

Texas Commission on Environmental Quality

Laboratory and Mobile Monitoring Section

P.O. Box 13087

Austin, Texas 78711

(512) 239-1869

Laboratory Analysis Results

ACL Number: 080821

ACL Lead: Ping Liu

Region: T04

Date Received: 8/26/2008

Facility(ies) Sampled	City	County	Facility Type
Salty's Disposal Well--Parker #1	Springtown	Parker	Unknown

Laboratory Procedure(s) Performed:

Analysis: AMOR006

Determination of VOC Canisters by GC/MS Using Modified Method TO-15

Procedure:

Prior to analysis, subatmospheric samples are pressurized to twice the collected volume using a sample dilution system. For analysis, a known volume of a sample is directed from the canister into a multitrap cryogenic concentrator. Internal standards are added to the sample stream prior to the trap. The concentrated sample is thermally desorbed and carried onto a GC column for separation. The analytical strategy involves using a GC with dual columns that are coupled to a mass selective detector (MSD) and a flame ionization detector (FID). Mass spectra for individual peaks in the total ion chromatogram are then used for target compound identification and quantitation. The fragmentation pattern is compared with stored spectra taken under similar conditions in order to identify the compound. For any given compound, the intensity of the quantitation fragment is compared with the system response to the fragment for known amounts of the compound. This establishes the compound concentration in the sample. For non-target compound peaks which are at least one-half the height of the internal standard, a library search is performed in an attempt to identify the compound solely upon fracture patterns. These tentatively identified compounds (TIC's) are reported as a sample specific footnote. Accurate quantitation of TICs is not possible. The FID is used for the quantitation of ethane, ethylene, acetylene, propylene and propane and identification is based on matching retention times of standards containing known analytes.

Sample(s) Received

Field ID Number: 20445

Laboratory Sample Number: 080821-0001

Sampled by: Amy Pritchett

Sampling Site: Near the open receiving pit at the facility.

Date & Time Sampled: 08/08/08 15:00:00 Valid Sample: Yes

Comments:

Canister 20445 was used to collect a sample approximately 3 feet downwind of the open receiving pits of this saltwater disposal facility. Height was approximately 6 feet above the surface of the liquid in the pit. If possible, please check for any other hazardous air pollutants (HAPs regulated via 30 TAC 113) present in the sample. The requested AMOR-014 is a PUF/XAD analysis. Currently canisters are used solely for VOC analytes. An oil/fuel pattern was observed in this sample.

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Laboratory Analysis Results**ACL Number: 080821****Sample(s) Screening**

As a routine procedure, the data from this (these) sample(s) have been screened. No target compounds were detected at or above the Effects Screening Level. Therefore, the TCEQ's Toxicology Section expects no adverse health effects or odors and will not review the data further. Please note that this analytical technique is not capable of measuring all compounds which might have the potential to cause adverse health effects or odors. For questions on the analytical procedures please contact the laboratory manager at (512)-239-1725. If further health effects evaluation is desired please contact the Toxicology Section at (512)-239-1795.

Analyst: Jaydeep Patel
Jaydeep PatelDate: ²⁸08 09/04/08Reviewed By: P. Li for P. Liu
Ping Liu

Date: 9/4/08

Section Manager: David Carmichael
David Carmichael (Acting)

Date: 9/4/08

Laboratory Analysis Results

ACL Number: 080821-0001

Analysis Code: AMOR006

Note: Results are reported in units of parts per billion by volume (ppbv)

