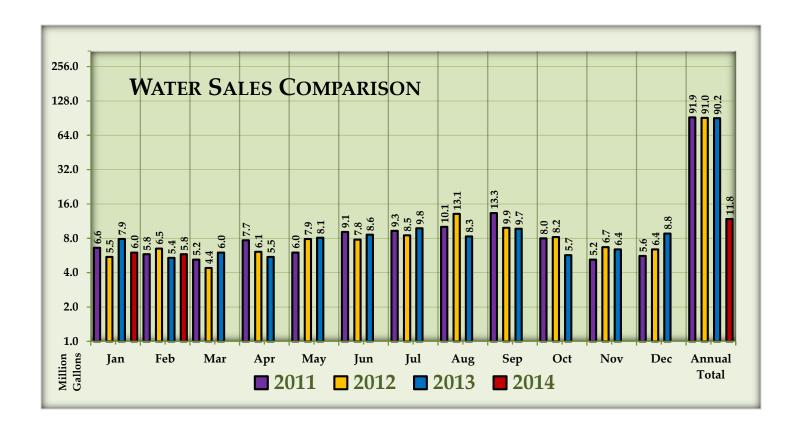
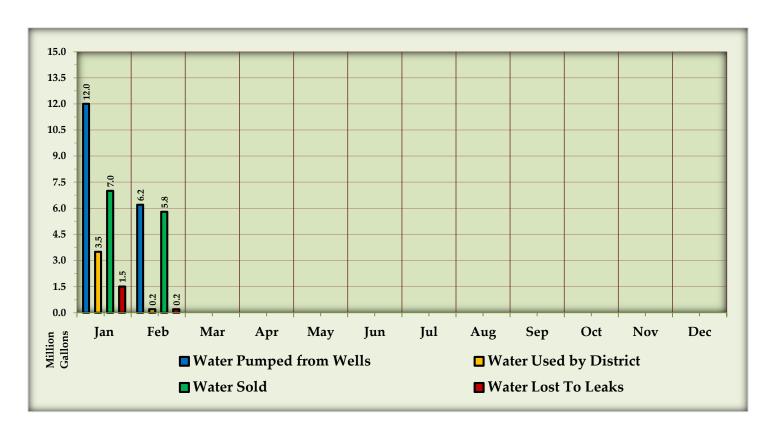


### GENERAL MANAGER'S REPORT

Report on Water System Operations for the Month of: February	, 2014
The metering period for this report begins on:	
January 08, 2014 through February 8, 2014.	
The billing period for this report is for the:	
January 15, 2014 through February 15, 2014.	
The activity period for this report is for the:	
February 1, 2014 through February 27, 2014.	
Water pumped from all wells in February	6.2 mg <sup>1</sup>
Water used by District in February	$\_$ 0.2 mg
Water sold in February	$\_$ 5.8 mg
Water lost to leaks in February	0.1 mg
Percent of water lost in February	3.2%
Water pumped from all wells in 2014 to date	
Water used by the District in 2014 to date	_3.7 mg
Water sold in 2014 to date	_12.8 mg
Water lost to leaks in 2014 to date	_ 1.7 mg
Percent of water lost in 2014 to date	_ 9.3%
Accounts billed for water in February (\$130,374)	_2,681
Accounts billed a late fee in February (\$2,608)	_287
Accounts 60 days past due (\$4,233.95)	_67
Accounts secured with a lien (\$31,172.25)	32
Accounts locked off for nonpayment in February (\$350) $_{----}$	_07
Water quality complaints responded to in February	10
Locates requests in February	_30
Number of customer valves installed in February	_ 01

<sup>&</sup>lt;sup>1</sup> Million Gallons





### Water Quality Report:

NBWD does not use continuous disinfection on its water supply. Historically the water systems has been very successful at maintaining high quality bacteria free water supply. NBWD did have a "Out of Compliance" "Coliform Bacteria" event in 2012 but the source of the contamination was quickly discovered and remedied.

NBWD tests for coliform bacteria five times a month.

Five coliform bacteria samples were collected from the distribution system submitted to a certified laboratory in February, 2014.

### Five of the Samples tested satisfactory.

The Environmental Protection Agency (EPA) regulates disinfection byproducts in drinking water. NBWD tests for bromate (BrO $^{-}$ 3) every month. The treatment plant uses ozone (O<sub>3</sub>) as on oxidant to remove iron. manganese, and color. One of NBWD's raw water benign constituents is bromide (br $^{-}$ ). If the dose of ozone is too high then the extra ozone not used to oxidize iron, manganese, and color will convert bromide to bromate (Br $^{-}$  + O<sub>3</sub>  $\rightarrow$  BrO $^{-}$ 3). According to the EPA, some people who drink water containing bromate in excess of the maximum contaminant level (MCL) of 0.010 mg/l have and increased risk of getting cancer.

NBWD tests for bromate once a month.

### Test one result <0.005 mg/L (satisfactory)

In addition to federal and state mandated water quality tests The Treatment Plant Operator (TPO) monitors the water quality at the treatment plant and in the distribution system. The reasons of the extra water quality monitoring is to monitor the quality of the our source water, verify the treatment plant is operating at peak efficiency, and maintain the highest quality water possible is being delivered to our ratepayers. The water quality monitoring is part of the operation and maintenance plan.

In the treatment plant the raw water (well water) quality is tested regularly to monitor seasonal, inter-annual, and historical fluctuations. The TPO monitors eight constituents of the raw water. They are iron (Fe), manganese(Mn), color (Clr), pH, temperature( $F^{\circ}$ ), tannic acid (Ta), silica (SiO<sub>2</sub>), ammonia (NH<sub>3</sub>). The treatment plant is designed to remove iron, manganese, and color. The TPO monitors iron, manganese, and color to establish a baseline for removal efficiency of the treatment plant and to record raw water historical quality fluctuations. The TPO test for pH, temperature, tannic acid, silica, and ammonia because fluctuations in

these constituents require adjustments to the operation protocols in the treatment plant and affect the quality of the finished water.

The TPO tests the finished water (post treatment) before it goes to storage for the same constitutes at the raw water. All of this data is recorded every day. The general manager reviews the data regularly with the TPO to discuss trends and review operation protocols.

In the distribution system the TPO regularly tests for five drinking water constituents but may test for others based on conditions. The TPO regularly tests for color , temperature , pH, taste, and odor,. The TPO bases his need for reactionary water main flushing on the results of these tests.

If the color is between 15hu and 30hu the water main will be scheduled for a flush within the next week. If the color is above 30hu it will be scheduled for a flush within the next 24 hours.

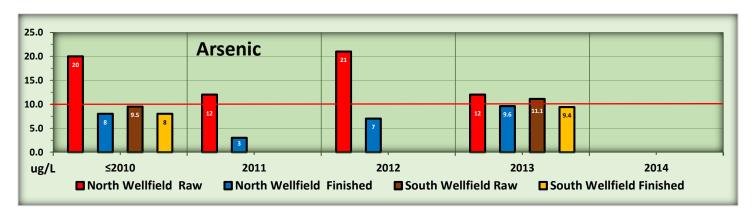
If the temperature is above 60°F the water main will be scheduled for a flush within the next week. If the water temperature is above 65°F it will be scheduled for a flush within the next 24 hours.

If the pH is below 6.8 or above 8.5 the water main will be scheduled for a flush within the next 24 hours.

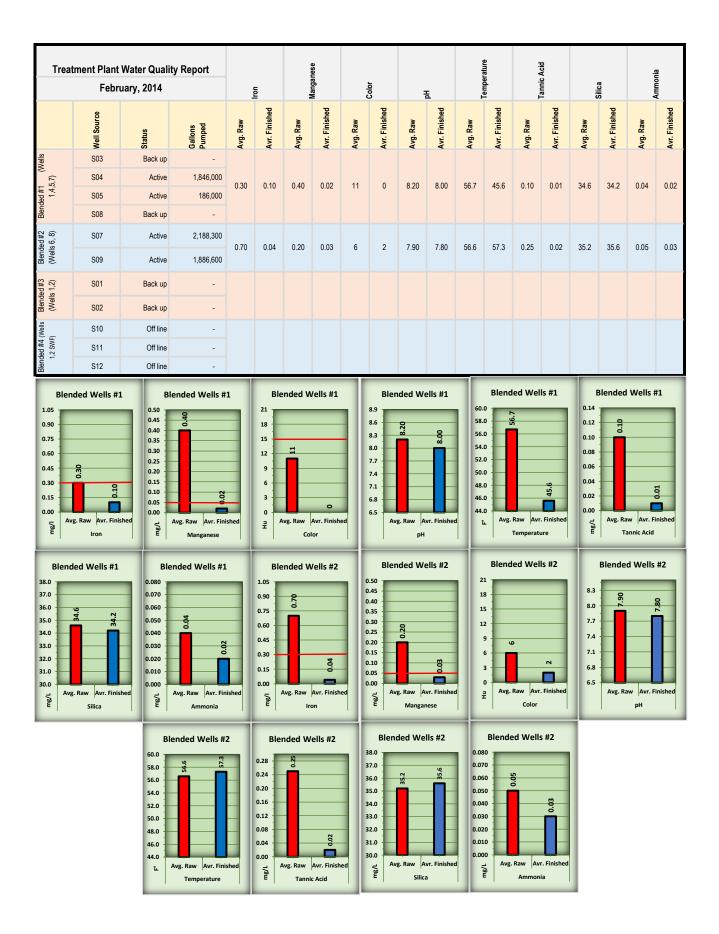
If the TPO detects a taste or odor condition the water main will be scheduled for a flush within the next 24 hours.

NBWD is scheduled to test for the following contaminates during 2014:

Arsenic: Raw Water arsenic levels are slightly above the MCL (10  $ug/L^2$ ). The Treatment Plant reduces the residuals to below the MCL as the chart below indicates:



<sup>&</sup>lt;sup>2</sup> Ug/L is microgram per liter or part per billion. There are 100,000 drops of water in a gallon. One drop of Arsenic in 1,000 gallons would be approximately 10 ug/L.



### DWSRF Projects:

Project 129 - Supply and Treatment Project. Bison Drilling has completed the well drilling and testing of all three wells. The water samples for well #3 have been delivered to the laboratory for analysis. Mike Piechowski, Robinson Noble has all of the data from the well # 3 pump test and are preparing the final report. Mike Johnson and Russ Porter, Gray and Osborne are working on a pilot test protocol for the treatment of the arsenic and hydrogen sulfide gas treatment for the new wells. The next phase will be design of the improvements at the South and North Well Fields.

Fund Beginning Funds Expended Balance 11/1/13		Fund Balance	30% Forgiveness- to-Date Earned	
\$2,190,631	\$265,035.56	\$1,925,596	\$79,510.67	

### Project 121 - Water Main Project.

Birch Street is 95% complete. The water main is 100% complete and water is flowing through the main. Road restoration, bollards, and valve markers are all that is left to complete are complete with the exception of hydro seed and final punch list items.

Z Street is 95% complete. The water main is 100% complete and water is flowing through the main. Right-of Way restoration, customer property restoration, and valve markers along with the Bay Avenue crossing Change Order need to be completed complete with the exception of hydro seed, some of the customer property restoration, and final punch list items.

U Street is 95% complete. The water main is 100% complete and water is flowing through the main. Right-of Way restoration, customer property restoration, and valve markers along with the Bay Avenue crossing Change Order need to be completed complete with the exception of hydro seed, some of the customer property restoration, and final punch list items.

I will be conducting a walk through with Tom Grandt, Pacific County Public Works on Monday March 17, 2014 to determine if there are any County Right-of-Way issues that Big River will need to address before they are complete. Gray and Osborne will issue a final punch list on Tuesday March 18, 2014. I project final meeting will be held on Thursday March 20, 2014.

Fund Beginning Balance	Loan Fee	Funds Expended 11/1/13	Fund Balance
\$891,123	\$8,823	\$490,045.52	\$392,254

### Water Revenue Bond Project Fund:

The water revenue bond project fund was created to fund three separate expenses. The first was to purchase the Wiegardt property to locate the new well field. The second was to build an equipment building to house the District's vehicles and equipment. The third is to purchase or build a business office for the District. The district also paid the cost of issuance of the Bonds from the bond fund.

