3rd QUARTERLY MONITORING REPORT
August 2007 SAMPLING

City of Patterson
Water Quality Control Facility
Groundwater Monitoring Program

Conducted in Accordance with
Waste Discharge Requirements Order No. 5-00-146

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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. 5-00-146 for the Water Quality Control Facility (WQCF) in the City of Patterson, Stanislaus County, California. The wells were installed as part of the groundwater monitoring program developed to determine if groundwater has been, or has the potential to be, adversely impacted by wastewater treatment and disposal operations. The monitoring program includes an assessment of background conditions and a determination if there has been any impact from wastewater disposal. The groundwater monitoring program consists of the quarterly sampling of nine monitoring wells.

Monitoring wells MW-1 to MW-5 were constructed in March 2001 and have been sampled on a quarterly basis since April 2001. MW-1 and MW-2 are background upgradient wells. MW-3, MW-4, and MW-5 are downgradent wells located east of existing percolation pond 13, AIPS primary pond, and percolation pond 7, respectfully.

In conjunction with the 1.25 mgd expansion, four monitoring wells MW-6 to MW-10 were constructed between the months of July and August 2004. MW-6 is a background upgradient well. MW-7, MW-8, and MW-10 are downgradient wells located next to ponds 18, 17, and 12, respectfully. There is no well MW-9. These wells have been sampled on a quarterly basis since being constructed in the summer of 2004.

As of the July 2006 sampling round, a Supplemental Groundwater Monitoring and Reporting Program (Supplemental Program) was issued. To date, all groundwater samples are tested in accordance with this Supplemental Program.

This report presents the results of the quarterly samples collected on August 28, 2007. Included in this report will be groundwater elevation summaries and contour maps.

SECTION 2 GROUNDWATER MONITORING WELLS

Figure 1 shows the monitoring well locations.

All monitoring wells have 15 feet of screen with total depths ranging from 28 to 31.5 feet below ground surface (bgs). A summary of well characteristics is provided in **Table 1**.

SECTION 3 GROUNDWATER ELEVATIONS

Groundwater elevations measured in this sampling round are listed in **Table 2** and are contoured on the map in **Figure 1**.

SECTION 4 MONITORING WELL SAMPLING

The wells were purged and sampled on August 28, 2007 in accordance with the procedures specified in the workplan. The August sampling is considered the third quarter sampling round. Sampling was conducted by Ken Moffitt of FGL Environmental. Purge logs are presented in **Appendix A**.

SECTION 5 GROUNDWATER QUALITY RESULTS

In accordance with the Supplemental Program, the following parameters were tested:

- Pathogens
  - Total Coliform Organisms
  - Fecal Coliform
- Total Organic Carbon
- Nitrogen Compounds
  - Nitrate (as NO_3-N)
  - Ammonia (as NH_3-N)
  - Total Kjeldahl Nitrogen
- General Minerals
- Sodium Adsorption Ration (SAR)
- Dissolved Metals

The samples were analyzed by FGL Environmental, a state-certified environmental laboratory. The analysis for Ammonia – N and Total Kjeldahl Nitrogen (TKN) was performed by North Coast Laboratories.

Primary contaminants of concern associated with wastewater treatment plant effluent are coliform and nitrogen compounds.

Total Coliform data that has been collected since the October 2004 sampling period are included in **Table 3.1**. In the August 2007 sampling round, Total Coliform was present in wells MW-6, MW-7, and MW-10. Well MW-6 has had significant hits of Total Coliform, with Total Coliform detected in nine of the eleven sampling events since sampling began in October 2004 as shown in **Figure 3.1**. Fecal Coliform was detected in this sampling round. MW-6 is an upgradient background well. The Coliform presence could be the result of an existing neighboring dairy farm west of the MW-6.

Well MW-7 is located in the northern tip of Percolation Pond 18. Well MW-10 is located between Percolation Pond 12 and the south activated sludge system. Since sampling began in 2004, there have been a few Total Coliform hits found in samples taken from wells MW-7 and MW-10, all well under a most probably number (MPN) of 15. A MPN of 23 for Total Coliform was found in MW-7 when it was first sampled in October 2004. No Fecal Coliform was detected in the August 28, 2007samples taken from both MW-7 and MW-10

Nitrate has been detected in groundwater samples at concentrations of up to 14.2 mg/L nitrate as NO_3-N. The nitrate results are included in **Table 3.2** and graphically shown in **Figure 3.2**.

Additional groundwater analytical results are provided in **Table 3, Table 4,** and **Table 5**. Total Coliform organisms were detected in August 2007 in monitoring wells MW-6, MW-7, and MW-10. Total dissolved solids (TDS) results are included in **Table 5.1** and **Figure 5.1**. Electric Conductivity (EC) results are included in **Table 5.2** and **Figure 5.2**. Laboratory reports for the August 2007 samples are presented in **Appendix B**.

Table 1

Well Construction Summary

	Well Depth (ft)	Completion Type	Slab Surface Elev (ft msl)	Top of Casing Elev (ft msl)	Water Elev 08/28/07 (ft msl)
MW-1	27.5	Below	55.58	54.93	37.38
MW-2	31.4	Above	57.93	59.68	39.80
MW-6	29.2	Above	51.81	55.23	39.31
MW-3	31.0	Above	52.18	53.80	32.56
MW-4	31.0	Above	56.99	58.58	35.52
MW-5	31.0	Above	53.79	55.21	34.27
MW-7	31.0	Above	54.62	58.04	35.24
MW-8	30.7	Above	55.91	59.33	36.25
MW-10	30.0	Below	58.33	58.12	36.12

Table 2
Groundwater Elevations
Upgradient and Downgradient Monitoring Wells

Water Elevations	Upgradient Wells			Downgradient Wells						
	MW-1	MW-2	MW-6	MW-3	MW-4	MW-5	MW-7	MW-8	MW-9	MW-10
Water Elevation 4/4/01 (ft msl)	38.10	40.30	N/A	35.90	37.18	35.85	N/A	N/A	N/A	N/A
Water Elevation 4/24/01 (ft msl)	38.57	43.79	N/A	35.85	36.85	35.31	N/A	N/A	N/A	N/A
Water Elevation 5/23/01 (ft msl)	39.24	40.81	N/A	35.80	36.94	36.52	N/A	N/A	N/A	N/A
Water Elevation 7/13/01 (ft msl)	39.49	40.58	N/A	34.77	36.10	35.59	N/A	N/A	N/A	N/A
Water Elevation 11/7/01 (ft msl)	37.79	37.32	N/A	34.58	35.77	35.04	N/A	N/A	N/A	N/A
Water Elevation 2/8/02 (ft msl)	37.68	40.16	N/A	35.69	36.35	35.30	N/A	N/A	N/A	N/A
Water Elevation 5/3/02 (ft msl)	39.80	39.59	N/A	35.11	35.97	34.76	N/A	N/A	N/A	N/A
Water Elevation 8/12/02 (ft msl)	38.10	42.26	N/A	31.28	33.48	33.50	N/A	N/A	N/A	N/A
Water Elevation 11/6/02 (ft msl)	37.47	40.93	N/A	34.48	35.46	35.13	N/A	N/A	N/A	N/A
Water Elevation 2/18/03 (ft msl)	37.22	42.99	N/A	35.05	35.87	34.50	N/A	N/A	N/A	N/A
Water Elevation 7/09/03 ((ft msl)	37.48	42.23	N/A	32.58	33.97	33.83	N/A	N/A	N/A	N/A
Water Elevation 10/08/03 (ft msl)	37.93	37.99	N/A	33.97	35.40	34.80	N/A	N/A	N/A	N/A
Water Elevation 1/9/04 (ft msl)	35.97	35.55	N/A	N/A	30.97	36.29	N/A	N/A	N/A	N/A
Water Elevation 1/29/04 (ft msl)	N/A	N/A	N/A	35.30	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	35.14	35.36	34.41	N/A	N/A	N/A	N/A
Water Elevation 7/8/04 (ft msl)	37.61	38.82	N/A	33.76	34.44	33.60	N/A	N/A	N/A	N/A
Water Elevation 10/18/04 (ft msl)	37.90	37.68	36.01	34.87	35.40	34.19	34.33	35.41	38.08	37.38
Water Elevation 1/17/05 (ft msl)	37.83	37.22	36.81	37.05	37.72	37.50	37.54	37.98	37.28	37.94
Water Elevations 4/05/05 (ft msl)	40.03	38.87	39.15	39.47	39.58	39.58	40.13	40.20	39.36	39.85
Water Elevations 7/11/05 (ft msl)	41.95	42.15	42.14	39.78	39.87	38.93	39.13	40.42	N/A	43.12
Water Elevations 10/10/05 (ft msl)	40.62	40.48	39.72	37.46	37.70	36.61	37.86	38.37	N/A	38.69
Water Elevations 01/09/06 (ft msl)	38.60	38.25	38.25	37.12	46.45	37.34	39.43	38.49	N/A	39.82
Water Elevations 04/12/06 (ft msl)	41.69	40.74	41.92	45.65	47.63	47.19	47.75	44.87	N/A	41.74
Water Elevations 07/06/06 (ft msl)	46.21	44.93	46.08	43.53	43.37	42.89	43.33	45.21	N/A	44.38
Water Elevations 01/23/07 (ft msl)	38.95	37.71	37.33	37.32	36.71	35.69	35.84	37.66	N/A	N/A
Water Elevations 06/14/07 (ft msl)	38.11	39.79	40.33	34.15	34.98	34.66	36.21	37.20	N/A	35.24
Water Elevations 08/28/07 (ft msl)	**37.38**	**39.80**	**39.31**	**32.56**	**35.52**	**34.27**	**35.24**	**36.25**	**N/A**	**36.12**

Table 3
Analytical Results Upgradient and Downgradietn Monitoring Wells
August 28, 2007 Sampling

		Pathogens			Nitrogen Compounds			
		Total Coliform Organisms (MPN/100ml)	Fecal Coliform (MPN/100ml)	Total Organic Carbon (mg/L)	Nitrate (as NO_3-N) (mg/L)	Ammonia (NH_3-N) (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Sodium Adsorption Rations (SAR) (mg/L)
Up-gradient	MW-1	<1.1 Absent	<1.1 Absent	0.8	14.2	ND	ND	6.3
	MW-2	<1.1 Absent	<1.1 Absent	1.5	13.4	ND	ND	6.7
	MW-6	>23 Present	1.1 Present	1.2	5.8	ND	ND	4.2
Downgradient	MW-3	<2 Absent	<2 Absent	0.9	7.2	ND	ND	8.2
	MW-4	<1.1 Absent	<1.1 Absent	1.9	0.3	ND	1.9	5.2
	MW-5	<2 Absent	<2 Absent	2.2	ND	1.2	1.9	5.6
	MW-7	1.1 Present	<1.1 Absent	1.2	0.7	ND	1.1	7.1
	MW-8	<1.1 Absent	<1.1 Absent	0.9	11.0	ND	1.9	6.9
	MW-10	5.1 Present	<1.1 Absent	1.1	6.6	ND	ND	4.9

A/P = Absence/Presence
ND = Not Detected

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

Sample Date	MW-1		MW-2		MW-6	
	Total Coliform Organisms	Fecal Coliform	Total Coliform Organisms	Fecal Coliform	Total Coliform Organisms	Fecal Coliform
10/18/2004	<2	<2	7	4	17	17
1/17/2005	6.9	<1.1	<1.1	N/R	12	<1.1
4/5/2005	<2	NT	<2	NT	>1600	>1600
7/11/2005	<2	NT	<2	NT	>1600	>1600
10/10/2005	<2	NT	<2	NT	>1600	>1600
1/9/2006	<2	NT	<2	NT	50	50
4/12/2006	<1	NT	<1	NT	<1	NT
7/6/2006	1	NT	3.1	NT	>2420	NT
1/23/2007	6.9	<1.1	<1.1	N/R	12	<1.1
6/14/2007	1.1	<1.1	<1.1	<1.1	>23	<1.1
8/28/2007	**<1.1**	**<1.1**	**<1.1**	**<1.1**	**>23**	**1.1**

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

Sample Date	MW-3		MW-4		MW-5		MW-7		MW-8		MW-10	
	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
1/17/2005	<2	N/R	<1.1	N/R	<2	N/R	<1.1	N/R	<1.1	N/R	NS	NS
4/5/2005	<2	NT	<2	NT	<2	NT	<2	NT	<2	NT	2	<2
7/11/2005	<2	NT	<2	NT	<2	NT	<2	NT	<2	NT	4	<2
10/10/2005	<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	13	<2
4/12/2006	<1	NT	1100	21	730	60	<1	NT	<1	NT	<1	NT
7/6/2006	<1	NT	<1	NT	<1	NT	<1	NT	<1	NT	12	NT
1/23/2007	<2	N/R	<1.1	N/R	<2	N/R	<1.1	N/R	<1.1	N/R	NS	NS
6/14/2007	<2	<2	<1.1	<1.1	<2	<2	<1.1	<1.1	<1.1	<1.1	2.2	<1.1
8/28/2007	**<2**	**<2**	**<1.1**	**<1.1**	**<2**	**<2**	**1.1**	**<1.1**	**<1.1**	**<1.1**	**5.1**	**<1.1**

NS = Not Sampled
NT = Not Tested
N/R = Not Required

Table 3.2
Upgradient and Downgradient Monitoring Wells
Groundwater Nitrate as NO_3-N Data
(MG/L)

Sample Date	Upgradient MW			Downgradient MW					
	MW-1	MW-2	MW-6	MW-3	MW-4	MW-5	MW-7	MW-8	MW-10
10/18/2004	10	8.4	4.1	11	ND	2.7	5.3	8.6	12
1/17/2005	15	7.6	4.2	12	0.6	1.8	5.2	7.2	9.1
4/5/2005	17	8.6	1.5	12	26.6	10	5.9	7	9.3
7/11/2005	9.7	8.4	7	5	5.7	4.1	6.3	7	2.7
10/10/2005	8.4	10	6.1	7.5	2.9	6.3	8.4	6.1	4.7
1/9/2006	14	17	5.5	8.4	ND	0.3	5.5	5.9	3.2
4/12/2006	17	24	5.9	15	48	30	4.1	7.2	6.5
7/6/2006	15	22	5.7	10	7.9	19	9.5	6.3	2.9
1/23/2007	12.5	13.3	6.1	9.3	ND	13.1	0.3	7.4	NS
6/14/2007	13	17.5	5	9.9	ND	2.1	0.3	11.8	6
8/28/2007	**14.2**	**13.4**	**5.8**	**7.2**	**0.3**	**ND**	**0.7**	**11**	**6.6**

