



NEW MEXICO  
ENVIRONMENT DEPARTMENT



*Surface Water Quality Bureau*

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ERIKA SCHWENDER  
Director  
Resource Protection Division

**Certified Mail - Return Receipt Requested**

February 19, 2014

Mr. John Hoogendoorn, Facility Manager  
Glorieta Camps  
P.O. Box 8  
Glorieta, New Mexico 87535

**Re: Glorieta Camps; Minor; Individual Permit; SIC 4952; NPDES Compliance Evaluation  
Inspection; NPDES # NM0028088; February 13, 2014**

Dear Mr. John Hoogendoorn:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the "Further Explanations" section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Diana McDonald  
US Environmental Protection Agency, Region VI  
Enforcement Branch (6EN-WM)  
1445 Ross Avenue  
Dallas, Texas 75202-2733

Bruce Yurdin  
New Mexico Environment Department  
Surface Water Quality Bureau  
Point Source Regulation Section  
P.O. Box 5469  
Santa Fe, New Mexico 87502

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If you have any questions about this inspection report, please contact Daniel Valenta at 505-827-2575 or at [daniel.valenta@state.nm.us](mailto:daniel.valenta@state.nm.us).

Sincerely,

*/s/Bruce Yurdin*

Bruce J. Yurdin  
Program Manager  
Point Source Regulation Section  
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail  
Carol Peters, USEPA (6EN-WM) by e-mail  
Brent Larsen, USEPA (6WQ) by e-mail  
Racquel Douglas, USEPA (6EN-WM) by e-mail  
Gladys Gooden-Jackson, USEPA (6EN-WC) by e-mail  
NMED District II, Robert Italiano by e-mail



SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO)

DETAILS:

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE  Y  N  NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES  Y  N  NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT  Y  N  NA

4. ALL DISCHARGES ARE PERMITTED  Y  N  NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.  S  M  U  NA (FURTHER EXPLANATION ATTACHED No)

DETAILS:

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.  Y  N  NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.  S  M  U  NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING  Y  N  NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING  Y  N  NA

c) ANALYTICAL METHODS AND TECHNIQUES.  Y  N  NA

d) RESULTS OF ANALYSES AND CALIBRATIONS.  Y  N  NA

e) DATES AND TIMES OF ANALYSES.  Y  N  NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.  Y  N  NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.  S  M  U  NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.  S  M  U  NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.  Y  N  NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.  S  M  U  NA (FURTHER EXPLANATION ATTACHED Yes)

DETAILS:

1. TREATMENT UNITS PROPERLY OPERATED.  S  M  U  NA

2. TREATMENT UNITS PROPERLY MAINTAINED.  S  M  U  NA

3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.  S  M  U  NA

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. **No alarm in case of UV failure.**  S  M  U  NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE  S  M  U  NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.  S  M  U  NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.  S  M  U  NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.  Y  N  NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.  Y  N  NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.  Y  N  NA

## SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?  Y  N  NA  
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?  Y  N  NA  
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?  Y  N  NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?  Y  N  NA  
 IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?  Y  N  NA

## SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO).  
 DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.  Y  N  NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.  Y  N  NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.  Y  N  NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.  Y  N  NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.  Y  N  NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE  Y  N  NA

a) SAMPLES REFRIGERATED DURING COMPOSITING.  Y  N  NA

b) PROPER PRESERVATION TECHNIQUES USED.  Y  N  NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.  Y  N  NA

7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?  Y  N  NA

## SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED Yes)  
 DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.  Y  N  NA  
 TYPE OF DEVICE **V-Notch Flume with Doppler Device**

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.  Y  N  NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.  Y  N  NA

4. CALIBRATION FREQUENCY ADEQUATE. **Doppler meter has never been completely calibrated.**  Y  N  NA  
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES.  Y  N  NA  
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.  Y  N  NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.  Y  N  NA

6. HEAD MEASURED AT PROPER LOCATION.  Y  N  NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.  Y  N  NA

## SECTION F - LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO)  
 DETAILS:

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)  Y  N  NA

**SECTION F - LABORATORY (CONT'D)**

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED  Y  N  NA
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.  S  M  U  NA
4. QUALITY CONTROL PROCEDURES ADEQUATE.  S  M  U  NA
5. DUPLICATE SAMPLES ARE ANALYZED. 80 % OF THE TIME. **No duplicate samples analyzed for pH and O&G**  Y  N  NA
6. SPIKED SAMPLES ARE ANALYZED.     % OF THE TIME.  Y  N  NA
7. COMMERCIAL LABORATORY USED.  Y  N  NA