Description of Cost	Funds Expended	Fund Balance
		\$1,162,392.64
Cost of Issuance	\$25,775.00	\$1,136,617.64
Wiegardt Property Purchase	\$121,874.39	\$1,014,742.75
Driftmier Architects	\$6,417.47	\$1,008,325.78

### 227<sup>th</sup> Lane Customer Generated Infrastructure:

The 227<sup>th</sup> Lane water main is 99% complete. Due to weather and equipment issues Nacelle Rock has not completed the patch on the asphalt at the intersection of 227<sup>th</sup> Lane and Hwy. 103. When that is complete I will prepare a final report and resolution for the Board to accept the project and customers can connect to the water system. Our customers are getting anxious to connect to the water system. I may request the Board consider the Resolution to accept the final project and set the Local Facility Charge at a special meeting in early April, 2014.

### 245<sup>th</sup> Street Water Main Loop Project:

Gray and Osborne prepared a new design for the crossing at 245th Street and Hwy. 103 utilizing an open cut about fifteen feet to the north of the original site. Gray and Osborne based the change on an investigation of Washington State Department of Transportation records of previous work completed in the immediate vicinity of the crossing. The general manager has applied for a permit with the Washington State Department of Transpiration for the work. When the permit has been issued the general manager will seek qualified contractors from the small works rooster to complete the 245th Street water main loop project. I anticipate WSDOT will issue the Permit sometime in April, 2014.

### Safety Meeting Minutes:

North Beach Water District staff meet for their monthly Safety meeting on the first Monday of the December.

### Attachments:

- o Water Sample Results
  - o Coliform Bacteria Sample Results
  - o Bromate
- o DOC Vender Distribution Form for 01-03-2014 thru 02-03-2014 DM12-952-129 (Supply and Treatment Project)
- o DOC Vender Distribution Form for 01-03-2014 thru 02-03-2014 DM12-952-121 (Water Main Project)
- o Surfside November/December Report

### End of Report

SR# 41401594-00



### **COLIFORM BACTERIA ANALYSIS**

Date Sample Collected	Time Sample	County
2/18/2014	Collected ロットにロ	AM ,
Month Day Year	12:05 R	PM Macific
Type of Water System (check only one t	box)	☐ Private Household
Group A Grou	up B	] Other
Group A and Group B Systems – Provid	le from Water Fa	acilities Inventory (WFI):
10# 6 5 0 0	$\frac{\partial}{\partial x} = \frac{\partial}{\partial x} = \frac{\partial}$	· · · · · · · · · · · · · · · · · · ·
System Name: North Be	each l	Water
Contact Person: We	<u> </u>	
Day Phone: (360) - 665 - 418		Cell Phone: (360) 24400
Eve. Phone: (3(60)-244-00		FAX: (360) - 665-460
Send results to: (Print full name, address and	zip code)	
PO BOX 618 0	Cean?c	rK, WA 98640
CAMDI	E INFORMA	TION
Sample collected by (name):	L INFORMA	11011
1/04	m tia	iant
Specific location where sample collected $26200$ Sandruge	5 A	Special instructions or comments:
36300 June under	Alle Car	
/V3574- [		
Type of Sample (MUST CHECK ONL)	Y ONE BOX OF	#1 THROUGH #4 LISTED BELOW)
#1, 🗷 Routine Distribution Sample		Sample (after unsat, routine)
Chlorinated: YesNo_X	LI Distr	ribution System
Chlorine Residual: Total Free		rce Groundwater Rule (GWR) oulation of 1,000 or less)
#3. Raw Water Source Sample  □ E.coli – GWR source sample	Un	satisfactory routine lab number:
Fecal –Surface, GWI, some spring	ns 0 1	7 -
☐ Other	* I	factory routine collect date:
S laccos gas agrangemental contentration of the con	Chlorina	ated: Yes No
Public systems must provide source number from WFL	Chlorine	Residual: TotalFree
#4. Sample Collected for Informatio	n Only	
Investigative Construction	n / Repairs	Other
LAB USE ONLY DRINKING	3 WATER RE	ESULTS LAB USE ONLY
☐ Unsatisfactory Total Coliform Prese		Satisfactory
ů,	E.coli absent	7
,		
Replacement Sample Required:	~~ ·~	leaned
housed	TNTC	
☐ Improper Container ☐	Turbid culture	
Bacterial Density Results: Plate Count		/ml. <i>E.coli/</i> 100ml.
Total Coliform/100m	il. Fecal Coli	form/100ml.
Method Code	-	Date, Time and Temp Received:
MICR- YWY JUDO		
		2/19/14 0910 0.400
Date Analyzed ODIGIT 4 Sample Number (DOH number plus five digits)		2/19/14 0910 0.4°6 Date Reported: (7) 22 14 Lab Use Only:

### INTERPRETATION OF RESULTS FOR DRINKING WATER

The analysis performed on this drinking water sample is an examination for the presence of coliform organisms in the water and indicates the bacteriological quality of the sample. The presence of coliform organisms is used by health organizations worldwide as an indicator for the possible presence of other disease causing organisms.

### REPORTING OF RESULTS:

Group A Public Water Systems must report the results of Drinking Water Analysis to the State as specified in WAC 246-290-480

### SATISFACTORY RESULTS:

The absence of coliforms from any sample is satisfactory. Proper system maintenance and bacteriological monitoring should be continued routinely to insure the safety of the water supply.

### UNSATISFACTORY RESULTS:

Any coliform presence is unsatisfactory.

The presence of coliforms indicates the system is not properly protected against contamination and may be unsafe for human consumption. Unsatisfactory samples should be investigated IMMEDIATELY and repeat samples submitted. Contact your local health department or DOH Regional Office for assistance in determining the source of contamination and corrective procedures.

When fecal coliforms or E. coli are reported present in a sample, the IMMEDIATE ACTION REQUIRED by a Public System is:

- Investigate to determine the cause and correct the situation. Your local health department or DOH Regional Office can assist you.
- 2. Submit repeat samples as specified in WAC 246-290-480.
- Publicly notify the users of public water systems as specified in WAC 246-290-480.
- Contact your local health department or DOH Regional Office as specified in WAC 248-290-480.

### TEST UNSUITABLE: Resample Immediately

"Confluent Growth" means bacteria have grown into a continuous mass which makes counting impossible. "TNC" means bacteria are too numerous to count. "Excess Debris" means that particulates in the water interfere with the interpretation of test results, "Turbid Culture" means overgrowth of other bacteria can interfere with coliform analysis. If any box indicating an unsuitable test is checked, the presence of coliform bacteria could not be determined and a new sample must be obtained for testing.

### RESAMPLE:

Sample too old. (Sample to be tested must be received within 30 hours). Not in proper container. (Bottle to be used for testing must be purchased from a certified lab within 6 months.) insufficient volume. (Sample must be at least 100 ml)

If not tested, a new sample must be submitted for analysis.

### FOR ADDITIONAL INFORMATION:

Contact your local health department OR the laboratory where this sample was tested OR the Department of Health, Drinking Water Program Regional Office.

### 1317 S. 13th Avenue • Kelso, WA 98626

### CALIEADM BACTEDIA AMALVEIC

COLIFORNI DA	VIERIA.	MINALI 313
	e Sample ollected	County
2 / 8 /2014 Month Day Year 11	: <u>50</u> 0 PM	Pacific
Type of Water System (check only one box)	)P	rivate Household
☐ Group A ☐ Group B	B 🗆 C	other
Group A and Group B Systems – Provide fg	om Water Facilit	ies Inventory (WFI):
D# 6 3000	$\mathcal{C}$	
System Name: North Be	each 1	Wester
Contact Person: B.W. New!		
Day Phone: (360) - (65-4)4		ell Phone: (360)-244-006
Eve. Phone: (360)-244-00 (	ිරි F.	4X: (360)-665-4641
Send results to: (Print full name, address and zip	code)	
PO Box 618,	Ocean	Park, WA 98640
SAMPLEI	NFORMATIC	N
Sample collected by (name):	1 1	Hunt
Specific location where sample collected:	S	pecial instructions or comments:
VSS#6		
Type of Sample (MUST CHECK ONLY OF	NE BOX OF #1 1	HROUGH #4 LISTED BELOW)
#1. Routine Distribution Sample	#2.Repeat Sai	mple (after unsat. routine)
Chlorinated: Yes No_X	☐ Distribut	ion System
Chlorine Residual: Total Free		Groundwater Rule (GWR)
#3. Raw Water Source Sample		ion of 1,000 or less)
☐ E.coli – GWR source sample	0 4 ==	factory routine lab number:
☐ Fecal –Surface, GWI, some springs	0 1 /	
Other	Unsatisfacto	ry routine collect date:
s		
Public systems must provide source number from WF1	Chlorinated:	Yes No
	Chlorine Re	sidual: TotalFree
#4. Sample Collected for Information O	nly	
Investigative Construction / R	Repairs	Other
LAB USE ONLY DRINKING W	ATER RESU	LTS LAB USE ONLY
Unsatisfactory Total Coliform Present a	ınd	Satisfactory
☐ E.coli present ☐ E.co	oli absent	
Replacement Sample Required:		
☐ Sample too old (>30 hours) ☐ TNT	C I	
☐ Improper Container ☐ Turb	oid culture	
Bacterial Density Results: Plate Count	/ml.	E.coli/100ml.
Total Coliform/100ml.	Fecal Coliform	/100ml.
Method Code: MICR-  MICR-  MICRORITION	. Dat	e,Time and Temp Received:
Date Analyzed (2) 19 11	nos	Reported: (2)22/11
Sample Number (DOH number plus five digits)		Ties Only

### - INTERPRETATION OF RESULTS FOR DRINKING WATER

The analysis performed on this drinking water sample is an examination for the presence of coliform organisms in the water and indicates the bacteriological quality of the sample. The presence of coliform organisms is used by health organizations worldwide as an indicator for the possible presence of other disease causing organisms.

### REPORTING OF RESULTS:

Group A Public Water Systems must report the results of Drinking Water Analysis to the State as specified in WAC 246-290-480

### SATISFACTORY RESULTS:

The absence of cofiforms from any sample is satisfactory. Proper system maintenance and bacteriological monitoring should be continued routinely to insure the safety of the water supply.

### UNSATISFACTORY RESULTS:

Any coliform presence is unsatisfactory.

The presence of coliforms indicates the system is not properly protected against contamination and may be unsafe for human consumption. Unsatisfactory samples should be investigated IMMEDIATELY and repeat samples submitted. Contact your local health department or DOH Regional Office for assistance in determining the source of contamination and corrective procedures.

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- 1. Investigate to determine the cause and correct the situation. Your local health department or DOH Regional Office can assist you.
- 2. Submit repeat samples as specified in WAC 246-290-480.
- 3. Publicly nouty the users of public water systems as specified in WAC 246-290-480
- 4. Contact your local health department or DOH Regional Office as specified in WAC 246-290-480.

### TEST UNSUITABLE: Resample Immediately

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### RESAMPLE:

Sample too old. (Sample to be tested must be received within 39 hours). Not in proper container. (Bottle to be used for testing must be purchased from a certified lab within 6 months.) insufficient volume. (Sample must be at least 100 ml)

If not tested, a new sample must be submitted for analysis.

### FOR ADDITIONAL INFORMATION:

Contact your local health department OR the laboratory where this sample was tested OR the Department of Health, Drinking Water Program Regional Office.

