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NAS PENSACOLA
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NOVEMBER 1995 MONTHLY OPERATION AND MAINTENANCE REPORT ON THE
DOMESTIC WASTEWATER TREATMENT PLANT GROUNDWATER REMEDIATION NAS
PENSACOLA FL
11/28/1995
RUST ENVIRONMENTAL & INFRASTRUCTURE INC

RUST Rust Environment & Infrastructure Inc.

A Rust International Company Phone 803.572.5600
2694 Lake Park Drive Fax 803.572.5661
North Charleston, SC 29406

November 28, 1995

Commanding Officer
Naval Public Works Center, Code 911.3
Attn: Mr. Tom Kelley
Naval Air Station
Pensacola, FL 32508-6500

Re: November 1995 Monthly Operation and Maintenance
Report on the Industrial Wastewater Treatment Plant (IWTP)
Ground-Water Remediation
Naval Air Station (NAS) Pensacola, Florida
Contract No. N62467-93-D-0662, Delivery Order No. 0045
Rust Project No. 33561.000

Dear Sir:

Rust Environment and Infrastructure (Rust) is pleased to submit a monthly operation and maintenance report on the IWTP ground-water remediation for the above referenced project. The attached table 1 contains a summary of the recovery well pumping data for the month of November 1995 and Attachment "A" contains time series graphs of the calculated bi-weekly pump flow rates and measured well water levels to facilitate evaluation of the performance and maintenance requirements of the recovery wells and pumps. In addition, two (2) copies of the report have been sent to Mr. Tom Sailors with Southern Division, Naval Facilities Engineering Command and two (2) copies to Commander, Naval Air Station, Environmental Division, Attention: Mr. Bill Taylor. Rust has the following comments for the month of November 1995.

RECOVERY WELL SYSTEM OPERATION STATUS

RW 1,2 & 3

1. On November 6, 1995 RW 1, 2 & 3 (Pump "A") was running but not pumping upon arrival to perform the O&M service. The pump apparently lost prime when the contractor (Poole & Kent) shut off the power at the main disconnect panel to make the piping tie-in at the new air stripper unit.
2. On November 8, 1995 Rust representative installed a new 1/2 horsepower A.O. Smith Pump Motor at Pump "B" with a new shaft seal and flange gasket. The

suction piping of RW 2 and RW 3 was filled with potable water and both pumps were reprimmed at 1425 hours. Pump "B" was left in operation and was operating properly upon departure from the IWTP job site.

3. On November 8, 1995 leaks were observed at the discharge and suction ports of Pump "A" during reprimming of both pumps.
4. On November 21, 1995 RW 1, 2 & 3 (Pump "B") was not operating upon arrival to perform the O&M service. The disconnect panel was in the "on" position but no power was coming into the panel. Troubleshooting revealed that the new air stripper unit apparently malfunctioned and automatically shut the power off to the pump station for RW 1, 2 & 3.
5. On November 21, 1995 at 1230 hours, Rust representative notified Mr. Tom Kelly of the status of the recovery well system. The pump station for RW 1, 2 & 3 was left "off-line" as directed.

RW 4 & 6

1. On November 6, 1995 RW 4 & 6 (Pump "A") was running and pumping but the discharge valve was in the "closed" position. The pump and motor were very hot and leaks were observed at the discharge and suction ports of the pump. The discharge valve was inadvertently placed in the closed position by "others". The flowmeter for RW 4 & 6 was not functioning after the discharge valve was placed in the open position.
2. On November 7, 1995 Rust representative installed a new ½ horsepower century pump motor at pump "A" and "B" with new shaft seals and flange gaskets, also installed a new 0-60 PSIG pressure gauge and a new 0-30" hg vacuum gauge.
3. On November 8, 1995 Rust representative installed a new 1" Master flowmeter for RW 4 & 6 and reprimmed both pumps. The pump station was placed back on line at 1200 hours and pump "B" was left in operation. The pump station was operating properly upon departure from the IWTP job site.
4. On November 21, 1995 RW 4 & 6 (Pump "B") was not operating upon arrival to perform the O&M service. The disconnect panel for pump "B" was in the "on" position but no power was coming into the panel. Troubleshooting revealed that

the new air stripper unit apparently malfunctioned and automatically shut the power off to the pump station for RW 4 & 6.

5. On November 21, 1995 at 1230 hours, Rust representative notified Mr. Tom Kelly of the status of the recovery well system. The pump station for RW 4 & 6 was left "off-line" as directed.

RW 5A

1. On November 6, 1995 RW 5A (Pump "A") was running but pumping at a reduced flow rate.
2. On November 7, 1995 Rust representative installed a new ½ horsepower century pump motor at RW 5A (Pump "B") with a new shaft seal and flange gasket, also installed a new diffuser plate within pump "A".
3. On November 8, 1995 Rust representative reprimmed both pumps at RW 5A and placed the pump station back on line at 1130 hours. The pump station was operating properly upon departure from the IWTP job site.
4. On November 21, 1995 RW 5A (Pump "A") was not operating upon arrival to perform the O&M service. The disconnect panel of Pump "A" was in the "on" position but no power was coming into the panel. Troubleshooting revealed that the new air stripper unit apparently malfunctioned and automatically shut the power off to the pump station for RW 5A.
5. On November 21, 1995 at 1230 hours, Rust representative notified Mr. Tom Kelly of the status of the recovery well system. The pump station for RW 5A was left "off-line" as directed.

RW7

1. On November 6, 1995 Rust representative installed a new ½ horsepower A.O. Smith pump motor at Pump "A" and at Pump "B" with new shaft seals and flange gaskets.
2. On November 7, 1995 Rust representative installed a new 30 AMP, 120/230 volt disconnect panel at Pump "A" and at Pump "B", also installed a new ½" exterior plywood cover on the pump station enclosure with a 48" long brass hinge. The

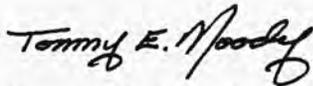
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plywood cover was primed and painted with two (2) coats of white semi-gloss paint.

3. On November 8, 1995 Rust representative installed a new 0-30" hg vacuum gauge, reprimmed both pumps and placed RW 7 back "on-line" at 1100 hours. Pump "B" was left in operation and was operating properly upon departure from the IWTP job site.
4. On November 21, 1995 RW 7 (Pump "B") was operating properly upon arrival to perform the O&M service. At 1230 hours, Rust representative notified Mr. Tom Kelly of the status of the recovery well system. The pump station for RW 7 was placed "off-line" at 1320 hours as directed. (Note: RW 7 is not presently (electrically) tied in to the new air stripper unit.)

As always, if there are any questions regarding this report or other matters pertaining to this project, please feel free to contact me or Susan Burdick at (803) 572-5600.

Sincerely,



Tommy E. Moody
Project O&M

Enclosure

- c: Tom Sailors - NAVFAC - Code 1826 (2 copies)
Bill Taylor - NAS, Environmental Division (2 copies)
Brian Caldwell - ENSAFE
Susan Burdick - Rust

NAS PENSACOLA IWTP RCRA RECOVERY WELL WATER LEVEL BELOW TOP OF CASING

DATE	RW 1** WLBTC (feet)	RW 2** WLBTC (feet)	RW 3** WLBTC (feet)	RW 4 WLBTC (feet)	RW 5A* WLBTC (feet)	RW 6 WLBTC (feet)	RW 7 WLBTC (feet)
6/20/95	4.31	10.27	9.78	2.56	4.97	10.21	23.99
7/4/95	4.35	11.07	10.75	2.70	4.31	11.96	24.45
7/18/95	4.28	11.50	11.22	2.65	4.95	10.33	24.20
8/1/95	2.73	10.32	10.24	1.26	3.61	11.09	24.31
8/10/95***	2.81	9.15	8.93	0.42	2.65	8.52	23.40
8/22/95	2.91	10.08	10.00	1.09	3.31	10.57	23.92
9/5/95	2.91	9.82	9.58	1.27	3.30	9.32	24.35
9/19/95	3.61	10.82	10.60	1.96	3.91	11.05	24.89
10/3/95	3.42	10.97	10.76	2.09	4.69	9.76	24.74
10/25/95	3.22	4.05	3.64	1.46	3.61	7.15	0.70
11/8/95	2.51	6.91	8.28	4.59	3.38	4.28	20.80
11/21/95	3.59	4.45	4.10	1.87	3.60	0.90	16.90

* RW 5 relocated and pump replaced 11/12/93, renamed RW 5A.

** RW 2 only being purged 9/2/93 thru 3/28/94; RW 3 only being purged 3/28/94 to present.
(RW 1 suction valve is presently in the closed position; RW 2 suction valve is presently in the slightly opened position; RW 3 suction valve is presently in the full open position.)

*** The O&M Inspection scheduled for 8/15/95 was moved forward to 8/10/95 to check on the status of the recovery well system following Hurricane Erin; no significant damage was observed.

NAS PENSACOLA IWTP RCRA RECOVERY WELL WATER LEVEL BELOW TOP OF CASING

DATE	RW 1** WLBTC (feet)	RW 2** WLBTC (feet)	RW 3** WLBTC (feet)	RW 4 WLBTC (feet)	RW 5A* WLBTC (feet)	RW 6 WLBTC (feet)	RW 7 WLBTC (feet)
9/2/93	3.78	12.71	4.61	2.30	5.61	11.30	24.15
9/16/93	3.02	11.95	3.68	1.41	2.01	10.80	23.70
9/28/93	3.77	12.21	4.38	2.50	7.41	11.36	23.99
10/12/93	4.05	13.01	4.83	2.45	5.55	11.71	23.30
10/26/93	3.72	12.62	4.39	2.06	5.63	11.47	23.97
11/9/93*	3.71	12.83	4.25	1.97	0.00	11.22	24.28
11/23/93*	4.10	13.07	4.72	2.40	5.47	11.61	24.61
12/7/93	4.31	13.44	5.01	2.66	5.60	11.26	24.50
12/21/93	2.87	11.95	3.38	1.29	4.01	10.21	24.70
1/4/94	4.03	13.32	4.52	2.23	5.14	11.46	24.45
1/18/94	4.15	12.18	4.69	2.35	6.68	10.25	24.90
2/1/94	3.69	12.75	4.19	1.89	3.59	11.45	25.49
2/15/94	4.20	12.28	4.68	2.36	5.75	11.30	24.55
2/28/94	4.20	13.15	4.82	2.49	5.65	11.65	23.49
3/14/94	4.01	12.26	4.54	2.25	5.41	11.59	23.58
3/28/94	3.42	12.91	4.05	1.88	3.68	10.80	24.19
4/11/94	4.15	5.16	4.90	9.60	4.21	9.11	25.23
4/26/94	3.64	4.67	16.99	8.30	3.75	9.18	24.12
5/10/94	3.97	5.09	15.52	7.30	3.95	9.88	23.91
5/24/94	4.36	5.40	16.53	5.35	4.35	10.97	24.13
6/7/94	3.06	4.04	16.72	1.96	3.28	10.56	23.95
6/20/94	2.58	4.16	16.31	1.20	4.21	10.80	23.67
7/5/94	2.31	3.71	15.65	0.71	2.21	10.80	23.20
7/19/94	2.85	6.66	18.92	1.03	2.71	10.60	24.55
8/2/94	3.44	5.36	15.38	1.47	3.06	11.15	24.65
8/16/94	3.49	5.62	15.42	1.91	5.05	10.88	23.89
8/30/94	3.67	7.19	12.51	1.99	3.91	11.65	24.29
9/13/94	3.87	7.51	15.45	2.28	3.85	11.70	24.51
9/27/94	2.83	7.71	11.64	1.16	2.90	10.31	24.48
10/11/94	1.75	8.20	9.30	0.30	3.75	5.49	23.67
10/25/94	3.12	9.21	10.31	1.26	3.45	10.45	0.60
11/8/94	3.75	9.71	11.11	2.01	4.18	11.10	25.28
11/22/94	4.14	10.93	12.61	2.45	4.61	12.35	25.76
12/6/94	3.74	11.09	12.01	2.05	3.71	11.79	25.09
12/20/94	3.98	11.40	13.02	2.22	5.61	11.71	25.42
1/3/95	3.81	11.21	13.16	2.16	4.94	12.05	25.18
1/17/95	3.91	11.30	13.05	2.31	4.39	12.05	24.19
1/31/95	3.95	9.05	9.27	2.46	4.30	12.01	25.63
2/14/95	4.19	5.18	12.74	3.80	4.07	11.45	24.21
2/28/95	4.41	8.09	11.70	7.78	5.62	7.21	24.20
3/14/95	3.49	7.34	12.10	7.80	3.88	8.19	24.70
3/28/95	3.70	7.65	12.94	6.25	3.91	7.53	24.70
4/11/95	3.71	7.69	12.69	6.29	3.58	9.16	23.73
4/25/95	2.64	6.47	11.75	3.68	2.88	7.86	23.58
5/9/95	3.81	10.95	10.77	4.15	4.30	10.31	23.85
5/23/95	3.31	9.29	9.35	1.80	2.99	9.25	23.84
6/6/95	3.97	10.70	9.91	1.90	5.09	11.20	23.79

