
SABINE RIVER AUTHORITY OF TEXAS

TO: INTERESTED PARTIES
FROM: ENVIRONMENTAL SERVICES DIVISION
RE: MAY 2002 MONTHLY WATER QUALITY REPORT

This is the Sabine River Authority Water Quality Summary for May 2002. Water quality sampling was performed May 14th through May 16th. Recent weather in the Basin was mild with air temperatures in the 70s and 80s during the daytime and lows in the 60s and 70s at night. Temperatures were 10-15 degrees cooler during the most recent two days. The Upper Basin received 7.23 – 6.83 inches of rainfall during the 28 days since the previous sample run as recorded at Lake Tawakoni and Lake Fork respectively. Toledo Bend and Orange received considerably less rainfall with 0.35 and 0.07 inches respectively during the 28 days preceding the sample run. Reservoir profiles indicated stratification of the water column with a distinct thermocline in each reservoir. The thermocline was still deep, running about 14m at the dam at Lake Tawakoni, 11 m at the Lake Fork dam, and 10-15 m at Toledo Bend Reservoir.

UPPER SABINE BASIN ABOVE TOLEDO BEND INCLUDING LAKE FORK AND LAKE TAWAKONI

For the May sample run, most of the parameter's values seen at the Upper Basin sites were consistent with water of high quality. The most recent rain was 1.31 inches at Lake Tawakoni and 0.88 inch at Lake Fork two days prior to the first sample date. Surface water temperatures were between 20 and 23.6 C. *E. coli* exceeded the single-grab stream standard limit at SR22 and SR21. These sites were most influenced by the recent rain that was heavier in the Lake Tawakoni region than in downstream areas. Nitrate/nitrite exceeded screening guidelines at LT23D and LT23A. LT23D also exceeded the screening guideline for orthophosphate. LT23C had 105% saturation of dissolved oxygen, indicating significant algal growth. Surface temperatures near the dams at Lake Tawakoni and Lake Fork respectively were about two and eight degrees warmer than bottom temperatures.

SABINE RIVER AUTHORITY OF TEXAS: MONTHLY WATER QUALITY REPORT

LOWER SABINE BASIN INCLUDING TOLEDO BEND TO MORGAN BLUFF

The May monthly sampling results were indicative of water of high quality at most sites. The last significant rainfall occurred over one week prior to the sampling event. The level of Toledo Bend Reservoir was recorded at 171.64 feet with no discharge from the spillway gates at the time of sampling. The generator was not operating at the time of sampling. All lake sites were thermally stratified with some of the deep-water stations showing anoxic conditions at the deepest depths. Stations TB6N and TB6M had oxygen levels that were below the stream standard, and station BA4 had a sulfate result that was above the stream standard.

TIDAL SECTION OF THE SABINE BASIN BELOW MORGAN BLUFF

Stations sampled in the tidal portion of the Sabine Basin had values that were consistent with water of high quality at most sites. It had been over a week since the last significant rainfall. All sites showed some slight differences in the oxygen levels as the depths increased, but all sites were well mixed with respect to temperature. The stations BB1 and SRT1 were the only sites that showed surface salinity results. The values at these sites were recorded at 2 ppt. The highest salinity value, of 5 ppt, was recorded at station SRT1 at a depth of 8.8 m. All values recorded in this section of the Basin were within their stream standard.

This Report and additional data for these monitoring stations are available on our World Wide Web site (www.sra.dst.tx.us). If you have any questions or comments concerning this report, please contact:

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SABINE RIVER AUTHORITY OF TEXAS

Monthly Water Quality Report

May 2002

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FY2002 Fixed Monitoring Stations

Upper Sabine Basin

<i>SW</i>	<i>Segment</i>	<i>Station</i>	<i>Location</i>
7.00	0507	10440 (LT23C)	LAKE TAWAKONI NR WIND POINT PARK
7.00	0507	10435 (LT23D)	LAKE TAWAKONI IN KITSEE INLET NEAR WHITE POINT CAUSEWAY
7.00	0507	10434 (LT23A)	LAKE TAWAKONI IN THE MAIN LAKE NEAR THE DAM
6.12	0512	10461 (LF3)	LAKE FORK RESERVOIR MID-ARM IN CANEY CREEK ARM AT FM 515
6.12	0512	10462 (LF4)	LAKE FORK RESERVOIR MID-COVE IN LAKE FORK CREEK ARM AT FM515
6.12	0512	10458 (LF2)	LAKE FORK RESERVOIR NEAR DAM IN CREEK CHANNEL
6.10	0515	10469 (LF20)	LAKE FORK CREEK AT US 80
6.02	0514	10467 (BS18)	BIG SANDY CREEK AT US 80
6.00	0506	17065 (SR22)	SABINE RIVER AT FM 17 (SR22)
6.00	0506	10430 (SR21)	SABINE RIVER AT US 69
6.00	0506	10429 (SR19)	SABINE RIVER AT SH 14 S. OF HAWKINS
5.00	0505	10428 (SR17)	SABINE RIVER AT US 271
5.00	0505	10427 (SR16)	SABINE RIVER AT SH 42
5.00	0505	10426 (SR15)	SABINE RIVER AT US 259
5.00	0505	10423 (SR14)	SABINE RIVER AT SH 149
5.00	0505	13628 (SR11)	SABINE RIVER AT US 59
5.00	0505	10415 (SR10)	SABINE RIVER AT FM 2517

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Upper Sabine Basin Report

May 2002

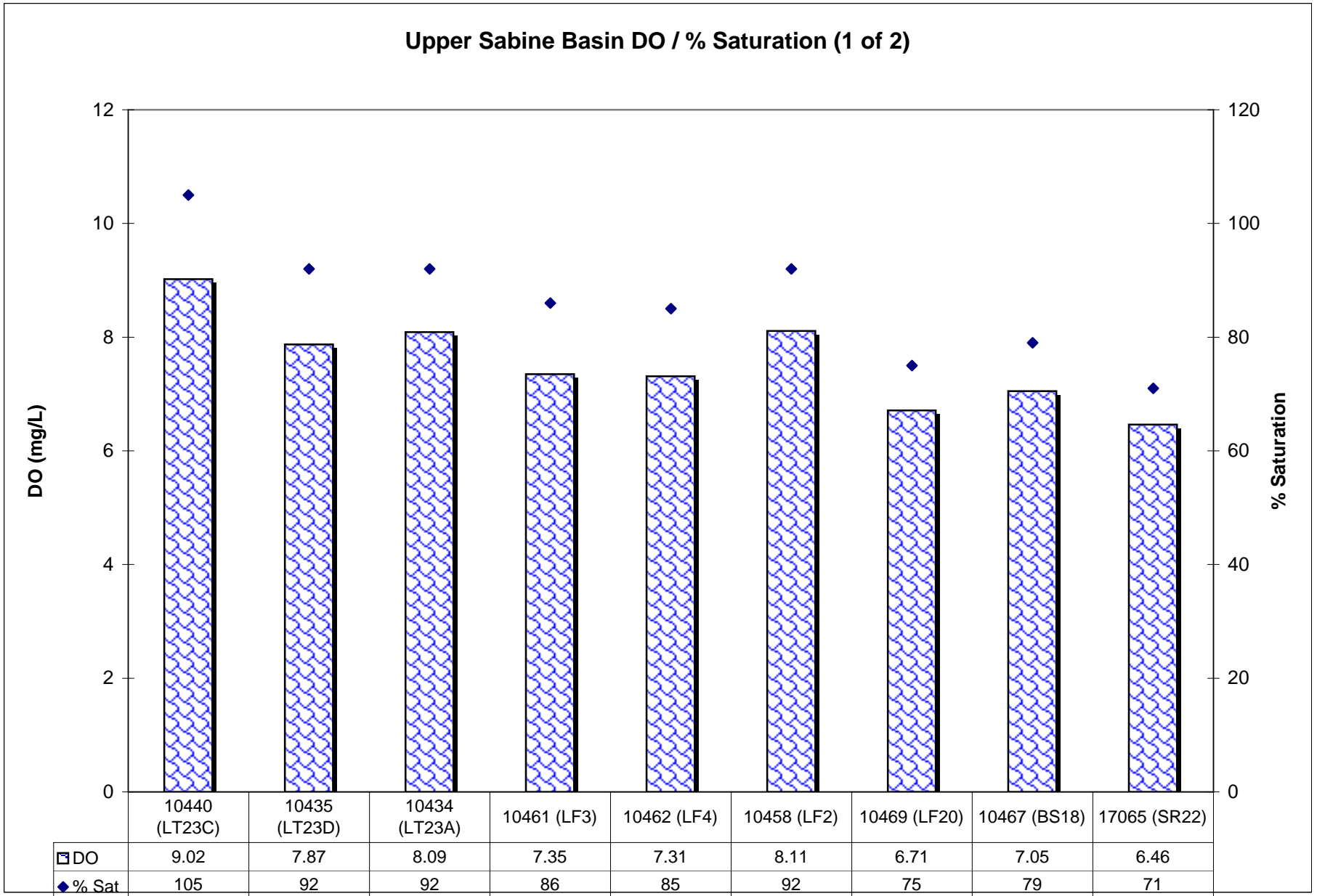
Date	SW ID	Station	Temperature °C 00010	pH Units 00400	DO mg/L 00300	% Saturation 00301	Conductivity µS/cm 00094	Salinity ppt 00480	Secchi Meters 00078	Turbidity NTU 82079	<i>E. coli</i> mpn/100ml 31699	Chlorophyll a µg/L 32211	Nitrate & Nitrite 00630	Ortho- Phosphate 00671	TOC mg/L 00680	Total Alkalinity 00410	Total Hardness 00900	Chloride mg/L 00940	Sulfate mg/L 00945
5/14/02 11:13 AM	7.00	10440 (LT23C)	23.2	8.29	9.02	105	167	*	0.57	21.8	3	14	0.25	0.04	5	60	64	< 10	< 10
5/14/02 10:32 AM	7.00	10435 (LT23D)	23.2	7.82	7.87	92	168	*	0.56	12.9	25	14	0.47	0.21	5	60	64	< 10	< 10
5/14/02 9:49 AM	7.00	10434 (LT23A)	21.5	7.78	8.09	92	162	*	1.03	11.4	16	8	0.38	0.07	4	60	56	< 10	< 10
5/14/02 8:47 AM	6.12	10461 (LF3)	23	7.04	7.35	86	144	*	1.01	4.13	1	13	< 0.04	0.05	7	20	32	12	14
5/14/02 9:06 AM	6.12	10462 (LF4)	22.6	7	7.31	85	137	*	1.01	5.5	4	13	< 0.04	< 0.04	6	20	36	< 10	16
5/14/02 8:04 AM	6.12	10458 (LF2)	21.8	7.18	8.11	92	132	*	1.51	4.46	4	6	< 0.04	< 0.04	5	20	28	< 10	14
5/14/02 1:14 PM	6.10	10469 (LF20)	20.8	6.69	6.71	75	152	*	1.01	9.31	249	*	0.09	< 0.04	8	20	36	14	16
5/14/02 1:57 PM	6.02	10467 (BS18)	20.9	6.61	7.05	79	138	*	0.58	17.9	276	*	0.22	< 0.04	11	20	32	14	13
5/14/02 12:03 PM	6.00	17065 (SR22)	20	7.08	6.46	71	144	*	0.36	54.6	1120	*	0.25	0.24	8	40	44	< 10	10
5/14/02 12:36 PM	6.00	10430 (SR21)	21.3	6.88	5.83	66	152	*	0.41	25.1	411	*	0.24	0.27	8	40	48	< 10	11
5/14/02 1:36 PM	6.00	10429 (SR19)	22	6.85	6.68	76	163	*	0.43	18.9	238	*	0.26	< 0.04	8	30	44	14	14
5/14/02 2:18 PM	5.00	10428 (SR17)	23	6.93	6.52	76	181	*	0.58	34.2	108	*	0.28	< 0.04	7	30	48	18	16
5/14/02 2:53 PM	5.00	10427 (SR16)	23.5	7.04	7	83	191	*	0.5	41.3	76	*	0.28	< 0.04	7	30	48	20	16
5/15/02 9:22 AM	5.00	10426 (SR15)	22.6	7.05	6.87	79	184	*	0.38	43.5	50	*	0.29	< 0.04	8	30	44	19	16
5/15/02 9:50 AM	5.00	10423 (SR14)	22.8	7.05	6.82	79	193	*	0.38	25.6	60	*	0.33	< 0.04	7	30	48	21	17
5/15/02 10:34 AM	5.00	13628 (SR11)	23.2	7.15	7.18	84	187	*	0.42	56.8	78	*	0.33	< 0.04	6	40	48	17	17
5/15/02 11:07 AM	5.00	10415 (SR10)	23.6	7.13	7.2	84	184	*	0.31	67.1	104	*	0.57	< 0.04	6	30	48	16	17

*: Not sampled on this run

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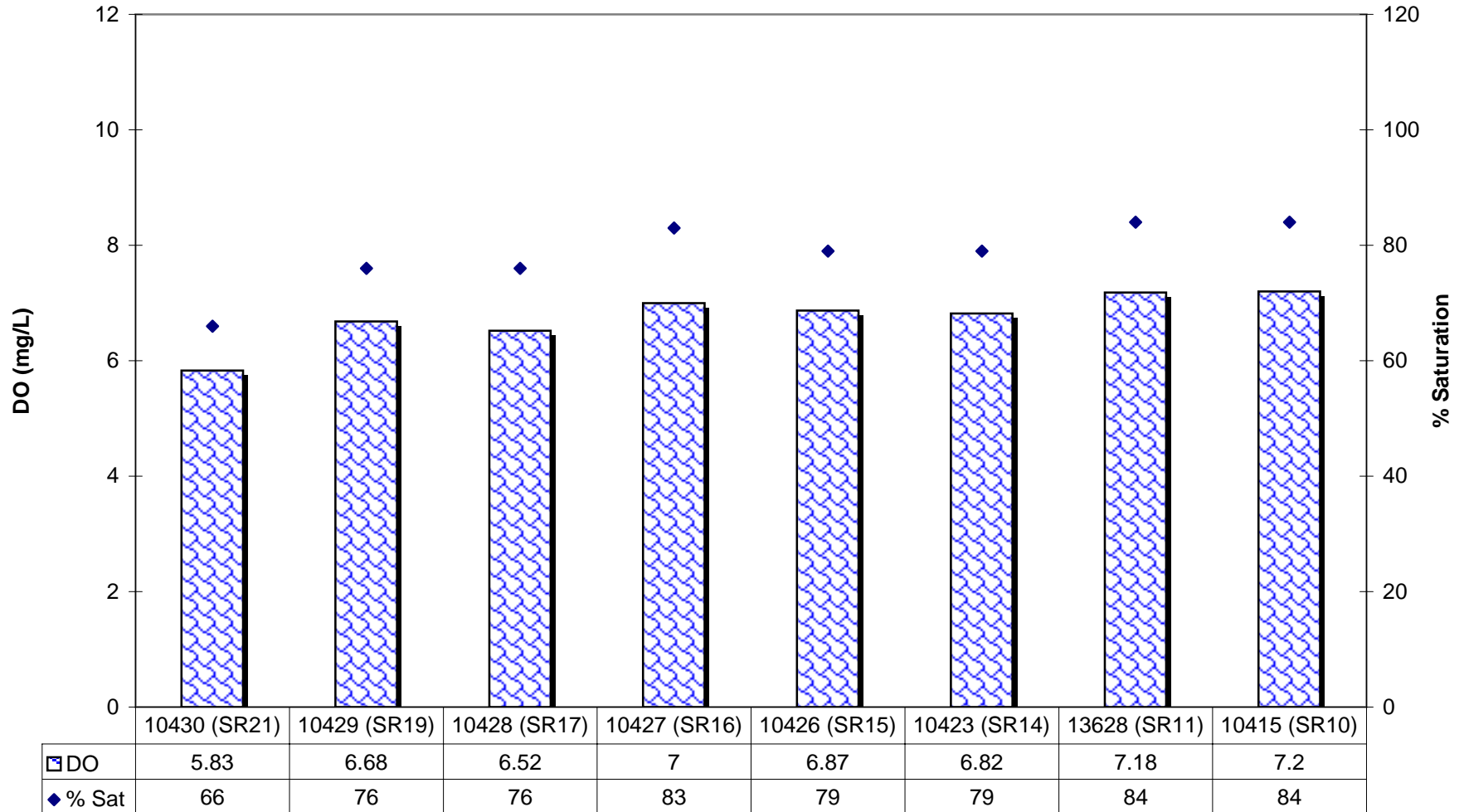
Upper Sabine Basin DO / % Saturation (1 of 2)