> Regional DOH - (360) 236-3030 Cowlitz County - (360) 414-5599 Lewis County - (800) 562-6130

Pacific County - (360) 875-9356



1317 S. 13th Avenue • Kelso, WA 98626

### **COLIFORM BACTERIA ANALYSIS**

Date Sample Collected		me Sample County		
2 1/8/2014	C	ollected	0 .	
Month Day Year	10	EL PM	Tachic	
Type of Water System (check of	only one box)	□Р	rivate Household	
☐ Group A	☐ Group B		other	
Group A and Group B Systems	- Provide fro	om Water Facilit	ies Inventory (WFI):	
1D# <u>6 5 0</u>		$\underline{O}$	**	
System Name: North	Bea	ch Wa	tell	
Contact Person: 3, \	Nea	N		
Day Phone: (3(6)) - (6(6)	5-414	Ч с	ell Phone: (360) _ 244-001	
Eve. Phone: (3(40) >- (60)	244-0	065 F	AX: (360)-665-4641	
Send results to: (Print full name, ad	dress and zip	code)		
PO BOX GB	Qe.	Rack	, WA 98640	
	SAMPLE	NFORMATIC	N	
Sample collected by (name):	Richa	7-4-11	and the same of th	
Specific location where sample	collected:	S	pecial instructions or comments:	
279000 st oce	ian Pa	rk		
VSS#9				
Type of Sample (MUST CHE	CK ONLY O	NE BOX OF #1	THROUGH #4 LISTED BELOW)	
#1. 🛛 Routine Distribution Sa	-1	#2.Repeat Sa	mple (after unsat. routine)	
Chlorinated: Yes No_		☐ Distribu	ion System	
Chlorine Residual: Total	Free		Groundwater Rule (GWR) tion of 1,000 or less)	
#3, Raw Water Source Sample		, ,	sfactory routine lab number:	
☐ E.coli – GWR source san	•	0 1 7	_	
☐ Fecal –Surface, GWI, so	me springs		ory routine collect date:	
Other		Viibalibiacii	/ / / / / / / / / / / / / / / / / / /	
S		Chlorinated	Yes No	
Public systems must provide source number	er from WFI		sidual: Total Free	
#4. Sample Collected for In	formation ()		Siddai, Iotal 7 Tee	
Investigative Co			Other	
		ATER RESU	ILTS LAB USE ONLY  Satisfactory	
☐ Unsatisfactory Total Colifo ☐ E.coli present		a <b>na</b> oli absent	X Satisfactory	
Replacement Sample Require	od.		***************************************	
Sample too old (>30 hou		TC .		
☐ Improper Container	•	oid culture	Security special security secu	
			<i>E.coli</i> /100ml.	
Total Coliform			1 /100ml.	
Method Code: 04MG	223P		te,Time and Temp Received:	
D. L. A. J	aliu		te Reported: (12/22/14	
Sample Number (DOH number plus five d	1161	Lai	Use Only.	
0 1 7 -	14443		d 2/24/14	

### INTERPRETATION OF RESULTS FOR DRINKING WATER

The analysis-performed on this drinking water sample is an examination for the presence of coliform organisms in the water and indicates the bacteriological quality of the sample. The presence of coliform organisms is used by health organizations worldwide as an indicator for the possible presence of other disease causing organisms.

### REPORTING OF RESULTS:

Group A Public Water Systems must report the results of Drinking Water Analysis to the State as specified in WAC 246-290-480

### SATISFACTORY RESULTS:

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  - 3. Publicly notify the users of public water systems as specified in WAC 246-290-480.
  - 4. Contact your local health department or DOH Regional Office as specified in WAC 246-290-480.

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### RESAMPLE:

Sample too old. (Sample to be tested must be received within 30 hours). Not in proper container. (Bottle to be used for testing must be purchased from a certified lab within 6 months.) insufficient volume. (Sample must be at least 100 ml)

If not tested, a new sample must be submitted for analysis.

### FOR ADDITIONAL INFORMATION:

Contact your local health department OR the laboratory where this sample was tested OR the Department of Health, Drinking Water Program Regional Office.

### 1317 S. 13th Avenue • Kelso, WA 98626

COLIFOR	KM BA	CTERIA	ANA	LYSIS
Date Sample Collected		e Sample		County
2 / 18/2014	12	ollected	AM O	· green
Month Day Year	10/	: LEX	PM   VC	icitic
Type of Water System (check o	nly one box)	E	Private Ho	pusehold
Group A	☐ Group B		Other	The section of the Addition of the section of the S
Group A and Group B Systems	- Provide fro	om Water Fac	cilities Inver	ntory (WFI):
1D# 6 3 0	Q	$\underline{\circ}$		
System Name:	Bea	- la i	late	· victoria
Contact Person:	Nool	rin	/are	
Day Phone: (36)-665	>-UIUC	.1	Cell Phon	e: (360)-244-0068
Eve. Phone: (360) - 246				,U)-665-4641
Send results to: (Print full name, add	dress and zip o	code)		
PO Box 618	5, Oce	en R	ark,	WA 98640
S	AMPLE	NFORMAT	ION	
Sample collected by (name):	0 1	1 ~ 1	- to a second	
	KOI	ren	TTC	unt
Specific location where sample	collected: Pl	erk	Special ins	structions or comments:
VSS± 8		the control of the co		
Type of Sample (MUST CHEC	CK ONLY ON	4E BOX OF #	1 THROUG	H #4 LISTED BELOW
#1. Routine Distribution Sar				ter unsat. routine)
Chlorinated: Yes No_		☐ Distri	bution Syste	em
Chlorine Residual: Total	Free			rater Rule (GWR)
#3, Raw Water Source Sample				000 or less)
☐ E.coli – GWR source sam	ple	0 4	atisfactory r	outine lab number:
☐ Fecal –Surface, GWI, som	ne springs	0 1		A COMMISSION AND ADDRESS OF THE PARTY OF THE
Other	YTTEROPOLICA	Unsatisfa	•	e collect date:
S	944	01-1		
Public systems must provide source number	from WFI			No
#4 Sample Collected for Inf	ormation O		Residual: To	otalFree
Investigative Con		*	Other	
		The state of the s		
		ATER RE	OULI O	LAB USE ONLY Satisfactory
☐ Unsatisfactory Total Colifor☐ E.coli present		nu vli absent		XI Satisfactory
Replacement Sample Require	d:			
Sample too old (>30 hours		С		
☐ Improper Container	Turb	id culture		
Bacterial Density Results: Plate	Count	/n	nl. <i>E.coli</i>	/100ml.
Total Coliform		Fecal Colifo		/100ml.
				ad Temp Received:
Method Code: 8M923	13B		Date, Time ar 2/19/14	na remp received: 0910 0 4 4 -
Date Analyzed OD	19/14		Date Reports	d: 02/22/14
Sample Number (DOH number plus five dig	i		Lab Use Only	
0 1 7 - 1	594 H	-	Å	V ahilli

### INTERPRETATION OF RESULTS FOR DRINKING WATER

The analysis-performed on this drinking water sample is an examination for the presence of coliform organisms in the water and indicates the bacteriological quality of the sample. The presence of coliform organisms is used by health organizations worldwide as an indicator for the possible presence of other disease causing organisms.

### REPORTING OF RESULTS:

Group A Public Water Systems must report the results of Drinking Water Analysis to the State as specified in WAC 246-290-480

### SATISFACTORY RESULTS:

The absence of coliforms from any sample is satisfactory. Proper system maintenance and bacteriological monitoring should be continued routinely to insure the safety of the water supply.

### UNSATISFACTORY RESULTS:

Any coliform presence is unsatisfactory.

The presence of coliforms indicates the system is not properly protected against contamination and may be unsafe for human consumption. Unsatisfactory samples should be investigated IMMEDIATELY and repeal samples submitted. Contact your local health department or DOH Regional Office for assistance in determining the source of contamination and corrective procedures.

When fecal coliforms or E. coli are reported present in a sample, the IMMEDIATE ACTION REQUIRED by a Public System is:

- 1. Investigate to determine the cause and correct the situation. Your local health department or DOH Regional Office can assist you.
- 2. Submit repeat samples as specified in WAC 246-290-480.
- 3. Publicly notify the users of public water systems as specified in WAC 246-290-480
- 4. Contact your local health department or DOH Regional Office as specified in WAC 246-290-480.

### TEST UNSUITABLE: Resample Immediately

"Confluent Growth" means bacteria have grown into a continuous mass which makes counting impossible. "TNC" means bacteria are too numerous to count. "Excess Debris" means that particulates in the water interfere with the interpretation of test results, "Turbid Culture" means overgrowth of other bacteria can interfere with coliform analysis. If any box indicating an unsuitable test is checked, the presence of coliform bacteria could not be determined and a new sample must be obtained for testing.

### RESAMPLE:

Sample too old. (Sample to be tested must be received within 30 hours). Not in proper container. (Bottle to be used for testing must be purchased from a certified lab within 6 months.)

insufficient volume. (Sample must be at least 100 ml)

If not tested, a new sample must be submitted for analysis.

### FOR ADDITIONAL INFORMATION:

Contact your local health department OR the laboratory where this sample was tested OR the Department of Health, Drinking Water Program Regional Office.

SR# 41401694-005



(ALS) Environmental

1317 S. 13th Avenue • Kelso, WA 98626

### **COLIFORM BACTERIA ANALYSIS**

	A CONTRACTOR OF THE PARTY	
	ne Sample Collected	County
2/8/2014 Month Day Year 2	:50 A	
Type of Water System (check only one box	k) 🗆	Private Household
☐ Group A ☐ Group	в 🗆	Other
Group A and Group B Systems – Provide 1	from Water Faci	lities Inventory (WFI):
10# 6 9 0 0	<u> </u>	general American
System Name: North Be	each !	Water
Contact Person:  S  NEarl		3/ # 51
Day Phone: (366)-665-414	14	Cell Phone: (S(0)-)-144-00
Eve. Phone: (360)-244-006	00	FAX: (360)-665-464
Send results to: (Print full name, address and zi		X.11 (3.55)
PO Box 618 Ocean	) Yark	, WA 48640
SAMPI F	INFORMAT	ON
Sample collected by (name):	ort H	fac
Specific location where sample collected:	o B AK	Special instructions or comments:
12122474 PL COM	TIGIN	
Type of Sample (MUST CHECK ONLY (	ONE BOX OF #	THROUGH #4 LISTED BELOW)
#1. (2) Routine Distribution Sample		iample (after unsat. routine)
Chlorinated: YesNo	☐ Distril	oution System
Chlorine Residual: Total Free		e Groundwater Rule (GWR) lation of 1,000 or less)
#3. Raw Water Source Sample	Uns	utisfactory routine lab number:
<ul><li>☐ E.coli – GWR source sample</li><li>☐ Fecal –Surface, GWI, some springs</li></ul>	0 1	7
Other	1	ctory routine collect date:
s		
Public systems must provide source number from WFI	Chlorinat	ed; Yes No
Public systems must provide source harrise from 1911	Chlorine	Residual: TotalFree
#4. Sample Collected for Information		
Investigative Construction	/ Repairs	Other
LAB USE ONLY DRINKING	WATER RE	
Unsatisfactory Total Coliform Presen	t and	Satisfactory
☐ E.coli present ☐ E	.coli absent	
Replacement Sample Required:		
☐ Sample too old (>30 hours) ☐ T		
☐ Improper Container ☐ Ti	urbid culture	
Bacterial Density Results: Plate Count		nl. <i>E.coli/</i> 100ml
Total Coliform/100ml.	Fecal Colife	orm/100ml.
Method Code: SMG2236	3,	Date, Time and Temp Received:
Date Analyzed O2 1 G	T	Date Reported: 02/22/14
Sample Number (DOH number plus five digits)	aller	I ah Use Only:
0 1 7 - 15	447	WT 2/24/14

### INTERPRETATION OF RESULTS FOR DRINKING WATER

The analysis-performed on this drinking water sample is an examination for the presence of coliform organisms in the water and indicates the bacteriological quality of the sample. The presence of coliform organisms is used by health organizations worldwide as an indicator for the possible presence of other disease causing organisms.

### REPORTING OF RESULTS:

Group A Public Water Systems must report the results of Drinking Water Analysis to the State as specified in WAC 246-290-480

### SATISFACTORY RESULTS:

The absence of coliforms from any sample is satisfactory. Proper system maintenance and bacteriological monitoring should be continued routinely to insure the safety of the water supply.

### UNSATISFACTORY RESULTS:

Any coliform presence is unsatisfactory.

The presence of coliforms indicates the system is not properly protected against contamination and may be unsafe for human consumption. Unsatisfactory samples should be investigated IMMEDIATELY and repeat samples submitted. Contact your local health department or DOH Regional Office for assistance in determining the source of contamination and corrective procedures.

When fecal coliforms or E. coli are reported present in a sample, the IMMEDIATE ACTION REQUIRED by a Public System is:

- Investigate to determine the cause and correct the situation. Your local health department or DOH Regional Office can assist you.
- 2. Submit repeat samples as specified in WAC 246-290-480.
- Publicly notify the users of public water systems as specified in WAC 246-290-480
- Contact your local health department or DOH Regional Office as specified in WAC 246-290-480.