ND = Not Detected
NS = Not Sampled

Table 4
Upgradient and Downgradient Monitoring Wells
Dissolved Metals Results
August 28, 2007 Sampling

	Arsenic (ug/L)	Barium (ug/L)	Cadmium (ug/L)	Copper (mg/L)	Lead (ug/L)	Mercury (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Selenium (ug/L)	Zinc (mg/L)
MW-1	0.002	0.0361	ND	ND	ND	ND	0.015	0.002	0.01	ND
MW-2	0.004	0.0338	ND	0.002	0.0002	ND	0.01	0.003	0.017	ND
MW-6	0.002	0.0264	ND	0.001	ND	ND	0.008	0.003	0.006	ND
MW-3	0.005	0.0323	ND	0.002	0.0002	ND	0.002	0.004	0.006	ND
MW-4	0.014	0.126	0.0003	0.005	0.0004	ND	0.007	0.021	0.004	ND
MW-5	0.006	0.0754	0.0007	0.005	ND	ND	0.027	0.025	0.003	ND
MW-7	0.006	0.0449	ND	0.004	ND	ND	0.026	0.017	0.003	ND
MW-8	0.008	0.0654	ND	0.008	ND	ND	0.018	0.009	0.004	ND
MW-10	0.003	0.0459	ND	0.003	ND	0.00008	0.001	0.007	0.004	ND

ND = Not Detected

Table 5
Upgradient and Downgradient Monitoring Wells
General Minerals Results
August 2007 Sampling

		Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/l)	Iron (mg/L)	Manganese (mg/L)	Chloride (mg/L)	Sulfate (as SO_4) (mg/L)	pH (Std. Units)	Total Dissolved Solids (mg/L)	Electrical Conductivity (umhos/cm)	Hardness (as $CaCO_3$) (mg/L)	Total Alkalinity (as $CaCO_3$) (mg/L)	Total Anion meq/L	Total Cation meq/L
Up-gradient	MW-1	77	112	371	ND	ND	ND	240	530	8.3	1620	2440	653	400	26.9	29.2
	MW-2	96	291	588	ND	60	ND	410	1060	7.4	2990	4080	1440	780	50.2	54.3
	MW-6	54	119	239	ND	340	ND	165	460	7.7	1290	1940	624	370	22.0	22.9
Downgradient	MW-3	106	122	522	2	ND	ND	480	620	7.5	2130	3200	766	440	35.8	38.1
	MW-4	120	93	312	11	ND	1410	360	270	7.3	1460	2380	682	480	25.5	27.5
	MW-5	106	79	315	18	ND	1110	400	320	7.0	1450	2340	590	320	24.4	26.0
	MW-7	40	89	354	2	350	10	380	300	7.7	1370	2240	466	300	22.9	24.8
	MW-8	71	77	353	1	ND	ND	360	320	7.7	1410	2260	494	280	23.2	25.3
	MW-10	140	110	322	2	ND	ND	410	380	7.6	1640	2550	802	400	28	30.1

ND = Not Detected
NS = Not Sampled

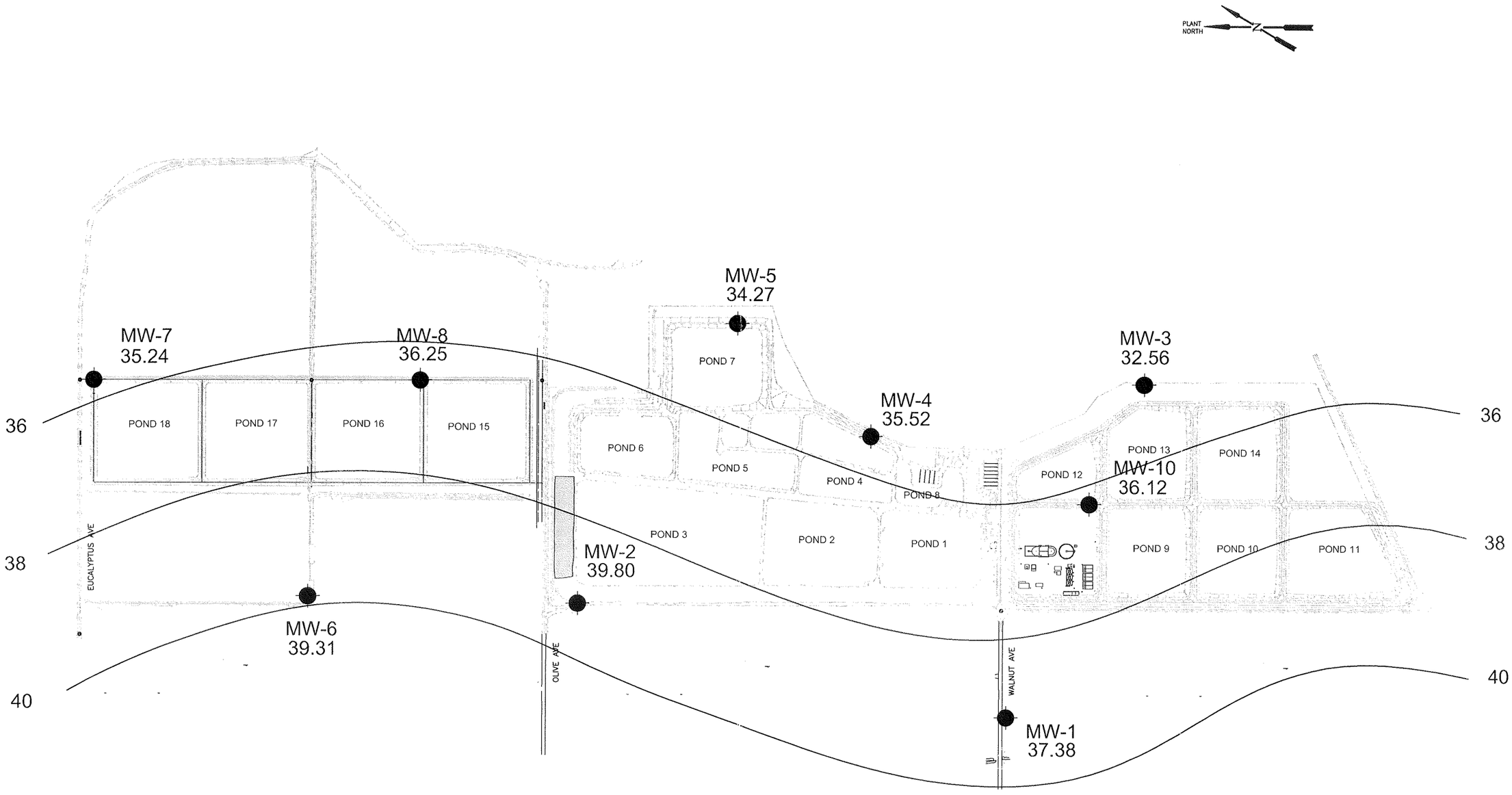
TABLE 5.1
Upgradient and Downgradient Monitoring Wells
Groundwater TDS Data
(MG/L)

Sample Date	Upgradient MW			Downgradient MW					
	MW-1	MW-2	MW-6	MW-3	MW-4	MW-5	MW-7	MW-8	MW-10
10/18/2004	1310	1870	1160	2450	1510	1250	1190	1940	1810
1/17/2005	1610	1850	1110	2480	1610	1360	1240	1940	1830
4/5/2005	1720	1910	1270	2440	1500	1280	1300	1960	1870
7/11/2005	1310	1880	1220	1410	1580	1330	1260	1810	1600
10/10/2005	1140	2000	1420	2200	1490	1540	1620	1870	1790
1/9/2006	1600	2100	1300	2500	1500	1700	1600	1800	1500
4/12/2006	1800	2200	1200	2200	2100	1800	1500	1800	1800
7/6/2006	1560	2410	1240	2240	807	1690	2200	1710	1520
1/23/2007	1330	1920	1140	2070	1570	1660	1260	1730	NS
6/14/2007	1550	3030	1340	1890	1580	1650	1340	1500	1620
8/28/2007	**1620**	**2990**	**1290**	**2130**	**1460**	**1450**	**1370**	**1410**	**1640**

TABLE 5.2
Upgradient and Downgradient Monitoring Wells
Groundwater Electrical Conductivity Data
(MG/L)

Sample Date	Upgradient MW			Downgradient MW					
	MW-1	MW-2	MW-6	MW-3	MW-4	MW-5	MW-7	MW-8	MW-10
10/18/2004	2000	3040	1820	3890	2990	2080	1920	3330	3040
1/17/2005	3020	3420	2340	4920	3140	2850	2510	3730	3570
4/5/2005	2590	2950	1990	3870	2200	2070	2070	3090	2670
7/11/2005	2120	3180	2230	3650	2830	2350	2210	2870	2640
10/10/2005	1860	3400	2420	3820	2780	2750	2840	3100	3180
1/9/2006	2350	NT	2090	3650	2580	2780	2600	2890	2610
4/12/2006	2520	3510	1920	3540	3100	2900	2520	2790	2900
7/6/2006	2880	3860	2090	3910	1210	2560	3620	2830	2360
1/23/2007	2040	2860	1760	3200	2530	2720	2080	2630	NS
6/14/2007	2300	3990	1990	2890	2450	2630	2140	2320	2460
8/28/2007	**2440**	**4080**	**1940**	**3200**	**2380**	**2340**	**2240**	**2260**	**2550**

NS = Not Sampled
NT = Not Tested



	LEE&RO, Inc. RANCHO CORDOVA, CALIFORNIA	CITY OF PATTERSON WATER QUALITY CONTROL FACILITY 14901 POPLAR AVENUE	FIGURE 1 AUGUST 2007 SAMPLING ROUND GROUNDWATER ELEVATION CONTOUR MAP SCALE 1"=600'

