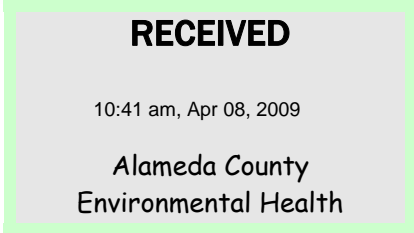


March 13, 2008



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Mr. Daniel Davis
 Project Manager
 Delta Environmental Consultants inc
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 Rancho Cordova, CA 95670

Project No. 400-A

First Quarter 2008
Ozone Injection System O&M Report
76 Service Station No. 1871
 96 MacArthur Boulevard
 Oakland, California

Dear Mr. Davis:

Environ Strategy Consultants, Inc. is pleased to submit this ozone injection system operation and maintenance (O&M) report for 76 Service Station No. 1871, located at 96 MacArthur Boulevard, Oakland, California. An ozone injection system was started on June 23, 2003 to remediate hydrocarbon-impacted groundwater.

| | |
|---|---|
| Type of Remediation System: | Ozone Injection System |
| Operation Data During: Reporting Period: Dec. 1, 2007 – Feb. 29, 2008 | Operated 91 days during the period Hours of Operation: 2,187 |
| System Operation Data Since Startup: June 23, 2003 | Total Hours of Operation: 17,855 |
| Note: | |

Environ Strategy appreciates the opportunity to be of service. If you have any questions or require additional information regarding this report, please do not hesitate to call us at (949) 486-0884.

Respectfully submitted,



Dane Nygaard
 Project Supervisor



Jinghui Niu, P.E.
 Principal Engineer



First Quarter 2008 O&M Report

76 Service Station No. 1871

March 13, 2008

Page 2

Attachments: Figure - Site Plan

Table 1 - Ozone Injection - System Operation Data

Table 2 - Ozone Injection - Groundwater Monitoring Data

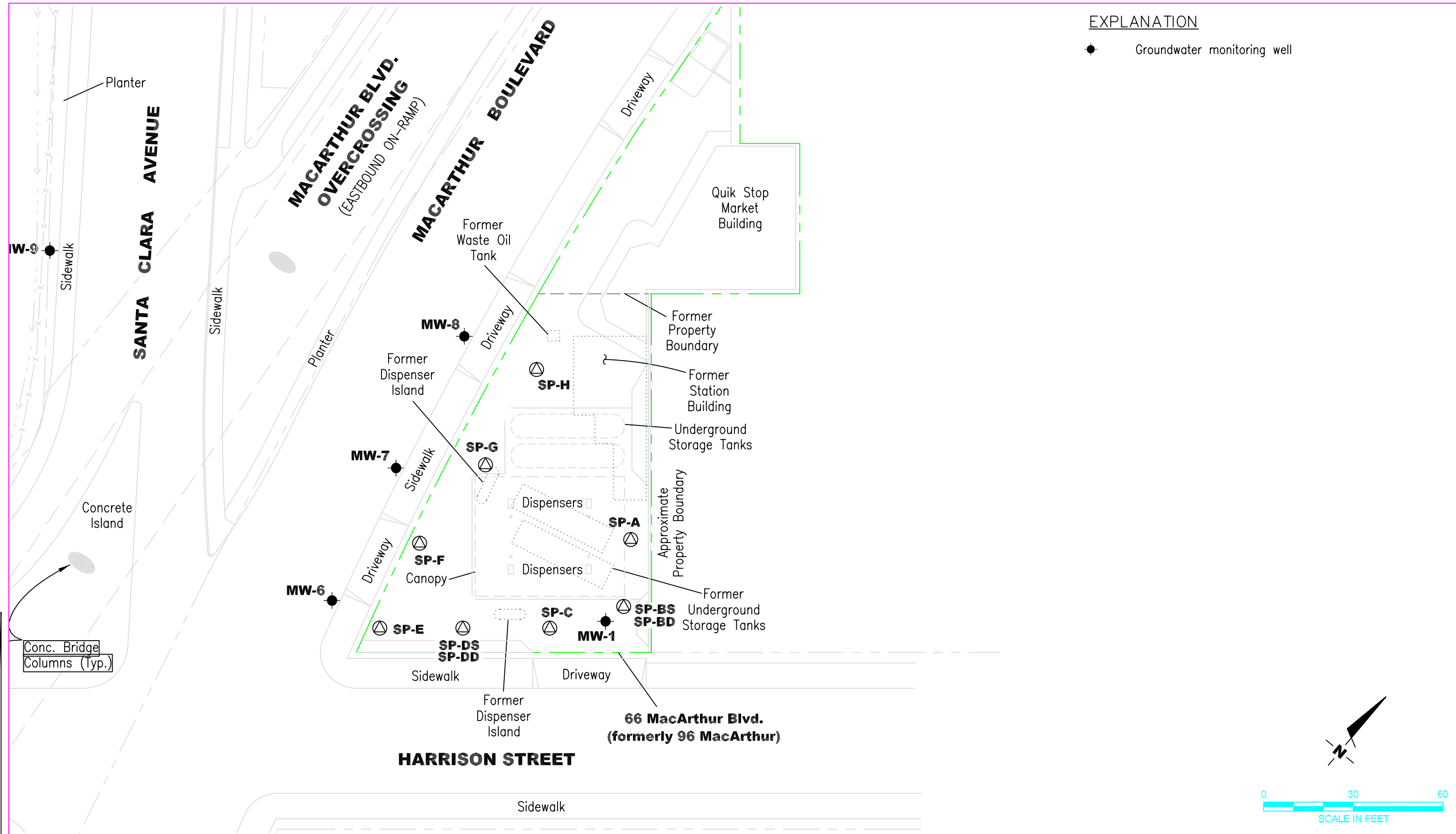
Graph 1 - MW-1 TPHg, Benzene, and MtBE Groundwater Concentrations

Graph 2 - MW-7 TPHg, Benzene, and MtBE Groundwater Concentrations

Appendix A – Field Notes

cc: Bill Borgh, ConocoPhillips Company (electronic copy)