### TEST UNSUITABLE: Resample Immediately

"Confluent Growth" means bacteria have grown into a continuous mass which makes counting impossible. "TNC" means bacteria are too numerous to count. "Excess Debris" means that particulates in the water interfere with the interpretation of test results, "Turbid Culture" means overgrowth of other bacteria can interfere with coliform analysis. If any box indicating an unsultable test is checked, the presence of coliform bacteria could not be determined and a new sample must be obtained for testing.

### RESAMPLE:

Sample too old. (Sample to be tested must be received within 30 hours). Not in proper container. (Bottle to be used for testing must be purchased from a certified lab within 6 months.) insufficient volume. (Sample must be at least 100 ml)

If not tested, a new sample must be submitted for analysis.

### FOR ADDITIONAL INFORMATION:

Contact your local health department OR the laboratory where this sample was tested OR the Department of Health, Drinking Water Program Regional Office.



### **ALS Environmental**

1317 South 13th Avenue Kelso, WA 98626

### **BROMATE TEST PANEL**

### (Bromate by EPA Methods 300.1) for the State of Washington

### REPORT OF ANALYSIS

Date Collected: (MM/DD/YY)	02/18/14	System Gro	up Type: (A	A,B,Other): A
Water System ID Number:	63000C	System Nar	ne:	North Beach Water
Lab Sample Number:	01716291	County:		Pacific
Sample Location:	North Well Field 2212 272 <sup>nd</sup> St	Source Nun	nber(s):	S06
Sample Purpose:		Date Receiv	ved:	02/19/14
Select One		Date Analy	zed:	02/20/14
X RC- Routine/Complian	ce	Date Repor	ted:	02/25/14
C- Confirmation		Comments:		K1401629-001
Investigative				
Other(specify)				
Sample Composition:		Sample Ty	pe: (Select	One)
Select One			Pre-Treatm	nent/Raw
X S- Single Source		X	Post-Treatr	ment/Finished
B- Blended (List multiple	source numbers)		Unknown	
C- Composite		Sample Col	lected by:	Nick Morrison
D- Distribution sample		Phone Num	ber:	360-660-4144
Send Report to: North Bea	ch Water District	Bill to:	Same	

DOH#	ANALYTES	RESULTS	UNITS	SRL	TRIGGER	MCL	Method	Analyst
0419	BROMATE	< 0.05	mg/L	0.005	0.005	0.010	300.1	NB

### **NOTES:**

SRL (State Reporting Level): indicates the minimum reporting level required by the Washington Department of Health (DOH).

**Trigger Level:** DOH Drinking Water Response Level. Systems with compounds detected at concentrations in excess of this level are required to take additional samples. Contact your regional DOH office for further information.

 $MCL\ (Maximum\ Contaminant\ Level): If the\ contaminant\ amount\ exceeds\ the\ MCL, immediately\ contact\ your\ regional\ DOH\ office.$ 

NA (Not Analyzed): in the results column indicates this compound was not included in the current analysis.

ND (Not Detected): in the results column indicates this compound was analyzed and not detected at a level greater than or equal to the SRL.

<(0.00X): indicates the compound was not detected in the sample at or above the concentration indicated. (lab mdl) lower than the SRL.

Comm	ients:			
	-			
		•		•

								-			
6					SHINGTON STATE						
	9			DEI	PARTMENT OF COMMERCE			AGENCY NUMBER	Short Code	Commerce	Contract Number
Forn A19-1					VOUCHER DISTRIBUTION DEPARTMENT OF COMMERCE PO BOX 42525 OLYMPIA, WA 98504-2525			103	30	DM12-	952-129
		VEN	OOR OR	CLAIMAN	T (Warrant is to be payable to:)			Submit this for		ANT: rials, merchandise, or services.	
		North Beacl PO Box 618 Ocean Park			ict			Vendor's Certi authorized and under penalty services furnis provided witho	d on the behalf of the entity id of perjury that the items and t hed to the State of Washingt	otals listed herein are proper charg on, and that all goods furnished and age, sex, marital status, race creed	. The individual signing below certifies es for materials, merchandise or Vor services rendered have been
Contact P	erson:				Jack McCarty					2	
Phone:	S				(360) 665-4144 11/29/2012 - 11/29/2036			-	20	1	
Contract F Report Pe					2/4/14 - 3/5/14			By:		(SIGN IN BLUE INK)	1963 NOVAS VIV
								Ge	neral Manager (TITLE)		3/5/2014 (DATE)
		Original Contra	ct Amou	int			\$	2,190,631			
		Loan Fee (if an	y)					\$0			
Date	,				DESCRIPTION		Bue	dget	Previously Requested	Amount of This Invoice	Award Remaining Balance
		Net Contract A	mount		Request #10		\$2,19	0,631	\$242,126.95		\$1,948,504
2/5/20	14	Invoice #14-11	5 / Robi							\$1,690.50	
2/4/20	14	Invoice #13224	.01-11	Gray & C	Osborne / Drilling & Testing					\$575.58	
3/5/20	14	Progress Estim	ate #6 /	Bison We	ell Drilling & Septic / New Well Drilling					\$20,642.57	
					т	otals				\$22,908.65	\$1,925,595
Match: Year	Dollars	Coding				IPROGRAM	APPROVAL (the	unductual singing this	s voucher warrants they have the author	ev to sign this voucher)	DATE
DOC DATE	Domino	, dodany		CURRENT	DOC NO	-2	CE DOC NO.			31/24/57/14/2 (13/9/22/9/III	7555
DOCDATE				CURRENT	DOC, NO.	NEI EIGH	oc boo no.		VENDOR NUMBER and SUFFIX	SWV0110176 00	
ACCOUNT N	O,					ASD NUME	BER	27010	VENDOR MESSAGE		
TRANS CODE	MASTE	R INDEX	su	в овј	SUB SUB OBJ	GL	ACCT	SUBSID	AMOUN	т	INVOICE
											DM12-952-129
SIGNATURE	OF ACC	OUNTING PREPARER	OR PAYM	INT				DATE		WARRANT TOTAL	
ACCOUNTIN	3 APPRO	OVAL FOR PAYMENT						DATE			

								,				
					SHINGTON STATE							
				DE	PARTMENT OF COMMERCE			AGENCY NUMBER	Short Code		Commerce C	Contract Number
Forn A19-					VOUCHER DISTRIBUTION DEPARTMENT OF COMMERCE PO BOX 42525 OLYMPIA, WA 98504-2525			10	30	Di	VI12-	952-121
		VENI	OOR OR	CLAIMAN	T (Warrant is to be payable to:)				NS TO VENDOR OR CLA		r services.	
		North Beac PO Box 618 Ocean Park			ict			Vendor's Cert authorized an under penalty services furnis provided withou	d on the behalf of the entity of perjury that the items ar shed to the State of Washir	identified in the Vendor d totals listed herein are gton, and that all goods of age, sex, marital state	r/Client section. e proper charge s furnished and/	we the authority to do so as The individual signing below certifies is for materials, merchandise or or services rendered have been color, national origin, handicap,
Contact P	erson:				Jack McCarty (360) 665-4144							
Phone: Contract I REPORT P					11-29-2012 thru 11-29-2036 2/4/2014 - 3/6/2014	5		Ву:	4	(SIGN IN BLUE	INK)	
KEI OKT I	LINIOD				2/4/2014 3/0/2014			Ge	neral Manager (TITLE)	(0)014114 0000		/6/2014 (DATE)
		Original Contra	ct Amo	unt				\$891,123				
		Loan Fee (if an						\$8,823				
Date	e				DESCRIPTION		Bue	dget	Previously Requeste	d Amount of Th	nis Invoice	Award Remaining Balance
		Net Contract A	mount		Request #8		\$882	2,300	\$348,499.52			\$533,800
2/4/20	014	Invoice #13223	.01-3 /	Gray & Os	sborne / Water Main Project Manageme	ent				\$27,71	2.88	
3/6/20	)14	Progress Estim	ate #3	Big River	Excavating / Water Main Intallation					\$113,83	33.51	
					То	tals				\$141,54	16.39	\$392,254
Match: Year	/ Dollars	/ Coding				PROGRAM	APPROVAL (the	individual elamina th	s voucher warrants they have the au	hosts to sign this souther)		DATE
DOC DATE	7 Donars	roung		CURRENT		REFERENC	1				70.00	DATE
				CORRENT	500, NO.				VENDOR NUMBER and SUF	x SWV011017	6 00	
ACCOUNT N	0.					ASD NUMB	BER		VENDOR MESSAGE			
TRANS CODE	MASTE	R INDEX	811	в овј	SUB SUB OBJ	GL	ACCT	SUBSID	AMO	INT		INVOICE
CODE	MAGIE	R INDEX	80	6 063	000	OL.	Acci	00000	Allio			***************************************
												DM12-952-121
SIGNATURE	OF ACC	DUNTING PREPARER I	OR PAYM	ENT				DATE		WARRANT TOTAL		
ACCOUNTIN	G APPRO	OVAL FOR PAYMENT						DATE		1		



### Surfside Water Department Water System Manager's Report

### Report on water system operations for the month of February, 2014 Water production and use report:

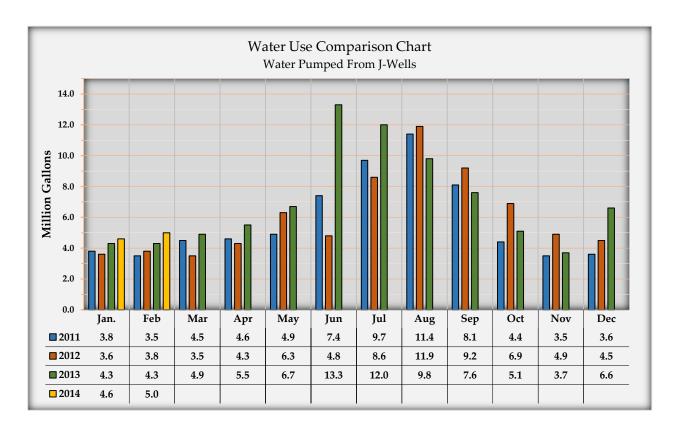
The metering period for February, 2014 is from **January 31**, **2014 to February 28**, **2014**.

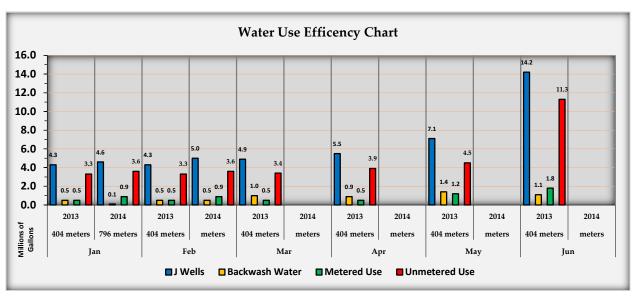
The water department pumped **5.0** million gallons from the J-Well field in the February metering period.

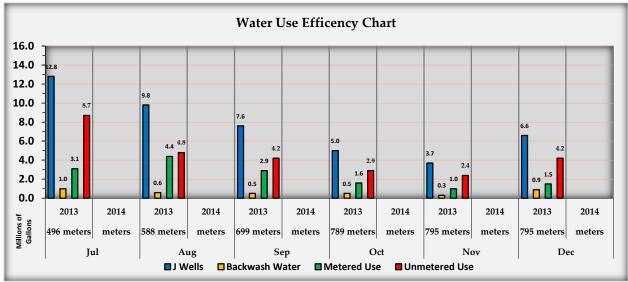
The water department used 0.5 million gallons of water backwashing the filter and flushing water mains in the February metering period.

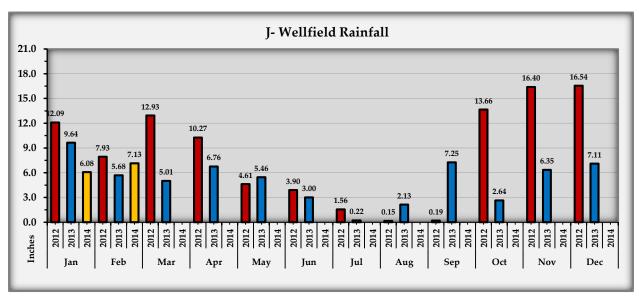
The water department read **796** service meters on February 28, 2014. Those service meters recorded **0.9** million gallons of water use in the February metering period.

