CONOCOPHILLIPS COMPANY
LOS ANGELES REFINERY, WILMINGTON PLANT
NORTH FLARE

Reporting Period: October 1, 2003 - December 31, 2003

Flaring Event Data

Event Start Date	Event Start Time	Event End Date	Event End Time	Average Vent Gas Flow Rate (SCFM)	Higher Heating Value (BTU/SCF)	HHV Basis	Sulfur Content (PPM as H2S)	Sulfur Basis	Total Event Flow (MSCF)
10/1/2003	8:54	10/1/2003	10:33	510	1678	Meth 3588-91	2	Meth 307-91	50
10/7/2003	19:14	10/7/2003	19:46	620	1151	Meth 3588-91	10	Meth 307-91	20
10/10/2003	7:57	10/10/2003	12:55	600	2090	Meth 3588-91	5	Meth 307-91	179
10/12/2003	3:29	10/12/2003	4:14	800	1888	Meth 3588-91	18	Meth 307-91	36
10/12/2003	12:26	10/12/2003	15:25	575	1888	Estimation	18	Estimation	103
10/20/2003	8:43	10/20/2003	12:44	725	2097	Meth 3588-91	39	Meth 307-91	175
10/21/2003	9:50	10/21/2003	13:30	650	2745	Meth 3588-91	5	Meth 307-91	143
10/21/2003	20:13	10/21/2003	20:50	560	2222	Meth 3588-91	7	Meth 307-91	21
10/23/2003	16:11	10/23/2003	20:52	7400	1769	Meth 3588-91	8	Meth 307-91	2079
10/25/2003	21:15	10/25/2003	22:16	1100	1426	Meth 3588-91	4	Meth 307-91	67
10/25/2003	23:23	10/25/2003	23:59	1450	1414	Meth 3588-91	5	Meth 307-91	52
10/26/2003	0:00	10/26/2003	6:08	1100	1414	Meth 3588-91	5	Meth 307-91	405
10/26/2003	13:28	10/26/2003	19:29	500	1774	Meth 3588-91	5	Meth 307-91	181
10/27/2003	3:13	10/27/2003	5:50	400	1555	Meth 3588-91	243	Meth 307-91	63
11/2/2003	21:21	11/2/2003	23:51	825	973	Meth 3588-91	31	Meth 307-91	124
11/18/2003	22:29	11/18/2003	22:54	2700	1307	Meth 3588-91	9	Meth 307-91	67
11/19/2003	10:30	11/19/2003	12:46	1400	1737	Meth 3588-91	7	Meth 307-91	190
11/19/2003	16:06	11/19/2003	23:20	1300	1747	Meth 3588-91	8	Meth 307-91	564
11/21/2003	1:41	11/21/2003	2:35	1500	1472	Meth 3588-91	5	Meth 307-91	81
11/22/2003	8:10	11/22/2003	8:59	700	1571	Meth 3588-91	3	Meth 307-91	34
11/23/2003	9:43	11/23/2003	11:06	775	1480	Meth 3588-91	4	Meth 307-91	66
12/3/2003	16:28	12/3/2003	16:59	500	1322	Meth 3588-91	64	Meth 307-91	16
12/3/2003	21:48	12/3/2003	22:48	1700	1379	Meth 3588-91	74	Meth 307-91	102
12/23/2003	0:14	12/23/2003	8:40	575	3486	Meth 3588-91	116	Meth 307-91	291
12/24/2003	17:00	12/24/2003	23:59	1000	3102	Meth 3588-91	4	Meth 307-91	419
12/25/2003	0:00	12/25/2003	4:44	600	3102	Meth 3588-91	4	Meth 307-91	170
12/30/2003	20:48	12/30/2003	22:59	750	3528	Meth 3588-91	204	Meth 307-91	98