Figure



EXPLANATION

● Groundwater monitoring well



Source: Caltrans As-Built Plans and Right of Way Maps confirmed by field observations

| | |
|-----------|---------------|
| DRAWN BY: | MD |
| CHECKED: | AD |
| APPROVED: | RB |
| DATE: | 3/22/04 PR |
| JOB NO.: | 77CP.60004.01 |
| CAD FILE: | SITEPLAN |


 environ strategy consultants, inc.
 ONE TECHNOLOGY, SUITE B-123
 IRVINE, CA

PREPARED FOR:
 CONOCOPHILLIPS
 76 STATION #1871
 96 MACARTHUR BOULEVARD
 OAKLAND, CALIFORNIA

FIGURE 1
 SITE PLAN

Tables

Table 1
Ozone Injection - System Operation Data
76 Service Station No. 1871
96 MacArthur Blvd., Oakland, California
Page 1 of 3

| Date | Notes | OZONE SPARGE SYSTEM | | | | | | OZ-1 | OZ-2 | OZ-3 | OZ-4 | OZ-5 | OZ-6 | OZ-7 | OZ-8 | OZ-9 | OZ-10 | |
|----------|-------|------------------------|-----------|-------------------|----------------------|--------------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | | System Status (On/Off) | | Hourmeter Reading | Period Online Factor | Cumulative Online Factor | Ozone Injected (lbs) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) |
| | | Arrival | Departure | | | | | | | | | | | | | | | |
| 6/23/03 | | On | On | 8807.26 | -- | 0.95 | -- | 20 | 18 | 19 | 20 | 21 | 23 | 20 | 26 | 14 | 26 | |
| 7/16/03 | | Off | On | 8850.46 | 0.09 | 0.91 | 0.39 | 27 | 18 | 31 | 40 | 28 | 29 | 31 | 38 | 24 | 25 | |
| 8/30/03 | | On | On | 9180.61 | 0.35 | 0.86 | 2.97 | 17 | 15 | 17 | 19 | 19 | 19 | 20 | 26 | 19 | 26 | |
| 9/18/03 | | On | On | 9327.43 | 0.37 | 0.84 | 1.32 | 13.5 | 14.7 | 17.0 | 16.3 | 16.0 | 19.7 | 16.8 | 19.8 | 15.7 | 20 | |
| 10/16/03 | | On | On | -- | -- | 0.84 | -- | 27.0 | 19.5 | 40.8 | 39.0 | 40.8 | 38.5 | 34.2 | 46.4 | 24.2 | 39.8 | |
| 11/17/03 | | On | On | 9696.55 | 0.29 | 0.81 | -- | 11.0 | 20.0 | 17.0 | 18.0 | 17.5 | 17.0 | 16.0 | 21.0 | 51.0 | 22.0 | |
| 12/5/03 | | On | On | 9804.98 | 0.29 | 0.80 | 0.98 | 33.0 | 21.0 | 44.0 | 40.0 | 43.0 | 39.0 | 33.5 | 44.0 | 26.0 | 33.0 | |
| 1/16/04 | | On | On | 10471.28 | 0.76 | 0.79 | 6.00 | 12.5 | 11.0 | 18.5 | 16.5 | 17.5 | 17.0 | 16.0 | 20.0 | 16.0 | 20.0 | |
| 2/3/04 | | On | On | 10727.69 | 0.68 | 0.79 | 2.31 | 12.3 | 11.5 | 18.2 | 16.5 | 18.2 | 17.3 | 16.0 | 19.0 | 16.0 | 18.2 | |
| 3/24/04 | | On | On | 11424.95 | 0.66 | 0.78 | 6.28 | 31.0 | 18.3 | 37.5 | 26.0 | 34.0 | 33.2 | 32.3 | 41.5 | 23.0 | 31.0 | |
| 4/14/04 | | On | On | 11676.10 | 0.57 | 0.77 | 2.26 | 32.0 | 19.0 | 38.7 | 26.0 | 37.7 | 37.1 | 32.8 | 41.8 | 23.8 | 29.5 | |
| 4/15/04 | a | On | On | 11685.29 | 0.44 | 0.77 | 0.08 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/16/04 | a | On | On | 11693.80 | 0.41 | 0.77 | 0.08 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/19/04 | a | On | On | 11742.90 | 0.78 | 0.77 | 0.44 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/23/04 | a | On | On | 11773.10 | 0.36 | 0.77 | 0.27 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 5/4/04 | | Off | On | 11837.70 | 0.28 | 0.76 | 0.58 | 32.2 | 20.5 | 39.4 | 36.2 | 38.1 | 32.0 | 33.5 | 60.0 | 25.8 | 33.1 | |
