8
Lead	0.500	1.51	1.46	3
Molybdenum	0.250	<0.250	<0.250	--
Nickel	0.250	6.39	6.95	8
Selenium	0.750	<0.750	<0.750	--
Silver	0.250	<0.250	<0.250	--
Thallium	0.750	<0.750	<0.750	--
Vanadium	0.250	64.3	66.4	3
Zinc	1.000	43.8	46.8	7
Mercury	0.0835	<0.0835	<0.0835	--
Pesticides	RL	ND	ND	--
Polychlorinated biphenyls (PCBs)	50	<50	<50	--
Semi-volatile organic compounds (SVOCs)	RL	ND	ND	--

Groundwater Samples				
Groundwater Sample ID		11-GW-31-36	110-GW-31-36	
Analyte	Reporting Limits (ug/L)	(primary)	(duplicate)	RPD
Volatile Organic compounds (VOCs)	RL	ND	ND	--
Groundwater Sample ID		13-GW-27-32	130-GW-27-32	
Analyte	Reporting Limits (ug/L)	(primary)	(duplicate)	RPD
Formaldehyde	30	<30	<30	--

MANY VOC'S IN GROUNDWATER BELOW R.L. 48 UG/L EST.

12 UG/L -*

Soil Gas Samples							
Soil Gas Sample ID		1-SV-6	1-SV-5-Rep		6-SV-15	6-SV-15-Rep	
Analyte	Reporting Limits	(primary)	(duplicate)	RPD	(primary)	(duplicate)	RPD
Volatile Organic Compounds (VOCs)	RL	ND	ND	--	ND	ND	--

*.02 BENZENE WAS DETECTED AND LOGGED ON TABLE SOIL GAS

Soil Gas Soil Gas Sample				
Sample ID		10B-SV	10B-SV Rep	
Analyte	Reporting Limits (ug/m3)	(primary)	(duplicate)	RPD
Methanol	27	230	190	19
Methylene chloride (Dichloromethane)	3.5	3.7	<3.5	--
Benzene	3.2	7.6	5.8	27
Toluene	3.8	16	11	37
m,p-Xylene	8.8	18	12	29
o-Xylene	4.4	5.2	5.4	4
1,2,4-Trimethylbenzene	5.0	14	13	7
Formaldehyde in Soil Vapor				
Sample ID		6-SV-15	60-SV-15	
Analyte	Reporting Limits (ug/m3)	(primary)	(duplicate)	RPD
Formaldehyde	3.75	<3.75	<3.76	--

*SHOULD HAVE LISTED 3.76 IN SOIL GAS 60-SV-15 3.75 = RL

Notes:
1. RPDs = Relative Percent Different calculated using: $RPD = 2 \times \left[\frac{primary - duplicate}{primary + duplicate}\right] \times 100$
2. RPD was not calculated when either primary or duplicate sample, or both samples were not detected above the reporting limits, or detected concentrations less than five times the reporting limit.
3. Detected concentrations at the laboratory reporting limit are shown in bold.
4. RL = reporting limit
5. ND = Not detected at or above laboratory reporting limit.

Certificate of Analysis

Quality Control Section

Aldehydes by EPA Method 8315A - Quality Control

Batch W3K0392 - EPA 8315A

Blank (W3K0392-BLK1) — Prepared: 11/08/13 Analyzed: 11/11/13 13:17

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Formaldehyde		ND		ug/l					

LCS (W3K0392-BS1) — Prepared: 11/08/13 Analyzed: 11/11/13 13:17

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Formaldehyde		102		ug/l	100	102	44-173		

Matrix Spike (W3K0392-MS1) — Source: 3K08030-01 Prepared: 11/08/13 Analyzed: 11/11/13 13:17

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Formaldehyde	ND	113		ug/l	100	113	32-164		

Matrix Spike Dup (W3K0392-MSD1) — Source: 3K08030-01 Prepared: 11/08/13 Analyzed: 11/11/13 13:17

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Formaldehyde	ND	115		ug/l	100	115	32-164	2	20

DTSC only reported the "Target" Compounds they selected in their report.

Quantitation Report (QT Reviewed)

Data Path : E:\data\111413\
Data File : 13-SV-5.D
Acq On : 14 Nov 2013 1:49 pm
Operator : CS
Sample : 8311047-07
Misc : 0.01
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 27 14:48:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\METHODS\111213VAPOR.M
Quant Title : 8260 SV for volatile organic compounds GC/MS #3
QLast Update : Wed Nov 13 13:17:48 2013
Response via : Initial Calibration
InstName : GC MS #3

Internal Standards	R.T.	Qion	Response	Conc Units	Dev(Min)
1) Fluorobenzene	4.73	96	135226	50.00 ng	0.00
43) Chlorobenzene-D5	6.94	82	47497	50.00 ng	0.00
54) 1,4-Dichlorobenzene-d4	8.84	152	39303	50.00 ng	0.01
77) TBA-d9	3.10	65	18290	1000.00 ng	0.00
System Monitoring Compounds					
24) Dibromofluoromethane	4.26	113	21754	43.08 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 86.16%		
27) 1,2-Dichloroethane-d4	4.51	65	23486	49.63 ng	0.01
Spiked Amount 50.000	Range 62 - 139		Recovery = 99.26%		
37) Toluene-d8	5.84	98	118980	51.53 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 103.06%		
55) 4-Bromofluorobenzene	7.87	174	27890	50.35 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 100.70%		
Target Compounds					Qvalue
21) Chloroform	4.16	83	2625	2.41 ng	# 60
30) Benzene*	4.56	78	14751	5.54 ng	95

