

	State of Washington Department of Ecology WASTEWATER TREATMENT PLANT COMPLIANCE INSPECTION REPORT		Northwest Regional Office 3190 160 th Ave SE Bellevue, WA 98008 (425) 649-7000 ph (425) 649-7098 fax (last update 6-11-07)
	Section A: General Information		

Report Version <input checked="" type="checkbox"/> New <input type="checkbox"/> Changed <input type="checkbox"/> Delete	PERMIT # WA-002070-2	mo/day/yr 10/23/07	Inspection Type <u>S</u>	Inspector Code <u>S</u>	Facility Type <input checked="" type="checkbox"/> 1 Municipal <input type="checkbox"/> Public <input type="checkbox"/> Private
Remarks					
Inspection work days <u>4.0</u>	Facility Self-Monitoring <u>5.0</u>	Photos Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Samples Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	BI <u>N</u>	QA <u>N</u>
Lead Ecology Inspector(s)					

Section B: Facility Data	
Name, Location, and Phone of Facility Inspected Langley Wastewater Treatment Plant 4999 Coles Road Langley, WA 98260	Entry Time 9:40 AM Exit Time 11:50 AM
Name(s)/Title(s) of On-Site Representative(s) Randi Perry / Lead Operator	Permit Effective Date 10/01/04 Permit Expiration Date 09/08/09
Name, Address, Title, Phone, and Fax Number of Responsible Official Neil Colburn, Mayor City of Langley P.O. Box 366 Langley, WA 98260 Phone Number (360) 221-4246 Fax	Ecology Staff On-Site Lori LeVander Tonya Lane Other Facility Data Receiving water is Saratoga Passage, Puget Sound
Contacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)			
<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> CSO/SSO (Sewer Overflow)
<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Effluent <input type="checkbox"/> Receiving Water	<input checked="" type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Pretreatment	<input type="checkbox"/> Multimedia
			<input type="checkbox"/> Other

Section D: Summary of Findings/Comments

I. INTRODUCTION

A regional Class II inspection was conducted at the Langley Wastewater Treatment Plant (Langley) on October 23, 2007. Lori LeVander and Tonya Lane from the Water Quality Section of the Department of Ecology's Northwest Regional Office conducted the inspection with assistance from Randi Perry, Lead Operator at Langley. Prior notification of the inspection was given so the 24-hour compositing samplers could be set up prior to Ecology's arrival. WQ arrived at 9:40 AM, conducted an inspection of the facility, laboratory, and records/reports, collected split samples, and departed at 11:50 AM.

The service area for the Langley WWTP is the City of Langley. The treatment plant is owned by the City of Langley and is operated by Water and Wastewater Services, LLC of Mt. Vernon, WA. The original Langley wastewater treatment plant was built in 1963 at the foot of Anthes Street near the town shoreline. The City of Langley constructed a new plant in 1991-92 at its current location on Coles Road. Ecology provided a grant for part of the cost of the new plant. The new (existing) plant started up during October 1992.

The treatment process at the plant consists of a grit chamber, an influent grinder, two sequencing batch reactors (SBR), and a chlorine contact chamber. Based on the current NPDES permit, the design flow for the plant is 0.15 MGD. Typical flow into the plant is currently approximately 0.081 MGD. The most recent Class I inspection of the plant was conducted on June 29, 2004. A Class II inspection of the plant was conducted during May 1998.

The purpose of this inspection was to fulfill regional Class II requirements by conducting a site inspection, reviewing records, assessing the permittee's self-monitoring procedures, splitting samples with the permittee to compare sampling methods and laboratory results, and sampling permit-limited parameters.

II. RESULTS AND DISCUSSION

Collection System:

Wastewater in Langley flows via gravity to the original wastewater treatment plant location at the foot of Anthes Street. From there it is pumped through a series of lift stations to the new treatment plant on Coles Road. Three active lift stations are currently operating within the collection system. The Sunrise Beach lift station directs flow to Lift Station 1 (at the original treatment plant site), which directs flow into Lift Station 2 and then on to the Coles Road plant. The City of Langley Public Works Department maintains the collection system which includes jetting of the lines as needed. The Public Works Department reports to the Group III operator when the collection system needs to be serviced.

Inflow and infiltration were investigated in the 1990 Facilities Plan for Secondary Treatment. The plan identified several sources of inflow and infiltration, and recommended corrections. Significant inflow problems were corrected during construction of the Coles Road treatment plant.