LAB NAME                     HUTHER AND ASSOCIATES                      
 LAB ADDRESS                     1156 N. BONNIE BRAE, DENTON, TX 76201                      
 PARAMETERS PERFORMED           BIOMONITORING          

**SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS.**  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO).

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	NONE	NONE	NONE	NONE	NONE	CLEAR	

RECEIVING WATER OBSERVATIONS

**SECTION H - SLUDGE DISPOSAL**

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO).  
 DETAILS:

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY.  S  M  U  NA
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503.  S  M  U  NA
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: COMPOST GIVEN AWAY (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

**SECTION I - SAMPLING INSPECTION PROCEDURES** (FURTHER EXPLANATION ATTACHED    ).

1. SAMPLES OBTAINED THIS INSPECTION.  Y  N  NA
2. TYPE OF SAMPLE OBTAINED  
 GRAB                      COMPOSITE SAMPLE     METHOD                      FREQUENCY
3. SAMPLES PRESERVED.  Y  N  NA
4. FLOW PROPORTIONED SAMPLES OBTAINED.  Y  N  NA
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.  Y  N  NA
6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.  Y  N  NA
7. SAMPLE SPLIT WITH PERMITTEE.  Y  N  NA
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.  Y  N  NA
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.  Y  N  NA

**Lifeway Glorieta Camps**  
**February 13, 2014**  
**NM0028088**

**Introduction**

On February 13, 2014 Daniel Valenta (accompanied by Sandra Gabaldón and Anna Keller ) of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Glorieta Camps Wastewater Treatment Plant (WWTP). The Lifeway Glorieta WWTP has a design flow capacity of 0.4 MGD (million gallons per day) and is classified as a minor discharger under the Federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0028088.

This permit regulates the WWTP discharge to Glorieta Creek, thence to Pecos River in the Pecos River Basin in Segment 20.6.4.217 NMAC according to the *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 NMAC*. This segment includes the designated uses of domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; public water supply on the main stem of the Pecos River

The NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the Federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the permittee's representatives, observations made by the NMED inspector, and records and reports kept by the permittee and/or NMED.

Upon arrival at the WWTP at 0950 hours on February 13, 2014, the inspector conducted an entrance interview with Mr. Pat White, Wastewater Supervisor, where he presented credentials and explained the purpose of the inspection. Mr. White conducted a tour of the facility, including the laboratory and records kept onsite. An exit interview was conducted with Mr. Pat White and Mr. Rusty Surratt at the facility at approximately 1315 on February 13, 2014 to present the preliminary findings of the inspection.

**Treatment Scheme**

Domestic wastewater (including grease from the onsite cafeteria) from the Lifeway Glorieta Conference Center and the community of Glorieta Estates (approximately 3,000 during the summer, down to a minimum of 100 guests at the conference center in the winter) is conveyed to an activated sludge/extended aeration system with ultraviolet disinfection. Influent is conveyed to the system by gravity flow. The number of guests at the facility varies greatly from season to season.

Raw wastewater enters the facility headworks via gravity flow. Peak load periods typically occur between 0700 and 0900 hours. The headworks consist of a small three-channel influent grit chamber, manual bar screen with two inch gaps, followed by a second screen with ½ inch gaps. Debris, trash and other materials collected on the bar screens is cleaned off each morning and placed into an onsite trash barrel, dumped into a trash compactor and eventually transported to a landfill for final disposal. The flow enters a Parshall flume where it merely flows through the first splitter box and then flows to a second splitter box before reaching a manhole where valves direct it to the aeration basin.

The aeration basin consists of three rings with rotating disc aerators. The flow moves through the basin in series fashion, entering the outer ring and exiting out of the inner ring. Wastewater flows can be manipulated between the rings for maximum efficiency. For instance, when influent volumes are low, only the inner ring is utilized.

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Manipulation occurs through the use of turning on/off valves within the aeration basin. The aeration basin also receives leachate from two separate sludge bed underdrain systems that are combined prior to reaching the basin.

Wastewater exits the inner ring of the aeration basin and flows into a covered clarifier unit. Return Activated Sludge (RAS) is pumped from the clarifier back into the outer ring of the aeration basin. After leaving the clarifier, water flows through a pipeline that travels along the west side over Glorieta Creek and into a splitter box to a UV disinfection system.