| 5/11/04 | | On | On | 11950.51 | 0.77 | 0.76 | 1.02 | 32.5 | 20.0 | 38.5 | 29.8 | 38.8 | 39.5 | 34.8 | 60.0 | 23.5 | 35.9 | |
| 6/14/04 | b,c | On | On | 12464.64 | 0.72 | 0.76 | 4.63 | 20.0 | 21.0 | 38.8 | 27.2 | 37.0 | 38.2 | 35.2 | 60.0 | 24.0 | 32.1 | |
| 7/29/04 | d | On | On | 844.62 | 0.99 | 0.77 | 7.60 | 22 | 15 | -- | 26 | 35 | 34 | 35 | -- | 25 | 33 | |
| 8/12/04 | e | On | On | 1075.97 | 0.98 | 0.78 | 2.08 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/10/04 | | On | On | 1490.23 | 0.85 | 0.78 | 3.73 | 32 | 32 | 33 | 33 | 21 | 24 | 30 | 20 | 26 | 30 | |
| 10/5/04 | | On | On | 1868.83 | 0.90 | 0.78 | 3.41 | 31 | 32 | 33 | 31 | 22 | 23 | 31 | 21 | 26 | 28 | |
| 11/5/04 | | On | On | 2360.90 | 0.93 | 0.79 | 4.43 | 22 | 26 | 12 | 18 | 12 | 22 | 30 | 32 | 26 | 22 | |
| 12/2/04 | f | Off | Off | 2802.02 | 0.97 | 0.79 | 3.97 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/13/05 | | Off | On | 2802.07 | 0.00 | 0.76 | 0.00 | 23 | 27 | 15 | 20 | 15 | 23 | 31 | 34 | 28 | 25 | |
| 2/25/05 | g | Off | Off | 2802.42 | 0.00 | 0.73 | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/8/05 | h,i | Off | Off | 2802.42 | 0.00 | 0.72 | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/5/05 | i | Off | Off | 2802.42 | 0.00 | 0.70 | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 5/4/05 | j | Off | On | 2802.49 | 0.00 | 0.69 | 0.00 | 14 | 11 | 16 | 12 | 20 | 27 | 25 | 29 | 25 | 31 | |
| 6/2/05 | k | On | On | 3407.97 | 1.00 | 0.69 | 5.45 | 35 | 25 | Off | 40 | 41 | 36 | 35 | 34 | 27 | 25 | |
| 7/7/05 | k,l,m | On | On | 4067.42 | 1.29 | 0.71 | 5.94 | 31 | 23 | Off | 30 | Off | 26 | 32 | 28 | 25 | Off | |
| 8/26/05 | n | On | On | 4665.98 | 0.81 | 0.72 | 5.39 | 13 | 13 | Off | 14 | Off | 13 | 12 | 12 | 13 | Off | |
| 9/23/05 | o | On | On | 4947.97 | 0.69 | 0.71 | 2.54 | 16 | 15 | Off | Off | Off | 16 | 16 | 16 | 16 | Off | |
| 10/23/05 | p | On | On | 5264.28 | 0.72 | 0.71 | 2.85 | 16 | 16 | Off | Off | Off | 16 | 16 | 16 | 16 | Off | |
| 11/11/05 | q,r | On | Off | 0.90 | -- | 0.71 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 11/15/05 | s | Off | On | 0.90 | 0.00 | 0.71 | 0.00 | 35 | 16 | 16 | 22 | 23 | 18 | 23 | 23 | 23 | 24 | |
| 12/6/05 | t | Off | On | 2.49 | 0.00 | 0.70 | 0.01 | 22 | 20 | 19 | 24 | 24 | 22 | 26 | 23 | 24 | 25 | |
| 1/4/06 | u | Off | On | 6 | 0.01 | 0.69 | 0.03 | 20 | 20 | 18 | 17 | 23 | 20 | 25 | 19 | 22 | 20 | |
| 1/18/06 | u | Off | On | 203 | 0.67 | 0.69 | 1.77 | 22 | 19 | 19 | 20 | 19 | 18 | 21 | 22 | 22 | 23 | |
| 2/1/06 | v | Off | On | 316 | 0.38 | 0.68 | 1.02 | 20 | 20 | 18 | 22 | 22 | 18 | 23 | 23 | 22 | 25 | |
| 2/15/06 | v | Off | On | 344 | 0.10 | 0.68 | 0.25 | 20 | 19 | 18 | 17 | 19 | 20 | 23 | 19 | 22 | 20 | |
| 3/1/06 | v | Off | On | 417 | 0.25 | 0.67 | 0.66 | 21 | 20 | 19 | 19 | 21 | 17 | 24 | 23 | 21 | 21 | |

