

**2ND QUARTERLY MONITORING REPORT
MAY 6, 2009 SAMPLING**

City of Patterson
Water Quality Control Facility
Groundwater Monitoring Program

Conducted in Accordance with R5-2007-0147

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REMARKS AND SIGNATURE

The interpretations and/or conclusions contained in this report represent professional opinions based on the information reviewed to date. These opinions are based on currently available information, and were developed in accordance with currently accepted engineering practices at this time for this specific site. Other than this, no warranty is implied nor intended.

This report has been prepared solely for the use of the City of Patterson. The work described herein was performed by or under the direct supervision of the professional engineer, registered in the State of California, whose signature appears below.



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SECTION 1 - INTRODUCTION

This Quarterly Groundwater Monitoring Report has been prepared in accordance with the Waste Discharge Requirements (WDR) Order No. R5-2007-0147 for the Water Quality Control Facility (WQCF) located in the City of Patterson, Stanislaus County, California. The 15 monitoring wells were installed as part of the Monitoring and Reporting Program developed to determine if groundwater has been, or has the potential to be, adversely impacted by wastewater treatment and disposal operations. In addition, the program includes assessment of background conditions and determination of any impacts from wastewater disposal.

Five monitoring wells were constructed in March 2001, MW-1 through MW-5. MW-1 and MW-2 are background upgradient wells and located west of the WQCF along Walnut Avenue and northwest of existing Percolation Pond 3, respectively. MW-3, MW-4 and MW-5 are downgradient wells located east of existing Percolation Pond 13, AIPS primary pond and Percolation Pond 7, respectively.

In conjunction with the 1.25 MGD treatment facility expansion, four monitoring wells, MW-6 through MW-10 were constructed between the months of July and August 2004. MW-6 is an upgradient well adjacent to agricultural field crops and west of the northern percolation ponds. Downgradient wells, MW-7 and MW-8 are located east of existing Percolation Ponds 18 and 16, respectively. Downgradient well, MW-10 is located east of the south activated sludge process operations. There is no well MW-9.

An additional six wells were constructed in July 2008. Upgradient wells, MW-11 and MW-12 are located along Olive Avenue and Eucalyptus Avenue, respectively. MW-13 through MW-16 are downgradient wells located east of Percolation Ponds 6, 2, 11 and 15, respectively. For the groundwater monitoring program, MW-16 was installed in lieu of using a privately owned domestic well east of Percolation Pond 5.

Since construction of each monitoring well, all groundwater samples are tested on a quarterly basis in accordance with the Monitoring and Reporting Program. This report presents the results of the quarterly samples collected on May 6, 2009. Included in this report are groundwater elevation summaries, a contour map and analytical results from each sampled monitoring well.

SECTION 2 - GROUNDWATER MONITORING WELLS

The groundwater monitoring wells have 2-inch or 4-inch nominal diameter Schedule 40 PVC casings with 15 feet of 20-slot well screen. The monitoring well locations are provided as **Figure 1**. MW-1 through MW-10 have total depths ranging from 28 to 32 feet below ground surface (bgs) and 15 feet of solid surface casing. The remaining six wells, MW-11 through MW-16 have a depth of 41 feet bgs with 26 feet of solid surface casing. These wells are deeper to comply with current State and local monitoring well installation guidelines that required a sanitary seal that extends to at least 20 feet bgs. A well construction summary is provided in **Table 1**.

SECTION 3 - GROUNDWATER ELEVATIONS

Groundwater flow direction is generally from west to east. The Patterson WQCF is surrounded primarily of agricultural farmland and is immediately adjacent to the floodplain of the San Joaquin River. Depth to groundwater varies depending on season, location and local influences, such as irrigation practices. The monitoring wells were installed at different times; therefore varying amounts of data exists for each set of wells. Groundwater elevations measured in this sampling round are listed in **Table 2** and contoured on the map in **Figure 1**.

As shown on **Figure 1**, groundwater levels generally graduate downwards towards the east. However, water depth in well MW-10 is not consistent with the other measured water depths. Possible causes include localized mounding of water in the area of MW-10, an inaccurate measurement of water depth, or impacts from neighboring agricultural irrigation.

SECTION 4 - MONITORING WELL SAMPLING

The monitoring wells were purged and sampled on May 6, 2009 in accordance with the procedures specified in the *Revised Monitoring Well Installation Workplan* dated April 15, 2008. The May sampling is considered the second quarter sampling round. Sampling was conducted by Del-Tech Geotechnical Support Services. Purge logs are presented in **Appendix A**.

SECTION 5 - GROUNDWATER QUALITY RESULTS

In accordance with the Monitoring and Reporting Program, the following parameters were tested:

- Total Dissolved Solids
- Nitrate as Nitrogen
- Total Kjeldahl Nitrogen
- pH
- Chloride
- Sodium
- Total Coliform Organisms

Prior to sampling, the groundwater elevations were measured and the wells were purged at a minimum of three well volumes until the following three parameters were stabilized: temperature, pH and electrical conductivity. Depth to groundwater was measured to the nearest 0.01 feet. Purge logs and groundwater level measurements are presented in **Appendix A**. The samples were analyzed by BC Laboratories, Inc., a state-certified environmental laboratory. Laboratory analytical reports are included in **Appendix B**.

Degradation and pollution of underlying groundwater is of great concern regarding wastewater treatment plant effluent disposal. Coliform and nitrogen compound are contaminants associated with plant effluent disposal.

All groundwater monitoring wells were within the acceptable limit of <2.2 MPN/100 mL for Total Coliform with the exception of MW-6 and MW-7, which samples were found to have 27 and 4 MPN/100 ML respectively. Monitoring Well 6 is an upgradient well which has had significant prior detections for total and fecal coliform. All wells tested were within the acceptable limits for Fecal Coliform. Historical Total and Fecal Coliform data is included in **Table 3.1**. Historical Total Coliform is graphically shown in **Figure 3.1**.

Nitrate (as nitrogen) has been detected in the groundwater samples. All monitoring wells were within the acceptable interim groundwater limit of 10 mg/L for Nitrate, except for upgradient wells MW-1 and MW-2 with values of 21.0 mg/L and 15 mg/L, respectively. Nitrate levels have been consistently higher in these two wells since 2006. Historical nitrate values are included in **Table 3.2** and graphically shown in **Figure 3.2**.

Additional analytical results as required in the City of Patterson's Waste Discharge Report for Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen, pH, Chloride and Sodium are included in **Table 3**. Historical TDS data is provided in **Table 5.1** and graphically shown in **Figure 5.1**.

Table 1

Well Construction Summary

| | Well Depth (ft) | Completion Type | Slab Surface Elev (ft msl) | Top of Casing Elev (ft msl) | Water Elev 05/06/09 (ft msl) |
|-------|--------------------|--------------------|----------------------------------|-----------------------------------|---------------------------------|
| MW-1 | 27.55 | Below | 55.58 | 54.93 | 37.46 |
| MW-2 | 31.42 | Above | 57.93 | 59.68 | 37.20 |
| MW-6 | 28.40 | Above | 51.81 | 55.23 | 36.44 |
| MW-11 | 43.75 | Above | 57.71 | 57.31 | 36.86 |
| MW-12 | 41.00 | Below | 50.65 | 50.43 | 34.33 |
| MW-3 | 31.00 | Above | 52.18 | 53.80 | 33.92 |
| MW-4 | 31.60 | Above | 56.99 | 58.58 | 34.38 |
| MW-5 | 31.00 | Above | 53.79 | 55.21 | 33.69 |
| MW-7 | 29.80 | Above | 54.62 | 58.04 | 34.82 |
| MW-8 | 30.61 | Above | 55.91 | 59.33 | 35.86 |
| MW-10 | 30.00 | Below | 58.33 | 58.12 | 37.72 * |
| MW-13 | 44.75 | Above | 55.04 | 54.58 | 34.38 |
| MW-14 | 41.35 | Below | 56.63 | 56.46 | 34.85 |
| MW-15 | 41.15 | Below | 58.61 | 58.45 | 33.65 |
| MW-16 | 43.94 | Above | 55.20 | 54.81 | 34.54 |

* Cause of high water level in MW-10 is unknown.

Table 2
Groundwater Elevations
Upgradient and Downgradient Monitoring Wells

| Water Elevations | Upgradient Wells | | | | | Downgradient Wells | | | | | | | | | | |
|---|------------------|--------------|--------------|------------|--------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | MW-1 | MW-2 | MW-6 | MW-9 | MW-11 | MW-12 | MW-3 | MW-4 | MW-5 | MW-7 | MW-8 | MW-10 | MW-13 | MW-14 | MW-15 | MW-16 |
| Water Elevation 4/4/01 (ft msl) | 38.10 | 40.30 | N/A | N/A | N/A | N/A | 35.90 | 37.18 | 35.85 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 4/24/01 (ft msl) | 38.57 | 43.79 | N/A | N/A | N/A | 35.85 | 36.85 | 35.31 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 5/23/01 (ft msl) | 39.24 | 40.81 | N/A | N/A | N/A | 35.80 | 36.94 | 36.52 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 7/13/01 (ft msl) | 39.49 | 40.58 | N/A | N/A | N/A | 34.77 | 36.10 | 35.59 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 11/7/01 (ft msl) | 37.79 | 37.32 | N/A | N/A | N/A | 34.58 | 35.77 | 35.04 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 2/8/02 (ft msl) | 37.68 | 40.16 | N/A | N/A | N/A | 35.69 | 36.35 | 35.30 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 5/3/02 (ft msl) | 39.80 | 39.59 | N/A | N/A | N/A | 35.11 | 35.97 | 34.76 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 8/12/02 (ft msl) | 38.10 | 42.26 | N/A | N/A | N/A | 31.28 | 33.48 | 33.50 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 11/6/02 (ft msl) | 37.47 | 40.93 | N/A | N/A | N/A | 34.48 | 35.46 | 35.13 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 2/18/03 (ft msl) | 37.22 | 42.99 | N/A | N/A | N/A | 35.05 | 35.87 | 34.50 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 7/09/03 (ft msl) | 37.48 | 42.23 | N/A | N/A | N/A | 32.58 | 33.97 | 33.83 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 10/08/03 (ft msl) | 37.93 | 37.99 | N/A | N/A | N/A | 33.97 | 35.40 | 34.80 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 1/9/04 (ft msl) | 35.97 | 35.55 | N/A | N/A | N/A | N/A | 30.97 | 36.29 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 1/29/04 (ft msl) | N/A | N/A | N/A | N/A | N/A | 35.30 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 4/8/04 (ft msl) | 37.24 | 38.06 | N/A | N/A | N/A | 35.14 | 35.36 | 34.41 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 7/8/04 (ft msl) | 37.61 | 38.82 | N/A | N/A | N/A | 33.76 | 34.44 | 33.60 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 10/18/04 (ft msl) | 37.90 | 37.68 | 36.01 | 38.08 | N/A | 34.87 | 35.40 | 34.19 | 34.33 | 35.41 | 37.38 | N/A | N/A | N/A | N/A | N/A |
| Water Elevation 1/17/05 (ft msl) | 37.83 | 37.22 | 36.81 | 37.28 | N/A | 37.05 | 37.72 | 37.50 | 37.54 | 37.98 | 37.94 | 37.94 | N/A | N/A | N/A | N/A |
| Water Elevations 4/05/05 (ft msl) | 40.03 | 38.87 | 39.15 | 39.36 | N/A | 39.47 | 39.58 | 39.58 | 40.13 | 40.20 | 39.85 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 7/11/05 (ft msl) | 41.95 | 42.15 | 42.14 | N/A | N/A | 39.78 | 39.87 | 38.93 | 39.13 | 40.42 | 43.12 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 10/10/05 (ft msl) | 40.62 | 40.48 | 39.72 | N/A | N/A | 37.46 | 37.70 | 36.61 | 37.86 | 38.37 | 38.69 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 01/09/06 (ft msl) | 38.60 | 38.25 | 38.25 | N/A | N/A | 37.12 | 46.45 | 37.34 | 39.43 | 38.49 | 39.82 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 04/12/06 (ft msl) | 41.69 | 40.74 | 41.92 | N/A | N/A | 45.65 | 47.63 | 47.19 | 47.75 | 44.87 | 41.74 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 07/06/06 (ft msl) | 46.21 | 44.93 | 46.08 | N/A | N/A | 43.53 | 43.37 | 42.89 | 43.33 | 45.21 | 44.38 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 01/23/07 (ft msl) | 38.95 | 37.71 | 37.33 | N/A | N/A | 37.32 | 36.71 | 35.69 | 35.84 | 37.66 | N/A | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 06/14/07 (ft msl) | 38.11 | 39.79 | 40.33 | N/A | N/A | 34.15 | 34.98 | 34.66 | 36.21 | 37.20 | 35.24 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 08/28/07 (ft msl) | 37.38 | 39.80 | 39.31 | N/A | N/A | 32.56 | 35.52 | 34.27 | 35.24 | 36.25 | 36.12 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 11/08/08 (ft msl) | 37.88 | 38.13 | 34.91 | N/A | N/A | 35.98 | 35.49 | 37.28 | 35.84 | 38.11 | 35.98 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 04/03/08 (ft msl) | 38.88 | 38.44 | 37.55 | N/A | N/A | 36.22 | 36.84 | 36.31 | 37.46 | 39.07 | 36.94 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 02/11/08 (ft msl) | 38.08 | 36.33 | N/A | N/A | N/A | 35.60 | 36.03 | 35.26 | 35.96 | 37.96 | 36.42 | N/A | N/A | N/A | N/A | N/A |
| Water Elevations 09/24/08 (ft msl) | 37.68 | 39.40 | 41.07 | N/A | N/A | 33.45 | 34.75 | 33.95 | 35.64 | 37.11 | 34.62 | 35.03 | 35.71 | 34.62 | 35.31 | 35.31 |
| Water Elevations 12/02/08 (ft msl) | 37.18 | 36.52 | 36.50 | N/A | N/A | 34.21 | 34.51 | 33.90 | 34.69 | 37.08 | 34.81 | 34.69 | 34.95 | 35.54 | 35.09 | 35.09 |
| Water Elevations 02/20/09 (ft msl) | 36.63 | 36.18 | 35.94 | N/A | N/A | 34.43 | 34.75 | 34.20 | 34.94 | 37.16 | 35.10 | 34.83 | 35.11 | 35.55 | 35.40 | 35.40 |
| Water Elevations 05/06/09 (ft msl) | 37.46 | 37.20 | 36.44 | N/A | 36.86 | 33.92 | 34.38 | 33.69 | 34.82 | 35.86 | 37.72 | 34.38 | 34.85 | 33.65 | 34.54 | 34.54 |

