

FTIR Summary Report

TERRA AIR SERVICES
 2950 N. Loop West, Ste 1050
 Houston, Texas 77029
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Customer: Tosco SFR
Address: 1380 San Pablo Avenue
 Rodeo, CA 94572-1299

Monitoring Period
From: 04/01/98 00:00:01
To: 04/30/98 23:59:59

Total Hours: 720.00

North Fenceline

Compound	Path - Average Conc. (ppm)			Detections			Alarms				Path - MDL (ppm)		
	Avg.*	Max*	Min*	Number	Confirmed	False Positive	High Level (ppm)	#	Low Level (ppm)	#	Avg Detect Limit	Max Detect Limit	Min Detect Limit
1,1,1 Trichloroethane	0.000	0.000	0.000	2	0	2	450	0	350	0	0.032	0.467	0.014
1,3 Butadiene	0.000	0.000	0.000	0	0	0	50	0	10	0	0.046	0.463	0.019
2,2,4-Trimethylpentane	0.000	0.000	0.000	0	0	0	0	0	0	0	3.982	31.479	0.947
Acetaldehyde	0.000	0.000	0.000	0	0	0	150	0	25	0	0.663	8.821	0.265
Ammonia	0.000	0.000	0.000	29	0	29	100	0	3	0	0.019	0.251	0.007
Butane	0.000	0.000	0.000	0	0	0	1000	0	800	0	0.382	2.425	0.151
Carbon monoxide	0.000	0.000	0.000	634	0	634	400	0	20	0	0.381	9.556	0.237
Carbonyl sulfide	0.000	0.000	0.000	0	0	0	10	0	1	0	0.015	0.136	0.002
Chlorodifluoromethane	0.000	0.000	0.000	0	0	0	100	0	10	0	0.020	0.309	0.008
Diethanol amine	0.000	0.000	0.000	0	0	0	6	0	0.46	0	0.645	9.659	0.260
Dimethyl sulfide	0.000	0.000	0.000	0	0	0	500	0	50	0	0.459	5.086	0.164
Ethane	0.000	0.000	0.000	0	0	0	3000	0	1000	0	0.167	1.173	0.069
Ethyl benzene	0.000	0.000	0.000	0	0	0	125	0	100	0	0.363	3.824	0.146
Ethylene	0.000	0.000	0.000	0	0	0	2700	0	1000	0	0.040	0.430	0.015
Formaldehyde	0.000	0.000	0.000	31	0	31	2	0	0.3	0	0.042	0.688	0.003
Furan	0.000	0.000	0.000	0	0	0	2300	0	230	0	1.773	13.536	0.894
Hydrogen chloride	0.000	0.000	0.000	36	0	36	20	0	1	0	0.061	1.676	0.005
Hydrogen Cyanide	0.000	0.000	0.000	0	0	0	3	0	0.3	0	0.034	1.044	0.017
Methane	1.274	1.620	1.096	7322	7322	0	5000	0	1000	0	1.322	3.534	1.096
Methyl mercaptan	0.000	0.000	0.000	0	0	0	10	0	0.005	0	1.412	12.292	0.544
Methyl tert-butyl ether	0.000	0.000	0.000	13	0	13	200	0	40	0	0.126	1.834	0.051
n-Hexane	0.000	0.000	0.000	0	0	0	75	0	50	0	0.571	5.099	0.225
n-Octane	0.000	0.000	0.000	0	0	0	375	0	75	0	0.314	2.987	0.124
Naphthalene	0.000	0.000	0.000	0	0	0	15	0	10	0	0.861	8.863	0.265

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	Avg.*	Max*	Min*	Number	Confirmed	False Positive	High Level (ppm)	#	Low Level (ppm)	#	Avg Detect Limit	Max Detect Limit	Min Detect Limit
Nickel carbonyl	0.000	0.000	0.000	0	0	0	0.16	0	0.09	0	0.012	0.127	0.001
Nitrous oxide***	0.240	0.482	0.152	7854	7854	0	NONE	na	NONE	na	0.283	0.337	0.147
Ozone**	0.071	0.092	0.058	1146	191	955	NONE	na	NONE	na	0.066	0.689	0.023
Phenol	0.000	0.000	0.000	39	0	39	50	0	5	0	0.103	29.074	0.005
Phosgene	0.000	0.000	0.000	2	0	2	0.2	0	0.003	0	0.007	0.061	0.003
Propane	0.000	0.000	0.000	0	0	0	2500	0	1000	0	0.241	1.793	0.092

