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11 August 2006

Ms. Joan Fleck
California Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

Subject: Results of Additional Groundwater Monitoring Event and Recommendation for No Further Action
Santa Rosa Station, Santa Rosa, California
K/J 032777.14

Dear Ms. Fleck:

Kennedy/Jenks Consultants (Kennedy/Jenks) has prepared this *Results of Additional Groundwater Monitoring Event and Recommendation for No Further Action* (Report) on behalf of the Union Pacific Railroad Company (Union Pacific) and Sonoma-Marin Area Rail Transit (SMART) for the Santa Rosa Station (Site) in Santa Rosa, California. This Report summarizes the additional groundwater sampling activities conducted at the Site on 7 June 2006 pursuant to the request from the North Coast Regional Water Quality Control Board (Regional Board) in its letter dated 22 May 2006 (Attachment A). The Report provides a summary of the work conducted, the field procedures used, and the results for the groundwater sampling activities. A Site location map is presented as Figure 1, and a Site plan is presented as Figure 2.

The results from the additional groundwater monitoring event are consistent with historical results. Furthermore, the public notification requirements identified by the Regional Board in its letter dated 22 May 2006 have been completed. As a result, Kennedy/Jenks recommends that the Regional Board grant No Further Action status to the Site.

## Monitoring Well Sampling

Groundwater monitoring, including measuring depth to groundwater and collecting groundwater samples for analysis, was performed by Kennedy/Jenks on 7 June 2006. Monitoring well construction details are presented in Table 1. A copy of the field notes and groundwater sampling forms are presented as Attachment B.

According to the field notes, depth to groundwater measurements were collected from the monitoring wells prior to initiating groundwater sampling. As specified in the Regional Board's 22 May 2006 letter, groundwater samples were collected using a disposable bailer at each monitoring well. Groundwater samples were collected after approximately three casing volumes had been removed from each monitoring well, or field parameters (temperature, pH and specific

conductivity) had stabilized and consecutive parameter recordings were within approximately ten percent of each other. Purged groundwater was collected in 5-gallon pails and transferred to a 55-gallon drum for temporary onsite storage.

Quality assurance/quality control (QA/QC) samples consisted of a field duplicate sample and equipment blank. The duplicate sample was collected from monitoring well SRMW-10 and labeled as SRMW-09.

Groundwater samples were delivered under chain-of-custody procedures to Severn Trent Laboratories (STL) San Francisco of Pleasanton, California, and were analyzed for total petroleum hydrocarbons as diesel (TPHd) and motor oil (TPHmo) by EPA Method 8015M with silica gel cleanup, and PAHs by EPA Method 8270C with selective ion monitoring. If TPHd or TPHmo were detected, the samples were filtered and then reanalyzed for TPHd or TPHmo by EPA Method 8015M with silica gel cleanup. As specified in the Regional Board's 22 May 2006 letter, the reporting limit for TPHd was 50 micrograms per liter (µg/l). The detection limit of 100 µg/l specified for TPHmo could not be achieved by the laboratory due to interferences inherent in the motor oil analysis. The inability to achieve the specified detection limit was discussed with the Regional Board on 1 June 2006 prior to conducting the groundwater monitoring and it was agreed to proceed using higher detection limits. The reporting limit for TPHmo was 500 µg/l.

## Summary of Results

A summary of current and historic groundwater elevation data for the Site is presented in Table 2. A groundwater elevation contour map for this sampling event is presented as Figure 3. Groundwater level elevations ranged from 135.59 feet above mean sea level (AMSL) to 141.87 feet AMSL. Groundwater elevation measurements indicate that groundwater flow is predominantly toward the west, which is toward Santa Rosa Creek and is generally consistent with results from previous monitoring events. The average horizontal hydraulic gradient is calculated to be approximately 0.009 foot per foot.

Current and historic groundwater analytical results for the Site are presented in Table 3. Prior to filtration, TPHd was detected in the sample from monitoring well SRMW-13 at a concentration of 280 µg/l. Following filtration, TPHd was detected in the sample from monitoring well SRMW-13 at a concentration of 200 µg/l. TPHd was not detected in any of the other groundwater samples. Acenaphthene, phenanthrene, anthracene, and pyrene were detected in monitoring well SRMW-13 at concentrations of 0.32 µg/l, 0.18 µg/l, 0.11 µg/l, and 0.12 µg/l, respectively. PAHs were not detected in any of the other groundwater samples. TPHmo was not detected in any of the groundwater samples. A map illustrating the spatial distribution of chemical concentrations in groundwater is presented as Figure 4. The laboratory data report and chain-of-custody records are included in Attachment C.

TPHd, TPHmo, and PAHs were not detected in the equipment blank sample that was collected during the June 2006 sampling event. TPHd, TPHmo, and PAHs were not detected in the original or the duplicate samples collected from monitoring well SRMW-10. The laboratory

quality control analysis is documented in the case narrative attached to the laboratory data report (Attachment C).

## Recommendation for No Further Action

The Regional Board's letter dated 22 May 2006 specified the following two items for completion prior to consideration of a request for a no further action determination:

- The completion of an additional groundwater monitoring/sampling event to document current water quality conditions and verify a lack of downgradient migration.
- The completion of public notice requirements.

The additional groundwater monitoring event conducted on 7 June 2006 addresses the first item. Petroleum hydrocarbons have been detected consistently in only one of the seven groundwater monitoring wells installed within and downgradient of the former source areas. As shown in Table 3, the detected concentrations of TPHd and PAHs in monitoring well SRMW-13 during the most recent monitoring event are consistent with historical results. Petroleum hydrocarbons were not detected in any of the downgradient monitoring wells, indicating that the chemicals detected in groundwater at the one monitoring well have not migrated further.

The following activities were conducted to address the public notification requirements:

- On 7 June 2006, the public notice provided by the Regional Board in its 22 May 2006 letter was posted at three locations near the Site. The notice was posted on the 3rd Street side of the Site, the 6th Street side of the Site, and the Wilson Street side of the Site. Photos of the posted notices are included in Attachment D.
- On 7 June 2006, copies of the public notice provided by the Regional Board in its 22 May 2006 letter were hand-delivered to adjacent properties. The list of properties that received the notice is included in Attachment E.
- On 10 July 2006, copies of the public notice provided by the Regional Board in its 22 May 2006 letter were mailed to the property owners of adjacent properties. The property owners were identified by the Sonoma County Assessor's Office. The list of property owners that received the notice is included in Attachment E.
- On 13 July 2006, the public notice provided by the Regional Board in its 22 May 2006 letter was published in The Press Democrat newspaper. A copy of the newspaper publication is included in Attachment F.

Based on the source removal activities conducted at the Site, subsequent groundwater monitoring data, and completion of the items identified by the Regional Board in its letter dated 22 May 2006, Kennedy/Jenks recommends that the Regional Board grant No Further Action status to the Site.

If you have any questions regarding the information presented in this Report or the attached tables and figures, please contact Rick Teczon at (415) 243-2442 or Laura Kennedy at (415) 243-2405.

Very truly yours,

KENNEDY/JENKS CONSULTANTS

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Enclosures Tables 1 through 3
Figures 1 through 4
Attachments A through F

cc: Mr. Michael Grant, Union Pacific Railroad Company
Ms. Lucrecia Milla, Sonoma-Marin Area Rail Transit District

# Tables

# Table 1: Monitoring Well Construction Data

| Monitoring Well | Date Installed | TOC[b] Elevation (ft AMSL)[c] | Approximate Seal Depth (ft bgs)[d] | Total Depth (ft bgs) | Casing Diameter (inches) | Screened Interval Depth (ft bgs) | Sand Pack Interval Depth (ft bgs) | Screen Specifications |
|---|---|---|---|---|---|---|---|---|
| SRMW-05[a] | 09/27/01 | 149.05 | 9.0 | 22.0 | 2 | 10.4 to 20.0 | 9.0 to 22.0 | Sch. 40 PVC[e] 0.010-inch slot |
| SRMW-06[a] | 09/27/01 | 149.71 | 9.0 | 22.0 | 2 | 10.5 to 20.1 | 9.0 to 22.0 | Sch. 40 PVC 0.010-inch slot |
| SRMW-07[a] | 09/27/01 | 151.25 | 9.0 | 22.0 | 2 | 10.7 to 20.0 | 9.0 to 22.0 | Sch. 40 PVC 0.010-inch slot |
| SRMW-08[a] | 09/28/01 | 152.29 | 9.0 | 22.0 | 2 | 10.9 to 20.5 | 9.0 to 22.0 | Sch. 40 PVC 0.010-inch slot |
| SRMW-10[a] | 09/27/01 | 150.26 | 9.0 | 22.0 | 2 | 10.6 to 20.3 | 9.0 to 22.0 | Sch. 40 PVC 0.010-inch slot |
| SRMW-11 | 09/08/04 | 149.60 | 11.5 | 31.0 | 2 | 18.2 to 28.2 | 15.0 to 31.0 | Sch. 40 PVC 0.010-inch slot |
| SRMW-12 | 09/07/04 | 150.18 | 12.5 | 29.5 | 2 | 17.0 to 27.0 | 15.5 to 29.5 | Sch. 40 PVC 0.010-inch slot |
| SRMW-13 | 09/07/04 | 149.49 | 12.0 | 28.0 | 2 | 17.0 to 27.0 | 15.5 to 28.0 | Sch. 40 PVC 0.010-inch slot |
| SRMW-14 | 09/07/04 | 149.77 | 11.0 | 27.0 | 2 | 14.5 to 24.5 | 13.0 to 27.0 | Sch. 40 PVC 0.010-inch slot |

(a) Monitoring well construction data from the *Quarterly Groundwater Monitoring Report – July 2003* by Geomatrix Consultants, Inc.
(b) TOC = Top of Casing.
(c) ft AMSL = feet above mean sea level.
(d) ft bgs = feet below ground surface.
(e) Sch. 40 PVC = Schedule 40 polyvinyl chloride well screen.

# Table 2: Summary of Groundwater Depths and Elevations

| Monitoring Well[a] | Date | TOC[b] Elevation (feet AMSL)[c] | Depth to Groundwater (feet BTOC)[d] | Groundwater Elevation (feet AMSL) |
|---|---|---|---|---|
| SRMW-05 | 11/26/01 | 149.05[e] | 11.38[f] | 137.67 |
| | 12/20/01 | | 8.30 | 140.75 |
| | 03/19/02 | | 9.92 | 139.13 |
| | 06/05/02 | | 14.76 | 134.29 |
| | 09/17/02 | | 16.74 | 132.31 |
| | 12/31/02 | | 6.46 | 142.59 |
| | 03/04/03 | | 10.33 | 138.72 |
| | 06/23/03 | | 12.55 | 136.50 |
| | 09/29/03 | | 15.93 | 133.12 |
| | 12/09/03 | | 12.80 | 136.25 |
| | 03/08/04 | | 8.34 | 140.71 |
| | 06/15/04 | | 13.40 | 135.65 |
| | 09/16/04 | | 15.86 | 133.19 |
| | 12/07/04 | | 15.10 | 133.95 |
| | 03/24/05 | | 9.04 | 140.01 |
| | 06/14/05 | | 11.36 | 137.69 |
| | 06/07/06 | | 11.68 | 137.37 |
| SRMW-06 | 11/26/01 | 149.71[e] | 14.64 | 135.07[f] |
| | 12/20/01 | | 11.17 | 138.54 |
| | 03/19/02 | | 11.94 | 137.77 |
| | 06/05/02 | | 16.89 | 132.82 |
| | 09/17/02 | | 18.49 | 131.22 |
| | 12/31/02 | | 9.02 | 140.69 |
| | 03/04/03 | | 12.46 | 137.25 |
| | 06/23/03 | | 14.60 | 135.11 |
| | 09/29/03 | | 17.58 | 132.13 |
| | 12/09/03 | | 15.08 | 134.63 |
| | 03/08/04 | | 10.62 | 139.09 |
| | 06/15/04 | | 15.30 | 134.41 |
| | 09/16/04 | | 17.27 | 132.44 |
| | 12/07/04 | | 15.12 | 134.59 |
| | 03/24/05 | | 12.73 | 136.98 |
| | 06/14/05 | | 14.09 | 135.62 |
| | 06/07/06 | | 14.12 | 135.59 |
| SRMW-07 | 11/26/01 | 151.25[e] | 11.93 | 139.32[f] |
| | 12/20/01 | | 8.66 | 142.59 |
| | 03/19/02 | | 10.03 | 141.22 |
| | 06/05/02 | | 14.07 | 137.18 |
| | 09/17/02 | | 16.70 | 134.55 |
| | 12/31/02 | | 6.42 | 144.83 |
| | 03/04/03 | | 9.64 | 141.61 |
| | 06/23/03 | | 12.08 | 139.17 |
| | 09/29/03 | | 15.57 | 135.68 |
| | 12/09/03 | | 12.82 | 138.43 |

# Table 2: Summary of Groundwater Depths and Elevations

| Monitoring Well[a] | Date | TOC[b] Elevation (feet AMSL)[c] | Depth to Groundwater (feet BTOC)[d] | Groundwater Elevation (feet AMSL) |
|---|---|---|---|---|
| SRMW-07 Cont'd | 03/08/04 | | 7.98 | 143.27 |
| | 06/15/04 | | 13.23 | 138.02 |
| | 09/16/04 | | 15.75 | 135.50 |
| | 12/07/04 | | 13.88 | 137.37 |
| | 03/24/05 | | 9.66 | 141.59 |
| | 06/14/05 | | 11.64 | 139.61 |
| | 06/07/06 | | 11.95 | 139.30 |
| SRMW-08 | 11/26/01 | 152.29[e] | 9.40 | 142.89[f] |
| | 12/20/01 | | 7.55 | 144.74 |
| | 03/19/02 | | 9.15 | 143.14 |
| | 06/05/02 | | 11.13 | 141.16 |
| | 09/17/02 | | 12.47 | 139.82 |
| | 12/31/02 | | 6.05 | 146.24 |
| | 03/04/03 | | 9.18 | 143.11 |
| | 06/23/03 | | 10.78 | 141.51 |
| | 09/29/03 | | 12.39 | 139.90 |
| | 12/09/03 | | 10.14 | 142.15 |
| | 03/08/04 | | 7.76 | 144.53 |
| | 06/15/04 | | 11.45 | 140.84 |
| | 09/16/04 | | 12.70 | 139.59 |
| | 12/07/04 | | 13.08 | 139.21 |
| | 03/24/05 | | 8.30 | 143.99 |
| | 06/14/05 | | 10.17 | 142.12 |
| | 06/07/06 | | 10.42 | 141.87 |
| SRMW-10 | 11/26/01 | 150.26[e] | 12.06 | 138.20[f] |
| | 12/20/01 | | 8.13 | 142.13 |
| | 03/19/02 | | 9.43 | 140.83 |
| | 06/05/02 | | 14.11 | 136.15 |
| | 09/17/02 | | 16.65 | 133.61 |
| | 12/31/02 | | 5.78 | 144.48 |
| | 03/04/03 | | 9.69 | 140.57 |
| | 06/23/03 | | 11.94 | 138.32 |
| | 09/29/03 | | 15.62 | 134.64 |
| | 12/09/03 | | 12.79 | 137.47 |
| | 03/08/04 | | 7.91 | 142.35 |
| | 06/15/04 | | 13.18 | 137.08 |
| | 09/16/04 | | 15.61 | 134.65 |
| | 12/07/04 | | 13.60 | 136.66 |
| | 03/24/05 | | 9.60 | 140.66 |
| | 06/14/05 | | 11.60 | 138.66 |
| | 06/07/06 | | 11.98 | 138.28 |
| SRMW-11 | 09/10/04 | 149.60[g] | 16.21 | 133.39[h] |
| | 09/16/04 | | 16.37 | 133.23 |
| | 12/07/04 | | 14.36 | 135.24 |

# Table 2: Summary of Groundwater Depths and Elevations

| Monitoring Well[a] | Date | TOC[b] Elevation (feet AMSL)[c] | Depth to Groundwater (feet BTOC)[d] | Groundwater Elevation (feet AMSL) |
|---|---|---|---|---|
| SRMW-11 Cont'd | 03/24/05 | | 11.61 | 137.99 |
| | 06/14/05 | | 13.05 | 136.55 |
| | 06/07/06 | | 13.26 | 136.34 |
| SRMW-12 | 09/10/04 | 150.18[g] | 15.79 | 134.39[h] |
| | 09/16/04 | | 15.92 | 134.26 |
| | 12/07/04 | | 13.85 | 136.33 |
| | 03/24/05 | | 10.34 | 139.84 |
| | 06/14/05 | | 12.05 | 138.13 |
| | 06/07/06 | | 12.47 | 137.71 |
| SRMW-13 | 09/10/04 | 149.49[g] | 14.50 | 134.99[h] |
| | 09/16/04 | | 14.63 | 134.86 |
| | 12/07/04 | | 12.62 | 136.87 |
| | 03/24/05 | | 8.93 | 140.56 |
| | 06/14/05 | | 10.87 | 138.62 |
| | 06/07/06 | | 11.14 | 138.35 |
| SRMW-14 | 09/10/04 | 149.77[g] | 16.55 | 133.22[h] |
| | 09/16/04 | | 16.71 | 133.06 |
| | 12/07/04 | | 14.15 | 135.62 |
| | 03/24/05 | | 11.10 | 138.67 |
| | 06/14/05 | | 13.11 | 136.66 |
| | 06/07/06 | | 13.16 | 136.61 |

(a) Monitoring Wells SRMW-05, SRMW-06, and SRMW-11 are located west of the Santa Rosa Station (the Site) on the Salvador Trust property; Wells SRMW-07 and SRMW-08 are located east of the Site on property owned by SMART; and Wells SRMW-10, SRMW-12, SRMW-13, and SRMW-14 are located on the Site.
(b) TOC = Top of Casing.
(c) AMSL = Above Mean Sea Level.
(d) BTOC = Below Top of Casing.
(e) TOC elevation data from the *Quarterly Groundwater Monitoring Report – July 2003* produced by Geomatrix Consultants, Inc.
(f) Water level measured prior to well development on 18 December 2001.
(g) Surveyed by Adobe Associates, Inc. on 10 September 2004.
(h) Water level measured prior to well development on 10 September 2004.