N/A = Not Applicable

| Table 3 Analytical Results Upgradient and Downgradient Monitoring Wells May 6, 2009 Sampling | | | | | | | | | |
|--|-------------------------------|------------------------------|--------------------------------|----------|-----------------|---------------|--------------------------------------|----------------------------|--|
| | Total Dissolved Solids (mg/L) | Nitrogen Compounds | | pH units | Chloride (mg/L) | Sodium (mg/L) | Pathogens | | |
| | | Nitrate (as Nitrogen) (mg/L) | Total Kjeldahl Nitrogen (mg/L) | | | | Total Coliform Organisms (MPN/100ml) | Fecal Coliform (MPN/100ml) | |
| Up-gradient | MW-1 | 1800 | 21.00 | ND | 340.0 | 330.0 | <2 | <2 | |
| | MW-2 | 2500 | 15.00 | 0.120 | 300.0 | 390.0 | <2 | <2 | |
| | MW-6 | 1100 | 5.50 | 0.200 | 240.0 | 180.0 | 27 | <2 | |
| | MW-11 | 1200 | 9.80 | 0.046 | 220.0 | 220.0 | <2 | <2 | |
| | MW-12 | 1500 | 5.10 | ND | 380.0 | 250.0 | <2 | <2 | |
| | MW-3 | 2200 | 6.40 | 0.055 | 490.0 | 380.0 | <2 | <2 | |
| Downgradient | MW-4 | 1700 | 0.76 | 0.140 | 390.0 | 270.0 | <2 | <2 | |
| | MW-5 | 1600 | 2.50 | 0.240 | 440.0 | 270.0 | <2 | <2 | |
| | MW-7 | 1400 | 3.70 | 0.250 | 360.0 | 270.0 | 4 | <2 | |
| | MW-8 | 1300 | 4.40 | 0.120 | 340.0 | 220.0 | <2 | <2 | |
| | MW-10 | 1400 | 9.90 | 0.420 | 380.0 | 260.0 | <2 | <2 | |
| | MW-13 | 1700 | 4.80 | 0.140 | 360.0 | 300.0 | <2 | <2 | |
| | MW-14 | 1600 | 2.30 | 0.050 | 400.0 | 320.0 | <2 | <2 | |
| | MW-15 | 1300 | 3.60 | 0.170 | 410.0 | 310.0 | <2 | <2 | |
| | MW-16 | 1400 | 3.80 | 0.170 | 380.0 | 250.0 | <2 | <2 | |

A/P = Absence/Presence
 N/A = Not Applicable
 ND = Not Detected
 NS = Not Sampled
 NT = Not Tested

Table 3.1
Upgradient Monitoring Wells
Historical Groundwater Total and Fecal Coliform Data
MPN/100 ML

| Sample Date | MW-1 | | MW-2 | | MW-5 | | MW-11 | | MW-12 | |
|-------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|
| | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform |
| 10/18/2004 | <2 | <2 | 7 | 4 | 17 | 17 | N/A | N/A | N/A | N/A |
| 1/17/2005 | 6.9 | <1.1 | <1.1 | N/R | 12 | <1.1 | N/A | N/A | N/A | N/A |
| 4/5/2005 | <2 | NT | <2 | NT | >1600 | >1600 | N/A | N/A | N/A | N/A |
| 7/11/2005 | <2 | NT | <2 | NT | >1600 | >1600 | N/A | N/A | N/A | N/A |
| 10/10/2005 | <2 | NT | <2 | NT | 50 | 50 | N/A | N/A | N/A | N/A |
| 1/9/2006 | <2 | NT | <2 | NT | <1 | NT | N/A | N/A | N/A | N/A |
| 4/12/2006 | <1 | NT | <1 | NT | >2420 | NT | N/A | N/A | N/A | N/A |
| 7/6/2006 | 1 | NT | 3.1 | NT | 12 | <1.1 | N/A | N/A | N/A | N/A |
| 1/23/2007 | 6.9 | <1.1 | <1.1 | N/R | 12 | <1.1 | N/A | N/A | N/A | N/A |
| 6/14/2007 | 1.1 | <1.1 | <1.1 | <1.1 | >23 | <1.1 | N/A | N/A | N/A | N/A |
| 8/28/2007 | <1.1 | <1.1 | <1.1 | <1.1 | >23 | 1.1 | N/A | N/A | N/A | N/A |
| 1/18/2008 | <1.1 | <1.1 | <1.1 | <1.1 | 16.1 | <1.1 | N/A | N/A | N/A | N/A |
| 2/11/2008 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | N/A | N/A | N/A | N/A |
| 4/3/2008 | <1.1 | <1.1 | <1.1 | <1.1 | NS | NS | N/A | N/A | N/A | N/A |
| 9/24/2008 | <2 | <2 | <2 | <2 | >1600 | >1600 | <2 | <2 | <2 | <2 |
| 12/2/2008 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 2/20/2009 | <2 | NT | <2 | NT | 2 | NT | <2 | NT | <2 | NT |
| 5/6/2009 | <2 | <2 | <2 | <2 | 27 | <2 | <2 | <2 | <2 | <2 |

Table 3.1
Downgradient Monitoring Wells
Historical Groundwater Total and Fecal Coliform Data
MPN/100 ML

| Sample Date | MW-3 | | MW-4 | | MW-5 | | MW-7 | | MW-8 | | MW-10 | | MW-13 | | MW-14 | | MW-15 | | MW-16 | |
|-------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|
| | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform | Total Coliform Organisms | Fecal Coliform |
| 10/18/2004 | 2 | <2 | 4 | <2 | 9 | <2 | 23 | <2 | 8 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 1/17/2005 | <2 | N/R | <1.1 | N/R | <2 | N/R | <1.1 | N/R | <1.1 | <1.1 | N/R | <1.1 | N/R | <1.1 | N/R | <1.1 | N/R | <1.1 | N/R | <1.1 |
| 4/5/2005 | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT |
| 7/11/2005 | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT |
| 10/10/2005 | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT |
| 1/9/2006 | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT |
| 4/12/2006 | <1 | NT | 1100 | 21 | 730 | 60 | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT |
| 7/6/2006 | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT | <1 | NT |
| 1/23/2007 | <2 | N/R | <1.1 | N/R | <2 | N/R | <1.1 | N/R | <1.1 | <1.1 | N/R | <1.1 | N/R | <1.1 | N/R | <1.1 | N/R | <1.1 | N/R | <1.1 |
| 6/14/2007 | <2 | <2 | <1.1 | <1.1 | <2 | <2 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| 8/28/2007 | <2 | <2 | <1.1 | <1.1 | <2 | <2 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| 1/18/2008 | <2 | <2 | <1.1 | <1.1 | <2 | <2 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| 2/11/2008 | <2 | <2 | <1.1 | <1.1 | <2 | <2 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| 4/3/2008 | <2 | <2 | <1.1 | <1.1 | <2 | <2 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| 9/24/2008 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 12/2/2008 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |
| 2/20/2009 | <2 | NT | <2 | NT | 2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT | <2 | NT |
| 5/6/2009 | <2 | <2 | <2 | <2 | <2 | <2 | 4 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 |

