

**BIENNIAL GROUNDWATER TECHNICAL REPORT (FEB. 1995-DEC. 1996)
HARDEE COUNTY SOLID WASTE DISPOSAL FACILITY
HARDEE COUNTY SOLID WASTE RECYCLING CENTER
HARDEE COUNTY, FLORIDA
PERMIT NUMBER SO25-214306**

Prepared For:

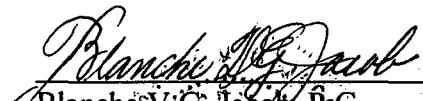
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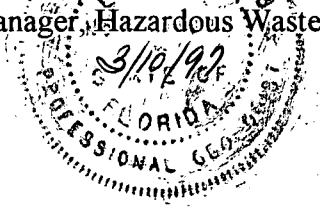
MARCH 1997

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MAR 11 1997
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EXECUTIVE SUMMARY

This biennial technical report was prepared in response to Specific Condition Number 46 of the landfill operating permit and in accordance with Chapter 62-701.510 (9)(b) of the Florida Administrative Code (F.A.C.).

Groundwater elevation data and analytical results from February 1995 to December 1996 were tabulated and analyzed to determine the effectiveness of the groundwater monitoring plan implemented at the Hardee County Solid Waste Disposal Facility. Groundwater samples were collected and analyzed from seven monitor wells throughout the monitoring period. Groundwater elevation data was recorded from these seven monitor wells as well as fourteen piezometers located throughout the site.

The landfill site is monitored to determine if a contaminant leak from the landfill liner system has occurred. All tested analytes, except for iron, pH, and methylene chloride were reported below their respective guidance concentration limit or drinking water standard, where applicable, in all monitoring wells throughout the monitoring period. Elevated iron concentrations and low pH readings were reported for all monitoring wells, including the background well, for a majority of the sampling events. Methylene chloride was reported above its maximum concentration limit at one monitoring well for one sampling event. Based on the location and depths of the monitoring wells, the groundwater monitoring plan currently in effect may require a minor modification in order to comply with F.A.C. 62-701.

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HARDEE COUNTY SOLID WASTE DISPOSAL FACILITY

OPERATING PERMIT

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Section 1

INTRODUCTION

1.1 BACKGROUND AND REPORT OBJECTIVES

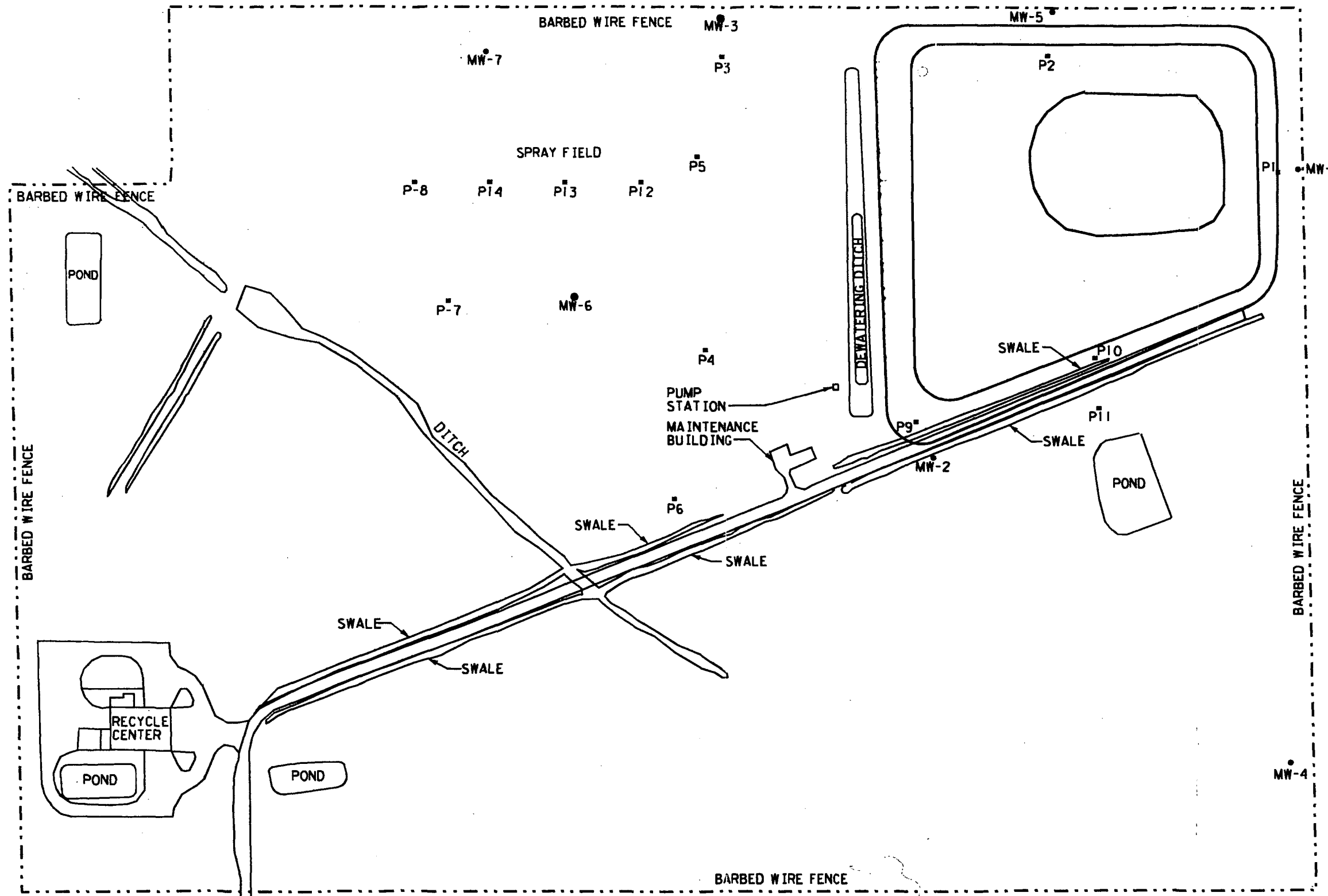
This report summarizes groundwater data collected from the Hardee County Solid Waste Disposal Facility (HCSWDF) from February 1995 to December 1996. The sampling frequency was conducted on a quarterly basis for the first two sampling events of 1995 and on a semi-annual basis for the remaining 1995 and 1996 sampling events. The change from quarterly to semi-annual groundwater sampling was approved by the Florida Department of Environmental Protection (FDEP) in correspondence dated August 24, 1995. The operating permit was issued on November 29, 1993 and was subsequently modified on June 13, 1996 to implement a new leachate/stormwater management plan. The sampling events included in this reporting period are indicated in the following table:

1995	1996
1Q: February 21	2Q: June 4
2Q: May 9	4Q: December 9
4Q: December 5	

The groundwater samples were analyzed by Short Environmental Laboratories, Inc. of Sebring, Florida. Their approved Comprehensive Quality Assurance Plan (CompQAP) is currently on file with FDEP (No. 880516).

The monitoring points consisted of seven groundwater monitoring wells and fourteen piezometers which monitor the surficial aquifer. A site map showing the locations of the sampling points is presented as Figure 1-1. A well classification chart is included as Table 1-1.

This biennial report has been prepared in accordance with Specific Condition Number 46 of the operating permit for the HCSWDF.



SCALE: 1" = 200'

LEGEND

- PI MONITORING WELL
- MW-2 PIEZOMETER

**HARDEE COUNTY SOLID WASTE MANAGEMENT FACILITY
MONITORING WELL AND PIEZOMETER LOCATION MAP**

**FIGURE
1-1**

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TABLE 1-1
HARDEE COUNTY
MONITORING WELL CLASSIFICATION CHART

<u>Monitor Well Number</u>	<u>GMS Number</u>	<u>Aquifer</u>	<u>Designation</u>
MW-1	4025A14569	SURFICIAL	COMPLIANCE
MW-2	4025A14570	SURFICIAL	COMPLIANCE
MW-3	4025A14571	SURFICIAL	COMPLIANCE
MW-4	4025A14572	SURFICIAL	BACKGROUND
MW-5	4025A14573	SURFICIAL	COMPLIANCE
MW-6	4025A14574	SURFICIAL	COMPLIANCE
MW-7	4025A14575	SURFICIAL	COMPLIANCE

Section 2

GROUNDWATER ANALYTICAL RESULTS

2.1 GROUNDWATER ANALYTICAL RESULTS SUMMARY

The analytical results for groundwater sampling conducted from February 1995 to December 1996 are summarized on the tables following this section. Additional statistical analyses are included in these tables as well. A copy of the certificates of laboratory analyses for each sampling event is currently on file with FDEP.

Iron consistently exceeded its maximum concentration limit (MCL) of 0.3 mg/L in all monitoring wells during the reporting period. Background concentrations of iron, as evidenced in the analysis of groundwater samples collected from monitor well MW-4, ranged from 31.4 to 63.6 mg/L with an overall average of 43.3 mg/L throughout this monitoring period. The groundwater samples collected from the remaining compliance wells showed similar iron concentration fluctuations; however, reported readings for all sampling events were below background concentrations in these wells. Iron is a naturally occurring element and may be present in the groundwater as a product of the surrounding environment. This is supported by information presented in the Florida Geological Survey (FGS) Special Publication No. 34. According to this publication, iron has been detected in this region in the surficial aquifer at a background concentration of 43.90 part per million (ppm).

In addition to iron, all sampling events for all monitoring wells (except for the February 1995 and December 1996 sampling events for monitoring well MW-2) did not achieve the minimum pH standard of 6.5. The lowest overall average pH, 4.47, was noted in monitoring well MW-7. The average reading for background well MW-4 was 5.86. Background pH readings for Hardee County have been reported at 4.90 as documented in the FGS report previously referenced.

The third analyte which exceeded its MCL (5.0 µg/L) was methylene chloride. A concentration of 5.2 µg/L was reported for the sample collected from monitoring well MW-6 on December 9, 1995. Analysis results from the two subsequent sampling events reported methylene chloride concentrations below laboratory detection limits. Methylene chloride was also detected in monitor wells MW-2, MW-4, and MW-5 for the same sampling event. These concentrations were reported below the MCL. Methylene chloride was below laboratory detection limits for the subsequent sampling events. Methylene chloride concentrations will be closely monitored in future sampling events.

Minor concentrations of arsenic were consistently reported for monitor wells MW-1 and MW-4. The highest arsenic concentration, 0.029 µg/L, was reported for monitor well MW-4 during the May 1995 sampling event. This value is below the primary drinking water standard of 0.05 ug/l. However, since the analyte was consistently reported throughout the testing period it will be closely monitored in future sampling events.

2.2 GROUNDWATER MONITORING WELL COMPARISONS

Since only surficial monitoring wells were present at the site during this monitoring period, a relationship cannot be established between different flow zones. Section 2.4 discusses upgradient and downgradient groundwater quality comparisons.

2.3 GROUNDWATER FLOW

The estimated static groundwater flow gradient across the site is inferred to be to the southeast with monitor well MW-4 considered the farthest upgradient well. However, the ditch to the south of the landfill coupled with the liners around the other three sides of the landfill distort the overall groundwater flow near the site. As shown in the figures in Appendix A, an inward groundwater flow gradient has been consistently maintained around the perimeter of the landfill cell except during the December 5, 1995 sampling event. An outward flow from the landfill perimeter was observed along the northern and eastern sides of the landfill at that time. Additionally, during the December 9, 1996 sampling event date, the groundwater flow around the western side of the landfill projected outward away from the landfill perimeter. Groundwater flow direction around these sides will be closely monitored during the dry season in the future. Additional pumping activities may be initiated if the inward gradient is not maintained during future monitoring. Groundwater elevation data is presented in Section 7.

2.4 DOWNGRAIENT CONTAMINANT MIGRATION

Monitor wells MW-3, MW-5, MW-6, and MW-7 are considered the downgradient wells for the site. Monitor wells MW-1 and MW-2 are considered the upgradient wells with monitor well MW-4 considered the background well. The upgradient and downgradient water quality was at or below background contaminant concentrations throughout the monitoring period. As referenced earlier, iron and pH consistently did not meet their established MCL levels. However, there is no significant variation between upgradient, downgradient, and background concentration values.

2.5 GROUNDWATER MONITORING PLAN EVALUATION

The groundwater monitoring plan currently in effect may require modifications in order to comply with 62-701.510(3)(a) and 62-701.510(3)(d) F.A.C. The monitoring wells currently present along the downgradient side of the landfill cell are not within 50 feet of the edge of the solid waste unit, and the spacing of the downgradient monitoring wells along the southwestern and southern ends of the solid waste unit exceed the maximum spacing of 500 feet.

As part of the operating permit modification planned to be submitted in the middle of the 1997 calendar year for the HCSWMF, a vertical liner is to be installed along the southern border of the landfill cell. The dewatering ditch currently present at the southern border of the landfill cell will be incorporated into the landfill as part of this modification. Additionally, the spray field will be taken off-line as it has been proposed that leachate be collected in tanks and taken off-site for ultimate disposal.

A groundwater monitoring plan modification will be submitted along with the operating permit modification to incorporate all proposed changes to the landfill. A modification of the current groundwater monitoring plan at this time may not be applicable with the design changes proposed for the operating permit modification.

TABLE 2-1

**SUMMARY OF LABORATORY ANALYSES
MONITOR WELL MW-1**

Analyte	Primary Drinking Water Standard	Secondary Drinking Water Standard	Units	Sample Date								
				12-09-96	06-04-96	12-05-95	05-09-95	02-21-95	MIN	MAX	AVG	ST. DEV.
Field Data												
Conductivity	6.5 - 8.5		umhos/cm	224	270	290	340	330	224	340	291	42
pH			pH units	4.84	4.46	3.66	4.86	5.26	3.66	5.26	4.62	0.54
Dissolved Oxygen			mg/L	5.4	2	4.6	1.8	6.1	1.8	6.1	4.0	1.8
Turbidity			NTU	15.5	2.4	4	2.9	126	2.4	126	30.2	48.2
Temperature			°C	22.2	19.7	24.6	23.2	21.9	19.7	24.6	22.3	1.6
C/Sheens			N/A	NO	NO	NO	NO	NO				
Laboratory Data												
Ammonia			mg/L	0.24	0.41	0.34	0.35	0.38	0.24	0.41	0.34	0.06
Ammonium			mg/L				0.35	0.38	0.35	0.38	0.37	0.02
Chloride		250	mg/L	34	43	42	94	55	34	94	54	21
Color			N/A				350	230	230	350	290	60
Iron		0.3	mg/L	10.8	16.8	15.4	20.8	27.4	10.8	27.4	18.24	5.58
Mercury	0.002		mg/L	BDL	BDL	BDL	BDL	BDL	0.001	0.001	0.001	0.000
Nitrate	10		mg/L	BDL	0.06	0.04	0.04	0.04	0.02	0.06	0.04	0.02
Sodium	160		mg/L	13.5	15.5	16	18	19	13.5	19	16.4	1.9
Total Dissolved Solids		500	mg/L	288	262	318	318	282	262	318	294	22
Total Organic Carbon			mg/L				60	63	60	63	62	2
Antimony	0.006		mg/L	BDL	BDL	BDL			0.003	0.003	0.003	0.000
Arsenic	0.05		mg/L	0.008	0.008	0.007	0.009	0.021	0.007	0.021	0.0106	0.005
Barium	2		mg/L	BDL	BDL	0.03			0.02	0.03	0.023333	0.014
Beryllium	0.004		mg/L	BDL	BDL	BDL	BDL	BDL	0.001	0.001	0.001	0.000
Cadmium	0.005		mg/L	BDL	BDL	BDL	BDL	BDL	0.002	0.002	0.002	0.000
Chromium	0.1		mg/L	BDL	BDL	BDL	BDL	BDL	0.02	0.02	0.02	0.00
Cobalt			mg/L	BDL	BDL	BDL			0.05	0.05	0.05	0.00
Copper		1	mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Lead	0.015		mg/L	0.002	BDL	0.002	0.001	0.002	0.001	0.002	0.0014	0.001
Nickel	0.1		mg/L	BDL	BDL	0.02			0.01	0.02	0.01	0.01
Selenium	0.05		mg/L	BDL	BDL	BDL			0.005	0.005	0.005	0.000
Silver		0.05	mg/L	BDL	BDL	0.001			0.001	0.001	0.001	0.000
Thallium	1		mg/L	BDL	BDL	BDL			0.002	0.002	0.002	0.000
Vanadium		0.049 *	mg/L	BDL	BDL	0.012			0.012	0.1	0.0	0.0
Zinc		5	mg/L	0.004	0.006	0.012			0.004	0.012	0.007	0.003
Appendix I												
Acetone		700 *	ug/L	BDL	BDL	5.1			2.5	5.1	3.4	1.2
Other App. I analytes			ug/L	BDL	BDL	BDL						
EPA 601/602 analytes			ug/L				BDL	BDL				

All listed drinking water standards are established under F.A.C. 62-520.420(1)

* Guidance concentration limit; guidance concentration limits are non-enforceable limits established under F.A.C. 62-520.400

BDL - Below Detection Limit

TABLE 2-1 (cont)

SUMMARY OF LABORATORY ANALYSES
MONITOR WELL MW-2

Analyte	Primary Drinking Water Standard	Secondary Drinking Water Standard	Units	Sample Date								
				12-09-96	06-04-96	12-05-95	05-09-95	02-21-95	MIN	MAX	AVG	ST. DEV.
Field Data												
Conductivity			umhos/cm	395	340	480	300	340	300	480	371	62
pH	6.5 - 8.5		pH units	6.54	6.31	6.34	6.24	6.83	6.24	6.83	6.45	0.21
Dissolved Oxygen			mg/L	3.1	1.8	2.4	1.8	5.8	1.8	5.8	3.0	1.5
Turbidity			NTU	21	7.7	14.6	19	269	7.7	269	66.3	101.5
Temperature			°C	22	19.6	23.2	22.6	19.2	19.2	23.2	21.3	1.6
C/Sheens			N/A	YES	NO	YES	NO	NO				
Laboratory Data												
Ammonia			mg/L	0.11	0.18	0.19	0.22	0.17	0.11	0.22	0.17	0.04
Ammonium			mg/L				0.22	0.17	0.17	0.22	0.20	0.03
Chloride		250	mg/L	20	15	23	18	20	15	23	19	3
Color			N/A				45	17	17	45	31	14
Iron		0.3	mg/L	4.57	8.46	2.95	8.54	18.9	2.95	18.9	8.68	5.55
Mercury	0.002		mg/L	BDL	BDL	BDL	BDL	BDL	0.001	0.001	0.001	0.000
Nitrate	10		mg/L	0.03	0.03	BDL	0.04	0.03	0.02	0.04	0.03	0.01
Sodium	160		mg/L	10.1	10.2	11	8.3	10	8.3	11	9.9	0.9
Total Dissolved Solids		500	mg/L	216	268	296	189	242	189	296	242	38
Total Organic Carbon			mg/L				8.2	7.7	7.7	8.2	8	0
Antimony	0.006		mg/L	BDL	BDL	BDL			0.003	0.003	0.003	0.000
Arsenic	0.05		mg/L	BDL	BDL	BDL	BDL	0.009	0.005	0.009	0.0058	0.004
Barium	2		mg/L	BDL	BDL	0.02			0.02	0.02	0.02	0.009
Beryllium	0.004		mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Cadmium	0.005		mg/L	BDL	BDL	BDL	BDL	BDL	0.002	0.002	0.002	0.000
Chromium	0.1		mg/L	BDL	BDL	BDL	BDL	0.02	0.02	0.02	0.02	0.00
Cobalt			mg/L	BDL	BDL	BDL			0.05	0.05	0.05	0.00
Copper		1	mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Lead	0.015		mg/L	0.002	BDL	BDL	BDL	0.007	0.001	0.007	0.00275	0.003
Nickel	0.1		mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Selenium	0.05		mg/L	BDL	BDL	BDL			0.005	0.005	0.005	0.000
Silver		0.05	mg/L	BDL	BDL	0.001			0.001	0.001	0.001	0.000
Thallium	1		mg/L	BDL	BDL	BDL			0.002	0.002	0.002	0.000
Vanadium		0.049 *	mg/L	BDL	BDL	BDL			0.1	0.1	0.1	0.0
Zinc		5	mg/L	BDL	BDL	0.004			0.002	0.004	0.003	0.002
Appendix I												
Acetone		700 *	ug/L	BDL	BDL	5.3			2.5	5.3	3.4	1.3
Methylene Chloride	5		ug/L	BDL	BDL	4.1			0.1	4.1	1.5	1.9
Other App. I analytes			ug/L	BDL	BDL	BDL						
EPA 601/602 analytes			ug/L				BDL	BDL				

All listed drinking water standards are established under F.A.C. 62-520.420(1)

* Guidance concentration limit; guidance concentration limits are non-enforceable limits established under F.A.C. 62-520.400

BDL - Below Detection Limit

TABLE 2-1 (cont)

