

QUARTERLY MONITORING REPORT JANUARY 2007 SAMPLING

City of Patterson Water Quality Control Facility Groundwater Monitoring Program

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

Prepared by:



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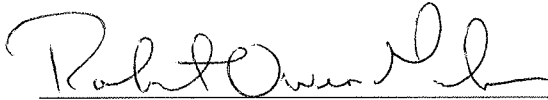
Prepared for:



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Patterson, CA 95363

March 2007

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3-22-07

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(DATE)
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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 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 will include an assessment of background conditions and a determination if there has been any impact from wastewater disposal. The groundwater monitoring program consists of the construction and 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. In conjunction with the 1.25 mgd expansion, five new monitoring wells MW-6 to MW-10 were constructed between the months of July and August of 2004. 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 January 23th, 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 ten 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**.

The location of monitoring well MW-9 was disputed by the neighbors. Therefore, as of May 10, 2005, MW-9 was removed in accordance with the Stanislaus County requirements. At this time, no new location has been proposed to replace MW-9.



SECTION 3 GROUNDWATER ELEVATIONS

Groundwater elevations measured in this sampling round along with the groundwater elevation from the previous three years are presented in **Table 2**. The current groundwater elevations are contoured on the map in **Figure 1**.

SECTION 4 MONITORING WELL SAMPLING

The wells were purged and sampled on January 23, 2007 in accordance with the procedures specified in the workplan. Monitoring Well MW-10 was inadvertently missed during this sampling round, but will be sampled in the April sampling round. Sampling was conducted by Ken Moffitt of FGL Environmental. Purge logs are presented in **Appendix A**.

SECTION 5 GROUNDWATER QUALITY RESULTS

The samples were analyzed by FGL Environmental, a state-certified environmental laboratory. In accordance with the Supplemental Program, the following parameters were tested:

- Pathogens
 - Total Coliform Organisms
 - Fecal Coliform
- Total Organic Carbon
- Nitrogen Compounds
 - Nitrate (as $\text{NO}_3\text{-N}$)
 - Ammonia (as $\text{NH}_3\text{-N}$)
 - Total Kjeldahl Nitrogen
- General Minerals
- Sodium Adsorption Ration (SAR)
- Dissolved Metals

The groundwater analytical results are provided in **Table 3**, **Table 4**, and **Table 5**. Laboratory reports for the January 2007 samples are presented in **Appendix B**.

Table 1

Well Construction Summary

	Well Depth (ft)	Completion Type	Slab Surface Elevation	Top of Casing Elevation	Water Elevation 01/23/07 (ft msl)
MW-1	27.5	Below	55.58	54.93	38.95
MW-2	31.4	Above	57.93	59.68	37.71
MW-3	31.0	Above	52.18	53.80	37.32
MW-4	31.0	Above	56.99	58.58	36.71
MW-5	31.0	Above	53.79	55.21	35.69
MW-6	29.2	Above	51.81	55.23	37.33
MW-7	31.0	Above	54.62	58.04	35.84
MW-8	30.7	Above	55.91	59.33	37.66
MW-10	30.0	Below	58.33	58.12	-

Table 2

Groundwater Elevations
Patterson WWTP Monitoring Wells

Water Elevations	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
Water Elevation 1/9/04 (ft msl)	35.97	35.55	N/A	30.97	36.29	N/A	N/A	N/A	N/A	N/A
Water Elevation 1/29/04 (ft msl)	N/A	N/A	35.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water Elevation 4/8/04 (ft msl)	37.24	38.06	35.14	35.36	34.41	N/A	N/A	N/A	N/A	N/A
Water Elevation 7/8/04 (ft msl)	37.61	38.82	33.76	34.44	33.60	N/A	N/A	N/A	N/A	N/A
Water Elevation 10/18/04 (ft msl)	37.90	37.68	34.87	35.40	34.19	36.01	34.33	35.41	38.08	37.38
Water Elevation 1/17/05 (ft msl)	37.83	37.22	37.05	37.72	37.50	36.81	37.54	37.98	37.28	37.94
Water Elevations 4/05/05 (ft msl)	40.03	38.87	39.47	39.58	39.58	39.15	40.13	40.20	39.36	39.85
Water Elevations 7/11/05 (ft msl)	41.95	42.15	39.78	39.87	38.93	42.14	39.13	40.42	N/A	43.12
Water Elevations 10/10/05 (ft msl)	40.62	40.48	37.46	37.70	36.61	39.72	37.86	38.37	N/A	38.69
Water Elevations 01/09/06 (ft msl)	38.60	38.25	37.12	46.45	37.34	38.25	39.43	38.49	N/A	39.82
Water Elevations 04/12/06 (ft msl)	41.69	40.74	45.65	47.63	47.19	41.92	47.75	44.87	N/A	41.74
Water Elevations 07/06/06 (ft msl)	46.21	44.93	43.53	43.37	42.89	46.08	43.33	45.21	N/A	44.38
Water Elevations 01/23/07 (ft msl)	38.95	37.71	37.32	36.71	35.69	37.33	35.84	37.66	N/A	N/A

Table 3
January 2007 Sampling
Analytical Results

	Pathogens		Total Organic Carbon (mg/L)	Nitrogen Compounds			Sodium Adsorption Ratios (SAR) (mg/L)
	Total Coliform Organisms (MPN/100ml)	Fecal Coliform (MPN/100ml)		Nitrate (as NO ₃ -N) (mg/L)	Ammonia (NH ₃ -N) (mg/L)	Total Kjeldahl Nitrogen (mg/L)	
MW-1	6.9	<1.1	0.7	12.5	0.2	ND	5.9
MW-2	<1.1	N/R	1.1	13.3	ND	ND	5.9
MW-3	<2	N/R	0.9	9.3	ND	0.7	10.2
MW-4	<1.1	N/R	2.1	ND	ND	ND	5.4
MW-5	<2	N/R	1.6	13.1	ND	ND	7.6
MW-6	12	<1.1	1.0	6.1	ND	ND	4.5
MW-7	<1.1	N/R	1.2	0.3	ND	2.6	8.2
MW-8	<1.1	N/R	1.3	7.4	ND	ND	6.3
MW-10	NS	NS	NS	NS	NS	NS	NS

ND = Not Detected
N/R = Not Required
NS = Not Sampled

Table 4
January 2007 Sampling
Dissolved Metals Results

	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	ND	0.0314	ND	0.002	0.0002	ND	0.015	0.001	0.008	ND
MW-2	0.003	0.0258	ND	0.003	ND	0.00003	0.013	0.002	0.012	ND
MW-3	0.006	0.0285	ND	0.004	0.0003	ND	0.005	0.003	0.004	ND
MW-4	0.015	0.121	0.0004	0.011	0.0011	ND	0.01	0.016	0.003	100
MW-5	0.005	0.0606	ND	0.005	ND	ND	0.014	0.009	0.006	ND
MW-6	0.002	0.0268	ND	0.002	ND	ND	0.013	0.001	0.005	ND
MW-7	0.007	0.0378	0.0002	0.007	0.0002	ND	0.017	0.013	ND	30
MW-8	0.007	0.0878	ND	0.003	ND	ND	0.006	0.003	0.005	ND
MW-10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

ND = Not Detected

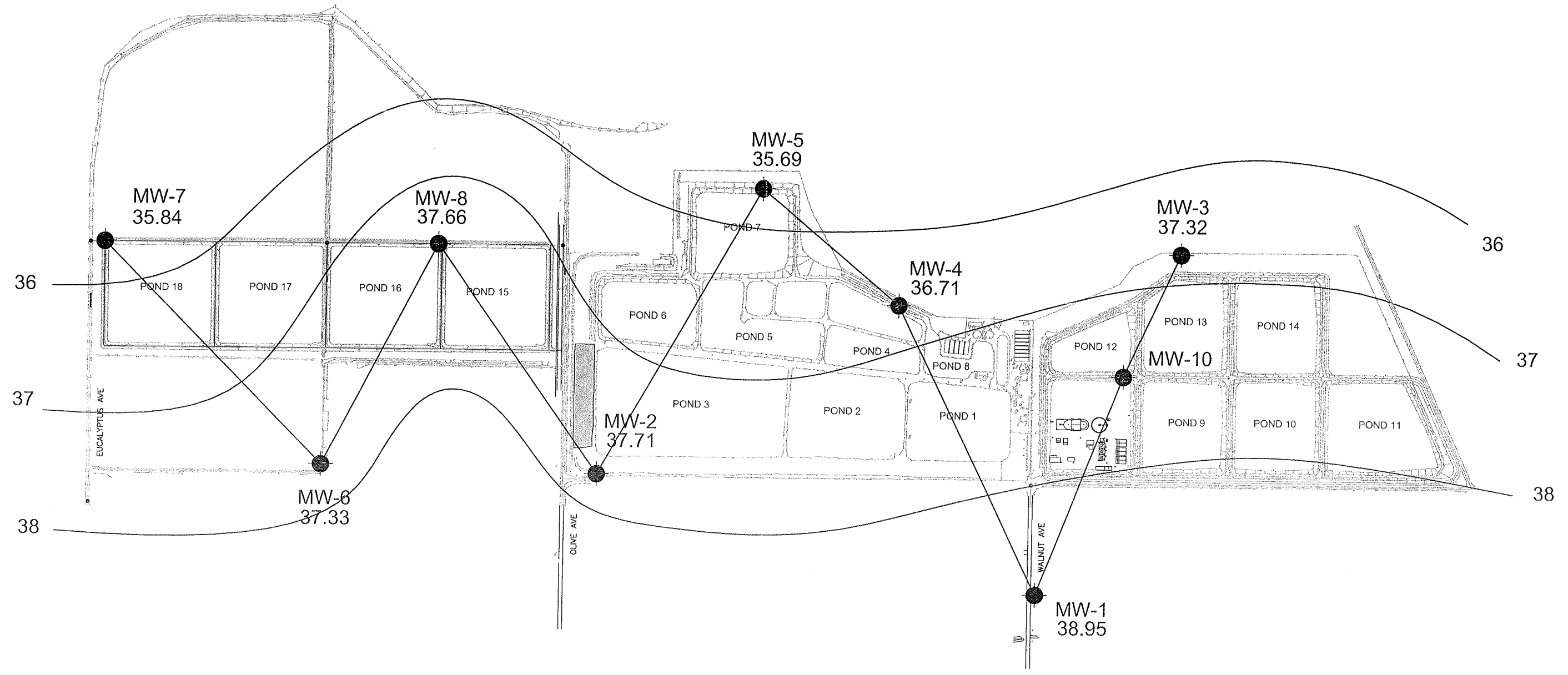
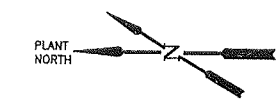
NT = Not Tested