Table 1
Ozone Injection - System Operation Data
76 Service Station No. 1871
96 MacArthur Blvd., Oakland, California
Page 2 of 3

| Date | Notes | OZONE SPARGE SYSTEM | | | | | | OZ-1 | OZ-2 | OZ-3 | OZ-4 | OZ-5 | OZ-6 | OZ-7 | OZ-8 | OZ-9 | OZ-10 |
|----------|-------|------------------------|-----------|-------------------|----------------------|--------------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | | System Status (On/Off) | | Hourmeter Reading | Period Online Factor | Cumulative Online Factor | Ozone Injected (lbs) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) |
| | | Arrival | Departure | | | | | | | | | | | | | | |
| 3/16/06 | u | Off | On | 501 | 0.27 | 0.67 | 0.76 | 20 | 19 | 18 | 17 | 19 | 20 | 23 | 20 | 22 | 20 |
| 3/29/06 | u | Off | On | 560 | 0.22 | 0.67 | 0.53 | 20 | 20 | 19 | 19 | 20 | 21 | 25 | 21 | 22 | 21 |
| 4/16/06 | u | Off | On | 624 | 0.17 | 0.66 | 0.58 | 20 | 19 | 18 | 17 | 19 | 20 | 23 | 20 | 23 | 21 |
| 4/25/06 | u | Off | On | 718 | 0.50 | 0.66 | 0.85 | 20 | 20 | 19 | 18 | 20 | 22 | 24 | 21 | 22 | 20 |
| 5/9/06 | u | Off | On | 776 | 0.20 | 0.65 | 0.52 | 20 | 19 | 19 | 17 | 19 | 21 | 22 | 20 | 22 | 20 |
| 5/23/06 | u | Off | On | 834 | 0.20 | 0.65 | 0.52 | 19 | 20 | 18 | 18 | 20 | 20 | 23 | 20 | 23 | 21 |
| 6/6/06 | u | Off | On | 1,042 | 0.71 | 0.65 | 1.87 | 20 | 19 | 18 | 17 | 19 | 20 | 23 | 20 | 22 | 20 |
| 6/20/06 | w | Off | On | 1,206 | 0.56 | 0.65 | 1.48 | 19 | 20 | 18 | 18 | 19 | 20 | 25 | 21 | 23 | 21 |
| 7/7/06 | x | Off | Off | 1,313 | 0.30 | 0.65 | 0.96 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 7/28/06 | y | Off | On | 1,313 | 0.00 | 0.64 | 0.00 | 19 | 17 | 16 | 19 | 24 | 17 | 22 | 19 | 21 | 23 |
| 8/15/06 | u | Off | On | 1,616 | 0.80 | 0.64 | 2.73 | 19 | 17 | 17 | 16 | 19 | 19 | 23 | 19 | 21 | 21 |
| 8/29/06 | u | Off | On | 1,801 | 0.63 | 0.64 | 1.67 | 19 | 19 | 17 | 17 | 21 | 18 | 21 | 19 | 22 | 23 |
| 9/12/06 | u | Off | On | 2,022 | 0.75 | 0.64 | 1.99 | 23 | 19 | 17 | 16 | 19 | 19 | 25 | 19 | 22 | 21 |
| 9/22/06 | u | Off | On | 2,204 | 0.87 | 0.64 | 1.64 | 21 | 21 | 19 | 20 | 23 | 21 | 26 | 23 | 25 | 27 |
| 10/4/06 | u | Off | On | 2,313 | 0.43 | 0.64 | 0.98 | 18 | 18 | 17 | 18 | 18 | 18 | 25 | 23 | 22 | 21 |
| 10/18/06 | u | Off | On | 2,401 | 0.30 | 0.64 | 0.79 | 20 | 19 | 17 | 16 | 18 | 19 | 20 | 20 | 21 | 27 |
| 10/31/06 | w | Off | On | 2,516 | 0.42 | 0.63 | 1.04 | 22 | 20 | 19 | 20 | 19 | 19 | 23 | 21 | 25 | 23 |
| 11/14/06 | u | Off | On | 2,636 | 0.41 | 0.63 | 1.08 | 18 | 18 | 17 | 17 | 18 | 18 | 22 | 24 | 22 | 24 |
| 11/28/06 | u | Off | On | 2,744 | 0.37 | 0.63 | 0.97 | 20 | 20 | 19 | 20 | 22 | 21 | 25 | 25 | 22 | 23 |
| 12/14/06 | u | Off | On | 2,801 | 0.17 | 0.63 | 0.51 | 19 | 19 | 18 | 18 | 19 | 19 | 22 | 22 | 23 | 22 |
| 12/26/06 | u | Off | On | 2,906 | 0.42 | 0.62 | 0.95 | 20 | 20 | 19 | 20 | 21 | 20 | 25 | 25 | 20 | 24 |
| 1/15/07 | u | Off | On | 2,983 | 0.18 | 0.62 | 0.69 | 19 | 20 | 18 | 18 | 19 | 19 | 22 | 23 | 22 | 22 |
| 1/29/07 | v | Off | On | 3,076 | 0.32 | 0.62 | 0.84 | 20 | 20 | 19 | 20 | 20 | 20 | 24 | 21 | 23 | 24 |
| 2/6/07 | u | Off | On | 3,156 | 0.48 | 0.62 | 0.72 | 19 | 20 | 18 | 17 | 19 | 19 | 21 | 24 | 21 | 23 |
| 2/21/07 | u | Off | On | 3,303 | 0.47 | 0.62 | 1.32 | 20 | 21 | 20 | 20 | 18 | 21 | 23 | 21 | 25 | 23 |
| 3/5/07 | u | Off | On | 3,378 | 0.30 | 0.61 | 0.68 | 19 | 20 | 18 | 18 | 18 | 20 | 21 | 23 | 22 | 22 |
| 3/19/07 | u | Off | On | 3,476 | 0.33 | 0.61 | 0.88 | 20 | 21 | 20 | 19 | 18 | 21 | 23 | 24 | 23 | 24 |
| 4/4/07 | u | Off | On | 3,515 | 0.12 | 0.61 | 0.35 | 19 | 20 | 18 | 17 | 18 | 19 | 21 | 21 | 21 | 22 |
| 4/18/07 | u | Off | On | 3,606 | 0.31 | 0.60 | 0.82 | 21 | 21 | 20 | 20 | 18 | 21 | 24 | 24 | 24 | 23 |
| 5/10/07 | u | Off | On | 3,676 | 0.15 | 0.60 | 0.63 | 19 | 20 | 19 | 17 | 18 | 19 | 20 | 23 | 20 | 21 |
| 5/25/07 | u | Off | On | 3,758 | 0.26 | 0.60 | 0.74 | 22 | 21 | 20 | 19 | 19 | 21 | 22 | 22 | 22 | 23 |
| 6/4/07 | u | Off | On | 3,801 | 0.18 | 0.59 | 0.39 | 18 | 20 | 18 | 18 | 17 | 19 | 19 | 20 | 21 | 20 |
| 6/18/07 | | On | On | 4,137 | 1.00 | 0.60 | 3.02 | 20 | 20 | 19 | 19 | 19 | 20 | 22 | 22 | 20 | 22 |
| 7/2/07 | | On | On | 4,373 | 0.70 | 0.60 | 2.12 | 15 | 21 | 19 | 18 | 20 | 19 | 24 | 21 | 21 | 23 |
| 7/16/07 | | On | On | 4,409 | 0.11 | 0.59 | 0.32 | 18 | 20 | 20 | 19 | 21 | 20 | 26 | 23 | 22 | 25 |
| 8/8/07 | | On | On | 4,961 | 1.00 | 0.60 | 4.97 | 13 | 20 | 20 | 18 | 20 | 18 | 29 | 22 | 20 | 24 |
| 8/27/07 | | On | On | 5,411 | 0.99 | 0.60 | 4.05 | 14 | 21 | 19 | 20 | 21 | 19 | 30 | 20 | 21 | 21 |
| 9/13/07 | | On | On | 5,822 | 1.01 | 0.61 | 3.70 | 22 | 21 | 21 | 23 | 21 | 22 | 30 | 20 | 21 | 21 |
| 9/27/07 | | On | On | 6,155 | 0.99 | 0.61 | 3.00 | 28 | 25 | 25 | 27 | 25 | 26 | 32 | 21 | 26 | 25 |
| 10/29/07 | | On | On | 6,917 | 0.99 | 0.62 | 6.86 | 28 | 25 | 24 | 25 | 33 | 32 | 32 | 21 | 30 | 30 |

