

**NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS  
NCTCOG STORMWATER QUALITY MONITORING PROJECT  
PROJECT ID 100024283  
CITY OF GARLAND 2012**

**Sample Collection Report  
Event Date: July 20, 2012**

Storm Summary

Storm description: An area of showers and thunderstorms developed north of the Metroplex and proceeded to the southwest.

Rain event start time and date: 1620 7/20/12    Rainfall total:                    0.22 in  
Rain event end time and date: 1655 7/20/12    Peak 1-hr rate:                    0.22 in/hr

Rainfall station:                    GA 1201  
Antecedent dry period:            136 hrs

Comments: None.

GA 1201

Station location description: Duck Creek at Shiloh Bridge

Flow start time and date:            1635 7/20/12    Time first aliquot collected: 1635  
Flow end time and date:            Unknown            Time last aliquot collected: 1840

Peak depth:                    0.6 ft                    Aliquots collected:            6  
Average depth:                0.3 ft                    Total sample volume:        3.5 gal

Aliquot Collection Times:            1635 7/20/12  
    1640 7/20/12  
    1709 7/20/12  
    1740 7/20/12  
    1809 7/20/12  
    1840 7/20/12

Comments: The automatic sampler experienced a malfunction during the program after the second aliquot collection for bottle 2. The aliquots for bottles 3 and 4 were collected manually using the sampler. The flow end time and date could not be determined due to the equipment malfunction.

GA 1202

Station location description: Duck Creek between Forest North and South

Flow start time and date: 1640 7/20/12 Time first aliquot collected: 1643

Flow end time and date: 1900 7/20/12 Time last aliquot collected: 1849

Peak depth: 0.9 ft Aliquots collected: 6

Average depth: 0.3 ft Total sample volume: 3.5 gal

Aliquot Collection Times: 1649 7/20/12

1719 7/20/12

1749 7/20/12

1819 7/20/12

1849 7/20/12

Comments: The distributor arm jammed during the program sequence and manual aliquots were collected. The flow end time and date are a result of the sampling equipment being removed at the conclusion of the sampling activities.

GA 1203

Station location description: Duck Creek under La Prada Bridge

Comments: A successful sample was collected at this site for this quarter on July 7, 2012.

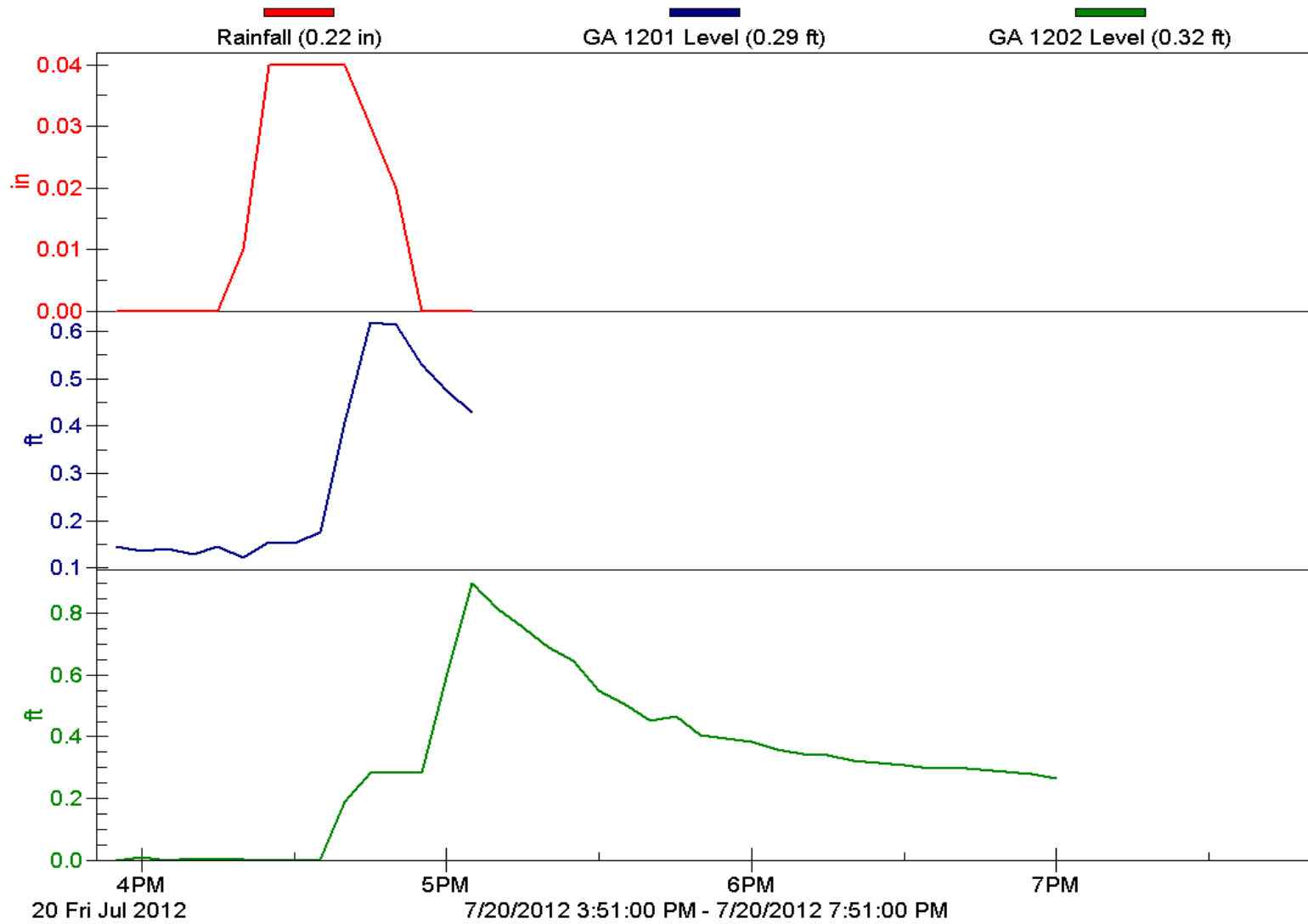
Prepared By: Sue Shartzner

Date: October 13, 2012

Checked By: Chad Richards

Date: October 22, 2012

### GA1201 and GA1202 Flowlink 5



Analytical Results Summary  
NCTCOG Stormwater Quality Monitoring Project  
NCTCOG Project 100024283  
CITY OF GARLAND 2012

Storm Event: 07/20/12 Project Number: 100024283	GA 1201	GA 1202	GA 1203	
PARAMETER NAME	COMPOSITE	COMPOSITE	COMPOSITE	UNIT*
Total Dissolved Solids (TDS)	192	126	NST	mg/L
Total Suspended Solids (TSS)	5.670	10.33	NST	mg/L
Biochemical Oxygen Demand	6.84	9.99	NST	mg/L
Chemical Oxygen Demand	<1.00 U	<1.00 U	NST	mg/L
Total Nitrogen	17.4	14.1	NST	mg/L
Phosphorus, Dissolved	0.01	0.08	NST	mg/L
Carbaryl	<0.300 U	<0.300 U	NST	µg/L
Arsenic, Total	0.003 J	<0.002 U	NST	mg/L
Copper, Total	0.032	0.026	NST	mg/L
Lead, Total	0.004 J	<0.004 U	NST	mg/L
Zinc, Total	0.064	0.112	NST	mg/L
Chromium, Total	<0.003 U	<0.003 U	NST	mg/L
Phosphorus, Total	0.28	0.23	NST	mg/L
PARAMETER NAME	GRAB	GRAB	GRAB	UNIT
Oil & Grease(HEM)	1.70 J	<1.40 U	NST	mg/L
pH (field)	8.4	8.2	NST	su
Ambient Air Temperature (field)	97	97	NST	°F
Water Temperature (field)	88	88.1	NST	°F
E. Coli	94,000	30,000	NST	col/100 mL
Specific Conductivity	168	157	NST	µS/cm
Total Coliforms	234,000	130,000	NST	col/100 mL

\* - Reported in mg/L and µg/L. The units mg/L and µg/L are equal to ppm and ppb, respectively.

- ">" - Not Identified Above the Upper Detection Limit
- "<" - Not Identified Below the Lower Detection Limit
- J - Positively Identified Below the Lower Detection Limit
- NST - No Sample Taken
- U - Undetected



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**Sample Collection Report  
Event Date: July 7, 2012**

Storm Summary

Storm description: A pop-up thunderstorm produced rainfall over the lower portion of the Duck Creek watershed missing GA 1201 and GA 1202 but producing a qualifying event at GA 1203.

Rain event start time and date: 1605 7/7/12    Rainfall total:                    0.28 in  
Rain event end time and date: 1640 7/7/12    Peak 1-hr rate:                    0.28 in/hr

Rainfall station:                                    KTXGARLA4 at Southwest Garland, TX

Antecedent dry period:                        431 hrs

Comments: The thunderstorm did not produce rainfall at the rain gauge located at GA 1201. The storm summary was calculated based on the data obtained from weather station KTXGARLA4 at Southwest Garland, TX for this event ([www.wunderground.com/weatherstation](http://www.wunderground.com/weatherstation)).

GA 1201

Station location description: Duck Creek at Shiloh Bridge

Comments: A qualifying event did not occur at this station.

GA 1202

Station location description: Duck Creek between Forest North and South

Comments: A qualifying event did not occur at this station.

GA 1203

Station location description: Duck Creek under La Prada Bridge

Flow start time and date: 1640 7/7/12 Time first aliquot collected: 1647  
Flow end time and date: 1900 7/7/12 Time last aliquot collected: 1851

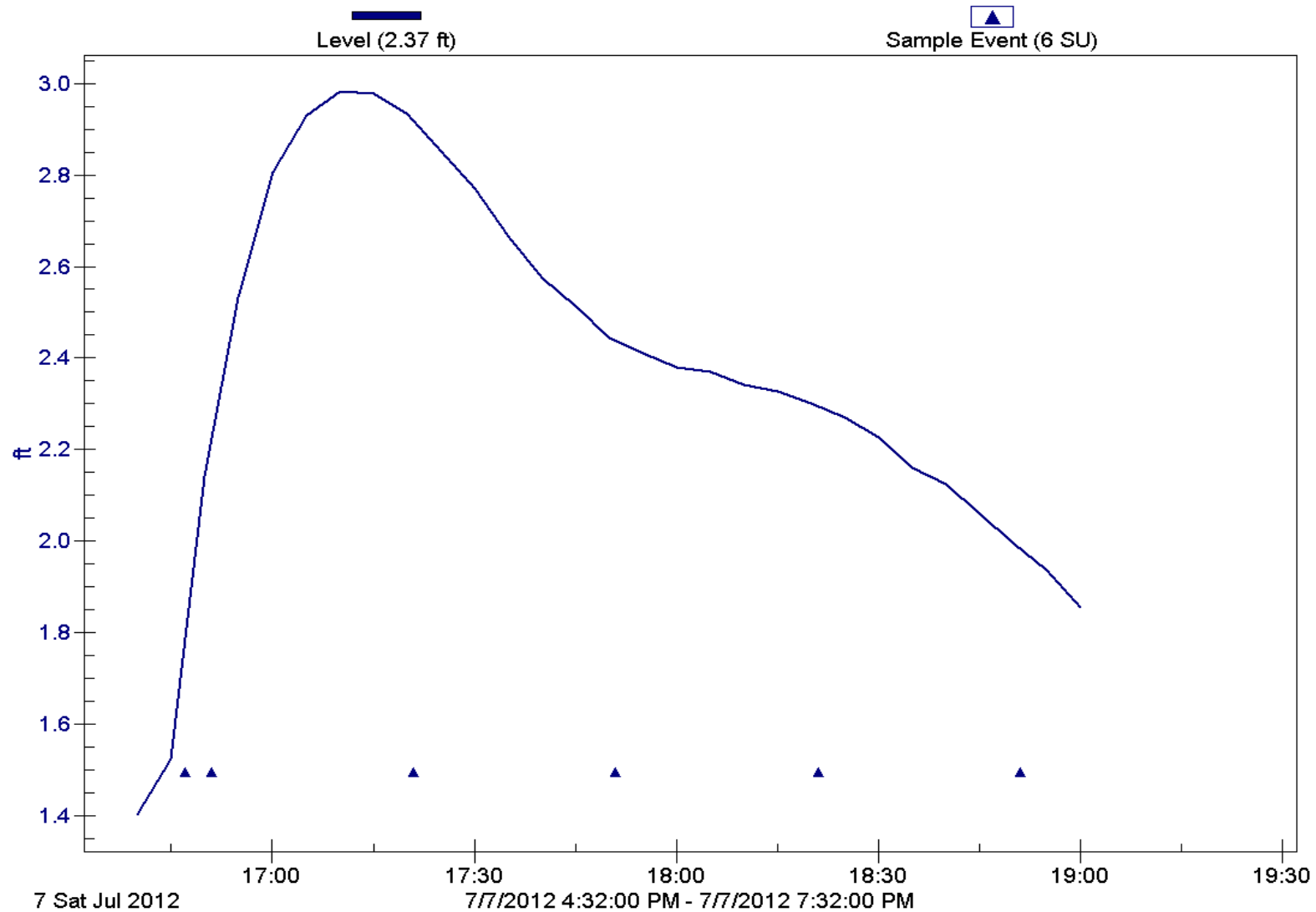
Peak depth: 3.0 ft Aliquots collected: 6  
Average depth: 2.4 ft Total sample volume: 3.5 gal

Comments: The flow end time and date are a result of the sampling equipment being removed at the conclusion of the sampling activities.

Prepared By: Sue Shartzler Date: October 13, 2012

Checked By: Chad Richards Date: October 22, 2012

GA1203  
Flowlink 5



Analytical Results Summary  
NCTCOG Stormwater Quality Monitoring Project  
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CITY OF GARLAND 2012

Storm Event: 07/07/12 Project Number: 100024283	GA 1201	GA 1202	GA 1203	
PARAMETER NAME	COMPOSITE	COMPOSITE	COMPOSITE	UNIT*
Total Dissolved Solids (TDS)	NST	NST	132	mg/L
Total Suspended Solids (TSS)	NST	NST	156.0	mg/L
Biochemical Oxygen Demand	NST	NST	31.4	mg/L
Chemical Oxygen Demand	NST	NST	96.1	mg/L
Total Nitrogen	NST	NST	24.0	mg/L
Phosphorus, Dissolved	NST	NST	0.13	mg/L
Carbaryl	NST	NST	<0.060 U	µg/L
Arsenic, Total	NST	NST	0.004 J	mg/L
Copper, Total	NST	NST	0.077	mg/L
Lead, Total	NST	NST	0.026	mg/L
Zinc, Total	NST	NST	0.242	mg/L
Chromium, Total	NST	NST	0.025	mg/L
Phosphorus, Total	NST	NST	2.53	mg/L
PARAMETER NAME	GRAB	GRAB	GRAB	UNIT
Oil & Grease(HEM)	NST	NST	1.60 J	mg/L
pH (field)	NST	NST	8.7	su
Ambient Air Temperature (field)	NST	NST	77	°F
Water Temperature (field)	NST	NST	84.2	°F
E. Coli	NST	NST	1,900	col/100 mL
Specific Conductivity	NST	NST	172	µS/cm
Total Coliforms	NST	NST	25,000	col/100 mL

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- J - Positively Identified Below the Lower Detection Limit
- NST - No Sample Taken
- U - Undetected