Groundwater Coliform Limits < 2.2 MPN/100mL

NS = Not Sampled

NT = Not Tested

N/A = Not Applicable

**Table 3.2
Upgradient and Downgradient Monitoring Wells
Historical Groundwater Nitrate as Nitrogen Data
(MGL)**

| Sample Date | Upgradient MW | | | | | | Downgradient MW | | | | | | | | | |
|-------------|---------------|------|------|-------|-------|--|-----------------|------|------|------|------|-------|-------|-------|-------|-------|
| | MW-1 | MW-2 | MW-6 | MW-11 | MW-12 | | MW-3 | MW-4 | MW-5 | MW-7 | MW-8 | MW-10 | MW-13 | MW-14 | MW-15 | MW-16 |
| 10/18/2004 | 10 | 8.4 | 4.1 | N/A | N/A | | 11 | ND | 2.7 | 5.3 | 8.6 | 12 | N/A | N/A | N/A | N/A |
| 1/17/2005 | 15 | 7.6 | 4.2 | N/A | N/A | | 12 | 0.6 | 1.8 | 5.2 | 7.2 | 9.1 | N/A | N/A | N/A | N/A |
| 4/5/2005 | 17 | 8.6 | 1.5 | N/A | N/A | | 12 | 26.6 | 10 | 5.9 | 7 | 9.3 | N/A | N/A | N/A | N/A |
| 7/11/2005 | 9.7 | 8.4 | 7 | N/A | N/A | | 5 | 5.7 | 4.1 | 6.3 | 7 | 2.7 | N/A | N/A | N/A | N/A |
| 10/10/2005 | 8.4 | 10 | 6.1 | N/A | N/A | | 7.5 | 2.9 | 6.3 | 8.4 | 6.1 | 4.7 | N/A | N/A | N/A | N/A |
| 1/9/2006 | 14 | 17 | 5.5 | N/A | N/A | | 8.4 | ND | 0.3 | 5.5 | 5.9 | 3.2 | N/A | N/A | N/A | N/A |
| 4/12/2006 | 17 | 24 | 5.9 | N/A | N/A | | 15 | 48 | 30 | 4.1 | 7.2 | 6.5 | N/A | N/A | N/A | N/A |
| 7/6/2006 | 15 | 22 | 5.7 | N/A | N/A | | 10 | 7.9 | 19 | 9.5 | 6.3 | 2.9 | N/A | N/A | N/A | N/A |
| 1/23/2007 | 12.5 | 13.3 | 6.1 | N/A | N/A | | 9.3 | ND | 13.1 | 0.3 | 7.4 | NS | N/A | N/A | N/A | N/A |
| 6/14/2007 | 13 | 17.5 | 5 | N/A | N/A | | 9.9 | ND | 2.1 | 0.3 | 11.8 | 6 | N/A | N/A | N/A | N/A |
| 8/28/2007 | 14.2 | 13.4 | 5.8 | N/A | N/A | | 7.2 | 0.3 | ND | 0.7 | 11 | 6.6 | N/A | N/A | N/A | N/A |
| 11/8/2007 | 14.3 | 7.8 | 6.2 | N/A | N/A | | 6.7 | 0.3 | ND | 0.2 | 4.2 | 8.4 | N/A | N/A | N/A | N/A |
| 2/11/2008 | 16.7 | 7.9 | 6.1 | N/A | N/A | | 6.9 | ND | 0.1 | 0.5 | 0.2 | 8.1 | N/A | N/A | N/A | N/A |
| 4/3/2008 | 17.4 | 10.2 | NS | N/A | N/A | | 6.4 | 3.1 | 0.9 | 0.7 | 0.7 | 7.3 | N/A | N/A | N/A | N/A |
| 9/24/2008 | 14 | 16 | 5.3 | 9.2 | 4.8 | | 6.4 | 2.3 | ND | 1.2 | 3.1 | 6.3 | 2.1 | 1.6 | 1 | 0.1 |
| 12/2/2008 | 18 | 10 | 5.2 | 9.2 | 3.9 | | 5.6 | 1.8 | 0.58 | 4.7 | 1.2 | 5.6 | 4.1 | 1.4 | 0.66 | 0.27 |
| 2/20/2009 | 21 | 11 | 5.7 | 9.1 | 4.7 | | 5.9 | 1.3 | 1.8 | 3.2 | 2.6 | 6.8 | 2.2 | 2 | 1.8 | 6.1 |
| 5/6/2009 | 21 | 15 | 5.5 | 9.8 | 5.1 | | 6.4 | 0.76 | 2.5 | 3.7 | 4.4 | 9.9 | 4.8 | 2.3 | 3.6 | 3.8 |

ND = Not Detected
NS = Not Sampled
N/A = Not Applicable

TABLE 5.1
Upgradient and Downgradient Monitoring Wells
Historical Groundwater TDS Data
(MG/L)

| Sample Date | Upgradient MW | | | | | | Downgradient MW | | | | | | | | | |
|-------------|---------------|------|------|-------|-------|--|-----------------|------|------|------|------|-------|-------|-------|-------|-------|
| | MW-1 | MW-2 | MW-6 | MW-11 | MW-12 | | MW-3 | MW-4 | MW-5 | MW-7 | MW-8 | MW-10 | MW-13 | MW-14 | MW-15 | MW-16 |
| 10/18/2004 | 1310 | 1870 | 1160 | N/A | N/A | | 2450 | 1510 | 1250 | 1190 | 1940 | 1810 | N/A | N/A | N/A | N/A |
| 1/17/2005 | 1610 | 1850 | 1110 | N/A | N/A | | 2480 | 1610 | 1360 | 1240 | 1940 | 1830 | N/A | N/A | N/A | N/A |
| 4/5/2005 | 1720 | 1910 | 1270 | N/A | N/A | | 2440 | 1500 | 1280 | 1300 | 1960 | 1870 | N/A | N/A | N/A | N/A |
| 7/11/2005 | 1310 | 1880 | 1220 | N/A | N/A | | 1410 | 1580 | 1330 | 1260 | 1810 | 1600 | N/A | N/A | N/A | N/A |
| 10/10/2005 | 1140 | 2000 | 1420 | N/A | N/A | | 2200 | 1490 | 1540 | 1620 | 1870 | 1790 | N/A | N/A | N/A | N/A |
| 1/9/2006 | 1600 | 2100 | 1300 | N/A | N/A | | 2500 | 1500 | 1700 | 1600 | 1800 | 1500 | N/A | N/A | N/A | N/A |
| 4/12/2006 | 1800 | 2200 | 1200 | N/A | N/A | | 2200 | 2100 | 1800 | 1500 | 1800 | 1800 | N/A | N/A | N/A | N/A |
| 7/6/2006 | 1560 | 2410 | 1240 | N/A | N/A | | 2240 | 807 | 1690 | 2200 | 1710 | 1520 | N/A | N/A | N/A | N/A |
| 1/23/2007 | 1330 | 1920 | 1140 | N/A | N/A | | 2070 | 1570 | 1660 | 1260 | 1730 | NS | N/A | N/A | N/A | N/A |
| 6/14/2007 | 1550 | 3030 | 1340 | N/A | N/A | | 1890 | 1580 | 1650 | 1340 | 1500 | 1620 | N/A | N/A | N/A | N/A |
| 8/28/2007 | 1620 | 2990 | 1290 | N/A | N/A | | 2130 | 1460 | 1450 | 1370 | 1410 | 1640 | N/A | N/A | N/A | N/A |
| 1/18/2008 | 1720 | 2330 | 1140 | N/A | N/A | | 2020 | 1600 | 1460 | 1310 | 1460 | 1690 | N/A | N/A | N/A | N/A |
| 2/11/2008 | 1770 | 2230 | 1180 | N/A | N/A | | 1960 | 1600 | 1430 | 1320 | 1110 | 1600 | N/A | N/A | N/A | N/A |
| 4/3/2008 | 1600 | 2450 | NS | N/A | N/A | | 1810 | 1590 | 1500 | 1260 | 1070 | 1540 | N/A | N/A | N/A | N/A |
| 9/24/2008 | 1800 | 2300 | 1000 | 1300 | 1000 | | 2000 | 1600 | 1600 | 1400 | 1400 | 2100 | 1800 | 1700 | 1700 | 1300 |
| 12/2/2008 | 2000 | 2000 | 930 | 1200 | 920 | | 2000 | 1600 | 1600 | 1400 | 1300 | 1700 | 1800 | 1600 | 1500 | 1200 |
| 2/20/2009 | 2000 | 2100 | 1000 | 1200 | 1400 | | 2100 | 1700 | 1600 | 1500 | 1200 | 1800 | 1800 | 1600 | 1400 | 1300 |
| 5/6/2009 | 1800 | 2500 | 1100 | 1200 | 1500 | | 2200 | 1700 | 1600 | 1400 | 1300 | 1400 | 1700 | 1600 | 1300 | 1400 |

NS = Not Sampled
 NT = Not Tested
 N/A = Not Applicable

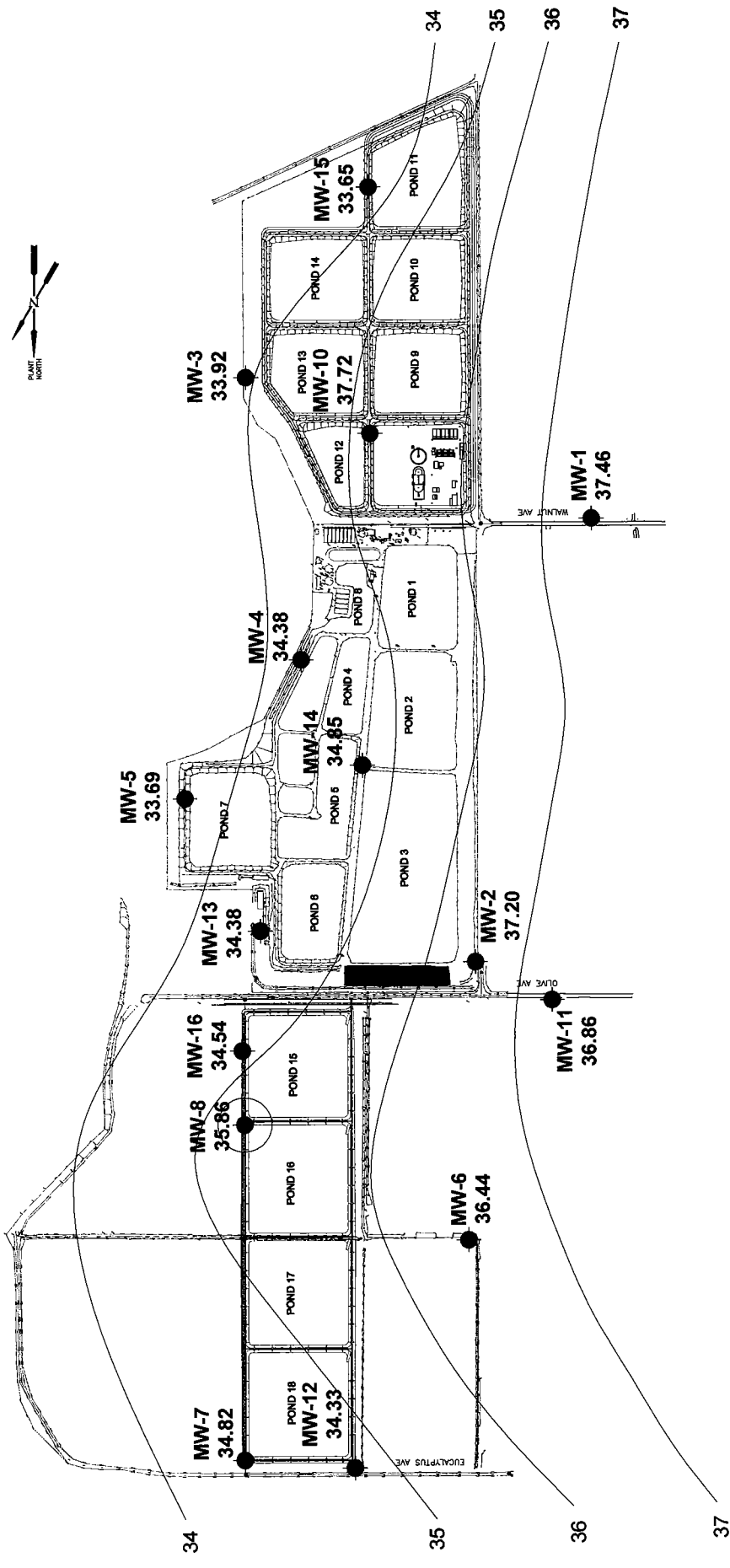
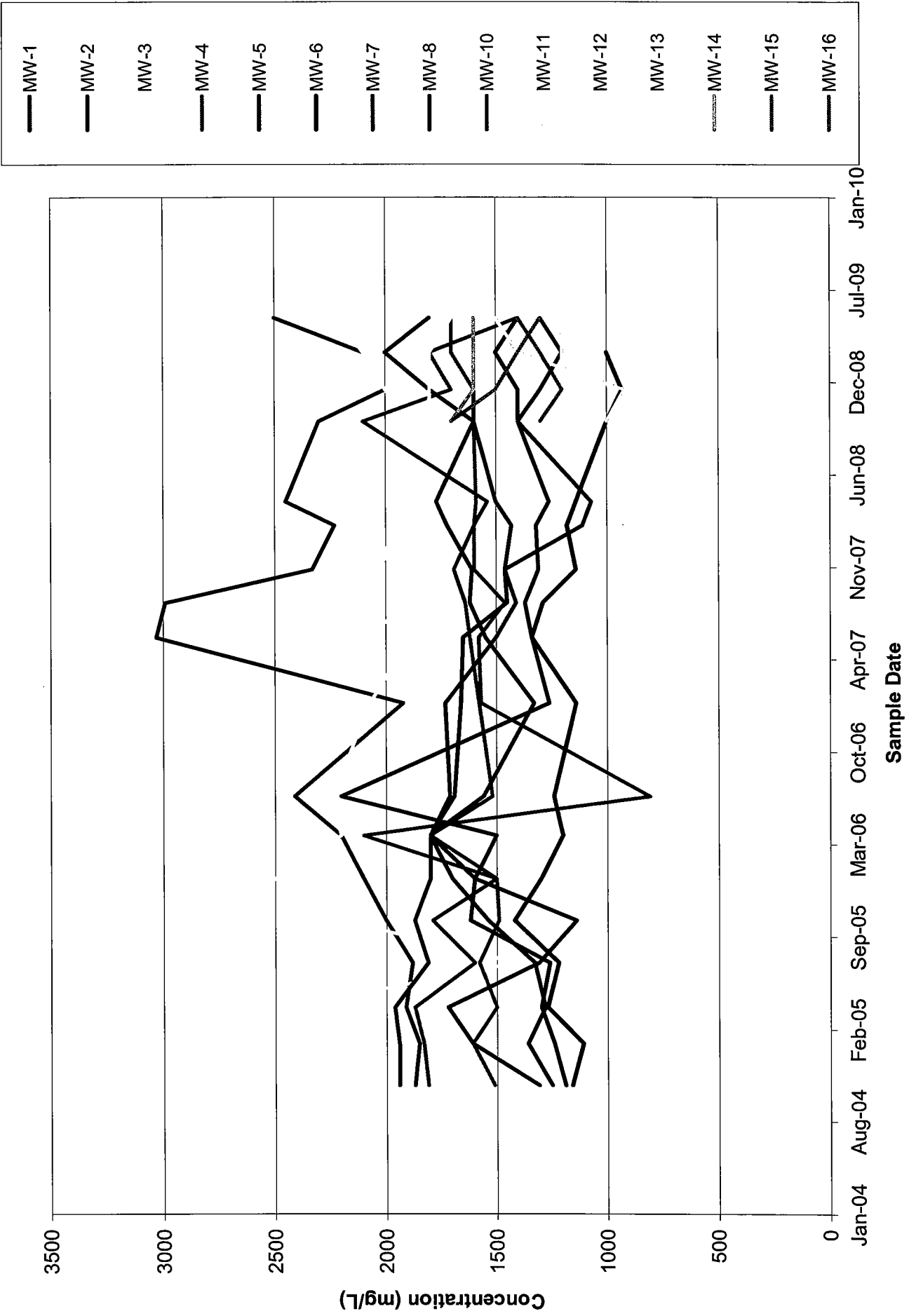


