



# Waterworks Compliance Inspection - Human Consumptive Use (Part I)

<b>System Name:</b>	<u>SOUTH YELLOWHEAD WATER CORP. WATERWORKS</u>	Remote Inspection ID:	1141630
<b>Approval No:</b>	<u>00054716-03-00</u>		
<b>Population:</b>	<u>130</u>	<b>Announced:</b>	<u>No</u>
<b>Date:</b>	<u>03-MAR-2020 13:00</u>	<b>Person Interviewed:</b>	<u>HEUCHERT, RANDY</u>

## General Section

<b>Water Supplies in Service :</b>	<u>PIPELINE (SURFACE)</u>	<b>System Classification:</b>	<u>NONE WT ONE WD</u>
<b># of Service Connections:</b>	<u>40</u>	<b>System Type:</b>	<u>PIPELINE &gt; 15 CONNECTIONS</u>
<b>Service Connection Metering:</b>	<u>Yes</u>	<b>Source Inspection Completed:</b>	<u>No</u>
<b>Comments:</b> THE WATERWORKS IS SUPPLIED WITH POTABLE WATER, FROM THE CITY OF SASKATOON, BY THE SASKWATER SASKATOON EAST TREATED PIPELINE SYSTEM AND SO A SOURCE INSPECTION IS NOT REQUIRED. THERE ARE NO PUMPHOUSES OR RESERVOIRS ON THE SYSTEM AS IT IS A LOW FLOW/LOW PRESSURE SYSTEM DIRECTLY CONNECTED TO SASKWATER. ALL CONSUMERS HAVE THEIR OWN HOLDING TANKS.			

## Contacts

Name	Position	Phone / Fax	Email
SORENSEN, DON	CERTIFIED OPERATOR	Phone: (306) 384-6686 Business: (306) 966-2748	DON.SORENSEN@USASK.CA
REINHART, LEE	ENVIRONMENTAL PROJECT OFFICER	Business: (306) 933-8367 Cell: (306) 230-3254 Fax: (306) 933-6820	LEE.REINHART@WSASK.CA
HEUCHERT, RANDY	CERTIFIED OPERATOR	Phone: (306) 931-0017 Cell: (306) 241-7088 Fax: (306) 931-0017	RANDY@SASKTEL.NET

SCHINDEL, PERCY	PRESIDENT	Phone: (306) 934-2071	MERRIKAM@SASKTEL.NET
<b>Complaints:</b>			
NONE			

### Operator Certification Section

Operator Name	Certification Levels		Expiry Date	Operator is a Supervisor
	Water Distribution	Water Treatment		
SORENSEN, DON	ONE	NONE	15-JUN-2020	No
HEUCHERT, RANDY	ONE	NONE	15-APR-2021	No

### Test Results

Station #	Sample ID	Location/Comments	Variable	Flag	Measurement	Qualifier
SK05HG0392	2020256582	CARMEN RESIDENCE	CHLORINE (TOTAL)	N/A	1.700 mg/l	N/A
"	"	"	TURBIDITY	N/A	0.410 NTU	N/A
"	2020256583	BAKER RESIDENCE - A BACTI SAMPLE WAS TAKEN HERE.	CHLORINE (TOTAL)	N/A	1.680 mg/l	N/A
"	"	"	TURBIDITY	N/A	0.450 NTU	N/A
"	2020256584	DOETZEL RESIDENCE	CHLORINE (TOTAL)	N/A	1.320 mg/l	N/A
"	"	"	TURBIDITY	N/A	0.200 NTU	N/A
"	2020256585	HEUCHERT RESIDENCE - A SPLIT SAMPLE WITH THE OPERATOR. OPERATOR'S TEST RESULT - TOTAL CL2 = 1.60 MG/L.	CHLORINE (TOTAL)	N/A	1.490 mg/l	N/A
"	"	"	TURBIDITY	N/A	0.090 NTU	N/A