# Table 3: Summary of Analytical Results of Groundwater Samples

| Monitoring Well | Sample Date | Analytical Results[a] (µg/l)[b] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Benzene[c] | Toluene[c] | Ethylbenzene[c] | Total Xylenes[c] | MTBE[d] | Gas TPHg[e] | Diesel TPHd[f] | Motor Oil TPHmo[g] | PAHs[h] |
| SRMW-05 | 12/20/01 | NA[i] | NA | NA | NA | NA | NA | <50[j] | <300 | <0.94 |
| | 03/19/02 | NA | NA | NA | NA | NA | NA | <50 | <300 | <0.94 |
| | 06/05/02 | NA | NA | NA | NA | NA | NA | <61 | <610 | <0.10 |
| | 09/17/02 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 12/31/02 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 03/04/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 06/23/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 09/29/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <3.1[k][l] |
| | 12/09/03 | NA | NA | NA | NA | NA | NA | <50[l] | <500[l] | <5.0[l] |
| | 03/08/04 | NA | NA | NA | NA | NA | NA | <50[l] | <500[l] | <5.0[m] |
| | 06/15/04 | NA | NA | NA | NA | NA | NA | <50[l] | <500[l] | <5.0[l] |
| | 09/16/04 | NA | NA | NA | NA | NA | NA | <50[l] | <500[l] | <5.0 |
| | 12/07/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |
| | 03/24/05 | NA | NA | NA | NA | NA | NA | <50 | NA | <5.0 |
| | 06/14/05 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |
| | 06/07/06 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| SRMW-06 | 12/20/01 | NA | NA | NA | NA | NA | NA | <50 | <300 | <0.94 |
| | 03/19/02 | NA | NA | NA | NA | NA | NA | <50 | <300 | <0.94 |
| | 06/05/02 | NA | NA | NA | NA | NA | NA | <60 | <600 | <0.11 |
| | 09/17/02 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 12/31/02 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.11 |
| | 03/04/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 06/23/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 09/29/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <2.0 |
| | 12/09/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0[l] |
| | 03/08/04 | NA | NA | NA | NA | NA | NA | <50[l] | <500[l] | <5.0[m] |
| | 06/15/04 | NA | NA | NA | NA | NA | NA | <50[l] | <500[l] | <20[k] |
| | 09/16/04 | NA | NA | NA | NA | NA | NA | <50[l] | <500[l] | <5.0[l] |
| | 12/07/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |
| | 03/24/05 | NA | NA | NA | NA | NA | NA | <50 | NA | <5.0 |
| | 06/14/05 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |

# Table 3: Summary of Analytical Results of Groundwater Samples

| Monitoring Well | Sample Date | Analytical Results[a] (µg/l)[b] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Benzene[c] | Toluene[c] | Ethylbenzene[c] | Total Xylenes[c] | MTBE[d] | Gas TPHg[e] | Diesel TPHd[f] | Motor Oil TPHmo[g] | PAHs[h] |
| SRMW-06 Cont'd | 06/07/06 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| SRMW-07 | 12/20/01 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <50 | <300 | <0.94 |
| | 03/19/02 | <0.5 | <0.5 | <0.5 | <0.5 | **0.6** | <50 | <50 | <300 | <0.94 |
| | 06/05/02 | <1 | <1 | <1 | <1 | **5.3** | <50 | **130**[n] | <500 | <0.10 |
| | 09/17/02 | <0.5 | <0.5 | <0.5 | <1 | **12** | <50 | <50 | <500 | <0.10 |
| | 12/31/02 | <0.5 | <0.5 | <0.5 | <1 | **0.52** | <50 | <50 | <500 | <0.10 |
| | 03/04/03 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <50 | <50 | <500 | <0.10 |
| | 06/23/03 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <50 | <50 | <500 | <0.10 |
| | 09/29/03 | <0.5[o] | <0.5[o] | <0.5[o] | <0.5[o] | <5[o] | <50 | <50 | <500 | <2.0 |
| | 12/09/03 | <0.5[o] | <0.5[o] | <0.5[o] | <0.5[o] | <5[o] | <50 | <50[l] | <500[l] | <5.0[l] |
| | 03/08/04 | <0.5[o] | <0.5[o] | <0.5[o] | <0.5[o] | <5[o] | <50 | <50 | <500 | <5.0[m] |
| | 06/15/04 | <0.5 | <0.5 | <0.5 | <1.0 | **1.7** | <50 | <50[l] | <500[l] | <20[k] |
| | 09/16/04 | <0.5 | <0.5 | <0.5 | <1.0 | **2.5** | <50 | <50 | <500 | <5.0[l] |
| | 12/07/04 | Not Sampled | | | | | | | | |
| | 03/24/05 | Not Sampled | | | | | | | | |
| | 06/14/05 | Not Sampled | | | | | | | | |
| | 06/07/06 | Not Sampled | | | | | | | | |
| SRMW-08 | 12/20/01 | <0.5 | <0.5 | <0.5 | <0.5 | **4.4** | <50 | NA | NA | NA |
| | 03/19/02 | <0.5 (<0.5)[p] | <0.5 (<0.5)[p] | <0.5 (<0.5)[p] | <0.5 (<0.5) | **5.3** (**5.2**) | <50 (<50) | NA | NA | NA |
| | 06/05/02 | <1 (<1) | <1 (<1) | <1 (<1) | <1 (<1) | **11** (**11**) | <50 (<50) | NA | NA | NA |
| | 09/17/02 | <0.5 (<0.5) | <0.5 (<0.5) | <0.5 (<0.5) | <1 (<1) | **14** (**16**) | <50 (<50) | NA | NA | NA |
| | 12/31/02 | <0.5 (<0.5) | <0.5 (<0.5) | <0.5 (<0.5) | <1 (<1) | **2.3** (**2.7**) | <50 (<50) | NA | NA | NA |
| | 03/04/03 | <0.5 (<0.5) | <0.5 (<0.5) | <0.5 (<0.5) | <1 (<1) | **7.1**[q] (**4.3**)[q] | <50 (<50) | NA | NA | NA |
| | 06/23/03 | <0.5 (<0.5) | <0.5 (<0.5) | <0.5 (<0.5) | <1 (<1) | **11** (**9.4**) | <50 (<50) | NA | NA | NA |
| | 09/29/03 | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | **22**[o] (**22**)[o] | <50 (<50) | NA | NA | NA |

# Table 3: Summary of Analytical Results of Groundwater Samples

| Monitoring Well | Sample Date | Analytical Results[a] (µg/l)[b] Benzene[c] | Toluene[c] | Ethylbenzene[c] | Total Xylenes[c] | MTBE[d] | Gas TPHg[e] | Diesel TPHd[f] | Motor Oil TPHmo[g] | PAHs[h] |
|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-08 Cont'd | 12/09/03 | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | **13**[o] (**13**)[o] | <50 (<50) | NA | NA | NA |
| | 03/08/04 | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | <0.5[o] (<0.5)[o] | <5[o] (<5)[o] | <50 (<50) | NA | NA | NA |
| | 06/15/04 | <0.5 (<0.5) | <0.5 (<0.5) | <0.5 (<0.5) | <1.0 (<1.0) | **17** (**18**) | **57**[r] (**51**[r]) | NA | NA | NA |
| | 09/16/04 | <0.5 (<0.5) | <0.5 (<0.5) | <0.5 (<0.5) | <1.0 (<1.0) | **23** (**21**) | <50 (<50) | NA | NA | NA |
| | 12/07/04 | Not Sampled | | | | | | | | |
| | 03/24/05 | Not Sampled | | | | | | | | |
| | 06/14/05 | Not Sampled | | | | | | | | |
| | 06/07/06 | Not Sampled | | | | | | | | |
| SRMW-10 | 12/20/01 | NA | NA | NA | NA | NA | NA | <50 (<50) | <300 (<300) | <0.94 (<0.94) |
| | 03/19/02 | NA | NA | NA | NA | NA | NA | <50 | <300 | <0.94 |
| | 06/05/02 | NA | NA | NA | NA | NA | NA | <62 | <620 | <0.10 |
| | 09/17/02 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 12/31/02 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 03/04/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 06/23/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |
| | 09/29/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <2.5[k] |
| | 12/09/03 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.7[l] |
| | 03/08/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.6[k] |
| | 06/15/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <7.0[k] |
| | 09/16/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0[l] |
| | 12/07/04 | NA | NA | NA | NA | NA | NA | **150**[s] (<50) | <500 (<50) | <5.0 (<5.0) |
| | 03/24/05 | NA | NA | NA | NA | NA | NA | <50 (<50) | NA | 5.0 (<5.0) |
| | 06/14/05 | NA | NA | NA | NA | NA | NA | <50 (<50) | <500 (<500) | 5.0 (<5.0) |
| | 06/07/06 | NA | NA | NA | NA | NA | NA | <50 (<50) | <500 (<500) | <0.10 (<0.10) |

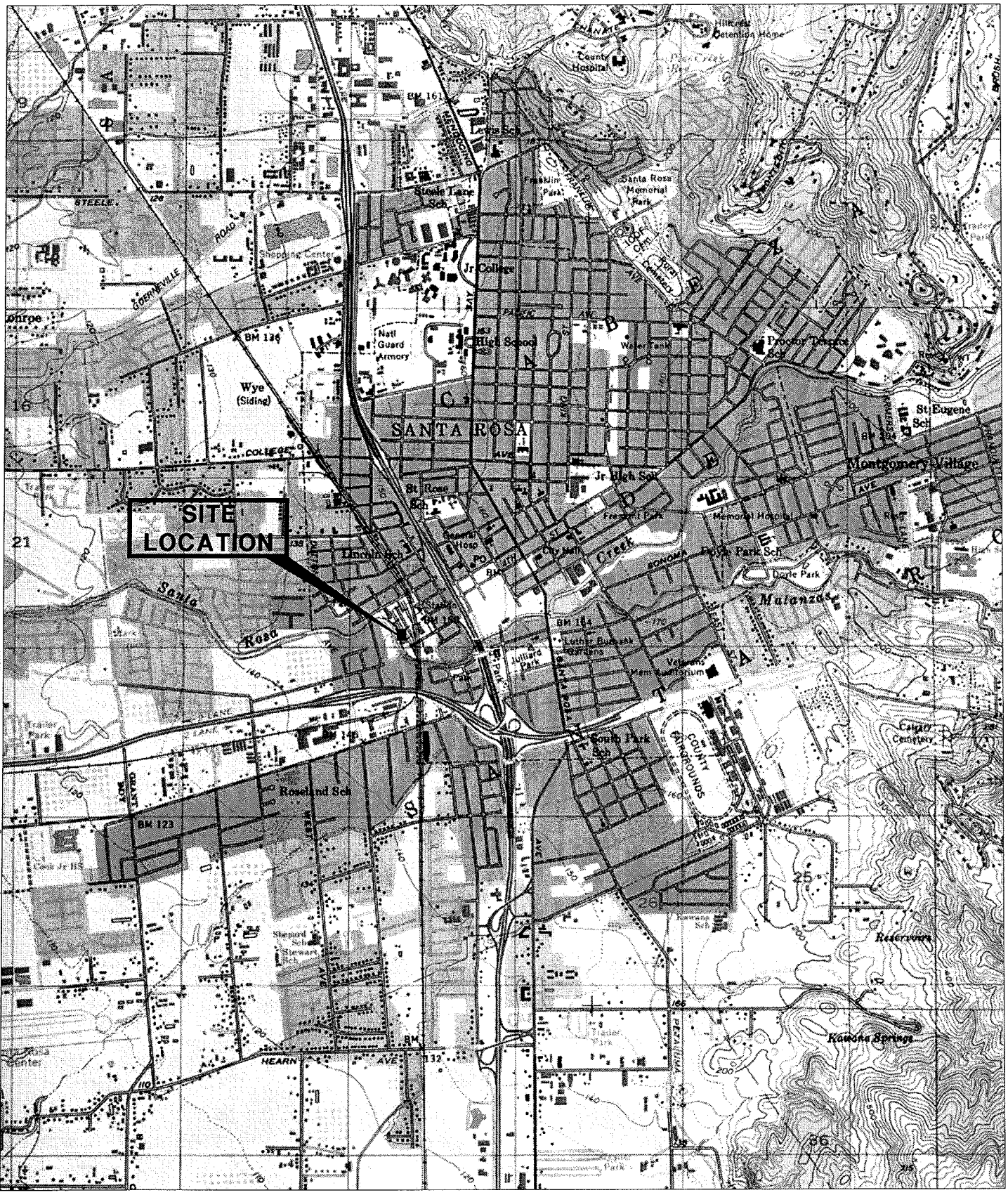
# Table 3: Summary of Analytical Results of Groundwater Samples

| Monitoring Well | Sample Date | Analytical Results[a] (µg/l)[b] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Benzene[c] | Toluene[c] | Ethylbenzene[c] | Total Xylenes[c] | MTBE[d] | Gas TPHg[e] | Diesel TPHd[f] | Motor Oil TPHmo[g] | PAHs[h] |
| SRMW-11 | 09/16/04 | NA | NA | NA | NA | NA | NA | <50[l] | <500[l] | <5.7[k][l] |
| | 12/07/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |
| | 03/24/05 | NA | NA | NA | NA | NA | NA | <50 | NA | <5.0 |
| | 06/14/05 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |
| | 06/07/06 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.11 |
| SRMW-12 | 09/16/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0[l] |
| | 12/07/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |
| | 03/24/05 | NA | NA | NA | NA | NA | NA | <50 | NA | <5.0 |
| | 06/14/05 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |
| | 06/07/06 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.11 |
| SRMW-13 | 09/16/04 | NA | NA | NA | NA | NA | NA | **540**[r]<br>**220**[r][t] | <500 | Phenanthrene **(4.6)**[l]<br>Anthracene **(5.1)**[l]<br>Pyrene **(6.1)**[l]<br>Chrysene **(4.3)**[l] |
| | 12/07/04 | NA | NA | NA | NA | NA | NA | **1500**[s] | **970**[u] | <50[v][w] |
| | 03/24/05 | NA | NA | NA | NA | NA | NA | **390**[s]<br>**190**[s][t][x] | NA | <5.0 |
| | 06/14/05 | NA | NA | NA | NA | NA | NA | **730**<br>**200**[t] | <500<br><500 | <5.0 |
| | 06/07/06 | NA | NA | NA | NA | NA | NA | **280**<br>**200**[t] | <500<br><500[t] | Acenaphthene **(0.32)**<br>Phenanthrene **(0.18)**<br>Anthracene **(0.11)**<br>Pyrene **(0.12)** |
| SRMW-14 | 09/16/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0[l] |
| | 12/07/04 | NA | NA | NA | NA | NA | NA | <50 | <500 | <5.0 |
| | 03/24/05 | NA | NA | NA | NA | NA | NA | <50 | NA | <5.0 |
| | 06/14/05 | NA | NA | NA | NA | NA | NA | **55**<br><50[t] | <500<br><500 | <5.0 |
| | 06/07/06 | NA | NA | NA | NA | NA | NA | <50 | <500 | <0.10 |

