

FTIR Summary Report

TERRA AIR SERVICES
 2950 N. Loop West, Ste 1050
 Houston, Texas 77029
 Phone (713) 956-6250
 FAX (713) 956-2185

Customer: Tosco SFR

Monitoring Period

Address: 1380 San Pablo Avenue
 Rodeo, CA 94572-1299

From: 2/1/98 12:00:01 AM

Total Hours: 672.00

To: 2/28/98 11:59:59 PM

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	0	0	0	450	0	350	0	0.041	0.310	0.018
1,3 Butadiene	0.000	0.000	0.000	0	0	0	50	0	10	0	0.052	0.219	0.027
2,2,4-Trimethylpentane	0.000	0.000	0.000	0	0	0	0	0	0	0	3.875	34.456	1.382
Acetaldehyde	0.000	0.000	0.000	0	0	0	150	0	25	0	0.829	5.940	0.465
Ammonia	0.000	0.000	0.000	0	0	0	100	0	3	0	0.020	0.096	0.011
Butane	0.000	0.000	0.000	0	0	0	1000	0	800	0	0.566	3.249	0.206
Carbon monoxide	0.314	0.550	0.165	3847	3847	0	400	0	20	0	0.564	15.813	0.158
Carbonyl sulfide	0.000	0.000	0.000	0	0	0	10	0	1	0	0.018	0.146	0.008
Chlorodifluoromethane	0.000	0.000	0.000	1	0	1	100	0	10	0	0.025	0.172	0.014
Diethanol amine	0.000	0.000	0.000	0	0	0	6	0	0.46	0	0.812	5.308	0.454
Dimethyl sulfide	0.000	0.000	0.000	0	0	0	500	0	50	0	0.505	2.535	0.259
Ethane	0.000	0.000	0.000	0	0	0	3000	0	1000	0	0.239	1.389	0.091
Ethyl benzene	0.000	0.000	0.000	0	0	0	125	0	100	0	0.506	3.549	0.198
Ethylene	0.000	0.000	0.000	0	0	0	2700	0	1000	0	0.044	0.217	0.023
Formaldehyde	0.000	0.000	0.000	48	0	48	2	0	0.3	0	0.056	0.630	0.002
Furan	0.000	0.000	0.000	0	0	0	2300	0	230	0	2.075	11.746	0.883
Hydrogen chloride	0.000	0.000	0.000	36	0	36	20	0	1	0	0.083	1.480	0.006
Hydrogen Cyanide	0.000	0.000	0.000	0	0	0	3	0	0.3	0	0.040	0.493	0.017
Methane	1.325	1.666	1.083	7030	7030	0	5000	0	1000	0	1.438	2.545	1.072
Methyl mercaptan	0.000	0.000	0.000	0	0	0	10	0	0.005	0	1.975	14.860	0.750
Methyl tert-butyl ether	0.000	0.000	0.000	5	0	5	200	0	40	0	0.159	1.034	0.089
n-Hexane	0.000	0.000	0.000	0	0	0	75	0	50	0	0.818	5.416	0.306
n-Octane	0.000	0.000	0.000	0	0	0	375	0	75	0	0.447	2.937	0.168
Naphthalene	0.000	0.000	0.000	0	0	0	15	0	10	0	0.913	4.531	0.351

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Nickel carbonyl	0.000	0.000	0.000	0	0	0	0.16	0	0.06	0	0.015	0.137	0.006
Nitrous oxide***	0.223	0.349	0.180	7582	7582	0	NONE	na	NONE	na	0.349	0.521	0.180
Ozone**	0.000	0.000	0.000	111	0	111	NONE	na	NONE	na	0.072	0.381	0.036
Phenol	0.000	0.000	0.000	29	0	29	50	0	5	0	0.617	3468.775	0.006
Phosgene	0.000	0.000	0.000	6	0	6	0.2	0	0.003	0	0.008	0.038	0.004
Propane	0.000	0.000	0.000	0	0	0	2500	0	1000	0	0.359	2.737	0.127

Number of Valid Spectra Collected and Analyzed: 7592

Online %:

96.1

Offline %:

3.9

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	1	0	1	450	0	350	0	0.033	0.883	0.014
1,3 Butadiene	0.000	0.000	0.000	0	0	0	50	0	10	0	0.036	0.397	0.022
2,2,4-Trimethylpentane	0.000	0.000	0.000	0	0	0	0	0	0	0	2.477	55.443	1.035
Acetaldehyde	0.000	0.000	0.000	0	0	0	150	0	25	0	0.616	12.299	0.258
Ammonia	0.000	0.000	0.000	0	0	0	100	0	3	0	0.017	0.278	0.010
Butane	0.000	0.000	0.000	0	0	0	1000	0	800	0	0.261	2.518	0.135
Carbon monoxide	0.372	0.560	0.256	2731	2731	0	400	0	20	0	0.558	19.535	0.256
Carbonyl sulfide	0.000	0.000	0.000	0	0	0	10	0	1	0	0.013	0.205	0.003
Chlorodifluoromethane	0.000	0.000	0.000	0	0	0	100	0	10	0	0.019	0.575	0.008
Diethanol amine	0.000	0.000	0.000	0	0	0	6	0	0.46	0	0.607	13.704	0.252
Dimethyl sulfide	0.000	0.000	0.000	0	0	0	500	0	50	0	0.402	6.717	0.226
Ethane	0.000	0.000	0.000	0	0	0	3000	0	1000	0	0.119	1.432	0.062
Ethyl benzene	0.000	0.000	0.000	0	0	0	125	0	100	0	0.252	2.891	0.132
Ethylene	0.000	0.000	0.000	0	0	0	2700	0	1000	0	0.036	0.673	0.020
Formaldehyde	0.000	0.000	0.000	2	0	2	2	0	0.3	0	0.031	1.444	0.003
Furan	0.000	0.000	0.000	0	0	0	2300	0	230	0	4.749	24.021	2.075
Hydrogen chloride	0.000	0.000	0.000	36	0	36	20	0	1	0	0.046	2.375	0.003
Hydrogen Cyanide	0.000	0.000	0.000	0	0	0	3	0	0.3	0	0.096	0.466	0.041
Methane	1.476	1.804	1.236	6266	6266	0	5000	0	1000	0	2.079	7.572	1.236

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	0.955	15.698	0.488
Methyl tert-butyl ether	0.000	0.000	0.000	0	0	0	200	0	40	0	0.120	2.913	0.050
n-Hexane	0.000	0.000	0.000	0	0	0	75	0	50	0	0.388	5.550	0.200
n-Octane	0.000	0.000	0.000	0	0	0	375	0	75	0	0.213	3.126	0.110
Naphthalene	0.000	0.000	0.000	17	0	17	15	0	10	0	0.677	8.582	0.233
Nickel carbonyl	0.000	0.000	0.000	0	0	0	0.16	0	0.09	0	0.011	0.179	0.002
Nitrous oxide***	0.247	0.491	0.196	7004	7004	0	NONE	na	NONE	na	0.620	0.957	0.196
Ozone**	0.000	0.000	0.000	0	0	0	NONE	na	NONE	na	0.055	0.783	0.037
Phenol	0.000	0.000	0.000	14	0	14	50	0	5	0	0.066	12.607	0.002
Phosgene	0.000	0.000	0.000	0	0	0	0.2	0	0.003	0	0.006	0.207	0.003
Propane	0.000	0.000	0.000	0	0	0	2500	0	1000	0	0.161	1.778	0.082

Number of Valid Spectra Collected and Analyzed: 7007

Online %:

89.8

Offline %:

10.2

* 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