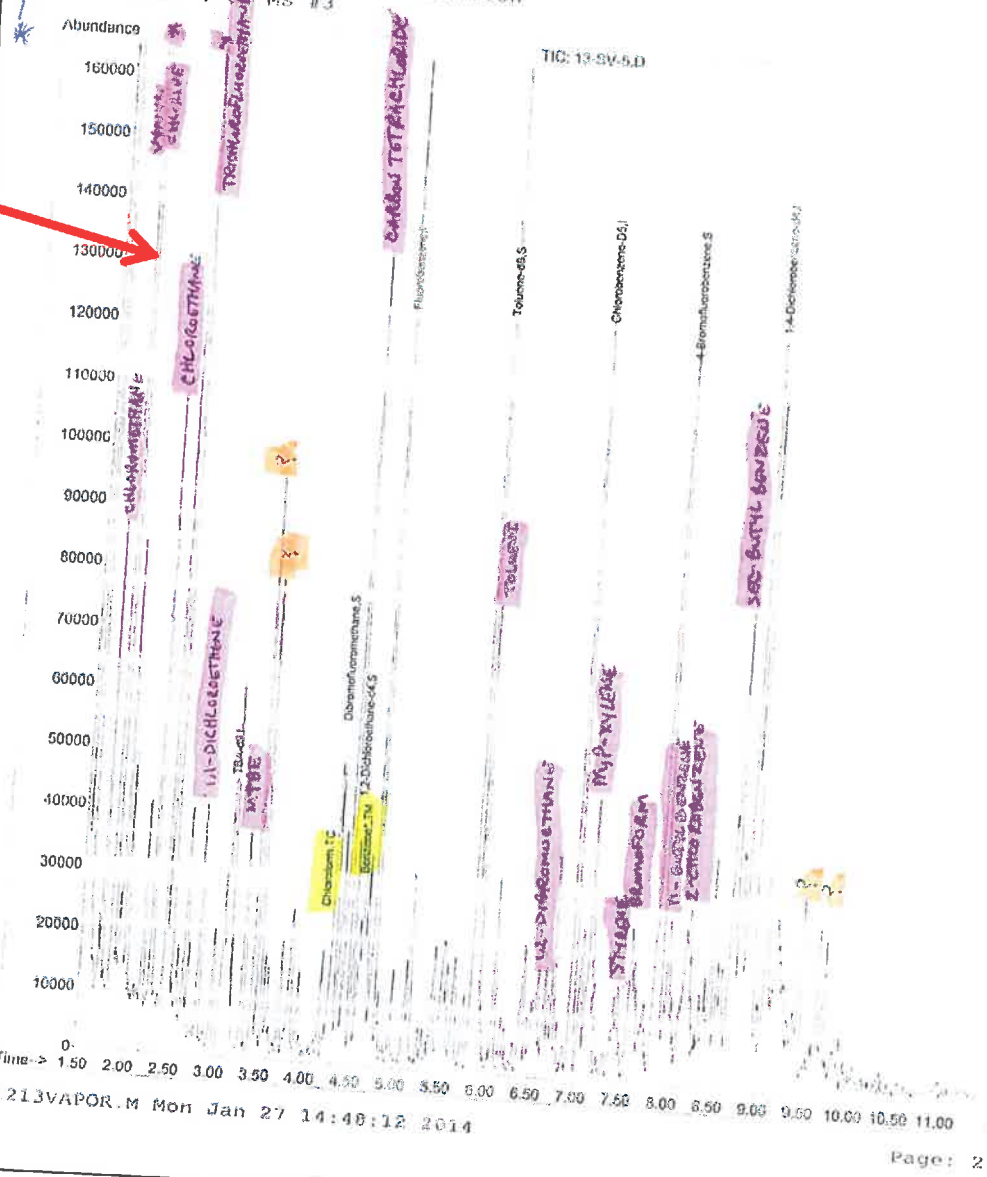
(#) = qualifier out of range (m) = manual integration (+) = signals summed

DTSC failed to report all the other compounds found in the testing and that would have been reported if they had run a normal full scan of 108+ compounds

Quantitation Report (QT Reviewed)

Data Path : E:\data\111413\
Data File : 13-SV-5.D
Acq On : 14 Nov 2013 1:49 pm
Operator : CS
Sample : 6311047-07
Misc : 0.01
ALS Vial : 16 Sample Multiplier: 1

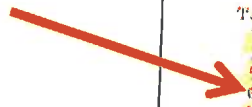
Quant Time: Jan 27 14:48:03 2014
Quant Method : C:\MSDCHEM\1\METHODS\METHODS\111213VAPOR.M
Quant Title : 8260 SV for volatile organic compounds GC/MS #3
QLast Update : Wed Nov 13 13:17:48 2013
Response via : Initial Calibration
InstName : GC/MS #3



111213VAPOR.M Mon Jan 27 14:48:12 2014

Page: 2

"Target" Compounds reported by DTSC



Quantitation Report (QT Reviewed)

Data Path : E:\data\111413\
Data File : 2-SV-15.D
Acq On : 14 Nov 2013 9:48 am
Operator : CS
Sample : E311047-04
Misc : 0.01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 27 14:39:38 2014
Quant Method : C:\MSDCHEM\1\METHODS\METHODS\111213VAPOR.M
Quant Title : 8260 SV for volatile organic compounds GC/MS #3
QLast Update : Wed Nov 13 13:17:48 2013
Response via : Initial Calibration
InstName : GC MS #3

Internal Standards	R.T.	Qion	Response	Conc Units	Dev(Min)
1) Fluorobenzene	4.73	96	127148	50.00 ng	0.00
43) Chlorobenzene-D5	6.94	82	45931	50.00 ng	0.00
54) 1,4-Dichlorobenzene-d4	8.84	152	38357	50.00 ng	0.00
77) TBA-d9	3.10	65	19677	1000.00 ng	0.00
System Monitoring Compounds					
24) Dibromofluoromethane	4.26	113	23503	48.77 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 97.54%		
27) 1,2-Dichloroethane-d4	4.50	65	24861	55.05 ng	0.00
Spiked Amount 50.000	Range 62 - 139		Recovery = 110.10%		
37) Toluene-d8	5.84	98	121178	54.99 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 109.98%		
55) 4-Bromofluorobenzene	7.87	174	29343	54.28 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 108.56%		
Target Compounds					Qvalue
30) Benzene*	4.56	78	20204	7.95 ng	96
38) Toluene*	5.90	92	46261	24.73 ng	94
50) m,p-Xylene*	7.12	106	36354	26.46 ng	95
65) 1,2,4-Trimethylbenzene	8.52	105	22767	10.29 ng	88
75) Naphthalene	10.78	128	238	20.26 ng	70