FIGURE 1
 MAY 6, 2009 SAMPLING ROUND
 GROUNDWATER ELEVATION CONTOUR MAP
 SCALE 1" = 600'

CITY OF PATTERSON
 WATER QUALITY CONTROL FACILITY
 14901 POPLAR AVENUE

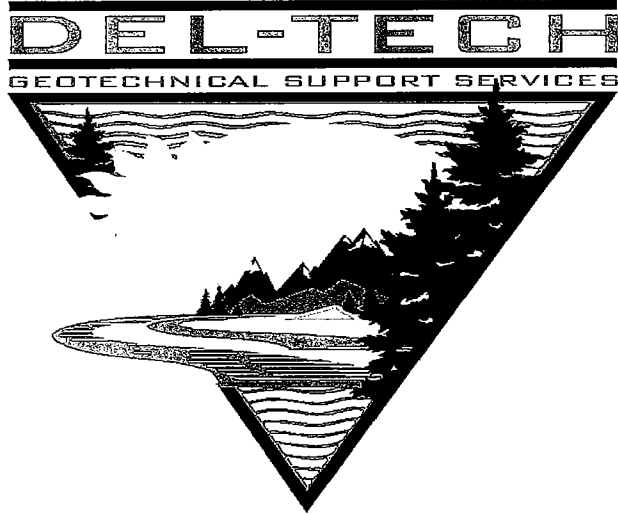


FIGURE 5.1 HISTORICAL GROUNDWATER TDS DATA



APPENDIX A

Well Purge Logs



**2009
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT**

SITE:

**PATTERSON W.Q.C.P.
14901 POPLAR AVENUE
PATTERSON, CA.
May 6, 2009**



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| SAMPLE LOCATION / MW - | | 1 | DATE: | | 5/6/2009 | | | | | | |
|---------------------------------|------------------------------------|-------------------------|--------------------|-------------------------------|-------------------------------------|----------------------|--|-----------------|------------------------|--------------------|--|
| PROJECT NAME: | | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | | SEE CHAIN OF CUSTODY | | | | | |
| ADDRESS: | | 14901 POPLAR AVENUE | | SAMPLE TIME: | | 13:31 | | | | | |
| CITY, STATE: | | PATTERSON, CA. | | SAMPLE CONTAINERS: | | SEE CHAIN OF CUSTODY | | | | | |
| SITE CONTACT: | | IGNACIO LOPEZ | | PRESERVATIVES: | | SEE CHAIN OF CUSTODY | | | | | |
| CONSULTANT: | | LEE & RO, INC. | | LAB. ANALYSIS BY: | | BC LABS. | | | | | |
| PROJECT MANAGER: | | IGNACIO LOPEZ | | MONUMENT: | | FLUSH | | | | | |
| SAMPLER: | | DEL-TECH / ASHLEY LIGHT | | WELL CASING MATERIAL : | | PVC | | | | | |
| SIGNED: | | <i>Ashley Light</i> | | WELL CASING DIA. : | | 4" / 0.6528 | | | | | |
| SAMPLE MEDIA: | | GROUNDWATER | | P.I.D. READING / ODOR: | | N/A NONE | | | | | |
| TOP OF CASING ELEVATION: | | MSL | | COLOR: | | CLEAR | | | | | |
| DEPTH TO WATER: | | (feet.100th's) | 17.47 | FEET | CALC. PURGE VOL.: 6.58 GAL. | | | | | | |
| DEPTH OF WELL: | | (feet.100th's) | 27.55 | FEET | TOTAL VOLUME PURGED: 18 GAL. | | | | | | |
| STANDING WATER COLUMN: | | | 10.08 | FEET | DEPTH OF PUMP: 26 FEET | | | | | | |
| FIELD PARAMETERS | | | | | | | | | | | |
| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) | |
| | 0 | 0 | N/A | 2.0 GPM | 7.97 | 2642 | 23.5 | 23 | N/A | 17 | |
| | 6.58 | 6 | " | " | 7.80 | 2765 | 22.4 | 29 | " | 14 | |
| | 13.16 | 12 | " | " | 7.87 | 2767 | 22.4 | 33 | " | 10 | |
| | 19.74 | 18 | " | " | 7.57 | 2765 | 22.0 | 29 | " | 7 | |
| PURGE METHOD: | | | | | | | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. | | | | |
| SAMPLE METHOD: | | | | | | | DEDICATED WATERRA INERTIA PUMP & TUBING. | | | | |
| D. T. W. AFTER PURGE: | | | | | | | D. T. W. AT SAMPLE TIME: 17.50' | | | | |
| WELL INTEGRITY: | | | | | | | CAP & SEAL ARE SECURE. LOCK INSTALLED. | | | | |
| WELL LOCATION: | | | | | | | SEE SITE MAP. | | | | |
| REMARKS: | | | | | | | | | | | |
| WEATHER: | | | | | | | CLEAR SKIES / COOL. WIND: NW5 | | | | |
| QUALITY CONTROL: | | | | | | | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. | | | | |
| CONTAINMENT: | | | | | | | PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. | | | | |
| INSTRUMENTATION: | | | | | | | Y.S.I. 556 MULTIPROBE SYSTEM HACH TURBIDITY METER SOLINIST SLOPE METER | | | | |
| # OF DRUMS ON SIGHT: | | | | | | | WATER: 0 | | SOIL: 0 | | |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| SAMPLE LOCATION / MW - | | 2 | DATE: | | 5/6/2009 | | | | | |
|---------------------------------|------------------------------------|----------------------------|--------------------|---|-------------------------------------|--|-----------------|-----------------|------------------------|--------------------|
| PROJECT NAME: | | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: SEE CHAIN OF CUSTODY | | | | | | |
| ADDRESS: | | 14901 POPLAR AVENUE | | SAMPLE TIME: 13:48 | | | | | | |
| CITY, STATE: | | PATTERSON, CA. | | SAMPLE CONTAINERS: SEE CHAIN OF CUSTODY | | | | | | |
| SITE CONTACT: | | IGNACIO LOPEZ | | PRESERVATIVES: SEE CHAIN OF CUSTODY | | | | | | |
| CONSULTANT: | | LEE & RO, INC. | | LAB. ANALYSIS BY: BC LABS. | | | | | | |
| PROJECT MANAGER: | | IGNACIO LOPEZ | | MONUMENT: STEEL POST | | | | | | |
| SAMPLER: | | DEL-TECH / CASSANDRA LIGHT | | WELL CASING MATERIAL : PVC | | | | | | |
| SIGNED: | | <i>Cassandra Light</i> | | WELL CASING DIA. : 4" / 0.6528 | | | | | | |
| SAMPLE MEDIA: | | GROUNDWATER | | P.I.D. READING / ODOR: N/A NONE | | | | | | |
| TOP OF CASING ELEVATION: | | MSL | | COLOR: BROWN TO LIGHT BROWN | | | | | | |
| DEPTH TO WATER: | | (feet.100th's) | 22.48 | FEET | CALC. PURGE VOL.: 5.78 GAL. | | | | | |
| DEPTH OF WELL: | | (feet.100th's) | 31.34 | FEET | TOTAL VOLUME PURGED: 15 GAL. | | | | | |
| STANDING WATER COLUMN: | | | 8.86 | FEET | DEPTH OF PUMP: 30 FEET | | | | | |
| FIELD PARAMETERS | | | | | | | | | | |
| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
| | 0 | 0 | N/A | 2.0 GPM | 7.58 | 3196 | 23.5 | 186 | N/A | 875 |
| | 5.78 | 5 | " | " | 7.48 | 3502 | 22.9 | 187 | " | 136 |
| | 11.57 | 10 | " | " | 7.51 | 3497 | 23.8 | 187 | " | 732 |
| | 17.35 | 15 | " | " | 7.52 | 3490 | 23.0 | 184 | " | 240 |
| PURGE METHOD: | | | | | | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. | | | | |
| SAMPLE METHOD: | | | | | | DEDICATED WATERRA INERTIA PUMP & TUBING. | | | | |
| D. T. W. AFTER PURGE: | | | | | | D. T. W. AT SAMPLE TIME: 23.85' | | | | |
| WELL INTEGRITY: | | | | | | CAP & SEAL ARE SECURE. LOCK INSTALLED. | | | | |
| WELL LOCATION: | | | | | | SEE SITE MAP. | | | | |
| REMARKS: | | | | | | | | | | |
| WEATHER: | | | | | | CLEAR SKIES / COOL. WIND: NW5 | | | | |
| QUALITY CONTROL: | | | | | | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. | | | | |
| CONTAINMENT: | | | | | | PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. | | | | |
| INSTRUMENTATION: | | | | | | Y.S.I. 556 MULTIPROBE SYSTEM HACH TURBIDITY METER SOLINIST SLOPE METER | | | | |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| | | | | | |
|---------------------------------|----------------------------|-------|-------------------------------|-----------------------------|-----------|
| SAMPLE LOCATION / MW - | | 3 | DATE: | | 5/6/2009 |
| PROJECT NAME: | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | SEE CHAIN OF CUSTODY | |
| ADDRESS: | 14901 POPLAR AVENUE | | SAMPLE TIME: | 10:38 | |
| CITY, STATE: | PATTERSON, CA. | | SAMPLE CONTAINERS: | SEE CHAIN OF CUSTODY | |
| SITE CONTACT: | IGNACIO LOPEZ | | PRESERVATIVES: | SEE CHAIN OF CUSTODY | |
| CONSULTANT: | LEE & RO, INC. | | LAB. ANALYSIS BY: | BC LABS. | |
| PROJECT MANAGER: | IGNACIO LOPEZ | | MONUMENT: | STEEL POST | |
| SAMPLER: | DEL-TECH / CASSANDRA LIGHT | | WELL CASING MATERIAL : | PVC | |
| SIGNED: | <i>Cassandra Light</i> | | WELL CASING DIA. : | 4" / 0.6528 | |
| SAMPLE MEDIA: | GROUNDWATER | | P.I.D. READING / ODOR: | N/A NONE | |
| TOP OF CASING ELEVATION: | MSL | | COLOR: | LIGHT BROWN TO CLEAR | |
| DEPTH TO WATER: | (feet.100th's) | 19.88 | FEET | CALC. PURGE VOL.: | 7.26 GAL. |
| DEPTH OF WELL: | (feet.100th's) | 31.00 | FEET | TOTAL VOLUME PURGED: | 22.5 GAL. |
| STANDING WATER COLUMN: | | 11.12 | FEET | DEPTH OF PUMP: | 30 FEET |

