

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: 12/1/97 00:00:01
To: 12/31/97 23:59:59

Total Hours: 744.00

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	21	0	21	450	0	350	0	0.098	5.365	0.009
1,3 Butadiene	0.000	0.000	0.000	2	0	2	50	0	10	0	0.099	3.237	0.018
2,2,4-Trimethylpentane	0.000	0.000	0.000	3	0	3	0	0	0	0	5.231	131.700	0.830
Acetaldehyde	0.000	0.000	0.000	0	0	0	150	0	25	0	1.266	27.326	0.166
Ammonia	0.000	0.000	0.000	3	0	3	100	0	3	0	0.031	0.489	0.005
Butane	0.000	0.000	0.000	1	0	1	1000	0	800	0	0.704	201.819	0.054
Carbon monoxide	0.321	5.615	0.106	1715	1715	0	400	1	20	0	0.552	21.393	0.106
Carbonyl sulfide	0.000	0.000	0.000	0	0	0	10	0	1	0	0.044	0.860	0.002
Chlorodifluoromethane	0.000	0.000	0.000	155	0	155	100	0	10	0	0.037	0.931	0.005
Diethanol amine	0.000	0.000	0.000	31	0	31	6	0	0.46	0	1.260	26.913	0.161
Dimethyl sulfide	0.000	0.000	0.000	4	0	4	500	0	50	0	0.758	20.078	0.127
Ethane	0.000	0.000	0.000	0	0	0	3000	0	1000	0	0.268	83.406	0.024
Ethyl benzene	0.000	0.000	0.000	5	0	5	125	0	100	0	0.603	17.336	0.050
Ethylene	0.000	0.000	0.000	1	0	1	2700	0	1000	0	0.069	1.895	0.011
Formaldehyde	0.000	0.000	0.000	42	0	42	2	0	0.3	0	0.127	1.899	0.002
Furan	0.000	0.000	0.000	6	0	6	2300	0	230	0	328.159	485639.260	1.068
Hydrogen chloride	0.000	0.000	0.000	9	0	9	20	0	1	0	0.212	8.523	0.003
Hydrogen Cyanide	0.000	0.000	0.000	13	0	13	3	0	0.3	0	82.912	199020.473	0.021
Methane	1.408	2.131	0.795	3622	3622	0	5000	0	1000	15	0.904	8.965	0.151
Methyl mercaptan	0.000	0.000	0.000	0	0	0	10	0	0.005	0	3.401	3961.191	0.183
Methyl tert-butyl ether	0.155	0.167	0.144	184	3	181	200	0	40	0	0.238	12.952	0.032
n-Hexane	0.000	0.000	0.000	0	0	0	75	0	50	0	1.139	532.328	0.078
n-Octane	0.000	0.000	0.000	1	0	1	375	0	75	0	0.731	420.514	0.042
Naphthalene	0.000	0.000	0.000	5	0	5	15	0	10	0	1.218	93.554	0.209

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Nickel carbonyl	0.000	0.000	0.000	20	0	20	0.16	0	0.09	0	0.050	1.541	0.001
Nitrous oxide***	0.220	0.856	0.044	3618	3618	0	NONE	na	NONE	na	0.300	1.985	0.016
Ozone**	2.135	3.684	0.983	252	252	0	NONE	na	NONE	na	0.097	3.086	0.017
Phenol	0.000	0.000	0.000	221	0	221	50	0	5	0	0.164	13.328	0.012
Phosgene	0.000	0.000	0.000	2	0	2	0.2	0	0.003	0	0.919	19.094	0.003
Propane	0.000	0.000	0.000	2	0	2	2500	0	1000	0	0.454	23.711	0.031

Number of Valid Spectra Collected and Analyzed: 5086

Online %: 58.1

Offline %: 41.9

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	8	0	8	450	0	350	0	0.037	0.076	0.011
1,3 Butadiene	0.000	0.000	0.000	0	0	0	50	0	10	0	0.042	0.083	0.024
2,2,4-Trimethylpentane	0.000	0.000	0.000	0	0	0	0	0	0	0	5.616	39.687	1.017
Acetaldehyde	0.000	0.000	0.000	0	0	0	150	0	25	0	0.804	2.586	0.326
Ammonia	0.019	0.038	0.011	287	287	0	100	80	3	67	0.017	0.033	0.010
Butane	0.000	0.000	0.000	0	0	0	1000	0	800	0	0.713	3.638	0.157
Carbon monoxide	0.346	0.513	0.242	1978	1978	0	400	0	20	0	0.514	8.152	0.181
Carbonyl sulfide	0.000	0.000	0.000	0	0	0	10	0	1	0	0.027	0.258	0.002
Chlorodifluoromethane	0.000	0.000	0.000	0	0	0	100	0	10	0	0.020	0.056	0.007
Diethanol amine	0.000	0.000	0.000	0	0	0	6	0	0.46	0	0.750	1.625	0.298
Dimethyl sulfide	0.000	0.000	0.000	3	0	3	500	0	50	0	0.408	0.759	0.227
Ethane	0.000	0.000	0.000	0	0	0	3000	0	1000	0	0.303	1.490	0.069
Ethyl benzene	0.000	0.000	0.000	0	0	0	125	0	100	0	0.577	1.417	0.147
Ethylene	0.000	0.000	0.000	0	0	0	2700	0	1000	0	0.037	0.071	0.020
Formaldehyde	0.000	0.000	0.000	95	0	95	2	0	0.3	0	0.050	0.209	0.003
Furan	0.000	0.000	0.000	0	0	0	2300	0	230	0	4.867	13.741	2.112
Hydrogen chloride	0.000	0.000	0.000	3	0	3	20	0	1	0	0.074	0.316	0.001
Hydrogen Cyanide	0.000	0.000	0.000	0	0	0	3	0	0.3	0	0.094	0.342	0.040
Methane	1.537	1.925	1.256	5699	5699	0	5000	0	1000	0	1.793	3.491	1.256

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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	2.557	14.661	0.547
Methyl tert-butyl ether	0.000	0.000	0.000	0	0	0	200	0	40	0	0.115	0.318	0.032
n-Hexane	0.000	0.000	0.000	0	0	0	75	0	50	0	1.046	5.232	0.230
n-Octane	0.000	0.000	0.000	0	0	0	375	0	75	0	0.572	2.851	0.126
Naphthalene	0.000	0.000	0.000	1	0	1	15	0	10	0	0.694	1.455	0.157
Nickel carbonyl	0.000	0.000	0.000	0	0	0	0.16	0	0.09	0	0.022	0.247	0.002
Nitrous oxide***	0.255	0.512	0.201	8267	8267	0	NONE	na	NONE	na	0.397	0.537	0.145
Ozone**	0.054	0.054	0.054	1	1	0	NONE	na	NONE	na	0.059	0.095	0.034
Phenol	0.000	0.000	0.000	82	0	82	50	0	5	0	0.152	39.411	0.006
Phosgene	0.000	0.000	0.000	6	0	6	0.2	0	0.003	0	0.007	0.014	0.004
Propane	0.000	0.000	0.000	0	0	0	2500	0	1000	0	0.441	2.644	0.096

Number of Valid Spectra Collected and Analyzed: 8274 Online %: 95.8 Offline %: 4.2

* 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