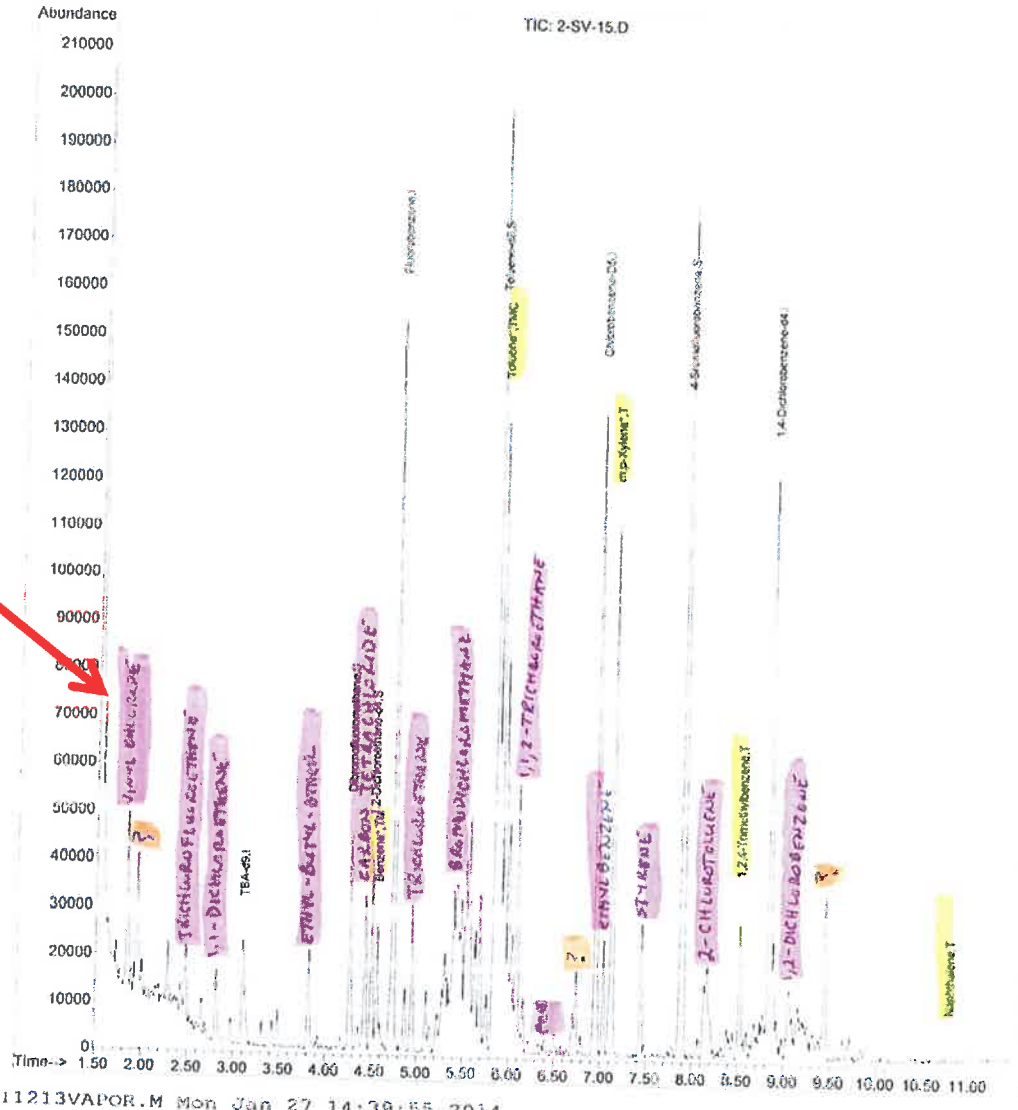
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Full Scan Compounds actually found in testing

Quantitation Report (QT Reviewed)

Data Path : E:\data\111413\
Data File : 2-SV-15.D
Acq On : 14 Nov 2013 9:48 am
Operator : CS
Sample : E311047-04
Misc : 0.01
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 27 14:39:38 2014
Quant Method : C:\MSDCHEM\1\METHODS\111213VAPOR.M
Quant Title : 8260 SV for volatile organic compounds GC/MS #3
QLast Update : Wed Nov 13 13:17:48 2013
Response via : Initial Calibration
InstName : GC MS #3



"Target" Compounds reported by DTSC

Quantitation Report (QT Reviewed)

Data Path : E:\data\111413\
Data File : 12-SV-5.D
Acq On : 14 Nov 2013 12:09 pm
Operator : CS
Sample : E311047-05
Misc : 0.01
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 27 14:42:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\METHODS\111213VAPOR.M
Quant Title : 8260 SV for volatile organic compounds GC/MS #3
QLast Update : Wed Nov 13 13:17:48 2013
Response via : Initial Calibration
InstName : GC MS #3

Internal Standards	R.T.	Qion	Response	Conc Units	Dev(Min)
1) Fluorobenzene	4.73	96	104267	50.00 ng	0.00
43) Chlorobenzene-D5	6.94	82	37196	50.00 ng	0.00
54) 1,4-Dichlorobenzene-d4	8.84	152	31013	50.00 ng	0.00
77) TBA-d9	3.10	65	14236	1000.00 ng	0.00
System Monitoring Compounds					
24) Dibromofluoromethane	4.27	113	19941	50.46 ng	0.01
Spiked Amount 50.000	Range 75 - 125		Recovery = 100.92%		
27) 1,2-Dichloroethane-d4	4.50	65	19652	53.06 ng	0.00
Spiked Amount 50.000	Range 62 - 139		Recovery = 106.12%		
37) Toluene-d8	5.84	98	94212	52.13 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 104.26%		
55) 4-Bromofluorobenzene	7.87	174	22900	52.39 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 104.78%		
Target Compounds					Qvalue
2) 1,1-Difluoroethane	1.56	65	30000	88.76 ng	87
30) Benzene*	4.55	78	4663	2.24 ng	82
50) m,p-Xylene*	7.12	106	13834	10.63 ng	93
65) 1,2,4-Trimethylbenzene	8.52	105	19958	11.16 ng	81
67) p-Isopropyltoluene	8.78	119	7186	3.35 ng	86

