QUARTERLY GROUNDWATER MONITORING REPORT

City of Patterson Wastewater Treatment Plant
Groundwater Monitoring Program

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

Prepared by:

LEE & RO, Inc.
11060 White Rock Road, Suite 100
Rancho Cordova, California 95670-6046

Prepared for:

City of Patterson
Department of Public Works
33 South Del Puerto Avenue
Patterson, CA 95363

October 2001

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FIELD WORK CONDUCTED UNDER THE SUPERVISION OF AND REPORT PREPARED BY:

Tambrey A. Tosk (DATE)
Registered Geologist California No. 5848
Certified Hydrogeologist California No. HG 439

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1. INTRODUCTION

This Groundwater Monitoring Report has been prepared in accordance with the Waste Discharge Requirements for the City of Patterson Wastewater Treatment Plant in the City of Patterson, Stanislaus County, California (see **Figure 1**). 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 five monitoring wells.

The wells were constructed March 26-29, 2001 and developed April 2 and 3, 2001. The first quarterly samples were collected April 4, 2001, with resampling for additional microbiology testing on April 24, 2001. This report presents the second and third quarterly sampling results. The samples were collected July 13, 2001 and September 5, 2001.

This report provides groundwater elevation summaries and contour maps as well as groundwater quality sampling results for the second and third sampling of the wells after construction.

2. HYDROGEOLOGIC SETTING

The plant is located on a gently sloping plain at the edge of a ten-foot high bluff overlooking the San Joaquin River (approximately 1/2 mile to the east) (see **Figure 2**). The area between the plant and the river is occupied by ox-bow lake ponds formed by cut-off meanders of the river. Surface and groundwater flow is generally eastward toward the river.

The near-surface lithology consists of sand, silt, and clay flood plain deposits of the Holocene age Dos Palos Alluvium. Silt or clay was found in the upper portion of each boring. Sand was found at depths ranging from 10 ft to 20 ft bgs in each borehole except MW-2, where sand was not encountered until the depth of 30 ft. Sand continued to the total depth reached in each borehole except in MW-1, where clay was encountered at 25 ft, and in MW-4, where clay was encountered at 31 ft.

3. GROUNDWATER MONITORING WELLS

Two upgradient wells and three downgradient wells are located at the plant site. **Figure 3** shows the monitoring well locations.

The wells have 15 feet of screen per well. The total depths range from 27 to 30 feet below ground surface (bgs). A summary of well characteristics is provided in **Table 1**.

Table 1
Well Construction Summary

	MW-1	MW-2	MW-3	MW-4	MW-5
Well Depth (ft)	28	29	28	30	29
Completion Type	Below	Above	Above	Above	Above
Slot Size (inch)	0.01	0.02	0.02	0.01	0.02
Elevation of Slab Surface	55.58	57.93	52.18	56.99	53.79
Elevation of Top of Casing	54.93	59.68	53.80	58.58	55.21
Northing	63170.83	65646.16	63426.28	64632.54	65640.07
Easting	27600.60	26971.88	29651.79	28630.20	28819.87

4. GROUNDWATER ELEVATIONS

Groundwater depths measured to date are presented in **Table 2** and **Figure 4**. Groundwater elevation contour maps of the April, July and September 2001 measurements are presented in **Figures 5a, 5b, and 5c**.

Table 2
Groundwater Elevations
April to September 2001

	MW-1	MW-2	MW-3	MW-4	MW-5
Water Elevation 4/4/01 (ft msl)	38.10	40.30	35.90	37.18	35.85
Water Elevation 4/24/01 (ft msl)	38.57	43.79	35.85	36.85	35.31
Water Elevation 5/23/01 (ft msl)	39.24	40.81	35.80	36.94	36.52
Water Elevation 7/13/01 (ft msl)	39.49	40.58	34.77	36.10	35.59
Water Elevation 9/5/01 (ft msl)	39.88	41.66	35.12	36.41	35.92

5. MONITORING WELL SAMPLING

The wells were purged and sampled according to the procedures specified in the workplan on July 13 and September 5, 2001. Purge logs are presented in **Appendix A**.

6. GROUNDWATER QUALITY RESULTS

Laboratory reports are presented in **Appendix B**. Analytical results for each of the sampling events are summarized in **Table 3a-3c** below.

Table 3a
Groundwater Analytical Results
April 2001

	Unit	MW-1	MW-2	MW-3	MW-4	MW-5
pH	Unit	7.5	7.4	7.2	7.4	6.9
Electrical Conductivity	uS/cm	3,600	2,900	4,100	930	1,500
Total Dissolved Solids	mg/L	2,400	1,800	2,800	550	1,500
Nitrate as Nitrogen	mg/L	25	4.9	17	0.48	9.8
Total Coliform Organisms	MPN/100 mL	4	17	22	7	500
Fecal Coliform Organisms	MPN/100 mL	<2	2	<2	<2	<2

Table 3b
Groundwater Analytical Results
July 2001

	Unit	MW-1	MW-2	MW-3	MW-4	MW-5
pH (field)	Unit	7.44	7.28	6.36	6.86	6.80
Electrical Conductivity (field)	uS/cm	1,890	1,901	1,537	1,853	1,898
Total Dissolved Solids	mg/L	1,600	2,010	3,110	1,680	1,700
Nitrate as Nitrogen	mg/L	8.8	6.4	19	<0.2	1.4
Total Coliform Organisms	MPN/100 mL	<2	<2	<2	<2	<2
Fecal Coliform Organisms	MPN/100 mL	<2	<2	<2	<2	<2

Table 3c
Groundwater Analytical Results
September 2001

	Unit	MW-1	MW-2	MW-3	MW-4	MW-5
pH	Unit	7.85	7.66	7.54	7.27	7.36
Electrical Conductivity	uS/cm	2,710	3,720	4,410	2,710	3,130
Total Dissolved Solids	mg/L	1,830	2,050	2,260	1,670	1,670
Nitrate as Nitrogen	mg/L	15	4.9	15	2.7	4.4
Total Coliform Organisms	MPN/100 mL	500	11	<2	<2	<2
Fecal Coliform Organisms	MPN/100 mL	170	<2	<2	<2	<2

7. COMPARISON WITH EFFLUENT QUALITY

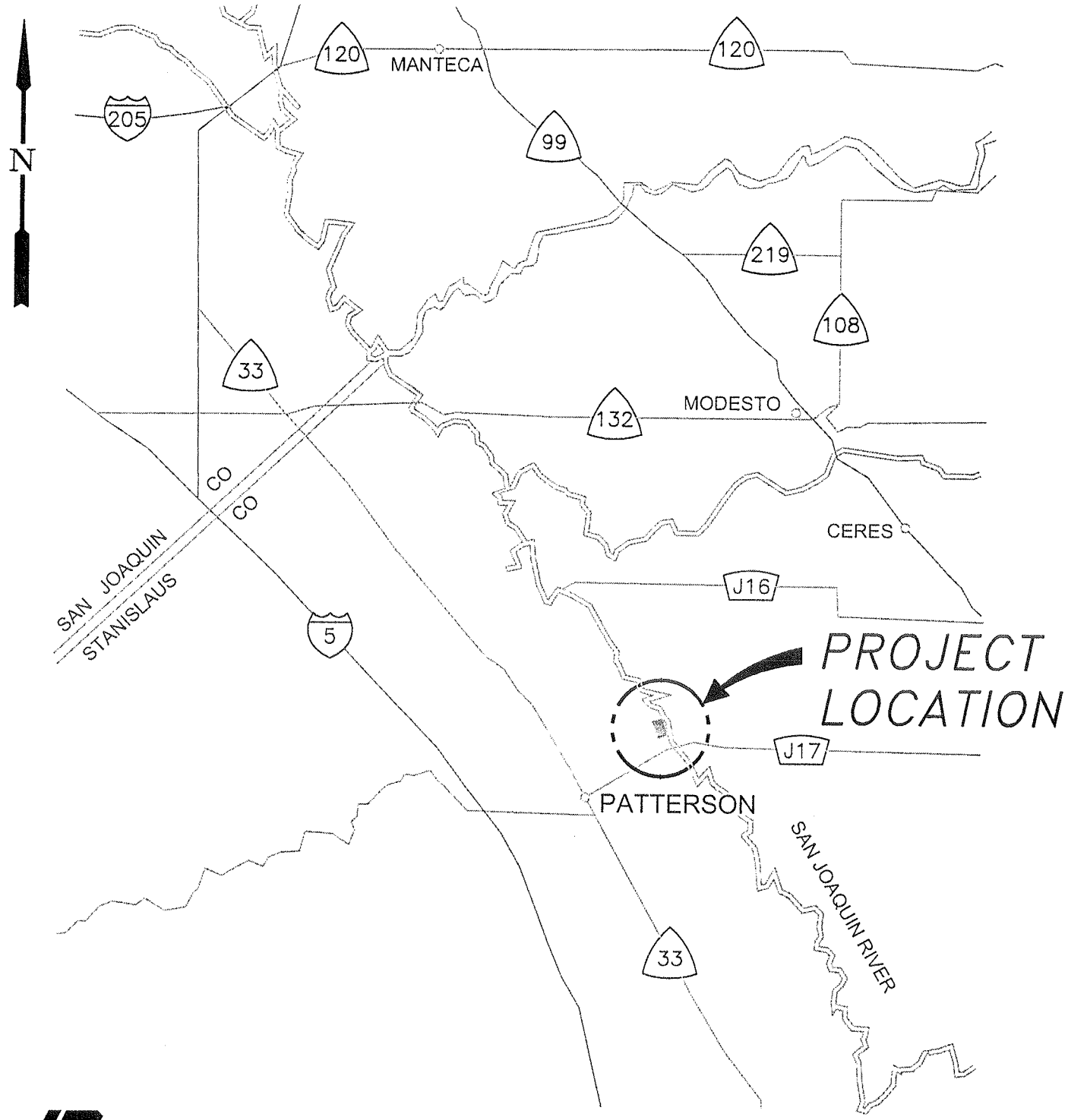
The average data for the plant's influent, effluent, treatment ponds, and percolation ponds are summarized in **Table 4** below. Complete tables are provided in **Appendix C**.

Graphs showing the electrical conductivity, TDS and nitrate analytical results for the plant water and groundwater samples are presented in **Figures 6, 7 and 8.** The results show that the groundwater quality is improved by dilution with the plant effluent.

Table 4
Plant Samples Analytical Results
January through August, 2001

Analyte	Date	Unit	Influent	Activated Sludge Effluent	AIPS Effluent	Pond #1	Pond #2	Pond #3	Pond #4	Pond #5
Electrical Conductivity	January Average	uS/cm	NS	1335	1408	NS	NS	NS	NS	NS
	February Average		2376	1716	1613	NS	NS	NS	NS	NS
	March Average		3069	1556	1628	1244	1288	1231	1355	1362
	April Average		2199	1411	1417	1460	1429	1570	DRY	1443
	May Average		2029	1471	1591	1894	1912	1919	DRY	1757
	June Average		1687	1687	1796	1896	1960	1968	2120	1615
	July Average		2058	1636	1727	2134	2368	1736	1787	1578
	August Average		1755	1744	1867	2035	2386	1865	NS	1726
Total Dissolved Solids	January Average	mg/L	NA	1090	NS	NA	NA	NA	NA	NA
	February Average			1260	NS					
	March Average			1130	1100					
	April Average			1230	1300					
	May Average			1310	1290					
	June Average			1230	1360					
	July Average			460	1475					
	August Average			1280	1350					
Nitrate (as N)	January Average	mg/L	NA	69	NS	NA	NA	NA	NA	NA
	February Average			78	NS					
	March Average			31	33					
	April Average			4	10					
	May Average			18	1					
	June Average			21	2					
	July Average			63	1					
	August Average			39	1					

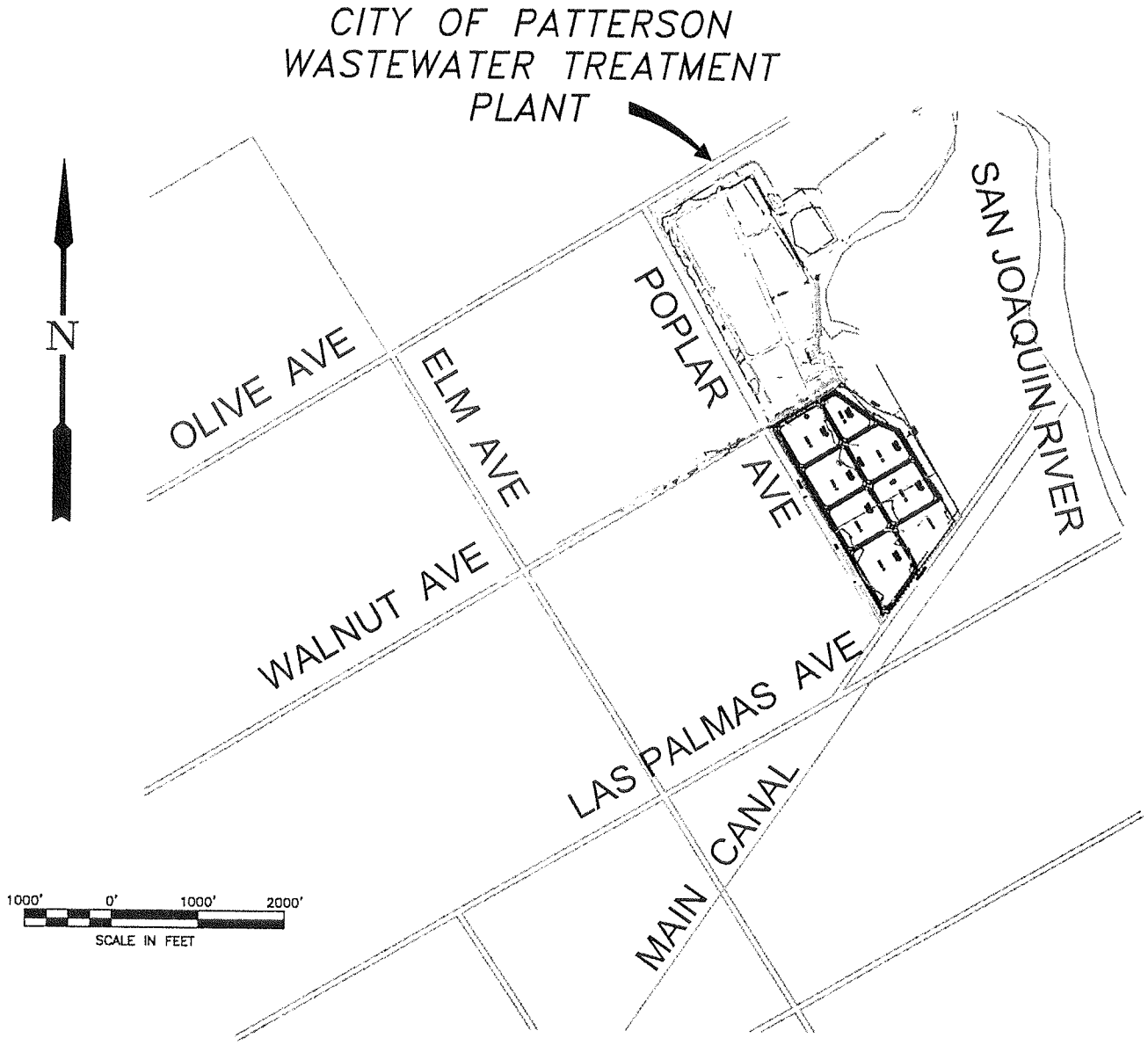
FIGURE 1
PATTERSON WWTP
VICINITY MAP



LEE&RO, Inc.