SUMMARY OF LABORATORY ANALYSES
MONITOR WELL MW-3

Analyte	Primary Drinking Water Standard	Secondary Drinking Water Standard	Units	Sample Date								
				12-09-96	06-04-96	12-05-95	05-09-95	02-21-95	MIN	MAX	AVG	ST. DEV.
Field Data												
Conductivity	6.5 - 8.5		umhos/cm	95	90	90	100	95	90	100	94	4
pH			pH units	5.16	4.64	3.87	5.35	5.92	3.87	5.92	4.99	0.69
Dissolved Oxygen			mg/L	4.4	1.8	3.2	1.9	5.4	1.8	5.4	3.3	1.4
Turbidity			NTU	1	0.8	3.2	2.4	77	0.8	77	16.9	30.1
Temperature			°C	23.9	20.9	26.7	24.4	21.1	20.9	26.7	23.4	2.2
C/Sheens			N/A	NO	NO	NO	NO	NO				
Laboratory Data												
Ammonia			mg/L	0.06	0.07	0.06	0.08	0.11	0.06	0.11	0.08	0.02
Ammonium			mg/L				0.08	0.11	0.08	0.11	0.10	0.02
Chloride		250	mg/L	4.8	5	4.9	6	7.1	4.8	7.1	6	1
Color			N/A				38	19	19	38	29	10
Iron		0.3	mg/L	0.79	0.86	1.1	1.08	3.74	0.79	3.74	1.51	1.12
Mercury	0.002		mg/L	BDL	BDL	BDL	BDL	BDL	0.001	0.001	0.001	0.000
Nitrate	10		mg/L	BDL	BDL	BDL	BDL	0.03	0.02	0.03	0.02	0.01
Sodium	160		mg/L	3.1	2.9	3.4	3.2	3.5	2.9	3.5	3.2	0.2
Total Dissolved Solids		500	mg/L	74	58	70	64	56	56	74	64	7
Total Organic Carbon			mg/L				4.8	4.6	4.6	4.8	5	0
Antimony	0.006		mg/L	BDL	BDL	BDL			0.003	0.003	0.003	0.000
Arsenic	0.05		mg/L	BDL	BDL	BDL	BDL	BDL	0.005	0.005	0.005	0.000
Barium	2		mg/L	BDL	BDL	BDL			0.02	0.02	0.02	0.000
Beryllium	0.004		mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Cadmium	0.005		mg/L	BDL	BDL	BDL	BDL	BDL	0.002	0.002	0.002	0.000
Chromium	0.1		mg/L	BDL	BDL	BDL	BDL	0.02	0.02	0.02	0.02	0.01
Cobalt			mg/L	BDL	BDL	BDL			0.05	0.05	0.05	0.00
Copper		1	mg/L	BDL	BDL	BDL	BDL		0.01	0.01	0.01	0.00
Lead	0.015		mg/L	BDL	BDL	BDL	BDL	0.005	0.001	0.005	0.0018	0.002
Nickel	0.1		mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Selenium	0.05		mg/L	BDL	BDL	BDL			0.005	0.005	0.005	0.000
Silver		0.05	mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Thallium	1		mg/L	BDL	BDL	BDL			0.002	0.002	0.002	0.000
Vanadium		0.049 *	mg/L	BDL	BDL	BDL			0.1	0.1	0.1	0.0
Zinc		5	mg/L	0.002	BDL	BDL			0.002	0.002	0.001	0.001
Appendix I												
Acetone		700 *	ug/L	BDL	BDL	99			2.5	99.0	34.7	45.5
Other App. I analytes			ug/L	BDL	BDL	BDL						
EPA 601/602 analytes			ug/L				BDL	BDL				

All listed drinking water standards are established under F.A.C. 62-520.420(1)

* Guidance concentration limit; guidance concentration limits are non-enforceable limits established under F.A.C. 62-520.400

BDL - Below Detection Limit

TABLE 2-1 (cont)

SUMMARY OF LABORATORY ANALYSES
MONITOR WELL MW-4

Analyte	Primary Drinking Water Standard	Secondary Drinking Water Standard	Units	Sample Date								
				12-09-96	06-04-96	12-05-95	05-09-95	02-21-95	MIN	MAX	AVG	ST. DEV.
Field Data												
Conductivity			umhos/cm	290	265	340	350	340	265	350	317	33
pH	6.5 - 8.5		pH units	5.96	5.7	5.24	6.35	6.06	5.24	6.35	5.86	0.37
Dissolved Oxygen			mg/L	2.8	2.2	3.4	2.2	5.4	2.2	5.4	3.2	1.2
Turbidity			NTU	7.92	2.3	0.7	1.9	166	0.7	166	35.8	65.2
Temperature			°C	22.4	19.6	18.2	22.1	20.1	18.2	22.4	20.5	1.6
C/Sheens			N/A	NO	NO	NO	NO	NO				
Laboratory Data												
Ammonia			mg/L	0.39	0.48	0.5	0.52	0.46	0.39	0.52	0.47	0.04
Ammonium			mg/L				0.52	0.46	0.46	0.52	0.49	0.03
Chloride		250	mg/L	26	18	15	9.3	9.8	9.3	26	16	6
Color			N/A									
Iron		0.3	mg/L	33.8	39.5	31.4	63.6	48.1	31.4	63.6	43.28	11.67
Mercury	0.002		mg/L	BDL	BDL	BDL	BDL	BDL	0.001	0.001	0.001	0.000
Nitrate	10		mg/L	BDL	0.07	0.05	0.05	0.03	0.02	0.07	0.04	0.02
Sodium	160		mg/L	7.4	4.9	5	4.3	4	4	7.4	5.1	1.2
Total Dissolved Solids		500	mg/L	232	262	288	326	298	232	326	281	32
Total Organic Carbon			mg/L				82	72	72	82	77	5
Antimony	0.006		mg/L	BDL	BDL	BDL			0.003	0.003	0.003	0.000
Arsenic	0.05		mg/L	0.026	0.026	0.017	0.029	0.019	0.017	0.029	0.0234	0.005
Barium	2		mg/L	BDL	BDL	0.02			0.02	0.02	0.02	0.000
Beryllium	0.004		mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Cadmium	0.005		mg/L	BDL	BDL	BDL	BDL	BDL	0.002	0.002	0.002	0.000
Chromium	0.1		mg/L	BDL	BDL	BDL	BDL	BDL	0.02	0.02	0.02	0.00
Cobalt			mg/L	BDL	BDL	BDL			0.05	0.05	0.05	0.00
Copper		1	mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Lead	0.015		mg/L	BDL	BDL	0.001	BDL	BDL	0.001	0.001	0.001	0.000
Nickel	0.1		mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Selenium	0.05		mg/L	BDL	BDL	BDL			0.005	0.005	0.005	0.000
Silver		0.05	mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Thallium	1		mg/L	BDL	BDL	BDL			0.002	0.002	0.002	0.000
Vanadium		0.049 *	mg/L	BDL	BDL	0.013			0.013	0.1	0.1	0.0
Zinc		5	mg/L	BDL	0.002	0.009			0.002	0.009	0.003	0.003
Appendix I												
Acetone		700 *	ug/L	BDL	BDL	11			2.5	11.0	5.3	4.0
Methylene chloride	5		ug/L	BDL	BDL	4.2			0.1	4.2	1.5	1.9
Other App. I analytes			ug/L	BDL	BDL	BDL						
EPA 601/602 analytes			ug/L				BDL	BDL				

All listed drinking water standards are established under F.A.C. 62-520.420(1)

* Guidance concentration limit; guidance concentration limits are non-enforceable limits established under F.A.C. 62-520.400

BDL - Below Detection Limit

TABLE 2-1 (cont)

SUMMARY OF LABORATORY ANALYSES
MONITOR WELL MW-5

Analyte	Primary Drinking Water Standard	Secondary Drinking Water Standard	Units	Sample Date								
				12-09-96	06-04-96	12-05-95	05-09-95	02-21-95	MIN	MAX	AVG	ST. DEV.
Field Data												
Conductivity			umhos/cm	81	80	80	85	85	80	85	82	2
pH	6.5 - 8.5		pH units	5.19	4.56	4	5	5.7	4	5.7	4.89	0.58
Dissolved Oxygen			mg/L	4	1.7	3.2	1.9	5.4	1.7	5.4	3.2	1.4
Turbidity			NTU	3.6	3.2	2.2	3.8	136	2.2	136	29.8	53.1
Temperature			°C	23	20	25.7	23.4	21.1	20	25.7	22.6	2.0
C/Sheens			N/A	NO	NO	NO	NO	NO				
Laboratory Data												
Ammonia			mg/L	0.16	0.15	0.18	0.19	0.21	0.15	0.21	0.18	0.02
Ammonium			mg/L				0.19	0.21	0.19	0.21	0.20	0.01
Chloride		250	mg/L	6.2	6.2	4.9	6.2	7.2	4.9	7.2	6	1
Color			N/A				23	16	16	23	20	4
Iron		0.3	mg/L	4.4	4.98	4.99	5.91	7.86	4.4	7.86	5.63	1.22
Mercury	0.002		mg/L	BDL	BDL	BDL	BDL	BDL	0.001	0.001	0.001	0.000
Nitrate	10		mg/L	0.04	0.3	BDL	0.07	0.03	0.02	0.3	0.08	0.11
Sodium	160		mg/L	5	4.9	4.6	5.1	5.1	4.6	5.1	4.9	0.2
Total Dissolved Solids		500	mg/L	64	68	86	68	48	48	86	67	12
Total Organic Carbon			mg/L				6.1	8.5	6.1	8.5	7	1
Antimony	0.006		mg/L	BDL	BDL	BDL			0.003	0.003	0.003	0.000
Arsenic	0.05		mg/L	BDL	BDL	BDL	BDL	BDL	0.005	0.005	0.005	0.000
Barium	2		mg/L	BDL	BDL	BDL			0.02	0.02	0.02	0.000
Beryllium	0.004		mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Cadmium	0.005		mg/L	BDL	BDL	BDL	BDL	BDL	0.002	0.002	0.002	0.000
Chromium	0.1		mg/L	BDL	BDL	BDL	BDL	BDL	0.02	0.02	0.02	0.00
Cobalt			mg/L	BDL	BDL	BDL			0.05	0.05	0.05	0.00
Copper		1	mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Lead	0.015		mg/L	0.002	BDL	BDL	BDL	0.004	0.001	0.004	0.0012	0.002
Nickel	0.1		mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Selenium	0.05		mg/L	BDL	BDL	BDL			0.005	0.005	0.005	0.000
Silver		0.05	mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Thallium	1		mg/L	BDL	BDL	BDL			0.002	0.002	0.002	0.000
Vanadium		0.049 *	mg/L	BDL	BDL	BDL			0.1	0.1	0.1	0.0
Zinc		5	mg/L	BDL	0.004	BDL			0.002	0.004	0.003	0.002
Appendix I												
Acetone		700 *	ug/L	BDL	BDL	5.5			2.5	5.5	3.5	1.4
Methylene chloride	5		ug/L	BDL	BDL	4.2			0.1	4.2	1.5	1.9
Other App. I analytes			ug/L	BDL	BDL	BDL						
EPA 601/602 analytes			ug/L				BDL	BDL				

All listed drinking water standards are established under F.A.C. 62-520.420(1)

* Guidance concentration limit; guidance concentration limits are non-enforceable limits established under F.A.C. 62-520.400

BDL - Below Detection Limit

TABLE 2-1 (cont)

SUMMARY OF LABORATORY ANALYSES
MONITOR WELL MW-6

Analyte	Primary Drinking Water Standard	Secondary Drinking Water Standard	Units	Sample Date								
				12-09-96	06-04-96	12-05-95	05-09-95	02-21-95	MIN	MAX	AVG	ST. DEV.
Field Data												
Conductivity	6.5 - 8.5		umhos/cm	130	155	175	190	185	130	190	167	22
pH			pH units	4.85	4.3	4.3	4.83	5.5	4.3	5.5	4.76	0.44
Dissolved Oxygen			mg/L	3.2	2.3	2.8	1.5	4.4	1.5	4.4	2.8	1.0
Turbidity			NTU	0.79	0.6	0.3	1.1	80	0.3	80	16.6	31.7
Temperature			°C	22.3	19.6	26	22.6	21.5	19.6	26	22.4	2.1
C/Sheens			N/A	NO	NO	NO	NO	NO				
Laboratory Data												
Ammonia			mg/L	0.05	0.07	0.1	0.1	0.11	0.05	0.11	0.09	0.02
Ammonium			mg/L				0.1	0.11	0.1	0.11	0.11	0.00
Chloride		250	mg/L	29	35	39	42	44	29	44	38	5
Color			N/A				3	BDL	0	3	2	2
Iron		0.3	mg/L	4.45	5.34	5.78	7.8	6.97	4.45	7.8	6.07	1.19
Mercury	0.002		mg/L	BDL	BDL	BDL	BDL	BDL	0.001	0.001	0.001	0.000
Nitrate	10		mg/L	0.05	0.03	0.06	0.04	0.03	0.03	0.06	0.04	0.01
Sodium	160		mg/L	17.2	18.8	20	21	22	17.2	22	19.8	1.7
Total Dissolved Solids		500	mg/L	88	100	98	98	76	76	100	92	9
Total Organic Carbon			mg/L				3.4	3.3	3.3	3.4	3	0
Antimony	0.006		mg/L	BDL	BDL	BDL			0.003	0.003	0.003	0.000
Arsenic	0.05		mg/L	BDL	BDL	BDL	BDL	BDL	0.005	0.005	0.005	0.000
Barium	2		mg/L	BDL	BDL	BDL			0.02	0.02	0.02	0.000
Beryllium	0.004		mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Cadmium	0.005		mg/L	BDL	BDL	BDL	BDL	BDL	0.002	0.002	0.002	0.000
Chromium	0.1		mg/L	BDL	BDL	BDL	BDL	BDL	0.02	0.02	0.02	0.00
Cobalt			mg/L	BDL	BDL	BDL			0.05	0.05	0.05	0.00
Copper		1	mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Lead	0.015		mg/L	BDL	BDL	0.001	0.001	0.001	0.001	0.001	0.001	0.000
Nickel	0.1		mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Selenium	0.05		mg/L	BDL	BDL	BDL			0.005	0.005	0.005	0.000
Silver		0.05	mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Thallium	1		mg/L	BDL	0.002	BDL			0.002	0.002	0.002	0.000
Vanadium		0.049 *	mg/L	BDL	BDL	BDL			0.1	0.1	0.1	0.0
Zinc		5	mg/L	BDL	0.002	0.014			0.002	0.014	0.006	0.006
Appendix I												
Methylene chloride	5		ug/L	BDL	BDL	5.2			0.1	5.2	1.8	2.3
Other App. I analytes			ug/L	BDL	BDL	BDL						
EPA 601/602 analytes			ug/L				BDL	BDL				

All listed drinking water standards are established under F.A.C. 62-520.420(1)

* Guidance concentration limit; guidance concentration limits are non-enforceable limits established under F.A.C. 62-520.400

BDL - Below Detection Limit

TABLE 2-1 (cont)

SUMMARY OF LABORATORY ANALYSES
MONITOR WELL MW-7

Analyte	Primary Drinking Water Standard	Secondary Drinking Water Standard	Units	Sample Date								
				12-09-96	06-04-96	12-05-95	05-09-95	02-21-95	MIN	MAX	AVG	ST. DEV.
Field Data												
Conductivity	6.5 - 8.5		umhos/cm	161	170	200	200	190	161	200	184	16
pH			pH units	4.71	4.21	3.92	4.48	5.04	3.92	5.04	4.47	0.39
Dissolved Oxygen			mg/L	3.2	2.8	3.2	2	4.8	2	4.8	3.2	0.9
Turbidity			NTU	0.7	1	0.8	1.6	15	0.7	15	3.8	5.6
Temperature			°C	22.6	19.1	25.6	22.3	20.5	19.1	25.6	22.0	2.2
C/Sheens			N/A	NO	NO	NO	NO	NO				
Laboratory Data												
Ammonia			mg/L	0.28	0.32	0.41	0.37	0.38	0.28	0.41	0.35	0.05
Ammonium			mg/L				0.37	0.38	0.37	0.38	0.38	0.00
Chloride		250	mg/L	35	40	49	49	52	35	52	45	6
Color			N/A				47	25	25	47	36	11
Iron		0.3	mg/L	3.26	4.92	5.34	6.7	7.42	3.26	7.42	5.53	1.45
Mercury	0.002		mg/L	BDL	BDL	BDL	BDL	BDL	0.001	0.001	0.001	0.000
Nitrate	10		mg/L	0.02	BDL	0.03	BDL	0.02	0.02	0.03	0.02	0.01
Sodium	160		mg/L	18.4	20.7	24	24	25	18.4	25	22.4	2.5
Total Dissolved Solids		500	mg/L	110	107	124	112	110	107	124	113	6
Total Organic Carbon			mg/L				11	8	8	11	10	2
Antimony	0.006		mg/L	BDL	BDL	BDL			0.003	0.003	0.003	0.000
Arsenic	0.05		mg/L	BDL	BDL	BDL	BDL	BDL	0.005	0.005	0.005	0.000
Barium	2		mg/L	BDL	BDL	BDL			0.02	0.02	0.02	0.000
Beryllium	0.004		mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Cadmium	0.005		mg/L	BDL	BDL	BDL	BDL	BDL	0.002	0.002	0.002	0.000
Chromium	0.1		mg/L	BDL	BDL	BDL	BDL	BDL	0.02	0.02	0.02	0.00
Cobalt			mg/L	BDL	BDL	BDL			0.05	0.05	0.05	0.00
Copper		1	mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Lead	0.015		mg/L	0.001	BDL	BDL	0.001	BDL	0.001	0.001	0.001	0.000
Nickel	0.1		mg/L	BDL	BDL	BDL			0.01	0.01	0.01	0.00
Selenium	0.05		mg/L	BDL	BDL	BDL			0.005	0.005	0.005	0.000
Silver		0.05	mg/L	BDL	BDL	BDL			0.001	0.001	0.001	0.000
Thallium	1		mg/L	BDL	BDL	BDL			0.002	0.002	0.002	0.000
Vanadium		0.049 *	mg/L	BDL	BDL	BDL			0.1	0.1	0.1	0.0
Zinc		5	mg/L	BDL	BDL	0.003			0.000	0.003	0.001	0.001
Appendix I												
Acetone		700 *	ug/L	BDL	BDL	3.0			2.5	3.0	2.7	0.2
Other App. I analytes			ug/L	BDL	BDL	BDL						
EPA 601/602 analytes			ug/L				BDL	BDL				

All listed drinking water standards are established under F.A.C. 62-520.420(1)

* Guidance concentration limit; guidance concentration limits are non-enforceable limits established under F.A.C. 62-520.400

BDL - Below Detection Limit

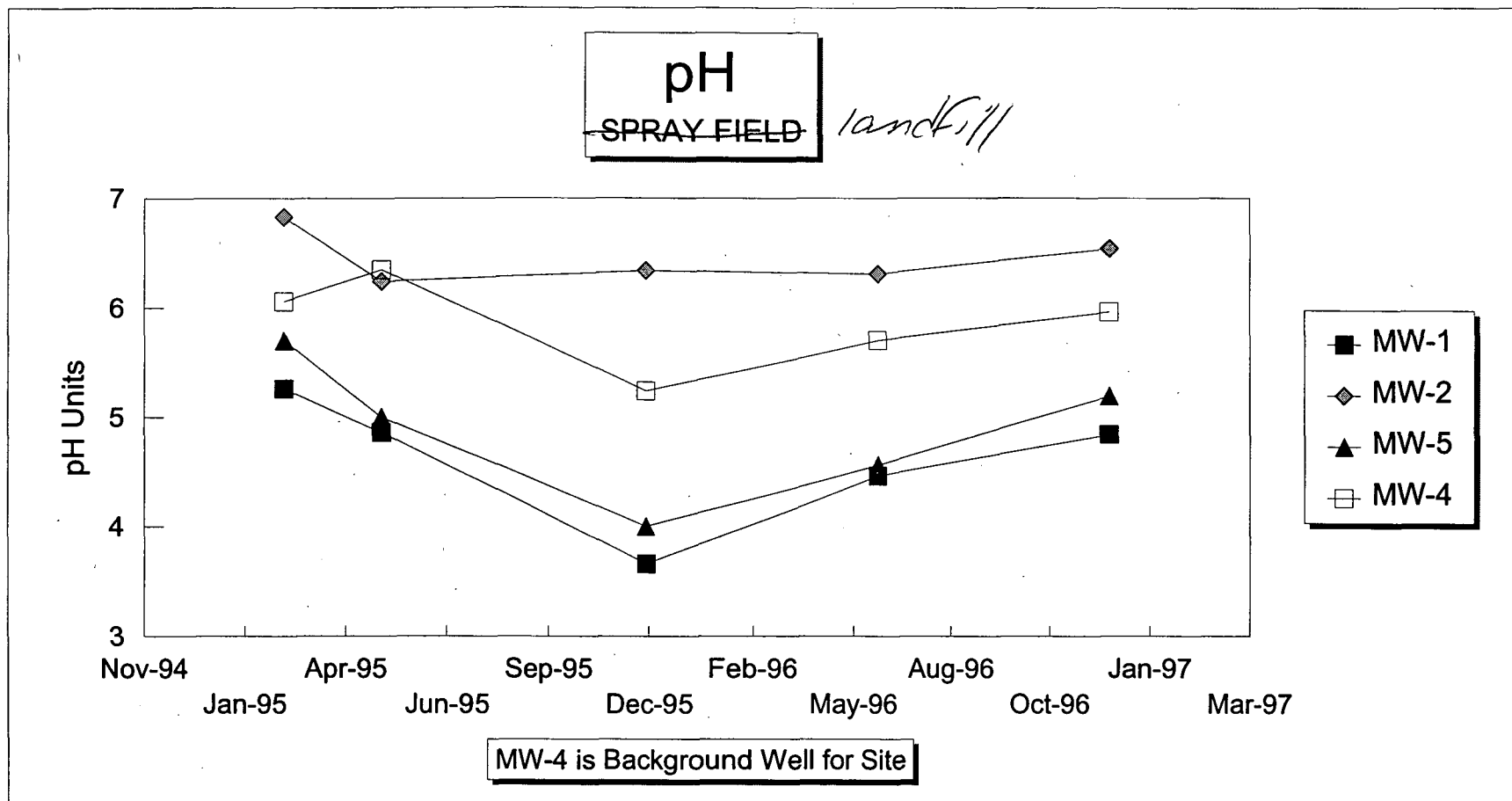
Section 3

GRAPHICAL ANALYSIS OF GROUNDWATER DATA

3.1 GRAPHICAL SUMMARY

Graphs displaying the concentration of pH, dissolved oxygen, temperature, ammonia, and total dissolved solids are presented for each monitoring well. The monitoring wells are grouped on the graphs according to their location on site. Monitor wells MW-1, MW-2, and MW-5 are located adjacent to the landfill while monitor wells MW-3, MW-6, and MW-7 are located in the spray field area. Monitor well MW-4 is included on both graphs for each parameter set since it represents background levels. Any observed trends are discussed below.