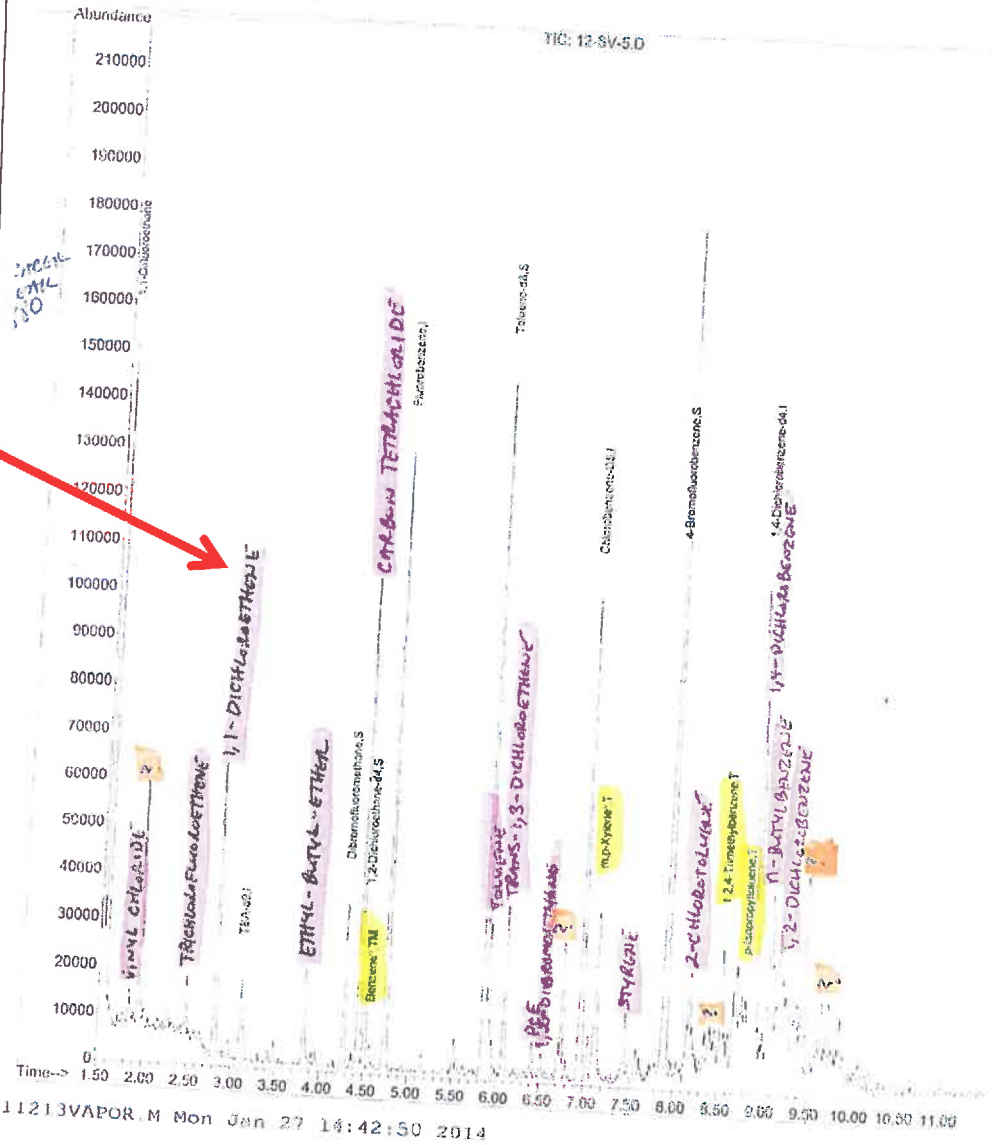
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Full Scan Compounds actually found in testing

Quantitation Report (QT Reviewed)

Data Path : E:\data\111413\
Data File : 12-SV-5.D
Acq On : 14 Nov 2013 12:09 pm
Operator : CS
Sample : E311047-05
Misc : 0.01
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 27 14:42:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\METHODS\111213VAPOR.M
Quant Title : 8260 SV for volatile organic compounds GC/MS #3
Last Update : Wed Nov 13 13:17:48 2013
Response via : Initial Calibration
InstName : GC MS #3



"Target" Compounds reported by DTSC

Quantitation Report (QT Reviewed)

Data Path : E:\data\111413\
Data File : 2-SV-5-10PV.D
Acq On : 14 Nov 2013 9:18 am
Operator : CS
Sample : E311047-03
Misc : 0.01
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 27 13:49:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\METHODS\111213VAPOR.M
Quant Title : 8260 SV for volatile organic compounds GC/MS #3
QLast Update : Wed Nov 13 13:17:48 2013
Response via : Initial Calibration
InstName : GC MS #3

Internal Standards	R.T.	Qion	Response	Conc Units	Dev(Min)
1) Fluorobenzene	4.73	96	115431	50.00 ng	0.00
43) Chlorobenzene-D5	6.94	82	38058	50.00 ng	0.00
54) 1,4-Dichlorobenzene-d4	8.84	152	32457	50.00 ng	0.00
77) TBA-d9	3.10	65	14536	1000.00 ng	0.00
System Monitoring Compounds					
24) Dibromofluoromethane	4.26	113	20813	47.58 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 95.16%		
27) 1,2-Dichloroethane-d4	4.50	65	21220	51.76 ng	0.00
Spiked Amount 50.000	Range 62 - 139		Recovery = 103.52%		
37) Toluene-d8	5.94	98	96501	48.24 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 96.48%		
55) 4-Bromofluorobenzene	7.97	174	23383	51.12 ng	0.00
Spiked Amount 50.000	Range 75 - 125		Recovery = 102.24%		
Target Compounds					Qvalue
12) Methylene Chloride	1.13	84	821	1.17 ng	91
21) Chloroform	4.16	83	3388	3.53 ng	91
30) Benzene*	4.57	78	4996	2.17 ng	97
50) m,p-Xylene*	7.12	106	31092	27.31 ng	93

