

# McKinleyville Community Services District



## **ANNUAL WASTEWATER MANAGEMENT FACILITY MONITORING & DISCHARGE REPORT FOR 2013**

NPDES No. CA0024490  
WDID No. 1B820840HUM

McKinleyville Community Services District  
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March 1, 2014

Regional Water Quality Control Board, North Coast Region  
5550 Skylane Blvd., Suite A  
Santa Rosa, California 95403

**McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY ANNUAL REPORT, FOR 2013**

The McKinleyville Community Services District operates the wastewater collection, treatment, and disposal facilities that serve 6391 customer units in the unincorporated area of McKinleyville in Northern Humboldt County. The system operates under Order Number WQ 2011-0008-DWQ, National Pollution Discharge Elimination System (NPDES) Permit No. CA0024490, WDID No. 1B820840HUM and issued by the California State Water Resources Control Board.

Tables 1 and 2 summarize the existing permit elements for reference.

Table 1. Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	45	65			
	lbs/day	604	873			
Total Suspended Solids	mg/L	83				
	lbs/day	1108				
pH	pH Units				6.5	8.5
Settleable Matter	mg/L	0.1		0.2		
Chlorine Residual	mg/L	0.01		0.02		
Nitrate as Nitrogen	mg/L	10				
4,4'-DDT	ug/L	0.00059		0.0027		
bis(2-ethylhexyl) phthalate	ug/L	1.8		3.6		

Table 2. Summary of Monitoring Location Names and Descriptions.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	M-INF	Treatment facility headworks
All	M-001	Chlorine contact chamber following dechlorination
001	M-002	Outfall to the Mad River under the Hammond Trail railroad bridge
002	M-003	Outfall to Mad River percolation ponds
003	M-004	Recycled wastewater irrigation of Lower Fisher Ranch
004	M-005	Discharge to land on Upper Fisher Ranch
005	M-006	Recycled wastewater irrigation of Hiller Storm Water Treatment Wetland
006	M-007	Recycled wastewater irrigation of Pialorsi Ranch
	M-008	Overflow from the Hiller Storm Water Treatment Wetland
	R-001	Mad River at Highway 101 Bridge
	R-002	North bank of Mad River as close as possible to the discharge point under the Hammond Trail Bridge
	W-001	Well M-1 adjacent to Fisher Road
	W-002	Well M-2 on the SW corner of the intersection of School and Fisher Roads
	W-006	Well M-6 south of W-9 and west of W-7
	W-007	Well M-7 in the upper portion of the Fisher parcel
	W-008	Well M-8 400 feet west of the intersection of School and Fisher Roads
	W-009	Well M-9 adjacent to School Road
	W-014	Well down gradient of the Hiller Storm Water Treatment Wetlands
	W-015	Well within the Lower Fisher Ranch irrigation area
	W-016	Well within the Pialorsi Ranch irrigation area

### Compliance:

#### Biochemical Oxygen Demand (BOD) Testing:

Discharge Point 001 requirement for BOD are 45 mg/L, 604 lbs/day and 65% removal for the monthly average and a weekly average limit of 65 mg/L and 873 lbs/day. Discharge Point 002 requirement for BOD is 45 mg/L monthly average and a weekly average limit of 65 mg/L. Discharge Point 003- 006 requirements for BOD are 45 mg/L monthly.

BOD limitations for 2013 were not exceeded.

#### Total Suspended Solids Testing (TSS):

Discharge Point 001 requirement for TSS is 83 mg/L, 1108 lbs/day and 65% removal for the monthly average. Discharge Points 002- 006 requirements are 83 mg/L for the monthly average.

TSS limitations for 2013 were not exceeded.

#### 3x5 Total Coliform/ Disinfection Testing:

The effluent limitations for coliform 3x5 testing is a maximum monthly median, a most probable number (MPN) of 23 per 100 milliliters and a daily maximum of 230 MPN and are the same for Discharge Point 001- 006. Coliform limitations for Monthly Median and Daily Maximum were in compliance in 2013.

#### Settleable Matter Testing:

The effluent limitations for settleable Matter testing are listed in Table 1 and are for Discharge Point 001. Settable Matter limitations for 2013 were not exceeded.

#### Chlorine Residual Testing:

The effluent limitations for Chlorine Residual testing are listed in Tables 1 and are for Discharge Point. Residual limitations for 2013 were not exceeded.

#### Nitrate as Nitrogen Testing:

The effluent limitations for Nitrate as Nitrogen testing are listed in Tables 1 and are for Discharge Point 001 and 002. Nitrate as Nitrogen limitations for 2013 were not exceeded.

#### 4,4'-DDT; bis(2-ethylhexyl) phthalate and carbon tetrachloride Testing:

The effluent limitations for these constituents are Table 1 and are for Discharge Point 001. The limitations for 2013 were in compliance.

#### Acute Toxicity Monitoring:

The acute toxicity monitoring bioassay criteria for Discharge Point 001 requires a 96-hour fish bioassay test conducted at M-001 in undiluted effluent. Two test species were required, Ceriodaphnia dubia (C.dubia) and Rainbow Trout. The method for conducting this test require the laboratory maintain the test sample the same pH as when the effluent sample was collected and that ammonia, pH and temperature be recorded on 24-hour intervals and reported with the bioassay test results.

It was determined that the C. dubia was too sensitive to the buffering agent used to maintain the pH and mortality rates were beyond the limits set forth in the permit so pH control of the C. dubia was discontinued. After the first year of testing the most sensitive species was to be determined and continue testing that species only but we have continued to conduct testing on both species.

The minimum compliance for any one test is 70% survival. The median for all bioassays during any calendar month is at least 90%. If the results of any 96-hour bioassay test are not in compliance a follow up test is required within 7 day of notification. The results for Acute Testing were in compliance in 2013 with the exception of a March test for C. dubia that required follow up testing which was in compliance.

#### **Non-Compliance:**

#### Acute Toxicity Testing

The Requirement for Acute Toxicity testing is a minimum of 70% survival for any one test and median for all tests in one month of 90%. Acute Testing remained in compliance throughout the calendar year for Rainbow Trout and C. dubia remained in compliance from January to May with the exception of March. Please review Table 3 for results.

Table 3 Monthly and Accelerated Testing

Date Collected	Test	Trout Survival	Cerio Survival
03/5/2013	Monthly	100%	0%
3/19/2013	Accelerated #1	-	85%
3/26/2013	Accelerated #2	-	100%



### Conclusion

It has been a long standing observation that our ammonia levels are high and un-ionized ammonia cause toxicity in the right conditions. Due to the toxicity of the pH buffering agent and the high temperatures required for C.dubia test, pH fluctuations and temperatures far outside those characteristic in our effluent cause unionized ammonia to increase to become toxic.

The District, with concurrence of the Regional Board, has decided to run the acute toxicity as a side by side comparison with the second testing criteria at 20°C for C. dubia along with daily renewal of effluent which is consistent with the method.

### Chronic Toxicity Monitoring:

The chronic toxicity monitoring bioassay criteria for Discharge Point 001 requires a 96-hour static renewal or 96-hour static non-renewal testing. The sample is a 24-hour composite and is representative of the volume and quality of the discharge. The sampling is conducted at M-001 WWMF Effluent. Test species for chronic testing are a vertebrate, the fathead minnow, *Pimephales promelas* (larval survival and growth test), an invertebrate, the water flea, *Ceriodaphnia dubia* (survival and reproduction test), and a plant, the green alga, *Selenastrum capricornutum* (growth test). The District conducted chronic toxicity testing one time during the 2013 discharge season. The testing results for Acute Testing are detailed in Table 4

Table 4 Chronic Toxicity Testing for 2013

Dilution Water	Date	Test Species				
		Flathead minnow		Water flea		Algae
		Survival	Growth	Survival	Reproduction	Growth
Diluted w/ Lab Control Water	Jan. 2013	TUc = 2	TUc = 2	TUc = 1.3	TUc = 2	1

### Accelerated Monitoring Requirements:

If the result of any chronic toxicity test exceeds the chronic toxicity trigger of 1.0 TUc and the testing meets all test acceptability criteria, the District shall initiate accelerated monitoring. Accelerated monitoring shall consist of four additional effluent samples, one test conducted approximately every week, over a four-week period. Testing shall commence within 14 days of receipt of the sample results of the exceedance of the chronic toxicity effluent limitation. The following protocol was used for accelerated monitoring and the TRE implemented and detailed in a study submitted during the 2009 discharge season.

### Conclusion:

It was concluded that the mortality experienced in regular testing and verified in the monitoring study was due to ammonia. Ammonia toxicity has been addressed in the 20 Year Facility Plan and a preferred alternative has been identified for the plant upgrade that will reliably remove ammonia. Design began in early 2013 with construction to begin in 2016. An interim solution for ammonia removal will also be explored.

### **Other Projects and Commentary on the Treatment Process:**

#### Treatment Process Trends:

The success of a particular process can be gauged by tracking the removal of BOD and TSS. Chart 1 demonstrates average BOD concentration in mg/L from 2004 through 2013. The average BOD in 2013 was 25 mg/L and continues to remain well below 45mg/L, our current limit.

Chart 1 Annual Average BOD Concentrations

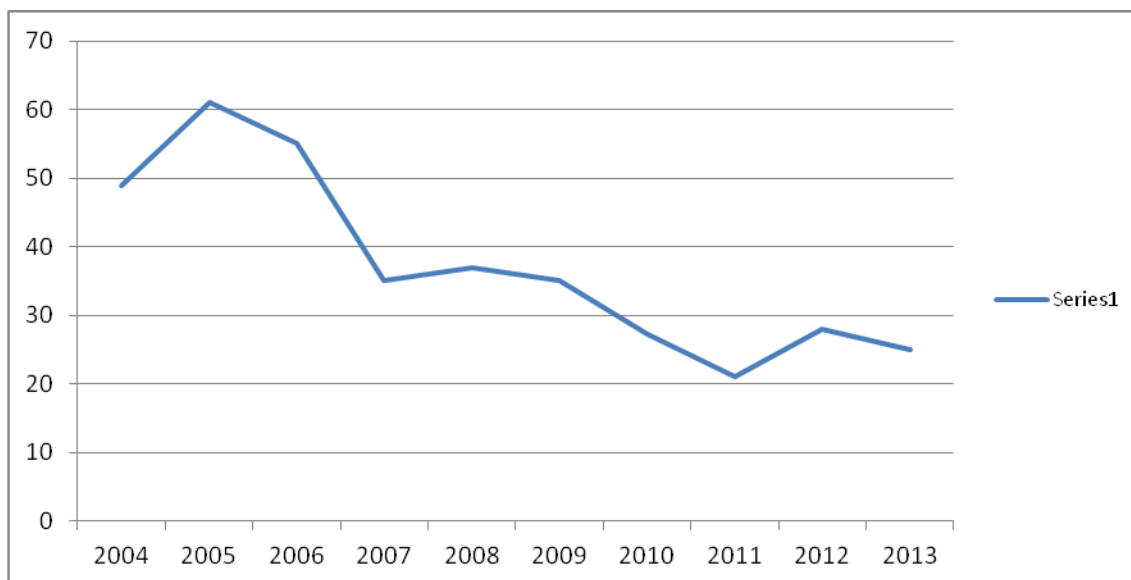


Chart 2 demonstrates average TSS concentration in mg/L from 2004 through 2013. The average TSS in 2013 was below 30 mg/L and is well below 100mg/L, the level it was in 2005.

Chart 2 Annual Average TSS Concentrations

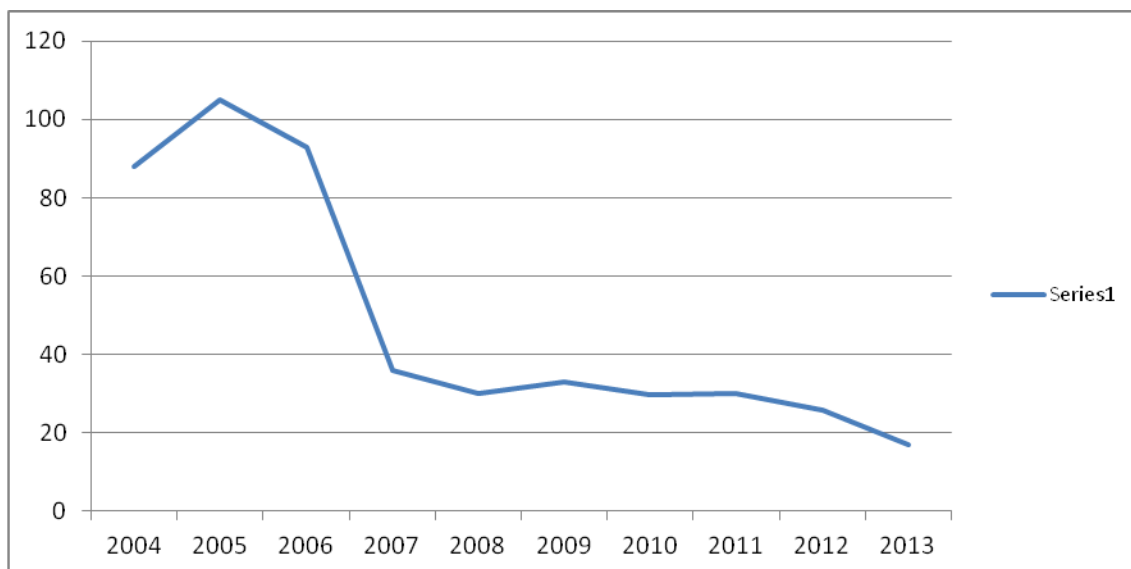
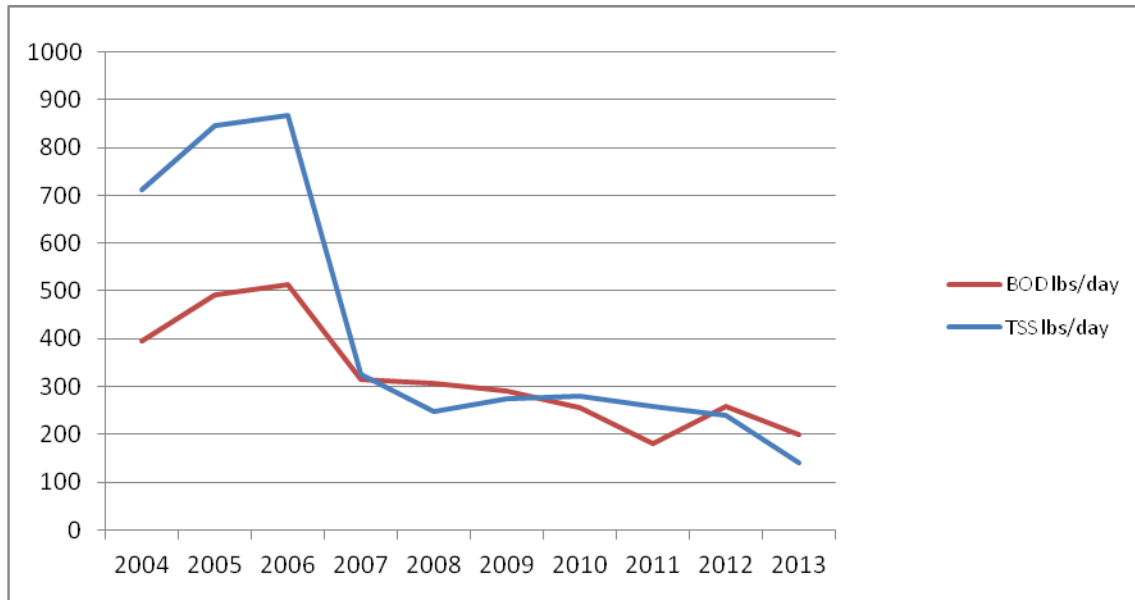


Chart 3 is the product of the flow and the concentration, is identified as mass loading and measured in pounds per day. BOD and TSS continue to trend lower.

Chart 3 Annual Average BOD and TSS Mass Loading



Charts 1-3 demonstrate the steady trend upward of BOD and TSS from 2004 through the time of the treatment marsh upgrade project completion in 2006. From 2006 through 2007 the performance of the treatment process can be demonstrated by the drastic improvement. From 2007 through 2011 the efficiency of the process continues to trend down. The blip upward in BOD experience in 2012 but trended back down in 2013.

#### Main Area of Concern:

#### Nitrogen Removal

Ammonia has been identified as the main area of concern as demonstrated through biological testing and the appearance of Nitrate in the ground water adjacent to the irrigation sites. Though our permit does not directly limit ammonia we recognize the importance of addressing the concern. The District is committed to reversing the trend of ammonia toxicity in our effluent stream. The 20 Year Facility Plan directly addresses and is dedicated to the removal by treatment of this constituent. The District is also exploring other interim alternatives that have the potential to augment planned upgrades and are addressed in the WWMF Improvement Project Design.

#### Summary of Work Completed in 2013

#### Sanitary Sewer Management Plan (SSMP) Audit.

In May for 2011 MCSD assisted by Freshwater Environmental completed our SSMP as required by our NPDES Permit. The SSMP is an operational plan that was designed by the state to help prevent sanitary sewer overflows. An annual in-house Audit was performed along with SSO training and updating. The full document can be located at the District's web site by following this link.

[http://mckinleyvillecsd.com/sites/mckinleyvillecsd.com/files/documents/MCSD%20SSMP%20Final%200511811\\_0.pdf](http://mckinleyvillecsd.com/sites/mckinleyvillecsd.com/files/documents/MCSD%20SSMP%20Final%200511811_0.pdf)

#### Fischer Overflow Emergency Plan: Attachment 1

Review for our SSMP occurs annually and MCSD started work in 2013 on Contingency Plans for all Sewer lift Stations. Fischer Sewer Lift Station Overflow Emergency Plan was completed. The plan focuses on transferring the station along with hooking up a towable generator in the event that the station loses power and the station generator fails to start.

#### Pipe Lining Sewer Mains: Attachment 2

In 2013, the Operations Department purchased a kit and received training on pipe patch repairing. It was purchased to fix defects in the sewer main which allows groundwater infiltration into the sewer collection system. This allows for trenchless repairs resulting in a substantial cost saving on labor, materials and equipment.

#### WWMF Preliminary Design Drawings: Attachment 3

In 2013 MCSD contracted Kennedy/ Jenks to design the WWMF upgrade. The Preliminary Design Report is just under the 30% phase. Valued Engineering (VE) was also performed by Robinson, Stafford, & Rude, Inc. The VE team came up with several ideas and options for saving costs and improving treatment. Those ideas are currently being reviewed closer. The District has also contracted a couple more sets of eyes to aid in the process. The new treatment process will be designed in Pond 1A which will have sludge removed and drained in 2014. Doing Pond 1A now will give us a better idea of how much sludge has accumulated and to verify the engineers findings during their survey. The sludge information will be important information as we move forward to determine costs and removal options.

#### 20 Year Facilities Plan

The District also completed significant work in 2011 on the 20-year facilities plan for the District WWMF. An initial draft of the facilities plan was published in August 2011 for a peer review by Kennedy Jenks. In October 2011 a revised draft was published and circulated for public review and comment. The final draft of the facilities plan was published in January 2012 and accepted by the District board on February 1, 2012. The full document can be located at the District web site by following this link.

<http://mckinleyvillecsd.com/document-library/20%20Year%20Facilities%20Plan>

## INDEX OF ATTACHMENTS and EXHIBITS

ATTACHMENT 1: Fischer Station Overflow Emergency Response Plan

ATTACHMENT 2: Pipe Patch Repair (Trenchless)

ATTACHMENT 3: WWMF Upgrade Preliminary Design Drawings

EXHIBIT A: Tabular and Graphical Data

Influent and Effluent Monthly Totals  
Influent and Effluent Maximum Day

EXHIBIT B: Tabular

CFS, River Dilution, Effluent Flow and Effluent Distribution

EXHIBIT C: Tabular and Graphical Data

Monthly Totals for Effluent Flow and Discharge Disposal Locations  
Annual Effluent Distribution Pie Chart  
Daily Totals for Effluent Flow and Discharge Disposal Locations

EXHIBIT D: Tabular Data

Monthly Monitoring Report (Permit exceedances highlighted in yellow)

EXHIBIT E: Tabular Data

Influent and Effluent Testing Monthly Averages  
Daily Influent and Effluent Testing

EXHIBIT F: Tabular and Graphical Data

30-day Average BOD and NFR Worksheet  
30 Day BOD and NFR Maximum, Minimum and Average Chart  
BOD and NFR 30 Average Concentration Chart  
BOD and NFR 30 Average lbs/day Chart  
BOD and NFR 30 Day Average Removal Comparisons  
BOD Influent, Effluent and Terminal Pond Comparisons

EXHIBIT G: Tabular and Graphical Data

Monthly Averages for pH, temperature Ionized and Unionized Ammonia  
Relationship between Temperature and Ammonia Percent Removal Chart  
Influent and Effluent Average Total Ammonia Chart

EXHIBIT H: Tabular Data

Discharge Data R-001, R-002 and M-001  
Discharge Data R-003  
Discharge Data R-004 and R-005  
Well Monitoring Data

EXHIBIT I: Tabular Graphical Data

Pond Sludge Depths  
Remaining Sludge Capacity Chart  
Monthly/ Annual Averages for Pond Ammonia  
Monthly/ Annual Averages for Pond Temperature  
Monthly/ Annual Averages for Pond pH  
Monthly/ Annual Averages for Pond Dissolved Oxygen  
Monthly/ Annual Averages for Pond Level

EXHIBIT J: Tabular and Graphical Data

Monthly Total Aerator Hours  
Monthly Total Aerator Hours versus Ammonia % Removal Chart  
Monthly Total Aerator Hours versus Effluent BOD Chart  
Monthly Total Aerator Hours versus BOD Percent Removal Chart

EXHIBIT K: Tabular Data

Monthly Total Electric, Cl<sub>2</sub>, SO<sub>2</sub>, and Rain Gage Data  
TKN, Alkalinity, and Nitrate Special Testing

If you have any questions, please contact this office.

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GREGORY ORSINI, GENERAL MANAGER





# **McKinleyville Community Services District Fischer Lift Station Overflow Emergency Response Plan**

**December 2013**



## **Table of Contents**

<b>Flow Rate Projections</b>	<b>Page 1</b>
<b>Power Failure Procedures</b>	<b>Page 2</b>
<b>Lift Station Overload</b>	<b>Page 11</b>
<b>Emergency Phone List</b>	<b>Page 13</b>

## **Fischer Lift Station Flow Rate Projections**

- Peak dry weather flow rate      400,000 gallons per day (gpd)
- Peak wet weather flow rate      800,000 gpd

## **Fischer Lift Station Pump Capacity**

- Pump 1 Horsepower      30 horsepower
- Pump 1 Capacity      650 gallons per minute (936,000 gpd)
  
- Pump 2 Horsepower      30 horsepower
- Pump 2 Capacity      650 gallons per minute (936,000 gpd)
  
- Pump 3 Horsepower      100 horsepower
- Pump 3 Capacity      1,100 gallons per minute (1,584,000 gpd)
  
- Pump 4 Horsepower      100 horsepower
- Pump 4 Capacity      1,100 gallons per minute (1,584,000 gpd)



## **Power Failure Procedures**

- Lift Station backup generator will turn on automatically
- Lift Station backup generator fuel tank contains 13.89 gallons per inch of fuel in the tank.
- The Lift Station backup generator consumes 4.6 gallons of fuel per hour (3 hours of operation uses 1-inch of fuel in the tank).
- If backup generator fails, connect portable generator (Steps 1-12 on the following pages)
- Generator out of fuel, call Renner Fuel 707-443-1645.

Disconnect generator battery tender from power cord.

**Step 1**

Close generator doors. Hook up generator to truck. Remove wheel chocks.

**Step 2**

Back generator into place near southeast corner of the lift station. Chock generator wheels.



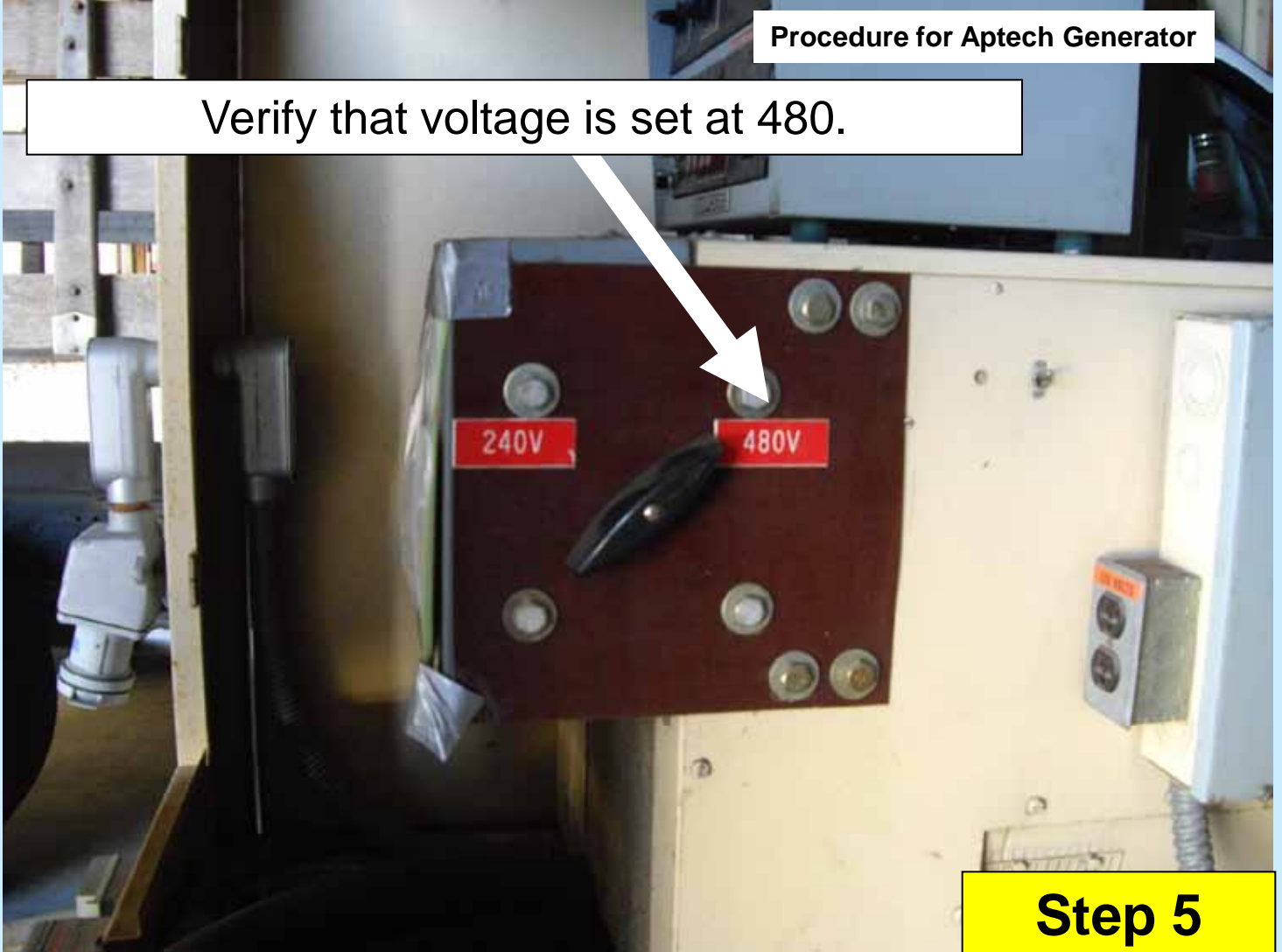
Open the front door of the generator, remove the large power cord connected to the generator and lay cord in notch.

Locate and lineup notch on plug and knobs on the inlet. Push plug all of the way into the inlet and tighten the lock ring.



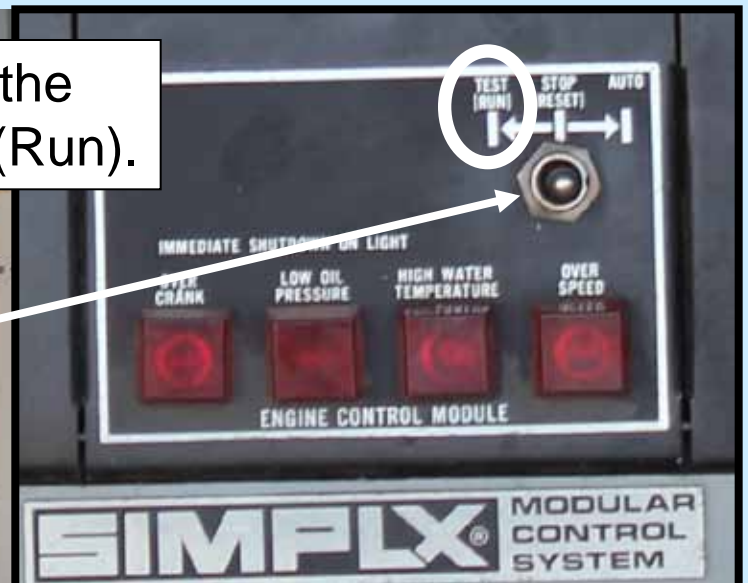


Verify that voltage is set at 480.



**Step 5**

Start generator by moving the toggle switch to the left, Test (Run).



**Step 6**

Check that voltage output is between 440 and 480 volts.

Check that gauge reads between 58 and 62 hertz.



**Step 7**

Verify that oil pressure is over 30 PSI.

Verify that battery voltage is 14 volts.



**Step 8**



Apply voltage (480 volt switch on small box on generator).





ON

OFF

Verify that main transfer switches are fully transferred. (This may take up to 5 minutes)

ON

OFF

Verify that generator on lights are red.

**Never have  
PG&E and  
Generator  
breakers in the  
ON position at  
the same time.**



Check fuel level with the wooden dip stick. Check fuel after four hours of operation to determine fuel consumption rate. If fuel is needed call Renner Petroleum at 707 443-1645.



## Step 12

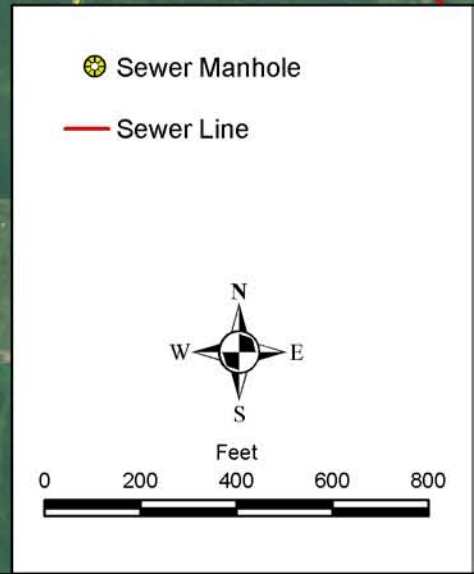
When power is restored breakdown the generator in reverse order.

## Step 13

## **Lift Station Overload Procedure**

- High level alarm---pager---office---duty cell;
- Close weir gate (procedure on the following page); and
- Employees split into two teams to check upstream junction manholes moving upstream from the lift station. Investigation coordinated by the Operations Director or Lead Man.







## Emergency Phone List

- **Electricity**

PG&E Account Rep Ivan Marruffo 707-445-5631  
Ivan Marruffo (cell) 707-498-4826

- **Electrician**

Ambrosini & Sons Electric 707 442-1170  
Dave Ambrosini (cell) 707-499-2275

- **Fuel**

Renner Fuel 707-443-1645

- **Generator**

Cummins West 707-822-7390

- **Septic Hauler**

Steve's Septic 707 839-2270  
Teresa Green (owner) 498-6082 C or 839-4059  
Wes Green (owner) 498-0175 C or 839-4059  
Lyndsey Brunner (office manager) 498-9665  
Kent Tuter (septic technician) 498-8874  
Bryan Millerbis (septic technician) 498-8874  
Brad Smith (plumber & septic technician) 834-7248

## **McKinleyville Community Services District Pipe Patch Repair Kit**

Last year the Operations Department purchased a pipe patch repair kit to fix defects in the sewer main which allows groundwater infiltration into the sewer collection system. This allows for trenchless repairs resulting in a substantial cost savings on labor, material and equipment.

A 24" flow thru packer wrapped with an epoxy soaked fiberglass wrap is installed into the previously hydro-cleaned main through the manhole. It is designed to allow wastewater to flow through the center of the device to prevent blocking off the sewer flow. Push rods are used to push the packer to the desired spot. The push rods are hollow and also serve as the air line. A camera is positioned at the desired area to verify that the repair equipment is in the correct spot. Air is then introduced to the packer to expand the bladder and press the wrap against the pipe lining. The equipment sits for 1 hour to cure while maintaining 12 psi of air. After 1 hour the equipment is removed, cleaned and stored.

The equipment cost the District \$5200.00. The patches to make the repairs are approximately \$350.00. The patch takes approximately 1.5 – 2 hours to complete and has an indefinite life.

To dig up the street and cut in a new piece of pipe depending on paved or gravel road ranges from \$4000.00 to \$6500.00.

After just two repairs the equipment is paid for.

These figures do not include savings for pumping and treating groundwater.

Staff made two repairs which have resulted in removing a total of 10 gallons/minute from the sewer collection system. 10 gallons/minute equals 14,400 gallons/day amounting for 5 million gallons/year. The daily cost to pump and treat would be \$69.00. The annual cost to pump and treat this volume of groundwater is approximately \$25,000.00.

For every 208 gallons of ground water that reaches the collection system, it cost \$1.00 to pump and treat. Example: a 10 gpm leak would cost \$25,000 per year to pump and treat.

Each patch will save the district \$3,000.00 - \$4,500 in time and materials.