NOT TO SCALE

FIGURE 2
LOCATION MAP



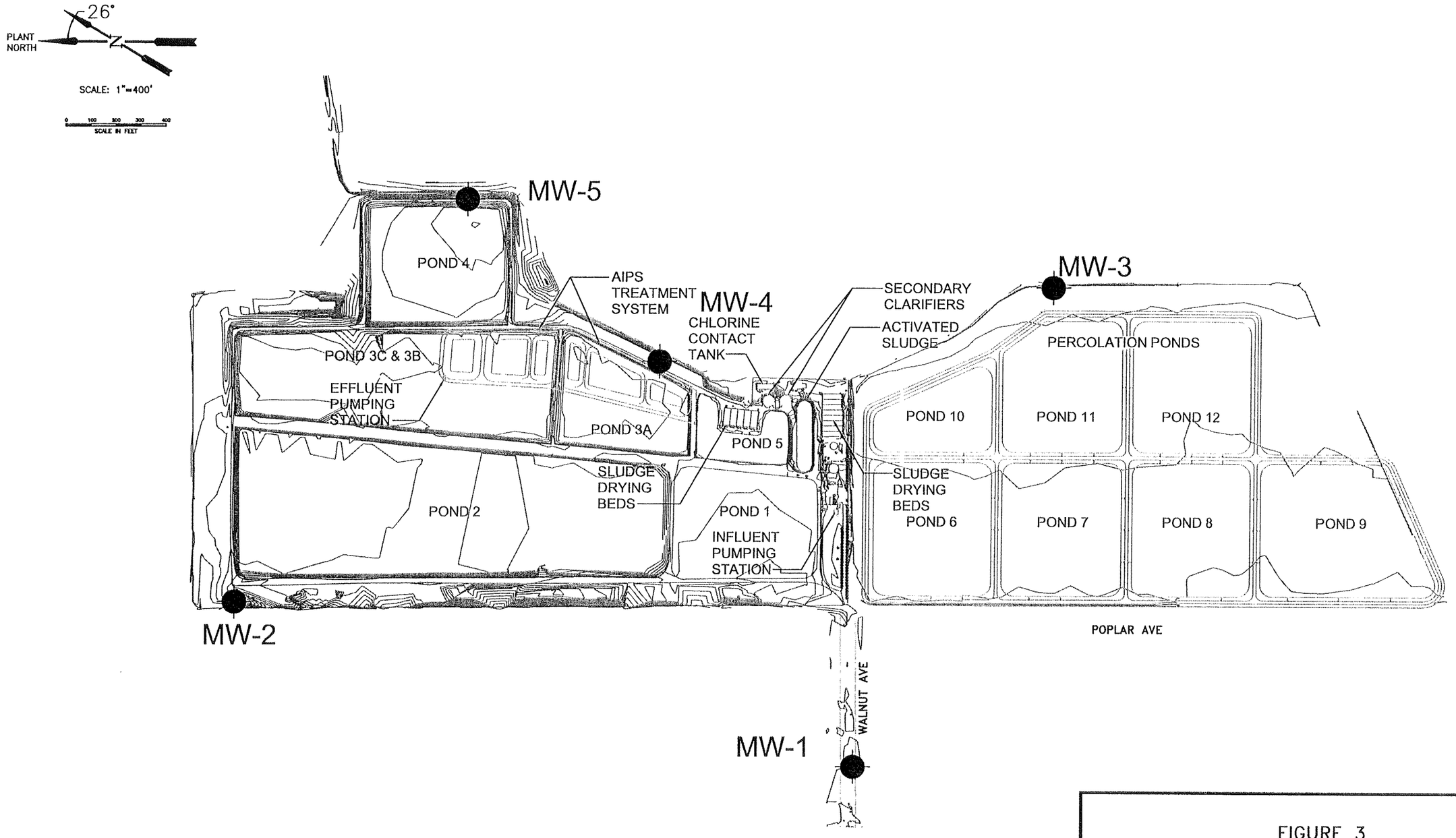
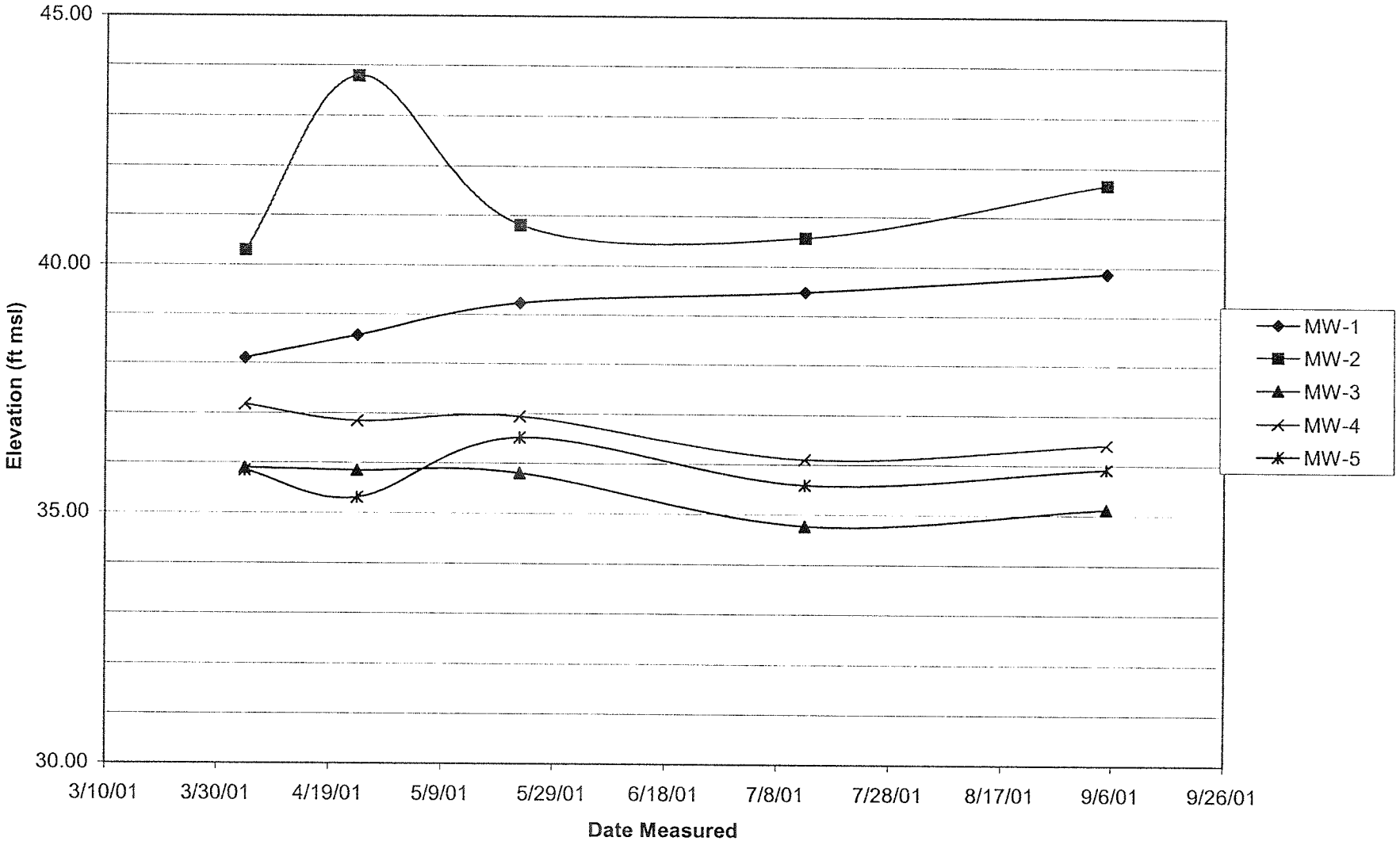


FIGURE 3

WELL LOCATION MAP

K:\PROJ\715\FIGURES\FIGURE3.DWG

Figure 4
Groundwater Elevations in Patterson WWTP Monitoring Wells



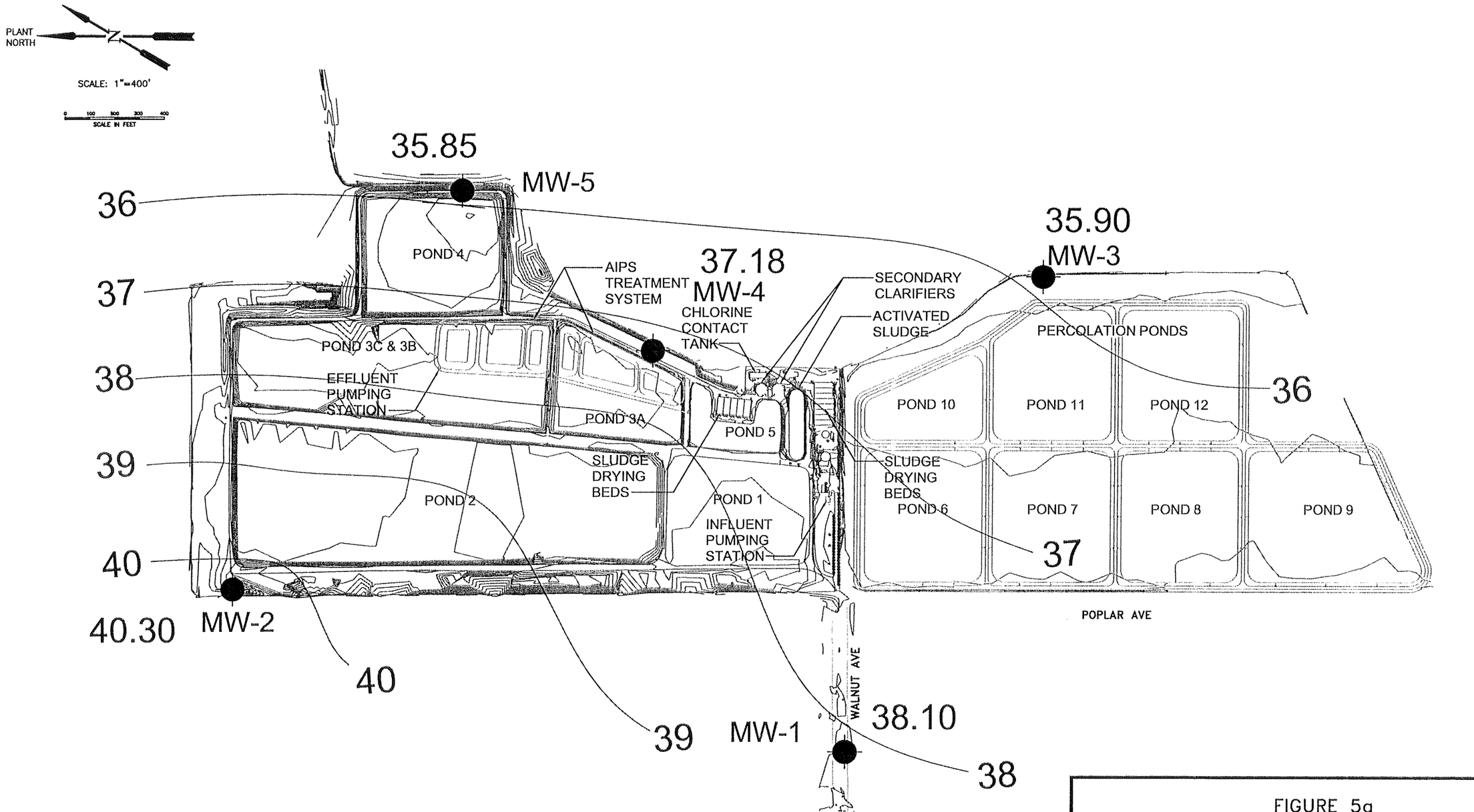


FIGURE 5a
GROUNDWATER ELEVATION MAP
APRIL 4, 2001

N:\PROJ\715\FIGURES\FIGURE5.DWG

PLANT NORTH

SCALE: 1"=400'

0 100 200 300 400
SCALE IN FEET

35.92
MW-5
36
37
38
39
40
41
41.66
MW-2
POND 4
POND 3C & 3B
EFFLUENT PUMPING STATION
POND 3A
POND 5
POND 2
SLUDGE DRYING BEDS
POND 1
INFLUENT PUMPING STATION
AIPS TREATMENT SYSTEM
36.41
MW-4
CHLORINE CONTACT TANK
SECONDARY CLARIFIERS
ACTIVATED SLUDGE
35.12
MW-3
PERCOLATION PONDS
36
POND 10
POND 11
POND 12
37
SLUDGE DRYING BEDS
POND 6
POND 7
POND 8
POND 9
38
POPLAR AVE
39
40
MW-1
39.88
WALNUT AVE

FIGURE 5c
GROUNDWATER ELEVATION MAP
SEPTEMBER 5, 2001

P:\PROJ\715\FIGURES\FIGURE5.DWG

PLANT NORTH

SCALE: 1"=400'

0 100 200 200 400
SCALE IN FEET

35
35.59
MW-5
36
37
38
39
40
40.58
MW-2
POND 4
POND 3C & 3B
EFFLUENT PUMPING STATION
POND 3A
POND 2
AIPS TREATMENT SYSTEM
36.10
MW-4
CHLORINE CONTACT TANK
POND 5
SLUDGE DRYING BEDS
POND 1
INFLUENT PUMPING STATION
SECONDARY CLARIFIERS
ACTIVATED SLUDGE
34.77
MW-3
PERCOLATION PONDS
35
POND 10
POND 11
POND 12
36
SLUDGE DRYING BEDS
POND 6
POND 7
POND 8
POND 9
37
POPLAR AVE
38
WALNUT AVE
MW-1
39.49
39
40

