



2016 Consumer Confidence Report

Conservation: Saving for our future one drop at a time!

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Water Quality Report, 2016

The City of Punta Gorda is a surface water supply plant with Shell Creek as our source of water. Water impounded by the Hendrickson Dam is known as Shell Creek Reservoir and is the fourth largest surface water system within the boundary of the Southwest Florida Water Management District. The system, including the dam, was constructed in 1964. Shell Creek Reservoir is fed by two creek systems consisting of Shell Creek from the east and Prairie Creek from the northwest. The total drainage area at Hendrickson Dam is 373 square miles creating a reservoir surface area of approximately 800 acres containing 765 million gallons of water. The treatment plant has a design rated capacity of 10 million gallons per day. Our type of treatment is conventional treatment consisting of coagulation, sedimentation, and filtration. Alum is used as the coagulant to remove large particles in the water, powdered activated carbon is added for the removal of objectionable taste and odors, a polymer is added to aid in sedimentation, and finally the pH is adjusted. A stabilizer is also added to the finished water for corrosion control in the distribution system.

Untreated water is pumped from Shell Creek to the plant where the water is aerated by means of a cascade aerator. Following aeration, powdered activated carbon and alum are added. The water and chemicals are then “flash mixed” in insure an even mixture of the compound before exiting the aerator. The water leaves the aerator proceeding to the next stage of the treatment, the flocculation stage. Flocculation takes place in basins that contain two variable speed mixers. As this mixed water enters the Solids Contact Units – an area of the plant where most of the treatment occurs – polymer is added. In the Solids Contact Units, water flows up from the bottom of the tank through the solids mass. This mass is made up of settled solids and chemicals that act as a coagulant and liquid filter. The clear water exits these units where chlorine is added. Ammonia is introduced to the chlorinated water to form chloramines.

If chlorine alone were used, organic material contained in the water would combine to form these carcinogenic precursors. Chloramines prevent the formation of carcinogenic precursors. The final step of the treatment process involves the filtering of the treated water to remove any additional suspended solids. Prior to filtration, caustic soda is added to adjust the pH and stabilize the water. The water enters a clear well where a stabilizer is added to help prevent corrosion in the distribution system. The finished water is transferred by pumps into a 2 million gallon storage tank. From this tank, water is sent throughout the distribution system to your home.

SOURCE WATER ASSESMENT

In 2016 the Department of Environmental Protection Performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our surface water intakes. The surface water system is considered to be at high risk because of the many potential sources of contamination present in the assessment area. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from:

City of Punta Gorda Utility Department at 326 W. Marion Avenue, Punta Gorda FL.
33950, (941) 575-3339.

GENERAL INFORMATION

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- (A) Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

All drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at: 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Those with compromised immune systems, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS, or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency and or centers for Disease Control and Prevention provide guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants. These are available from the Safe Drinking Water Hotline (800-426-4791)

DEFINITIONS

- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Maximum residual disinfectant or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum residual disinfectant level goal (MRDLG):** The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Parts per million (ppm) or Milligrams per liter (mg/L):** One part by weight of analyte to 1 million parts by weight of the water sample.
- **Parts per billion (ppb) or Micrograms per liter:** one part by weight of analyte to 1 billion parts by weight of the water sample.
- **Picocurie per liter (pCi/L):** Measure of radioactivity in water.
- **Nephelometric Turbidity Unit (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Detected Compounds:** Listed are the compounds detected in Punta Gorda's drinking water during 2016 or the last time monitoring was performed in the last 5 years.. The SDWA requires that the highest detected value be provided. Not listed are the numerous other compounds tested for, but not detected.
- **Inorganic Parameters:** The mineral type compounds, such as metals and salts, found in drinking water.
- **Microbial Parameters:** Disease causing organisms that, at certain levels, may be harmful.
- **Radiochemical Parameters:** Compounds found in drinking water which emit radiation.
- **Secondary Parameters:** The compounds which affect drinking water aesthetics such as taste, odor, color and hardness.
- **Source:** The major sources of the compounds detected in the drinking water.
- **Trihalomethanes (TTHM) and Haloacetic Acids (HAA5):** Compounds formed during the disinfection of drinking water with chlorine.
- **Unregulated Organic Contaminants:** There are no MCL's for unregulated compounds but they are monitored for in water samples to determine or evaluate which compounds, if any should be considered for regulation.

