Item #5d

Guadalupe Small Tributaries Loads

New contaminant Data and Preliminary Interpretations

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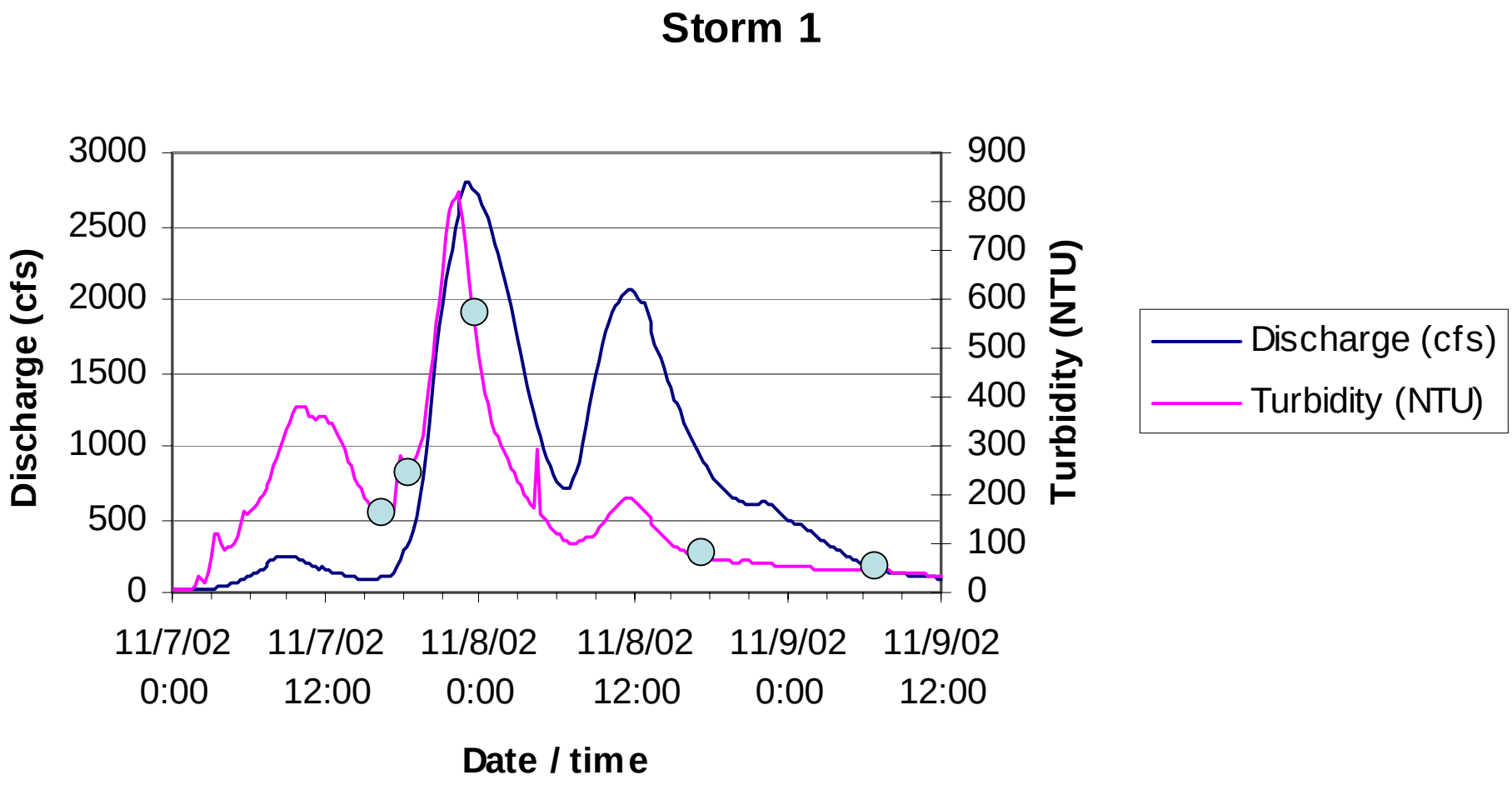
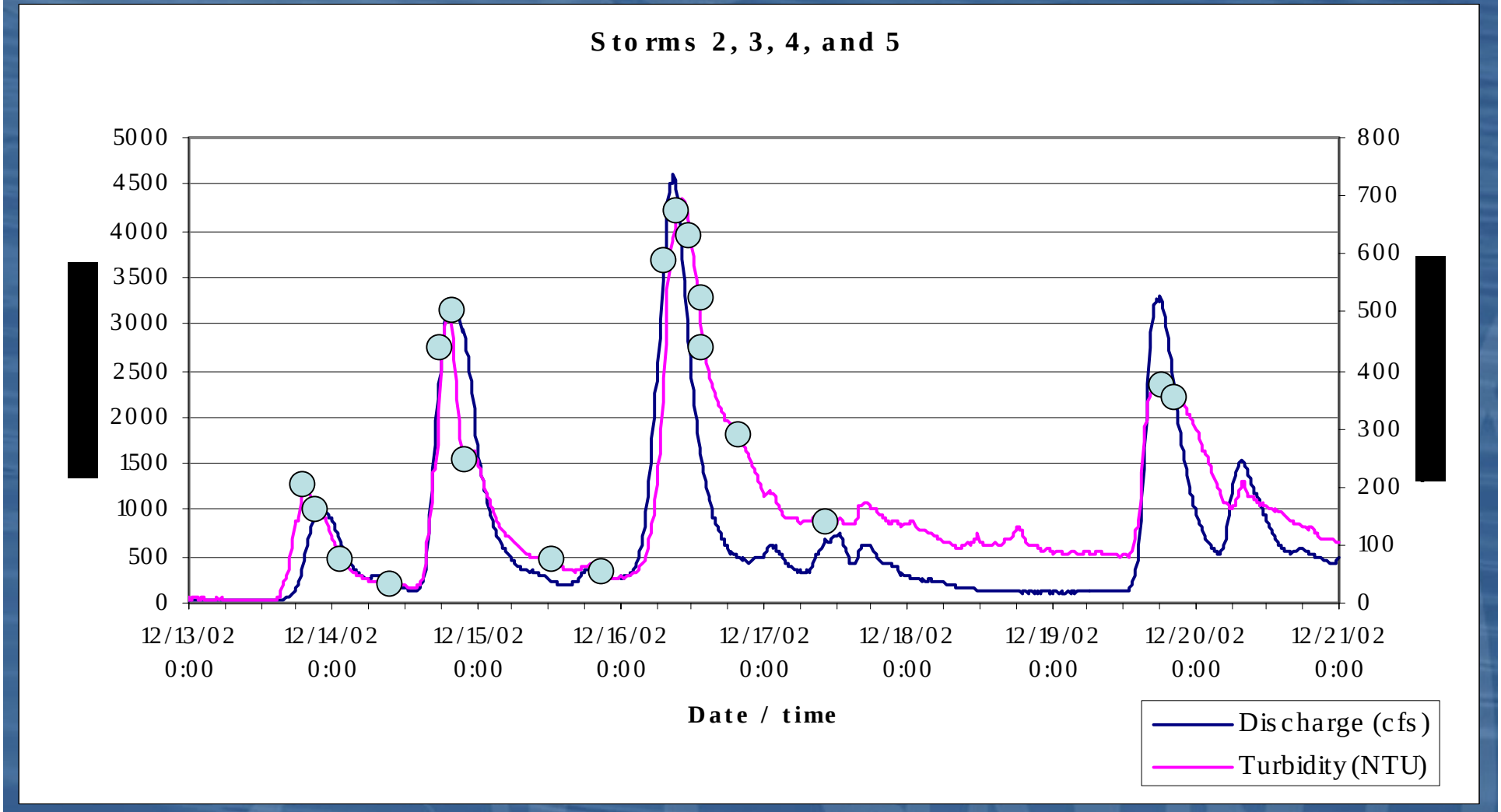
Sampling Overview