FIGURE 5b
GROUNDWATER ELEVATION MAP
JULY 13, 2001

M:\PROJ\715\FIGURES\FIGURE5.DWG

Figure 6
Electrical Conductivity in Patterson WWTP Plant Samples and Wells

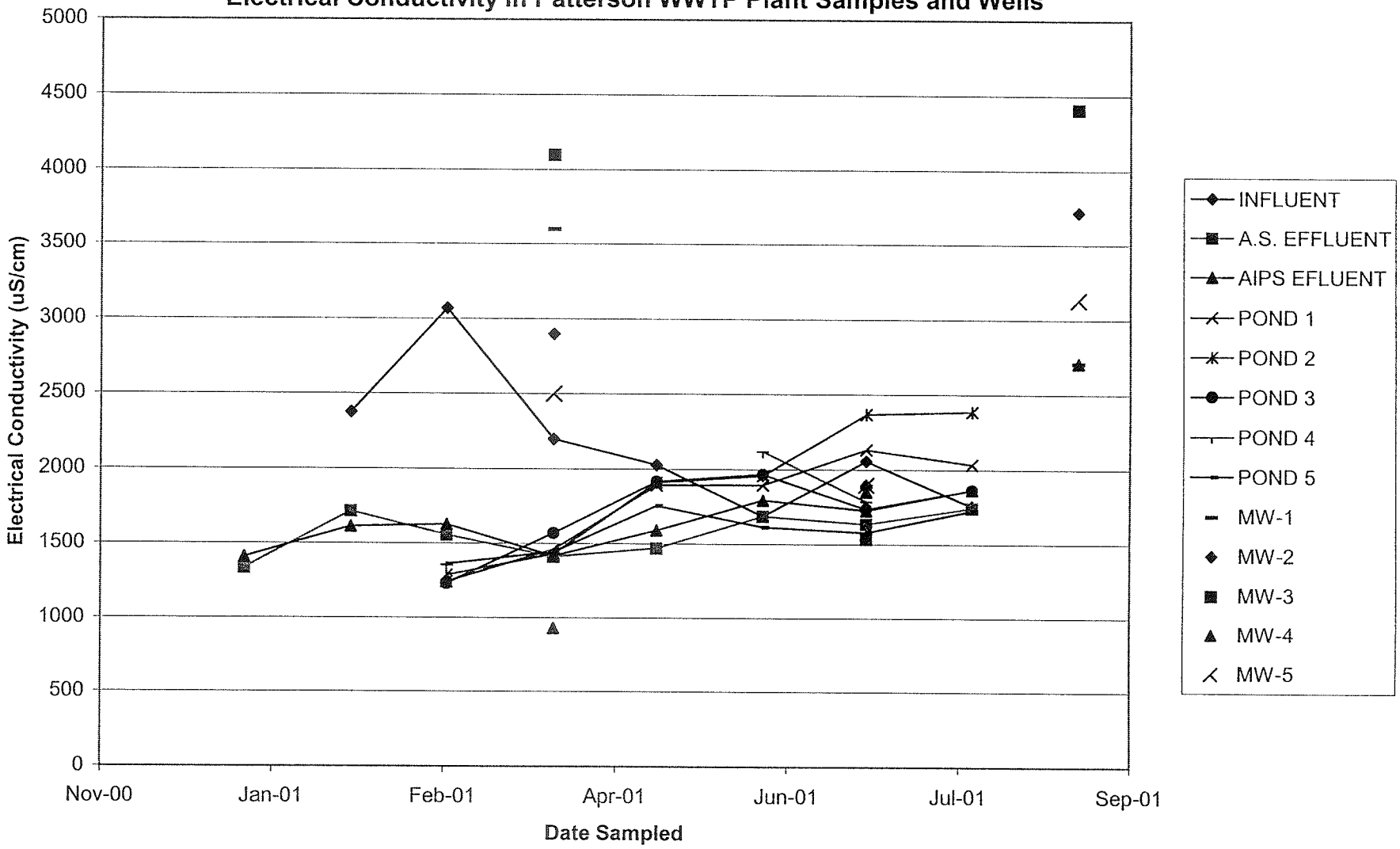


Figure 7
Total Dissolved Solids in Patterson WWTP Plant Samples and Wells

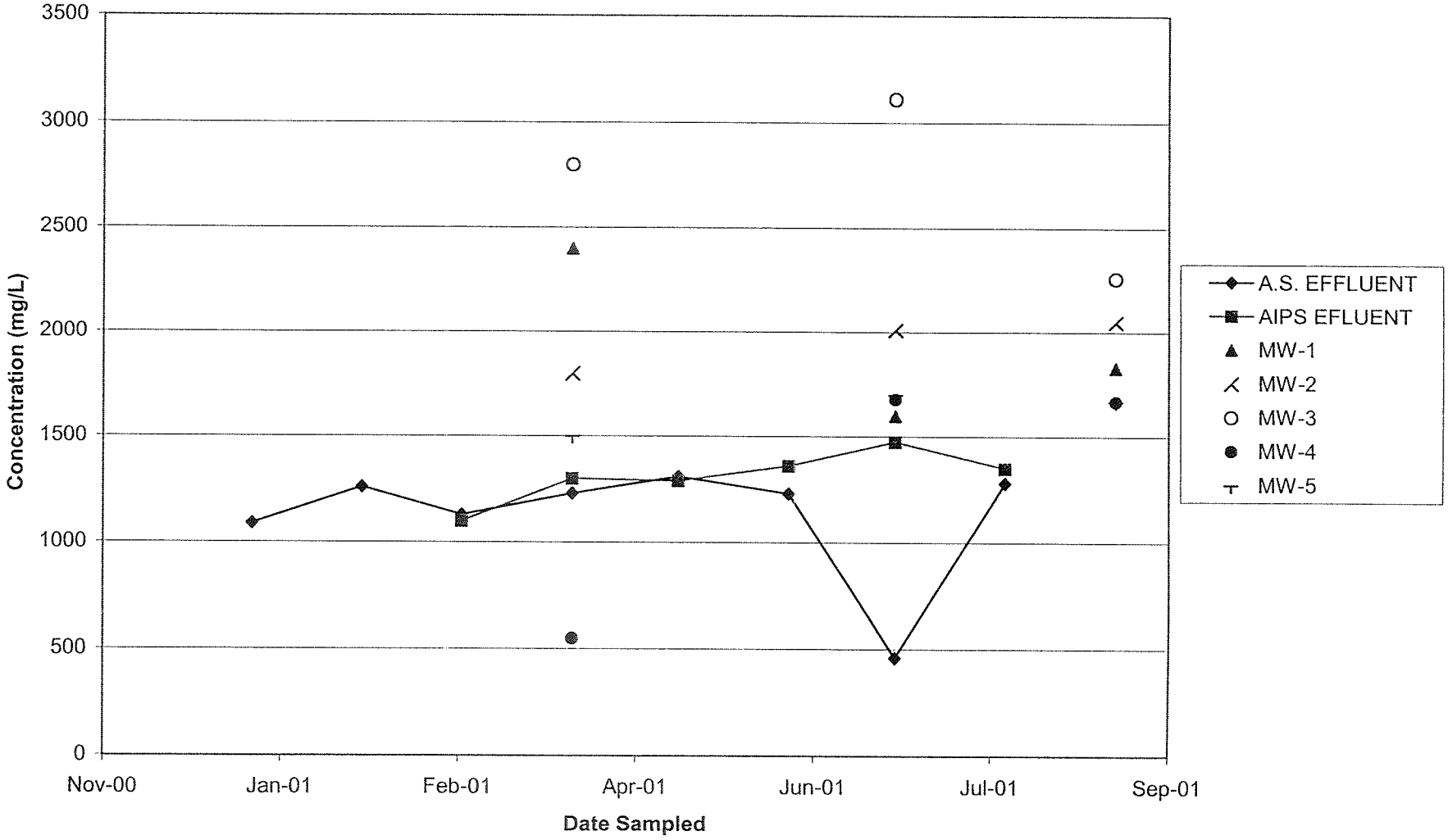
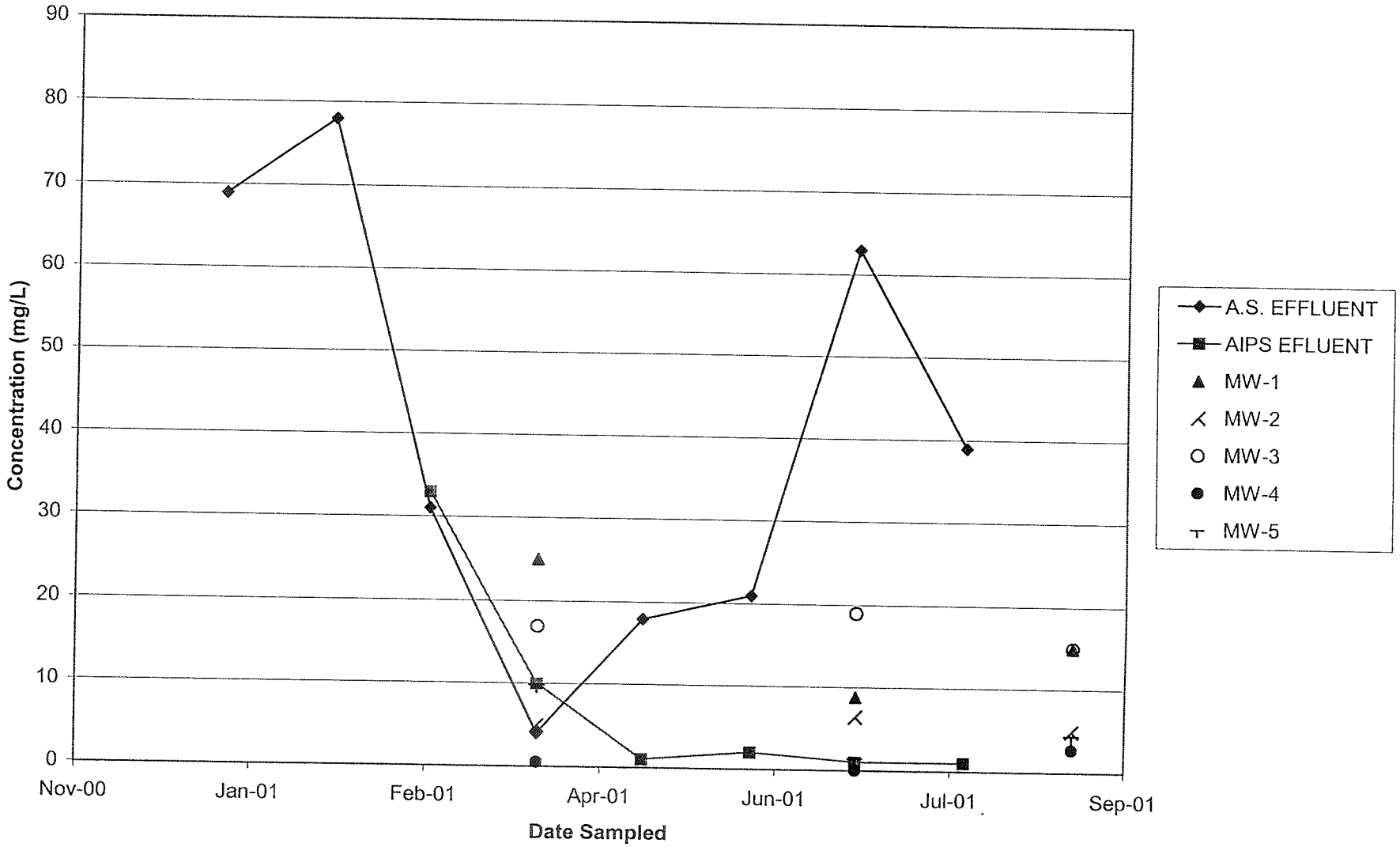


Figure 8
Nitrate in Patterson WWTP Plant Samples and Wells



APPENDIX A
PURGE LOGS

Measurement of Groundwater Levels

Project Name	Patterson WWTP	**Project No.**	715
		Recorded By	Ray Azevedo/GeoAnal
Location	Monitoring Wells	**Date**	7/13/01
Equipment Type	Solinst Water Level Meter	**Checked By**	Tambrey Tosk
Equipment No.	1	**Date**	10/1/01

Well Number	Time	Reference Point	Reference Elevation	Depth to Water	Water Elevation	Product Thickness	Product Elevation	Adjusted Water Elevation	Depth to Well Bottom	Notes (add below)
MW-1	10:12 AM	TOC	54.93	15.44	39.49	-	-	-	27.52	
MW-2	10:37 AM	TOC	59.68	19.10	40.58	-	-	-	31.28	
MW-3	11:30 AM	TOC	53.80	19.03	34.77	-	-	-	30.88	
MW-4	11:11 AM	TOC	58.58	22.48	36.10	-	-	-	31.64	
MW-5	10:54 PM	TOC	55.21	19.62	35.59	-	-	-	30.50	

Notes:

Report # _____

Field Log / Groundwater Sampling Form

Date 7/13/01

Client City of Patterson

Well MW-1

Project Name Quarterly Groundwater Monitoring

Well Type : ✱ Monitor ❑ Extraction ❑ Other _____

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Sampler Ray Azevedo / Rich Chrun

WELL PURGING

Purge Method

- [ ] Bailer - Type _____
- [x] Pump - Type 2"
- [ ] Other _____

Multiplier

Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4686

Purge Volume

Well Casing Diameter
- [ ] 2 - inch
- [x] 4 - inch
- [ ] other _____

Well Volume Purged
- [x] 3 volumes
- [ ] 4 volumes
- [ ] other _____

Total Well Depth 27.5

Depth to Water 15.44

= Water Column Length _____

12.06 (Water column length) x 0.6527 (Multiplier) x 3 (No. Volumes) = 23.64 (CALCULATED. Purge Vol.)

23.64 (Purge Vol) / 2.5 (Purge Rate) = 9.46 (TOTAL PURGE TIME)

9.46 (Total Purge Time) / 3 (# Volumes) = 3.15 (PURGE TIME/VOL.)

Actual Values

Purge Time /Vol.	3
X No. Volumes	3
= Total Purge Time	9
X Purge Rate	2.5
= Actual Purge Vol.	22.5

GROUNDWATER PARAMATER MEASUSREMENTS

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ❑ deg C ❑ deg F	Turbidity NTU	Color / Odor
Start	10:12	-	-	-	-	-	-
Vol 1	10:15	7.5	7.89	1720	23.1		Muddy
Vol 2	10:18	15	7.67	1884	22.2		turbid
Vol 3	10:21	22.5	7.44	1890	22.4		clear
Vol 4							
Vol 5							

Meter Type IQ Scientific

Purge Water Storage / Disposal
- [ ] Drummed onsite
- [x] Onsite Treatment System
- [ ] Other _____

COMMENTS/purge: _____

WELL SAMPLING

Sampling Method
- [ ] Bailer - Type _____
- [ ] Pump - Type _____
- [ ] Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
10:21	MW-1	✓				1 Amber Ltr ~~Bacti~~	2	4degrees C

COMMENTS/sampling: _____

1405 Kansas Ave.
Modesto. CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: : (209) 572-0916

Report # _____

Field Log / Groundwater Sampling Form

Date 7/13/01

Client City of Patterson

Well MW 2

Project Name Quarterly Groundwater Monitoring

Well Type : ✳ Monitor ☐ Extraction ☐ Other _____

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Sampler _____

WELL PURGING

Purge Method

- ☐ Bailer - Type _____
- ☒ Pump - Type 2"
- ☐ Other _____

Multiplier

Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4686

Purge Volume

Well Casing Diameter
- ☐ 2 - inch
- ☒ 4 - inch
- ☐ other _____

Well Volume Purged
- ☒ 3 volumes
- ☐ 4 volumes
- ☐ other _____

Total Well Depth 31.4

Depth to Water − 19.1

Water Column Length = 12.3

12.3 (Water column length) X 0.6527 (Multiplier) X 3 (No. Volumes) = 24.08 (CALCULATED. Purge Vol.)

24.08 (Purge Vol) / 2.5 (Purge Rate) = 9.63 (TOTAL PURGE TIME)

9.63 (Total Purge Time) / 3 (# Volumes) = 3.21 (PURGE TIME/VOL.)

Actual Values

Purge Time /Vol.	3
X	
No. Volumes	3
=	
Total Purge Time	9
X	
Purge Rate	2.5
=	
Actual Purge Vol.	22.5

GROUNDWATER PARAMATER MEASUSREMENTS

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☒ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	10:37	-	-	-	-	-	-
Vol 1	10:40	7.5	8.12	1826	24.5		turbid
Vol 2	10:43	15.0	7.47	1881	23.8		"
Vol 3	10:46	22.5	7.28	1901	23.1		"
Vol 4							
Vol 5							

Meter Type IQ Scientific

Purge Water Storage / Disposal
- ☐ Drummed onsite
- ☒ Onsite Treatment System
- ☐ Other _____

COMMENTS/purge: _____

WELL SAMPLING

Sampling Method
- ☐ Bailer - Type _____
- ☐ Pump - Type _____
- ☐ Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
10:46	MW-2	✓				1 Amber Ltr 1 ~~Bacti~~	2	4degrees C

COMMENTS/ sampling: _____

1405 Kansas Ave.
Modesto, CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: : (209) 572-0916

Report # _____

Field Log / Groundwater Sampling Form

Date 7/15/01

Client City of Patterson

Well MW 3

Project Name Quarterly Groundwater Monitoring

Well Type : ✱ Monitor ☐ Extraction ☐ Other _____

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Sampler Ray Azevedo / Rich Chrun

WELL PURGING

Purge Method

- ☐ Bailer - Type _____
- ☒ Pump - Type 2"
- ☐ Other _____

Total Well Depth 31.0

Depth to Water 19.03

= Water Column Length 11.97

Multiplier

Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4686

Purge Volume

Well Casing Diameter
- ☒ 2 - inch
- ☒ 4 - inch
- ☐ other _____

Well Volume Purged
- ☒ 3 volumes
- ☐ 4 volumes
- ☐ other _____

11.97 (Water column length) x 0.6527 (Multiplier) x 3 (No. Volumes) = 23.44 (CALCULATED. Purge Vol.)

23.44 (Purge Vol) / 2.5 (Purge Rate) = 9.38 (TOTAL PURGE TIME)

9.38 (Total Purge Time) / 3 (# Volumes) = 3.12 (PURGE TIME/VOL.)

Actual Values

Purge Time /Vol.	3
X No. Volumes	3
= Total Purge Time	9
X Purge Rate	2.5
= Actual Purge Vol.	22.5

GROUNDWATER PARAMATER MEASUSREMENTS

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☐ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	11:30	-	-	-	-	-	-
Vol 1	11:33	7.5	7.20	1322	24.2		CLEAR
Vol 2	11:36	15	6.85	1412	20.9		"
Vol 3	11:39	22.5	6.36	1537	20.5		"
Vol 4							
Vol 5							

Meter Type IQ Scientific

Purge Water Storage / Disposal
- ☐ Drummed onsite
- ☒ Onsite Treatment System
- ☐ Other _____

COMMENTS/purge: _____

WELL SAMPLING

Sampling Method
- ☐ Bailer - Type _____
- ☒ Pump - Type _____
- ☐ Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
11:39	MW-3	✓				1 Amber Ltr 1 Bacti	2	4degrees C

COMMENTS/ sampling: _____

1405 Kansas Ave.
Modesto, CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: : (209) 572-0916

Report # _____

Field Log / Groundwater Sampling Form

Date 7/13/01

Client City of Patterson

Well MW-4

Project Name Quarterly Groundwater Monitoring

Well Type : ✱ Monitor ☐ Extraction ☐ Other _____

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Sampler Ray Azevedo/Rich Chrun

WELL PURGING

Purge Method

- ☐ Bailer - Type _____
- ☒ Pump - Type 2"
- ☐ Other _____

Multiplier

Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4686

Purge Volume

Well Casing Diameter

- ☐ 2 - inch
- ☒ 4 - inch
- ☐ other _____

Well Volume Purged

- ☒ 3 volumes
- ☐ 4 volumes
- ☐ other _____

Total Well Depth 31.7

Depth to Water 22.48

Water Column Length 9.22

9.22 (Water column length) X 0.6527 (Multiplier) X 3 (No. Volumes) = 18.05 (CALCULATED. Purge Vol.)

18.05 (Purge Vol) / 2.5 (Purge Rate) = 7.22 (TOTAL PURGE TIME)

7.22 (Total Purge Time) / 3 (# Volumes) = 2.40 (PURGE TIME/VOL.)