Table 1
Ozone Injection - System Operation Data
76 Service Station No. 1871
96 MacArthur Blvd., Oakland, California
Page 3 of 3

| Date | Notes | OZONE SPARGE SYSTEM | | | | | | OZ-1 | OZ-2 | OZ-3 | OZ-4 | OZ-5 | OZ-6 | OZ-7 | OZ-8 | OZ-9 | OZ-10 | |
|---|---|------------------------|-----------|-------------------|----------------------|--------------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----|
| | | System Status (On/Off) | | Hourmeter Reading | Period Online Factor | Cumulative Online Factor | Ozone Injected (lbs) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | Pressure (psi) | |
| | | Arrival | Departure | | | | | | | | | | | | | | | |
| 11/26/07 | | On | On | 7,591 | 1.00 | 0.62 | 6.07 | 26 | 22 | 24 | 25 | 31 | 30 | 32 | 22 | 30 | 30 | |
| 12/31/07 | | On | On | 8,425 | 0.99 | 0.63 | 7.51 | 26 | 20 | 24 | 24 | 30 | 32 | 32 | 30 | 28 | 30 | |
| 1/28/08 | | On | On | 9,103 | 1.01 | 0.63 | 6.10 | 26 | 21 | 22 | 21 | 26 | 30 | 28 | 26 | 27 | 27 | |
| 2/25/08 | | On | On | 9,778 | 1.00 | 0.64 | 6.08 | 23 | 19 | 22 | 20 | 25 | 30 | 30 | 28 | 27 | 28 | |
| Sparge time per cycle (min) | | | | | | | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| Number of Cycles per Day | | | | | | | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Reporting Period: First Quarter 2008 (11/01/07 to 02/29/08) | | | | | | | | | | | | | | | | | | |
| Total Hours Operational: 17,855 | | | | | | | | | | | | | | | | | | |
| Total Pounds Ozone Injected: 168 | | | | | | | | | | | | | | | | | | |
| Period Hours Operational: 2187 | | | | | | | | | | | | | | | | | | |
| Period Percent Operational: 100% | | | | | | | | | | | | | | | | | | |
| Period Pounds Ozone Injected: 19.68 | | | | | | | | | | | | | | | | | | |
| Definitions: | | | | | | | | | | | | | | | | | | |
| psi Pounds per square inch | | | | | | | | | | | | | | | | | | |
| -- Data not available | | | | | | | | | | | | | | | | | | |
| NA Not applicable | | | | | | | | | | | | | | | | | | |
| lbs Pounds | | | | | | | | | | | | | | | | | | |
| Notes: | | | | | | | | | | | | | | | | | | |
| Hour Meter Formula adjusted 12/19/07 | | | | | | | | | | | | | | | | | | |
| June 4, 2007 - Control Panel retrofit installed. | | | | | | | | | | | | | | | | | | |
| System cycles through program 18 times per day, for 53% utilization | | | | | | | | | | | | | | | | | | |
| a | Troubleshooting time counter | | | | | | | | | | | | | | | | | |
| b | Hourmeter replaced | | | | | | | | | | | | | | | | | |
| c | Solenoid 8 has high pressure, taken offline | | | | | | | | | | | | | | | | | |
| d | Solenoid 3 leaking, taken off line | | | | | | | | | | | | | | | | | |
| e | Pressures not properly recorded | | | | | | | | | | | | | | | | | |
| f | Ozone generator hose ruptured on effluent side to solenoid manifold. No Readings. | | | | | | | | | | | | | | | | | |
| g | System down due to bad GFI | | | | | | | | | | | | | | | | | |
| h | New GFI was installed. | | | | | | | | | | | | | | | | | |
| i | Fan in compressor broken and tubing from compressor to manifold needs to be replaced. System left off until repairs made. | | | | | | | | | | | | | | | | | |
| j | Installed new motor fan and manifold fittings, restarted system. | | | | | | | | | | | | | | | | | |
| k | OZ-3 turned off due to high pressure of over 60 psi. | | | | | | | | | | | | | | | | | |
| l | OZ-5 too brittle. Left off until lines are replaced. | | | | | | | | | | | | | | | | | |
| m | OZ-10 turned off due to leak in secondary containment | | | | | | | | | | | | | | | | | |
| n | Hourmeter reading not correct, will check next visit | | | | | | | | | | | | | | | | | |
| o | Hourmeter not working properly. | | | | | | | | | | | | | | | | | |
| p | Pressure gauge stuck at 16 psi. | | | | | | | | | | | | | | | | | |
| q | New hourmeter, panel fan, and GFCI installed | | | | | | | | | | | | | | | | | |
| r | Fuse blown in ozone generator, system left off | | | | | | | | | | | | | | | | | |
| s | Replaced tubing to all wells and replaced ozone generator circuit board and pressure gauge | | | | | | | | | | | | | | | | | |
| t | System down due to tripped GFI; foam on door may have been pressing reset button. Foam removed. | | | | | | | | | | | | | | | | | |
| u | Ozone sensor tripped; system restarted. | | | | | | | | | | | | | | | | | |
| v | Rainbird meter malfunction. | | | | | | | | | | | | | | | | | |
| w | System down time due to tripped GFI; system restarted. | | | | | | | | | | | | | | | | | |
| x | System off due to bad compressor. | | | | | | | | | | | | | | | | | |
| y | Compressor repaired; system restarted. | | | | | | | | | | | | | | | | | |

Table 2
Ozone Injection - Groundwater Monitoring Data
76 Service Station No. 1871
96 MacArthur Blvd., Oakland, California
Page 1 of 1