NAS PENSACOLA IWTP RCRA RECOVERY WELL FLOW DATA

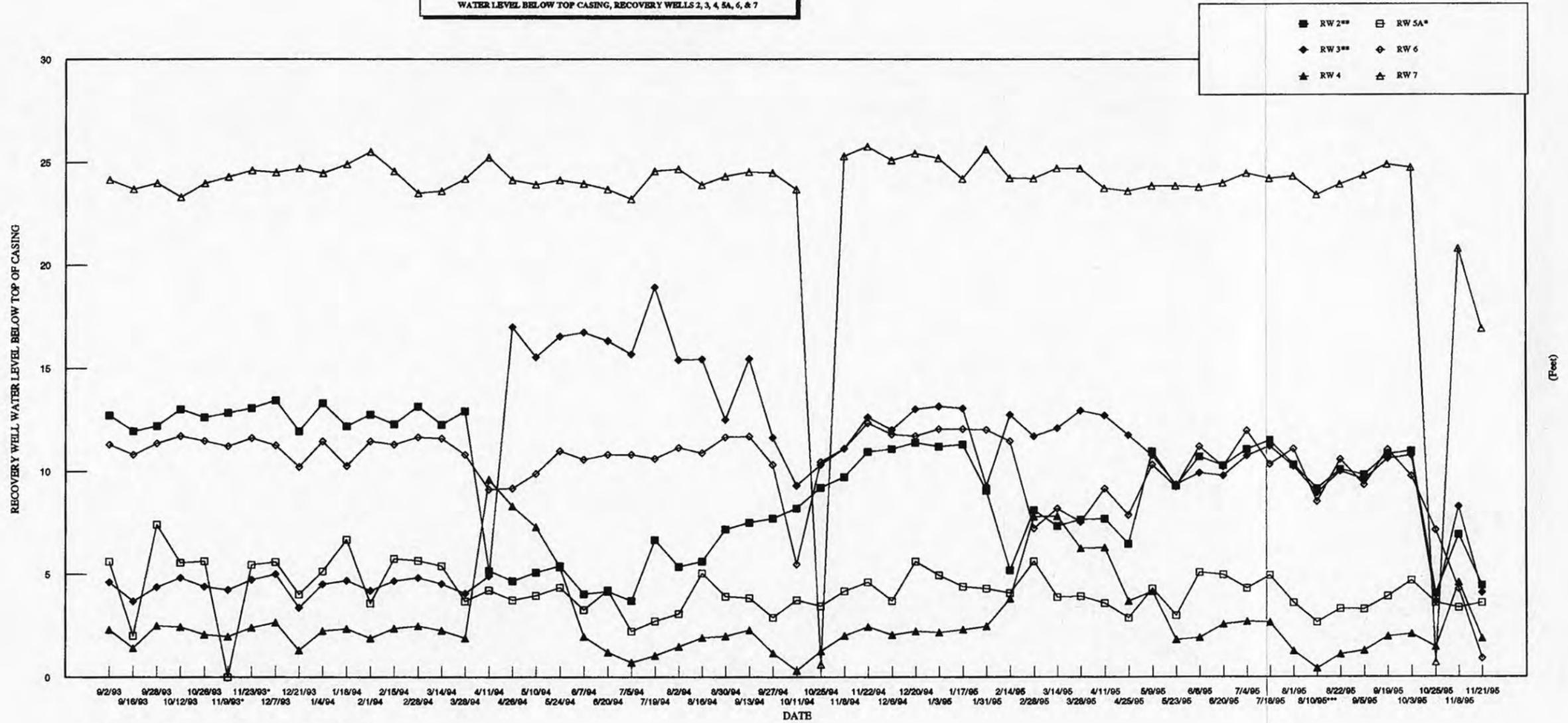
DATE	RW 1,2,&3** FLOW (GALS/2wks)	RW 4&6 FLOW (GALS/2wks)	RW 5A* FLOW (GALS/2wks)	RW 7 FLOW (GALS/2wks)	TOTAL FLOW (GALS/2wks)
3/28/95	125571	152781	147296	46200	471848
4/11/95	121568	184651	2015	45893	354127
4/25/95	126623	147850	224282	47128	545883
5/9/95	94185	167684	220647	46206	528722
5/23/95	80867	135931	100613	46105	363516
6/6/95	136660	157320	332514	44446	670940
6/20/95	94863	132718	78605	42396	348582
7/4/95	122115	150562	1577	40923	315177
7/18/95	128917	131634	148926	41204	450681
8/1/95	134318	152703	132928	41322	461271
8/10/95***	94856	88538	87222	29445	300061
8/22/95	122086	134403	123028	37154	416671
9/5/95	131628	133923	120794	43401	429746
9/19/95	137823	155558	93131	43165	429677
10/3/95	129645	132519	50273	40028	352465
10/25/95	12024	136159	69476	3701	221360
11/8/95	22566	82653	78603	0	183822
11/21/95	15068	20731	13571	45233	94603

* RW 5 relocated and pump replaced 11/12/93, renamed RW 5A.