Actual Values

Purge Time /Vol.	2
X No. Volumes	3
= Total Purge Time	6
X Purge Rate	2.5
= Actual Purge Vol.	15

GROUNDWATER PARAMATER MEASUSREMENTS

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☐ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	11:11	-	-	-	-	-	-
Vol 1	11:13	5	6.99	1749	21.9		turbid
Vol 2	11:15	10	6.97	1798	21.1		"
Vol 3	11:17	15	6.86	1853	20.6		"
Vol 4							
Vol 5							

Meter Type IQ Scientific

Purge Water Storage / Disposal

- ☐ Drummed onsite
- ☒ Onsite Treatment System
- ☐ Other _____

COMMENTS/purge: _____

WELL SAMPLING

Sampling Method

- ☐ Bailer - Type _____
- ☐ Pump - Type _____
- ☐ Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
11:17	MW 4	✓				1 Amber Ltr 1 Bact.	2	4degrees C

COMMENTS/ sampling: _____

1405 Kansas Ave.
Modesto, CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: : (209) 572-0916

Report # _____

Field Log / Groundwater Sampling Form

Date 7/13/01

Client City of Patterson

Project Name Quarterly Groundwater Monitoring

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Well MW 5

Well Type : * Monitor ☐ Extraction ☐ Other _____

Sampler Ray Azevedo / Rick Crews

WELL PURGING

Purge Method

- ☐ Bailer - Type _____
- ☒ Pump - Type 2"
- ☐ Other _____

Multiplier

Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4686

Purge Volume

Well Casing Diameter
- ☐ 2 - inch
- ☒ 4 - inch
- ☐ other _____

Well Volume Purged
- ☒ 3 volumes
- ☐ 4 volumes
- ☐ other _____

Total Well Depth 31.0

Depth to Water 19.62

= Water Column Length 11.38

11.38 (Water column length) X 0.6527 (Multiplier) X 3 (No. Volumes) = 19.21 (CALCULATED. Purge Vol.)

19.21 (Purge Vol) / 2.5 (Purge Rate) = 7.68 (TOTAL PURGE TIME)

7.68 (Total Purge Time) / 3 (# Volumes) = 2.52 (PURGE TIME/VOL.)

Actual Values

Purge Time /Vol.	3
X	
No. Volumes	3
=	
Total Purge Time	9
X	
Purge Rate	2.5
=	
Actual Purge Vol.	22.5

GROUNDWATER PARAMATER MEASUSREMENTS

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☐ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	10:54	-	-	-	-	-	-
Vol 1	10:57	7.5	7.64	1137	25.3		Clear
Vol 2	11:00	15	6.92	1790	21.2		"
Vol 3	11:03	22.5	6.80	1898	20.6		"
Vol 4							
Vol 5							

Meter Type IQ Scientific

Purge Water Storage / Disposal
- ☐ Drummed onsite
- ☒ Onsite Treatment System
- ☐ Other _____

COMMENTS/purge: _____

WELL SAMPLING

Sampling Method
- ☐ Bailer - Type _____
- ☐ Pump - Type _____
- ☐ Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
11:03	MW 5	✓				1 Amber Ltr ~~1 Bacti~~	2	4degrees C

COMMENTS/ sampling: _____

1405 Kansas Ave.
Modesto, CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: : (209) 572-0916

Measurement of Groundwater Levels

Project Name	Patterson WWTP	**Project No.**	715
		Recorded By	Ray Azevedo/GeoAnal
Location	Monitoring Wells	**Date**	9/5/01
Equipment Type	Solinst Water Level Meter	**Checked By**	Tambrey Tosk
Equipment No.	1	**Date**	10/2/01

Well Number	Time	Reference Point	Reference Elevation	Depth to Water	Water Elevation	Product Thickness	Product Elevation	Adjusted Water Elevation	Depth to Well Bottom	Notes (add below)
MW-1	11:36 AM	TOC	54.93	15.05	39.88	-	-	-	27.52	
MW-2	12:04 PM	TOC	59.68	18.02	41.66	-	-	-	31.28	
MW-3	12:55 PM	TOC	53.80	18.68	35.12	-	-	-	30.88	
MW-4	12:35 PM	TOC	58.58	22.17	36.41	-	-	-	31.64	
MW-5	12:20 PM	TOC	55.21	19.29	35.92	-	-	-	30.50	

Notes:

Report # _____

Field Log / Groundwater Sampling Form

Date 9/5/01

Client City of Patterson

Well MW 1

Project Name Quarterly Groundwater Monitoring

Well Type : ✱ Monitor ☐ Extraction ☐ Other _____

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Sampler Ray AZEVEDO / Rich Chenu

Purge Method

- ☐ Bailer - Type _____
- ☒ Pump - Type 2"
- ☐ Other _____

Total Well Depth 27.5

Depth to Water 15.05

= Water Column Length 12.0

Multiplier

Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
4.0	0.6527
6.0	1.4686

Purge Volume

Well Casing Diameter
- ☐ 2 - inch
- ☒ 4 - inch
- ☐ other _____

Well Volume Purged
- ☒ 3 volumes
- ☐ 4 volumes
- ☐ other _____

12.0 (Water column length) x 0.6527 (Multiplier) x 3 (No. Volumes) = 23.50 CALCULATED. Purge Vol.

23.5 (Purge Vol) / 2.5 (Purge Rate) = 9.4 TOTAL PURGE TIME

9.4 (Total Purge Time) / 3 (# Volumes) = 3.13 PURGE TIME/VOL.

Actual Values

Purge Time /Vol.	3
X No. Volumes	3
= Total Purge Time	9
X Purge Rate	2.5
= Actual Purge Vol.	22.5

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☐ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	11:36	-	-	-	-	-	-
Vol 1	11:39	7.5	7.12	1872	23.0		clear
Vol 2	11:42	15	7.04	1735	22.3		
Vol 3	11:45	22.5	6.96	17.35	21.8		
Vol 4							
Vol 5							

Meter Type IQ Scientific

Purge Water Storage / Disposal
- ☐ Drummed onsite
- ☒ Onsite Treatment System
- ☐ Other _____

COMMENTS/purge: _____

Sampling Method

- ☐ Bailer - Type _____
- ☐ Pump - Type _____
- ☐ Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
11:45	MW-1					1 Amber 1 Bacti	2	4degrees C

COMMENTS/sampling: _____

1405 Kansas Ave.
Modesto, CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: : (209) 572-0916

Report # _____

Field Log / Groundwater Sampling Form

Date 9/ /01

Client City of Patterson

Project Name Quarterly Groundwater Monitoring

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Well MW-2

Well Type : ✱ Monitor ☐ Extraction ☐ Other _____

Sampler Ray Azevedo / Rich Chavez

Purge Method

- ☐ Bailer - Type _____
- ☒ Pump - Type 2"
- ☐ Other _____

Total Well Depth 32.4

Depth to Water 18.02

Water Column Length 13.38

Multiplier

Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4886

Purge Volume

Well Casing Diameter
- ☒ 2 - inch
- ☒ 4 - inch
- ☐ other _____

Well Volume Purged
- ☒ 3 volumes
- ☐ 4 volumes
- ☐ other _____

13.38 (Water column length) X 0.6527 (Multiplier) X 3 (No. Volumes) = 26.20 CALCULATED. Purge Vol.

26.20 (Purge Vol) / 2.5 (Purge Rate) = 10.48 TOTAL PURGE TIME

10.48 (Total Purge Time) / 3 (# Volumes) = 3.49 PURGE TIME/VOL

Actual Values

Purge Time /Vol.	4
X No. Volumes	3
= Total Purge Time	12
X Purge Rate	2.5
= Actual Purge Vol.	30

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☐ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	12:04	-	-	-	-	-	-
1 1	12:08	10	7.49	1812	24.4		
1 2	12:12	20	7.33	19.88	22.3		Muddy
Vol 3	12:16	30	7.26	1999	21.6		
1 4							
1 5							

Water Type IQ Scientific

Purge Water Storage / Disposal
- ☐ Drummed onsite
- ☒ Onsite Treatment System
- ☐ Other _____

COMMENTS/purge: _____

Sampling Method

- ☐ Bailer - Type _____
- ☐ Pump - Type _____
- ☐ Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
12:16	MW-2					1 Amber Liter	2	4degrees C
						1 Plastic		

COMMENTS/sampling: _____

405 Kansas Ave.
Modesto, CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: (209) 572-0916

Report # _____

Field Log / Groundwater Sampling Form

Date 9/5/01

Client City of Patterson

Project Name Quarterly Groundwater Monitoring

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Well MW 3

Well Type : ✱ Monitor ☐ Extraction ☐ Other _____

Sampler Ray Azevedo / Rich Chrisman

Purge Method

- ☐ Bailer - Type _____
- ☒ Pump - Type 2"
- ☐ Other _____

Total Well Depth 31.0

Depth to Water 18.48

Water Column Length 12.52

Multiplier

Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4686

Purge Volume

Well Casing Diameter
- ☐ 2 - inch
- ☒ 4 - inch
- ☐ other _____

Well Volume Purged
- ☒ 3 volumes
- ☐ 4 volumes
- ☐ other _____

12.52 (Water column length) x 0.6527 (Multiplier) x 3 (No. Volumes) = 24.12 (CALCULATED. Purge Vol.)

24.12 (Purge Vol) / 2.5 (Purge Rate) = 9.65 (TOTAL PURGE TIME)

9.65 (Total Purge Time) / 3 (# Volumes) = 3.21 (PURGE TIME/VOL.)

Actual Values

Purge Time /Vol.	3
X No. Volumes	3
= Total Purge Time	9
X Purge Rate	2.5
= Actual Purge Vol.	22.5

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☐ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	1255	-	-	-	-	-	-
Vol 1	1258	7.5	7.59	1816	23.3		Muddy
Vol 2	1:01	15	736	1825	20.6		↓
Vol 3	1:04	22.5	729	1853	20.1		↓
Vol 4							
Vol 5							

Water Type IQ Scientific

Purge Water Storage / Disposal
- ☐ Drummed onsite
- ☒ Onsite Treatment System
- ☐ Other _____

COMMENTS/purge: _____

Sampling Method

- ☐ Bailer - Type _____
- ☐ Pump - Type _____
- ☐ Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
1:04	MW-3					1 Amber 1L 1 Bacti	2	4degrees C

COMMENTS/ sampling: _____

405 Kansas Ave.
Modesto, CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: (209) 572-0916

Report # _____

Field Log / Groundwater Sampling Form

Date 9/5/01

Client City of Patterson

Well MW-4

Project Name Quarterly Groundwater Monitoring

Well Type : * Monitor ☐ Extraction ☐ Other _____

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Sampler Ray Acevedo / Rich Chrun

Purge Method

- ☐ Bailer - Type _____
- ☒ Pump - Type 2"
- ☐ Other _____

Total Well Depth 31.0

Depth to Water 22.17

Water Column Length 8.83

Multiplier	
Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4686

Purge Volume

Well Casing Diameter
- ☐ 2 - inch
- ☒ 4 - inch
- ☐ other _____

Well Volume Purged
- ☒ 3 volumes
- ☐ 4 volumes
- ☐ other _____

8.83 (Water column length) x 0.6527 (Multiplier) x 3 (No. Volumes) = 17.29 CALCULATED. Purge Vol.

17.29 (Purge Vol) / 2.5 (Purge Rate) = 6.92 TOTAL PURGE TIME

6.92 (Total Purge Time) / 3 (# Volumes) = 2.30 PURGE TIME/VOL.

Actual Values

Purge Time /Vol.	2
X No. Volumes	3
= Total Purge Time	6
X Purge Rate	2.5
= Actual Purge Vol.	15

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☐ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	12:35	-	-	-	-	-	-
Vol 1	1237	5	7.11	955	21.4		Turbid
Vol 2	1239	10	6.93	1311	21.0		
Vol 3	12:41	15	6.95	1999	20.8		↓
Vol 4							
Vol 5							

Meter Type IQ Scientific

Purge Water Storage / Disposal
- ☐ Drummed onsite
- ☒ Onsite Treatment System
- ☐ Other _____

COMMENTS/purge: _____

Sampling Method

- ☐ Bailer - Type _____
- ☐ Pump - Type _____
- ☐ Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
12:41	MW 4					1 Amber 1 Bacti	2	4degrees C

COMMENTS/sampling: _____

405 Kansas Ave.
Modesto, CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0900
Fax: : (209) 572-0916

Report # _____

Field Log / Groundwater Sampling Form

Date 9/5/01

Client City of Patterson

Project Name Quarterly Groundwater Monitoring

Consultant _____

Proj. Manager Ignacio Lopez/Joel Cockrell

Well MW 5

Well Type : * Monitor ☐ Extraction ☐ Other _____

Sampler Ray Azevedo / Rich Chavez

Purge Method

- [ ] Bailer - Type _____
- [x] Pump - Type 2"
- [ ] Other _____

Total Well Depth 31.0

Depth to Water 19.29

= Water Column Length 11.71

Multiplier	
Well Casing I.D. (in.)	Gal/Ft.
2.0	0.1632
(4.0)	0.6527
6.0	1.4686

Purge Volume
Well Casing Diameter
- [ ] 2 - inch
- [x] 4 - inch
- [ ] other _____

Well Volume Purged
- [x] 3 volumes
- [ ] 4 volumes
- [ ] other _____

11.71 (Water column length) X 0.6527 (Multiplier) X 3 (No. Volumes) = 22.93 CALCULATED. Purge Vol.

293 / 2.5 = 9.17 Purge Vol / Purge Rate = TOTAL PURGE TIME

9.17 / 3 = 305 Total Purge Time / # Volumes = PURGE TIME/VOL.

Actual Values

Purge Time /Vol.	3
X	
No. Volumes	3
=	
Total Purge Time	9
X	
Purge Rate	2.5
=	
Actual Purge Vol.	22.5

	Time	Gallons	pH	Conductivity µmhos/cm	Temp. ☐ deg C ☐ deg F	Turbidity NTU	Color / Odor
Start	12:20	-	-	-	-	-	-
1	12:23	7.5	7.35	1082	22.0		clear
2	12:26	15	6.53	1518	20.4		
3	1229	22.5	7.07	1377	20.8		↓
4							
5							

Meter Type IQ Scientific

Purge Water Storage / Disposal
- [ ] Drummed onsite
- [x] Onsite Treatment System
- [ ] Other _____

COMMENTS/purge: _____

Sampling Method

- [ ] Bailer - Type _____
- [ ] Pump - Type _____
- [ ] Other _____

Time	Sample ID	Org	Dup	Split	Blank	Container Type	Number of Containers	Preservative
1229	MW5					1 Amber Liter 1 Plastic	2	4degrees C

COMMENTS/sampling: _____

Kansas Ave.
Sta. CA 95351

GeoAnalytical Laboratories, Inc.
Cert# 1157

Phone: (209) 572-0800
Fax: (209) 572-0916

APPENDIX B
LABORATORY ANALYTICAL REPORTS

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # M194-21

Date: 7/18/01

City of Patterson
33 So. Del Puerto Ave.
Patterson CA 95363

Project: Quarterly Monitoring Wells

PO#

Date Rec'd: 7/13/01
Date Started: 7/13/01
Date Completed: 7/17/01

Date Sampled: 7/13/01
Time:
Sampler: R Azevedo (Geo)

Sample ID	Lab ID	RL	Method	Analyte	Results	Units
MW-1	M306812	10	160.1	TDS (Filterable Residue)	1600	mg/L
		0.2	300.0	Nitrate as N	8.8	mg/L
MW-2	M306813	10	160.1	TDS (Filterable Residue)	2010	mg/L
		0.2	300.0	Nitrate as N	6.4	mg/L
MW-3	M306814	10	160.1	TDS (Filterable Residue)	3110	mg/L
		0.2	300.0	Nitrate as N	19	mg/L
MW-4	M306815	10	160.1	TDS (Filterable Residue)	1680	mg/L
		0.2	300.0	Nitrate as N	ND	mg/L
MW-5	M306816	10	160.1	TDS (Filterable Residue)	1700	mg/L
		0.2	300.0	Nitrate as N	1.4	mg/L