The water department recorded **3.6** million gallons of water as unmetered water use in the February metering period.







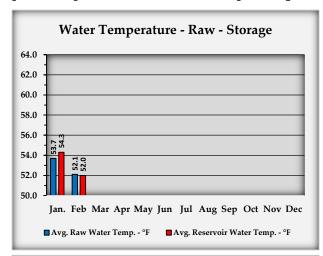


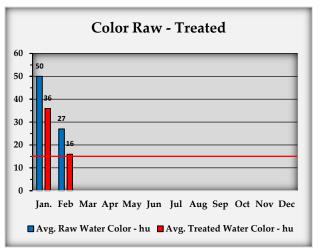
### Raw and finished water quality report:

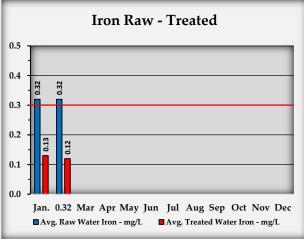
The Surfside water department operates a water treatment plant that is designed to reduce the iron and manganese levels in the raw water (well water). The Environmental Protection Agencies (EPA) has set Secondary Maximum Contaminant Levels (SMCL) for iron (Fe) at .3 mg/L and manganese (Mn) at .05 mg/L. The J-Wells water exceed the EPA SMCL for both iron and manganese.

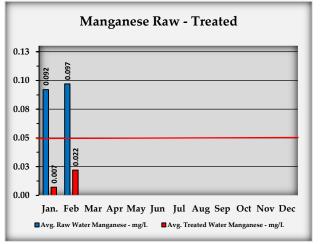
The EPA has set an SMCL for color at 15 HU. The J-Wells water exceed the EPA SMCL for color. The treatment plant was not designed to reduce color in the raw water. The water department is able to reduce the color by a respectable percentage with the current treatment plant but the equipment will not reduce the color to below the SMCL.

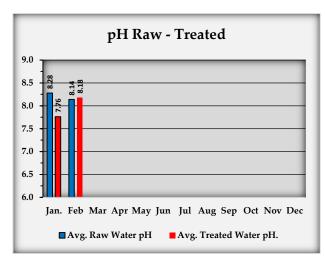
Factors such as pH and water temperature affect the operation of the treatment plant. The water department closely monitors all of these water quality constituents and makes adjustments to the chemical and treatment plant operation as water quality changes happen throughout the year.

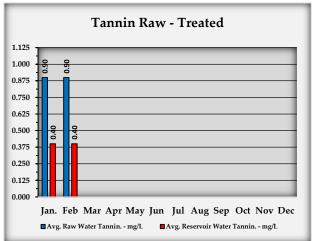












### J-Wellfield Report:

The J-Wellfield is located at 33104 J Place. The J-Wellfield, treatment plant, storage reservoirs, and booster station are all located together on five contiguous parcels of land that total 20.12 acres. There are seven wells in the J-Wellfield. They are designated as J-1, J-2A, J-3, J-4, J-5, J-6, and J-7.

J-1 was drilled in 1977. The well is constructed with 8" diameter casing to a depth of 223'. The well is screened from 193' to 223' with a 10 slot screen. Due to very poor water quality and the availability of wells J-6 and J-7 the water



Well Screen & Sand Pack Cross Section Image

department designated J-1 as an emergency only well in 2000. J-1 was taken off line in 2009 and is no longer identified as a water source in Surfside's water facilities inventory. The water department uses J-1 as an observation well.

J-2A was drilling in 1991. The well is constructed with 8" diameter casing to a depth of 225'. The well is screened from 192' to 223' with a 9 and 8 slot screen. J-2A replaces J-2 which was drilled in 1983. J-2 was drilled to a depth of 360' before the casing broke. That well was decommissioned and a second attempt was made. The second J-2 was drilled to 346'. For reasons not preserved in the record the well was not accepted. The well was decommissioned in 1991 just before the construction of J-2A. J-2A produces 175 GPM.

J-3 was drilling in 1991. The well is constructed with 8" diameter casing to a depth of 223'. The well is screened from 192' to 222' with a 9 and 8 slot screen. J-3 produces 175 GPM.

J-4 was drilling in 1994. The well is constructed with 8'' diameter casing to a depth of 220'. The well is screened from 182' to 203' with an 8 slot screen. J-4 produces 175 GPM.

J-5 was drilling in 1994. The well is constructed with 8'' diameter casing to a depth of 208'. The well is screened from 182' to 203' with an 8 slot screen. J-5 produces 175 GPM.

J-6 was drilling in 1996. The well is constructed with 8" diameter casing to a depth of 204'. The well is screened from 180' to 200' with an 8 slot screen. J-6 produces 175 GPM.

J-7 was drilling in 1996. The well is constructed with 8'' diameter casing to a depth of 200'. The well is screened from 180' to 200' with an 8 slot screen. J-7 produces 175 GPM.

### Water Rights:

On August 16, 1999 the Department of Ecology issued Surfside Homeowners Association an Amended Groundwater Permit No. G2-24260. The permit has a priority date of August 9, 1976. The priority date is used to set the seniority of your Water Right compared to other Water Rights in the same basin. Groundwater Permit No. G2-24260 authorizes Surfside to construct up to ten (10) active water wells<sup>1</sup> within the boundaries of the 20 acres J-Wellfield site. The permit authorizes Surfside to pump a Maximum Instantaneous Flow Rate ( $Q_i$ ) of 1900 gallons per minute (gpm) and a Maximum Annual Volume ( $Q_a$ ) of 1,143 acre feet<sup>2</sup>.

Surfside Homeowners Association has conveyed 40 gpm ( $Q_i$ ) and 30 Acre feet a year ( $Q_a$ ) of Groundwater Permit No. G2-24260 to Oysterville Water Company.

Groundwater Permit No. G2-24260 permit has conditions that Surfside must meet. When Surfside reaches build out the Permit must perfected the Amended Groundwater Permit No. G2-24260. At that time the Department of Ecology will issue Surfside a Groundwater Certificate. Surfside will relinquish its earlier water rights associated with the three shallow Wellfields and establish a final Maximum Instantaneous Flow Rate  $(Q_{\rm i})$  and Maximum Annual Volume  $(Q_{\rm a})$ .

Surfside has the authority to construct up to three additional production water wells at the J-Wellfield if needed and increase production by approximately 800 gpm under Groundwater Permit No. G2-24260. That is

<sup>1</sup> Observation, test, and monitoring wells are not considered water wells.

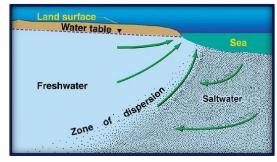
 $<sup>^2</sup>$  One acre feet of water equals 325,851 gallons of water. (2 acre feet fill 1 Olympic Size Swimming Pool)

 $<sup>^3</sup>$  A Water Right Permit is considered perfected when it is put to full beneficial use. When the permit is perfected the DOE will issue a Water Right Certificate for the  $Q_i$  and  $Q_a$  that the owner can prove he has put to full beneficial use not to exceed the amount stated on the Water Right Permit. The final  $Q_i$  and  $Q_a$  can be less than the amount identified on the Water Right Permit.

more water than is currently projected to meet Surfside's needs for build out.

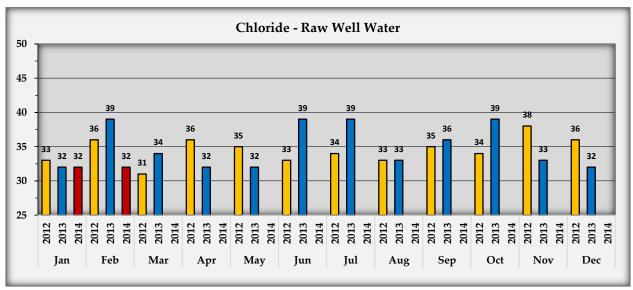
The J-Wellfield geology is coastal marine sand aquifers. The Pacific Ocean is to the west of the J-Wellfield and Willapa Bay is to the east. The aquifer Surfside relies on for its water is hydraulically connected to these saltwater bodies. Although the Peninsula is blessed with nearly 6.5 feet of rain a year it is important to monitor our wells for any indication of saltwater intrusion. The water department monitors with wells two ways.

The first way is mechanically. We take water level readings of the well depths while the wells are pumping and at rest. We record those readings and compare them with previous reading. We watch for trends that would indicate seasonal year over year drop in water levels.

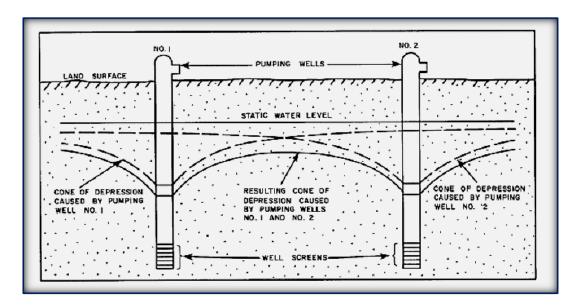


The second way is chemically. We test

the raw well water each month for chloride (Cl $^-$ ). Chloride is a simple inexpensive test that is one of the best indicators of increased landward movement of the "zone of dispersion". Most hydrogeologist agree that a chloride residual of 100 mg/L is an indicator that action is needed. Most people will notice a salty taste in the drinking water when the chloride residual exceeds 250 mg/L. The EPA has set a SMCL $^4$  for chloride at 250 mg/L.

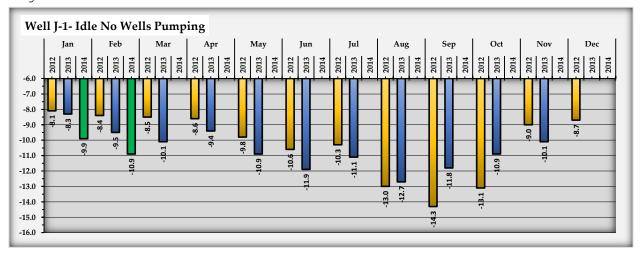


<sup>&</sup>lt;sup>4</sup> Secondary maximum contaminant (SMCL) were established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health at the SMCL.

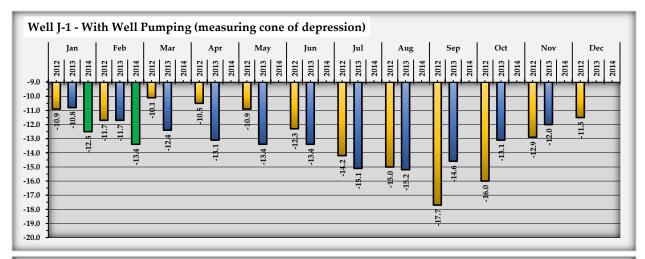


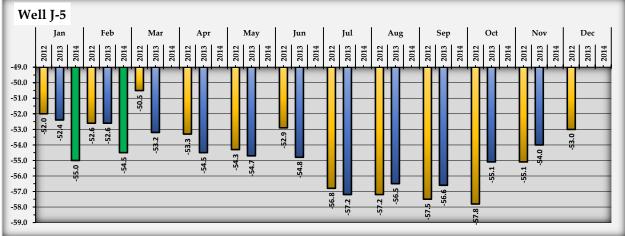
During the pumping cycles of the wells in the J-Wellfield the water in the aquifer draws down in a cone around each of the wells. These cones will overlap each other during the pumping cycles. During rest the cones of depression will reverse or recover to the static level. The above illustration is a bit misleading. The pumping level most wells is generally lower than the cone of depression unless the well have been pumping form more than 24 hours. The difference in the pumping level and the lower edge of the cone of depression has to do with the efficiency of the well design and development. A 100% efficient well is impossible to construct. Most engineers and hydrogeologist consider 70% to 80% efficient well a success.

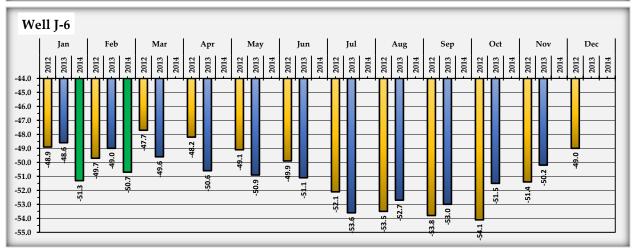
The water department measures and records the water levels of all of the wells including well J-1 during the pumping and resting cycles. These readings reveal the condition of the well, loss of efficiency, and the aquifer, loss of capacity or head. In the three years I have been taking regular measurements the wells and aquifer have shown no signs of decline.