Lab ID			080821-0001					
Field ID			20445					
Canister ID			20445					
Analysis Date			08/29/08					
Compound	ESL	MDL	Concentration	SDL	Flags**	Concentration	SDL	Flags**
ethane	10000	0.50	32	7.5	D1			
ethylene	1200	0.50	1.5	7.5	J,D1			
acetylene	25000	0.50	ND	7.5	D1			
propane	10000	0.50	10	7.5	L,D1			
propylene	68000	0.50	ND	7.5	D1			
dichlorodifluoromethane	10000	0.20	0.63	3.0	J,D1			
methyl chloride	500	0.20	1.3	3.0	J,D1			
isobutane	2000	0.23	2.3	3.5	J,D1			
vinyl chloride	50	0.17	0.08	2.6	J,D1			
1-butene	360	0.20	2.6	3.0	J,D1			
1,3-butadiene	50	0.27	ND	4.1	D1			
n-butane	8000	0.20	8.0	3.0	L,D1			
t-2-butene	2100	0.18	ND	2.7	D1			
bromomethane	30	0.27	ND	4.1	D1			
c-2-butene	2100	0.27	ND	4.1	D1			
3-methyl-1-butene	250	0.23	ND	3.5	D1			
isopentane	1200	0.27	3.6	4.1	J,D1			
trichlorofluoromethane	5000	0.29	0.41	4.4	J,D1			
1-pentene	100	0.27	ND	4.1	D1			
n-pentane	1200	0.27	4.0	4.1	J,D1			
isoprene	5.0	0.27	0.89	4.1	J,D1			
t-2-pentene	2600	0.27	ND	4.1	D1			
1,1-dichloroethylene	180	0.18	0.18	2.7	J,D1			
c-2-pentene	2600	0.25	ND	3.8	D1			
methylene chloride	75	0.14	ND	2.1	D1			
2-methyl-2-butene	250	0.23	ND	3.5	D1			
2,2-dimethylbutane	1000	0.21	0.30	3.2	J,D1			
isobutyraldehyde	47	2.0	ND	30	D1			
cyclopentene	2900	0.20	ND	3.0	D1			
4-methyl-1-pentene	20	0.22	ND	3.3	D1			
1,1-dichloroethane	1000	0.19	ND	2.9	D1			
cyclopentane	1200	0.27	ND	4.1	D1			
2,3-dimethylbutane	1000	0.28	ND	4.2	D1			
2-methylpentane	83	0.27	3.9	4.1	J,D1			
methyl-t-butyl ether	130	0.27	ND	4.1	D1			
methyl ethyl ketone	1300	2.0	ND	30	D1			
3-methylpentane	1000	0.23	2.3	3.5	J,A1,D1			
2-methyl-1-pentene + 1-hexene	20	0.20	ND	3.0	D1			
n-hexane	1500	0.20	10	3.0	D1			
ethyl acetate	4000	2.0	ND	30	D1			
chloroform	20	0.21	ND	3.2	D1			
t-2-hexene	20	0.27	ND	4.1	D1			
c-2-hexene	20	0.27	ND	4.1	D1			
1,2-dichloroethane	40	0.27	ND	4.1	D1			
methylcyclopentane	750	0.27	3.0	4.1	J,D1			
2,4-dimethylpentane	910	0.27	1.5	4.1	J,D1			
1,1,1-trichloroethane	2000	0.26	0.43	3.9	J,D1			
benzene	180	0.27	15	4.1	D1			

Laboratory Analysis Results

ACL Number: 080821-0001

Analysis Code: AMOR006

Quality Control Notes:

Quality control Notes for samples 080821-0001

A1-Not all associated QC data met accuracy specification. Data may be an average 23 percent low with a range of -39 to +4 percent.

A2-Not all associated QC data met accuracy specification. Data may be an average 23 percent low with a range of -40 to +5 percent.

TCEQ laboratory customer support may be reached at pliu@tceq.state.tx.us

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Note: Results are reported in units of parts per billion by volume (ppbv)

ESL - Effects Screening Level. (Short-term Health and Odor Based in units of ppbv)

MDL - Method Detection Limit .

ND - not detected

NQ - concentration can not be quantified.

SDL - Sample Detection Limit (MDL adjusted for dilutions).

INV - Invalid.

J - Reported concentration is below SDL.

L - Reported concentration is above the SDL and is below the lower limit of instrument calibration.

E - Reported concentration exceeds the upper limit of instrument calibration.

M - Result modified from previous result.

* SDL is equal to MDL

** Quality control flags explanations are listed on the last page of this report.

Compound concentration is equal to or greater than the Effects Screening Level.

D1-Sample was diluted 30 times to determine the concentration.

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