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NAS PENSACOLA
5090.3a

JANUARY 1998 MONTHLY OPERATION AND MAINTENANCE REPORT ON THE
DOMESTIC WASTEWATER TREATMENT PLANT GROUNDWATER REMEDIATION
PROJECT FOR NAS PENSACOLA FL
2/5/1998
HRP SPECTRUM INC

February 5, 1998

Commanding Officer
Naval Public Works Center, Code 911.3
310 John Tower Road, Building 3819
Naval Air Station
Pensacola, Florida 32508-6500

Attn: Mr. Tom Kelley

**RE: JANUARY 1998 MONTHLY OPERATION AND MAINTENANCE REPORT
ON THE DOMESTIC WASTEWATER TREATMENT PLANT (DWTP)
GROUNDWATER REMEDIATION NAVAL AIR STATION (NAS)
PENSACOLA, FLORIDA, JOB #NAV0303.FE**

Dear Sir:

HRP/Spectrum is pleased to submit the January 1998 Monthly and Quarterly Report for the operation and maintenance activities conducted on the DWTP Ground Water Treatment System for the above referenced project. The attached Table 1 contains a summary of the recovery well pumping data for the month of January 1998 and Attachment #1 contains a time series graph of the calculated biweekly pump flow rates 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. Maxis Keisler with Southern Division, Naval Facilities Engineering command and two (2) copies to Commander, Naval Air Station, Environmental Division, Attention: Mr. Bill Taylor. **HRP/Spectrum** has the following comments for the month of January 1998 and overall for the Fourth Quarter of 1997:

RECOVERY WELL SYSTEM OPERATION STATUS

RW-1, 2 AND 3

- On January 12, 1998, Pump B for RW-1, 2, and 3 was shut off for rehabilitation of RW-3, 4, 5A, 6, and 7. Recovery Well 3 was cleaned according to the steps listed on the enclosed "Rehabilitation Procedures for Recovery Systems RW-1, 2, 3, and RW-7".
- On January 15, 1998, Pump B for RW-1, 2, and 3 was restarted. Upon departure, RW-1, 2, and 3 were operating normally. No leaks were detected on either the recovery wells or pumps.

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RW-4 AND 6

- On January 12, 1998, Pump A for RW-4 and 6 was shut down to perform RW rehabilitation on RW-3, 4, 5A, 6, and 7. Recovery Wells 4 and 6 were cleaned according to the steps listed on the enclosed "Rehabilitation Procedures for Recovery Systems RW-4, 6 and RW-5A".
- On January 15, 1998, Pump A for RW-4 and 6 was restarted. Upon departure, RW-4 and 6 were operating, producing normal flow and pressure. No leaks were detected on either the recovery wells or pumps.

RW-5A

- Upon arrival to the site on January 12, 1998, Pump B for RW-5A was switched off for RW rehabilitation for RW-3, 4, 5A, 6, and 7. Recovery Well 5A was cleaned according to the steps listed on the enclosed "Rehabilitation Procedures for Recovery Systems RW-4, 6, and RW-5A".
- On January 15, 1998, Pump B for RW-5A was restarted. Upon departure, RW-5A was operating, producing normal flow and pressure. No leaks were detected on either the recovery well or pump.

RW-7

- On January 12, 1998, RW-7 was shut down to perform RW rehabilitation on RW-3, 4, 5A, 6, and 7. Recovery Well 7 was cleaned according to the steps listed on the enclosed "Rehabilitation Procedures for Recovery Systems RW-1, 2, 3, and RW-7".
- On January 15, 1998, Pump A for RW-7 was restarted and operating with normal pressure and flow. Upon departure, no leaks were detected at the recovery well or pump.

PRE-TREATMENT AIR STRIPPER

- On January 12, 1998, the Air Stripper was taken off-line to perform RW rehabilitation on Wells 3, 4, 5A, 6, and 7, as well as cleaning of the Air Stripper. The Air Stripper was cleaned on January 13, 1998 using the steps listed on the enclosed "Cleaning Procedures for the Air Stripper Unit". The Air Stripper was brought back on-line January 15, 1998. Prior to cleaning the Air Stripper, samples were taken from the influent and effluent sample ports. Upon departure, no leaks were detected.