Page 7 of 12







Wells J-5 and J-6 are two of the production wells. When the wells are not pumping the static water level in all of the wells is the same as J-1 at idle. During the pumping cycle the production wells will drawdown to different levels. The different drawdown levels have more to do with

 $<sup>^{5}</sup>$  Drawdown is the drop in the level of water in a well when water is being pumped either from that well or nearby wells.

individual well efficiency rates than aquifer characteristics. During the pumping cycle we are able to measure the edge of the cone of depression at the J-1 observation well. J-1 is approximately 350' from the center of the J-Wellfield. There is consistently 2 to 3 feet of drawdown on J-1 during the pumping cycle. The static water level has a very predictable lowing during the dry summer season and raising in the wetter fall and winter season.

"All water is off on a journey unless it's in the sea, and it's homesick, and bound to make its way home someday"

Although the J-Wellfield has not been tested by hydrogeologist to quantify the aquifers storage properties and transmissivity<sup>6</sup> the data collected by the water department does document that the aquifer has consistent seasonal water table fluctuations and stable drawdown rates during pumping cycles throughout the year indicating the amount of water Surfside pumps from the aquifer each year is less than the annual recharge.

### Distribution Water Quality Report:

The water in the distribution system is tested more frequently than the raw, treated and finished water at the treatment plant. The water department has over twenty miles of water main to manage and keeping the water in the distribution system of the highest possible quality is our highest priority.

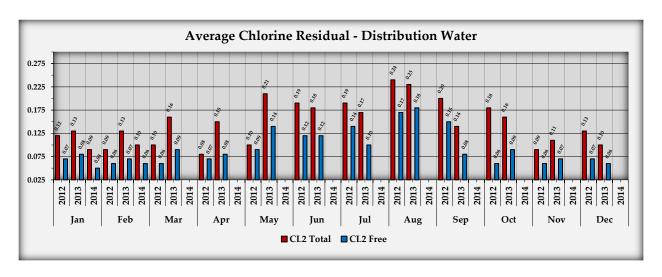
Maintaining chlorine residuals that will effectively disinfect the water and yet keep a balance where the smell and taste of chlorine at low levels requires constant vigilance. The water department also tests for other water constituents.

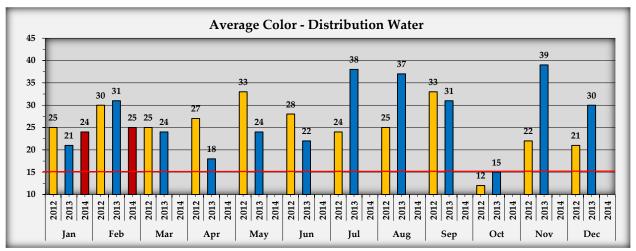
The water department tests the water for  $pH^7$  and temperature regularly in the distribution system. Fluctuations in pH and temperature can have a significant effect on the effectivity of chlorine as a disinfectant.

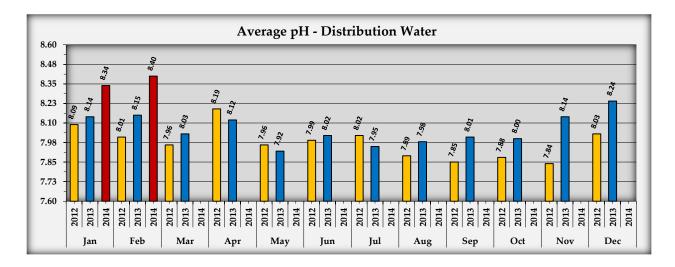
The water department test the water for color regularly in the distribution system. Color in the water is the most common member compliant received by the water department. The water department will perform a reactive flush water mains for members when the color gets above  $50~{\rm HU}$ 

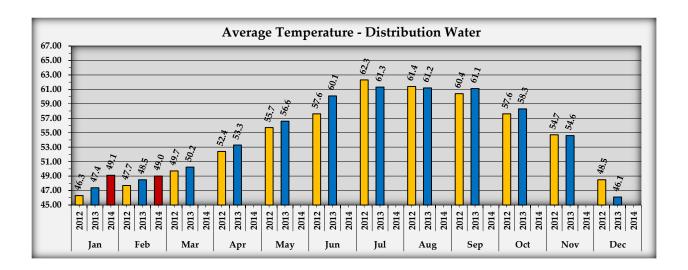
<sup>&</sup>lt;sup>6</sup> Transmissivity is the measurement of water flowing through an aquifer. All groundwater is moving toward a surface water body. Transmissivity is the rate or speed that the water moves through the aquifer on that journey.

<sup>&</sup>lt;sup>7</sup> The pH value is the indicator for acidity, alkalinity, or basic condition of a substance. A pH value of 7 means a substance is neutral (basic). A pH value higher than 7 indicates alkalinity and a pH value lower than 7 indicates acidity.









### February Project Reports:

### WMR:

The water department crew has been concentrating on the WMR project in February. The work has been on 206<sup>th</sup> between J place and O Place. The work along 306<sup>th</sup> have been slow due to the many crossing that require valve clusters, fire hydrants and extra restoration. There has been excessive tree and brush removal from the county right-of-way required along 306<sup>th</sup> also. The right-of-way has fiber optic cable, PUD power lines, CenturyTel telephone and cable and Pacific County storm drain infrastructure existing. All of these factors make for slow going. All in all though the work has been progressing well:







### MIP:

The Board of Trustees awarded the MIP materials bid to HD Fowler in January 2014 and the Board will be considering Resolution 2014-03-01 to purchase meters for the 2014 meter installation project. The meters installation will begin in June, 2014.

### Chloroform Reduction Pilot Test:

The pilot test has begun. The equipment was installed February 26<sup>th</sup>. We are testing activated carbon from two different manufactures. One is from Calgon and one is from Siemens. The test has just started but we have already gotten data that is very helpful. The carbon does an excellent job removing the total organic carbons (precursors to the disinfection byproducts) according to the UV-254 test. The carbon also does an excellent job removing color. We expected the iron and manganese to pass right through the carbon but the carbon also removes all of the iron and about one third of the manganese. There are a couple of reasons why this could be happing. We will be doing more testing to determine what is happing in the near future. When we determine why the iron and manganese are being removed by the carbon we may need to modify the pilot test protocols to account for the unexpected reaction. The good news is we are on our way to finding answers. Gil will have water samples for the Board to observe at the meeting.





### Monthly Water System Data Compilation

### Month/Year

### Metering Period1

February 2014 -Conected 3-5-14	1/31/14-2/28/14

Data	Target	Int2.	Amt.	UM <sup>3</sup>	Date
Total Water Pumped from J- Wells for Metering Period	N/A	(40)	5	Yg <sup>5</sup>	3/4
Total Backwash and Authorized Use Water for Metering Period	N/A	W	.5	Ng	3/4
Total Metered Water for Metering Period	N/A	Re	.9	Ид	3/4
Total Unmetered Water for Metering Period	N/A	(HD)	3.6	Иg	3/4
Total Number of Service Meters Read in the Metering Period	N/A	a	796	Ea	3/4
Average Raw Water Iron for Month	< .5 mg/L	(A)	.32	mg/L	3/4
Average Finished Water Iron for Month ( reservoir )	< .1 m/L	an	.12	mg/L	3/4
Average Raw Water Manganese for Month	< .15 mg/L	(HD)	.097	mg/L	3/4
Average Finished Water Manganese for Month ( reservoir )	d'ga 10. >	(N)	.022	ng/L	3/4
Average Raw Water pH for Month	7.5-8.5	(AD)	8.14	ÞН	3/4
Average Finished Water pH for the Month ( reservoir )	7.2-7,8	(AN)	8.18	рн	3/4
Average Raw Water Color for the Month	<50 HJ	H	27	RU	3/4
Average Finished Water Color for the Month ( reservoir )	< 15 W	(In)	16	HU	3/4
Average Raw Water Temperature - Fahrenheit	N/A	W	52.1	**	3/4
Average Finished Water Temperature - Fahrenheit ( reservoir )	N/A	(40)	52	'F.	3/4
J-1 Idle Depth to Water ( no well pumping for a minimum of 30 minutes )6	N/A	(1)	-10.9	Ft.	2/3
J-1 Depth to Water ( wells pumping for a minimum of 30 minutes )	N/A	AR	-13.4	Ft.	2/3
J-2 Depth to Water ( wells pumping for a minimum of 30 minutes )	N/A	(41)	-16.2	Ft.	2/3
J-3 Depth to Water ( wells pumping for a minimum of 30 minutes )	N/A	GHL	-19	Ft.	2/3
J-4 Depth to Water (wells pumping for a minimum of 30 minutes)	N/A	(KR)	-54.9	Ft.	2/3

<sup>&</sup>lt;sup>1</sup> Metering period is the days between meter readings. Example: Meters are read on 11/29/13. The meter readings total is 10. The meters are next read on 12/31/13. The meter readings total is 20. The metering period is 11/29/13 to 12/31/13 and the use is 10 (20-10=10). The meters are next read on 1/31/14. The readings total is 35. The next metering period is 12/31/13 to 1/31/14 and the use for that metering period is 15 (35-20=15). All meter readings in this report need to be from the same metering period.

<sup>&</sup>lt;sup>2</sup> Provide the initials of the person recording the data.

Junit of measurement.

Provide the date the data was recorded. Record the day and month only.

<sup>5</sup> Million Gallons. All metered water for this report will be converted to "millions of gallons".

 $<sup>^{6}</sup>$  Well water depth readings will be taken in the first week of each month. Readings will be measured from the water level to the top of casing (TOC).

Data	Target	Int	Amt.	UM	Date
J-5 Depth to Water ( wells pumping for a minimum of 30 minutes )	N/A	(All)	-54.5	Ft.	2/3
J-6 Depth to Water ( wells pumping for a minimum of 30 minutes )	N/A	(1)	-50.7	Ft.	2/3
J-7 Depth to Water ( wells pumping for a minimum of 30 minutes )	N/A	(BN)	-50	Ft.	2/3
Average Distribution Water Color for the Month	< 15 HJ	AND	25	HU	3/4
Average Distribution Water Temperature for the Month - Fahrenheit	N/A	(14)	49	· • •	3/4
Average Distribution Water Total CL2 for the Month	> .8 mg/L < .2 mg/L	OP.	.10	mg/L	3/4
Average Distribution Water Free CL2 for the Month	> ,4 sg/t, < ,05 sg/t.	(gp)	.06	ng/L	3/4
Average Distribution Water pH for the Month	7.2-7.8	An	8.4	pR	3/4
	N/A	1	7.13	In.	3/4
Total Rainfall at J-Wellfield for the Month	< 800 µbas/an	100	216	phos/cn	3/4
Average Raw Water Conductivity for the Month	< 400 ma/t	1	HUSSOCIUMA	mg/L	
Average Raw Water TDS for the Month		1	154	1700	3/4
Average Raw Water Salt for the Month	< 500 my/L	10	100	mg/L	3/4
Average Raw Water Ammonia (NH3) for the Month	< 30 m/L	**	0	Eg/L	3/4
Average Raw Water Silica(SiO2) for the Month	< 70 mg/L	m	6.8	mg/L	3/4
Average Raw Water Tannin for the Month	< 1 m/L	(H)	0.9	ng/L	3/4
Average Raw Water Chloride (Cl <sup>-</sup> ) for the Month	< 250 sg/L	(8)	32	Eg/L	3/4
Average Treated Water Total CL2 for the Month ( green pipe )	> 2.5 mg/L < 1.7 mg/L	(M)	2.26	ng/L	3/4
Average Treated Water Free CL2 for the Month ( green pipe )	> 1.5 mg/L < .5 mg/L	10	1.20	ng/L	3/4
Average Treated Water Manganese for Month ( green pipe )	< .2 mg/L	(M)	.175	ng/L	3/4
Average Finished Water Total CL2 for the Month ( blue pipe )	> 1.2 my/L < .5 my/L	M	.98	mg/L	3/4
Average Finished Water Free CL2 for the Honth ( blue pipe )	> .75 mg/L < 20 mg/L	B	.54	ng/L	3/4
Average Finished Water Total CL2 for the Month ( reservoir )	.1/ga 8. < .2/ga 2. >	NO	.22	ng/L	3/4
Average Finished Water Free CL2 for the Month ( reservoir )	> .20 my/L < .05 mg/L	(th)	.04	ng/L	3/4
Average Finished Water Ammonia (NH3) for the Month ( reservoir )	< 15 mg/L	AND	.03	mg/L	3/4
Average Finished Water Silica(SiO2) for the Month ( reservoir )	< 70 ag/L	(HU	8	mg/L	3/4
Average Finished Water Tannin for the Month ( reservoir )	< .5 mg/L	SE SE	0.4	mg/L	3/4
Average Post CL2 Total ( just outside booster )	> 1 ag/L	(M)	.72	mg/L	3/4
Average Post CL2 Free ( just outside booster )	>.5 m/L	(FD)	.49	mg/L	3/4
Jar Test	> 1.2 mg/L < 1.8 mg/L	FP	1,4	ng/L	3/4
			781 7	7 17	1

