

**CONOCOPHILLIPS COMPANY  
LOS ANGELES REFINERY, WILMINGTON PLANT  
LPG FLARE**

**Reporting Period:**

**October 1, 2003 - December 31, 2003**

**Flaring Event Data Clean Service Flare Sampling NOT Required**

Event Start (Date/Time)	Event End (Date/Time)	Average Vent Gas Flow Rate (SCFM)	Higher Heating Value (BTU/SCF)	HHV Basis	Sulfur Content (PPM as H2S)	Sulfur Basis
None	None	NA	NA	NA	NA	NA

**EMISSIONS FROM FLARES**

Date	PM	EMISSIONS (LBS)				Total Gas Flow MSCFD
		NOX	ROG	CO	SOX as SO2	
10/1/2003	0.2	19.9	0.5	4.9	7.2	47
10/2/2003	0.1	11.4	0.3	2.8	4.1	27
10/3/2003	0.1	7.2	0.2	1.8	2.6	17
10/4/2003	0.1	4.7	0.1	1.1	1.7	11.0
10/5/2003	0.1	5.0	0.1	1.2	1.8	11.7
10/6/2003	0.1	9.1	0.2	2.2	3.3	21.4
10/7/2003	0.1	12.9	0.3	3.2	4.7	30.5
10/8/2003	0.1	10.0	0.2	2.5	3.6	23.6
10/9/2003	0.1	5.0	0.1	1.2	1.8	11.7
10/10/2003	0.0	4.4	0.1	1.1	1.6	10.4
10/11/2003	0.1	6.5	0.2	1.6	2.4	15.4
10/12/2003	0.1	7.6	0.2	1.9	2.8	18
10/13/2003	0.1	7.6	0.2	1.9	2.8	18.0
10/14/2003	0.0	3.8	0.1	0.9	1.4	9.0
10/15/2003	0.1	6.4	0.1	1.6	2.3	15.0
10/16/2003	0.1	12.2	0.3	3.0	4.4	28.8
10/17/2003	0.1	11.9	0.3	2.9	4.3	28.0
10/18/2003	0.1	8.5	0.2	2.1	3.1	20.0
10/19/2003	0.1	5.9	0.1	1.5	2.1	14.0
10/20/2003	0.1	6.2	0.1	1.5	2.3	14.7
10/21/2003	0.1	10.6	0.2	2.6	3.8	25.0
10/22/2003	0.1	13.6	0.3	3.3	4.9	32.0
10/23/2003	0.3	29.2	0.7	7.2	10.6	69.0
10/24/2003	0.1	6.4	0.1	1.6	2.3	15.0
10/25/2003	0.1	6.4	0.1	1.6	2.3	15.0
10/26/2003	0.3	25.0	0.6	6.2	9.0	59.0
10/27/2003	0.2	17.4	0.4	4.3	6.3	41.0
10/28/2003	0.2	15.3	0.4	3.8	5.5	36.0
10/29/2003	0.0	0.3	0.0	0.1	0.1	0.6
10/30/2003	0.0	0.1	0.0	0.0	0.0	0.3
10/31/2003	0.0	0.2	0.0	0.1	0.1	0.5
11/1/2003	0.0	0.1	0.0	0.0	0.0	0.3
11/2/2003	0.0	0.1	0.0	0.0	0.0	0.2
11/3/2003	0.0	0.0	*	0.0	0.0	0.1
11/4/2003	0.0	0.0	0.0	0.0	0.0	0.1
11/5/2003	0.0	0.0	0.0	0.0	0.0	0.1
11/6/2003	0.0	0.0	0.0	0.0	0.0	0.1
11/7/2003	0.0	0.1	0.0	0.0	0.0	0.2
11/8/2003	0.0	0.1	0.0	0.0	0.0	0.2
11/9/2003	0.0	0.4	0.0	0.1	0.2	1.0
11/10/2003	0.0	0.2	0.0	0.1	0.1	0.5
11/11/2003	0.0	0.2	0.0	0.1	0.1	0.5