Type	Nº of samples	Results in
PCB's	16	19%
Hg	26	90%
Other TMs	26	42%
Suspended sediment	26	90%
Dissolved Organic Carbon	20	80%
Particulate Organic Carbon	20	80%

Sampling Relative to Discharge



Sampling Relative to Discharge



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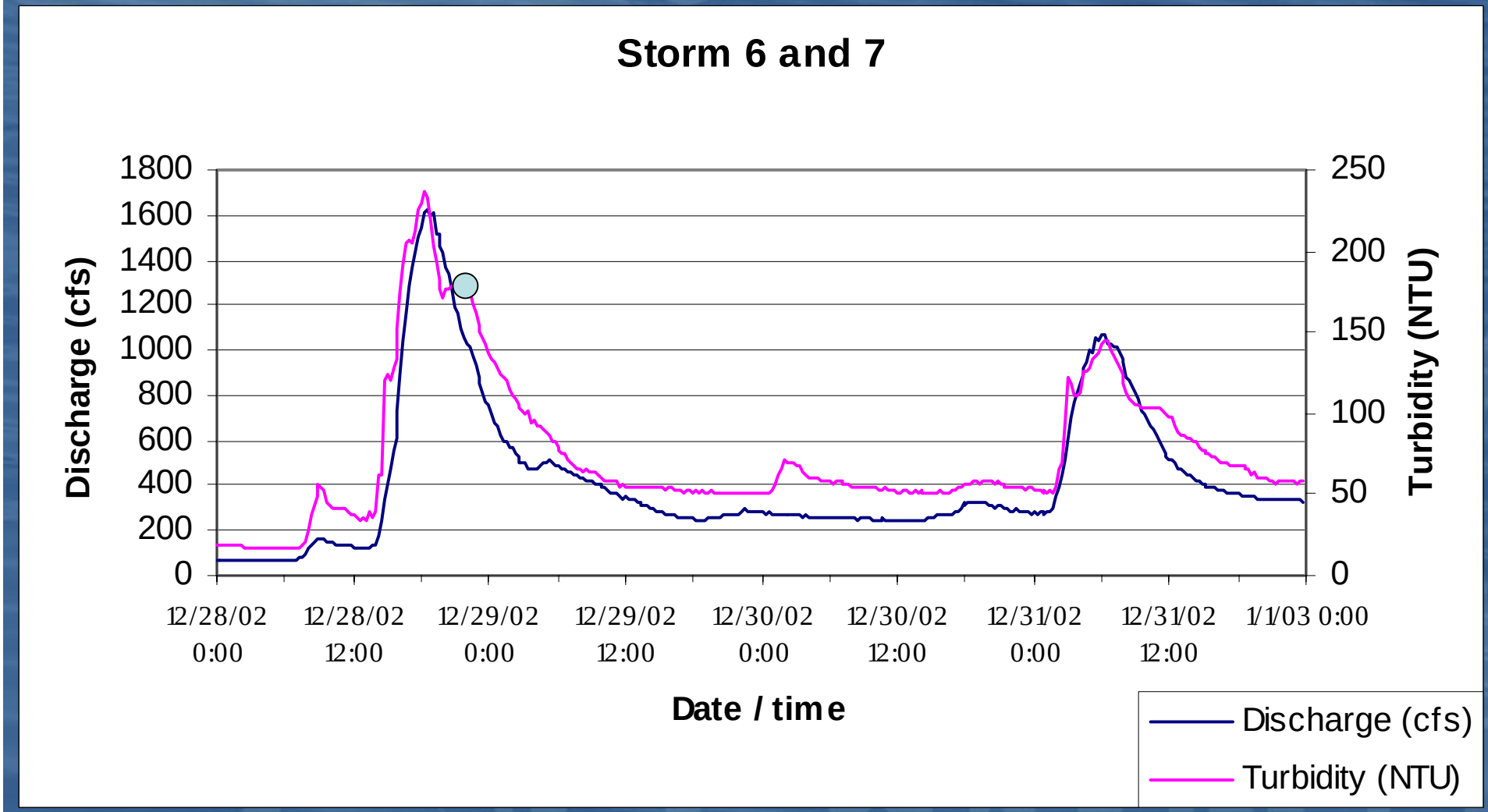
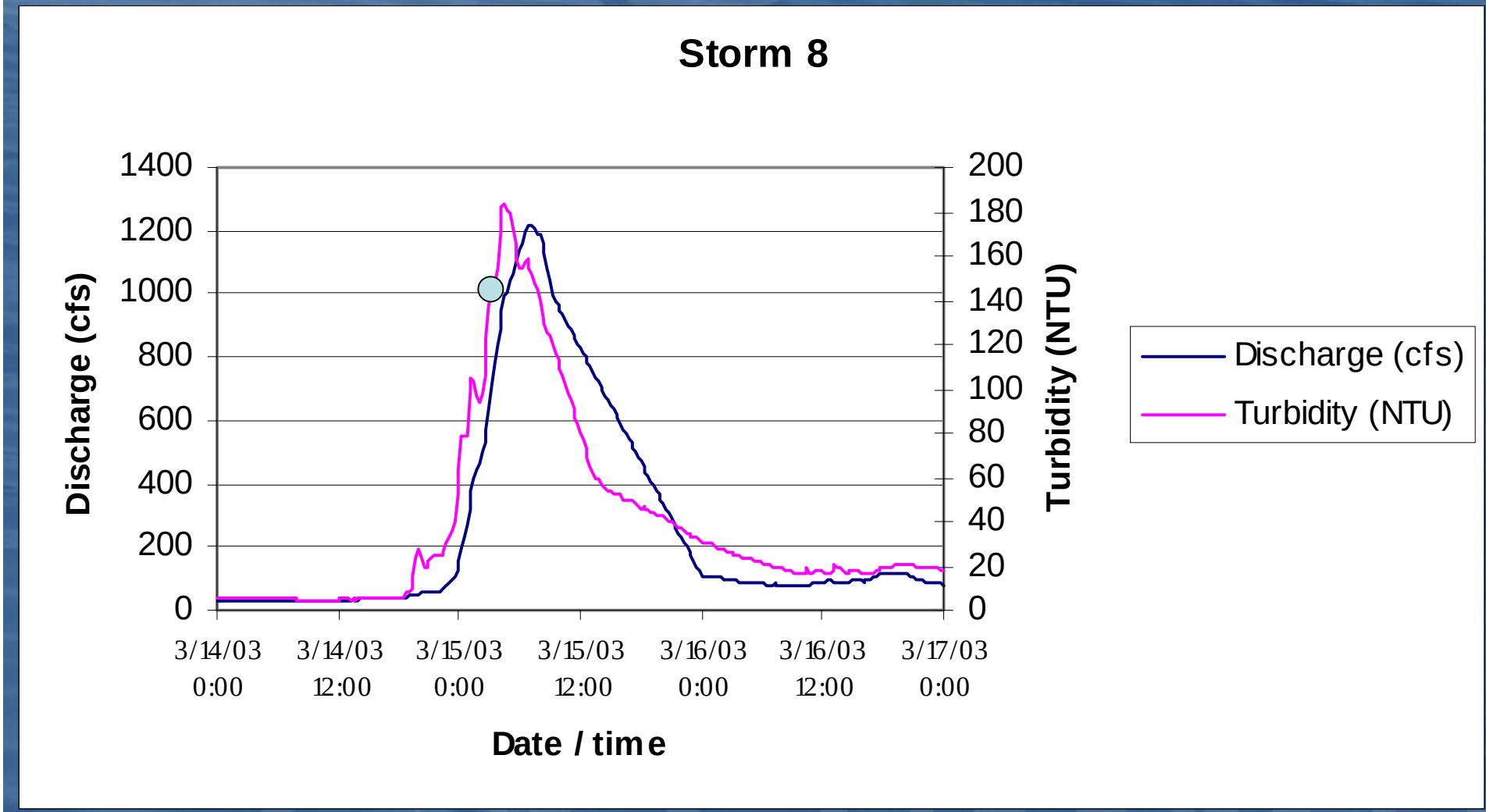
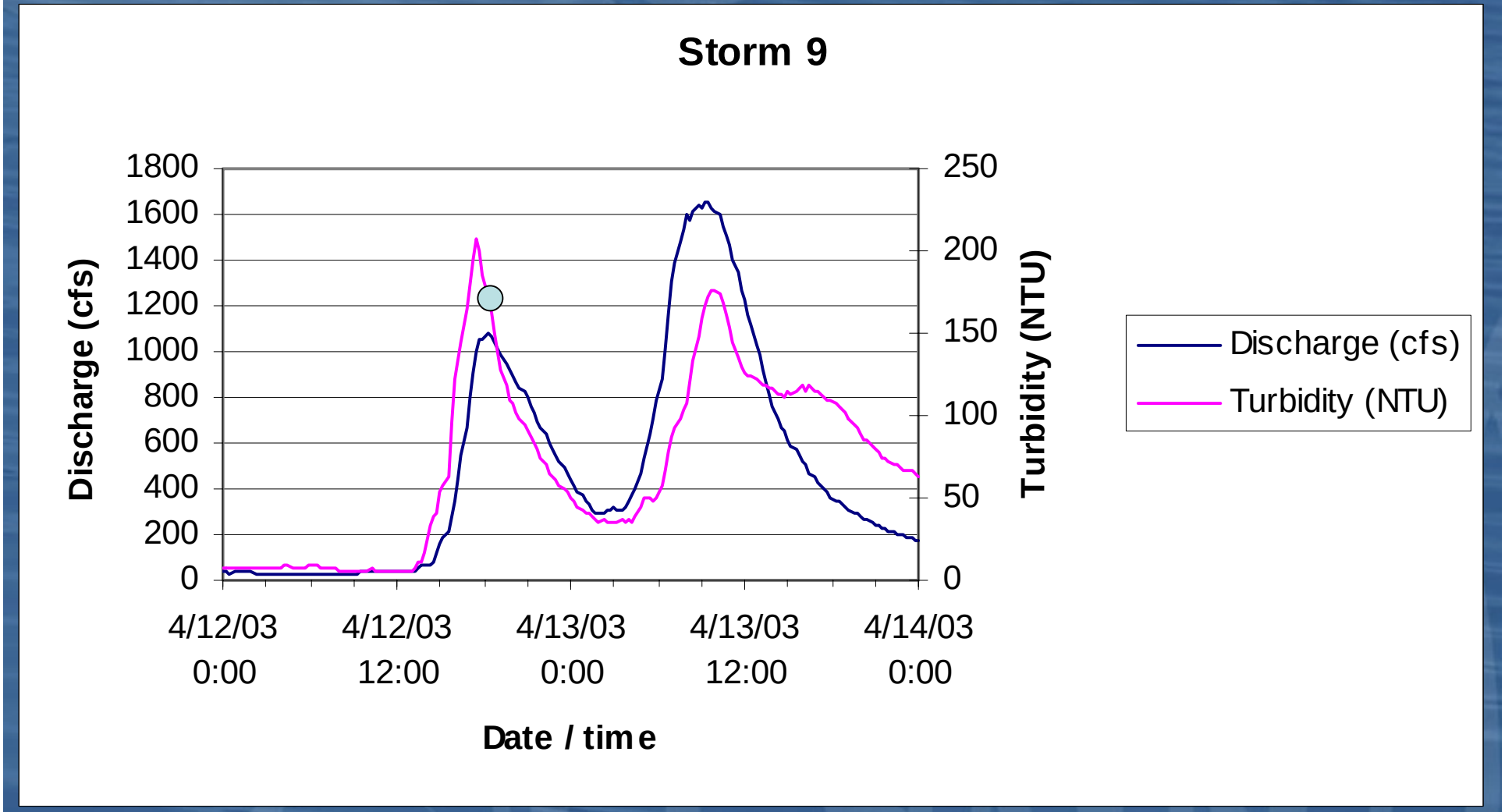