Figure 2
Groundwater Elevations in Patterson WQCF Monitoring Wells

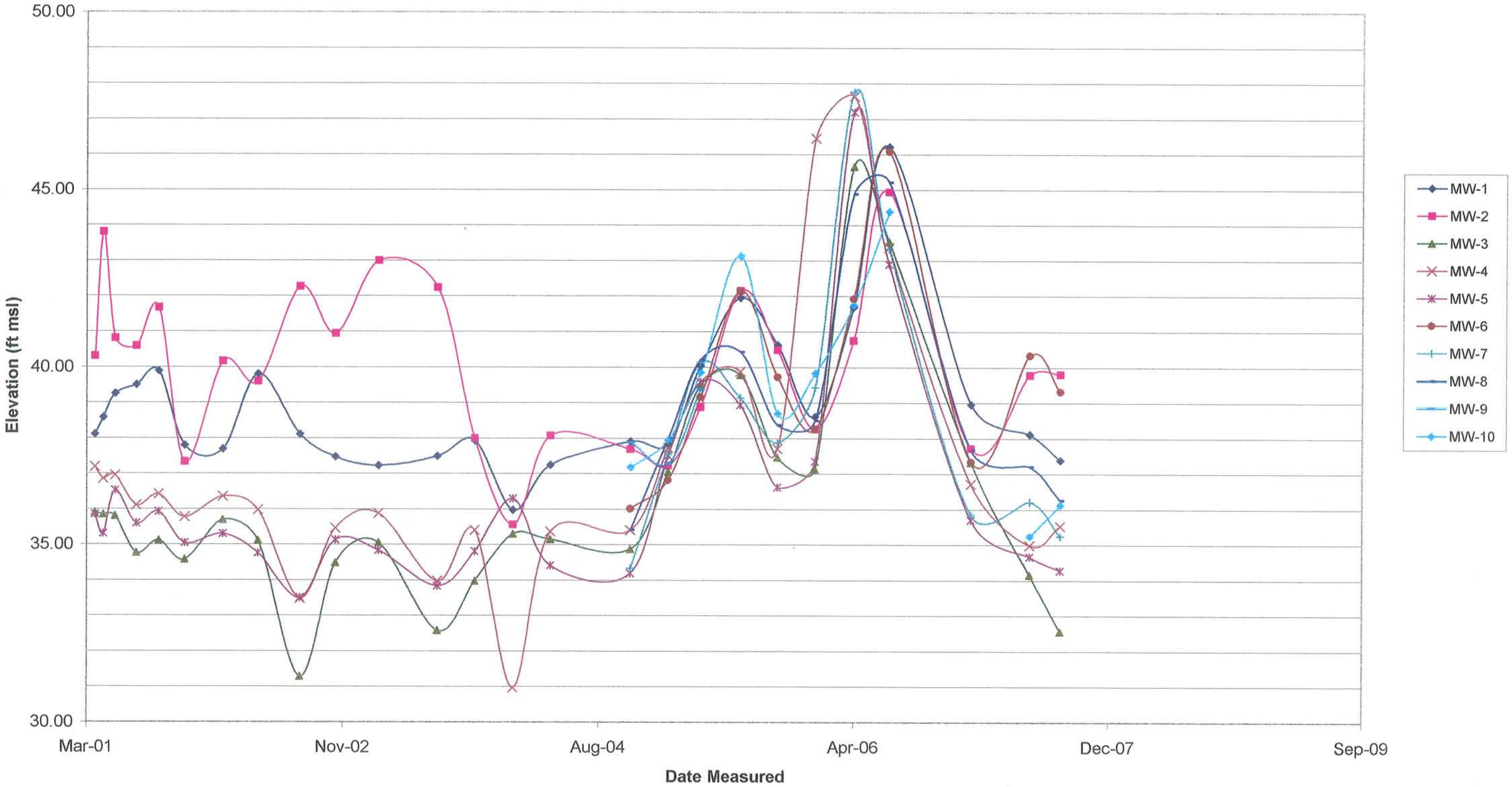


FIGURE 3.1 GROUNDWATER TOTAL COLIFORM DATA

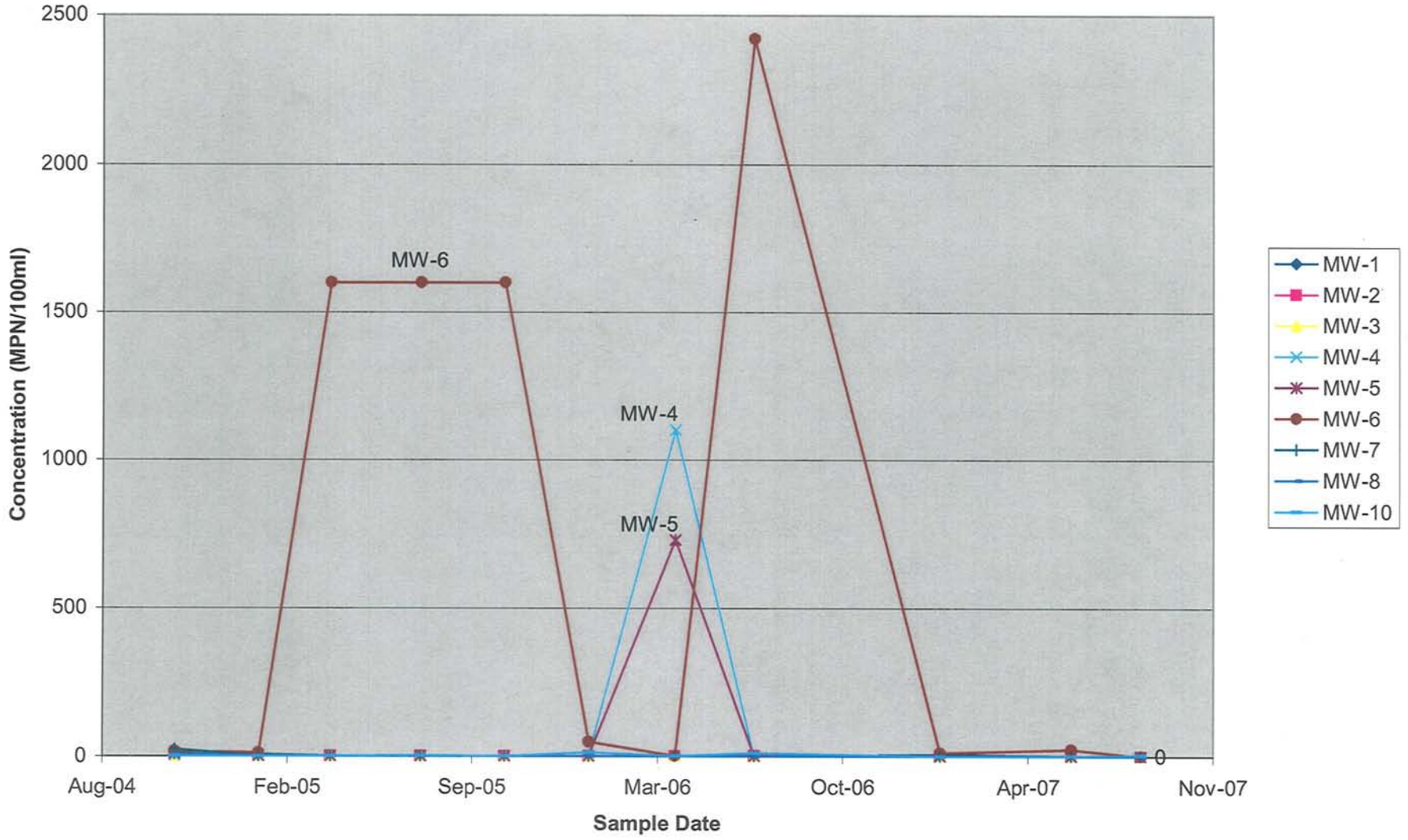


FIGURE 3.2 GROUNDWATER NITRATE DATA (NO_3-N)

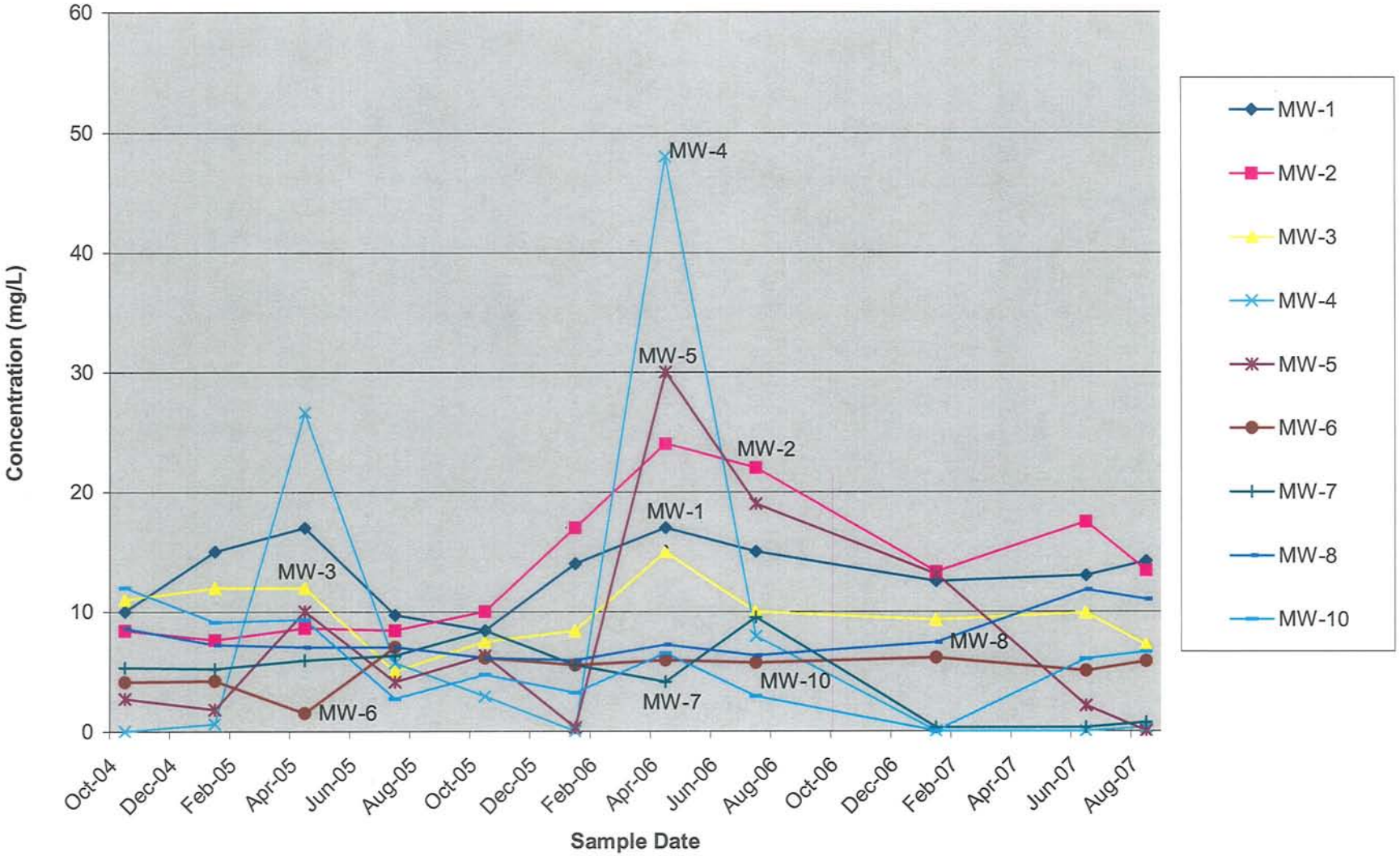


FIGURE 5.1 GROUNDWATER TDS DATA

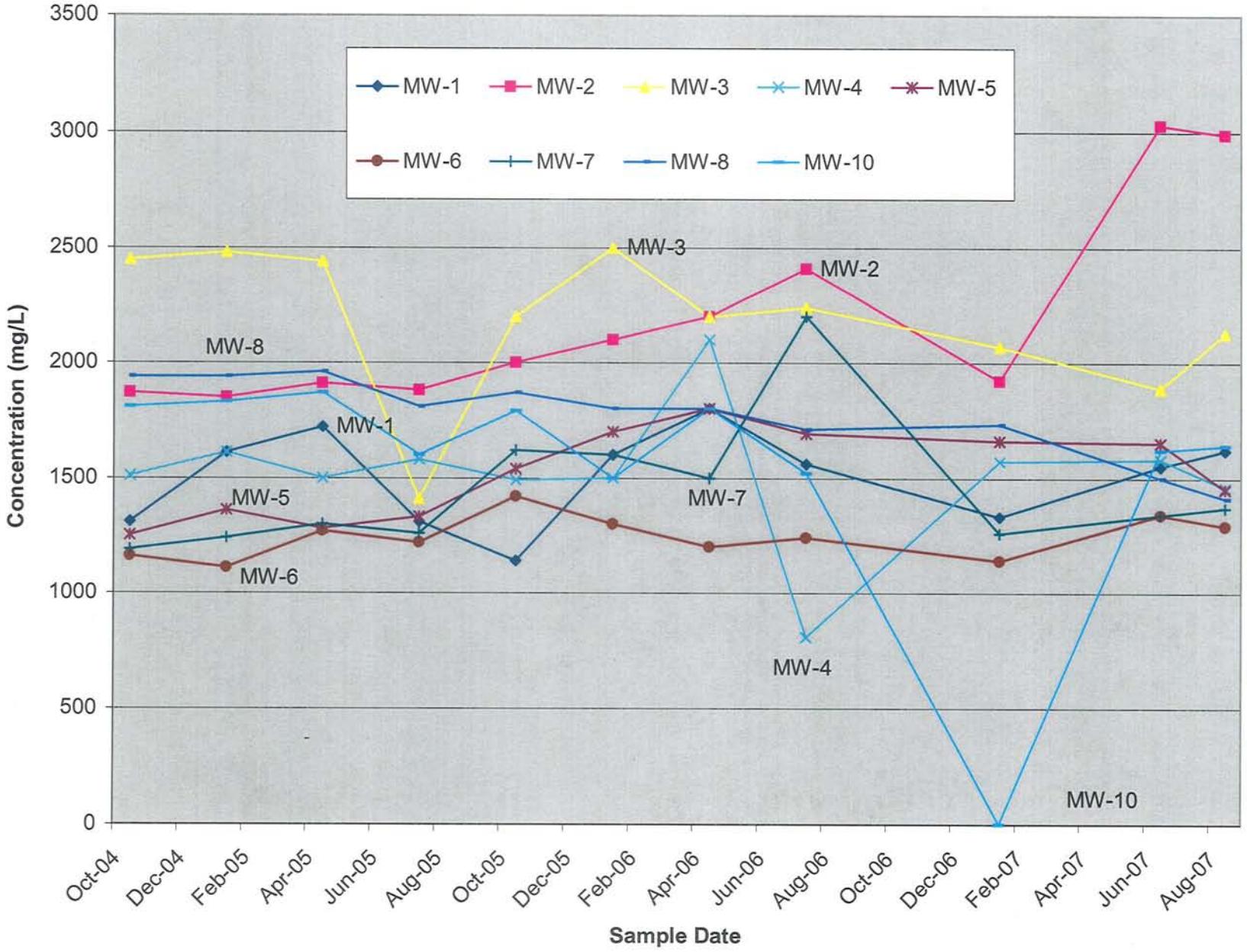
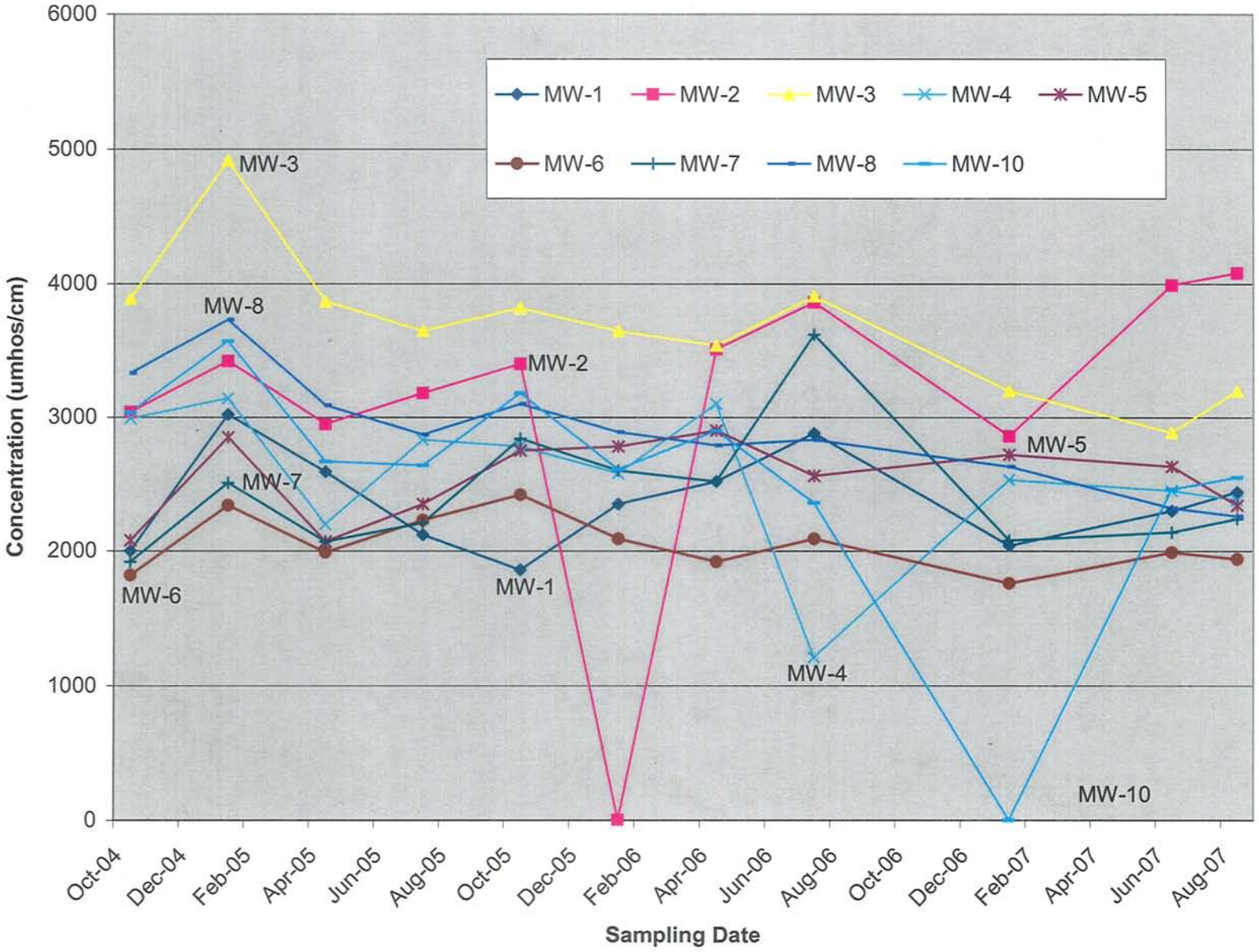