11/12/2003	0.0	0.1	0.0	0.0	0.0	0.3
11/13/2003	0.0	0.3	0.0	0.1	0.1	0.6
11/14/2003	0.0	0.4	0.0	0.1	0.2	1.0
11/15/2003	0.0	0.4	0.0	0.1	0.2	1.0
11/16/2003	0.0	0.2	0.0	0.1	0.1	0.5
11/17/2003	0.0	0.0	0.0	0.0	0.0	0.1
11/18/2003	0.0	0.1	0.0	0.0	0.0	0.2
11/19/2003	0.0	0.0	0.0	0.0	0.0	0.1
11/20/2003	0.0	1.3	0.0	0.3	0.5	3
11/21/2003	0.0	4.2	0.1	1.0	1.5	10
11/22/2003	0.1	13.1	0.3	3.2	4.7	31
11/23/2003	0.1	13.6	0.3	3.3	4.9	32
11/24/2003	0.4	33.1	0.8	8.1	12.0	78.0
11/25/2003	0.1	13.6	0.3	3.3	4.9	32.0
11/26/2003	0.2	14.0	0.3	3.4	5.1	33.0
11/27/2003	0.2	14.0	0.3	3.4	5.1	33.0
11/28/2003	0.2	14.8	0.3	3.7	5.4	35.0
11/29/2003	0.2	14.8	0.3	3.7	5.4	35.0
11/30/2003	0.2	14.4	0.3	3.5	5.2	34
12/1/2003	0.2	15.3	0.4	3.8	5.5	36
12/2/2003	0.2	15.3	0.4	3.8	5.5	36
12/3/2003	0.0	4.2	0.1	1.0	1.5	10
12/4/2003	0.0	2.7	0.1	0.7	1.0	6.3
12/5/2003	0.0	0.0	0.0	0.0	0.0	0
12/6/2003	0.0	0.0	0.0	0.0	0.0	0
12/7/2003	0.0	0.0	0.0	0.0	0.0	0.0
12/8/2003	0.0	0.0	0.0	0.0	0.0	0.1
12/9/2003	0.0	0.0	0.0	0.0	0.0	0.0
12/10/2003	0.0	0.0	0.0	0.0	0.0	0.1
12/11/2003	0.0	0.8	0.0	0.2	0.3	2.0
12/12/2003	0.0	0.4	0.0	0.1	0.1	0.9
12/13/2003	0.0	0.2	0.0	0.1	0.1	0.5
12/14/2003	0.0	0.0	0.0	0.0	0.0	0.1
12/15/2003	0.0	0.4	0.0	0.1	0.2	1.0
12/16/2003	0.0	0.4	0.0	0.1	0.2	1.0
12/17/2003	0.0	0.2	0.0	0.1	0.1	0.5
12/18/2003	0.0	0.2	0.0	0.1	0.1	0.5
12/19/2003	0.0	0.3	0.0	0.1	0.1	0.6
12/20/2003	0.0	3.8	0.1	0.9	1.4	9.0
12/21/2003	0.0	3.0	0.1	0.7	1.1	7
12/22/2003	0.1	5.9	0.1	1.5	2.1	14
12/23/2003	0.0	0.8	0.0	0.2	0.3	2
12/24/2003	0.0	0.1	0.0	0.0	0.0	0.2
12/25/2003	0.0	0.8	0.0	0.2	0.3	2
12/26/2003	0.0	0.8	0.0	0.2	0.3	2
12/27/2003	0.0	0.8	0.0	0.2	0.3	2
12/28/2003	0.0	0.4	0.0	0.1	0.2	1
12/29/2003	0.0	1.3	0.0	0.3	0.5	3
12/30/2003	0.0	0.2	0.0	0.1	0.1	0.5
12/31/2003	0.0	0.1	0.0	0.0	0.0	0.2
Sum for Quarter	5	503	12	124	182	1187
Pilot/Purge Gas	2.2	208.3	4.8	51.3	75.3	491
Quarter Total	8	711	16	175	257	1679
Average Daily	0.08	7.82	0.18	1.92	2.83	18.45

Mean	0.0	1.3	0.0	0.3	0.5	3.0
Average	0.1	5.5	0.1	1.4	2.0	13.0
Std Dev	0.1	7.1	0.2	1.7	2.6	16.7
Max	0.4	33.1	0.8	8.1	12.0	78.0
Ave+3 sd	0.3	26.8	0.6	6.6	9.7	63.3

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LPG FLARE**

Monitor System: System Downtime

Breakdowns and unplanned Maintenance			
Start (Date/Time)	End (Date/Time)	Hours Offline	Explanation
None			
Total time for quarter		0:00:00	hours

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

**Assumptions:**

If daily Total Gas Flow unavailable due to chart malfunction,  
estimated Total Gas Flow based on totalizer reading and averaging daily flow.