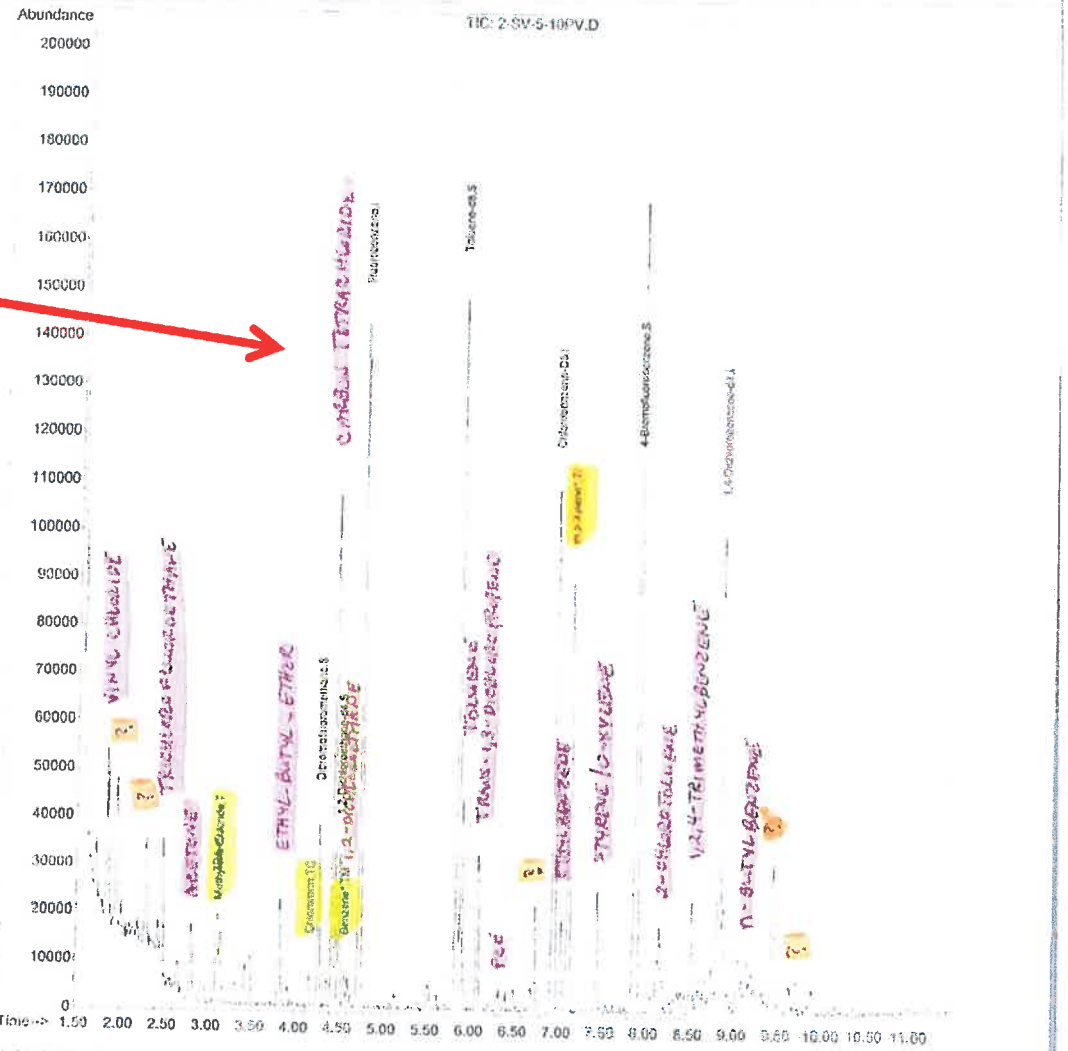
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Full Scan Compounds actually found in testing

Quantitation Report (QT Reviewed)

Data Path : E:\data\111413\
Data File : 2-SV-5-100PV.D
Acq On : 14 Nov 2013 9:16 am
Operator : CS
Sample : E311047-03
Misc : 0.01
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 27 13:49:02 2014
Quant Method : C:\MSDCHEM\1\METHODS\METHODS\111213VAPOR.M
Quant Title : 8260 SV for volatile organic compounds GC/MS #3
QLast Update : Wed Nov 13 13:17:48 2013
Response via : Initial Calibration
InstName : GC MS #3



111213VAPOR.M Mon Jan 27 13:49:11 2014 Page: 2

"Target" Compounds reported by DTSC

Quantitation Report (QT Reviewed)

Data Path : D:\DATA\111913.1p\
Data File : AMBC-148-SV.D
Acq On : 20 Nov 2013 12:05 pm
Operator : slc
Misc :
ALS Vial : 18 Sample Multiplier: 5

Quant Time: Jan 30 11:14:08 2014
Quant Method : C:\msdchem\1\METHODS\102313ppbV-250cc.M
Quant Title : EPA TO-15 GC/MS #12
QLast Update : Thu Jan 30 10:36:55 2014
Sample : E311062-02

Inst : GCMS#12

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	7.369	130	141920	50.00	ppbV	0.00
41) Difluorobenzene	8.615	114	553317	50.00	ppbV	0.00
63) Chlorobenzene-d5	11.131	82	300131	50.00	ppbV	0.00
System Monitoring Compounds						
35) 1,2-Dichloroethane-d4	7.885	65	279748	53.72	ppbV	0.00
Spiked Amount 50.000			Recovery = 107.44%			
55) Toluene-d8	10.065	98	545628	52.96	ppbV	0.00
Spiked Amount 50.000			Recovery = 105.92%			
72) 4-Bromofluorobenzene	12.001	95	350180	48.23	ppbV	0.00
Spiked Amount 50.000			Recovery = 96.46%			
Target Compounds						Qvalue
4) 1,1,-Difluoroethane	2.996	51	10514	4.395	ppbV	97
5) Propene	3.071	41	5792	4.852	ppbV	89
13) Ethanol	4.351	45	5838	5.127	ppbV	100
14) Acetone	4.823	43	1147573	188.947	ppbV	92
18) tert-Butanol	5.668	59	11873	1.454	ppbV	63
21) Carbon Disulfide	5.988	76	13143	1.572	ppbV	100
24) Methyl-tert-Butyl Ether	6.705	73	22006	2.378	ppbV #	48
26) 2-Butanone	6.945	43	40650	6.208	ppbV	96
30) Hexane	7.408	57	15526	4.671	ppbV	89
39) Benzene	8.423	78	244356	32.953	ppbV	99
42) Cyclohexane	8.601	84	23849	6.619	ppbV	86
49) 2,2,4 Trimethylpentane	9.078	57	71754	5.866	ppbV #	92
50) Heptane	9.218	71	5765	2.500	ppbV	95
56) Toluene	10.124	91	548069	41.655	ppbV	100
61) Tetrachloroethene	10.771	166	12937	1.875	ppbV	94
65) Ethylbenzene	11.357	91	129366	7.871	ppbV	99
66) m,p-Xylene	11.449	91	274218	16.035	ppbV	99
70) o-Xylene	11.730	91	109139	6.570	ppbV	100
81) 1,2,4-Trimethylbenzene	12.793	105	74639	3.047	ppbV	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