Water System Manager

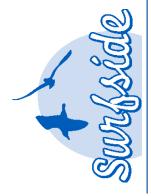
3/4/14 Date

						_	Γ		əį	əɔ	әэ	ĸ		Main B	Main Break Time	me
Date	Employee	M&O	WMR	MIP	L&B (	CMP Tc	Total	Work Description/Service Call Description	гося	Servi Call	WeW Servi	Mair Brea	Address of Locate, Service Call, New Service, or Main Break	Start	End	Total
Mon	Gil		8.0			3		WMR - 306 & L PL								
3-Feb	Aaron		8.0			3	8.0									
	Larry		8.0			3	8.0									
	Chris		8.0			3	8.0									
	April	8.0				3	8.0									
	John					)	0.0									
	Dan	5.0				3)	5.0									
Tue	li9	2.0	0.9			3	8.0 V	WMR-306 & L PL, LOCATES	9							
4-Feb	Aaron		8.0			3	8.0									
	Larry		8.0			3	8.0									
	Chris		8.0			3	8.0									
	April	8.0				3	8.0									
	John					)	0.0									
	Dan	5.0				( ت	5.0									
Wed	Gil	8.0				3	8.0 R	RESTORATION, CLEAN UP, ASPHALT, SERVICE HOOK-UP, SEASIDE FOR CUTTER,								
5-Feb	Aaron	8.0				3	8.0									
	Larry	8.0				3	8.0									
	Chris	8.0				3	8.0									
	April	8.0				3	8.0									
	John					)	0.0									
	Dan	5.0				3)	2.0									
Thu	Gil	8.0				3	8.0 <sup>C</sup>	CUT ACROSS M PL, BLOW OFF HOOK UP, CHECK COUNTY DRAINS, CUTTER TO SEASIDE,		1		2	29918 M PL (BA-03-24)			
6-Feb	Aaron	8.0				3	8.0									
	Larry	8.0				3	8.0									
	Chris	8.0				~										
	April	8.0				~	8.0	6 YEAR PLAN DATA								
	John					_	0.0									
	Dan	3.0				(1)										
Fri	Gil	8.0				3	8.0	COMPACTOR, WATER CALL OUTS - FREEZE, UPGRADED SERVICE		1		2	2200 304ТН (16-06-04)			
7-Feb	Aaron	8.0				3	8.0									
	Larry	8.0				3	8.0									
	Chris	8.0				3	8.0									
	April	8.0				3	8.0	6 YEAR PLAN DATA								
	nhol					)	0.0									
	Dan					)	0.0									
	AH SC	4.5				7		AARON - WEEKEND & SERVICE CALL		1		8	810 OYSTERVILLE RD(OC-00-33)	3)		
	Total	160.5	62.0	0.0		0.0	222.5		9	3	0	0				
AH SC = After Ho	AH SC = After Hours/Service Calls	M&O	WMR		L&B	CMP To	Total									

									əj	əɔ			II-O cilino 3 chece i go compre	Main	Main Break Time	me
Date	Employee	M&O	WMR	MIP	L&B	CMP	Total	Work Description/Service Call Description	Госа	Serv Call	WeW Serv	Mair Brea	New Service, or Main Break	Start	End	Total
Mon	Gil	1.0	7.0					WMR @ 306, FLUSHING		1			1913 323 (15-05-11)			
10-Feb	Aaron	1.0	7.0				8.0									
	Larry	1.0	7.0				8.0									
	Chris	1.0	7.0				8.0									
	April	8.0					8.0	6 YEAR PLAN DATA								
	uyof						0.0									
	Dan	2.0					5.0									
Tue	liÐ	1.0	7.0				0.8	WMR @ 306, RESTORATION, CLEAN UP, FLUSHING								
11-Feb	Aaron	1.0	7.0				8.0									
	Larry	1.0	7.0				8.0									
	Chris	1.0	7.0				8.0									
	April	8.0					8.0	2 BACTI, 6 YEAR PLAN DATA								
	nhof					_	0.0									
	Dan	5.0					5.0									
Wed	liĐ		8.0			-	۸ 0.8	WMR @ 306, RESTORATION, CLEAN UP								
12-Feb	Aaron		8.0				8.0									
	Larry		8.0				8.0									
	Chris		8.0			-	8.0									
	April	8.0					8.0	6 YEAR PLAN DATA								
	nhof						0.0									
	Dan	2.0					5.0									
Thu	Gil		8.0				8.0	WMR @ 306, RESTORATION, CLEAN UP								
13-Feb	Aaron		8.0				8.0									
	Larry		8.0				8.0									
	Chris		8.0				8.0									
	April	8.0					8.0	6 YEAR PLAN DATA								
	nhol		8.0				8.0 F	FLAGGING								
	Dan	2.0					2.0									
Fri	li9		8.0				8.0	WMR @306, RESTORATION, CLEAN UP								
14-Feb	Aaron		8.0				8.0									
	Larry		8.0				8.0									
	Chris		8.0				8.0									
	April	8.0					8.0 F	PILOT TEST PREP, 6 YEAR PLAN DATA								
	nhof		8.0					FLAGGING								
	Dan					_	0.0									
		3.0					3.0	LARRY - WEEKEND								
	Total	68.0	168.0	0.0	$\vdash$	0.0	236.0		0	1	0	0				
AH SC = After Hours/Service Calls		M&O	M&O WMR	MIP	L&B	CMP T	Total									

									əţ	əɔ		-	11-0	Main Break Time	reak Ti	me
Date	Employee	M&0	WMR	MIP	L&B	CMP	Total	Work Description/Service Call Description	Госа	Serv Call	Mew Serv	Mair Brea	New Service, or Main Break	Start	End	Total
Mon	Gil	2.0	0.9				8.0	WMR, HYDRANT, GRAVEL, RESTORATION								
17-Feb	Aaron		8.0				8.0									
	Larry		8.0				8.0									
	Chris		8.0				8.0									
	April	0.8					8.0	PILOT TEST PREP, 6 YEAR PLAN DATA								
	nhol		4.5				4.5	FLAGGING								
	Dan	2.0					5.0									
Tue	lib	0.8					8.0									
18-Feb	Aaron	8.0					8.0									
	Larry	8.0					8.0									
	Chris	8.0					8.0									
	April						0.0									
	John						0.0									
	Dan	2.0					2.0									
Wed	Gil	2.0	3.0				8.0	WMR, WMR TREES, RESTORATION, CLEAN UP 350TH TRAIL								
19-Feb	Aaron	2.0	3.0				8.0									
	Larry	2.0	3.0				8.0									
	Chris	2.0	3.0				8.0									
	April	8.0					8.0	6 YEAR PLAN DATA, PILOT TEST PREP								
	lohn						0.0									
	Dan	2.0					5.0									
Thu	Gil	4.0				4.0	8.0	350TH PATH - SIGNS & NET, PLUMB MANIFOLD ROOM FOR PILOT TEST	4							
20-Feb	Aaron	0.9			2.0		8.0									
	Larry	0.9			2.0		8.0									
	Chris	8.0					8.0									
	April	8.0					8.0	PILOT TEST PREP, 6 YEAR PLAN DATA								
	nhol						0.0									
	Dan	5.0					5.0									
Fri	ΙΪΘ	8.0					8.0	EMPTIED & CLEANED PRE FILTER CL2 RESERVOIR, REPAIRED PLUMBING LEAKS AT PRE	1							
21-Feb	Aaron	8.0					8.0	FILLIER CLE KESERVOIR, WRAPPED A/C, CLEAN OF @ 306, SET BOX @ 330 CONDOS								
	Larry	8.0					8.0									
	Chris	8.0					8.0									
	April	8.0					8.0	PILOT TEST PREP, ROCK RE-BID								
	nhol						0.0									
	Dan						0.0									
	AH SC	10.5					10.5	GIL - PRE FILTER CL2 PUMP FAIL, CHRIS - WEEKEND & PUMP FAILURE								
	Total	172.5	46.5	0.0	4.0	4.0	227.0		2	0	0	0				
AH SC = After Ho	AH SC = After Hours/Service Calls	M&0	WMR	MIP	L&B	CMP	Total									

							Sivie	we ervice	ain eak	Address of Locate, Service Call,		sak Time
Date	Employee	M&O 0.8	WMR	d M	L&B	CMP Total	Work Description/Service Call Description 3 % SET UP FOR PILOT TEST - MANIFOLD ROOM,	N		New Service, or Main Break	Start End	Total
24-Feb	Aaron	8.0				8.0						
	Larry	8.0				8.0	0					
	Chris	8.0				8.0	0					
	April	8.0				8.0	0					
	uyor					0.0	0					
	Dan	5.0				5.0	0					
Tue	liÐ		8.0			8.0	0 WWR	1	,	32606 G ST (10-03-08)		
25-Feb	Aaron		8.0			8.0						
	Larry		8.0			8.0	0					
	Chris		8.0			8.0						
	April	8.0				8.0	0 SERVICE CALL					
	uyor					0.0	0					
	Dan	5.0				2.0						
Wed	liĐ	8.0				8.	8.0 CONST BACTI, INVENTORY TOOLS, FLUSHING, PILOT TEST SET UP					
26-Feb	Aaron	8.0				8.0	0					
	Larry	8.0				8.0	0					
	Chris	8.0				8.0	0					
	April	8.0				8.0	0 PILOT TEST SET UP W/ RUSS PORTER					
	uyor					0.0	0					
	Dan	2.0				2.0						
Thu	liĐ	8.0		$\vdash$	$\vdash$	8.0	0 PILOTTEST, LOCATES 2					
27-Feb	Aaron	8.0				8.0	0					
	Larry	8.0		$\vdash$	$\vdash$	8.0	0					H
	Chris	8.0				8.0	0					
	April	8.0				8.	8.0 PILOT TEST W/ RUSS PORTER					
	ndol					0.0	0					
	Dan	5.0				2.0						
Fri	l!9	8.0				8.0	0 SERVICE CALL, PILOT TESTING, WRAPPED A/C PIPE, SEEDED 306TH		,	30910 O PL (13-05-17)		
28-Feb	Aaron	8.0				8.0	0					
	Larry	8.0				8.0	0					
	Chris	8.0				8.0						
	April	8.0				8.0	0 MEET W/GRAY & OSBORNE ENGINEERS & BILL NEAL					
	John					0.0	0					
	Dan					0.0						
	AH SC	7.5				7.5	5 GIL-PILOT TEST W/ RUSS, WEEKEND					
	Total	195.5		-		0.0 227.5	7.5	0	0			_
AH SC = After Hours/Service Calls	urs/Service Calls	M&O WMR		MIP	L&B C	CMP Total	tal					