Table 5
January 2007 Sampling
General Minerals Results

	Total Dissolved Solids (Total) (mg/L)	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)	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
MW-1	1330	62	91	312	3	110	20	190	400	7.7	2040	529	330	21.2	24.2
MW-2	1920	61	191	417	3	140	ND	280	540	7.4	2860	938	630	32.7	37.0
MW-3	2070	75	119	611	4	80	ND	480	590	7.4	3200	677	400	34.6	40.2
MW-4	1570	126	106	342	12	290	1060	370	210	7.1	2530	750	610	27.1	30.2
MW-5	1660	99	99	445	7	120	10	450	280	7.0	2720	654	450	28.5	32.6
MW-6	1140	43	111	245	2	610	40	134	410	7.6	1760	564	350	19.7	22.0
MW-7	1260	33	74	372	5	5240	270	360	280	7.4	2080	387	250	21.0	24.0
MW-8	1730	103	115	393	4	560	10	390	450	7.3	2630	730	390	28.8	31.8
MW-10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

ND = Not Detected

NS = Not Sampled



CITY OF PATTERSON
WATER QUALITY CONTROL FACILITY
14901 POPLAR AVENUE

FIGURE 1
JANUARY 2007 SAMPLING ROUND
GROUNDWATER ELEVATION CONTOUR MAP
SCALE 1"=600'

**APPENDIX A
PURGE LOGS**

Analytical Chemists

FGL ENVIRONMENTAL
GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-01-23 Lab ID #: 0730704 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): 15.98 ft. Reference Point: North Side Top Casing
 Height of Water Column: 11.52 ft. Casing Diameter: 4 in.
 Casing Volume: 7.48 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)
 Amount to be purged: 22.44 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
0820	Start						
0824	8	7.70	1.98	21.8		Clear	
0826	12	7.66	1.93	21.3			
0828	16	7.66	1.93	21.4			
0832	24	7.65	1.93	21.4			
0833	Sampled						
0834	Off						

Total Purge Time: 12 Minutes Total Purge Volume: 24 gal
 Recharge Depth: 16.00 ft. Time: 0839 Sampling Method: 12 Volt Purge Pump
 Decontamination Procedure: Cleaned at lab prior to use in field.

Notes: _____



Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-01-23 Lab ID #: 0730704 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): 21.97 ft. Reference Point: North Side Top Casing

Height of Water Column: 8.39 ft. Casing Diameter: 4 in.

Casing Volume: 5.45 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 16.35 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
1056	Start						
1059	6	7.42	2.73	19.8		Clear	
1102	12	7.36	2.63	20.2			
1104	16	7.35	2.64	20.2			
1105	18	7.35	2.64	20.2			
1106	Sampled						
1107	Off						

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

Recharge Depth: 22.50 ft. Time: 1112 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: 2007-01-23 Lab ID #: 0730704 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): 16.48 ft. Reference Point: North Side Top Casing

Height of Water Column: 14.47 ft. Casing Diameter: 4 in.

Casing Volume: 9.40 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 28.20 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
0856	Start						
0901	10	7.30	3.03	19.8		Clear	
0906	20	7.29	3.02	19.9			
0911	30	7.29	3.03	19.9			
0912	Sampled						
0913	Off						

Total Purge Time: 15 Minutes Total Purge Volume: 30 gal

Recharge Depth: 16.10 ft. Time: 0918 Sampling Method: 12 Volt Purge Pump

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

Notes: _____

Analytical Chemists

FGL ENVIRONMENTAL
GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-01-23 Lab ID #: 0730704 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): 21.87 ft. Reference Point: North Side Top Casing
 Height of Water Column: 9.73 ft. Casing Diameter: 4 in.
 Casing Volume: 6.32 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)
 Amount to be purged: 18.96 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
0939	Start						
0943	8	7.06	2.37	19.5		Clear	
0947	16	7.05	2.37	19.5			
0949	20	7.05	2.37	19.5			
0950	Sampled						
0951	Off						

Total Purge Time: 10 Minutes Total Purge Volume: 20 gal
 Recharge Depth: 21.83 ft. Time: 0958 Sampling Method: 12 Volt Purge Pump
 Decontamination Procedure: Cleaned at lab prior to use in field.

Notes: _____



Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-01-23 Lab ID #: 0730704 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): 19.52 ft. Reference Point: North Side Top Casing

Height of Water Column: 11.40 ft. Casing Diameter: 4 in.

Casing Volume: 7.41 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 22.23 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
1010	Start						
1014	8	6.98	2.55	19.0		Clear	
1018	16	6.98	2.55	19.0			
1022	24	6.97	2.55	18.9			
1023	Sampled						
1024	Off						

Total Purge Time: 12 Minutes Total Purge Volume: 24 gal

Recharge Depth: 19.52 ft. Time: 1028 Sampling Method: 12 Volt Purge Pump

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

Notes: _____



Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-01-23 Lab ID #: 0730704 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): 17.90 ft. Reference Point: North Side Top Casing

Height of Water Column: 10.70 ft. Casing Diameter: 2 in.

Casing Volume: 1.74 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 5.22 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
1238	Start						
1240	2	7.68	1.67	19.5		Clear	
1242	4	7.67	1.66	19.6			
1244	6	7.67	1.66	19.6			
1245	Sampled						
1246	Off						

Total Purge Time: 6 Minutes Total Purge Volume: 6 gal

Recharge Depth: 17.96 ft. Time: 1250 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: 2007-01-23 Lab ID #: 0730704 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): 22.20 ft. Reference Point: North Side Top Casing

Height of Water Column: 7.90 ft. Casing Diameter: 2 in.

Casing Volume: 1.28 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 3.84 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
1130	Start						
1133	1.50	7.57	1.99	20.4		Muddy	
1136	3	7.44	1.98	20.4		Muddy	
1138	4	7.39	1.98	20.4		Muddy	
1142	Sampled						
1144	Finished						

Total Purge Time: 8 Minutes Total Purge Volume: 4 gal

Recharge Depth: 22.22 ft. Time: 1150 Sampling Method: Disposable Hand Bail

Decontamination Procedure: New sealed from Manufacturer

Notes: _____



Analytical Chemists

FGL ENVIRONMENTAL

GROUNDWATER SAMPLING & PURGE LOG

Date: 2007-01-23 Lab ID #: 0730704 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): 21.67 ft. Reference Point: North Side Top Casing

Height of Water Column: 8.68 ft. Casing Diameter: 2 in.

Casing Volume: 1.41 gal = Height of Column x Volume/ft. (2"=0.163, 4"=0.650, 6"=1.43 gal/ft)

Amount to be purged: 4.22 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
1205	Start						
1207	2	7.25	2.40	20.1		Clear	
1209	4	7.24	2.39	20.2			
1211	6	7.24	2.39	20.2			
1212	Sampled						
1213	Off						

Total Purge Time: 6 Minutes Total Purge Volume: 6 gal

Recharge Depth: 21.68 ft. Time: 1218 Sampling Method: 12 Volt Purge Pump

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

Notes: _____

APPENDIX B
LABORATORY ANALYTICAL REPORT



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704

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 (4 Pages): An overview of the work performed at FGL.

Chemical Results (27 Pages): Results for each sample submitted.

Quality Control (9 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	01/23/2007	01/23/2007	STK730704-01	MW
MW2	01/23/2007	01/23/2007	STK730704-02	MW
MW3	01/23/2007	01/23/2007	STK730704-03	MW
MW4	01/23/2007	01/23/2007	STK730704-04	MW
MW5	01/23/2007	01/23/2007	STK730704-05	MW
MW6	01/23/2007	01/23/2007	STK730704-06	MW
MW7	01/23/2007	01/23/2007	STK730704-07	MW
MW8	01/23/2007	01/23/2007	STK730704-08	MW
Mitigation Well	01/23/2007	01/23/2007	STK730704-10	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. The holding time for pH is listed as immediate. Logistically this is very difficult to obtain. FGL policy is to analyze all samples requiring pH on the same day of receipt at the laboratory. If this presents any problem please call. 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.