Sampling Relative to Discharge



Sampling Relative to Discharge



Monthly Concentrations

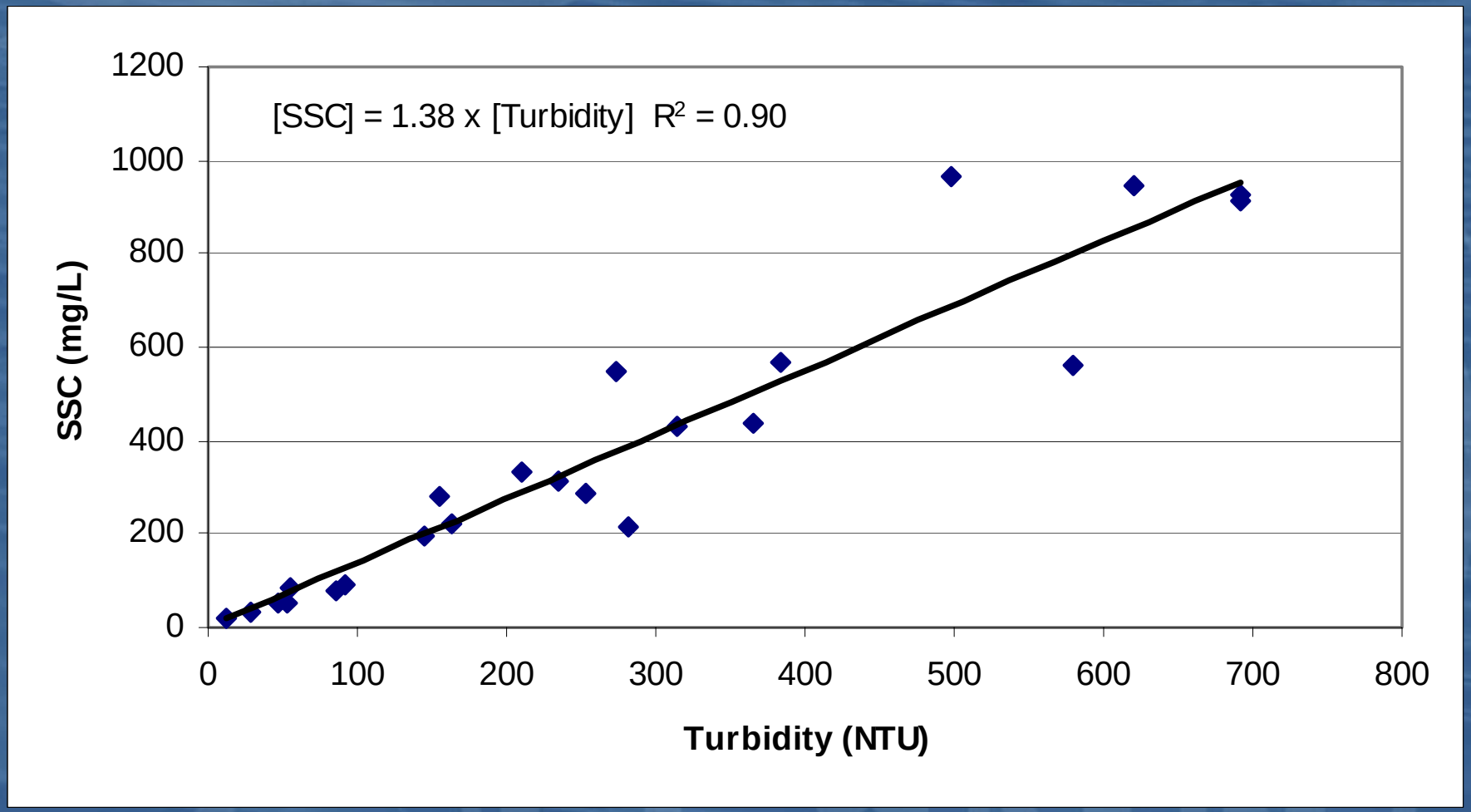
(Note do not quote – preliminary data - some aspects of SFEI QA still to occur)