City of Punta Gorda Water Quality Charts

Water Quality Results

Inorganic Testing Results

Contaminants and Unit of Measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Barium (ppm)	6/26/16	N	0.028	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries erosion of natural deposits
Sodium	6/29/16	N	68.50	N/A	N/A	160	Salt water intrusion, leaching from soil
Nitrate (as Nitrogen) (ppm)	1/6/2016	N	0.37	0.37	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic (ppb)	5/4/2016 6/29/16 7/13/2016	N	4.1	2.3-4.1	0	10	Erosion of natural deposits; runoff from glass and electronics production wastes
Nickel (ppb)	6/29/16	N	1.2	N/A	N/A	0.100	Pollution from mining and refining operations. Natural occurrence in soil.

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Total Dissolved Solids Testing Results

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MRDLG	MCL	Likely Source of Contamination
Total Dissolved Solids (ppm)	Monthly 2016	N*	536	232-536	N/A	500	Natural occurrence from soil leaching *TDS EXEMPTION ALLOWS 1000

Stage 2 Disinfectants/Disinfection By-Products (D/DBP) Results

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chloramines (ppm)	Jan-Dec 2016	N	3.1	2.5-3.6	4	4	Water additive used to control microbes

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MRDL	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	Quarterly 2016	N	50.9	44-63	N/A	80	By-Product of drinking water disinfection

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MRDL	Likely Source of Contamination
Haloacetic Acids (five)(HAA5) (ppb)	Quarterly 2016	N	37.2 (highest LRAA at Site 1)	17-34	N/A	60	By-Product of drinking water disinfection

Total Organic Carbon Testing Results

The monthly TOC removal ratio is the ratio between the actual and required TOC removals							
Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon	Monthly 2016	N	1.70	1.42-2.04	N/A	T T	Naturally present in the environment

Radiological Testing Results

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium 226+228 (pCi/L)	1/2016, 6/2016	N	1.8	1.56-1.8	N/A	5	Erosion of natural deposits

Microbiological Testing Results

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	JAN-DEC 2016	N	0.49	98.9%	N/A	TT	Soil runoff

Lead and Copper (Tap Water) Testing Results

Contaminants and Unit of measurement	Sampling Date MO/YR	Action Level Violation Y/N	90 th Percentile Results	Number of sampling sites exceeding the AL	MCLG	Action Level	Likely Source of Contamination
Copper Tap water (ppm)	6/5/2014	N	0.0981	0	1.3	1.3	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives
Lead Tap water (ppb)	6/5/2014	N	1.8	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Punta Gorda is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>

Special Notes

Cryptosporidium and Giardia: Cryptosporidium and Giardia are microscopic organisms, which can enter surface waters from run off containing animal wastes. If ingested they cause diarrhea, fever, and other gastro intestinal symptoms. The City has monitored for Giardia and Cryptosporidium in the past and the organisms were not detected in either the source water or the finished water. Currently the City is testing again for Cryptosporidium and Giardia over the next 24 months.

Turbidity: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms, these organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Sodium: Softeners to reduce calcium hardness at home that use salt to regenerate may contribute increased levels of sodium in the drinking water. Consumers that are on reduced salt (sodium) diets should consider this in cooking and drinking.

For More Information About:

- *Water Quality:* Call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline, (800) 426-4791
- *Questions concerning this report or the water treatment process:* Contact the City Water Treatment Plant at (941) 639-2057
- *Water Conservation and use restrictions:* Contact the Southwest Florida Water Management District at (800) 423-1476 or the City Utility Department at (941) 575-3339 or visit the City's Website at www.ci.punta-gorda.fl.us and follow the links to the Utility Department.

The City of Punta Gorda City Council meets the first and third Wednesday of each month at 9:00 AM in City Hall located at 326 West Marion Ave, Punta Gorda, Florida.

The City of Punta Gorda City Council has also appointed a Utility Advisory Board of local citizens which meets the fourth Monday of each month at 9:00 AM in City Hall. All meetings are noticed and open to the public.

The City of Punta Gorda Utility Department works around the clock to provide the best service and water quality possible. We ask that all our customers help us to protect our water resources, which are the heart of our community, our way of life, and our children's future.

Thank You!

Notice of Drinking Water Exemption

On June 22, 2011 the city received an Exemption from Total Dissolved Solids (TDS) standard from the Department of Environmental Protection due to the fact that the treated water does not meet the current MCL of 500 mg/L at times throughout the year. The exemption allows the city to exceed the current 500 mg/l standard to a level of 1,000 mg/l for a period of five years renewable for an additional 5 years provided the peak demand for water remains at a level below the maximum capacity of the existing plant (10 million gallons per day).The City is reviewing options for the correction of the situation. The next opportunity for public input will be during the renewal process in 2016.