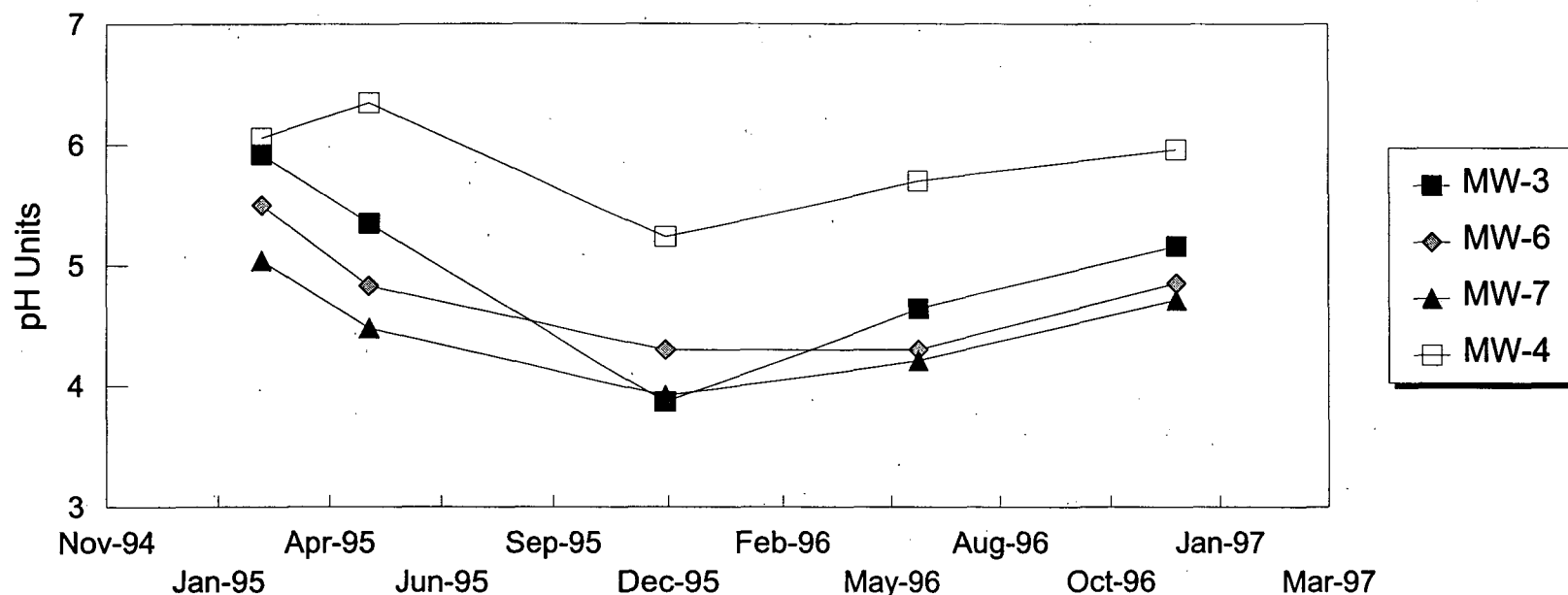
In general, most of the graphs displayed fluctuations. Most fluctuations were consistent with the background well. Seasonal fluctuations were apparent with some parameters such as dissolved oxygen, but a majority of the fluctuations did not exhibit any significant trends. The trends, however, were consistent between the landfill and the spray field for most parameters.