	Number of samples	SSC (mg/L)	Hg (µg/L)	Hg (µg/g)	Cu (µg/L)	Ni (µg/L)
Nov	1*	50	4.66	93.9	-	-
Dec	19	32-967	0.18-18.67	1.0-47.9	8-46	13-113
Mar	1	282	6.81	24.2	18	15
Apr	1	225	5.77	25.7	-	-
May	1	18	5.15	279.4	-	-

* There are a further 3 to be analyzed

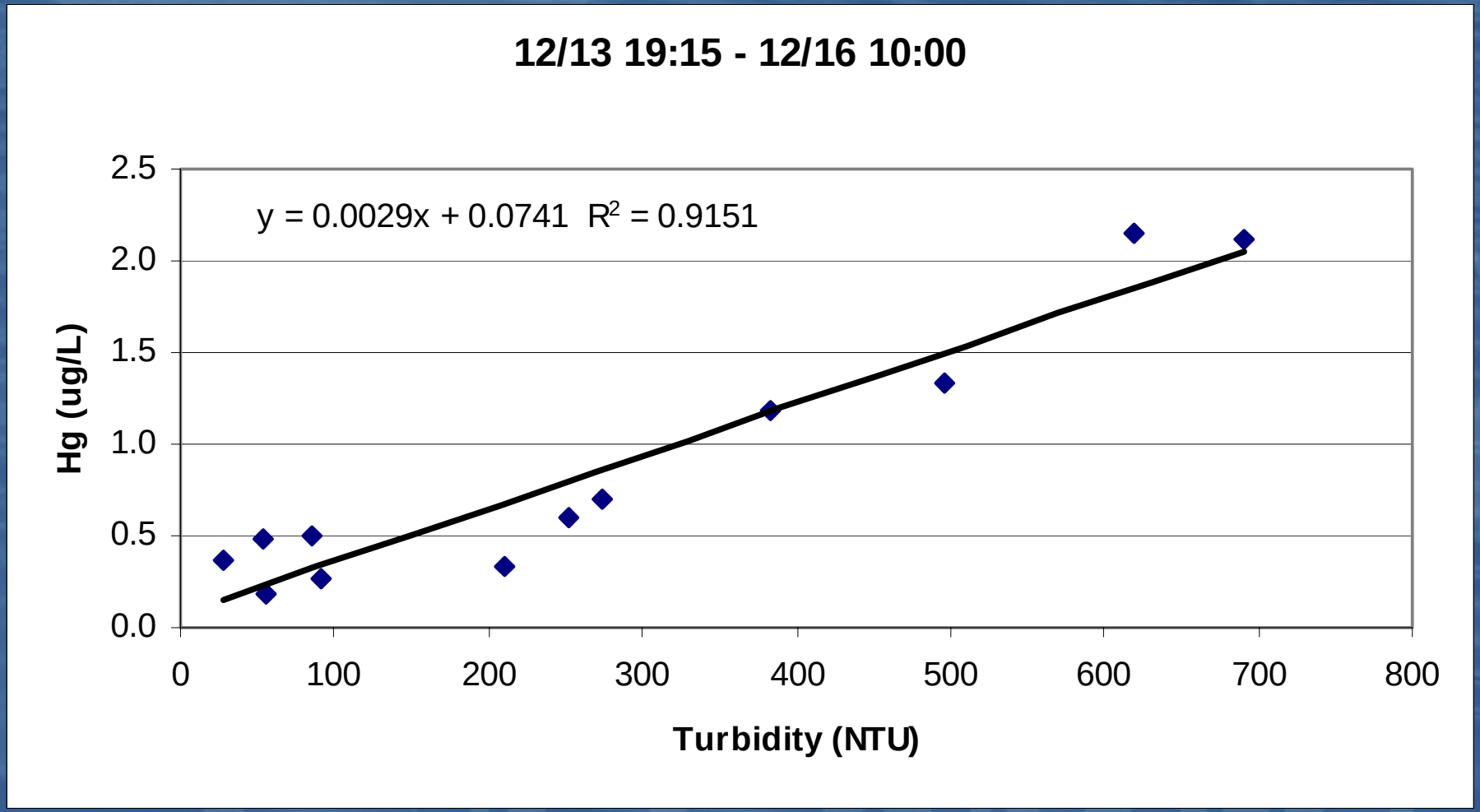
Correlative Relationships Turbidity – SSC