FIELD PARAMETERS

| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
|------|------------------------------------|----------------------|--------------------|------------------------|------------|---------------|-----------------|-----------------|------------------------|--------------------|
| | 0 | 0 | N/A | 2.0 GPM | 7.44 | 2906 | 21.3 | 211 | N/A | 87 |
| | 7.26 | 7.5 | " | " | 7.47 | 3054 | 20.1 | 208 | " | 59 |
| | 14.52 | 15 | " | " | 7.48 | 3075 | 20.4 | 203 | " | 30 |
| | 21.78 | 22.5 | " | " | 7.45 | 3091 | 20.0 | 201 | " | 24 |
| | | | | | | | | | | |

| | | |
|------------------------------|--|----------------------|
| PURGE METHOD: | CENTRIFUGAL PUMP VIA DEDICATED WATER INERTIA PUMP. | |
| SAMPLE METHOD: | DEDICATED WATER INERTIA PUMP & TUBING. | |
| D. T. W. AFTER PURGE: | D. T. W. AT SAMPLE TIME: 19.90' | |
| WELL INTEGRITY: | CAP & LOCK SECURE. | |
| WELL LOCATION: | SEE SITE MAP. | |
| REMARKS: | | |
| WEATHER: | CLEAR SKIES / COOL. | WIND: NW5 |
| QUALITY CONTROL: | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. | |
| CONTAINMENT: | PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. | |
| INSTRUMENTATION: | Y.S.I. 556 MULTIPROBE SYSTEM | HACH TURBIDITY METER |
| | SOLINIST SLOPE METER | |
| | | |
| | | |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| | | | | | |
|---------------------------------|----------------------------|-------------------------------|--------------|----------------------|----------|
| SAMPLE LOCATION / MW - | | 4 | DATE: | | 5/6/2009 |
| PROJECT NAME: | PATTERSON W.Q.C.P. | ANALYSIS PERFORMED: | | SEE CHAIN OF CUSTODY | |
| ADDRESS: | 14901 POPLAR AVENUE | SAMPLE TIME: | | 11:44 | |
| CITY, STATE: | PATTERSON, CA. | SAMPLE CONTAINERS: | | SEE CHAIN OF CUSTODY | |
| SITE CONTACT: | IGNACIO LOPEZ | PRESERVATIVES: | | SEE CHAIN OF CUSTODY | |
| CONSULTANT: | LEE & RO, INC. | LAB. ANALYSIS BY: | | BC LABS. | |
| PROJECT MANAGER: | IGNACIO LOPEZ | MONUMENT: | | STEEL POST | |
| SAMPLER: | DEL-TECH / CASSANDRA LIGHT | WELL CASING MATERIAL : | | PVC | |
| SIGNED: | <i>Cassandra Light</i> | WELL CASING DIA. : | | 4" / | 0.6528 |
| SAMPLE MEDIA: | GROUNDWATER | P.I.D. READING / ODOR: | | N/A NONE | |
| TOP OF CASING ELEVATION: | MSL | COLOR: | | LIGHT BROWN TO CLEAR | |
| DEPTH TO WATER: | (feet.100th's) 24.20 FEET | CALC. PURGE VOL.: | | 4.83 | GAL. |
| DEPTH OF WELL: | (feet.100th's) 31.60 FEET | TOTAL VOLUME PURGED: | | 15 | GAL. |
| STANDING WATER COLUMN: | 7.40 FEET | DEPTH OF PUMP: | | 31 | FEET |

FIELD PARAMETERS

| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
|------|------------------------------------|----------------------|--------------------|------------------------|------------|---------------|-----------------|-----------------|------------------------|--------------------|
| | 0 | 0 | N/A | 2.0 GPM | 7.26 | 2453 | 23.8 | 189 | N/A | 237 |
| | 4.83 | 5 | " | " | 7.30 | 2475 | 21.2 | 187 | " | 29 |
| | 9.66 | 10 | " | " | 7.30 | 2463 | 21.5 | 184 | " | 18 |
| | 14.49 | 15 | " | " | 7.21 | 2519 | 21.4 | 189 | " | 11 |
| | | | | | | | | | | |

| | |
|------------------------------|--|
| PURGE METHOD: | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. |
| SAMPLE METHOD: | DEDICATED WATERRA INERTIA PUMP & TUBING. |
| D. T. W. AFTER PURGE: | D. T. W. AT SAMPLE TIME: 24.19' |
| WELL INTEGRITY: | CAP & LOCK INSTALLED. |
| WELL LOCATION: | SEE SITE MAP. |
| REMARKS: | |
| WEATHER: | CLEAR SKIES / COOL. WIND: NW5 |
| QUALITY CONTROL: | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. |
| CONTAINMENT: | PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. |
| INSTRUMENTATION: | Y.S.I. 556 MULTIPROBE SYSTEM HACH TURBIDITY METER SOLINIST SLOPE METER |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| | | | | | |
|---------------------------------|----------------------------|-------|-------------------------------|-----------------------------|-----------|
| SAMPLE LOCATION / MW - | | 5 | DATE: | | 5/6/2009 |
| PROJECT NAME: | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | SEE CHAIN OF CUSTODY | |
| ADDRESS: | 14901 POPLAR AVENUE | | SAMPLE TIME: | 12:12 | |
| CITY, STATE: | PATTERSON, CA. | | SAMPLE CONTAINERS: | SEE CHAIN OF CUSTODY | |
| SITE CONTACT: | IGNACIO LOPEZ | | PRESERVATIVES: | SEE CHAIN OF CUSTODY | |
| CONSULTANT: | LEE & RO, INC. | | LAB. ANALYSIS BY: | BC LABS. | |
| PROJECT MANAGER: | IGNACIO LOPEZ | | MONUMENT: | STEEL POST | |
| SAMPLER: | DEL-TECH / CASSANDRA LIGHT | | WELL CASING MATERIAL : | PVC | |
| SIGNED: | <i>Cassandra Light</i> | | WELL CASING DIA. : | 4" / | 0.6528 |
| SAMPLE MEDIA: | GROUNDWATER | | P.I.D. READING / ODOR: | N/A | NONE |
| TOP OF CASING ELEVATION: | | MSL | COLOR: | CLEAR | |
| DEPTH TO WATER: | (feet.100th's) | 21.52 | FEET | CALC. PURGE VOL.: | 6.19 GAL. |
| DEPTH OF WELL: | (feet.100th's) | 31.00 | FEET | TOTAL VOLUME PURGED: | 19.5 GAL. |
| STANDING WATER COLUMN: | | 9.48 | FEET | DEPTH OF PUMP: | 30 FEET |

FIELD PARAMETERS

| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
|------|------------------------------------|----------------------|--------------------|------------------------|------------|---------------|-----------------|-----------------|------------------------|--------------------|
| | 0 | 0 | N/A | 2.0 GPM | 7.24 | 2481 | 22.6 | 180 | N/A | 53 |
| | 6.19 | 6.5 | " | " | 7.31 | 2477 | 20.1 | 181 | " | 86 |
| | 12.38 | 13 | " | " | 7.24 | 2484 | 19.5 | 183 | " | 62 |
| | 18.57 | 19.5 | " | " | 7.22 | 2487 | 20.0 | 187 | " | 45 |