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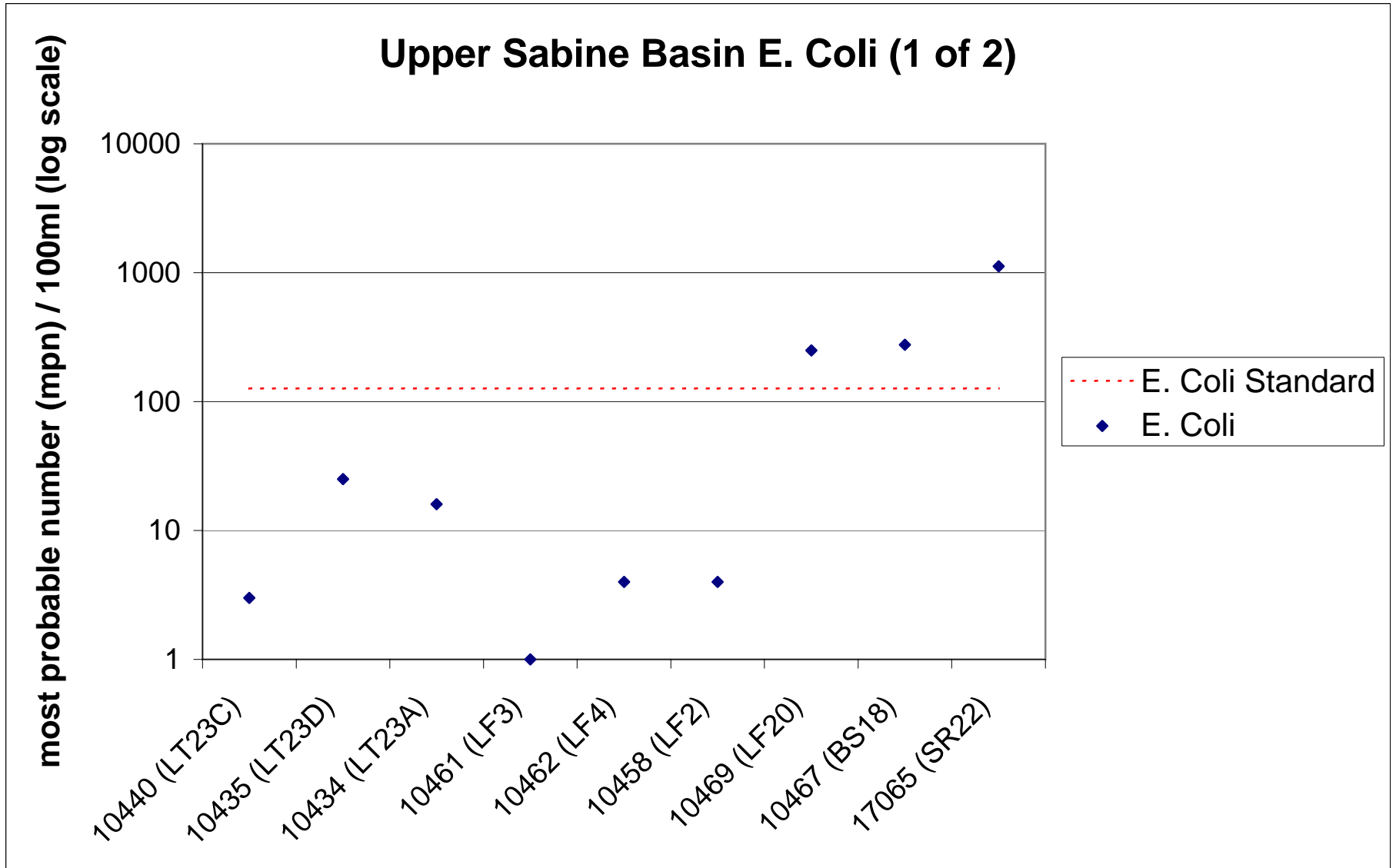
May 2002

Upper Sabine Basin DO / % Saturation (2 of 2)



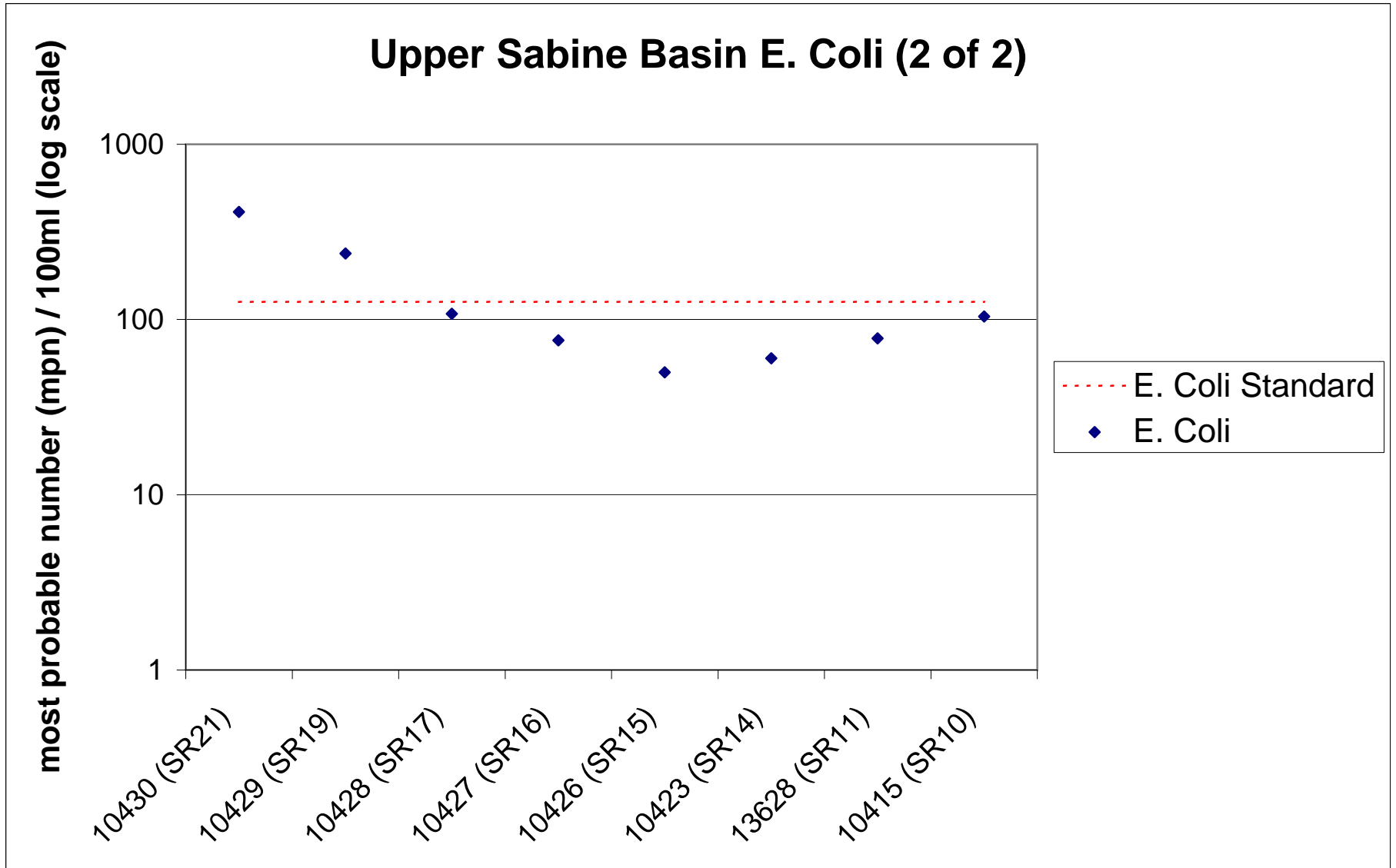
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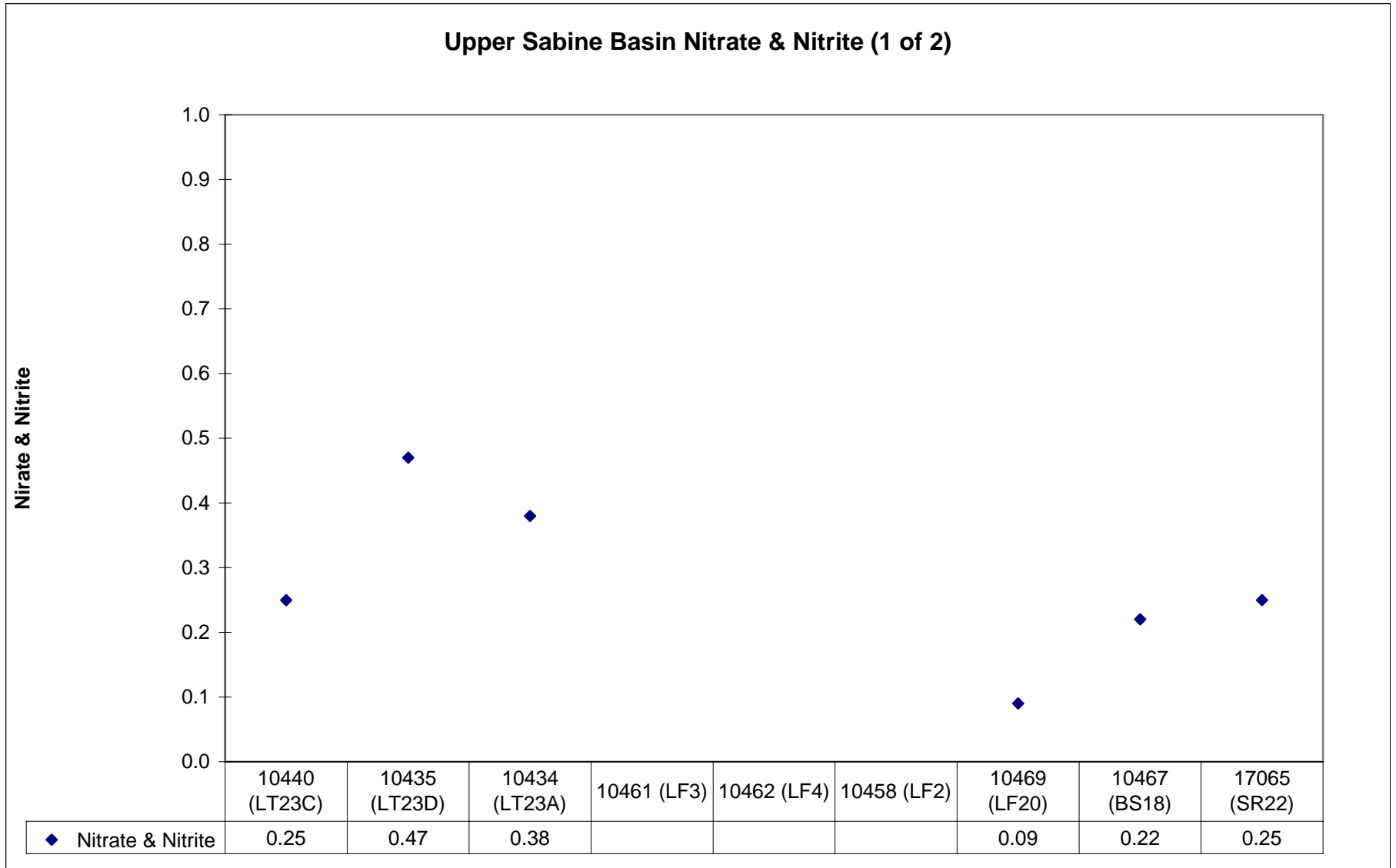
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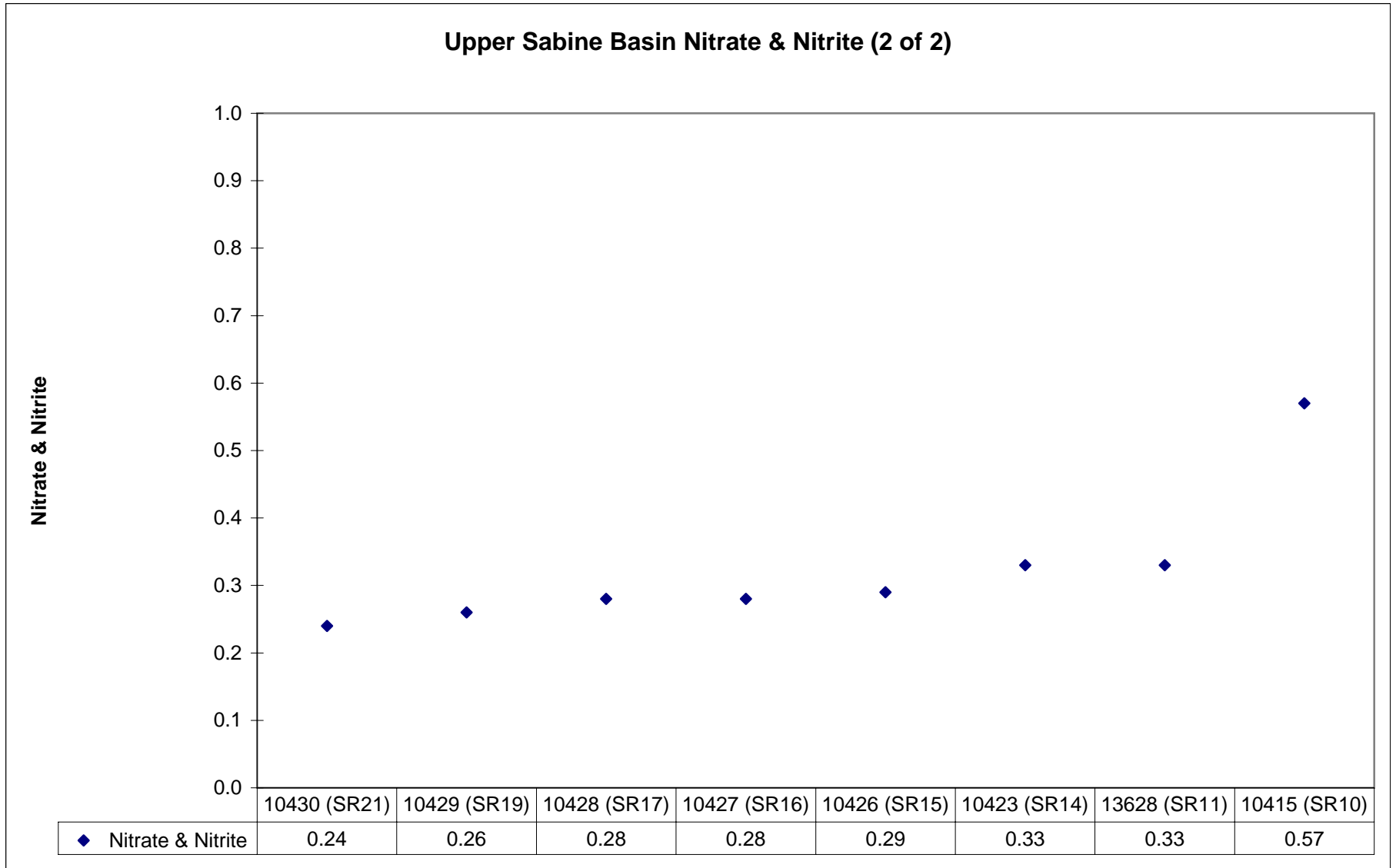
May 2002



Stations without values were below detection limit on this run (see page 2)

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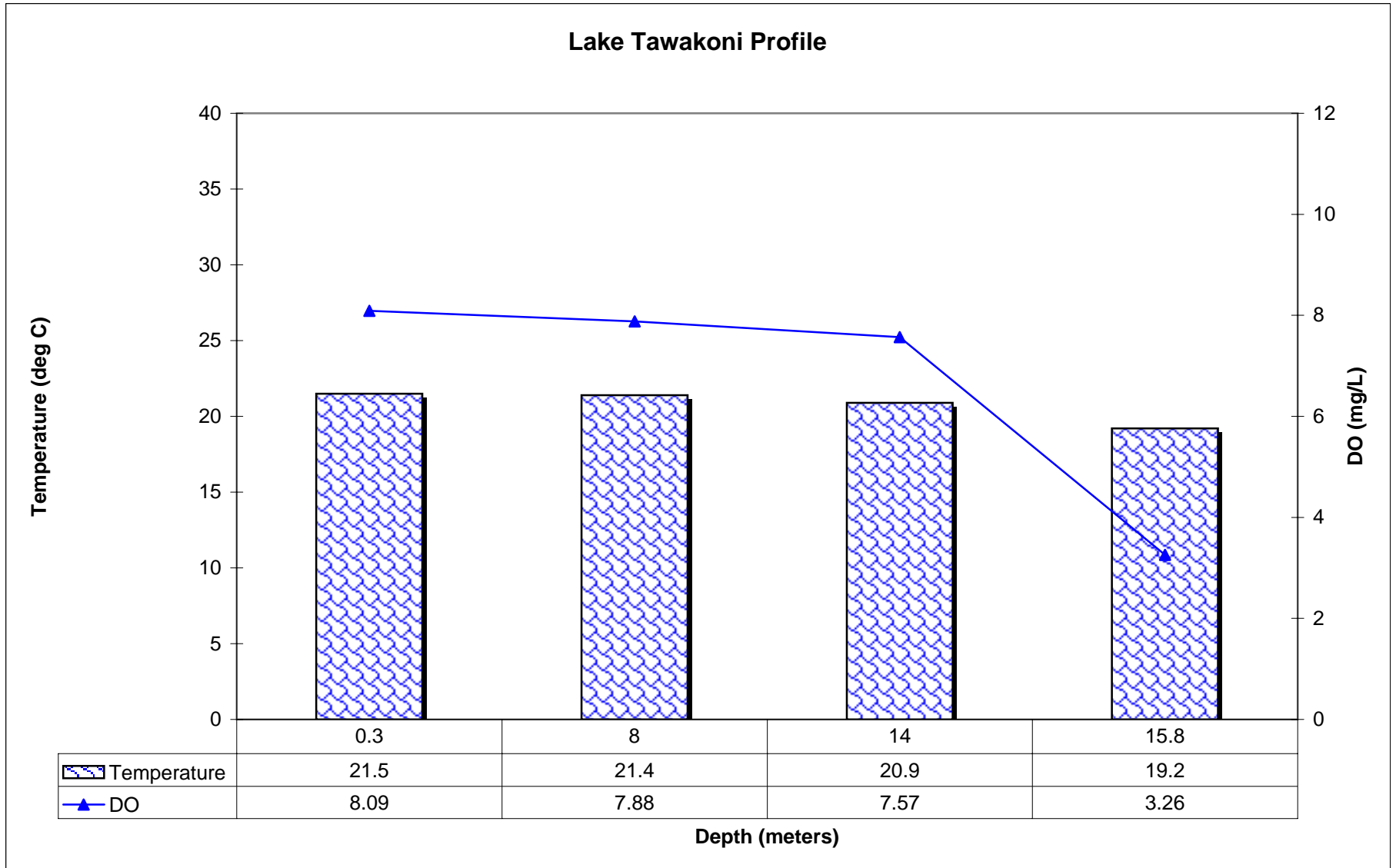
Upper Basin Profiles