TABLE 5.2 GROUNDWATER ELECTRIC CONDUCTIVITY DATA



APPENDIX A
PURGE LOGS

Measurement of Groundwater Levels

Project Name	Patterson WWTP	**Project No.**	72802
		Recorded By	Ken Moffitt
Location	Monitoring Wells	**Date**	8/28/2007
Equipment Type	Solinst Water Level Meter	**Checked By**	
Equipment No.	1	**Date**	

Well Number	Time	Reference Point	Reference Elevation	Depth to Water	Water Elevation	Product Thickness	Product Elevation	Adjusted Water Elevation	Depth to Well Bottom	Notes (add below)
MW-1	9:01	TOC	54.93	17.55	37.38	-	-	-	27.50	
MW-2	13:47	TOC	59.68	19.88	39.80	-	-	-	31.40	
MW-3	11:27	TOC	53.80	21.24	32.56	-	-	-	31.00	
MW-4	12:30	TOC	58.58	23.06	35.52	-	-	-	31.00	
MW-5	13:01	TOC	55.21	20.94	34.27	-	-	-	31.00	
MW-6	10:41	TOC	55.23	15.92	39.31	-	-	-	29.20	
MW-7	9:39	TOC	58.04	22.80	35.24	-	-	-	31.00	
MW-8	10:11	TOC	59.33	23.08	36.25	-	-	-	30.70	
MW-10	11:55	TOC	58.12	22.00	36.12	-	-	-	30.00	

Notes:

Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-1 Well Completion Depth: 27.50 ft.

Depth to Water (sounded depth): 17.55 ft. Reference Point: North Side Top Casing

Height of Water Column: 9.95 ft. Casing Diameter: 4 in.

Casing Volume: 6.46 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 19.38 gal = Casing Volume x 3 (volumes required)

Purge Rate: 2.0 gal Purge Method: 12 Volt Purge Pump

RECEIVED
SEP 05 2007
JOB #
CLEARLEE & RO, INC.
SACRAMENTO

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
0850	Start						
0854	8	8.30	2.34	20.7		Clear	
0857	14	8.30	2.34	20.7			
0900	20	8.29	2.33	20.8			
0901	Sampled						
0903	Off						

Total Purge Time: 10 Minutes Total Purge Volume: 20 gal

Recharge Depth: 17.55 ft. Time: 0908 Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: Cleaned at lab prior to use in field.

Notes:

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Visalia, California
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FAX: 559/734-8435

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-2 Well Completion Depth: 30.36 ft.

Depth to Water (sounded depth): 19.88 ft. Reference Point: North Side Top Casing

Height of Water Column: 10.48 ft. Casing Diameter: 4 in.

Casing Volume: 6.81 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 20.43 gal = Casing Volume x 3 (volumes required)

Purge Rate: 2.0 gal Purge Method: 12 Volt Purge Pump

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
1335	Start						
1339	8	7.41	3.76	20.0		Clear	
1342	14	7.40	3.76	20.0			
1346	22	7.40	3.76	20.0			
1347	Sampled						
1349	Off						

Total Purge Time: 11 Minutes Total Purge Volume: 22 gal

Recharge Depth: 19.88 ft. Time: 1355 Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: Cleaned at lab prior to use in field.

Notes:

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Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-3 Well Completion Depth: 30.95 ft.

Depth to Water (sounded depth): 21.24 ft. Reference Point: North Side Top Casing

Height of Water Column: 9.71 ft. Casing Diameter: 4 in.

Casing Volume: 6.31 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 18.93 gal = Casing Volume x 3 (volumes required)

Purge Rate: 2.0 gal Purge Method: 12 Volt Purge Pump

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
1116	Start						
1119	6	7.54	3.06	19.1		CLEAR	
1122	12	7.55	3.01	19.1			
1126	20	7.54	3.00	19.1			
1127	Sampled						
1129	Off						

Total Purge Time: 10 Minutes Total Purge Volume: 20 gal

Recharge Depth: 21.26 ft. Time: 1135 Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: Cleaned at lab prior to use in field.

Notes:

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Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 0207-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-4 Well Completion Depth: 31.60 ft.

Depth to Water (sounded depth): 23.06 ft. Reference Point: North Side Top Casing

Height of Water Column: 8.54 ft. Casing Diameter: 4 in.

Casing Volume: 5.55 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 16.65 gal = Casing Volume x 3 (volumes required)

Purge Rate: 2.0 gal Purge Method: 12 Volt Purge Pump

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
1221	Start						
1224	6	7.25	2.20	20.0		Clear	
1227	12	7.26	2.21	20.1			
1230	18	7.26	2.21	20.1			
1231	Sampled						
1233	Off						

Total Purge Time: 9 Minutes Total Purge Volume: 18 gal

Recharge Depth: 23.09 ft. Time: 1238 Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: Cleaned at lab prior to use in field.

Notes:

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Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-5 Well Completion Depth: 30.92 ft.

Depth to Water (sounded depth): 20.94 ft. Reference Point: North Side Top Casing

Height of Water Column: 9.98 ft. Casing Diameter: 4 in.

Casing Volume: 6.48 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 19.44 gal = Casing Volume x 3 (volumes required)

Purge Rate: 2.0 gal Purge Method: 12 Volt Purge Pump

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
1250	Start						
1254	8	6.96	2.19	17.9		Clear	
1258	16	6.97	2.19	17.8			
1300	20	6.97	2.19	17.8			
1301	Sampled						
1303	Off						

Total Purge Time: 10 Minutes Total Purge Volume: 20 gal

Recharge Depth: 20.95 ft. Time: 1308 Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: Cleaned at lab prior to use in field.

Notes:

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Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-6 Well Completion Depth: 28.60 ft.

Depth to Water (sounded depth): 15.92 ft. Reference Point: North Side Top Casing

Height of Water Column: 12.68 ft. Casing Diameter: 2 in.

Casing Volume: 2.06 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 6.18 gal = Casing Volume x 3 (volumes required)

Purge Rate: 1.50 gal Purge Method: 12 Volt Purge Pump

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
1035	Start						
1037	3	7.72	1.80	19.4		Clear	
1039	6	7.72	1.80	19.4			
1040	7.5	7.72	1.80	19.3			
1041	Sampled						
1043	Off						

Total Purge Time: 5 Minutes Total Purge Volume: 7.5 gal

Recharge Depth: 16.00 ft. Time: 1050 Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: Cleaned at lab prior to use in field.

Notes:

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FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-7 Well Completion Depth: 30.10 ft.

Depth to Water (sounded depth): 22.80 ft. Reference Point: North Side Top Casing

Height of Water Column: 7.30 ft. Casing Diameter: 2 in.

Casing Volume: 1.18 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 3.54 gal = Casing Volume x 3 (volumes required)

Purge Rate: _____ gal Purge Method: Disposable Hand Bail

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
0925	Start						
0930	2	7.76	2.09	21.6		TURBID	
0934	3	7.75	2.10	21.6			
0938	4	7.74	2.09	21.5			
0939	Sampled						
0946	Finished						
-						-	
				-	-		

Total Purge Time: 13 Minutes Total Purge Volume: 4 gal

Recharge Depth: 18.42 ft. Time: 0953 Sampling Method: Disposable Hand Bail

Decontamination Procedure: New sealed from Manufacturer

Notes: _____

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Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-8 Well Completion Depth: 30.35 ft.

Depth to Water (sounded depth): 23.08 ft. Reference Point: North Side Top Casing

Height of Water Column: 7.27 ft. Casing Diameter: 2 in.

Casing Volume: 1.18 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 3.54 gal = Casing Volume x 3 (volumes required)

Purge Rate: 1.0 gal Purge Method: 12 Volt Purge Pump

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
1006	Start						
1008	2	7.69	2.11	20.2		Clear	
1009	3	7.70	2.11	20.2			
1010	4	7.70	2.11	20.2			
1011	Sampled						
1013	Off						

Total Purge Time: 4 Minutes Total Purge Volume: 4 gal

Recharge Depth: 23.10 ft. Time: 1019 Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: Cleaned at lab prior to use in field.

Notes:

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Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: MW-10 Well Completion Depth: 29.95 ft.

Depth to Water (sounded depth): 22.00 ft. Reference Point: North Side Top Casing

Height of Water Column: 7.95 ft. Casing Diameter: 2 in.

Casing Volume: 1.29 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 3.87 gal = Casing Volume x 3 (volumes required)

Purge Rate: 1.0 gal Purge Method: 12 Volt Purge Pump

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
1150	Start						
1152	2	7.65	2.35	17.9		Muddy	
1153	3	7.58	2.36	17.9		Turbid	
1154	4	7.57	2.36	17.8			
1155	Sampled						
1157	OFF						

Total Purge Time: 4 Minutes Total Purge Volume: 4 gal

Recharge Depth: 24.97 ft. Time: 1203 Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: Cleaned at Lab prior to use in field

Notes:

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Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-08-28 Lab ID #: 737852 Client: City of Patterson WWTP

Tech. Name: Ken Moffitt Project Name/No: QUARTERLY

Well No: Mitigation Well Well Completion Depth: _____ ft.

Depth to Water (sounded depth): _____ ft. Reference Point: _____

Height of Water Column: _____ ft. Casing Diameter: 4 in.

Casing Volume: _____ gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: _____ gal = Casing Volume x 3 (volumes required)

Purge Rate: _____ gal Purge Method: 12 Volt Purge Pump

Time	Purge Vol Gal	pH	EC	Temp °C	ORP	Turb	Comments
1315	Start						
1320	Sampled	7.51	2.33	20.0		Clear	
-						-	
				-	-		

Total Purge Time: _____ Total Purge Volume: _____ gal

Recharge Depth: _____ ft. Time: _____ Sampling Method: 12 Volt Purge Pump

Decontamination Procedure: _____

Notes: _____

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APPENDIX B
LABORATORY ANALYTICAL REPORT

ENVIRONMENTAL

Analytical Chemists

September 7, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

STK0737852:1-8, 10-11 **COLIFORM BACTERIA ANALYSIS**
Customer ID : 3-15918

System Number :
Project Name : Groundwater Monitoring

Sample Handling Information

ID	Sample Number	Sample Description	Sample Type/Reason	Sampled By	Employed By	Sampled	Started	Finished
1	STK0737852-001	MW1	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 09:01	08/28/2007 13:34 BAO	2007-08-30 BAO
2	STK0737852-002	MW2	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 13:47	08/28/2007 15:50 CTH	2007-08-30 CTH
3	STK0737852-003	MW3	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 11:27	08/28/2007 13:35 cth	2007-08-30 cth
4	STK0737852-004	MW4	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 12:30	08/28/2007 15:52 CTH	2007-08-30 CTH
5	STK0737852-005	MW5	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 13:01	08/28/2007 15:38 cth	2007-08-30 cth
6	STK0737852-006	MW6	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 10:41	08/28/2007 13:36 BAO	2007-08-30 BAO
7	STK0737852-007	MW7	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 09:39	08/28/2007 13:38 BAO	2007-09-01 BAO
8	STK0737852-008	MW8	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 10:11	08/28/2007 13:40 BAO	2007-08-30 BAO
9	STK0737852-010	MW10	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 11:55	08/28/2007 15:54 CTH	2007-08-31 CTH
10	STK0737852-011	Mitigation Well	Source-Other	Ken Moffitt	FGL Environmental	08/28/2007 13:20	08/28/2007 15:40 cth	2007-08-30 cth

Analytical Results

ID	Sample Description	Chlorine Total/Free	Temp °C	Method	Units	Total	Fecal	Person	Date	Time	Foot Note
1	MW1	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	<1.1 ABSENT	N/R			
2	MW2	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	<1.1 ABSENT	N/R			
3	MW3	---	---	SM 9221B	MPN/100ml	<2 ABSENT	<2 ABSENT	N/R			
4	MW4	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	<1.1 ABSENT	N/R			
5	MW5	---	---	SM 9221B	MPN/100ml	<2 ABSENT	<2 ABSENT	N/R			
6	MW6	---	---	SM 9221B	MPN/100ml	>23.0 PRESENT	1.1 PRESENT		09/04/2007	08:47	
7	MW7	---	---	SM 9221B	MPN/100ml	1.1 PRESENT	<1.1 ABSENT		09/04/2007	08:47	
8	MW8	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	<1.1 ABSENT	N/R			
9	MW10	---	---	SM 9221B	MPN/100ml	5.1 PRESENT	<1.1 ABSENT		09/04/2007	08:47	
10	Mitigation Well	---	---	SM 9221B	MPN/100ml	<2 ABSENT	<2 ABSENT	N/R			

N/R Not Required. MPN Most Probable Number A/P Absence/Presence

Reviewed and Approved By **Raquel R. Harvey**
Digitally signed by Raquel R. Harvey
Title: Tech Director Microbiology
Date: 2007-09-07

September 7, 2007

STK0737852:1-8, 10-11 **COLIFORM BACTERIA ANALYSIS**
Customer ID : 3-15918

City of Patterson Wastewater

The samples listed below had failures for Total and/or Fecal Coliform as listed:
MW6 Total Coliform - Failure, Total Coliform - Failure, Fecal Coliform - Failure, Fecal Coliform - Failure.
MW7 Total Coliform - Failure, Total Coliform - Failure.
MW10 Total Coliform - Failure, Total Coliform - Failure.

Treatment: Guidance on well cleanup will be faxed upon requested. Alternatively, we suggest that you contact a qualified well service company

Analyses were performed using Standard Methods 20th edition. If you have any questions regarding your results, please call.