# Table 3: Summary of Analytical Results of Groundwater Samples

(a) Monitoring well groundwater samples analyzed by Severn Trent Laboratories (STL) San Francisco of Pleasanton, California. Data for samples collected prior to 29 September 2003 are from the *Quarterly Groundwater Monitoring Report – July 2003* produced by Geomatrix Consultants, Inc.
(b) µg/l = Micrograms per liter.
(c) Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260 unless indicated otherwise.
(d) MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8260 unless indicated otherwise.
(e) TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8015M.
(f) TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015M. Samples collected since 29 September 2003 analyzed with silica gel cleanup.
(g) TPHmo = Total petroleum hydrocarbons as motor oil analyzed by EPA Method 8015M. Samples collected since 29 September 2003 analyzed with silica gel cleanup.
(h) PAHs = Polycyclic aromatic hydrocarbons analyzed by EPA Method 8270 SIM prior to 29 September 2003 and EPA Method 8270C since 29 September 2003. Reported detection limit reflects the highest detection limit for individual PAHs.
(i) NA = Not analyzed.
(j) < = Not detected at or above stated laboratory reporting limit shown.
(k) Laboratory reports that the reporting limit was raised due to reduced sample size.
(l) Laboratory reports that the surrogate recoveries were lower than the quality control limit due to matrix interference, but that the analytical result was confirmed by reanalysis.
(m) Laboratory reports that the surrogate recoveries were lower than the quality control limit due to matrix interference.
(n) According to USEPA National Functional Guidelines, the compound is considered non-detect since the associated numerical value is less than five times the concentration of the compound detected in the field equipment blank.
(o) Sample analyzed using EPA Method 8021B.
(p) ( ) = Duplicate sample.
(q) The relative percent difference between primary and duplicate samples is greater than 30 percent.
(r) Hydrocarbon reported does not match the laboratory standard.
(s) Quantitation of unknown hydrocarbon(s) in sample based on diesel.
(t) Sample was filtered prior to analysis.
(u) Quantitation of unknown hydrocarbon(s) in sample based on motor oil.
(v) Reporting limits raised due to high level of non-target analyte materials.
(w) Surrogate(s) were diluted out.
(x) Sample was extracted out of hold time.

# Figures




N:\2003.ISB\032777.14 Santa Rosa\Addtl GWMR 2006\Jun06F1.dwg 6-30-06 10:56:13 AM RickT

SOURCE: (MAPTECH 1997)

**Kennedy/Jenks Consultants**

Union Pacific Railroad Company
Santa Rosa Station
Santa Rosa, California

**SITE LOCATION MAP**

K/J 032777.14

**FIGURE 1**

SANTA ROSA CREEK

PAVED

6TH STREET

JEFFERSON STREET

SRMW-06

SRMW-11

WAREHOUSE

WAREHOUSE

FORMER OIL HOUSE AND GASOLINE TANKS

FORMER OIL UNDERGROUND STORAGE TANKS

FORMER SAND PILES AND SOIL DISCOLORATION

OIL TRAP

SRMW-05

SRMW-14

6TH STREET WAREHOUSE

FORMER UNDERGROUND STORAGE TANK

FORMER ABOVEGROUND 3,000-BBL OIL TANK

SRMW-13

SRMW-10

SRMW-12

OIL TRAP

FORMER OIL COLUMN

CONCRETE PAD

FORMER UNDERGROUND PETROLEUM PIPELINE TRENCH

FORMER WOODEN UNDERGROUND STORAGE TANK

FORMER PUMP HOUSE

ACCESS GATE

FORMER TURNTABLE

FORMER 230-GALLON FUEL OIL TANK

CONCRETE PAD

SHED ON CONCRETE PAD

"NORTHWESTERN AREA"

FORMER 10,000-GALLON UNDERGROUND DIESEL TANK

ACCESS GATE

FORMER FUEL STORAGE HOUSE

FORMER 10,000-GALLON UNDERGROUND GASOLINE TANK

FORMER STORAGE TRAILER

FORMER PUMP HOUSE

STORAGE HOUSE

SRMW-07

TEMPORARY FENCING

"FENCED ENCLOSURE"

CORRUGATED METAL PIPE

FORMER ABOVEGROUND STORAGE TANK

SHED

SMART OWNERSHIP

SRMW-08

3RD STREET

4TH STREET

5TH STREET

ADAMS STREET

**LEGEND**

- SRMW-14 — MONITORING WELL LOCATION AND DESIGNATION
- SITE PROPERTY BOUNDARY
- RAILROAD TRACK
- FORMER RAILROAD TRACK
- CHAIN LINK FENCE
- CITY OF SANTA ROSA STORM WATER LINE
- CITY OF SANTA ROSA SEWER LINES
- MANHOLE
- SMART — SONOMA-MARIN AREA RAIL TRANSIT

PROJECT NORTH

TRUE NORTH

0 40 80

1"=80'

NOTES:

1. BASE MAP FROM GEOMATRIX CONSULTANTS
2. ALL LOCATIONS ARE APPROXIMATE

**Kennedy/Jenks Consultants**

Union Pacific Railroad Company
Santa Rosa Station
Santa Rosa, California

**SITE PLAN**

K/J 032777.14

**FIGURE 2**

V:\2003.ISB\032777.14 Santa Rosa\Addtl GWMR 2006\Jun06F2.dwg 6-29-06 03:34:37 PM RickT

SANTA ROSA CREEK

PAVED

WAREHOUSE

WAREHOUSE

6TH STREET WAREHOUSE

"NORTHWESTERN AREA"

"FENCED ENCLOSURE"

ACCESS GATE

ACCESS GATE

SRMW-05 (137.37)

SRMW-06 (135.59)

SRMW-07 (139.30)

SRMW-08 (141.87)

SRMW-10 (138.28)

SRMW-11 (136.34)

SRMW-12 (137.71)

SRMW-13 (138.35)

SRMW-14 (136.61)

?-136.0

136.0-?

?-136.5

136.5-?

?-137.0

137.0-?

137.5-?

?-137.0

?-137.5

?-138.0

138.0-?

138.5-?

?-138.5

?-139.0

139.0-?

?-139.5

139.5-?

?-140.0

140.0-?

?-140.5

140.5-?

?-141.0

141.0-?

?-141.5

141.5-?

SMART RIGHT OF WAY

6TH STREET

JEFFERSON STREET

ADAMS STREET

3RD STREET

4TH STREET

5TH STREET

## LEGEND

SRMW-14 (133.06) — MONITORING WELL LOCATION WITH DESIGNATION AND GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

SITE PROPERTY BOUNDARY

RAILROAD TRACK

FORMER RAILROAD TRACK

CHAIN LINK FENCE

CITY OF SANTA ROSA STORM WATER LINE

CITY OF SANTA ROSA SEWER LINES

134-? — GROUNDWATER ELEVATION CONTOUR

INTERPRETED GROUNDWATER FLOW DIRECTION

MANHOLE

SMART — SONOMA-MARIN AREA RAIL TRANSIT

PROJECT NORTH

TRUE NORTH

0 40 80

1"=80'

NOTES:

1. BASE MAP FROM GEOMATRIX CONSULTANTS.
2. ALL LOCATIONS ARE APPROXIMATE.
3. GROUNDWATER DATA COLLECTED ON 7 JUNE 2006.

**Kennedy/Jenks Consultants**

Union Pacific Railroad Company
Santa Rosa Station
Santa Rosa, California

**GROUNDWATER ELEVATION CONTOUR MAP**

K/J 032777.14
7 JUNE 2006

**FIGURE 3**

N:\2003\SB\032777.14 Santa Rosa\Addtl GWMR 2006\Jun06F3.dwg 6-30-06 10:51:24 AM RickT

| SRMW-13 | |
|---|---|
| TPHd | 280 |
| TPHd filtered | 200 |
| TPHmo | <500 |
| TPHmo filtered | <500 |
| PAHs | |
| Acenaphthene | 0.32 |
| Phenanthrene | 0.18 |
| Anthracene | 0.11 |
| Pyrene | 0.12 |

| SRMW-06 | |
|---|---|
| TPHd | <50 |
| TPHmo | <500 |
| PAHs | <0.10 |

| SRMW-11 | |
|---|---|
| TPHd | <50 |
| TPHmo | <500 |
| PAHs | <0.11 |

| SRMW-10 | |
|---|---|
| TPHd | <50 (<50) |
| TPHmo | <500 (<500) |
| PAHs | <0.10 (<0.10) |

| SRMW-14 | |
|---|---|
| TPHd | <50 |
| TPHmo | <500 |
| PAHs | <0.10 |

| SRMW-05 | |
|---|---|
| TPHd | <50 |
| TPHmo | <500 |
| PAHs | <0.10 |

| SRMW-12 | |
|---|---|
| TPHd | <50 |
| TPHmo | <500 |
| PAHs | <0.11 |

SANTA ROSA CREEK

PAVED

6TH STREET

JEFFERSON STREET

WAREHOUSE

WAREHOUSE

6TH STREET WAREHOUSE

SRMW-06

SRMW-11

SRMW-05

SRMW-14

SRMW-13

SRMW-10

SRMW-12

"NORTHWESTERN AREA"

ACCESS GATE

"FENCED ENCLOSURE"

ACCESS GATE

SRMW-07

3RD STREET

SRMW-08

SMART RIGHT OF WAY

4TH STREET

5TH STREET

ADAMS STREET

## LEGEND

- SRMW-14 — MONITORING WELL LOCATION AND DESIGNATION
- SITE PROPERTY BOUNDARY
- RAILROAD TRACK
- FORMER RAILROAD TRACK
- CHAIN LINK FENCE
- CITY OF SANTA ROSA STORM WATER LINE
- CITY OF SANTA ROSA SEWER LINES
- MANHOLE
- SMART — SONOMA-MARIN AREA RAIL TRANSIT

TPHd Total Petroleum Hydrocarbons as Diesel
TPHmo Total Petroleum Hydrocarbons as Motor Oil
PAHs Polycyclic Aromatic Hydrocarbons

PROJECT NORTH

TRUE NORTH

0 40 80

1"=80'

NOTES:

1. BASE MAP FROM GEOMATRIX CONSULTANTS.
2. ALL LOCATIONS ARE APPROXIMATE.
3. ANALYTICAL RESULTS ARE IN ug/L.
4. GROUNDWATER DATA COLLECTED ON 7 JUNE 2006.
5. PARENTHESIS INDICATES A DUPLICATE SAMPLE.

**Kennedy/Jenks Consultants**

Union Pacific Railroad Company
Santa Rosa Station
Santa Rosa, California

**CHEMICAL CONCENTRATION MAP**

K/J 032777.14
7 JUNE 2006

**FIGURE 4**

V:\2003.ISB\032777.14 Santa Rosa\Addtl GWMR 2006\Jun06F4.dwg 6-30-06 10:21:15 AM RickT

# Attachment A

Regional Board Letter Dated 22 May 2006

# California Regional Water Quality Control Board
## North Coast Region
**William R. Massey, Chairman**

www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

**Dan Skopec**
*Acting Secretary*

**Arnold Schwarzenegger**
*Governor*


May 22, 2006

Mr. Mike Grant
Union Pacific Railroad
Manager Environmental Site Remediation
49 Stevenson Street, 15th Floor
San Francisco, CA 94105

Dear Mr. Grant:

Subject: Case Status

File: Southern Pacific Transportation Company, 3rd Street Property, Santa Rosa
Case No. 1TSR196

Regional Water Board staff has reviewed the case file including the September 26, 2005 *Second Quarter 2005 Groundwater Monitoring Report and Request for No Further Action* prepared by Kennedy/Jenks Consultants for the Southern Pacific Transportation Company site located between 3rd and 6th Streets in Santa Rosa. Our comments are:

The groundwater monitoring well network includes two wells (MW-7 and MW-8) on the northeastern portion of the site, four wells in the northwestern portion of the site and three wells off site and to the west. Groundwater impacts in MW-7 and MW-8 include detectable levels of Methyl tertiary Butyl Ether (MtBE), which is a gasoline oxygenate. Of the other seven wells, one well (MW-13) contains detectable levels of diesel and oil range hydrocarbons.

An on site source of MtBE has not been identified and the presence of this chemical in groundwater beneath the railroad property on the eastern side appears to be the result of on site migration. The onsite sources of diesel and oil range hydrocarbons have been removed to the extent feasible. Concentrations of diesel and oil in groundwater collected from the vicinity of MW-13 prior to the completion of corrective action in 2003 were reported as high as 6,300,000 and 12,000,000 ug/l, respectively. Post corrective action groundwater samples collected from MW-13 contain dissolved diesel and oil at up to 1,500 and 970 ug/l, respectively. The last sampling event was conducted in June 2005.

This case is being considered for no further action with regards to groundwater sampling and remediation and has been evaluated at the management level, where two items were identified for completion prior to consideration of no further action. They include:

- The completion of an additional groundwater monitoring/sampling event to document current water quality conditions and verify a lack of down gradient migration. The wells must be sampled using the method identified in the Kennedy Jenks work plan for well sampling (bailer) rather than the method used during the March and June 2005 events, which included a pump and tubing. The detection limit for diesel and oil must be 50 ug/l. The detection limit for oil must be no more than 100 ug/l. Please notify me of the sampling schedule so I can conduct a site visit during field activities.

- The completion of the public notice requirements. I have enclosed a public notice form for you to 1) publish in a local newspaper of general circulation, 2) post at and near the site in conspicuous locations on Sixth Street, Wilson Street and Third Street and 3) distribute to adjacent landowners and business operators and interested parties. I will place the notice on our web site and make it available at our front counter for public review.

We look forward to receipt of the monitoring and sampling report in the near future and proof that the public notice requirements were completed including:

- A copy of the newspaper publication.
- Photos of the locations where the notice was posted and the date posted.
- A list of adjacent property owners and interested parties that received the notice and the date of distribution.

In addition, as you know, this property is proposed for development known as the Railroad Square Development, a transit-oriented project including retail and residential land use, a food and wine center, culinary and wine education and a local farmer's market. The issuance of a no further action letter does equate to the property being free of future regulatory requirements with unrestricted land use. A soil and groundwater management plan will be a required component of the permit application process with the City of Santa Rosa Community Development and Fire Departments. The plan will ensure that remaining impacts, such as the area of the light pole in the fenced enclosure area, or impacts encountered during the grading/construction process, will be managed appropriately.

This matter was discussed at a meeting held on October 27, 2004 at which time, it was agreed that Union Pacific Railroad and SMART would negotiate who would address environmental regulatory requirements during property development.

If you have any questions or would like to meet to discuss this case, I can be reached at (707) 576-2675.