May 2002

Date	SW ID	Station	Depth Meters	Temperature	pH	DO	%	Conductivity
				°C 00010	Units 00400	mg/L 00300	Saturation 00301	µS/cm 00094
5/14/02 11:13 AM	7.00	10440 (LT23C)	0.3	23.2	8.29	9.02	105	167
			4.62	22.5	7.88	7.8	90	175
5/14/02 10:32 AM	7.00	10435 (LT23D)	0.3	23.2	7.82	7.87	92	168
			7	22.9	7.66	7.34	86	169
			11.3	22.6	7.6	6.73	78	172
5/14/02 9:49 AM	7.00	10434 (LT23A)	0.3	21.5	7.78	8.09	92	162
			8	21.4	7.71	7.88	89	163
			14	20.9	7.59	7.57	86	163
			15.8	19.2	7.2	3.26	35	167
5/14/02 8:47 AM	6.12	10461 (LF3)	0.3	23	7.04	7.35	86	144
			4	23	7.26	7.35	86	144
			7	21.8	6.27	5.39	61	140
			8	20.9	6.76	4.16	46	139
			9.89	20.1	6.77	4.05	44	138
5/14/02 9:06 AM	6.12	10462 (LF4)	0.3	22.6	7	7.31	85	137
			4	22.6	7.25	7.53	87	137
			8	20.3	6.84	5.5	60	133
			9	19.4	6.74	4.52	49	133
			10	17.3	6.53	1.04	10	142
			11.1	16.5	6.69	1.4	14	139
5/14/02 8:04 AM	6.12	10458 (LF2)	0.3	21.8	7.18	8.11	92	132
			8	21.8	7.22	8.05	92	132
			11	21.8	7.39	8.18	93	132
			12	16.1	6.65	3.67	36	132
			13	14.6	6.29	2.88	28	133
			17.2	13.5	6.47	2.21	20	137

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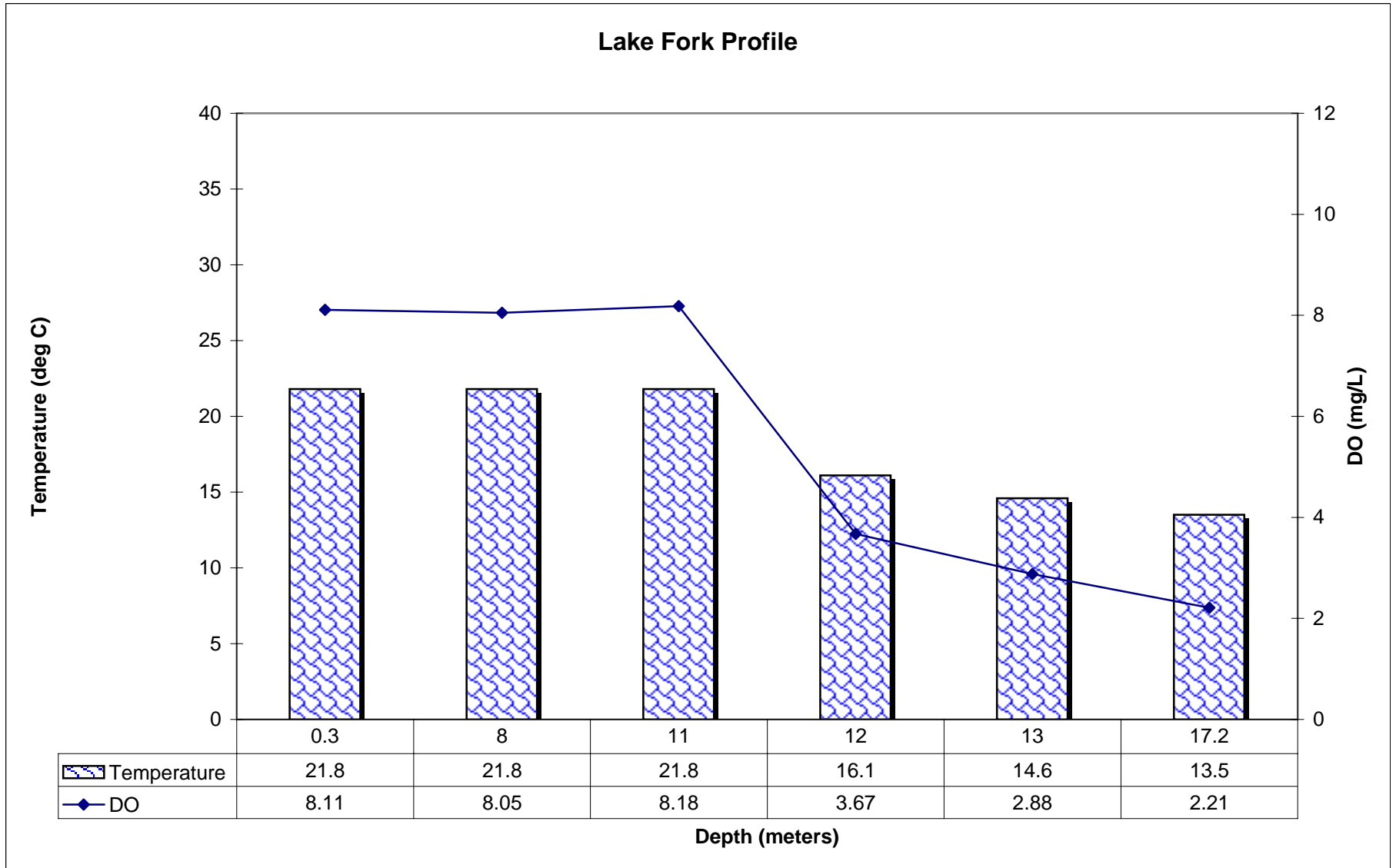
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For Station 10434 (LT23A): LAKE TAWAKONI IN THE MAIN LAKE NEAR THE DAM IN THE OLD RIVER CHANNEL

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Lake Tawakoni Weather and Reservoir Data

May 2002

Date	Lake Elev	LE - TOP	Releases inst	Max Temp	Min Temp	Rainfall	Evap
5/1/2002	437.90	0.40	355	87	73	0.00	0.32
5/2/2002	437.88	0.38	355	90	72	0.00	0.32
5/3/2002	437.82	0.32	235	85	57	1.05	0.00
5/4/2002	437.86	0.36	355	72	58	0.71	0.00
5/5/2002	438.08	0.58	665	80	62	1.84	0.00
5/6/2002	438.23	0.73	845	83	63	0.13	0.41
5/7/2002	438.21	0.71	845	87	74	0.00	0.32
5/8/2002	438.16	0.66	845	87	62	0.00	0.24
5/9/2002	438.13	0.63	665	88	65	0.03	0.20
5/10/2002	438.14	0.64	665	80	65	1.22	0.00
5/11/2002	438.13	0.63	665	86	64	0.00	0.24
5/12/2002	438.16	0.66	845	88	72	0.00	0.31
5/13/2002	438.25	0.75	1,045	87	53	1.31	0.00
5/14/2002	438.16	0.66	845	72	52	0.00	0.39
5/15/2002	438.08	0.58	665	76	53	0.00	0.27
5/16/2002	438.02	0.52	505	81	57	0.00	0.32
5/17/2002	437.98	0.48	505	88	69	0.00	0.23
5/18/2002	438.29	0.79	1,045	75	50	1.13	0.00
5/19/2002	438.39	0.89	1,255	70	50	0.00	0.28
5/20/2002	438.36	0.86	1,255	72	50	0.00	0.25
5/21/2002	438.28	0.78	1,045	77	55	0.00	0.28
5/22/2002	438.18	0.68	845	81	57	0.00	0.36
5/23/2002	438.12	0.62	665	82	62	0.00	0.38
5/24/2002	438.05	0.55	665	83	63	0.00	0.32
5/25/2002	438.02	0.52	505	84	64	0.00	0.31
5/26/2002	438.97	1.47	505	92	68	0.47	0.04
5/27/2002	437.92	0.42	355	90	68	0.00	0.35
5/28/2002	437.92	0.42	355	87	66	0.03	0.23
5/29/2002	437.93	0.43	355	82	65	1.05	0.00
5/30/2002	437.90	0.40	355	83	67	0.20	0.32
5/31/2002	437.87	0.37	355	78	67	0.00	0.18
Avg or Tot	438.11	0.61	660	82	62	9.17	6.87

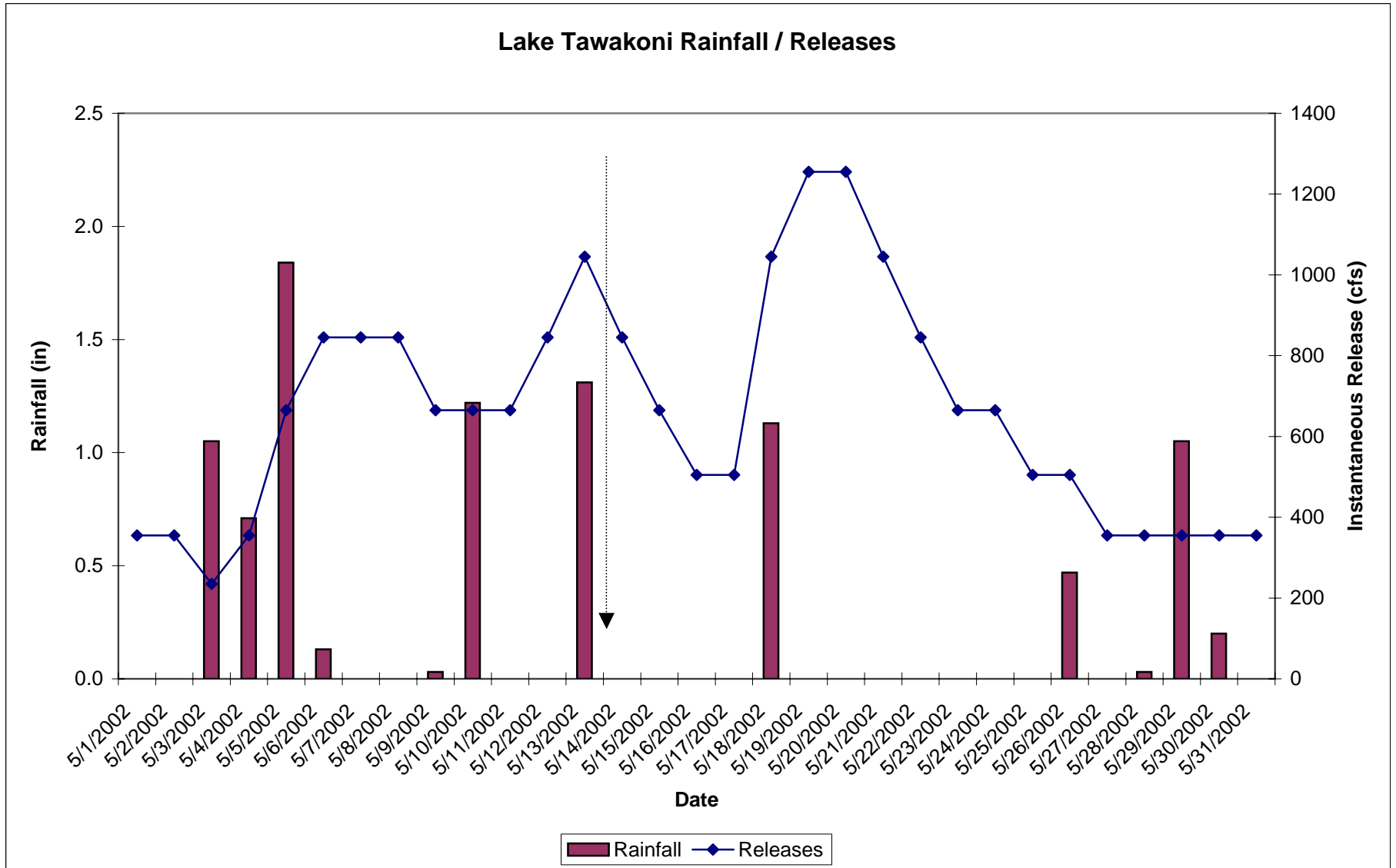
	Avg	Avg	Avg	Avg	Avg	Tot	Tot
Units	Feet M.S.L.	Feet	cfs	Deg F	Deg F	Inches	Inches
			Instantaneous appx. 8 a.m.				

TOP: Top of Pool = 437.5 Feet M.S.L.

Lake Tawakoni Sampled on 5/14/2002

SABINE RIVER AUTHORITY OF TEXAS

May 2002



Please Note : Lake Tawakoni has an uncontrolled spillway.

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Lake Fork Weather and Reservoir Data

May 2002

Date	Lake Elev	LE - TOP	Releases avg	Releases cur	Max Temp	Min Temp	Rainfall	Evap
5/1/2002	402.72	(0.28)	8	8	88	72	0.00	0.22
5/2/2002	402.71	(0.29)	8	8	92	72	0.00	0.35
5/3/2002	402.72	(0.28)	8	8	80	60	0.15	0.10
5/4/2002	402.81	(0.19)	8	8	70	58	1.90	0.00
5/5/2002	402.82	(0.18)	8	1,384	80	60	0.03	0.15
5/6/2002	403.07	0.07	1,384	1,384	86	62	0.85	0.30
5/7/2002	403.02	0.02	1,384	1,384	90	72	0.00	0.29
5/8/2002	402.90	(0.10)	1,384	1,384	88	72	0.00	0.29
5/9/2002	402.83	(0.17)	1,384	1,384	88	72	0.00	0.15
5/10/2002	402.91	(0.09)	466	1,376	86	62	1.85	0.36
5/11/2002	402.90	(0.10)	1,376	1,376	80	64	0.00	0.10
5/12/2002	402.79	(0.21)	1,376	8	90	70	0.00	0.43
5/13/2002	402.90	(0.10)	8	8	90	54	0.88	0.36
5/14/2002	402.85	(0.15)	8	8	74	52	0.00	0.22
5/15/2002	402.82	(0.18)	8	8	78	54	0.00	0.29
5/16/2002	402.80	(0.20)	8	8	84	56	0.00	0.34
5/17/2002	402.86	(0.14)	8	8	88	68	0.00	0.30
5/18/2002	402.99	(0.01)	1,322	1,322	78	52	1.40	0.23
5/19/2002	402.89	(0.11)	1,322	1,322	72	46	0.00	0.28
5/20/2002	402.77	(0.23)	1,376	8	74	50	0.00	0.30
5/21/2002	402.76	(0.24)	8	8	78	54	0.00	0.26
5/22/2002	402.75	(0.25)	8	8	82	58	0.00	0.33
5/23/2002	402.73	(0.27)	8	8	82	60	0.00	0.26
5/24/2002	402.71	(0.29)	8	8	84	62	0.00	0.27
5/25/2002	402.72	(0.28)	8	8	82	62	0.00	0.03
5/26/2002	402.71	(0.29)	8	8	88	66	0.00	0.24
5/27/2002	402.69	(0.31)	8	8	90	66	0.00	0.32
5/28/2002	402.70	(0.30)	8	8	88	66	0.00	0.16
5/29/2002	402.72	(0.28)	8	8	86	64	0.70	0.33
5/30/2002	402.72	(0.28)	8	8	84	64	0.05	0.10
5/31/2002	402.72	(0.28)	8	8	82	64	0.00	0.25
Avg or Tot	402.81	(0.19)	417	403	83	62	7.81	7.61

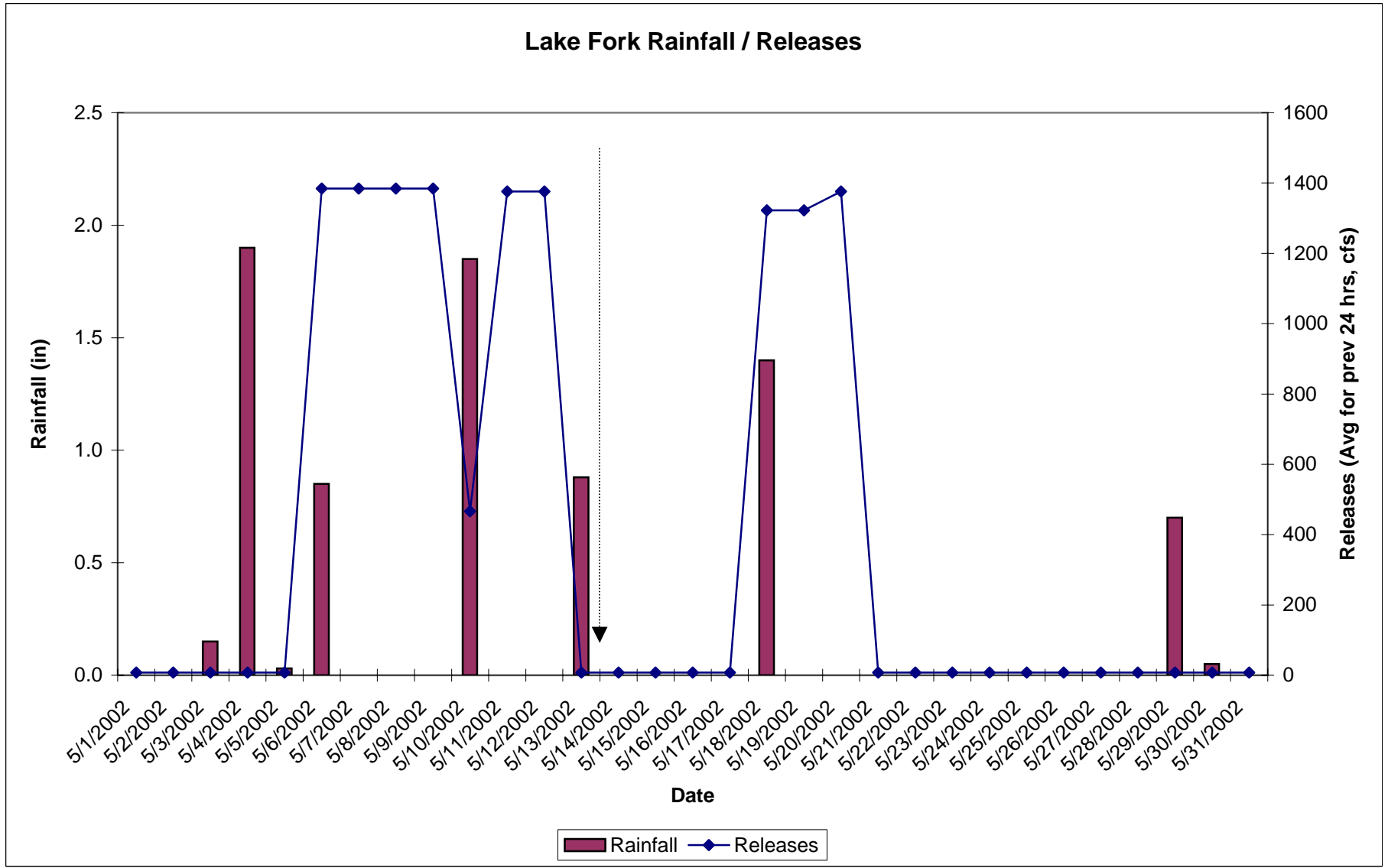
Units	Avg Feet M.S.L.	Avg Feet	Avg cfs Previous 24 hrs	cfs	Avg Deg F	Avg Deg F	Tot Inches	Tot Inches
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TOP: Top of Pool = 403 Feet M.S.L.