| Date | Notes | Monitoring Well: MW-1 | | | | | | | | Monitoring Well: MW-7 | | | | | | | |
|------------|-------|-----------------------|-----------|---------------|----------------|----------------|----------------------|------------------------|--------------|-----------------------|-----------|---------------|----------------|----------------|----------------------|------------------------|---------------|
| | | ORP (mV) | DO (mg/l) | TPHg (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Xylenes (total) (µg/L) | MtBE (µg/L) | ORP (mV) | DO (mg/l) | TPHg (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Xylenes (total) (µg/L) | MtBE (µg/L) |
| 4/16/2003 | a | NM | NM | 510 | 57 | 0.62 | 29 | 61 | 160 | NM | NM | <25,000 | <250 | <250 | <250 | <500 | 37,000 |
| 6/23/2003 | a | NM | NM | 75 | <0.50 | <0.50 | <0.50 | 5.3 | 12 | NM | NM | 20,000 | 260 | <0.50 | <0.50 | <1.0 | 20,000 |
| 8/29/2003 | a | NM | NM | 11,000 | 64 | <1.0 | 330 | 1,400 | 440 | NM | NM | <10,000 | <100 | <100 | <100 | <200 | 24,000 |
| 9/18/2003 | | NM | NM | 390 | 2.3 | <0.50 | 3.6 | 31 | 30 | NM | NM | -- | -- | -- | -- | -- | -- |
| 10/16/2003 | | NM | NM | 2,100 | 6.0 | <0.50 | 24.0 | 120 | 110 | NM | NM | -- | -- | -- | -- | -- | -- |
| 11/17/2003 | | NM | NM | 130 | 0.51 | <0.50 | 2.1 | 7.9 | 43 | NM | NM | 16,000 | <130 | <130 | <130 | <250 | 17,000 |
| 12/5/2003 | | NM | NM | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 36 | NM | NM | 12,000 | <100 | <100 | <100 | <200 | 19,000 |
| 1/16/2004 | b | NM | NM | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <2.0 | NM | NM | 17,000 | 160 | 270 | <130 | <250 | 19,000 |
| 2/3/2004 | | 238 | NM | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <2.0 | 72 | NM | 10,000 | <25 | <25 | <25 | <50 | 15,000 |
| 3/24/2004 | b | 169 | NM | 55 | <0.50 | <0.50 | 0.80 | 2.9 | 7.8 | 56 | NM | 13,000 | <100 | <100 | <100 | <200 | 15,000 |
| 4/14/2004 | b | 0.4 | NM | 23,000 | 310 | 10 | 590 | 2400 | 1700 | 42 | NM | 9,000 | <50 | <50 | <50 | <100 | 11,000 |
| 5/11/2004 | c | NM | NM | 7,800 | 160 | <1.0 | 170 | 700 | 720 | -3 | NM | 8,300 | <50 | <50 | <50 | <100 | 11,000 |
| 6/14/2004 | | 20 | 5.25 | 110 | <0.50 | <0.50 | 1.0 | 6.4 | 3.4 | 35 | 1.45 | <5,000 | <50 | <50 | <50 | <100 | 6,500 |
| 7/26/2004 | | NM | NM | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 3.2 | NM | NM | <5,000 | <50 | <50 | <50 | <100 | 3,100 |
| 8/12/2004 | | 171 | 0.07 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 0.80 | 117 | 0.06 | 2,100 | <10 | <10 | <10 | <20 | 2,700 |
| 9/10/2004 | | 180 | 0.08 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 5.7 | 122 | 0.07 | 3,100 | <13 | <13 | <13 | <25 | 4,400 |
| 10/5/2004 | | 175 | 0.09 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | 117 | 0.08 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 7.1 |
| 11/5/2004 | d | 117 | 0.05 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 0.89 | 210 | 0.06 | 50 | <0.50 | <0.50 | <0.50 | <1.0 | 1.1 |
| 12/2/2004 | | 109 | 0.03 | 83 | 0.83 | <0.50 | <0.50 | 1.2 | 44 | 214 | 0.03 | 180 | 1.6 | <0.50 | 66 | 4.5 | 51 |
| 1/13/2005 | | 105 | 0.04 | 1,100 | 26 | 1.2 | 2.10 | 70 | 630 | 201 | 0.05 | 1,000 | 25 | 1 | 1.9 | 68 | 460 |
| 2/25/2005 | c,f | -- | 2.67 | 24,000 | 350 | 10 | 820 | 2,200 | 1,300 | 21 | 2.05 | 680 | <2.0 | <2.0 | 2.3 | 58 | 2,500 |
| 3/8/2005 | g | -35 | 4.43 | 23,000 | 410 | <1.0 | 1,100 | 2,300 | 1,300 | NR | NR | -- | -- | -- | -- | -- | -- |
| 4/5/2005 | | -30 | 4.56 | 34,000 | 300 | <1.0 | 910 | 2,000 | 1,100 | 135 | 6.53 | <5,000 | <.50 | <.50 | <.50 | <1.00 | 19,000 |
| 5/4/2005 | | -59 | 2.40 | 26,000 | 220 | 7.4 | 790 | 2,100 | 860 | -24 | 1.13 | <2,000 | <0.50 | <0.50 | <0.50 | <1.0 | 7,100 |
| 6/2/2005 | | -20 | 7.34 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 3.5 | -12 | 1.01 | 3500 | <0.50 | <0.50 | <0.50 | <1.0 | 4,000 |
| 7/7/2005 | i,j | 142 | 7.42 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 0.61 | 154 | 1.40 | 5000 | <0.50 | <0.50 | <0.50 | <1.0 | 8,900 |
| 9/23/2005 | | 16 | 7.77 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | 56 | 1.39 | <500 | <5.0 | <5.0 | <5.0 | <10 | 1,900 |
| 10/23/2005 | | 154 | 7.13 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | 0.56 | 191 | 1.59 | <250 | <2.5 | <2.5 | <2.5 | <5 | 680 |
| 11/1/2005 | k | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Definitions:

TPHg = Total petroleum hydrocarbons as gasoline
MtBE = Methyl tert-butyl ether
µg/L = Micrograms per liter