Sincerely,

Joan Fleck
Engineering Geologist

Enclosure: Public Notice Form

052206_JEF_UnionPacific

cc: Fire Inspector Corey Vincent, Santa Rosa Fire Department
Ms. Laura Kennedy, Kennedy/Jenks, 622 Folsom Street, San Francisco, CA 94107
Mr. Jeffery Kolin, City Manager, P.O. Box 1678, Santa Rosa, CA 95402-1678
Ms. Cappie Garrett, 1104 McDonald Avenue, Santa Rosa, CA 95404
Ms. Lillian Hames, SMART District Office, 4040 Civic Center Drive, Suite 200, San Rafael, CA 94903
Ms. Lucrecia Milla, SMART District Office, 4040 Civic Center Drive, Suite 200, San Rafael, CA 94903
Ms. Sheryl Bratton, Chief Deputy County Counsel, 575 Administration Drive, Room 105A, Santa Rosa, CA 95403

# California Regional Water Quality Control Board
## North Coast Region
### William R. Massey, Chairman

Dan Skopec
*Acting Secretary*

www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

Arnold Schwarzenegger
*Governor*


May 22, 2006

Southern Pacific Transportation Company
Third Street Property (North)
Santa Rosa, California
1TSR196

**Notice of Consideration of No Further Action**
Case No. 1TSR196 is being evaluated with regards to no further action. The comment period will end 30-days after all the public notice requirements have been completed including publication in a newspaper of general circulation, distributed to neighboring land and business owners, posted at the site in conspicuous locations and posted on the Regional Water Board web page.

**Problem Description**
The site was formerly occupied by, a water and fueling station dating back to the 1800s for the Northwestern Pacific Railroad (NWPR), followed by Southern Pacific Transportation Company (SPTCO) in 1906 and Union Pacific Railroad in 1996. Petroleum hydrocarbons including gasoline, diesel and oil were used and stored on the property in above and below ground storage tanks. Discharges to soil and groundwater were discovered and investigated from 1995 to 2003. Significant diesel and oil range hydrocarbon impacts were found in the northwest portion of the property including the presence of separate phase oil in soil and on groundwater. Shallow soil impacts were found in other areas.

**Remedial Actions Completed**

The above and belowground tanks and associated piping were removed. Approximately 5,400 cubic yards of impacted soil was removed in 2003. At that time, 70,000 gallons of impacted groundwater were pumped from the open excavations. Separate phase hydrocarbons (oil) on water were also removed.

**Status of Contaminants in Groundwater**

Five groundwater-monitoring wells were installed and monitored from 2001 to 2004. Four additional wells were installed in 2004. Post excavation monitoring was conducted quarterly in all the wells from 2004 to June 2005. Diesel and oil have been detected in one of the seven, groundwater-monitoring wells at up to 1500 and 970 ug/l, respectively. An additional groundwater-sampling event has been requested to document current concentrations.

**MtBE Status**

Methyl tert Butyl Ether (MtBE) is present in groundwater and appears to be the result of on site migration.

**Consideration of No Further Action**
Regional Board staff, are considering this case for no further action. Records for this case are contained in a file identified as Southern Pacific Transportation Company, 3rd Street (North), Santa Rosa, Case No. 1TSR196 available for review by calling (707) 576-2220. You may also contact Joan Fleck at (707) 576-2675 or Jfleck@waterboards.ca.gov with questions.

052206_UPNFAnoticeform

# Attachment B

Field Notes and Groundwater Sampling Forms

SEVERN TRENT **STL**

# STL San Francisco Chain of Custody

1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 484-1096
Email: sflogin@stl-inc.com

Reference #: _____

Date 6/7/06 Page 1 of 1

## Report To

Attn: LAURA KENNEDY
Company: KENNEDY/JENKS CONSULTANTS
Address: 622 FOLSOM ST, SAN FRANCISCO 94107
Phone: 415-243-2405 Email: LAURAKENNEDY@KENNEDYJENKS.COM
Bill To: UNION PACIFIC RAILROAD COMPANY
Sampled By: M. KEY
Attn: MIKE GRANT
Phone: 510-891-7433

## Analysis Request

| Sample ID | Date | Time | Matrix | Pres erv. | TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE | Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B | TEPH EPA 8015M* ☒ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other ___ | Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol | Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B | Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624 | Semivolatiles GC/MS ☐ EPA 8270 ☐ 625 | Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total | Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608 | PNAs by ☒ 8270 ☐ 8310 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___ | Low Level Metals by EPA 200.8/6020 (ICP-MS): ___ | ☐ W.E.T (STLC) ☐ TCLP | Hexavalent Chromium ☐ pH (24h hold time for $H_2O$) | Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS | Anions: ☐ Cl ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | | | | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-05 | 6/7/06 | 1335 | W | - | | | X | | | | | | | X | | | | | | | | | | | | 3 |
| SRMW-06 | | 1300 | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| SRMW-09 | | 1640 | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| SRMW-10 | | 1635 | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| SRMW-11 | | 1205 | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| SRMW-12 | | 1505 | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| SRMW-13 | | 1715 | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| SRMW-14 | | 1550 | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| EB-060706 | ↓ | 1725 | ↓ | ↓ | | | ↓ | | | | | | | ↓ | | | | | | | | | | | | 3 |

## Project Info.

Project Name: UNION PACIFIC-SANTA ROSA
Project#: 032777.14
PO#: 032777.14
Credit Card#:

## Sample Receipt

# of Containers:
Head Space:
Temp:
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☒ EDD ☐ State Tank Fund EDF ☐ Global ID _____

Special Instructions / Comments:
- GEOTRACKER EDF
- IF $TPH_d$ OR $TPH_{mo}$ DETECTED, ANALYZE WITH FILTRATION AND SILICA GEL

| 1) Relinquished by: | 2) Relinquished by: | 3) Relinquished by: |
|---|---|---|
| Signature: Maya Key Time: 1300 | Signature: Time: | Signature: Time: |
| Printed Name: MAYA KEY Date: 6/8/06 | Printed Name: Date: | Printed Name: Date: |
| Company: K/J | Company: | Company: |
| **1) Received by:** | **2) Received by:** | **3) Received by:** |
| Signature: Time: 1135 | Signature: Time: | Signature: Time: |
| Printed Name: Date: 6/9/06 | Printed Name: Date: | Printed Name: Date: |
| STL-SF | | |

# SEVERN TRENT LABORATORIES, INC. TERMS AND CONDITIONS OF SALE (Short Form)

Where a purchaser (Client) places an order for laboratory, consulting or sampling services from Severn Trent Laboratories, Inc. (STL), a Delaware corporation, STL shall provide the ordered services pursuant to these Terms and Conditions, and the related Quotation or Price Schedule, or as agreed in a negotiated contract. In the absence of a written agreement to the contrary, the Order constitutes an acceptance by the Client of STL's offer to do business under these Terms and Conditions, and an agreement to be bound by these Terms and Conditions. No contrary or additional terms and conditions expressed in a Client's document shall be deemed to become a part of the contract created upon acceptance of these Terms and Conditions, unless accepted by STL in writing.

## 1. ORDERS AND RECEIPT OF SAMPLES

1.1 The Client may place the Order (i.e., specify a Scope of Work) either by submitting a purchase order to STL in writing or by telephone subsequently confirmed in writing, or by negotiated contract. Whichever option the Client selects for placing the Order, the Order shall not be valid unless it contains sufficient specification to enable STL to carry out the Client's requirements. In particular, samples must be accompanied by: a) adequate instruction on type of analysis requested, and b) complete written disclosure of the known or suspected presence of any hazardous substances, as defined by applicable federal or state law. Where any samples which were not accompanied by the required disclosure, cause interruptions in the lab's ability to process work due to contamination of instruments or work areas, the Client will be responsible for the costs of clean up and recovery.

1.2 The Client shall provide one week's advance notice of the sample delivery schedule, or any changes to the schedule, whenever possible. Upon timely delivery of samples, STL will use its best efforts to meet mutually agreed turnaround times. All turnaround times will be calculated from the point in time when STL has determined that it can proceed with defined work following receipt, inspection of samples, and resolution of any discrepancies in Chain-of-Custody forms and project guidance regarding work to be done (Sample Delivery Acceptance). In the event of any changes in the sample delivery schedule by the Client, prior to Sample Delivery Acceptance, STL reserves the right to modify its turnaround time commitment, to change the date upon which STL will accept samples, or refuse Sample Delivery Acceptance for the affected samples.

1.3 STL reserves the right, exercisable at any time, to refuse or revoke Sample Delivery Acceptance for any sample which in the sole judgment of STL: a) is of unsuitable volume; b) may pose a risk or become unsuitable for handling, transport, or processing for any health, safety, environmental or other reason, whether or not due to the presence in the sample of any hazardous substance and whether or not such presence has been disclosed to STL by the Client; or c) holding times cannot be met, due to passage of more than 48 hours from the time of sampling or 1/2 the holding time for the requested test, whichever is less.

1.4 Prior to Sample Delivery Acceptance, the entire risk of loss or damage to samples remains with the Client, except where STL provides courier services. In no event will STL have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from STL's premises. Client is responsible to assure that any sample containing any hazardous substance which is to be delivered to STL's premises will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

## 2. PAYMENT TERMS

2.1 Services performed by STL will be in accordance with prices quoted and later confirmed in writing or as stated in the Price Schedule. Invoices may be submitted to Client upon completion of any sample delivery group. Payment in advance is required for all Clients except those whose credit has been established with STL. For Clients with approved credit, payment terms are net 30 days from the date of invoice by STL. All overdue payments are subject to an additional interest and service charge of one and one-half percent (1.5%) (or the maximum rate permissible by law, whichever is lesser) per month or portion thereof from the due date until the date of payment. All fees are charged or billed directly to the Client. The billing of a third party will not be accepted without a statement, signed by the third party, that acknowledges and accepts payment responsibility. STL may suspend work and withhold delivery of data under this order at any time in the event Client fails to make timely payment of its invoices. Client shall be responsible for all costs and expenses of collection including reasonable attorney's fees. STL reserves the right to refuse to proceed with work at any time based upon an unfavorable Client credit report.

## 3. CHANGE ORDERS, TERMINATION

3.1 Changes to the Scope of Work, price, or result delivery date may be initiated by STL after Sample Delivery Acceptance due to any condition which conflicts with analytical, QA or other protocols warranted in these Terms and Conditions. STL will not proceed with such changes until an agreement with the Client is reached on the amount of any cost, schedule change or technical change to the Scope of Work, and such agreement is documented in writing.

3.2 Changes to the Scope of Work, including but not limited to increasing or decreasing the work, changing test and analysis specification, or acceleration in the performance of the work may be initiated by the Client after sample delivery acceptance. Such a change will be documented in writing and may result in a change in cost and turnaround time commitment. STL's acceptance of such changes is contingent upon technical feasibility and operational capacity.

3.3 Suspension or termination of all or any part of the work may be initiated by the Client. STL will be compensated consistent with Section 2 of these Terms and Conditions. STL will complete all work in progress and be paid in full for all work completed.

## 4. WARRANTIES AND LIABILITY

4.1 Where applicable, STL will use analytical methodologies which are in substantial conformity with published test methods. STL has implemented these methods in its Laboratory Quality Manuals and referenced Standard Operating Procedures and where the nature or composition of the sample requires it, STL reserves the right to deviate from these methodologies as necessary or appropriate, based on the reasonable judgment of STL, which deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or STL's Laboratory Quality Manuals. Client may request that STL perform according to a mutually agreed Quality Assurance Project Plan (QAPP). In the event that samples arrive prior to agreement on a QAPP, STL will proceed with analyses under its standard Quality Manuals then in effect, and STL will not be responsible for any resampling or other charges if work must be repeated to comply with a subsequently finalized QAPP.

4.2 STL shall start preparation and/or analysis within holding times provided that Sample Delivery Acceptance occurs within 48 hours of sampling or 1/2 of the holding time for the test, whichever is less. Where resolution of inconsistencies leading to Sample Delivery Acceptance does not occur within this period, STL will use its best efforts to meet holding times and will proceed with the work provided that, in STL's judgment, the chain-of-custody or definition of the Scope of Work provide sufficient guidance. Reanalysis of samples to comply with STL's Quality Manuals will be deemed to have met holding times provided the initial analysis was performed within the applicable holding time. Where reanalysis demonstrates that sample matrix interference is the cause of failure to meet any Quality Manual requirements, the warranty will be deemed to have been met.

4.3 STL warrants that it possesses and maintains all licenses and certifications which are required to perform services under these Terms and Conditions provided that such requirements are specified in writing to STL prior to Sample Delivery Acceptance. STL will notify the Client in writing of any decertification or revocation of any license, or notice of either, which affects work in progress.

4.4 The warranty obligations set forth in Sections 4.1, 4.2 and 4.3 are the sole and exclusive warranties given by STL in connection with any services performed by STL or any Results generated from such services, and STL gives and makes NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. No representative of STL is authorized to give or make any other representation or warranty or modify this warranty in any way.

4.5 Client's sole and exclusive remedy for the breach of warranty in connection with any services performed by STL, will be limited to repeating any services performed, contingent on the Client's providing, at the request of STL and at the Client's expense, additional sample(s) if necessary. Any reanalysis requested by the Client generating Results consistent with the original Results will be at the Client's expense. If resampling is necessary, STL's liability for resampling costs will be limited to actual cost or one hundred and fifty dollars ($150) per sample, whichever is less.

4.6 STL's liability for any and all causes of action arising hereunder, whether based in contract, tort, warranty, negligence or otherwise, shall be limited to the lesser amount of compensation for the services performed or $100,000. All claims, including those for negligence, shall be deemed waived unless suit thereon is filed within one year after STL's completion of the services. Under no circumstances, whether arising in contract, tort (including negligence), or otherwise, shall STL be responsible for loss of use, loss of profits, or for any special, indirect, incidental or consequential damages occasioned by the services performed or by application or use of the reports prepared.

4.7 In no event shall STL have any responsibility or liability to the Client for any failure or delay in performance by STL which results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of STL. Such causes and circumstances shall include, but not be limited to, acts of God, acts of Client, acts or orders of any governmental authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, equipment breakdown, matrix interference or unknown highly contaminated samples that impact instrument operation, unavailability of supplies from usual suppliers, difficulties or delays in transportation, mail or delivery services, or any other cause beyond STL's reasonable control.

## 5. RESULTS, WORK PRODUCT

5.1 Data or information provided to STL or generated by services performed under this agreement shall only become the property of the Client upon receipt in full by STL of payment for the whole Order. Ownership of any analytical method, QA/QC protocols, software programs or equipment developed by STL for performance of work will be retained by STL, and Client shall not disclose such information to any third party.

5.2 Data and sample materials provided by Client or at Client's request, and the result obtained by STL shall be held in confidence (unless such information is generally available to the public or is in the public domain or Client has failed to pay STL for all services rendered or is otherwise in breach of these Terms and Conditions), subject to any disclosure required by law or legal process.

5.3 Should the Results delivered by STL be used by the Client or Client's client, even though subsequently determined not to meet the warranties described in these Terms and Conditions, than the compensation will be adjusted based upon mutual agreement. In no case shall the Client unreasonably withhold STL's right to independently defend its data.

5.4 STL reserves the right to perform the services at any laboratory in the STL network, unless the Client has specified a particular location for the work. In addition, STL reserves the right to subcontract services ordered by the Client to another laboratory or laboratories, if, in STL's sole judgment, it is reasonably necessary, appropriate or advisable to do so. STL will in no way be liable for any subcontracted services (outside the STL network) except for work performed at laboratories which have been audited and approved by STL.

5.5 STL shall dispose of the Client's samples 30 days after the analytical report is issued, unless instructed to store them for an alternate period of time or to return such samples to the Client, in a manner consistent with U.S. Environmental Protection Agency regulations or other applicable federal, state or local requirements. Any samples for projects that are canceled or not accepted, or for which return was requested, will be returned to the Client at his own expense. STL reserves the right to return to the Client any sample or unused portion of a sample that is not within STL's permitted capability or the capabilities of STL's designated waste disposal vendor(s). ALL DIOXIN, MIXED WASTE, AND RADIOACTIVE SAMPLES WILL BE RETURNED TO THE CLIENT, unless prior arrangements for disposal are made.