| | |
|------------------------------|---|
| PURGE METHOD: | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. |
| SAMPLE METHOD: | DEDICATED WATERRA INERTIA PUMP & TUBING. |
| D. T. W. AFTER PURGE: | D. T. W. AT SAMPLE TIME: 21.61' |
| WELL INTEGRITY: | CAP & SEAL ARE SECURE. |
| WELL LOCATION: | SEE SITE MAP. |
| REMARKS: | NEEDS A NEW CAP. |
| WEATHER: | CLEAR SKIES / COOL. WIND: NW5 |
| QUALITY CONTROL: | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. |
| CONTAINMENT: | DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. |
| INSTRUMENTATION: | Y.S.I. 556 MULTIPROBE SYSTEM HACH TURBIDITY METER SOLINIST SLOPE METER |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| SAMPLE LOCATION / MW - | | 6 | DATE: | | 5/6/2009 | | | | | |
|---------------------------------|------------------------------------|---|--------------------|-------------------------------|--------------------------------------|----------------------|-----------------|-----------------|------------------------|--------------------|
| PROJECT NAME: | | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | | SEE CHAIN OF CUSTODY | | | | |
| ADDRESS: | | 14901 POPLAR AVENUE | | SAMPLE TIME: | | 10:50 | | | | |
| CITY, STATE: | | PATTERSON, CA. | | SAMPLE CONTAINERS: | | SEE CHAIN OF CUSTODY | | | | |
| SITE CONTACT: | | IGNACIO LOPEZ | | PRESERVATIVES: | | SEE CHAIN OF CUSTODY | | | | |
| CONSULTANT: | | LEE & RO, INC. | | LAB. ANALYSIS BY: | | BC LABS. | | | | |
| PROJECT MANAGER: | | IGNACIO LOPEZ | | MONUMENT: | | STEEL POST | | | | |
| SAMPLER: | | DEL-TECH / ASHLEY LIGHT | | WELL CASING MATERIAL : | | PVC | | | | |
| SIGNED: | | <i>Rashley Light</i> | | WELL CASING DIA. : | | 2" / 0.1632 | | | | |
| SAMPLE MEDIA: | | GROUNDWATER | | P.I.D. READING / ODOR: | | N/A NONE | | | | |
| TOP OF CASING ELEVATION: | | MSL | | COLOR: | | BROWN | | | | |
| DEPTH TO WATER: | | (feet.100th's) | 18.79 | FEET | CALC. PURGE VOL.: 1.57 GAL. | | | | | |
| DEPTH OF WELL: | | (feet.100th's) | 28.40 | FEET | TOTAL VOLUME PURGED: 4.5 GAL. | | | | | |
| STANDING WATER COLUMN: | | | 9.61 | FEET | DEPTH OF PUMP: 28 FEET | | | | | |
| FIELD PARAMETERS | | | | | | | | | | |
| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
| | 0 | 0 | N/A | 1.0 GPM | 7.88 | 1629 | 21.9 | 20 | N/A | 572 |
| | 1.57 | 1.5 | " | " | 7.68 | 1551 | 22.2 | 35 | " | 491 |
| | 3.14 | 3 | " | " | 7.63 | 1577 | 21.5 | 37 | " | 500 |
| | 4.71 | 4.5 | " | " | 7.60 | 1584 | 21.1 | 39 | " | 480 |
| PURGE METHOD: | | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. | | | | | | | | |
| SAMPLE METHOD: | | DEDICATED WATERRA INERTIA PUMP & TUBING. | | | | | | | | |
| D. T. W. AFTER PURGE: | | D. T. W. AT SAMPLE TIME: 19.60' | | | | | | | | |
| WELL INTEGRITY: | | CAP & SEAL ARE SECURE. | | | | | | | | |
| WELL LOCATION: | | SEE SITE MAP. | | | | | | | | |
| REMARKS: | | | | | | | | | | |
| WEATHER: | | CLEAR SKIES / COOL. | | WIND: NW5 | | | | | | |
| QUALITY CONTROL: | | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. | | | | | | | | |
| CONTAINMENT: | | DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. | | | | | | | | |
| INSTRUMENTATION: | | Y.S.I. 556 MULTIPROBE SYSTEM | | HACH TURBIDITY METER | | | | | | |
| | | SOLINIST SLOPE METER | | | | | | | | |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| SAMPLE LOCATION / MW - | | 7 | DATE: | | 5/6/2009 | | | | | |
|---------------------------------|------------------------------------|---|--------------------|-------------------------------|------------------------------------|----------------------|-----------------|-----------------|------------------------|--------------------|
| PROJECT NAME: | | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | | SEE CHAIN OF CUSTODY | | | | |
| ADDRESS: | | 14901 POPLAR AVENUE | | SAMPLE TIME: | | 12:10 | | | | |
| CITY, STATE: | | PATTERSON, CA. | | SAMPLE CONTAINERS: | | SEE CHAIN OF CUSTODY | | | | |
| SITE CONTACT: | | IGNACIO LOPEZ | | PRESERVATIVES: | | SEE CHAIN OF CUSTODY | | | | |
| CONSULTANT: | | LEE & RO, INC. | | LAB. ANALYSIS BY: | | BC LABS. | | | | |
| PROJECT MANAGER: | | IGNACIO LOPEZ | | MONUMENT: | | STEEL POST | | | | |
| SAMPLER: | | DEL-TECH / ASHLEY LIGHT | | WELL CASING MATERIAL : | | PVC | | | | |
| SIGNED: | | <i>Ashley Light</i> | | WELL CASING DIA. : | | 2" / 0.1632 | | | | |
| SAMPLE MEDIA: | | GROUNDWATER | | P.I.D. READING / ODOR: | | N/A NONE | | | | |
| TOP OF CASING ELEVATION: | | MSL | | COLOR: | | LIGHT BROWN | | | | |
| DEPTH TO WATER: | | (feet.100th's) | 23.22 | FEET | CALC. PURGE VOL.: 1.07 GAL. | | | | | |
| DEPTH OF WELL: | | (feet.100th's) | 29.80 | FEET | TOTAL VOLUME PURGED: 3 GAL. | | | | | |
| STANDING WATER COLUMN: | | | 6.58 | FEET | DEPTH OF PUMP: 29 FEET | | | | | |
| FIELD PARAMETERS | | | | | | | | | | |
| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
| | 0 | 0 | N/A | 0.5 GPM | 7.77 | 2005 | 21.9 | 26 | N/A | 70 |
| | 1.07 | 1 | " | " | 7.64 | 2077 | 21.9 | 37 | " | 44 |
| | 2.15 | 2 | " | " | 7.62 | 2070 | 21.8 | 28 | " | 22 |
| | 3.22 | 3 | " | " | 7.60 | 2074 | 21.7 | 36 | " | 17 |
| PURGE METHOD: | | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. | | | | | | | | |
| SAMPLE METHOD: | | DEDICATED WATERRA INERTIA PUMP & TUBING. | | | | | | | | |
| D. T. W. AFTER PURGE: | | D. T. W. AT SAMPLE TIME: 24.86' | | | | | | | | |
| WELL INTEGRITY: | | CAP & SEAL ARE SECURE. | | | | | | | | |
| WELL LOCATION: | | SEE SITE MAP. | | | | | | | | |
| REMARKS: | | | | | | | | | | |
| WEATHER: | | CLEAR SKIES / COOL. | | WIND: NW5 | | | | | | |
| QUALITY CONTROL: | | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. | | | | | | | | |
| CONTAINMENT: | | DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. | | | | | | | | |
| INSTRUMENTATION: | | Y.S.I. 556 MULTIPROBE SYSTEM | | HACH TURBIDITY METER | | | | | | |
| | | SOLINIST SLOPE METER | | | | | | | | |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| | | | | | |
|---------------------------------|-------------------------|-------|-------------------------------|-----------------------------|-----------|
| SAMPLE LOCATION / MW - | | 8 | DATE: | | 5/6/2009 |
| PROJECT NAME: | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | SEE CHAIN OF CUSTODY | |
| ADDRESS: | 14901 POPLAR AVENUE | | SAMPLE TIME: | 9:53 | |
| CITY, STATE: | PATTERSON, CA. | | SAMPLE CONTAINERS: | SEE CHAIN OF CUSTODY | |
| SITE CONTACT: | IGNACIO LOPEZ | | PRESERVATIVES: | SEE CHAIN OF CUSTODY | |
| CONSULTANT: | LEE & RO, INC. | | LAB. ANALYSIS BY: | BC LABS. | |
| PROJECT MANAGER: | IGNACIO LOPEZ | | MONUMENT: | STEEL POST | |
| SAMPLER: | DEL-TECH / ASHLEY LIGHT | | WELL CASING MATERIAL : | PVC | |
| SIGNED: | <i>Ashley Light</i> | | WELL CASING DIA. : | 2" / | 0.1632 |
| SAMPLE MEDIA: | GROUNDWATER | | P.I.D. READING / ODOR: | N/A | NONE |
| TOP OF CASING ELEVATION: | | MSL | COLOR: | LIGHT BROWN TO CLEAR | |
| DEPTH TO WATER: | (feet.100th's) | 23.47 | FEET | CALC. PURGE VOL.: | 1.17 GAL. |
| DEPTH OF WELL: | (feet.100th's) | 30.61 | FEET | TOTAL VOLUME PURGED: | 5 GAL. |
| STANDING WATER COLUMN: | | 7.14 | FEET | DEPTH OF PUMP: | 30 FEET |

FIELD PARAMETERS

| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
|------|------------------------------------|----------------------|--------------------|------------------------|------------|---------------|-----------------|-----------------|------------------------|--------------------|
| | 0 | 0 | N/A | 0.5 GPM | 6.10 | 1807 | 22.9 | 68 | N/A | 162 |
| | 1.17 | 1.5 | " | " | 6.41 | 1751 | 21.3 | 53 | " | 70 |
| | 2.33 | 3 | " | " | 6.49 | 1766 | 20.9 | 54 | " | 34 |
| | 3.50 | 4.5 | " | " | 6.62 | 1791 | 20.7 | 52 | " | 27 |

| | |
|------------------------------|--|
| PURGE METHOD: | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. |
| SAMPLE METHOD: | DEDICATED WATERRA INERTIA PUMP & TUBING. |
| D. T. W. AFTER PURGE: | D. T. W. AT SAMPLE TIME: 23.67' |
| WELL INTEGRITY: | CAP & SEAL ARE SECURE. LOCK INSTALLED. |
| WELL LOCATION: | SEE SITE MAP. |
| REMARKS: | |
| WEATHER: | CLEAR SKIES / COOL. WIND: NWS |
| QUALITY CONTROL: | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. |
| CONTAINMENT: | PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. |
| INSTRUMENTATION: | Y.S.I. 556 MULTIPROBE SYSTEM HACH TURBIDITY METER SOLINIST SLOPE METER |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

SAMPLE LOCATION / MW - 10 **DATE:** 5/6/2009

| | | | |
|----------------------|---------------------|----------------------------|----------------------|
| PROJECT NAME: | PATTERSON W.Q.C.P. | ANALYSIS PERFORMED: | SEE CHAIN OF CUSTODY |
| ADDRESS: | 14901 POPLAR AVENUE | SAMPLE TIME: | 10:03 |
| CITY, STATE: | PATTERSON, CA. | SAMPLE CONTAINERS: | SEE CHAIN OF CUSTODY |
| SITE CONTACT: | IGNACIO LOPEZ | PRESERVATIVES: | SEE CHAIN OF CUSTODY |
| CONSULTANT: | LEE & RO, INC. | LAB. ANALYSIS BY: | BC LABS. |

| | | | |
|---------------------------------|----------------------------|-------------------------------|----------------------|
| PROJECT MANAGER: | IGNACIO LOPEZ | MONUMENT: | FLUSH |
| SAMPLER: | DEL-TECH / CASSANDRA LIGHT | WELL CASING MATERIAL : | PVC |
| SIGNED: | <i>Cassandra Light</i> | WELL CASING DIA. : | 2" / 0.1632 |
| SAMPLE MEDIA: | GROUNDWATER | P.I.D. READING / ODOR: | N/A NONE |
| TOP OF CASING ELEVATION: | MSL | COLOR: | BROWN TO LIGHT BROWN |
| DEPTH TO WATER: | (feet.100th's) 20.40 FEET | CALC. PURGE VOL.: | 1.57 GAL. |
| DEPTH OF WELL: | (feet.100th's) 30.00 FEET | TOTAL VOLUME PURGED: | 5 GAL. |
| STANDING WATER COLUMN: | 9.60 FEET | DEPTH OF PUMP: | 29 FEET |

FIELD PARAMETERS

| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
|------|------------------------------------|----------------------|--------------------|------------------------|------------|---------------|-----------------|-----------------|------------------------|--------------------|
| | 0 | 0 | N/A | 0.5 GPM | 7.17 | 2075 | 21.0 | 201 | N/A | 1000+ |
| | 1.57 | 1 | DRY | " | 7.41 | 2416 | 19.8 | 202 | " | 382 |
| | 3.13 | 2 | DRY | " | 7.46 | 2433 | 19.4 | 201 | " | 162 |
| | 4.70 | 3 | DRY | " | 7.42 | 2425 | 19.5 | 202 | " | 125 |

PURGE METHOD: CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP.
SAMPLE METHOD: DEDICATED WATERRA INERTIA PUMP & TUBING.
D. T. W. AFTER PURGE: D. T. W. AT SAMPLE TIME: 21.65'
WELL INTEGRITY: CAP & SEAL ARE SECURE. LOCK INSTALLED.
WELL LOCATION: SEE SITE MAP.
REMARKS:

WEATHER: CLEAR SKIES / COOL. **WIND:** NW5
QUALITY CONTROL: ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.
 DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.
CONTAINMENT: PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT.