*replaced w/
4/29/97 w/
correct label*

pH
LANDFILL

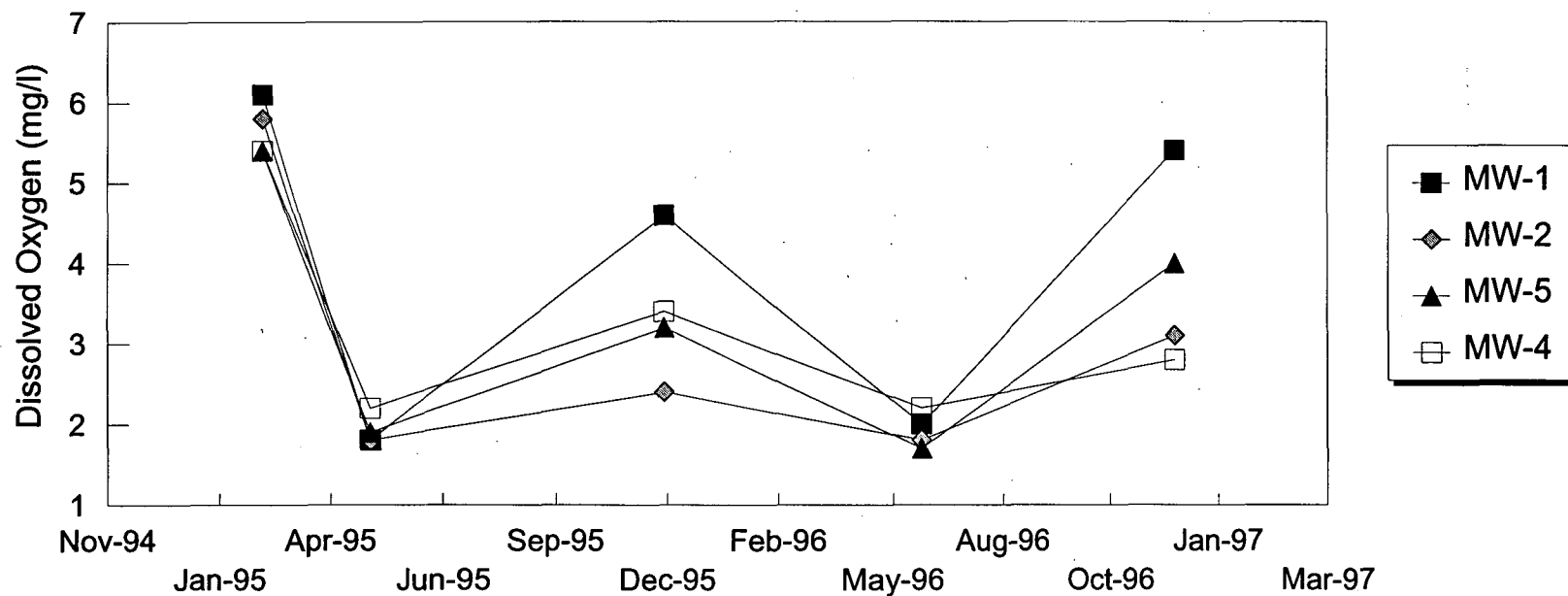
sprayfield



MW-4 is Background Well for Site

DISSOLVED OXYGEN

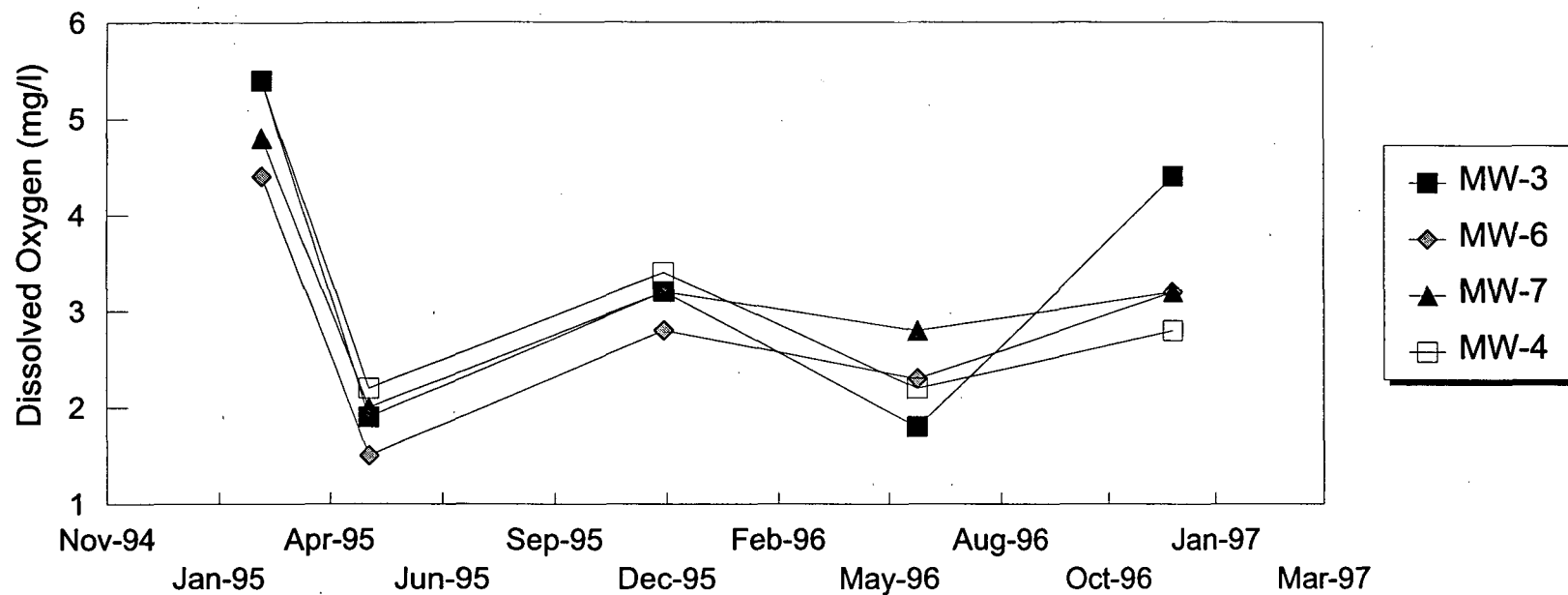
~~SPRAY FIELD~~ LF



MW-4 is Background Well for Site

DISSOLVED OXYGEN

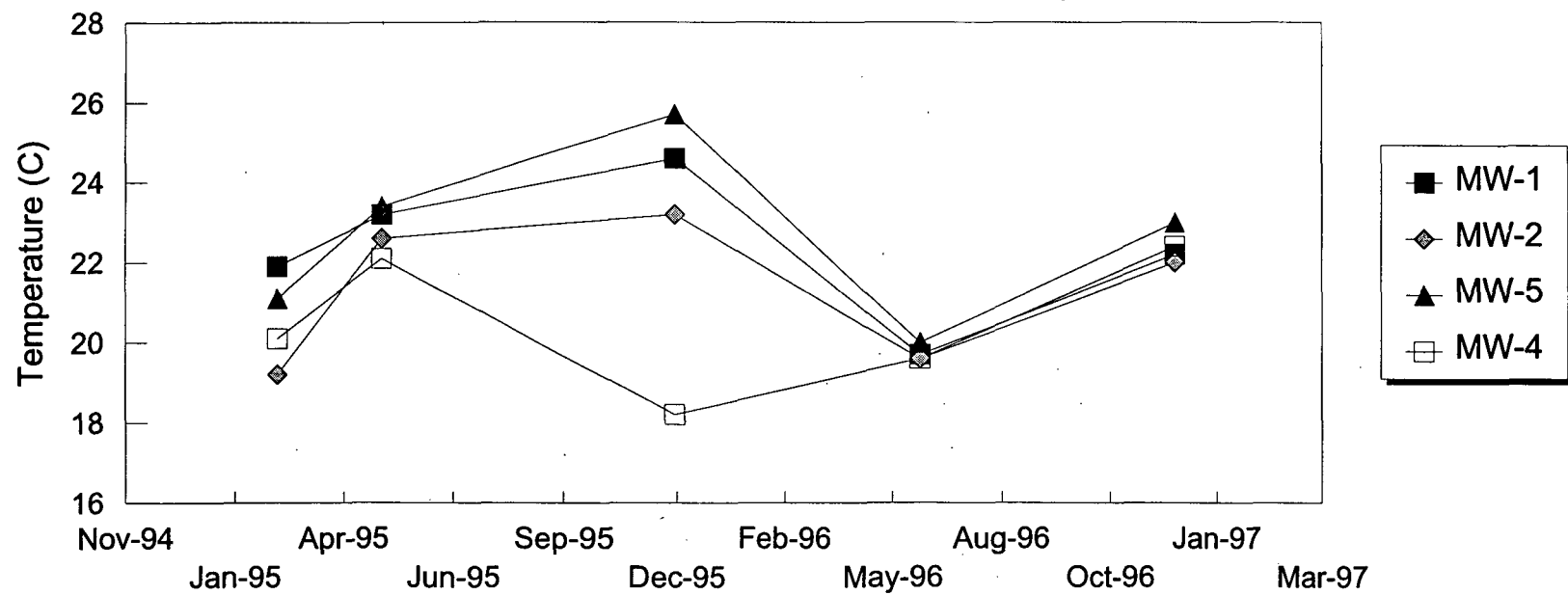
LANDFILL *sprayfield*



MW-4 is Background Well for Site

TEMPERATURE

~~SPRAY FIELD~~ LF

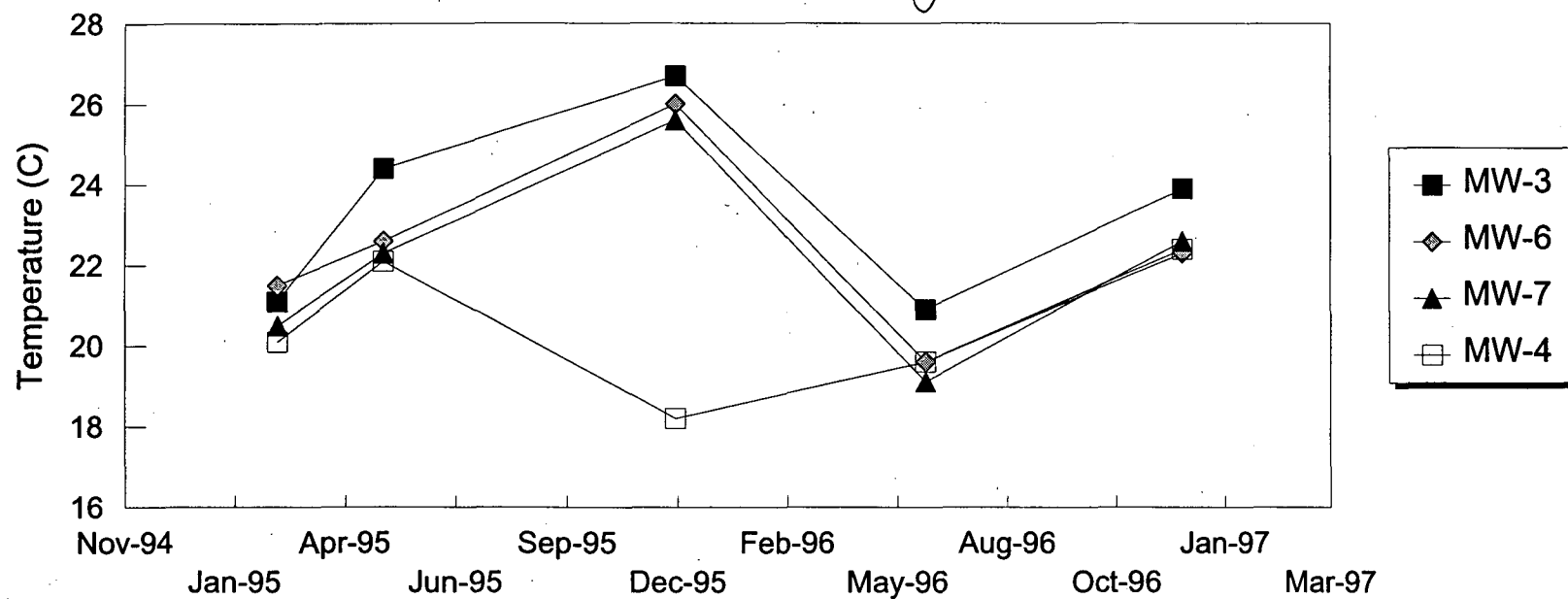


MW-4 is Background Well for Site

TEMPERATURE

LANDFILL

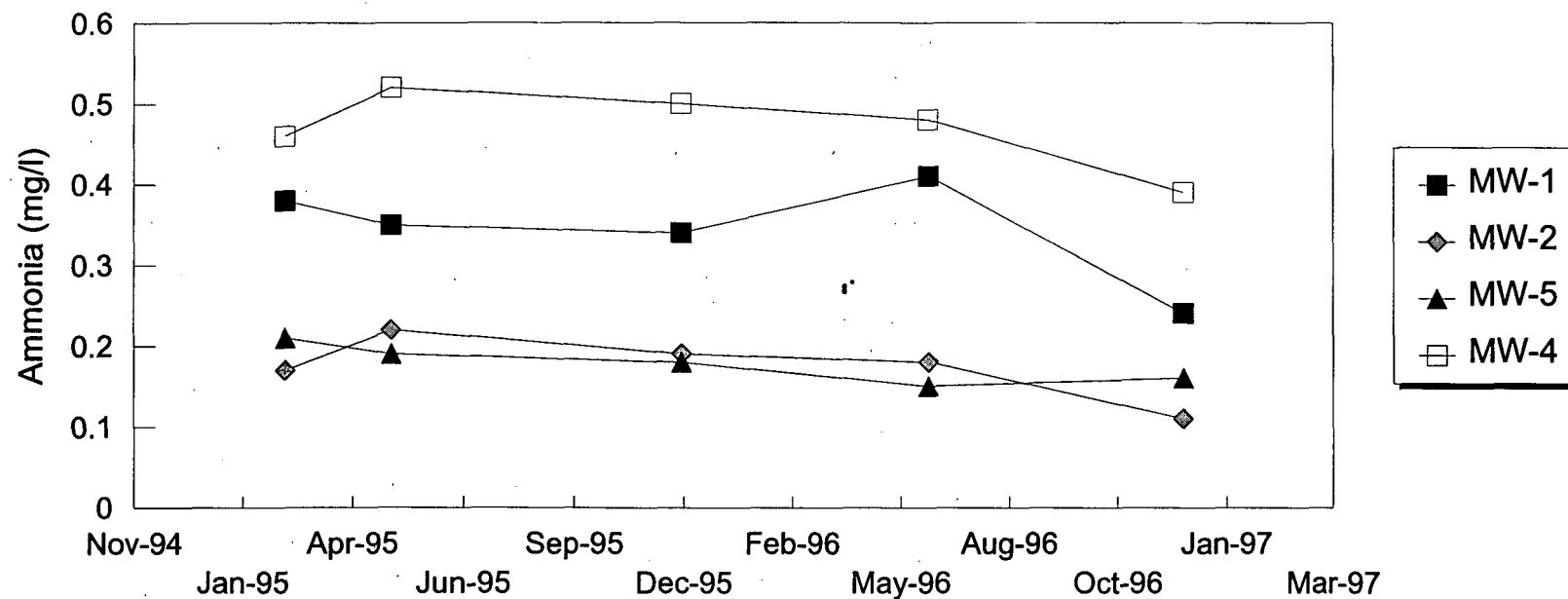
sprague



MW-4 is Background Well for Site

AMMONIA

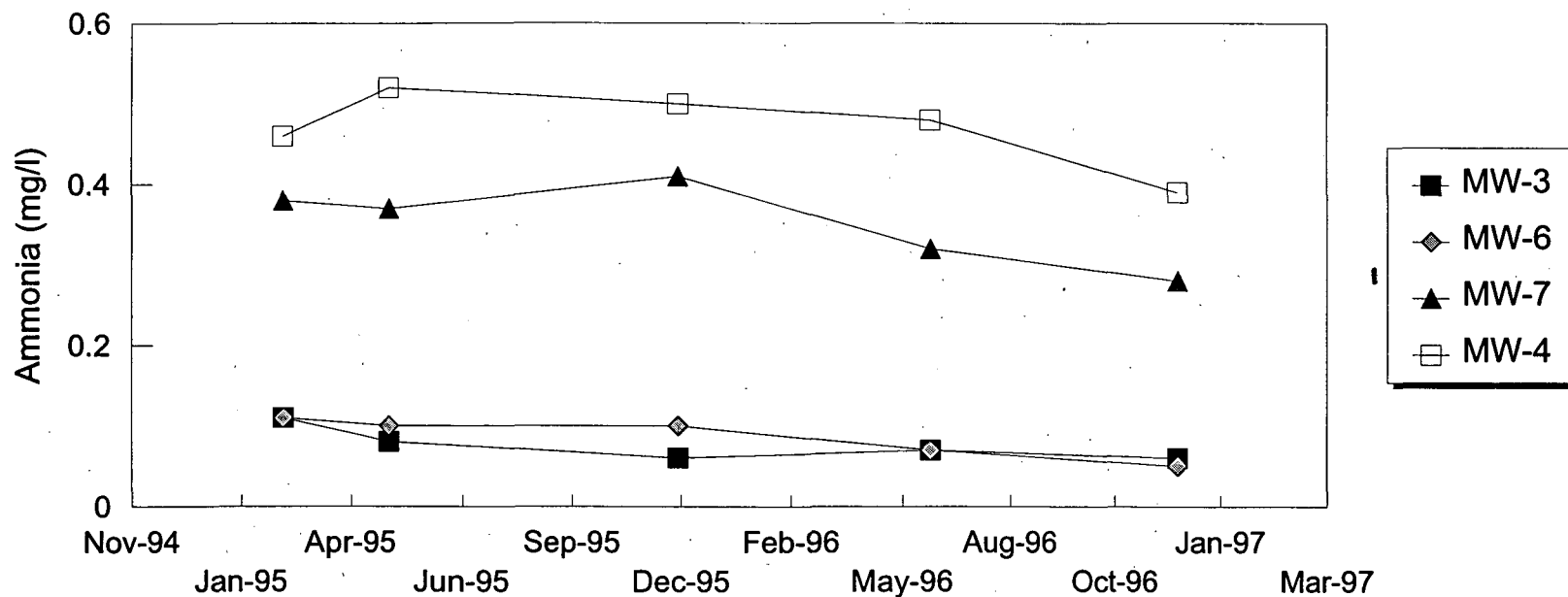
SPRAY FIELD *LF*



MW-4 is Background Well for Site

AMMONIA

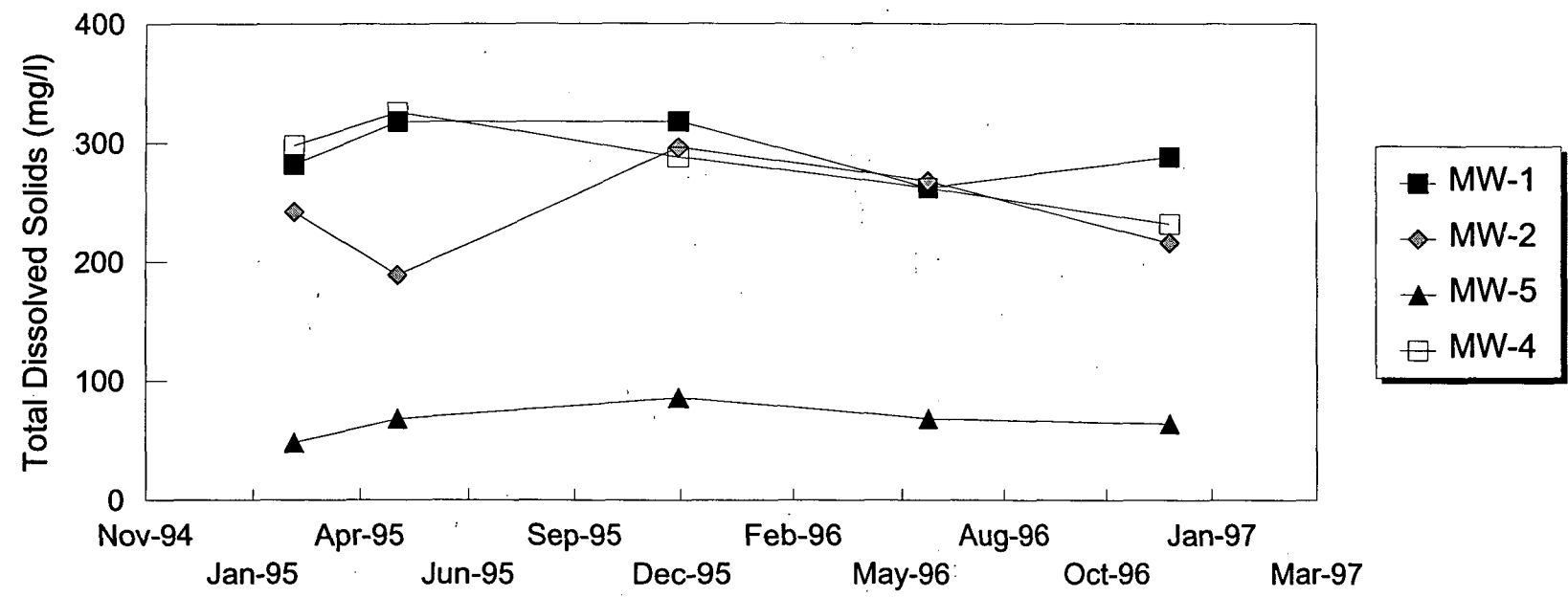
~~LANDFILL~~ *sprayfield*



MW-4 is Background Well for Site

TOTAL DISSOLVED SOLIDS

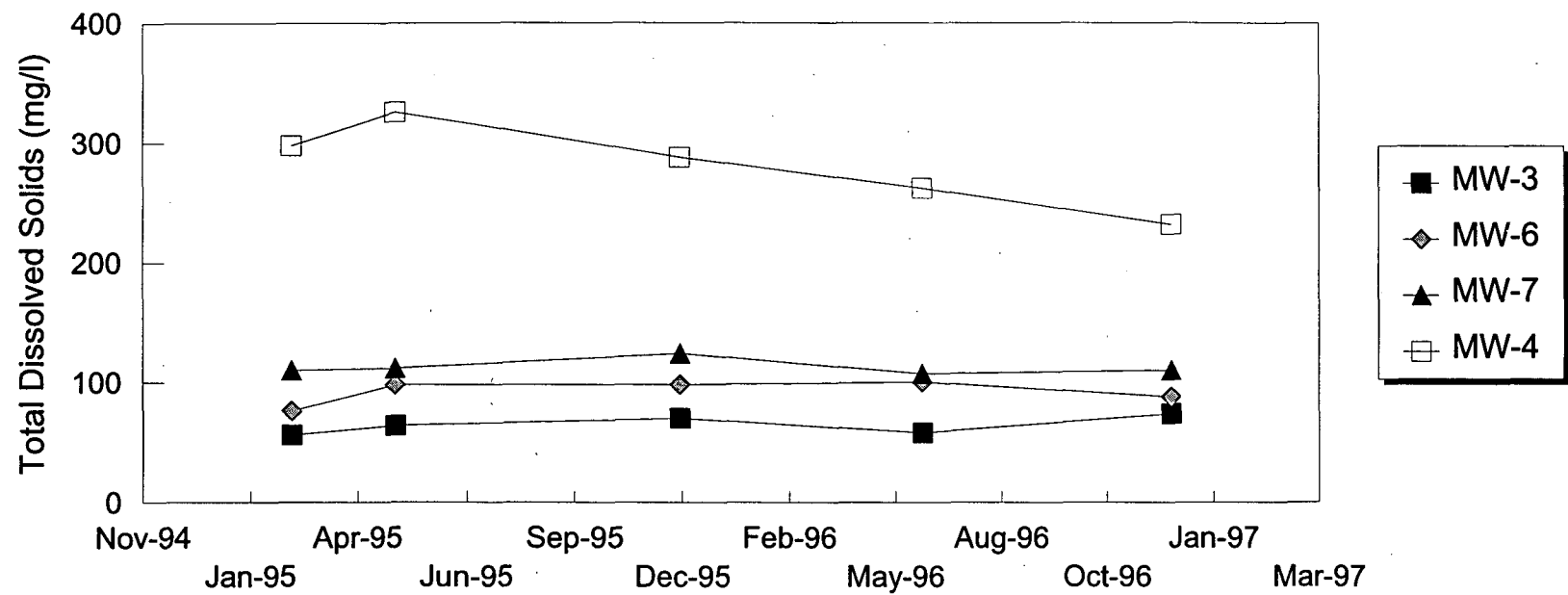
~~SPRAY FIELD~~ LF



MW-4 is Background Well for Site

TOTAL DISSOLVED SOLIDS

LANDFILL *Sprayfield*



MW-4 is Background Well for Site

Section 4

GROUNDWATER PARAMETER CORRELATIONS

4.1 GROUNDWATER PARAMETER CORRELATIONS

Related groundwater monitoring parameters have been correlated and graphed to depict any relationships that may exist. The graphs located on the following pages compare the following parameters:

TDS vs. Conductivity

Iron vs. Conductivity

Sodium vs. Conductivity

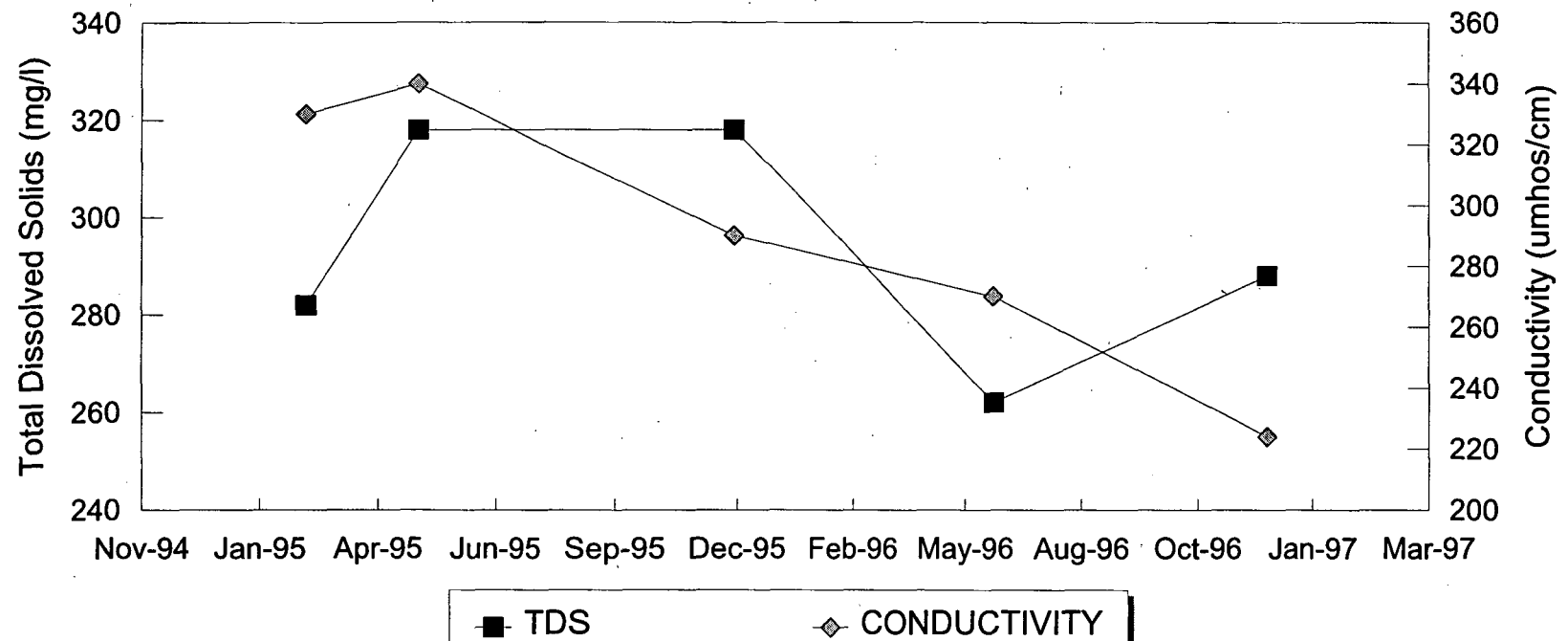
Iron vs. Turbidity

Sodium vs. Turbidity

The relationship between TDS vs conductivity, as displayed graphically for the monitor wells, shows a partial direct correlation with some variation. The relationship between iron and conductivity shows a similar direct correlation with less variation than the TDS vs conductivity graph. The sodium vs conductivity graph shows a direct relationship with the best match of all conductivity comparison plots. An excellent direct correlation was observed for the iron versus turbidity graph with only a slight variation for monitor wells MW-4 and MW-6. The relationship was the best for the sodium versus turbidity plot. The only deviation from a direct relationship plot was observed in monitoring well MW-4.