5.6 Unless a different time period is agreed to in any order under these Terms and Conditions, STL agrees to retain all records for five (5) years.

5.7 In the event that STL is required to respond to legal process related to services for Client, Client agrees to reimburse STL for hourly charges for personnel involved in the response and attorney fees reasonably incurred in obtaining advice concerning the response, preparation to testify, and appearances related to the legal process, travel and all reasonable expenses associated with the litigation.

## 6. INSURANCE

6.1 STL shall maintain in force during the performance of services under these Terms and Conditions, Workers' Compensation and Employer's Liability insurance in accordance with the laws of the states having jurisdiction over STL's employees who are engaged in the performance of the work. STL shall also maintain during such period, Comprehensive General and Contractual Liability (limit of $2,000,000 per occurrence/aggregate), Comprehensive Automobile Liability, owned and hired, ($1,000,000 combined single limit), and Professional/Pollution Liability Insurance (limit of $5,000,000 per occurrence/aggregate).

## 7. AUDIT

7.1 Upon prior notice to STL, the Client may audit and inspect STL's records and accounts covering reimbursable costs related to work done for the Client, for a period of two (2) years after completion of the work. The purpose of any such audit shall be only for verification of such costs, and STL shall not be required to provide access to cost records where prices are expressed as fixed fees or published unit prices.

## 8. MISCELLANEOUS PROVISIONS

8.1 These Terms and Conditions, together with any additions or revisions which may be agreed to in writing by STL, embody the whole agreement of the parties and provide the only remedies available. There are no promises, terms, conditions, understandings, obligations or agreements other than those contained herein, and these Terms and Conditions shall supersede all previous communications, representations, or agreements, either verbal or written, between the Client and STL. These Terms and Conditions, and any transactions or agreements to which they apply, shall be governed both as to interpretation and performance by the laws of the state where STL's services are performed.

8.2 The invalidity or unenforceability, in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder to these Terms and Conditions. the intent of the parties being that the provisions be severable. The section headings of these Terms and Conditions are intended solely for convenient reference and shall not define, limit or affect in any way these Terms and Conditions or their interpretations. No waiver by either party of any provision, term or condition hereof or of any obligation of the other party hereunder shall constitute a waiver of any subsequent breach or other obligation.

8.3 The obligations, liabilities, and remedies of the parties, as provided herein, are exclusive and in lieu of any others available at law or in equity. Indemnifications, releases from liability and limitations of liability shall apply, notwithstanding the fault, negligence or strict liability of the party to be indemnified, released, or whose liability is limited, except to the extent of sole negligence or willful misconduct.

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-05

PROJECT NUMBER: 032777.14 PERSONNEL: M.ICEY

STATIC WATER LEVEL (FT): 11.68 MEASURING POINT DESCRIPTION: TOC

WATER LEVEL MEASUREMENT METHOD: SOLINST PURGE METHOD: SUBMERSIBLE PUMP W/ DISPOSABLE TUBING

TIME START PURGE: 1327 PURGE DEPTH (FT) 16

TIME END PURGE: 1333

TIME SAMPLED: 1335

COMMENTS:

| WELL VOLUME CALCULATION (FILL IN BEFORE PURGING) | TOTAL DEPTH (FT) | - | DEPTH TO WATER (FT) | = | WATER COLUMN (FT) | X | MULTIPLIER FOR CASING DIAMETER (IN) 2 | 4 | 6 | = | CASING VOLUME (GAL) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 19.65 | | 11.68 | | 7.97 | | (0.16) | 0.64 | 1.44 | | 1.3×3=3.8 |

| TIME | 1328 | 1330 | 1333 | | | | |
|---|---|---|---|---|---|---|---|
| VOLUME PURGED (GAL) | 1.5 | 2.5 | 3.9 | | | | |
| PURGE RATE (GPM) | 2.5 | | | | | | |
| TEMPERATURE (°C) | 21.6 | 19.8 | 19.5 | | | | |
| pH | 6.66 | 6.66 | 6.70 | | | | |
| SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected) | 371 | 464 | 494 | | | | |
| DISSOLVED OXYGEN (mg/L) | | | | | | | |
| eH(MV)Pt-AgCl ref. | | | | | | | |
| TURBIDITY/COLOR | turbid brown | → | clear | | | | |
| ODOR | none | → | → | | | | |
| DEPTH OF PURGE INTAKE (FT) | 17.5 | | | | | | |
| DEPTH TO WATER DURING PURGE (FT) | | | | | | | |
| NUMBER OF CASING VOLUMES REMOVED | 1 | 2 | 3 | | | | |
| DEWATERED? | Y | Y | Y | | | | |

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-05

PROJECT NUMBER: 032777.14 PERSONNEL: M.KEY

SAMPLE DATA:

TIME SAMPLED: 1335 COMMENTS:

DEPTH SAMPLED (FT):

SAMPLING EQUIPMENT: DISPOSABLE BAILER

| SAMPLE NO. | NO. OF CONTAIN-ERS | CON-TAINER TYPE | PRESER-VATIVE | FIELD FILTRA-TION | VOLUME FILLED (ml or L) | TURBIDITY | COLOR | SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C? | ANALYSIS REQUEST (METHOD) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-05 | 2 | Amber | - | N | 1L | clear | - | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 3.9 COMMENTS:

DISPOSAL METHOD: 55-GAL DRUM

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS: crevice in floor of well vault

GENERAL:

WEATHER CONDITIONS: Sunny, warm

TEMPERATURE (SPECIFY °C OR °F):

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?

cc: Project Manager:
Job File:
Other:

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC - SANTA ROSA STATION WELL NUMBER: SRMW-06

PROJECT NUMBER: 032777.14 PERSONNEL: M. KEY

STATIC WATER LEVEL (FT): 14.12 MEASURING POINT DESCRIPTION: TOC

WATER LEVEL MEASUREMENT METHOD: SOLINST PURGE METHOD: DISP. BAILER ~~SUB PUMP W/ DISP. TUBING~~

TIME START PURGE: _____ PURGE DEPTH (FT) _____

TIME END PURGE: 1255

TIME SAMPLED: 1300

COMMENTS: _____

| WELL VOLUME CALCULATION (FILL IN BEFORE PURGING) | TOTAL DEPTH (FT) | - | DEPTH TO WATER (FT) | = | WATER COLUMN (FT) | X | MULTIPLIER FOR CASING DIAMETER (IN) 2 | 4 | 6 | = | CASING VOLUME (GAL) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20.28 | | 14.12 | | 6.16 | | (0.16) | 0.64 | 1.44 | | 1.0 ~~0.64~~ x 3 = 2.8 |

| TIME | 1247 | 1251 | 1255 | | | | |
|---|---|---|---|---|---|---|---|
| VOLUME PURGED (GAL) | 1.0 | 2.0 | 3.0 | | | | |
| PURGE RATE (GPM) | | | | | | | |
| TEMPERATURE (°C) | 21.0 | 19.6 | 19.4 | | | | |
| pH | 6.47 | 6.52 | 6.52 | | | | |
| SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected) | 554 | 481 | 471 | | | | |
| DISSOLVED OXYGEN (mg/L) | | | | | | | |
| eH(MV)Pt-AgCl ref. | | | | | | | |
| TURBIDITY/COLOR | ~~clear~~ Sl. turbid | → | → | | | | |
| ODOR | none | → | → | | | | |
| DEPTH OF PURGE INTAKE (FT) | | | | | | | |
| DEPTH TO WATER DURING PURGE (FT) | | | | | | | |
| NUMBER OF CASING VOLUMES REMOVED | 1 | 2 | 3 | | | | |
| DEWATERED? | N | N | N | | | | |

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-06

PROJECT NUMBER: [redacted] 032777.14 PERSONNEL: M. KEY

SAMPLE DATA:
TIME SAMPLED: 1300 COMMENTS:

DEPTH SAMPLED (FT):

SAMPLING EQUIPMENT: DISP. BAILER

| SAMPLE NO. | NO. OF CONTAIN-ERS | CON-TAINER TYPE | PRESER-VATIVE | FIELD FILTRA-TION | VOLUME FILLED (ml or L) | TURBIDITY | COLOR | SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C? | ANALYSIS REQUEST (METHOD) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-06 | 2 | Amber | - | N | 1L | clear | - | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PURGE WATER DISPOSAL NOTES:
TOTAL DISCHARGE (GAL): 3.2 COMMENTS:

DISPOSAL METHOD: 55-GAL DRUM

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS: cave in of the bottom of the well vault.

GENERAL:
WEATHER CONDITIONS: Sunny, warm

TEMPERATURE (SPECIFY °C OR °F):

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?

cc: Project Manager:
Job File:
Other:

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-10

PROJECT NUMBER: 032777.12 PERSONNEL: M.KEY

STATIC WATER LEVEL (FT): 11.98 MEASURING POINT DESCRIPTION: TOC

WATER LEVEL MEASUREMENT METHOD: SOLINST PURGE METHOD: SUB. PUMP W/ DISP. TUBING

TIME START PURGE: 1624 PURGE DEPTH (FT) 16

TIME END PURGE: 1629

TIME SAMPLED: 1635

COMMENTS: DUP: SRMW-09 @ 1640

| WELL VOLUME CALCULATION (FILL IN BEFORE PURGING) | TOTAL DEPTH (FT) | - | DEPTH TO WATER (FT) | = | WATER COLUMN (FT) | X | MULTIPLIER FOR CASING DIAMETER (IN) 2 | 4 | 6 | = | CASING VOLUME (GAL) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ~~20.25~~ | | 11.98 | | 8.27 | | (0.16) | 0.64 | 1.44 | | 1.3×3=4.0 |

| TIME | 1625 | 1627 | 1629 | | | | |
|---|---|---|---|---|---|---|---|
| VOLUME PURGED (GAL) | 1.5 | 2.5 | 4.0 | | | | |
| PURGE RATE (GPM) | 2.5 | | | | | | |
| TEMPERATURE (°C) | 20.4 | 19.0 | 18.7 | | | | |
| pH | 6.69 | 6.65 | 6.64 | | | | |
| SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected) | 520 | 503 | 498 | | | | |
| DISSOLVED OXYGEN (mg/L) | | | | | | | |
| eH(MV)Pt-AgCl ref. | | | | | | | |
| TURBIDITY/COLOR | clear → | → | → | | | | |
| ODOR | none → | → | → | | | | |
| DEPTH OF PURGE INTAKE (FT) | 16 | | | | | | |
| DEPTH TO WATER DURING PURGE (FT) | | | 13.2 | | | | |
| NUMBER OF CASING VOLUMES REMOVED | 1 | 2 | 3 | | | | |
| DEWATERED? | N | N | N | | | | |

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-10

PROJECT NUMBER: 032777.14 PERSONNEL: M. ILEY

SAMPLE DATA:
TIME SAMPLED: 1635 COMMENTS: DUP SRMW-09@ 1640

DEPTH SAMPLED (FT): _____

SAMPLING EQUIPMENT: DISP. BAILER

| SAMPLE NO. | NO. OF CONTAIN-ERS | CON-TAINER TYPE | PRESER-VATIVE | FIELD FILTRA-TION | VOLUME FILLED (ml or L) | TURBIDITY | COLOR | SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C? | ANALYSIS REQUEST (METHOD) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-10 | 2 | Amber | - | N | 1L | clear | - | | | |
| SRMW-09 (DUP) | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PURGE WATER DISPOSAL NOTES:
TOTAL DISCHARGE (GAL): 4.25 COMMENTS: _____

DISPOSAL METHOD: 55 GAL DRUM

DRUM DESIGNATION(S)/VOLUME PER (GAL): _____

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: (YES) NO

WELL CASING OK?: (YES) NO

COMMENTS: _____

GENERAL:
WEATHER CONDITIONS: Sunny, warm

TEMPERATURE (SPECIFY °C OR °F): _____

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING? _____

cc: Project Manager: _____
Job File: _____
Other: _____

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-11

PROJECT NUMBER: 032777.14 PERSONNEL: M.KEY

STATIC WATER LEVEL (FT): 13.26 MEASURING POINT DESCRIPTION: TOC

WATER LEVEL MEASUREMENT METHOD: SOLINST PURGE METHOD: SUB. PUMP W/ DISP. TUBING

TIME START PURGE: 1148 PURGE DEPTH (FT) 21

TIME END PURGE: 1153

TIME SAMPLED: 1205

COMMENTS: calibrate pH7.00=6.99 pH4.01=4.01 pH10.01=9.77
12.86 µS=12.97mS

| WELL VOLUME CALCULATION (FILL IN BEFORE PURGING) | TOTAL DEPTH (FT) | - | DEPTH TO WATER (FT) | = | WATER COLUMN (FT) | X | MULTIPLIER FOR CASING DIAMETER (IN) 2 | 4 | 6 | = | CASING VOLUME (GAL) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 28.20 | | 13.26 | | 14.94 | | (0.16) | 0.64 | 1.44 | | 2.4×3=7.2 |

| TIME | 1149 | 1152 | 1153 | | | | |
|---|---|---|---|---|---|---|---|
| VOLUME PURGED (GAL) | 2.5 | 5.0 | 7.5 | | | | |
| PURGE RATE (GPM) | 2.5 | | | | | | |
| TEMPERATURE (°C) | 19.9 | 19.5 | 19.2 | | | | |
| pH | 6.72 | 6.74 | 6.73 | | | | |
| SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected) | 622 | 534 | 529 | | | | |
| DISSOLVED OXYGEN (mg/L) | | | | | | | |
| eH(MV)Pt-AgCl ref. | | | | | | | |
| TURBIDITY/COLOR | ~~clear~~ sl. turbid | → | → | | | | |
| ODOR | none | → | → | | | | |
| DEPTH OF PURGE INTAKE (FT) | 21 | | | | | | |
| DEPTH TO WATER DURING PURGE (FT) | - | | 14 | | | | |
| NUMBER OF CASING VOLUMES REMOVED | 1 | 2 | 3 | | | | |
| DEWATERED? | N | N | N | | | | |

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC – SANTA ROSA STATION WELL NUMBER: SRMW-11

PROJECT NUMBER: 032777.14 PERSONNEL: M. KEY

SAMPLE DATA:

TIME SAMPLED: 1205 COMMENTS:

DEPTH SAMPLED (FT):

SAMPLING EQUIPMENT: DISP. BAILER

| SAMPLE NO. | NO. OF CONTAIN-ERS | CON-TAINER TYPE | PRESER-VATIVE | FIELD FILTRA-TION | VOLUME FILLED (ml or L) | TURBIDITY | COLOR | SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C? | ANALYSIS REQUEST (METHOD) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-11 | 2 | Amber | - | N | 1L | clear | - | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 2.75 COMMENTS:

DISPOSAL METHOD: 55 GAL DRUM

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES (NO) casing submerged ≈

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Sunny, Warm

TEMPERATURE (SPECIFY °C OR °F):

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?

cc: Project Manager:
Job File:
Other:

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-12

PROJECT NUMBER: 032777.14 PERSONNEL: M. KEY

STATIC WATER LEVEL (FT): 12.47 MEASURING POINT DESCRIPTION: TOC

WATER LEVEL MEASUREMENT METHOD: SOLINST PURGE METHOD: SUB. PUMP W/ DISP. TUBING

TIME START PURGE: 1455 PURGE DEPTH (FT) 20

TIME END PURGE: 1501

TIME SAMPLED: 1505

COMMENTS:

| WELL VOLUME CALCULATION (FILL IN BEFORE PURGING) | TOTAL DEPTH (FT) | - | DEPTH TO WATER (FT) | = | WATER COLUMN (FT) | X | MULTIPLIER FOR CASING DIAMETER (IN) 2 | 4 | 6 | = | CASING VOLUME (GAL) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ~~27.09~~ ~~26.70~~ | | 12.47 | | 14.53 | | (0.16) | 0.64 | 1.44 | | 2.3×3=~~6.9~~ 7.0 |

| TIME | 1457 | 1459 | 1501 | | | | |
|---|---|---|---|---|---|---|---|
| VOLUME PURGED (GAL) | 2.5 | 5.0 | 7.0 | | | | |
| PURGE RATE (GPM) | 2.5 | | | | | | |
| TEMPERATURE (°C) | 20.4 | 18.9 | 18.7 | | | | |
| pH | 6.72 | 6.68 | 6.69 | | | | |
| SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected) | 529 | 520 | 511 | | | | |
| DISSOLVED OXYGEN (mg/L) | | | | | | | |
| eH(MV)Pt-AgCl ref. | | | | | | | |
| TURBIDITY/COLOR | tinted brown | sl. tinted brown → | | | | | |
| ODOR | none → | → | | | | | |
| DEPTH OF PURGE INTAKE (FT) | 20 | | | | | | |
| DEPTH TO WATER DURING PURGE (FT) | | 14.5 | | | | | |
| NUMBER OF CASING VOLUMES REMOVED | 1 | 2 | 3 | | | | |
| DEWATERED? | N | N | N | | | | |