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # M194-21

Date: 7/20/01

City of Patterson
33 So. Del Puerto Ave.
Patterson CA 95363

Project: Quarterly Monitoring Wells

PO#

Date Rec'd: 7/13/01
Date Started: 7/13/01
Date Completed: 7/17/01

Date Sampled: 7/13/01
Sampler: R Azevedo (Geo)

ample ID	Lab ID	Time	RL	Method	Analyte	Results	Units
W-1	M306812		2	9221B	Total Coliform	<2	MPN/100ml
			2	9221E	Fecal Coliform	<2	MPN/100ml
W-2	M306813		2	9221B	Total Coliform	<2	MPN/100ml
			2	9221E	Fecal Coliform	<2	MPN/100ml
AW-3	M306814		2	9221B	Total Coliform	<2	MPN/100ml
			2	9221E	Fecal Coliform	<2	MPN/100ml
AW-4	M306815		2	9221B	Total Coliform	<2	MPN/100ml
			2	9221E	Fecal Coliform	<2	MPN/100ml
W-5	M306816		2	9221B	Total Coliform	<2	MPN/100ml
			2	9221E	Fecal Coliform	<2	MPN/100ml

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report# M194-21

QC REPORT

City of Patterson
33 So. Del Puerto Ave.
Patterson CA 95363

Dates Analyzed 7/13/01-7/17/01

Analyte	Batch #	Method	Original	Duplicate	MS %	MSD %REC.	RPD	Blank
TDS (Filterable Residue)	I08993	160.1	1603	1613			0.6	ND
Nitrate as N	I08991	300.0			110.4	104.8	5.2	ND

Comments:

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report# M194-21

QC REPORT

City of Patterson
33 So. Del Puerto Ave.
Patterson CA 95363

Dates Analyzed 7/13/01-7/17/01

Analyte	Batch #	Method	Original	Duplicate	RPD	Blank
Total Coliform	B00380	9221B	< 2	< 2	0.0	< 2
Fecal Coliform	B00380	9221E	< 2	< 2	0.0	< 2

Comments:

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # M248-26

Date: 9/07/01

City of Patterson
33 So. Del Puerto Ave.
Patterson CA 95363

Project: Quarterly-Monitoring Wells

PO#

Date Rec'd: 9/05/01
Date Started: 9/06/01
Date Completed: 9/07/01

Date Sampled: 9/05/01
Time:
Sampler: R.Chrun/R.Azevedo

Sample ID	Lab ID	RL	Method	Analyte	Results	Units
MW-1	M308624	10	160.1	TDS (Filterable Residue)	1830	mg/L
		0.2	300.0	Nitrate as N	15	mg/L
		NA	150.1	pH	7.85	Std. Units
		1.0	120.1	Electro Conductivity (EC)	2710	µmhos/cm
MW-2	M308625	10	160.1	TDS (Filterable Residue)	2050	mg/L
		0.2	300.0	Nitrate as N	4.9	mg/L
		NA	150.1	pH	7.66	Std. Units
		1.0	120.1	Electro Conductivity (EC)	3720	µmhos/cm
MW-3	M308626	10	160.1	TDS (Filterable Residue)	2260	mg/L
		0.2	300.0	Nitrate as N	15	mg/L
		NA	150.1	pH	7.54	Std. Units
		1.0	120.1	Electro Conductivity (EC)	4410	µmhos/cm
MW-4	M308627	10	160.1	TDS (Filterable Residue)	1670	mg/L
		0.2	300.0	Nitrate as N	2.7	mg/L
		NA	150.1	pH	7.27	Std. Units
		1.0	120.1	Electro Conductivity (EC)	2710	µmhos/cm
MW-5	M308628	10	160.1	TDS (Filterable Residue)	1670	mg/L
		0.2	300.0	Nitrate as N	4.4	mg/L
		NA	150.1	pH	7.36	Std. Units
		1.0	120.1	Electro Conductivity (EC)	3130	µmhos/cm

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report# M248-26

QC REPORT

City of Patterson
33 So. Del Puerto Ave.
Patterson CA 95363

Dates Analyzed 9/6/01-9/7/01

Analyte	Batch #	Method	Original	Duplicate	MS %Recovery	MSD %Recovery	RPD	Blank
TDS (Filterable Residue)	I11875	160.1	841	836			0.6	ND
Nitrate as N	I11936	300.0			101.6	102.4	0.8	ND
pH	I11816	150.1	7.35	7.36			0.1	5.84
Electro Conductivity (EC)	I11817	120.1	3130	3220			2.8	N.D

Comments:

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # M248-26

Date: 9/11/01

City of Patterson
33 So. Del Puerto Ave.
Patterson CA 95363

Project: Quarterly-Monitoring Wells

PO#

Date Rec'd: 9/05/01
Date Started: 9/05/01
Date Completed: 9/09/01

Date Sampled: 9/05/01
Time:
Sampler: R.Chrun/R.Azevedo

Sample ID	Lab ID	RL	Method	Analyte	Results	Units
MW-1	M308624	2	9221B	Total Coliform	500	MPN/100ml
		2	9221E	Fecal Coliform	170	MPN/100ml
MW-2	M308625	2	9221B	Total Coliform	11	MPN/100ml
		2	9221E	Fecal Coliform	<2	MPN/100ml
MW-3	M308626	2	9221B	Total Coliform	<2	MPN/100ml
		2	9221E	Fecal Coliform	<2	MPN/100ml
MW-4	M308627	2	9221B	Total Coliform	<2	MPN/100ml
		2	9221E	Fecal Coliform	<2	MPN/100ml
MW-5	M308628	2	9221B	Total Coliform	<2	MPN/100ml
		2	9221E	Fecal Coliform	<2	MPN/100ml

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report# M248-26

QC REPORT

City of Patterson
33 So. Del Puerto Ave.
Patterson CA 95363

Dates Analyzed 9/5/01-9/9/01

Analyte	Batch #	Method	Original	Duplicate	RPD	Blank
Total Coliform	B00482	9221B	<2	<2	0.0	<2

Comments:

Ramiro Salgado
Chemist

Certification # 1157

Donna Keller
Laboratory Director

APPENDIX C
PLANT SAMPLE TABLES

City of Patterson, CA (209) 892-2041	Water Quality Control Facility			WDR Order No. 5-00-146																		
	Monitoring Report				**Monthly Summary**																	
Constituent / Parameter	Frequency (Daily = Week days Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	April Ave	April Max	April Min	1-Apr Sunday	2 Apr Monday	3 Apr Tuesday	4 Apr Wednesday	5 Apr Thursday	6 Apr Friday	7 Apr Saturday	8 Apr Sunday	9 Apr Monday	10 Apr Tuesday	11 Apr Wednesday	12 Apr Thursday	13 Apr Friday	14 Apr Saturday	15 Apr Sunday	16 Apr Monday	17 Apr Tuesday	18 Apr Wednesday
Weather																								
Ambient Air Temperature	Daily	°F	-		49	62	40		46.0	40.0	40.0	42.0	48.0			44.0	46.0	50.0	44.0	44.0			46.0	56.0	50.0
Precipitation (inches)	Daily	Inches	24HC	total-->	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	see4/9	see4/9	see4/9	0.5	0.0	0.0	0.0	see4/16	see4/16	see4/16	0.0	0.0	0.00
INFLUENT - Raw																								
Total Plant Influent Flow (MCC-A)	Continuous	mgd	OIP	1.3 Max	0.72	0.78	0.66	0.733	0.704	0.751	0.659	0.772	0.703	0.703	0.703	0.723	0.724	0.701	0.686	0.725	0.725	0.725	0.721	0.693	0.689
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		1500	1700	1300			1300														1700	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC		250	290	210			213														286	
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		200	200	200			200.0														200.0	
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC		2199	2498	1899						1899												
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.4	0.7	0.1						0.35							0.30					
Temperature	Weekly	°C	Grab		21	22	20						20.1							20.8					
pH	Weekly	pH	Grab		7	8	7						8.1							6.7					
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.	Total=	22	mgd/month																			
EFFLUENT - A. Sludge																								
Effluent Flow	Daily	Calc. mgd	-		0.4	0.5	0.0	0.5	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.		7	8	7			8														7	
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC	30 Ave.	2	2	2			1.9														1.9	
BOD Removal Efficiency	Twice Monthly	%	Calc.		99	99	99			99														99	
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC		25	40	10			40.0														10.0	
TSS Removal Efficiency	Twice Monthly	%	Calc.		88	95	80			80														95	
Settleable Solids (SS)	Weekly	ml/l	8HC		0	0	0			0.0															
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1230					1230.0															
Electrical Conductivity	Weekly	µmhos/cm	Grab		1411	1512	1347						1435.0							1347.0					
Nitrate (as N)	Monthly	mg/l	8HC		4					4.0															
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Weekly	mg/l	Grab		2.5	4.8	0.3						1.65							3.36					
Temperature	Weekly	°C	Grab		19	21	18						17.9							18.5					
pH	Weekly	pH	Grab		7	8	7						7.5							6.7					
EFFLUENT - AIPS																								
Effluent Flow	Daily	Calc. mgd	-		0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		47	49	44			44														49	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC	45 Ave.	21	23	19			19.0														23.0	
BOD Removal Efficiency	Weekly	%	Calc.		92	92	91			91														92	
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		25	30	20			20.0														30.0	
TSS Removal Efficiency	Weekly	%	Calc.		88	90	85			90														85	
Settleable Solids (SS)	Weekly	ml/l	Grab		0	0	0			0.0														0.0	
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1300					1300.0															
Electrical Conductivity	Weekly	µmhos/cm	Grab		1417	1600	1329						1332.0							1329.0					
Nitrate (as N)	Monthly	mg/l	8HC		10					10.0															
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Twice Weekly	mg/l	Grab	>=1.0	2.2	7.9	0.1		0.70				0.19			4.51				3.10			0.29		
Temperature	Twice Weekly	°C	Grab		17	21	15		17.2				15.1			15.0				15.3			16.5		
pH	Twice Weekly	pH	Grab		7	8	7		7.6				8.1			8.2				7.0			6.8		
Pre 2000 Ponds																								
Pond #1; Aux. Aeration																								
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	1.9	3.5	0.2						1.70							3.46					
Temperature	Weekly	°C	Grab		17	21	16						15.8							15.6					
pH	Weekly	pH	Grab		7	8	7						7.9							6.9					
Electrical Conductivity	Monthly	µmhos/cm	Grab		1460	1460	1460						1460.0												

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																	
	Monitoring Report				Monthly Summary																	
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	April Ave.	April Max.	April Min	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
								Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
Pond #2																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	3.6	6.0	0.3						2.63							6.01					
Temperature	Weekly	°C	Grab		17	21	15						15.5							15.0					
pH	Weekly	pH	Grab		8	8	7						8.2							7.3					
Electrical Conductivity	Monthly	µmhos/cm	Grab		1429	1429	1429						1429.0												
Pond #3																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	6.4	15.1	0.9						6.20							15.11					
Temperature	Weekly	°C	Grab		16	21	14						15.2							14.2					
pH	Weekly	pH	Grab		9	9	8						9.3							8.6					
Electrical Conductivity	Monthly	µmhos/cm	Grab		1570	1570	1570						1570.0												
Pond #4													LOW							MT					
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	0.0	0.0	0.0																		
Temperature	Weekly	°C	Grab		0	0	0																		
pH	Weekly	pH	Grab		0	0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		0	0	0																		
Pond #5																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	4.0	13.5	0.3						1.81							0.50					
Temperature	Weekly	°C	Grab		16	18	13						15.4							13.4					
pH	Weekly	pH	Grab		8	9	7						8.1							6.7					
Electrical Conductivity	Monthly	µmhos/cm	Grab		1443	1443	1443						1443.0												
AIPS No. 1 Ponds																									
Pond #6													LOW							MT					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	0.0	0.0	0.0																		
Temperature	Weekly	°C	Grab		0	0	0																		
pH	Weekly	pH	Grab		0	0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		0	0	0																		
Pond #7																				LOW					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	5.1	5.1	5.1						5.10												
Temperature	Weekly	°C	Grab		8	8	8						7.8												
pH	Weekly	pH	Grab		10	10	10						9.5												
Electrical Conductivity	Monthly	µmhos/cm	Grab		1545	1545	1545						1545.0												
Pond #8													MT							LOW					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	2.2	4.0	0.4																		
Temperature	Weekly	°C	Grab		17	19	14																		
pH	Weekly	pH	Grab		9	9	8																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		0	0	0																		

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146		
	Monitoring Report				Monthly Summary		
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	April Ave	April Max	April Min
Pond #9							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	0.0	0.0	0.0
Temperature	Weekly	°C	Grab		0	0	0
pH	Weekly	pH	Grab		0	0	0
Electrical Conductivity	Monthly	μmhos/cm	Grab		0	0	0
Pond #10							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	0.0	0.0	0.0
Temperature	Weekly	°C	Grab		0	0	0
pH	Weekly	pH	Grab		0	0	0
Electrical Conductivity	Monthly	μmhos/cm	Grab		0	0	0
Pond #11							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	0.0	0.0	0.0
Temperature	Weekly	°C	Grab		0	0	0
pH	Weekly	pH	Grab		0	0	0
Electrical Conductivity	Monthly	μmhos/cm	Grab		0	0	0
Pond #12							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	3.7	3.7	3.7
Temperature	Weekly	°C	Grab		15	15	15
pH	Weekly	pH	Grab		9	9	9
Electrical Conductivity	Monthly	μmhos/cm	Grab		1470	1470	1470

Constituent / Parameter	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
Pond #9						MT							MT					
Freeboard																		
Dissolved Oxygen (DO)																		
Temperature																		
pH																		
Electrical Conductivity																		
Pond #10						MT							MT					
Freeboard																		
Dissolved Oxygen (DO)																		
Temperature																		
pH																		
Electrical Conductivity																		
Pond #11						WET							MT					
Freeboard																		
Dissolved Oxygen (DO)																		
Temperature																		
pH																		
Electrical Conductivity																		
Pond #12													LOW					
Freeboard																		
Dissolved Oxygen (DO)						3.65												
Temperature						14.71												
pH						9.2												
Electrical Conductivity						1470.0												

Note 1:

Note 2:

Note 3:

City of Patterson, CA (209) 892-2041	Water Quality Control Facility															
	Monitoring Report															
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 Apr Thursday	20 Apr Friday	21 Apr Saturday	22 Apr Sunday	23 Apr Monday	24 Apr Tuesday	25 Apr Wednesday	26 Apr Thursday	27 Apr Friday	28 Apr Saturday	29 Apr Sunday	30 Apr Monday	
Weather																
Ambient Air Temperature:	Daily	°F	-	50.0	46.0			48.0	58.0	62.0	62.0	51.0			56.0	
Precipitation (inches):	Daily	Inches	24HC	0.0	0.06	see4/23	see4/23	0.5	0.0	0.0	0.0	see4/30	see4/30	see4/30	0.0	
INFLUENT - Raw																
Total Plant Influent Flow (MCC-A)	Continuous	mgd	DIP	0.702	0.778	0.778	0.778	0.722	0.712	0.744	0.711	0.746	0.746	0.746	0.734	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.													
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC													
Total Suspended Solids (TSS)	Weekly	mg/l	24HC													
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC									2498				
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.10							0.66				
Temperature	Weekly	°C	Grab		20.1							22.1				
pH	Weekly	pH	Grab		6.9							7.6				
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.													
EFFLUENT - A. Sludge																
Effluent Flow	Daily	Calc. mgd	-	0.4	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.0
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.													
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC													
BOD Removal Efficiency	Twice Monthly	%	Calc.													
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC													
TSS Removal Efficiency	Twice Monthly	%	Calc.													
Settleable Solids (SS)	Weekly	ml/l	8HC													
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab		1350.0							1512.0				
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Weekly	mg/l	Grab		0.25							4.78				
Temperature	Weekly	°C	Grab		18.2							21.0				
pH	Weekly	pH	Grab		6.9							7.4				
EFFLUENT - AIPS																
Effluent Flow	Daily	Calc. mgd	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.													
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC													
BOD Removal Efficiency	Weekly	%	Calc.													
Total Suspended Solids (TSS)	Weekly	mg/l	24HC													
TSS Removal Efficiency	Weekly	%	Calc.													
Settleable Solids (SS)	Weekly	ml/l	Grab													
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab		1405.0							1600.0				
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Twice Weekly	mg/l	Grab		0.05			0.10				3.24			7.90	
Temperature	Twice Weekly	°C	Grab		17.0			17.4				20.7			19.8	
pH	Twice Weekly	pH	Grab		6.8			6.7				7.8			7.8	
Pre 2000 Ponds																
Pond #1; Aux. Aeration																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.24							2.21				
Temperature	Weekly	°C	Grab		16.0							21.1				
pH	Weekly	pH	Grab		7.0							7.8				
Electrical Conductivity	Monthly	µmhos/cm	Grab													