LABORATORY RESULTS - AIR STRIPPER ANALYTICAL RESULTS

During the January sampling event, samples were collected from the influent and effluent ports of the Air Stripper. A copy of the laboratory results for the month of January is provided in

Attachment #3 to this report. The Air Stripper was found to be working effectively as the outlet sample yielded nondetectable levels of contaminants. Specific chemicals present in the inlet samples are provided below:

AIR STRIPPER ANALYTICAL RESULTS		
NAS-PENSACOLA		
JANUARY 1998		
CHEMICAL	INLET	OUTLET
Chlorobenzene (ug/l)	140	N/D
1,2-Dichlorobenzene (ug/l)	71	N/D
1,3-Dichlorobenzene (ug/l)	37	N/D
1,4-Dichlorobenzene (ug/l)	72	N/D
1,1-Dichloroethane (ug/l)	5	N/D
Benzene (ug/l)	6	N/D

*N/D-Not detected.

GROUNDWATER LEVELS

- On January 12, 1998, the quarterly groundwater levels in all designated monitoring wells were measured. The results from these measurements are provided in Attachment #4. An electronic meter measuring device was used to measure the water level in each well.

If you have questions regarding this report or other matters pertaining to this project, please contact Tad Goetcheus or myself at (864) 289-0311.

Sincerely,

HRP/Spectrum, Inc.



Anthony L. Gentry
Project Engineer

Enclosure

cc: Maxis Keisler-NAVFACENGCOM-Code 18213 (2 cys)
Bill Taylor-NAS Pensacola-Code 00500 (2 cys)

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HRP/Spectrum

TABLE 1
NAS PENSACOLA
RECOVERY WELL PUMPING DATA

PUMP STATION	DATE INSPECTED	TIME (MILITARY)	FLOW METER READING (GALLONS)	DISCHARGE PRESSURE (psig)	SUCTION VACUUM ("Hg)	INSTANTANEOUS PUMPING FLOW RATE (GPM)	CALCULATED BI-WEEKLY FLOW RATE (GPM)	PUMP IN USE (A or B)	ELAPSED TIME (HOURS)	TOTAL BI-WEEKLY FLOW (GALLONS)	WATER LEVEL BELOW TOP OF CASING (Ft) (RESPECTIVELY)
RW 1,2 & 3	1/12/98	12:40	14,052,880	7	16	7.2	7.08	B	600	254,880	N/A, N/A, 4.46
RW 4&6	1/12/98	12:55	4,952,250	5	11	4.5	4.45	A	600	160,220	2.67, 4.91
RW 5A	1/12/98	12:55	8,126,550	56	11	5.7	5.38	B	600	193,520	4.56
RW 7	1/12/98	13:05	6,907,970	10	22.5	2.6	2.62	A	600	94,190	22.96

NOTES:

RW 1,2 3 - Recovery station for recovery wells RW 1, RW 2, and RW 3.

RW 4 6 - Recovery well for wells RW 4 and RW 6.

INSPECTOR'S NAME	ANTHONY L. GENTRY
DATE	1/12/98
AMBIENT TEMPERATURE	60
WEATHER CONDITIONS	OVERCAST

ITEM	INSPECTION CHECK	INSPECTION FREQUENCY	DATA/ COMMENTS
INFLUENT PIPING	OPERATION OF BALL CHECK VALVE	MONTHLY	OK
	SAMPLE PORT OPERATION	MONTHLY	OK
	FLOW METER READING	BI-WEEKLY	14,804,850
	SAMPLE COLLECTION	MONTHLY	YES
AIR STRIPPER	PRESSURE GAUGE READING	BI-WEEKLY	19.1" WATER
	CLEAN / CHECK TRAYS	BI-WEEKLY	CLEANED
BLOWER	PIPING CONNECTIONS	MONTHLY	OK
EFFLUENT PIPING	OPERATION OF BALL CHECK VALVE	MONTHLY	OK
	SAMPLE PORT OPERATION	MONTHLY	OK
	FLOW METER READING	BI-WEEKLY	N/A
	SAMPLE COLLECTION	MONTHLY	YES
SYSTEM COMPONENTS	EXPOSED PIPING CONNECTIONS	MONTHLY	OK

SYSTEM DESCRIPTION:

ACTIVITIES PERFORMED:

CLEANED THE AIR STRIPPER ON JANUARY 13, 1998

Attachment #1
Time Series Graphs

**ATTACHMENT 1
GROUNDWATER FLOW READINGS**

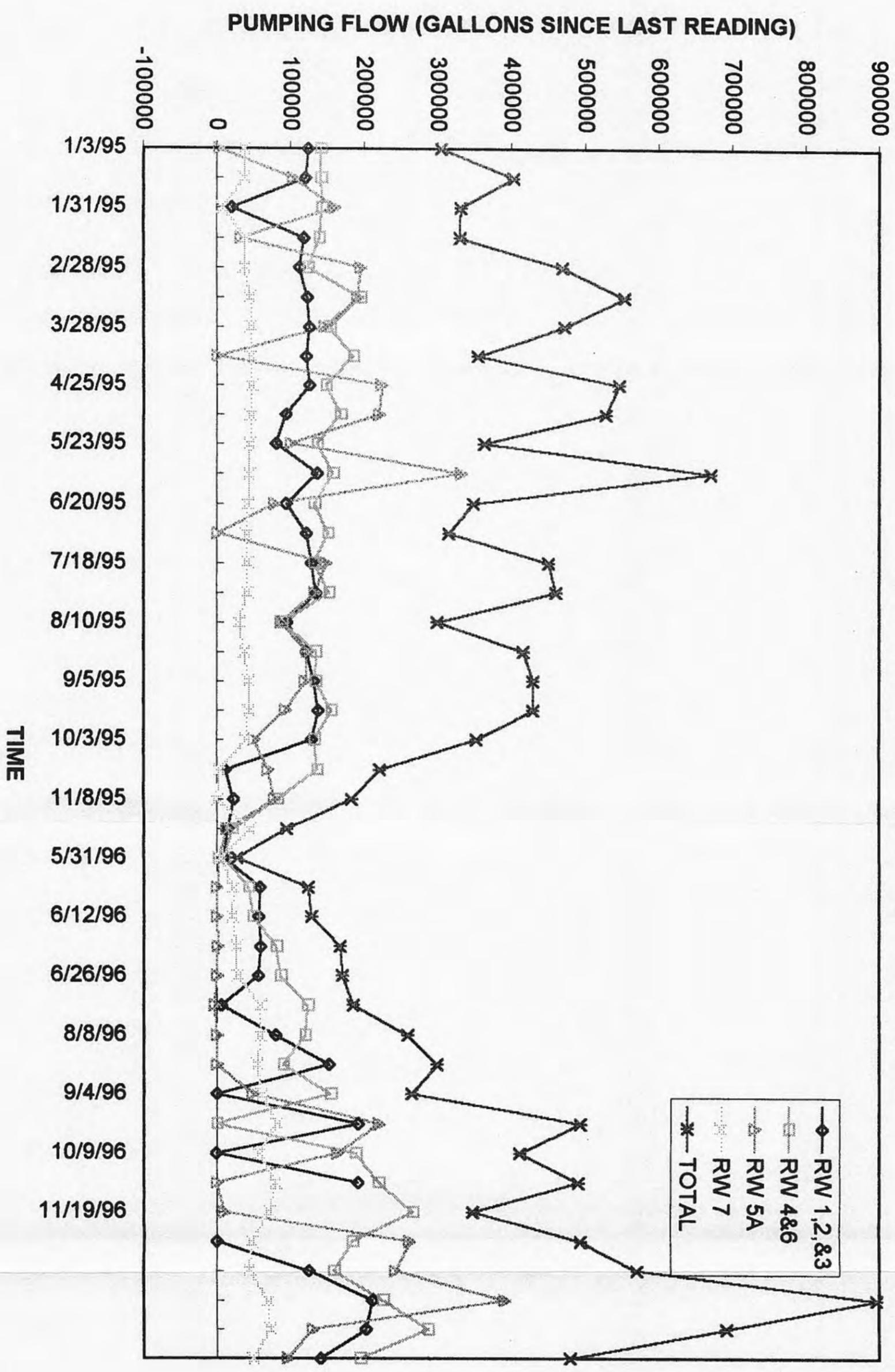
DATE	RW 1,2,&3	RW 4&6	RW 5A	RW 7	TOTAL
1/3/95	124,006	141,588	2,629	36,814	305,037
1/17/95	121,155	141,168	103,562	37,668	403,553
1/31/95	20,528	143,045	160,533	7,741	331,847
2/14/95	118,171	139,268	33,440	39,172	330,051
2/28/95	112,145	124,628	195,889	37,053	469,715
3/14/95	123,141	194,925	190,593	45,607	554,266
3/28/95	125,571	152,781	147,296	46,200	471,848
4/11/95	121,568	184,651	2,015	45,893	354,127
4/25/95	126,623	147,850	224,282	47,128	545,883
5/9/95	94,185	167,684	220,647	46,206	528,722
5/23/95	80,867	135,931	100,613	46,105	363,516
6/6/95	136,660	157,320	332,514	44,446	670,940
6/20/95	94,863	132,718	78,605	42,396	348,582
7/4/95	122,115	150,562	1,577	40,923	315,177
7/18/95	128,917	131,634	148,926	41,204	450,681
8/1/95	134,318	152,703	132,928	41,322	461,271
8/10/95	94,856	88,538	87,222	29,445	300,061
8/22/95	122,086	134,403	123,028	37,154	416,671
9/5/95	131,628	133,923	120,794	43,401	429,746
9/19/95	137,823	155,558	93,131	43,165	429,677
10/3/95	129,645	132,519	50,273	40,028	352,465
10/25/95	12,024	136,159	69,476	3,701	221,360
11/8/95	22,566	82,653	78,603	0	183,822
11/21/95	15,068	20,731	13,571	45,233	94,603
5/31/96	9,722	10,033	2,577	4,760	27,092
6/6/96	59,060	42,822	439	22,325	124,646
6/12/96	56,952	49,788	460	21,626	128,826
6/19/96	59,513	80,468	1,555	26,465	168,001
6/26/96	56,512	86,242	0	28,001	170,755
7/11/96	6,264	123,432	-3,289	59,241	185,648
8/8/96	80,000	120,000	0	60,000	260,000
8/21/96	153,290	90,540	0	55,670	299,500
9/4/96	0	154,470	49,184	60,980	264,634
9/23/96	192,330	0	220,336	82,000	494,666
10/9/96	0	188,940	164,420	57,760	411,120
10/28/96	191,710	220,050	0	79,580	491,340
11/19/96		266,730	10,080	70,950	347,760
12/3/96	0	184,490	262,710	47,130	494,330
12/16/96	125,560	158,840	242,580	44,410	571,390
1/6/97	211,440	225,360	391,290	69,570	897,660
1/28/97	203,820	286,830	130,110	72,700	693,460
2/11/97	140,470	194,330	95,910	49,490	480,200
3/14/97	313,290	437,710	191,710	101,070	1,043,780
3/25/97	110,100	147,810	65,650	34,540	358,100
4/16/97	169,240	215,640	102,140	55,370	542,390
4/29/97	109,650	98,960	32,710	38,680	280,000
5/16/97	161,300	105,890	204,190	56,590	527,970
5/29/97	129,190	83,640	156,490	43,120	412,440

**ATTACHMENT 1
GROUNDWATER FLOW READINGS**

DATE	RW 1,2,&3	RW 4&6	RW 5A	RW 7	TOTAL
6/10/97	192,010	123,890	209,690	83,390	416,970
6/26/97	65,640	41,840	56,390	0	163,870
7/14/97	167,630	109,340	109,800	0	386,770
8/5/97	290	123,010	0	72,580	195,880
8/19/97	141,650	86,850	28,060	54,660	311,220
9/3/97	150,690	92,500	176	56,910	300,276
9/17/97	140,450	85,610	0	51,390	277,450
10/6/97	193,180	118,120	0	68,230	379,530
10/27/97	210,410	127,460	275,934	70,980	684,784
11/10/97	122,530	75,330	240,020	42,840	480,720
11/24/97	143,590	69,310	195,400	49,930	458,230
12/9/97	153,410	95,070	136,140	54,790	439,410
12/18/97	92,110	57,360	71,100	33,470	254,040
1/12/98	254,880	160,220	193,520	94,190	702,810

NOTE: Large peak on 3/14/97 is due to no second site visit during the month of February.

NAS PENSACOLA
GROUNDWATER RECOVERY WELL FLOW RATES



Attachment #2

**Recovery Well and Air Stripper
REHAB Procedures**

**REHABILITATION PROCEDURES FOR RECOVERY SYSTEMS
RW-1, 2, 3 AND RW-7**

- Shut down recovery system, disconnect suction piping, and remove suction piping and sensor probes from well.
- Install tremie pipe with "swab" attachment into recovery well.
- Inject 15 gallons of sodium hypochlorite (bleach - 3000 to 4000 ppm) through tremie pipe and swab into well. Bleach solution must have a contact time of at least 12 hours.
- Inject 15 gallons of bleach solution into discharge piping and allow the solution to sit until well rehabilitation is complete.
- Inject 5 gallons of water through tremie pipe and initiate swabbing of well.
- Swab well for 5 to 10 minutes at 20 minute intervals for 4 to 6 hours. (If necessary, well can sit overnight with solution in place).
- If well is allowed to sit overnight, swabbing should be performed for at least one (1) hour prior to evacuating solution from well.
- Remove tremie pipe and disconnect swab. Re-install tremie pipe and connect pipe to pump and recovery system discharge line.
- Pump excess bleach solution out of well, flushing discharge piping.
- Disconnect and remove tremie system from well.
- Re-install suction piping and sensor probes and re-start recovery system.

REHABILITATION PROCEDURES FOR RECOVERY SYSTEMS
RW-4, 6 AND RW-5A

Each of these wells will first go through the same "bleach" process as RW-3 and RW-7. After the bleach solution is pumped out of the well and flushed through the discharge piping, the following activities will be performed.

- Re-install tremie pipe with "swab" attachment into recovery well.
- Inject 15 gallons of Well Klean II and muriatic acid solution (1 part Well Klean II to four (4) parts muriatic acid (31.5% HCL) through tremie pipe and swab into well.
- Inject 15 gallons of Well Klean II and muriatic acid solution into discharge piping and allow the solution to sit until well rehabilitation is complete.
- Swab well for 5 to 10 minutes at 20 minute intervals for several hours. This solution must have, at a minimum, a 12 hour contact time. (If necessary, well can sit overnight with solution in place).
- If well is allowed to sit overnight, swabbing should be performed for at least one (1) hour prior to evacuating solution from well.
- Remove tremie pipe and disconnect swab. Re-install tremie pipe and connect pipe to pump and recovery system discharge line.
- Pump excess bleach solution out of the well, flushing discharge piping.
- Disconnect and remove tremie system from well.
- Re-install suction piping and sensor probes and re-start recovery system.

Attachment #3
Air Stripper
Laboratory Results
January 1998

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



January 21, 1998

To: HRP/Spectrum
Attn: Tad Goetcheus
5 Century Dr. Suite 230
Greenville, SC 29607
Proj: NAS-Pensacola

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA85761 Customer Code: HRPSPEC
Login Group #: 1099D2 Customer Reference: NAS-PENS
Phone Number: (864)298-0231/fax(864)242-6243
Customer Sample I.D#: INFLUENT
Sample collection date: 01/12/98 Time: 13:00
Lab submittal date: 01/14/98 Time: 10:20
Received by: RCH Validated by: ADO

Parameter: VOLATILES BY 601/602
Method reference: EPA 601/602 Unit: ug/L
Result: see below
Date started: 01/15/98 Date finished: 01/19/98
Time started: 16:31 Analyst: ARV

Data for VOLATILES BY 601/602 ug/L:

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	1
BROMOFORM	Not detected	1
BROMOMETHANE	Not detected	5
CARBON TETRACHLORIDE	Not detected	1
CHLOROBENZENE	140	1
CHLOROETHANE	Not detected	5
CHLOROFORM	Not detected	1
CHLOROMETHANE	Not detected	5
DIBROMOCHLOROMETHANE	Not detected	1
1, 2-DICHLOROBENZENE	71	1
1, 3-DICHLOROBENZENE	37	1
1, 4-DICHLOROBENZENE	72	1
DICHLORODIFLUOROMETHANE	Not detected	5
1, 1-DICHLOROETHANE	5	1
1, 2-DICHLOROETHANE	Not detected	1
1, 1-DICHLOROETHENE	Not detected	1
TRANS-1, 2-DICHLOROETHENE	Not detected	1
1, 2-DICHLOROPROPANE	Not detected	1
CIS-1, 3-DICHLOROPROPENE	Not detected	1
TRANS-1, 3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1

Lab Report

HRP/Spectrum Sample I.D. AA85761 (continued)

Page: 2

January 21, 1998



Data for VOLATILES BY 601/602 (continued):

Component Name	Result	Component MDL
METHYLENE CHLORIDE	Not detected	5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1, 1, 1-TRICHLOROETHANE	Not detected	1
1, 1, 2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
BENZENE	6	1
ETHYLBENZENE	Not detected	1
IPE	Not detected	5
MTBE	Not detected	5
TOLUENE	Not detected	1
TOTAL XYLENES	Not detected	3
CIS-1, 2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NAS- Pensacola
PO# NAV 0303.FE

If there are any questions regarding this data, please call.

A handwritten signature in black ink, appearing to read "Angela D. Overcash".

Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



January 21, 1998

To: HRP/Spectrum
Attn: Tad Goetcheus
5 Century Dr. Suite 230
Greenville, SC 29607
Proj: NAS-Pensacola

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA85762 Customer Code: HRPSPEC
Login Group #: 1099D2 Customer Reference: NAS-PENS
Phone Number: (864)298-0231/fax(864)242-6243
Customer Sample I.D#: EFFLUENT
Sample collection date: 01/12/98 Time: 13:05
Lab submittal date: 01/14/98 Time: 10:20
Received by: RCH Validated by: ADD

Parameter: VOLATILES BY 601/602 Unit: ug/L
Method reference: EPA 601/602
Result: see below
Date started: 01/15/98 Date finished: 01/15/98
Time started: 17:31 Analyst: ARV

Data for VOLATILES BY 601/602 ug/L:

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	1
BROMOFORM	Not detected	1
BROMOMETHANE	Not detected	5
CARBON TETRACHLORIDE	Not detected	1
CHLOROENZENE	Not detected	1
CHLOROETHANE	Not detected	5
CHLOROFORM	Not detected	1
CHLOROMETHANE	Not detected	5
DIBROMOCHLOROMETHANE	Not detected	1
1,2-DICHLOROENZENE	Not detected	1
1,3-DICHLOROENZENE	Not detected	1
1,4-DICHLOROENZENE	Not detected	1
DICHLORODIFLUOROMETHANE	Not detected	5
1,1-DICHLOROETHANE	Not detected	1
1,2-DICHLOROETHANE	Not detected	1
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1

Lab Report

HRP/Spectrum Sample I.D. AA85762 (continued)

Page: 2

January 21, 1998



Data for VOLATILES BY 601/602 (continued):

Component Name	Result	Component MDL
METHYLENE CHLORIDE	Not detected	5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1, 1, 1-TRICHLOROETHANE	Not detected	1
1, 1, 2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
BENZENE	Not detected	1
ETHYLBENZENE	Not detected	1
IPE	Not detected	5
MTBE	Not detected	5
TOLUENE	Not detected	1
TOTAL XYLENES	Not detected	3
CIS-1, 2-DICHLOROETHENE	Not detected	1

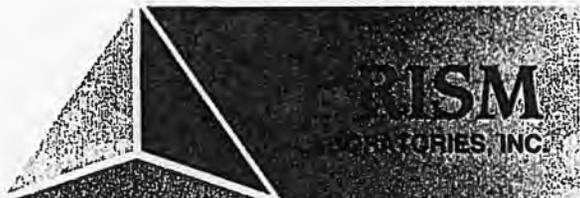
Sample comments:

Project Name: NAS- Pensacola
PO# NAV 0303.FE

If there are any questions regarding this data, please call.

A handwritten signature in black ink, appearing to read "Angela D. Overcash". The signature is fluid and cursive, with a large loop at the end.

Angela D. Overcash
Laboratory Director



CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

449 Springbrook Road ▲ Charlotte, NC 28217
 P.O. Box 240543 ▲ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY			
	YES	NO	N/A
Samples INTACT upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received ON WET ICE? Temp _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER PRESERVATIVES indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received WITHIN HOLDING TIMES?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CUSTODY SEALS INTACT?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOLATILES rec'd W/OUT HEADSPACE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER CONTAINERS used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Full Service Analytical & Environmental Solutions

Client HRP/Spectrum
 Physical Address 5 Century Dr Suite 330
Greenville, SC 29607
 Phone 864-298-0231 Fax 864-242-6243
 P.O./Billing Reference NAV0303 FE
 Project Name NAS-Pensacola

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name Tad A. Goetcheus
 Address _____
 BILL TO: Name Tad A. Goetcheus
 Address _____
 Requested Due Date 47d Turnaround

State Certification FL
 Requested NC _____ SC _____ Other X NA _____
 Water Chlorinated Yes _____ No _____ NA X
 Sample Iced Upon Collection Yes X No _____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.	
				*TYPE SEE BELOW	NO.	SIZE		601	602								
Influent	1-13-98 1-12-98	13:00	W	VOA/G	2	40ml	HCl	X	X								8576
Effluent	1-13-98 1-12-98	13:05	W	VOA/G	3	40ml	HCl	X	X								8576.2

Sampler's Signature Brian W. Hill Sampled By (Print Name) Brian W. Hill Affiliation HRP/Spectrum

Relinquished By: (Signature) <u>Brian W. Hill</u>	Received By: (Signature) _____	Date _____	Military/Hours _____
Relinquished By: (Signature) _____	Received By: (Signature) _____	Date _____	
Relinquished By: (Signature) _____	Received For Prism Laboratories By: <u>Kelly Burke</u>	Date <u>1/14/98</u>	<u>10:20</u>
Method of Shipment: _____		Log-In Group No. <u>1099D7</u>	

Additional Comments: _____

NPDES: NC _____ UST: NC _____ GROUNDWATER: NC _____ DRINKING WATER: NC _____ SOLID WASTE: NC _____ OTHER: NC _____
 SC _____ SC _____ SC _____ SC _____ SC _____ SC _____
 OTHER _____ OTHER _____ OTHER FL OTHER _____ OTHER _____ OTHER _____

Attachment #4

Quarterly Ground Water Level Measurements

January 1998

PROJECT: <u>WATER LEVEL MEASUREMENTS</u>					DATE: <u>1/12/98</u>	
LOCATION: <u>NAS - PENSACOLA FLORIDA</u>					TIDE: <u>Warrington: Low Tide 8:30</u>	
JOB NUMBER: <u>NAV0303.FE</u>					MEASURED BY: <u>ALG/BWH</u>	
MEASUREING DEVICE: <u>Electronic Meter</u>						
Measuring Point						
Well Number	Description	Elevation (ft)	Depth to Water (ft)	Elevation of Water (ft)	Time	Comments
GM-70	TOC	6.96				DESTROYED
GM-71	TOC	6.60	6.41	0.19	11:11	Well Casing Damaged
GM-72	TOC	7.25	6.56	0.69	10:35	
GM-73	TOC	12.23	0.49	11.74	10:24	
GM-76	TOC	8.12	5.93	2.19	10:04	
GM-77	TOC	5.27	3.76	1.51	10:02	
GM-78	TOC	6.86	4.67	2.19	9:58	
GM-79	TOC	4.60	2.89	1.71	9:48	
GM-80	TOC	4.56	3.17	1.39	9:39	
GM-81	TOC	4.21	2.76	1.45	9:41	
GM-82	TOC	3.59	2.84	0.75	9:51	
GM-83	TOC	4.74	3.98	0.76	9:43	
GM-84R	TOC	12.26	11.66	0.60	10:25	
33G01	TOC	7.35	5.55	1.80	11:09	
33G02	TOC	7.82	4.85	2.97	11:20	
33G03	TOC	6.28	4.31	1.97	10:00	
33G04	TOC	11.78	11.27	0.51	10:32	
33G05	TOC	7.44	7.04	0.40	10:37	No Lock. USGS Tubing
33G08	TOC	6.02	4.22	1.80	10:00	
33G09	TOC	7.53	5.12	2.41	10:07	
33G10	TOC	10.73	7.80	2.93	10:10	
33G11	TOC	7.60	5.50	2.10	10:15	
33G12	TOC	7.33	7.03	0.30	10:37	No Lock. USGS Tubing
33G14	TOC	10.51	9.82	0.69	10:23	
33G15	TOC	5.28	3.40	1.88	9:53	
33G16	TOC	7.84	5.90	1.94	11:20	
33G17	TOC	7.75	5.77	1.98	11:05	
33G18	TOC	12.05	10.23	1.82	10:31	
33G20	TOC	3.73	2.90	0.83	10:41	Well Lock Cut
13G06	TOC	6.99	6.49	0.50	10:20	Well Casing Damaged
13G07	TOC	10.59	9.42	1.17	9:30	
13G19	TOC	7.35		7.35		DESTROYED