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-12

PROJECT NUMBER: 032777.14 PERSONNEL: M. ICEY

SAMPLE DATA:

TIME SAMPLED: 1505 COMMENTS:

DEPTH SAMPLED (FT):

SAMPLING EQUIPMENT: DISP. BAILER

| SAMPLE NO. | NO. OF CONTAIN-ERS | CON-TAINER TYPE | PRESER-VATIVE | FIELD FILTRA-TION | VOLUME FILLED (ml or L) | TURBIDITY | COLOR | SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C? | ANALYSIS REQUEST (METHOD) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-12 | 2 | Amber | - | N | 1L | sl. turbid | brn | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 7.25 COMMENTS:

DISPOSAL METHOD: 55-GAL DRUM

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES (NO) casing submerged

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Sunny, warm

TEMPERATURE (SPECIFY °C OR °F):

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?

cc: Project Manager:
Job File:
Other:

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-13

PROJECT NUMBER: 032777.18 PERSONNEL: M. ICEY

STATIC WATER LEVEL (FT): 11.14 MEASURING POINT DESCRIPTION: TOC

WATER LEVEL MEASUREMENT METHOD: SOLINST PURGE METHOD: SUB. PUMP W/ DISP. BAILER

TIME START PURGE: 1704 PURGE DEPTH (FT) 19

TIME END PURGE: 1708

TIME SAMPLED: 1715

COMMENTS:

| WELL VOLUME CALCULATION (FILL IN BEFORE PURGING) | TOTAL DEPTH (FT) | - | DEPTH TO WATER (FT) | = | WATER COLUMN (FT) | X | MULTIPLIER FOR CASING DIAMETER (IN) 2 | 4 | 6 | = | CASING VOLUME (GAL) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 27.15 | | 11.14 | | 16.01 | | 0.16 | 0.64 | 1.44 | | 2.6×3=7.7 |

| TIME | 1706 | 1707 | 1708 | | | | |
|---|---|---|---|---|---|---|---|
| VOLUME PURGED (GAL) | 2.75 | 5.5 | 8.5 | | | | |
| PURGE RATE (GPM) | 2.5 | | | | | | |
| TEMPERATURE (°C) | 19.0 | 19.1 | 18.7 | | | | |
| pH | 6.74 | 6.73 | 6.72 | | | | |
| SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected) | 624 | 546 | 606 | | | | |
| DISSOLVED OXYGEN (mg/L) | | | | | | | |
| eH(MV) Pt-AgCl ref. | | | | | | | |
| TURBIDITY/COLOR | clear → | → | | | | | |
| ODOR | HC odor → | → | | | | | |
| DEPTH OF PURGE INTAKE (FT) | 16 | | | | | | |
| DEPTH TO WATER DURING PURGE (FT) | | 16.5 | | | | | |
| NUMBER OF CASING VOLUMES REMOVED | 1 | 3 | 3 | | | | |
| DEWATERED? | N | N | N | | | | |

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-13

PROJECT NUMBER: 032777.14 PERSONNEL: M. KEY

SAMPLE DATA:

TIME SAMPLED: 1715 COMMENTS:

DEPTH SAMPLED (FT):

SAMPLING EQUIPMENT: DISP. BAILER

| SAMPLE NO. | NO. OF CONTAIN-ERS | CON-TAINER TYPE | PRESER-VATIVE | FIELD FILTRA-TION | VOLUME FILLED (ml or L) | TURBIDITY | COLOR | SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C? | ANALYSIS REQUEST (METHOD) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-13 | 2 | Amber | - | N | 1L | Clear | - | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PURGE WATER DISPOSAL NOTES:

TOTAL DISCHARGE (GAL): 8.75 COMMENTS:

DISPOSAL METHOD: 55-GAL DRUM

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES (NO) casing submerged

WELL CASING OK?: (YES) NO

COMMENTS:

GENERAL:

WEATHER CONDITIONS: Sunny, warm

TEMPERATURE (SPECIFY °C OR °F):

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?

cc: Project Manager:
Job File:
Other:

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SR MW-14

PROJECT NUMBER: 032777.14 PERSONNEL: M. IKEY

STATIC WATER LEVEL (FT): 13.16 MEASURING POINT DESCRIPTION: TOC

WATER LEVEL MEASUREMENT METHOD: SOLINST PURGE METHOD: SUB. PUMP W/ DISP. TUBING

TIME START PURGE: 1541 PURGE DEPTH (FT) 19

TIME END PURGE: 1546

TIME SAMPLED: 1550

COMMENTS:

| WELL VOLUME CALCULATION (FILL IN BEFORE PURGING) | TOTAL DEPTH (FT) | - | DEPTH TO WATER (FT) | = | WATER COLUMN (FT) | X | MULTIPLIER FOR CASING DIAMETER (IN) 2 | 4 | 6 | = | CASING VOLUME (GAL) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 24.70 | | 13.16 | | 11.54 | | (0.16) | 0.64 | 1.44 | | 1.8×3=5.5 |

| TIME | 1542 | 1544 | 1546 | | | | |
|---|---|---|---|---|---|---|---|
| VOLUME PURGED (GAL) | 2.0 | 4.0 | 6.0 | | | | |
| PURGE RATE (GPM) | 2.5 | | | | | | |
| TEMPERATURE (°C) | 20.1 | 19.2 | 19.4 | | | | |
| pH | 6.76 | 6.75 | 6.83 | | | | |
| SPECIFIC CONDUCTIVITY (micromhos/cm) (uncorrected) | 524 | 520 | 515 | | | | |
| DISSOLVED OXYGEN (mg/L) | | | | | | | |
| eh(MV) Pt-AgCl ref. | | | | | | | |
| TURBIDITY/COLOR | turbid dk brown | sl. turbid grey | clear | | | | |
| ODOR | none → | → | → | | | | |
| DEPTH OF PURGE INTAKE (FT) | 19 | | | | | | |
| DEPTH TO WATER DURING PURGE (FT) | | 15.5 | | | | | |
| NUMBER OF CASING VOLUMES REMOVED | 1 | 2 | 3 | | | | |
| DEWATERED? | N | N | N | | | | |

**Groundwater Purge and Sample Form** Date: 6/7/06 **Kennedy/Jenks Consultants**

PROJECT NAME: UNION PACIFIC-SANTA ROSA STATION WELL NUMBER: SRMW-14

PROJECT NUMBER: 032777.14 PERSONNEL: M. KEY

SAMPLE DATA:
TIME SAMPLED: 1550 COMMENTS:

DEPTH SAMPLED (FT):

SAMPLING EQUIPMENT: DISP. BAILER

| SAMPLE NO. | NO. OF CONTAIN-ERS | CON-TAINER TYPE | PRESER-VATIVE | FIELD FILTRA-TION | VOLUME FILLED (ml or L) | TURBIDITY | COLOR | SHIPPED UNDER CHAIN-OF-CUS-TODY AT 4°C? | ANALYSIS REQUEST (METHOD) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-14 | 2 | Amber | - | N | 1L | sl. turbid | brn | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PURGE WATER DISPOSAL NOTES:
TOTAL DISCHARGE (GAL): 6.5 COMMENTS:

DISPOSAL METHOD: 55-gAL DRUM

DRUM DESIGNATION(S)/VOLUME PER (GAL):

WELL HEAD CONDITIONS CHECKLIST (CIRCLE YES OR NO - IF NO, ADD COMMENTS):

WELL SECURITY DEVICES OK (BOLLARDS, CHRISTY LID, CASING LID AND LOCK)?: (YES) NO

INSIDE OF WELL HEAD AND OUTER CASING DRY?: YES (NO)

WELL CASING OK?: (YES) NO ~1/4" water in well vault

COMMENTS:

GENERAL:
WEATHER CONDITIONS: Sunny, warm

TEMPERATURE (SPECIFY °C OR °F):

PROBLEMS ENCOUNTERED DURING PURGING OR SAMPLING?

cc: Project Manager:
Job File:
Other:

**Daily Inspection Report No. ____** **Kennedy/Jenks Consultants**

**Contractor:**
**Supt. on Job:** **Sheet:** 1 **of** 4
**Weather:** **Date:** 6/7/06
**Temperature:** **°F Max:** **°F Min:** **Project:** UP Santa Rosa
**Work Hours:** **to** **Memos Issued:** 2006 Sampling
**Photos:** **Proj. No.:** 032777.14

**Special Conditions, Delays, Changes:**

**Accident Damage:**

**Sampling, Testing:**

**Visitors to Site:** Joan Fleck (RWQCB)

**Work Report** (Work Done, Personnel/Equipment Working):

0930: Arrive on-site. Road construction in the area. Able to get gate open with black Master key.
0945: Call Joan Fleck, left message, expect to be near 1700 when ol get to SRMW-13.
0950: Open up wells.
1025: Start DTW
1050: Mike called, they will drill boring ~~today~~, casing tomorrow, grout Friday? Can be there ~9
has measured blanks on trailer (marked on front end of blanks) ← old bundle, will need to measure new bundle
left picket with driller Jack (559-994-5707)
1105: Joan Fleck stops by site briefly.
1125: Arrive at SRMW-11.
1230: Arrive at SRMW-06.
1310: Arrive at SRMW-05

Distribution:

By M. Key

**Daily Inspection Report No. ____** **Kennedy/Jenks Consultants**

**Contractor:** _____

**Supt. on Job:** _____ **Sheet:** 2 **of** 4

**Weather:** _____ **Date:** 6/7/06

**Temperature:** _____ **°F Max:** _____ **°F Min:** _____ **Project:** UP Santa Rosa 2006 Sampling

**Work Hours:** _____ **to** _____ **Memos Issued:** _____

**Photos:** _____ **Proj. No.:** 032777.14

**Special Conditions, Delays, Changes:** _____

**Accident Damage:** _____

**Sampling, Testing:** _____

**Visitors to Site:** _____

**Work Report** (Work Done, Personnel/Equipment Working): _____

1355: Serve public notice sheet to 1) ticket booth ~~personnel~~ personnel at 6th Street Playhouse

2) Chops, 6th Street, front desk

3) Assistance League of Sonoma County, 5 West 6th Street, cashier

4) Aroma Roasters Wilson, manager

5) Greater Santa Rosa Convention & Visitors Bureau, 9 4th Street, front desk

6) Flying Goat Coffee, , cashier

7) Cheng's, [redacted], waited

8) Courtyard Marriot, 175 Railroad Street, front desk

9) Carlile-Macy Engineers, 15 3rd Street, front desk

10) Simply Skin, 10 4th Street Suite 104, front desk

11) J. Leonard Salon, 10 4th Street, Suite 102, front desk

Distribution: _____

_____

_____

By _____

**Daily Inspection Report No. ____** **Kennedy/Jenks Consultants**

**Contractor:** _____

**Supt. on Job:** _____ **Sheet:** 3 **of** 4

**Weather:** _____ **Date:** 6/7/06

**Temperature:** _____ **°F Max:** _____ **°F Min:** _____ **Project:** VP Santa Rosa

**Work Hours:** _____ **to** _____ **Memos Issued:** _____ 2006 Sampling

**Photos:** _____ **Proj. No.:** 032777.14

**Special Conditions, Delays, Changes:** _____

Drum Inventory:

**Accident Damage:** _____

A) 90% Purge+Decon Water 6/14/05

B) 80% Purge+Decon Water 6/7/06

C) ~50% Water, non-hazardous, on side

**Sampling, Testing:** _____

D) 2 drums, non-haz, solids?

+ many in demolition area of warehouses

**Visitors to Site:** _____

**Work Report** (Work Done, Personnel/Equipment Working): _____

1440: Arrive at SRMW-12

1525: Arrive at SRMW-14

15:30: Call Jorn Fleck, leave message

1610: Arrive at SRMW-10

1645: Jorn Fleck arrives.

1655: Arrive at SRMW-13.

1720: Jorn Fleck leaves.

1725: Equipment blank EB-060706

Clean rinse bucket filled with fresh water, pump with fresh tubing placed in bucket, after water circulated a few times, sample collected.

Distribution: _____

By _____

**Daily Inspection Report No. ____** **Kennedy/Jenks Consultants**

**Contractor:** _____

**Supt. on Job:** _____ **Sheet:** 4 **of** 4

**Weather:** _____ **Date:** 6/7/06

**Temperature:** _____ **°F Max:** _____ **°F Min:** _____ **Project:** UP Santa Rosa 2006 Sampling

**Work Hours:** _____ **to** _____ **Memos Issued:** _____

**Photos:** _____ **Proj. No.:** 032777.14

**Special Conditions, Delays, Changes:** _____

**Accident Damage:** _____

**Sampling, Testing:** _____

**Visitors to Site:** _____

**Work Report** (Work Done, Personnel/Equipment Working): _____

1820: Deliver public notice forms to
12) The Dance Center, (6th St. Warehouse), front desk.
13) 45 6th Street residence, left in door
1835: Post notice around fence + photograph.
1900: Leave site.