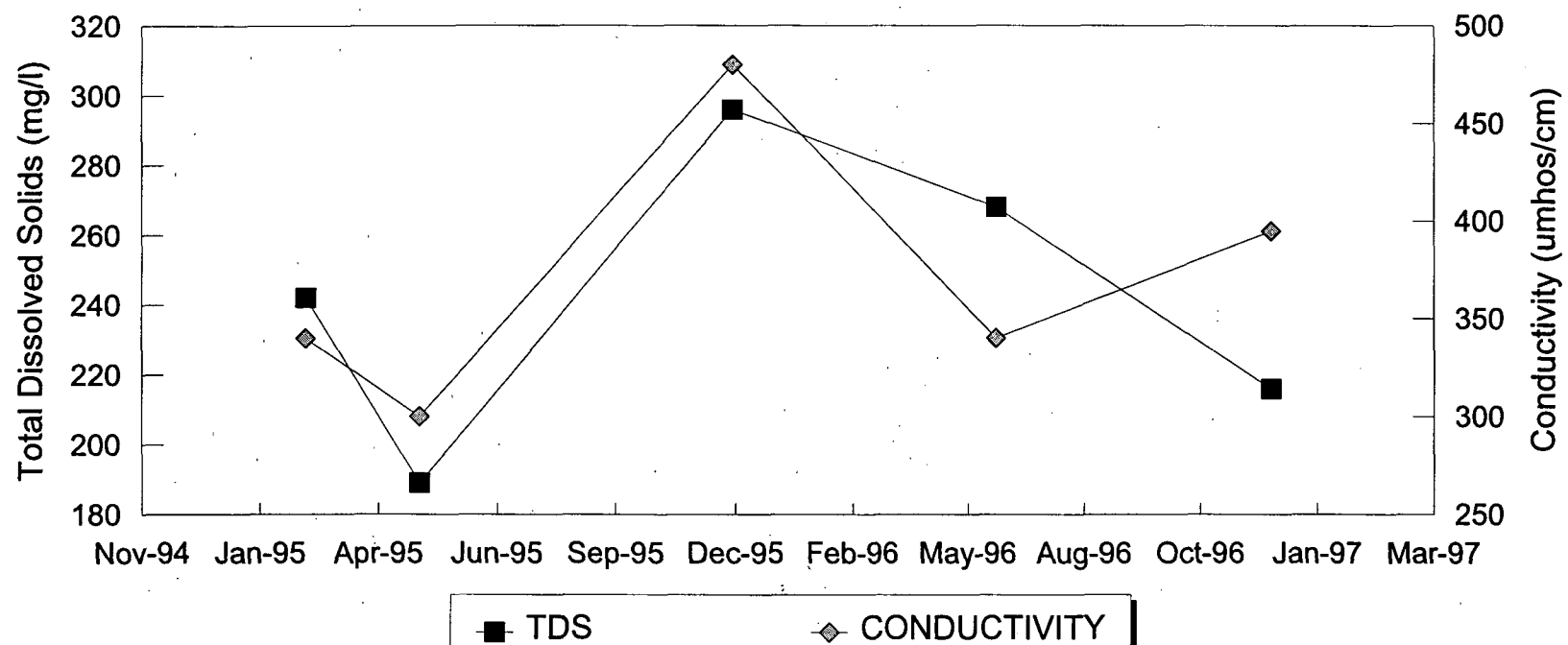
TDS VS CONDUCTIVITY

MW-1



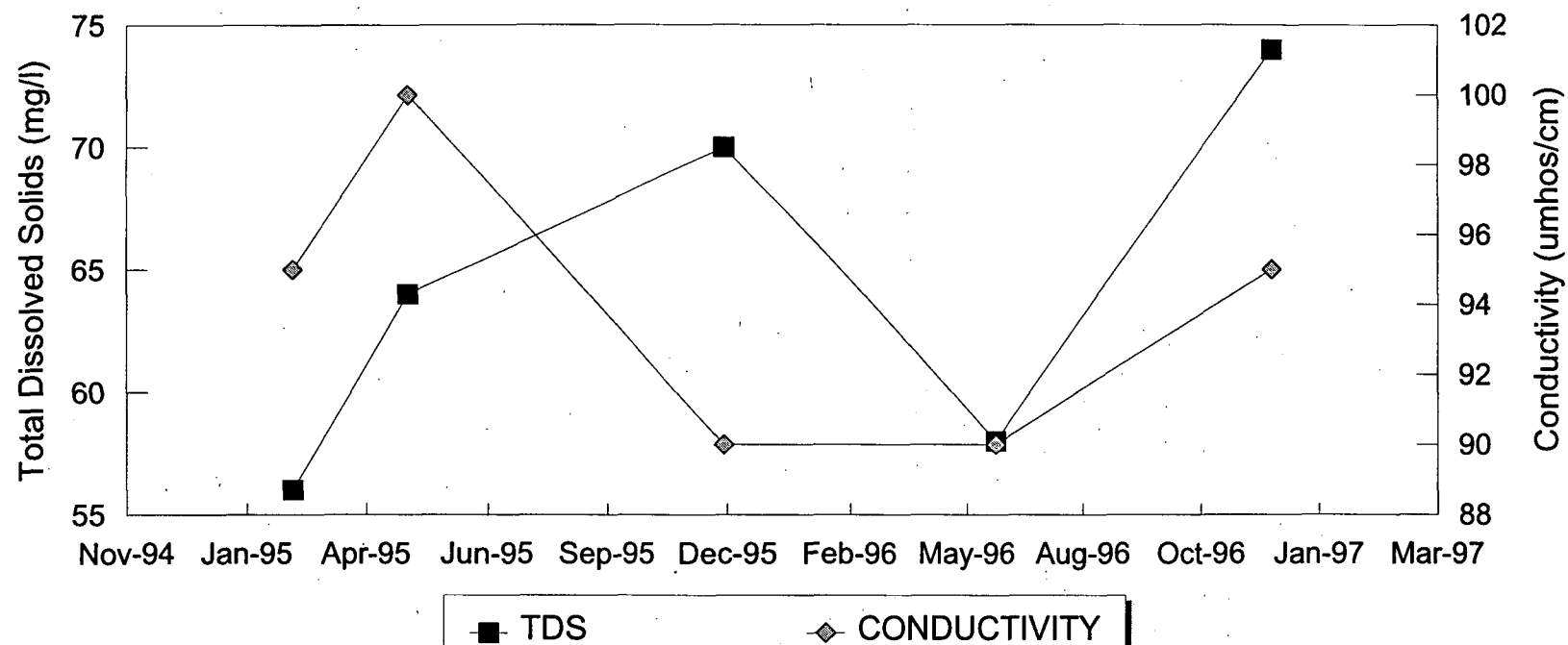
TDS VS CONDUCTIVITY

MW-2



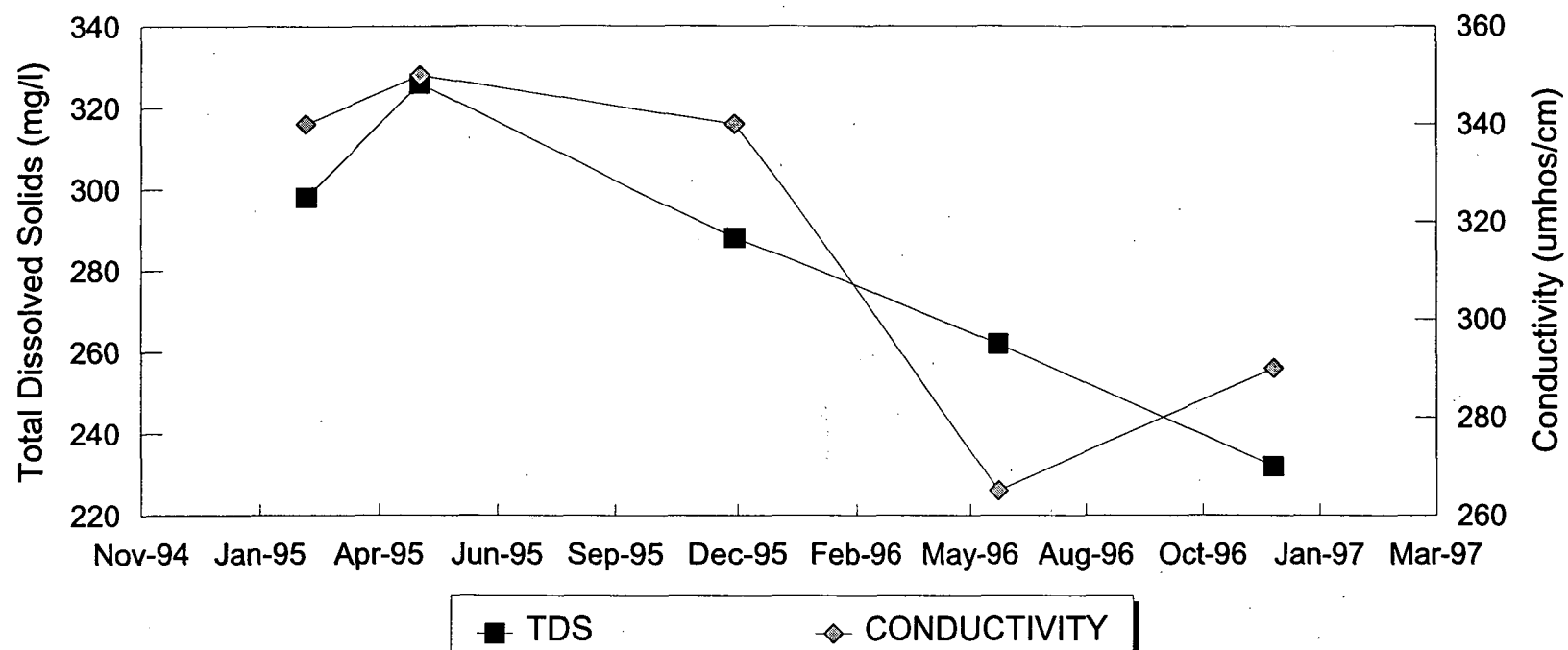
TDS VS CONDUCTIVITY

MW-3



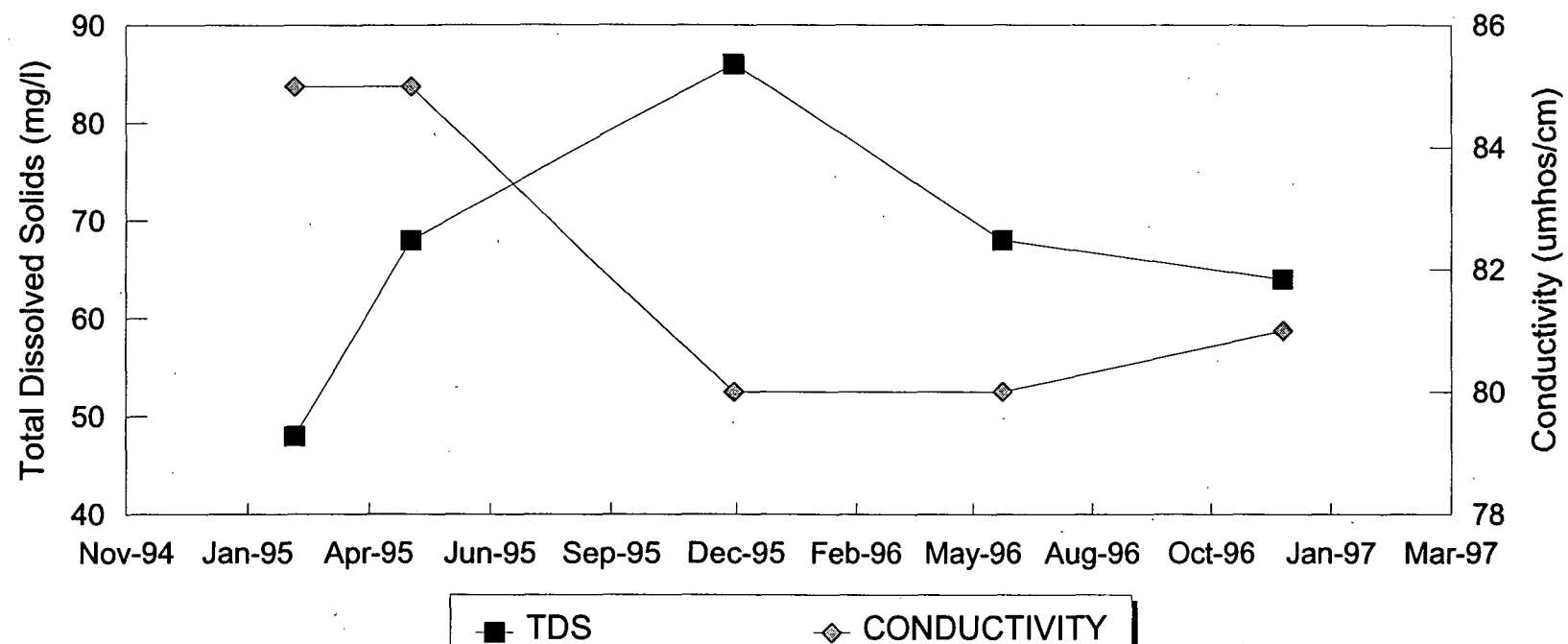
TDS VS CONDUCTIVITY

MW-4



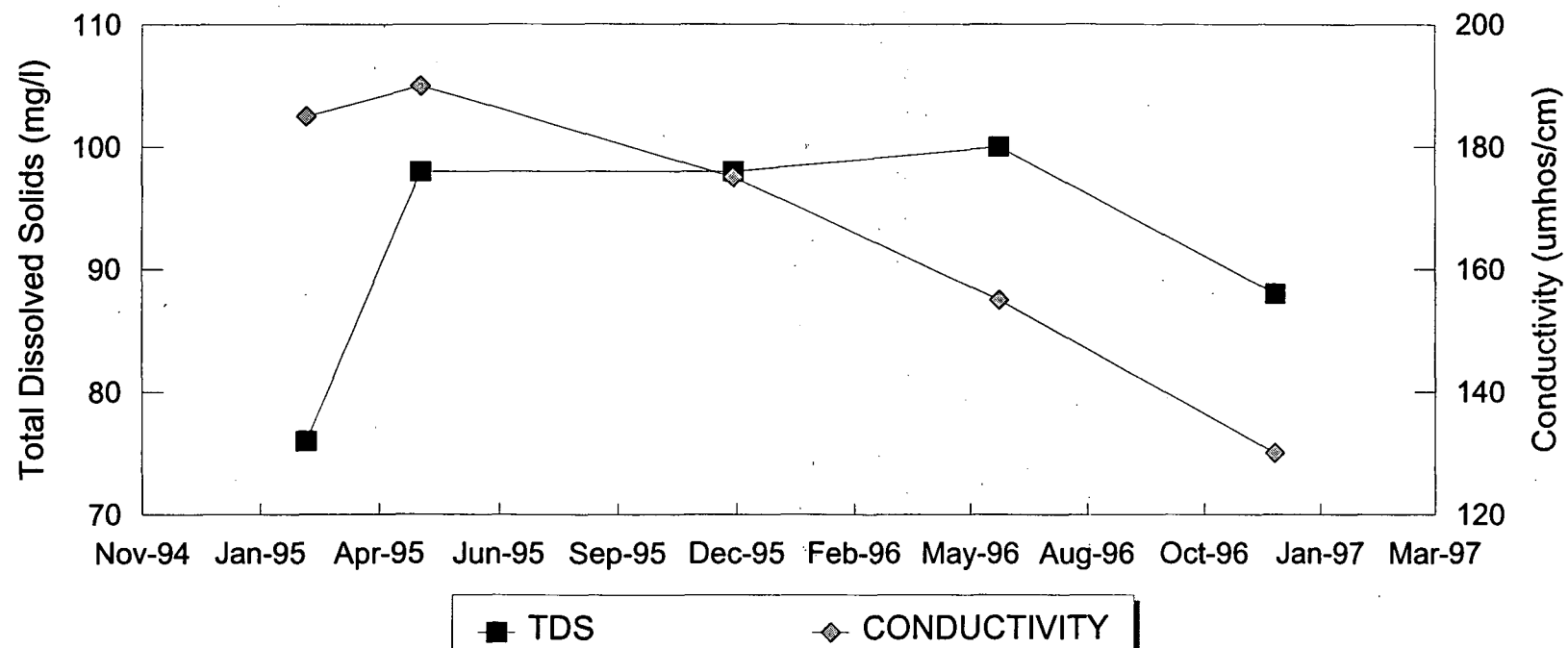
TDS VS CONDUCTIVITY

MW-5



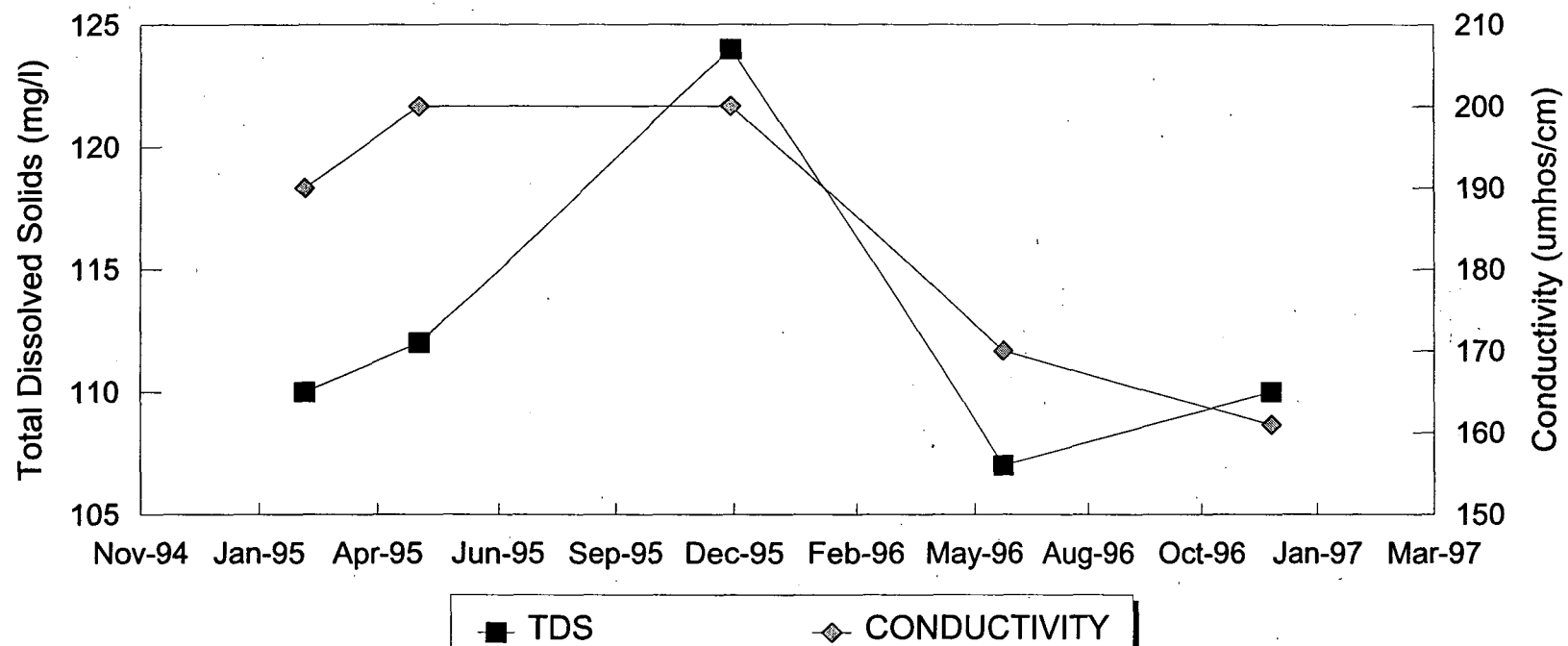
TDS VS CONDUCTIVITY

MW-6



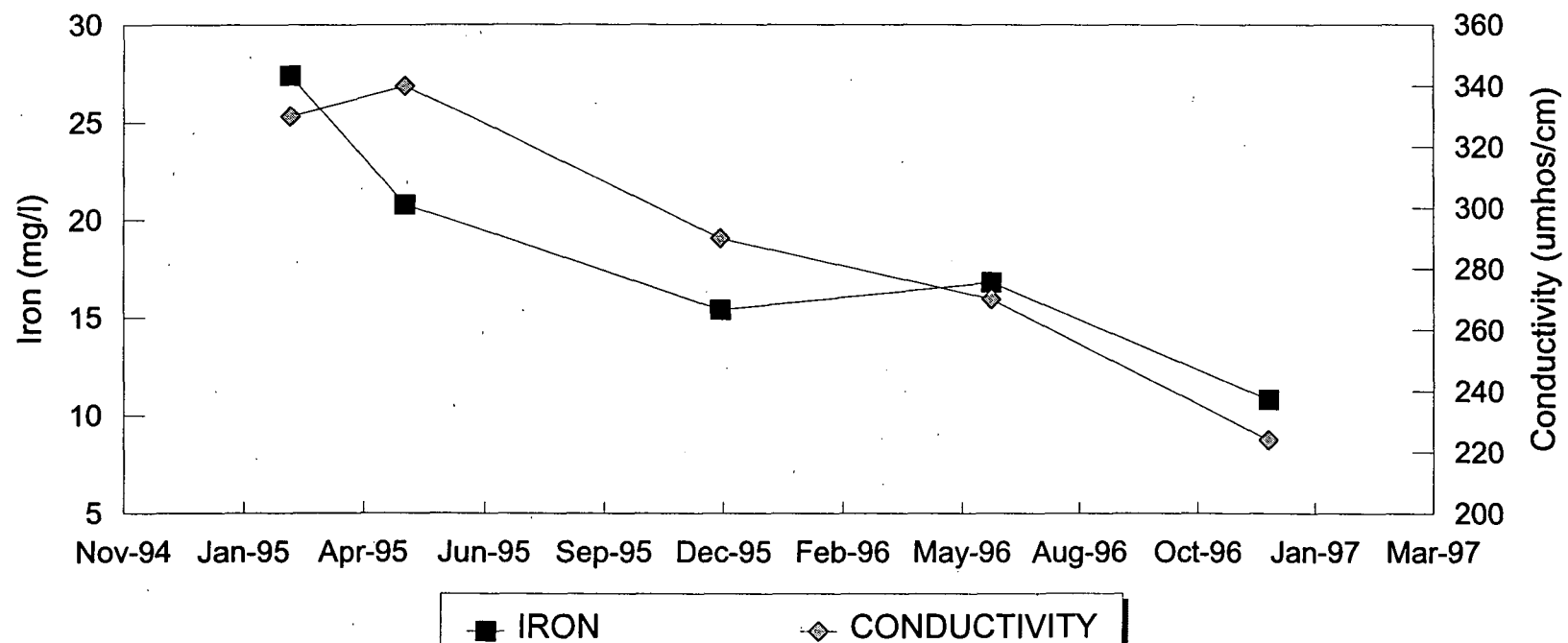
TDS VS CONDUCTIVITY

MW-7



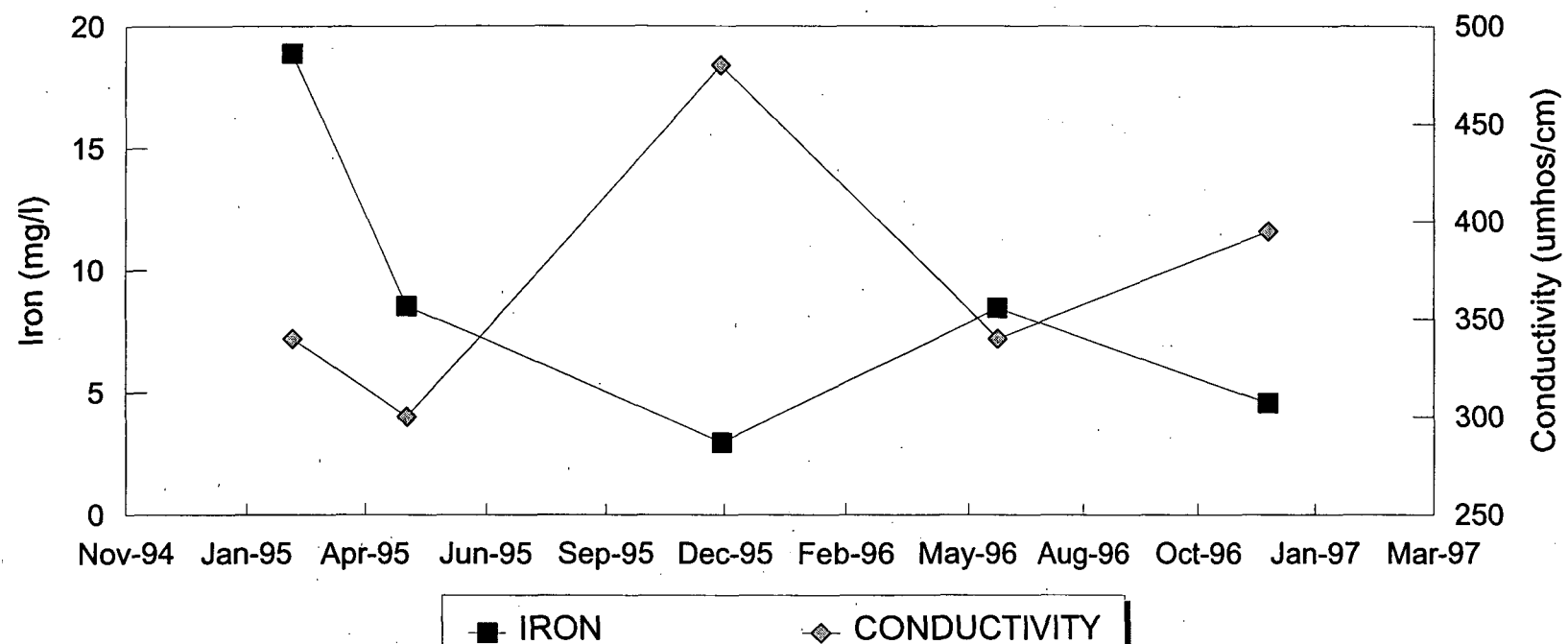