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 Apr Thursday	20 Apr Friday	21 Apr Saturday	22 Apr Sunday	23 Apr Monday	24 Apr Tuesday	25 Apr Wednesday	26 Apr Thursday	27 Apr Friday	28 Apr Saturday	29 Apr Sunday	30 Apr Monday	
Pond #2																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.29							5.58					
Temperature	Weekly	°C	Grab		15.6							20.8					
pH	Weekly	pH	Grab		7.6							8.1					
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #3																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.87							3.34					
Temperature	Weekly	°C	Grab		14.9							20.6					
pH	Weekly	pH	Grab		8.2							9.1					
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #4					MT							MT					
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #5																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.30							13.52					
Temperature	Weekly	°C	Grab		15.7							18.4					
pH	Weekly	pH	Grab		7.0							8.6					
Electrical Conductivity	Monthly	µmhos/cm	Grab														
AIPS No. 1 Ponds																	
Pond #6					LOW							LOW					
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #7					LOW							LOW					
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #8																	
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.36							4.03					
Temperature	Weekly	°C	Grab		14.1							19.4					
pH	Weekly	pH	Grab		7.9							9.2					
Electrical Conductivity	Monthly	µmhos/cm	Grab														

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 Apr	20 Apr	21 Apr	22 Apr	23 Apr	24 Apr	25 Apr	26 Apr	27 Apr	28 Apr	29 Apr	30 Apr	
				Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	
Pond #9					MT							LOW				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #10					MT							MT				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #11					MT							MT				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #12					LOW							LOW				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													

Note 1:

Note 2:

Note 3:

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																				
	Monitoring Report				Monthly Summary																				
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	May Ave.	May Max	May Min	1 May	2 May	3 May	4 May	5 May	6 May	7 May	8 May	9 May	10 May	11 May	12 May	13 May	14 May	15 May	16 May	17 May	18 May
								Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Weather																									
Ambient Air Temperature	Daily	°F	-		64	74	52	62.0	56.0	59.0	52.0			54.0	68.0	70.0	62.0	64.0			52.0	64.0	66.0		62.0
Precipitation (inches):	Daily	Inches	24HC	total-->	0.0	0.0	0.0	0.0	0.0	0.0	see5/7	see5/7	see5/7	0.0	0.0	0.0	0.0	see5/14	see5/14	see5/14	0.0	0.0	0.0	0.0	see5/21
INFLUENT - Raw																									
Total Plant Influent Flow (MCC-A)	Continuous	mgd	OIP	1.3 Max	0.75	0.87	0.70	0.707	0.725	0.870	0.697	0.697	0.697	0.745	0.775	0.737	0.748	0.761	0.761	0.761	0.775	0.738	0.734	0.747	0.747
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		1900	2100	1600	1600																	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC		310	340	280	276																	
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		165	210	120	210.0																	
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC		2029	2430	1627																		1627
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.2	0.3	0.1				0.30							0.10							0.05
Temperature	Weekly	°C	Grab		24	25	23				22.8							23.7							25.4
pH	Weekly	pH	Grab		8	8	7				7.8							7.6							7.4
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.	Total=	23	mgd/month																			
EFFLUENT - A. Sludge																									
Effluent Flow	Daily	Calc. mgd	-		0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.		11	14	8	8																	
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC	30 Ave	3	4	2	2.2																	
BOD Removal Efficiency	Twice Monthly	%	Calc.		99	99	99	99																	
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC		20	30	10	30.0																	
TSS Removal Efficiency	Twice Monthly	%	Calc.		89	92	86	86																	
Settleable Solids (SS)	Weekly	ml/l	8HC		0	0	0	0.0																	
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1310			1310.0																	
Electrical Conductivity	Weekly	µmhos/cm	Grab		1471	1515	1430				1430.0							1515.0							
Nitrate (as N)	Monthly	mg/l	8HC		18			18.0																	
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Weekly	mg/l	Grab		3.2	4.2	2.4				4.19							2.37							
Temperature	Weekly	°C	Grab		22	24	20				20.2							23.0							
pH	Weekly	pH	Grab		7	7	7				7.4							7.40							
EFFLUENT - AIPS																									
Effluent Flow	Daily	Calc. mgd	-		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		66	69	63	63																	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC	45 Ave	30	30	29	29.0																	
BOD Removal Efficiency	Weekly	%	Calc.		90	91	90	89																	
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		40	40	40	40.0																	
TSS Removal Efficiency	Weekly	%	Calc.		74	81	67	81																	
Settleable Solids (SS)	Weekly	ml/l	Grab		0	0	0	0.0																	
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1290			1290.0																	
Electrical Conductivity	Weekly	µmhos/cm	Grab		1591	1690	1400				1400.0							1690.0							1617.0
Nitrate (as N)	Monthly	mg/l	8HC		1			1																	
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Twice Weekly	mg/l	Grab	>=1.0	1.2	3.2	0.3				3.22			2.23				1.02			0.40				0.30
Temperature	Twice Weekly	°C	Grab		22	24	18				17.7			20.3				23.0			21.4				23.5
pH	Twice Weekly	pH	Grab		8	8	7				7.9			7.8				7.7			7.5				7.4
Pre 2000 Ponds																									
Pond #1; Aux. Aeration																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	2.9	4.6	0.4				4.55							3.10							0.42
Temperature	Weekly	°C	Grab		22	25	17				16.7							24.1							25.4
pH	Weekly	pH	Grab		8	8	8				7.7							7.8							7.6
Electrical Conductivity	Monthly	µmhos/cm	Grab		1894	1894	1894																		1894.0
Pond #2																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	7.4	11.8	0.4				6.32							11.06							0.44
Temperature	Weekly	°C	Grab		23	25	18				17.5							24.3							25.2

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																	
	Monitoring Report				Monthly Summary																	
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	May Ave.	May Max	May Min.	1 May	2 May	3 May	4 May	5 May	6 May	7 May	8 May	9 May	10 May	11 May	12 May	13 May	14 May	15 May	16 May	17 May	18 May
								Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
pH	Weekly	pH	Grab		8	9	8				8.2							8.4							8.0
Electrical Conductivity	Monthly	µmhos/cm	Grab		1912	1912	1912																		1912.0
Pond #3																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	6.2	15.9	1.1				1.29							15.88							1.07
Temperature	Weekly	°C	Grab		23	27	17				17.2							24.3							26.6
pH	Weekly	pH	Grab		9	9	8				8.2							9.0							9.2
Electrical Conductivity	Monthly	µmhos/cm	Grab		1919	1919	1919																		1919.0
Pond #4											LOW							LOW							LOW
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	#DIV/0!	0.0	0.0																		
Temperature	Weekly	°C	Grab		#DIV/0!	0	0																		
pH	Weekly	pH	Grab		#DIV/0!	0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		#DIV/0!	0	0																		
Pond #5																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	5.1	11.8	1.4				4.96							11.83							1.39
Temperature	Weekly	°C	Grab		22	27	17				17.2							22.7							26.5
pH	Weekly	pH	Grab		8	9	7				7.6							8.4							8.8
Electrical Conductivity	Monthly	µmhos/cm	Grab		1757	1757	1757																		1757.0
AIPS No. 1 Ponds																									
Pond #6											LOW							MT							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	#DIV/0!	0.0	0.0																		
Temperature	Weekly	°C	Grab		#DIV/0!	0	0																		
pH	Weekly	pH	Grab		#DIV/0!	0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		#DIV/0!	0	0																		
Pond #7																		LOW							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	6.9	6.9	6.9				6.93														
Temperature	Weekly	°C	Grab		17	17	17				17.3														
pH	Weekly	pH	Grab		8	8	8				7.8														
Electrical Conductivity	Monthly	µmhos/cm	Grab		#DIV/0!	0	0																		
Pond #8																		LOW							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	3.0	3.0	3.0				3.00														
Temperature	Weekly	°C	Grab		16	16	16				15.9														
pH	Weekly	pH	Grab		9	9	9				9.0														
Electrical Conductivity	Monthly	µmhos/cm	Grab		#DIV/0!	0	0																		

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																		
	Monitoring Report				Monthly Summary																		
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	May Ave.	May Max	May Min	1 May	2 May	3 May	4 May	5 May	6 May	7 May	8 May	9 May	10 May	11 May	12 May	13 May	14 May	15 May	16 May	17 May	18 May
								Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Pond #9											LOW							LOW							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	#DIV/0!	0.0	0.0																		
Temperature	Weekly	°C	Grab		#DIV/0!	0	0																		
pH	Weekly	pH	Grab		#DIV/0!	0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		#DIV/0!	0	0																		
Pond #10											MT							LOW							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	8.1	8.1	8.1																		
Temperature	Weekly	°C	Grab		24	24	24																		
pH	Weekly	pH	Grab		8	8	8																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		#DIV/0!	0	0																		
Pond #11											MT							MT							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	#DIV/0!	0.0	0.0																		
Temperature	Weekly	°C	Grab		#DIV/0!	0	0																		
pH	Weekly	pH	Grab		#DIV/0!	0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		#DIV/0!	0	0																		
Pond #12																		LOW							
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	2.6	2.6	2.6				2.60														
Temperature	Weekly	°C	Grab		18	18	18				17.5														
pH	Weekly	pH	Grab		9	9	9				9.1														
Electrical Conductivity	Monthly	µmhos/cm	Grab		#DIV/0!	0	0																		

Note 1:

Note 2:

Note 3:

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 May Saturday	20 May Sunday	21 May Monday	22 May Tuesday	23 May Wednesday	24 May Thursday	25 May Friday	26 May Saturday	27 May - Sunday -	28 May Monday	29 May Tuesday	30 May Wednesday	31 May Thursday
Weather																
Ambient Air Temperature:	Daily	°F	-				72.0	64.0	70.0	70.0				60.0	71.0	74.0
Precipitation (inches):	Daily	Inches	24HC	see5/21	see5/21	0.0	0.0	0.0	0.0	see5/29	see5/29	see5/29	see5/29	0.0	0.0	0.0
INFLUENT - Raw																
Total Plant Influent Flow (MCC-A)	Continuous	mgd	OIP	0.747	0.748	0.766	0.722	0.749	0.768	0.767	0.767	0.767	0.767	0.760	0.771	0.743
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.					2100								
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC					341								
Total Suspended Solids (TSS)	Weekly	mg/l	24HC					120.0								
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC							2430						
Dissolved Oxygen (DO)	Weekly	mg/l	Grab							0.25						
Temperature	Weekly	°C	Grab							25.1						
pH	Weekly	pH	Grab							7.4						
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.													
EFFLUENT - A. Sludge																
Effluent Flow	Daily	Calc. mgd	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.					14								
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC					3.6								
BOD Removal Efficiency	Twice Monthly	%	Calc.					99								
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC					9.9								
TSS Removal Efficiency	Twice Monthly	%	Calc.					92								
Settleable Solids (SS)	Weekly	ml/l	8HC					0.0								
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab							1468.0						
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Weekly	mg/l	Grab							2.96						
Temperature	Weekly	°C	Grab							23.5						
pH	Weekly	pH	Grab							7.3						
EFFLUENT - AIPS																
Effluent Flow	Daily	Calc. mgd	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.					69								
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC					30.0								
BOD Removal Efficiency	Weekly	%	Calc.					91								
Total Suspended Solids (TSS)	Weekly	mg/l	24HC					40.0								
TSS Removal Efficiency	Weekly	%	Calc.					67								
Settleable Solids (SS)	Weekly	ml/l	Grab													
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab							1655.0						
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Twice Weekly	mg/l	Grab			0.86				0.83				0.92		
Temperature	Twice Weekly	°C	Grab			23.5				24.1				22.7		
pH	Twice Weekly	pH	Grab			6.9				7.4				7.8		
Pre 2000 Ponds																
Pond #1; Aux. Aeration																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab							3.59						
Temperature	Weekly	°C	Grab							23.3						
pH	Weekly	pH	Grab							7.5						
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #2																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab							11.83						
Temperature	Weekly	°C	Grab							23.0						

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily + Week-days Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 May	20 May	21-May	22 May	23-May	24 May	25 May	26 May	27 May	28 May	29 May	30 May	31 May
				Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
pH	Weekly	pH	Grab							8.8						
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #3																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab							6.60						
Temperature	Weekly	°C	Grab							22.6						
pH	Weekly	pH	Grab							8.5						
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #4										LOW						
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #5																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab							2.13						
Temperature	Weekly	°C	Grab							22.3						
pH	Weekly	pH	Grab							7.3						
Electrical Conductivity	Monthly	µmhos/cm	Grab													
AIPS No. 1 Ponds																
Pond #6										MT						
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #7										MT						
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #8										LOW						
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 May	20-May	21-May	22 May	23 May	24 May	25-May	26 May	27 May	28 May	29 May	30 May	31 May
				Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
Pond #9										LOW						
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #10																
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab							8.10						
Temperature	Weekly	°C	Grab							24.1						
pH	Weekly	pH	Grab							8.4						
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #11										MT						
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #12										LOW						
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													

Note 1:

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City of Patterson, CA (209) 892-2041	Water Quality Control Facility			WDR Order No. 5-00-146																			
	Monitoring Report			Monthly Summary																			
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	June Ave.	June Max	June Min	1-Jun Friday	2-Jun Saturday	3-Jun Sunday	4-Jun Monday	5-Jun Tuesday	6 Jun Wednesday	7-Jun Thursday	8 Jun Friday	9 Jun Saturday	10-Jun Sunday	11-Jun Monday	12-Jun Tuesday	13-Jun Wednesday	14 Jun Thursday	15-Jun Friday	16 Jun Saturday	17-Jun Sunday	18 Jun Monday
Weather																							
Ambient Air Temperature	Daily	°F	-		66	72	58	72.0			64.0	58.0	64.0	66.0	70.0			62.0	64.0	68.0	62.0	70.0			64.0
Precipitation (inches)	Daily	inches	24HC	total—>	0.0	0.0	0.0	see6/4	see6/4	see6/4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	see6/18	see6/18	see6/18	0.0
INFLUENT - Raw																							
Total Plant Influent Flow (MCC-A)	Continuous	mgd	OIP	1.3 Max	0.77	0.84	0.73	0.797	0.797	0.797	0.842	0.759	0.743	0.799	0.771	0.771	0.771	0.764	0.744	0.728	0.753	0.783	0.783	0.783	0.793
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		1700	1700	1700					1700													
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC		260	270	250					265													
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		235	280	190					190.0													
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC		2228	2921	1542	1545							2921							2903			
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.2	0.2	0.0	0.02							0.24							0.22			
Temperature	Weekly	°C	Grab		26	26	26	25.9							25.8							25.9			
pH	Weekly	pH	Grab		7	8	7	7.4							7.6							7.6			
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.	Total=	23	mgd/month																			
EFFLUENT - A. Sludge																							
Effluent Flow	Daily	Calc. mgd	-		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.		14	18	10					18													
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC	30 Ave.	4	5	2					4.6													
BOD Removal Efficiency	Twice Monthly	%	Calc.		99	99	98					98													
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC		15	20	10					20.0													
TSS Removal Efficiency	Twice Monthly	%	Calc.		93	97	90					89													
Settleable Solids (SS)	Weekly	ml/l	8HC		0	0	0					0.0													
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1230							1230.0													
Electrical Conductivity	Weekly	µmhos/cm	Grab		1687	2290	1452	1530.0				2290.0			1566.0							1580.0			
Nitrate (as N)	Monthly	mg/l	8HC		21							21.0													
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Weekly	mg/l	Grab		2.7	4.9	0.2	0.19							2.69							4.88			
Temperature	Weekly	°C	Grab		25	25	24	24.8							23.9							24.5			
pH	Weekly	pH	Grab		7	7	7	7.4							7.4							7.4			
EFFLUENT - AIPS																							
Effluent Flow	Daily	Calc. mgd	-		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		89	111	68					68													
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC	45 Ave.	37	45	29					29.0													
BOD Removal Efficiency	Weekly	%	Calc.		86	89	82					89													
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		85	110	60					110.0													
TSS Removal Efficiency	Weekly	%	Calc.		60	79	42					42													
Settleable Solids (SS)	Weekly	ml/l	Grab		0	0	0					0.0													
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1360							1360.0													
Electrical Conductivity	Weekly	µmhos/cm	Grab		1796	2480	1445	1704.0				2480.0			1752.0							1445.0			
Nitrate (as N)	Monthly	mg/l	8HC		2							1.9													
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Twice Weekly	mg/l	Grab	>=1.0	1.2	2.8	0.2	0.29			2.78				2.80			1.71				0.20			1.54
Temperature	Twice Weekly	°C	Grab		24	26	21	26.2			21.2				23.4			22.5				24.3			24.5
pH	Twice Weekly	pH	Grab		7	8	7	7.7			7.2				7.9			7.1				7.6			7.6
Pre 2000 Ponds																							
Pond #1; Aux. Aeration																							
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	1.8	6.1	0.2	0.40							6.08							0.44			
Temperature	Weekly	°C	Grab		26	27	23	27.2							23.4							25.7			
pH	Weekly	pH	Grab		8	8	7	7.1							8.2							7.6			
Electrical Conductivity	Monthly	µmhos/cm	Grab		1896	2153	1649	1885.0							2153.0							1649.0			