Distribution: _____

By _____

F-3p [Rev. 2/97]

## Groundwater Depth Measurement Log

**Kennedy/Jenks Consultants**

**Project Name:** Union Pacific - Santa Rosa Station
**Project Number:** 032777.14
**Project Manager:** Laura Kennedy

**Date:** 6/7/06
**Time Start:** 1027
**Time End:** 1118



| Well Number | Time | Groundwater Depth | Total Well Depth +0.3 | Measuring Point Description | Comments |
|---|---|---|---|---|---|
| SRMW-05 | 1049 | 11.68 | 19.35 | TOC | |
| SRMW-06 | 1046 | 14.12 | 19.98 | TOC | |
| SRMW-07 | 1037 | 11.95 | | TOC | |
| SRMW-08 | 1030 | 10.42 | | TOC | well ~~vault~~ vault covered by dirt |
| SRMW-10 | 1113 | 11.98 | 19.95 | TOC | |
| SRMW-11 | 1042 | 12.26 | 27.90 | TOC | well casing submerged |
| SRMW-12 | 1101 | 12.47 | 26.70 | TOC | " |
| SRMW-13 | 1117 | 11.14 | 26.85 | TOC | " |
| SRMW-14 | 1105 | 13.16 | 24.90 | TOC | |

# Attachment C

Laboratory Data Reports and Chain-of-Custody Records

SEVERN TRENT STL

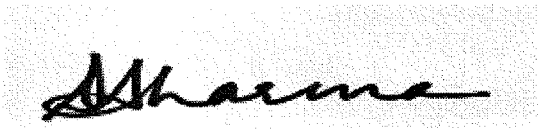
# ANALYTICAL REPORT

Job Number: 720-4017-1

Job Description: Union Pacific -Santa Rosa

For:
Kennedy/Jenks Consultants
622 Folsom St
San Francisco, CA 94107-1366

Attention: Mr. Rick Teczon



Dimple Sharma
Project Manager I
dsharma@stl-inc.com
06/19/2006

Project Manager: Dimple Sharma

**Severn Trent Laboratories, Inc.**
STL San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 484-1096 www.stl-inc.com

# METHOD SUMMARY

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

| Description | Lab Location | Method | Preparation Method |
|---|---|---|---|
| **Matrix: Water** | | | |
| Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring) | STL-SF | SW846 8270C | |
| Separatory Funnel Liquid-Liquid Extraction | STL-SF | | SW846 3510C |
| Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) | STL-SF | SW846 8015B | |
| Separatory Funnel Liquid-Liquid Extraction | STL-SF | | SW846 3510C |
| Silica Gel Cleanup | STL-SF | | SW846 3630C |
| Sample Filtration | STL-SF | | FILTRATION |

## LAB REFERENCES:

STL-SF = STL-San Francisco

## METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## SAMPLE SUMMARY

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time Sampled | Date/Time Received |
|---|---|---|---|---|
| 720-4017-1 | SRMW-05 | Water | 06/07/2006 1335 | 06/09/2006 1500 |
| 720-4017-2 | SRMW-06 | Water | 06/07/2006 1300 | 06/09/2006 1500 |
| 720-4017-3 | SRMW-09 | Water | 06/07/2006 1640 | 06/09/2006 1500 |
| 720-4017-4 | SRMW-10 | Water | 06/07/2006 1635 | 06/09/2006 1500 |
| 720-4017-5 | SRMW-11 | Water | 06/07/2006 1205 | 06/09/2006 1500 |
| 720-4017-6 | SRMW-12 | Water | 06/07/2006 1505 | 06/09/2006 1500 |
| 720-4017-7 | SRMW-13 | Water | 06/07/2006 1715 | 06/09/2006 1500 |
| 720-4017-8 | SRMW-14 | Water | 06/07/2006 1550 | 06/09/2006 1500 |
| 720-4017-9 | EB-060706 | Water | 06/07/2006 1725 | 06/09/2006 1500 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-05**

Lab Sample ID: 720-4017-1
Client Matrix: Water

Date Sampled: 06/07/2006 1335
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1603
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 980 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.10 |
| Acenaphthene | ND | | 0.10 |
| Acenaphthylene | ND | | 0.10 |
| Fluorene | ND | | 0.10 |
| Phenanthrene | ND | | 0.10 |
| Anthracene | ND | | 0.10 |
| Benzo[a]anthracene | ND | | 0.10 |
| Chrysene | ND | | 0.10 |
| Benzo[a]pyrene | ND | | 0.10 |
| Benzo[b]fluoranthene | ND | | 0.10 |
| Benzo[k]fluoranthene | ND | | 0.10 |
| Benzo[g,h,i]perylene | ND | | 0.10 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.10 |
| Fluoranthene | ND | | 0.10 |
| Pyrene | ND | | 0.10 |
| Dibenz(a,h)anthracene | ND | | 1.0 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 86 | 43 - 116 |
| Terphenyl-d14 | 79 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-06**

Lab Sample ID: 720-4017-2
Client Matrix: Water

Date Sampled: 06/07/2006 1300
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1631
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 990 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.10 |
| Acenaphthene | ND | | 0.10 |
| Acenaphthylene | ND | | 0.10 |
| Fluorene | ND | | 0.10 |
| Phenanthrene | ND | | 0.10 |
| Anthracene | ND | | 0.10 |
| Benzo[a]anthracene | ND | | 0.10 |
| Chrysene | ND | | 0.10 |
| Benzo[a]pyrene | ND | | 0.10 |
| Benzo[b]fluoranthene | ND | | 0.10 |
| Benzo[k]fluoranthene | ND | | 0.10 |
| Benzo[g,h,i]perylene | ND | | 0.10 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.10 |
| Fluoranthene | ND | | 0.10 |
| Pyrene | ND | | 0.10 |
| Dibenz(a,h)anthracene | ND | | 1.0 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 78 | 43 - 116 |
| Terphenyl-d14 | 82 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-09**

Lab Sample ID: 720-4017-3
Client Matrix: Water

Date Sampled: 06/07/2006 1640
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1700
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 970 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.10 |
| Acenaphthene | ND | | 0.10 |
| Acenaphthylene | ND | | 0.10 |
| Fluorene | ND | | 0.10 |
| Phenanthrene | ND | | 0.10 |
| Anthracene | ND | | 0.10 |
| Benzo[a]anthracene | ND | | 0.10 |
| Chrysene | ND | | 0.10 |
| Benzo[a]pyrene | ND | | 0.10 |
| Benzo[b]fluoranthene | ND | | 0.10 |
| Benzo[k]fluoranthene | ND | | 0.10 |
| Benzo[g,h,i]perylene | ND | | 0.10 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.10 |
| Fluoranthene | ND | | 0.10 |
| Pyrene | ND | | 0.10 |
| Dibenz(a,h)anthracene | ND | | 1.0 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 76 | 43 - 116 |
| Terphenyl-d14 | 85 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-10**

Lab Sample ID: 720-4017-4
Client Matrix: Water

Date Sampled: 06/07/2006 1635
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1729
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 980 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.10 |
| Acenaphthene | ND | | 0.10 |
| Acenaphthylene | ND | | 0.10 |
| Fluorene | ND | | 0.10 |
| Phenanthrene | ND | | 0.10 |
| Anthracene | ND | | 0.10 |
| Benzo[a]anthracene | ND | | 0.10 |
| Chrysene | ND | | 0.10 |
| Benzo[a]pyrene | ND | | 0.10 |
| Benzo[b]fluoranthene | ND | | 0.10 |
| Benzo[k]fluoranthene | ND | | 0.10 |
| Benzo[g,h,i]perylene | ND | | 0.10 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.10 |
| Fluoranthene | ND | | 0.10 |
| Pyrene | ND | | 0.10 |
| Dibenz(a,h)anthracene | ND | | 1.0 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 78 | 43 - 116 |
| Terphenyl-d14 | 78 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID:** **SRMW-11**

Lab Sample ID: 720-4017-5
Client Matrix: Water

Date Sampled: 06/07/2006 1205
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1758
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 870 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.11 |
| Acenaphthene | ND | | 0.11 |
| Acenaphthylene | ND | | 0.11 |
| Fluorene | ND | | 0.11 |
| Phenanthrene | ND | | 0.11 |
| Anthracene | ND | | 0.11 |
| Benzo[a]anthracene | ND | | 0.11 |
| Chrysene | ND | | 0.11 |
| Benzo[a]pyrene | ND | | 0.11 |
| Benzo[b]fluoranthene | ND | | 0.11 |
| Benzo[k]fluoranthene | ND | | 0.11 |
| Benzo[g,h,i]perylene | ND | | 0.11 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.11 |
| Fluoranthene | ND | | 0.11 |
| Pyrene | ND | | 0.11 |
| Dibenz(a,h)anthracene | ND | | 1.1 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 75 | 43 - 116 |
| Terphenyl-d14 | 76 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-12**

Lab Sample ID: 720-4017-6
Client Matrix: Water

Date Sampled: 06/07/2006 1505
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1827
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 900 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.11 |
| Acenaphthene | ND | | 0.11 |
| Acenaphthylene | ND | | 0.11 |
| Fluorene | ND | | 0.11 |
| Phenanthrene | ND | | 0.11 |
| Anthracene | ND | | 0.11 |
| Benzo[a]anthracene | ND | | 0.11 |
| Chrysene | ND | | 0.11 |
| Benzo[a]pyrene | ND | | 0.11 |
| Benzo[b]fluoranthene | ND | | 0.11 |
| Benzo[k]fluoranthene | ND | | 0.11 |
| Benzo[g,h,i]perylene | ND | | 0.11 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.11 |
| Fluoranthene | ND | | 0.11 |
| Pyrene | ND | | 0.11 |
| Dibenz(a,h)anthracene | ND | | 1.1 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 66 | 43 - 116 |
| Terphenyl-d14 | 85 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-13**

Lab Sample ID: 720-4017-7
Client Matrix: Water

Date Sampled: 06/07/2006 1715
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1856
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 920 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.11 |
| Acenaphthene | 0.32 | | 0.11 |
| Acenaphthylene | ND | | 0.11 |
| Fluorene | ND | | 0.11 |
| Phenanthrene | 0.18 | | 0.11 |
| Anthracene | 0.11 | | 0.11 |
| Benzo[a]anthracene | ND | | 0.11 |
| Chrysene | ND | | 0.11 |
| Benzo[a]pyrene | ND | | 0.11 |
| Benzo[b]fluoranthene | ND | | 0.11 |
| Benzo[k]fluoranthene | ND | | 0.11 |
| Benzo[g,h,i]perylene | ND | | 0.11 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.11 |
| Fluoranthene | ND | | 0.11 |
| Pyrene | 0.12 | | 0.11 |
| Dibenz(a,h)anthracene | ND | | 1.1 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 58 | 43 - 116 |
| Terphenyl-d14 | 59 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID:** **SRMW-14**

Lab Sample ID: 720-4017-8
Client Matrix: Water

Date Sampled: 06/07/2006 1550
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1924
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 960 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.10 |
| Acenaphthene | ND | | 0.10 |
| Acenaphthylene | ND | | 0.10 |
| Fluorene | ND | | 0.10 |
| Phenanthrene | ND | | 0.10 |
| Anthracene | ND | | 0.10 |
| Benzo[a]anthracene | ND | | 0.10 |
| Chrysene | ND | | 0.10 |
| Benzo[a]pyrene | ND | | 0.10 |
| Benzo[b]fluoranthene | ND | | 0.10 |
| Benzo[k]fluoranthene | ND | | 0.10 |
| Benzo[g,h,i]perylene | ND | | 0.10 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.10 |
| Fluoranthene | ND | | 0.10 |
| Pyrene | ND | | 0.10 |
| Dibenz(a,h)anthracene | ND | | 1.0 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 84 | 43 - 116 |
| Terphenyl-d14 | 86 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: EB-060706**

Lab Sample ID: 720-4017-9
Client Matrix: Water

Date Sampled: 06/07/2006 1725
Date Received: 06/09/2006 1500

**8270C Semivolatile Organic Compounds by GC/MS (Selective Ion Monitoring)**

Method: 8270C
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1953
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\06
Initial Weight/Volume: 910 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.11 |
| Acenaphthene | ND | | 0.11 |
| Acenaphthylene | ND | | 0.11 |
| Fluorene | ND | | 0.11 |
| Phenanthrene | ND | | 0.11 |
| Anthracene | ND | | 0.11 |
| Benzo[a]anthracene | ND | | 0.11 |
| Chrysene | ND | | 0.11 |
| Benzo[a]pyrene | ND | | 0.11 |
| Benzo[b]fluoranthene | ND | | 0.11 |
| Benzo[k]fluoranthene | ND | | 0.11 |
| Benzo[g,h,i]perylene | ND | | 0.11 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.11 |
| Fluoranthene | ND | | 0.11 |
| Pyrene | ND | | 0.11 |
| Dibenz(a,h)anthracene | ND | | 1.1 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 74 | 43 - 116 |
| Terphenyl-d14 | 80 | 33 - 141 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-05**

Lab Sample ID: 720-4017-1
Client Matrix: Water

Date Sampled: 06/07/2006 1335
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/12/2006 1207
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 78 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID:** **SRMW-06**

Lab Sample ID: 720-4017-2
Client Matrix: Water

Date Sampled: 06/07/2006 1300
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1127
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 66 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID:** **SRMW-09**

Lab Sample ID: 720-4017-3
Client Matrix: Water

Date Sampled: 06/07/2006 1640
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1154
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 82 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-10**

Lab Sample ID: 720-4017-4
Client Matrix: Water

Date Sampled: 06/07/2006 1635
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1221
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 80 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID:** **SRMW-11**

Lab Sample ID: 720-4017-5
Client Matrix: Water

Date Sampled: 06/07/2006 1205
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/12/2006 1356
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 62 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-12**

Lab Sample ID: 720-4017-6
Client Matrix: Water

Date Sampled: 06/07/2006 1505
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1249
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 80 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-13**

Lab Sample ID: 720-4017-7
Client Matrix: Water

Date Sampled: 06/07/2006 1715
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/13/2006 1316
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | 280 | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 80 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID:** **SRMW-13**

Lab Sample ID: 720-4017-7
Client Matrix: Water

Date Sampled: 06/07/2006 1715
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) -Dissolved**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/19/2006 1124
Date Prepared: 06/16/2006 1513

Analysis Batch: 720-10089
Prep Batch: 720-10062

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | 200 | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 81 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: SRMW-14**

Lab Sample ID: 720-4017-8
Client Matrix: Water

Date Sampled: 06/07/2006 1550
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/12/2006 1518
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 74 | 60 - 130 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Client Sample ID: EB-060706**

Lab Sample ID: 720-4017-9
Client Matrix: Water

Date Sampled: 06/07/2006 1725
Date Received: 06/09/2006 1500

**8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 06/12/2006 1546
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result (ug/L) | Qualifier | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | %Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 72 | 60 - 130 |

## DATA REPORTING QUALIFIERS

| Lab Section | Qualifier | Description |
|---|---|---|

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|
| **GC/MS Semi VOA** | | | | |
| **Prep Batch: 720-9840** | | | | |
| LCS 720-9840/2-A | Lab Control Spike | Water | 3510C | |
| LCSD 720-9840/3-A | Lab Control Spike Duplicate | Water | 3510C | |
| MB 720-9840/1-A | Method Blank | Water | 3510C | |
| 720-4017-1 | SRMW-05 | Water | 3510C | |
| 720-4017-2 | SRMW-06 | Water | 3510C | |
| 720-4017-3 | SRMW-09 | Water | 3510C | |
| 720-4017-4 | SRMW-10 | Water | 3510C | |
| 720-4017-5 | SRMW-11 | Water | 3510C | |
| 720-4017-6 | SRMW-12 | Water | 3510C | |
| 720-4017-7 | SRMW-13 | Water | 3510C | |
| 720-4017-8 | SRMW-14 | Water | 3510C | |
| 720-4017-9 | EB-060706 | Water | 3510C | |
| **Analysis Batch:720-9958** | | | | |
| LCS 720-9840/2-A | Lab Control Spike | Water | 8270C | 720-9840 |
| LCSD 720-9840/3-A | Lab Control Spike Duplicate | Water | 8270C | 720-9840 |
| MB 720-9840/1-A | Method Blank | Water | 8270C | 720-9840 |
| 720-4017-1 | SRMW-05 | Water | 8270C | 720-9840 |
| 720-4017-2 | SRMW-06 | Water | 8270C | 720-9840 |
| 720-4017-3 | SRMW-09 | Water | 8270C | 720-9840 |
| 720-4017-4 | SRMW-10 | Water | 8270C | 720-9840 |
| 720-4017-5 | SRMW-11 | Water | 8270C | 720-9840 |
| 720-4017-6 | SRMW-12 | Water | 8270C | 720-9840 |
| 720-4017-7 | SRMW-13 | Water | 8270C | 720-9840 |
| 720-4017-8 | SRMW-14 | Water | 8270C | 720-9840 |
| 720-4017-9 | EB-060706 | Water | 8270C | 720-9840 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|
| **GC Semi VOA** | | | | |
| **Prep Batch: 720-9826** | | | | |
| LCS 720-9826/2-B | Lab Control Spike | Water | 3510C | |
| LCSD 720-9826/3-B | Lab Control Spike Duplicate | Water | 3510C | |
| MB 720-9826/1-B | Method Blank | Water | 3510C | |
| 720-4017-1 | SRMW-05 | Water | 3510C | |
| 720-4017-2 | SRMW-06 | Water | 3510C | |
| 720-4017-3 | SRMW-09 | Water | 3510C | |
| 720-4017-4 | SRMW-10 | Water | 3510C | |
| 720-4017-5 | SRMW-11 | Water | 3510C | |
| 720-4017-6 | SRMW-12 | Water | 3510C | |
| 720-4017-7 | SRMW-13 | Water | 3510C | |
| 720-4017-8 | SRMW-14 | Water | 3510C | |
| 720-4017-9 | EB-060706 | Water | 3510C | |
| **Prep Batch: 720-10062** | | | | |
| LCS 720-10061/2-C | Lab Control Spike | Water | 3510C | |
| LCSD 720-10061/3-K | Lab Control Spike Duplicate | Water | 3510C | |
| MB 720-10061/1-C | Method Blank | Water | 3510C | |
| 720-4017-7 | SRMW-13 | Water | 3510C | |
| **Analysis Batch:720-9912** | | | | |
| LCS 720-9826/2-B | Lab Control Spike | Water | 8015B | 720-9826 |
| LCSD 720-9826/3-B | Lab Control Spike Duplicate | Water | 8015B | 720-9826 |
| MB 720-9826/1-B | Method Blank | Water | 8015B | 720-9826 |
| 720-4017-1 | SRMW-05 | Water | 8015B | 720-9826 |
| 720-4017-2 | SRMW-06 | Water | 8015B | 720-9826 |
| 720-4017-3 | SRMW-09 | Water | 8015B | 720-9826 |
| 720-4017-4 | SRMW-10 | Water | 8015B | 720-9826 |
| 720-4017-5 | SRMW-11 | Water | 8015B | 720-9826 |
| 720-4017-6 | SRMW-12 | Water | 8015B | 720-9826 |
| 720-4017-7 | SRMW-13 | Water | 8015B | 720-9826 |
| 720-4017-8 | SRMW-14 | Water | 8015B | 720-9826 |
| 720-4017-9 | EB-060706 | Water | 8015B | 720-9826 |
| **Analysis Batch:720-10089** | | | | |
| LCS 720-10061/2-C | Lab Control Spike | Water | 8015B | 720-10062 |
| LCSD 720-10061/3-K | Lab Control Spike Duplicate | Water | 8015B | 720-10062 |
| MB 720-10061/1-C | Method Blank | Water | 8015B | 720-10062 |
| 720-4017-7 | SRMW-13 | Water | 8015B | 720-10062 |