### Equipment Validation

#### Turbidity

Equipment Type	Equipment Name/Number	STD1(L) (Expected, Test)	STD2 (Expected, Test)	STD3 (Expected, Test)	STD4 (Expected, Test)	Result	Gel Standard

#### Chlorine

Equipment Type	Equipment Name/Number	STD1 (Expected, Test)	STD2 (Expected, Test)	STD3 (Expected, Test)	Result
	HACH	(0.23, 0.21)	(0.86, 0.85)	(1.55, 1.53)	GOOD

POCKET COLORIMETER(PC)					
<b>Comment</b>					
THE TEST EQUIPMENT HAS NOT BEEN PROFESSIONALLY CALIBRATED FOR A LONG TIME BUT IS PERFORMING ACCURATELY.					


### Human Consumptive Regulatory Section

**C=Compliant NC=Non-Compliant N/A=Not Applicable**


C	NC	NA	General	Comments
X			Valid permit to operate and/or construct EMPA2010 24(1)	DUE FOR RENEWAL ON MAY 15, 2022.
X			Certified operator WWSW 62	A CERTIFIED OPERATOR, FROM THE SE CORMAN PARK RURAL WATER CORP., IS USED AS A BACKUP IF REQUIRED.
X			Valid water rights license EMPA2010 29(1)	12572; C020 - EXPIRES MARCH 31, 2029.
X			Copy of permit posted at waterworks EMPA2010 29(1)	THERE IS NO PUMPHOUSE FOR THE WATERWORKS AND SO A COPY OF THE PTO IS KEPT WITH THE BOARD AND THE OPERATOR.
			<b>Distribution System</b>	
		X	Common trenching WWSW 23(1)(2)	ALL SEWAGE IS TREATED WITH ON-SITE SYSTEMS.
X			Disinfection of new and repaired pipelines WWSW 23(4)& 27(4)	
			<b>Water Treatment Plants and Pumphouses</b>	
X			Backflow prevention device on treatment component WWSW 25(c)	THE CONNECTION TO THE SASKWATER PIPELINE, AS WELL AS EACH HOUSEHOLD, HAS BACKFLOW PREVENTION.
X			Water meter(s) installed in WTP or pumphouse WWSW 25(d)	THE CONNECTION TO THE SASKWATER PIPELINE, AS WELL AS EACH HOUSEHOLD, HAS A WATER METER.
	X		Water quality monitoring and testing equipment is maintained and calibrated as recommended by manufacturer EMPA2010 29(1)	THE TEST EQUIPMENT HAS NOT BEEN PROFESSIONALLY CALIBRATED FOR SOME TIME BUT ANNUAL EPO CHECKS SHOW THAT THE EQUIPMENT IS PERFORMING PROPERLY.
			<b>Disinfection</b>	
X			Continuous chlorine disinfection (unless otherwise approved per 27(7)) WWSW 27(5)	PROVIDED BY THE CITY OF SASKATOON AND BOOSTED BY SASKWATER.
		X	A free chlorine residual of not less than 0.1 mg/L in water entering the distribution system WWSW 27(6) (a)	POTABLE WATER IS SUPPLIED, FROM THE CITY OF SASKATOON BY A SASKWATER TREATED WATER PIPELINE SYSTEM, WHICH IS CHLORAMINATED, AND SO A FREE CHLORINE RESIDUAL OF 0.1 MG/L IS RARELY REACHED. THE SYSTEM