IRON VS CONDUCTIVITY

MW-1



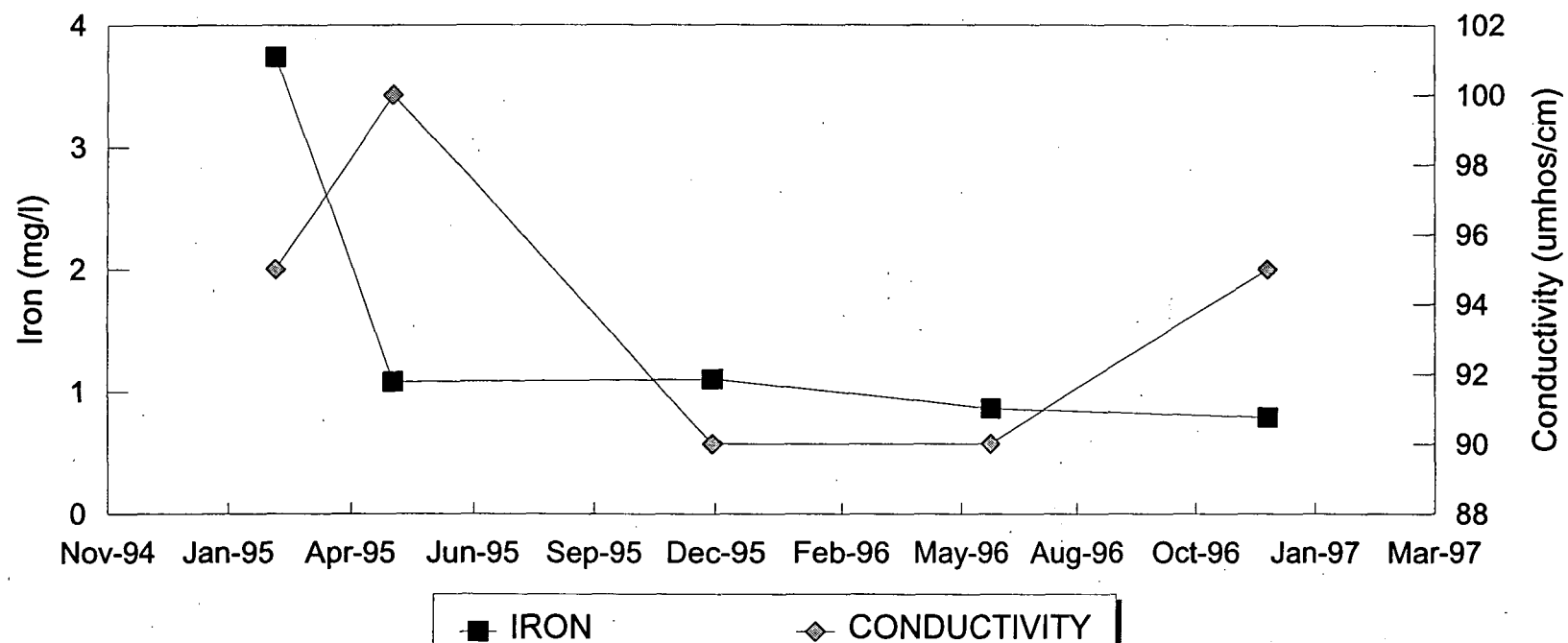
IRON VS CONDUCTIVITY

MW-2



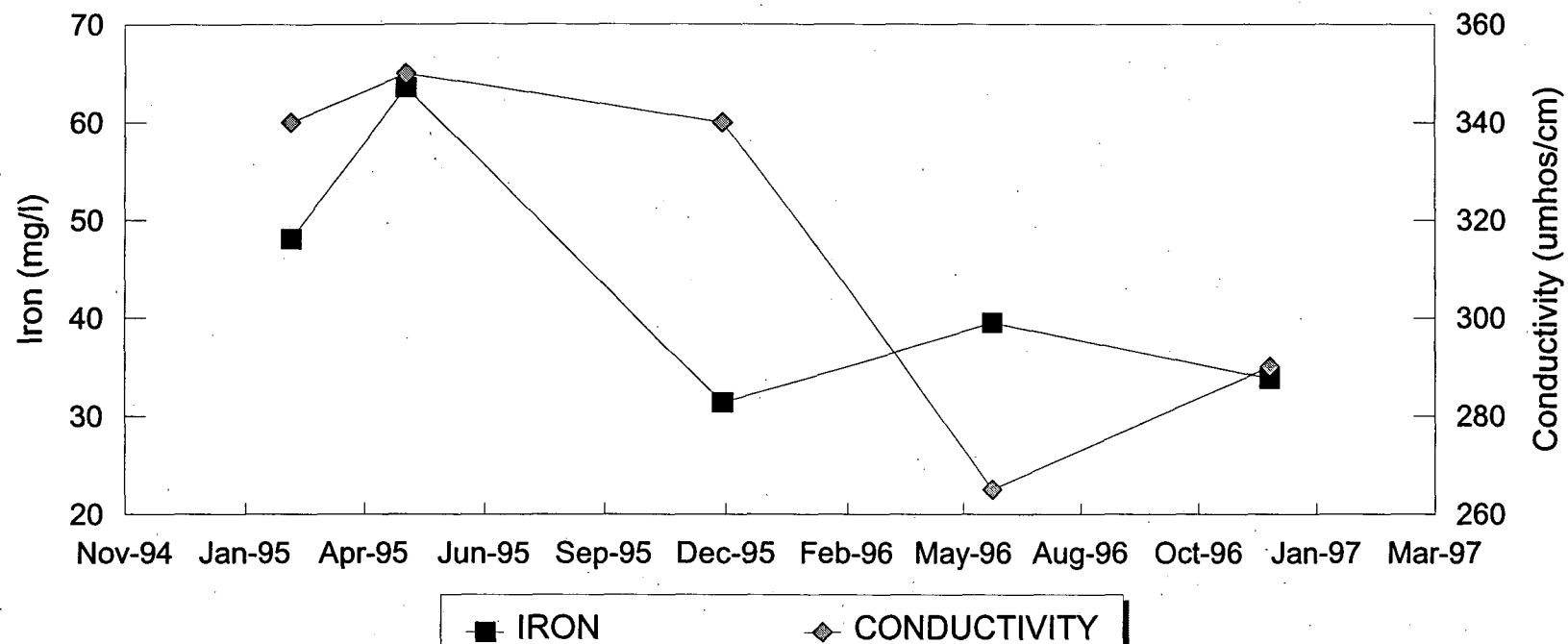
IRON VS CONDUCTIVITY

MW-3



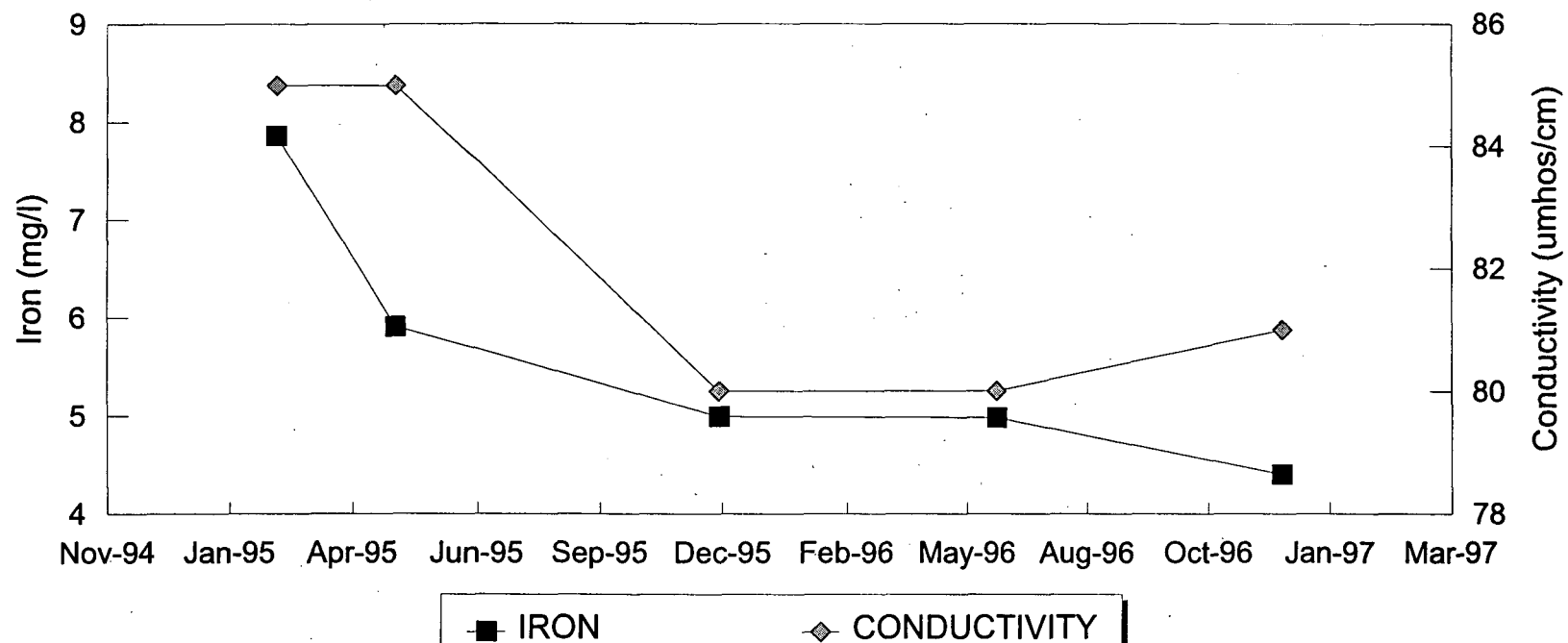
IRON VS CONDUCTIVITY

MW-4



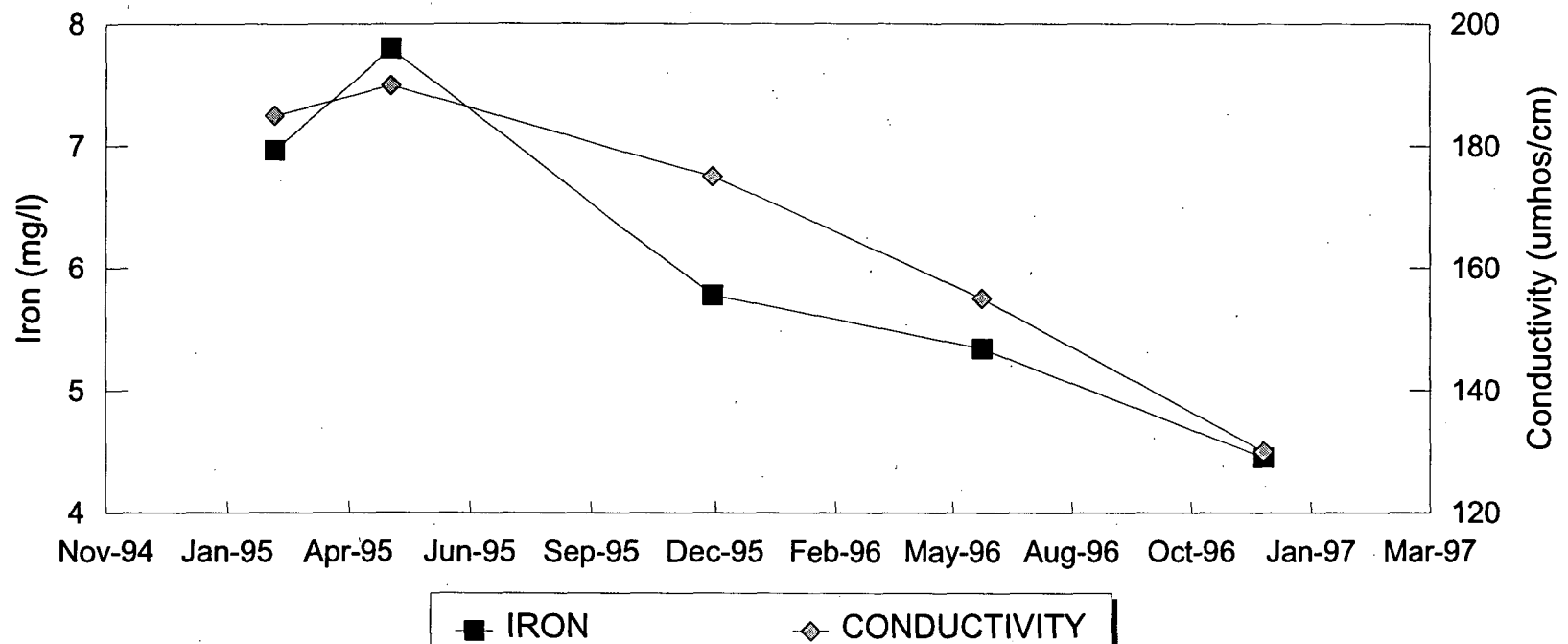
IRON VS CONDUCTIVITY

MW-5



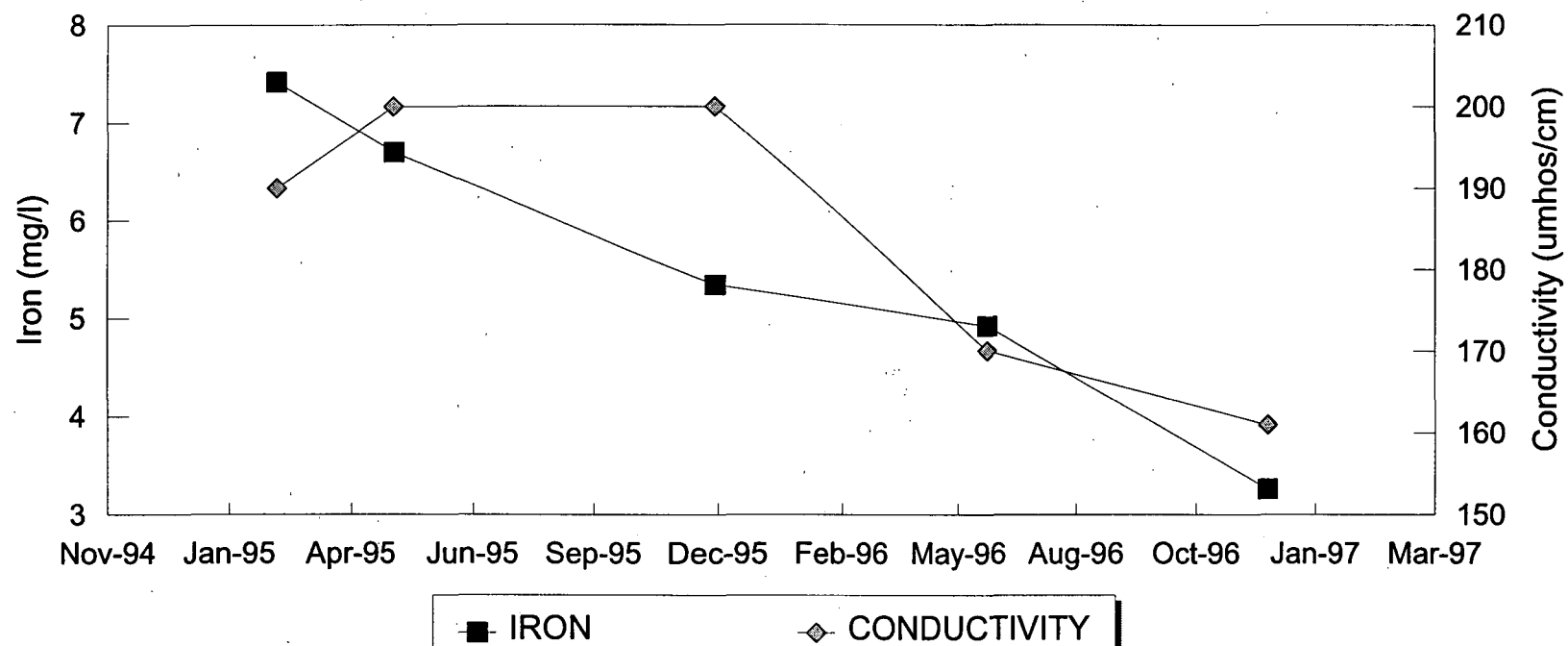
IRON VS CONDUCTIVITY

MW-6



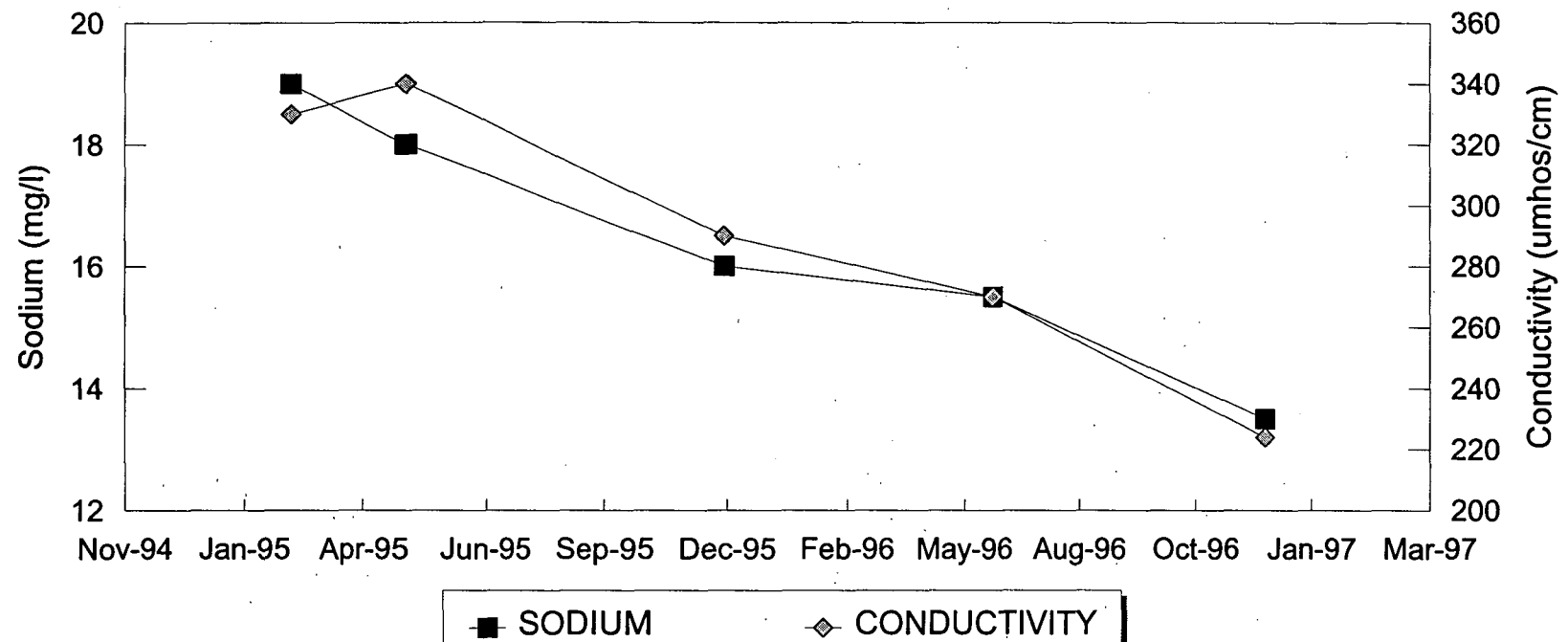
IRON VS CONDUCTIVITY

MW-7



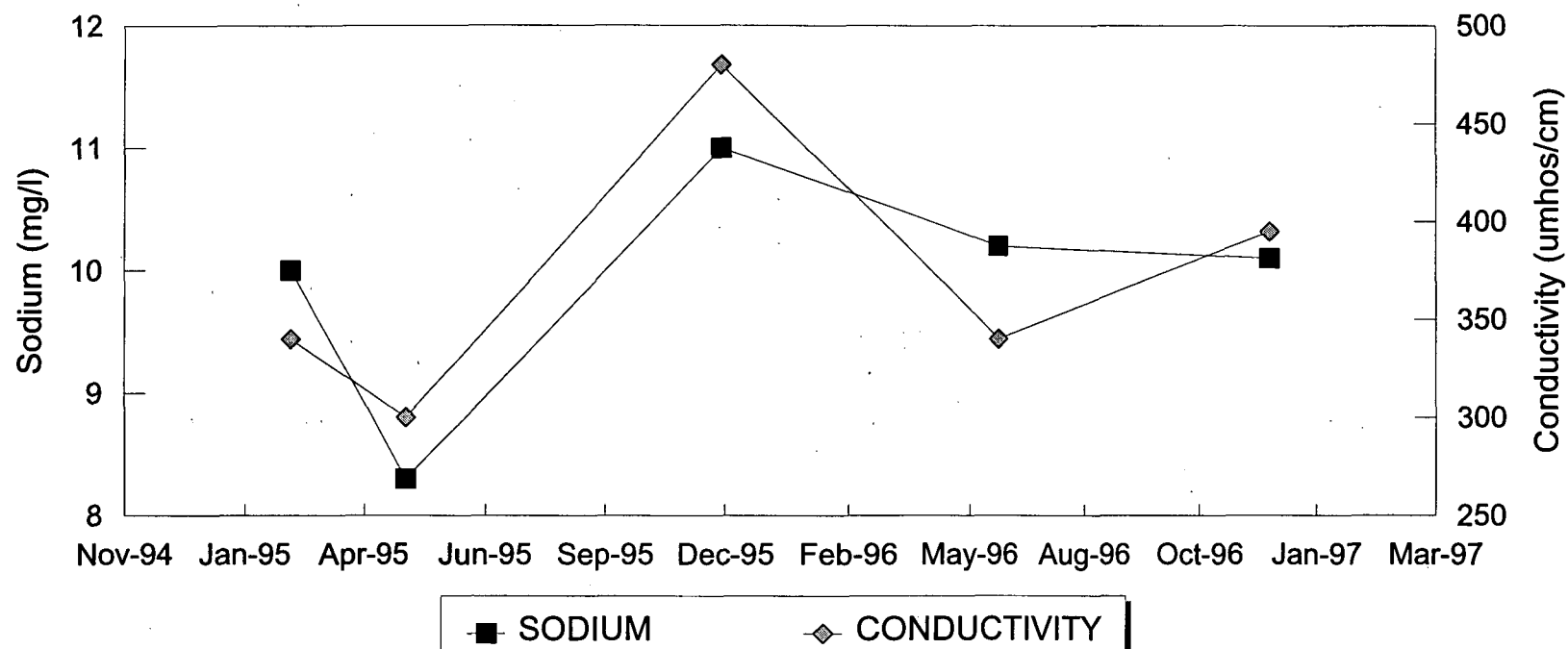
SODIUM VS CONDUCTIVITY

MW-1



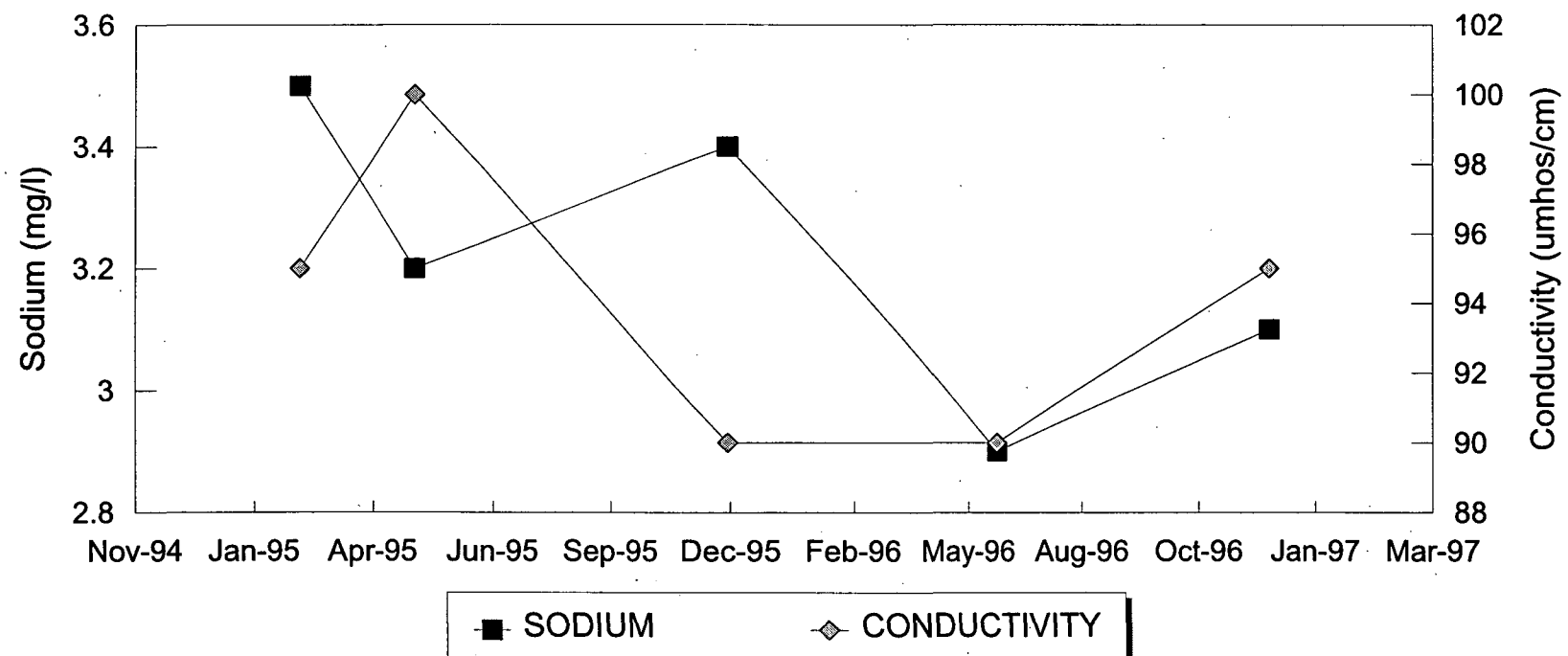
SODIUM VS CONDUCTIVITY

MW-2



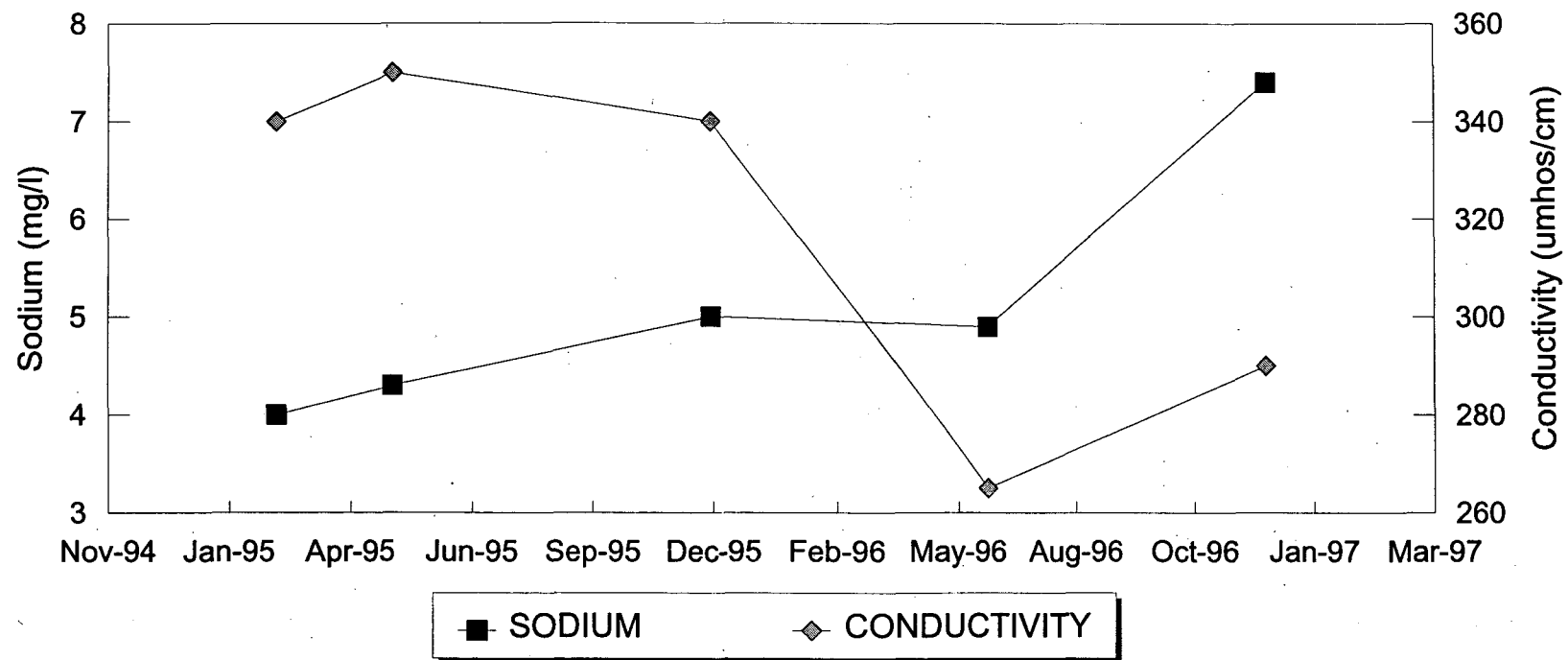
SODIUM VS CONDUCTIVITY

MW-3



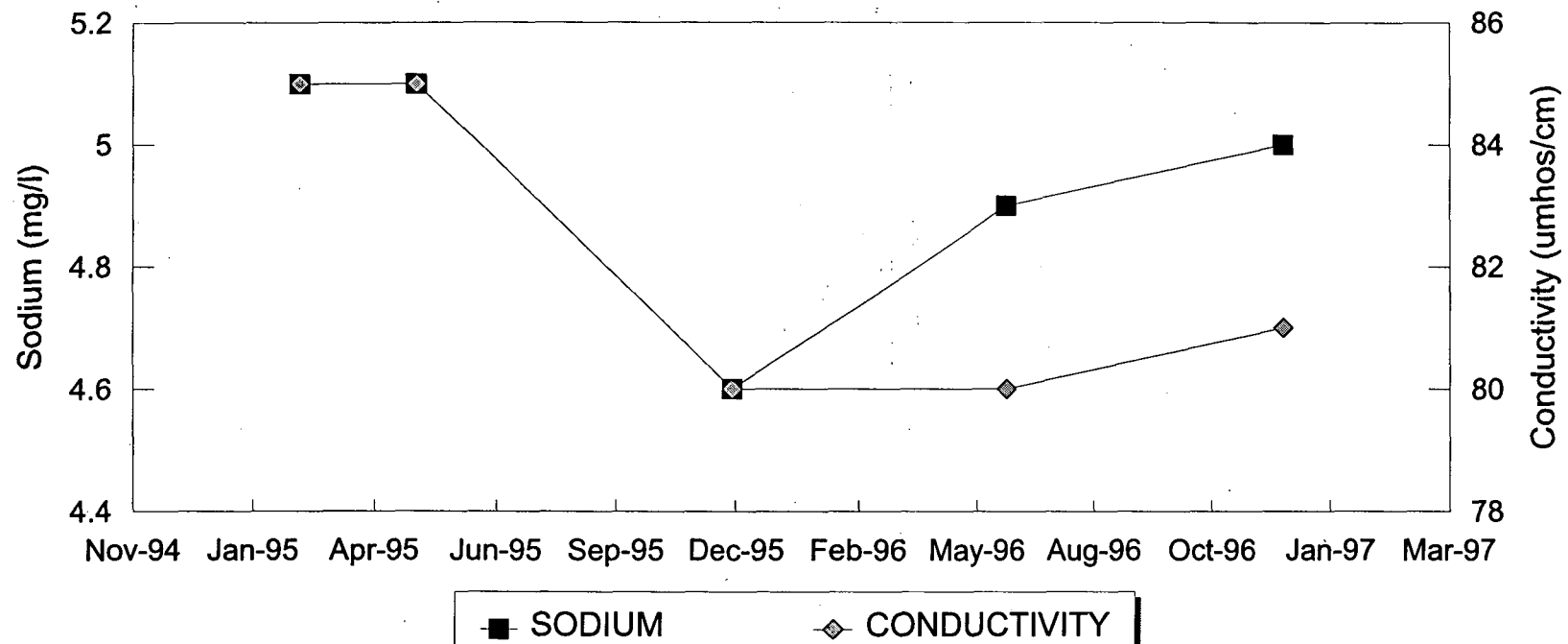
SODIUM VS CONDUCTIVITY

MW-4



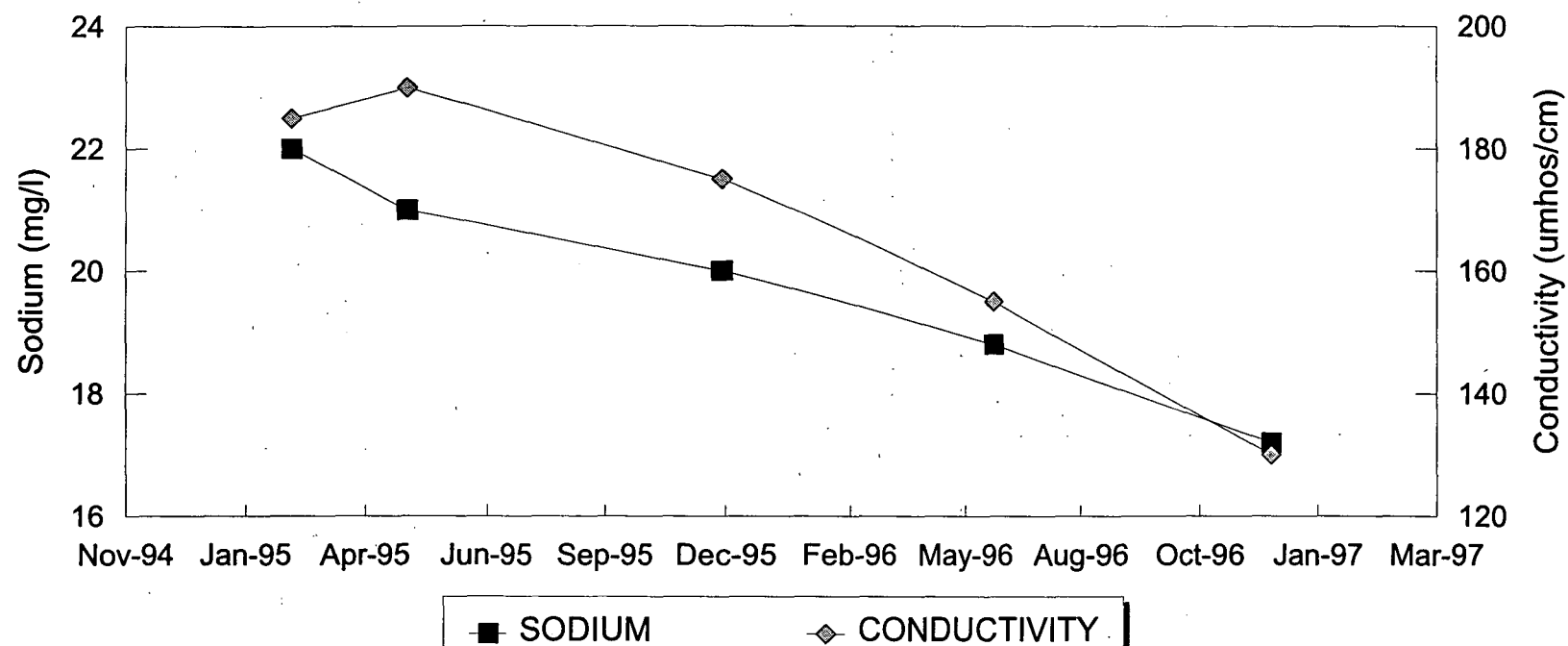
SODIUM VS CONDUCTIVITY

MW-5



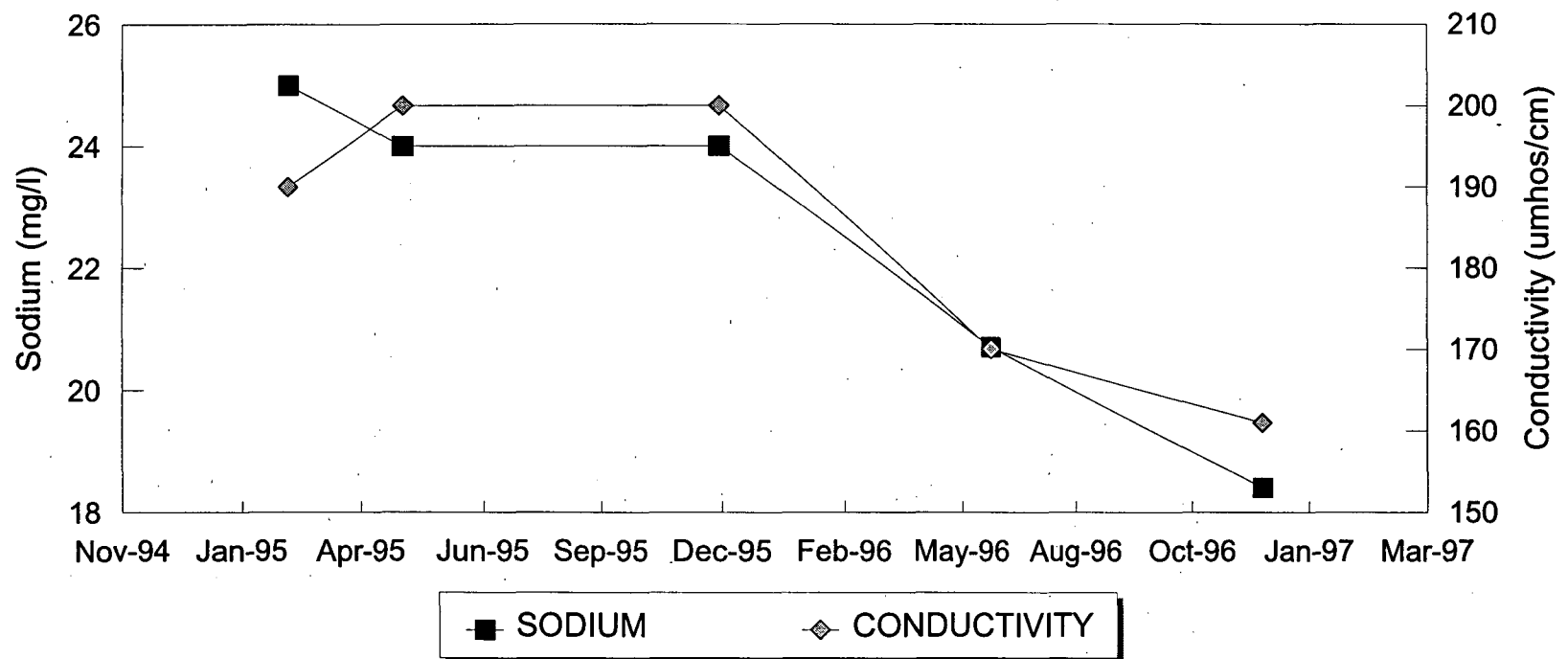
SODIUM VS CONDUCTIVITY

MW-6



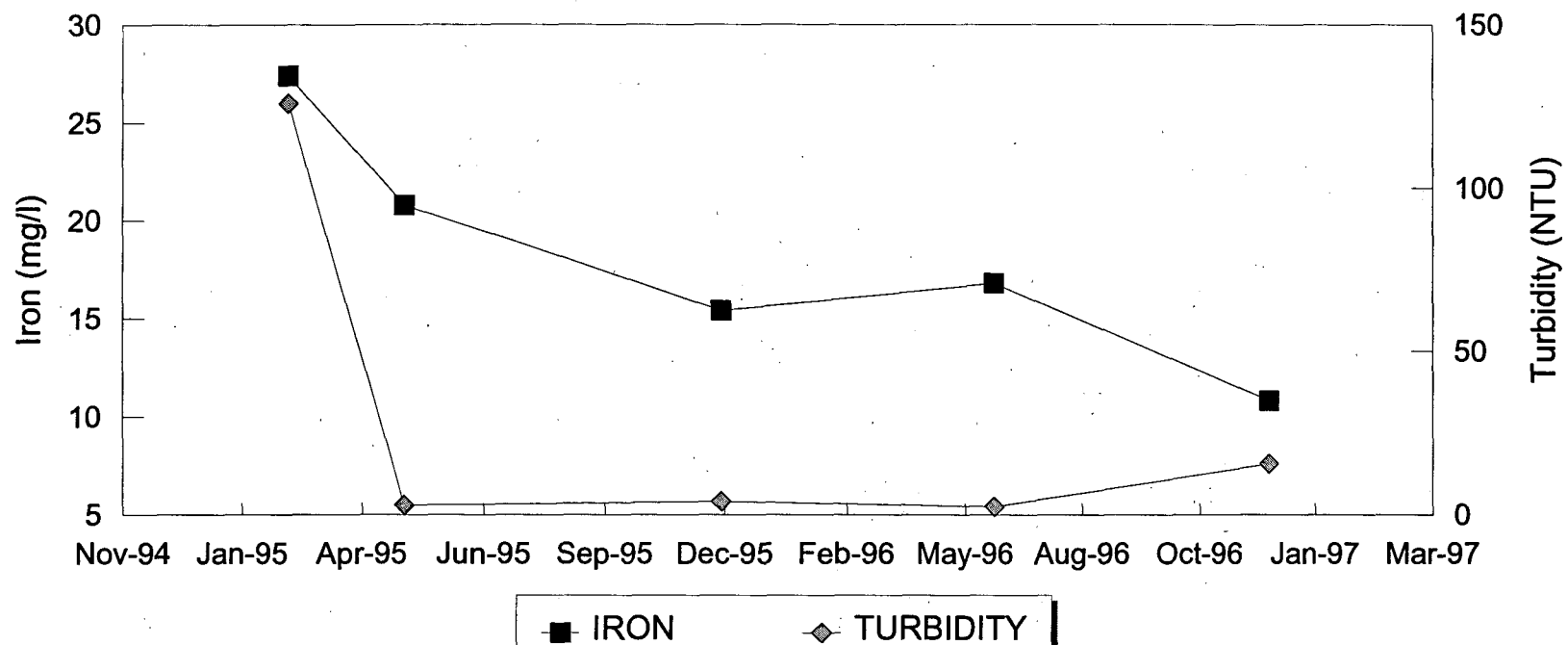
SODIUM VS CONDUCTIVITY

MW-7



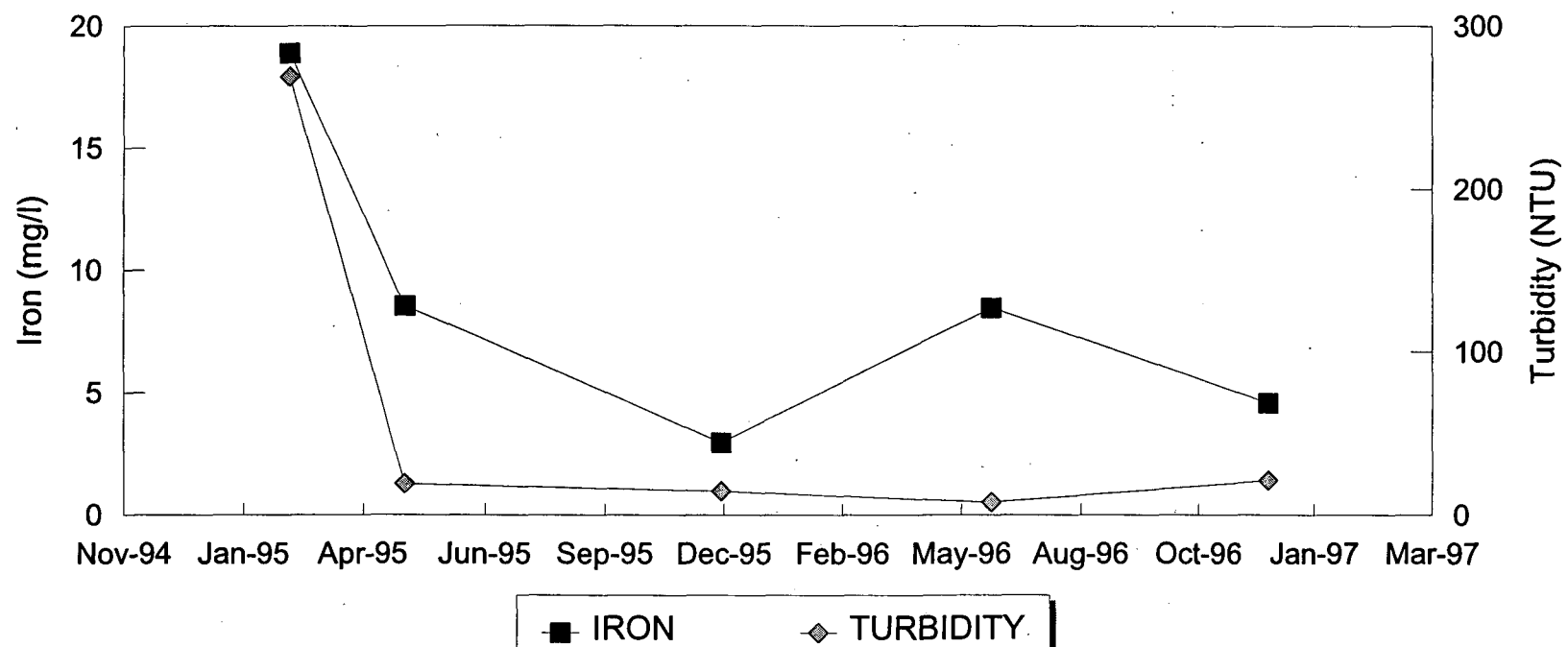
IRON VS TURBIDITY

MW-1



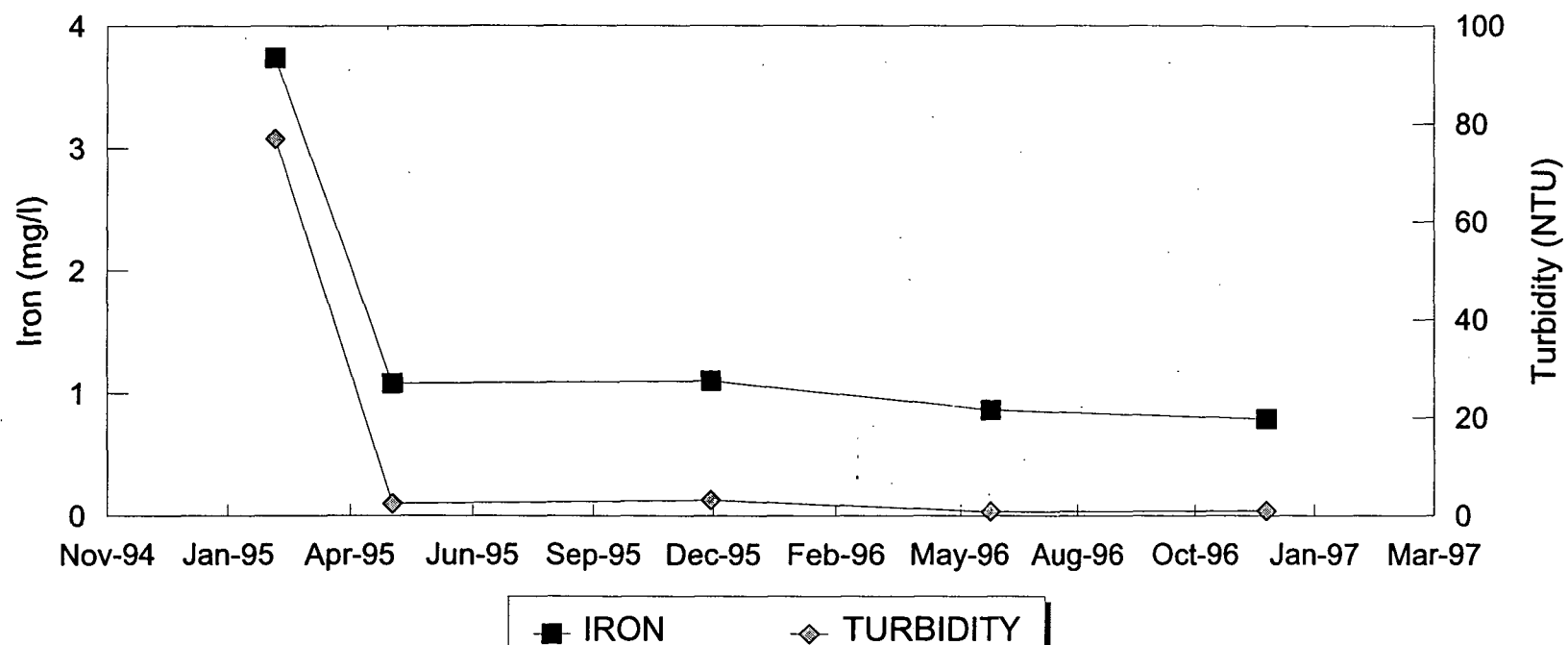