RRH:SMH

Reviewed and Approved By **Raquel R. Harvey**

Digitally signed by Raquel R. Harvey
Title: Tech Director Microbiology
Date: 2007-09-07

September 20, 2007

Lab ID : STK737852
Customer : 3015918

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Laboratory Report

Introduction: This report package contains total of 40 pages divided into three sections:

Case Narrative (3 Pages) : An overview of the work performed at FGL.
Chemical Results (30 Pages) : Results for each sample submitted.
Quality Control (7 Pages) : Supporting Quality Control (QC) results.

This report package pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab Sample ID #	Matrix
MW1	08/28/2007	08/28/2007	STK737852-01	MW
MW2	08/28/2007	08/28/2007	STK737852-02	MW
MW3	08/28/2007	08/28/2007	STK737852-03	MW
MW4	08/28/2007	08/28/2007	STK737852-04	MW
MW5	08/28/2007	08/28/2007	STK737852-05	MW
MW6	08/28/2007	08/28/2007	STK737852-06	MW
MW7	08/28/2007	08/28/2007	STK737852-07	MW
MW8	08/28/2007	08/28/2007	STK737852-08	MW
MW10	08/28/2007	08/28/2007	STK737852-10	MW
Mitigation Well	08/28/2007	08/28/2007	STK737852-11	MW

Sampling and Receipt Information: The sampling was performed by FGL using the following methods (where applicable):

Bacteriological Sampling - SOFS005
Grab sampling for liquids - SOFS010
Composite sampling for liquids - SOFS015
Grab sampling for solids - SOFS020
Composite sampling for solids - SOFS025

All samples were received, prepared and analyzed within the method specified holding times. All samples were received on ice. All samples were checked for pH if acid or base preservation required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Forms.

Quality Control: All samples were prepared and analyzed according to the following tables:

Case Narrative continued on next page...

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Mobile: (559) 737-2399

September 20, 2007

Lab ID : STK737852
Customer : 3015918

City of Patterson Wastewater

Quality Control:

Inorganic - Metals QC

200.7	09/17/2007:A203 All preparation quality controls are within established criteria, except: The following note applies to Calcium, Sodium: 408 Matrix Spike(MS) or Post Digestion Spike(PDS) has no Acceptance Range (DQO) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.
	09/17/2007:B203 All preparation quality controls are within established criteria, except: The following note applies to Calcium, Magnesium, Sodium: 408 Matrix Spike(MS) or Post Digestion Spike(PDS) has no Acceptance Range (DQO) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.
	09/17/2007:A - IT203 All analysis quality controls are within established criteria.
200.8	09/14/2007:B204 All preparation quality controls are within established criteria, except: The following note applies to Barium, Molybdenum: 408 Matrix Spike(MS) or Post Digestion Spike(PDS) has no Acceptance Range (DQO) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.
	09/14/2007:A - IX202 All analysis quality controls are within established criteria, except: The following note applies to Arsenic, Barium, Cadmium, Copper, Lead, Molybdenum, Nickel, Selenium: 220 The absolute value of the CCB was greater than the DQO. However, all results were either five times greater than the CCB concentration or ND relative to the PQL. The following note applies to Arsenic, Barium, Cadmium, Copper, Molybdenum, Nickel, Selenium: 355 CCV not within Acceptance Range (AR). Results were reported with client approval.
245.1	08/31/2007:A - HG202 All analysis quality controls are within established criteria.
	09/14/2007:A - HG203 All analysis quality controls are within established criteria.
7470A	08/31/2007:B212 All preparation quality controls are within established criteria.
	09/12/2007:A212 All preparation quality controls are within established criteria.

Inorganic - Wet Chemistry QC

2320B	08/31/2007:B202 All preparation quality controls are within established criteria.
	08/31/2007:A - TI201 All analysis quality controls are within established criteria.
2510B	08/30/2007:A212 All preparation quality controls are within established criteria.

Table continued on next page...

September 20, 2007

Lab ID : STK737852
Customer : 3015918

City of Patterson Wastewater

Quality Control:

Inorganic - Wet Chemistry QC

2510B	08/30/2007:A - EC201 Continued... 08/30/2007:A - EC201 All analysis quality controls are within established criteria.
2540 C,E	08/31/2007:C235 All preparation quality controls are within established criteria.
2540C	08/31/2007:C235 All preparation quality controls are within established criteria.
300.0	08/29/2007:B215 All preparation quality controls are within established criteria.
	09/10/2007:B215 All preparation quality controls are within established criteria.
	08/29/2007:A - IC204 All analysis quality controls are within established criteria.
	09/10/2007:A - IC204 All analysis quality controls are within established criteria.
5540C	08/29/2007:A218 All preparation quality controls are within established criteria.
	08/29/2007:A - AMM All analysis quality controls are within established criteria.

Organic QC

5310C	08/30/2007:A234 All preparation quality controls are within established criteria.
	08/30/2007:A - TC202 All analysis quality controls are within established criteria.

Certification: I certify that this data package is in compliance with NELAC Standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following signature.

FGL ENVIRONMENTAL

KAD:cea

Kelly A. Dunnahoo, B.S.
Laboratory Director

ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-01
Customer ID: 3-15918

Sampled On : August 28, 2007-09:01
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW1
Project : Groundwater Moniroring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	653	2.5	mg/L		Calculation		Calculation	
Calcium	77	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Magnesium	112	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Potassium	ND	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Sodium	371	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Total Cations	29.2	--	meq/L		Calculation		Calculation	
Boron	1.76	0.05	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Iron	ND	50	ug/L	300[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Manganese	ND	10	ug/L	50[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Gypsum Requirement	1.3	--	mg/L		Calculation		Calculation	
SAR	6.3	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	400	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	490	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	530	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	240	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	63.0	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/29/2007:A00 23:40
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/29/2007:A00 23:40
Fluoride	0.3	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	26.9	--	meq/L		Calculation		Calculation	
pH (Field Test)	8.3	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 09:01
Specific Conductance	2440	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00
Total Dissolved Solids	1620	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	1880	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:01
Aggressiveness Index	13.2	1.0	mg/L		Calculation		Calculation	
Langlier Index	1.3	1.0	mg/L		Calculation		Calculation	

Table continued next page...

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-01
Customer ID: 3-15918
Description : MW1

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
Metals, Diss P:1,5								
Arsenic	0.002	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0361	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	ND	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	08/31/07:B212	245.1	08/31/2007:A00
Molybdenum	0.015	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.002	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.010	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	14.2	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/29/2007:A00 23:40
Solids, Fixed Dissolved (FDS)	1440	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	180	20	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. ² - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-01
Customer ID: 3-15918

Sampled On : August 28, 2007-09:01
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW1
Project : Groundwater Moniroring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4 TOC 5310 C	0.8	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. ² - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-02
Customer ID: 3-15918

Sampled On : August 28, 2007-13:47
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW2
Project : Groundwater Monirоring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	1440	2.5	mg/L		Calculation		Calculation	
Calcium	96	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Magnesium	291	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Potassium	ND	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Sodium	588	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Total Cations	54.3	--	meq/L		Calculation		Calculation	
Boron	3.80	0.05	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Iron	60	50	ug/L	300[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Manganese	ND	10	ug/L	50[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Gypsum Requirement	1.5	--	mg/L		Calculation		Calculation	
SAR	6.7	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	780	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	950	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	1060	40♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	410	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	59.1	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:33
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:33
Fluoride	0.2	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	50.2	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.4	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 13:47
Specific Conductance	4080	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

Table continued next page...

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-02
Customer ID: 3-15918
Description : MW2

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	2990	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	3450	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:01
Aggressiveness Index	12.7	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.7	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.004	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0338	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.002	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	0.0002	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	08/31/07:B212	245.1	08/31/2007:A00
Molybdenum	0.010	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.003	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.017	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	13.4	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:33
Solids, Fixed Dissolved (FDS)	2520	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	470	20	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Description : MW2
Project : Groundwater Monironing

Lab ID : STK737852-02
Customer ID: 3-15918

Sampled On : August 28, 2007-13:47
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	1.5	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. ² - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-03
Customer ID: 3-15918

Sampled On : August 28, 2007-11:27
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW3
Project : Groundwater Moniroring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	766	2.5	mg/L		Calculation		Calculation	
Calcium	106	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Magnesium	122	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Potassium	2	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Sodium	522	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Total Cations	38.1	--	meq/L		Calculation		Calculation	
Boron	1.85	0.05	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Iron	ND	50	ug/L	300[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Manganese	ND	10	ug/L	50[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Gypsum Requirement	1.9	--	mg/L		Calculation		Calculation	
SAR	8.2	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	440	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	540	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	620	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	480	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	32.0	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:22
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:22
Fluoride	0.3	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	35.8	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.5	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 11:27
Specific Conductance	3200	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

Table continued next page...

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-03
Customer ID: 3-15918
Description : MW3

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	2130	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	2420	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:01
Aggressiveness Index	12.6	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.6	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.005	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0323	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.002	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	0.0002	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	08/31/07:B212	245.1	08/31/2007:A00
Molybdenum	0.002	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.004	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.006	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	7.2	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:22
Solids, Fixed Dissolved (FDS)	1960	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	170	20	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-03
Customer ID: 3-15918

Sampled On : August 28, 2007-11:27
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW3
Project : Groundwater Moniroring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	0.9	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. ² - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-04
Customer ID: 3-15918

Sampled On : August 28, 2007-12:30
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW4
Project : Groundwater Moniroring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	682	2.5	mg/L		Calculation		Calculation	
Calcium	120	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Magnesium	93	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Potassium	11	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Sodium	312	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Total Cations	27.5	--	meq/L		Calculation		Calculation	
Boron	0.81	0.05	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Iron	ND	50	ug/L	300[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Manganese	1410	10	ug/L	50[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Gypsum Requirement	1.2	--	mg/L		Calculation		Calculation	
SAR	5.2	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	480	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	590	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	270	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	360	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	1.2	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:50
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:50
Fluoride	0.3	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	25.5	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.3	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 12:30
Specific Conductance	2380	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-04
Customer ID: 3-15918
Description : MW4

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	1460	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	1760	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:01
Aggressiveness Index	12.5	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.5	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.014	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.126	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	0.0003	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.005	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	0.0004	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	08/31/07:B212	245.1	08/31/2007:A00
Molybdenum	0.007	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.021	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.004	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	0.3	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:50
Solids, Fixed Dissolved (FDS)	1350	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	110	20	mg/L		Calculation		Calculation	
Field Test								
pH	7.3	-	units			08/28/07:FS00		08/28/2007:

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H_2SO_4 pH < 2

ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Description : MW4
Project : Groundwater Moniroring

Lab ID : STK737852-04
Customer ID: 3-15918

Sampled On : August 28, 2007-12:30
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	1.9	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-05
Customer ID: 3-15918

Sampled On : August 28, 2007-13:01
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW5
Project : Groundwater Monirоring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	590	2.5	mg/L		Calculation		Calculation	
Calcium	106	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Magnesium	79	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Potassium	18	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Sodium	315	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Total Cations	26.0	--	meq/L		Calculation		Calculation	
Boron	0.79	0.05	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Iron	ND	50	ug/L	300[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Manganese	1110	10	ug/L	50[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Gypsum Requirement	1.0	--	mg/L		Calculation		Calculation	
SAR	5.6	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	320	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	390	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	320	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	400	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	ND	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:05
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:05
Fluoride	0.4	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	24.4	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.0	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 13:01
Specific Conductance	2340	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

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Mobile: (559) 737-2399

September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-05
Customer ID: 3-15918
Description : MW5

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	1450	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	1630	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:01
Aggressiveness Index	11.9	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.0	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.006	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0754	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	0.0007	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.005	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	08/31/07:B212	245.1	08/31/2007:A00
Molybdenum	0.027	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.025	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.003	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	ND	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:05
Solids, Fixed Dissolved (FDS)	1340	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	110	20	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Description : MW5
Project : Groundwater Monirorring

Lab ID : STK737852-05
Customer ID: 3-15918

Sampled On : August 28, 2007-13:01
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	2.2	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. ² - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-06
Customer ID: 3-15918

Sampled On : August 28, 2007-10:41
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW6
Project : Groundwater Monirroring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	624	2.5	mg/L		Calculation		Calculation	
Calcium	54	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Magnesium	119	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Potassium	ND	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Sodium	239	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Total Cations	22.9	--	meq/L		Calculation		Calculation	
Boron	1.52	0.05	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Iron	340	50	ug/L	300[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Manganese	ND	10	ug/L	50[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Gypsum Requirement	0.6	--	mg/L		Calculation		Calculation	
SAR	4.2	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	370	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	450	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	460	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	165	5♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	25.5	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 00:52
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 00:52
Fluoride	0.4	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	22.0	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.7	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 10:41
Specific Conductance	1940	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

Table continued next page...