(Note do not quote – preliminary data - some aspects of SFEI QA still to occur)



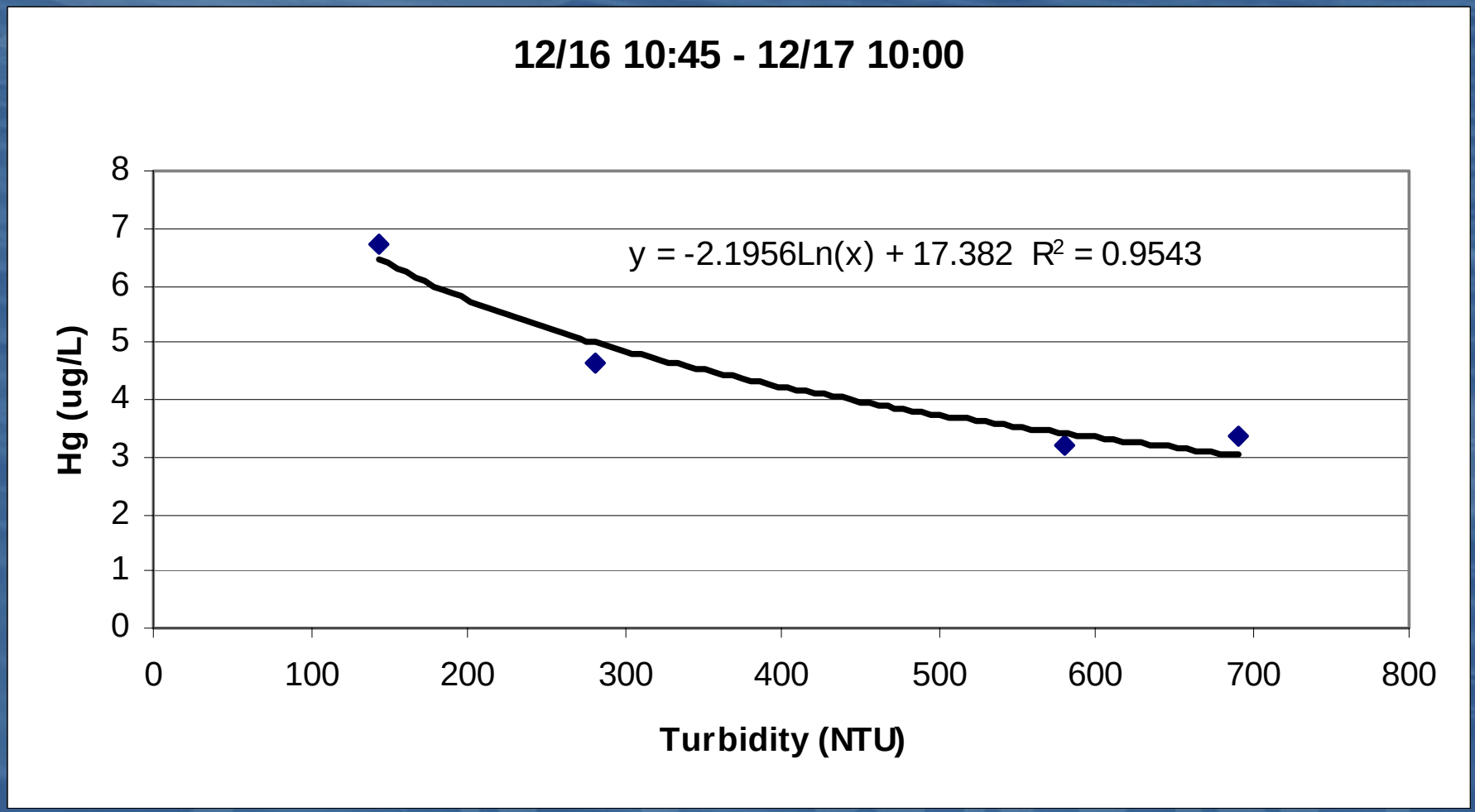
Correlative Relationships
Turbidity – Hg

(Note do not quote – preliminary data - some aspects of SFEI QA still to occur)