Effluent flows into the two celled remnant chlorine contact chamber. Following UV disinfection, the effluent flow is measured by a 90° V-notch weir and staff gage with a Stevens electronic totalizer meter. The disinfected effluent cascades down a series of concrete steps for approximately 25 feet, then flows through a 30 foot long manhole trench, and discharges into Glorieta Creek.

**Solids Management**

Waste Activated Sludge (WAS) is sent to the Imhoff tanks from the clarifier. The two Imhoff tanks are now used as sludge thickeners. Following the Imhoff tanks, sludge is transported to the sludge drying beds. Sludge is periodically removed from the drying beds and composted, 4 additional sludge beds were added to the facility to increase the composting capacity, making a total of 7 sludge beds. The sludge is mixed with yard, tree, and landscaping waste. This is composted and used on site.

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**Further Explanations**

**Section C – Operations and Maintenance – Overall rating of “Unsatisfactory”**

The permit requires in Part III.B.3. PROPER OPERATIONS AND MAINTENANCE:

*The permittee shall at all times properly operate and maintain all facilities and systems of the treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.*

*b. The permittee shall provide an adequate operation staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance with the conditions of this permit.*

Part D. (Overflow Reporting) of the permit states,

*“The permittee shall report all overflows with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary).”*

*“Overflows that endanger health or the environment shall be orally reported to EPA at (214) 665-6595, and NMED Surface Water Quality Bureau at (505) 827-0187, within 24 hours from the time the permittee becomes aware of the circumstance.*

*A written report of overflows that endanger health or the environment shall be provided to EPA and the NMED Surface Water Quality Bureau within 5 days of the time the permittee becomes aware of the circumstance.”*

Part III.D.7 (Standard Conditions, Twenty-Four Hour Reporting) of the permit states:

*“The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information: (1) A description of the noncompliance and its cause; (2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and, (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge. b. The following shall be included as information which must be reported within 24 hours:*

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*(1) Any unanticipated bypass which exceeds any effluent limitation in the permit; (2) Any upset which exceeds any effluent limitation in the permit.... c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.”*

Part III.D.8 (Standard Conditions, Other Noncompliance) of the permit states:

*“The permittee shall report all instances of noncompliance not reported under Parts III.D.4 and D.7 ...at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.7.”*

Per State of New Mexico Regulations for Wastewater and Water Supply Facilities 20.7.4.20.A

*“It is unlawful to operate or allow the operation of a public water supply system or public wastewater facility unless the system or facility is operated by or under the supervision of a certified operator who meets or exceeds the appropriate level of certification required to operate the system or facility.”*

**Finding**

1. While discussing reporting requirements for overflows at the treatment facility and in the collection system with the operator it was found a review of the rules would be helpful. A meeting was held with Mr. Rusty Surratt, Maintenance Supervisor, to review facility inspection finding and permit overflow reporting requirements as found above.
2. Inadequate operational staff; at the present time there is only one plant operator who is also the lab technician assigned to the facility. The WWTP is a complex system and requires highly trained and skilled Operators to prevent system failures and to protect human health and the environment. The lab is staffed by the operator with no back-up. It takes time and experience for new staff to become familiar with the operating systems, sampling procedures, standard and emergency SOP's. State regulations at 20.7.4.20 (A) NMAC require that a certified operator must oversee the operation of a facility, which means that a certified operator must be on site during working hours. The facility should ensure that proper procedures are in place to keep a backup certified operator (at a level 3, for this facility) on site in the event of an illness or a vacation.

**Section E - Flow Measurement – Overall Rating of “U = “Marginal”**

Permit Requirements for Flow Measurement

Part I.A of the permit requires reporting of Totalizing Meter system ‘total flow at a frequency of 5/week”

Part III.C.6 of the permit states:

*Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges.*

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*The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

**Finding**

The facility has used until recently a v-notch weir with a staff gage to get an instantaneous reading of the discharge. The new permit requires a totalizing meter; a Doppler meter has been installed and is in use at the present time. The meter has only been calibrated by having zero flow and checking to see if the meter reads zero. It has not been checked by comparing the metered flow against the staff gage reading. This should be documented to ensure the correct program has been used to calculate the correct discharge based on water height.

**NMED/SWQB**  
**Official Photograph Log**

Photo # 1

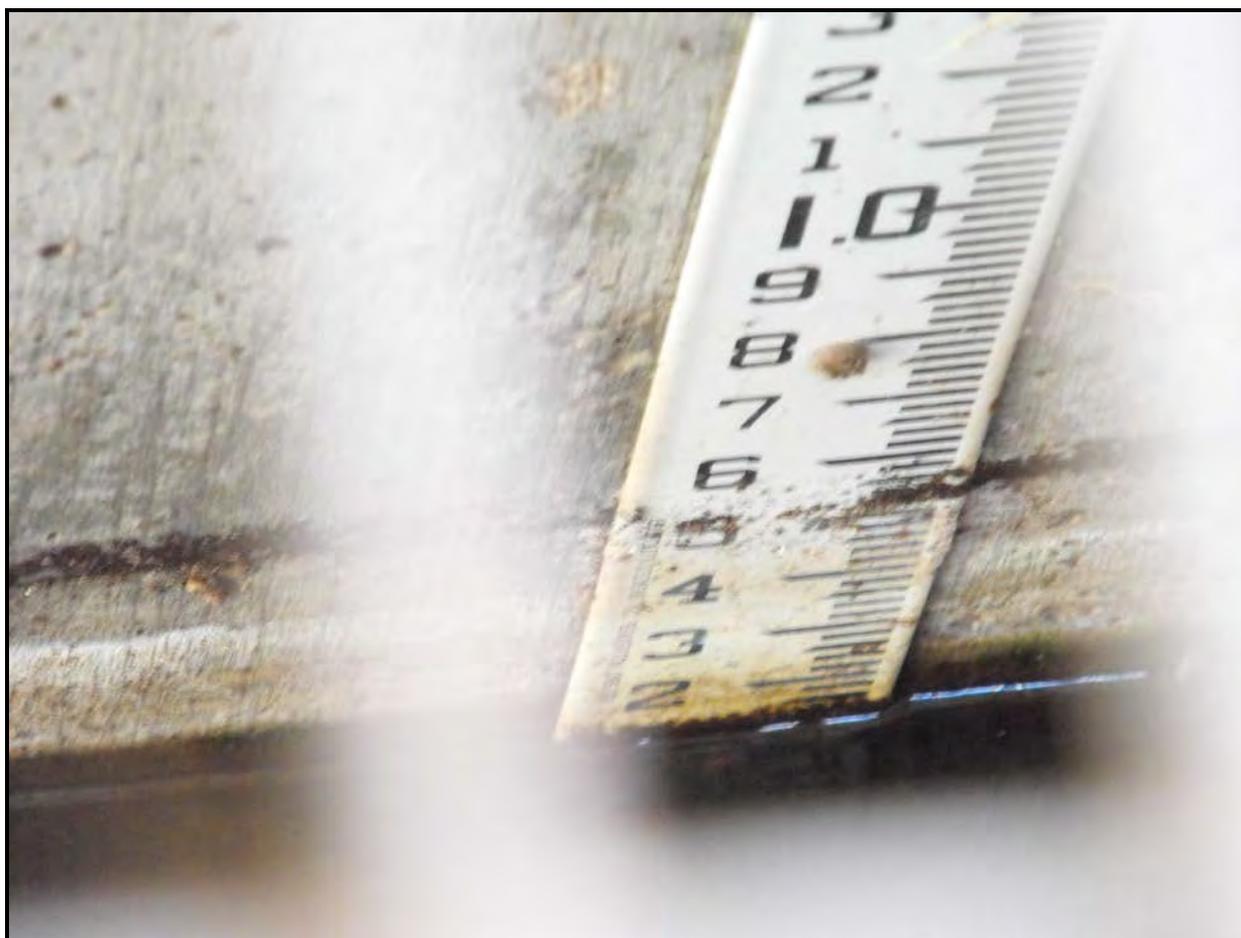
Photographer: Daniel Valenta	Date: 2/13/2014	Time: 1030 hours
City/County: Glorieta/Santa Fe County		
Location: East of Santa Fe, off state road 50 #11, facing southwest.		
Subject: Treatment ring channels, with the low visitors this time of year the third treatment channel is not being used at this time.		



**NMED/SWQB**  
**Official Photograph Log**

Photo # 2

Photographer: Daniel Valenta	Date: 2/13/2014	Time: 1050 hours
City/County: Glorieta/Santa Fe County		
Location: East of Santa Fe, off state road 50 #11.		
Subject: To get a correct reading from the staff gauge one has to climb down into the flume.		



# NMED/SWQB

## Official Photograph Log

Photo # 3

Photographer: Daniel Valenta	Date: 2/13/2014	Time: 1023 hours
City/County: Glorieta/Santa Fe County		
Location: East of Santa Fe, off state road 50 #11, facing northeast.		
Subject: The third and second treatment ring, drum routers turn to aerate the effluent. Dome building at end of walkway is the clarifier unit.		