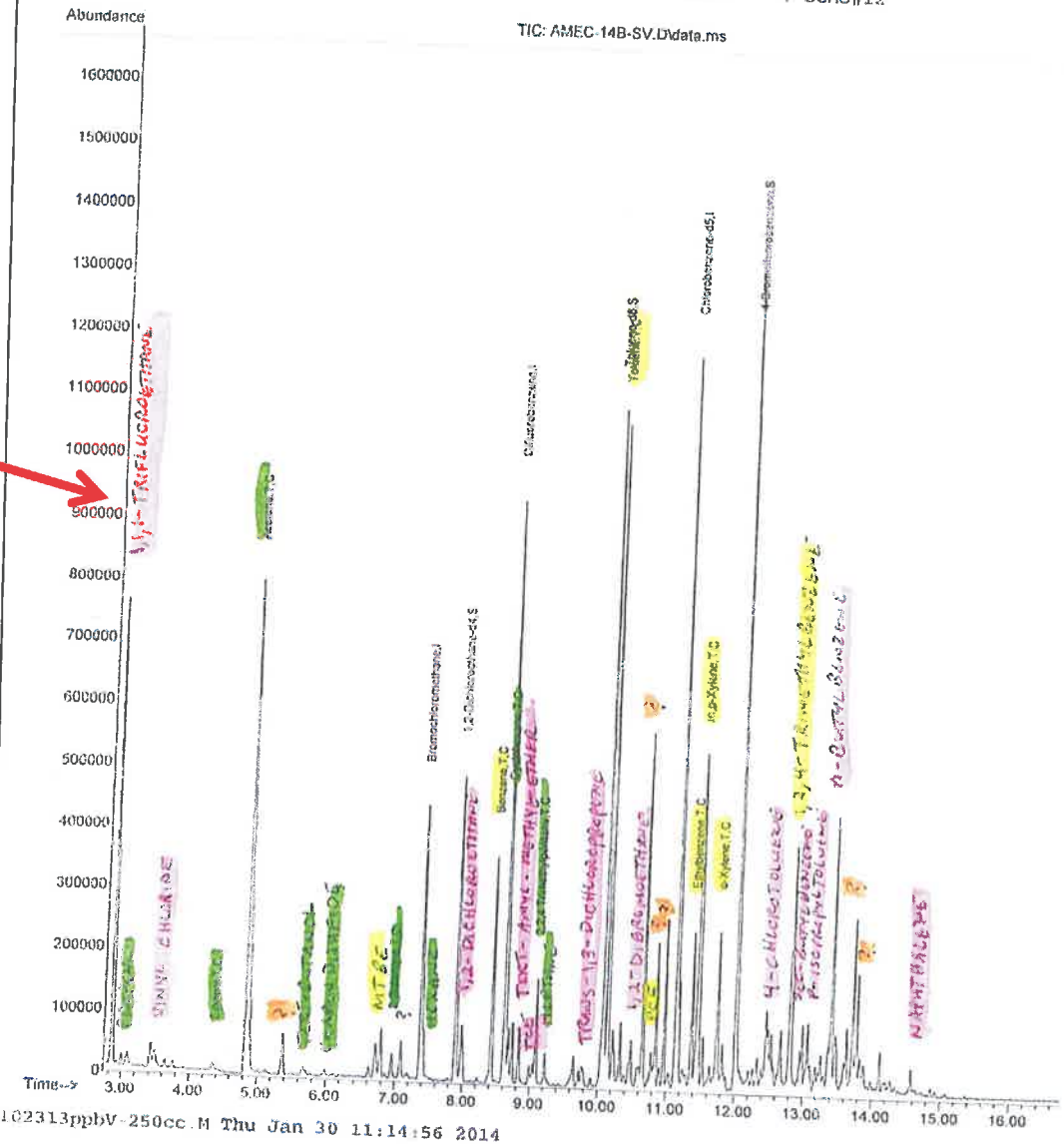
Full Scan Compounds actually found in testing

Quantitation Report (QT Reviewed)

Data Path : D:\DATA\111913.1p\
Data File : AMEC-14B-SV.D
Acq On : 20 Nov 2013 12:05 pm
Operator : slc
Misc :
ALS Vial : 18 Sample Multiplier: 5

Quant Time: Jan 30 11:14:08 2014
Quant Method : C:\msdchem\1\METHODS\102313ppbV-250cc.M
Quant Title : EPA TO-15 GC/MS #12
QLast Update : Thu Jan 30 10:36:55 2014
Sample : E311062-02

Inst : GCMS#12



102313ppbV-250cc.M Thu Jan 30 11:14:56 2014

All test sites show contaminants in groundwater – EXCEPT sample taken on 11/14/2013.

This sample was the split sample provided to our Industrial Hygienist for testing at a different lab.

Although the other testing sites are surrounding this site, unlike all the other sampling sites, this sample shows very few contaminants.!?!

Raw Data & Quantitation (Reviewed)		ug/L			
sample dates	11/14/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013
VOC (Groundwater Locations)	7-GW	13-GW	11-GW	110-GW	1-GW
Ethanol	2.06	3.67	16.92	5.14	16.22
Tert-Butyl Alcohol-(TBA)		18.05	4.58	3.2	9.25
Chloromethane	0.3	0.35	0.49	0.45	0.29
Bromomethane	2.87	0.91	1.21	1.11	1.17
Chloroethane		0.61	0.6	2.08	0.49
1,3-Butadiene		0.44		0.11	
Acetone	0.78				
Iodomethane			0.15	0.16	
1,1-Dichloroethene				0.12	
Isopropanol	0.38	9.14	8.23	2.17	15.49
Acetonitrile			0.13	0.14	0.1
Acrylonitrile			0.15		
Acrolein		0.7	0.48	0.56	0.32
Methylene Chloride			0.1	0.13	
Isobutyl Alcohol		1.36	3.63	4.1	2.4
Hexane		0.32	0.13		
Vinyl-Acetate					0.14
2,2-Dichloropropane			0.11	0.13	0.27
2-Butanone		1.1	0.75	0.61	0.49
Propionitrile		0.12	0.13		0.13
Tetrahydrofuran		0.13			
Chloroform		0.83	0.18	0.18	
Cyclohexane		1.32	1.3	1.19	1.34
Benzene		0.1	0.11	0.1	0.21
Methyl Methacrylate		3.36	3.51	3.48	3.48
1,4-Dioxane		0.47	0.58	1.49	0.58
Bromodichloromethane		0.22			
Toluene	0.11	0.13	0.11	0.12	0.13
Ethyl Methacrylate		4.61	4.61	4.6	4.6
Hexachloro-1,3-Butadiene		0.12		0.111	
Total Groundwater VOC's	6.5	48.06	48.19	31.481	57.1

Truth Out Article

Dr. Yoram Cohen, a professor of chemical engineering at UCLA who has led a number of studies looking into contamination in Southern California, has looked at the DTSC's January report, though not the raw data. He also examined the findings from the previous studies conducted at Autumnwood. He recommended that the community approach their State or Federal representative, and that they also consider urging the United States Environmental Protection Agency for an independent investigation.