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																	
	Monitoring Report				Monthly Summary																	
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	June Ave.	June Max	June Min	1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	8 Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun	17-Jun	18 Jun
								Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday
Pond #2																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	3.7	11.5	0.2	0.52							11.50							0.15			
Temperature	Weekly	°C	Grab		26	27	25	26.5							24.5							26.5			
pH	Weekly	pH	Grab		8	10	8	8.9							9.7							7.6			
Electrical Conductivity	Monthly	µmhos/cm	Grab		1960	2365	1672	1843.0							2365.0							1672.0			
Pond #3																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	5.2	9.8	0.9	0.90							8.65							1.38			
Temperature	Weekly	°C	Grab		26	27	24	27.1							23.7							27.1			
pH	Weekly	pH	Grab		9	9	8	8.9							9.1							8.2			
Electrical Conductivity	Monthly	µmhos/cm	Grab		1968	2206	1834	2206.0							1863.0							1834.0			
Pond #4								LOW														LOW			
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	11.0	11.0	11.0								10.97										
Temperature	Weekly	°C	Grab		25	25	25								24.5										
pH	Weekly	pH	Grab		10	10	10								9.5										
Electrical Conductivity	Monthly	µmhos/cm	Grab		2120	2120	2120								2120.0										
Pond #5																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	2.0	6.3	0.3	0.30							0.98							0.60			
Temperature	Weekly	°C	Grab		25	26	22	26.2							22.1							25.8			
pH	Weekly	pH	Grab		8	8	7	7.8							7.6							7.6			
Electrical Conductivity	Monthly	µmhos/cm	Grab		1615	1774	1487	1583.0							1774.0							1487.0			
AIPS No. 1 Ponds																									
Pond #6								MT							MT							MT			
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #7								MT							MT							MT			
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #8								LOW							MT							MT			
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #9								LOW							MT							MT			
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #10																									
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	4.8	9.8	0.4	0.37							9.80							4.33			
Temperature	Weekly	°C	Grab		26	28	25	27.9							24.7							25.0			
pH	Weekly	pH	Grab		9	9	9	8.9							9.4							9.4			
Electrical Conductivity	Monthly	µmhos/cm	Grab		2080	2120	2046	2075.0							2046.0							2120.0			
Pond #11								MT							MT							N2 (LOW)			
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																		
	Monitoring Report				Monthly Summary																		
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	June Ave	June Max	June Min	1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun	17-Jun	18-Jun
								Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #12								LOW							MT							MT			
Freeboard	Daily	0.1 Feet	>2.0 ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		

Note 1:

Note 2:

Note 3:

City of Patterson, CA (209) 892-2041	Water Quality Control Facility															
	Monitoring Report															
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 Jun	20 Jun	21 Jun	22 Jun	23 Jun	24 Jun	25 Jun	26 Jun	27 Jun	28 Jun	29 Jun	30 Jun	
				Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Weather																
Ambient Air Temperature:	Daily	°F	-	69.0	72.0	70.0	70.0			60.0	60.0	62.0	64.0	64.0		
Precipitation (inches):	Daily	Inches	24HC	0.0	0.0	0.0	see6/25	see6/25	see6/25	0.0	0.0	0.0	0.0	0.0	0.0	
INFLUENT - Raw																
Total Plant Influent Flow (MCC-A)	Continuous	mgd	OIP	0.796	0.733	0.758	0.777	0.777	0.777	0.749	0.750	0.785	0.785	0.792	0.792	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.	1700												
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC	250												
Total Suspended Solids (TSS)	Weekly	mg/l	24HC	280.0												
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC	1542												
Dissolved Oxygen (DO)	Weekly	mg/l	Grab				0.13									
Temperature	Weekly	°C	Grab				26.0									
pH	Weekly	pH	Grab				6.9									
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.													
EFFLUENT - A. Sludge																
Effluent Flow	Daily	Calc. mgd	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.	10												
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC	2.3												
BOD Removal Efficiency	Twice Monthly	%	Calc.	99												
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC	9.9												
TSS Removal Efficiency	Twice Monthly	%	Calc.	96												
Settleable Solids (SS)	Weekly	ml/l	8HC	0.0												
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab	1704.0			1452.0									
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Weekly	mg/l	Grab				3.00									
Temperature	Weekly	°C	Grab				25.3									
pH	Weekly	pH	Grab				7.3									
EFFLUENT - AIPS																
Effluent Flow	Daily	Calc. mgd	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.	111												
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC	45.0												
BOD Removal Efficiency	Weekly	%	Calc.	82												
Total Suspended Solids (TSS)	Weekly	mg/l	24HC	60.0												
TSS Removal Efficiency	Weekly	%	Calc.	79												
Settleable Solids (SS)	Weekly	ml/l	Grab	0.0												
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab	1837.0			1557.0									
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Twice Weekly	mg/l	Grab				0.15			1.28				0.25		
Temperature	Twice Weekly	°C	Grab				26.2			24.4				24.0		
pH	Twice Weekly	pH	Grab				7.4			7.1				7.3		
Pre 2000 Ponds																
Pond #1; Aux. Aeration																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab				0.21									
Temperature	Weekly	°C	Grab				26.8									
pH	Weekly	pH	Grab				7.3									
Electrical Conductivity	Monthly	µmhos/cm	Grab													

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19-Jun Tuesday	20-Jun Wednesday	21-Jun Thursday	22-Jun Friday	23-Jun Saturday	24-Jun Sunday	25-Jun Monday	26-Jun Tuesday	27-Jun Wednesday	28-Jun Thursday	29-Jun Friday	30-Jun Saturday		
Pond #2																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab				2.61										
Temperature	Weekly	°C	Grab				26.1										
pH	Weekly	pH	Grab				7.6										
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #3																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab				9.76										
Temperature	Weekly	°C	Grab				26.1										
pH	Weekly	pH	Grab				8.2										
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #4							LOW										
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #5																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab				6.31										
Temperature	Weekly	°C	Grab				24.2										
pH	Weekly	pH	Grab				7.4										
Electrical Conductivity	Monthly	µmhos/cm	Grab														
AIPS No. 1 Ponds																	
Pond #6							MT										
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #7							MT										
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #8							MT										
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #9							MT										
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #10							LOW										
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														
pH	Weekly	pH	Grab														
Electrical Conductivity	Monthly	µmhos/cm	Grab														
Pond #11							LOW										
Freeboard	Daily	0.1 Feet	>2-ft ?														
Dissolved Oxygen (DO)	Weekly	mg/l	Grab														
Temperature	Weekly	°C	Grab														

City of Patterson, CA (209) 892-2041	Water Quality Control Facility															
	Monitoring Report															
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19-Jun Tuesday	20 Jun Wednesday	21 Jun Thursday	22 Jun Friday	23 Jun Saturday	24 Jun Sunday	25-Jun Monday	26 Jun Tuesday	27-Jun Wednesday	28 Jun Thursday	29 Jun Friday	30 Jun Saturday	
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #12								MT								
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													

Note 1:

Note 2:

Note 3:

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																	
	Monitoring Report				Monthly Summary																	
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	July Ave.	July Max	July Min	1-Jul Sunday	2-Jul Monday	3-Jul Tuesday	4-Jul Wednesday	5-Jul Thursday	6-Jul Friday	7-Jul Saturday	8 Jul Sunday	9-Jul Monday	10-Jul Tuesday	11-Jul Wednesday	12 Jul Thursday	13 Jul Friday	14 Jul Saturday	15 Jul Sunday	16 Jul Monday	17 Jul Tuesday	18 Jul Wednesday
Weather																								
Ambient Air Temperature	Daily	°F	-		64	79	60		70.0	79.0		70.0	70.0			66.0	62.0	60.0	60.0	62.0			62.0		60.0
Precipitation (Inches)	Daily	Inches	24HC	total-->	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	see7/9	see7/9	see7/9	0.0	0.0	0.0	0.0	see7/16	see7/16	see7/16	0.0	0.0	0.0
INFLUENT - Raw																								
Total Plant Influent Flow (MCC-A)	Continuous	mgd	OIP	1.3 Max	0.78	0.92	0.73	0.792	0.809	0.769	0.769	0.790	0.790	0.790	0.790	0.794	0.772	0.817	0.918	0.733	0.733	0.733	0.788	0.752	0.809
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		1600	1700	1400					1600													1700
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC		240	260	230					247													258
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		180	200	150					190.0													150.0
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC		2058	2609	1580						2599							2609					1716
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.2	0.2	0.1						0.17							0.15					
Temperature	Weekly	°C	Grab		27	28	26						27.0							26.9					
pH	Weekly	pH	Grab		7	8	7						7.2							7.2					
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.	Total=	24	mgd/month																			
EFFLUENT - A. Sludge																									
Effluent Flow	Daily	Calc. mgd	-		0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.		9	9	8					8													9
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC	30 Ave.	2	2	2					1.9													2.1
BOD Removal Efficiency	Twice Monthly	%	Calc.		99	99	99					99													99
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC		30	60	10					60.0													10.0
TSS Removal Efficiency	Twice Monthly	%	Calc.		84	93	68					68													93
Settleable Solids (SS)	Weekly	ml/l	8HC		0	0	0					0.0													0.0
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		460							460.0													
Electrical Conductivity	Weekly	µmhos/cm	Grab		1636	1846	1450					1716.0	1480.0							1501.0					1846.0
Nitrate (as N)	Monthly	mg/l	8HC		63							63.0													
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Weekly	mg/l	Grab		3.0	3.3	2.5						3.23							3.33					
Temperature	Weekly	°C	Grab		25	26	25						25.5							25.6					
pH	Weekly	pH	Grab		7	7	7						7.3							7.3					
EFFLUENT - AIPS																									
Effluent Flow	Daily	Calc. mgd	-		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		78	90	59					90													85
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC	45 Ave.	32	37	25					37.0													34.0
BOD Removal Efficiency	Weekly	%	Calc.		87	89	85					85													87
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		53	60	50					60.0													50.0
TSS Removal Efficiency	Weekly	%	Calc.		70	75	67					68													67
Settleable Solids (SS)	Weekly	ml/l	Grab		0	0	0					0.0													0.0
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1475							1475.0													
Electrical Conductivity	Weekly	µmhos/cm	Grab		1727	1940	1571					1780.0	1595.0							1595.0					1920.0
Nitrate (as N)	Monthly	mg/l	8HC		1							0.99													
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Twice Weekly	mg/l	Grab	>=1.0	0.4	1.2	0.1		0.59				0.17			0.25				0.18			0.14		
Temperature	Twice Weekly	°C	Grab		26	27	25		24.8				26.5			26.2				27.2			24.8		
pH	Twice Weekly	pH	Grab		7	8	7		7.1				7.2			7.2				7.2			7.2		
Pre 2000 Ponds																									
Pond #1; Aux. Aeration																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	6.1	12.4	1.7						4.48							4.10					
Temperature	Weekly	°C	Grab		26	28	24						26.0							26.1					
pH	Weekly	pH	Grab		8	8	8						7.6							7.5					
Electrical Conductivity	Monthly	µmhos/cm	Grab		2134	2265	2003													2265.0					

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																		
	Monitoring Report				Monthly Summary																		
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	July Ave.	July Max	July Min	1-Jul Sunday	2-Jul Monday	3-Jul Tuesday	4-Jul Wednesday	5-Jul Thursday	6-Jul Friday	7-Jul Saturday	8 Jul Sunday	9-Jul Monday	10 Jul Tuesday	11-Jul Wednesday	12-Jul Thursday	13-Jul Friday	14-Jul Saturday	15-Jul Sunday	16-Jul Monday	17-Jul Tuesday	18-Jul Wednesday
Pond #2													LOW											
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	5.7	7.5	4.3													4.30					
Temperature	Weekly	°C	Grab		26	32	23													22.8					
pH	Weekly	pH	Grab		9	9	8													8.9					
Electrical Conductivity	Monthly	µmhos/cm	Grab		2368	2865	1870													1870.0					
Pond #3													LOW											
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	9.5	13.1	6.0																		
Temperature	Weekly	°C	Grab		26	30	24													23.5					
pH	Weekly	pH	Grab		8	9	8													8.9					
Electrical Conductivity	Monthly	µmhos/cm	Grab		1736	1870	1601													1870.0					
Pond #4													MT											
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	1.0	1.0	1.0													0.99					
Temperature	Weekly	°C	Grab		22	22	22													22.2					
pH	Weekly	pH	Grab		8	8	8													7.7					
Electrical Conductivity	Monthly	µmhos/cm	Grab		1787	1787	1787													1787.0					
Pond #5													LOW											
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	8.0	16.6	1.7													MT					
Temperature	Weekly	°C	Grab		27	30	24																		
pH	Weekly	pH	Grab		7	8	7																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		1578	1578	1578																		
AIPS No. 1 Ponds																									
Pond #6													MT							MT					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #7													MT							MT					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #8													MT							MT					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #9													MT							MT					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #10													LOW											
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	0.5	0.5	0.5													0.51					
Temperature	Weekly	°C	Grab		27	27	27													27.3					
pH	Weekly	pH	Grab		7	7	7													7.4					
Electrical Conductivity	Monthly	µmhos/cm	Grab		2019	2019	2019													2019.0					
Pond #11													LOW							MT					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																		
	Monitoring Report				Monthly Summary																		
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	July Ave.	July Max	July Min	1-Jul Sunday	2-Jul Monday	3-Jul Tuesday	4-Jul Wednesday	5-Jul Thursday	6-Jul Friday	7-Jul Saturday	8 Jul Sunday	9 Jul Monday	10-Jul Tuesday	11-Jul Wednesday	12-Jul Thursday	13-Jul Friday	14-Jul Saturday	15-Jul Sunday	16 Jul Monday	17-Jul Tuesday	18 Jul Wednesday
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #12													MT							MT					
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		

Note 1:

Note 2:

Note 3:

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19-Jul Thursday	20-Jul Friday	21-Jul Saturday	22-Jul Sunday	23-Jul Monday	24-Jul Tuesday	25-Jul Wednesday	26-Jul Thursday	27-Jul Friday	28-Jul Saturday	29-Jul Sunday	30-Jul Monday	31-Jul Tuesday
Weather																	
Ambient Air Temperature:	Daily	°F	-	60.0				62.0	64.0	62.0		60.0			64.0	60.0
Precipitation (inches):	Daily	Inches	24HC	0.0	see7/23	see7/23	see7/23	0.0	0.0	0.0	0.0	see7/30	see7/30	see7/30	0.0	0.0
INFLUENT - Raw																	
Total Plant Influent Flow (MCC-A)	Continuous	mgd	OIP	0.761	0.752	0.752	0.752	0.728	0.736	0.765	0.816	0.779	0.779	0.779	0.756	0.777
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.							1400						
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC							225						
Total Suspended Solids (TSS)	Weekly	mg/l	24HC							200.0						
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC							1785		1580				
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.13							0.17				
Temperature	Weekly	°C	Grab		25.9							27.5				
pH	Weekly	pH	Grab		7.4							7.8				
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.													
EFFLUENT - A. Sludge																	
Effluent Flow	Daily	Calc. mgd	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.							9						
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC							2.2						
BOD Removal Efficiency	Twice Monthly	%	Calc.							99						
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC							20.0						
TSS Removal Efficiency	Twice Monthly	%	Calc.							90						
Settleable Solids (SS)	Weekly	ml/l	8HC							0.0						
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab		1450.0					1823.0						
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Weekly	mg/l	Grab		2.50											
Temperature	Weekly	°C	Grab		24.6											
pH	Weekly	pH	Grab		7.2											
EFFLUENT - AIPS																	
Effluent Flow	Daily	Calc. mgd	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.							59						
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC							25.0						
BOD Removal Efficiency	Weekly	%	Calc.							89						
Total Suspended Solids (TSS)	Weekly	mg/l	24HC							50.0						
TSS Removal Efficiency	Weekly	%	Calc.							75						
Settleable Solids (SS)	Weekly	ml/l	Grab							0.0						
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab		1687.0					1940.0		1571.0				
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Twice Weekly	mg/l	Grab		0.23			0.24				1.21				0.56
Temperature	Twice Weekly	°C	Grab		24.8			24.5				26.8				25.8
pH	Twice Weekly	pH	Grab		7.3			7.2				7.5				7.3
Pre 2000 Ponds																	
Pond #1; Aux. Aeration																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		1.72							7.99				12.35
Temperature	Weekly	°C	Grab		23.9							28.4				26.3
pH	Weekly	pH	Grab		7.6							7.7				7.5
Electrical Conductivity	Monthly	µmhos/cm	Grab									2003.0				