Lake Fork Sampled on 5/14/2002

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May 2002



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FY2002 Fixed Monitoring Stations

Lower Sabine Basin

<i>SW</i>	<i>Segment</i>	<i>Station</i>	<i>Location</i>
4.10	0504	15658 (TB6N)	BAYOU SCIE AT LA SH 191
4.00	0504	10403 (TB8)	TOLEDO BEND RESERVOIR AT US 84
4.00	0504	15657 (TB6M)	TOLEDO BEND RESERVOIR SAN PATRICIA ARM AT LA SH191
4.00	0504	15656 (TB6L)	TOLEDO BEND RESERVOIR SAN MIGUEL ARM AT LA SH191
4.00	0504	15655 (TB6J)	TOLEDO BEND RESERVOIR PATROON BAYOU ARM AT SH 276
4.00	0504	15659 (TB6K)	TOLEDO BEND RESERVOIR LANANA ARM AT LA SH191
4.00	0504	10402 (TB6H)	TOLEDO BEND RESERVOIR AT SH 21
4.00	0504	10411 (TB6F)	TOLEDO BEND RESERVOIR IN SUNSHINE BAY AT FM 3121
4.00	0504	10407 (TB6CN)	TOLEDO BEND RESERVOIR IN SIX MILE BOAT LANE AT SH 87
4.00	0504	10404 (TB6A)	TOLEDO BEND RESERVOIR NEAR DAM IN RIVER CHANNEL
3.03	0503	10340 (BA4)	ANACOCO BAYOU AT LOUISIANA HWY 111
3.00	0503	10401 (TB6S)	SABINE RIVER BELOW TOLEDO BEND SPILLWAY
3.00	0503	10400 (TB6)	TAIL RACE CHANNEL AT FM 692 TB6
3.00	0503	10399 (SR5)	SABINE RIVER AT SH 63
3.00	0503	10398 (SR3)	SABINE RIVER AT US 190
2.00	0503	10397 (SR2)	SABINE RIVER AT SH 12

SABINE RIVER AUTHORITY OF TEXAS

Lower Basin Report

May 2002

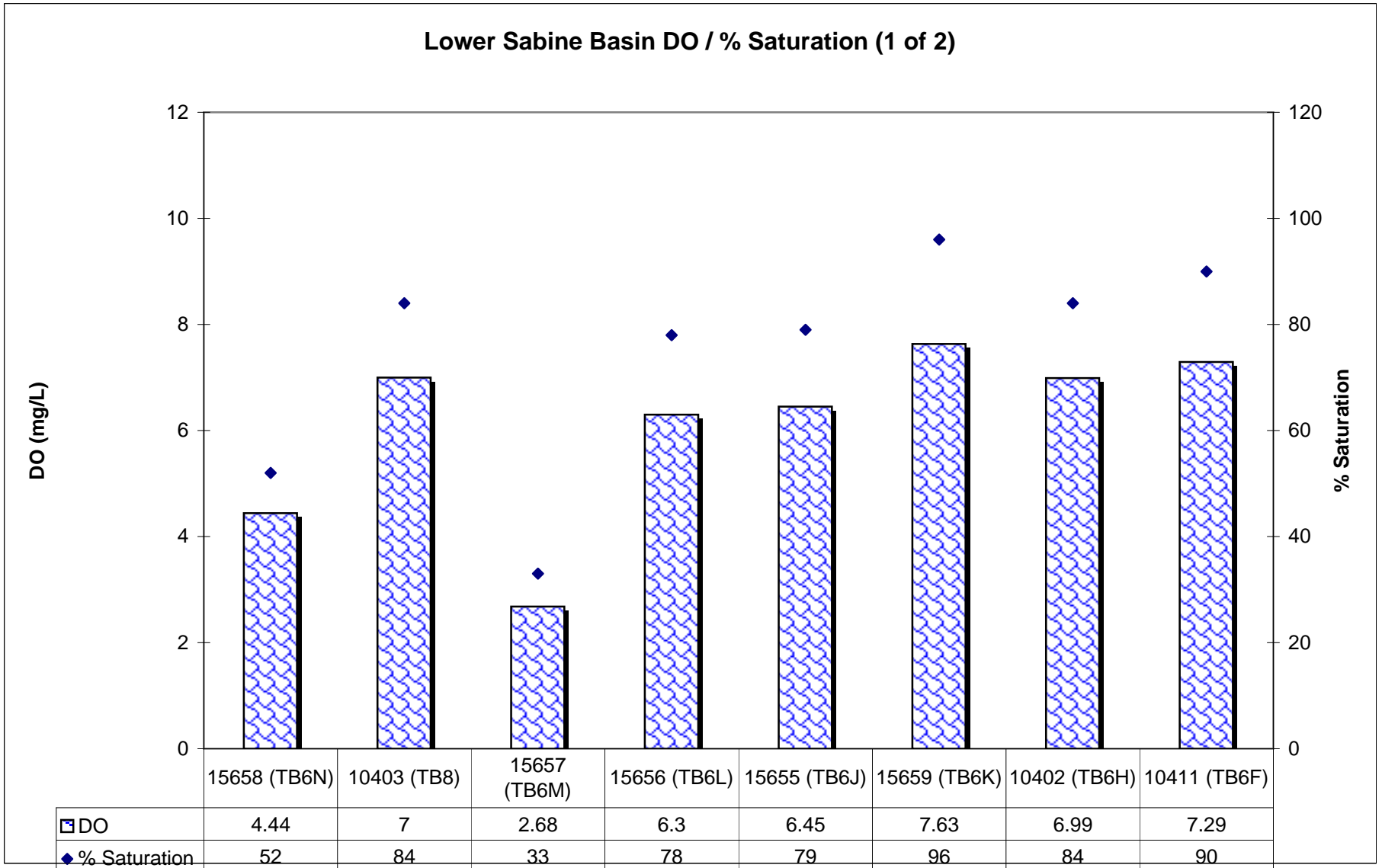
Date	SW ID	Station	Temperature °C 00010	pH Units 00400	DO mg/L 00300	% Saturation 00301	Conductivity µS/cm 00094	Salinity ppt 00480	Secchi Meters 00078	Turbidity NTU 82079	<i>E. coli</i> mpn/100ml 31699	Chlorophyll a µg/L 32211	Nitrate & Nitrite 00630	Ortho-Phosphate 00671	TOC mg/L 00680	Total Alkalinity 00410	Total Hardness 00900	Chloride mg/L 00940	Sulfate mg/L 00945
5/14/02 12:10 PM	4.10	15658 (TB6N)	23.8	7.11	4.44	52	384	*	0.5	16.7	21	*	0.06	0.22	13	130	64	37	15
5/15/02 11:36 AM	4.00	10403 (TB8)	24.6	7.1	7	84	196	*	0.32	35.8	20	*	0.43	< 0.04	7	30	48	19	19
5/14/02 12:30 PM	4.00	15657 (TB6M)	25.8	6.39	2.68	33	127	*	0.51	5.6	9	*	< 0.04	< 0.04	12	30	32	15	< 10
5/14/02 12:15 PM	4.00	15656 (TB6L)	25.7	6.79	6.3	78	123	*	0.38	13.2	12	*	< 0.04	< 0.04	11	20	32	13	< 10
5/14/02 10:15 AM	4.00	15655 (TB6J)	25.9	6.97	6.45	79	157	*	0.7	9.24	4	*	< 0.04	< 0.04	8	30	36	16	19
5/14/02 11:50 AM	4.00	15659 (TB6K)	26.5	7.27	7.63	96	141	*	0.78	6.84	3	*	< 0.04	< 0.04	8	20	36	15	17
5/14/02 10:55 AM	4.00	10402 (TB6H)	24.6	7.1	6.99	84	144	*	1.17	4.19	1	14	0.04	< 0.04	7	20	40	16	16
5/14/02 10:40 AM	4.00	10411 (TB6F)	25.8	7.21	7.29	90	121	*	0.73	5.16	8	11	< 0.04	< 0.04	6	20	36	12	13
5/14/02 9:40 AM	4.00	10407 (TB6CN)	25.4	6.8	6.72	82	122	*	0.86	5.81	2	*	< 0.04	< 0.04	8	20	32	12	14
5/15/02 10:15 AM	4.00	10404 (TB6A)	23.1	7.11	7.8	91	132	*	1.06	4.23	< 1	< 10	< 0.04	< 0.04	6	20	32	14	16
5/15/02 12:35 PM	3.03	10340 (BA4)	24.5	7.3	8.29	100	279	*	0.3	9.15	7	*	0.26	< 0.04	10	80	40	21	119
5/15/02 10:40 AM	3.00	10401 (TB6S)	15.7	6.86	9.37	94	136	*	*	3.06	3	*	0.11	< 0.04	6	20	32	14	16
5/15/02 10:55 AM	3.00	10400 (TB6)	20.1	6.7	6.24	69	131	*	> 1	3.63	2	*	0.1	< 0.04	6	20	32	14	16
5/15/02 12:10 PM	3.00	10399 (SR5)	22.7	7.01	8.01	93	127	*	*	5.35	9	*	0.05	< 0.04	6	20	32	14	15
5/15/02 12:55 PM	3.00	10398 (SR3)	24.4	7.08	8.32	100	144	*	0.51	10.7	4	*	0.08	< 0.04	5	30	28	13	19
5/15/02 8:25 AM	2.00	10397 (SR2)	24.7	6.82	7.16	86	128	*	0.36	18.3	< 1	*	0.05	< 0.04	5	30	32	12	17

*: Not sampled on this run

SABINE RIVER AUTHORITY OF TEXAS

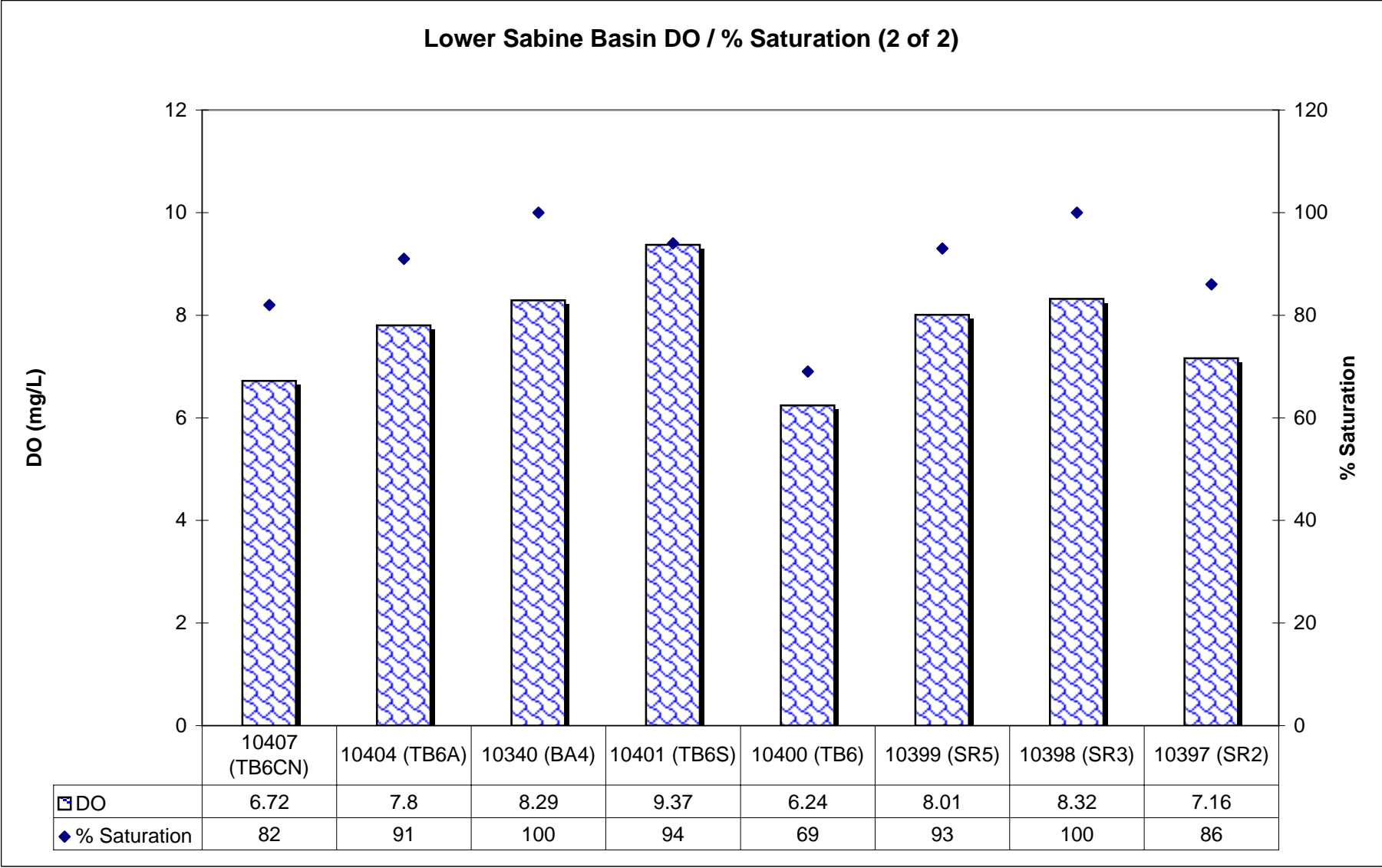
May 2002

Lower Sabine Basin DO / % Saturation (1 of 2)