10 GPM LEAK BEFORE REPAIR



INFLATABLE FLOW THRU PACKER



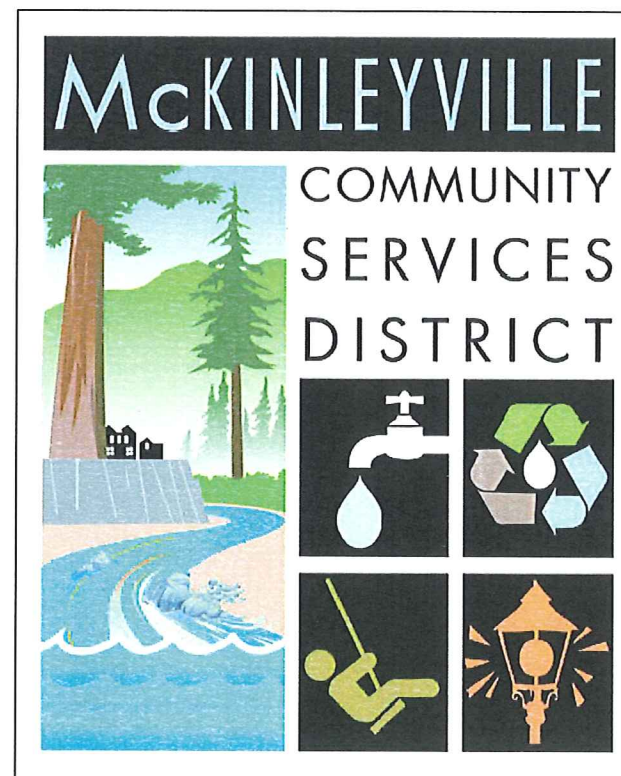
10 GPM LEAK AFTER REPAIRS





PRELIMINARY DESIGN  
DRAWINGS

# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY IMPROVEMENTS



PREPARED FOR:  
**McKINLEYVILLE  
COMMUNITY  
SERVICES  
DISTRICT**

1656 SUTTER ROAD  
McKINLEYVILLE, CA 95519

K/J PROJECT NO. 1368004

**JUNE 2013**

VOLUME 3 OF 3:  
DRAWINGS

**Kennedy/Jenks Consultants**  
Engineers & Scientists

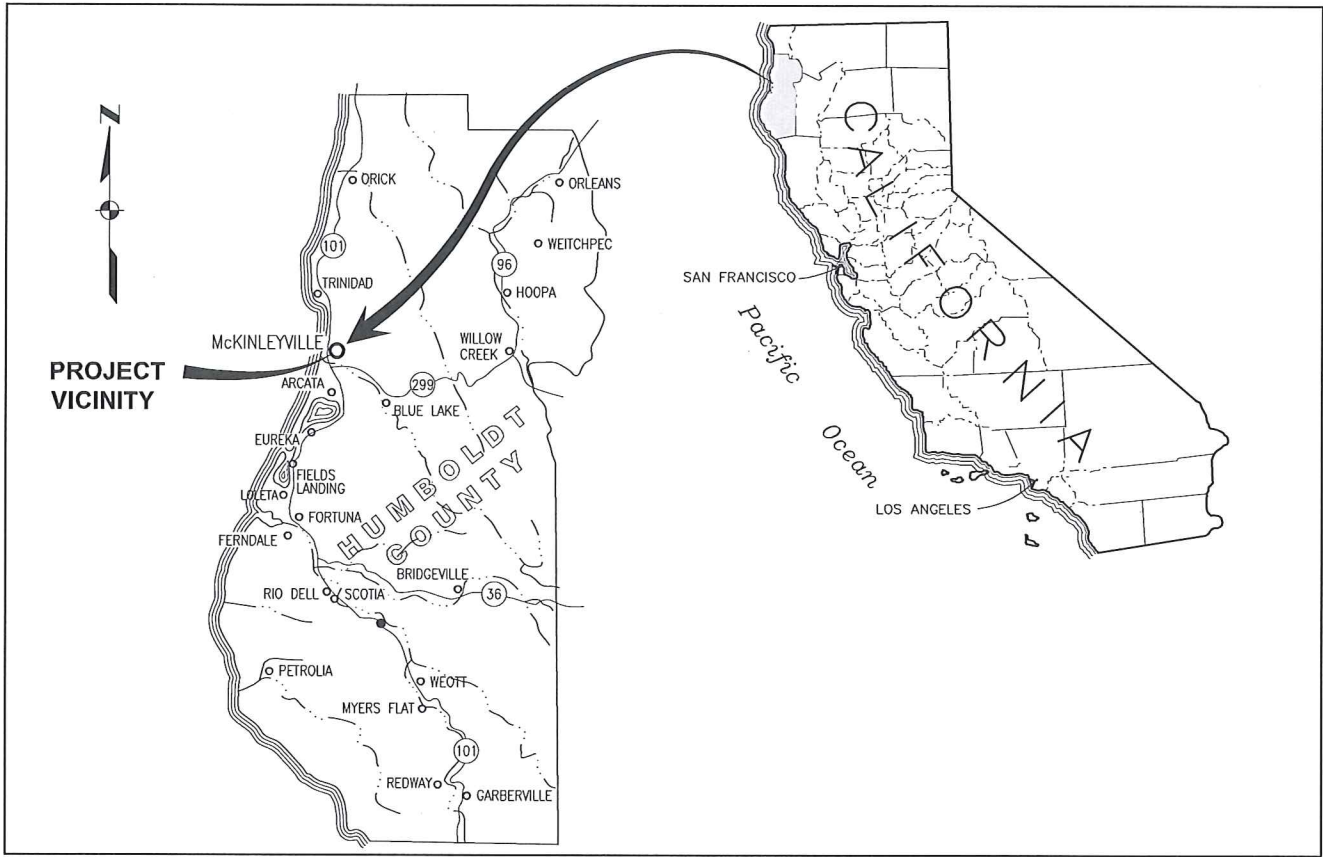


CONTRACT DRAWINGS

McKINLEYVILLE COMMUNITY SERVICES DISTRICT

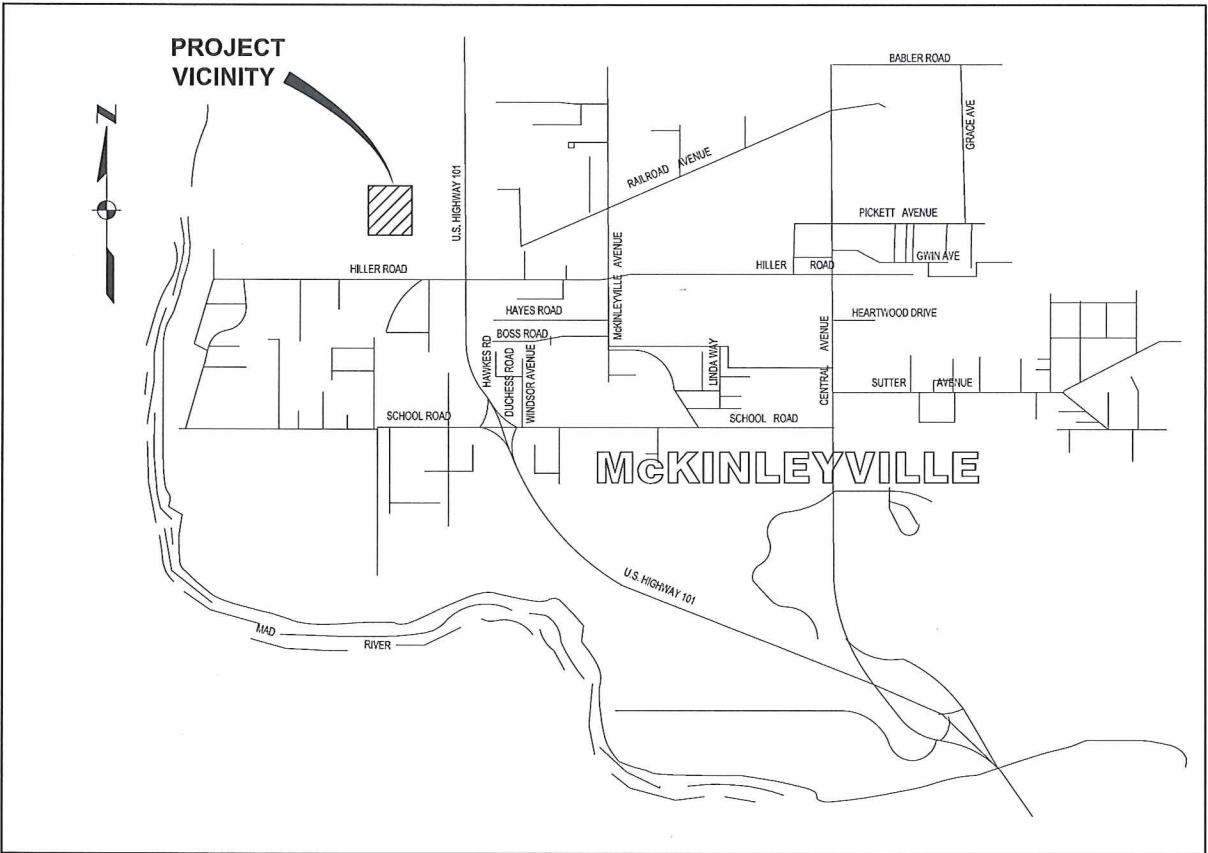
McKINLEYVILLE, CALIFORNIA

WASTEWATER MANAGEMENT FACILITY IMPROVEMENTS



REGION MAP

NO SCALE



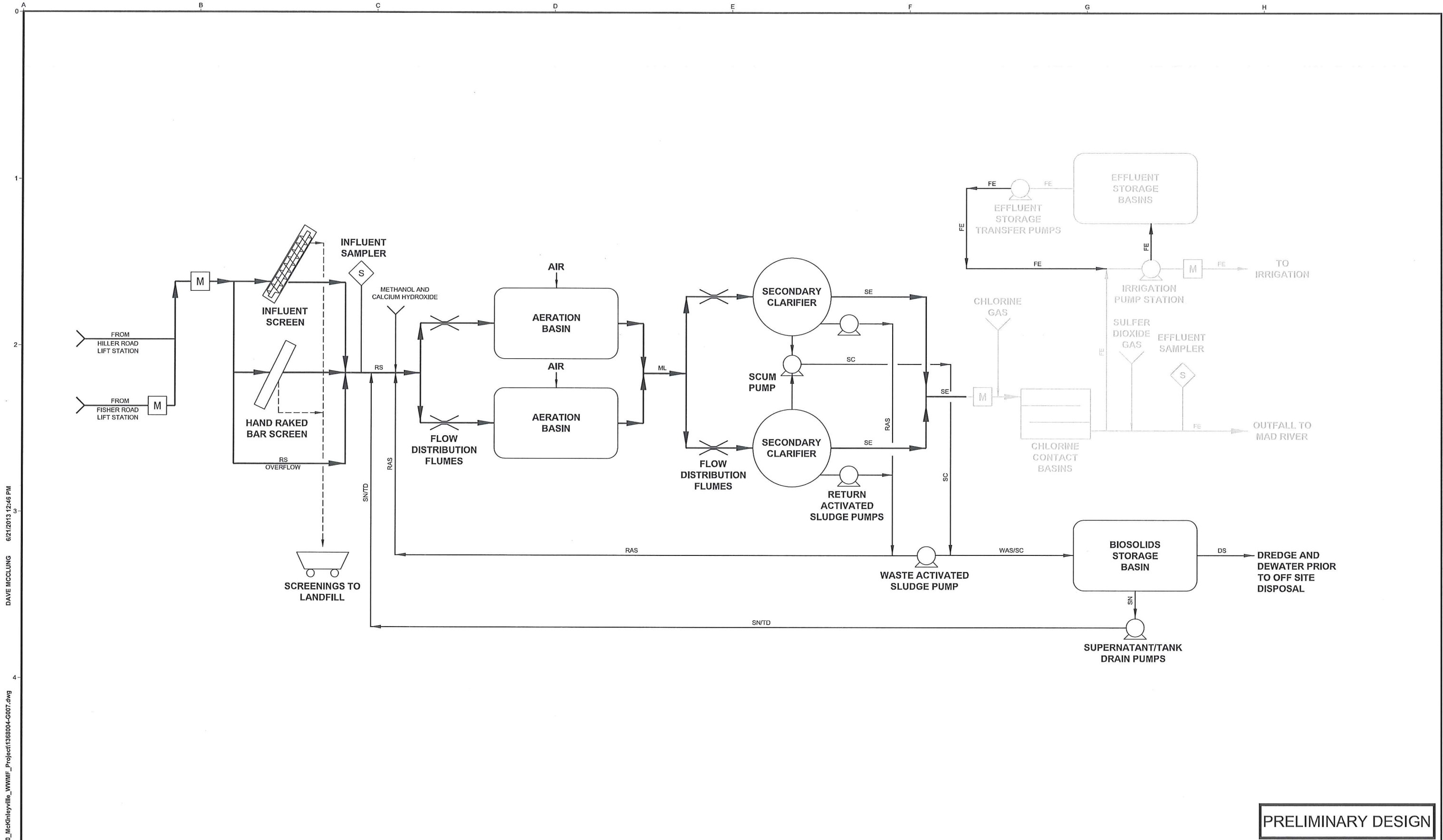
VICINITY MAP

NO SCALE

PRELIMINARY DESIGN

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	NO.	REVISION	DATE	BY			DRAWN GAS			



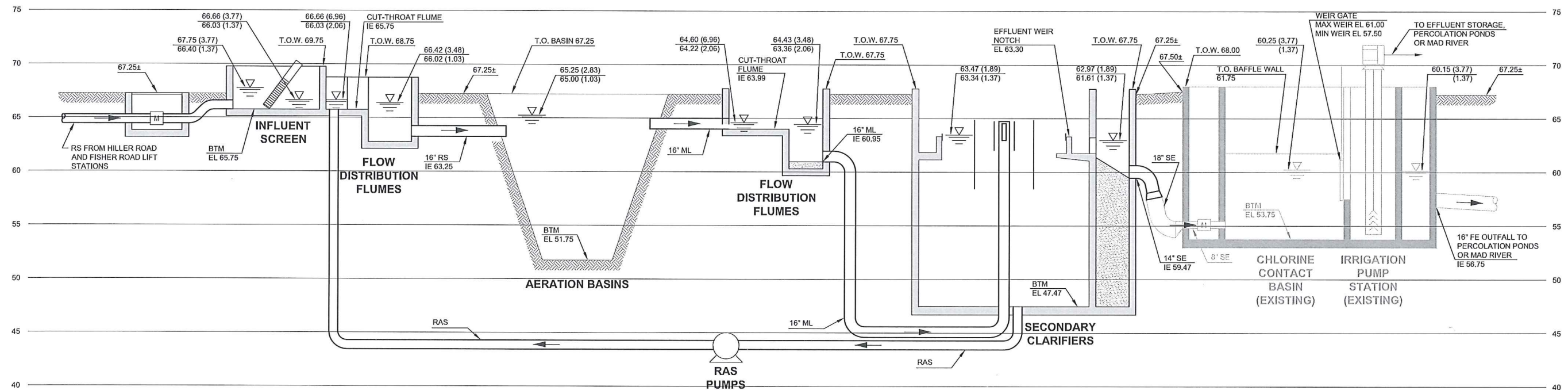


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						WMH			1368004-G007
						DRAWN			JOB NO.
						GAS			1368004.00
						CHECKED			DATE
									JUNE 2013
									SHEET OF
									<b>G007</b>
	NO.	REVISION	DATE	BY					

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### HYDRAULIC PROFILE

## USE OF DOCUMENTS

NO.	REVISION	DATE	BY

## SCALES



DESIGNED

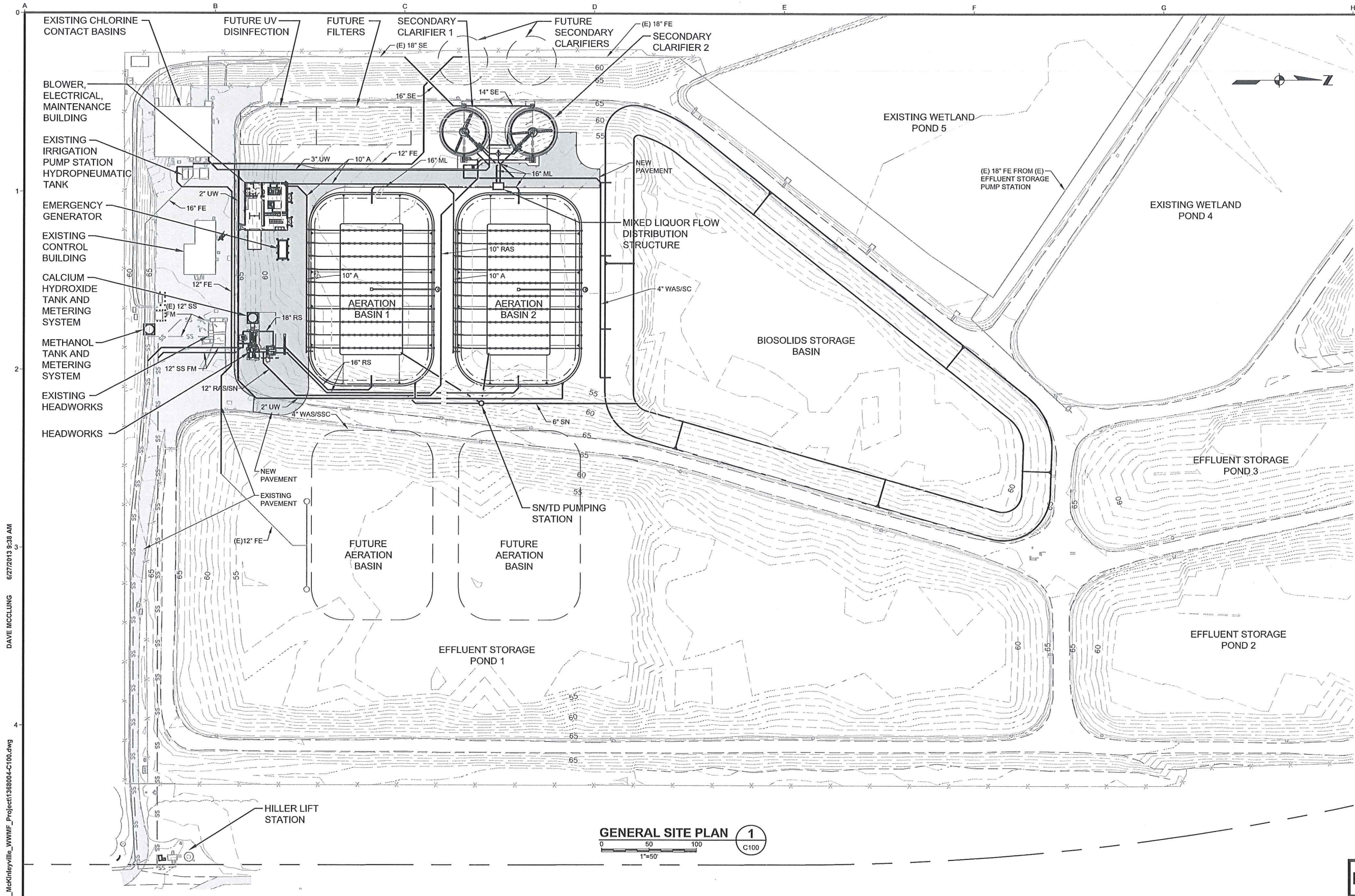
McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
McKINLEYVILLE, CA

## WASTEWATER MANAGEMENT FACILITY IMPROVEMENTS

## HYDRAULIC PROFILE

## PRELIMINARY DESIGN





- NOTES:**
1. THE BEARINGS FOR THIS SURVEY ARE BASED ON ZONE 1 OF THE CALIFORNIA COORDINATE SYSTEM (NAD 83).
  2. THE ELEVATIONS FOR THIS SURVEY ARE BASED ON MEASUREMENTS TO NGS BENCHMARK "H 1088". ELEVATION = 139.00'

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**GENERAL SITE PLAN 1**  
0 50 100  
1"=50'

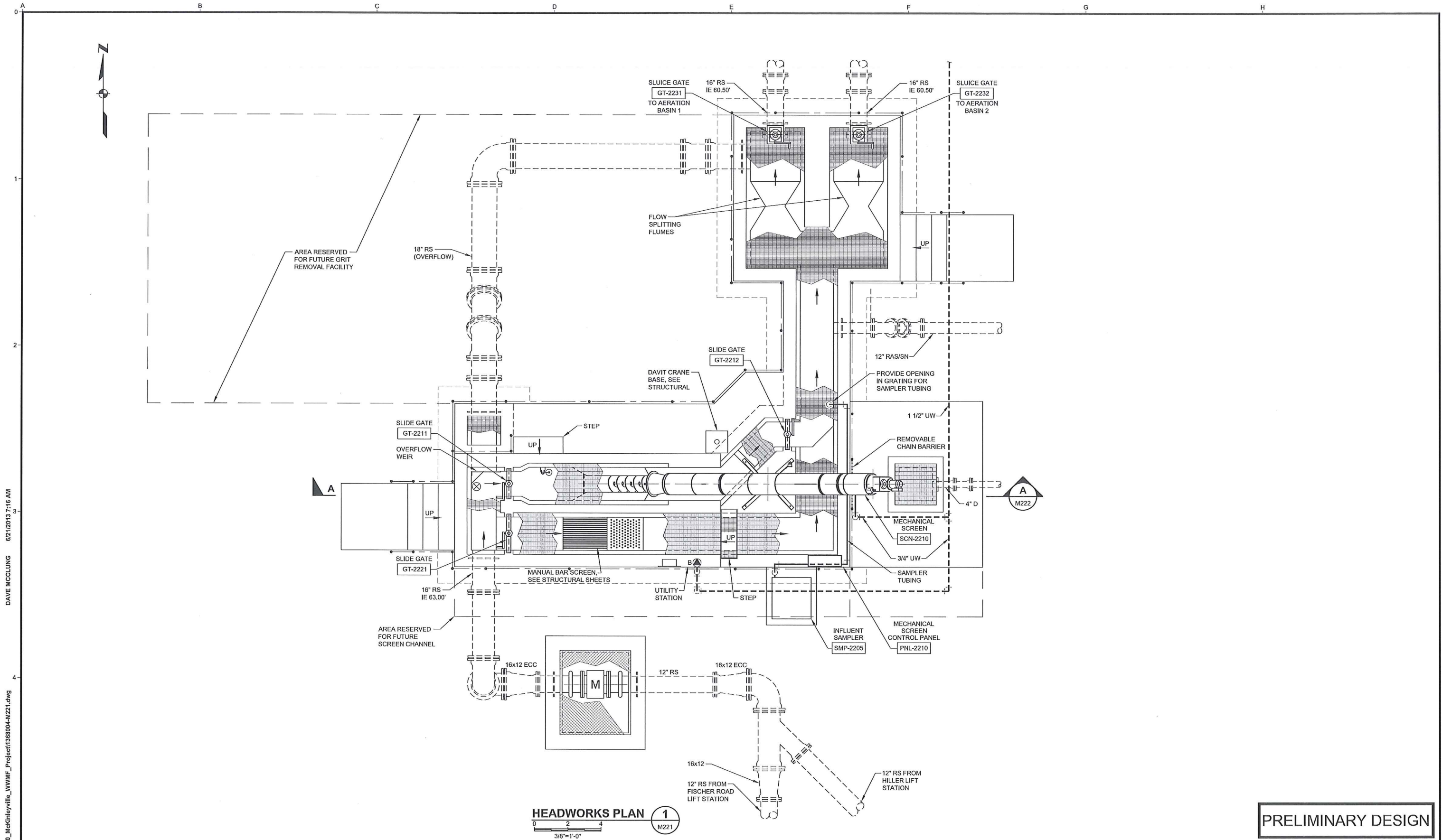
**PRELIMINARY DESIGN**

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	WMH	McKINLEYVILLE, CA		1368004-C100								
	DRAWN	WASTEWATER MANAGEMENT FACILITY IMPROVEMENTS		JOB NO.								
	GAS			1368004.00								
	CHECKED	Kennedy/Jenks Consultants		DATE								
-	SANTA ROSA, CALIFORNIA		JUNE 2013									
	NO.	REVISION	DATE	BY				SHEET OF				
								C100				

**SCALES**  
0 1" 25mm  
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.



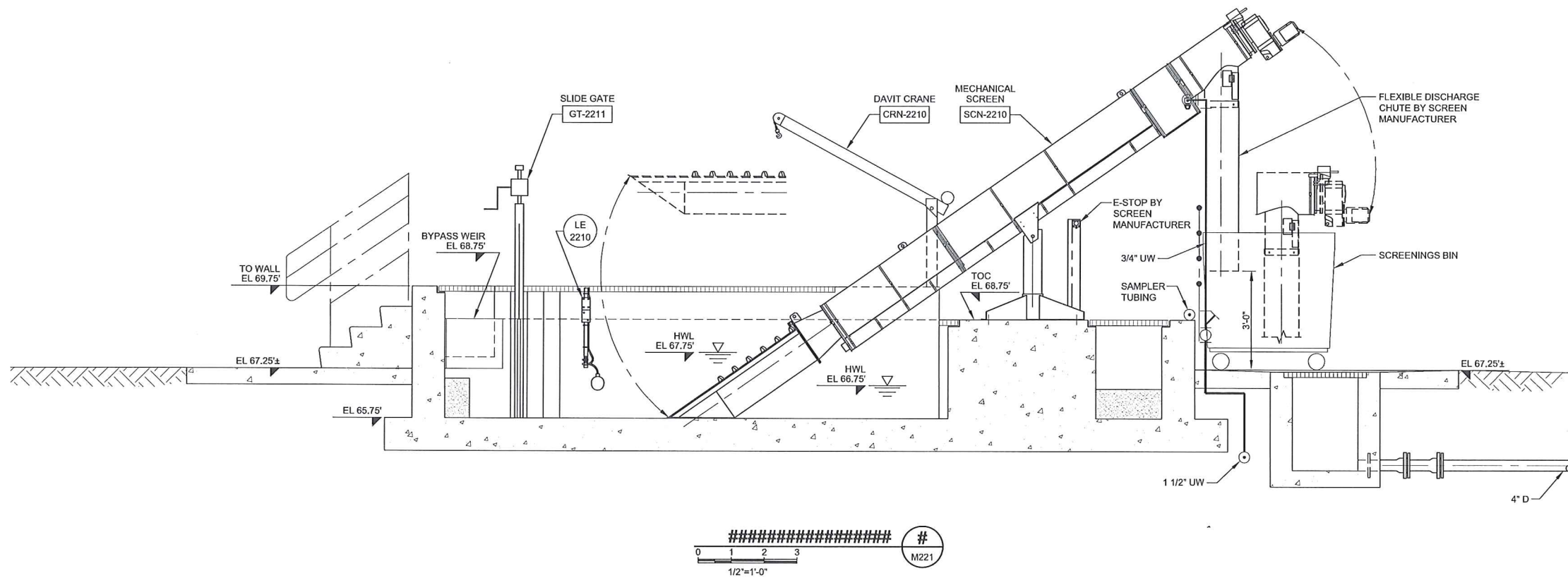





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	WMH	1368004-M221								
	DRAWN	JOB NO.								
	GAS	1368004.00								
	CHECKED	WASTEWATER MANAGEMENT FACILITY IMPROVEMENTS	DATE							
	-		JUNE 2013							
	Kennedy/Jenks Consultants	SHEET OF								
	SANTA ROSA, CALIFORNIA	M221								

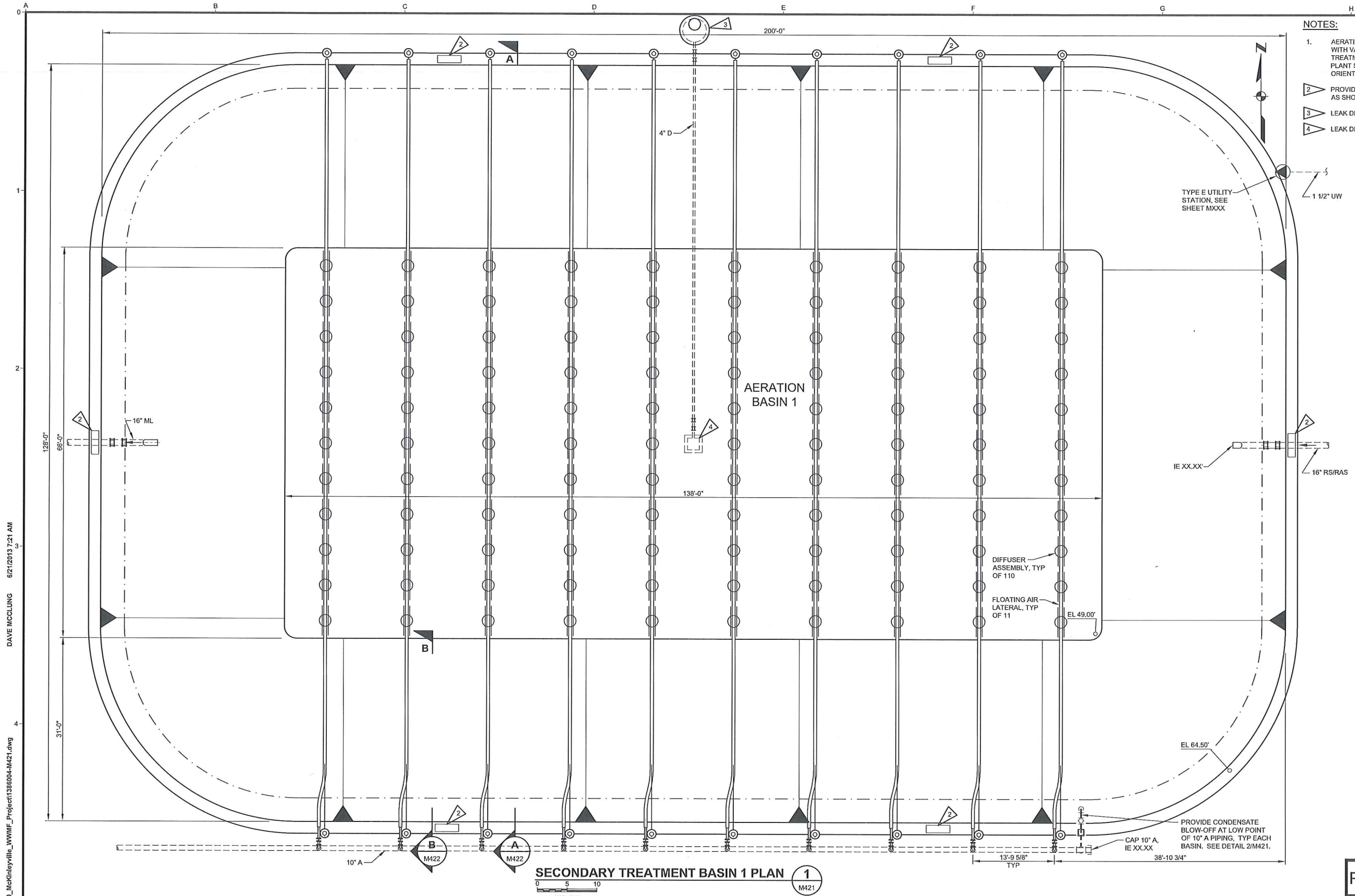
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PRELIMINARY DESIGN

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							DRAWN GAS			JOB NO. 1368004.00
							CHECKED			DATE JUNE 2013
	NO.	REVISION	DATE	BY						SHEET OF <b>M222</b>



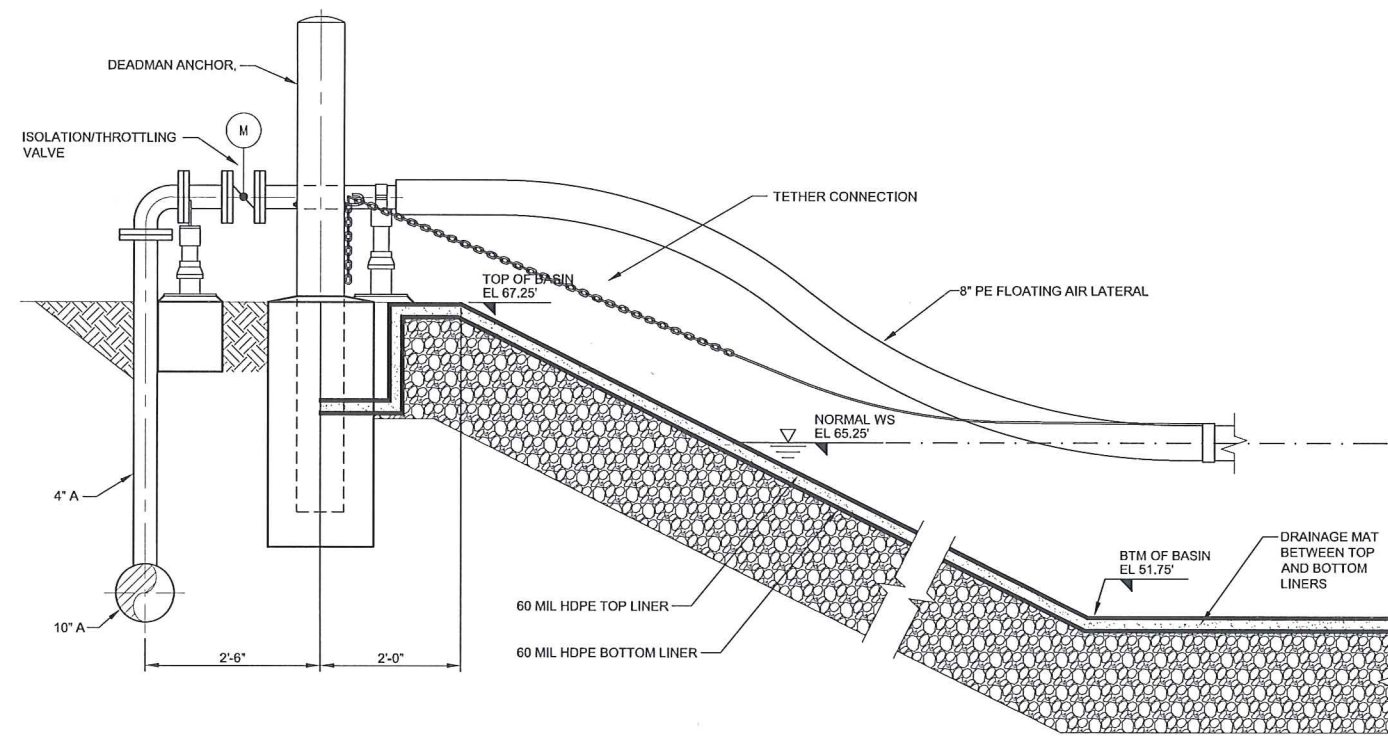
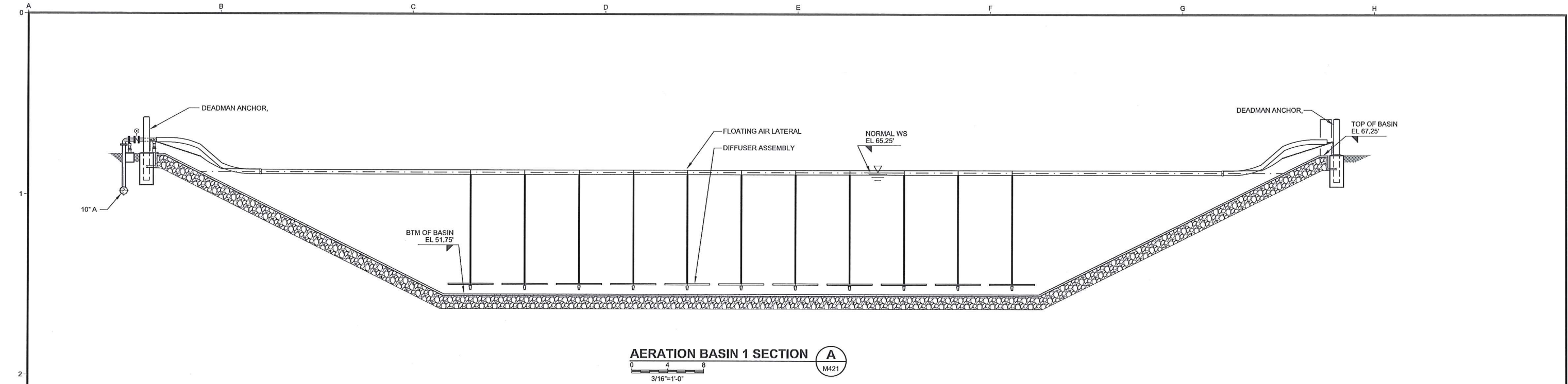


- NOTES:
1. AERATION BASIN 1 IS SHOWN. AERATION BASIN 2 IS SIMILAR WITH VARIED EQUIPMENT AND PIPING ORIENTATION. SEE TREATMENT PLANT SITE, SHEET C100 AND TREATMENT PLANT SITE UNDERGROUND PIPING, SHEET C105 FOR ORIENTATIONS.
  2. PROVIDE SIX LIFE RING STATIONS AT EACH AERATION BASIN AS SHOWN. SEE SPECIFICATION SECTION 11903.
  3. LEAK DETECTION MANHOLE.
  4. LEAK DETECTION SUMP.