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 Jul Thursday	20 Jul Friday	21 Jul Saturday	22 Jul Sunday	23 Jul Monday	24 Jul Tuesday	25 Jul Wednesday	26 Jul Thursday	27 Jul Friday	28 Jul Saturday	29 Jul Sunday	30 Jul Monday	31 Jul Tuesday
Pond #2																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		5.37							7.49				
Temperature	Weekly	°C	Grab		23.2							31.5				
pH	Weekly	pH	Grab		8.6							8.1				
Electrical Conductivity	Monthly	µmhos/cm	Grab									2865.0				
Pond #3					MT											
Dissolved Oxygen (DO)	Weekly	mg/l	Grab									5.95				13.09
Temperature	Weekly	°C	Grab									29.9				25.7
pH	Weekly	pH	Grab									7.8				7.6
Electrical Conductivity	Monthly	µmhos/cm	Grab									1601.0				
Pond #4					MT							LOW				
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #5																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		1.65							5.63				16.63
Temperature	Weekly	°C	Grab		23.6							29.7				28.0
pH	Weekly	pH	Grab		7.4							7.6				7.4
Electrical Conductivity	Monthly	µmhos/cm	Grab									1578.0				
AIPS No. 1 Ponds																
Pond #6					LOW							LOW				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #7					MT							MT				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #8					MT							MT				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #9					MT							MT				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #10					LOW							LOW				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #11					MT							MT				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													

City of Patterson, CA (209) 892-2041	Water Quality Control Facility															
	Monitoring Report															
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26 Jul	27-Jul	28-Jul	29 Jul	30-Jul	31-Jul
				Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #12					MT							MT				
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													

Note 1:

Note 2:

Note 3:

City of Patterson, CA (209) 892-2041	Water Quality Control Facility			WDR Order No. 5-00-146																				
	Monitoring Report			**Monthly Summary**																				
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	August Ave.	August Max	August Min.	1-Aug Wednesday	2-Aug Thursday	3 Aug Friday	4-Aug Saturday	5-Aug Sunday	6 Aug Monday	7-Aug Tuesday	8 Aug Wednesday	9 Aug Thursday	10-Aug Friday	11 Aug Saturday	12 Aug Sunday	13-Aug Monday	14 Aug Tuesday	15 Aug Wednesday	16 Aug Thursday	17 Aug Friday	18 Aug Saturday
Weather																								
Ambient Air Temperature:	Daily	°F	-		61	72	54	64.0	60.0	62.0			64.0	62.0	72.0	64.0	62.0			56.0	56.0		62.0	70.0	
Precipitation (inches):	Daily	Inches	24HC	total--->	0.0	0.0	0.0	0.0	0.0	see8/6	see8/6	see8/6	0.0	0.0	0.0	0.0	see8/13	see8/13	see8/13	0.0	0.0	0.0	0.0	see8/20	see8/20
INFLUENT - Raw																								
Total Plant Influent Flow (MCC-A)	Continuous	mgd	0IP	1.3 Max	0.79	0.83	0.75	0.793	0.757	0.786	0.786	0.786	0.807	0.793	0.774	0.767	0.790	0.790	0.790	0.818	0.810	0.786	0.796	0.795	0.795
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		1600	1900	1400	1900															1400		
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC		240	280	220	284															218		
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		293	560	120	560.0															200.0		
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC		1755	1974	1148	1148									1789						1920	1944	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab		0.3	0.4	0.1			0.27							0.39							0.11	
Temperature	Weekly	°C	Grab		27	28	23			27.2							22.5							27.9	
pH	Weekly	pH	Grab		7	8	7			6.7							7.6							7.1	
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.	Total=	24	mgd/month																			
EFFLUENT - A. Sludge																								
Effluent Flow	Daily	Calc. mgd	-		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.		10	13	8	13															8		
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC	30 Ave.	2	3	2	3.2															1.9		
BOD Removal Efficiency	Twice Monthly	%	Calc.		99	99	99	99															99		
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC		13	20	10	9.9															20.0		
TSS Removal Efficiency	Twice Monthly	%	Calc.		93	98	90	98															90		
Settleable Solids (SS)	Weekly	ml/l	8HC		0	0.0	0	0.0															0.0		
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1280			1240.0															1320.0		
Electrical Conductivity	Weekly	µmhos/cm	Grab		1744	2020	1499	1,715									1499.0						2020.0	1724.0	
Nitrate (as N)	Monthly	mg/l	8HC		39			42.0															35.0		
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Weekly	mg/l	Grab		2.8	3.9	1.4			3.86							1.37							3.06	
Temperature	Weekly	°C	Grab		25	26	23			24.3							23.4							26.1	
pH	Weekly	pH	Grab		7	8	7										7.7							6.6	
EFFLUENT - AIPS																								
Effluent Flow	Daily	Calc. mgd	-		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.		110	159	66	66															106		
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC	45 Ave.	46	67	27	27.0															43.0		
BOD Removal Efficiency	Weekly	%	Calc.		80	91	70	90															80		
Total Suspended Solids (TSS)	Weekly	mg/l	24HC		50	70	40	40.0															70.0		
TSS Removal Efficiency	Weekly	%	Calc.		75	93	65	93															65		
Settleable Solids (SS)	Weekly	ml/l	Grab		0	0	0	0.0															0.0		
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC		1350			1,340															1360.0		
Electrical Conductivity	Weekly	µmhos/cm	Grab		1867	2130	1373	1373.0									2005.0						2130.0	1881.0	
Nitrate (as N)	Monthly	mg/l	8HC		1			0.99															1.0		
Standard Minerals	Annually	mg/l	Grab		see annual rpt																				
Dissolved Oxygen	Twice Weekly	mg/l	Grab	>=1.0	1.5	6.5	0.1			0.41			0.47				6.45							3.14	
Temperature	Twice Weekly	°C	Grab		26	27	25			25.9			25.4				27.4							26.1	
pH	Twice Weekly	pH	Grab		7	8	7			7.1			7.2				7.6							6.8	
Pre 2000 Ponds																								
Pond #1; Aux. Aeration																								
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	5.3	10.1	1.7			3.06							1.72							10.11	
Temperature	Weekly	°C	Grab		25	28	24			23.9							27.9							25.7	
pH	Weekly	pH	Grab		7	8	7			7.2							7.8							7.0	
Electrical Conductivity	Monthly	µmhos/cm	Grab		2035	2253	1750										1750.0							2253.0	

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																				
	Monitoring Report				Monthly Summary																				
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	August Ave.	August Max.	August Min	1 Aug	2 Aug	3 Aug	4 Aug	5 Aug	6 Aug	7 Aug	8 Aug	9 Aug	10 Aug	11 Aug	12 Aug	13 Aug	14 Aug	15 Aug	16 Aug	17 Aug	18 Aug
								Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Pond #2																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	5.0	8.7	1.2			5.46							8.72							4.57	
Temperature	Weekly	°C	Grab		27	29	22			22.2							28.9							26.8	
pH	Weekly	pH	Grab		8	8	7			8.0							7.9							7.1	
Electrical Conductivity	Monthly	µmhos/cm	Grab		2386	2950	1822										1822.0							2950.0	
Pond #3																	LOW								
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	10.3	16.5	5.5			5.49														11.65	
Temperature	Weekly	°C	Grab		25	27	22			22.3														27.0	
pH	Weekly	pH	Grab		8	8	7			7.9														7.1	
Electrical Conductivity	Monthly	µmhos/cm	Grab		1865	1936	1794																	1936.0	
Pond #4										LOW							LOW							MT	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	10.7	10.7	10.7																		
Temperature	Weekly	°C	Grab		25	25	25																		
pH	Weekly	pH	Grab		8	8	8																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #5																									
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	6.2	12.5	0.9			5.80							7.80							12.51	
Temperature	Weekly	°C	Grab		24	26	22			22.1							23.6							25.8	
pH	Weekly	pH	Grab		7	8	7			7.1							7.8							7.6	
Electrical Conductivity	Monthly	µmhos/cm	Grab		1726	1843	1533										1803.0							1843.0	
AIPS No. 1 Ponds																									
Pond #6																	LOW								
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	7.3	12.0	3.9			4.83														12.01	
Temperature	Weekly	°C	Grab		26	28	24			24.1														26.8	
pH	Weekly	pH	Grab		8	8	7			7.3														7.5	
Electrical Conductivity	Monthly	µmhos/cm	Grab		1875	1929	1820																	1929.0	
Pond #7										MT							N2 (LOW)							LOW	
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	9.6	18.5	0.6																		
Temperature	Weekly	°C	Grab		26	27	25																		
pH	Weekly	pH	Grab		8	8	8																		
Electrical Conductivity	Monthly	µmhos/cm	Grab		1891	1891	1891																		
Pond #8										MT							MT							MT	
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #9										MT							MT							MT	
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #10										MT														MT	
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0	6.6	6.6	6.6										6.55								
Temperature	Weekly	°C	Grab		24	24	24										24.1								
pH	Weekly	pH	Grab		8	8	8										8.4								
Electrical Conductivity	Monthly	µmhos/cm	Grab		2141	2141	2141										2141.0								
Pond #11										MT							MT							MT	
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		

City of Patterson, CA (209) 892-2041	Water Quality Control Facility				WDR Order No. 5-00-146																				
	Monitoring Report				Monthly Summary																				
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	WDR Limit	August Ave.	August Max.	August Min.	1 Aug	2 Aug	3 Aug	4 Aug	5 Aug	6 Aug	7 Aug	8 Aug	9 Aug	10 Aug	11 Aug	12 Aug	13 Aug	14 Aug	15 Aug	16 Aug	17 Aug	18 Aug
								Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		
Pond #12										MT							MT								MT
Freeboard	Daily	0.1 Feet	>2-ft ?				>2.0																		
Dissolved Oxygen (DO)	Weekly	mg/l	Grab	>=1.0		0.0	0.0																		
Temperature	Weekly	°C	Grab			0	0																		
pH	Weekly	pH	Grab			0	0																		
Electrical Conductivity	Monthly	µmhos/cm	Grab			0	0																		

Note 1:

Note 2:

Note 3:

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
				Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Weather																	
Ambient Air Temperature	Daily	°F	-		54.0	56.0	56.0	56.0	60.0			66.0	64.0	62.0	60.0	60.0
Precipitation (inches)	Daily	Inches	24HC	see8/20	0.0	0.0	0.0	0.0	see8/27	see8/27	see8/27	0.0	0.0	0.0	0.0	0.0
INFLUENT - Raw																	
Total Plant Influent Flow (MCC-A)	Continuous	mgd	OIP	0.795	0.816	0.750	0.774	0.783	0.783	0.783	0.783	0.789	0.834	0.745	0.768	0.795
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.												1400	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC												223	
Total Suspended Solids (TSS)	Weekly	mg/l	24HC												120.0	
Electrical Conductivity	Twice Monthly	µmhos/cm	24HC						1974							
Dissolved Oxygen (DO)	Weekly	mg/l	Grab						0.30							0.22
Temperature	Weekly	°C	Grab						27.4							27.7
pH	Weekly	pH	Grab						7.4							7.4
Total Plant Influent Flow (MCC-A)	Monthly	mgd	Calc.													
EFFLUENT - A. Sludge																	
Effluent Flow	Daily	Calc. mgd	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	lbs/day	Calc.												8	
Biochemical Oxygen Demand, 20°C BOD_5	Twice Monthly	mg/l	8HC												1.9	
BOD Removal Efficiency	Twice Monthly	%	Calc.												99	
Total Suspended Solids (TSS)	Twice Monthly	mg/l	8HC												10.0	
TSS Removal Efficiency	Twice Monthly	%	Calc.												92	
Settleable Solids (SS)	Weekly	ml/l	8HC												0.0	
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab						1608.0						1900.0	
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Weekly	mg/l	Grab						3.60							2.30
Temperature	Weekly	°C	Grab						24.8							25.9
pH	Weekly	pH	Grab						7.3							7.0
EFFLUENT - AIPS																	
Effluent Flow	Daily	Calc. mgd	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	lbs/day	Calc.												159	
Biochemical Oxygen Demand, 20°C BOD_5	Weekly	mg/l	24HC												67.0	
BOD Removal Efficiency	Weekly	%	Calc.												70	
Total Suspended Solids (TSS)	Weekly	mg/l	24HC												40.0	
TSS Removal Efficiency	Weekly	%	Calc.												67	
Settleable Solids (SS)	Weekly	ml/l	Grab												0.0	
Total Dissolved Solids (TDS)	Monthly	mg/l	8HC													
Electrical Conductivity	Weekly	µmhos/cm	Grab						1714.0						2100.0	
Nitrate (as N)	Monthly	mg/l	8HC													
Standard Minerals	Annually	mg/l	Grab													
Dissolved Oxygen	Twice Weekly	mg/l	Grab			0.16			0.67			0.12				0.52
Temperature	Twice Weekly	°C	Grab			25.0			24.7			24.7				25.4
pH	Twice Weekly	pH	Grab			7.6			7.6			6.9				6.9
Pre 2000 Ponds																	
Pond #1; Aux. Aeration																	
Dissolved Oxygen (DO)	Weekly	mg/l	Grab						6.96							4.53
Temperature	Weekly	°C	Grab						23.7							25.3
pH	Weekly	pH	Grab						7.7							7.1
Electrical Conductivity	Monthly	µmhos/cm	Grab						2102.0							

City of Patterson, CA (209) 892-2041	Water Quality Control Facility																
	Monitoring Report																
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19 Aug	20 Aug	21 Aug	22 Aug	23 Aug	24 Aug	25 Aug	26 Aug	27 Aug	28 Aug	29 Aug	30 Aug	31 Aug
				Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Pond #2									MT							
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													1.19
Temperature	Weekly	°C	Grab													28.1
pH	Weekly	pH	Grab													7.6
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #3																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab						7.50							16.53
Temperature	Weekly	°C	Grab						23.7							26.0
pH	Weekly	pH	Grab						8.2							7.6
Electrical Conductivity	Monthly	µmhos/cm	Grab						1794.0							
Pond #4									LOW							
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													10.68
Temperature	Weekly	°C	Grab													25.3
pH	Weekly	pH	Grab													7.6
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #5																
Dissolved Oxygen (DO)	Weekly	mg/l	Grab						0.90							4.12
Temperature	Weekly	°C	Grab						23.4							25.8
pH	Weekly	pH	Grab						7.6							7.1
Electrical Conductivity	Monthly	µmhos/cm	Grab						1533.0							
AIPS No. 1 Ponds																
Pond #6																
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab						3.88							8.54
Temperature	Weekly	°C	Grab						24.3							28.0
pH	Weekly	pH	Grab						8.1							7.7
Electrical Conductivity	Monthly	µmhos/cm	Grab						1820.0							
Pond #7																
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab						0.60							18.54
Temperature	Weekly	°C	Grab						24.8							26.8
pH	Weekly	pH	Grab						7.6							8.1
Electrical Conductivity	Monthly	µmhos/cm	Grab						1891.0							
Pond #8									MT							MT
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #9									MT							MT
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #10									MT							MT
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #11									MT							MT
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													

City of Patterson, CA (209) 892-2041	Water Quality Control Facility															
	Monitoring Report															
Constituent / Parameter	Frequency (Daily = Weekdays Only)	Units (mgd = Million Gallons per Day)	Action / Sample Type	19-Aug Sunday	20 Aug Monday	21-Aug Tuesday	22-Aug Wednesday	23 Aug Thursday	24 Aug Friday	25 Aug Saturday	26-Aug Sunday	27-Aug Monday	28-Aug Tuesday	29-Aug Wednesday	30 Aug Thursday	31 Aug Friday
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													
Pond #12									MT							MT
Freeboard	Daily	0.1 Feet	>2-ft ?													
Dissolved Oxygen (DO)	Weekly	mg/l	Grab													
Temperature	Weekly	°C	Grab													
pH	Weekly	pH	Grab													
Electrical Conductivity	Monthly	µmhos/cm	Grab													

Note 1:

Note 2:

Note 3: