

Purchasing Division

ADDENDUM NO. 2

DATE: April 20, 2017

FROM: City of Grand Junction Purchasing Division

TO: All Offerors

RE: Persigo Wastewater Treatment Plant Raw Sewage Wet Well Rehabilitation Project

IFB-4355-17-DH

Offerors responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following clarifications:

- 1. The Castagra Ecodur 201 epoxy coating product is not being approved for use on this project due to warranty concerns if used with another manufacturer's cementitious coating.
- 2. Replace the original Bid Schedule with the updated Bid Schedule that is attached to this Addendum.
- 3. Replace sheet C1.0 in the construction plans with the updated sheet C1.0 that is attached to this Addendum.
- 4. Remove the original Appendix C and replace with the updated historical influent flows and flow equalization (FE) basin return flows that is attached to this Addendum.

The updated historical influent flows now include the In-Plant Waste Flows. The In-Plant Waste discharges into the influent flow upstream of the bar screen channels. Also included is the Daily Peak Flows and the Daily Min. Flows. All flows provided are from the years 2014, 2015, and 2016; for the months of May, June, and July.

The average daily return flows from the FE basin are provided as well in the updated Appendix C.

5. Replace Special Condition 3.3.32, Bypass Pumping, with the following:

Bypass Pumping: Full-time bypass pumping of the wastewater treatment plants influent flows and flow equalization (FE) basin flows is required. The Contractor will be required to provide onsite monitoring of the bypass pumping assemblies 24 hours a day, seven days a week. Contractor will be required to provide backup controls, power equipment, diesel fuel, pumps, pipe and all required equipment for continuous operations of the bypass pumping systems.

Historic influent flows from the past three years for the months of May, June, and July are provided in Appendix C.

The contractor is responsible for coring two holes into the 8-inch thick concrete floor in the Headworks Building to access the two channels downstream of the bar screens for the suction pipes. The width of each bar screen channel is 48-inches (4-ft). The City estimates that the two holes can each be 4-ft wide by 3-ft long.

The maximum water depth in the bar screen channels for the bypass pumping suction pipe shall be 5-feet. The bypass pumping contractor shall adjust the pumps flow to maintain the water depth in these bar screen channels at 5-feet or less.

The bypass pumping discharge pipes shall discharge into the west chambers of Control Structure #1 which is immediately upstream of the plants primary clarifiers. The discharge flows shall be split as evenly as possible between the two primary clarifiers.

The contractor is responsible for all calculations in properly sizing the suction and discharge pipes, and sizing the pump(s) for bypassing the sewage around the project area and for pumping the FE basin return flows.

The contractor shall account for rainfall events within the Persigo WWTP service area for sizing the pumps and pipe. These rainfall events could potentially increase the influent flows at the plant. Daily peak influent flows are provided in Appendix C. Rain events can produce up to 20 MGD instantaneous flows coming into the WWTP. These spikes in influent flow can last anywhere from 15 minutes to 1 hour. At flows higher than 20 MGD, the WWTP will divert excess flows into the flow equalization basins. The Contractor will not be compensated for increased influent flows due to a rain event. The pump design for the FE return flows does not need to account for increased flows due to a rain event.

The influent flows fluctuate throughout a 24-hour period. The plants highest influent flows typically start around 10:30 am and then the flows start to taper off around 10:00 pm. The Contractor shall maintain as close as possible a minimum total flow of 8.5 MGD going into Control Structure #1. During peak flow periods, the flows going to Control Structure #1 will be higher than 8.5 MGD. The flow shall be split as evenly as possible at Control Structure #1 so each primary clarifier is receiving close to the same amount of water.

In order to maintain a minimum flow going to Control Structure #1 of about 8.5 MGD during periods of the day when the influent flows coming into the plant drop below 8.5 MGD, the Contractor shall install a pumping assembly that will pump water from the middle FE basin back to the headworks building. This will result in increased flows being pumped up to Control Structure #1. Daily FE return flows are provided in Appendix C.

Historical flow charts at Persigo show that the FE basin returns flows supplement influent flows primarily during the period of 1:00 am to 10:00 am (9-hour period). These are the approximate times the Contractor would have to run the pump assembly for the FE return flows back to the headworks building.

The FE return flow pump assembly shall be capable of pumping at a range of 0.5 MGD up to 4 MGD during the 9-hour period given above. When the influent flows reach 8.5 MGD and higher, the FE return flow pump assembly doesn't need to be in operation.

The Contractor has a maximum of 30-calendar days for bypass pumping both influent and FE return flows.

The City will be responsible for dismantling the aluminum safety railing at Control Structure #1 and at the Headworks building so it doesn't interfere with the bypass pumping discharge piping.

6. Section 01010, Summary of Work, in the Project Manual is hereby revised for this project as follows:

Subsection 1.2, Work Covered by Contract Documents, shall include the following section:

F.1 The Contractor is responsible for removing all grit and/or debris from within the chambers and wet wells prior to hydro-demolition/waterblasting operations. Grit and debris removed from the chambers and wet wells can be disposed of in the Persigo drying beds on the west side of the Persigo property. Removal and disposal of grit, dirt, and debris will not be paid for separately, but shall be included in the total price of the Project.

The original solicitation for the project noted above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

Duane Hoff Jr., Senior Buyer City of Grand Junction, Colorado

Bid Schedule: Persigo WWTP - Raw Sewage Wet Well Rehab Project ADDENDUM #2

2220 9985 1010 1010	Description Removal of Existing Liner Protective Coating Bypass Pumping (Headworks Bldg - Primary Clarifiers) (30-Calendar Days) Bypass Pumping (FE Basin Return Flows) (30-Calendar Days) Mobilization & Demobilization Bid Alternatives: Bypass Pumping (Additional bypass pumping as required for Foam Injection	Quantity 1. 7,722. 1. 1. 5.	Sq. Ft. Lump Sum Lump Sum Lump Sum	\$ \$ \$ \$	\$\$\$ \$\$	
9985 1010 1010 1200	Protective Coating Bypass Pumping (Headworks Bldg - Primary Clarifiers) (30-Calendar Days) Bypass Pumping (FE Basin Return Flows) (30-Calendar Days) Mobilization & Demobilization Bid Alternatives: Bypass Pumping (Additional bypass pumping as	7,722. 1. 1.	Sq. Ft. Lump Sum Lump Sum Lump Sum	\$ \$ \$	\$\$\$ \$\$	
1010 1010 1200	Bypass Pumping (Headworks Bldg - Primary Clarifiers) (30-Calendar Days) Bypass Pumping (FE Basin Return Flows) (30-Calendar Days) Mobilization & Demobilization Bid Alternatives: Bypass Pumping (Additional bypass pumping as	1. 1.	Lump Sum Lump Sum	\$\$ \$\$	\$\$	
1010 1200 1200	(Headworks Bldg - Primary Clarifiers) (30-Calendar Days) Bypass Pumping (FE Basin Return Flows) (30-Calendar Days) Mobilization & Demobilization Bid Alternatives: Bypass Pumping (Additional bypass pumping as	1.	Lump Sum Lump Sum	\$\$	\$	
1200 1200	(FE Basin Return Flows) (30-Calendar Days) Mobilization & Demobilization Bid Alternatives: Bypass Pumping (Additional bypass pumping as	1.	Lump Sum	\$		
1200	Bid Alternatives: Bypass Pumping (Additional bypass pumping as				<u> </u>	
1200	Bypass Pumping (Additional bypass pumping as	5.	Dov			
	(Additional bypass pumping as	5.	Dov			
	operations, if necessary) (Includes pumping both influent flows and FE Basin return flows)		Day	\$	\$	
3936	Foam Injection	50.	Lin. Ft.	\$	\$	
	Minor Contract Revisions				\$	25,000.00
		Bio	d Amount:	:	\$	
d Amo	ount:				dol	llars
rrosi	ve Barrier Liner System to be U	Jsed:			$\overline{}$	
ntrac	ctor Name:				\dashv	
ntrac	ctor Address:					
d	Am	936 Foam Injection Minor Contract Revisions Amount: rosive Barrier Liner System to be Untractor Name: ntractor Address:	936 Foam Injection 50. Minor Contract Revisions Bi Amount: rosive Barrier Liner System to be Used: ntractor Name:	936 Foam Injection 50. Lin. Ft. Minor Contract Revisions Bid Amount: Amount: rosive Barrier Liner System to be Used: ntractor Name:	Minor Contract Revisions Bid Amount: Amount: rosive Barrier Liner System to be Used: htractor Name:	936 Foam Injection 50. Lin. Ft. \$\$

YEAR 2014

MAY JUNE JULY

1407.11												
May Influent Flow 2014	Plant influent flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD		June Influent Flow 2014	Plant influent flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD	July Influent Flow 2014	Plant influent flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD
5/1/2014	7.42	11.57	3.94		6/1/2014	7.54	11.46	4.73	7/1/2014	7.12	11.77	3.889
5/2/2014	7.46	11.82	4.09		6/2/2014	6.66	14.48	4.75	7/2/2014	6.92	11.33	3.889
5/3/2014	7.11	10.87	4.09		6/3/2014	7.83	11.25	5.03	7/3/2014	6.87	10.82	3.991
5/4/2014	7.17	11.62	4.09		6/4/2014	7.74	11.55	4.75	7/4/2014	6.66	12.26	3.991
5/5/2014	7.51	11.55	4.28		6/5/2014	7.81	12.51	4.65	7/5/2014	6.81	13.16	4.016
5/6/2014	7.53	11.50	4.28		6/6/2014	7.70	11.90	4.56	7/6/2014	6.86	10.61	3.889
5/7/2014	7.41	11.82	4.09		6/7/2014	7.45	12.35	4.39	7/7/2014	7.26	10.66	4.067
5/8/2014	7.59	11.18	4.35		6/8/2014	7.58	12.27	4.50	7/8/2014	8.85	10.98	0.852
5/9/2014	7.58	11.52	4.22		6/9/2014	7.87	12.80	4.18	7/9/2014	6.89	11.30	4.118
5/10/2014	7.18	11.77	3.84		6/10/2014	7.81	11.55	4.53	7/10/2014	7.17	13.62	4.003
5/11/2014	10.30	16.98	5.05		6/11/2014	7.68	11.38	4.51	7/11/2014	7.19	14.10	4.156
5/12/2014	8.76	12.93	5.41		6/12/2014	7.90	12.48	4.63	7/12/2014	6.78	13.76	4.156
5/13/2014	8.11	11.72	4.79		6/13/2014	7.70	11.83	4.60	7/13/2014	6.91	14.11	4.207
5/14/2014	7.96	11.81	4.47		6/14/2014	7.35	11.45	4.37	7/14/2014	7.36	14.33	4.131
5/15/2014	11.75	12.19	4.54		6/15/2014	7.44	11.81	4.31	7/15/2014	7.29	13.99	4.156
5/16/2014	7.83	11.78	4.77		6/16/2014	7.77	11.95	4.50	7/16/2014	7.20	14.26	4.067
5/17/2014	7.54	12.46	4.18		6/17/2014	7.69	10.89	4.37	7/17/2014	7.23	14.19	4.143
5/18/2014	7.65	11.69	4.50		6/18/2014	6.81	10.47	4.04	7/18/2014	7.19	11.38	4.156
5/19/2014	7.76	11.64	4.54		6/19/2014	6.77	11.51	3.70	7/19/2014	6.95	13.92	4.003
5/20/2014	7.62	11.20	4.35		6/20/2014	6.69	11.11	3.83	7/20/2014	7.16	14.14	4.245
5/21/2014	7.83	11.77	4.50		6/21/2014	6.41	10.95	4.03	7/21/2014	7.48	14.53	4.194
5/22/2014	7.74	11.66	4.28		6/22/2014	6.60	10.64	3.88	7/22/2014	7.21	13.93	4.029
5/23/2014	7.60	11.27	4.44		6/23/2014	7.12	12.25	4.31	7/23/2014	7.08	10.89	4.194
5/24/2014	7.25	11.81	4.35		6/24/2014	6.94	11.97	4.27	7/24/2014	7.12	10.70	4.22
5/25/2014	8.03	17.37	4.28		6/25/2014	6.86	11.94	3.86	7/25/2014	7.99	16.35	4.334
5/26/2014	7.75	12.20	4.83		6/26/2014	6.80	10.30	4.16	7/26/2014	7.14	14.19	4.283
5/27/2014	8.00	11.87	4.73		6/27/2014	6.76	12.41	4.02	7/27/2014	7.32	10.88	4.385
5/28/2014	7.80	11.50	4.50		6/28/2014	6.48	12.19	3.85	7/28/2014	7.54	11.49	4.181
5/29/2014	7.80	11.43	4.54		6/29/2014	6.67	14.18	3.80	7/29/2014	10.78	26.74	
5/30/2014	7.68	16.74	4.41		6/30/2014	7.07	10.69	3.95	7/30/2014	9.35	13.35	5.973
5/31/2014	7.54	12.01	4.51						7/31/2014	8.96	13.84	5.745
Sum =	244.25				Sum =	217.48			Sum =	230.63		
Avg. =	7.879				Avg. =	7.249			Avg. =	7.44		
Max. =	11.75	17.37			Max. =	7.90	14.48		Max. =	10.78	26.74	
Min. =	7.11		3.84		Min. =	6.41		3.70	Min. =	6.66		0.85