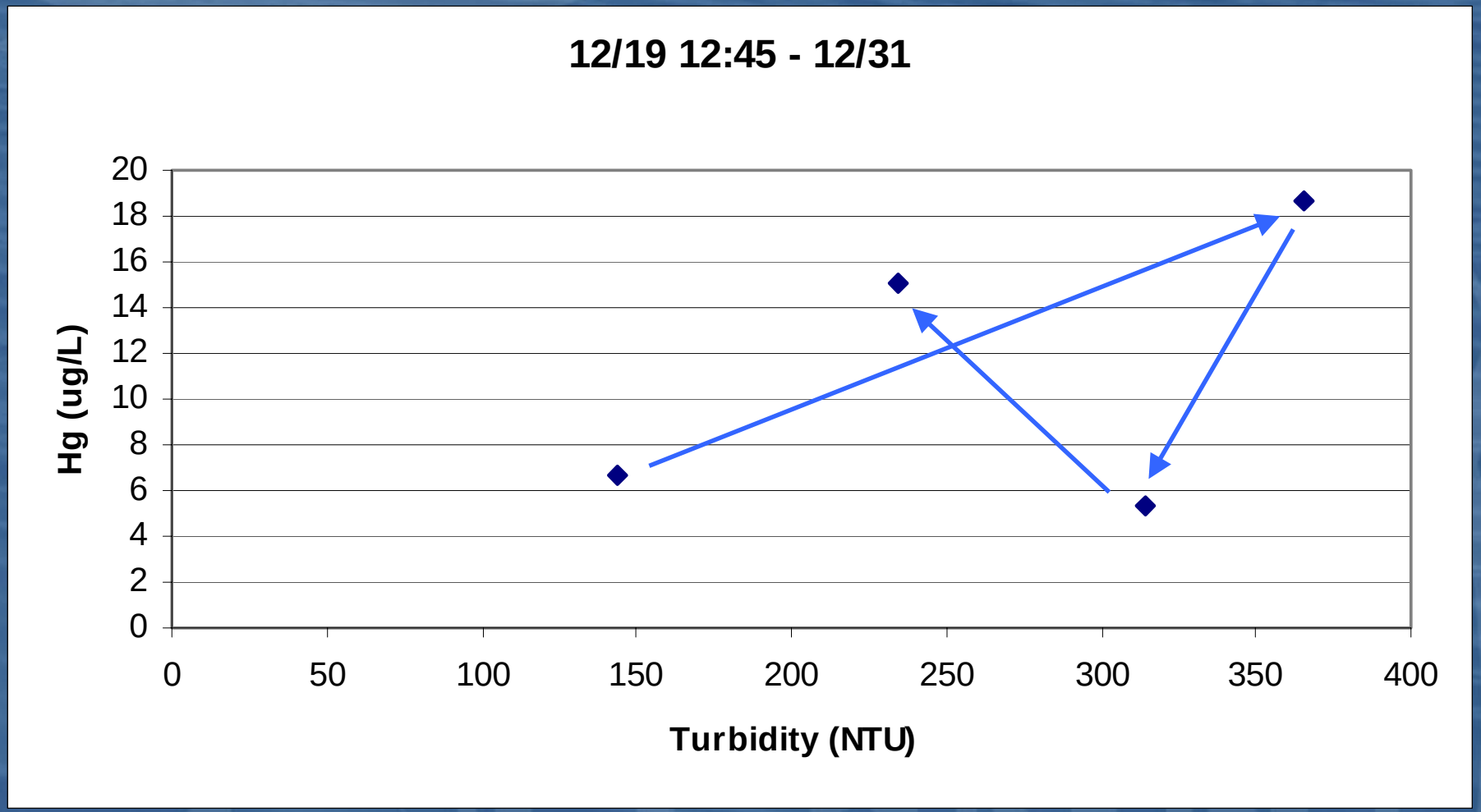
Correlative Relationships Turbidity – Hg

(Note do not quote – preliminary data - some aspects of SFEI QA still to occur)



Correlative Relationships
Turbidity – Hg

(Note do not quote – preliminary data - some aspects of SFEI QA still to occur)



December Flood Month

- ~44% of the WY 2003 discharge
- ~ 67% of the suspended sediment load
- ~1:6 year return event

Discharge (Guadalupe R. @ San Jose 11169000)

- Maximum daily = 1,770 cfs
- Maximum instantaneous = 6,160 cfs

Loads

(Note - do not quote – preliminary analysis – no verification)

- Hg December = 95kg
- Hg Annual >200 kg
- Cu Annual = ~1,800 kg
- Ni Annual = ~4,100 kg

2004 Sampling Scheme

Add the following components for Hg

- Routine monthly for period with no floods (~3 samples)
- Sample 3 hours before expected flood event (~6 samples)
- Sample 1 week after flood event (~6 samples)

Total ~15 extra samples