Case narrative continued on next page...

STK730704 Case Narrative Page 1

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February 14, 2007

Lab ID : STK730704

Customer : 3015918

City of Patterson Wastewater

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

Inorganic - Metals QC

200.7	01/26/2007:A203 All preparation quality controls are within established criteria, except: The following note applies to 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. The following note applies to Potassium: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.
	01/26/2007: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. The following note applies to Potassium: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.
	01/29/2007:A - IT203 All analysis quality controls are within established criteria.
200.8	02/01/2007:A204 All preparation quality controls are within established criteria, except: The following note applies to Copper: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.
	02/01/2007:A - IX201 All analysis quality controls are within established criteria.
245.1	01/25/2007:A - HG202 All analysis quality controls are within established criteria.
	01/26/2007:A - HG202 All analysis quality controls are within established criteria.
7470A	01/25/2007:B212 All preparation quality controls are within established criteria.

Inorganic - Wet Chemistry QC

2320B	01/29/2007:A202 All preparation quality controls are within established criteria.
	01/29/2007:A - TI201 All analysis quality controls are within established criteria.
2510B	01/25/2007:A - EC201 All analysis quality controls are within established criteria.
2540 C,E	01/25/2007:B235 All preparation quality controls are within established criteria.
	01/26/2007:B235 All preparation quality controls are within established criteria.

Table continued on next page...

February 14, 2007

Lab ID : STK730704

Customer : 3015918

City of Patterson Wastewater

Quality Control:

Inorganic - Wet Chemistry QC

2540 C,E	01/29/2007:B235 Continued... 01/29/2007:B235 All preparation quality controls are within established criteria.
2540C	01/25/2007:B235 All preparation quality controls are within established criteria.
	01/26/2007:B235 All preparation quality controls are within established criteria.
	01/29/2007:B235 All preparation quality controls are within established criteria.
300.0	01/24/2007:A215 All preparation quality controls are within established criteria.
	01/24/2007:B215 All preparation quality controls are within established criteria, except: The following note applies to Sulfate: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.
	01/24/2007:A - IC204 All analysis quality controls are within established criteria.
351.1	01/25/2007:A242 All preparation quality controls are within established criteria.
	01/26/2007:A242 All preparation quality controls are within established criteria, except: The following note applies to Nitrogen, Total Kjeldahl: 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.
	01/31/2007:C - FI203 All analysis quality controls are within established criteria.
	02/01/2007:C - FI203 All analysis quality controls are within established criteria.
4500-H B	01/23/2007:S346 All preparation quality controls are within established criteria.
	01/23/2007:S - PH301 All analysis quality controls are within established criteria.
4500NH3H	01/25/2007:A203 All preparation quality controls are within established criteria, except: The following note applies to Ammonia-N: 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.
	01/26/2007:A203 All preparation quality controls are within established criteria, except: The following note applies to Ammonia-N: 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.

Table continued on next page...

February 14, 2007

Lab ID : STK730704

Customer : 3015918

City of Patterson Wastewater

Quality Control:**Inorganic - Wet Chemistry QC**

4500NH3H	01/26/2007:A - FI203 Continued...
	01/26/2007:A - FI203 All analysis quality controls are within established criteria.
	02/02/2007:A - FI203 All analysis quality controls are within established criteria.
5540C	01/24/2007:A218 All preparation quality controls are within established criteria.
	01/24/2007:A - CHL All analysis quality controls are within established criteria.

Organic QC

5310B	01/31/2007:A234 All preparation quality controls are within established criteria.
	01/31/2007: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



Kelly A. Dunnahoo, B.S.
Laboratory Director

KAD:ehb



K&E ENVIRONMENTAL

Analytical Chemists

February 13, 2007

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

STK0730704:1-8, 10 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	STK0730704-001	MW1	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 08:33	01/23/2007 14:07 CTH	2007-01-26 CTH
2	STK0730704-002	MW2	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 11:00	01/23/2007 14:15 CTH	2007-01-25 CTH
3	STK0730704-003	MW3	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 09:12	01/23/2007 13:58 cth	2007-01-25 cth
4	STK0730704-004	MW4	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 09:50	01/23/2007 14:17 CTH	2007-01-25 CTH
5	STK0730704-005	MW5	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 10:23	01/23/2007 14:00 cth	2007-01-25 cth
6	STK0730704-006	MW6	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 12:45	01/23/2007 14:09 CTH	2007-01-26 CTH
7	STK0730704-007	MW7	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 11:42	01/23/2007 14:11 CTH	2007-01-25 CTH
8	STK0730704-008	MW8	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 12:12	01/23/2007 14:13 CTH	2007-01-25 CTH
9	STK0730704-010	Mitigation Well	Source-Other	Ken Moffitt	FGL Environmental	01/23/2007 10:40	01/23/2007 14:05 CTH	2007-01-25 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	6.9 PRESENT	<1.1 ABSENT	N/R	01/26/2007	12:40	
2	MW2	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	N/R	N/R			
3	MW3	---	---	SM 9221B	MPN/100ml	<2 ABSENT	N/R	N/R			
4	MW4	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	N/R	N/R			
5	MW5	---	---	SM 9221B	MPN/100ml	<2 ABSENT	N/R	N/R			
6	MW6	---	---	SM 9221B	MPN/100ml	12.0 PRESENT	<1.1 ABSENT	N/R	01/26/2007	12:40	
7	MW7	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	N/R	N/R			
8	MW8	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	N/R	N/R			
9	Mitigation Well	---	---	SM 9221B	MPN/100ml	<1.1 ABSENT	N/R	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: 2007-02-13

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Bacteriological Results Page: 1

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February 13, 2007

City of Patterson Wastewater

STK0730704:1-8, 10 COLIFORM BACTERIA ANALYSIS
Customer ID : 3-15918

The samples listed below had failures for Total and/or Fecal Coliform as listed:

MW1 Total Coliform - Failure.

MW6 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:GMA

Reviewed and Approved By **Raquel R. Harvey**
Digitally signed by Raquel R. Harvey
Title: Tech Director Microbiology
Date: 2007-02-13



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-01

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-08:33

Sampled By : Ken Moffitt

Received On : January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW1

Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.7	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:37
General Mineral P:1,5,4 Total Hardness	529	2.5	mg/L		Calculation		Calculation	
Calcium	62	1	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Magnesium	91	1	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Potassium	3	1	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Sodium	312	1	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Total Cations	24.2	--	meq/L		Calculation		Calculation	
Boron	1.62	0.05	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Copper	ND	10	ug/L	1000 ²	200.7	01/26/07:A203	200.7	01/29/2007:A00
Iron	110	50	ug/L	300 ²	200.7	01/26/07:A203	200.7	01/29/2007:A00
Manganese	20	10	ug/L	50 ²	200.7	01/26/07:A203	200.7	01/29/2007:A00
Zinc	ND	20	ug/L	5000 ²	200.7	01/26/07:A203	200.7	01/29/2007:A00
Gypsum Requirement	1.1	--	mg/L		Calculation		Calculation	
SAR	5.9	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO ₃)	330	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	400	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	400	20 ⁺	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Chloride	190	10 ⁺	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Nitrate	55.4	0.4	mg/L	45	300.0	01/24/07:A215 14:00	300.0	01/24/2007:A00 16:34
Nitrite as N	ND	0.1	mg/L	1	300.0	01/24/07:A215 14:00	300.0	01/24/2007:A00 16:34
Fluoride	0.4	0.1	mg/L	2	300.0	01/24/07:A215	300.0	01/24/2007:A00
Total Anions	21.2	--	meq/L		Calculation		Calculation	
Specific Conductance	2040	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	1330	40	mg/L	1000 ²	2540C	01/26/07:B235	2540 C,E	01/29/2007:B00
Total Dissolved Solids (sum)	1510	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14

Table continued next page...

STK730704: Chemical Results Page 1

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February 14, 2007

Lab ID : STK730704-01

Customer ID: 3-15918

City of Patterson Wastewater

Description : MW1

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
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	ND	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.0314	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.002	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	0.0002	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	ND	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/25/2007:A00
Molybdenum	0.015	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.001	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	0.008	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	0.2	0.2	mg/L		4500NH3H	01/25/07:A203	4500NH3H	01/26/2007:A00
Nitrate Nitrogen	12.5	0.1	mg/L	10	300.0	01/24/07:A215 14:00	300.0	01/24/2007:A00 16:34
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		351.1	01/25/07:A242	351.1	02/01/2007:C00
Solids, Fixed Dissolved (FDS)	1180	40	mg/L		2540 C,E	01/26/07:B235	2540 C,E	01/29/2007:C00
Solids, Volatile Dissolved	150	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-01

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-08:33

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW1

Project : Groundwater Monitoring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	0.7	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A01

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximum Contaminant Level. 2 - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

STK730704: Chemical Results Page 3

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ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-02

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-11:00

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW2

Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.4	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:39
General Mineral P:1,5,4 Total Hardness	938	2.5	mg/L		Calculation		Calculation	
Calcium	61	1	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Magnesium	191	1	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Potassium	3	1	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Sodium	417	1	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Total Cations	37.0	--	meq/L		Calculation		Calculation	
Boron	2.57	0.05	mg/L		200.7	01/26/07:A203	200.7	01/29/2007:A00
Copper	ND	10	ug/L	1000 ²	200.7	01/26/07:A203	200.7	01/29/2007:A00
Iron	140	50	ug/L	300 ²	200.7	01/26/07:A203	200.7	01/29/2007:A00
Manganese	ND	10	ug/L	50 ²	200.7	01/26/07:A203	200.7	01/29/2007:A00
Zinc	ND	20	ug/L	5000 ²	200.7	01/26/07:A203	200.7	01/29/2007:A00
Gypsum Requirement	1.4	--	mg/L		Calculation		Calculation	
SAR	5.9	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO ₃)	630	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	770	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	540	20*	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Chloride	280	10*	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Nitrate	58.9	0.4	mg/L	45	300.0	01/24/07:A215 17:00	300.0	01/24/2007:A00 23:21
Nitrite as N	ND	0.1	mg/L	1	300.0	01/24/07:A215 17:00	300.0	01/24/2007:A00 23:21

Table continued next page...