# Water Department Weekly Materials Report

# James Flood - Co Trustee & David Olson - Co Trustee

	Comments			TORATION																					
	S	20 MONDAY - WMR		TUESDAY- WMR AND RESTORATION	9	1	1	1	1	1	1	1	1	1	1	4	1	1	1	2	1	1	2	1	
	Total	7(	20	82	125	` '	` '	``	``	``	``	``	``	``	``	7	Ì	``	``		``	` '		` .	
9-Feb	Sun																								
8-Feb	Sat																								
7-Feb	Fri																								
6-Feb	Thu																								
5-Feb	Wed																								
4-Feb	Tue			20	20											1									
3-Feb	Mon.	20	20	15	22	1	1	1	1	1	1	1	1	1	1	3	1	1	1	2	1	1	2	1	
	Unit	FT	FT	FT	FT	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
	Description	6" C-900 PVC	4" C-900 PVC	8" C-900 PVC	TRACER WIRE	8" MJ CPLG	8X8X6X6 MJ X FLG	6X4 FLG RED	8" MJ X FLG VALVE	6" MJ X FLG VALVE	4" MJ X FLG VALVE	8" FLG X PE SPOOL	6" HYMAX	4" HYMAX	8" MEGA LUG DI	8" MEGA LUG PVC	6" MEGA LUG PVC	4" MEGA LUG PVC	8" RR GASKET	6" RR GASKET	4" RR GASKET	8" BOLT UP KITS	6" BOLT UP KITS	4" BOLT UP KITS	



# Water Department Weekly Materials Report

# James Flood - Co Trustee & David Olson - Co Trustee

	Comments	270 MONDAY - WMR	210 TUESDAY - WMR RESTORATION	2 WEDNESDAY - WMR RESTORATION	10 THURSDAY - WMR	FRIDAY - WMR																		
	Total	270	210	2	10	25	40	1	1	3	2	1	1	10	1	1	5	2	1	2	4	4	1	
16-Feb	Sun																							
14-Feb 15-Feb 16-Feb	Sat																							
14-Feb	Fri	100			2																		1	
13-Feb	Thu	10	20		4		40	1	1	3	2	1	1	10	1	1	2	2	1	2	4	4		
12-Feb	Wed					12																		
11-Feb	Tue					13																		
10-Feb	Mon.	160	160	2	4																			
C	Unit	FT	FT	EA	EA	ΛD	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	FT		
	Description	8" C900 PVC	TRACER WIRE	8" 45 ELBOW	8" MEGA LUG SET	GRAVEL	6" C900 PVC	8" FLG CROSS	8 X 6 FLG TEE	8" MJ X FLG VALVE	6" MJ X FLG VALVE	8" FLG X SPOOL 18" LONG	8" FLG X MJ ADPT	8 X 6 FLG RED	8" MYMAX	6" MYMAX	8" RR W/ BOLTS & NUTS	6" RR W/ BOLTS & NUTS	8" DI MEGA LUG SET	6" MEGA LUG SET	VALVE BOX & LID	GREEN SEWER PIPE	8" MJ X MJ LONG SLEEVE	



# Water Department Weekly Materials Report

Co Trustee
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David Olson
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	Comments	1 MONDAY - WMR, HYDRANT, CLEAN UP, RESTORATION					FRIDAY - METER BOX @ 356 CONDOS									
	Total	1	1	7	7	10	1									
23-Feb	Sun															
21-Feb 22-Feb 23-Feb	Sat															
21-Feb	Fri						1									
	Thu															
17-Feb 18-Feb 19-Feb 20-Feb	Wed															
18-Feb	Tue															
17-Feb	Mon.	1	1	4	2	10										
	Unit	EA	EA	EA	BAG	ΛD	EA									
	Description	HYDRANT	GRADELOCK	16 X 16 X 4 BLOCK	CONCRETE	GRAVEL	METER BOX & LID									



Water Department Weekly Materials Report

James Flood - Co Trustee & David Olson - Co Trustee

	Comments																
	Ö	-1															
		TUESDAY - WMR															
		TUESDA															
	Total																
2-Mar	Sun																
1-Mar	Sat																
28-Feb	Fri																
7-Feb 2	Thu																
6-Feb 2	Wed																
24-Feb 25-Feb 26-Feb 27-Feb	Tue	160	1	1	1	160	10	1									
-Feb 2	Mon.																
77	Unit N	FT	EA	EA	EA	FT	FT	EA									
		4	B	B			4	B									
	tion		٦٢		V/ STRA												
	Description		RESTRAIL	STOP	ADDLE V	WIRE	, PIPE	:ENER									
		8" (900	8" BELL RESTRAINT	3/4 CORP STOP	8 X 3/4 SADDLE W/ STRAPS	TRACER WIRE	3/4 POLY PIPE	3/4 STIFFENER									



Pacific County
Department of Community Development
PO Box 68, South Bend, WA 98586

### COLIFORM BACTERIA ANALYSIS

Date Sample Collected T	ime Sample	- 1	County				
Collected Collected							
Morth Day Year : T DPM MULTIC							
Type of Water System (check only one bo	ox)		F				
☐ Group A ☐ Group	10	Other_					
Group A and Group B Systems – Provide			rentony (WEI):				
ID#	<i>0</i> √						
System Name:	. 7						
and the Hatter	25-21/15	1551	(a)				
Contact Person: (50 A 2 Cot			e e				
Day Phone: ( ) 4/7			one: ((//() )/ ) - 36				
Eve. Phone: ( )  Send results to: (Print full name, address and zip	<i>j</i>	FAX: (	1.045 5464				
dendresults to: (First full flame, address and Zip		10.					
1402 4 54 .	2 (1946 at 16 to transport with the column is to the	(Second Contraction	THE NAME OF THE PARTY OF THE PA				
The second secon	78640	7					
The state of the s	INFORMATI						
Sample collected by (name):	INFURIMATI	UN					
Sample collected by (name).	the we	· godin					
Specific location where sample collected:		Special i	nstructions or comments:				
113 325 " F. W. F.							
W Coto or lot.							
Type of Sample (must check only one box	of #1 through #	4 listed b	pelow)				
1. Routine Distribution Sample	2. Repeat Sa	mple (at	fter unsatisfactory routine)				
Chlorinated: YesNo	☐ Distribu	tion Sys	tem				
Chlorine Residual: TotalFree/			water Rule (GWR)				
3. Raw Water Source Sample	0.000		,000 or less)				
☐ E. coli – GWR source sample	Unsati	stactory	routine lab number:				
☐ Fecal –Surface, GWI, some springs							
Other	Unsatisfacto	ory routir	ne collect date:				
S							
Public systems must provide source number from WFI	Chlorinated: YesNo						
4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Chlorine Re	sidual: T	otalFree				
4. Sample Collected for Information On	-						
Investigative Construction / R							
LAB USE ONLY DRINKING W.		LTS	LAB USE ONLY				
Unsatisfactory Total Coliform Present a			Satisfactory				
	li absent						
Fecal coliform present Replacement Sample Required:	Fecal coliform a	bsent					
		_					
	85						
- Improber container - Imp	id culture						
Bacterial Density Results: Plate Count	/ml.	E.coli	/100ml.				
T	Fecal Coliform_		/100ml.				
Method Code:		Date ar	nd Time Received:				
AICR-			MI DEXX				
Date Analyzed:		Date R					
ample Number (DOH number plus five digits)		Lab Us	e Only:				



### Pacific County

Department of Community Development PO Box 68, South Bend, WA 98586

### COLIFORM BACTERIA ANALYSIS

	ne Sample Collected	County
21 11 1 2014	, DA	
Month Day Year	_: <u>}</u> _ DP	M Palyee
Type of Water System (check only one box	:)	
Group A Group E	3 🗆	Other
Group A and Group B Systems – Provide fr	rom Water Facil	lities Inventory (WFI):
ID# _ {	0 1	
System Name:	(	
4 - 4	LNO A	100
Contact Person:	(Royan	
Day Phone: ( 60 ) 75 41 71		Cell Phone: ( 1/6/1) 8323
Eve. Phone: ( 60 ) 76 3 2 3 9 3		FAX: 6/00 1/5-5469
Send results to: (Print full name, address and zip of		
Commission of the Commission o	niệ n <del>a Pradi</del> me Taxonio na <u>mar</u>	
manager de la company de la co		
annearmann and superiorable places on the best of a continuous personal beautiful		A CONTROL THAN IN THE PROPERTY OF THE PROPERTY
	NFORMÁTIC	NC
Sample collected by (name):	witel	
Specific location where sample collected:		Considirate at a second
# NV7 3141	The second secon	Special instructions or comment
Type of Sample (must check only one box		06 < 11 Pl.
1. Routine Distribution Sample		
Chlorinated: Yes No	77	mple (after unsatisfactory routing
Chlorine Residual: Total // Free		tion System
3. Raw Water Source Sample		Groundwater Rule (GWR) tion of 1,000 or less)
☐ E. coli – GWR source sample	182 588	sfactory routine lab number:
Fecal –Surface, GWI, some springs		_
Other	Uncatiofact	ory routine collect date:
	Onsatistacti	POLIT OF THE PROPERTY OF THE P
S	Chlorinated	<u> </u>
Public systems must provide source number from WFI		: YesNo sidual: Total Free
4. ☐ Sample Collected for Information On		sidual. Total Free
Investigative Construction / Re		Other
		7
Unsatisfactory Total Coliform Present at □ E.coli present □ E.co.		☐ Satisfactory
9		
Replacement Sample Required:	Fecal coliform a	ibsent
☐ Sample too old (>30 hours) ☐ TNT(☐ Improper Container ☐ Turb		
Improper Container   Turb	id culture	
Bacterial Density Results: Plate Count	/ml	E.coli/100ml.
Ductorial Derivity (Vesults, Flate Court	1 (4)	
	Faral C Pr	/100ml.
Total Coliform/100ml.	Fecal Coliform	
Total Coliform/100ml.  Method Code:	Fecal Coliform	Date and Time Received:
Total Coliform/100ml.  Method Code:  MICR	Fecal Coliform	Date and Time Received:
Total Coliform/100ml.  Method Code:	Fecal Coliform	1



### Pacific County

Department of Community Development PO Box 68, South Bend, WA 98586

### **COLIFORM BACTERIA ANALYSIS**

	Date Sample Collected		ne Sample	County										
	214 1001		Collected											
	Month Day Year	. 4	: 19 DF		0									
		aly one how	)		1 acofec									
ile.	Type of Water System (check only one box)  ☐ Group A ☐ Group B ☐ Other													
	Group A Group B Other  Group A and Group B Systems – Provide from Water Facilities Inventory (WFI):													
	ID# 4 7 )													
	System Name:													
	out to de	Honey	WILLS A	5 / (										
	Contact Person:	Irnya	Corne		w = 7									
	Day Phone: ( 60 ) 77 2	393	٧.	Cell P	hone: ( )783 2393									
	Eve. Phone: ( 78)	2 393		FAX: ( 100) 15 5469										
		Send results to: (Print full name, address and zip code)												
	2141 Am A Share													
	1099 Park WA 18640													
	SAMPLE INFORMATION													
	Sample collected by (name):													
	Specific location where sample co	24.20		Specia	I instructions or comments:									
	# 1306 306 - James	<i>†</i>		Eleca	y- Construction									
	Type of Sample (must check only one box of #1 through #4 listed below)													
	1. Routine Distribution Sam	ple	2. Repeat Sa	mple	(after unsatisfactory routine)									
	Chlorinated: Yes No	_	☐ Distribu	tion S	ystem									
	Chlorine Residual: Total 22 Fi	ree 🎵			ndwater Rule (GWR)									
	3. Raw Water Source Sample	3			1,000 or less)									
	☐ E. coli – GWR source samp		Unsatisfactory routine lab number:											
	Fecal -Surface, GWI, some	springs												
	Other		Unsatisfactory routine collect date:											
	S													
	Public systems must provide source number from W	/FI	Chlorinated: YesNo											
-	Ma Lauren		Chlorine Residual: Total Free											
	4. Sample Collected for Information Only													
-	Investigative Construction / Repairs Other													
-			ATER RESU	LTS	LAB USE ONLY									
	Unsatisfactory Total Coliform				☐ Satisfactory									
	☐ E.coli present		li absent											
-	Fecal coliform present Fecal coliform absent													
'	Replacement Sample Required:			_										
	Sample too old (>30 hours)													
-	☐ Improper Container ☐ Turbid culture													
E	Bacterial Density Results: Plate Count/ml. E.coli/100ml.													
	Total Coliform/	Fecal Coliform												
1 10	Method Code:		Date	e and Time Received:										
$\vdash$	MICR			UN 10:15a										
	Date Analyzed:				e Reported:									
0	Sample Number (DOH number plus five digits)			Lab	Use Only:									
DO	H Form#331-319 (revised 11/10)	- 67		11	HULLIT									