^{*} Plant Influent Flows now include Implant Waste Flows

YEAR 2015

MAY JUNE JULY

May Influent Flow 2015	Plant influent flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD	June Influent Flow 2015	Plant influent flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD	July Influent Flow 2015	Plant influent flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD
5/1/2015	9.08	13.35	3.21	6/1/2015	9.88	13.28	3.92	7/1/2015	9.76	13.5	3.9
5/2/2015	8.54	12.68	3.43	6/2/2015	9.44	13.41	3.84	7/2/2015	9.78	11.77	4.507
5/3/2015	8.84	12.85	3.24	6/3/2015	9.26	11.66	4.16	7/3/2015	9.36	13.74	4.338
5/4/2015	9.46	12.90	3.52	6/4/2015	9.59	12.37	3.40	7/4/2015	8.71	13.18	4.278
5/5/2015	9.39	11.40	3.13	6/5/2015	9.38	11.76	3.36	7/5/2015	8.69	12.73	4.109
5/6/2015	11.22	19.53	3.56	6/6/2015	8.89	12.02	3.72	7/6/2015	9.74	12.53	4.266
5/7/2015	9.77	12.72	3.63	6/7/2015	8.73	12.18	3.62	7/7/2015	11.05	25.19	4.206
5/8/2015	9.80	13.01	3.45	6/8/2015	9.59	12.19	3.69	7/8/2015	12.19	17.66	5.423
5/9/2015	9.11	13.01	3.40	6/9/2015	9.48	11.63	3.66	7/9/2015	10.60	14.36	4.483
5/10/2015	8.94	12.95	3.34	6/10/2015	10.75	20.18	3.63	7/10/2015	9.91	12.71	5.363
5/11/2015	9.65	14.00	3.30	6/11/2015	11.90	23.40	5.71	7/11/2015	9.96	13.59	4.411
5/12/2015	10.00	13.49	3.74	6/12/2015	9.89	12.52	4.10	7/12/2015	9.69	14.04	4.844
5/13/2015	9.90	13.81	3.80	6/13/2015	9.03	11.94	4.21	7/13/2015	10.31	14.03	4.266
5/14/2015	9.85	14.12	3.80	6/14/2015	9.09	11.98	4.22	7/14/2015	10.09	16.27	4.278
5/15/2015	10.30	14.45	3.18	6/15/2015	10.81	14.54	3.76	7/15/2015	10.59	14.5	4.338
5/16/2015	9.27	14.20	3.54	6/16/2015	10.07	12.23	5.33	7/16/2015	11.02	13.77	4.278
5/17/2015	9.26	13.88	3.72	6/17/2015	9.92	13.53	4.30	7/17/2015	11.04	14.39	4.085
5/18/2015	9.39	13.88	3.82	6/18/2015	10.04	13.77	4.03	7/18/2015	9.72	13.34	4.085
5/19/2015	10.26	15.45	3.97	6/19/2015	9.41	12.89	4.06	7/19/2015	9.73	13.92	4.001
5/20/2015	9.73	13.84	3.97	6/20/2015	9.11	14.03	4.21	7/20/2015	10.18	12.53	3.724
5/21/2015	9.48	13.58	3.88	6/21/2015	9.30	13.93	4.28	7/21/2015	10.29	17.97	4.085
5/22/2015	9.87	13.91	4.21	6/22/2015	9.92	12.95	4.21	7/22/2015	10.39	14.36	5.302
5/23/2015	8.75	19.93	3.92	6/23/2015	9.90	14.09	4.24	7/23/2015	10.24	13.55	4.278
5/24/2015	8.58	13.09	3.15	6/24/2015	9.88	13.49	3.88	7/24/2015	9.87	14	4.29
5/25/2015	9.35	14.41	4.00	6/25/2015	10.03	13.63	4.11	7/25/2015	9.32	13.68	3.977
5/26/2015	9.94	13.73	3.76	6/26/2015	9.57	13.24	3.88	7/26/2015	9.46	13.27	4.049
5/27/2015	9.43	14.03	3.60	6/27/2015	8.94	13.35	3.93	7/27/2015	10.19	14.1	4.266
5/28/2015	9.63	13.89	3.80	6/28/2015	8.88	13.47	4.01	7/28/2015	9.78	14.38	3.82
5/29/2015	9.40	13.89	3.87	6/29/2015	9.57	12.32	4.07	7/29/2015	9.75	13.82	3.904
5/30/2015	8.66	13.77	4.03	6/30/2015	7.83	12.66	3.86	7/30/2015	9.88	13.49	3.82
5/31/2015	8.78	13.22	3.86					7/31/2015	9.67	14	3.88
Sum =	293.61			Sum =	288.07			Sum =	310.94		
Avg. =	9.471			Avg. =	9.602			Avg. =	10.030		
Max. =	11.22	19.93		Max. =	11.90	23.40		Max. =	12.19	25.19	
Min. =	8.54		3.13	Min. =	7.83		3.36	Min. =	8.69		3.72