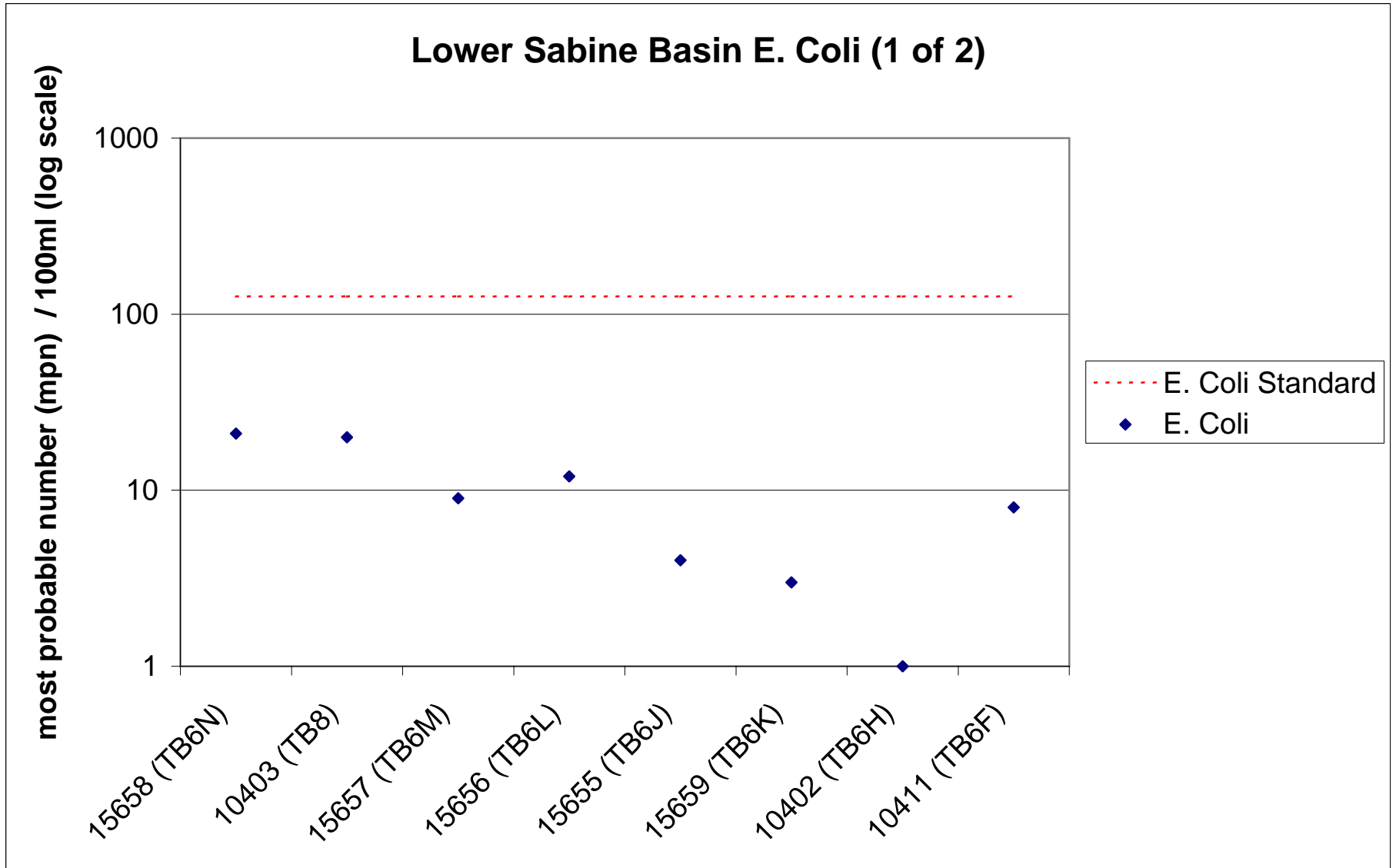
SABINE RIVER AUTHORITY OF TEXAS

May 2002



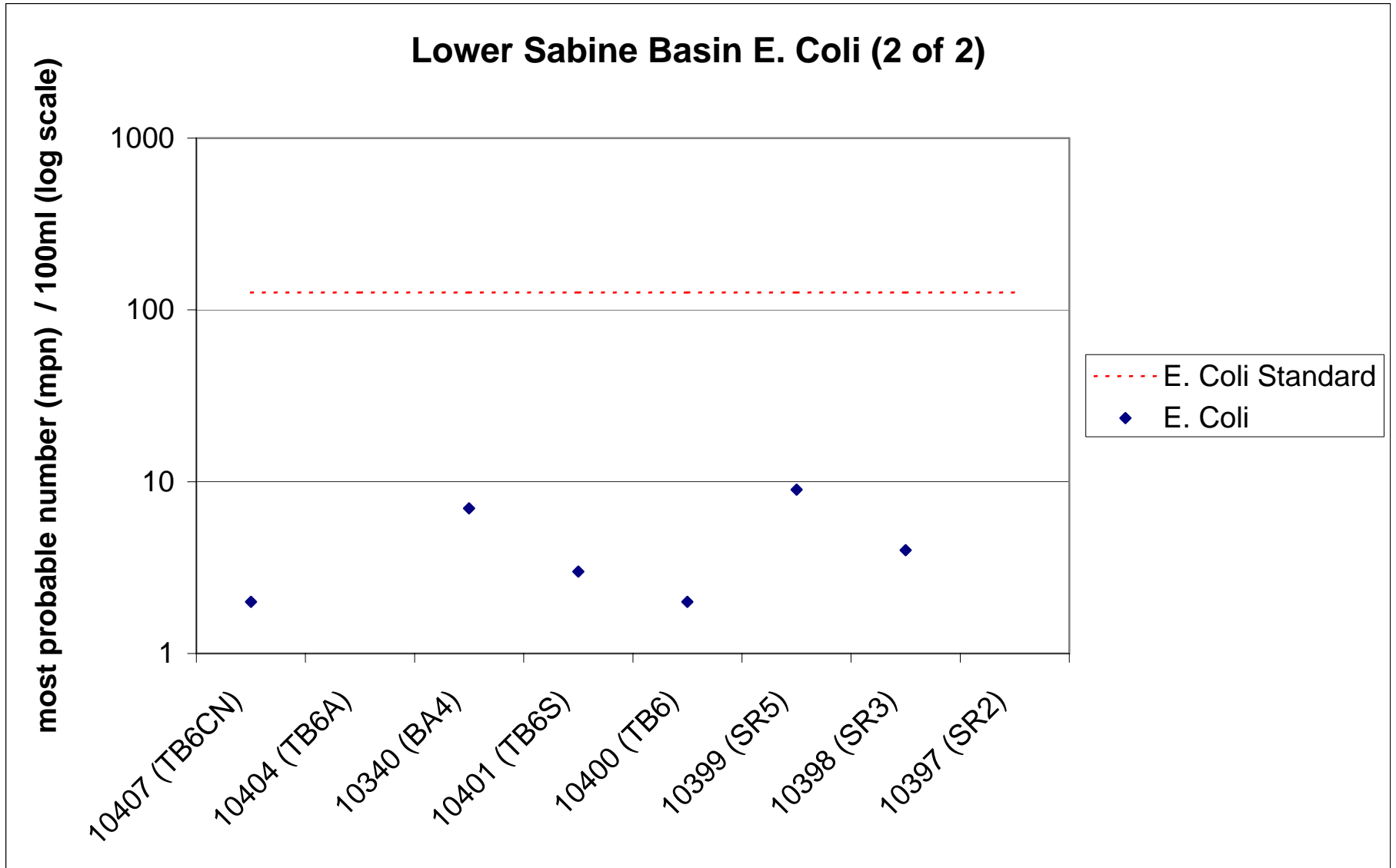
SABINE RIVER AUTHORITY OF TEXAS

May 2002



SABINE RIVER AUTHORITY OF TEXAS

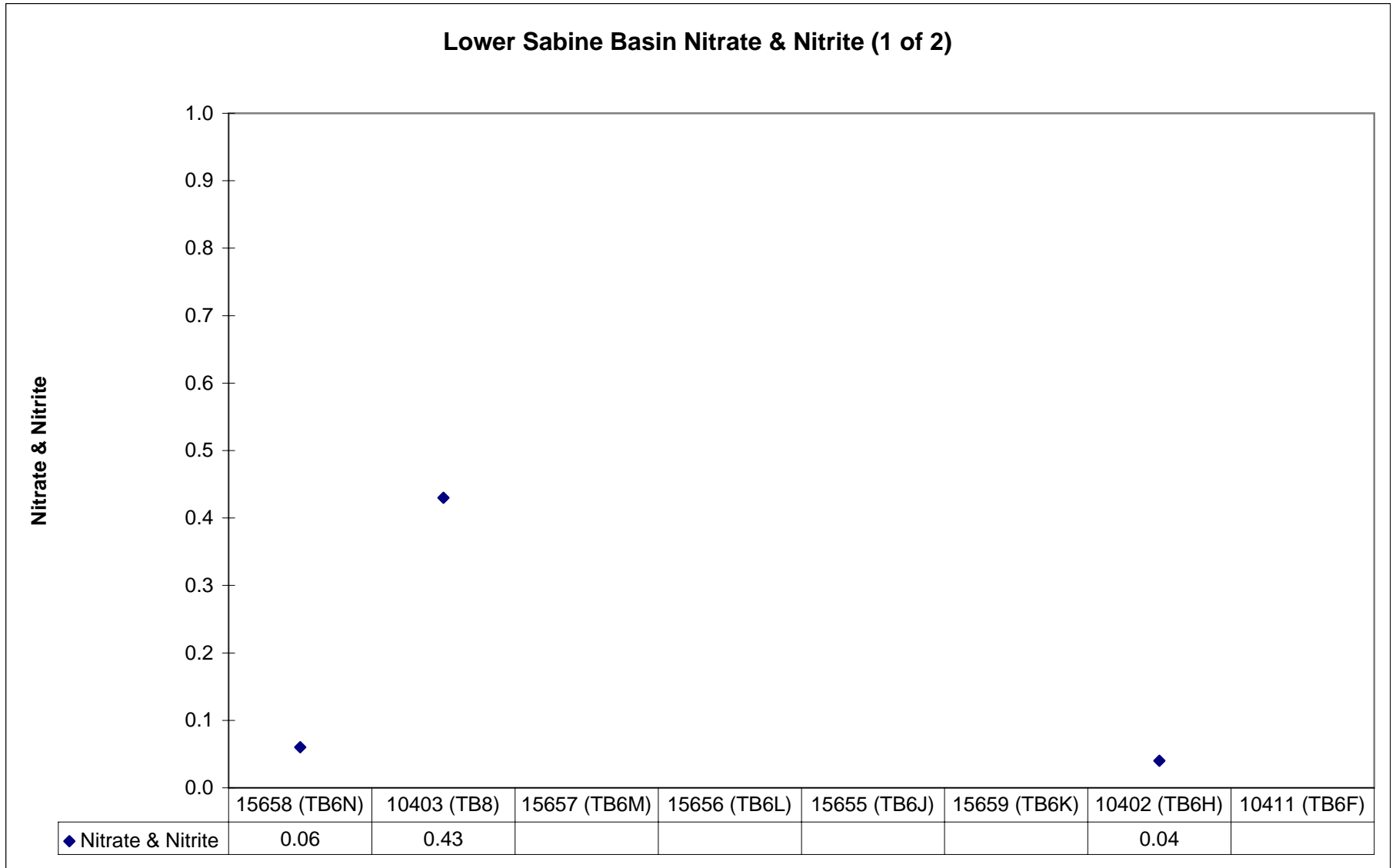
May 2002



Stations without values were below detection limit on this run (see page 18).

SABINE RIVER AUTHORITY OF TEXAS

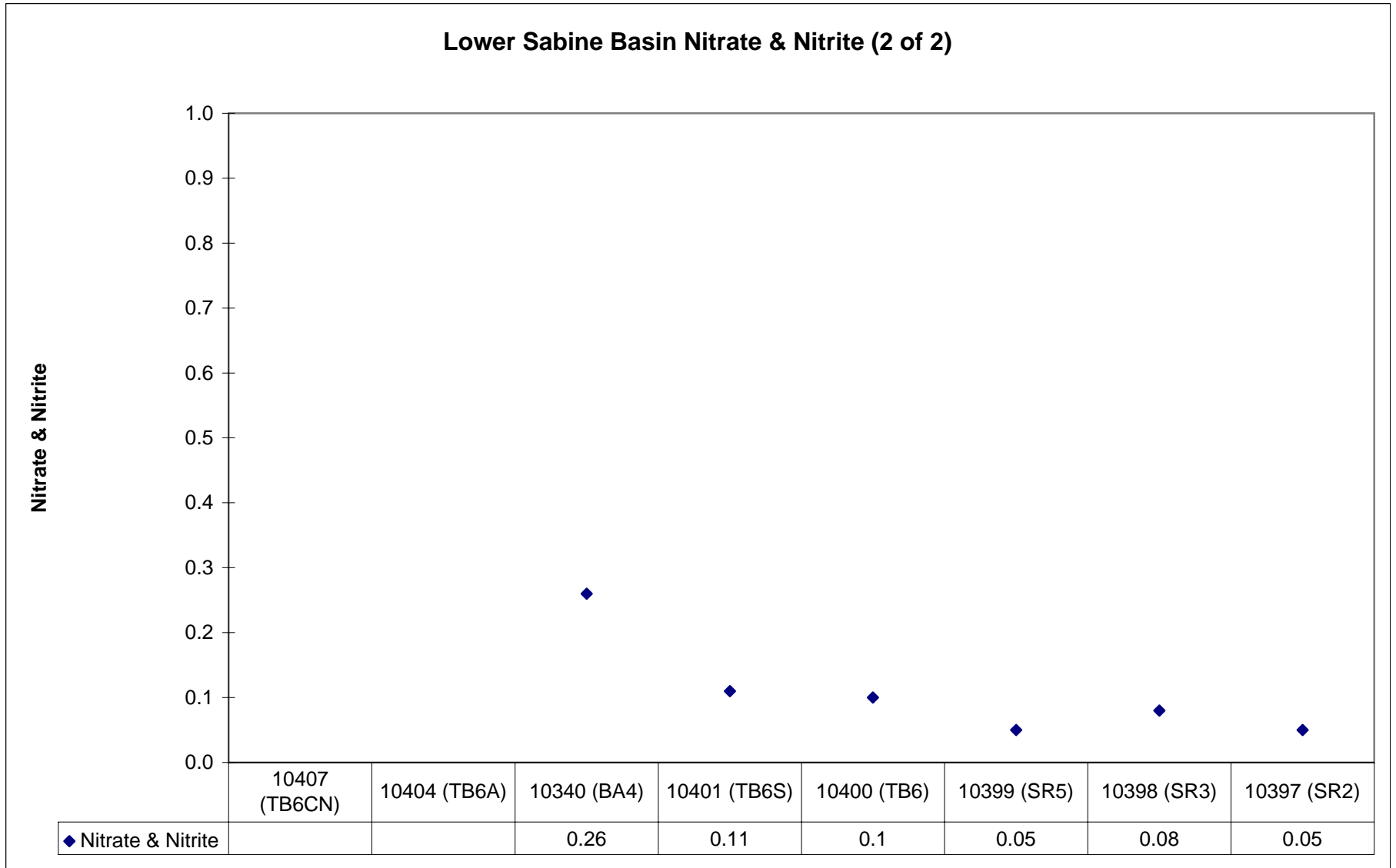
May 2002



Stations without values were below detection limit on this run (see page 18).

SABINE RIVER AUTHORITY OF TEXAS

May 2002



Stations without values were below detection limit on this run (see page 18)

SABINE RIVER AUTHORITY OF TEXAS

Lower Basin Profiles

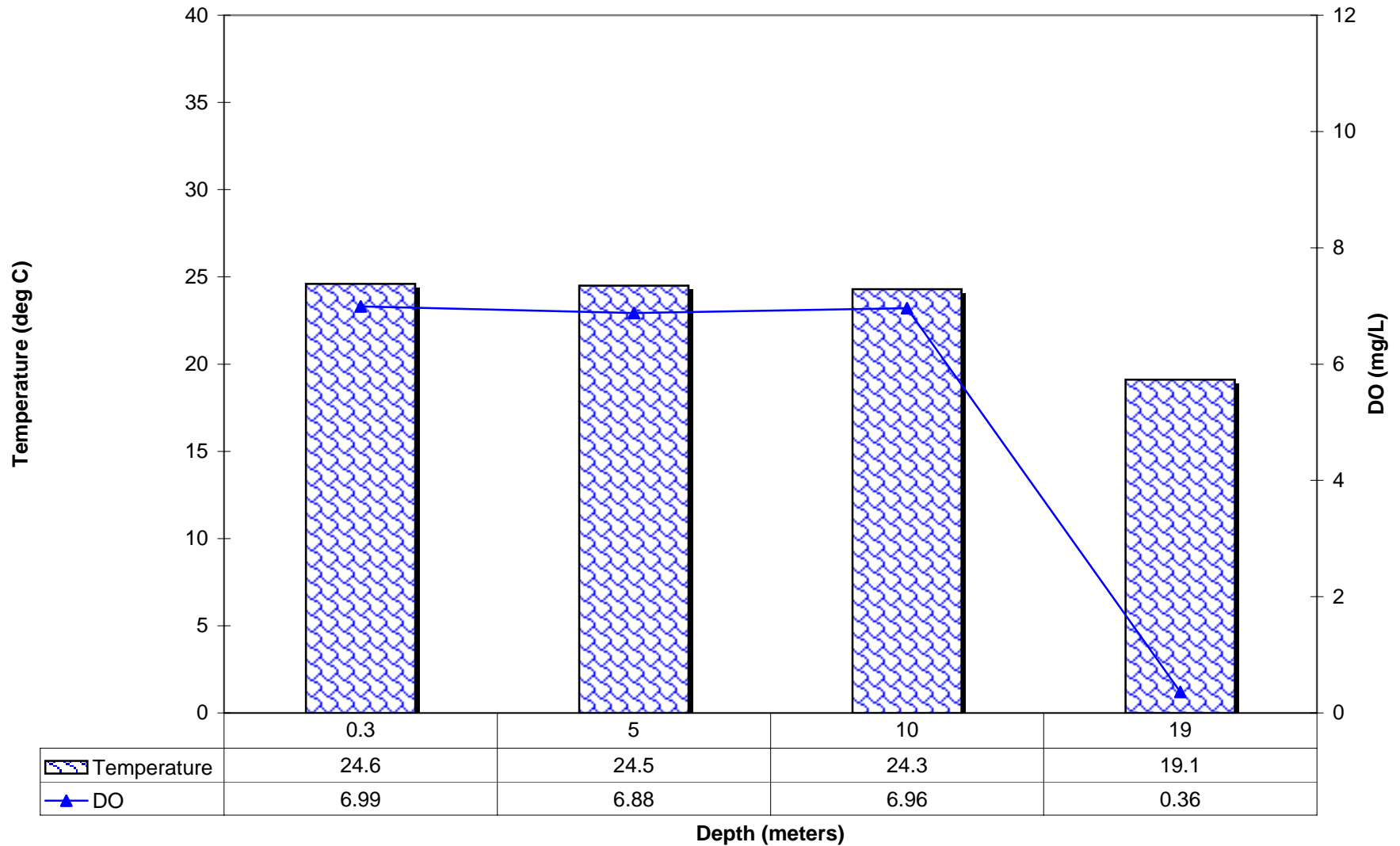
May 2002

Date	SW ID	Station	Depth Meters	Temperature	pH	DO	%	Conductivity
				°C 00010	Units 00400	mg/L 00300	Saturation 00301	µS/cm 00094
5/14/02 12:30 PM	4.00	15657 (TB6M)	0.3	25.8	6.39	2.68	33	127
			4.3	24.4	6.35	1.64	20	127
5/14/02 12:15 PM	4.00	15656 (TB6L)	0.3	25.7	6.79	6.3	78	123
			2.8	25.1	6.79	5.59	67	119
5/14/02 10:15 AM	4.00	15655 (TB6J)	0.3	25.9	6.97	6.45	79	157
			4.9	25.8	6.88	6.12	75	153
5/14/02 11:50 AM	4.00	15659 (TB6K)	0.3	26.5	7.27	7.63	96	141
			6	25.7	6.97	6.93	86	145
			9.5	22.3	6.69	0.51	5	170
5/14/02 10:55 AM	4.00	10402 (TB6H)	0.3	24.6	7.1	6.99	84	144
			5	24.5	7.05	6.88	83	144
			10	24.3	6.92	6.96	84	139
			19	19.1	6.52	0.36	4	170
5/14/02 10:40 AM	4.00	10411 (TB6F)	0.3	25.8	7.21	7.29	90	121
			2.5	25.8	7.14	7.38	90	123
			5.5	24.7	6.59	2.32	26	123
5/14/02 9:40 AM	4.00	10407 (TB6CN)	0.3	25.4	6.8	6.72	82	122
			3	23.2	6.68	6.6	81	117
			7.1	23.2	6.34	0.41	5	146
5/15/02 10:15 AM	4.00	10404 (TB6A)	0.3	23.1	7.11	7.8	91	132
			5	22.4	6.83	6.71	78	131
			10	19.6	6.54	4.5	49	134
			19	14.1	6.51	2.68	26	132
			25.4	13.6	6.58	1.82	17	139