Liquid Stream:

The treatment process at the plant consists of a grit chamber, an influent grinder, two sequencing batch reactors (SBR), and two chlorine contact chambers (one is used as a backup). Flows to the plant are predominantly domestic sewage. No industrial users are known to contribute to the system. Influent passes through the grit chamber and through a Parshall flume where it is measured using a bubble flow meter. After the flume, the flow channel splits to allow influent to pass through a grinder or a bar screen. The default setting is to direct flow through the grinder, but the operator has the option to bypass to the bar screen. Once influent passes through the grinder, alternating split flow actuators direct it into either one of two SBRs. The split flow actuators alternate every 3.5 hours to disperse influent evenly between the two SBRs. One SBR processes wastewater while the other fills with wastewater. The SBRs fill, aerate, settle, and decant to the chlorine contact chamber in 7-hour cycles. When effluent is decanted from the top of an SBR, it is disinfected in the chlorine contact chamber for a minimum of 1 hour. After disinfection, treated effluent is measured by a magmeter as it leaves the plant to be discharged into the Saratoga Passage. The outfall is located about 1000 feet offshore in forty feet of water at mean lower low water.

Jet pumps that aerate the SBR basins are pulled and cleaned on a monthly basis. The chlorine contact chambers are cleaned every six months. Chlorine gas is delivered every quarter and is stored on site. During the inspection, one of the contact chambers was offline for cleaning. The SBRs and effluent leaving the chlorine contact chamber looked good during the inspection.

Solids Stream:

Solids are first removed from the wastewater stream at the headworks (grit and screenings). The grit chamber is cleaned on a monthly basis and grit is disposed of at a local landfill. Incidental solids (rags and other debris) removed during routine maintenance of the SBRs are also collected, drained, and disposed of at the local landfill. It was noted during the inspection that the grinder in the grit chamber provides a maintenance challenge. It is suggested that some modification be made to improve the removal of debris and rags before they reach the SBRs where they have been known to repeatedly clog the jet pumps.

Waste pumps move scum and waste activated sludge from the SBRs to the aerobic digesters. The sludge is digested and treated with flocculents before being dewatered via a belt press to approximately 16% solids. Pressate water from the belt filter press is returned to the headworks for treatment. The dewatered biosolids are mixed with yard waste from the community yard waste take-back program to make Class A biosolids for land application. The compost is provided to local residents for their use. Storm drains in the compost area lead back to the headworks.

Langley also serves as a septage receiving and treatment facility for the surrounding community. Septage is added directly to the digester. An average of between 10,000 and 17,000 gallons of septage is accepted at Langley on a weekly basis, including 10,000 gallons a month of biosolids from Holmes Harbor.

Flow Measurement:

Influent passing through the grit chamber is directed through a Parshall flume where a bubble flow meter is used to determine the volumetric flow rate. Effluent is measured using a magmeter. The bubble flow meter is flushed each morning and is thoroughly cleaned once a month. Both the influent and effluent flow measurement devices are calibrated at least annually and calibration records are kept on file. The effluent flow measurement equipment is considered adequate to measure the

expected range in volumetric flows, however there is a question about the influent bubble flow meter's ability to measure low flows accurately. It is suggested that a replacement influent flow meter be installed that is easily maintained and that can better capture the range of influent flows seen at the plant.

Sampling:

Automated, refrigerated samplers are used to collect and store influent and effluent samples. The sampling locations before the grinder and in the chlorine contact chamber should provide for representative sampling. Chlorine residuals are taken in the contact chamber.

Sampling during the inspection included time proportional samples (60 minute composites) of 20mL collected at each sampler. The temperature within the influent sampler was 5° C during the inspection, and the temperature within the effluent sampler was 5° C. A grab sample was also taken from the chlorine contact chamber for fecal coliform analysis.

The Langley onsite lab is accredited by the Department of Ecology's Lab Accreditation Program (#M576) for pH, TSS, chlorine, BOD, and fecal coliform. On a quarterly basis biosolids samples from Langley are sent to AVOCET, an outside lab, for analysis.