^{*} Plant Influent Flows now include Implant Waste Flows

YEAR 2016

MAY JUNE JULY

May Influent Flow 2016	Plant Influent Flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD	June Influent Flow 2016	Plant influent flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD	July Influent Flow 2016	Plant influent flow, MGD*	Daily Peak Influent Flow, MGD	Daily Min. Influent Flow, MGD
5/1/2016	8.73	12.05	3.45	6/1/2016	9.26	13.08	3.63	7/1/2016	9.95	15.39	4.30
5/2/2016	9.32	12.43	3.28	6/2/2016	9.21	12.62	3.93	7/2/2016	9.14	17.48	4.42
5/3/2016	9.11	11.49	3.10	6/3/2016	9.08	12.08	3.63	7/3/2016	8.69	12.28	4.28
5/4/2016	9.34	13.09	3.12	6/4/2016	8.96	12.08	3.37	7/4/2016	8.81	12.64	4.21
5/5/2016	8.45	18.57		6/5/2016	8.68	12.16	3.30	7/5/2016	9.58	12.59	4.34
5/6/2016	10.35	14.57	4.46	6/6/2016	9.18	11.96	3.75	7/6/2016	9.14	11.66	3.92
5/7/2016	10.02	15.37	4.12	6/7/2016	9.03	11.94	3.63	7/7/2016	9.21	11.48	4.03
5/8/2016	9.47	14.67	3.48	6/8/2016	9.18	11.67	3.33	7/8/2016	9.11	12.01	4.00
5/9/2016	11.79	14.43	7.36	6/9/2016	9.19	12.06	3.76	7/9/2016	8.71	13.09	4.03
5/10/2016	10.41	14.02	5.30	6/10/2016	9.32	11.54	4.24	7/10/2016	8.92	12.13	3.97
5/11/2016	9.65	13.86	3.68	6/11/2016	8.87	11.32	3.99	7/11/2016	9.36		4.29
5/12/2016	9.81	13.73	3.80	6/12/2016	8.70	11.73	3.70	7/12/2016	9.18	12.02	3.76
5/13/2016	9.55	13.77	3.69	6/13/2016	9.28	11.95	3.76	7/13/2016	9.22	11.84	3.81
5/14/2016	9.01	13.75	3.94	6/14/2016	9.33	12.14		7/14/2016	8.98	13.22	3.86
5/15/2016	9.34	13.53	4.00	6/15/2016	8.91	12.71	3.92	7/15/2016	9.01	11.18	3.90
5/16/2016	10.63	14.73	4.24	6/16/2016	9.41	11.90	3.92	7/16/2016	8.47	11.67	3.37
5/17/2016	9.47	12.83	3.54	6/17/2016	9.18	12.30	3.58	7/17/2016	8.78	11.73	3.69
5/18/2016	9.05	13.24	3.68	6/18/2016	8.73	12.07	3.82	7/18/2016	9.53	12.14	4.15
5/19/2016	9.00	13.33	3.75	6/19/2016	8.89	12.94	3.87	7/19/2016	10.09	11.87	4.09
5/20/2016	9.22	13.31	4.09	6/20/2016	9.59	12.77	3.69	7/20/2016	10.70	12.27	4.03
5/21/2016	8.94	14.03	3.90	6/21/2016	9.34	12.32	3.87	7/21/2016	9.98	11.59	3.75
5/22/2016	8.88	13.56	3.88	6/22/2016	9.43	11.78	3.74	7/22/2016	9.87	12.24	3.84
5/23/2016	9.40	13.57	3.60	6/23/2016	9.26	11.89	4.15	7/23/2016	9.42	12.61	3.74
5/24/2016	9.19	13.10	3.01	6/24/2016	9.15	11.99	4.22	7/24/2016	9.34	12.30	3.93
5/25/2016	9.07	13.39	3.63	6/25/2016	8.78	11.96	3.74	7/25/2016	9.79	12.06	3.86
5/26/2016	9.26	13.26	3.64	6/26/2016	8.75	11.74	3.93	7/26/2016	9.43	12.71	4.05
5/27/2016	9.13	13.36	3.68	6/27/2016	9.29	12.02	4.10	7/27/2016	9.34	12.28	3.98
5/28/2016	8.48	13.35	3.30	6/28/2016	9.19	12.16	4.21	7/28/2016	9.31	12.44	3.99
5/29/2016	8.49	12.78	3.31	6/29/2016	9.56	11.45	3.82	7/29/2016	9.20	11.99	3.69
5/30/2016	8.93	13.14	3.48	6/30/2016	9.45	11.99	4.17	7/30/2016	8.78	11.64	3.62
5/31/2016	9.31	11.95	3.51					7/31/2016	8.99	11.82	3.70
Sum =	290.77			Sum =	274.17			Sum =	287.98		
Avg. =	9.38			Avg. =	9.14			Avg. =	9.290		
Max. =	11.79	18.57		Max. =	9.59	13.08		Max. =	10.70	17.48	
Min. =	8.45		3.01	Min. =	8.68		3.30	Min. =	8.47		3.37

^{*} Plant Influent Flows now include Implant Waste Flows

Daily FE Basin Return Flows, MGD

	Year 2	2016			Year	2015			Year 2014			
Day	May	June	July	Day	May	June	July	Day	May	June	July	
1	1.31	1.03	1.07	1	1.01	0.80	1.63	1	0.57	0.61	1.03	
2	1.30	1.24	1.27	2	0.80	1.18	1.57	2	0.55	0.67	1.05	
3	3.17	1.24	1.13	3	0.84	1.36	1.82	3	0.75	1.33	1.11	
4	2.87	1.08	1.11	4	0.71	1.02	1.86	4	0.89	0.66	1.06	
5	0.29	0.96	0.96	5	1.01	1.00	1.52	5	0.82	0.67	0.75	
6	0.41	0.82	1.12	6	0.94	1.06	1.00	6	0.79	0.68	0.74	
7	1.12	0.91	1.11	7	1.48	1.15	0.84	7	0.81	0.72	1.02	
8	1.73	1.14	1.15	8	1.55	0.96	1.00	8	0.78	0.45	1.49	
9	0.14	1.05	1.30	9	1.76	0.98	2.36	9	0.81	0.41	1.40	
10	1.16	1.09	0.99	10	1.62	0.84	2.78	10	0.99	0.48	1.02	
11	1.56	1.12	0.83	11	0.97	3.42	2.87	11	1.31	0.73	0.96	
12	0.94	0.83	0.82	12	0.91	3.80	2.42	12	0.47	0.69	0.84	
13	1.29	0.75	0.83	13	1.14	2.02	0.64	13	1.44	0.70	0.96	
14	1.63	0.97	0.83	14	1.22	1.67	1.17	14	1.14	0.81	0.96	
15	1.40	0.93	0.97	15	1.61	0.27	1.16	15	0.72	0.86	0.90	
16	0.76	1.05	0.94	16	1.37	1.73	1.13	16	0.69	0.73	0.97	
17	0.69	1.19	0.80	17	1.11	2.67	1.81	17	0.76	0.75	0.91	
18	1.05	1.22	0.77	18	0.77	1.31	2.28	18	0.81	0.78	0.96	
19	1.18	0.92	0.74	19	0.60	1.09	1.19	19	0.71	1.12	1.16	
20	1.12	0.77	0.82	20	0.86	1.25	1.40	20	0.68	1.00	1.08	
21	1.25	0.89	0.98	21	1.37	1.17	1.18	21	0.56	0.74	0.89	
22	1.18	1.05	1.08	22	1.12	1.05	2.34	22	0.60	0.68	0.91	
23	0.99	1.08	1.25	23	0.92	0.97	3.00	23	0.85	0.40	0.73	
24	1.09	1.05	1.27	24	1.22	1.04	1.98	24	1.28	0.99	0.71	
25	1.09	1.28	0.98	25	0.73	1.00	0.98	25	0.92	1.03	0.93	
26	1.06	1.32	1.03	26	0.95	1.02	1.91	26	0.76	1.03	1.68	
27	1.08	1.08	0.74	27	1.22	1.22	2.75	27	0.54	1.03	1.52	
28	1.24	1.03	1.23	28	1.11	0.83	1.37	28	0.72	0.93	0.16	
29	1.14	1.05	1.17	29	1.17	1.08	0.76	29	0.73	0.94	0.68	
30	0.75	1.06	1.40	30	1.01	0.62	1.34	30	1.09	0.83	1.65	
31	0.79		1.34	31	0.92		2.02	31	0.45		0.95	
Avg. =	1.19	1.04	1.03	Avg. =	1.10	1.32	1.68	Avg. :	0.81	0.78	1.01	
Min. =	0.14	0.75	0.74	Min. =	0.60	0.27	0.64	Min.		0.40	0.16	
Max. =	3.17	1.32	1.40	Max. =	1.76	3.80	3.00	Max.		1.33	1.68	