SABINE RIVER AUTHORITY OF TEXAS

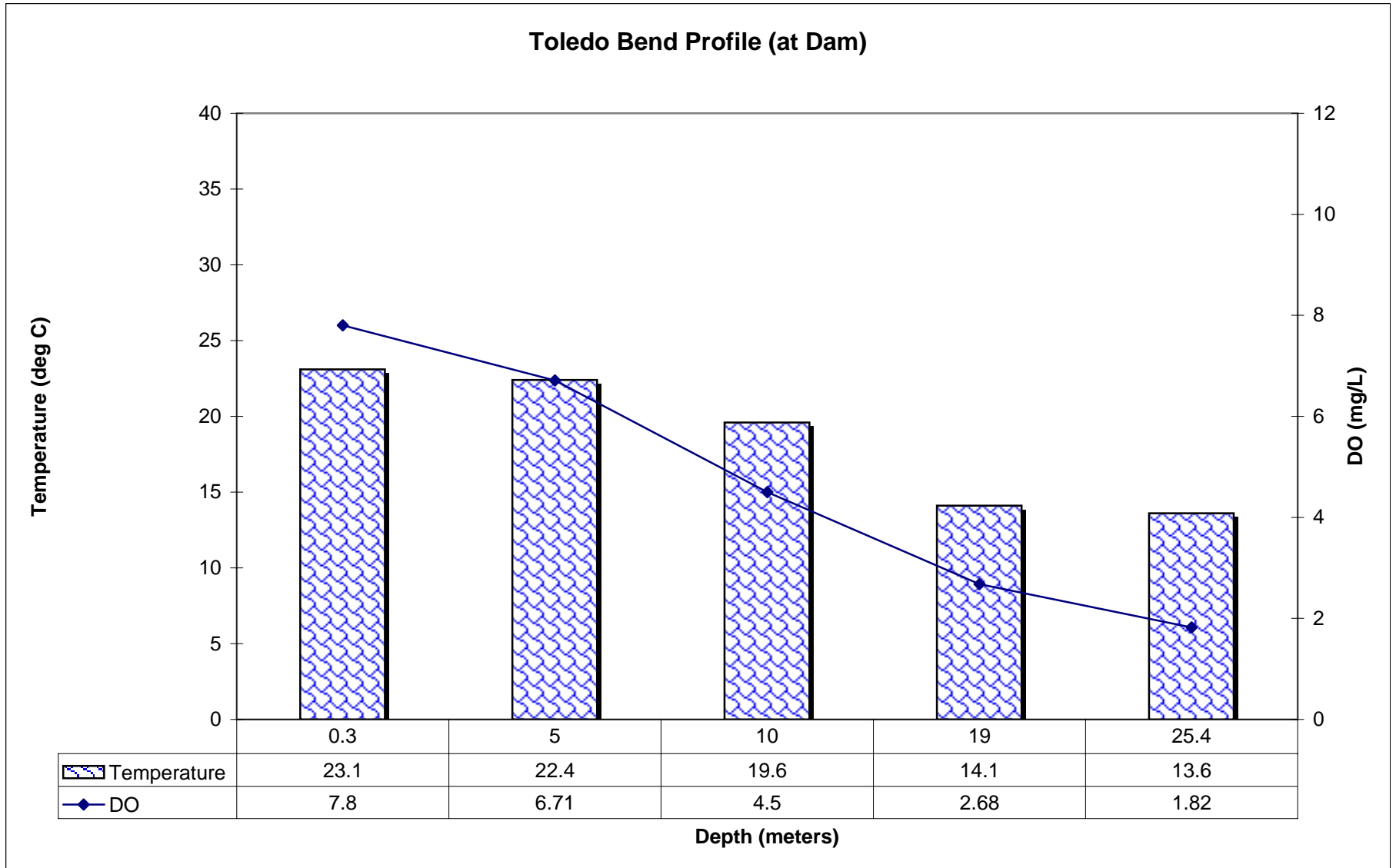
May 2002

Toledo Bend Profile (at Pendleton Bridge)



SABINE RIVER AUTHORITY OF TEXAS

May 2002



SABINE RIVER AUTHORITY OF TEXAS

Toledo Bend Weather and Reservoir Data

May 2002

Date	Lake Elev	LE - TOP	Max Temp	Min Temp	Rainfall	Evaporation	Daily Releases cfs	Daily Releases ac ft	Current Release
5/1/2002	171.67	(0.33)	90	71	0.00	0.34	1,969	3,905	144
5/2/2002	171.52	(0.48)	89	73	0.00	0.20	1,731	3,433	144
5/3/2002	171.63	(0.37)	91	73	0.00	NR	1,837	3,644	144
5/4/2002	171.76	(0.24)	90	68	0.00	0.19	1,585	3,144	174
5/5/2002	171.71	(0.29)	81	68	0.02	0.16	163	323	174
5/6/2002	171.64	(0.36)	90	68	0.00	0.14	1,702	3,376	144
5/7/2002	171.61	(0.39)	90	72	0.00	0.35	1,945	3,858	174
5/8/2002	171.65	(0.35)	90	70	0.00	0.11	1,894	3,757	174
5/9/2002	171.55	(0.45)	90	70	0.00	0.32	1,979	3,925	174
5/10/2002	171.66	(0.34)	90	68	0.00	0.27	1,954	3,876	174
5/11/2002	171.59	(0.41)	92	68	0.00	0.31	1,647	3,267	174
5/12/2002	171.54	(0.46)	90	69	0.00	0.15	174	345	174
5/13/2002	171.96	(0.04)	91	65	0.13	0.53	1,929	3,826	174
5/14/2002	171.64	(0.36)	75	50	0.19	NR	1,892	3,753	174
5/15/2002	171.63	(0.37)	79	51	0.00	0.30	1,967	3,901	174
5/16/2002	171.56	(0.44)	80	52	0.00	0.34	1,968	3,903	174
5/17/2002	171.54	(0.46)	90	62	0.00	0.30	1,967	3,901	144
5/18/2002	171.97	(0.03)	79	58	0.30	0.15	1,668	3,308	174
5/19/2002	171.76	(0.24)	70	46	0.00	0.21	174	345	174
5/20/2002	171.73	(0.27)	74	46	0.00	0.25	1,944	3,856	174
5/21/2002	171.74	(0.26)	79	48	0.00	0.28	1,926	3,820	174
5/22/2002	171.72	(0.28)	84	50	0.00	0.31	1,940	3,848	174
5/23/2002	171.60	(0.40)	84	54	0.00	NR	1,953	3,873	174
5/24/2002	171.73	(0.27)	82	55	0.00	0.24	1,938	3,844	174
5/25/2002	171.80	(0.20)	85	56	0.00	0.27	1,552	3,078	174
5/26/2002	171.80	(0.20)	89	65	0.00	0.22	174	345	174
5/27/2002	171.95	(0.05)	91	63	0.62	NR	174	345	174
5/28/2002	171.89	(0.11)	88	63	0.00	0.32	1,922	3,812	174
5/29/2002	171.92	(0.08)	84	64	0.03	0.17	1,905	3,779	144
5/30/2002	171.98	(0.02)	80	64	0.22	0.19	1,841	3,652	144
5/31/2002	172.02	0.02	79	64	0.23	0.11	1,986	3,939	174
Avg or Tot	171.72	(0.28)	85	62	1.74	6.73	1,594	97,981	

Units	Avg Feet M.S.L.	Avg Feet	Avg Deg. F	Avg Deg. F	Tot Inches	Tot Inches	Avg cfs	Tot Ac. Ft.	cfs
									approx. 8:00 a.m.

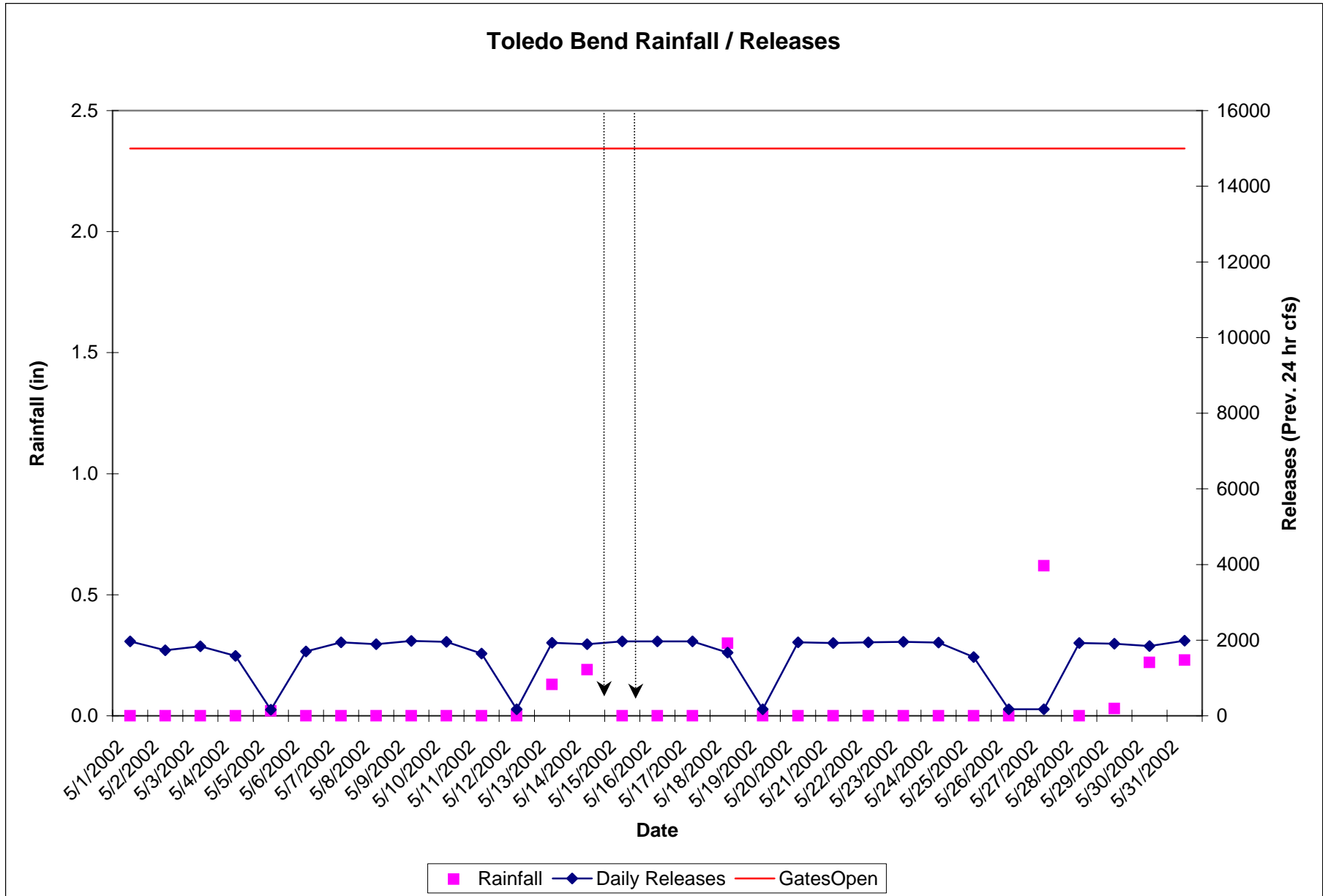
TOP: Top of Pool = 172 Feet M.S.L.

NR: Not Recorded

Toledo Bend Sampled on 5/14/2002 and 5/15/2002

SABINE RIVER AUTHORITY OF TEXAS

May 2002



Toledo Bend sampled on 5/14/2002 and 5/15/2002

Flood gates open when flow greater than approximately 15,000 cfs

SABINE RIVER AUTHORITY OF TEXAS

Burkeville Weather and River Data

May 2002

Date	<i>Rainfall</i>	<i>Gauge Height</i>	<i>GH - FS</i>	<i>Flow</i>
5/1/2002	0.00	18.47	(19.53)	3,763
5/2/2002	0.00	15.87	(22.13)	1,713
5/3/2002	0.00	15.65	(22.35)	1,568
5/4/2002	0.00	15.51	(22.49)	1,479
5/5/2002	0.00	15.25	(22.75)	1,321
5/6/2002	0.00	12.89	(25.11)	281
5/7/2002	0.00	15.69	(22.31)	1,594
5/8/2002	0.00	15.57	(22.43)	1,517
5/9/2002	0.00	15.70	(22.30)	1,601
5/10/2002	0.00	15.74	(22.26)	1,627
5/11/2002	0.00	16.25	(21.75)	1,977
5/12/2002	0.00	15.87	(22.13)	1,713
5/13/2002	OUT	OUT	OUT	OUT
5/14/2002	0.28	16.32	(21.68)	2,027
5/15/2002	0.01	16.50	(21.50)	2,160
5/16/2002	0.00	16.33	(21.67)	2,035
5/17/2002	0.00	16.27	(21.73)	1,991
5/18/2002	0.24	16.31	(21.69)	2,020
5/19/2002	0.00	15.88	(22.12)	1,719
5/20/2002	0.00	13.38	(24.62)	437
5/21/2002	0.00	16.16	(21.84)	1,912
5/22/2002	0.01	16.17	(21.83)	1,919
5/23/2002	0.00	16.18	(21.82)	1,927
5/24/2002	0.00	16.00	(22.00)	1,801
5/25/2002	0.00	15.93	(22.07)	1,753
5/26/2002	0.00	15.76	(22.24)	1,640
5/27/2002	0.20	13.43	(24.57)	455
5/28/2002	0.00	13.25	(24.75)	392
5/29/2002	0.00	16.20	(21.80)	1,941
5/30/2002	0.01	16.22	(21.78)	1,955
5/31/2002	0.01	16.19	(21.81)	1,934
Avg or Tot	0.76	15.70	(22.30)	1,672

	Tot	Avg	Avg	Avg
Units	Inches	Feet	Feet	cfs

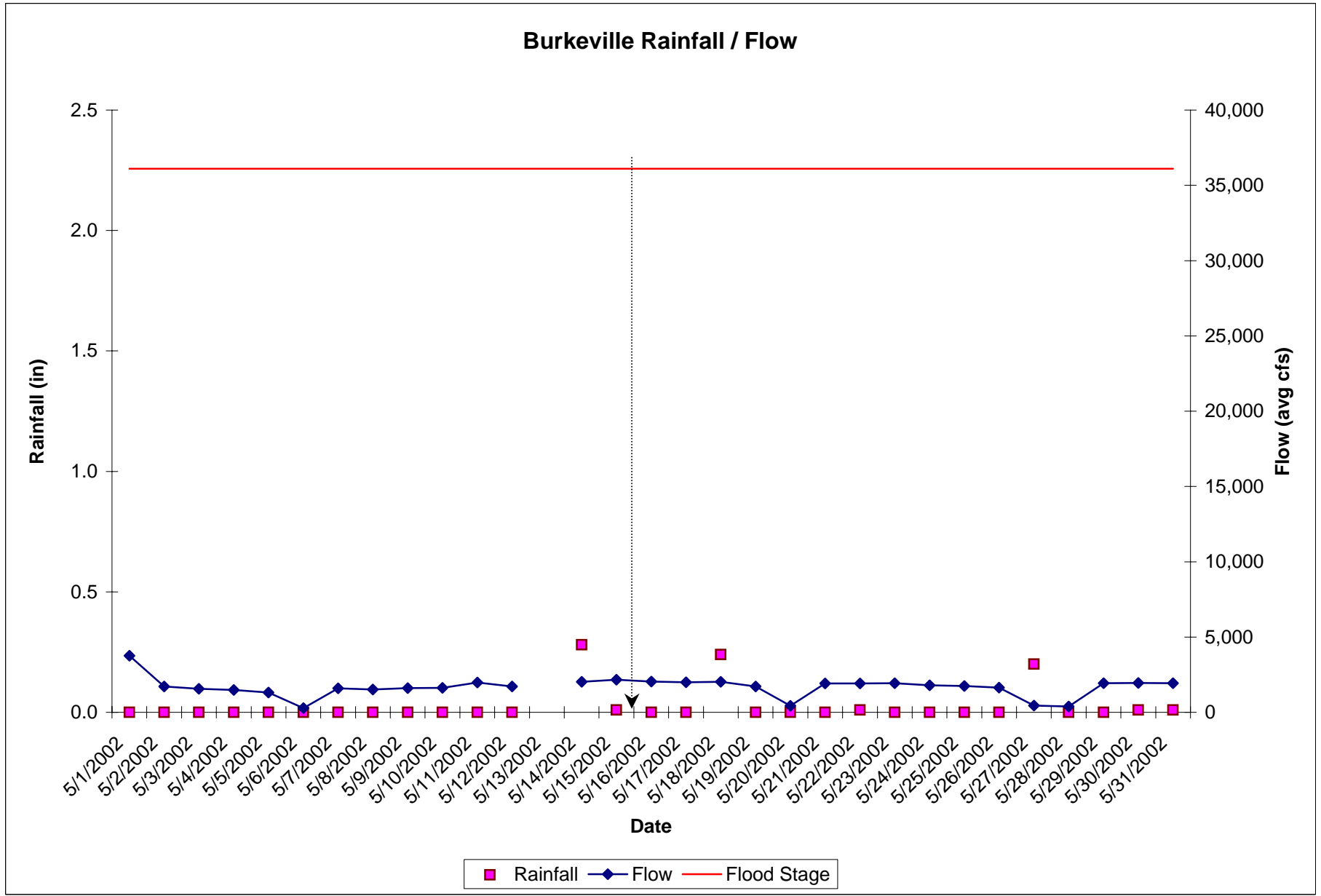
FS: Flood Stage = 41 feet

OUT: Gage Out

Lower Sabine Basin Sampled on 5/15/2002

SABINE RIVER AUTHORITY OF TEXAS

May 2002



Flood stage flow of 36,100 cfs calculated from flood stage gage height, 38 ft msl.

