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TERRA AIR SERVICES
FTIR Summary Report

Customer: Tosco SFAR
Address: 1380 San Pablo Avenue
Rodeo, CA 94572-1298

Monitoring Period

From: 01/01/99 00:00:01
To: 01/31/99 23:59:59

Total Hours: 744.00

North Fenceline

Compound	Path - Average Conc. (ppm)		Detections		Alarms			Path - MDL (ppm)					
	Avg.*	Max*	Min*	Number	Confirmed	J Values	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	0.033	0.741	0.002
1,3 Butadiene	0.000	0.000	0.000	1	0	1	50	0	10	0	0.028	1.800	0.006
2,2,4-Trimethylpentane	0.000	0.000	0.000	0	0	0	0	0	0	0	5.133	84.346	0.909
Acetaldehyde	0.000	0.000	0.000	1	0	0	150	0	25	0	0.689	14.412	0.238
Ammonia	0.000	0.000	0.000	83	0	83	100	0	3	0	0.012	0.385	0.002
Butane	0.000	0.000	0.000	0	0	0	1000	0	800	0	0.467	5.000	0.135
Carbon monoxide	0.312	2.552	0.126	5913	5913	0	400	0	20	0	1.969	40.926	0.126
Carbonyl sulfide	0.000	0.000	0.000	0	0	0	10	0	1	0	0.026	0.282	0.001
Chlorodifluoromethane	0.000	0.000	0.000	0	0	0	100	0	10	0	0.021	0.445	0.007
Diethanol Amine	0.000	0.000	0.000	1	0	0	6	0	0.46	0	0.673	14.487	0.226
Dimethyl sulfide	0.000	0.000	0.000	9	0	9	500	0	50	0	0.331	8.233	0.156
Ethane	0.000	0.000	0.000	0	0	0	3000	0	1000	0	0.211	2.062	0.059
Ethyl benzene	0.000	0.000	0.000	0	0	0	125	0	100	0	0.428	4.515	0.124
Ethylene	0.000	0.000	0.000	0	0	0	2700	0	1000	0	0.030	2.241	0.010
Formaldehyde	0.000	0.000	0.000	129	0	118	2	0	0.3	0	0.061	1.492	0.004
Furan	0.000	0.000	0.000	0	0	0	2300	0	230	0	3.289	36.651	1.102
Hydrogen chloride	0.000	0.000	0.000	66	0	66	20	0	1	0	0.067	2.208	0.007
Hydrogen cyanide	0.000	0.000	0.000	0	0	0	3	0	0.3	0	0.069	1.292	0.020
Methane	1.204	1.717	0.442	7258	7258	0	5000	0	1000	0	0.889	2.659	0.405
Methyl mercaptan	0.000	0.000	0.000	0	0	0	10	0	0.005	0	1.699	16.173	0.456
Methyl tert-butyl ether	0.108	0.162	0.076	23	23	0	200	0	40	0	0.132	2.969	0.044
n-Hexane	0.000	0.000	0.000	0	0	0	75	0	50	0	0.694	5.703	0.197
n-Octane	0.000	0.000	0.000	0	0	0	375	0	75	0	0.390	3.247	0.108
Naphthalene	0.000	0.000	0.000	0	0	0	15	0	10	0	0.501	23.765	0.078

Date: 21-Feb-99 12:18

North Fenceline

Compound	Path - Average Conc. (ppm)		Detections		Alarms			Path - MDL (ppm)					
	Avg.*	Max*	Min*	Number	Confirmed	J Values	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	0.021	0.229	0.001
Nitrous oxide***	0.271	0.581	0.196	7518	7518	0	NONE	na	NONE	na	0.569	1.441	0.196
Ozone**	0.000	0.000	0.000	790	0	790	NONE	na	NONE	na	0.046	0.991	0.009
Phenol	0.000	0.000	0.000	53	0	0	50	0	5	0	0.183	70.035	0.008
Phosgene	0.000	0.000	0.000	0	0	0	0.2	0	0.003	0	0.007	0.252	0.002
Propane	0.000	0.000	0.000	0	0	0	2500	0	1000	0	0.289	6.006	0.082