** RW 2 only being purged 9/2/93 thru 3/28/94; RW 3 only being purged 3/28/94 to present. (RW 1 suction valve is presently in the closed position; RW 2 suction valve is presently in the slightly opened position; RW 3 suction valve is presently in the full open position.)

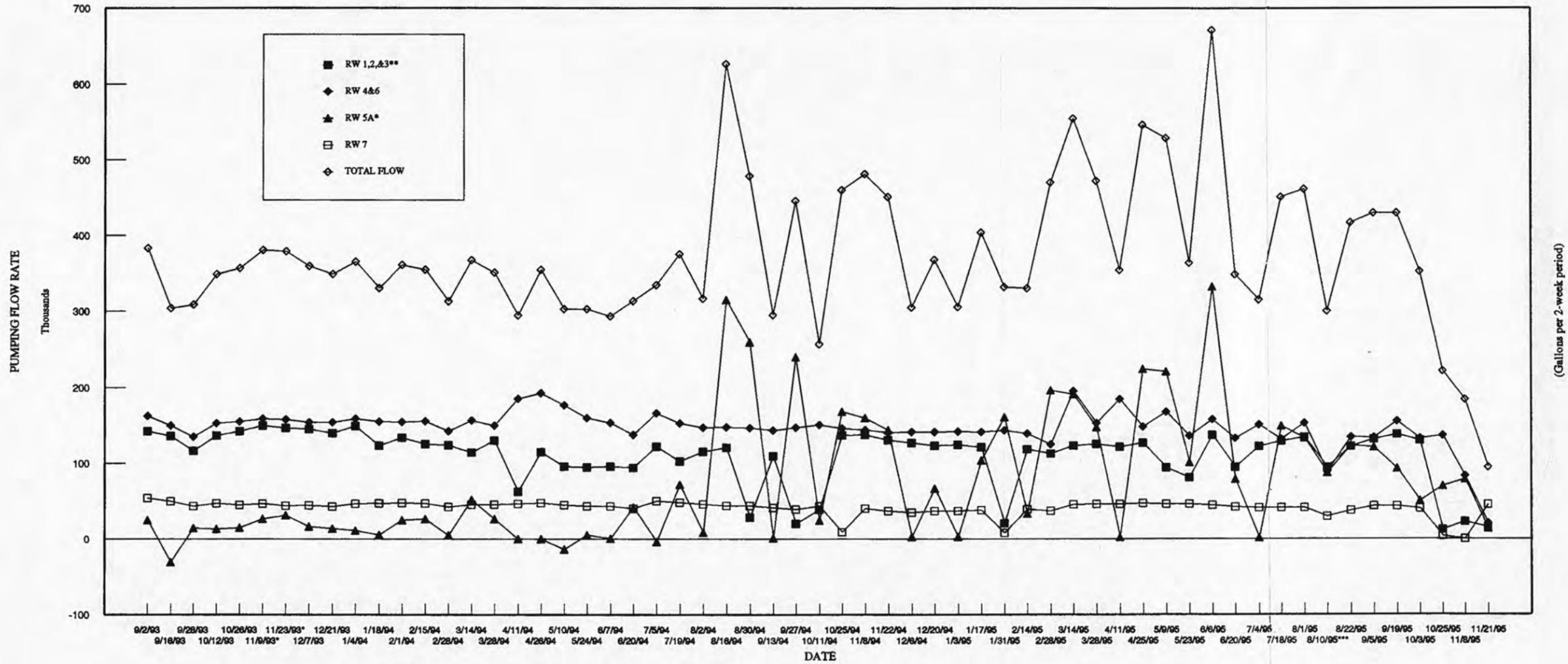
*** The O&M Inspection scheduled for 8/15/95 was moved forward to 8/10/95 to check on the status of the recovery well system following Hurricane Erin; no significant damage was observed.

NAS PENSACOLA IWTP RCRA SITE
 WATER LEVEL BELOW TOP CASING, RECOVERY WELLS 2, 3, 4, 5A, 6, & 7



* RW 5 relocated and pump replaced 11/12/93, renamed RW 5A.
 ** RW 2 only being purged 9/2/93 thru 3/28/94; RW 3 only being purged 3/28/94 to present.
 *** The O&M inspection scheduled for 8/15/95 was moved forward to 8/10/95 to check on the status of the recovery well system following Hurricane Erin; no significant damage was observed.

NAS PENSACOLA IWTP RCRA SITE
RECOVERY WELL FLOW DATA



* RW 5 relocated and pump replaced 11/12/93, renamed RW 5A.

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