Alarms/Back-up Power

Autodialers at each lift station alert plant staff via pager around the clock if there is a power failure or other problem. Two of the three lift stations have backup generators. These lift stations and their generators are checked at least weekly by the Group III operator. A portable generator belonging to the City is stored behind the Langley plant and can be used in emergencies to power the remaining lift station (Sunrise Beach).

The plant itself is not staffed during the night. However, an alarm system at the plant is wired to City facilities and to the contract operators residences to notify them of problems that occur during the night. The plant is also equipped with an onsite emergency back-up generator. In the event of a power failure, the emergency generator will only power a single digester blower. The influent valves will also operate, but the back-up generator will not power SBR jet pumps. All remaining critical processes must be conducted manually every four hours when the operators come in to check on the downed system. The emergency back-up generator is exercised weekly for 30 minutes under a partial load. It is exercised under full load with a load bank on an annual basis. Most of the diesel fuel needed for the emergency generator is stored on site. Additional offsite diesel fuel is readily accessible.

Staffing:

There is one Group III operator, one Group II operator, and one Group I operator on staff at Langley. Normal plant hours are 7:00am to 3:00pm weekdays, and Saturday 11:00am to 4:00pm. The Group III operator works full time on weekdays, and the Group II operator oversees the yard waste program and works Saturday. The Group I operator works part-time to assist as needed.

Records Review:

The facility had the required records and charts, and a copy of the current permit. A comparison of bench sheets at the facility and DMRs submitted to Ecology showed consistency. The original four-volume O&M manual was kept onsite. O&M documentation for more recent modifications to the treatment plant have been added to the new working copy of the O&M manual.

Split Sampling:

Influent and effluent composite samples were split on Tuesday, October 23, 2007. The Ecology samples were placed on ice and transported to Manchester Laboratory, the USEPA Region 10 laboratory. Lab bottles used at Langley are not randomized, but this method was suggested to the Group III operator who runs the Langley lab.

Parameter	Influent		Effluent	
	Langley	Ecology	Langley	Ecology
BOD (mg/L)	338	281	3.8	4 U
TSS (mg/L)	284	225	5.0	4
Fecal Coliform (#/100 mL)			4 E	1 (Dup: 3)

E = estimated value
U = analyte not detected at or above the reported result

Dup = duplicate sample result

Samples were split to compare Langley and Ecology laboratory results. The effluent results were found to be in agreement.

III. CONCLUSION

The grounds were well maintained and the wastewater treatment plant appears to be operating well and to be maintained in good condition. There were no compliance related concerns as a result of this inspection.

Tonya Lane, municipal facility manager, should be contacted at 425-649-7050 with permit related questions. Carl Jones should be contacted at 360-407-6431 with operation-related questions. Amy Jankowiak should be contacted at 425-649-7195, with any compliance-related questions.

Attachments: photos, laboratory reports.

CC and electronic copy to all unless otherwise noted:

Lori LeVander, Industrial Unit, NWRO


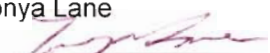
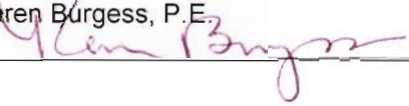
Neil Colburn, Mayor, City of Langley

Randi Perry, Lead Operator, Langley Wastewater Treatment Plant

Tonya Lane, Municipal Unit, NWRO, ecopy only

Tricia Miller, Permit Coordinator, NWRO, CC only

Central Files, Langley WWTP, WQ 6.1, CC only

Name(s) and Signatures of Inspector(s)	Agency/Office/Telephone	Date
Lori LeVander 	WA Dept. of Ecology, NWRO, (425)649-7039 3190 160th SE, Bellevue, WA 98008-5452	01/03/08
Tonya Lane 	WA Dept. of Ecology, NWRO, (425)649-7050 3190 160th SE, Bellevue, WA 98008-5452	1/3/2008
Name and Signature of Management QA Reviewer	Agency/Office/Telephone	Date
Karen Burgess, P.E. 	WA Dept. of Ecology, NWRO, (425)649-7207 3190 160th SE, Bellevue, WA 98008-5452	1/11/2008

ANNOUNCED Inspection

INSTRUCTIONS

Section A: General Information

Report Version: N for 1st version, C for Changed or amended, or D for Delete

NPDES Permit No.: Enter the facility's NPDES or State permit number.

Inspection Date: Insert the date entry was made into the facility. Use the month/day/year format (e.g., 06/30/04 = June 30, 2004).

Inspection Type: Use one of the codes listed below to describe the type of inspection:

A Performance Audit	L Enforcement Case Support	2 IU Sampling Inspection
B Compliance Biomonitoring	M Multimedia	3 IU Non-Sampling Inspection
C Compliance Evaluation (non-sampling)	P Pretreatment Compliance Inspection	4 IU Toxics Inspection
D Diagnostic	R Reconnaissance	5 IU Sampling Inspection with Pretreatment
E Corps of Engineers Inspection	S Compliance Sampling	6 IU Non-Sampling Inspection with pretreatment
F Pretreatment Follow-up	U IU Inspection with Pretreatment Audit	7 IU Toxics with Pretreatment
G Pretreatment Audit	X Toxics Inspection	
I Industrial User (IU) Inspection	Z Sludge	

Inspector Code: Use one of the codes listed below to describe the *lead agency* in the inspection:

C - Contractor or Other Inspectors (Specify in Remarks Columns)	N - NEIC Inspectors
E - Corps of Engineers	R - EPA Regional Inspector
J - Joint EPA/State Inspectors - EPA Lead	S - State Inspector
	T - Joint State/EPA Inspectors - State Lead

Facility Type: Use one of the choices below to describe the facility.

- 1 - Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
- 2 - Industrial. Other than municipal, agricultural, and Federal facilities.
- 3 - Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
- 4 - Federal. Facilities identified as Federal by the EPA Regional Office

Remarks: These columns are reserved for remarks.

Inspection Work Days.: Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, travel time and preparation time. This estimate does not require detailed documentation.

Facility Evaluation Rating: Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Quality Assurance Data Inspection. Enter Q if the inspection was conducted as follow-up on quality assurance sample results. Enter N otherwise.

Photos Taken: Yes or No

Samples Taken: Yes or No

Lead Ecology Inspector: Enter lead inspector's name

Section B: Facility Data

This section is self-explanatory except for: "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, and other updates to the record), e-mail addresses...; and "Ecology Staff On-Site", which may include staff names, titles, phone numbers, or e-mail addresses.

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary.

Section D: Summary of Findings/Comments

Support the findings, as necessary, in a narrative report. Use the headings given on the report form (staffing, back-up power) as appropriate. Reference a list of attachments, such as completed checklists, photos, lab reports, etc. Use extra sheets as necessary.

LINKS AND INFORMATION:

"Informational Manual for Treatment Plant Operators"; February 2004; by the Department of Ecology
Publication Number 04-10-020:

<http://www.ecy.wa.gov/pubs/0410020.pdf>

The manual was prepared to help wastewater treatment plant operators complete and submit their Discharge Monitoring Reports (DMRs) and other annual reports to the Department of Ecology. The manual is available in hard copy. To request a copy, contact the Department of Ecology, Publications Distribution Center at P.O. Box 47600, Olympia, WA 98504-7600 or by Telephone: (360) 407-7472. Updates to the manual are included on the website version.

Ecology's Wastewater and Reuse website:

<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>

Ecology's Operator Certification website:

http://www.ecy.wa.gov/programs/wq/wastewater/op_cert/index.html

Ecology's Laboratory Accreditation website:

http://www.ecy.wa.gov/programs/eap/labs/labs_main.html

Ecology's Biosolids website:

<http://www.ecy.wa.gov/programs/swfa/biosolids/>

Ecology's Operator Outreach: Carl Jones (360) 407-6431; cjon461@ecy.wa.gov

Ecology's Municipal Compliance Specialist (Northwest Regional Office): Amy Jankowiak (425) 649-7195;

ajan461@ecy.wa.gov

Ecology's Wastewater Operator Certification Coordinator: Poppy Carre (360) 407-6449; 1-800-633-6193 (within the state)

poca461@ecy.wa.gov

Ecology's Biosolids Coordinator (Northwest Regional Office)" Marietta Sharp (425) 649-7258 mars461@ecy.wa.gov

Reporting Spills/Overflows/Upsets/Bypasses/Loss of Disinfection IMMEDIATELY:

Ecology's 24-hour number: (425) 649-7000 to report a spill

Department of Health – Shellfish Program 24-hour number: (360) 236-3330


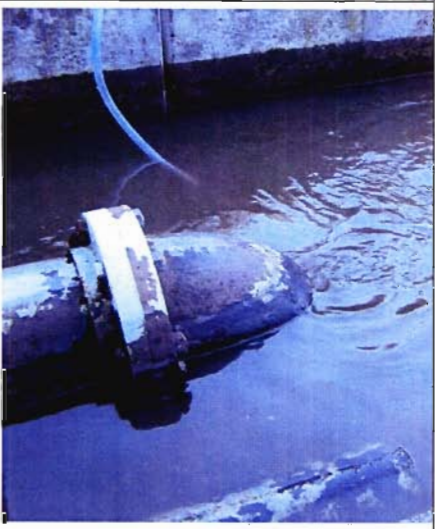




<p><u>Photo #:</u> 01</p> <p><u>Description:</u> Influent compositing sampler, confirmatory thermometer indicated 5° C.</p> <p><u>Date Taken:</u> 10/23/07</p> <p><u>Taken By:</u> Lori LeVander</p> <p><u>Witness:</u> Tonya Lane</p>		<p><u>Photo #:</u> 02</p> <p><u>Description:</u> Influent pipe at beginning of grit chamber.</p> <p><u>Date Taken:</u> 10/23/07</p> <p><u>Taken By:</u> Lori LeVander</p> <p><u>Witness:</u> Tonya Lane</p>	
<p><u>Photo #:</u> 03</p> <p><u>Description:</u> Grit chamber Parshall flume.</p> <p><u>Date Taken:</u> 10/23/07</p> <p><u>Taken By:</u> Lori LeVander</p> <p><u>Witness:</u> Tonya Lane</p>		<p><u>Photo #:</u> 04</p> <p><u>Description:</u> Influent grinder at end of grit chamber.</p> <p><u>Date Taken:</u> 10/23/07</p> <p><u>Taken By:</u> Lori LeVander</p> <p><u>Witness:</u> Tonya Lane</p>	
<p><u>Photo #:</u> 05</p> <p><u>Description:</u> Split flow actuators control flow into the SBR basins.</p> <p><u>Date Taken:</u> 10/23/07</p> <p><u>Taken By:</u> Lori LeVander</p> <p><u>Witness:</u> Tonya Lane</p>		<p><u>Photo #:</u> 06</p> <p><u>Description:</u> SBR 1.</p> <p><u>Date Taken:</u> 10/23/07</p> <p><u>Taken By:</u> Lori LeVander</p> <p><u>Witness:</u> Tonya Lane</p>	

Photo #: 07

Description:
SBR 2.

Date Taken:
10/23/07

Taken By:
Lori LeVander

Witness:
Tonya Lane



Photo #: 08

Description:
Randi in front of chlorine contact chambers explaining effluent flow sequence.

Date Taken:
10/23/07

Taken By:
Lori LeVander

Witness:
Tonya Lane

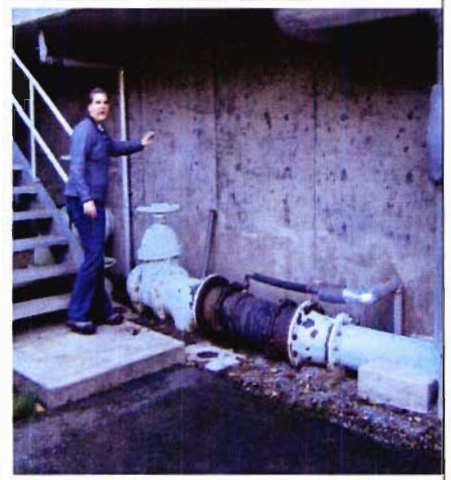


Photo #: 09

Description:
Chlorine contact chambers.

Date Taken:
10/23/07

Taken By:
Lori LeVander

Witness:
Tonya Lane



Photo #: 10

Description:
Chlorine gas canister storage room.

Date Taken:
10/23/07

Taken By:
Lori LeVander

Witness:
Tonya Lane



Photo #: 11

Description:
Randi taking effluent grab sample from chlorine contact chamber.

Date Taken:
10/23/07

Taken By:
Lori LeVander

Witness:
Tonya Lane



Photo #: 12

Description:
Effluent compositing sampler, confirmatory thermometer indicated 5° C.

Date Taken:
10/23/07

Taken By:
Lori LeVander

Witness:
Tonya Lane



Photo #: 13Description:
Effluent flow meter.Date Taken:
10/23/07Taken By:
Lori LeVanderWitness:
Tonya LanePhoto #: 14Description:
Digester, side view.Date Taken:
10/23/07Taken By:
Lori LeVanderWitness:
Tonya LanePhoto #: 15Description:
Digester, top view.Date Taken:
10/23/07Taken By:
Lori LeVanderWitness:
Tonya LanePhoto #: 16Description:
Polymer storage for injection system.Date Taken:
10/23/07Taken By:
Lori LeVanderWitness:
Tonya LanePhoto #: 17Description:
Belt filter press.Date Taken:
10/23/07Taken By:
Lori LeVanderWitness:
Tonya LanePhoto #: 18Description:
Backup diesel generator.Date Taken:
10/23/07Taken By:
Lori LeVanderWitness:
Tonya Lane

Photo #: 19

Description:

Class A biosolids
composting area.

Date Taken:

10/23/07

Taken By:

Lori LeVander

Witness:

Tonya Lane



Photo #: 20

Description:

Composting area
stormdrain.

Date Taken:

10/23/07

Taken By:

Lori LeVander

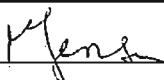
Witness:

Tonya Lane



Washington State Department of Ecology
Manchester Environmental Laboratory
Analysis Report for
Fecal Coliforms: Membrane Filter method

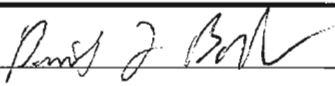
Project Name: City Of Langley - 43				LIMS Project ID: 1965-07				
Project Officer: Tonya Lane				Method: SM9222D				
Date Reported: 10/25/07				Analyte: Fecal Coliform				
Sample	QC	Field ID	Matrix	Result	Qualifier	Units	Collected	Analyzed
07434012		EFF GRAB	Water	1	U	#/100mL	10/23/07	10/24/07
07434012		LDP1 (duplicate)		3		#/100mL	10/23/07	10/24/07

Authorized By: 

Release Date: 10/25/07

Washington State Department of Ecology
Manchester Environmental Laboratory
Analysis Report for
Biochemical Oxygen Demand five day test

Project Name: City Of Langley - 43					LIMS Project ID: 1965-07			
Project Officer: Tonya Lane					Method: SM5210B			
Date Reported: 11/06/07					Analyte: Biochemical Oxygen Demand			
Sample	QC	Field ID	Matrix	Result	Qualifier	Units	Collected	Analyzed
07434010		INF COMP	Water	281		mg/L	10/23/07	10/25/07
07434011		EFF COMP	Water	4	U	mg/L	10/23/07	10/25/07
07434011		LDP1 (duplicate)		4	U	mg/L	10/23/07	10/25/07
GB07298B1		Lab BLNK	Water	0.02		mg/L		10/25/07
GL07298B1		Lab SUGR	Water	107		%		10/25/07

Authorized By: 

Release Date: 11/08/07

Page: 1

Washington State Department of Ecology
Manchester Environmental Laboratory
Analysis Report for
Total Suspended Solids

Project Name: City Of Langley - 43

LIMS Project ID: 1965-07

Project Officer: Tonya Lane

Method: SM2540D

Date Reported: 10/29/07

Analyte: Total Suspended Solids

Sample	QC	Field ID	Matrix	Result	Qualifier	Units	Collected	Analyzed
07434010		INF COMP	Water	225		mg/L	10/23/07	10/25/07
07434011		EFF COMP	Water	4		mg/L	10/23/07	10/25/07
GB07298S1		Lab BLNK	Water	1	U	mg/L		10/25/07
GL07298S1		Lab LCS-	Water	99		%		10/25/07

Authorized By: 

Release Date: 10/29/07

Page: 1

From: Randi Schultz [wwws@whidbey.com]
Sent: Thursday, November 08, 2007 10:08 AM
To: Lane, Tonya (ECY)
Subject: Langley results

Follow Up Flag: Follow up
Flag Status: Green
Tonya,

Here are the Langley results for our split sample on October 23, 07.

Fecals = E 4 average CFU/100ml

BOD Influent = 338 mg/l
Effluent = 3.8 mg/l

TSS Influent = 284 mg/l
Effluent = 5.0 mg/l

Thank you,

Randi Perry
Water & Wastewater Services
(360) 221-4274 Langley
(360) 661-0681 Cell