February 14, 2007

Lab ID : STK730704-02

City of Patterson Wastewater

Customer ID: 3-15918

Description : MW2

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
Fluoride	0.3	0.1	mg/L	2	300.0	01/24/07:A215	300.0	01/24/2007:A00
Total Anions	32.7	--	meq/L		Calculation		Calculation	
Specific Conductance	2860	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	1920	40	mg/L	1000 ²	2540C	01/26/07:B235	2540 C,E	01/29/2007:B00
Total Dissolved Solids (sum)	2320	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14
Aggressiveness Index	12.4	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.4	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.003	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.0258	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.003	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	0.00003	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/25/2007:A00
Molybdenum	0.013	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.002	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	0.012	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	ND	0.2	mg/L		4500NH3H	01/25/07:A203	4500NH3H	01/26/2007:A00
Nitrate Nitrogen	13.3	0.1	mg/L	10	300.0	01/24/07:A215 17:00	300.0	01/24/2007:A00 23:21
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		351.1	01/25/07:A242	351.1	01/31/2007:C00
Solids, Fixed Dissolved (FDS)	1620	40	mg/L		2540 C,E	01/26/07:B235	2540 C,E	01/29/2007:C00
Solids, Volatile Dissolved	300	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminat Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-02

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-11:00

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW2

Project : Groundwater Monitoring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	1.1	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A01

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

STK730704: Chemical Results Page 6

Corporate Offices & Laboratory
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CA ELAP Certification No. 1563

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



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-03

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-09:12

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW3

Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.4	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:41
General Mineral P:1,5,4 Total Hardness	677	2.5	mg/L		Calculation		Calculation	
Calcium	75	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Magnesium	119	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Potassium	4	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Sodium	611	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Total Cations	40.2	--	meq/L		Calculation		Calculation	
Boron	2.24	0.05	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Copper	ND	10	ug/L	1000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Iron	80	50	ug/L	300 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Manganese	ND	10	ug/L	50 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Zinc	ND	20	ug/L	5000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Gypsum Requirement	2.5	--	mg/L		Calculation		Calculation	
SAR	10.2	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO ₃)	400	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	490	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	590	20 ⁺	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Chloride	480	10 ⁺	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Nitrate	41.0	0.4	mg/L	45	300.0	01/24/07:A215	300.0	01/24/2007:A00
						15:00		18:30
Nitrite as N	ND	0.1	mg/L	1	300.0	01/24/07:A215	300.0	01/24/2007:A00
						15:00		18:30

Table continued next page...

STK730704: Chemical Results Page 7

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February 14, 2007

Lab ID : STK730704-03

Customer ID: 3-15918

City of Patterson Wastewater

Description : MW3

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
Fluoride	0.7	0.1	mg/L	2	300.0	01/24/07:A215	300.0	01/24/2007:A00
Total Anions	34.6	--	meq/L		Calculation		Calculation	
Specific Conductance	3200	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	2070	40	mg/L	1000 ²	2540C	01/26/07:B235	2540 C,E	01/29/2007:B00
Total Dissolved Solids (sum)	2410	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14
Aggressiveness Index	12.3	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	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.0285	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.004	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	0.0003	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	ND	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/26/2007:A00
Molybdenum	0.005	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.003	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	0.004	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	ND	0.2	mg/L		4500NH3H	01/26/07:A203	4500NH3H	02/02/2007:A00
Nitrate Nitrogen	9.3	0.1	mg/L	10	300.0	01/24/07:A215 15:00	300.0	01/24/2007:A00 18:30
Nitrogen, Total Kjeldahl	0.7	0.5	mg/L		351.1	01/26/07:A242	351.1	01/31/2007:C00
Solids, Fixed Dissolved (FDS)	1900	40	mg/L		2540 C,E	01/26/07:B235	2540 C,E	01/29/2007:C00
Solids, Volatile Dissolved	170	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-03
Customer ID: 3-15918

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

Sampled On : January 23, 2007-09:12
Sampled By : Ken Moffitt
Received On: January 23, 2007-14:30
Matrix : Monitoring Well

Description : MW3
Project : Groundwater Monitoring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	0.9	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A01

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H₂SO₄ pH < 2

STK730704: Chemical Results Page 9

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ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-04

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667
Patterson, CA. 95363

Sampled On : January 23, 2007-09:50

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW4

Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.1	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:43
General Mineral P:1,5,4 Total Hardness	750	2.5	mg/L		Calculation		Calculation	
Calcium	126	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Magnesium	106	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Potassium	12	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Sodium	342	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Total Cations	30.2	--	meq/L		Calculation		Calculation	
Boron	1.03	0.05	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Copper	160	10	ug/L	1000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Iron	290	50	ug/L	300 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Manganese	1060	10	ug/L	50 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Zinc	100	20	ug/L	5000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Gypsum Requirement	1.5	--	mg/L		Calculation		Calculation	
SAR	5.4	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO ₃)	610	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	750	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	210	20*	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Chloride	370	10*	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Nitrate	0.4	0.4	mg/L	45	300.0	01/24/07:A215 15:00	300.0	01/24/2007:A00 19:28
Nitrite as N	ND	0.1	mg/L	1	300.0	01/24/07:A215 15:00	300.0	01/24/2007:A00 19:28

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STK730704: Chemical Results Page 10

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February 14, 2007

Lab ID : STK730704-04

Customer ID: 3-15918

City of Patterson Wastewater

Description : MW4

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
Fluoride	0.3	0.1	mg/L	2	300.0	01/24/07:A215	300.0	01/24/2007:A00
Total Anions	27.1	--	meq/L		Calculation		Calculation	
Specific Conductance	2530	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	1570	40	mg/L	1000 ²	2540C	01/26/07:B235	2540 C,E	01/29/2007:B00
Total Dissolved Solids (sum)	1920	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14
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	0.015	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.121	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	0.0004	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.011	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	0.0011	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	ND	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/26/2007:A00
Molybdenum	0.010	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.016	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	0.003	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	ND	0.2	mg/L		4500NH3H	01/25/07:A203	4500NH3H	01/26/2007:A00
Nitrate Nitrogen	ND	0.1	mg/L	10	300.0	01/24/07:A215 15:00	300.0	01/24/2007:A00 19:28
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		351.1	01/25/07:A242	351.1	01/31/2007:C00
Solids, Fixed Dissolved (FDS)	1380	40	mg/L		2540 C,E	01/26/07:B235	2540 C,E	01/29/2007:C00
Solids, Volatile Dissolved	190	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminat Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-04
Customer ID: 3-15918

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

Sampled On : January 23, 2007-09:50
Sampled By : Ken Moffitt
Received On: January 23, 2007-14:30
Matrix : Monitoring Well

Description : MW4
Project : Groundwater Moniroring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	2.1	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A03

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

STK730704: Chemical Results Page 12

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ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-05
Customer ID: 3-15918City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363Sampled On : January 23, 2007-10:23
Sampled By : Ken Moffitt
Received On: January 23, 2007-14:30
Matrix : Monitoring WellDescription : MW5
Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.0	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:44
General Mineral P:1,5,4 Total Hardness	654	2.5	mg/L		Calculation		Calculation	
Calcium	99	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Magnesium	99	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Potassium	7	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Sodium	445	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Total Cations	32.6	--	meq/L		Calculation		Calculation	
Boron	1.33	0.05	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Copper	ND	10	ug/L	1000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Iron	120	50	ug/L	300 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Manganese	10	10	ug/L	50 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Zinc	ND	20	ug/L	5000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Gypsum Requirement	1.8	--	mg/L		Calculation		Calculation	
SAR	7.6	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	450	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	550	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	280	20*	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Chloride	450	10*	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Nitrate	57.8	0.4	mg/L	45	300.0	01/24/07:A215 16:00	300.0	01/24/2007:A00 20:27
Nitrite as N	ND	0.1	mg/L	1	300.0	01/24/07:A215 16:00	300.0	01/24/2007:A00 20:27

Table continued next page...