INSTRUMENTATION: Y.S.I. 556 MULTIPROBE SYSTEM HACH TURBIDITY METER
 SOLINIST SLOPE METER



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| SAMPLE LOCATION / MW - | | 11 | | DATE: | | 5/6/2009 | | | | | |
|---------------------------------|------------------------------------|---|--------------------|-------------------------------|------------|----------------------|-----------------|-----------------|------------------------|--------------------|--|
| PROJECT NAME: | | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | | SEE CHAIN OF CUSTODY | | | | | |
| ADDRESS: | | 14901 POPLAR AVENUE | | SAMPLE TIME: | | 13:00 | | | | | |
| CITY, STATE: | | PATTERSON, CA. | | SAMPLE CONTAINERS: | | SEE CHAIN OF CUSTODY | | | | | |
| SITE CONTACT: | | IGNACIO LOPEZ | | PRESERVATIVES: | | SEE CHAIN OF CUSTODY | | | | | |
| CONSULTANT: | | LEE & RO, INC. | | LAB. ANALYSIS BY: | | BC LABS. | | | | | |
| PROJECT MANAGER: | | IGNACIO LOPEZ | | MONUMENT: | | STEEL POST | | | | | |
| SAMPLER: | | DEL-TECH / ASHLEY LIGHT | | WELL CASING MATERIAL : | | PVC | | | | | |
| SIGNED: | | <i>Ashley Light</i> | | WELL CASING DIA. : | | 4" / 0.6528 | | | | | |
| SAMPLE MEDIA: | | GROUNDWATER | | P.I.D. READING / ODOR: | | N/A NONE | | | | | |
| TOP OF CASING ELEVATION: | | MSL | | COLOR: | | LIGHT BROWN TO CLEAR | | | | | |
| DEPTH TO WATER: | | (feet.100th's) 20.45 FEET | | CALC. PURGE VOL.: | | 15.21 GAL. | | | | | |
| DEPTH OF WELL: | | (feet.100th's) 43.75 FEET | | TOTAL VOLUME PURGED: | | 45 GAL. | | | | | |
| STANDING WATER COLUMN: | | 23.30 FEET | | DEPTH OF PUMP: | | 43 FEET | | | | | |
| FIELD PARAMETERS | | | | | | | | | | | |
| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) | |
| | 0 | 0 | N/A | 2.0 GPM | 7.99 | 1930 | 23.7 | 17 | N/A | 65 | |
| | 15.21 | 15 | " | " | 7.67 | 1922 | 22.2 | 27 | " | 49 | |
| | 30.42 | 30 | " | " | 7.57 | 1939 | 21.0 | 32 | " | 20 | |
| | 45.63 | 45 | " | " | 7.72 | 1936 | 21.0 | 30 | " | 11 | |
| PURGE METHOD: | | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. | | | | | | | | | |
| SAMPLE METHOD: | | DEDICATED WATERRA INERTIA PUMP & TUBING. | | | | | | | | | |
| D. T. W. AFTER PURGE: | | D. T. W. AT SAMPLE TIME: 20.50' | | | | | | | | | |
| WELL INTEGRITY: | | CAP & SEAL ARE SECURE. LOCK INSTALLED. | | | | | | | | | |
| WELL LOCATION: | | SEE SITE MAP. | | | | | | | | | |
| REMARKS: | | | | | | | | | | | |
| WEATHER: | | CLEAR SKIES / COOL. | | WIND: NW5 | | | | | | | |
| QUALITY CONTROL: | | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. | | | | | | | | | |
| CONTAINMENT: | | DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. | | | | | | | | | |
| | | PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. | | | | | | | | | |
| INSTRUMENTATION: | | Y.S.I. 556 MULTIPROBE SYSTEM | | HACH TURBIDITY METER | | | | | | | |
| | | SOLINIST SLOPE METER | | | | | | | | | |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| | | | | | |
|---------------------------------|-------------------------|-------|-------------------------------|-----------------------------|------------|
| SAMPLE LOCATION / MW - | | 12 | DATE: | | 5/6/2009 |
| PROJECT NAME: | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | SEE CHAIN OF CUSTODY | |
| ADDRESS: | 14901 POPLAR AVENUE | | SAMPLE TIME: | 11:42 | |
| CITY, STATE: | PATTERSON, CA. | | SAMPLE CONTAINERS: | SEE CHAIN OF CUSTODY | |
| SITE CONTACT: | IGNACIO LOPEZ | | PRESERVATIVES: | SEE CHAIN OF CUSTODY | |
| CONSULTANT: | LEE & RO, INC. | | LAB. ANALYSIS BY: | BC LABS. | |
| PROJECT MANAGER: | IGNACIO LOPEZ | | MONUMENT: | FLUSH | |
| SAMPLER: | DEL-TECH / ASHLEY LIGHT | | WELL CASING MATERIAL : | PVC | |
| SIGNED: | <i>Ashley Light</i> | | WELL CASING DIA. : | 4" / | 0.6528 |
| SAMPLE MEDIA: | GROUNDWATER | | P.I.D. READING / ODOR: | N/A NONE | |
| TOP OF CASING ELEVATION: | MSL | | COLOR: | CLEAR | |
| DEPTH TO WATER: | (feet.100th's) | 16.10 | FEET | CALC. PURGE VOL.: | 16.25 GAL. |
| DEPTH OF WELL: | (feet.100th's) | 41.00 | FEET | TOTAL VOLUME PURGED: | 48 GAL. |
| STANDING WATER COLUMN: | | 24.90 | FEET | DEPTH OF PUMP: | 40 FEET |

FIELD PARAMETERS

| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
|------|------------------------------------|----------------------|--------------------|------------------------|------------|---------------|-----------------|-----------------|------------------------|--------------------|
| | 0 | 0 | N/A | 2.0 GPM | 7.78 | 1980 | 23.1 | 15 | N/A | 37 |
| | 16.25 | 16 | " | " | 7.66 | 2330 | 21.7 | 38 | " | 11 |
| | 32.51 | 32 | " | " | 7.74 | 2368 | 21.2 | 42 | " | 9 |
| | 48.76 | 48 | " | " | 7.68 | 2354 | 21.0 | 40 | " | 7 |

| | |
|------------------------------|---|
| PURGE METHOD: | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. |
| SAMPLE METHOD: | DEDICATED WATERRA INERTIA PUMP & TUBING. |
| D. T. W. AFTER PURGE: | D. T. W. AT SAMPLE TIME: 16.10' |
| WELL INTEGRITY: | CAP & SEAL ARE SECURE. LOCK INSTALLED. |
| WELL LOCATION: | SEE SITE MAP. |
| REMARKS: | |
| WEATHER: | CLEAR SKIES / COOL. WIND: NW5 |
| QUALITY CONTROL: | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. |
| CONTAINMENT: | DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. |
| INSTRUMENTATION: | Y.S.I. 556 MULTIPROBE SYSTEM HACH TURBIDITY METER SOLINIST SLOPE METER |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| SAMPLE LOCATION / MW - | | 13 | DATE: | | 5/6/2009 | | | | | |
|---------------------------------|------------------------------------|--|--------------------|---|---------------------------------------|----------------------|-----------------|-----------------|------------------------|--------------------|
| PROJECT NAME: | | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: SEE CHAIN OF CUSTODY | | | | | | |
| ADDRESS: | | 14901 POPLAR AVENUE | | SAMPLE TIME: 12:56 | | | | | | |
| CITY, STATE: | | PATTERSON, CA. | | SAMPLE CONTAINERS: SEE CHAIN OF CUSTODY | | | | | | |
| SITE CONTACT: | | IGNACIO LOPEZ | | PRESERVATIVES: SEE CHAIN OF CUSTODY | | | | | | |
| CONSULTANT: | | LEE & RO, INC. | | LAB. ANALYSIS BY: BC LABS. | | | | | | |
| PROJECT MANAGER: | | IGNACIO LOPEZ | | MONUMENT: STEEL POST | | | | | | |
| SAMPLER: | | DEL-TECH / CASSANDRA LIGHT | | WELL CASING MATERIAL : PVC | | | | | | |
| SIGNED: | | <i>Cassandra Light</i> | | WELL CASING DIA. : 4" / 0.6528 | | | | | | |
| SAMPLE MEDIA: | | GROUNDWATER | | P.I.D. READING / ODOR: N/A NONE | | | | | | |
| TOP OF CASING ELEVATION: | | MSL | | COLOR: BROWN TO CLEAR | | | | | | |
| DEPTH TO WATER: | | (feet.100th's) | 20.20 | FEET | CALC. PURGE VOL.: 16.03 GAL. | | | | | |
| DEPTH OF WELL: | | (feet.100th's) | 44.75 | FEET | TOTAL VOLUME PURGED: 49.5 GAL. | | | | | |
| STANDING WATER COLUMN: | | | 24.55 | FEET | DEPTH OF PUMP: 44 FEET | | | | | |
| FIELD PARAMETERS | | | | | | | | | | |
| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
| | 0 | 0 | N/A | 2.0 GPM | 7.35 | 2560 | 22.1 | 179 | N/A | 1000 |
| | 16.03 | 16.5 | " | " | 7.61 | 2561 | 20.4 | 177 | " | 102 |
| | 32.05 | 33 | " | " | 7.60 | 2598 | 20.2 | 184 | " | 27 |
| | 48.08 | 49.5 | " | " | 7.60 | 2609 | 19.6 | 184 | " | 13 |
| PURGE METHOD: | | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. | | | | | | | | |
| SAMPLE METHOD: | | DEDICATED WATERRA INERTIA PUMP & TUBING. | | | | | | | | |
| D. T. W. AFTER PURGE: | | D. T. W. AT SAMPLE TIME: 20.25' | | | | | | | | |
| WELL INTEGRITY: | | CAP & SEAL ARE SECURE. LOCK INSTALLED. | | | | | | | | |
| WELL LOCATION: | | SEE SITE MAP. | | | | | | | | |
| REMARKS: | | | | | | | | | | |
| WEATHER: | | CLEAR SKIES / COOL. | | | WIND: NW5 | | | | | |
| QUALITY CONTROL: | | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. | | | | | | | | |
| CONTAINMENT: | | PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT. | | | | | | | | |
| INSTRUMENTATION: | | Y.S.I. 556 MULTIPROBE SYSTEM | | | | HACH TURBIDITY METER | | | | |
| | | SOLINIST SLOPE METER | | | | | | | | |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| SAMPLE LOCATION / MW - | | 14 | DATE: | | 5/6/2009 | | | | | |
|---------------------------------|------------------------------------|---|--------------------|-------------------------------|---------------------------------------|----------------------|-----------------|-----------------|------------------------|--------------------|
| PROJECT NAME: | | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | | SEE CHAIN OF CUSTODY | | | | |
| ADDRESS: | | 14901 POPLAR AVENUE | | SAMPLE TIME: | | 14:31 | | | | |
| CITY, STATE: | | PATTERSON, CA. | | SAMPLE CONTAINERS: | | SEE CHAIN OF CUSTODY | | | | |
| SITE CONTACT: | | IGNACIO LOPEZ | | PRESERVATIVES: | | SEE CHAIN OF CUSTODY | | | | |
| CONSULTANT: | | LEE & RO, INC. | | LAB. ANALYSIS BY: | | BC LABS. | | | | |
| PROJECT MANAGER: | | IGNACIO LOPEZ | | MONUMENT: | | FLUSH | | | | |
| SAMPLER: | | DEL-TECH / CASSANDRA LIGHT | | WELL CASING MATERIAL : | | PVC | | | | |
| SIGNED: | | <i>Cassandra Light</i> | | WELL CASING DIA. : | | 4" / 0.6528 | | | | |
| SAMPLE MEDIA: | | GROUNDWATER | | P.I.D. READING / ODOR: | | N/A NONE | | | | |
| TOP OF CASING ELEVATION: | | MSL | | COLOR: | | BROWN TO CLEAR | | | | |
| DEPTH TO WATER: | | (feet.100th's) | 21.61 | FEET | CALC. PURGE VOL.: 12.89 GAL. | | | | | |
| DEPTH OF WELL: | | (feet.100th's) | 41.35 | FEET | TOTAL VOLUME PURGED: 39.0 GAL. | | | | | |
| STANDING WATER COLUMN: | | | 19.74 | FEET | DEPTH OF PUMP: 41 FEET | | | | | |
| FIELD PARAMETERS | | | | | | | | | | |
| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
| | 0 | 0 | N/A | 2.0 GPM | 7.84 | 2522 | 23.3 | 179 | N/A | 1000+ |
| | 12.89 | 13 | " | " | 7.83 | 2562 | 21.6 | 175 | " | 36 |
| | 25.77 | 26 | " | " | 7.81 | 2574 | 21.2 | 170 | " | 12 |
| | 38.66 | 39 | " | " | 7.79 | 2582 | 21.3 | 168 | " | 11 |
| PURGE METHOD: | | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. | | | | | | | | |
| SAMPLE METHOD: | | DEDICATED WATERRA INERTIA PUMP & TUBING. | | | | | | | | |
| D. T. W. AFTER PURGE: | | D. T. W. AT SAMPLE TIME: 21.65' | | | | | | | | |
| WELL INTEGRITY: | | CAP & SEAL ARE SECURE. LOCK INSTALLED. | | | | | | | | |
| WELL LOCATION: | | SEE SITE MAP. | | | | | | | | |
| REMARKS: | | | | | | | | | | |
| WEATHER: | | CLEAR SKIES / COOL. | | WIND: NW5 | | | | | | |
| QUALITY CONTROL: | | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. | | | | | | | | |
| CONTAINMENT: | | DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. | | | | | | | | |
| INSTRUMENTATION: | | Y.S.I. 556 MULTIPROBE SYSTEM | | HACH TURBIDITY METER | | | | | | |
| | | SOLINIST SLOPE METER | | | | | | | | |