DAILY EMISSIONS FROM FLARES

	EMISSIONS (LBS)					Total Gas Flow	HHV	Sulfur ppmv
Date	PM	NOX	ROG	CO	SOX as SO2	MSCF		
10/1/2003	1.4	6.6	6.1	35.9	0.0	64.5	1505	4
10/2/2003	0.1	0.6	0.5	3.1	0.1	5.3	1586	101
10/3/2003	0.1	0.6	0.6	3.4	0.2	5.5	1668	198
10/4/2003	1.8	10.2	9.5	55.5	4.2	85.7	1750	295
10/5/2003	0.0	0.1	0.1	0.8	0.1	1.2	1832	391
10/6/2003	0.4	2.2	2.0	12.0	1.4	16.9	1914	488
10/7/2003	0.9	5.7	5.3	31.0	4.1	42.0	1996	585
10/8/2003	0.2	0.7	0.7	3.8	0.0	9.0	1151	10
10/9/2003	0.2	1.6	1.4	8.4	0.0	11.1	2054	11
10/10/2003	3.8	25.7	23.8	140.0	0.2	181.1	2090	5
10/11/2003	0.3	1.7	1.6	9.3	0.0	12.6	1989	11
10/12/2003	5.2	31.8	29.5	173.2	0.7	248.0	1888	18
10/13/2003	0.6	3.0	2.8	16.2	0.3	30.0	1460	63
10/14/2003	0.1	0.3	0.3	1.6	0.1	4.3	1031	108
10/15/2003	0.3	1.3	1.2	7.2	0.3	16.0	1209	97
10/16/2003	0.7	3.0	2.8	16.4	0.5	32.0	1386	85
10/17/2003	0.3	1.4	1.3	7.8	0.2	13.4	1564	74
10/18/2003	0.4	2.2	2.0	11.8	0.2	18.3	1742	62
10/19/2003	0.3	1.6	1.5	8.9	0.1	12.5	1919	51
10/20/2003	5.2	35.0	32.4	190.5	1.6	245.6	2097	39
10/21/2003	4.3	34.9	32.3	189.8	0.2	206.5	2484	6
10/22/2003	2.2	15.7	14.5	85.2	0.3	104.7	2200	15
10/23/2003	48.5	277.8	257.3	1511.3	3.1	2309.0	1769	8
10/24/2003	**1.1**	**5.9**	**5.5**	32.2	0.1	**54.4**	**1598**	**6**
10/25/2003	**4.1**	**19.1**	**17.7**	103.7	0.1	**196.5**	**1426**	**4**
10/26/2003	**14.6**	**75.4**	**69.9**	410.3	0.6	**695.7**	**1594**	**5**
10/27/2003	**2.7**	**13.1**	**12.1**	71.0	2.7	**129.3**	**1485**	**126**
10/28/2003	**0.6**	**2.6**	**2.4**	14.0	0.3	**27.3**	**1382**	**65**
10/29/2003	**0.1**	**0.3**	**0.3**	1.7	0.0	**3.5**	**1279**	**4**
10/30/2003	**0.2**	**0.7**	**0.7**	3.9	0.0	**8.8**	**1202**	**11**
10/31/2003	**0.3**	**1.3**	**1.2**	6.8	0.0	**16.4**	**1126**	**18**
11/1/2003	**0.3**	**1.1**	**1.1**	6.2	0.1	**16.1**	**1049**	**24**
11/2/2003	**3.1**	**9.8**	**9.1**	53.2	0.8	**147.8**	**973**	**31**
11/3/2003	**0.4**	**1.4**	**1.3**	7.7	0.1	**17.1**	**1215**	**22**
11/4/2003	**0.3**	**1.2**	**1.2**	6.8	0.0	**12.6**	**1457**	**13**