SECONDARY TREATMENT BASIN 1 PLAN 1  
M421

PRELIMINARY DESIGN

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						<div>DRAWN</div> <div>GAS</div>			<div>JOB NO.</div> <div>1386004.00</div>
						<div>CHECKED</div> <div>-</div>			<div>DATE</div> <div>JUNE 2013</div>
									<div>SHEET</div> <div>OF</div>
									<div>M421</div>
	<div>NO.</div>	<div>REVISION</div>	<div>DATE</div>	<div>BY</div>					

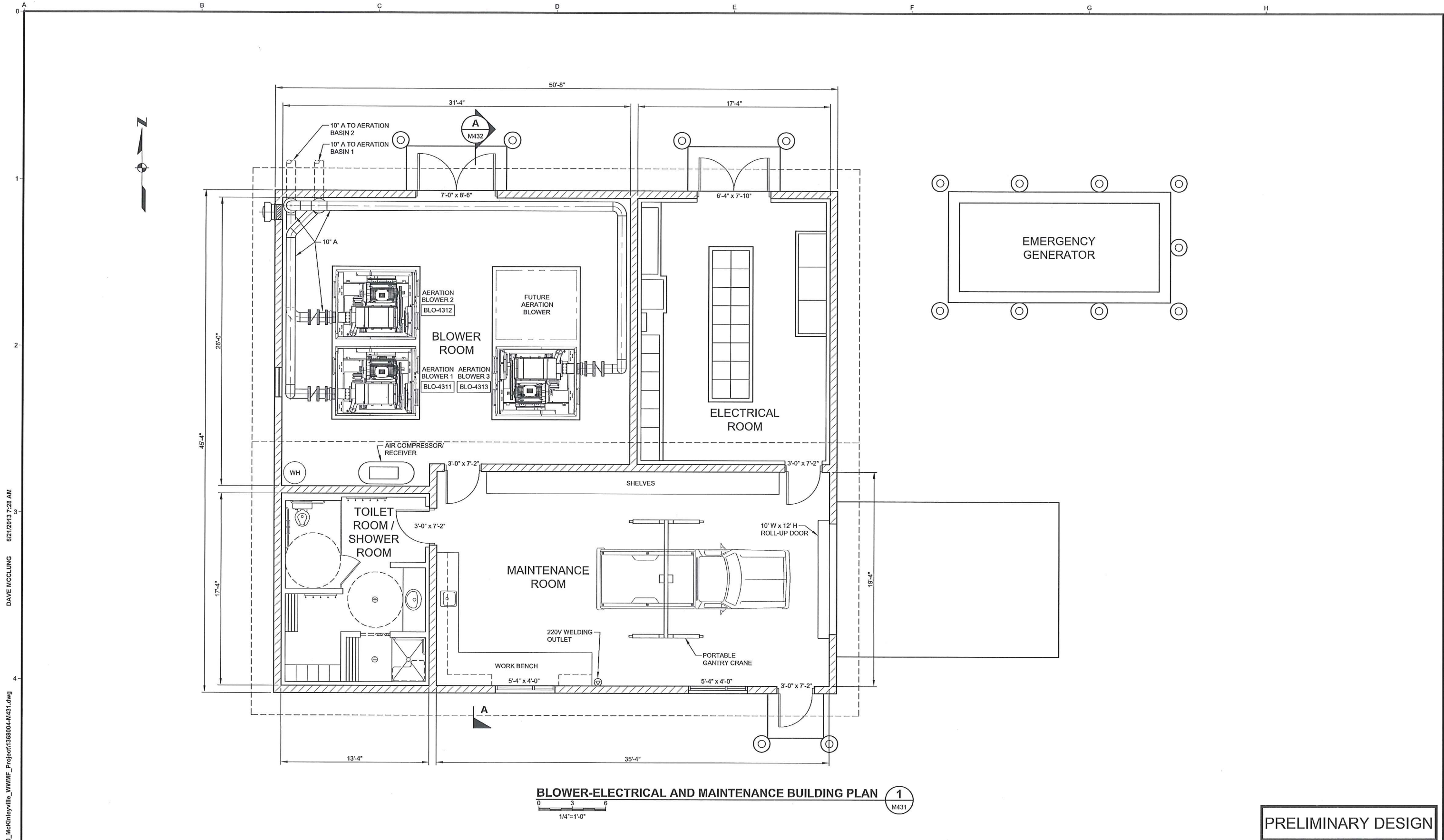


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							WMH			1368004-M422
							DRAWN			JOB NO.
							GAS			1368004.00
							CHECKED			DATE
							-			JUNE 2013
	NO.	REVISION	DATE	BY				Kennedy/Jenks Consultants SANTA ROSA, CALIFORNIA		M422

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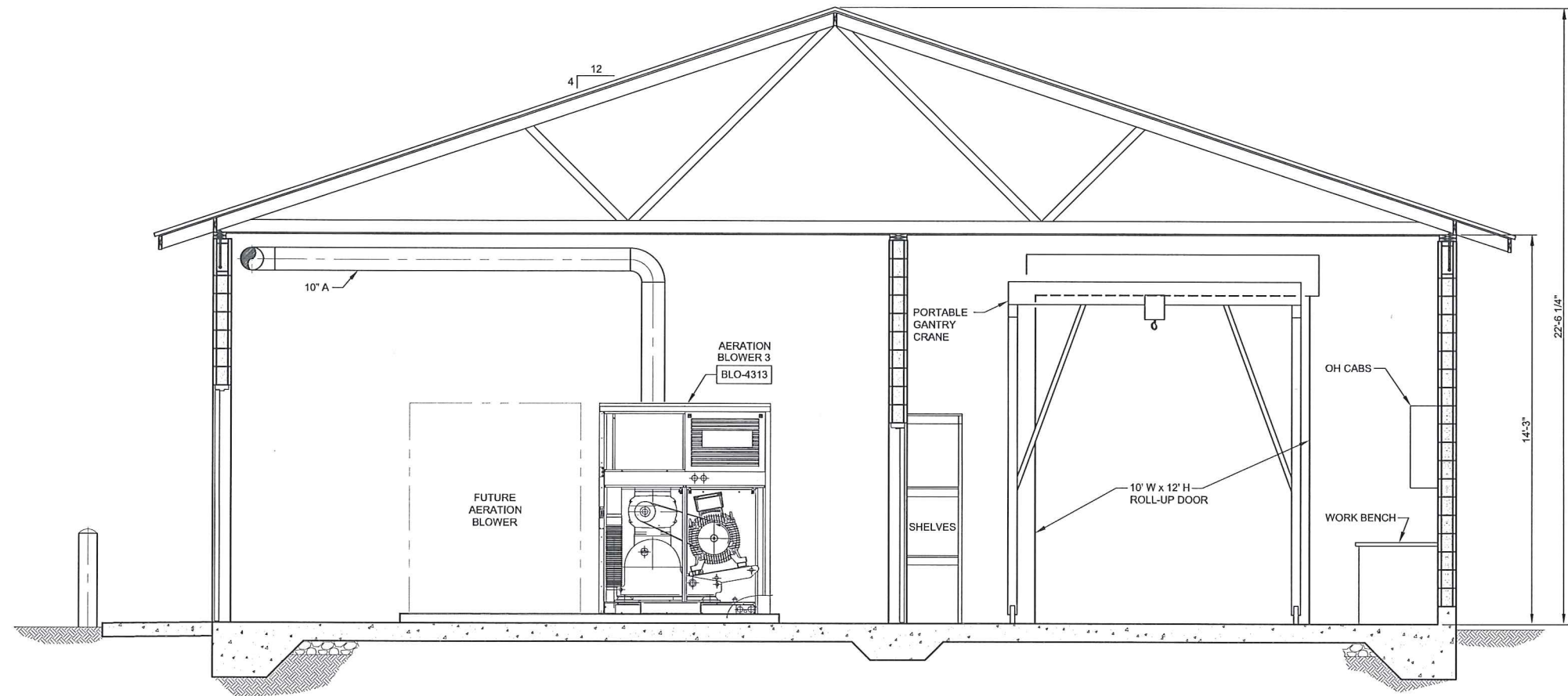


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							DRAWN			JOB NO.	1368004.00
							GAS			DATE	JUNE 2013
							CHECKED			SHEET	OF
							-			M431	
	NO.	REVISION	DATE	BY				Kennedy/Jenks Consultants SANTA ROSA, CALIFORNIA			




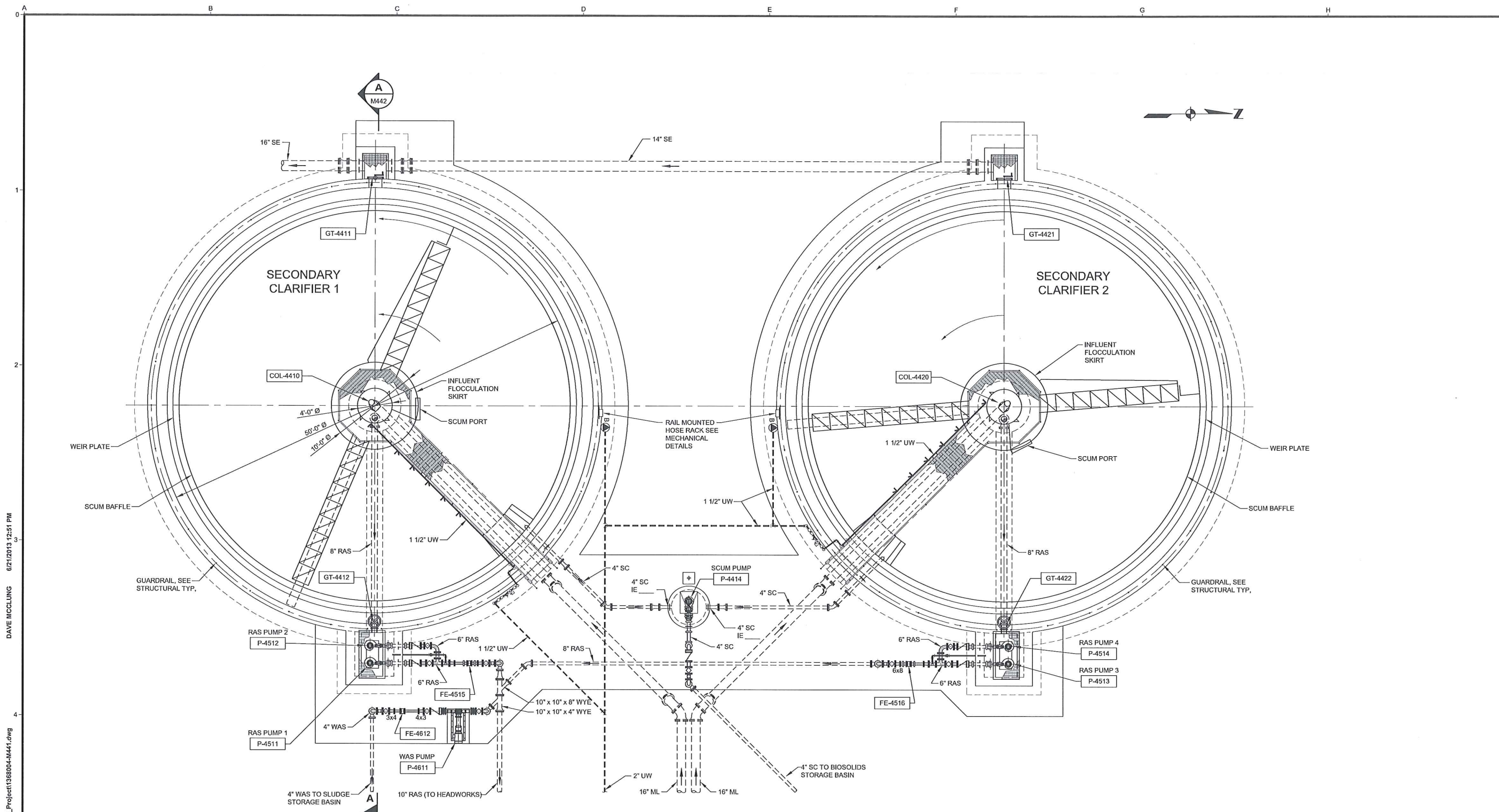
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BLOWER - ELECTRICAL AND MAINTENANCE BUILDING SECTION A  
3/8"=1'-0"


PRELIMINARY DESIGN

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						DRAWN GAS			JOB NO. 1368004.00
						CHECKED -			DATE JUNE 2013
	NO.	REVISION	DATE	BY					SHEET OF M432

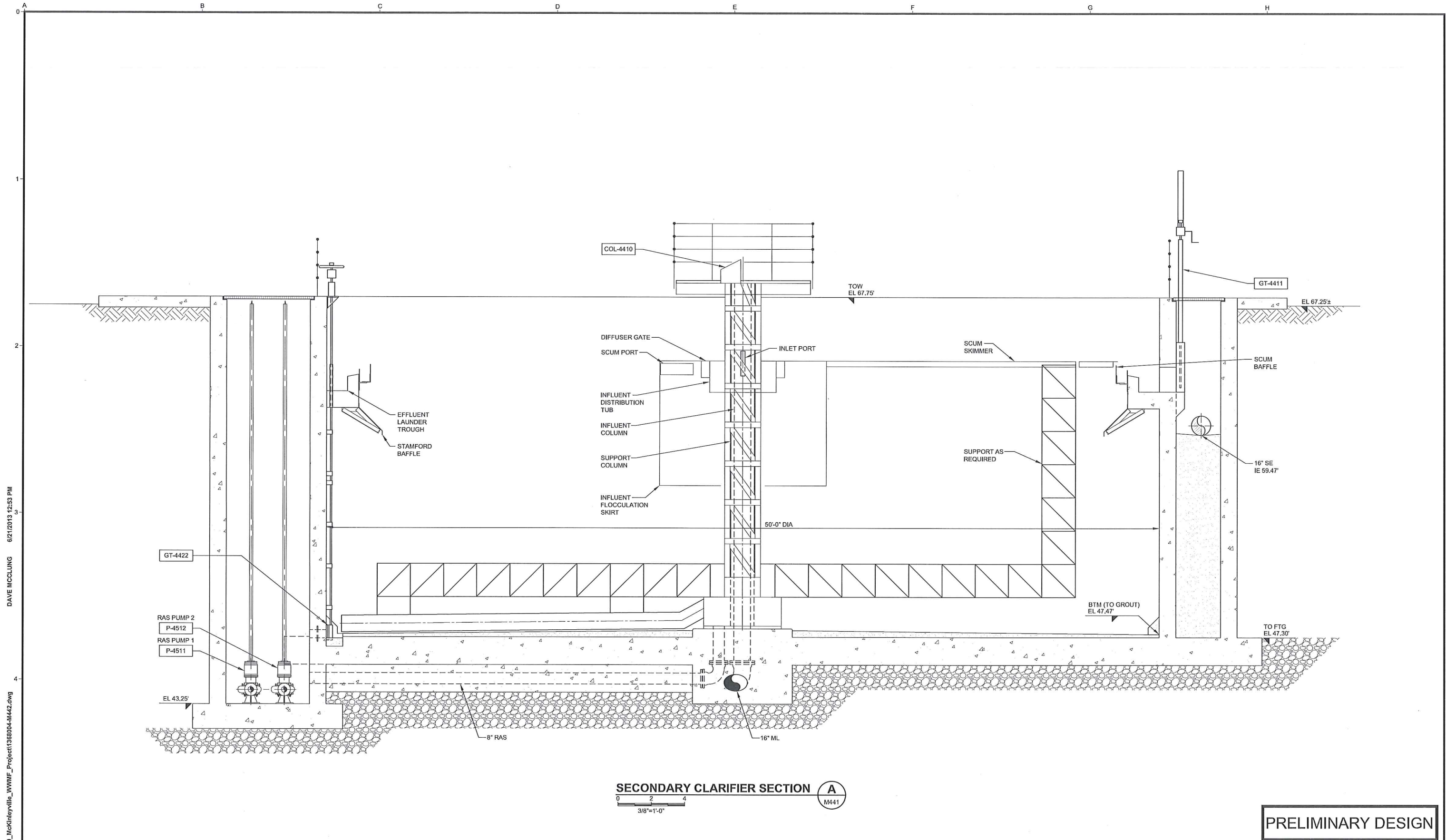


SECONDARY CLARIFIERS PLAN 1  
3/16"=1'-0"

PRELIMINARY DESIGN

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						DRAWN GAS			JOB NO. 1368004.00	
						CHECKED -			DATE JUNE 2013	
										SHEET OF
										M441
		NO.	REVISION	DATE		BY			Kennedy/Jenks Consultants SANTA ROSA, CALIFORNIA	



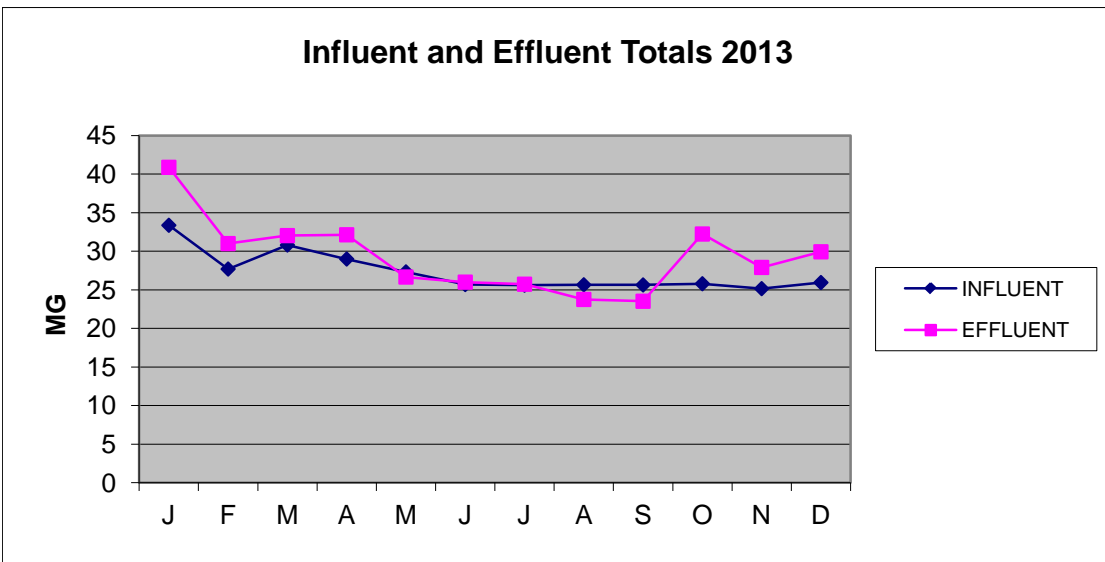


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	WMH	1368004-M442								
	DRAWN	WASTEWATER MANAGEMENT FACILITY IMPROVEMENTS	JOB NO.							
	GAS		1368004.00							
	CHECKED	Kennedy/Jenks Consultants SANTA ROSA, CALIFORNIA	DATE							
-	JUNE 2013									
									SHEET OF	
										M442
					</					

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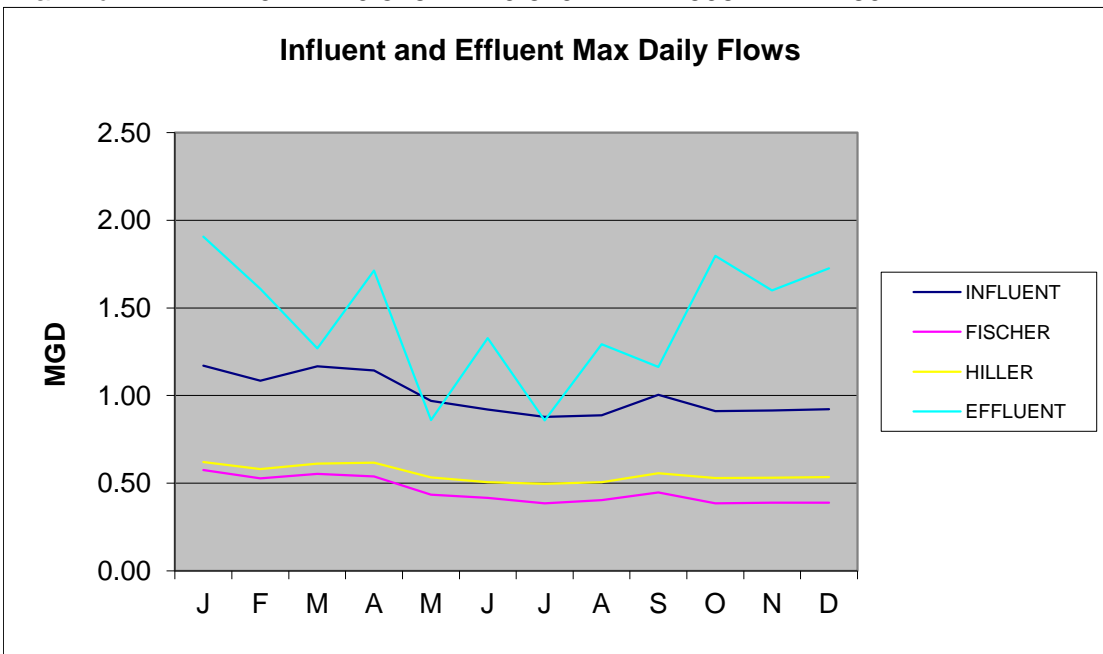
McKinleyville Community Services District  
Wastewater Management Facility  
Influent and Effluent Flows in MGD                      2013

DATE	INFLUENT	FISCHER	HILLER	EFFLUENT	AVERAGE GPM
J	33.372	16.469	18.076	40.882	984
F	27.702	12.795	14.907	30.999	829
M	30.813	14.126	16.687	32.033	767
A	28.998	13.449	15.549	32.139	828
M	27.332	12.355	14.977	26.664	790
J	25.689	11.358	14.331	26.001	822
J	25.609	10.811	13.987	25.732	855
A	25.658	11.213	14.445	23.760	800
S	25.639	11.313	14.326	23.526	773
O	25.796	10.941	14.855	32.238	1005
N	25.160	10.631	14.529	27.907	849
D	25.950	10.874	15.076	29.934	893
Total	327.718	146.335	181.745	351.815	
Average	27.310	12.195	15.145	29.318	850
Maximum	33.372	16.469	18.076	40.882	1005
Minimum	25.160	10.631	13.987	23.526	767



McKinleyville Community Services District  
Wastewater Management Facility  
Influent and Effluent Max Daily Flows in MGD  
2013

DATE	INFLUENT	FISCHER	HILLER	EFFLUENT	MAX GPM
J	1.170	0.576	0.620	1.906	1339
F	1.085	0.527	0.581	1.608	1135
M	1.166	0.554	0.612	1.270	892
A	1.143	0.539	0.618	1.713	1298
M	0.969	0.435	0.534	0.860	1121
J	0.921	0.416	0.506	1.328	1199
J	0.878	0.386	0.496	0.858	1308
A	0.888	0.404	0.506	1.293	1334
S	1.004	0.448	0.556	1.164	1348
O	0.911	0.386	0.529	1.797	1602
N	0.915	0.389	0.531	1.599	1395
D	0.922	0.389	0.535	1.725	1478
Maximum	1.170	0.576	0.620	1.906	1602









## MARCH 2013

**M-004**

RIVER DILUTION

**M-005**

**M-006**

**M-007**

DATE	INFLUENT MGD	EFFLUENT MGD	EFFLUENT MAXIMUM GPM	PERK PONDS MGD	IRRIGATE MGD	RIVER MGD	RIVER DILUTION 100:1	MAXIMUM G.P.M. DISCHARGE FOR 100:1	RIVER FLOW IN CFS	RIVER FLOW IN GPS
------	-----------------	-----------------	----------------------------	----------------------	-----------------	--------------	----------------------------	---	-------------------------	-------------------------

1	0.940	1.077	754			1.077	473	3568	795	5947
2	0.994	1.079	756			1.079	385	2909	648	4848
3	1.041	1.082	759			1.082	364	2760	615	4601
4	0.960	1.084	761			1.084	344	2621	584	4369
5	0.965	1.080	759			1.080	325	2464	549	4107
6	1.166	1.063	765			1.063	763	5835	1300	9725
7	1.052	1.059	750			1.059	1424	10683	2380	17805
8	1.014	1.060	748			1.060	1008	7541	1680	12568
9	1.041	1.059	754			1.059	816	6149	1370	10249
10	1.073	1.058	750			1.058	700	5252	1170	8753
11	1.011	0.653	744			0.653	670	4982	1110	8304
12	0.993	0.001	418			0.001	1289	5386	1200	8977
13	0.984	0.664	768			0.664	660	5072	1130	8454
14	0.980	1.085	764			1.085	605	4623	1030	7705
15	0.923	1.083	768			1.083	547	4201	936	7002
16	0.985	1.194	880			1.194	428	3770	840	6284
17	1.035	1.264	887			1.264	390	3456	770	5760
18	0.971	1.270	891			1.270	355	3160	704	5267
19	0.932	1.267	886			1.267	331	2931	653	4885
20	0.998	1.262	886			1.262	336	2980	664	4967
21	0.967	1.162	892			1.162	548	4893	1090	8154
22	0.954	1.017	719			1.017	501	3600	802	6000
23	0.993	1.023	726			1.023	492	3568	795	5947
24	1.052	1.022	725			1.022	458	3322	740	5536
25	0.989	1.020	723			1.020	433	3133	698	5222
26	0.967	1.014	717			1.014	426	3057	681	5095
27	0.976	1.005	710			1.005	434	3084	687	5139
28	0.949	0.997	704			0.997	389	2738	610	4563
29	0.938	1.048	799			1.048	325	2599	579	4331
30	0.968	1.142	801			1.142	313	2509	559	4182
31	1.002	1.139	799			1.139	306	2442	544	4070

TOTAL	30.813	32.033		0.000	0.000	32.033				
AVERAGE	0.994	1.033	767	0.000	0.000	1.033	543	4042	900	6736
MAXIMUM	1.166	1.270	892	0.000	0.000	1.270	1424	10683	2380	17805
MINIMUM	0.923	0.001	418	0.000	0.000	0.001	306	2442	544	4070
DAYS	31	31		0	0	31				

DAYS WITH NO DISCHARGE TO THE MAD RIVER = 0

April 2013

**M-006**

RIVER DILUTION

	M-INF	M-001		M-003	M-007	M-002				
DATE	INFLUENT	EFFLUENT	EFFLUENT	PERK	IRRIGATE	RIVER	RIVER	MAXIMUM	RIVER	RIVER
	MGD	MGD	MAXIMUM	PONDS	MGD	MGD	DILUTION	G.P.M.	FLOW IN	FLOW IN
			GPM	MGD			100:1	DISCHARGE	CFS	GPS
								FOR 100:1		

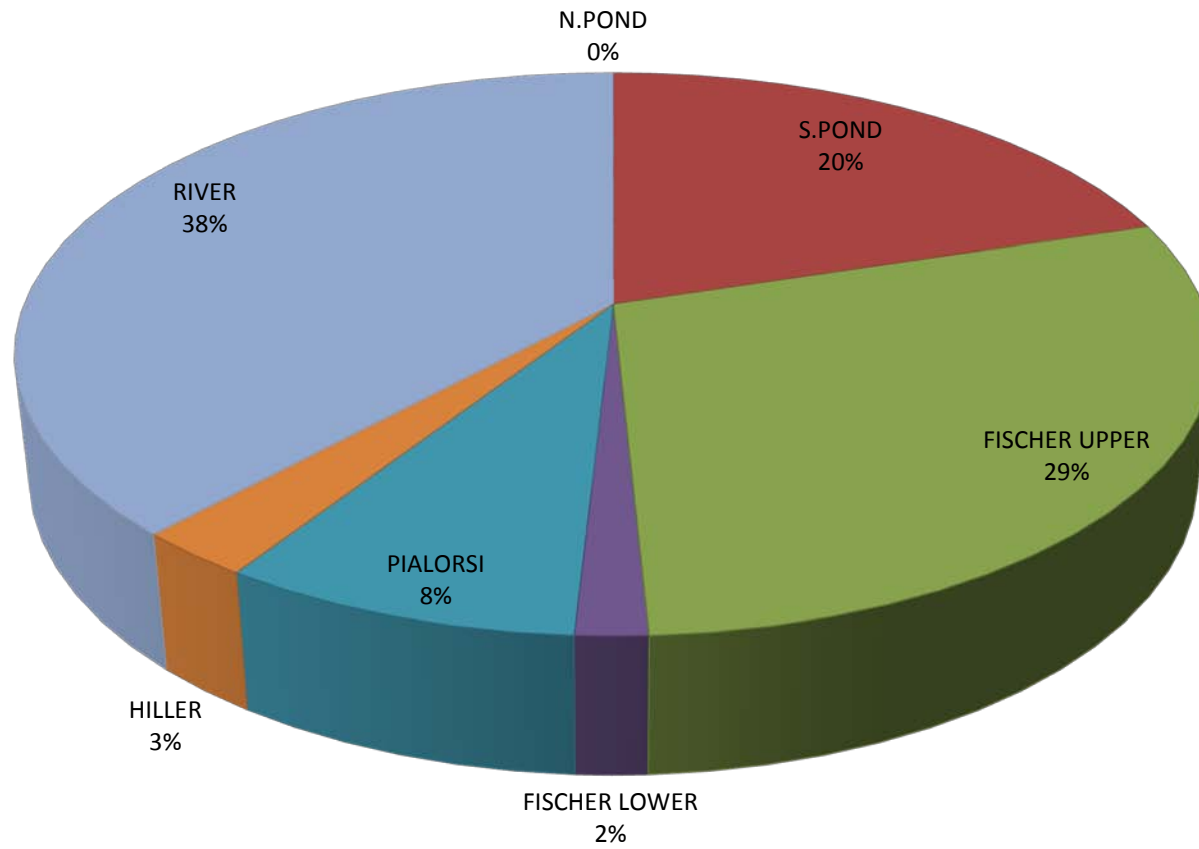
1	0.954	1.095	800			1.095	402	3214	716	5356
2	0.919	1.138	803			1.138	375	3007	670	5012
3	0.908	1.139	798			1.139	323	2576	574	4294
4	0.968	1.136	798			1.136	334	2666	594	4444
5	0.982	1.122	786			1.122	1034	8124	1810	13541
6	1.016	1.562	1298			1.562	546	7092	1580	11820
7	1.143	1.713	1298			1.713	564	7316	1630	12194
8	1.108	0.921	1114			0.921	1414	15755	3510	26258
9	1.037	0.000	0			0.000		10414	2320	17356
10	1.022	0.673	771			0.673	1030	7945	1770	13241
11	0.995	1.068	763			1.068	859	6553	1460	10922
12	0.978	1.050	741			1.050	763	5656	1260	9426
13	0.996	1.324	1060			1.324	462	4893	1090	8154
14	1.047	1.277	1058			1.277	403	4264	950	7107
15	0.976	1.138	871			1.138	447	3892	867	6486
16	0.951	1.135	807			1.135	457	3685	821	6142
17	0.955	1.135	805			1.135	370	2980	664	4967
18	0.934	1.130	798			1.130	343	2738	610	4563
19	0.907	1.123	788			1.123	333	2621	584	4369
20	0.958	1.122	789			1.122	318	2509	559	4182
21	1.010	1.123	791			1.123	292	2312	515	3853
22	0.934	1.124	832			1.124	242	2011	448	3351
23	0.914	1.112	784			1.112	235	1845	411	3075
24	0.916	1.106	782			1.106	216	1688	376	2813
25	0.912	1.114	853			1.114	184	1571	350	2618
26	0.892	1.097	769			1.097	182	1400	312	2334
27	0.897	1.098	773			1.098	172	1329	296	2214
28	0.964	0.759	770			0.759	154	1189	265	1982
29	0.916	0.533	721		0.533	0.000	153	1100	245	1833
30	0.889	1.072	815		1.072	0.000	129	1050	234	1751
31						0.000		0		0
TOTAL	28.998	32.139		0.000	1.605	30.534				
AVERAGE	0.967	1.071	828	0.000	0.803	0.985	439	3981	916	6634
MAXIMUM	1.143	1.713	1298	0.000	1.072	1.713	1414	15755	3510	26258
MINIMUM	0.889	0.000	0	0.000	0.533	0.000	129	0	234	0
DAYS	30	30		0	2	27				

DAYS WITH NO DISCHARGE TO THE MAD RIVER = 4

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
EFFLUENT DISCHARGE DISPOSAL TOTALS 2013

Discharge Monitoring DATE	<b>M-INF</b> INFLUENT MGD	<b>M-001</b> EFFLUENT MGD	<b>002</b> <b>M-003</b> N.POND MGD	<b>002</b> <b>M-003</b> S.POND MGD	<b>004</b> <b>M-005</b> FISCHER MGD UPPER	<b>003</b> <b>M-004</b> FISCHER MGD LOWER	<b>006</b> <b>M-007</b> PIALORSI MGD	<b>005</b> <b>M-006</b> HILLER MGD	IRRGATE TOTAL MGD	<b>001</b> <b>M-002</b> RIVER MGD
JANUARY	33.4	40.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.9
FEBRUARY	27.7	31.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
MARCH	30.8	32.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.0
APRIL	29.0	32.1	0.0	0.0	1.6	0.0	0.0	0.0	1.6	30.5
MAY	27.3	26.7	0.0	9.4	12.3	0.0	3.7	1.3	17.3	0.0
JUNE	25.7	26.0	0.0	8.2	10.4	1.0	4.0	2.4	17.8	0.0
JULY	25.6	25.7	0.0	7.2	10.5	0.6	5.1	2.8	19.0	0.0
AUGUST	25.7	23.8	0.0	6.7	11.1	1.0	4.6	0.3	17.1	0.0
SEPTEMBER	25.6	23.5	0.0	9.2	9.1	1.0	4.1	0.2	14.4	0.0
OCTOBER	25.8	32.2	0.0	8.0	20.3	0.7	3.3	0.0	24.2	0.0
NOVEMBER	25.2	27.9	0.0	9.6	13.1	0.8	4.4	0.0	18.3	0.0
DECEMBER	26.0	29.9	0.0	12.8	13.9	0.7	0.0	2.5	17.1	0.0
Totals	327.7	351.8	0.0	71.2	102.2	5.9	29.1	9.5	146.7	134.4