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-06
Customer ID: 3-15918
Description : MW6

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	1290	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	1510	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:02
Aggressiveness Index	12.4	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.5	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.002	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0264	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.001	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	08/31/07:B212	245.1	08/31/2007:A00
Molybdenum	0.008	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.003	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.006	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	5.8	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 00:52
Solids, Fixed Dissolved (FDS)	1110	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	180	20	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Description : MW6
Project : Groundwater Monironing

Lab ID : STK737852-06
Customer ID: 3-15918

Sampled On : August 28, 2007-10:41
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	1.2	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND = Non-Detect. PQL = Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-07
Customer ID: 3-15918

Sampled On : August 28, 2007-09:39
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW7
Project : Groundwater Monirоring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	466	2.5	mg/L		Calculation		Calculation	
Calcium	40	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Magnesium	89	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Potassium	2	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Sodium	354	1	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Total Cations	24.8	--	meq/L		Calculation		Calculation	
Boron	0.93	0.05	mg/L		200.7	09/17/07:A203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Iron	350	50	ug/L	300[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Manganese	10	10	ug/L	50[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:A203	200.7	09/17/2007:A00
Gypsum Requirement	1.4	--	mg/L		Calculation		Calculation	
SAR	7.1	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	300	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	360	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	300	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	380	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	2.9	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/29/2007:A00 23:55
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/29/2007:A00 23:55
Fluoride	0.5	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	22.9	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.7	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 09:39
Specific Conductance	2240	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-07
Customer ID: 3-15918
Description : MW7

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	1370	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	1530	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:02
Aggressiveness Index	12.2	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.3	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.006	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0449	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.004	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	09/12/07:A212	245.1	09/14/2007:A00
Molybdenum	0.026	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.017	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.003	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	0.7	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/29/2007:A00 23:55
Solids, Fixed Dissolved (FDS)	1250	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	120	20	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Description : MW7
Project : Groundwater Moniroring

Lab ID : STK737852-07
Customer ID: 3-15918

Sampled On : August 28, 2007-09:39
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	1.2	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. ² - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-08
Customer ID: 3-15918

Sampled On : August 28, 2007-10:11
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW8
Project : Groundwater Moniroring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	494	2.5	mg/L		Calculation		Calculation	
Calcium	71	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Magnesium	77	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Potassium	1	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Sodium	353	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Total Cations	25.3	--	meq/L		Calculation		Calculation	
Boron	1.11	0.05	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Iron	ND	50	ug/L	300[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Manganese	ND	10	ug/L	50[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Gypsum Requirement	1.3	--	mg/L		Calculation		Calculation	
SAR	6.9	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	280	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	340	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	320	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	360	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	48.5	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 00:09
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 00:09
Fluoride	0.8	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	23.2	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.7	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 10:11
Specific Conductance	2260	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-08
Customer ID: 3-15918
Description : MW8

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	1410	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	1570	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:02
Aggressiveness Index	12.4	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.5	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.008	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0654	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.008	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	09/12/07:A212	245.1	09/14/2007:A00
Molybdenum	0.018	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.009	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.004	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	11.0	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 00:09
Solids, Fixed Dissolved (FDS)	1280	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	130	20	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Description : MW8
Project : Groundwater Moniroring

Lab ID : STK737852-08
Customer ID: 3-15918

Sampled On : August 28, 2007-10:11
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	0.9	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-10
Customer ID: 3-15918

Sampled On : August 28, 2007-11:55
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : MW10
Project : Groundwater Monirоring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	802	2.5	mg/L		Calculation		Calculation	
Calcium	140	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Magnesium	110	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Potassium	2	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Sodium	322	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Total Cations	30.1	--	meq/L		Calculation		Calculation	
Boron	0.81	0.05	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Iron	ND	50	ug/L	300[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Manganese	ND	10	ug/L	50[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Zinc	ND	20	ug/L	5000[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Gypsum Requirement	0.7	--	mg/L		Calculation		Calculation	
SAR	4.9	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	400	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	490	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	380	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	410	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	29.0	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:36
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:36
Fluoride	0.2	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	28.0	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.6	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 11:55
Specific Conductance	2550	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

Table continued next page...

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-10
Customer ID: 3-15918
Description : MW10

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	1640	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	1880	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:02
Aggressiveness Index	12.7	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.8	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.003	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0459	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.003	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	0.00008	0.00002	mg/L		7470A	09/12/07:A212	245.1	09/14/2007:A00
Molybdenum	0.001	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.007	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.004	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	6.6	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 10:36
Solids, Fixed Dissolved (FDS)	1480	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	160	20	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Description : MW10
Project : Groundwater Monirоring

Lab ID : STK737852-10
Customer ID: 3-15918

Sampled On : August 28, 2007-11:55
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	1.1	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363

Lab ID : STK737852-11
Customer ID: 3-15918

Sampled On : August 28, 2007-13:20
Sampled By : Ken Moffitt
Received On: August 28, 2007-15:00
Matrix : Monitoring Well

Description : Mitigation Well
Project : Groundwater Monirоring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Hardness	729	2.5	mg/L		Calculation		Calculation	
Calcium	106	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Magnesium	113	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Potassium	3	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Sodium	346	1	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Total Cations	29.7	--	meq/L		Calculation		Calculation	
Boron	1.43	0.05	mg/L		200.7	09/17/07:B203	200.7	09/17/2007:A00
Copper	ND	10	ug/L	1000[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Iron	ND	50	ug/L	300[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Manganese	80	10	ug/L	50[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Zinc	20	20	ug/L	5000[2]	200.7	09/17/07:B203	200.7	09/17/2007:A00
Gypsum Requirement	1.3	--	mg/L		Calculation		Calculation	
SAR	5.6	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	530	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Hydroxide	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Carbonate	ND	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Bicarbonate	650	10	mg/L		2320B	08/31/07:B202	2320B	08/31/2007:A00
Sulfate	400	20♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Chloride	280	10♦	mg/L	500[2]	300.0	08/29/07:B215	300.0	08/30/2007:A00
Nitrate	39.3	0.4	mg/L	45	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:19
Nitrite as N	ND	0.1	mg/L	1	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:19
Fluoride	0.3	0.1	mg/L	2	300.0	09/10/07:B215	300.0	09/10/2007:A00
Total Anions	27.5	--	meq/L		Calculation		Calculation	
pH (Field Test)	7.5	--	units		4500-H B	08/28/07:S362	4500-H B	08/28/2007:S00 13:20
Specific Conductance	2470	1	umhos/cm	1600[2]	2510B	08/30/07:A212	2510B	08/30/2007:A00

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852-11
Customer ID: 3-15918
Description : Mitigation Well

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
General Mineral P:1,5,4								
Total Dissolved Solids	1600	20	mg/L	1000[2]	2540C	08/31/07:C235	2540 C,E	09/02/2007:C00
Total Dissolved Solids (sum)	1940	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5[2]	5540C	08/29/07:A218 18:00	5540C	08/29/2007:A00 18:02
Aggressiveness Index	12.6	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.7	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.005	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Barium	0.0362	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Copper	0.002	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Lead	ND	0.0002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Mercury	ND	0.00002	mg/L		7470A	09/12/07:A212	245.1	09/14/2007:A00
Molybdenum	0.011	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Nickel	0.003	0.001	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Selenium	0.010	0.002	mg/L		200.8	09/14/07:B204	200.8	09/14/2007:A00
Wet Chemistry P:1,4								
Nitrate Nitrogen	8.9	0.1	mg/L	10	300.0	08/29/07:B215 15:20	300.0	08/30/2007:A00 11:19
Solids, Fixed Dissolved (FDS)	1440	40	mg/L		2540 C,E	08/31/07:C235	2540 C,E	09/04/2007:C00
Solids, Volatile Dissolved	160	20	mg/L		Calculation		Calculation	
Field Test								
pH	7.5	-	units			08/28/07:FS00		08/28/2007:

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. [2] - Secondary Standard.
Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2

ANALYTICAL CHEMISTS

September 20, 2007

City of Patterson Wastewater
PO Box 667
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Description : Mitigation Well
Project : Groundwater Monirоring

Lab ID : STK737852-11
Customer ID: 3-15918

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Matrix : Monitoring Well

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation Method	Preparation Date/ID	Analysis Date/ID
TOC AVT:1,4							
TOC 5310 C	0.9	0.5	mg/L		5310C	08/30/07:A234	08/30/2007:A00

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximium Contaminat Level. ² - Secondary Standard.
Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

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September 20, 2007

City of Patterson Wastewater

Lab ID : STK737852

Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Arsenic	200.8	09/14/2007:B204 (VI 741916-05)	MS MSD MSRPD	ug/L ug/L ug/L	5.000 5.000	98.5% 101% 0.10	75-125 75-125 ≤2.00	
	200.8	09/14/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	 120.0 100.0	ND ND 108% 106%	<2 <2 90-110 90-110	
Barium	200.8	09/14/2007:B204 (VI 741916-05)	MS MSD MSRPD	ug/L ug/L ug/L	5.000 5.000	-60.6% -12.4% 2.5%	< ¼ < ¼ ≤20	408 408
	200.8	09/14/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	 120.0 100.0	ND ND 101% 99.2%	<0.2 <0.2 90-110 90-110	
Boron	200.7	09/17/2007:A203 (STK737046-02)	MS MSD MSRPD	mg/L mg/L mg/L	4.000 4.000	106% 105% 0.9%	75-125 75-125 ≤20.0	
		09/17/2007:B203 (STK737852-08)	MS MSD MSRPD	mg/L mg/L mg/L	4.000 4.000	97.5% 98.9% 1.1%	75-125 75-125 ≤20.0	
	200.7	09/17/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 5.000 5.000	ND ND 102% 98.2%	<0.1 <0.1 95-105 90-110	
Cadmium	200.8	09/14/2007:B204 (VI 741916-05)	MS MSD MSRPD	ug/L ug/L ug/L	5.000 5.000	98.1% 99.8% 1.7%	75-125 75-125 ≤20	
	200.8	09/14/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	 120.0 100.0	ND ND 104% 105%	<0.2 <0.2 90-110 90-110	
Calcium	200.7	09/17/2007:A203 (STK737046-02)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	81.1% 96.8% 1.3%	< ¼ < ¼ ≤20.0	408 408
		09/17/2007:B203 (STK737852-08)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	91.1% 91.3% 0.0%	< ¼ < ¼ ≤20.0	408 408
	200.7	09/17/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 25.00 25.00	ND ND 99.8% 98.8%	<1 <1 95-105 90-110	
Copper	200.8	09/14/2007:B204	MS	ug/L	5.000	105%	75-125	

Report continued on next page...

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September 20, 2007
City of Patterson Wastewater

Lab ID : STK737852
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Copper	200.8	09/14/2007:B204	MSD MSRPD	ug/L ug/L	5.000	106% 1.1%	75-125 ≤20	
	200.7	09/17/2007:A203 (STK737046-02)	MS MSD MSRPD	ug/L ug/L ug/L	800.0 800.0	110% 106% 3.0%	75-125 75-125 ≤20.0	
		09/17/2007:B203 (STK737852-08)	MS MSD MSRPD	ug/L ug/L ug/L	800.0 800.0	98.6% 98.7% 0.1%	75-125 75-125 ≤20.0	
	200.8	09/14/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	 120.0 100.0	ND ND 105% 103%	<1 <1 90-110 90-110	
	200.7	09/17/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 1.000 1.000	ND ND 100% 100%	<0.01 <0.01 95-105 90-110	
Iron	200.7	09/17/2007:A203 (STK737046-02)	MS MSD MSRPD	ug/L ug/L ug/L	4000 4000	109% 105% 3.8%	75-125 75-125 ≤20.0	
		09/17/2007:B203 (STK737852-08)	MS MSD MSRPD	ug/L ug/L ug/L	4000 4000	97.4% 96.8% 0.6%	75-125 75-125 ≤20.0	
	200.7	09/17/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 5.000 5.000	ND ND 100% 99.8%	<0.05 <0.05 95-105 90-110	
Lead	200.8	09/14/2007:B204 (VI 741916-05)	MS MSD MSRPD	ug/L ug/L ug/L	5.000 5.000	97.5% 97.4% 0.1%	75-125 75-125 ≤20	
	200.8	09/14/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	 120.0 100.0	ND ND 101% 97.7%	<0.2 <0.2 90-110 90-110	
Magnesium	200.7	09/17/2007:A203 (STK737046-02)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	106% 103% 0.8%	75-125 75-125 ≤20.0	
		09/17/2007:B203 (STK737852-08)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	95.5% 96.1% 0.1%	< ¼ < ¼ ≤20.0	408 408
	200.7	09/17/2007:A	00-ICB 00-CCB 00-ICV	ppm ppm ppm	 25.00	ND ND 98.7%	<1 <1 95-105	

Report continued on next page...

September 20, 2007
City of Patterson Wastewater

Lab ID : STK737852
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Magnesium	200.7	09/17/2007:A	00-CCV	ppm	25.00	98.4%	90-110	
Manganese	200.7	09/17/2007:A203	MS	ug/L	800.0	107%	75-125	
		(STK737046-02)	MSD	ug/L	800.0	104%	75-125	
			MSRPD	ug/L		1.9%	≤20.0	
		09/17/2007:B203	MS	ug/L	800.0	96.5%	75-125	
		(STK737852-08)	MSD	ug/L	800.0	97.1%	75-125	
			MSRPD	ug/L		0.6%	≤20.0	
	200.7	09/17/2007:A	00-ICB	ppm		ND	<0.01	
			00-CCB	ppm		ND	<0.01	
			00-ICV	ppm	1.000	99.7%	95-105	
			00-CCV	ppm	1.000	99.2%	90-110	
Mercury	7470A	08/31/2007:B212	Blank	ug/L		ND	<0.02	
			LCS	ug/L	0.2000	92.5%	85-115	
			MS	ug/L	0.2000	98.2%	75-125	
		(CH 775055-01)	MSD	ug/L	0.2000	120%	75-125	
			MSRPD	ug/L		19.9%	≤20	
		09/12/2007:A212	Blank	ug/L		ND	<0.02	
			LCS	ug/L	0.2000	95.2%	85-115	
			MS	ug/L	0.2000	92.8%	75-125	
		(SP 709959-01)	MSD	ug/L	0.2000	90.0%	75-125	
			MSRPD	ug/L		2.8%	≤20	
	245.1	08/31/2007:A	00-ICB	PPT		ND	<20	
			00-CCB	PPT		ND	<20	
			00-ICV	PPT	200.0	94.5%	90-110	
			00-CCV	PPT	200.0	95.0%	90-110	
		09/14/2007:A	00-ICB	ppt		ND	<20	
			00-CCB	ppt		ND	<20	
			00-ICV	ppt	200.0	108%	90-110	
			00-CCV	ppt	200.0	104%	90-110	
Molybdenum	200.8	09/14/2007:B204	MS	ug/L	5.000	62.6%	< ¼	408
		(VI 741916-05)	MSD	ug/L	5.000	56.2%	< ¼	408
			MSRPD	ug/L		1.2%	≤20	
	200.8	09/14/2007:A	00-ICB	ppb		ND	<1	
			00-CCB	ppb		ND	<1	
			00-ICV	ppb	120.0	102%	90-110	
			00-CCV	ppb	100.0	98.8%	90-110	
Nickel	200.8	09/14/2007:B204	MS	ug/L	5.000	107%	75-125	
		(VI 741916-05)	MSD	ug/L	5.000	101%	75-125	
			MSRPD	ug/L		5.1%	≤20	
	200.8	09/14/2007:A	00-ICB	ppb		ND	<1	
			00-CCB	ppb		ND	<1	
			00-ICV	ppb	120.0	106%	90-110	
			00-CCV	ppb	100.0	103%	90-110	

Report continued on next page...