11/5/2003	0.6	3.0	2.8	16.5	0.0	26.3	1699	4
11/6/2003	0.6	3.1	2.9	17.1	0.0	27.7	1670	5
11/7/2003	0.5	2.7	2.5	14.8	0.0	24.3	1641	6
11/8/2003	0.1	0.3	0.3	1.7	0.0	2.9	1612	7
11/9/2003	0.2	1.3	1.2	7.0	0.0	11.9	1584	9
11/10/2003	0.3	1.3	1.2	7.2	0.0	12.6	1555	10
11/11/2003	0.2	1.0	1.0	5.6	0.0	10.0	1526	11
11/12/2003	0.2	1.1	1.0	5.8	0.0	10.5	1498	12
11/13/2003	0.2	1.0	1.0	5.6	0.0	10.3	1466	12
11/14/2003	1.2	5.7	5.3	31.1	0.1	58.6	1434	11
11/15/2003	0.1	0.6	0.6	3.3	0.0	6.3	1402	11
11/16/2003	0.3	1.1	1.0	6.1	0.0	12.1	1370	10
11/17/2003	1.3	5.6	5.2	30.7	0.1	61.9	1338	10
11/18/2003	1.6	6.6	6.1	35.8	0.1	74.0	1307	9
11/19/2003	17.3	97.4	90.3	530.1	1.0	822.4	1742	7
11/20/2003	1.0	5.2	4.8	28.4	0.0	47.7	1607	6
11/21/2003	2.5	11.8	10.9	64.1	0.1	117.7	1472	5
11/22/2003	1.1	5.7	5.3	31.2	0.0	53.7	1571	3
11/23/2003	1.8	8.6	7.9	46.7	0.1	85.2	1480	4
11/24/2003	0.1	0.3	0.2	1.4	0.0	2.8	1329	3
11/25/2003	1.5	5.6	5.2	30.3	0.0	69.5	1177	3
11/26/2003	0.6	2.0	1.9	11.1	0.0	29.3	1026	2
11/27/2003	0.6	2.2	2.0	12.0	0.1	29.9	1087	13
11/28/2003	0.5	2.0	1.9	11.0	0.1	25.9	1147	23
11/29/2003	0.6	2.3	2.1	12.3	0.2	27.5	1208	34
11/30/2003	1.3	5.5	5.1	29.8	0.5	63.6	1268	45
12/1/2003	1.0	4.5	4.2	24.4	0.5	49.6	1329	56
12/2/2003	3.0	13.7	12.7	74.4	1.6	144.7	1389	66
12/3/2003	5.6	26.4	24.5	143.9	3.4	268.2	1450	77
12/4/2003	2.8	13.2	12.3	72.0	1.5	132.3	1470	69
12/5/2003	0.7	3.2	3.0	17.6	0.3	31.9	1491	62
12/6/2003	0.2	0.8	0.8	4.5	0.1	8.1	1511	54
12/7/2003	0.1	0.7	0.7	4.0	0.1	7.1	1532	46
12/8/2003	0.7	3.5	3.3	19.3	0.2	33.6	1552	39
12/9/2003	1.6	8.0	7.4	43.7	0.4	75.1	1573	31
12/10/2003	0.9	4.7	4.4	25.6	0.2	43.5	1593	24
12/11/2003	1.0	5.4	5.0	29.2	0.2	47.0	1678	26
12/12/2003	1.1	6.1	5.7	33.2	0.2	50.9	1763	28
12/13/2003	0.9	5.6	5.2	30.3	0.2	44.3	1848	30
12/14/2003	2.5	15.8	14.6	85.7	0.6	119.8	1934	32
12/15/2003	2.0	13.2	12.2	71.7	0.5	95.9	2019	34
12/16/2003	2.4	16.4	15.2	89.1	0.7	114.5	2104	36
12/17/2003	0.6	4.4	4.1	24.1	0.2	29.7	2189	38
12/18/2003	0.8	6.4	6.0	35.0	0.3	39.4	2399	49
12/19/2003	0.6	4.7	4.4	25.6	0.3	26.5	2609	61
12/20/2003	0.3	2.8	2.6	15.1	0.2	14.5	2819	72
12/21/2003	0.4	4.2	3.9	23.0	0.3	20.5	3028	84
12/22/2003	1.0	10.3	9.5	56.1	0.7	46.8	3238	95
12/23/2003	8.6	96.2	89.1	523.5	7.3	410.4	3448	107
12/24/2003	10.4	105.2	97.5	572.5	4.4	495.1	3125	53
12/25/2003	6.1	63.3	58.7	344.6	3.8	291.8	3192	78
12/26/2003	0.5	5.2	4.8	28.5	0.4	23.6	3259	103
12/27/2003	2.7	29.2	27.1	159.1	2.8	129.3	3327	129
12/28/2003	1.4	14.9	13.8	81.1	1.6	64.6	3394	154
12/29/2003	1.1	12.7	11.8	69.1	1.6	54.0	3461	179
12/30/2003	2.5	28.0	26.0	152.6	4.0	116.9	3528	204
12/31/2003	0.6	5.9	5.4	31.9	1.0	27.8	3103	224
Sum for Quarte	205	1314	1217	7148	65	9783		
Pilot/Purge Gas	6.6	302.4	9.2	76.1	84.1	1092		
Quarter Total	212	1616	1226	7224	149	10875		
Average Daily	2.3	17.8	13.5	79.4	1.6	119.5		

Mean	0.7	4.7	4.4	25.6	0.2	33.6
Average	2.3	14.4	13.3	78.2	0.7	107.2
Std Dev	5.7	34.6	32.1	188.4	1.3	269.1
Max	48.5	277.8	257.3	1511.3	7.3	2309.0
Ave+3 sd	19.2	118.2	109.5	643.3	4.6	914.

CONOCOPHILLIPS COMPANY
LOS ANGELES REFINERY, WILMINGTOI
NORTH FLARE

Monitor System: System Downtime

Breakdowns and unplanned Maintenance

Start (Date/Time)	End (Date/Time)	Hours Offline
None		
Total time for quarter		0:00:00

Planned Maintenance

Start (Date/Time)	End (Date/Time)	Hours Offline
None		
Total time for quarter		0:00:00

Recordable events with no samples collected

Start Date	Start Time	End Date	End Time
None			

Assumptions:

Criteria pollutants were calculated using interpolated sample results for days with low activity and no sample.
For days that had one or more flare events the lab results or estimations were used as representative
for the enitre day. This results is some over estimation and will be refined to be more representative in future report

Sulfur content and Higher heating value were estimated for events that did not have sample results available.
The estimates were calculated per the Rule 1118 Plan using results from similar events and similar time frames.

Estimates for unknown sources were calculated from event information during a similar time frame