SABINE RIVER AUTHORITY OF TEXAS

Bon Wier Weather and River Data

May 2002

Date	<i>Gauge Height</i>	<i>GH - FS</i>	<i>Flow Avg</i>	<i>308 Rainfall</i>
5/1/2002	20.76	(9.24)	7,593	0.00
5/2/2002	17.51	(12.49)	3,942	0.00
5/3/2002	15.79	(14.21)	2,454	0.00
5/4/2002	15.52	(14.48)	2,250	0.00
5/5/2002	15.44	(14.56)	2,190	0.00
5/6/2002	15.60	(14.40)	2,310	0.00
5/7/2002	13.91	(16.09)	1,200	0.00
5/8/2002	15.40	(14.60)	2,161	0.00
5/9/2002	15.46	(14.54)	2,205	0.00
5/10/2002	15.42	(14.58)	2,176	0.00
5/11/2002	15.42	(14.58)	2,176	0.00
5/12/2002	15.30	(14.70)	2,089	0.00
5/13/2002	15.14	(14.86)	1,976	0.00
5/14/2002	13.69	(16.31)	1,079	0.00
5/15/2002	15.32	(14.68)	2,103	0.00
5/16/2002	15.38	(14.62)	2,146	0.00
5/17/2002	15.41	(14.59)	2,168	0.00
5/18/2002	15.43	(14.57)	2,182	0.00
5/19/2002	15.35	(14.65)	2,125	0.00
5/20/2002	15.16	(14.84)	1,990	0.00
5/21/2002	13.62	(16.38)	1,042	0.00
5/22/2002	15.25	(14.75)	2,053	0.00
5/23/2002	15.29	(14.71)	2,082	0.00
5/24/2002	15.20	(14.80)	2,018	0.00
5/25/2002	15.18	(14.82)	2,004	0.00
5/26/2002	15.15	(14.85)	1,983	0.00
5/27/2002	14.94	(15.06)	1,838	0.00
5/28/2002	13.46	(16.54)	960	0.00
5/29/2002	13.26	(16.74)	862	0.00
5/30/2002	15.15	(14.85)	1,983	0.00
5/31/2002	15.23	(14.77)	2,039	0.00
Avg or Tot	15.29	(14.71)	2,174	0.00

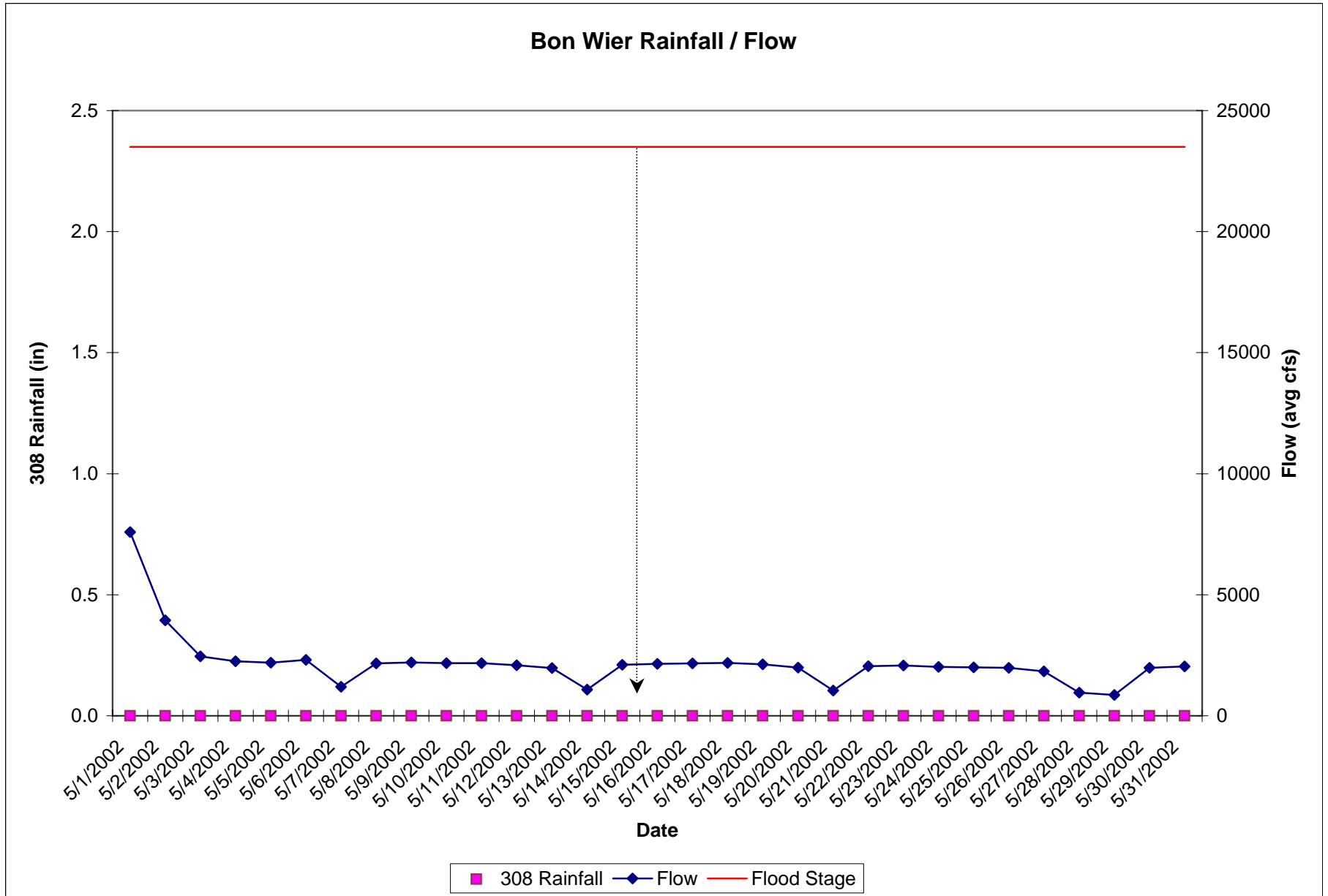
Units	Avg Feet	Avg Feet	Avg	Tot Inches
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FS: Flood Stage = 30 feet

Lower Sabine Basin Sampled on 5/15/2002

SABINE RIVER AUTHORITY OF TEXAS

May 2002



Lower Sabine Basin sampled on 5/15/2002

Flood stage flow of 23,500 cfs calculated from flood stage gage height, 30 ft msl.

SABINE RIVER AUTHORITY OF TEXAS

Ruliff Weather and River Data

May 2002

Date	<i>Gauge Height</i>	<i>GH - FS</i>	<i>Flow cfs</i>	<i>Flow acft</i>	<i>Flow avg</i>	<i>309 Rainfall</i>
5/1/2002	23.20	(0.80)	11,600	23,008	11,600	0.00
5/2/2002	22.91	(1.09)	10,226	20,283	10,913	0.00
5/3/2002	22.61	(1.39)	9,205	18,258	10,344	0.00
5/4/2002	21.80	(2.20)	7,231	14,342	9,566	0.00
5/5/2002	20.48	(3.52)	5,271	10,455	8,707	0.00
5/6/2002	19.64	(4.36)	4,224	8,378	7,960	0.00
5/7/2002	18.90	(5.10)	3,529	7,000	7,327	0.00
5/8/2002	17.78	(6.22)	2,783	5,520	6,759	0.00
5/9/2002	17.94	(6.06)	2,882	5,716	6,328	0.00
5/10/2002	18.60	(5.40)	3,321	6,587	6,027	0.00
5/11/2002	18.81	(5.19)	3,466	6,875	5,794	0.00
5/12/2002	18.66	(5.34)	3,362	6,668	5,592	0.00
5/13/2002	18.62	(5.38)	3,334	6,613	5,418	0.01
5/14/2002	18.31	(5.69)	3,124	6,196	5,254	0.00
5/15/2002	17.25	(6.75)	2,464	4,887	5,068	0.00
5/16/2002	17.46	(6.54)	2,589	5,135	4,913	0.00
5/17/2002	18.05	(5.95)	2,952	5,855	4,798	0.00
5/18/2002	18.31	(5.69)	3,124	6,196	4,705	0.80
5/19/2002	18.59	(5.41)	3,314	6,573	4,632	0.01
5/20/2002	18.38	(5.62)	3,171	6,290	4,559	0.00
5/21/2002	18.12	(5.88)	2,998	5,946	4,484	0.00
5/22/2002	16.99	(7.01)	2,314	4,590	4,386	0.00
5/23/2002	17.27	(6.73)	2,476	4,911	4,303	0.00
5/24/2002	18.08	(5.92)	2,972	5,895	4,247	0.00
5/25/2002	18.05	(5.95)	2,952	5,855	4,195	0.00
5/26/2002	18.15	(5.85)	3,018	5,986	4,150	0.15
5/27/2002	18.18	(5.82)	3,038	6,026	4,109	0.00
5/28/2002	17.76	(6.24)	2,770	5,494	4,061	0.00
5/29/2002	16.58	(7.42)	2,100	4,165	3,993	0.00
5/30/2002	15.59	(8.41)	1,652	3,277	3,915	0.15
5/31/2002	16.77	(7.23)	2,198	4,360	3,860	0.81
Avg or Tot	18.64	(5.36)	3,860	237,340		1.93

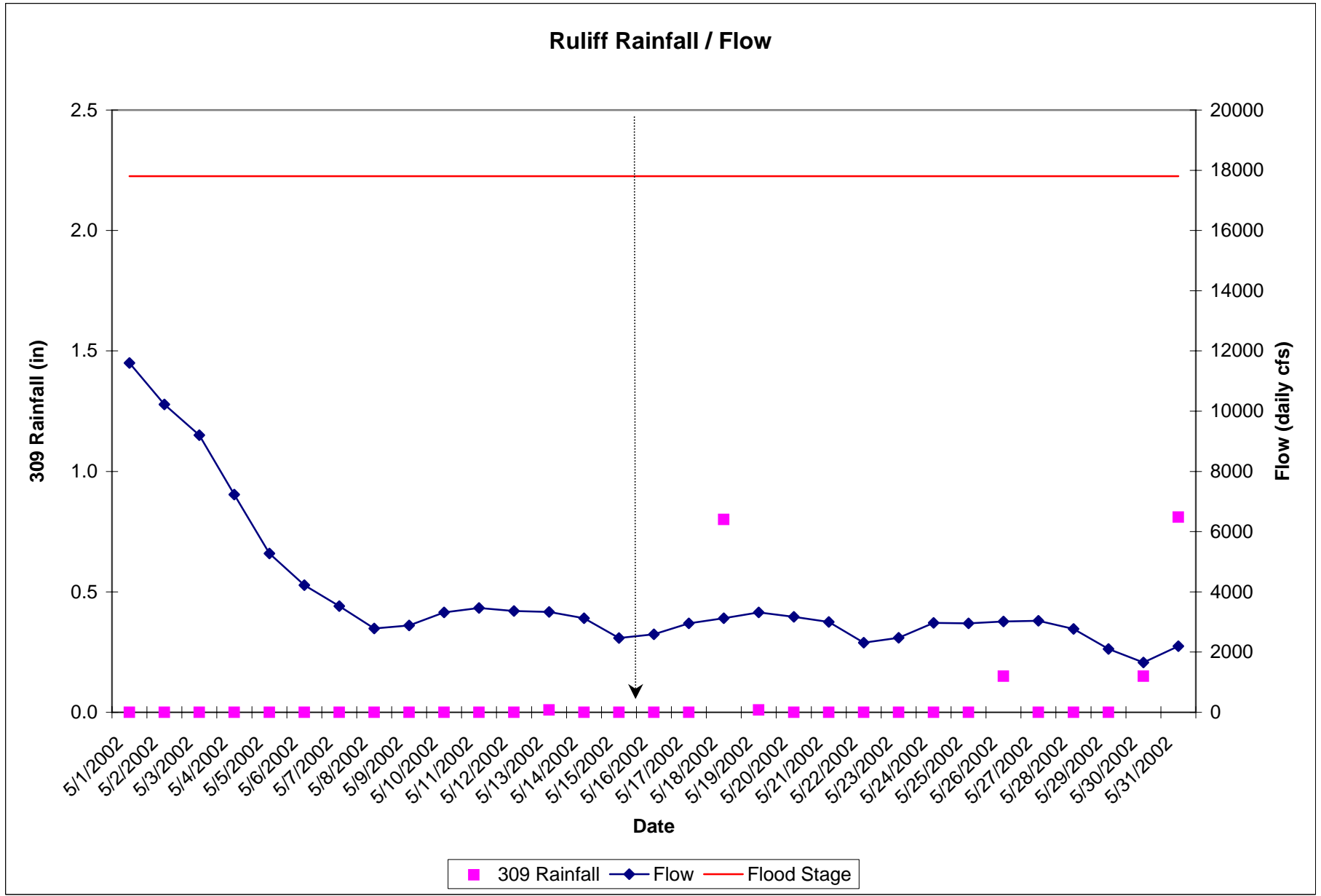
Units	Avg Feet	Avg Feet	Avg cfs	Tot ac ft	Tot Inches
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FS: Flood Stage 24 feet with 10 foot datum

Lower Sabine Basin Sampled on 5/15/2002

SABINE RIVER AUTHORITY OF TEXAS

May 2002



Lower Sabine Basin sampled on 5/15/2002

Flood stage flow of 17,800 cfs calculated from flood stage gage height, 24 ft msl.

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FY2002 Fixed Monitoring Stations

Tidal Sabine Basin

<i>SW</i>	<i>Segment</i>	<i>Station</i>	<i>Location</i>
1.05	0501	15653 (ICW1)	INTERCOASTAL WATERWAY AT PERRY RIDGE
1.01	0501	15654 (BB1)	BLACK BAYOU IN CAMERON PARISH
1.00	0501	10395 (SR1)	SABINE RIVER 12.00 KM UPSTREAM OF IH 10
1.00	0501	10394 (SRT2)	SABINE RIVER AT IH 10
1.00	0501	10391 (SRT1)	SABINE RIVER AT CHANNEL CAN 3

SABINE RIVER AUTHORITY OF TEXAS

Tidal Report

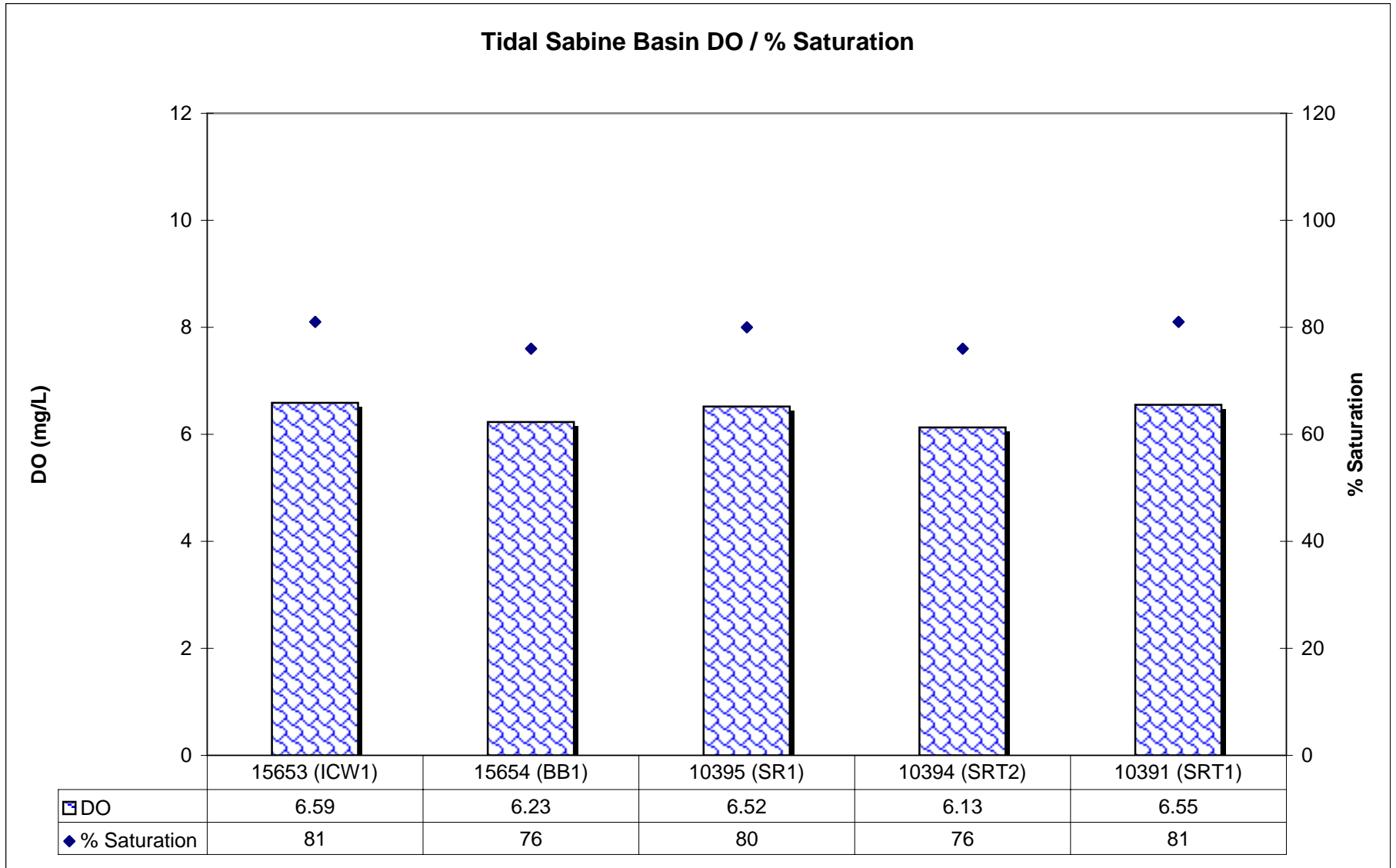
May 2002

Date	SW ID	Station	Temperature °C 00010	pH Units 00400	DO mg/L 00300	% Saturation 00301	Conductivity µS/cm 00094	Salinity ppt 00480	Secchi Meters 00078	Turbidity NTU 82079	<i>E. coli</i> mpn/100ml 31699	<i>Enterococcus</i> mpn/100ml 31701	Chlorophyll a µg/L 32211	Nitrate & Nitrite 00630	Ortho- Phosphate 00671	TOC mg/L 00680	Total Alkalinity 00410	Total Hardness 00900	Chloride mg/L 00940	Sulfate mg/L 00945
5/16/02 10:15 AM	1.05	15653 (ICW1)	25.8	6.99	6.59	81	422	< 1	0.39	18.5	*	1	*	0.05	< 0.04	7	30	52	58	25
5/16/02 10:40 AM	1.01	15654 (BB1)	24.8	6.96	6.23	76	3167	2	0.41	16.7	*	5	*	0.06	< 0.04	7	40	304	900	135
5/16/02 9:25 AM	1.00	10395 (SR1)	25.5	6.87	6.52	80	190	*	0.38	19.3	5	*	*	0.05	< 0.04	5	30	32	13	27
5/16/02 9:50 AM	1.00	10394 (SRT2)	26	6.79	6.13	76	162	< 1	0.5	14.6	*	13	*	0.07	< 0.04	6	30	32	14	20
5/16/02 10:50 AM	1.00	10391 (SRT1)	25.9	7.1	6.55	81	3220	2	0.41	16.4	*	5	*	0.07	< 0.04	6	40	320	920	141