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Method Blank - Batch: 720-9840**

**Method: 8270C**
**Preparation: 3510C**

Lab Sample ID: MB 720-9840/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/13/2006 1436
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840
Units: ug/L

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\0
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | Result | Qual | RL |
|---|---|---|---|
| Naphthalene | ND | | 0.10 |
| Acenaphthene | ND | | 0.10 |
| Acenaphthylene | ND | | 0.10 |
| Fluorene | ND | | 0.10 |
| Phenanthrene | ND | | 0.10 |
| Anthracene | ND | | 0.10 |
| Benzo[a]anthracene | ND | | 0.10 |
| Chrysene | ND | | 0.10 |
| Benzo[a]pyrene | ND | | 0.10 |
| Benzo[b]fluoranthene | ND | | 0.10 |
| Benzo[k]fluoranthene | ND | | 0.10 |
| Benzo[g,h,i]perylene | ND | | 0.10 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.10 |
| Fluoranthene | ND | | 0.10 |
| Pyrene | ND | | 0.10 |
| Dibenz(a,h)anthracene | ND | | 1.0 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| 2-Fluorobiphenyl | 86 | 43 - 116 |
| Terphenyl-d14 | 82 | 33 - 141 |

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Laboratory Control/**
**Laboratory Control Duplicate Recovery Report - Batch: 720-9840**

**Method: 8270C**
**Preparation: 3510C**

LCS Lab Sample ID: LCS 720-9840/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/13/2006 1505
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840
Units: ug/L

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\0
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

LCSD Lab Sample ID: LCSD 720-9840/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/13/2006 1534
Date Prepared: 06/12/2006 0915

Analysis Batch: 720-9958
Prep Batch: 720-9840
Units: ug/L

Instrument ID: Sat 2K2
Lab File ID: c:\saturnws\data\200606\061
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

| Analyte | % Rec. LCS | % Rec. LCSD | Limit | RPD | RPD Limit | LCS Qual | LCSD Qual |
|---|---|---|---|---|---|---|---|
| Naphthalene | 80 | 77 | 36 - 119 | 3 | 35 | | |
| Acenaphthene | 74 | 78 | 50 - 118 | 4 | 30 | | |
| Acenaphthylene | 82 | 77 | 54 - 126 | 7 | 35 | | |
| Fluorene | 80 | 84 | 56 - 108 | 6 | 35 | | |
| Phenanthrene | 84 | 81 | 44 - 125 | 4 | 35 | | |
| Anthracene | 85 | 80 | 44 - 118 | 6 | 35 | | |
| Benzo[a]anthracene | 82 | 89 | 42 - 133 | 8 | 35 | | |
| Chrysene | 87 | 87 | 42 - 139 | 0 | 35 | | |
| Benzo[a]pyrene | 84 | 81 | 32 - 148 | 3 | 35 | | |
| Benzo[b]fluoranthene | 85 | 83 | 42 - 140 | 2 | 35 | | |
| Benzo[k]fluoranthene | 90 | 87 | 26 - 145 | 4 | 35 | | |
| Benzo[g,h,i]perylene | 76 | 71 | 10 - 140 | 6 | 35 | | |
| Indeno[1,2,3-cd]pyrene | 88 | 86 | 10 - 150 | 2 | 35 | | |
| Fluoranthene | 83 | 72 | 43 - 121 | 14 | 35 | | |
| Pyrene | 81 | 87 | 52 - 115 | 7 | 35 | | |

| Surrogate | LCS % Rec | LCSD % Rec | Acceptance Limits |
|---|---|---|---|
| 2-Fluorobiphenyl | 87 | 85 | 43 - 116 |
| Terphenyl-d14 | 95 | 92 | 33 - 141 |

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Method Blank - Batch: 720-10062**

**Method: 8015B**
**Preparation: 3510C**
**Dissolved**

Lab Sample ID: MB 720-10061/1-C
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/19/2006 1002
Date Prepared: 06/16/2006 1513

Analysis Batch: 720-10089
Prep Batch: 720-10062
Units: ug/L

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result | Qual | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 88 | 60 - 130 |

**Laboratory Control/**
**Laboratory Control Duplicate Recovery Report - Batch: 720-10062**

**Method: 8015B**
**Preparation: 3510C**
**Dissolved**

LCS Lab Sample ID: LCS 720-10061/2-C
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/19/2006 1030
Date Prepared: 06/16/2006 1513

Analysis Batch: 720-10089
Prep Batch: 720-10062
Units: ug/L

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-10061/3-K
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/19/2006 1057
Date Prepared: 06/16/2006 1513

Analysis Batch: 720-10089
Prep Batch: 720-10062
Units: ug/L

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | % Rec. LCS | % Rec. LCSD | Limit | RPD | RPD Limit | LCS Qual | LCSD Qual |
|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 80 | 88 | 60 - 130 | 10 | 30 | | |

| Surrogate | LCS % Rec | LCSD % Rec | Acceptance Limits |
|---|---|---|---|
| o-Terphenyl | 79 | 83 | 60 - 130 |

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Method Blank - Batch: 720-9826**

**Method: 8015B**
**Preparation: 3510C**

Lab Sample ID: MB 720-9826/1-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/12/2006 1045
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826
Units: ug/L

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | Result | Qual | RL |
|---|---|---|---|
| Diesel Range Organics [C10-C28] | ND | | 50 |
| Motor Oil Range Organics [C24-C36] | ND | | 500 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl | 82 | 60 - 130 |

**Laboratory Control/**
**Laboratory Control Duplicate Recovery Report - Batch: 720-9826**

**Method: 8015B**
**Preparation: 3510C**

LCS Lab Sample ID: LCS 720-9826/2-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/12/2006 1112
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826
Units: ug/L

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-9826/3-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/12/2006 1139
Date Prepared: 06/12/2006 0528

Analysis Batch: 720-9912
Prep Batch: 720-9826
Units: ug/L

Instrument ID: HP DRO3
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

| Analyte | % Rec. LCS | % Rec. LCSD | Limit | RPD | RPD Limit | LCS Qual | LCSD Qual |
|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10-C28] | 82 | 83 | 60 - 130 | 1 | 30 | | |

| Surrogate | LCS % Rec | LCSD % Rec | Acceptance Limits |
|---|---|---|---|
| o-Terphenyl | 79 | 79 | 60 - 130 |

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-4017

SEVERN TRENT STL

# STL San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 484-1096
Email: sflogin@stl-inc.com

Reference #: 41297
Date 6/7/06 Page 1 of 1

## Report To

Attn: LAURA KENNEDY
Company: KENNEDY/JENKS CONSULTANTS
Address: 622 FOLSOM ST, SAN FRANCISCO 94107
Phone: 415-243-2405 Email: LAURA@KENNEDYJENKS.COM
Bill To: UNION PACIFIC RAILROAD COMPANY
Sampled By: M. KEY
Attn: MIKE GRANT
Phone: 510-891-7433

## Analysis Request

| Sample ID | Date | Time | Matrix | Preserv. | TPH: EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE | Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B | TEPH: EPA 8015 M* ☒ Silica Gel ☒ Diesel ☒ Motor Oil ☐ Other | Fuel Taxs EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxygenates ☐ DCA, EDB ☐ Ethanol | Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B | Volatile Organics GCMS (VOCs) ☐ EPA 8260B ☐ 624 | Semivolatiles GCMS ☐ EPA 8270 ☐ 625 | Oil and Grease ☐ Petroleum ☐ Total (EPA 1664) | Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608 | PNAs by ☒ 8270 ☐ 8310 | CAM17 Metals (EPA 6010/7470/7471) | Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: | Low Level Metals by EPA 200.8/6020 (ICP-MS): | W.E.T (STLC) TCLP ☐ ☐ | Hexavalent Chromium pH (24h hold time for $H_2O$) ☐ ☐ | Spec Cond. TDS ☐ Alkalinity ☐ TSS ☐ ☐ | Anions: ☐ $SO_4$ ☐ $NO_3$ ☐ F ☐ Br ☐ $NO_2$ ☐ $PO_4$ | | | | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SRMW-05 | 6/7/06 | 1335 | W | | X | | | | | | | | | X | | | | | | | | | | | | 7 |
| SRMW-06 | | 1300 | | | | | | | | | | | | | | | | | | | | | | | | |
| SRMW-09 | | 1640 | | | | | | | | | | | | | | | | | | | | | | | | |
| SRMW-10 | | 1635 | | | | | | | | | | | | | | | | | | | | | | | | |
| SRMW-11 | | 1205 | | | | | | | | | | | | | | | | | | | | | | | | |
| SRMW-12 | | 1505 | | | | | | | | | | | | | | | | | | | | | | | | |
| SRMW-13 | | 1715 | | | | | | | | | | | | | | | | | | | | | | | | |
| SRMW-14 | | 1550 | | | | | | | | | | | | | | | | | | | | | | | | |
| EB-060706 | ↓ | 1725 | ↓ | ↓ | ↓ | | ↓ | | | | | | | ↓ | | | | | | | | | | | | |

Page 1 of 1

## Project Info.

Project Name: UNION PACIFIC-SANTA ROSA
Project#: 032777.14
PO#: 032777.14
Credit Card#:

## Sample Receipt

# of Containers:
Head Space:
Temp: 3°c
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☒ EDD ☐ State Tank Fund EDF ☐ Global ID
Special Instructions / Comments:
- GEOTRACKER EDF
- IF $TPH_d$ or $TPH_{mo}$ DETECTED, ANALYZE WITH FILTRATION AND SILICA GEL

See Terms and Conditions on reverse.

| | 1) Relinquished by: | 2) Relinquished by: | 3) Relinquished by: |
|---|---|---|---|
| Signature | Maya Key | | |
| Time | 1300 | 1500 | |
| Printed Name | MAYA KEY | | |
| Date | 6/8/06 | 6/8/06 | |
| Company | KJ | STL-SF | |

| | 1) Received by: | 2) Received by: | 3) Received by: |
|---|---|---|---|
| Signature | | | |
| Time | 1135 | 1500 | |
| Printed Name | | T Bullock | |
| Date | 6/9/06 | 6/9/06 | |
| Company | STL-SF | STL-SF | |

# LOGIN SAMPLE RECEIPT CHECK LIST

Client: Kennedy/Jenks Consultants

Job Number: 720-4017-1

**Login Number: 4017**

| Question | T/F/NA | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | NA | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |

# Attachment D

Photographs of Posted Public Notices

# 3rd Street Posting


# 6th Street Posting

# Wilson Street Posting

# Attachment E

List of Notified Property Owners

# List of Notified Property Owners

## Public Notice Distribution: Hand-Delivered

On 7 June 2006, copies of the public notice provided by the North Coast Regional Water Quality Control Board (Regional Board) in its 22 May 2006 letter were hand-delivered to the following businesses and locations:

- 6th Street Playhouse (6th Street Warehouse)
- The Dance Center (6th Street Warehouse)
- Residence (45 6th Street)
- Chaps (6th Street)
- Assistance League of Sonoma County (5 West 6th Street)
- Aroma Roasters (5th and Wilson Streets)
- Greater Santa Rosa Convention and Visitors Bureau (9 4th Street)
- Flying Goat Coffee (4th Street)
- Cherry's (4th Street)
- Carlile-Macy Engineers and Architects (15 3rd Street)
- Simply Skin (10 4th Street, Suite 104)
- J. Leonard Salon (10 4th Street, Suite 102)
- Courtyard Marriott (175 Railroad Street)

## Public Notice Distribution: Mailed

On 10 July 2006, copies of the public notice provided by the Regional Board in its 22 May 2006 letter were mailed to the following addresses that were identified as owners of adjacent parcels by the Sonoma County Assessor's Office:

APN 010-171-014
Salvador Family Partnership
5582 Drakes Drive
Byron, CA 94514

APN 010-171-014
Santa Rosa Canners, LLC
C/O Devine and Gong, Inc.
160 Sansome Street, 7th Floor
San Francisco, CA 94104

APN 010-171-011
Santa Rosa Canners, LLC
C/O Richard Devine
160 Sansome Street, 7th Floor
San Francisco, CA 94104

APN 010-171-017 and APN 010-166-003
Sonoma-Marin Area Rail Transit District
4040 Civic Center Drive, Suite 200
San Rafael, CA 94903

# Attachment F

Copy of The Press Democrat Newspaper

PROOF OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA

County of Sonoma

I am a citizen of the United States and a resident of the county aforesaid: I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the printer of The Press Democrat, a newspaper of general circulation, printed and published DAILY IN THE City of Santa Rosa, County of Sonoma; and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Sonoma, State of California, under the date of November 29, 1951, Case number 34831, that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates to wit:

July 13

all in the year 2006
I certify (or declare) under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct.
Dated at Santa Rosa, California, this

3rd day of August

2006

Carol Loveland

SIGNATURE

2002v1

This space for County Clerk's Filing Stamp

Proof of Publication of

**Southern Pacific Transportation Company**
**Third Street Property (North)**
**Santa Rosa, California**
**1TSR196**

Notice of Consideration of No Further Action

Case No. 1TSR196 is being evaluated with regards to no further action. The comment period will end 30 days after all the public notice requirements have been completed including publication in a newspaper of general circulation, distributed to neighboring land and business owners, posted at the site in conspicuous locations and posted on the Regional Water Board web page.

Problem Description

The site was formerly occupied by, a water and fueling station dating back to the 1800s for the Northwestern Pacific Railroad (NWPR), followed by Southern Pacific Transportation Company (SPTCO) in 1906 and Union Pacific Railroad in 1996. Petroleum hydrocarbons including gasoline, diesel and oil were used and stored on the property in above and below ground storage tanks. Discharges to soil and groundwater were discovered and investigated from 1995 to 2003. Significant diesel and oil range hydrocarbon impacts were found in the northwest portion of the property including the presence of separate phase oil in soil and on groundwater. Shallow soil impacts were found in other areas.

Remedial Actions Completed

The above and belowground tanks and associated piping were removed. Approximately 5,400 cubic yards of impacted soil was removed in 2003. At that time, 70,000 gallons of impacted groundwater were pumped from the open excavations. Separate phase hydrocarbons (oil) on water were also removed.

Status of Contaminants in Groundwater

Five groundwater-monitoring wells were installed and monitored from 2001 to 2004. Four additional wells were installed in 2004. Post excavation monitoring was conducted quarterly in all the wells from 2004 to June 2005. Diesel and oil have been detected in one of the seven, groundwater-monitoring wells at up to 1500 and 970 ug/l, respectively