ADDITIONAL INFORMATION:

For more information please contact: The City of Punta Gorda Utility Department at 326 W. Marion Avenue, Punta Gorda Fl. 33950, (941) 575-3339. Or contact The Department of Environmental Protection potable water compliance/enforcement section at (239) 344-5600.

Total Dissolved Solids Testing 2015

Month	ppm	Month	ppm
Jan	520	July	407
Feb	446	Aug	376
Mar	308	Sept	232
Apr	477	Oct	243
May	500	Nov	450
June	400	Dec	536

Emergency Interconnect

The City of Punta Gorda now has an emergency interconnect with The Peace River/Manasota Regional Water Supply Authority (PR/MRWSA). This interconnect was constructed to be able to pump water to and from The City of Punta Gorda and PR/MRWSA during emergencies. During normal operation a maintenance flow is maintained from one of the systems to keep the lines and tank fresh.

The PR/MRWSA, uses surface water from the Peace River as its source of supply. The Peace River is a large river by Florida standards, having a drainage area of 2300 square miles. The head waters originate in the Green Swamp of northern Polk County, flowing through Lake Hancock, Winter Haven chain of lakes, and Lake Hamilton. The mouth of the Peace River is located at Punta Gorda, 120 miles downstream from the headwaters, delivering needed fresh water to the Charlotte Harbor estuary.

The Florida Department of Environmental Protection has conducted Source Water Assessments for all public water systems in Florida. The assessments will identify and assess any potential sources of contamination in the vicinity of your water supply. A Source Water Assessment Report for the PR/MRWSA was completed in 2013 and is available at the DEP Source Water Assessment and Protection Program web site: <http://www.dep.state.fl.us/swap>

PR/MRWSA –Water Quality Results

The tables below are the water quality results reported to the City from PR/MRWSA.

PR/MRWSA – Inorganic Testing Results

Contaminants and Unit of Measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	Jan 2016	N	0.010	0.010	2	2	Discharge of drilling wastes; discharge from metal refineries erosion of natural deposits
Sodium (mg/L)	Jan 2016	N	44.5	44.5	N/A	160	Salt water intrusion, leaching from soil
Nitrate (as Nitrogen) (ppm)	Jan 2016	N	0.244	0.244	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	Jan 2016	N	0.056	0.056	1	1	Runoff from fertilizer use; leaching from septic tanks; sewage erosion of natural deposits
Fluoride (ppm)	Jan 2016	N	.190	.190	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Nickel (ppb)	Jan 2016	N	2.0	2.0	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil

PR/MRWSA – Stage 2 Disinfectants/Disinfection By-Products (D/DBP) Results

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chloramines (ppm)	Jan-Dec 2016	N	3.73	3.27-3.9	4	4	Water additive used to control microbes

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MRDL	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	Jan, Apr, Jul, Oct 2016	N	77.2	24.4-33.4	N/A	80	By-Product of drinking water disinfection

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MRDL	Likely Source of Contamination
Haloacetic Acids (five)(HAA5) (ppb)	Jan, Apr, Jul, Oct 2016	N	31.3	15.1-32.2	N/A	60	By-Product of drinking water disinfection

PR/MRWSA – Total Organic Carbon Testing Results

The monthly TOC removal ratio is the ratio between the actual and required TOC removals

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon	Monthly 2016	N	1.548	1.36-1.88	N/A	T T	Naturally present in the environment

PR/MRWSA – Radiological Testing Results

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	Jan-Dec 2016	N	8.9	ND – 8.9	0	15	Erosion of natural deposits
Radium 226+228 (pCi/L)	Jan-Dec 2016	N	1.0	0.2 – 1.4	0	5	Erosion of natural deposits

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PR/MRWSA –Microbiological Testing Results

Contaminants and Unit of measurement	Sampling Date MO/YR	MCL Violation Y/N	Highest Single Measurement	Range of Results	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	JAN-DEC 2016	N	0.5	100%	N/A	TT	Soil runoff

PR/MRWSA – Lead and Copper (Tap Water) Testing Results

Contaminants and Unit of measurement	Sampling Date MO/YR	Action Level Violation Y/N	90 th Percentile Results	Number of sampling sites exceeding the AL	MCLG	Action Level	Likely Source of Contamination
Copper Tap water (ppm)	8/14/14	N	0.0580	0	1.3	1.3	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives
Lead Tap water (ppb)	8/14/14	N	0.003	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives

City of Punta Gorda Water Rates

The City utility budget is solely supported by the revenue generated from utility impact fees and rates. The City water rate structure is multi-faceted to meet several objectives. The costs are in two categories, fixed (costs the utility incurred regularly without regard to the volume produced), and variable (costs associated with the volumes of water produced). There is also a difference in rates based on location, inside the City and outside the City limits. This is followed by a difference in volume of water consumed or used, the higher the volume, higher the costs per thousand.