Number of Valid Spectra Collected and Analyzed: 7580

Online %: 87.5 Offline %: 12.5

South Fenceline

Compound	Path - Average Conc. (ppm)		Detections		Alarms			Path - MDL (ppm)					
	Avg.*	Max*	Min*	Number	Confirmed	J Values	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	0.036	0.205	0.013
1,3 Butadiene	0.000	0.000	0.000	0	0	0	50	0	10	0	0.048	0.278	0.016
2,2,4-Trimethylpentane	0.000	0.000	0.000	0	0	0	0	0	0	0	5.534	37.542	1.237
Acetaldehyde	0.000	0.000	0.000	0	0	0	150	0	25	0	0.758	4.420	0.296
Ammonia	0.000	0.000	0.000	8	0	8	100	0	3	0	0.021	0.091	0.007
Butane	0.000	0.000	0.000	0	0	0	1000	0	800	0	0.674	2.447	0.182
Carbon monoxide	0.300	0.497	0.195	1678	1678	0	400	0	20	0	0.829	24.596	0.195
Carbonyl sulfide	0.000	0.000	0.000	0	0	0	10	0	1	0	0.025	0.240	0.003
Chlorodifluoromethane	0.000	0.000	0.000	0	0	0	100	0	10	0	0.023	0.148	0.009
Diethanol Amine	0.000	0.000	0.000	0	0	0	6	0	0.46	0	0.744	4.581	0.290
Dimethyl sulfide	0.000	0.000	0.000	5	0	0	500	0	50	0	0.426	1.909	0.180
Ethane	0.000	0.000	0.000	0	0	0	3000	0	1000	0	0.298	0.966	0.079
Ethyl benzene	0.000	0.000	0.000	0	0	0	125	0	100	0	0.573	2.234	0.168
Ethylene	0.000	0.000	0.000	0	0	0	2700	0	1000	0	0.039	0.177	0.016
Formaldehyde	0.000	0.000	0.000	189	0	189	2	0	0.3	0	0.055	0.915	0.004
Furan	0.000	0.000	0.000	0	0	0	2300	0	230	0	4.793	13.955	1.620
Hydrogen chloride	0.000	0.000	0.000	57	0	57	20	0	1	0	0.095	1.402	0.005
Hydrogen cyanide	0.000	0.000	0.000	0	0	0	3	0	0.3	0	0.095	0.403	0.032
Methane	1.466	2.404	0.621	5611	5611	0	5000	0	1000	0	1.544	2.384	0.621

South Fenceline

Compound	Path - Average Conc. (ppm)		Detections		Alarms			Path - MDL (ppm)					
	Avg.*	Max*	Min*	Number	Confirmed	J Values	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	2.476	9.300	0.624
Methyl tert-butyl ether	0.000	0.000	0.000	0	0	0	200	0	40	0	0.145	0.897	0.057
n-Hexane	0.000	0.000	0.000	0	0	0	75	0	50	0	1.006	3.378	0.264
n-Octane	0.000	0.000	0.000	0	0	0	375	0	75	0	0.551	1.811	0.144
Naphthalene	0.000	0.000	0.000	0	0	0	15	0	10	0	0.668	3.646	0.206
Nickel carbonyl	0.000	0.000	0.000	0	0	0	0.16	0	0.09	0	0.021	0.218	0.002
Nitrous oxide***	0.286	0.618	0.211	6153	6153	0	NONE	na	NONE	na	0.537	0.895	0.211
Ozone**	0.000	0.000	0.000	203	0	203	NONE	na	NONE	na	0.058	0.250	0.029
Phenol	0.112	0.232	0.072	43	18	25	50	0	5	0	0.188	30.978	0.005
Phosgene	0.000	0.000	0.000	0	0	0	0.2	0	0.003	0	0.009	0.055	0.002
Propane	0.000	0.000	0.000	0	0	0	2500	0	1000	0	0.426	1.731	0.111

Number of Valid Spectra Collected and Analyzed: 6221

Online %: 73.6

Offline %: 26.4

* 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