STK730704: Chemical Results Page 13

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February 14, 2007

Lab ID : STK730704-05

Customer ID: 3-15918

City of Patterson Wastewater

Description : MW5

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
Fluoride	0.7	0.1	mg/L	2	300.0	01/24/07:A215	300.0	01/24/2007:A00
Total Anions	28.5	--	meq/L		Calculation		Calculation	
Specific Conductance	2720	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	1660	40	mg/L	1000 ²	2540C	01/26/07:B235	2540 C,E	01/29/2007:B00
Total Dissolved Solids (sum)	1990	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14
Aggressiveness Index	12.0	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.1	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.005	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.0606	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.005	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	ND	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/26/2007:A00
Molybdenum	0.014	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.009	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	0.006	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	ND	0.2	mg/L		4500NH3H	01/25/07:A203	4500NH3H	01/26/2007:A00
Nitrate Nitrogen	13.1	0.1	mg/L	10	300.0	01/24/07:A215 16:00	300.0	01/24/2007:A00 20:27
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		351.1	01/25/07:A242	351.1	01/31/2007:C00
Solids, Fixed Dissolved (FDS)	1480	40	mg/L		2540 C,E	01/26/07:B235	2540 C,E	01/29/2007:C00
Solids, Volatile Dissolved	180	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO₃ pH < 2, (4) H₂SO₄ pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-05

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-10:23

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW5

Project : Groundwater Moniroring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	1.6	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A03

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminat Level. ² - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

STK730704: Chemical Results Page 15

Corporate Offices & Laboratory
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Visalia, California
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FAX: (559) 734-8435
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ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-06

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-12:45

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW6

Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.6	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:48
General Mineral P:1,5,4 Total Hardness	564	2.5	mg/L		Calculation		Calculation	
Calcium	43	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Magnesium	111	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Potassium	2	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Sodium	245	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Total Cations	22.0	--	meq/L		Calculation		Calculation	
Boron	1.82	0.05	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Copper	ND	10	ug/L	1000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Iron	610	50	ug/L	300 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Manganese	40	10	ug/L	50 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Zinc	ND	20	ug/L	5000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Gypsum Requirement	0.7	--	mg/L		Calculation		Calculation	
SAR	4.5	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO ₃)	350	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	420	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	410	10*	mg/L	500 ²	300.0	01/24/07:B215	300.0	01/25/2007:A00
Chloride	134	5*	mg/L	500 ²	300.0	01/24/07:B215	300.0	01/25/2007:A00
Nitrate	27.2	0.4	mg/L	45	300.0	01/24/07:B215	300.0	01/25/2007:A00
Nitrite as N	ND	0.1	mg/L	1		18:00		04:41
					300.0	01/24/07:B215	300.0	01/25/2007:A00
						18:00		04:41

Table continued next page...

STK730704: Chemical Results Page 16

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February 14, 2007

Lab ID : STK730704-06

Customer ID: 3-15918

City of Patterson Wastewater

Description : MW6

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
Fluoride	0.5	0.1	mg/L	2	300.0	01/24/07:B215	300.0	01/25/2007:A00
Total Anions	19.7	--	meq/L		Calculation		Calculation	
Specific Conductance	1760	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	1140	40	mg/L	1000 ²	2540C	01/26/07:B235	2540 C,E	01/29/2007:B00
Total Dissolved Solids (sum)	1390	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14
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	0.002	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.0268	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.002	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	ND	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/26/2007:A00
Molybdenum	0.013	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.001	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	0.005	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	ND	0.2	mg/L		4500NH3H	01/25/07:A203	4500NH3H	01/26/2007:A00
Nitrate Nitrogen	6.1	0.1	mg/L	10	300.0	01/24/07:B215 18:00	300.0	01/25/2007:A00 04:41
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		351.1	01/25/07:A242	351.1	01/31/2007:C00
Solids, Fixed Dissolved (FDS)	960	40	mg/L		2540 C,E	01/26/07:B235	2540 C,E	01/29/2007:C00
Solids, Volatile Dissolved	180	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-06
Customer ID: 3-15918

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

Sampled On : January 23, 2007-12:45
Sampled By : Ken Moffitt
Received On: January 23, 2007-14:30
Matrix : Monitoring Well

Description : MW6
Project : Groundwater Monitoring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	1.0	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A03

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.
MCL = Maximum Contaminant Level. * - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

STK730704: Chemical Results Page 18

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ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-07

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-11:42

Sampled By : Ken Moffitt

Received On : January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW7

Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.4	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:50
General Mineral P:1,5,4 Total Hardness	387	2.5	mg/L		Calculation		Calculation	
Calcium	33	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Magnesium	74	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Potassium	5	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Sodium	372	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Total Cations	24.0	--	meq/L		Calculation		Calculation	
Boron	1.13	0.05	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Copper	ND	10	ug/L	1000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Iron	5240	50	ug/L	300 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Manganese	270	10	ug/L	50 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Zinc	30	20	ug/L	5000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Gypsum Requirement	1.6	--	mg/L		Calculation		Calculation	
SAR	8.2	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	250	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	300	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	280	20*	mg/L	500 ²	300.0	01/24/07:B215	300.0	01/25/2007:A00
Chloride	360	10*	mg/L	500 ²	300.0	01/24/07:B215	300.0	01/25/2007:A00
Nitrate	1.4	0.4	mg/L	45	300.0	01/24/07:B215 18:00	300.0	01/25/2007:A00 02:16
Nitrite as N	ND	0.1	mg/L	1	300.0	01/24/07:B215 18:00	300.0	01/25/2007:A00 02:16

Table continued next page...

STK730704: Chemical Results Page 19

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February 14, 2007

Lab ID : STK730704-07

City of Patterson Wastewater

Customer ID: 3-15918

Description : MW7

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
Fluoride	0.8	0.1	mg/L	2	300.0	01/24/07:B215	300.0	01/25/2007:A00
Total Anions	21.0	--	meq/L		Calculation		Calculation	
Specific Conductance	2080	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	1260	40	mg/L	1000 ²	2540C	01/26/07:B235	2540 C,E	01/29/2007:B00
Total Dissolved Solids (sum)	1430	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14
Aggressiveness Index	11.7	1.0	mg/L		Calculation		Calculation	
Langlier Index	-0.2	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.007	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.0378	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	0.0002	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.007	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	0.0002	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	ND	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/26/2007:A00
Molybdenum	0.017	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.013	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	ND	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	ND	0.2	mg/L		4500NH3H	01/25/07:A203	4500NH3H	01/26/2007:A00
Nitrate Nitrogen	0.3	0.1	mg/L	10	300.0	01/24/07:B215 18:00	300.0	01/25/2007:A00 02:16
Nitrogen, Total Kjeldahl	2.6	0.5	mg/L		351.1	01/25/07:A242	351.1	01/31/2007:C00
Solids, Fixed Dissolved (FDS)	1140	40	mg/L		2540 C,E	01/26/07:B235	2540 C,E	01/29/2007:C00
Solids, Volatile Dissolved	120	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-07
Customer ID: 3-15918City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363Sampled On : January 23, 2007-11:42
Sampled By : Ken Moffitt
Received On: January 23, 2007-14:30
Matrix : Monitoring WellDescription : MW7
Project : Groundwater Monitoring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	1.2	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A03

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. * - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

STK730704: Chemical Results Page 21

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ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-08
Customer ID: 3-15918City of Patterson Wastewater
PO Box 667
Patterson, CA. 95363Sampled On : January 23, 2007-12:12
Sampled By : Ken Moffitt
Received On: January 23, 2007-14:30
Matrix : Monitoring WellDescription : MW8
Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.3	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:52
General Mineral P:1,5,4 Total Hardness	730	2.5	mg/L		Calculation		Calculation	
Calcium	103	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Magnesium	115	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Potassium	4	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Sodium	393	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Total Cations	31.8	--	meq/L		Calculation		Calculation	
Boron	1.73	0.05	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Copper	ND	10	ug/L	1000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Iron	560	50	ug/L	300 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Manganese	10	10	ug/L	50 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Zinc	ND	20	ug/L	5000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Gypsum Requirement	1.2	--	mg/L		Calculation		Calculation	
SAR	6.3	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	390	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	480	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	450	20 ⁺	mg/L	500 ²	300.0	01/24/07:B215	300.0	01/25/2007:A00
Chloride	390	10 ⁺	mg/L	500 ²	300.0	01/24/07:B215	300.0	01/25/2007:A00
Nitrate	32.6	0.4	mg/L	45	300.0	01/24/07:B215 18:00	300.0	01/25/2007:A00 03:43
Nitrite as N	ND	0.1	mg/L	1	300.0	01/24/07:B215 18:00	300.0	01/25/2007:A00 03:43

Table continued next page...

STK730704: Chemical Results Page 22

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February 14, 2007

Lab ID : STK730704-08

City of Patterson Wastewater

Customer ID: 3-15918

Description : MW8

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
Fluoride	0.7	0.1	mg/L	2	300.0	01/24/07:B215	300.0	01/25/2007:A00
Total Anions	28.8	--	meq/L		Calculation		Calculation	
Specific Conductance	2630	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	1730	40	mg/L	1000 ²	2540C	01/29/07:B235	2540 C,E	01/30/2007:B00
Total Dissolved Solids (sum)	1970	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14
Aggressiveness Index	12.3	1.0	mg/L		Calculation		Calculation	
Langlier Index	0.4	1.0	mg/L		Calculation		Calculation	
Metals, Diss P:1,5								
Arsenic	0.007	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.0878	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.003	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	ND	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	ND	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/26/2007:A00
Molybdenum	0.006	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.003	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	0.005	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	ND	0.2	mg/L		4500NH3II	01/25/07:A203	4500NH3H	01/26/2007:A00
Nitrate Nitrogen	7.4	0.1	mg/L	10	300.0	01/24/07:B215 18:00	300.0	01/25/2007:A00 03:43
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		351.1	01/25/07:A242	351.1	01/31/2007:C00
Solids, Fixed Dissolved (FDS)	1540	40	mg/L		2540 C,E	01/29/07:B235	2540 C,E	01/30/2007:C00
Solids, Volatile Dissolved	190	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-08

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-12:12

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : MW8

Project : Groundwater Monitoring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	1.3	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A03

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H2SO4 pH < 2

STK730704: Chemical Results Page 24

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ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-10

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-10:40

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : Mitigation Well

Project : Groundwater Monitoring

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4 pH	7.6	--	units		4500-H B	01/23/07:S346	4500-H B	01/23/2007:S00 14:54
General Mineral P:1,5,4 Total Hardness	745	2.5	mg/L		Calculation		Calculation	
Calcium	104	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Magnesium	118	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Potassium	5	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Sodium	360	1	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Total Cations	30.7	--	meq/L		Calculation		Calculation	
Boron	1.45	0.05	mg/L		200.7	01/26/07:B203	200.7	01/29/2007:A00
Copper	20	10	ug/L	1000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Iron	70	50	ug/L	300 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Manganese	120	10	ug/L	50 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Zinc	40	20	ug/L	5000 ²	200.7	01/26/07:B203	200.7	01/29/2007:A00
Gypsum Requirement	1.3	--	mg/L		Calculation		Calculation	
SAR	5.7	0.1	mg/L		Calculation		Calculation	
Total Alkalinity (as CaCO3)	500	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Hydroxide	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Carbonate	ND	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Bicarbonate	610	10	mg/L		2320B	01/29/07:A202	2320B	01/29/2007:A00
Sulfate	380	20*	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Chloride	320	10*	mg/L	500 ²	300.0	01/24/07:A215	300.0	01/24/2007:A00
Nitrate	29.6	0.4	mg/L	45	300.0	01/24/07:A215 17:00	300.0	01/24/2007:A00 22:23
Nitrite as N	ND	0.1	mg/L	1	300.0	01/24/07:A215 17:00	300.0	01/24/2007:A00 22:23

Table continued next page...

STK730704: Chemical Results Page 25

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February 14, 2007

Lab ID : STK730704-10

Customer ID: 3-15918

City of Patterson Wastewater

Description : Mitigation Well

Sample Results - Inorganic

Constituent	Results	PQL	Units	MCL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
General Mineral P:1,5,4								
Fluoride	0.2	0.1	mg/L	2	300.0	01/24/07:A215	300.0	01/24/2007:A00
Total Anions	27.4	--	meq/L		Calculation		Calculation	
Specific Conductance	2490	1	umhos/cm	1600 ²	2510B	01/25/07:B212	2510B	01/25/2007:A00
Total Dissolved Solids	1610	40	mg/L	1000 ²	2540C	01/25/07:B235	2540 C,E	01/26/2007:B00
Total Dissolved Solids (sum)	1930	--	mg/L		Calculation		Calculation	
MBAS (foaming agents)	ND	0.1	mg/L	0.5 ²	5540C	01/24/07:A218 17:00	5540C	01/24/2007:A00 19:14
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	0.004	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Barium	0.0354	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Cadmium	0.0007	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Copper	0.005	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Lead	0.0008	0.0002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Mercury	ND	0.00002	mg/L		7470A	01/25/07:B212	245.1	01/26/2007:A00
Molybdenum	0.014	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Nickel	0.005	0.001	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Selenium	0.007	0.002	mg/L		200.8	02/01/07:A204	200.8	02/01/2007:A00
Wet Chemistry P:1,4								
Ammonia-N	ND	0.2	mg/L		4500NH3H	01/26/07:A203	4500NH3H	02/02/2007:A00
Nitrate Nitrogen	6.7	0.1	mg/L	10	300.0	01/24/07:A215 17:00	300.0	01/24/2007:A00 22:23
Nitrogen, Total Kjeldahl	0.7	0.5	mg/L		351.1	01/26/07:A242	351.1	01/31/2007:C00
Solids, Fixed Dissolved (FDS)	1390	40	mg/L		2540 C,E	01/25/07:B235	2540 C,E	01/26/2007:C00
Solids, Volatile Dissolved	220	40	mg/L		Calculation		Calculation	

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (P) Plastic Preservatives: (1) Cool 4°C, (5) HNO3 pH < 2, (4) H2SO4 pH < 2



ENVIRONMENTAL



ANALYTICAL CHEMISTS

February 14, 2007

Lab ID : STK730704-10

Customer ID: 3-15918

City of Patterson Wastewater

PO Box 667

Patterson, CA. 95363

Sampled On : January 23, 2007-10:40

Sampled By : Ken Moffitt

Received On: January 23, 2007-14:30

Matrix : Monitoring Well

Description : Mitigation Well

Project : Groundwater Monitoring

Sample Results - Organic

Constituents	Results	PQL	Units	MCL	Preparation		Analysis Date/ID
					Method	Date/ID	
TOC AVT:1,4 TOC 5310 C	1.0	0.3	mg/L		5310B	01/31/07:A234	01/31/2007:A03

ND=Non-Detect. PQL=Practical Quantitation Limit. ♦ PQL adjusted for dilutions, concentrations, dry weight reporting, or limited sample.

MCL = Maximum Contaminant Level. ² - Secondary Standard.

Containers: (AVT) Amber VOA TFE-Cap Preservatives: (1) Cool 4°C, (4) H₂SO₄ pH < 2



ENVIRONMENTAL CHEMISTS



February 14, 2007
 City of Patterson Wastewater

Lab ID : STK730704
 Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Arsenic	200.8	02/01/2007:A204 (SP 700690-03)	MS	ug/L	5.000	105%	75-125	
			MSD	ug/L	5.000	104%	75-125	
			MSRPD	ug/L		0.5%	≤20	
	200.8	02/01/2007:A	00-ICB	ppb		ND	<2	
			00-CCB	ppb		ND	<2	
			00-ICV	ppb	120.0	93.5%	90-110	
			00-CCV	ppb	100.0	102%	90-110	
Barium	200.8	02/01/2007:A204 (SP 700690-03)	MS	ug/L	5.000	109%	75-125	
			MSD	ug/L	5.000	104%	75-125	
			MSRPD	ug/L		1.4%	≤20	
	200.8	02/01/2007:A	00-ICB	ppb		ND	<0.2	
			00-CCB	ppb		ND	<0.2	
			00-ICV	ppb	120.0	90.2%	90-110	
			00-CCV	ppb	100.0	101%	90-110	
Boron	200.7	01/26/2007:A203 (STK730670-01)	MS	mg/L	4.000	112%	75-125	
			MSD	mg/L	4.000	113%	75-125	
		MSRPD	mg/L		0.6%	≤20.0		
	200.7	01/26/2007:B203 (STK730704-03)	MS	mg/L	4.000	112%	75-125	
			MSD	mg/L	4.000	112%	75-125	
			MSRPD	mg/L		0.4%	≤20.0	
	200.7	01/29/2007:A	00-ICB	ppm		ND	<0.1	
			00-CCB	ppm		ND	<0.1	
			00-ICV	ppm	5.000	101%	95-105	
			00-CCV	ppm	5.000	102%	90-110	
Cadmium	200.8	02/01/2007:A204 (SP 700690-03)	MS	ug/L	5.000	104%	75-125	
			MSD	ug/L	5.000	103%	75-125	
			MSRPD	ug/L		1.5%	≤20	
	200.8	02/01/2007:A	00-ICB	ppb		ND	<0.2	
			00-CCB	ppb		ND	<0.2	
			00-ICV	ppb	120.0	94.8%	90-110	
			00-CCV	ppb	100.0	101%	90-110	
Calcium	200.7	01/26/2007:A203 (STK730670-01)	MS	mg/L	12.50	107%	75-125	
			MSD	mg/L	12.50	109%	75-125	
		MSRPD	mg/L		0.4%	≤20.0		
	200.7	01/26/2007:B203 (STK730704-03)	MS	mg/L	12.50	82.4%	< ¼	408
			MSD	mg/L	12.50	80.1%	< ¼	408
			MSRPD	mg/L		0.3%	≤20.0	
	200.7	01/29/2007:A	00-ICB	ppm		ND	<1	
			00-CCB	ppm		ND	<1	
			00-ICV	ppm	25.00	96.2%	95-105	
			00-CCV	ppm	25.00	98.9%	90-110	
Copper	200.7	01/26/2007:A203	MS	ug/L	800.0	116%	75-125	

Report continued on next page...

STK730704: Quality Control Page 1

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February 14, 2007
City of Patterson Wastewater

Lab ID : STK730704
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Copper	200.7	01/26/2007:A203	MSD MSRPD	ug/L ug/L	800.0	116% 0.4%	75-125 ≤20.0	
		01/26/2007:B203 (STK730704-03)	MS MSD MSRPD	ug/L ug/L ug/L	800.0 800.0	114% 113% 0.4%	75-125 75-125 ≤20.0	
	200.8	02/01/2007:A204 (SP 700690-03)	MS	ug/L	5.000	153%	75-125	435
			MSD MSRPD	ug/L ug/L	5.000	155% 0.9%	75-125 ≤20	435
	200.7	01/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	1.000 1.000	ND ND 97.3% 99.9%	<0.01 <0.01 95-105 90-110	
200.8	02/01/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	120.0 100.0	ND ND 94.9% 99.8%	<1 <1 90-110 90-110		
Iron	200.7	01/26/2007:A203 (STK730670-01)	MS MSD MSRPD	ug/L ug/L ug/L	4000	111% 111% 0.2%	75-125 75-125 ≤20.0	
		01/26/2007:B203 (STK730704-03)	MS MSD MSRPD	ug/L ug/L ug/L	4000	108% 108% 0.1%	75-125 75-125 ≤20.0	
	200.7	01/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	5.000 5.000	ND ND 98.1% 101%	<0.05 <0.05 95-105 90-110	
Lead	200.8	02/01/2007:A204 (SP 700690-03)	MS MSD MSRPD	ug/L ug/L ug/L	5.000	107% 107% 0.1%	75-125 75-125 ≤20	
	200.8	02/01/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	120.0 100.0	ND ND 94.5% 101%	<0.2 <0.2 90-110 90-110	
Magnesium	200.7	01/26/2007:A203 (STK730670-01)	MS MSD MSRPD	mg/L mg/L mg/L	12.50	114% 112% 0.4%	75-125 75-125 ≤20.0	
		01/26/2007:B203 (STK730704-03)	MS MSD MSRPD	mg/L mg/L mg/L	12.50	76.4% 72.6% 0.4%	< ¼ < ¼ ≤20.0	408 408
	200.7	01/29/2007:A	00-ICB 00-CCB 00-ICV	ppm ppm ppm	25.00	ND ND 95.6%	<1 <1 95-105	

Report continued on next page...

February 14, 2007
City of Patterson Wastewater

Lab ID : STK730704
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note			
Metals Magnesium	200.7	01/29/2007:A	00-CCV	ppm	25.00	98.3%	90-110				
Manganese	200.7	01/26/2007:A203 (STK730670-01)	MS	ug/L	800.0	110%	75-125				
			MSD	ug/L	800.0	110%	75-125				
	MSRPD	ug/L		0.6%	≤20.0						
Manganese	200.7	01/26/2007:B203 (STK730704-03)	MS	ug/L	800.0	109%	75-125				
			MSD	ug/L	800.0	109%	75-125				
	MSRPD	ug/L		0.0%	≤20.0						
Manganese	200.7	01/29/2007:A	00-ICB	ppm		ND	<0.01				
			00-CCB	ppm		ND	<0.01				
			00-ICV	ppm	1.000	97.5%	95-105				
Manganese	200.7	01/29/2007:A	00-CCV	ppm	1.000	101%	90-110				
			Mercury	7470A	01/25/2007:B212 (SP 700784-01)	Blank	ug/L		ND	<0.02	
			LCS			ug/L	0.2000	108%	85-115		
Mercury	245.1	01/25/2007:A	MS	ug/L	0.2000	101%	75-125				
			MSD	ug/L	0.2000	104%	75-125				
	MSRPD	ug/L		2.3%	≤20						
Mercury	245.1	01/25/2007:A	00-ICB	PPT		ND	<20				
			00-CCB	PPT		ND	<20				
			00-ICV	PPT	200.0	102%	90-110				
Mercury	245.1	01/25/2007:A	00-CCV	PPT	200.0	102%	90-110				
			01/26/2007:A	00-ICB	PPT		ND	<20			
				00-CCB	PPT		ND	<20			
Mercury	245.1	01/26/2007:A	00-ICV	PPT	200.0	98.0%	90-110				
			00-CCV	PPT	200.0	104%	90-110				
	Molybdenum	200.8	02/01/2007:A204 (SP 700690-03)	MS	ug/L	5.000	100%	75-125			
MSD				ug/L	5.000	96.8%	75-125				
MSRPD		ug/L		2.0%	≤20						
Molybdenum	200.8	02/01/2007:A	00-ICB	ppb		ND	<1				
			00-CCB	ppb		ND	<1				
			00-ICV	ppb	120.0	92.2%	90-110				
Molybdenum	200.8	02/01/2007:A	00-CCV	ppb	100.0	98.1%	90-110				
			Nickel	200.8	02/01/2007:A204 (SP 700690-03)	MS	ug/L	5.000	119%	75-125	
						MSD	ug/L	5.000	121%	75-125	
Nickel	200.8	02/01/2007:A	MSRPD	ug/L		1.6%	≤20				
			00-ICB	ppb		ND	<1				
Nickel	200.8	02/01/2007:A	00-CCB	ppb		ND	<1				
			00-ICV	ppb	120.0	94.4%	90-110				
	00-CCV	ppb	100.0	101%	90-110						
Potassium	200.7	01/26/2007:A203 (STK730670-01)	MS	mg/L	12.50	135%	75-125	435			
			MSD	mg/L	12.50	134%	75-125	435			
	MSRPD	mg/L		0.4%	≤20.0						
Potassium	200.7	01/26/2007:B203	MS	mg/L	12.50	138%	75-125	435			

Report continued on next page...

February 14, 2007
City of Patterson Wastewater

Lab ID : STK730704
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Potassium	200.7	01/26/2007:B203	MSD MSRPD	mg/L mg/L	12.50	138% 0.5%	75-125 ≤20.0	435
	200.7	01/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	25.00 25.00	ND ND 97.8% 101%	<1 <1 95-105 90-110	
Selenium	200.8	02/01/2007:A204 (SP 700690-03)	MS MSD MSRPD	ug/L ug/L ug/L	5.000 5.000	111% 113% 0.099	75-125 75-125 ≤2.00	
	200.8	02/01/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppb ppb ppb ppb	120.0 100.0	ND ND 100% 105%	<2 <2 90-110 90-110	
Sodium	200.7	01/26/2007:A203 (STK730670-01)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	37.0% 23.0% 0.4%	< ¼ < ¼ ≤20.0	408 408
		01/26/2007:B203 (STK730704-03)	MS MSD MSRPD	mg/L mg/L mg/L	12.50 12.50	-81.8% -98.5% 0.3%	< ¼ < ¼ ≤20.0	408 408
	200.7	01/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	25.00	ND ND	<1 <1	
					25.00	98.0% 96.9%	95-105 90-110	
Zinc	200.7	01/26/2007:A203 (STK730670-01)	MS MSD MSRPD	ug/L ug/L ug/L	2000 2000	108% 110% 1.3%	75-125 75-125 ≤20.0	
		01/26/2007:B203 (STK730704-03)	MS MSD MSRPD	ug/L ug/L ug/L	2000 2000	112% 112% 0.2%	75-125 75-125 ≤20.0	
	200.7	01/29/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	1.000 1.000	ND ND 98.0% 102%	<0.02 <0.02 95-105 90-110	
Wet Chem Ammonia-N	4500NH3H	01/25/2007:A203 (CH 770487-02)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	2.000 2.000 2.000	ND 83.6% 77.4% 190% 9.8%	<0.2 63-116 < ¼ < ¼ ≤80.2	408 408
		01/26/2007:A203 (CH 770503-02)	Blank LCS MS MSD	mg/L mg/L mg/L mg/L	2.000 2.000 2.000	ND 78.3% -648% -460%	<0.2 63-116 < ¼ < ¼	408 408

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February 14, 2007
City of Patterson Wastewater

Lab ID : STK730704
Customer : 3-15918

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note	
Wet Chem Ammonia-N	4500NH3H	01/26/2007:A203	MSRPD	mg/L		29.3%	≤80.2		
	4500NH3H	01/26/2007:A	00-ICB	mg/l		ND	<0.2		
			00-CCB	mg/l	2.000	ND	<0.2		
				00-ICV	mg/l	2.000	97.8%	90-110	
			00-CCV	mg/l	2.000	98.0%	90-110		
		02/02/2007:A	00-ICB	mg/l		ND	<0.2		
			00-CCB	mg/l		ND	<0.2		
			00-ICV	mg/l	2.000	99.4%	90-110		
			00-CCV	mg/l	2.000	99.6%	90-110		
Bicarbonate	2320B	01/29/2007:A202	Dup	mg/L		1.6%	4.78		
Carbonate	2320B		Dup	mg/L		0.00	10		
Chloride	300.0	01/24/2007:A215 (VI 740110-01)	LCS	mg/L	25.00	97.0%	90-110		
			MS	mg/L	500.0	118%	86-128		
			MSD	mg/L	500.0	117%	86-128		
				MSRPD	mg/L		0.7%	≤23.0	
			01/24/2007:B215 (STK730779-01)	LCS	mg/L	25.00	99.4%	90-110	
				MS	mg/L	500.0	114%	86-128	
			MSD	mg/L	500.0	107%	86-128		
			MSRPD	mg/L		6.2%	≤23.0		
	300.0	01/24/2007:A	00-ICB	ppm		ND	<1		
00-CCB			ppm		ND	<1			
			00-ICV	ppm	50.00	102%	90-110		
			00-CCV	ppm	25.00	97.6%	90-110		
Fluoride	300.0	01/24/2007:A215 (VI 740110-01)	LCS	mg/L	2.500	90.4%	90-110		
			MS	mg/L	50.00	115%	81-126		
			MSD	mg/L	50.00	113%	81-126		
				MSRPD	mg/L		2.1%	≤12.1	
			01/24/2007:B215 (STK730779-01)	LCS	mg/L	2.500	95.3%	90-110	
				MS	mg/L	50.00	117%	81-126	
			MSD	mg/L	50.00	105%	81-126		
			MSRPD	mg/L		11.0%	≤12.1		
	300.0	01/24/2007:A	00-ICB	ppm		ND	<0.1		
00-CCB			ppm		ND	<0.1			
			00-ICV	ppm	5.000	96.4%	90-110		
			00-CCV	ppm	2.500	90.5%	90-110		
Hydroxide	2320B	01/29/2007:A202	Dup	mg/L		0.00	10		
MBAS (foaming agents)	5540C	01/24/2007:A218 (STK730670-01)	MS	mg/L	0.1000	100%	90-110		
			MSD	mg/L	0.1000	100%	90-110		
			MSRPD	mg/L		0.00	≤0.100		
	5540C	01/24/2007:A	00-CCB	mg/L		ND	<0.1		
			00-CCV	mg/L	0.1000	100%	99-101		