				OPERATES ON TOTAL/COMBINED CHLORINE RESIDUAL.
X			A total chlorine residual of not less than 0.5 mg/L OR a free chlorine residual of not less than 0.1 mg/L in water throughout the distribution system WWSW 27(6)(b)	
			<b>Standards</b>	
X			Bacteriological WWSW 29	
X			Chemical standards WWSW 26(2)(3) & 31	
X			Waterworks meets the requirements of future chemical health and pesticide related standards (July 1, 2020) see Table 3 WWSW 31	
			<b>Assessment</b>	
X			Proper waterworks assessment WWSW 32	
			<b>Operational Anomalies</b>	
		X	Reported upset condition WWSW 34(1)	NO UPSETS SINCE LAST INSPECTION.
		X	Reported disinfection system upset WWSW 34(2)(a) (b)	NO UPSETS SINCE LAST INSPECTION.
X			Reported missing on-site water quality testing records WWSW 34(2)(c)	
			<b>Testing</b>	
X			Bacteriological testing WWSW 37(2)	PAST INSPECTIONS HAVE NOTED THAT ROTATION OF BACTERIOLOGICAL SAMPLING SHOULD OCCUR MORE REGULARLY; THIS HAD OCCURRING BUT STILL ONLY SPORADICALLY. PLEASE CONTINUE TO ROTATE BACTI SAMPLING.
X			Bacteriological follow-up WWSW 37(5) & 37(9)	
X			Bacteriological sample after completion, alteration, extension or repair WWSW 38	
X			Chlorine monitoring WWSW 37(2)(4)	
			<b>Other Constituents</b>	
X			Accredited laboratory WWSW 37(2)(b)	SRC ANALYTICAL LAB.
			<b>Operational Records</b>	
		X	Daily water meter reading WWSW 40(1)(a)	THE OPERATOR READS HIS OWN METER DAILY BUT THE ONLY SYSTEM METER IS IN THE SASKWATER MANHOLE, AT THE CONNECTION POINT, WHICH IS LOCKED. SASKWATER READS THE METER MONTHLY FOR BILLING.
X			Samples - locations, sampler, and results WWSW 40(1)(c)	
X			Abnormal operating procedures WWSW 40(1)(d) & 40(1)(e)	
		X	Upset conditions (includes water treatment facility and water distribution system upsets) WWSW 40(1) (f)	NO UPSETS SINCE LAST INSPECTION.
		X	Chlorine upsets WWSW 40(1)(g)	NO UPSETS SINCE LAST INSPECTION.

X			Calibration records for test equipment WWSW 40(1)(h)	THE TEST EQUIPMENT HAS NOT BEEN PROFESSIONALLY CALIBRATED FOR QUITE SOME TIME BUT IS PERFORMING ACCURATELY.
X			Maintenance WWSW 40(1)(i)	
X			Chronological order WWSW 40(2)(a)	
X			Permittee recorder WWSW 40(2)(b)	
X			Identification of recorder WWSW 40(2)(c)	
X			Five year history of log WWSW 40(2)(d)	
X			Explanatory notes WWSW 40(2)(e)	
X			Factual data entry WWSW 40(2)(f)	
X			No default values used WWSW 40(2)(g)	
			<b>QA/QC and Recordkeeping Review</b>	
X			QA/QC and ERP in place WWSW 41(1)	
	X		Monthly review of records by permittee WWSW 41(2)	THE MONTHLY REVIEW PROCESS HAS LAPSED AND MUST BEGIN AGAIN IMMEDIATELY.
X			Report abnormal or missing records WWSW 41(3)	
			<b>Annual Notice To Customers</b>	
X			On water quality and sample submission compliance WWSW 42(1)	
X			Written notice provided to Minister of completion of annual notice to consumers WWSW 42(2)	THE 2019 ANNUAL NOTICE TO CONSUMERS HAS BEEN COMPLETED AND A COPY FORWARDED TO THE EPO.
			<b>General</b>	
X			Split sampling with the operator was completed	
X			Operator's test equipment appears to be performing adequately	THE SPLIT TEST WITH THE EPO HAD SOME DISCREPANCY BUT THE OPERATOR IS USING A DIFFERENT BRAND OF REAGENT. THE CALIBRATION CHECK SHOWED THE TESTER TO BE PERFORMING ACCURATELY.
X			Representative of the waterworks signature was obtained	YES
X			Representative of the waterworks agreed with the inspection statements	YES



(Operator/Supervisor Signature)



Agree with statements



(EPO Signature)