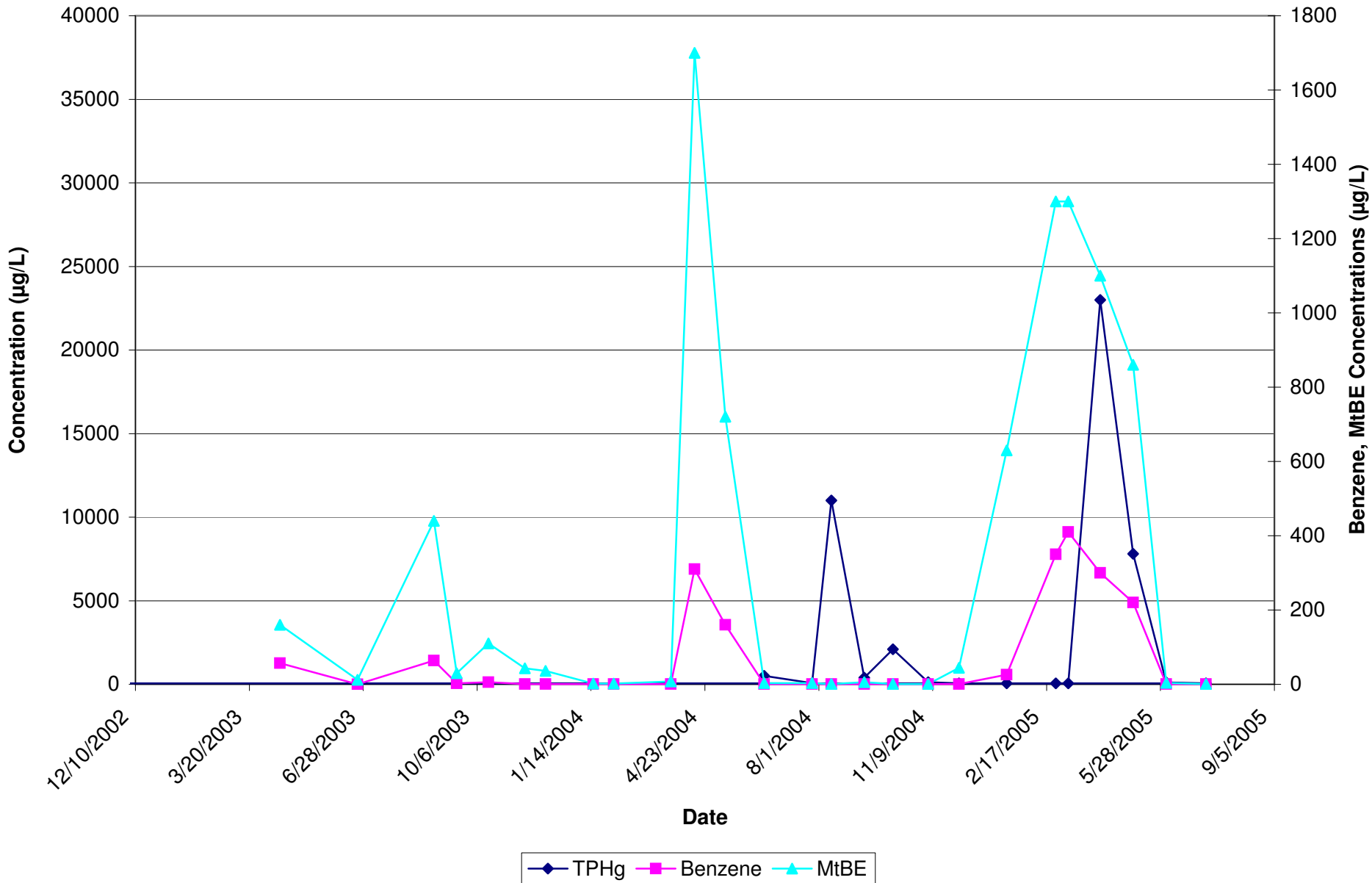
ORP = Oxidation Reduction Potential
DO = Dissolved Oxygen
mV = Millivolts
mg/l = Milligrams per liter

Notes:

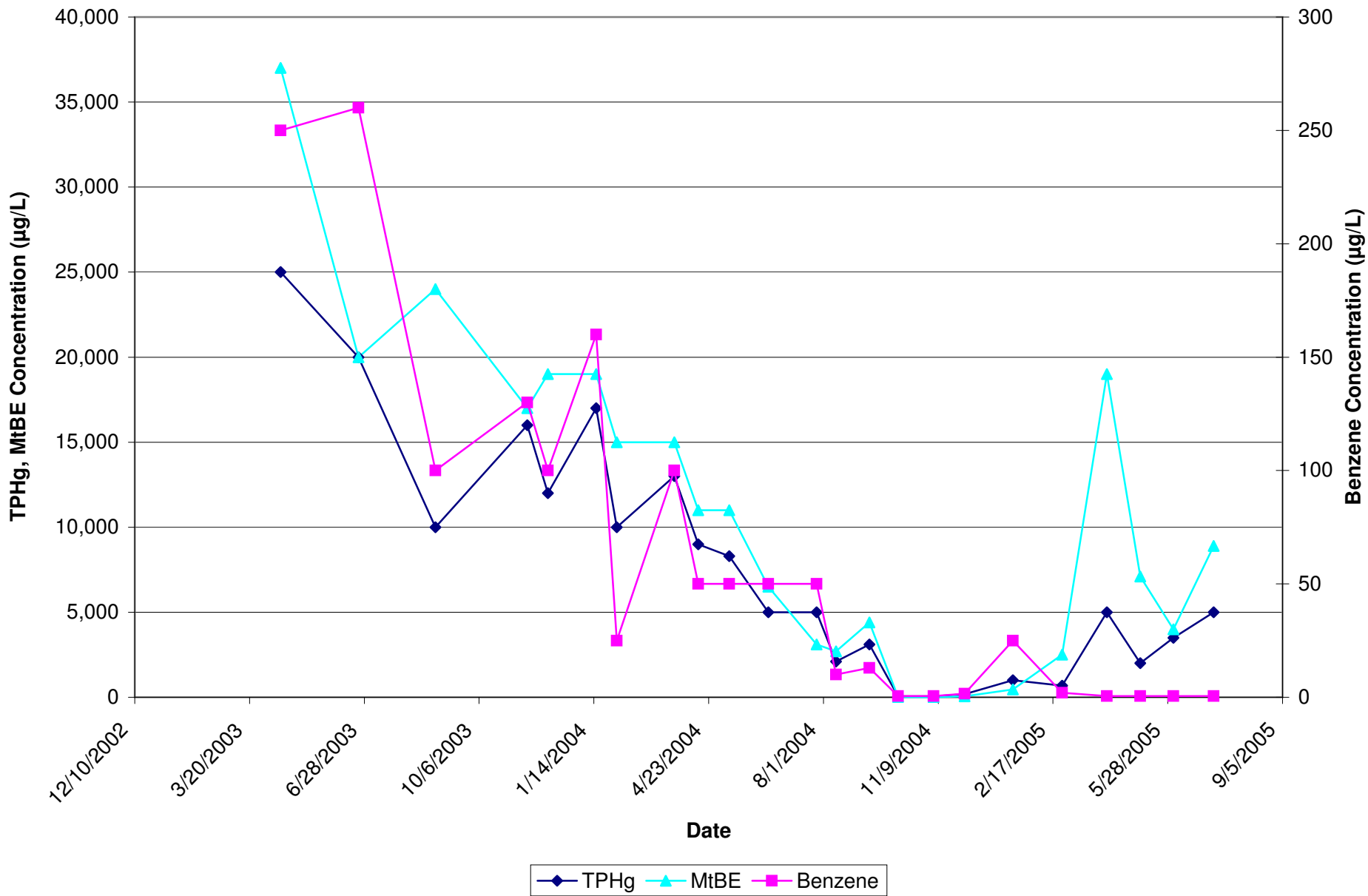
- Data not available
- NM Not Measured
- a Sampled by Gettler-Ryan, Inc.
- b Hydrocarbon in gasoline range does not match laboratory gasoline standard.
- c ORP reading under the range
- d Quantity of unknown hydrocarbon(s) in sample based on gasoline.
- e Data not available at time of reporting
- f MW-7 Estimated value of MtBE; concentration exceeded the calibration of analysis
- g Car parked on MW-7.
- h Data not available at time of reporting
- i Siloxane peaks were found in the sample which are not believed to be gasoline related. If they were to be quantified as gasoline, the concentration would be 58 ug/L. (MW-1).
- j The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern. (MW-1)
- k Sampling discontinued at the request of ConocoPhillips