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February 14, 2007
City of Patterson Wastewater

Lab ID : STK730704
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Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem Nitrate	300.0	01/24/2007:A215 (VI 740110-01)	LCS	mg/L	20.00	97.2%	90-110	
			MS	mg/L	400.0	117%	88-124	
			MSD	mg/L	400.0	116%	88-124	
			MSRPD	mg/L		1.0%	≤29.1	
	300.0	01/24/2007:B215 (STK730779-01)	LCS	mg/L	20.00	98.7%	90-110	
			MS	mg/L	400.0	112%	88-124	
			MSD	mg/L	400.0	105%	88-124	
			MSRPD	mg/L		5.7%	≤29.1	
300.0	01/24/2007:A	00-ICB	ppm		ND	<0.4		
		00-CCB	ppm		ND	<0.4		
		00-ICV	ppm	40.00	101%	90-110		
		00-CCV	ppm	20.00	97.4%	90-110		
300.0	01/24/2007:A215 (VI 740110-01)	LCS	mg/L	20.00	97.2%	90-110		
		MS	mg/L	400.0	117%	88-124		
		MSD	mg/L	400.0	116%	88-124		
		MSRPD	mg/L		1.0%	≤29.1		
300.0	01/24/2007:B215 (STK730779-01)	LCS	mg/L	20.00	98.7%	90-110		
		MS	mg/L	400.0	112%	88-124		
		MSD	mg/L	400.0	105%	88-124		
		MSRPD	mg/L		5.7%	≤29.1		
Nitrite	300.0	01/24/2007:A215 (VI 740110-01)	LCS	mg/L	15.00	95.5%	90-110	
			MS	mg/L	300.0	116%	91-121	
			MSD	mg/L	300.0	115%	91-121	
			MSRPD	mg/L		0.6%	≤23.8	
	300.0	01/24/2007:B215 (STK730779-01)	LCS	mg/L	15.00	97.6%	90-110	
			MS	mg/L	300.0	113%	91-121	
300.0	01/24/2007:A	00-ICB	ppm		ND	<0.3		
		00-CCB	ppm		ND	<0.3		
Nitrogen, Total Kjeldahl	351.1	01/25/2007:A242 (CH 770447-01)	Blank	mg/L		ND	<0.5	
			LCS	mg/L	2.000	105%	69-125	
			MS	mg/L	2.000	117%	0-149	
			MSD	mg/L	2.000	122%	0-149	
	351.1	01/26/2007:A242 (STK730431-02)	Blank	mg/L		ND	<0.5	
			LCS	mg/L	2.000	108%	69-125	
			MS	mg/L	2.000	-44.6%	< ¼	408
			MSD	mg/L	2.000	80.4%	< ¼	408
351.1	01/31/2007:C	00-ICB	mg/l		ND	<0.2		
		00-CCB	mg/l		ND	<0.2		

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Lab ID : STK730704
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Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem Ammonia Nitrogen	351.1	01/31/2007:C	00-ICV 00-CCV	mg/l mg/l	2.000 2.000	94.5% 94.5%	90-110 90-110	
		02/01/2007:C	00-ICB 00-CCB 00-ICV 00-CCV	mg/l mg/l mg/l mg/l		ND ND 90.8% 91.2%	<0.2 <0.2 90-110 90-110	
					2.000 2.000			
pH	4500-H B	01/23/2007:S346	Dup	units		0.3%	0.995	
	4500-H B	01/23/2007:S	00-CCV	units	8.000	99.4%	95-105	
Solids, Fixed Dissolved (FDS)	2540 C,E	01/25/2007:B235	Blank LCS Dup	mg/L mg/L mg/L	1000	ND 98.1% 0.8%	<40 90-110 12.2	
		01/26/2007:B235	Blank LCS Dup	mg/L mg/L mg/L	1000	ND 100% 0.5%	<40 90-110 12.2	
		01/29/2007:B235	Blank LCS Dup	mg/L mg/L mg/L	1000	ND 101% 0.1%	<40 90-110 12.2	
Specific Conductance	2510B	01/25/2007:A	00-ICB 00-ICV 00-CCV	umhos/cm umhos/cm umhos/cm	10000 1002	ND 99.0% 100%	<1 95-105 95-105	
Sulfate	300.0	01/24/2007:A215 (VI 740110-01)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	50.00 1000 1000	95.5% 118% 116% 1.3%	90-110 78-137 78-137 ≤12.3	
		01/24/2007:B215 (STK730779-01)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	50.00 1000 1000	98.0% 121% 106% 13.4%	90-110 78-137 78-137 ≤12.3	435
	300.0	01/24/2007:A	00-ICB 00-CCB 00-ICV 00-CCV	ppm ppm ppm ppm	100.0 50.00	ND ND 101% 95.9%	<2 <2 90-110 90-110	
Total Alkalinity (as CaCO3)	2320B	01/29/2007:A202	Dup	mg/L		1.6%	3.42	
	2320B	01/29/2007:A	00-ICV 00-CCV	mg/l mg/l	234.9 234.9	94.1% 92.3%	90-110 90-110	
Total Dissolved Solids	2540C	01/25/2007:B235	Blank LCS Dup	mg/L mg/L mg/L	1000	ND 99.6% 0.0%	<40 90-110 10.0	
		01/26/2007:B235	Blank LCS	mg/L mg/L	1000	ND 100%	<40 90-110	

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City of Patterson Wastewater

Lab ID : STK730704
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Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem Total Dissolved Solids	2540C	01/26/2007:B235	Dup	mg/L		0.5%	10.0	
		01/29/2007:B235	Blank	mg/L		ND	<40	
			LCS	mg/L	1000	101%	90-110	
			Dup	mg/L		0.1%	10.0	
Explanations								
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.							
435	Sample matrix may be affecting this analyte. 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 fourth of the sample concentration.							
DQO	: Data Quality Objective - This is the criteria against which the quality control data is compared.							

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February 14, 2007
City of Patterson Wastewater

Lab ID : STK730704
Customer : 3-15918

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
TOC 5310 C	5310B	01/31/2007:A234	Blank	mg/L		ND	<0.3	
			BS	mg/L	50.00	95.8%	80-117	
			BSD	mg/L	50.00	95.8%	80-117	
			BSRPD	mg/L		0.0%	≤14.2	
	5310B	01/31/2007:A	00-CCV	ppm	50.00	87.7%	76-119	
			01-CCV	ppm	50.00	80.3%	76-119	
			02-CCV	ppm	50.00	91.0%	76-119	
			03-CCV	ppm	50.00	91.5%	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 fourth of the sample concentration.								
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.								



ENVIRONMENTAL

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CHAIN OF CUSTODY
Laboratory Copy (1 of 3)

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 Monitoring
Purchase Order Number:
Quote Number:
Sampler(s): *Len*
Sampling Fee: _____ Pickup Fee: _____
Compositor Stamp Date: ____/____/____ Time: ____:____:____
Lab Number: **STK 0230704** 3-15918

33141:01/01/2007	TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling Information
Method of Sampling: Composite(C) Grab(G)	Type of Sample **SEE REVERSE SIDE**
Potable(P) Non-Potable(NP) Ag Water(AgW)	Bacti: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O)
Coliform - LTB-MTF 10 Tube 120ml(PBa)-Na2S2O3	General Mineral/Irrigation Suitability (Color Report N/R)
pH - Analyze in STK 500ml(P)-HNO3, 16oz(P), 8oz(P)-H2SO4, 8oz(P)	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	Coliform - LTB-Series 15 Tube 120ml(PBa)-Na2S2O3

Remarks:	Retinquired	Date:	Time:	Retinquired	Date:	Time:	Retinquired	Date:	Time:	Retinquired	Date:	Time:
10 Mitigation Well	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
9 MW9	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
8 MW8	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
7 MW7	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
6 MW6	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
5 MW5	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
4 MW4	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
3 MW3	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
2 MW2	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430
1 MW1	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430	G MW	1/23/07	1430

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