*: Not sampled on this run

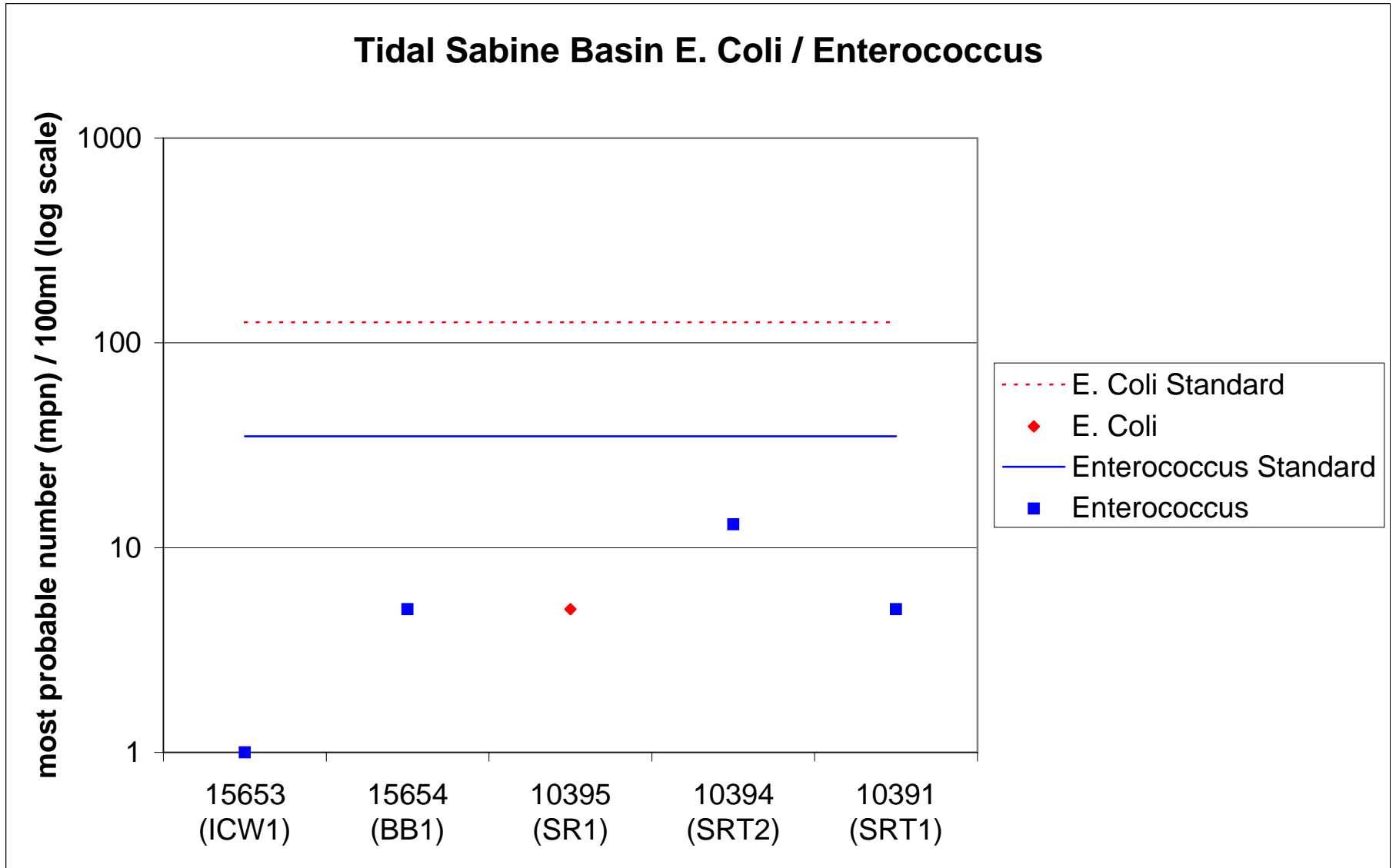
SABINE RIVER AUTHORITY OF TEXAS

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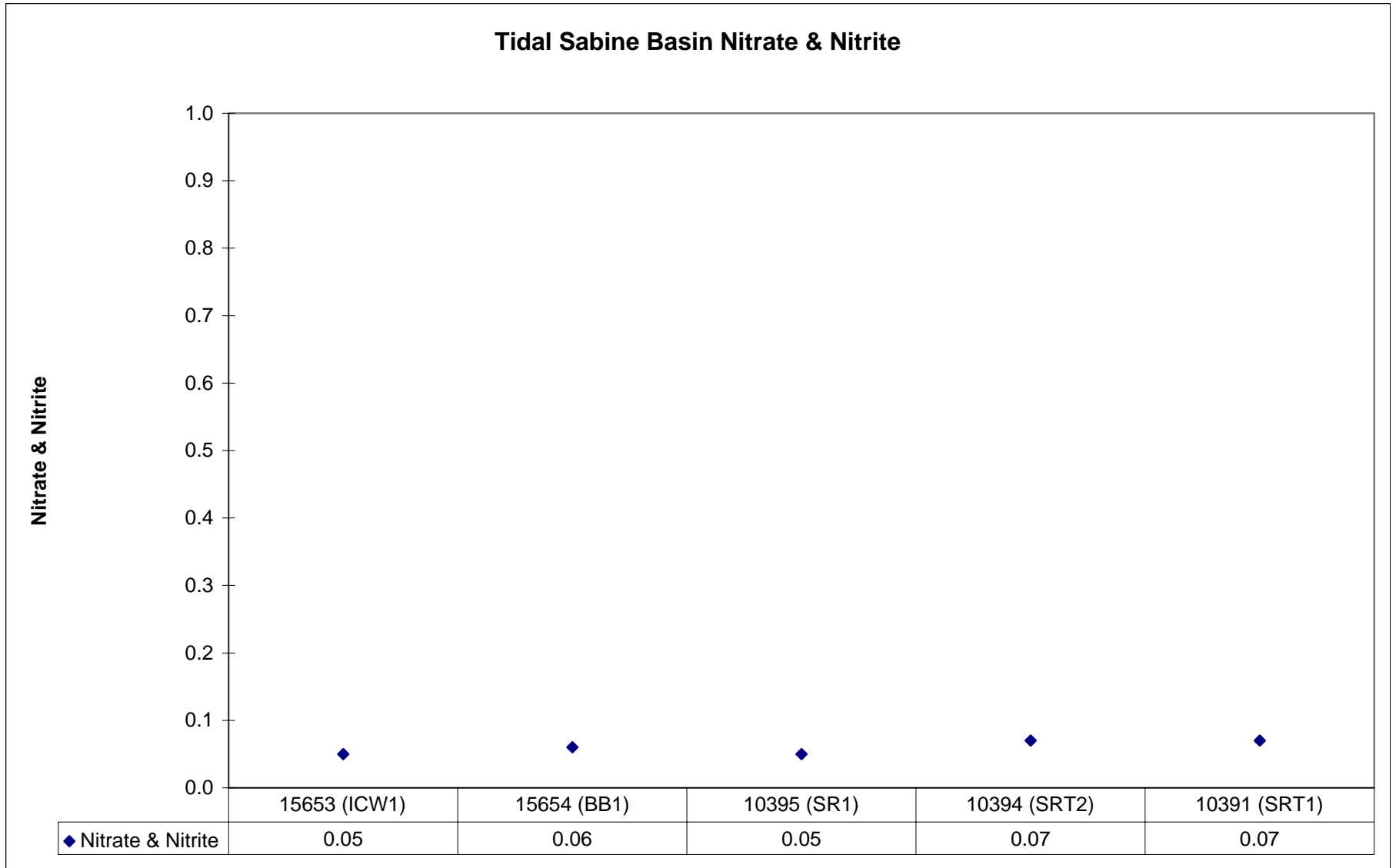
May 2002



Stations without values were not sampled on this run (see page 38).

SABINE RIVER AUTHORITY OF TEXAS

May 2002



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Tidal Profiles

May 2002

Date	SW ID	Station	Depth Meters	Temperature	pH	DO	%	Conductivity	Salinity
				°C 00010	Units 00400	mg/L 00300	Saturation 00301	µS/cm 00094	ppt 00480
5/16/02 10:15 AM	1.05	15653 (ICW1)	0.3	25.8	6.99	6.59	81	422	< 1
			6.3	25.5	6.95	6.27	76	432	< 1
5/16/02 10:40 AM	1.01	15654 (BB1)	0.3	24.8	6.96	6.23	76	3167	2
			3	24.8	6.96	6.05	74	3176	2
5/16/02 9:50 AM	1.00	10394 (SRT2)	0.3	26	6.79	6.13	76	162	< 1
			5	25.9	6.7	5.76	71	161	< 1
			10.8	25.8	6.64	5.63	69	155	< 1
5/16/02 10:50 AM	1.00	10391 (SRT1)	0.3	25.9	7.1	6.55	81	3220	2
			4	25.5	7.15	6.37	79	4315	2
			8.8	25.9	7.25	6.04	77	9738	5

SABINE RIVER AUTHORITY OF TEXAS

Orange Weather and River Data

May 2002

Date	310 (Orange) Rainfall	Gauge Height	GH - FS	Max Temp	Min Temp	Cur Temp	293 (GCD) Rainfall
5/1/2002	0.00	1.97	(2.03)	85	71	77	0.00
5/2/2002	0.00	2.09	(1.91)	85	77	77	0.00
5/3/2002	0.00	1.81	(2.19)	88	76	76	0.00
5/4/2002	0.00	1.69	(2.31)	89	76	77	0.00
5/5/2002	0.00	1.68	(2.32)	88	72	72	0.00
5/6/2002	0.00	2.37	(1.63)	88	71	75	0.00
5/7/2002	0.00	2.57	(1.43)	87	73	78	0.00
5/8/2002	0.00	2.80	(1.20)	87	76	76	0.00
5/9/2002	0.00	2.99	(1.01)	86	76	77	0.00
5/10/2002	0.00	2.25	(1.75)	87	74	74	0.00
5/11/2002	0.00	2.34	(1.66)	90	72	73	0.00
5/12/2002	0.00	2.62	(1.38)	87	73	77	0.00
5/13/2002	0.01	2.28	(1.72)	87	67	67	0.07
5/14/2002	0.01	0.45	(3.55)	76	56	56	0.00
5/15/2002	0.00	1.45	(2.55)	79	54	54	0.00
5/16/2002	0.00	1.85	(2.15)	83	54	65	0.00
5/17/2002	0.04	1.80	(2.20)	85	65	76	0.01
5/18/2002	0.78	1.04	(2.96)	77	62	62	0.90
5/19/2002	0.01	0.44	(3.56)	63	47	47	0.01
5/20/2002	0.00	1.35	(2.65)	76	47	48	0.00
5/21/2002	0.00	1.81	(2.19)	77	48	52	0.00
5/22/2002	0.00	2.15	(1.85)	81	52	56	0.00
5/23/2002	0.00	2.33	(1.67)	80	56	58	0.00
5/24/2002	0.00	2.33	(1.67)	81	57	63	0.00
5/25/2002	0.00	2.21	(1.79)	82	63	67	0.00
5/26/2002	0.02	1.89	(2.11)	85	67	68	0.02
5/27/2002	0.00	1.75	(2.25)	88	66	66	0.00
5/28/2002	0.00	1.40	(2.60)	86	66	67	0.00
5/29/2002	0.00	1.54	(2.46)	83	64	64	0.00
5/30/2002	0.02	1.37	(2.63)	85	64	68	0.05
5/31/2002	1.30	1.40	(2.60)	82	65	66	0.47
Avg or Tot	2.19	1.87	(2.13)	83	65	67	1.53

Units	Tot Inches	Avg Feet	Avg Feet	Avg Deg F	Avg Deg F	Avg Deg F	Tot Inches
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Appx. 8 am

310 Rainfall: Old Navy Base, City of Orange

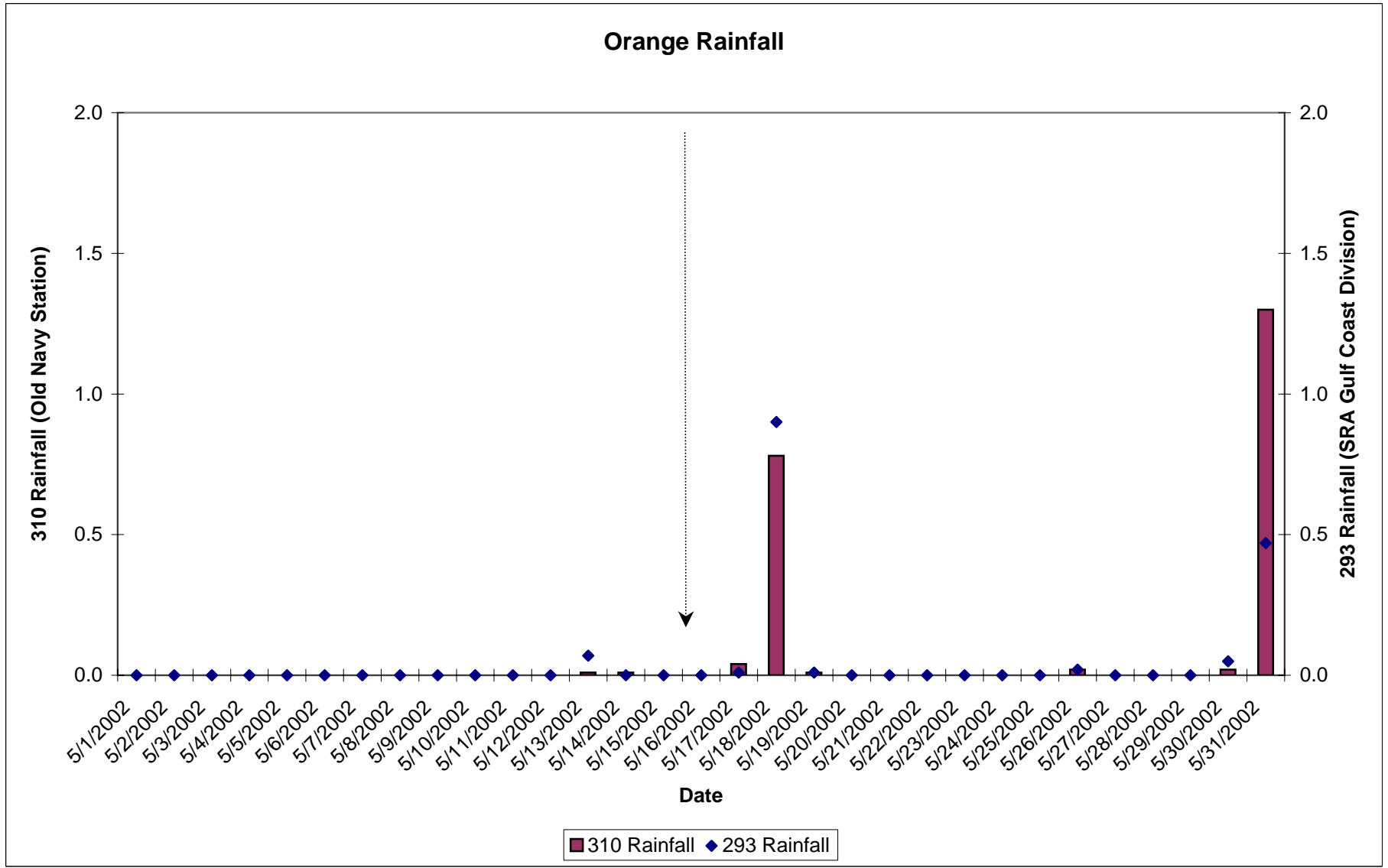
293: SRA Gulf Coast Division Office, Northern Orange County

FS: Flood Stage = 4 Feet

Tidal Sabine Basin Sampled on 5/16/2002

SABINE RIVER AUTHORITY OF TEXAS

May 2002



Tidal Sabine Basin Sampled on 5/16/2002