## Effluent Distribution



# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

JANUARY 2013

Discharge Monitoring	M-INF	M-001		002 M-003	002 M-003	004 M-005	003 M-004	006 M-007	005 M-006		001 M-002	
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
	1	1.164	1.904	1337							0.000	1.904
	2	1.115	1.906	1339							0.000	1.906
	3	1.112	1.540	1327							0.000	1.540
	4	1.082	1.268	887							0.000	1.268
	5	1.109	1.267	886							0.000	1.267
	6	1.150	1.263	885							0.000	1.263
	7	1.075	1.253	880							0.000	1.253
	8	1.046	1.248	874							0.000	1.248
	9	1.113	1.237	871							0.000	1.237
	10	1.147	1.389	1088							0.000	1.389
	11	1.125	0.764	1090							0.000	0.764
	12	1.144	1.089	1209							0.000	1.089
	13	1.170	1.727	1220							0.000	1.727
	14	1.081	1.722	1212							0.000	1.722
	15	1.053	1.710	1205							0.000	1.710
	16	1.054	1.381	1182							0.000	1.381
	17	1.050	1.097	770							0.000	1.097
	18	1.025	1.091	768							0.000	1.091
	19	1.055	1.096	770							0.000	1.096
	20	1.057	1.092	768							0.000	1.092
	21	1.069	1.088	764							0.000	1.088
	22	1.034	1.085	760							0.000	1.085
	23	1.053	1.079	757							0.000	1.079
	24	1.051	1.070	751							0.000	1.070
	25	1.146	1.072	1169							0.000	1.072
	26	1.114	1.390	1187							0.000	1.390
	27	1.068	1.691	1185							0.000	1.691
	28	1.018	1.695	1188							0.000	1.695
	29	0.988	1.578	731							0.000	1.578
	30	0.950	1.045	727							0.000	1.045
	31	0.954	1.045	732							0.000	1.045
TOTAL	33.372	40.882		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	40.882
AVERAGE	1.077	1.319	984	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.319
MAXIMUM	1.170	1.906	1339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.906
MINIMUM	0.950	0.764	727	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.764
DAYS	31	31		0	0	0	0	0	0	0	0	31
DAYS WITH NO DISCHARGE = 0												



# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

February 2013

Discharge Monitoring	M-INF	M-001		002 M-003	002 M-003	004 M-005	003 M-004	006 M-007	005 M-006		001 M-002	
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
	1	1.050	1.100	823							0.000	1.100
	2	1.000	1.125	823							0.000	1.125
	3	1.054	1.180	825							0.000	1.180
	4	1.007	1.179	826							0.000	1.179
	5	0.987	0.702	826							0.000	0.702
	6	0.991	0.000	0							0.000	0.000
	7	1.009	0.654	991							0.000	0.654
	8	0.998	0.995	859							0.000	0.995
	9	1.060	1.390	1082							0.000	1.390
	10	1.085	1.568	1105							0.000	1.568
	11	1.007	1.597	1123							0.000	1.597
	12	0.987	1.608	1135							0.000	1.608
	13	0.968	1.478	1125							0.000	1.478
	14	0.951	1.205	938							0.000	1.205
	15	0.945	1.089	766							0.000	1.089
	16	0.978	1.087	763							0.000	1.087
	17	0.986	1.093	770							0.000	1.093
	18	0.978	1.092	768							0.000	1.092
	19	0.977	1.098	783							0.000	1.098
	20	0.949	1.091	776							0.000	1.091
	21	0.946	1.088	766							0.000	1.088
	22	0.933	1.085	766							0.000	1.085
	23	0.978	1.081	765							0.000	1.081
	24	1.051	1.085	770							0.000	1.085
	25	0.976	1.083	759							0.000	1.083
	26	0.939	1.086	769							0.000	1.086
	27	0.947	1.087	771							0.000	1.087
	28	0.965	1.073	752							0.000	1.073
TOTAL	27.702	30.999		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.999
AVERAGE	0.989	1.107	829	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.107
MAXIMUM	1.085	1.608	1135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.608
MINIMUM	0.933	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DAYS	28	27		0	0	0	0	0	0	0	0	27
DAYS WITH NO DISCHARGE = 1												

# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

# March 2013

Discharge Monitoring				002	002	004	003	006	005			001
	M-INF	M-001		M-003	M-003	M-005	M-004	M-007	M-006			M-002
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
1	0.940	1.077	754								0.000	1.077
2	0.994	1.079	756								0.000	1.079
3	1.041	1.082	759								0.000	1.082
4	0.960	1.084	761								0.000	1.084
5	0.965	1.080	759								0.000	1.080
6	1.166	1.063	765								0.000	1.063
7	1.052	1.059	750								0.000	1.059
8	1.014	1.060	748								0.000	1.060
9	1.041	1.059	754								0.000	1.059
10	1.073	1.058	750								0.000	1.058
11	1.011	0.653	744								0.000	0.653
12	0.993	0.001	418								0.000	0.001
13	0.984	0.664	768								0.000	0.664
14	0.980	1.085	764								0.000	1.085
15	0.923	1.083	768								0.000	1.083
16	0.985	1.194	880								0.000	1.194
17	1.035	1.264	887								0.000	1.264
18	0.971	1.270	891								0.000	1.270
19	0.932	1.267	886								0.000	1.267
20	0.998	1.262	886								0.000	1.262
21	0.967	1.162	892								0.000	1.162
22	0.954	1.017	719								0.000	1.017
23	0.993	1.023	726								0.000	1.023
24	1.052	1.022	725								0.000	1.022
25	0.989	1.020	723								0.000	1.020
26	0.967	1.014	717								0.000	1.014
27	0.976	1.005	710								0.000	1.005
28	0.949	0.997	704								0.000	0.997
29	0.938	1.048	799								0.000	1.048
30	0.968	1.142	801								0.000	1.142
31	1.002	1.139	799								0.000	1.139
TOTAL	30.813	32.033		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	32.033
AVERAGE	0.994	1.033	767	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.033
MAXIMUM	1.166	1.270	892	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.270
MINIMUM	0.923	0.001	418	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
DAYS	31	31		0	0	0	0	0	0	0	0	31
DAYS WITH NO DISCHARGE = 0												

# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

April 2013

Discharge Monitoring	M-INF			M-001			002 M-003			002 M-003			004 M-005			003 M-004			006 M-007			005 M-006			001 M-002		
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD															
	1	0.954	1.095	800							0.000	1.095															
	2	0.919	1.138	803							0.000	1.138															
	3	0.908	1.139	798							0.000	1.139															
	4	0.968	1.136	798							0.000	1.136															
	5	0.982	1.122	786							0.000	1.122															
	6	1.016	1.562	1298							0.000	1.562															
	7	1.143	1.713	1298							0.000	1.713															
	8	1.108	0.921	1114							0.000	0.921															
	9	1.037	0.000	0							0.000	0.000															
	10	1.022	0.673	771							0.000	0.673															
	11	0.995	1.068	763							0.000	1.068															
	12	0.978	1.050	741							0.000	1.050															
	13	0.996	1.324	1060							0.000	1.324															
	14	1.047	1.277	1058							0.000	1.277															
	15	0.976	1.138	871							0.000	1.138															
	16	0.951	1.135	807							0.000	1.135															
	17	0.955	1.135	805							0.000	1.135															
	18	0.934	1.130	798							0.000	1.130															
	19	0.907	1.123	788							0.000	1.123															
	20	0.958	1.122	789							0.000	1.122															
	21	1.010	1.123	791							0.000	1.123															
	22	0.934	1.124	832							0.000	1.124															
	23	0.914	1.112	784							0.000	1.112															
	24	0.916	1.106	782							0.000	1.106															
	25	0.912	1.114	853							0.000	1.114															
	26	0.892	1.097	769							0.000	1.097															
	27	0.897	1.098	773							0.000	1.098															
	28	0.964	0.759	770							0.000	0.759															
	29	0.916	0.533	721			0.533				0.533	0.000															
	30	0.889	1.072	815			1.072				1.072	0.000															
	31										0.000	0.000															
TOTAL	28.998	32.139		0.000	0.000	1.605	0.000	0.000	0.000	1.605	30.534																
AVERAGE	0.967	1.071	828	0.000	0.000	0.000	0.000	0.000	0.000	0.052	0.985																
MAXIMUM	1.143	1.713	1298	0.000	0.000	1.072	0.000	0.000	0.000	1.072	1.713																
MINIMUM	0.889	0.000	0	0.000	0.000	0.533	0.000	0.000	0.000	0.000	0.000																
DAYS	30	29		0	0	2	0	0	0	2	27																
DAYS WITH NO DISCHARGE = 1																											

# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

May 2013

Discharge Monitoring				002	002	004	003	006	005		001
	M-INF	M-001		M-003	M-003	M-005	M-004	M-007	M-006		M-002
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD
1	0.884	0.895	881			0.895				0.895	0.000
2	0.875	0.900	902			0.900				0.900	0.000
3	0.865	0.900	819		0.421	0.479				0.479	0.000
4	0.880	0.766	540		0.766					0.000	0.000
5	0.946	0.763	541		0.763					0.000	0.000
6	0.897	0.369	777		0.276	0.093				0.093	0.000
7	0.880	0.000	0							0.000	0.000
8	0.881	0.640	1121			0.495		0.145		0.640	0.000
9	0.891	1.076	936			0.812		0.264		1.076	0.000
10	0.848	1.027	891		0.448	0.427		0.152		0.579	0.000
11	0.879	0.811	574		0.811					0.000	0.000
12	0.924	0.797	566		0.797					0.000	0.000
13	0.901	0.868	900		0.272	0.452		0.144		0.596	0.000
14	0.882	1.058	900			0.792		0.266		1.058	0.000
15	0.872	1.046	903			0.768		0.278		1.046	0.000
16	0.871	1.036	897			0.700		0.274	0.062	1.036	0.000
17	0.857	1.007	894		0.416	0.333		0.166	0.092	0.591	0.000
18	0.888	0.770	544		0.770					0.000	0.000
19	0.938	0.771	545		0.771					0.000	0.000
20	0.882	0.833	1110		0.294	0.310		0.148	0.081	0.539	0.000
21	0.884	1.038	981			0.611		0.273	0.154	1.038	0.000
22	0.872	1.171	995			0.740		0.276	0.155	1.171	0.000
23	0.876	1.165	989			0.726		0.281	0.158	1.165	0.000
24	0.834	1.002	977		0.312	0.440		0.162	0.088	0.690	0.000
25	0.822	0.576	408		0.576					0.000	0.000
26	0.856	0.569	401		0.569					0.000	0.000
27	0.969	0.570	399		0.570					0.000	0.000
28	0.885	0.857	1016		0.209	0.405		0.157	0.086	0.648	0.000
29	0.889	1.212	1023			0.771		0.284	0.157	1.212	0.000
30	0.863	1.211	1025			0.775		0.280	0.156	1.211	0.000
31	0.841	0.960	1023		0.330	0.383		0.160	0.087	0.630	0.000
TOTAL	27.332	26.664		0.000	9.371	12.307	0.000	3.710	1.276	17.293	0.000
AVERAGE	0.882	0.860	790	0.000	0.521	0.586	0.000	0.218	0.116	0.558	0.000
MAXIMUM	0.969	1.212	1121	0.000	0.811	0.900	0.000	0.284	0.158	1.212	0.000
MINIMUM	0.822	0.000	0	0.000	0.209	0.093	0.000	0.144	0.062	0.000	0.000
DAYS	31	30		0	18	21	0	17	11	21	0
DAYS WITH NO DISCHARGE = 1											



# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

June 2013

Discharge Monitoring	M-INF	M-001	002 M-003		002 M-003	004 M-005	003 M-004	006 M-007	005 M-006	001 M-002	
DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
1	0.859	0.612	430		0.612					0.000	0.000
2	0.921	0.612	429		0.612					0.000	0.000
3	0.870	0.858	973		0.225	0.290	0.099	0.158	0.086	0.633	0.000
4	0.857	1.117	976			0.524	0.155	0.284	0.154	1.117	0.000
5	0.846	1.076	932			0.574	0.064	0.286	0.152	1.076	0.000
6	0.854	1.049	896			0.469	0.142	0.282	0.156	1.049	0.000
7	0.831	0.913	1094		0.288	0.363	0.019	0.157	0.086	0.625	0.000
8	0.842	0.524	369		0.524					0.000	0.000
9	0.921	0.520	365		0.520					0.000	0.000
10	0.876	0.363	961		0.203	0.097	0.018	0.029	0.016	0.160	0.000
11	0.847	0.000	0 Shut down to wash CCB							0.000	0.000
12	0.857	0.641	1114			0.372	0.023	0.159	0.087	0.641	0.000
13	0.857	1.136	954			0.689		0.288	0.159	1.136	0.000
14	0.847	0.970	1067		0.308	0.181	0.225	0.166	0.090	0.662	0.000
15	0.860	0.567	410		0.567					0.000	0.000
16	0.876	0.555	389		0.555					0.000	0.000
17	0.841	0.919	1114		0.198	0.442	0.029	0.162	0.088	0.721	0.000
18	0.833	1.328	1199			0.854	0.022	0.289	0.163	1.328	0.000
19	0.852	1.314	1177			0.829	0.027	0.290	0.168	1.314	0.000
20	0.833	1.318	1172			0.837	0.024	0.291	0.166	1.318	0.000
21	0.830	1.101	1160		0.320	0.504	0.016	0.167	0.094	0.781	0.000
22	0.824	0.608	426		0.608					0.000	0.000
23	0.877	0.610	429		0.610					0.000	0.000
24	0.864	0.915	1124		0.225	0.447	0.036	0.115	0.092	0.690	0.000
25	0.840	1.276	1142			0.825	0.037	0.245	0.169	1.276	0.000
26	0.855	1.256	1060			0.810	0.035	0.244	0.167	1.256	0.000
27	0.861	1.269	1136			0.824	0.034	0.246	0.165	1.269	0.000
28	0.841	1.106	1133		0.402	0.450	0.032	0.130	0.092	0.704	0.000
29	0.841	0.735	516		0.735					0.000	0.000
30	0.876	0.733	518		0.733					0.000	0.000
31										0.000	0.000
TOTAL	25.689	26.001		0.000	8.245	10.381	1.037	3.988	2.350	17.756	0.000
AVERAGE	0.856	0.867	822	0.000	0.434	0.546	0.058	0.210	0.124	0.573	0.000
MAXIMUM	0.921	1.328	1199	0.000	0.735	0.854	0.225	0.291	0.169	1.328	0.000
MINIMUM	0.824	0.000	0	0.000	0.000	0.097	0.016	0.029	0.016	0.000	0.000
DAYS	30	29		0	18	19	18	19	19	19	0
DAYS WITH NO DISCHARGE = 1											

# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

July 2013

Discharge Monitoring				002	002	004	003	006	005			001
	M-INF	M-001		M-003	M-003	M-005	M-004	M-007	M-006			M-002
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
1	0.854	0.485	1174			0.401	0.045		0.039	0.485	0.000	
2	0.856	0.587	1119			0.452		0.135		0.587	0.000	
3	0.837	1.356	1222			0.681	0.237	0.284	0.154	1.356	0.000	
4	0.821	1.456	1118			0.851	0.144	0.299	0.162	1.456	0.000	
5	0.805	1.022	1186		0.262	0.504		0.166	0.090	0.760	0.000	
6	0.814	0.495	349		0.495					0.000	0.000	
7	0.878	0.498	352		0.498					0.000	0.000	
8	0.876	0.901	1202		0.190	0.378	0.132	0.115	0.086	0.711	0.000	
9	0.837	1.344	1308			0.906		0.284	0.154	1.344	0.000	
10	0.842	1.293	1228			0.860		0.280	0.153	1.293	0.000	
11	0.833	1.284	1247			0.803	0.040	0.286	0.155	1.284	0.000	
12	0.833	0.905	1054		0.662			0.158	0.085	0.243	0.000	
13	0.821	0.690	918		0.690					0.000	0.000	
14	0.860	1.033	912		1.033					0.000	0.000	
15	0.845	0.966	1060		0.266	0.462		0.150	0.088	0.700	0.000	
16	0.814	1.189	1080			0.738		0.290	0.161	1.189	0.000	
17	0.818	1.039	884			0.584		0.292	0.163	1.039	0.000	
18	0.814	0.809	865			0.363		0.289	0.157	0.809	0.000	
19	0.791	0.544	471		0.281	0.019		0.159	0.085	0.263	0.000	
20	0.791	0.514	360		0.514					0.000	0.000	
21	0.831	0.512	358		0.512					0.000	0.000	
22	0.817	0.601	771		0.193	0.171		0.155	0.082	0.408	0.000	
23	0.819	0.799	755			0.348		0.291	0.160	0.799	0.000	
24	0.811	0.650	745			0.198		0.288	0.164	0.650	0.000	
25	0.801	0.785	724			0.340		0.287	0.158	0.785	0.000	
26	0.802	0.734	665		0.307	0.196		0.152	0.079	0.427	0.000	
27	0.796	0.559	393		0.559					0.000	0.000	
28	0.843	0.564	397		0.564					0.000	0.000	
29	0.825	0.767	887		0.214	0.309		0.158	0.086	0.553	0.000	
30	0.808	0.998	945			0.548		0.285	0.165	0.998	0.000	
31	0.816	0.838	768			0.409		0.287	0.142	0.838	0.000	
TOTAL	25.609	25.732		0.000	7.240	10.521	0.598	5.090	2.768	18.977	0.000	
AVERAGE	0.826	0.858	855	0.000	0.453	0.478	0.120	0.231	0.126	0.612	0.000	
MAXIMUM	0.878	1.456	1308	0.000	1.033	0.906	0.237	0.299	0.165	1.456	0.000	
MINIMUM	0.791	0.495	349	0.000	0.190	0.019	0.040	0.115	0.039	0.000	0.000	
DAYS	31	31		0	16	22	5	22	22	23	0	
DAYS WITH NO DISCHARGE = 0												

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
EFFLUENT DISCHARGE DISPOSAL

August 2013

Discharge Monitoring				002	002	004	003	006	005			001
	M-INF	M-001		M-003	M-003	M-005	M-004	M-007	M-006			M-002
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
1	0.819	0.839	903			0.402		0.281	0.156	0.839	0.000	
2	0.799	0.747	741		0.268	0.233		0.158	0.088	0.479	0.000	
3	0.785	0.491	343		0.491					0.000	0.000	
4	0.848	0.488	342		0.488					0.000	0.000	
5	0.841	0.191	382		0.191					0.000	0.000	
6	0.818	0.000	0	Washed CCB						0.000	0.000	
7	0.819	0.529	992			0.284		0.160	0.085	0.529	0.000	
8	0.809	0.810	858			0.486	0.036	0.288		0.810	0.000	
9	0.804	0.647	846		0.226	0.233	0.030	0.158		0.421	0.000	
10	0.807	0.448	314		0.448					0.000	0.000	
11	0.847	0.445	313		0.445					0.000	0.000	
12	0.829	0.868	1158		0.169	0.448	0.096	0.155		0.699	0.000	
13	0.819	1.219	1235			0.817	0.118	0.284		1.219	0.000	
14	0.821	1.110	1130			0.774	0.045	0.291		1.110	0.000	
15	0.807	1.106	1106			0.790	0.030	0.286		1.106	0.000	
16	0.807	0.848	1140		0.239	0.416	0.031	0.162		0.609	0.000	
17	0.796	0.434	306		0.434					0.000	0.000	
18	0.852	0.434	306		0.434					0.000	0.000	
19	0.823	0.834	1084		0.161	0.421	0.093	0.159		0.673	0.000	
20	0.802	1.293	1207			0.898	0.117	0.278		1.293	0.000	
21	0.810	1.254	1334			0.937	0.032	0.285		1.254	0.000	
22	0.803	0.959	1012			0.641	0.029	0.289		0.959	0.000	
23	0.801	0.875	1099		0.340	0.339	0.031	0.165		0.535	0.000	
24	0.824	0.620	436		0.620					0.000	0.000	
25	0.887	0.615	431		0.615					0.000	0.000	
26	0.888	0.797	1010		0.272	0.303	0.079	0.143		0.525	0.000	
27	0.861	1.082	1120			0.637	0.151	0.294		1.082	0.000	
28	0.865	1.190	1134			0.843	0.047	0.300		1.190	0.000	
29	0.868	1.144	1114			0.806	0.043	0.295		1.144	0.000	
30	0.850	0.886	1006		0.307	0.384	0.031	0.164		0.579	0.000	
31	0.849	0.557	394		0.557					0.000	0.000	
TOTAL	25.658	23.760		0.000	6.705	11.092	1.039	4.595	0.329	17.055	0.000	
AVERAGE	0.828	0.766	800	0.000	0.353	0.555	0.061	0.230	0.110	0.550	0.000	
MAXIMUM	0.888	1.293	1334	0.000	0.620	0.937	0.151	0.300	0.156	1.293	0.000	
MINIMUM	0.785	0.000	0	0.000	0.000	0.233	0.029	0.143	0.085	0.000	0.000	
DAYS	31	30		0	18	20	17	20	3	20	0	
DAYS WITH NO DISCHARGE = 1												

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
EFFLUENT DISCHARGE DISPOSAL

SEPTEMBER 2013

Discharge Monitoring				002	002	004	003	006	005		001
	M-INF	M-001		M-003	M-003	M-005	M-004	M-007	M-006		M-002
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD
1	0.889	0.548	387		0.548					0.000	0.000
2	0.935	0.541	383		0.541					0.000	0.000
3	0.875	0.868	1348		0.207	0.419	0.084	0.158		0.661	0.000
4	0.872	0.968	966			0.584	0.096	0.288		0.968	0.000
5	0.884	0.815	766			0.485	0.036	0.294		0.815	0.000
6	0.888	0.806	690		0.400	0.244		0.162		0.406	0.000
7	0.923	0.727	513		0.727					0.000	0.000
8	0.935	0.720	505		0.720					0.000	0.000
9	0.843	0.341	652		0.273	0.068				0.068	0.000
10	0.800	0.000	0	Washed CCB						0.000	0.000
11	0.809	0.677	1049			0.433	0.079	0.165		0.677	0.000
12	0.799	1.145	1068			0.773	0.082	0.290		1.145	0.000
13	0.787	0.917	864		0.452	0.305		0.160		0.465	0.000
14	0.839	0.890	628		0.890					0.000	0.000
15	0.890	0.881	625		0.881					0.000	0.000
16	0.832	0.954	1012		0.338	0.399	0.058	0.159		0.616	0.000
17	0.805	1.164	1028			0.630	0.085	0.289	0.160	1.164	0.000
18	0.816	1.066	920			0.702		0.295	0.069	1.066	0.000
19	0.813	1.037	1105			0.705	0.039	0.293		1.037	0.000
20	0.818	0.844	988		0.337	0.301	0.040	0.166		0.507	0.000
21	0.841	0.613	432		0.613					0.000	0.000
22	0.886	0.614	432		0.614					0.000	0.000
23	0.829	0.808	998		0.233	0.323	0.088	0.164		0.575	0.000
24	0.805	1.014	1061			0.629	0.089	0.296		1.014	0.000
25	0.824	1.025	1038			0.697	0.038	0.290		1.025	0.000
26	0.821	1.033	1029			0.704	0.037	0.292		1.033	0.000
27	0.812	0.789	1014		0.258	0.332	0.035	0.164		0.531	0.000
28	0.822	0.469	331		0.469					0.000	0.000
29	1.004	0.471	332		0.471					0.000	0.000
30	0.943	0.781	1036		0.189	0.369	0.075	0.148		0.592	0.000
31										0.000	0.000
TOTAL	25.639	23.526		0.000	9.161	9.102	0.961	4.073	0.229	14.365	0.000
AVERAGE	0.855	0.784	773	0.000	0.458	0.479	0.064	0.226	0.115	0.463	0.000
MAXIMUM	1.004	1.164	1348	0.000	0.890	0.773	0.096	0.296	0.160	1.164	0.000
MINIMUM	0.787	0.000	0	0.000	0.000	0.068	0.035	0.148	0.069	0.000	0.000
DAYS	30	29		0	19	19	15	18	2	19	0
DAYS WITH NO DISCHARGE = 1											



McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
EFFLUENT DISCHARGE DISPOSAL

October 2013

Discharge Monitoring				002	002	004	003	006	005			001
	M-INF	M-001		M-003	M-003	M-005	M-004	M-007	M-006			M-002
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
1	0.842	1.282	1244			0.962	0.036	0.284		1.282	0.000	
2	0.830	1.588	1527			1.267	0.035	0.286		1.588	0.000	
3	0.827	1.435	1409			1.150		0.285		1.435	0.000	
4	0.796	0.943	1078		0.378	0.383	0.024	0.158		0.565	0.000	
5	0.828	0.686	484		0.686					0.000	0.000	
6	0.881	0.686	483		0.686					0.000	0.000	
7	0.831	0.256	488		0.256					0.000	0.000	
8	0.818	0.000	0							0.000	0.000	
9	0.813	0.955	1505			0.769	0.031	0.155		0.955	0.000	
10	0.812	1.696	1510			1.367	0.039	0.290		1.696	0.000	
11	0.797	1.226	1485		0.264	0.775	0.025	0.162		0.962	0.000	
12	0.848	0.478	339		0.478					0.000	0.000	
13	0.884	0.479	340		0.479					0.000	0.000	
14	0.842	0.487	345		0.487					0.000	0.000	
15	0.817	1.126	1506		0.186	0.683	0.092	0.165		0.940	0.000	
16	0.814	1.797	1602			1.372	0.125	0.300		1.797	0.000	
17	0.814	1.740	1570			1.620		0.120		1.740	0.000	
18	0.802	1.278	1347		0.384	0.894				0.894	0.000	
19	0.838	0.694	492		0.694					0.000	0.000	
20	0.903	0.692	489		0.692					0.000	0.000	
21	0.824	1.158	1421		0.264	0.701	0.032	0.161		0.894	0.000	
22	0.832	1.742	1545			1.345	0.095	0.302		1.742	0.000	
23	0.828	1.766	1594			1.342	0.120	0.304		1.766	0.000	
24	0.826	1.379	1392			1.199		0.180		1.379	0.000	
25	0.793	0.818	718		0.394	0.424				0.424	0.000	
26	0.854	0.717	505		0.717					0.000	0.000	
27	0.911	0.711	501		0.711					0.000	0.000	
28	0.836	0.804	995		0.286	0.518				0.518	0.000	
29	0.839	1.181	999			1.181				1.181	0.000	
30	0.823	1.152	990			1.152				1.152	0.000	
31	0.793	1.286	1251			1.161		0.125		1.286	0.000	
TOTAL	25.796	32.238		0.000	8.042	20.265	0.654	3.277	0.000	24.196	0.000	
AVERAGE	0.832	1.040	1005	0.000	0.473	1.013	0.059	0.218	0.000	0.781	0.000	
MAXIMUM	0.911	1.797	1602	0.000	0.717	1.620	0.125	0.304	0.000	1.797	0.000	
MINIMUM	0.793	0.000	0	0.000	0.186	0.383	0.024	0.120	0.000	0.000	0.000	
DAYS	31	30		0	17	20	11	15	0	20	0	
DAYS WITH NO DISCHARGE = 1												

# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

NOVEMBER 2013

Discharge Monitoring	M-INF	M-001		002 M-003	002 M-003	004 M-005	003 M-004	006 M-007	005 M-006		001 M-002	
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
1	0.801	1.078	1261		0.235	0.540	0.145	0.158		0.843	0.000	
2	0.860	0.424	301		0.424					0.000	0.000	
3	0.915	0.430	310		0.430					0.000	0.000	
4	0.866	1.177	1332		0.167	0.637	0.157	0.216		1.010	0.000	
5	0.802	1.509	1349			0.988	0.175	0.346		1.509	0.000	
6	0.819	1.420	1343			0.975	0.101	0.344		1.420	0.000	
7	0.822	1.149	1078			0.703	0.099	0.347		1.149	0.000	
8	0.806	0.859	1033		0.324	0.347	0.029	0.159		0.535	0.000	
9	0.843	0.579	416		0.579					0.000	0.000	
10	0.870	0.578	410		0.578					0.000	0.000	
11	0.888	0.574	409		0.574					0.000	0.000	
12	0.836	0.216	466		0.190	0.026				0.026	0.000	
13	0.827	0.645	1395			0.445	0.070	0.130		0.645	0.000	
14	0.809	1.207	940			0.786	0.070	0.351		1.207	0.000	
15	0.800	0.858	790		0.332	0.359		0.167		0.526	0.000	
16	0.863	0.626	442		0.626					0.000	0.000	
17	0.909	0.636	453		0.636					0.000	0.000	
18	0.834	1.113	1021		0.245	0.652		0.216		0.868	0.000	
19	0.837	1.503	1188			1.150		0.353		1.503	0.000	
20	0.847	1.508	1190			1.148		0.360		1.508	0.000	
21	0.834	1.527	1205			1.169		0.358		1.527	0.000	
22	0.807	1.051	1033		0.340	0.545		0.166		0.711	0.000	
23	0.861	0.641	453		0.641					0.000	0.000	
24	0.873	0.644	455		0.644					0.000	0.000	
25	0.834	1.254	1268		0.246	0.788		0.220		1.008	0.000	
26	0.817	1.599	1257			1.237		0.362		1.599	0.000	
27	0.838	1.101	1243		0.368	0.571		0.162		0.733	0.000	
28	0.849	0.668	472		0.668					0.000	0.000	
29	0.782	0.667	471		0.667					0.000	0.000	
30	0.811	0.666	471		0.666					0.000	0.000	
31										0.000	0.000	
TOTAL	25.160	27.907		0.000	9.580	13.066	0.846	4.415	0.000	18.327	0.000	
AVERAGE	0.839	0.930	849	0.000	0.456	0.726	0.106	0.260	0.000	0.591	0.000	
MAXIMUM	0.915	1.599	1395	0.000	0.668	1.237	0.175	0.362	0.000	1.599	0.000	
MINIMUM	0.782	0.216	301	0.000	0.167	0.026	0.029	0.130	0.000	0.000	0.000	
DAYS	30	30		0	21	18	8	17	0	18	0	
DAYS WITH NO DISCHARGE = 0												

# McKINLEYVILLE COMMUNITY SERVICES DISTRICT WASTEWATER MANAGEMENT FACILITY EFFLUENT DISCHARGE DISPOSAL

December 2013

Discharge Monitoring	M-INF	M-001		002 M-003	002 M-003	004 M-005	003 M-004	006 M-007	005 M-006		001 M-002	
	DATE	INFLUENT MGD	EFFLUENT MGD	MAXIMUM GPM	N.POND MGD	S.POND MGD	FISCHER MGD UPPER	FISCHER MGD LOWER	PIALORSI MGD	HILLER MGD	IRRGATE TOTAL MGD	RIVER MGD
1	0.885	0.665	469		0.665					0.000	0.000	
2	0.843	1.030	917		0.267	0.641			0.122	0.763	0.000	
3	0.824	1.314	925			1.108			0.206	1.314	0.000	
4	0.842	1.121	929			0.916			0.205	1.121	0.000	
5	0.826	0.958	679			0.748			0.210	0.958	0.000	
6	0.831	0.881	699		0.452	0.334			0.095	0.429	0.000	
7	0.879	0.835	591		0.835					0.000	0.000	
8	0.922	0.828	590		0.828					0.000	0.000	
9	0.865	0.321	596		0.150	0.171				0.171	0.000	
10	0.801	0.000	0							0.000	0.000	
11	0.837	0.786	1349			0.591	0.076		0.119	0.786	0.000	
12	0.816	1.160	1101			0.884	0.070		0.206	1.160	0.000	
13	0.799	0.884	1069		0.334	0.433	0.027		0.090	0.550	0.000	
14	0.858	0.632	445		0.632					0.000	0.000	
15	0.908	0.632	445		0.632					0.000	0.000	
16	0.838	1.210	1470		0.240	0.788	0.060		0.122	0.970	0.000	
17	0.825	1.725	1476			1.445	0.078		0.202	1.725	0.000	
18	0.833	1.725	1478			1.434	0.080		0.211	1.725	0.000	
19	0.845	1.577	1338			1.295	0.075		0.207	1.577	0.000	
20	0.816	1.014	1292		0.510	0.388	0.024		0.092	0.504	0.000	
21	0.854	0.932	654		0.932					0.000	0.000	
22	0.866	0.928	652		0.928					0.000	0.000	
23	0.828	1.135	1360		0.877	0.176	0.048		0.034	0.258	0.000	
24	0.841	0.946	669		0.946					0.000	0.000	
25	0.792	0.952	674		0.952					0.000	0.000	
26	0.817	1.340	1356		0.364	0.771	0.079		0.126	0.976	0.000	
27	0.784	1.049	1297		0.351	0.582	0.024		0.092	0.698	0.000	
28	0.808	0.636	450		0.636					0.000	0.000	
29	0.835	0.636	454		0.636					0.000	0.000	
30	0.819	1.232	1370		0.238	0.782	0.084		0.128	0.994	0.000	
31	0.813	0.850	887		0.415	0.367			0.068	0.435	0.000	
TOTAL	25.950	29.934		0.000	12.820	13.854	0.725	0.000	2.535	17.114	0.000	
AVERAGE	0.837	0.966	893	0.000	0.583	0.729	0.060	0.000	0.141	0.552	0.000	
MAXIMUM	0.922	1.725	1478	0.000	0.952	1.445	0.084	0.000	0.211	1.725	0.000	
MINIMUM	0.784	0.000	0	0.000	0.150	0.171	0.024	0.000	0.034	0.000	0.000	
DAYS	31	30		0	22	19	12	0	18	19	0	
DAYS WITH NO DISCHARGE = 1												