September 20, 2007
City of Patterson Wastewater

Lab ID : STK737852
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Potassium	200.7	09/17/2007:A203 (STK737046-02)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	125% 121% 2.7%	75-125 75-125 ≤20.0	
		09/17/2007:B203 (STK737852-08)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	112% 113% 1.1%	75-125 75-125 ≤20.0	
	200.7	09/17/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 25.00 25.00	ND ND 101% 101%	<1 <1 95-105 90-110	
Selenium	200.8	09/14/2007:B204 (VI 741916-05)	MS MSD MSRPD	ug/L ug/L ug/L	5.000 5.000	91.2% 86.8% 0.22	75-125 75-125 ≤2.00	
	200.8	09/14/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	 120.0 100.0	ND ND 94.4% 95.7%	<2 <2 90-110 90-110	
Sodium	200.7	09/17/2007:A203 (STK737046-02)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	87.9% 91.0% 0.1%	< ¼ < ¼ ≤20.0	408 408
		09/17/2007:B203 (STK737852-08)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	52.3% 60.4% 0.3%	< ¼ < ¼ ≤20.0	408 408
	200.7	09/17/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 25.00 25.00	ND ND 97.5% 96.5%	<1 <1 95-105 90-110	
Zinc	200.7	09/17/2007:A203 (STK737046-02)	MS MSD MSRPD	ug/L ug/L ug/L	2000 2000	111% 108% 3.2%	75-125 75-125 ≤20.0	
		09/17/2007:B203 (STK737852-08)	MS MSD MSRPD	ug/L ug/L ug/L	2000 2000	99.7% 100% 0.4%	75-125 75-125 ≤20.0	
	200.7	09/17/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 1.000 1.000	ND ND 100% 98.6%	<0.02 <0.02 95-105 90-110	
Wet Chem Bicarbonate	2320B	08/31/2007:B202	Dup	mg/L		1.2%	4.78	
Carbonate	2320B		Dup	mg/L		0.00	10	
Chloride	300.0	08/29/2007:B215	LCS	mg/L	25.00	96.0%	90-110	

Report continued on next page...

September 20, 2007
City of Patterson Wastewater

Lab ID : STK737852
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem Chloride	300.0	08/29/2007:B215 (CH 775062-02)	MS MSD MSRPD	mg/L mg/L mg/L	500.0 500.0	107% 106% 1.1%	86-128 86-128 ≤23.0	
	300.0	08/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 50.00 25.00	ND ND 100% 96.1%	<1 <1 90-110 90-110	
Fluoride	300.0	09/10/2007:B215 (VI 741951-01)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	2.500 50.00 50.00	90.8% 101% 101% 0.0%	90-110 81-126 81-126 ≤12.1	
	300.0	09/10/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 5.000 2.500	ND ND 91.2% 90.9%	<0.1 <0.1 90-110 90-110	
Hydroxide	2320B	08/31/2007:B202	Dup	mg/L		0.00	10	
MBAS (foaming agents)	5540C	08/29/2007:A218 (STK737852-01)	MS MSD MSRPD	mg/L mg/L mg/L	1.000 1.000	100% 100% 0.0	90-110 90-110 ≤0.1	
	5540C	08/29/2007:A	00-CCB 00-CCV	mg/L mg/L	 1.000	ND 100%	<0.1 99-101	
Nitrate	300.0	08/29/2007:B215 (CH 775062-02)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	20.00 400.0 400.0	97.3% 106% 105% 1.0%	90-110 88-124 88-124 ≤29.1	
	300.0	08/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 40.00 20.00	ND ND 99.6% 97.2%	<0.4 <0.4 90-110 90-110	
	300.0	08/29/2007:B215 (CH 775062-02)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	20.00 400.0 400.0	97.3% 106% 105% 1.0%	90-110 88-124 88-124 ≤29.1	
Nitrite	300.0	(CH 775062-02)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	15.00 300.0 300.0	93.9% 105% 102% 2.6%	90-110 91-121 91-121 ≤23.8	
	300.0	08/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 30.00 15.00	ND ND 100% 95.4%	<0.3 <0.3 90-110 90-110	
Solids, Fixed Dissolved (FDS)	2540 C,E	08/31/2007:C235	Blank	mg/L		ND	<40	

Report continued on next page...

September 20, 2007
City of Patterson Wastewater

Lab ID : STK737852
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem Solids, Fixed Dissolved (FDS)	2540 C,E	08/31/2007:C235	LCS Dup	mg/L mg/L	1000	101% 0.7%	90-110 12.2	
Specific Conductance	2510B	08/30/2007:A212	Blank Dup	umhos/cm umhos/cm		ND 0.2%	<1 0.372	
	2510B	08/30/2007:A	00-ICB 00-ICV 00-CCV	umhos/cm umhos/cm umhos/cm	 10000 998.0	ND 100% 101%	<1 95-105 95-105	
Sulfate	300.0	08/29/2007:B215 (CH 775062-02)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	50.00 1000 1000	95.7% 110% 106% 3.6%	90-110 78-137 78-137 ≤12.3	
	300.0	08/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	 100.0 50.00	ND ND 99.8% 96.0%	<2 <2 90-110 90-110	
Total Alkalinity (as CaCO3)	2320B	08/31/2007:B202	Dup	mg/L		1.2%	3.42	
	2320B	08/31/2007:A	00-ICV 00-CCV	mg/l mg/l	234.9 234.9	92.6% 92.0%	90-110 90-110	
Total Dissolved Solids	2540C	08/31/2007:C235	Blank LCS Dup	mg/L mg/L mg/L	 1000	ND 101% 0.1%	<20 90-110 10.0	

Explanations

220 The absolute value of the CCB was greater than the DQO. However, all results were either five times greater than the CCB concentration or ND relative to the PQL.

355 CCV not within Acceptance Range (AR). Results were reported with client approval.

408 Matrix Spike(MS) or Post Digestion Spike(PDS) has no Acceptance Range (DQO) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.

LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.

MS/MSD : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.

Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.

ICB : Initial Calibration Blank - Analyzed to verify the instrument baseline is within criteria.

ICV : Initial Calibration Verification - Analyzed to verify the instrument calibration is within criteria.

CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.

CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.

ND : Non-detect - Result was below the DQO listed for the analyte.

< ¼ : High Sample Background - Spike concentration was less than one forth of the sample concentration.

DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

Report continued on next page...

September 20, 2007
City of Patterson Wastewater

Lab ID : STK737852
Customer : 3-15918

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
TOC 5310 C	5310C	08/30/2007:A234	Blank	mg/L		ND	<0.5	
			BS	mg/L	50.00	99.9%	80-117	
			BSD	mg/L	50.00	99.3%	80-117	
			BSRPD	mg/L		0.7%	≤14.2	
	5310C	08/30/2007:A	00-ICV	ppm	53.13	88.8%	N/A	
			00-CCV	ppm	53.13	81.6%	76-119	

Definitions

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS/MSD : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
BS/BSD : Blank Spikes - A blank is spiked with a known amount of analyte. It is prepared to verify that the preparation process is not affecting analyte recovery.
Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
ICB : Initial Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
ICV : Initial Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
CCB : Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
ND : Non-detect - Result was below the DQO listed for the analyte.
< ¼ : High Sample Background - Spike concentration was less than one forth of the sample concentration.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

September 20, 2007

City of Patterson
P.O. Box 667
Patterson, CA 95363

RE: Ammonia -N & TKN Analysis, Project - Groundwater Monitoring, Lab No. 737852

Enclosed please find results for the above analysis on your samples received August 28, 2007.

Please note the analysis was performed by North Coast Laboratories, Ltd.

Thank you for using FGL Environmental.

Sincerely,

Kelly A. Dunnahoo, B.S.
Laboratory Director

KAD:cea

NORTH COAST LABORATORIES LTD.

September 11, 2007

Fruit Growers Laboratory
853 Corporation Street
P.O. Box 272
Santa Paula, CA 93061
Attn: Mike Ostrom

RE: 737852 (3-15918)

Order No.: 0708782
Invoice No.: 69052
PO No.:
ELAP No. 1247-Expires July 2008

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	MW1
02A	MW2
03A	MW3
04A	MW4
05A	MW5
06A	MW6
07A	MW7
08A	MW8
09A	MW10
10A	Mitigation Well

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

5680 West End Road • Arcata California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Date: 11-Sep-2007
WorkOrder: 0708782

ANALYTICAL REPORT

Client Sample ID: MW1 **Received:** 8/29/2007 **Collected:** 8/28/2007 9:01
Lab ID: 0708782-01A

Test Name: Ammonia Nitrogen without distillation **Reference:** Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/2/2007

Test Name: Nitrogen - Total Kjeldahl **Reference:** Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	ND	1.0	mg/L	1.0	9/2/2007	9/5/2007

Client Sample ID: MW2 **Received:** 8/29/2007 **Collected:** 8/28/2007 13:47
Lab ID: 0708782-02A

Test Name: Ammonia Nitrogen without distillation **Reference:** Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/2/2007

Test Name: Nitrogen - Total Kjeldahl **Reference:** Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	ND	1.0	mg/L	1.0	9/2/2007	9/5/2007

Client Sample ID: MW3 **Received:** 8/29/2007 **Collected:** 8/28/2007 11:27
Lab ID: 0708782-03A

Test Name: Ammonia Nitrogen without distillation **Reference:** Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/2/2007

Test Name: Nitrogen - Total Kjeldahl **Reference:** Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	ND	1.0	mg/L	1.0	9/2/2007	9/5/2007

Client Sample ID: MW4 **Received:** 8/29/2007 **Collected:** 8/28/2007 12:30
Lab ID: 0708782-04A

Test Name: Ammonia Nitrogen without distillation **Reference:** Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/2/2007

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Date: 11-Sep-2007

ANALYTICAL REPORT

WorkOrder: 0708782

Test Name: Nitrogen - Total Kjeldahl — Reference: Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	1.9	1.0	mg/L	1.0	9/2/2007	9/5/2007

Client Sample ID: MW5 — **Received:** 8/29/2007 — **Collected:** 8/28/2007 13:01

Lab ID: 0708782-05A

Test Name: Ammonia Nitrogen without distillation — Reference: Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	1.2	0.10	mg/L	1.0		9/2/2007

Test Name: Nitrogen - Total Kjeldahl — Reference: Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	1.9	1.0	mg/L	1.0	9/2/2007	9/5/2007

Client Sample ID: MW6 — **Received:** 8/29/2007 — **Collected:** 8/28/2007 10:41

Lab ID: 0708782-06A

Test Name: Ammonia Nitrogen without distillation — Reference: Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/2/2007

Test Name: Nitrogen - Total Kjeldahl — Reference: Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	ND	1.0	mg/L	1.0	9/6/2007	9/7/2007

Client Sample ID: MW7 — **Received:** 8/29/2007 — **Collected:** 8/28/2007 9:39

Lab ID: 0708782-07A

Test Name: Ammonia Nitrogen without distillation — Reference: Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/5/2007

Test Name: Nitrogen - Total Kjeldahl — Reference: Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	1.1	1.0	mg/L	1.0	9/6/2007	9/7/2007

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

Date: 11-Sep-2007
WorkOrder: 0708782

ANALYTICAL REPORT

Client Sample ID: MW8 **Received:** 8/29/2007 **Collected:** 8/28/2007 10:11
Lab ID: 0708782-08A

Test Name: Ammonia Nitrogen without distillation **Reference:** Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/5/2007

Test Name: Nitrogen - Total Kjeldahl **Reference:** Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	1.9	1.0	mg/L	1.0	9/6/2007	9/7/2007

Client Sample ID: MW10 **Received:** 8/29/2007 **Collected:** 8/28/2007 11:55
Lab ID: 0708782-09A

Test Name: Ammonia Nitrogen without distillation **Reference:** Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/5/2007

Test Name: Nitrogen - Total Kjeldahl **Reference:** Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	ND	1.0	mg/L	1.0	9/6/2007	9/7/2007

Client Sample ID: Mitigation Well **Received:** 8/29/2007 **Collected:** 8/28/2007 13:20
Lab ID: 0708782-10A

Test Name: Ammonia Nitrogen without distillation **Reference:** Std. Meth. 20th Ed. 4500-NH3 D

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Ammonia Nitrogen	ND	0.10	mg/L	1.0		9/5/2007

Test Name: Nitrogen - Total Kjeldahl **Reference:** Std. Meth. 20th Ed. 4500-Norg B+C

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Nitrogen- Total Kjeldahl	ND	1.0	mg/L	1.0	9/6/2007	9/7/2007

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831

North Coast Laboratories, Ltd.

Date: 11-Sep-2007

CLIENT: Fruit Growers Laboratory
Work Order: 0708782
Project: 737852 (3-15918)

QC SUMMARY REPORT
Method Blank

Sample ID: **MBLK** Batch ID: **R48612** Test Code: **AMMW** Units: **mg/L** Analysis Date **9/2/2007** Prep Date:
Client ID: Run ID: **WC_070902A** SeqNo: **705503**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia Nitrogen	ND	0.10									

Sample ID: **MBLK** Batch ID: **R48658** Test Code: **AMMW** Units: **mg/L** Analysis Date **9/5/2007** Prep Date:
Client ID: Run ID: **WC_070905B** SeqNo: **706084**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia Nitrogen	ND	0.10									

Sample ID: **MBLK** Batch ID: **R48666** Test Code: **NKJEW** Units: **mg/L** Analysis Date **9/5/2007** Prep Date: **9/2/2007**
Client ID: Run ID: **WC_070902C** SeqNo: **706217**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen- Total Kjeldahl	ND	1.0									

Sample ID: **MBLK** Batch ID: **R48705** Test Code: **NKJEW** Units: **mg/L** Analysis Date **9/7/2007** Prep Date: **9/6/2007**
Client ID: Run ID: **WC_070906K** SeqNo: **706841**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen- Total Kjeldahl	ND	1.0									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 11-Sep-2007

CLIENT: Fruit Growers Laboratory
Work Order: 0708782
Project: 737852 (3-15918)

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS** Batch ID: **R48612** Test Code: **AMMW** Units: **mg/L** Analysis Date **9/2/2007** Prep Date:
Client ID: Run ID: **WC_070902A** SeqNo: **705504**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia Nitrogen	9.790	0.10	10.0	0	97.9%	85	115	0			

Sample ID: **LCSD** Batch ID: **R48612** Test Code: **AMMW** Units: **mg/L** Analysis Date **9/2/2007** Prep Date:
Client ID: Run ID: **WC_070902A** SeqNo: **705505**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia Nitrogen	10.30	0.10	10.0	0	103%	85	115	9.79	5.08%	15	

Sample ID: **LCS** Batch ID: **R48658** Test Code: **AMMW** Units: **mg/L** Analysis Date **9/5/2007** Prep Date:
Client ID: Run ID: **WC_070905B** SeqNo: **706085**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia Nitrogen	10.30	0.10	10.0	0	103%	85	115	0			

Sample ID: **LCSD** Batch ID: **R48658** Test Code: **AMMW** Units: **mg/L** Analysis Date **9/5/2007** Prep Date:
Client ID: Run ID: **WC_070905B** SeqNo: **706086**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia Nitrogen	10.40	0.10	10.0	0	104%	85	115	10.3	0.966%	15	

Sample ID: **LCS** Batch ID: **R48666** Test Code: **NKJEW** Units: **mg/L** Analysis Date **9/5/2007** Prep Date: **9/2/2007**
Client ID: Run ID: **WC_070902C** SeqNo: **706218**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen- Total Kjeldahl	9.460	1.0	10.0	0	94.6%	85	115	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Fruit Growers Laboratory
Work Order: 0708782
Project: 737852 (3-15918)

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD** Batch ID: **R48666** Test Code: **NKJEW** Units: **mg/L** Analysis Date **9/5/2007** Prep Date: **9/2/2007**
Client ID: Run ID: **WC_070902C** SeqNo: **706219**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen- Total Kjeldahl	10.10	1.0	10.0	0	101%	85	115	9.46	6.54%	25	

Sample ID: **LCS** Batch ID: **R48705** Test Code: **NKJEW** Units: **mg/L** Analysis Date **9/7/2007** Prep Date: **9/6/2007**
Client ID: Run ID: **WC_070906K** SeqNo: **706842**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen- Total Kjeldahl	10.10	1.0	10.0	0	101%	85	115	0			

Sample ID: **LCSD** Batch ID: **R48705** Test Code: **NKJEW** Units: **mg/L** Analysis Date **9/7/2007** Prep Date: **9/6/2007**
Client ID: Run ID: **WC_070906K** SeqNo: **706856**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen- Total Kjeldahl	10.38	1.0	10.0	0	104%	85	115	10.1	2.77%	25	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

FGL ENVIRONMENTAL

Subcontract to North Coast Lab

CHAIN OF CUSTODY

AND ANALYSIS REQUEST DOCUMENT

Lab Number:

TEST DESCRIPTION AND ANALYSES REQUESTED

Client: FGL Stockton
Customer Number: 3000001
Address: 2500 Stagecoach Rd.
Stockton, CA 95215

Phone: (209)942-0181 Fax: (209)942-0423
Contact Person: Mike Ostrom
Project Name: 737852 (3-15918)
Purchase Order Number:
Quote Number:

Sampler(s): Ken

Sampling Fee: ______ Pickup Fee: ______
Compositor Setup Date: ______ Time: ______

Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling: Composite (C) Grab (G)	Number of Containers	Type of Containers: (G)Glass (P)Plastic (V)VOA (MT)Metal Tube	Potable (P) Non-Potable (NP) Ag Water (AgW)	(SW) Surface Water (MW) Monitoring Well (GW) Ground Water (TB) Travel Blank (WW) Waste Water (DW) Drinking Water	(S) Soil (SLG) Sludge (SLD) Solid (O) Oil	BacT: (Sys) System (SRC) Source (W) Waste	Bact (ROUT)Routine (RPT)Repeat (OTH)Other (RPL)Replace (SPL)Special	(LT) Leaf Tissue (PET) Petiole Tissue (PRD) Produce	Preservative: (1) NaOH + ZnAc, (2) NaOH, (3) HCl (4) H2SO4, (5) HNO3, (6) Na2S2O3, (7) Other ______	NH3-N, TKN
1	MW1	8/28/07	0901	G	1	P		MW					4	X
2	MW2		1347											
3	MW3		1127											
4	MW4		1230											
5	MW5		1301											
6	MW6		1041											
7	MW7		0939											
8	MW8		1011											

pc 8/29

Remarks

1 OF 2

Relinquished	Date	Time	Relinquished	Date	Time	Relinquished	Date	Time
Dr	8/28/07	1700						
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
Calvez	8/28/07	1700	RG	8/29/07	1535			

temp 6.7°C

08/22/2007 12:52 PM

Subcontract to NorthCoast LAB

FGL ENVIRONMENTAL

CHAIN OF CUSTODY

AND ANALYSIS REQUEST DOCUMENT 0708782

Client:	FGL Stockton
Customer Number:	3000001
Address:	2500 Stagecoach Rd. Stockton, CA 95215
Phone: (209)942-0181	Fax: (209)942-0423
Contact Person:	Mike Ostrom
Project Name:	737852 (3-15918)
Purchase Order Number:	
Quote Number:	
Sampler(s):	Ken
Sampling Fee: _____	Pickup Fee: _____
Compositor Setup Date: _____	Time: _____

Lab Number:

TEST DESCRIPTION AND ANALYSES REQUESTED

Method of Sampling: Composite (C) Grab (G)
Number of Containers
Type of Containers: (G)Glass (P)Plastic (V)VOA (MT)Metal Tube
Potable (P) Non-Potable (NP) Ag Water (AgW)
(SW) Surface Water (MW) Monitoring Well (GW) Ground Water (TB) Travel Blank (WW) Waste Water (DW) Drinking Water
(S) Soil (SLG) Sludge (SLD) Solid (O) Oil
Bact: (Sys) System (SRC) Source (W) Waste
Bact (ROUT)Routine (RPT)Repeat (OTH)Other (RPL)Replace (SPL)Special
(LT) Leaf Tissue (PET) Petiole Tissue (FRD) Produce
Preservative: (1) NaOH + ZnAc, (2) NaOH, (3) HCl (4) H2SO4, (5) HNO3, (6) Na2S2O3, (7) Other _____
8/29
NH3-N; TKN

Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling	Number of Containers	Type of Containers	Potable	Test Description
9	MW10	8/28/07	1155	G	1	P		MW; Preservative 4
10	Mitigation Well	〃	1320	〃	〃	〃		〃; 〃

Remarks

2 OF 2

Relinquished	Date:	Time:	Received By:	Date:	Time:
DR	8/28/07	1700	Calvey	8/28/07	1700
			RC	8/29/07	1535

temp 6.7°C

ENVIRONMENTAL

Quarterly
www.fglinc.com

CHAIN OF CUSTODY
Laboratory Copy (1 of 3)

33141:07/02/2007

TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information

Client: **City of Patterson Wastewater**
Address: PO Box 667
Patterson, CA. 95363

Phone: (209)892-3287 Fax: (209)892-3970
Contact Person: Joel Cockrell
Project Name: **Groundwater Monirroring**
Purchase Order Number:
Quote Number:

Sampler(s) JCW

Sampling Fee: _____ Pickup Fee: _____
Compositor Setup Date: ___/___/___ Time: ___/___

Lab Number: **STK** 737852 **3-15918**

Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling: Composite(C) Grab(G)	Type of Sample **SEE REVERSE SIDE**	Potable(P) Non-Potable(NP) Ag Water(AgW)	Bacti Type: Other(O) System(SYS) Source(SR) Waste(W)	Bacti Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)	Coliform - LTB-MTF 10 Tube 120ml(PBa)-Na2S2O3	General Mineral/Irrigation Suitability (Color Report N/R) 500ml(P)-HNO3 , 16oz(P), 8oz(P)-H2SO4	Metals, Diss-As,Ba,Cd,Cu,Pb,Hg,Mo,Ni,Se (Samples to be Field Filtered by Sampler) 500ml(P)-HNO3	Wet Chemistry-NH3-N,NO3-N,TKN,FDS,Vol Diss Solids 16oz(P)-H2SO4 , 16oz(P)	TOC 40ml(AVT)-H2SO4	Sampling - Field Logs (Depth to Water, pH, EC, Temp)	Sampling - Field Filtering	Sampling Charge	Field Test-Field pH !!pH = 15 MINUTE HOLD TIME!!	Field - pH Date	Field - pH Time	Coliform - LTB-Series 15 Tube 120ml(PBa)-Na2S2O3		
1	MW1	8/28/07	0904	G	MW				1	1,1,1	1	1,1	2	X	X	X	8.3	8/28	0901			
2	MW2		1340	G	MW				1	1,1,1	1	1,1	2	X	X	X	7.4		1347			
3	MW3		1127	G	MW					1,1,1	1	1,1	2	X	X	X	7.5		1127	1		
4	MW4		1230	G	MW				1	1,1,1	1	1,1	2	X	X	X	7.3		1230			
5	MW5		1301	G	MW					1,1,1	1	1,1	2	X	X	X	7.0		1301	1		
6	MW6		1041	G	MW				1	1,1,1	1	1,1	2	X	X	X	7.7		1041			
7	MW7		0939	G	MW				1	1,1,1	1	1,1	2	X	X	X	7.7		0939			
8	MW8		1011	G	MW				1	1,1,1	1	1,1	2	X	X	X	7.7		1011			
~~9~~	~~MW9~~		*	~~G~~	~~MW~~				~~1~~	~~1,1,1~~	~~1~~	~~1,1~~	~~2~~	~~X~~	~~X~~	~~X~~						
10	MW10		1155	G	MW				1	1,1,1	1	1,1	2	X	X	X	7.6		1155			

Remarks: **Multiple Chains**
#9 DOESN'T EXIST
ANY LONGER. *

Relinquished	Date:	Time:	Relinquished	Date:	Time:	Relinquished	Date:	Time:
	8/28/07	1130		8/28/07	1530			
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
	8-28-07	1130					8/29/07	1000

Corporate Offices & Laboratory
P.O. Box 272 / 853 Corporation Street
Santa Paula, CA 93061-0272
TEL: (805) 392-2000

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209) 942-0182

Office & Laboratory
563 East Lindo Avenue
Chico, CA 95926
TEL: (530) 343-5818

Field Office
Visalia, California
TEL: (559) 734-9473
Mobile: (559) 737-2399

ENVIRONMENTAL

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CHAIN OF CUSTODY
Laboratory Copy (1 of 3)

33141:07/02/2007

TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information

Client: **City of Patterson Wastewater**
Address: PO Box 667
Patterson, CA. 95363

Phone: (209)892-3287 Fax: (209)892-3970
Contact Person: Joel Cockrell
Project Name: **Groundwater Monirroring**
Purchase Order Number:
Quote Number:

Sampler(s) Joe

Sampling Fee: _____ Pickup Fee: _____
Compositor Setup Date: ___/___/___ Time: ___/___

Lab Number: **STK** 737852 **3-15918**

Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling: Composite(C) Grab(G)	Type of Sample **SEE REVERSE SIDE**	Potable(P) Non-Potable(NP) Ag Water(AgW)	Bacti Type: Other(O) System(SYS) Source(SR) Waste(W)	Bacti Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)	Coliform - LTB-MTF 10 Tube 120ml(PBa)-Na2S2O3	General Mineral/Irrigation Suitability (Color Report N/R) 500ml(P)-HNO3 , 16oz(P), 8oz(P)-H2SO4	Metals, Diss-As,Ba,Cd,Cu,Pb,Hg,Mo,Ni,Se (Samples to be Field Filtered by Sampler) 500ml(P)-HNO3	Wet Chemistry-NH3-N,NO3-N,TKN,FDS,Vol Diss Solids 16oz(P)-H2SO4 , 16oz(P)	TOC 40ml(AVT)-H2SO4	Sampling - Field Logs (Depth to Water, pH, EC, Temp)	Sampling - Field Filtering	Sampling Charge	Field Test-Field pH !!pH = 15 MINUTE HOLD TIME!!	Field - pH Date	Field - pH Time	Coliform - LTB-Series 15 Tube 120ml(PBa)-Na2S2O3		
11	Mitigation Well	8/28	1320	G	MW				1	1,1,1	1	1,1	2	X	X	X	7.5	8/28	1320	1		

Remarks: **Multiple Chains**

Relinquished	Date:	Time:	Relinquished	Date:	Time:	Relinquished	Date:	Time:
	8/28/07	1530						
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
							8/29/07	1000

Corporate Offices & Laboratory
P.O. Box 272 / 853 Corporation Street
Santa Paula, CA 93061-0272
TEL: (805) 392-2000
FAX: (805) 525-4172

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209) 942-0182
FAX: (209) 942-0423

Office & Laboratory
563 East Lindo Avenue
Chico, CA 95926
TEL: (530) 343-5818
FAX: (530) 343-3807

Field Office
Visalia, California
TEL: (559) 734-9473
Mobile: (559) 737-2399
FAX: (559) 734-8435

Stockton - Condition Upon Receipt (Attach to COC)

Sample Receipt at STK:

1. Number of ice chests/packages received: ROI

2. Were samples received in a chilled condition? Temps: _____ / _____ / _____ / _____ / _____
   Acceptable is above freezing to 6° C. Also acceptable is received on ice (ROI) for the same day of sampling or received at room temperature (RRT) if sampled within one hour of receipt. Client contact for temperature failures must be documented below. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received..

3. Do the number of bottles received agree with the COC? (Yes) No N/A

4. Were samples received intact? (i.e. no broken bottles, leaks etc.) (Yes) No

5. Were sample custody seals intact? (N/A) Yes No

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): [illegible]

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 6 / _____ / _____ / _____ / _____
   Acceptable is above freezing to 6° C. If many packages are received at one time check for tests/H.T.'s/rushes/Bacti's to prioritize further review. Please notify Microbiology personnel immediately of bacti samples received.

2. Do the number of bottles received agree with the COC? (Yes) No N/A

3. Were samples received intact? (i.e. no broken bottles, leaks etc.) (Yes) No

4. Were sample custody seals intact? (N/A) Yes No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? (Yes) No

2. Did bottle labels correspond with the client's ID's? (Yes) No

3. Were all bottles requiring sample preservation properly preserved? (Yes) No N/A FGL

4. Were all analyses within holding times at time of receipt? (Yes) No

5. Have rush or project due dates been checked and accepted? (N/A) Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): [illegible]

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:

   Resolution:

(3-15918)
City of Patterson Wastewater
STK0737852
IV-08/29/2007-12:42:38