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

SAMPLE LOCATION / MW - 15 **DATE:** 5/6/2009

| | | | |
|----------------------|---------------------|----------------------------|----------------------|
| PROJECT NAME: | PATTERSON W.Q.C.P. | ANALYSIS PERFORMED: | SEE CHAIN OF CUSTODY |
| ADDRESS: | 14901 POPLAR AVENUE | SAMPLE TIME: | 14:17 |
| CITY, STATE: | PATTERSON, CA. | SAMPLE CONTAINERS: | SEE CHAIN OF CUSTODY |
| SITE CONTACT: | IGNACIO LOPEZ | PRESERVATIVES: | SEE CHAIN OF CUSTODY |
| CONSULTANT: | LEE & RO, INC. | LAB. ANALYSIS BY: | BC LABS. |

| | | | |
|---------------------------------|---------------------------|-------------------------------|-------------|
| PROJECT MANAGER: | IGNACIO LOPEZ | MONUMENT: | FLUSH |
| SAMPLER: | DEL-TECH / ASHLEY LIGHT | WELL CASING MATERIAL : | PVC |
| SIGNED: | <i>Ashley Light</i> | WELL CASING DIA. : | 4" / 0.6528 |
| SAMPLE MEDIA: | GROUNDWATER | P.I.D. READING / ODOR: | N/A NONE |
| TOP OF CASING ELEVATION: | | COLOR: | LIGHT BROWN |
| DEPTH TO WATER: | (feet.100th's) 24.80 FEET | CALC. PURGE VOL.: | 10.67 GAL. |
| DEPTH OF WELL: | (feet.100th's) 41.15 FEET | TOTAL VOLUME PURGED: | 36 GAL. |
| STANDING WATER COLUMN: | 16.35 FEET | DEPTH OF PUMP: | 41 FEET |

FIELD PARAMETERS

| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
|------|------------------------------------|----------------------|--------------------|------------------------|------------|---------------|-----------------|-----------------|------------------------|--------------------|
| | 0 | 0 | N/A | 2.0 GPM | 8.24 | 2450 | 23.5 | 6 | N/A | 36 |
| | 10.67 | 12 | " | " | 8.43 | 2224 | 20.9 | -3 | " | 18 |
| | 21.35 | 24 | DRY | " | 8.49 | 2247 | 22.1 | -9 | " | 22 |
| | 32.02 | 36 | DRY | " | 8.47 | 2245 | 22.0 | -14 | " | 25 |
| | | | | | | | | | | |

PURGE METHOD: CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP.
SAMPLE METHOD: DEDICATED WATERRA INERTIA PUMP & TUBING.
D. T. W. AFTER PURGE: **D. T. W. AT SAMPLE TIME:** 33.42'
WELL INTEGRITY: CAP & SEAL ARE SECURE. LOCK INSTALLED.
WELL LOCATION: SEE SITE MAP.
REMARKS: SLOW RECHARGE.

WEATHER: CLEAR SKIES / COOL. **WIND:** NW5
QUALITY CONTROL: ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.
 DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.
CONTAINMENT: PURGE WATER WAS DISCHARGED INTO THE ADJACENT HOLDING POND ON SIGHT.
INSTRUMENTATION: Y.S.I. 556 MULTIPROBE SYSTEM HACH TURBIDITY METER
 SOLINIST SLOPE METER



DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2009

| SAMPLE LOCATION / MW - | | 16 | DATE: | | 5/6/2009 | | | | | |
|---------------------------------|------------------------------------|---|--------------------|-------------------------------|-------------------------------------|----------------------|-----------------|-----------------|------------------------|--------------------|
| PROJECT NAME: | | PATTERSON W.Q.C.P. | | ANALYSIS PERFORMED: | | SEE CHAIN OF CUSTODY | | | | |
| ADDRESS: | | 14901 POPLAR AVENUE | | SAMPLE TIME: | | 10:30 | | | | |
| CITY, STATE: | | PATTERSON, CA. | | SAMPLE CONTAINERS: | | SEE CHAIN OF CUSTODY | | | | |
| SITE CONTACT: | | IGNACIO LOPEZ | | PRESERVATIVES: | | SEE CHAIN OF CUSTODY | | | | |
| CONSULTANT: | | LEE & RO, INC. | | LAB. ANALYSIS BY: | | BC LABS. | | | | |
| PROJECT MANAGER: | | IGNACIO LOPEZ | | MONUMENT: | | STEEL POST | | | | |
| SAMPLER: | | DEL-TECH / ASHLEY LIGHT | | WELL CASING MATERIAL : | | PVC | | | | |
| SIGNED: | | <i>Ashley Light</i> | | WELL CASING DIA. : | | 4" / 0.6528 | | | | |
| SAMPLE MEDIA: | | GROUNDWATER | | P.I.D. READING / ODOR: | | N/A NONE | | | | |
| TOP OF CASING ELEVATION: | | MSL | | COLOR: | | CLEAR | | | | |
| DEPTH TO WATER: | | (feet.100th's) | 20.27 | FEET | CALC. PURGE VOL.: 15.45 GAL. | | | | | |
| DEPTH OF WELL: | | (feet.100th's) | 43.94 | FEET | TOTAL VOLUME PURGED: 48 GAL. | | | | | |
| STANDING WATER COLUMN: | | | 23.67 | FEET | DEPTH OF PUMP: 43 FEET | | | | | |
| FIELD PARAMETERS | | | | | | | | | | |
| TIME | CUMULATIVE CASING VOLUME PER PURGE | ACTUAL VOLUME PURGED | DRAW DOWN (D.T.W.) | PUMPING RATE (GPM/LPM) | pH (units) | E. C. (uS/cm) | TEMP. (Celsius) | O.R.P. (Mvolts) | DISSOLVED OXYGEN (PPM) | TURBIDITY (N.T.U.) |
| | 0 | 0 | N/A | 1.0 GPM | 7.34 | 2062 | 22.2 | 20 | N/A | 29 |
| | 15.45 | 16 | " | " | 7.33 | 2065 | 21.6 | 29 | " | 24 |
| | 30.90 | 32 | " | " | 7.33 | 2083 | 21.3 | 28 | " | 19 |
| | 46.36 | 48 | " | " | 7.37 | 2088 | 21.2 | 26 | " | 14 |
| PURGE METHOD: | | CENTRIFUGAL PUMP VIA DEDICATED WATERRA INERTIA PUMP. | | | | | | | | |
| SAMPLE METHOD: | | DEDICATED WATERRA INERTIA PUMP & TUBING. | | | | | | | | |
| D. T. W. AFTER PURGE: | | D. T. W. AT SAMPLE TIME: 20.29' | | | | | | | | |
| WELL INTEGRITY: | | CAP & SEAL ARE SECURE. LOCK INSTALLED. | | | | | | | | |
| WELL LOCATION: | | SEE SITE MAP. | | | | | | | | |
| REMARKS: | | | | | | | | | | |
| WEATHER: | | CLEAR SKIES / COOL. | | | WIND: | | NW5 | | | |
| QUALITY CONTROL: | | ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. | | | | | | | | |
| CONTAINMENT: | | DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES. | | | | | | | | |
| INSTRUMENTATION: | | Y.S.I. 556 MULTIPROBE SYSTEM | | | HACH TURBIDITY METER | | | | | |
| | | SOLINIST SLOPE METER | | | | | | | | |

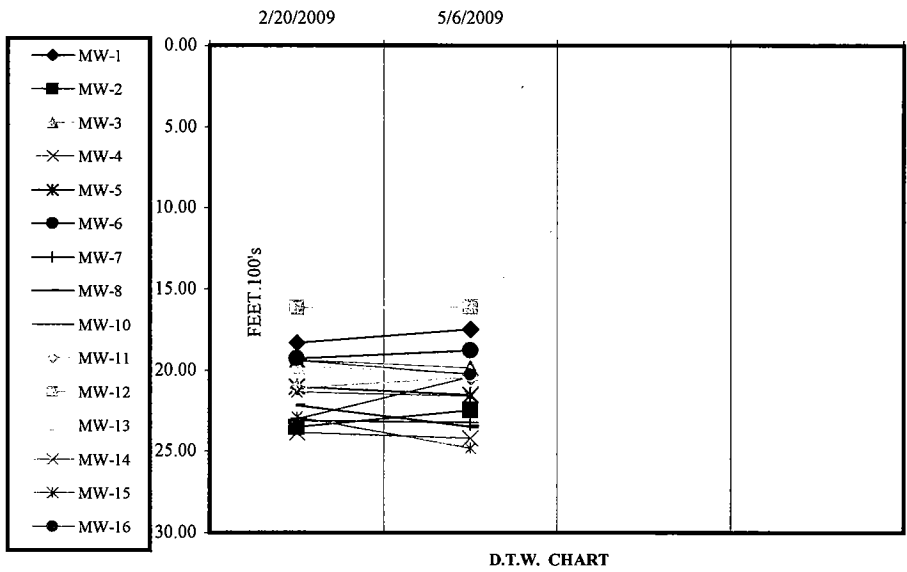


DEL-TECH GEOTECHNICAL SUPPORT, INC.
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PATTERSON W.Q.C.P.
14901 POPLAR AVE. - PATTERSON, CA.

MONITORING WELL FIELD SUMMARY LOG 2009
DEPTH TO WATER MEASUREMENTS

| | QTR. 1 | QTR. 2 | QTR. 3 | QTR. 4 | TOTAL |
|-----------------|-----------|----------|--------|--------|--------------|
| DATE | 2/20/2009 | 5/6/2009 | | | DEPTH |
| LOCATION | | | | | |
| MW-1 | 18.30 | 17.47 | | | 27.55' |
| MW-2 | 23.50 | 22.48 | | | 31.34' |
| MW-3 | 19.37 | 19.88 | | | 31.00' |
| MW-4 | 23.83 | 24.20 | | | 31.60' |
| MW-5 | 21.01 | 21.52 | | | 31.00' |
| MW-6 | 19.29 | 18.79 | | | 28.40' |
| MW-7 | 23.10 | 23.22 | | | 29.80' |
| MW-8 | 22.17 | 23.47 | | | 30.61' |
| MW-10 | 23.02 | 20.40 | | | 30.00' |
| MW-11 | 21.10 | 20.45 | | | 43.75' |
| MW-12 | 16.17 | 16.10 | | | 41.00' |
| MW-13 | 19.75 | 20.20 | | | 44.70' |
| MW-14 | 21.35 | 21.61 | | | 41.35' |
| MW-15 | 22.90 | 24.80 | | | 41.15' |
| MW-16 | 19.41 | 20.27 | | | 43.94' |



NOTE:
 ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMANENT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.