Graphs

Graph 1
MW-1 TPHg, Benzene, and MtBE Groundwater Concentrations
 76 Service Station No. 1871
 96 MacArthur Blvd., Oakland, California



Graph 2
MW-7 TPHg, Benzene, and MtBE Groundwater Concentrations
 76 Service Station No. 1871
 96 MacArthur Blvd., Oakland, California



Appendix A
Field Notes

ConocoPhillips Ozone Injection System Data

Station No. 1871

City: OAKLAND

| Date | Notes/ Date Sampled | Status ON/OFF | Cycles/ Day | Hour Meter | Well ID: <u>02-1</u> | | | | Well ID: <u>02-2</u> | | | | Well ID: <u>02-3</u> | | | |
|------------------|------------------------|------------------|----------------|---------------|----------------------|-------|----------|----------|----------------------|-------|----------|----------|----------------------|-------|----------|----------|
| | | | | | Pressure | Temp. | Run Time | Flowrate | Pressure | Temp. | Run Time | Flowrate | Pressure | Temp. | Run Time | Flowrate |
| | | | | | (psi) | (°F) | (min) | (acfm) | (psi) | (°F) | (min) | (acfm) | (psi) | (°F) | (min) | (acfm) |
| <u>31 DEC 07</u> | | <u>on/on</u> | <u>20</u> | <u>8925</u> | <u>26</u> | | <u>7</u> | | <u>20</u> | | <u>7</u> | | <u>24</u> | | <u>7</u> | |
| <u>28 JAN 08</u> | | <u>on/on</u> | <u>20</u> | <u>9103</u> | <u>26</u> | | <u>7</u> | | <u>21</u> | | <u>7</u> | | <u>22</u> | | <u>7</u> | |

| Date | Well ID: <u>02-4</u> | | | | Well ID: <u>02-5</u> | | | | Well ID: <u>02-6</u> | | | | Well ID: <u>02-7</u> | | | |
|------------------|----------------------|-------|----------|----------|----------------------|-------|----------|----------|----------------------|-------|----------|----------|----------------------|-------|----------|----------|
| | Pressure | Temp. | Run Time | Flowrate | Pressure | Temp. | Run Time | Flowrate | Pressure | Temp. | Run Time | Flowrate | Pressure | Temp. | Run Time | Flowrate |
| | (psi) | (°F) | (min) | (acfm) | (psi) | (°F) | (min) | (acfm) | (psi) | (°F) | (min) | (acfm) | (psi) | (°F) | (min) | (acfm) |
| <u>31 DEC 07</u> | <u>24</u> | | <u>7</u> | | <u>30</u> | | <u>7</u> | | <u>32</u> | | <u>7</u> | | <u>32</u> | | <u>7</u> | |
| <u>28 JAN 08</u> | <u>21</u> | | <u>7</u> | | <u>26</u> | | <u>7</u> | | <u>30</u> | | <u>7</u> | | <u>28</u> | | <u>7</u> | |

| Date | Well ID: <u>02-8</u> | | | | Well ID: <u>02-9</u> | | | | Well ID: <u>02-10</u> | | | | Well ID: | | | |
|------------------|----------------------|-------|----------|----------|----------------------|-------|----------|----------|-----------------------|-------|----------|----------|----------|-------|----------|----------|
| | Pressure | Temp. | Run Time | Flowrate | Pressure | Temp. | Run Time | Flowrate | Pressure | Temp. | Run Time | Flowrate | Pressure | Temp. | Run Time | Flowrate |
| | (psi) | (°F) | (min) | (acfm) | (psi) | (°F) | (min) | (acfm) | (psi) | (°F) | (min) | (acfm) | (psi) | (°F) | (min) | (acfm) |
| <u>31 DEC 07</u> | <u>30</u> | | <u>7</u> | | <u>28</u> | | <u>7</u> | | <u>30</u> | | <u>7</u> | | | | | |
| <u>28 JAN 08</u> | <u>26</u> | | <u>7</u> | | <u>27</u> | | <u>7</u> | | <u>27</u> | | <u>7</u> | | | | | |

Ozone Injection System Maintenance and Inspection Log

| Date | Check/ Repair Leaks | Check Hoses Fittings & Pipes | Check Air Filter (Document Date Replaced) | Check & Test Safety Interlock | Check Sparge Blower V-Belt Tension & Conditions | Check Controller Program | Change Blower Oil | Sparge Blower Grease Bearings | Sparge Blower Repair / Replace |
|------------------|---------------------------|---------------------------------------|--|--|--|--------------------------------|-------------------------|----------------------------------|-----------------------------------|
| <u>31 DEC 07</u> | <u>OK</u> | <u>OK</u> | <u>OK</u> | <u>OK</u> | <u>N/A</u> | <u>OK</u> | <u>N/A</u> | <u>N/A</u> | <u>OK</u> |
| <u>28 JAN 08</u> | <u>OK</u> | <u>OK</u> | <u>OK</u> | <u>OK</u> | <u>N/A</u> | <u>OK</u> | <u>N/A</u> | <u>N/A</u> | <u>OK</u> |

Comments: _____