Number of Valid Spectra Collected and Analyzed: 7860

Online %:

92.8

Offline %:

7.2

South Fenceline

Compound	Path - Average Conc. (ppm)			Detections			Alarms				Path - MDL (ppm)		
	Avg.*	Max*	Min*	Number	Confirmed	False Positive	High Level (ppm)	#	Low Level (ppm)	#	Avg Detect Limit	Max Detect Limit	Min Detect Limit
1,1,1 Trichloroethane	0.000	0.000	0.000	2	0	2	450	0	350	0	0.063	7.056	0.006
1,3 Butadiene	0.000	0.000	0.000	0	0	0	50	0	10	0	0.121	1.913	0.013
2,2,4-Trimethylpentane	0.000	0.000	0.000	8	0	8	0	0	0	0	4.554	36.510	0.791
Acetaldehyde	0.000	0.000	0.000	1	0	1	150	0	25	0	1.186	24.554	0.086
Ammonia	0.000	0.000	0.000	204	0	204	100	0	3	0	0.035	0.531	0.008
Butane	0.000	0.000	0.000	1	0	1	1000	0	800	0	0.538	5.543	0.115
Carbon monoxide	0.000	0.000	0.000	1354	0	1354	400	0	20	0	0.527	21.606	0.314
Carbonyl sulfide	0.000	0.000	0.000	1	0	1	10	0	1	0	0.017	0.167	0.003
Chlorodifluoromethane	0.000	0.000	0.000	3	0	3	100	0	10	0	0.048	0.821	0.003
Diethanol amine	0.000	0.000	0.000	4	0	4	6	0	0.46	0	1.645	27.958	0.084
Dimethyl sulfide	0.000	0.000	0.000	1	0	1	500	0	50	0	1.106	14.424	0.070
Ethane	0.000	0.000	0.000	0	0	0	3000	0	1000	0	0.223	1.578	0.052
Ethyl benzene	0.000	0.000	0.000	17	0	17	125	0	100	0	0.692	9.405	0.109
Ethylene	0.000	0.000	0.000	0	0	0	2700	0	1000	0	0.170	2.920	0.006
Formaldehyde	0.000	0.000	0.000	15	0	15	2	0	0.3	0	0.135	1.676	0.000
Furan	0.000	0.000	0.000	2	0	2	2300	0	230	0	6.542	154.647	1.162
Hydrogen chloride	0.000	0.000	0.000	2	0	2	20	0	1	0	0.200	7.459	0.004
Hydrogen Cyanide	0.000	0.000	0.000	2	0	2	3	0	0.3	0	0.173	6.584	0.023
Methane	1.465	1.808	0.972	2726	2360	366	5000	0	1000	0	1.716	4.239	0.126

South Fenceline

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	Avg.*	Max*	Min*	Number	Confirmed	False Positive	High Level (ppm)	#	Low Level (ppm)	#	Avg Detect Limit	Max Detect Limit	Min Detect Limit
Methyl mercaptan	0.000	0.000	0.000	0	0	0	10	0	0.005	0	1.925	16.093	0.205
Methyl tert-butyl ether	0.000	0.000	0.000	12	0	12	200	0	40	0	0.336	8.818	0.017
n-Hexane	0.000	0.000	0.000	0	0	0	75	0	50	0	0.866	8.205	0.152
n-Octane	0.000	0.000	0.000	54	0	54	375	0	75	0	0.498	6.570	0.092
Naphthalene	0.000	0.000	0.000	57	0	57	15	0	10	0	1.155	131.337	0.108
Nickel carbonyl	0.000	0.000	0.000	51	0	51	0.16	0	0.09	0	0.017	0.199	0.002
Nitrous oxide***	0.251	0.485	0.208	2915	2419	496	NONE	na	NONE	na	0.749	2.308	0.208
Ozone**	0.000	0.000	0.000	53	0	53	NONE	na	NONE	na	0.122	3.320	0.018
Phenol	0.000	0.000	0.000	25	0	25	50	0	5	0	0.214	48.018	0.006
Phosgene	0.000	0.000	0.000	0	0	0	0.2	0	0.003	0	0.172	20.974	0.002
Propane	0.000	0.000	0.000	1	0	1	2500	0	1000	0	0.339	4.537	0.069

Number of Valid Spectra Collected and Analyzed: 3012

Online %:

36.0

Offline %:

64.0

* Zero (0.000) values indicate all concentrations less than the minimum detection limit (<MDL)

** Included as an Interfering compound

*** Included as an ambient quality assurance check compound