David O. Carpenter, director of the Institute for Health and the Environment University at Albany

- "The only situation that I've run into where there was something similar was on a project I was doing in Northern Alaska on former military bases. They were building a foundation for a school and they dug up a tank. When the defense department left, they had just buried everything,"

Professor Carpenter, who has published studies looking into the health effects of toxic exposure, said that one of the concerns at Autumnwood is that little is known about the way in which chemicals act synergistically, even at low levels and over an extended period of time.

"The issue here is you know that you have a number of known human carcinogens. Formaldehyde and benzene would be cases in point, "said professor Carpenter. "Where you have two chemicals, each of which cause cancer; when you're exposed to both of them, you have more than an additive elevated risk. And in this instance, you have no idea of how many carcinogens people are being exposed to.“

That sentiment echoed by **Dr. Nachman Brautbar**, a specialist in toxicology, who also agreed that little was known about the long-term accumulative affects of toxic exposure.

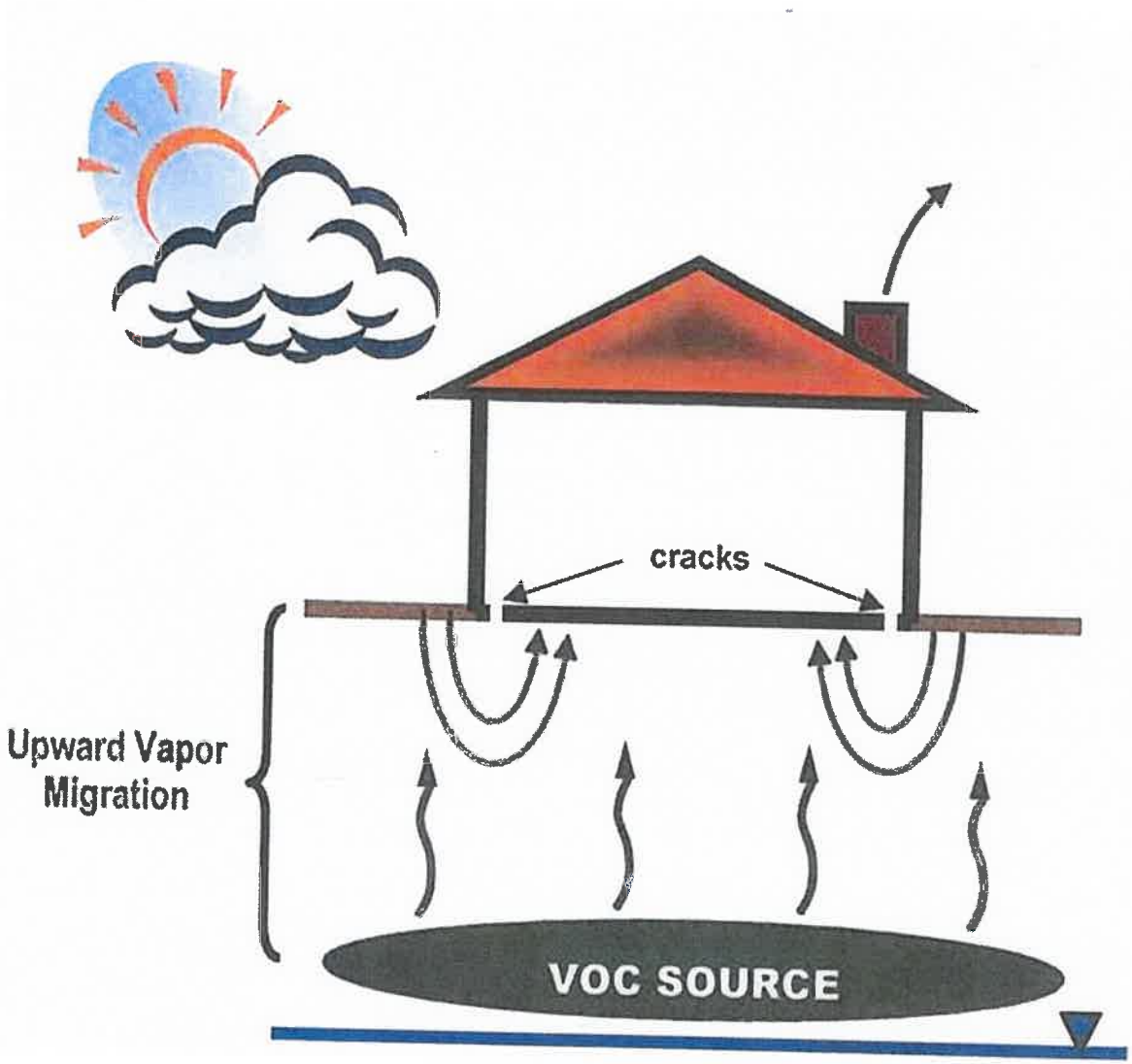
"Just because the levels are not at a level that the regulatory agencies do not recognize, that does not mean that it's healthy for these residents," said Dr. Brautbar. "There are chemicals that have an accumulative effect, and we have to take into consideration the duration of the exposure."

REQUESTS

- Due to the multiple inconsistencies with the testing, we request the following:
  - CalEPA to take the lead in a risk assessment investigation using independent contractors.
  - Invite U.S. EPA to join in the investigation
  - Consultation with ATSDR, OEHHA, CDPH and other appropriate agencies - with full involvement in developing the testing work plan.
  - Meaningful and full involvement by the residents

Full Comprehensive Risk Assessment Investigation

- Comprehensive testing to include simultaneous indoor air, Subslab, soil gas, soil matrix, groundwater sampling – near homes



- Following appropriate protocols for vapor intrusion testing at each house in groundwater, soil, Subslab indoor and outdoor air testing.