- a) A monthly base facility charge per Equivalent Residential Unit (ERU) shall be charged to all customer classes as follows:

Customer	Monthly Base Facility Charge Inside City October 22,2015	Monthly Base Facility Charge Outside City October 22,2015
All Classes	\$10.28 per ERU	\$12.85 per ERU

- b) In addition to the monthly base facility charge above, a monthly customer charge will be charged to all customer classes as follows:

Meter size (inches)	Monthly Customer Charge Inside City October 22,2015	Monthly Customer Charge Outside City October 22,2015
All Classes	\$4.47	\$5.59

- c) In addition to the monthly base facility charge and monthly customer charge, a monthly volume charge will also be determined based upon all water used, as determined by the City water meter, and will be billed monthly as follows:

Residential Usage Ranges/ERU	Monthly Volume Charge Inside City Limits October 22,2015 (per 1000 gallons)	Monthly Volume Charge Outside City Limits October 22,2015 (per 1000 gallons)
0 to 5,000 gals	\$3.05	\$3.81
6,000 to 10,000 gals	\$3.52	\$4.40
11,000 to 20,000 gals	\$4.36	\$5.45
21,000 to 40,000 gals	\$5.34	\$6.68
Over 40,000 gals	\$6.50	\$8.13

Commercial Usage ranges/ERU	Monthly Volume charge Inside City Limits October 22,2015 (per 1000 gallons)	Monthly Volume charge Outside City Limits October 22,2015 (per 1000 gallons)
All Usage	\$3.88	\$4.85

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Irrigation Meter Usage ranges/ERU	Monthly Volume charge Inside City Limits October 22,2015 (per 1000 gallons)	Monthly Volume charge Outside City Limits October 22,2015 (per 1000 gallons)
0 to 10,000 gals	\$4.36	\$5.45
11,000 to 30,000 gals	\$5.34	\$6.68
Over 30,000 gals	\$6.50	\$8.13

City of Punta Gorda Historical Monthly Usage Per Class in Gallons

Customer	3 year average/month 2014-2016
Single Family Inside	8,710
Single Family Outside	3,506
Multi Family Inside	3,106
Multi Family Outside	2,360
Commercial Inside	8,441
Commercial Outside	7,200
Irrigation Inside	8,307
Irrigation Outside	1,955

Important Numbers

City of Punta Gorda Utilities
 326 W. Marion Ave.
 Punta Gorda, Florida 33950
 Phone: 941-575-3339
 Fax: 941-575-5006
 Website: www.cipunta-gorda.fl.us
 Office hours: Monday – Friday 8:00A.M. – 4:30P.M.
 Closed on Holidays

Water Treatment Plant
 Phone: 941-639-2057
 Fax: 941-639-9491

Wastewater Treatment Plant

Phone: 941-639-1883
 Fax: 941-639-9416

Billing/Collection
 Phone: 941-639-2528
 Fax: 941-575-5042

AFTER HOURS WATER AND SEWER EMERGENCIES

941-639-2057

** If your call goes to the voicemail please leave a message and the licensed water plant employee will call back as soon as their duties allow. **

Unregulated Contaminants Study

We monitored for a specific list of Unregulated Contaminants (UCs) during the time period of 2013 - 2015 as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) or likely sources have been established for UCs. However, we are required to publish the detected analytical results of our UC monitoring in our annual water quality report. For the complete list of results, including the non-detected contaminants, contact [Brian Fuller](mailto:brian.fuller@cityofpuntaorda.com) at 941-639-2057. If you would like more information on the EPA’s Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

Below is the table of UCMR3 parameters that were detected at our water system:

Unregulated Contaminants			
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	Level Detected	Range of Results
Chromium (ppb)	3/15	0.36	0.22 - 0.36
Chromium 6 (ppb)	3/15	0.043	0.031 - 0.043
Molybdenum (ppb)	6/15	196	183 – 196
Strontium (ppb)	3/15	3850	1930 - 3850
Vanadium (ppb)	6/15	1.4	0.65 - 1.4