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: JANUARY

YEAR: 2013

DATE	INFLUENT FLOW	EFFLUENT FLOW	EFFLUENT MAXIMUM	RIVER	INFLUENT MONITORING		(C° )		B.O.D.	NFR	EFFLUENT MONITORING				3X5
	M.G.D.	M.G.D.	GPM	CFS	B.O.D.	N.F.R.	pH	TEMP	mg/L	mg/L	AMMONIA	CL <sub>2</sub> RES.	RIVER CL <sub>2</sub> RES	SETTLABLE SOLIDS	TOTAL COLIFORM
1	1.164	1.904	1337	1850			6.9	8.6				2.0	0.00		
2	1.115	1.906	1339	1600			7.0	8.9			28	2.1	0.00		<1.8
3	1.112	1.540	1327	1460			7.1	10.3			28	2.0	0.00		
4	1.082	1.268	887	1310	360	270	7.2	8.5	24	18	26	2.4	0.00	<0.1	
5	1.109	1.267	886	1220			7.2	8.1				2	0.00		
6	1.150	1.263	885	1200			7.3	8.4				2	0.00		
7	1.075	1.253	880	1140			7.4	8.7			20	1.7	0.00		<1.8
8	1.046	1.248	874	1150			7.3	9.2			30	1.9	0.00		
9	1.113	1.237	871	1220			7.3	9.6			28	1.8	0.00		
10	1.147	1.389	1088	1870			7.4	9.4			22	1.8	0.00		
11	1.125	0.764	1090	1850	180	210	7.6	9.5	29	21	22	1.5	0.00	<0.1	
12	1.144	1.089	1209	1670			7.5	8.5				1.4	0.00		
13	1.170	1.727	1220	1460			7.3	8.8				1.7	0.00		
14	1.081	1.722	1212	1310			7.4	7.7			28	1.7	0.00		<1.8
15	1.053	1.710	1205	1170			7.4	8.1			30	1.8	0.00		
16	1.054	1.381	1182	1090			7.3	8.7			28	1.9	0.00		
17	1.050	1.097	770	1150			7.5	8.1			28	1.9	0.00		
18	1.025	1.091	768	1270	250	530	7.4	7.4	30	18	30	1.8	0.00	<0.1	
19	1.055	1.096	770	1270			7.4	8.6				1.3	0.00		
20	1.057	1.092	768	1220			7.2	7.7				1.3	0.00		
21	1.069	1.088	764	1170			6.9	7.9			30	1.6	0.00		<1.8
22	1.034	1.085	760	1150			7.3	8.3			30	1.5	0.00		
23	1.053	1.079	757	1150			7.4	10.1			30	1.4	0.00		
24	1.051	1.070	751	1120			7.2	9.3			30	1.1	0.00		
25	1.146	1.072	1169	3560	200	160	7.6	9.7	32	21	30	1.5	0.00	<0.1	
26	1.114	1.390	1187	2360			7.2	10.3				0.4	0.00		
27	1.068	1.691	1185	2290			7.2	10				0.2	0.00		
28	1.018	1.695	1188	1950			6.9	9.6			30	0.1	0.00		<1.8
29	0.988	1.578	731	1740			6.8	9.6			28	1.1	0.00		
30	0.950	1.045	727	1520			6.9	10.6			26	4.5	0.00		
31	0.954	1.045	732	1350			7.0	10.4			28	3.4	0.00		

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
1/7/2013	180	26.0	ND	190

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	DNQ
Bromoform	ND
Chlorodibromomethane	ND
Chloroform	0.8

SPILLS:						
None to report						
BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal	
29	249	87	20	169	92	

30 DAY AVERAGE

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout 1/8/2013	100%
C. dubia 1/8/2013	95%

Rainbow Trout  
C. dubia

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnnow	2
C. Dubia	1.3
Algae	1
	TUc

Total Coliform
Monthly
MEDIAN
<1.8
Daily
Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS:

 Indicates Permit Exceedance

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: FEBRUARY

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		(C° )		B.O.D.	NFR	EFFLUENT MONITORING				3X5 TOTAL COLIFORM
					B.O.D. mg/L	N.F.R. mg/L	pH	TEMP	mg/L	mg/L	AMMONIA	CL <sub>2</sub> RES.	RIVER CL <sub>2</sub> RES	SETTLABLE SOLIDS	
1	1.050	1.100	823	1210	230	440	6.7	9.5	31	14	30	2.0	0.00	<0.1	
2	1.000	1.125	823	1110			7.0	10.8				0.6	0.00		
3	1.054	1.180	825	1020			7.3	10.4				0.1	0.00		
4	1.007	1.179	826	957			7.3	10.5			12	0.7	0.00		
5	0.987	0.702	826	915			7.1	11.1			24	1.5	0.00		<1.8
6	0.991	0.000	0	908			Shut down for CCB washdown								
7	1.009	0.654	991	950			7.0	11.0			28	0.8	0.00		
8	0.998	0.995	859	1190	280	250	7.0	9.8	24	11	20	2.8	0.00	<0.1	
9	1.060	1.390	1082	1020			7.3	9.7				2.5	0.00		
10	1.085	1.568	1105	922			7.3	9.7				2.9	0.00		
11	1.007	1.597	1123	860			7.4	9.9			24	2.7	0.00		
12	0.987	1.608	1135	834			7	9.4			20	1.3	0.00		
13	0.968	1.478	1125	789			7.3	10.1			18	0.3	0.00		<1.8
14	0.951	1.205	938	758			6.9	11.2			24	1.7	0.00		
15	0.945	1.089	766	659	320	500	7.0	10.9	30	16	28	3.1	0.00	<0.1	
16	0.978	1.087	763	642			7.3	10.4				2.0	0.00		
17	0.986	1.093	770	626			7.0	10.1				1.1	0.00		
18	0.978	1.092	768	605			7.0	10.1				1.3	0.00		
19	0.977	1.098	783	675			7.1	10.3			24	3.2	0.00		<1.8
20	0.949	1.091	776	795			7.6	9.7			26	1.3	0.00		
21	0.946	1.088	766	687			7.3	9.9			26	1.6	0.00		
22	0.933	1.085	766	648	290	300	7.1	10.0	26	16	28	1.2	0.00	<0.1	
23	0.978	1.081	765	704			7.0	9.7				0.9	0.00		
24	1.051	1.085	770	734			7.0	10.1				0.8	0.00		
25	0.976	1.083	759	670			7.2	10.0			16	1.8	0.00		<1.8
26	0.939	1.086	769	631			7	10			28	1.8	0.00		
27	0.947	1.087	771	599			7	10			26	1.5	0.00		
28	0.965	1.073	752	615			7.1	11.5			28	1.0	0.00		
29															
30															
31															

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
2/1/2013	260	32.0	ND	170

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	N/A
Bromoform	N/A
Chlorodibromomethane	N/A
Chloroform	N/A

SPILLS:						
None to report						
	BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal
30 DAY AVERAGE	28	248	90	14	127	96

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout 2/5/2013	100%
C. dubia 2/5/2013	95%

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly
MEDIAN
<1.8
Daily
Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS: 2/6/2013 Shut down to wash CCB

Indicates Permit Exceedance



McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: MARCH

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		EFFLUENT MONITORING									3X5 TOTAL COLIFORM
					B.O.D. mg/L	N.F.R. mg/L	pH	(C°) TEMP	B.O.D. mg/L	NFR mg/L	AMMONIA	CL <sub>2</sub> RES.	RIVER CL <sub>2</sub> RES	SETTLABLE SOLIDS		
1	0.940	1.077	754	795	290	380	6.8	11.4	27	33	30	0.2	0.00	<0.1		
2	0.994	1.079	756	648			6.8	12.0				0.1	0.00			
3	1.041	1.082	759	615			6.7	11.5				0.3	0.00			
4	0.960	1.084	761	584			6.8	10.9			30	1.3	0.00			<1.8
5	0.965	1.080	759	549			7	10.7			38	2	0.00			
6	1.166	1.063	765	1300			6.9	10.4			34	4.6	0.00			
7	1.052	1.059	750	2380			7.0	10.5			34	4.4	0.00			
8	1.014	1.060	748	1680	170	92	7.2	10.6	25	24	32	3.5	0.00	<0.1		
9	1.041	1.059	754	1370			7.1	10.7				2.8	0.00			
10	1.073	1.058	750	1170			7.7	10.7				1.7	0.00			
11	1.011	0.653	744	1110			7.0	10.7			36	1.0	0.00			<1.8
12	0.993	0.001	418	1200									0.00			
13	0.984	0.664	768	1130			7	11			34	0.2	0.00			
14	0.980	1.085	764	1030			6.8	12.3			28	2.2	0.00			
15	0.923	1.083	768	936	250	240	6.9	11.4	27	13	34	1.8	0.00	<0.1		
16	0.985	1.194	880	840			7.1	11.9				1.2	0.00			
17	1.035	1.264	887	770			6.8	12.5				0.5	0.00			
18	0.971	1.270	891	704			6.8	11.3			36	1.3	0.00			<1.8
19	0.932	1.267	886	653			6.8	11.8			36	1.4	0.00			
20	0.998	1.262	886	664			6.8	12.2			36	1.4	0.00			
21	0.967	1.162	892	1090			6.9	11.9			36	0.8	0.00			
22	0.954	1.017	719	802	210	140	6.8	11.3	18	17	36	2.9	0.00	<0.1		
23	0.993	1.023	726	795			6.9	11.4				3.8	0.00			
24	1.052	1.022	725	740			6.9	11.5				2.9	0.00			
25	0.989	1.020	723	698			7.0	11.0			36	2.4	0.00			<1.8
26	0.967	1.014	717	681			7	11.7			34	2.3	0.00			
27	0.976	1.005	710	687			7	12.6			32	1.4	0.00			
28	0.949	0.997	704	610			7.0	13.1			30	1.1	0.00			
29	0.938	1.048	799	579	260	230	6.9	13.0	20	16	32	1.9	0.00	<0.1		
30	0.968	1.142	801	559			6.8	13.1				0.8	0.00			
31	1.002	1.139	799	544			6.7	13.4				1.0	0.00			

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
3/6/2013	200	31.0	ND	190

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	N/A
Bromoform	N/A
Chlorodibromomethane	N/A
Chloroform	N/A

SPILLS:						
None to report						
	BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal
30 DAY AVERAGE	23	207	90	21	182	88

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout 3/5/2013	100%
C. dubia 3/5/2013	0%

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly
MEDIAN
<1.8
Daily
Maximum
<1.8

SIGNATURE: \_\_\_\_\_

       Indicates Permit Exceedance

REMARKS: Accelerated testing was performed with the following results: 0%, 85%, 100%.

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: April

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		(C° )		B.O.D.	NFR	EFFLUENT MONITORING				3X5 TOTAL COLIFORM
					B.O.D. mg/L	N.F.R. mg/L	pH	TEMP	mg/L	mg/L	AMMONIA	CL <sub>2</sub> RES.	RIVER CL <sub>2</sub> RES	SETTLABLE SOLIDS	
1	0.954	1.095	800	716			6.7	13.5			36	1.7	0.00		2
2	0.919	1.138	803	670			6.9	13.3			36	1.4	0.00		
3	0.908	1.139	798	574			6.8	13.9			36	1.4	0.00		
4	0.968	1.136	798	594			6.7	14.0			34	1.8	0.00		
5	0.982	1.122	786	1810	170	130	6.8	14.3	17	14	38	1.6	0.00	<0.1	
6	1.016	1.562	1298	1580			6.8	14.9				1.6	0.00		
7	1.143	1.713	1298	1630			7.0	14.6				0.2	0.00		
8	1.108	0.921	1114	3510			6.9	13.9			36	4.0	0.00		<1.8
9	1.037	0.000	0	2320	Shut down to wash Chlorine Contact Chamber										
10	1.022	0.673	771	1770			6.9	14.0			34	0.7	0.00		
11	0.995	1.068	763	1460			6.9	14.0			36	2.6	0.00		
12	0.978	1.050	741	1260	210	170	7	13.7	24	19	32	1.5	0.00	<0.1	
13	0.996	1.324	1060	1090			7.3	13.8				0.9	0.00		
14	1.047	1.277	1058	950			6.9	14.2				0.3	0.00		
15	0.976	1.138	871	867			6.7	13.9			34	1.0	0.00		2
16	0.951	1.135	807	821			6.8	14.0			34	2.1	0.00		
17	0.955	1.135	805	664			6.8	14.0			30	2.2	0.00		
18	0.934	1.130	798	610			6.7	13.7			32	1.3	0.00		
19	0.907	1.123	788	584	240	210	6.8	13.9	22	24	30	0.8	0.00	<0.1	
20	0.958	1.122	789	559			6.6	14				0.2	0.00		
21	1.010	1.123	791	515			6.7	14.4				0.2	0.00		
22	0.934	1.124	832	448			6.7	14.4			36	0.2	0.00		<1.8
23	0.914	1.112	784	411			6.7	14.8			34	1.6	0.00		
24	0.916	1.106	782	376			6.6	15.2			36	1.1	0.00		
25	0.912	1.114	853	350			6.7	14.8			36	0.8	0.00		
26	0.892	1.097	769	312	260	370	6.7	15.2	19	21	32	1	0.00	<0.1	
27	0.897	1.098	773	296			6.7	15.1				1.3	0.00		
28	0.964	0.759	770	265			6.7	15.0				1.3	0.00		
29	0.916	0.533	721	245			6.8	15.3			30	5.1	out of river		
30	0.889	1.072	815	234			6.6	14.6			34	3.8			<1.8
31															

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
4/5/2013	230	28.0	ND	210

Semi-Annual Tests	Value in ug/l
Bis phthalate	DNQ
alph-BHC	ND
4,4' -DDT	ND
carbon tetrachloride	ND

Quarterly Tests	Value in ug/l
Dichlorobromomethane	ND
Bromoform	ND
Chlorodibromomethane	DNQ
Chloroform	1.55

SPILLS:						
None to report						
BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal	
21	187	91	20	179	90	

30 DAY AVERAGE

ACUTE TOXICITY	
DATE	% Survival
4/3/2013	100%
4/3/2013	100%

Rainbow Trout  
C. dubia

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly MEDIAN
<1.8
Daily Maximum
2

SIGNATURE: \_\_\_\_\_

REMARKS: Stopped river discharge on 4/28/2013. Started land application on 4/29/2013.

Indicates Permit Exceedance

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: May

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		(C° )		B.O.D.	NFR	EFFLUENT MONITORING		RIVER	SETTLABLE	3X5
					B.O.D. mg/L	N.F.R. mg/L	pH	TEMP	mg/L	mg/L	AMMONIA	CL <sub>2</sub> RES.	CL <sub>2</sub> RES	SOLIDS	TOTAL COLIFORM
1	0.884	0.895	881	195			6.8	14.6			34	1.9			
2	0.875	0.900	902	168			6.7	15.3			34	1.7			
3	0.865	0.900	819	149	300	170	6.6	15.1	21	14	30	1.2		<0.1	
4	0.880	0.766	540	141											
5	0.946	0.763	541	130											
6	0.897	0.369	777	121			6.7	15.6			30	2.2			2
7	0.880	0.000	0	139	Shut down to clean Chlorine Contact Basin										
8	0.881	0.640	1121	134			6.5	15.8			30	6.9			
9	0.891	1.076	936	106			6.7	16.0			32	0.2			
10	0.848	1.027	891	91	300	270	6.6	15.0	22	17	36	1.2		<0.1	
11	0.879	0.811	574	94											
12	0.924	0.797	566	181											
13	0.901	0.868	900	132			6.6	16.9			30	3.6			<1.8
14	0.882	1.058	900	91			6.7	16.3			34	3.9			
15	0.872	1.046	903	87			6.6	16.4			34	4.7			
16	0.871	1.036	897	83			6.6	17.0			30	2.3			
17	0.857	1.007	894	87	300	220	6.6	17.2	17	19	24	3.2		<0.1	
18	0.888	0.770	544	84											
19	0.938	0.771	545	82											
20	0.882	0.833	1110	73			6.6	16.5			28	8			<1.8
21	0.884	1.038	981	72			6.9	16.6			32	2.3			
22	0.872	1.171	995	86			6.8	16.0			22	2.1			
23	0.876	1.165	989	80			6.7	16.1			28	2.2			
24	0.834	1.002	977	74	230	190	6.8	16.2	29	26	28	3.0		<0.1	
25	0.822	0.576	408	70											
26	0.856	0.569	401	75											
27	0.969	0.570	399	94											
28	0.885	0.857	1016	193			6.9	16.7			30	6.8			<1.8
29	0.889	1.212	1023	218			6.7	17.0			30	0.8			
30	0.863	1.211	1025	226			6.6	17.3			28	2.0			
31	0.841	0.960	1023	163	240	200	6.8	16.9	31	18	32	3.2		<0.1	

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
5/6/2013	260	32.0	ND	230

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	N/A
Bromoform	N/A
Chlorodibromomethane	N/A
Chloroform	N/A

SPILLS:						
None to report						
BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal	
24	196	91	19	154	91	

30 DAY AVERAGE

ACUTE TOXICITY	
DATE	% Survival
	N/A
	N/A
	N/A

Rainbow Trout  
C. dubia

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly
MEDIAN
<1.8
Daily
Maximum
2

SIGNATURE: \_\_\_\_\_

REMARKS:

  Indicates Permit Exceedance

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: JUNE

YEAR: 2013

DATE	INFLUENT FLOW	EFFLUENT FLOW	EFFLUENT MAXIMUM	RIVER CFS	INFLUENT MONITORING		EFFLUENT MONITORING									3X5 TOTAL
	M.G.D.	M.G.D.	GPM		B.O.D. mg/L	N.F.R. mg/L	pH	(C° ) TEMP	B.O.D. mg/L	NFR mg/L	AMMONIA	CL₂ RES.	RIVER CL₂ RES	SETTLEABLE SOLIDS	COLIFORM	
1	0.859	0.612	430													
2	0.921	0.612	429													
3	0.870	0.858	973				6.8	16.6			28	7.5			<1.8	
4	0.857	1.117	976				6.5	16.7			26	2.6				
5	0.846	1.076	932				6.8	17.2			30	3.2				
6	0.854	1.049	896				7.0	17.2			28	4.3				
7	0.831	0.913	1094		260	180	7.0	17.0	24	15	30	2.9		<0.1		
8	0.842	0.524	369													
9	0.921	0.520	365													
10	0.876	0.363	961				6.8	17.0			26	4.5			<1.8	
11	0.847	0.000	0													
12	0.857	0.641	1114				7.0	16.6			28	5.6				
13	0.857	1.136	954				6.9	16.7			24	4				
14	0.847	0.970	1067		280	250	7.0	16.7	20	10	24	1.8		<0.1		
15	0.860	0.567	410													
16	0.876	0.555	389													
17	0.841	0.919	1114				6.7	17.3			28	4.0			<1.8	
18	0.833	1.328	1199				6.9	17.8			28	1.1				
19	0.852	1.314	1177				6.6	18.0			28	1.3				
20	0.833	1.318	1172				7.0	18.1			30	1.1				
21	0.830	1.101	1160		200	290	6.8	18.1	38	16	28	1.8		<0.1		
22	0.824	0.608	426													
23	0.877	0.610	429													
24	0.864	0.915	1124				6.9	18.3			26	6.0			<1.8	
25	0.840	1.276	1142				6.9	18.5			26	0.5				
26	0.855	1.256	1060				6.8	18.8			30	1.1				
27	0.861	1.269	1136				6.8	19.1			24	0.7				
28	0.841	1.106	1133		440	440	6.8	19.3	47	16	20	0.9		<0.1		
29	0.841	0.735	516													
30	0.876	0.733	518													
31																

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
6/6/2013	300	15.0	ND	240

Semi-Annual Tests	Value in ug/l
Bis phthalate	
alph-BHC	
4,4' -DDT	
carbon tetrachloride	

Quarterly Tests	Value in ug/l
Dichlorobromomethane	N/A
Bromoform	N/A
Chlorodibromomethane	N/A
Chloroform	N/A

SPILLS:						
None to report						
	BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal
30 DAY AVERAGE	32	289	88	14	127	95

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout	N/A
C. dubia	N/A
	N/A

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly MEDIAN
<1.8
Daily Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS:

 Indicates Permit Exceedance

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: July

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		EFFLUENT MONITORING									3X5 TOTAL COLIFORM
					B.O.D. mg/L	N.F.R. mg/L	pH	(C° ) TEMP	B.O.D. mg/L	NFR mg/L	AMMONIA	CL <sub>2</sub> RES.	RIVER CL <sub>2</sub> RES	SETTLABLE SOLIDS		
1	0.854	0.485	1174				6.8	19.4			28	6.9				<1.8
2	0.856	0.587	1119				6.7	20.3			28	0.6				
3	0.837	1.356	1222		270	210	6.7	19.3	38	16	24	2.4				
4	0.821	1.456	1118				6.7	19.2			24	2.1				
5	0.805	1.022	1186				6.8	19.4			34	3.1		<0.1		
6	0.814	0.495	349													
7	0.878	0.498	352													
8	0.876	0.901	1202				6.8	18.6			26	5.6				<1.8
9	0.837	1.344	1308				6.8	18.6			34	0.1				
10	0.842	1.293	1228				6.7	18.3			32	1.1				
11	0.833	1.284	1247				6.8	18.4			32	1.7				
12	0.833	0.905	1054		250	200	6.8	18.5	44	15	32	2.9		<0.1		
13	0.821	0.690	918													
14	0.860	1.033	912													
15	0.845	0.966	1060				6.8	17.9			32	2.7				<1.8
16	0.814	1.189	1080				6.8	18.1			32	0.6				
17	0.818	1.039	884				6.8	18.1			34	0.7				
18	0.814	0.809	865				6.8	17.9			30	0.6				
19	0.791	0.544	471		250	160	6.7	18.1	27	16	34	5.3		<0.1		
20	0.791	0.514	360													
21	0.831	0.512	358													
22	0.817	0.601	771				6.9	17.7			32	1.6				<1.8
23	0.819	0.799	755				7.0	17.4			30	0.7				
24	0.811	0.650	745				6.8	17.1			30	2.4				
25	0.801	0.785	724				6.8	17.3			30	1.6				
26	0.802	0.734	665		290	210	6.9	17.4	28	14	32	3.2		<0.1		
27	0.796	0.559	393													
28	0.843	0.564	397													
29	0.825	0.767	887				6.9	17.2			34	3.3				<1.8
30	0.808	0.998	945				6.7	17.1			34	3.0				
31	0.816	0.838	768				6.8	17.2			34	2.3				

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
7/31/2013	410	22.0	ND	280

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	DNQ
Bromoform	ND
Chlorodibromomethane	DNQ
Chloroform	3.97

SPILLS:						
None to report						
BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal	
33	209	87	15	91	92	

30 DAY AVERAGE

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout	N/A
C. dubia	N/A
	N/A

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly MEDIAN
<1.8
Daily Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS:

 Indicates Permit Exceedance



McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: AUGUST

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		(C° )		B.O.D.	NFR	EFFLUENT MONITORING			RIVER	SETTLABLE	3X5
					B.O.D. mg/L	N.F.R. mg/L	pH	TEMP	mg/L	mg/L	AMMONIA	CL <sub>2</sub> RES.		CL <sub>2</sub> RES	SOLIDS	TOTAL COLIFORM
1	0.819	0.839	903				6.9	17.6			30	1.6				
2	0.799	0.747	741		320	160	6.8	17.6	27	16	34	3.8			<0.1	
3	0.785	0.491	343													
4	0.848	0.488	342													
5	0.841	0.191	382				6.7	17.3			34	5.8				<1.8
6	0.818	0.000	0				Washed CCB									
7	0.819	0.529	992				6.8	17.1			34	2.3				
8	0.809	0.810	858				6.6	16.8			32	7.1				
9	0.804	0.647	846		390	360	6.8	16.9	19	15	36	5.3			<0.1	
10	0.807	0.448	314													
11	0.847	0.445	313													
12	0.829	0.868	1158				6.8	17.3			36	1.4				<1.8
13	0.819	1.219	1235				6.8	17.4			36	1.3				
14	0.821	1.110	1130				6.9	17.6			28	1.3				
15	0.807	1.106	1106				6.9	18.9			30	0.1				
16	0.807	0.848	1140		380	460	6.8	18.9	19	17	36	1.1			<0.1	
17	0.796	0.434	306													
18	0.852	0.434	306													
19	0.823	0.834	1084				6.8	18.4			32	6.4				<1.8
20	0.802	1.293	1207				6.7	18.5			32	6.9				
21	0.810	1.254	1334				6.8	18.6			32	1.8				
22	0.803	0.959	1012				6.8	18.6			36	2.7				
23	0.801	0.875	1099		250	220	6.8	18.5	22	10	34	2.3			<0.1	
24	0.824	0.620	436													
25	0.887	0.615	431													
26	0.888	0.797	1010				6.8	18.2			34	4.2				<1.8
27	0.861	1.082	1120				6.8	18.7			32	2.9				
28	0.865	1.190	1134				6.9	19.2			32	1.2				
29	0.868	1.144	1114				6.8	19.6			30	0.3				
30	0.850	0.886	1006		230	220	6.8	19.6	28	21	30	0.1			<0.1	
31	0.849	0.557	394													

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
8/16/2013	330	30.0	ND	330

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	N/A
Bromoform	N/A
Chlorodibromomethane	N/A
Chloroform	N/A

SPILLS:						
None to report						
	BOD	BOD	BOD	NFR	NFR	NFR
	mg/L	LBS/DAY	% Removal	mg/L	LBS/DAY	% Removal
30 DAY AVERAGE	22	141	93	15	93	94

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout	N/A
C. dubia	N/A
	N/A

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly
MEDIAN
<1.8
Daily
Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS:

  Indicates Permit Exceedance

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: SEPTEMBER

YEAR: 2013

DATE	INFLUENT FLOW	EFFLUENT FLOW	EFFLUENT MAXIMUM	RIVER CFS	INFLUENT MONITORING		EFFLUENT MONITORING									3X5 TOTAL
	M.G.D.	M.G.D.	GPM		B.O.D. mg/L	N.F.R. mg/L	pH	(C° ) TEMP	B.O.D. mg/L	NFR mg/L	AMMONIA	CL <sub>2</sub> RES.	RIVER CL <sub>2</sub> RES	SETTLABLE SOLIDS	COLIFORM	
1	0.889	0.548	387													
2	0.935	0.541	383													
3	0.875	0.868	1348				6.7	20.2			32	2.5			<1.8	
4	0.872	0.968	966				6.7	19.8			28	2.6				
5	0.884	0.815	766				6.8	19.7			32	3.7				
6	0.888	0.806	690		250	200	6.9	19.7	18	10	34	4		<0.1		
7	0.923	0.727	513													
8	0.935	0.720	505													
9	0.843	0.341	652				6.7	19.4			34	4.4			<1.8	
10	0.800	0.000	0		Washed CCB											
11	0.809	0.677	1049				6.6	19.1			30	7.3				
12	0.799	1.145	1068				6.7	19.2			32	1.4				
13	0.787	0.917	864		200	230	6.7	19.3	14	10	32	3.7		<0.1		
14	0.839	0.890	628													
15	0.890	0.881	625													
16	0.832	0.954	1012				6.9	18.8			32	4.8			<1.8	
17	0.805	1.164	1028				6.8	18.9			28	3.9				
18	0.816	1.066	920				6.9	18.6			32	3.4				
19	0.813	1.037	1105				6.8	18.1			34	4.2				
20	0.818	0.844	988		240	240	6.8	17.8	19	12	36	5		<0.1		
21	0.841	0.613	432													
22	0.886	0.614	432													
23	0.829	0.808	998				6.9	18.3			34	5.5			<1.8	
24	0.805	1.014	1061				6.9	17.9			34	1.2				
25	0.824	1.025	1038				6.9	17.7			32	2.8				
26	0.821	1.033	1029				6.9	17.2			32	2.4				
27	0.812	0.789	1014		210	54	6.9	16.6	14	13	34	2.9		<0.1		
28	0.822	0.469	331													
29	1.004	0.471	332													
30	0.943	0.781	1036				6.8	17.3			28	3.8			<1.8	
31																

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
9/4/2013	340	27.0	ND	340

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	N/A
Bromoform	N/A
Chlorodibromomethane	N/A
Chloroform	N/A

SPILLS:						
None to report						
	BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal
30 DAY AVERAGE	16	113	93	11	78	90

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout	N/A
C. dubia	N/A
	N/A

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly
MEDIAN
<1.8
Daily
Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS:

  Indicates Permit Exceedance

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: OCTOBER

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		(C° )		B.O.D.	NFR	EFFLUENT MONITORING		RIVER	SETTLABLE	3X5
					B.O.D. mg/L	N.F.R. mg/L	pH	TEMP	mg/L	mg/L	AMMONIA	CL <sub>2</sub> RES.	CL <sub>2</sub> RES	SOLIDS	TOTAL COLIFORM
1	0.842	1.282	1244				7.0	16			34	0.6			
2	0.830	1.588	1527				6.8	16.2			34	3.7			
3	0.827	1.435	1409				6.9	16.1			30	4.1			
4	0.796	0.943	1078		220	210	7.0	16.4	18	14	30	6.6		<0.1	
5	0.828	0.686	484												
6	0.881	0.686	483												
7	0.831	0.256	488				7.0	15.6			34	6.0			<1.8
8	0.818	0.000	0				Washed CCB								
9	0.813	0.955	1505				6.9	14.6			34	1.6			
10	0.812	1.696	1510				7.1	14.7			34	5.5			
11	0.797	1.226	1485		310	290	6.9	14.7	22	17	36	6.1		<0.1	
12	0.848	0.478	339												
13	0.884	0.479	340												
14	0.842	0.487	345												
15	0.817	1.126	1506				7.0	14.2			34	9.5			<1.8
16	0.814	1.797	1602				7.0	14.0			34	6.4			
17	0.814	1.740	1570				7.0	13.4			36	1.4			
18	0.802	1.278	1347		220	280	6.8	13.4	16	11	38	2.9		<0.1	
19	0.838	0.694	492												
20	0.903	0.692	489												
21	0.824	1.158	1421				7.0	13.5			34	5.3			<1.8
22	0.832	1.742	1545				7.1	13.5			34	2.4			
23	0.828	1.766	1594				7.1	14.1			36	1.8			
24	0.826	1.379	1392				7.1	13.4			38	2.8			
25	0.793	0.818	718		220	250	6.8	13.3	14	12	36	5.8		<0.1	
26	0.854	0.717	505												
27	0.911	0.711	501												
28	0.836	0.804	995				7.0	12.7			36	4.6			<1.8
29	0.839	1.181	999				7.1	12.4			34	4.7			
30	0.823	1.152	990				7.0	12.7			32	3.4			
31	0.793	1.286	1251				7.2	12.4			32	3.7			

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
10/3/2013	340	28.0	ND	330

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	DNQ
Bromoform	ND
Chlorodibromomethane	ND
Chloroform	DNQ

SPILLS:						
None to report						
BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal	
18	158	93	14	121	95	

30 DAY AVERAGE

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout	N/A
C. dubia	N/A
	N/A

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly
MEDIAN
<1.8
Daily
Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS:

 Indicates Permit Exceedance

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: NOVEMBER

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		EFFLUENT MONITORING									3X5 TOTAL COLIFORM
					B.O.D. mg/L	N.F.R. mg/L	pH	(C°) TEMP	B.O.D. mg/L	NFR mg/L	AMMONIA	CL <sub>2</sub> RES.	RIVER CL <sub>2</sub> RES	SETTLABLE SOLIDS		
1	0.801	1.078	1261		280	240	6.9	11.9	25	12	38	3.8		<0.1		
2	0.860	0.424	301													
3	0.915	0.430	310													
4	0.866	1.177	1332				6.9	12.3			30	8.4				<1.8
5	0.802	1.509	1349				7.1	12.2			34	5.8				
6	0.819	1.420	1343				7.1	12.3			36	4.1				
7	0.822	1.149	1078				7.0	12.7			30	3.4				
8	0.806	0.859	1033		270	240	7.1	12.7	21	21	34	2.5		<0.1		
9	0.843	0.579	416													
10	0.870	0.578	410													
11	0.888	0.574	409													
12	0.836	0.216	466				7.1	13.4			36	3.2				<1.8
13	0.827	0.645	1395				6.8	13.7			30	2.9				
14	0.809	1.207	940				6.9	12.8			34	0.2				
15	0.800	0.858	790		260	170	6.9	12.2	15	15	34	8.0		<0.1		
16	0.863	0.626	442													
17	0.909	0.636	453													
18	0.834	1.113	1021				7.0	12.6			32	7.9				<1.8
19	0.837	1.503	1188				6.9	12.3			36	1.5				
20	0.847	1.508	1190				6.9	12.4			36	1.7				
21	0.834	1.527	1205				7.0	12.0			36	2.7				
22	0.807	1.051	1033		290	230	7.1	11.5	22	18	36	6.6		<0.1		
23	0.861	0.641	453													
24	0.873	0.644	455													
25	0.834	1.254	1268				6.9	10.7			32	8.2				<1.8
26	0.817	1.599	1257				7.1	10.8			30	9.9				
27	0.838	1.101	1243		330	280	7.1	10.7	29	20	34	6.1		<0.1		
28	0.849	0.668	472													
29	0.782	0.667	471													
30	0.811	0.666	471													
31																

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
11/30/2013	320	29.0	ND	320

Semi-Annual Tests	Value in ug/l
Bis phthalate	N/A
alph-BHC	N/A
4,4' -DDT	N/A
carbon tetrachloride	N/A

Quarterly Tests	Value in ug/l
Dichlorobromomethane	N/A
Bromoform	N/A
Chlorodibromomethane	N/A
Chloroform	N/A

SPILLS:						
None to report						
	BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal
30 DAY AVERAGE	22	167	92	17	127	92

ACUTE TOXICITY	
DATE	% Survival
Rainbow Trout	N/A
C. dubia	N/A
	N/A

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly
MEDIAN
<1.8
Daily
Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS:

 Indicates Permit Exceedance

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
MONITORING DATA

MONTH: DECEMBER

YEAR: 2013

DATE	INFLUENT FLOW M.G.D.	EFFLUENT FLOW M.G.D.	EFFLUENT MAXIMUM GPM	RIVER CFS	INFLUENT MONITORING		(C° )		B.O.D.	NFR	EFFLUENT MONITORING		RIVER	SETTLABLE	3X5
					B.O.D. mg/L	N.F.R. mg/L	pH	TEMP	mg/L	mg/L	AMMONIA	CL <sub>2</sub> RES.	CL <sub>2</sub> RES	SOLIDS	TOTAL COLIFORM
1	0.885	0.665	469												
2	0.843	1.030	917				6.9	11.1			30	2.8			<1.8
3	0.824	1.314	925				7.2	10.7			32	1.8			
4	0.842	1.121	929				6.9	10.1			34	1.4			
5	0.826	0.958	679				7.1	9.8			36	3.3			
6	0.831	0.881	699		290	440	7.0	9.8	20	24	24	3.9		<0.1	
7	0.879	0.835	591												
8	0.922	0.828	590												
9	0.865	0.321	596				7.0	7.4			34	7.7			<1.8
10	0.801	0.000	0				Washed CCB								
11	0.837	0.786	1349				7.0	9.0			32	9.0			
12	0.816	1.160	1101				7.2	8.3			30	7.0			
13	0.799	0.884	1069		240	240	7.0	7.7	29	26	30	6.7		<0.1	
14	0.858	0.632	445												
15	0.908	0.632	445												
16	0.838	1.210	1470				7.2	7.5			34	5.8			<1.8
17	0.825	1.725	1476				7.2	7.1			30	5.8			
18	0.833	1.725	1478				6.7	8.8			32	3.4			
19	0.845	1.577	1338				7.2	8.6			26	3.1			
20	0.816	1.014	1292		320	380	7.3	7.9	37	34	28	6.1		<0.1	
21	0.854	0.932	654												
22	0.866	0.928	652												
23	0.828	1.135	1360				7.0	9.3			30	1.2			<1.8
24	0.841	0.946	669												
25	0.792	0.952	674												
26	0.817	1.340	1356				7.0	8.6			30	0.2			
27	0.784	1.049	1297		350	290	6.9	7.8	34	36	34	3.5		<0.1	
28	0.808	0.636	450												
29	0.835	0.636	454												
30	0.819	1.232	1370				7.2	8.4			34	3.1			<1.8
31	0.813	0.850	887				7.0	8.7			32	0.8			

DATE	MONTHLY TESTS			
	TDS	AMMONIA	NITRATE	BORON
12/31/2013	280	24.0	ND	310

Semi-Annual Tests	Value in ug/l
Bis phthalate	DNQ
alph-BHC	ND
4,4' -DDT	ND
carbon tetrachloride	ND

Quarterly Tests	Value in ug/l
Dichlorobromomethane	N/A
Bromoform	N/A
Chlorodibromomethane	N/A
Chloroform	N/A

SPILLS:						
None to report						
BOD mg/L	BOD LBS/DAY	BOD % Removal	NFR mg/L	NFR LBS/DAY	NFR % Removal	
30	243	90	30	243	91	

30 DAY AVERAGE

ACUTE TOXICITY	
DATE	% Survival
	N/A
	N/A
	N/A

Rainbow Trout  
C. dubia

CHRONIC TOXICITY	
TESTED	SURVIVAL
Minnow	N/A
C. Dubia	N/A
Algae	N/A
	TUc

Total Coliform
Monthly MEDIAN
<1.8
Daily Maximum
<1.8

SIGNATURE: \_\_\_\_\_

REMARKS:

 Indicates Permit Exceedance



McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing

pH, Temperature, Ammonia, CL<sub>2</sub> Res,

Settleable Solids, BOD, NFR =

pH, mg/L, ° C

AVERAGE ANNUAL 2013

INFLUENT				AMMONIA		UN-IONIZED		EFFLUENT				AMMONIA		UN-IONIZED		River		Coliform			
Date	pH	Temp	S.S	mg/L	NH <sub>3</sub> (mg/L)	BOD	NFR	pH	Temp	D.O.	S.S.	mg/L	NH <sub>3</sub> (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	3x5	BOD	NFR		
JANUARY	7.7	14.1	17.3	38.1	0.750	248	293	7.2	9.0	3.7	<0.1	27.7	0.143	102.9	1.7	0.0	<1.8	29	20		
FEBRUARY	7.9	14.3	17.3	34.0	1.376	280	373	7.1	10.2	3.6	<0.1	23.9	0.094	111.8	1.6	0.0	<1.8	28	14		
MARCH	7.6	14.4	18.6	39.7	0.797	236	216	6.9	11.6	4.2	<0.1	33.7	0.077	74.8	1.8	0.0	<1.8	23	21		
APRIL	7.8	15.6	23.0	42.2	1.286	220	220	6.8	14.3	4.3	<0.1	34.1	0.071	68.5	1.5	0.0	<1.8	21	20		
MAY	7.9	17.3	21.2	41.5	1.629	274	210	6.7	16.2	5.0	<0.1	30.3	0.065	105.1	3.0	0.0	<1.8	24	19		
JUNE	7.8	18.6	21.3	41.4	1.512	295	290	6.8	17.6	3.4	<0.1	26.9	0.084	175.2	2.9	0.0	<1.8	32	14		
JULY	7.8	19.3	19.0	41.2	1.705	265	195	6.8	18.2	2.9	<0.1	31.0	0.093	153.2	2.4	0.0	<1.8	34	15		
AUGUST	7.8	20.0	23.2	42.3	1.742	314	284	6.8	18.2	3.7	<0.1	32.9	0.099	112.2	2.9	0.0	<1.8	23	16		
SEPTEMBER	7.9	20.7	28.3	44.1	2.280	225	181	6.8	18.6	3.2	<0.1	32.1	0.101	112.6	3.7	0.0	<1.8	16	11		
OCTOBER	7.9	18.9	24.0	44.3	2.172	243	258	7.0	14.2	3.4	<0.1	34.3	0.113	108.2	4.2	0.0	<1.8	18	14		
NOVEMBER	7.9	17.4	22.4	44.9	1.939	286	232	7.0	12.2	3.5	<0.1	33.8	0.098	107.5	4.8	0.0	<1.8	22	17		
DECEMBER	8.0	15.9	20.0	43.3	1.948	300	338	7.1	8.8	3.3	<0.1	31.2	0.112	112.7	4.0	0.0	<1.8	30	30		
Average	7.8	17.2	21.3	41.4	1.595	265	257	6.9	14.1	3.7	<0.1	31.0	0.096	112.1	2.9	0.0	<1.8	25	17		
Maximum	8.0	20.7	28.3	44.9	2.280	314	372.5	7.2	18.6	5.0	<0.1	34.3	0.143	175.2	4.8	0.0	<2	34	30		
Minimum	7.6	14.1	17.3	34.0	0.750	220	181	6.7	8.8	2.9	<0.1	23.9	0.065	68.5	1.5	0.0	<1.8	16	11		

McKinleyville Community Services District  
Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

JANUARY 2013

INFLUENT								EFFLUENT								River			
Date	pH	Temp	S.S	AMMONIA mg/L	UN-IONIZED NH <sub>3</sub> (mg/L)	BOD	NFR	pH	Temp	D.O.	S.S.	AMMONIA mg/L	UN-IONIZED NH <sub>3</sub> (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	Coliform 3x5	BOD	NFR
1	6.9	13.8						6.9	8.6	3.0				94.7	2.0	0.00			
2	7.5	14.1		38.0	0.365			7.0	8.9	4.2		28.0	0.057	95.1	2.1	0.00	<1.8		
3	7.2	14.3		32.0	0.225			7.1	10.3	3.7		28.0	0.092	93.5	2.0	0.00			
4	7.8	14.3	17.0	38.0	0.842	360	270	7.2	8.5	4.0	<0.1	26.0	0.096	110.0	2.4	0.00		24	18
5	7.8	14.1						7.2	8.1	4.8				105.0	2.0	0.00			
6	7.4	12.9						7.3	8.4	4.4				103.0	2.0	0.00			
7	7.9	14.9		32.0	0.878			7.4	8.7	5.2		20.0	0.109	102.0	1.7	0.00	<1.8		
8	7.7	14.3		40.0	0.720			7.3	9.2	3.7		30.0	0.144	104.0	1.9	0.00			
9	7.6	14.6		38.0	0.536			7.3	9.6	3.6		28.0	0.139	106.0	1.8	0.00			
10	7.8	14.4		30.0	0.669			7.4	9.4	4.9		22.0	0.127	106.0	1.8	0.00			
11	7.6	14.1	6.0	32.0	0.437	180.0	210.0	7.6	9.5	3.5	<0.1	22.0	0.212	109.0	1.5	0.00		29	21
12	7.8	12.7						7.5	8.5	6.1				90.4	1.4	0.00			
13	8.2	14.2						7.3	8.8	3.5				114.0	1.7	0.00			
14	7.4	14.0		28.0	0.231			7.4	7.7	3.1		28.0	0.296	114.0	1.7	0.00	<1.8		
15	7.4	14.2		32.0	0.267			7.4	8.1	2.7		30.0	0.157	115.0	1.8	0.00			
16	7.9	14.3		40.0	1.052			7.3	8.7	2.9		28.0	0.129	113.0	1.9	0.00			
17	7.6	14.1		38.0	0.520			7.5	8.1	3.1		28.0	0.170	101.0	1.9	0.00			
18	7.9	14.0	18.0	46.0	1.183	250	530	7.4	7.4	3.9	<0.1	30.0	0.148	98.6	1.8	0.00		30	18
19	7.9	13.7						7.4	8.6	3.9				99.7	1.3	0.00			
20	7.1	13.5						7.2	7.7	2.9				98.3	1.3	0.00			
21	7.0	13.5		44.0	0.128			6.9	7.9	3.4		30.0	0.049	99.1	1.6	0.00	<1.8		
22	7.9	14.7		44.0	1.191			7.3	8.3	4.2		30.0	0.134	101.0	1.5	0.00			
23	8.0	15.0		44.0	1.410			7.4	10.1	4.4		30.0	0.184	103.0	1.4	0.00			
24	7.8	14.3		40.0	0.886			7.2	9.3	2.5		30.0	0.118	102.0	1.1	0.00			
25	8.0	14.9	28.0	46.0	1.463	200.0	160.0	7.6	9.7	2.7	<0.1	30.0	0.294	101.0	1.5	0.00		32	21
26	7.9	14.0						7.2	10.3	3.1				99.0	0.4	0.00			
27	7.9	13.9						7.2	10.0	3.8				103.0	0.2	0.00			
28	8.2	15.2		48.0	0.920			6.9	9.6	2.5		30.0	0.056	102.0	0.1	0.00	<1.8		
29	7.2	12.9		28.0	0.145			6.8	9.6	2.9		28.0	0.044	99.1	1.1	0.00			
30	7.6	13.9		36.0	0.486			6.9	10.6	3.8		26.0	0.053	104.0	4.5	0.00			
31	8.1	14.9		44.0	1.956			7.0	10.4	3.3		28.0	0.338	103.0	3.4	0.00			
																	MEDIAN		
Average	7.7	14.1	17.3	38.1	0.750	248	293	7.2	9.0	3.7	<0.1	27.7	0.143	102.9	1.7	0.0	<1.8	29	20
Maximum	8.2	15.2	28.0	48.0	1.956	360	530	7.6	10.6	6.1	<0.1	30.0	0.338	115.0	4.5	0.0	<1.8	32	21
Minimum	6.9	12.7	6.0	28.0	0.128	180	160	6.8	7.4	2.5	<0.1	20.0	0.044	90.4	0.1	0.0	<1.8	24	18

McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

FEBRUARY 2013

INFLUENT			AMMONIA		UN-IONIZED		EFFLUENT			AMMONIA		UN-IONIZED		River		Coliform				
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR	pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	3x5	BOD	NFR	
1	7.9	14.1	18.0	42.0	1.088	230	440		6.7	9.5	3.1	<0.1	30	0.038	99.3	2.0	0.00		31	14
2	7.6	13.8							7.0	10.8	3.3				96.1	0.6	0.00			
3	7.2	13.4							7.3	10.4	2.6				97.1	0.1	0.00			
4	8.3	15.3		38.0	2.725				7.3	10.5	4.4		12	0.063	92.8	0.7	0.00			
5	7.8	14.6		26.0	1.775				7.1	11.1	4.0		24	0.108	88.3	1.5	0.00	<1.8		
6	8.1	14.3		40.0	1.703															
7	8.1	15.2		44.0	1.998				7.0	11.0	3.8		28.0	0.213	107.0	0.8	0.00			
8	8.1	13.9	15.0	34.0	1.405	280	250		7.0	9.8	4.2	<0.1	20.0	0.043	92.4	2.8	0.00		24	11
9	8.0	13.7							7.3	9.7	3.9				107.0	2.5	0.00			
10	8.3	13.7							7.3	9.7	4.3				114.0	2.9	0.00			
11	7.9	14.5		34.0	0.907				7.4	9.9	4.2		24.0	0.144	114.0	2.7	0.00			
12	7.1	14.3		28.0	0.123				7.0	9.4	3.7		20.0	0.042	118.0	1.3	0.00			
13	7.9	14.5		28.0	0.747				7.3	10.1	3.3		18.0	0.092	121.0	0.3	0.00	<1.8		
14	7.9	14.3		24.0	0.631				6.9	11.2	3.5		24.0	0.050	118.0	1.7	0.00			
15	8.0	15.3	25.0	38.0	1.244	320	500		7.0	10.9	3.5	<0.1	28.0	0.067	118.0	3.1	0.00		30	16
16	7.4	13.2							7.3	10.4	4.0				117.0	2.0	0.00			
17	8.1	14.3							7.0	10.1	3.6				117.0	1.1	0.00			
18	7.8	14.1							7.0	10.1	3.2				121.0	1.3	0.00			
19	7.9	14.0		34.0	0.874				7.1	10.3	3.9		24.0	0.078	123.0	3.2	0.00	<1.8		
20	8.4	14.9		40.0	0.329				7.6	9.7	3.5		26.0	0.254	123.0	1.3	0.00			
21	8.0	14.0		28.0	0.833				7.3	9.9	3.5		26.0	0.131	125.0	1.6	0.00			
22	7.7	13.6	11.0	28.0	0.479	290	300		7.1	10.0	3.0	<0.1	28.0	0.089	123.0	1.2	0.00		26	16
23	7.4	13.1							7.0	9.7	3.6				124.0	0.9	0.00			
24	7.6	14.0							7.0	10.1	3.1					0.8	0.00			
25	8.3	15.3		40.0	2.868				7.2	10.0	3.4		16.0	0.066	117.0	1.8	0.00	<1.8		
26	8.5	15.4		42.0	4.131				7.0	10.0	3.1		28.0	0.062	115.0	1.8	0.00			
27	7.9	13.7		34.0	0.855				7.0	10.0	3.6		26.0	0.058	111.0	1.5	0.00			
28	8.1	14.9		32.0	1.422				7.1	11.5	4.0		28.0	0.100	109.0	1.0	0.00			
																		MEDIAN		
Average	7.9	14.3	17.3	34.0	1.376	280	373		7.1	10.2	3.6	<0.1	23.9	0.094	111.8	1.6	0.0	<1.8	28	14
Maximum	8.5	15.4	25.0	44.0	4.131	320	500		7.6	11.5	4.4	<0.1	30.0	0.254	125.0	3.2	0.0	<1.8	31	16
Minimum	7.1	13.1	11.0	24.0	0.123	230	250		6.7	9.4	2.6	<0.1	12.0	0.038	88.3	0.1	0.0	<1.8	24	11

McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

MARCH 2013

INFLUENT			AMMONIA		UN-IONIZED		EFFLUENT				AMMONIA		UN-IONIZED		River		Coliform		
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR	pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	3x5	BOD	NFR
1	7.4	15.2	23.0	40.0	1.122	290	380	6.8	11.4	3.5	<0.1	30.0	0.054	110.0	0.2	0.00		27	33
2	7.3	14.1						6.8	12.0	2.8				104.0	0.1	0.00			
3	7.4	13.9						6.7	11.5	2.8				92.4	0.3	0.00			
4	7.7	14.4		42.0	0.760			6.8	10.9	3.7		30.0	0.052	85.7	1.3	0.00	<1.8		
5	7.9	14.4		46.0	1.218			7.0	10.7	3.7		38.0	0.089	82.5	2.0	0.00			
6	7.4	13.4		34.0	0.268			6.9	10.4	4.7		34.0	0.067	81.7	4.6	0.00			
7	7.5	13.8		36.0	0.338			7.0	10.5	4.9		34.0	0.078	87.9	4.4	0.00			
8	7.6	13.8	15.0	40.0	0.535	170	92	7.2	10.6	4.5	<0.1	32.0	0.139	87.7	3.5	0.00		25	24
9	7.7	13.5						7.1	10.7	4.6				86.9	2.8	0.00			
10	8.1	14.5						7.7	10.7	4.2				85.9	1.7	0.00			
11	7.6	13.9		38.0	0.512			7.0	10.7	4.9		36.0	0.084	80.9	1.0	0.00	<1.8		
12	7.8	14.4		38.0	0.848											0.00			
13	7.6	13.5		36.0	0.471			7.0	11.0	3.2		34.0	0.082	82.8	0.2	0.00			
14	7.5	13.8		40.0	0.377			6.8	12.3	4.9		28.0	0.054	72.9	2.2	0.00			
15	7.9	14.7	21.0	40.0	1.082	250	240	6.9	11.4	5.0	<0.1	34.0	0.073	70.7	1.8	0.00		27	13
16	7.6	13.8						7.1	11.9	3.4				67.3	1.2	0.00			
17	7.2	14.3						6.8	12.5	3.1				67.9	0.5	0.00			
18	7.9	14.9		42.0	1.152			6.8	11.3	4.3		36.0	0.064	64.3	1.3	0.00	<1.8		
19	7.7	14.4		38.0	0.688			6.8	11.8	4.3		36.0	0.067	64.2	1.4	0.00			
20	7.8	14.9		44.0	1.015			6.8	12.2	4.2		36.0	0.069	64.6	1.4	0.00			
21	7.9	14.9		40.0	1.097			6.9	11.9	4.3		36.0	0.080	65.1	0.8	0.00			
22	7.9	14.8	19.0	38.0	1.035	210	140	6.8	11.3	5.0	<0.1	36.0	0.064	62.1	2.9	0.00		18	17
23	7.7	14.0						6.9	11.4	4.9				64.9	3.8	0.00			
24	7.1	13.5						6.9	11.5	3.9				64.9	2.9	0.00			
25	8.0	15.0		42.0	1.345			7.0	11.0	4.7		36.0	0.086	65.1	2.4	0.00	<1.8		
26	7.7	14.3		40.0	0.720			7.0	11.7	4.3		34.0	0.087	65.6	2.3	0.00			
27	7.7	15.4		42.0	0.818			7.0	12.6	4.8		32.0	0.087	66.1	1.4	0.00			
28	7.7	15.1		42.0	0.798			7.0	13.1	5.0		30.0	0.085	65.2	1.1	0.00			
29	7.6	15.4	15.0	36.0	0.539	260	230	6.9	13.0	3.2	<0.1	32.0	0.077	61.4	1.9	0.00		20	16
30	7.6	15.3						6.8	13.1	4.6				63.7	0.8	0.00			
31	7.4	14.8						6.7	13.4	4.7				60.4	1.0	0.00			
																	MEDIAN		
Average	7.6	14.4	18.6	39.7	0.797	236	216	6.9	11.6	4.2	<0.1	33.7	0.077	74.8	1.8	0.0	<1.8	23	21
Maximum	8.1	15.4	23.0	46.0	1.345	290	380	7.7	13.4	5.0	<0.1	38.0	0.139	110.0	4.6	0.0	<1.8	27	33
Minimum	7.1	13.4	15.0	34.0	0.268	170	92	6.7	10.4	2.8	<0.1	28.0	0.052	60.4	0.1	0.0	<1.8	18	13

McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

APRIL 2013

INFLUENT				AMMONIA	UN-IONIZED	EFFLUENT				AMMONIA	UN-IONIZED	River			Coliform					
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR		pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL½ Res	CL½ Res	3x5	BOD	NFR
1	7.5	15.4		44.0	0.467				6.7	13.5	3.5		36.0	0.062	57.9	1.7	0.00	2		
2	7.1	14.8		32.0	0.165				6.9	13.3	3.6		36.0	0.089	56.3	1.4	0.00			
3	8.1	16.7		50.0	2.523				6.8	13.9	3.8		36.0	0.079	57.9	1.4	0.00			
4	7.1	15.2		34.0	0.160				6.7	14	3.5		34.0	0.061	58.9	1.8	0.00			
5	7.5	15.5	19.0	38.0	0.407	170.0	130.0		6.8	14.3	3.9	<0.1	38.0	0.086	61.1	1.6	0.00		17	14
6	7.6	15.5							6.8		4.0				64.3	1.6	0.00			
7	7.8	15.1							7.0		3.6				72.9	0.2	0.00			
8	7.9	15.7		44.0	1.282				6.9	13.9	4.1		36.0	0.094	74.2	4.0	0.00	<1.8		
9	8.0	15.7		46.0	1.551															
10	7.9	15.9		42.0	1.241				6.9	14.0	4.4		34.0	0.089	88.2	0.7	0.00			
11	8.0	15.0		42.0	1.346				6.9	14.0	4.3		36.0	0.094	82.3	2.6	0.00			
12	7.8	15.9	25.0	42.0	1.047	210	170		7.0	13.7	4.3	<0.1	32.0	0.095	87.6	1.5	0.00		24	19
13	7.6	14.5							7.3	13.8	5.0				87.7	0.9	0.00			
14	8.0	15.0							6.9	14.2	4.8				88.5	0.3	0.00			
15	8.2	16.1		42.0	2.608				6.7	13.9	4.7		34.0	0.060	84.8	1.0	0.00	2		
16	7.8	14.6		42.0	0.950				6.8	14.0	5.7		34.0	0.075	81.9	2.1	0.00			
17	8.0	16.1		42.0	1.457				6.8	14.0	5.6		30.0	0.066	80.3	2.2	0.00			
18	7.7	15.6		46.0	0.911				6.7	13.7	6.3		32.0	0.056	78.1	1.3	0.00			
19	7.8	15.2	20.0	40.0	0.945	240.0	210.0		6.8	13.9	4.3	<0.1	30.0	0.066	73.2	0.8	0.00		22	24
20	7.4	14.9							6.6	14.0	3.8				67.9	0.2				
21	7.5	15.2							6.7	14.4	3.3				64.4	0.2				
22	8.0	15.0		44.0	1.410				6.7	14.4	3.3		36.0	0.067	58.8	0.2	0.00	<1.8		
23	7.7	16.1		38.0	0.782				6.7	14.8	4.7		34.0	0.064	59.0	1.6	0.00			
24	7.8	16.4		40.0	1.034				6.6	15.2	3.6		36.0	0.054	58.4	1.1	0.00			
25	7.9	16.3		44.0	1.339				6.7	14.8	3.9		36.0	0.069	57.0	0.8	0.00			
26	8.1	16.6	28.0	46.0	2.306	260	370		6.7	15.2	4.3	<0.1	32.0	0.048	57.6	1.0	0.00		19	21
27	8.0	15.9							6.7	15.1	4.2				56.3	1.3	0.00			
28	7.9	15.4							6.7	15.0	4.3				56.3	1.3	0.00			
29	7.9	16.4		44.0	1.348				6.8	15.3	4.3		30.0	0.073	60.8	5.1	out of river			
30	8.2	16.9		46.0	3.018				6.6	14.6	4.4		34.0	0.049	52.9	3.8		<1.8		
																		MEDIAN		
Average	7.8	15.6	23.0	42.2	1.286	220	220		6.8	14.3	4.3	<0.1	34.1	0.071	68.5	1.5	0.0	<1.8	21	20
Maximum	8.2	16.9	28.0	50.0	3.018	260	370		7.3	15.3	6.3	<0.1	38.0	0.095	88.5	5.1	0.0	2	24	24
Minimum	7.1	14.5	19.0	32.0	0.16	170	130		6.6	13.3	3.3	<0.1	30.0	0.048	52.9	0.2	0.0	<1.8	17	14



McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

MAY 2012

INFLUENT				AMMONIA		UN-IONIZED		EFFLUENT				AMMONIA		UN-IONIZED		River		Coliform		
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR	pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	3x5	BOD	NFR	
1	8.1	16.4		46.0	2.274			6.8	14.6	4.8		34.0	0.079	55.8	1.9					
2	8.1	16.3		44.0	2.160			6.7	15.3	4.5		34.0	0.067	55.5	1.7					
3	7.8	16.5	20.0	42.0	1.093	300	170	6.6	15.1	3.5	<0.1	30.0	0.045	57.0	1.2			21	14	
4																				
5																				
6	8.2	17.6		42.0	2.893			6.7	15.6	5.8		30.0	0.075	54.0	2.2		2			
7	8.1	17.9		44.0	2.414															
8	7.5	16.6		42.0	0.488			6.5	15.8	5.4		30.0	0.033	67.9	6.9					
9	7.7	17.3		44.0	0.988			6.7	16.0	5.0		32.0	0.067	65.5	0.2					
10	8.3	18.1	26.0	50.0	4.347	300	270	6.6	15.0	4.0	<0.1	36.0	0.053	62.6	1.2			22	17	
11																				
12																				
13	8.1	18.6		44.0	2.540			6.6	16.9	5.4		30.0	0.052	61.9	3.6		<1.8			
14	7.5	16.8		40.0	0.454			6.7	16.3	5.0		34.0	0.072	67.6	3.9					
15	7.8	16.9		40.0	1.071			6.6	16.4	4.5		34.0	0.056	81.8	4.7					
16	7.6	16.8		46.0	0.769			6.6	17.0	4.9		30.0	0.052	94.5	2.3					
17	8.2	18.8	17.0	40.0	2.999	300	220	6.6	17.2	4.9	<0.1	24.0	0.042	103.0	3.2			17	19	
18																				
19																				
20	7.4	16.6		32.0	0.321			6.6	16.5	4.7		28.0	0.047	123.0	8.0		<1.8			
21	7.7	16.9		34.0	0.241			6.9	16.6	4.9		32.0	0.102	133.0	2.3					
22	7.9	17.2		34.0	1.103			6.8	16.0	5.2		22.0	0.056	145.0	2.1					
23	7.9	17.1		38.0	1.223			6.7	16.1	4.3		28.0	0.059	159.0	2.2					
24	8.3	18.3	22	46.0	3.999	230	190	6.8	16.2	4.4	<0.1	28.0	0.073	167.0	3.0			29	26	
25																				
26																				
27																				
28	8.0	17.9		42.0	1.657			6.9	16.7	5.5		30.0	0.096	156.0	6.8		<1.8			
29	7.6	17.8		44.0	0.790			6.7	17.0	5.3		30.0	0.099	162.0	0.8					
30	7.6	16.6		40.0	0.659			6.6	17.3	7.5		28.0	0.049	165.0	2.0					
31	7.9	17.8	21	40.0	1.354	240	200	6.8	16.9	5.6		32.0	0.087	169.0	3.2			31	18	
																	MEDIAN			
Average	7.9	17.3	21.2	41.5	1.629	274	210	6.7	16.2	5.0	<0.1	30.3	0.065	105.1	3.0	0.0	<1.8	24	19	
Maximum	8.3	18.8	26.0	50.0	4.347	300	270	6.9	17.3	7.5	<0.1	36.0	0.102	169	8	0.0	2	31	26	
Minimum	7.4	16.3	17.0	32.0	0.241	230	170	6.5	14.6	3.5	<0.1	22.0	0.033	54	0.2	0.0	<1.8	17	14	

## McKinleyville Community Services District

## Wastewater Management Facility

Influent & Effluent Testing      pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

JUNE 2013

INFLUENT			AMMONIA		UN-IONIZED		EFFLUENT				AMMONIA		UN-IONIZED		River		Coliform			
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR		pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	3x5	BOD	NFR
1																				
2																				
3	8.2	18.8		50.0	3.749				6.8	16.6	5.9		28.0	0.075	156.0	7.5		<1.8		
4	7.9	18.8		40.0	2.999				6.5	16.7	3		26.0	0.031	158.0	2.6				
5	7.8	17.8		42.0	1.200				6.8	17.2	2.6		30.0	0.084	165.0	3.2				
6	8.0	18.4		44.0	1.800				7.0	17.2	3.2		28.0	0.108	186.0	4.3				
7	8.0	18.1	20	46.0	1.841	260	180		7.0	17	2.8	<0.1	30.0	0.114	188.0	2.9			24	15
8																				
9																				
10	7.5	17.1		36.0	0.433				6.8	17.0	2.6		26.0	0.072	171.0	4.5		<1.8		
11	7.9	18.2		44.0	1.534															
12	7.9	18.7		44.0	1.589				7.0	16.6	4.0		28.0	0.103	143.0	5.6				
13	7.8	18.0		38.0	1.001				6.9	16.7	4.1		24.0	0.077	180.0	4.0				
14	8.0	18.1	18	44.0	1.761	280	250		7.0	16.7	3.5	<0.1	24.0	0.089	178.0	1.8			20	10
15																				
16																				
17	7.5	18.2		40.0	0.519				6.7	17.3	4.6		28.0	0.064	172.0	4.0		<1.8		
18	7.7	18.7		44.0	1.088				6.9	17.8	3.6		28.0	0.098	176.0	1.1				
19	7.8	18.9		46.0	1.419				6.6	18.0	2.4		28.0	0.052	180.0	1.3				
20	8.2	19.6		44.0	3.483				7.0	18.1	3.8		30.0	0.124	185.0	1.1				
21	7.6	18.0	15.0	32.0	0.583	200	290		6.8	18.1	2.7	<0.1	28.0	0.084	188.0	1.8			38	16
22																				
23																				
24	7.6	18.7		40.0	0.762				6.9	18.3	4.5		26.0	0.094	169.0	6.0		<1.8		
25	8.0	20.2		40.0	1.860				6.9	18.5	2.2		26.0	0.096	174.0	0.5				
26	7.6	19.3		42.0	0.836				6.8	18.8	2.5		30.0	0.095	185.0	1.1				
27	7.3	18.7		28.0	0.273				6.8	19.1	2.8		24.0	0.078	187.0	0.7				
28	7.8	20.3	32	44.0	1.504	440	440		6.8	19.3	2.9	<0.1	20.0	0.066	187.0	0.9			47	16
29																				
30																				
																		MEDIAN		
Average	7.8	18.6	21.3	41.4	1.512	295	290		6.8	17.6	3.4	<0.1	26.9	0.084	175.2	2.9	0.0	<1.8	32	14
Maximum	8.2	20.3	32.0	50.0	3.749	440	440		7.0	19.3	5.9	<0.1	30.0	0.124	188	7.5	0.0	<1.8	47	16
Minimum	7.3	17.1	15.0	28.0	0.273	200	180		6.5	16.6	2.2	<0.1	20.0	0.031	143	0.5	0.0	<1.8	20	10

McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res Settleable Solids, BOD, NFR =

pH, mg/L, ° C

JULY 2013

INFLUENT			AMMONIA			UN-IONIZED			EFFLUENT			AMMONIA			UN-IONIZED			River	Coliform		
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR		pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	3x5	BOD	NFR	
1	7.5	19.1		36.0	0.493				6.8	19.4	2.4		28.0	0.093	181.0	6.9		<1.8			
2	7.7	19.5		40.0	1.050				6.7	20.3	2.9		28.0	0.080	180.0	0.6					
3	7.6	19.4		32.0	0.642	270	210		6.7	19.3	2.2		24.0	0.064	167.0	2.4			38	16	
4	8.1	19.7		46.0	2.865				6.7	19.2	3.5		24.0	0.063	161.0	2.1					
5	7.4	18.9	14.0	38.0	0.443				6.8	19.4	3.9	<0.1	34.0	0.112	172.0	3.1					
6																					
7																					
8	8.2	20.0		44.0	3.576				6.8	18.6	3.7		26.0	0.081	140.0	5.6		<1.8			
9	8.2	19.6		48.0	3.800				6.8	18.6	2.8		34.0	0.106	167.0	0.1					
10	7.4	18.4		34.0	0.386				6.7	18.3	2.8		32.0	0.079	156.0	1.1					
11	8.2	19.7		44.0	3.507				6.8	18.4	2.7		32.0	0.098	157.0	1.7					
12	7.5	18.5	12.0	32.0	0.422	250	200		6.8	18.5	2.6	<0.1	32.0	0.099	168.0	2.9			44	15	
13																					
14																					
15	7.5	18.5		34.0	0.449				6.8	17.9	2.5		32.0	0.095	163.0	2.7		<1.8			
16	7.9	19.4		48.0	1.824				6.8	18.1	2.8		32.0	0.096	173.0	0.6					
17	7.8	18.9		40.0	1.233				6.8	18.1	3.4		34.0	0.102	169.0	0.7					
18	7.4	18.7		32.0	0.312				6.8	17.9	3		30.0	0.089	165.0	0.6					
19	8.2	20.1	28.0	46.0	3.763	250	160		6.7	18.1	3.0	<0.1	34.0	0.083	165.0	5.3			27	16	
20																					
21																					
22	7.6	19.3		44.0	0.875				6.9	17.7	2.6		32.0	0.111	139.0	1.6		<1.8			
23	8.1	19.7		46.0	2.866				7.0	17.4	3.2		30.0	0.118	131.0	0.7					
24	7.6	18.8		36.0	0.690				6.8	17.1	2.6		30.0	0.084	132.0	2.4					
25	7.6	18.9		40.0	0.771				6.8	17.3	2.5		30.0	0.085	131.0	1.6					
26	8.2	20.2	22.0	48.0	3.952	290	210		6.9	17.4	2.6	<0.1	32.0	0.108	130.0	3.2			28	14	
27																					
28																					
29	7.7	19.4		42.0	1.094				6.9	17.2	2.8		34.0	0.113	124.0	3.3		<1.8			
30	8.0	20.0		48.0	2.200				6.7	17.1	2.7		34.0	0.077	121.0	3.0					
31	8.4	20.2		50.0	2.011				6.8	17.2	2.7		34.0	0.096	132.0	2.3					
																		MEDIAN			
Average	7.8	19.3	19.0	41.2	1.705	265	195		6.8	18.2	2.9	<0.1	31.0	0.093	153.2	2.4	0.0	<1.8	34	15	
Maximum	8.4	20.2	28.0	50.0	3.952	290	210		7.0	20.3	3.9	<0.1	34.0	0.118	181	6.9	0.0	<1.8	44	16	
Minimum	7.4	18.4	12.0	32.0	0.312	250	160		6.7	17.1	2.2	<0.1	24.0	0.063	121	0.1	0.0	<1.8	27	14	

## McKinleyville Community Services District

## Wastewater Management Facility

Influent & Effluent Testing    pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

AUGUST 2013

INFLUENT			AMMONIA		UN-IONIZED		EFFLUENT				AMMONIA		UN-IONIZED		River		Coliform			
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR		pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	3x5	BOD	NFR
1	8.1	20.1		44.0	2.816				6.9	17.6	2.8		30.0	0.103	133.0	1.6				
2	7.9	19.6	18.0	44.0	1.696	320	160		6.8	17.6	2.6	<0.1	34.0	0.098	133.0	3.8			27	16
3																				
4																				
5	7.3	18.8		36.0	0.352				6.7	17.3	4.0		34.0	0.078	124.0	5.8		<1.8		
6	7.7	19.1		40.0	1.017				Washed CCB											
7	7.8	19.3		44.0	1.398				6.8	17.1	5.1		34.0	0.094	101.0	2.3				
8	7.7	19.3		44.0	1.137				6.6	16.8	3.6		32.0	0.054	107.0	7.1				
9	8.1	20.1	30.0	44.0	2.815	390	360		6.8	16.9	3.9	<0.1	36.0	0.098	119.0	5.3			19	15
10																				
11																				
12	7.7	19.4		40.0	1.041				6.8	17.3	4.3		36.0	0.101	110.0	1.4		<1.8		
13	7.6	19.6		44.0	0.897				6.8	17.4	3.7		36.0	0.102	115.0	1.3				
14	7.7	19.2		36.0	0.923				6.9	17.6	2.7		28.0	0.096	126.0	1.3				
15	7.6	20.2		40.0	0.855				6.9	18.9	3.0		30.0	0.114	131.0	0.1				
16	7.7	20.3	23.0	44.0	1.225	380	460		6.8	18.9	4.2	<0.1	36.0	0.114	125.0	1.1			19	17
17																				
18																				
19	7.8	20.2		40.0	1.357				6.8	18.4	4.3		32.0	0.098	116.0	6.4		<1.8		
20	8.0	20.3		46.0	2.155				6.7	18.5	3.8		32.0	0.080	108.0	6.9				
21	7.8	19.8		40.0	1.319				6.8	18.6	3.8		32.0	0.099	109.0	1.8				
22	8.2	20.2		46.0	3.787				6.8	18.6	3.6		36.0	0.112	107.0	2.7				
23	7.4	19.3	15	40.0	0.482	250	220		6.8	18.5	3.8	<0.1	34.0	0.105	98.6	2.3			22	10
24																				
25																				
26	8.2	20.7		44.0	3.741				6.8	18.2	4.0		34.0	0.102	92.9	4.2		<1.8		
27	7.6	19.6		40.0	0.816				6.8	18.7	2.7		32.0	0.100	91.5	2.9				
28	8.2	21.8		48.0	4.386				6.9	19.2	3.6		32.0	0.124	99.2	1.2				
29	7.9	21.3		40.0	1.738				6.8	19.6	3.8		30.0	0.100	101.0	0.3				
30	8.0	21.7	30.0	46.0	2.375	230	220		6.8	19.6	4.2	<0.1	30.0	0.100	110.0	0.1			28	21
31																				
																		MEDIAN		
Average	7.8	20.0	23.2	42.3	1.742	314	284		6.8	18.2	3.7	<0.1	32.9	0.099	112.2	2.9	0.0	<1.8	23	16
Maximum	8.2	21.8	30.0	48.0	4.386	390	460		6.9	19.6	5.1	<0.1	36.0	0.124	133	7.1	0.0	<1.8	28	21
Minimum	7.3	18.8	15.0	36.0	0.352	230	160		6.6	16.8	2.6	<0.1	28.0	0.054	91.5	0.1	0.0	<1.8	19	10

McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

SEPTEMBER 2013

INFLUENT				AMMONIA	UN-IONIZED	EFFLUENT				AMMONIA	UN-IONIZED	River		Coliform						
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR		pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL½ Res	CL½ Res	3x5	BOD	NFR
1																				
2																				
3	7.8	21.0		44.0	1.580				6.7	20.2	3.5		32.0	0.091	99.1	2.5		<1.8		
4	7.2	20.5		40.0	0.365				6.7	19.8	2.7		28.0	0.077	97.3	2.6				
5	8.0	21.0		46.0	2.263				6.8	19.7	2.3		32.0	0.108	97.5	3.7				
6	7.7	20.3	25	48.0	1.337	250	200		6.9	19.7	4.0	<0.1	34.0	0.137	97.3	4.0			18	10
7																				
8																				
9	7.6	20.3		38.0	0.818				6.7	19.4	2.6		34.0	0.091	89.6	4.4		<1.8		
10	8.0	21.6		46.0	2.359				Washed CCB											
11	7.8	20.6		40.0	1.397				6.6	19.1	4.1		30.0	0.061	71.6	7.3				
12	7.8	20.5		44.0	1.526				6.7	19.2	3.0		32.0	0.085	79.1	1.4				
13	8.1	21.6	34	44.0	3.113	200	230		6.7	19.3	2.4	<0.1	32.0	0.085	91.3	3.7			14	10
14																				
15																				
16	8.2	21.5		50.0	4.480				6.9	18.8	2.9		32.0	0.120	102.0	4.8		<1.8		
17	7.6	20.6		46.0	1.012				6.8	18.9	3.4		28.0	0.089	108.0	3.9				
18	8.2	21.5		46.0	4.122				6.9	18.6	3.1		32.0	0.119	115.0	3.4				
19	7.9	20.1		40.0	1.597				6.8	18.1	3.8		34.0	0.102	119.0	4.2				
20	8.2	20.9	27	46.0	3.960	240	240		6.8	17.8	4.2	<0.1	36.0	0.105	128.0	5.0			19	12
21																				
22																				
23	7.9	20.7		44.0	1.834				6.9	18.3	2.8		34.0	0.123	135.0	5.5		<1.8		
24	7.7	20.2		42.0	1.161				6.9	17.9	4.1		34.0	0.119	139.0	1.2				
25	7.7	20.0		40.0	1.091				6.9	17.7	2.4		32.0	0.111	146.0	2.8				
26	8.4	20.3		50.0	5.945				6.9	17.2	3.2		32.0	0.107	147.0	2.4				
27	8.1	20.1	27	46.0	2.943	210	54		6.9	16.6	2.9	<0.1	34.0	0.108	143.0	2.9			14	13
28																				
29																				
30	8.1	20.2		42.0	2.706				6.8	17.3	3.4		28.0	0.079	135.0	3.8		<1.8		
																		MEDIAN		
Average	7.9	20.7	28.3	44.1	2.280	225	181		6.8	18.6	3.2	<0.1	32.1	0.101	112.6	3.7	0.0	<1.8	16	11
Maximum	8.4	21.6	34.0	50.0	5.945	250	240		6.9	20.2	4.2	<0.1	36.0	0.137	147.0	7.3	0.0	<1.8	19	13
Minimum	7.2	20	25.0	38.0	0.365	200	54		6.6	16.6	2.3	<0.1	28.0	0.061	71.6	1.2	0.0	<1.8	14	10



McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

OCTOBER 2013

INFLUENT			AMMONIA			UN-IONIZED			EFFLUENT			AMMONIA			UN-IONIZED			River		Coliform		
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR		pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res	3x5	BOD	NFR		
1	8.1	19.7		44.0	2.741				7.0	16	3.1		34.0	0.126	123.0	0.6						
2	8	19.5		44.0	1.948				6.8	16.2	3.7		34.0	0.088	132.0	3.7						
3	7.6	18.7		40.0	0.762				6.9	16.1	2.8		30.0	0.092	140.0	4.1						
4	8.2	20.5	25.0	48.0	4.030	220	210		7.0	16.4	2.7	<0.1	30.0	0.109	145.0	6.6			18	14		
5																						
6																						
7	8.2	20.3		46.0	3.812				7.0	15.6	2.8		34.0	0.117	127.0	6.0		<1.8				
8	8.3	19.8		46.0	4.495																	
9	7.5	18.3		36.0	0.470				6.9	14.6	4.7		34.0	0.093	107.0	1.6						
10	8.1	19.3		44.0	2.668				7.1	14.7	3.0		34.0	0.154	112.0	5.5						
11	8.3	19.9	28.0	46.0	4.523	310	290		6.9	14.7	4.3	<0.1	36.0	0.099	118.0	6.1			22	17		
12																						
13																						
14																						
15	7.9	18.4		42.0	1.485				7.0	14.2	3.2		34.0	0.105	100.0	9.5		<1.8				
16	7.4	18.5		42.0	0.479				7.0	14.0	2.8		34.0	0.103	97.3	6.4						
17	7.9	18.0		42.0	1.442				7.0	13.4	3.5		36.0	0.104	100.0	1.4						
18	8.0	19.8	26.0	48.0	2.170	220	280		6.8	13.4	2.7	<0.1	38.0	0.080	96.4	2.9			16	11		
19																						
20																						
21	8.0	18.8		44.0	1.853				7.0	13.5	3.1		34.0	0.099	89.9	5.3		<1.8				
22	7.5	18.1		40.0	0.516				7.1	13.5	2.8		34.0	0.142	93.1	2.4						
23	8.2	19.2		46.0	3.546				7.1	14.1	2.7		36.0	0.157	97.5	1.8						
24	8.1	19.1		>50	2.990				7.1	13.4	2.7		38.0	0.157	98.7	2.8						
25	7.8	17.8	17.0	46.0	1.199	220	250		6.8	13.3	4.1	<0.1	36.0	0.075	98.4	5.8			14	12		
26																						
27																						
28	7.9	17.7		46.0	1.547				7.0	12.7	4.4		36.0	0.098	96.0	4.6		<1.8				
29	7.9	18.8		46.0	1.673				7.1	12.4	4.1		34.0	0.130	102.0	4.7						
30	7.9	17.7		48.0	1.614				7.0	12.7	3.4		32.0	0.088	98.3	3.4						
31	8.0	17.9		46.0	1.814				7.2	12.4	4.0		32.0	0.160	100.0	3.7						
																		MEDIAN				
Average	7.9	18.9	24.0	44.3	2.172	243	258		7.0	14.2	3.4	<0.1	34.3	0.113	108.2	4.2	0.0	<1.8	18	14		
Maximum	8.3	20.5	28.0	48.0	4.523	310	290		7.2	16.4	4.7	<0.1	38.0	0.160	145.0	9.5	0.0	<1.8	22	17		
Minimum	7.4	17.7	17.0	36.0	0.470	220	210		6.8	12.4	2.7	<0.1	30.0	0.075	89.9	0.6	0.0	<1.8	14	11		

McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

NOVEMBER 2013

Date	AMMONIA								UN-IONIZED				EFFLUENT				AMMONIA				UN-IONIZED				River	Coliform		
	ph	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR		pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL <sub>2</sub> Res	CL <sub>2</sub> Res		3x5	BOD	NFR							
1	7.6	16.6	13.0	44.0	0.725	280	240		6.9	11.9	4.1	<0.1	38.0	0.084	100.0	3.8				25	12							
2																												
3																												
4	8.0	17.6		44.0	1.699				6.9	12.3	2.0		30.0	0.069	111.0	8.4		<1.8										
5	8.0	17.9		50.0	1.972				7.1	12.2	4.0		34.0	0.129	115.0	5.8												
6	8.3	18.9		50.0	4.602				7.1	12.3	2.8		36.0	0.137	115.0	4.1												
7	7.9	18.2		50.0	1.743				7.0	12.7	4.0		30.0	0.082	114.0	3.4												
8	7.9	17.3	23.0	42.0	1.372	270	240		7.1	12.7	2.6	<0.1	34.0	0.133	108.0	2.5				21	21							
9																												
10																												
11																												
12	8.2	18.4		44.0	3.207				7.1	13.4	4.0		36.0	0.149	104.0	3.2		<1.8										
13	8.0	17.4		40.0	1.523				6.8	13.7	6.1		30.0	0.065	106.0	2.9												
14	7.8	17.7		50.0	1.418				6.9	12.8	4.3		34.0	0.081	102.0	0.2												
15	8.4	18.0	31.0	48.0	4.887	260	170		6.9	12.2	4.0	<0.1	34.0	0.077	105.0	8.0				15	15							
16																												
17																												
18	8.3	18.6		48.0	4.326				7.0	12.6	2.3		32.0	0.087	96.1	7.9		<1.8										
19	7.7	17.2		42.0	0.935				6.9	12.3	4.1		36.0	0.082	98.9	1.5												
20	7.9	17.4		44.0	1.448				6.9	12.4	3.5		36.0	0.083	103.0	1.7												
21	7.9	16.6		40.0	1.243				7.0	12.0	3.5		36.0	0.093	105.0	2.7												
22	7.8	16.2	30.0	44.0	1.121	290	230		7.1	11.5	2.3	<0.1	36.0	0.129	107.0	6.6				22	18							
23																												
24																												
25	7.6	16.1		44.0	0.699				6.9	10.7	3.8		32.0	0.065	110.0	8.2		<1.8										
26	7.6	15.9		40.0	0.625				7.1	10.8	2.7		30.0	0.102	115.0	9.9												
27	7.9	16.4	15.0	44.0	1.348	330	280		7.1	10.7	2.6	<0.1	34.0	0.115	120.0	6.1				29	20							
28																												
29																												
30																												
																			MEDIAN									
Average	7.9	17.4	22.4	44.9	1.939	286	232		7.0	12.2	3.5	<0.1	33.8	0.098	107.5	4.8	0.0	<1.8		22	17							
Maximum	8.4	18.9	31.0	50.0	4.887	330	280		7.1	13.7	6.1	<0.1	38.0	0.149	120.0	9.9	0.0	<1.8		29	21							
Minimum	7.6	15.9	13.0	40.0	0.625	260	170		6.8	10.7	2.0	<0.1	30.0	0.065	96.1	0.2	0.0	<1.8		15	12							

McKinleyville Community Services District

Wastewater Management Facility

Influent & Effluent Testing pH, Temperature, Ammonia, CL<sub>2</sub> Res, Settleable Solids, BOD, NFR =

pH, mg/L, ° C

DECEMBER 2013

INFLUENT				AMMONIA	UN-IONIZED	EFFLUENT				AMMONIA	UN-IONIZED	River		Coliform						
Date	pH	Temp	S.S	mg/L	NH3 (mg/L)	BOD	NFR		pH	Temp	D.O.	S.S.	mg/L	NH3 (mg/L)	NTU	CL½ Res	CL½ Res	3x5	BOD	NFR
1																				
2	7.9	15.9		48.0	1.300				6.9	11.1	4.2		30.0	0.630	110.0	2.8		<1.8		
3	8.2	17.7		48.0	3.329				7.2	10.7	2.4		32.0	0.140	106.0	1.8				
4	8.3	16.9		42.0	3.362				6.9	10.1	3.5		34.0	0.066	107.0	1.4				
5	8.3	17.1		48.0	3.896				7.1	9.8	2.6		36.0	0.113	110.0	3.3				
6	8.2	17.1	19	40.0	2.660	290	440		7.0	9.8	4.0	<0.1	24.0	0.053	112.0	3.9			20	24
7																				
8																				
9	8.2	15.3		46.0	2.701				7.0	7.4	4.3		34.0	0.060	123.0	7.7		<1.8		
10	7.8	15.9		40.0	0.996				Washed CCB											
11	8.3	17.0		38.0	3.062				7.0	9.0	3.4		32.0	0.066	119.0	9.0				
12	8.1	16.4		50.0	2.472				7.2	8.3	3.3		30.0	0.109	121.0	7.0				
13	7.6	14.4	19	40.0	0.557	240	240		7.0	7.7	4.2	<0.1	30.0	0.055	119.0	6.7			29	26
14																				
15																				
16	7.7	14.9		44.0	0.824				7.2	7.5	4.2		34.0	0.116	114.0	5.8		<1.8		
17	7.4	14.1		36.0	0.299				7.2	7.1	2.5		30.0	0.098	117.0	5.8				
18	8.2	17.4		44.0	2.990				6.7	8.8	2.2		32.0	0.038	117.0	3.4				
19	7.5	15.7		36.0	0.391				7.2	8.6	2.3		26.0	0.097	122.0	3.1				
20	7.6	15.4	22	40.0	0.598	320	380		7.3	7.9	3.8	<0.1	28.0	0.121	136.0	6.1			37	34
21																				
22																				
23	8.1	16.3		42.0	2.062				7.0	9.3	2.7		30.0	0.063	108.0	1.2		<1.8		
24																				
25																				
26	8.1	15.9		44.0	2.100				7.0	8.6	2.6		30.0	0.060	103.0	0.2				
27	7.5	14.1	20	44.0	0.422	350	290		6.9	7.8	2.9	<0.1	34.0	0.055	100.0	3.5			34	36
28																				
29																				
30	8.2	14.9		48.0	2.740				7.2	8.4	3.9		34.0	0.125	98.0	3.1		<1.8		
31	8.1	15.3		48.0	2.196				7.0	8.7	3.8		32.0	0.065	98.9	0.8				
																		MEDIAN		
Average	8.0	15.9	20.0	43.3	1.948	300	338		7.1	8.8	3.3	<0.1	31.2	0.112	112.7	4.0	0.0	<1.8	30	30
Maximum	8.3	17.7	22.0	50.0	3.896	350	440		7.3	11.1	4.3	<0.1	36.0	0.630	136.0	9.0	0.0	<1.8	37	36
Minimum	7.4	14.1	19.0	36.0	0.299	240	240		6.7	7.1	2.2	<0.1	24.0	0.038	98.0	0.2	0.0	<1.8	20	24

# Waste Water Management Facility 30 Day Average BOD & TSS Work Sheet 2013

DATE	Influent	Effluent	INF BOD	EFF BOD	INF TSS	EFF TSS	BOD	BOD	BOD	TSS	TSS	TSS
							mg/L	lbs/day	% Removal	mg/L	lbs/day	% Removal
6/7/2013	0.854	1.049	260	24	180	15	24	210	91	15	131	92
6/14/2013	0.847	0.970	280	20	250	10	20	162	93	10	81	96
6/21/2013	0.830	1.101	200	38	290	16	38	349	81	16	147	94
6/28/2013	0.841	1.106	440	47	440	16	47	434	89	16	148	96
							32	289	88	14	127	95

Monthly Avg.

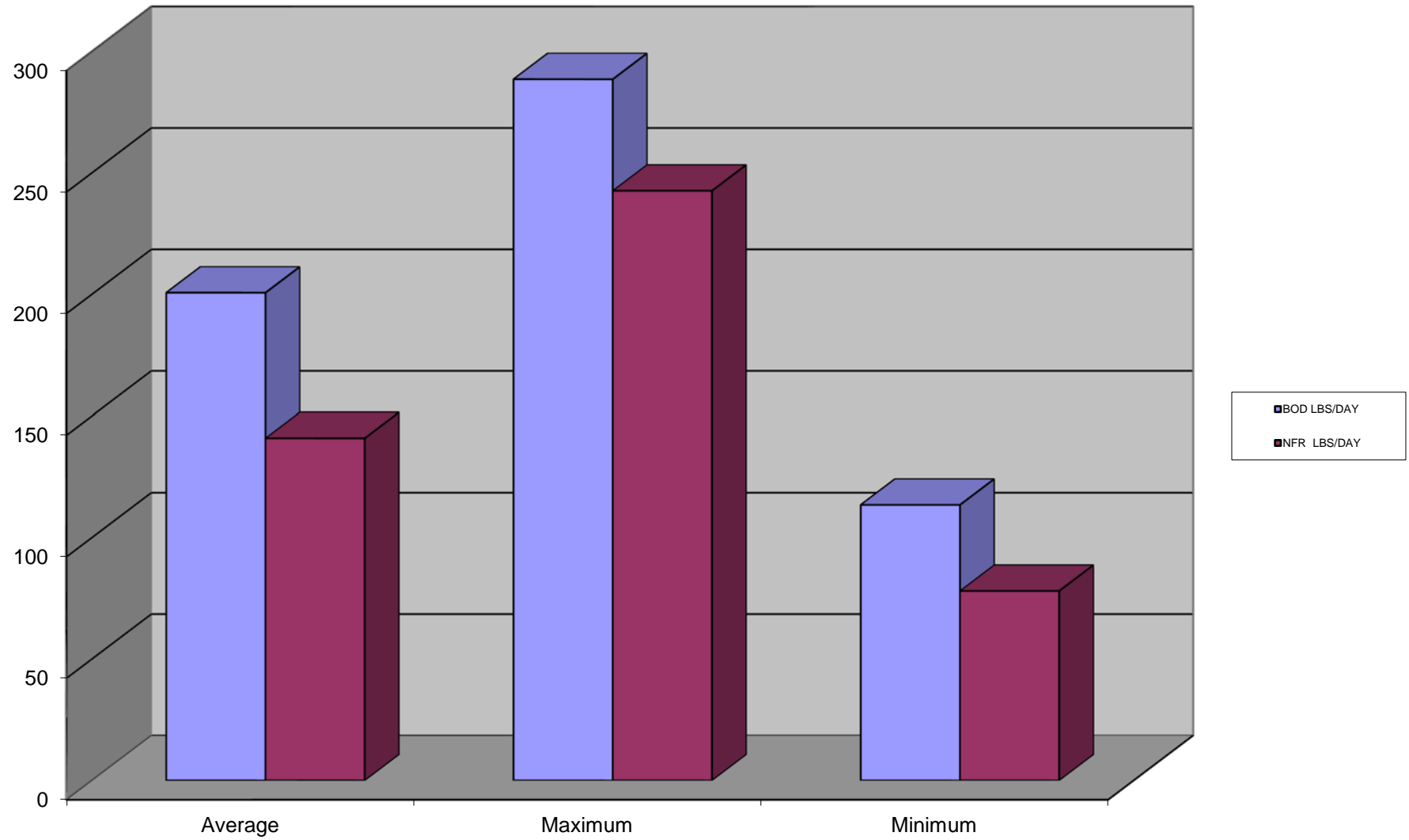
Monthly Avg.Monthly Avg.Monthly Avg.Monthly Avg.Monthly Avg.Monthly Avg.



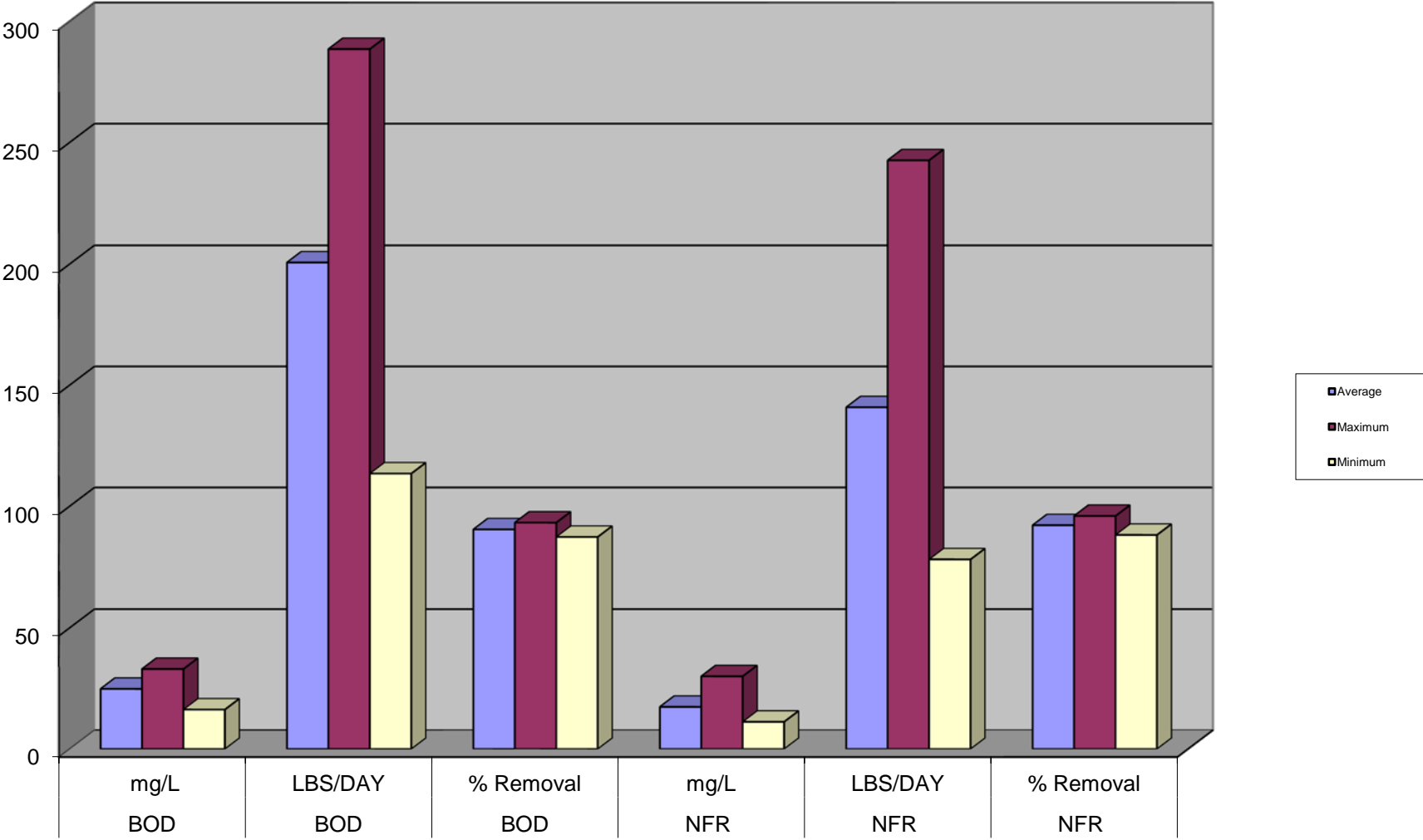
**2013 BOD & NFR 30 Day Average****Average, Maximum and Minimum Totals**

Month	BOD mg/L	BOD lbs/day	BOD % Removal	TSS mg/L	TSS lbs/day	TSS % Removal
January	38	332	86	47	404	82
February	23	218	91	28	265	85
March	24	226	88	26	242	85
April	20	206	90	27	284	83
May	16	167	92	28	291	80
June	24	213	89	28	250	83
July	32	234	87	32	227	83
August	32	245	89	23	178	91
September	38	333	85	31	269	87
October	28	252	89	30	274	87
November	22	203	89	29	268	86
December	29	359	85	31	394	81
Average	27	249	88	30	279	84
Maximum	38	359	92	47	404	91
Minimum	16	167	85	23	178	80

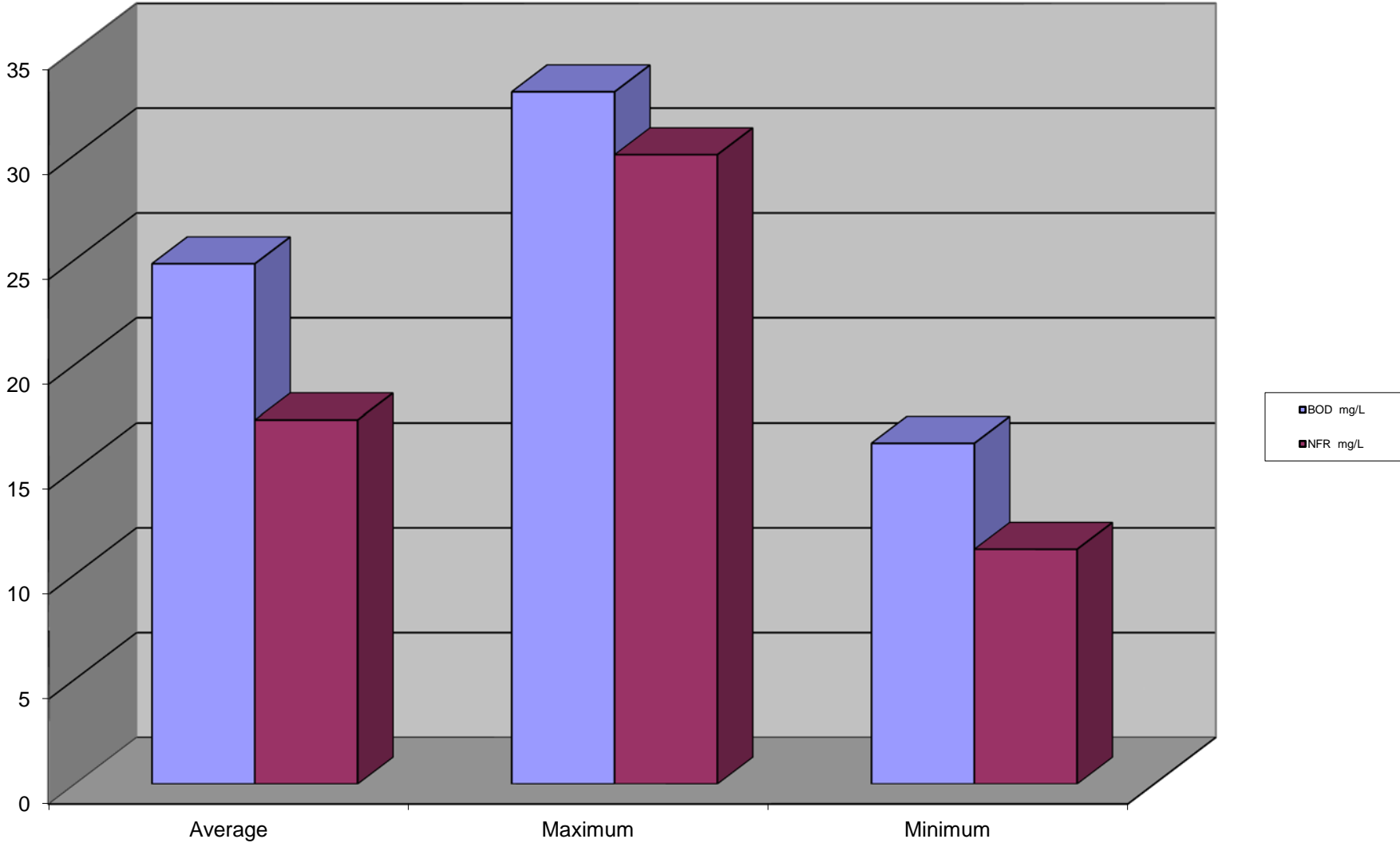
**BOD & NFR 30 DAY AVERAGE LBS/DAY**



**30 Day BOD & NFR**  
**Maximum, Minimum, and Average**



BOD & NFR 30 DAY AVERAGE mg/L



McKinleyville Community Services District  
Wastewater Management Facility  
2013 Influent, Terminal Pond, and Effluent BOD

MONTH		INFLUENT	EFFLUENT	POND 4	POND 5
		BOD	BOD	BOD	BOD
<b>January</b>	1/4/2013	360	24		42
	1/11/2013	180	29		38
	1/18/2013	250	30		37
	1/25/2013	200	32		44
<b>February</b>	2/1/2013	230	31		39
	2/8/2013	280	24		42
	2/15/2013	320	30		42
	2/22/2013	290	26		42
<b>March</b>	3/1/2013	290	27		39*
	3/8/2013	170	25		36
	3/15/2013	250	27		37
	3/22/2013	210	18		32
	3/29/2013	260	20		37
<b>April</b>	4/5/2013	170	17		31
	4/12/2013	210	24		37
	4/19/2013	240	22		29
	4/26/2013	260	19		33
<b>May</b>	5/3/2013	300	21		35
	5/10/2013	300	22		40
	5/17/2013	300	17		38
	5/24/2013	300	29		57
	5/31/2013	240	31		51
<b>June</b>	6/7/2013	260	24		49
	6/14/2013	280	20		75
	6/21/2013	200	38		96
	6/28/2013	440	47		110
<b>July</b>	7/3/2013	270	38		97
	7/12/2013	250	44		66
	7/19/2013	250	27		47
	7/26/2013	290	28		37
<b>August</b>	8/2/2013	320	27		70
	8/9/2013	390	19		58
	8/16/2013	380	19		57
	8/23/2013	250	22		34
	8/30/2013	230	28		36
<b>September</b>	9/6/2013	250	18		56
	9/13/2013	200	14		66
	9/20/2013	240	19		59
	9/27/2013	210	14		56
<b>October</b>	10/4/2013	220	18		44
	10/11/2013	310	22		46
	10/18/2013	220	16		40
	10/25/2013	220	14		36
<b>November</b>	11/1/2013	280	25		42
	11/8/2013	270	21		48
	11/15/2013	260	15		40
	11/22/2013	290	22		44
	11/29/2013	330	29		51
<b>December</b>	12/6/2013	290	20		35
	12/13/2013	240	29		46
	12/20/2013	320	37		53
	12/27/2013	350	34		56
<b>Average</b>		268	25	0	48
<b>Maximum</b>		440	47	0	110
<b>Minimum</b>		170	14	0	29

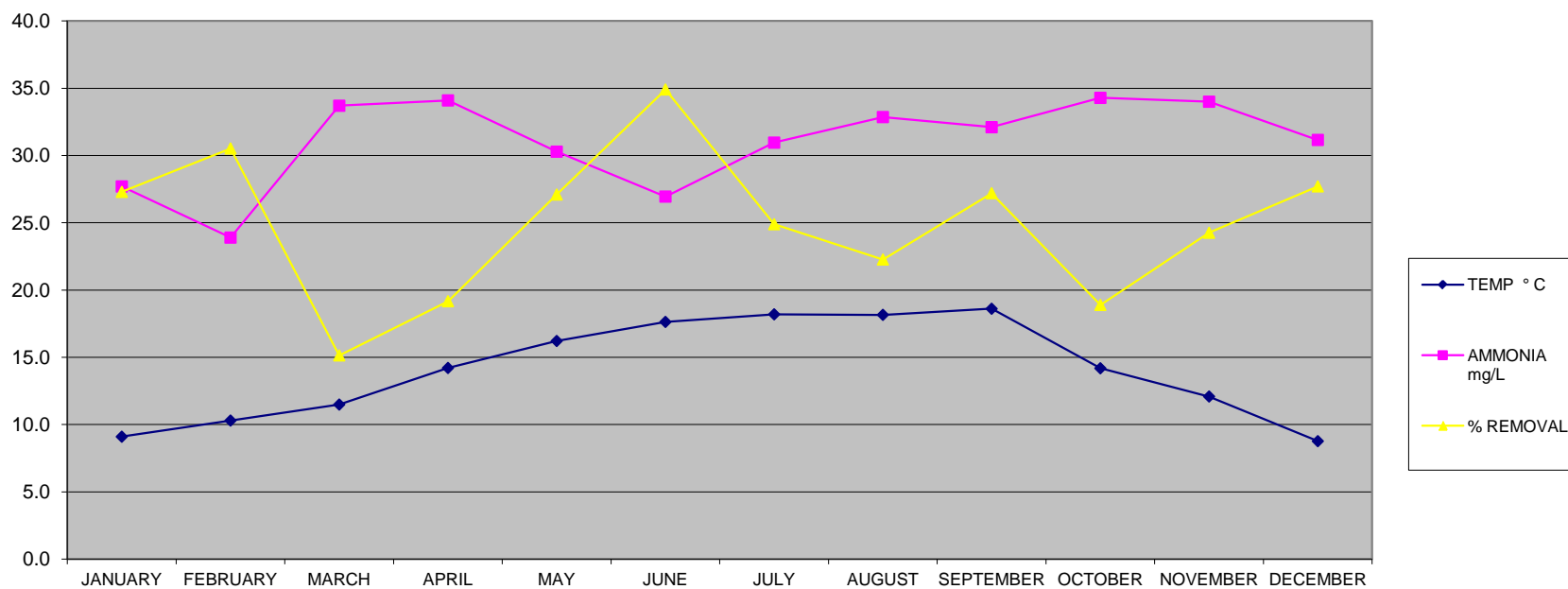
**McKINLEYVILLE COMMUNITY SERVICES DISTRICT**  
**WASTEWATER MANAGEMENT FACILITIES INFLUENT & EFFLUENT**  
**AVERAGE AMMONIA, TEMPERATURE, pH, CALCULATED UN-IONIZED NH<sub>3</sub>**