- Using CHHSLs and health based Detection Levels.

- Conduct long term testing instead of snap shot testing with at least a 24-hour indoor air testing.

- Test the white substance for the compounds found in the AQMD testing which included Uranium

Legend

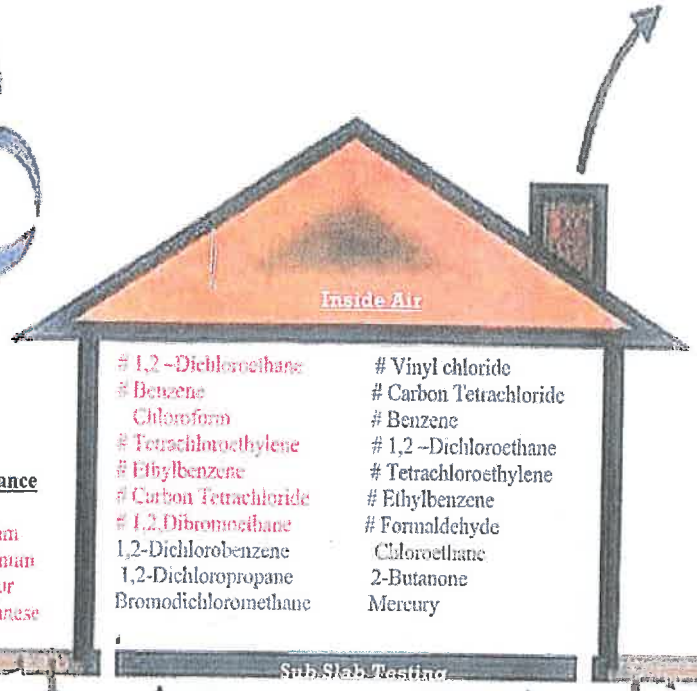
- AQMD Testing
- Independent Testing
- Arni Adini
- DTSC
- DTSC Groundwater
- HOA Testing

Above Health Threshold

@ All chemicals in powdery substance are high and above that to be expected in region with Uranium levels 77% higher than western US levels

Outside Air

# Carbon Tetrachloride	Toluene
# Benzene	Chlorobenzene
# Naphthalene	Tetrachloroethylene
# Vinyl Chloride	Vinyl acetate
1,2-dichloroethane	O-Xylene
Ethane	2-propanol
Propane	# Vinyl chloride
Chloromethane	# Carbon Tetrachloride
Bromoethane	# Benzene
Ethanol	# 1,2 –Dichloroethane
Methylene chloride	# Tetrachloroethylene
1,1-dichloroethane	# Ethylbenzene
2- butanone MEK	# Formaldehyde
Chloroform	Chlorobenzene
Bromoform	Chloroform
Ethyl benzene	Chlorobenzene
1,2-dibromoethane	Chloromethane
	Trichloroethylene
	Trichloroflouromethane



# 1,2 –Dichloroethane	# Vinyl chloride
# Benzene	# Carbon Tetrachloride
Chloroform	# Benzene
# Tetrachloroethylene	# 1,2 –Dichloroethane
# Ethylbenzene	# Tetrachloroethylene
# Carbon Tetrachloride	# Ethylbenzene
# 1,2 Dibromoethane	# Formaldehyde
1,2-Dichlorobenzene	Chloroethane
1,2-Dichloropropane	2-Butanone
Bromodichloromethane	Mercury

White Powdery Substance in yards @

# Arsenic	Uranium
Barium	Aluminum
Phosphorous	Sulphur
Chromium	Manganese

Outside Soil—Soil Gas

Chloroform	Formaldehyde
Toluene	Chloromethane
Chlorobenzene	Trichloroethylene
Trichloroethylene	Benzene
Chloromethane	Chloroform
Trichloroflouromethane	Toluene
# Benzene	Trichloroflouromethane
# Ethylbenzene	Ethylbenzene
# Tetrachloroethene	Tetrachloroethene
# Naphthalene	m-p-Xylene
# Chloroform	o-Xylene
Toluene	MTBE
m-p-Xylene	1,2,4-Trimetholbenzene
O-Xylene	1,3,5-Trimetholbenzene
MTBE	Vinyl Chloride
1,2,4-Trimetholbenzene	Naphthalene
1,3,5-Trimetholbenzene	1,2-Dibromoethane
p-Isopropyltoluene	Carbon Tetrachloride

# Benzene	MTBE
Toluene	m-p-Xylene
# Naphthalene	o-Xylene
Styrene	# Benzene
# Chloroform	Chloroform
# Benzene	Tetrachloroethylene
# Ethylbenzene	Ethylbenzene
# Tetrachloroethene	Chloromethane
Formaldehyde	1,2-Dichloroethane
# Chloroform	Trichloroethylene
Toluene	Trichloroflouromethane
# Methylene Chloride	Carbon Tetrachloride
1,2,4-Trimetholbenzene	Methylene chloride
1,2,5-Trimetholbenzene	

Groundwater

Acetine	Chloroethane	Toluene	Ethanol	Tetrahydrofuran
Benzene	Chloroform	2,2-dichloropropane	Tert-butyl alcohol	cyclohexane
Bromodichloromethane	Chloromethane	Methylene chloride	Acetonitrile	Methyl methacrylate
Bromomethane	1,1-dichloroethane	Vinyl-acetate	1,4-dioxane	Acrylonitrile
2-butanone	Isopropanol	Iodomethane	Formaldehyde	

Park Testing

In the report the Testing Firm commented on finding a "blackish stain at 1.2 feet with a "hydrocarbon odor in ambient air." "The origin of the blackish stain is unknown".

Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane c-1,2-Dichlorethene C-1,3-Dichloropropene **Vinyl Chloride** Carbon tetrachloride **Styrene** Toluene Hexavalent Chromium **# Arsenic Lead Dioxin Chloroform Ethylbenzene** Dibromomethane MTBE **Benzene Tetrachlorethene (PCE) Naphthalene Trichloroethene (TCE)** Methylene chloride **1,2-Dibromoethane** ETBE **Bis (2-Ethylhexyl) phthalate** nd many more industrial and agricultural chemicals!