**ANNUAL MONTHLY AVERAGE 2013**

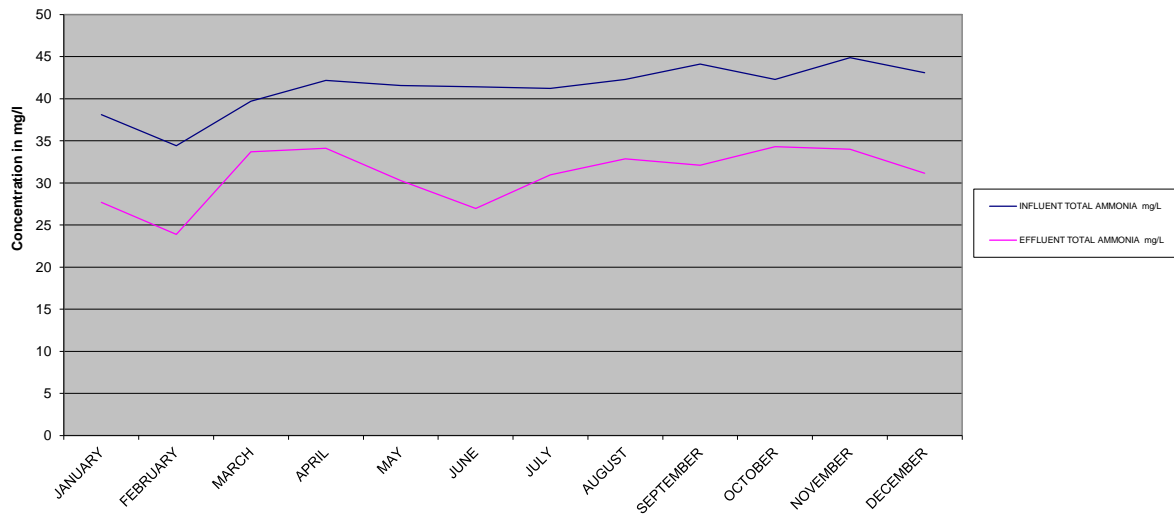
DATE	pH	TEMP ° C	INFLUENT TOTAL AMMONIA mg/L	UN-IONIZED NH <sub>3</sub> (mg/L)	pH	TEMP ° C	EFFLUENT TOTAL AMMONIA mg/L	UN-IONIZED NH <sub>3</sub> (mg/L)	% REMOVAL
JANUARY	7.7	14.3	38	0.750	7.2	9.1	28	0.143	27
FEBRUARY	8.0	14.5	34	1.532	7.1	10.3	24	0.094	31
MARCH	7.7	14.5	40	0.797	6.9	11.5	34	0.077	15
APRIL	7.8	15.8	42	1.286	6.8	14.2	34	0.071	19
MAY	7.9	17.3	42	1.629	6.7	16.2	30	0.065	27
JUNE	7.8	18.6	41	1.512	6.8	17.6	27	0.084	35
JULY	7.8	19.3	41	1.705	6.8	18.2	31	0.093	25
AUGUST	7.8	20.0	42	1.742	6.8	18.2	33	0.099	22
SEPTEMBER	7.9	20.7	44	2.280	6.8	18.6	32	0.101	27
OCTOBER	7.9	18.9	42	2.172	7.0	14.2	34	0.113	19
NOVEMBER	7.9	17.4	45	1.938	6.6	12.1	34	0.100	24
DECEMBER	8.0	15.9	43	1.948	7.1	8.8	31	0.082	28
<b>AVERAGE</b>	7.9	17.3	41.3	1.608	6.9	14.1	31.0	0.093	25
<b>MAXIMUM</b>	8.0	20.7	44.9	2.280	7.2	18.6	34.3	0.143	35
<b>MINIMUM</b>	7.7	14.3	34.4	0.750	6.6	8.8	23.9	0.065	15



**Relationship Between Temperature and Removal of Monthly Averages**



Average Total Ammonia



McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
MONITORING WELL DATA 2013

Location	W-001		W-002		W-006		W-007		W-008		W-009		W-014		W-015		W-016	
Quarter	Nitrate	TDS	Nitrate	TDS	Nitrate	TDS	Nitrate	TDS	Nitrate	TDS	Nitrate	TDS	Nitrate	TDS	Nitrate	TDS	Nitrate	TDS
January	5.2	140	3.6	99	18	270	17	240	5	150	14	190	1.8	97	ND	160	ND	6400
April	5.3	120	5.8	100	18	250	16	230	5.2	100	9.3	150	2	84	ND	1100	ND	5800
July	4.5	140	5.8	130	18	250	15	200	14	210	15	210	1.6	100	ND	1400	ND	6100
October	14	210	5.7	130	15	250	9.3	170	13	190	13	180	1.4	70	ND	460	ND	6200
AVERAGE	7.3	152.5	5.2	114.8	17.3	255.0	14.3	210.0	9.3	162.5	12.8	182.5	1.7	87.8	ND	780.0	ND	6125.0
MAXIMUM	14.0	210.0	5.8	130.0	18.0	270.0	17.0	240.0	14.0	210.0	15.0	210.0	2.0	100.0	ND	1400.0	ND	6400.0
MINIMUM	4.5	120.0	3.6	99.0	15.0	250.0	9.3	170.0	5.0	100.0	9.3	150.0	1.4	70.0	ND	160.0	ND	5800.0

McKinleyville Community Services District  
River Monitoring 2013

Upstream R-001											
Month	Date	Time	CFS	Temp	pH	D.O.	NTU	Conductivity	Ammonia	Hardness	TDS
January	1/7/2013	09:55	1150	8.4	8.0	11.2	16.2	62.5	ND	54	63
February	2/7/2013	13:30	950	9.8	8.1	11.9	8.76	65.8	ND	52	84
March	3/6/2013	09:40	1300	9.9	8.2	11.6	21.1	63.5	ND	57	210
April	4/5/2013	10:35	1810	12.3	7.9	10.1	65.8	178.7	ND	70	87
May	5/6/2013	13:40	121	20.0	8.0	7.9	1.21	175.3	ND		110
June	6/5/2013	15:00	86	20	8.1	10.2	0.6	145.9	ND		120
July	7/15/2013	1010	60	18.3	8.2	9.0	0.87	175.5	ND		140
August	8/16/2013	1105	40	24.2	7.5	6.3	0.6	259	ND		130
September	9/4/2013	1405	43	27.2	7.2	9.3	2.71	233	ND		150
October	10/3/2013	1405	179	17.9	7.1	11.4	3.15	132.1	ND		120
November	11/14/2013	1145	69	15.6	7.5	9.7	0.93	143.6	ND		110
December	12/5/2013	1505	113	9.4	7.1	8.5	0.97	116.1	0.7		100
Average				16.08	7.74	9.76	10.24	145.92	ND	58.25	118.67
Maximum				27.2	8.2	11.9	65.8	259.0	ND	70.0	210.00
Minimum				8.4	7.1	6.3	0.6	62.5	ND	52.0	63.00

Downstream R-002												
Month	Date	Time	CFS	Temp	pH	D.O.	NTU	Conductivity	Ammonia	Hardness	TDS	VISUAL IMPACT ON RIVER
January	1/17/2013	09:30	1150	8.9	7.7	11.4	14	73.0	1.20	53	74	No Visual Impact Observed
February	2/7/2013	14:00	950	9.3	7.7	11.9	11.5	63.2	0.70	54	90	
March	3/6/2013	10:10	1300	9.5	8.1	11.5	18.2	63.5	0.32	54	67	
April	4/5/2013	10:15	1810	12.7	7.5	8.8	64.1	151.9	2.40	68	100	
May	5/6/2013	14:10	121	19.3	8.1	8.2	1.27	166.8	ND		120	
June	6/5/2013	14:10	86	19.6	8.3	9.6	1.1	159.2	ND		130	
July	07/15/13	0935	60	17.7	7.8	6.9	1.2	724.0	ND		530	
August	8/16/2013	1045	40	22	7.0	6.3	2.8	236.0	ND		1,600	
September	9/4/2013	1430	43	21.8	7.5	12.4	2.12	5.6	ND		4000	
October	10/3/2013	1425	179	16.6	7.2	12.1	4.19	136.3	ND		120	
November	11/14/2013	1120	69	13.5	6.9	10.6	1.16	6.0	ND		9300	
December	12/5/2013	1445	113	10.1	6.9	8.9	1.09	907.0	0.10		810	
Average				15.08	7.56	9.88	10.23	224.37	0.94	57.25	1411.75	
Maximum				22.0	8.3	12.4	64.1	907.0	2.4	68.0	9300.00	
Minimum				8.9	6.9	6.3	1.1	5.6	ND	53.0	67.00	

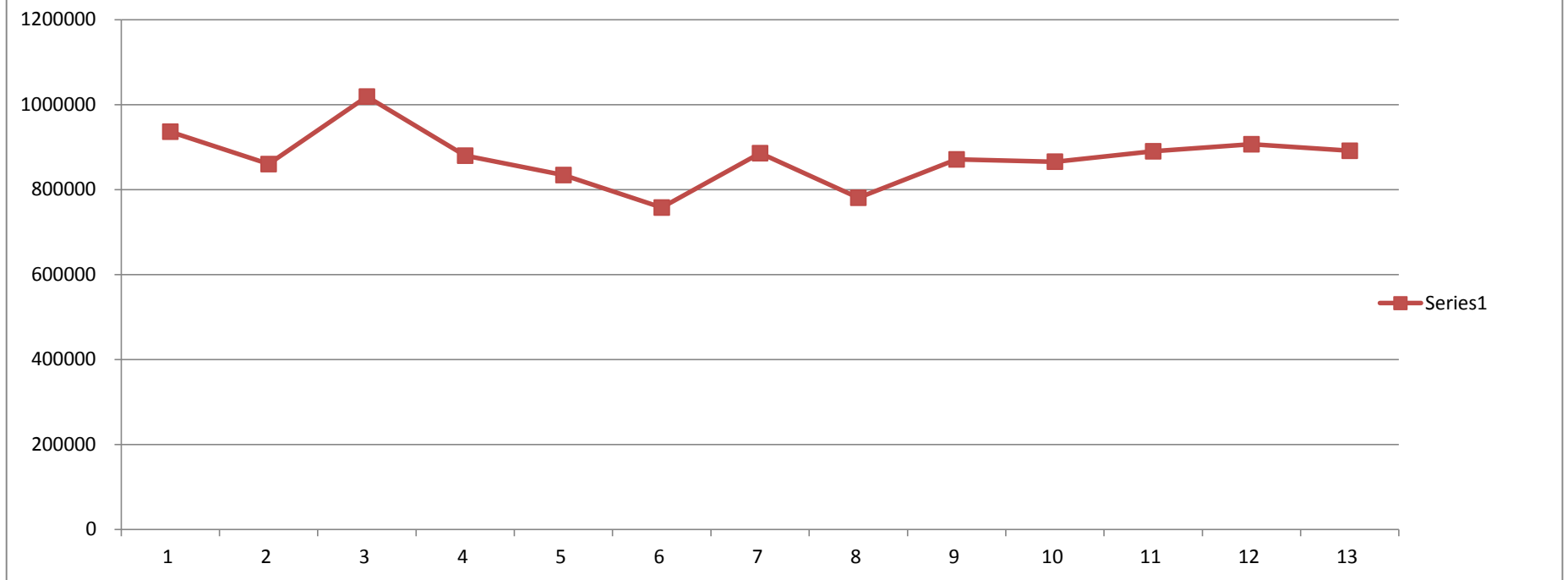
WWMF M-001											
Month	Date	Time	CFS	Temp	pH	D.O.	NTU	Conductivity	Ammonia	Hardness	TDS
January	1/7/2013	1015	1150	8.7	7.3	5.2	102	273.0	26	N/A	180
February	2/7/2013	14:15	950	11	7	5.8	91.9	315	32	N/A	260
March	3/6/2013	10:40	1300	10.4	6.9	4.7	82.6	306	31	N/A	200
April	4/5/2013	11:20	1810	14.3	6.8	3.9	61.1	428	28	N/A	230
May	5/6/2013	11:00	121	16.4	6.7	3.1	54.0	421	32	N/A	260
June	6/5/2013	16:10	86	20	6.7	2.8	179	454	15	N/A	300
July	07/15/13	1050	60	17.9	6.9	2.7	163.0	730.0	22	N/A	410
August	8/16/2013	1035	40	18.9	6.8	4.2	125	541	30	N/A	330
September	9/4/2013	1120	43	19.8	6.7	2.7	97.3	550	27	N/A	340
October	10/3/2013	0920	179	16.1	6.9	2.8	140	321	28	N/A	340
November	11/14/2013	0945	69	13.1	6.9	4.3	102	466	29	N/A	320
December	12/5/2013	1405	113	9.8	7	7.6	114	426	24	N/A	280
Average				14.70	6.88	4.15	109.33	435.92	27.00	0.00	287.50
Maximum				20.0	7.3	7.6	179.0	730.0	32.0	0.0	410.00
Minimum				8.7	6.7	2.7	54.0	273.0	15.0	0.0	180.00

McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
SLUDGE and SOLIDS MONITORING

FEBRUARY 2013

POND 1 A				POND 1 B		
	CENTER	SOUTH	NORTH	CENTER	SOUTH	NORTH
1	10	18	12	11	13	10
2	10	32	15	10	17	13
3	9	30	12	11	14	16
4	10	30	13	10	11	12
5	10	25	19	9	12	14
6	9	23	18	10	13	13
7	14	22	10	8	12	12
8	12	17	23	10	13	16
9	12	12	17	10	12	12
10	9	12	15	9	11	19
11	10	13	11	10	15	10
12	10	13	10	8	10	11
13	13	11	10	7	12	11
14	12	12	13	8	12	14
15	12	11	15	10	10	16
16	11	11	13	11	10	16
17	10	11	12	10	10	12
18	13	11	10	9	10	12
19	12	11	17	12	12	10
20	11	12	14	11	12	14
21	13	13	13	12	12	16
22	11	14	12	14	14	16
23	12	10	10	15	16	13
24	13	12	10	13	19	10
AVERAGE	11	16	14	10	13	13
MAXIMUM	14	32	23	15	19	19
MINIMUM	9	10	10	7	10	10
ALL				POND A POND B		
AVERAGE	ALL	13		AVERAGE	14	12
MAXIMUM	ALL	32		MAXIMUM	23	18
MINIMUM	ALL	7		MINIMUM	10	9
POND 1A	143,625	CUFT	AVERAGE POND 1A = 1.1 Ft. DEPTH			
POND 1B	100,709	CUFT	AVERAGE POND 1B = 1.0 Ft. DEPTH			
TOTAL	244,334 CUFT					
CAPACITY	POND A = 634,415 CUFT POND B = 501,225 CUFT					
REMAINING	POND A = 492,112 CUFT POND B = 414,555 CUFT					
TOTAL SLUDGE CAPACITY 1,135,640 CUFT						
TOTAL REMAINING SLUDGE CAPACITY 891,306 CUFT						

**Remaining Sludge Capacity in cuft.**





McKinleyville Community Services District  
Wastewater Management Facility  
Pond Ammonia Levels in mg/L  
Annual Averages 2013

Date		Pond A	Pond B	Pond 2	Pond 3	Pond 4	Pond 5
January		27	29	28	27	30	28
February		25	22	26	24	28	29
March		33	33	32	34	35	36
April		30	30	32	31	34	35
May		29	30	30	29	32	35
June		28	28	30	31	31	31
July		31	31	30	30	30	31
August		30	30	30	31	32	34
September		30	30	31	31	30	32
October		33	31	34	34	33	34
November		31	32	32	34	31	33
December		33	32	32	32	34	33
Average		30	30	30	31	32	32
Minimum		25	22	26	24	28	28
Maximum		33	33	34	34	35	36

McKinleyville Community Services District  
Wastewater Management Facility  
Pond Dissolved Oxygen in mg/L  
Annual Averages 2013

								Average
Date		Pond A	Pond B	Pond 2	Pond 3	Pond 4	Pond 5	Pond D.O.
January		2.6	2.4	3.1	4.5	2.5	1.7	2.8
February		2.3	1.9	3.7	3.7	1.8	1.3	2.5
March		4.9	3.6	5.0	4.9	2.5	1.5	3.8
April		9.6	7.7	7.7	7.1	3.0	1.9	6.2
May		9.0	7.8	6.1	7.0	2.7	1.5	5.7
June		2.4	4.1	3.3	4.9	3.1	1.5	3.2
July		3.7	1.8	4.2	4.4	2.6	1.2	3.0
August		5.4	3.9	5.0	5.2	3.2	1.4	4.0
September		3.5	4.1	5.6	4.7	2.9	1.4	3.7
October		4.9	4.9	3.9	4.5	2.2	1.6	3.7
November		4.9	5.3	6.8	5.1	2.6	1.8	4.4
December		3.4	3.8	4.6	5.2	2.4	1.9	3.6
Average		4.7	4.3	4.9	5.1	2.6	1.6	
Minimum		2.3	1.8	3.1	3.7	1.8	1.2	
Maximum		9.6	7.8	7.7	7.1	3.2	1.9	

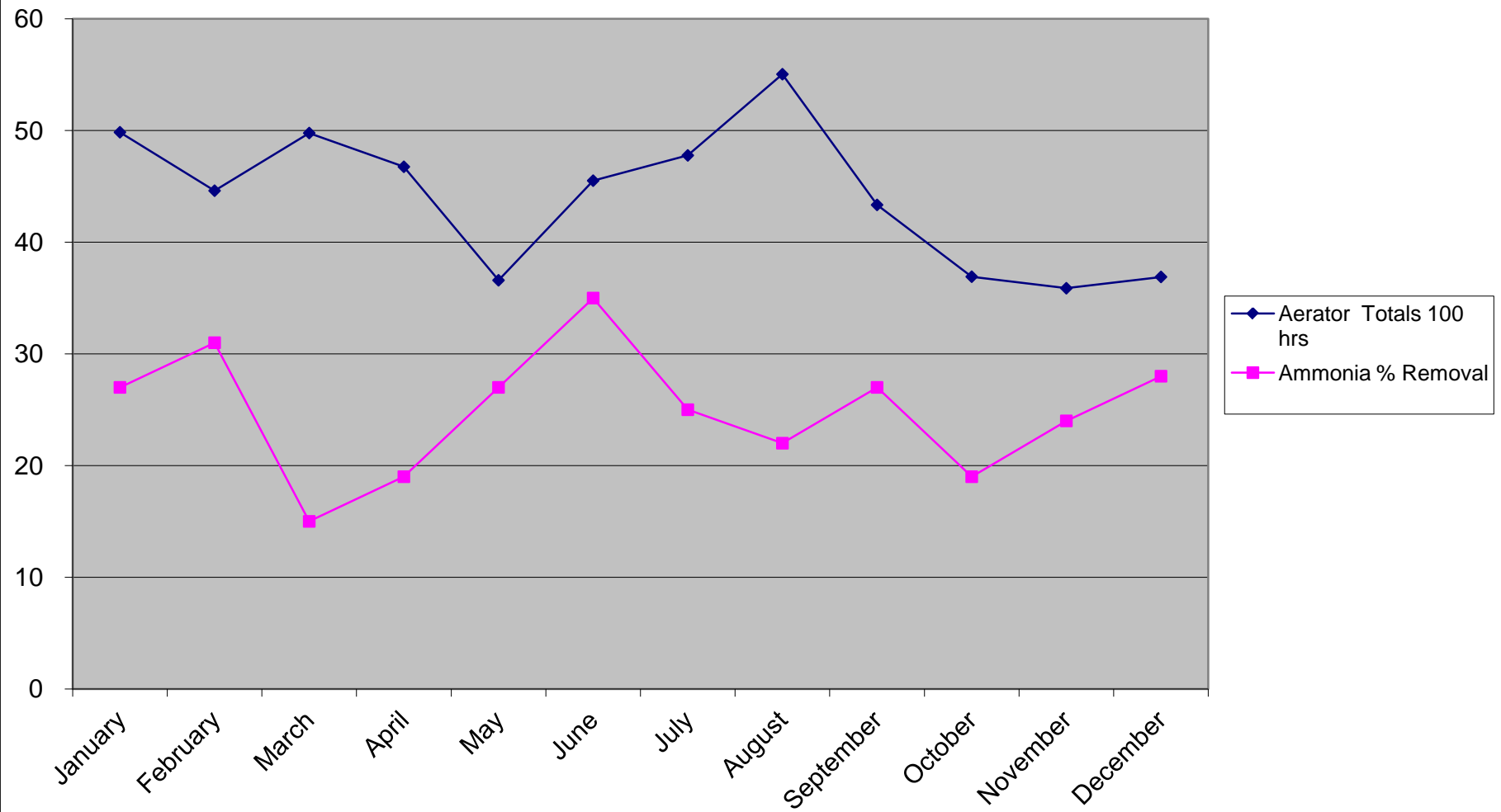
McKinleyville Community Services District  
Wastewater Management Facility  
Pond Depths, Elevation in Feet Above Sea Level  
Annual Averages 2013

								Average
Date		Pond A	Pond B	Pond 2	Pond 3	Pond 4	Pond 5	Pond Depth
January		62.6	62.6	62.1	61.7	61.4	61.0	61.9
February		62.3	62.3	61.9	61.6	61.3	61.0	61.7
March		62.3	62.3	61.9	61.6	61.5	61.2	61.8
April		62.3	62.3	61.9	61.6	61.4	61.0	61.8
May		62.2	62.2	61.8	61.6	61.3	61.1	61.7
June		62.4	62.4	62.0	61.8	61.5	61.2	61.9
July		62.2	62.2	61.5	61.3	61.2	60.9	61.9
August		62.4	62.4	61.7	61.5	61.4	61.2	61.8
September		62.5	62.5	61.7	61.5	61.3	61.0	61.8
October		62.6	62.6	61.9	61.7	61.5	61.1	61.9
November		62.2	62.2	61.8	61.6	61.5	61.2	61.8
December		62.3	62.3	61.8	61.7	61.6	61.4	61.8
Average		62.4	62.4	61.8	61.6	61.4	61.1	
Minimum		62.2	62.2	61.5	61.3	61.2	60.9	
Maximum		62.6	62.6	62.1	61.8	61.6	61.4	

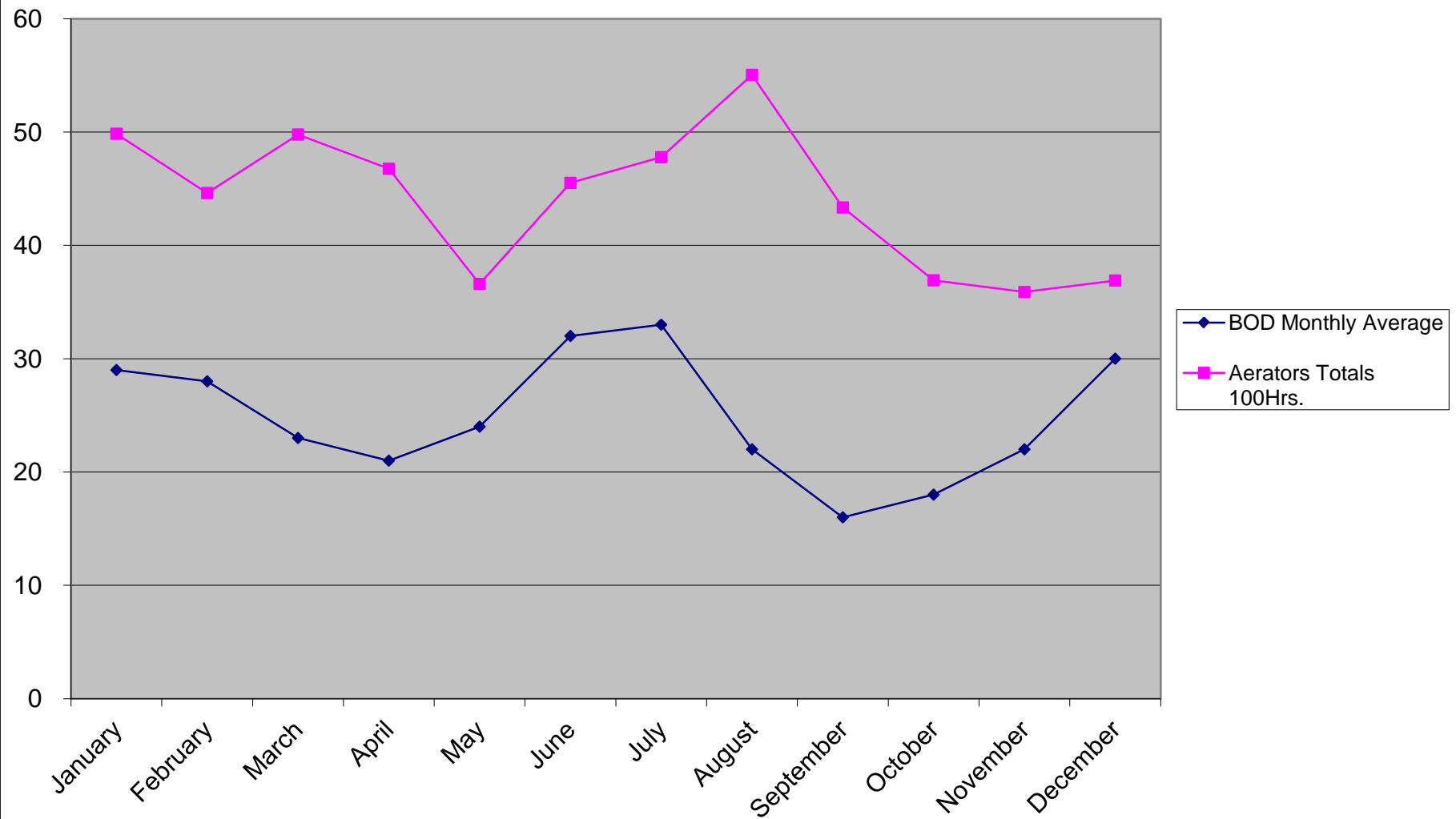
McKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
ANNUAL TOTAL AERATOR HOURS 2013

DATE	Pond A					Pond B					Pond		TOTALS
	1A	2A	3A	4A	5A	1B	2B	3B	4B	5B	2-A	3-A	
January	147.4	256.7	499.4	135.2	130.2	236.4	490.9	132.7	740.5	737.5	737.4	740.6	4984.9
February	129.7	220.1	461.6	123.9	118.5	209.8	438.6	119.0	666.1	661.6	666.1	646.5	4461.5
March	142.9	253.4	505.3	143.0	128.6	228.6	494.8	126.3	740.0	737.3	737.3	740.4	4977.9
April	137.4	236.4	483.1	137.5	123.4	223.3	462.2	118.7	690.7	681.6	689.2	692.2	4675.7
May	183.4	116.6	348.4	198.1	172.2	104.2	346.2	194.4	504.6	504.2	481.9	505.0	3659.2
June	273.9	368.2	469.6	276.5	161.4	237.2	466.6	167.5	565.2	566.7	479.1	519.5	4551.4
July	143.9	256.4	502.4	149.6	152.3	239.5	675.0	146.6	588.9	706.4	503.6	713.0	4777.6
August	142.1	251.3	738.1	147.3	136.8	234.7	743.4	136.3	743.5	743.6	743.7	744.0	5504.8
September	141.4	247.4	396.1	142.0	128.0	396.3	519.7	125.6	543.6	606.9	543.6	543.7	4334.3
October	148.1	246.0	335.9	142.1	132.5	235.9	332.2	139.8	493.1	495.3	495.2	495.3	3691.4
November	139.4	242.4	326.4	139.7	127.9	237.9	323.9	133.1	479.3	479.2	479.4	479.3	3587.9
December	142.7	257.2	335.2	146.0	134.8	236.7	329.6	131.3	494.0	493.9	493.9	494.0	3689.3
TOTAL	1872.3	2952.1	5401.5	1880.9	2820.5	5623.1	5623.1	1671.3	7249.5	7414.2	7050.4	7313.5	52895.9
AVERAGE	156.0	246.0	450.1	156.7	235.0	468.6	468.6	139.3	604.1	617.9	587.5	609.5	4408.0
MAXIMUM	273.9	368.2	738.1	276.5	396.3	743.4	743.4	194.4	743.5	743.6	743.7	744.0	5504.8
MINIMUM	129.7	116.6	326.4	123.9	104.2	323.9	323.9	118.7	479.3	479.2	479.1	479.3	3587.9

**Aerator Hours Versus Ammonia Percent Removal**

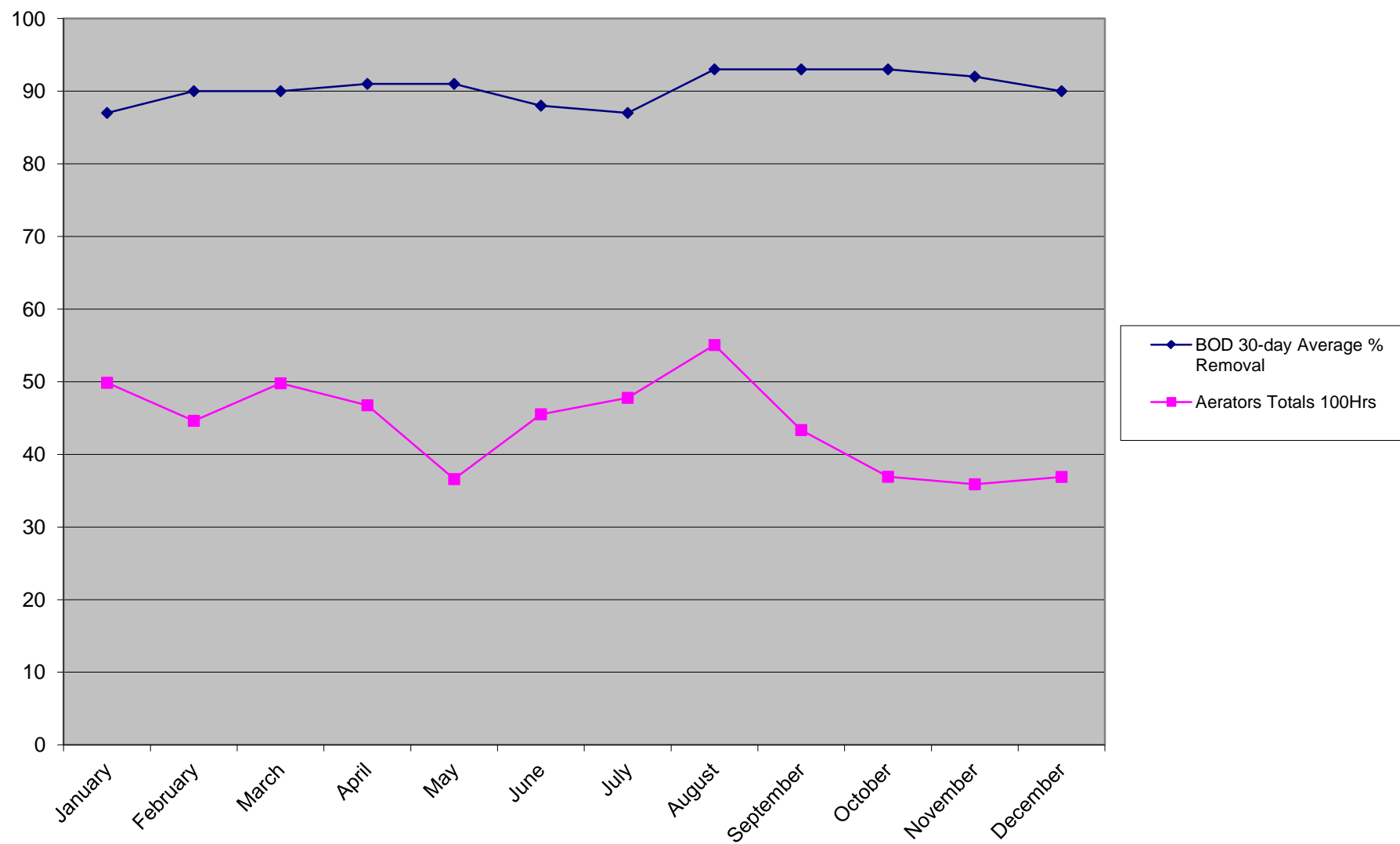


## Aerator Hours Versus Effluent BOD





**Aerator Hours Versus BOD 30-day Average % Removal**



MCKINLEYVILLE COMMUNITY SERVICES DISTRICT  
WASTEWATER MANAGEMENT FACILITY  
ELECTRIC, CL<sub>2</sub>, SO<sub>2</sub>, WATER and RAIN DATA  
ANNUAL 2013

DATE	PG&E kw Hours	CL <sub>2</sub> USAGE lbs.	SO2 USAGE lbs.	RAIN inches
JANUARY	24480	1545	887	2.92
FEBRUARY	23170	3270	780	1.62
MARCH	23562	4673	852	3.28
APRIL	24687	5302	684	2.38
MAY	25200	4254	0	1.90
JUNE	27620	2377	0	0.59
JULY	29887	114	0	0.00
AUGUST	32160	3463	0	0.00
SEPTEMBER	26080	3784	0	3.86
OCTOBER	25680	3410	0	0.00
NOVEMBER	24400	3391	0	1.53
DECEMBER	23520	2945	0	0.95

TOTAL	310446	38528	3203	19.03
AVERAGE	25871	3211	267	1.59
MAXIMUM	32160	5302	887	3.86
MINIMUM	23170	114	0	0.00

PG&E Meter was replaced in February and had issues into June.

WWMF WATER METER			
DATE	LOW	HIGH	CU.FT.
START	31924	72992	
END	36262	98517	1024

# SPECIAL TESTING

INFLUENT					EFFLUENT			
DATE	TKN Grab	TKN Comp.	ALKALINITY	NITRATE	TKN Grab	TKN Comp.	ALKALINITY	NITRATE
1/4/2013	45		210	ND	28		180	ND
1/11/2013	53		230	ND	30		180	ND
1/18/2013	65		270	ND	29		180	ND
1/18/2013	65		270	ND	29		180	ND
1/25/2013	75		290	ND	29		180	ND
2/1/2013	62		270	ND	27		180	ND
2/8/2013	50		230	ND	29		170	ND
2/15/2013	63		240	ND	37		180	ND
2/22/2013	42		190	ND	37		190	ND
3/1/2013	50		230	ND	31		180	ND
3/8/2013	51		210	ND	29		180	ND
3/15/2013	61		230	ND	28		170	ND
3/22/2013	63		240	ND	36		180	ND
3/29/2013	53		240	ND	31		180	ND
4/5/2013	45		210	ND	34		180	ND
4/12/2013	66		280	ND	32		180	ND
4/19/2013	81		290	ND	38		180	ND
4/26/2013	53		260	ND	35		180	ND
5/3/2013	57		240	ND	30		180	ND
5/10/2013	81		300	ND	37		180	ND
5/17/2013	58		290	ND	33		180	ND
5/24/2013	63		290	ND	35		190	ND
5/31/2013	75		310	ND	40		190	ND
6/7/2013	67		300	ND	37		200	ND
6/14/2013	42		220	ND	35		190	ND
6/21/2013	65		290	ND	37		200	ND
6/28/2013	78		300	ND	42		210	ND
7/3/2013	55		280	ND	34		210	ND
7/12/2013	62		310	ND	41		220	ND
7/19/2013	83		330	ND	48		220	ND
7/26/2013	64		320	ND	40		220	ND
8/2/2013	59		82	ND	38		220	ND
8/9/2013	56		280	ND	41		230	ND
8/16/2013	60		270	ND	47		230	ND
8/23/2013	64		290	ND	37		230	ND
8/30/2013	54		290	ND	35		230	ND
9/6/2013	62		290	ND	31		220	ND
9/13/2013	62		280	ND	34		220	ND

9/20/2013	67		310	ND	39		230	ND
9/27/2013	66	40	300	ND	39	33	230	ND
10/4/2013	74	45	310	ND	20	37	220	ND
10/11/2013	56	50	250	ND	40	38	230	ND
10/18/2013	58	42	290	ND	35	39	240	ND
10/25/2013	53	38	280	ND	31	32	230	ND
11/1/2013	60	49	260	ND	38	38	230	ND
11/8/2013	68	46	310	ND	32	34	230	ND
11/15/2013	67	52	290	ND	39	39	220	ND
11/22/2013	71	47	310	ND	40	37	220	ND
11/27/2013	88	52	340	ND	39	39	230	ND
12/6/2013	72	46	290	ND	37	35	230	ND
12/13/2013	57	44	260	ND	39	malfunction	230	ND
12/20/2013	55	52	250	ND	47	40	230	ND
12/27/2013	58	43	300	ND	36	32	230	ND