IRON VS TURBIDITY

MW-2



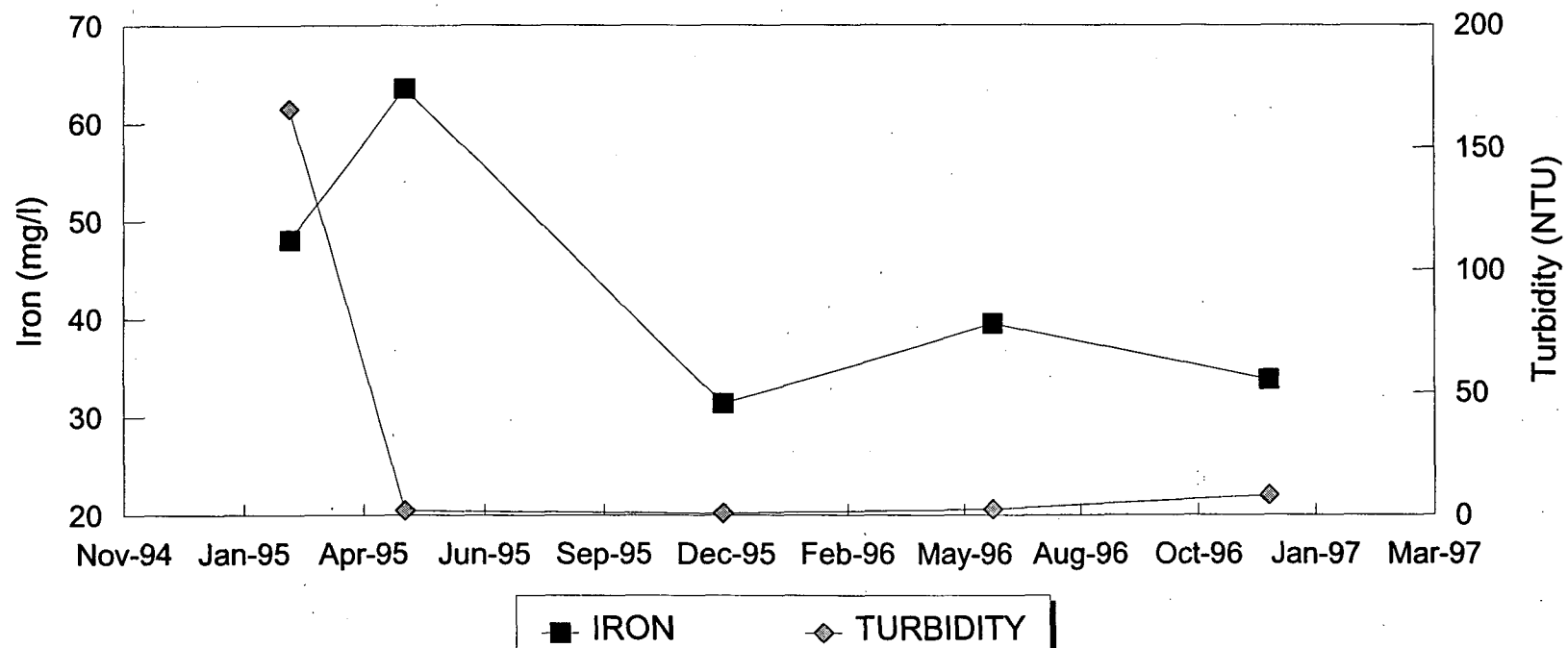
IRON VS TURBIDITY

MW-3



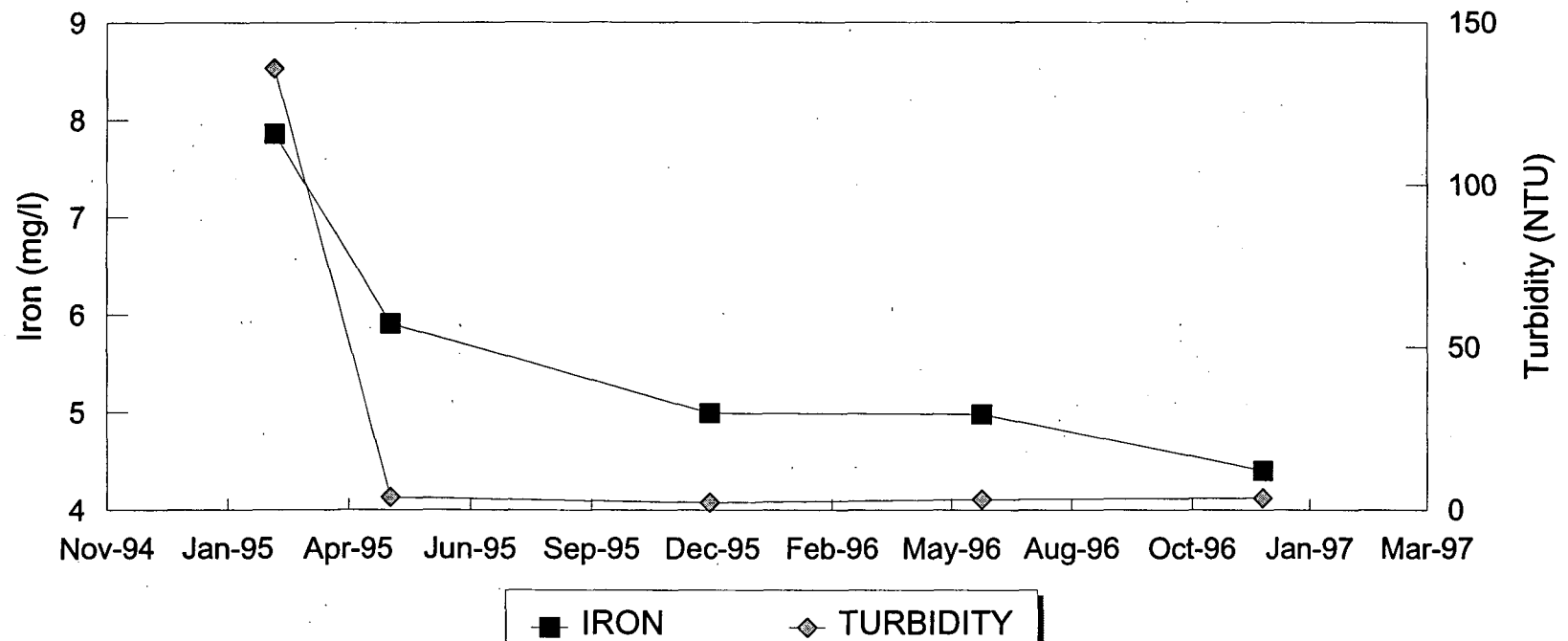
IRON VS TURBIDITY

MW-4



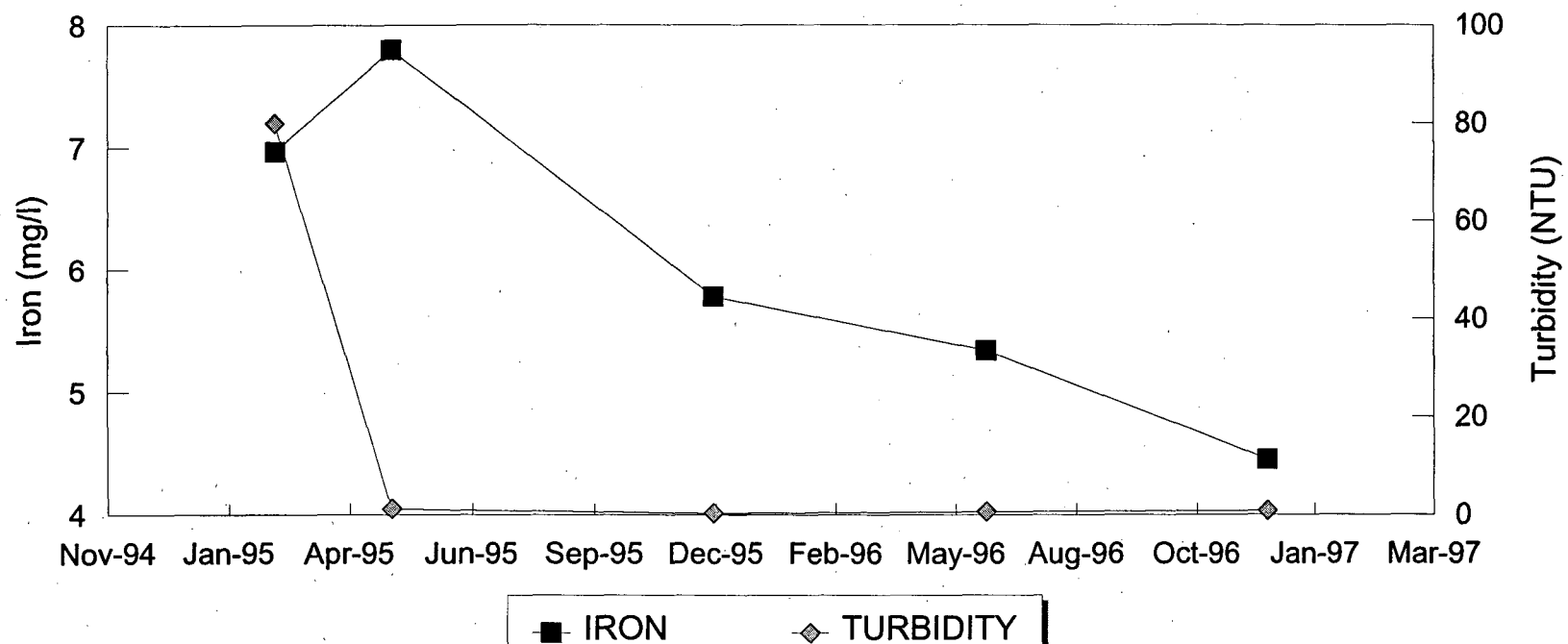
IRON VS TURBIDITY

MW-5



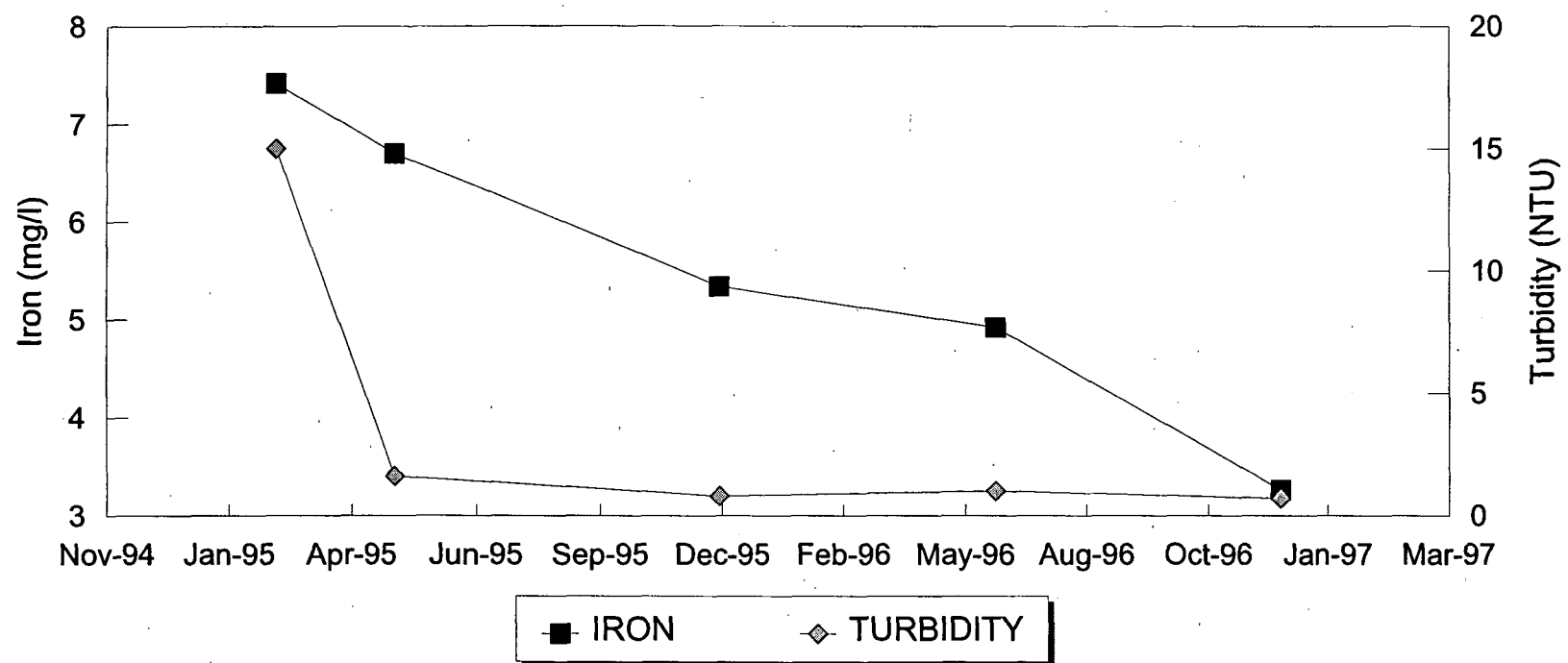
IRON VS TURBIDITY

MW-6



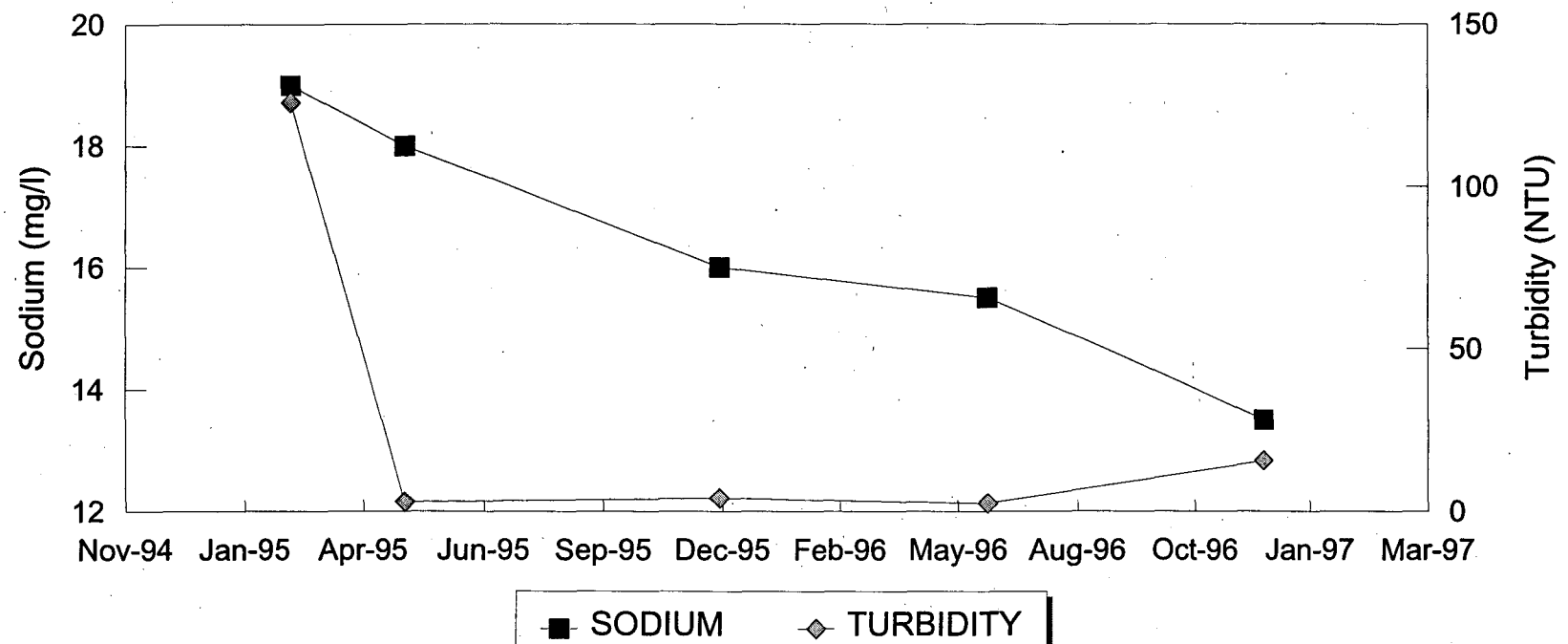
IRON VS TURBIDITY

MW-7



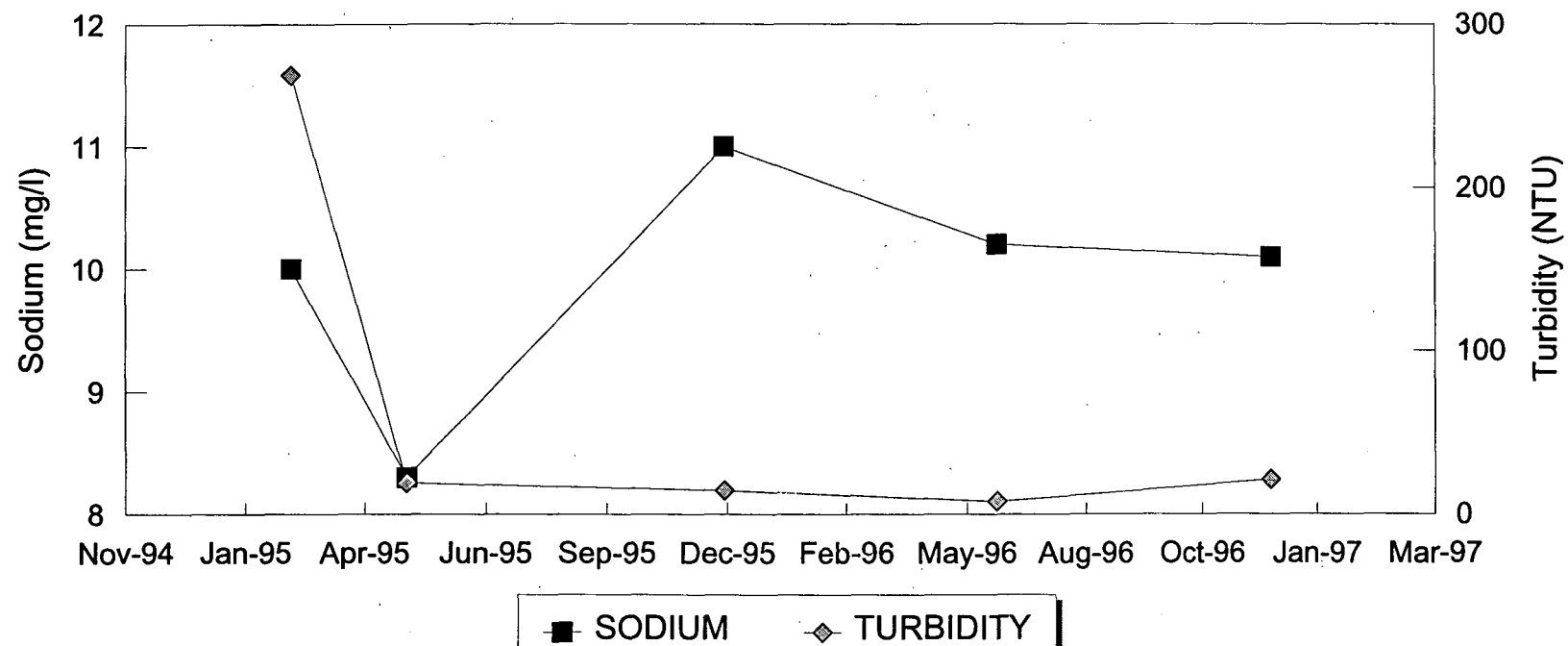
SODIUM VS TURBIDITY

MW-1



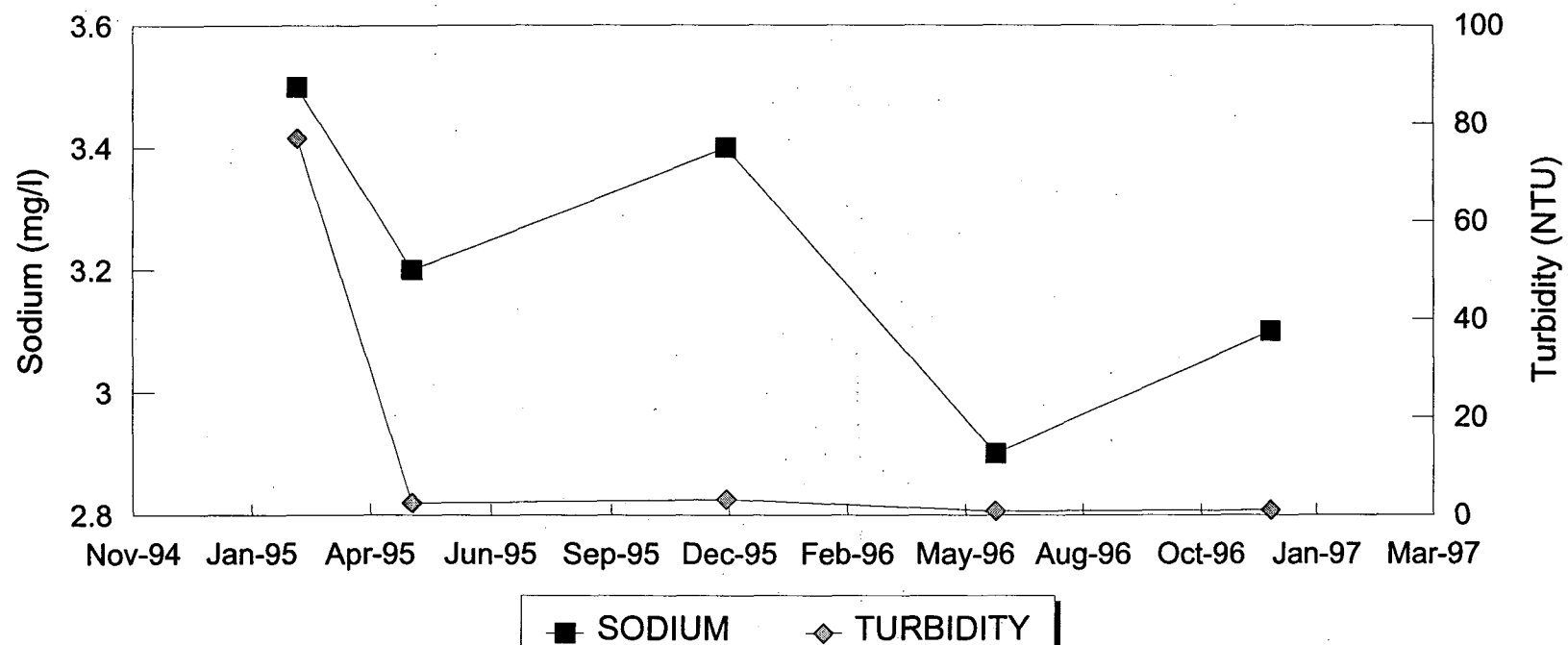
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MW-2



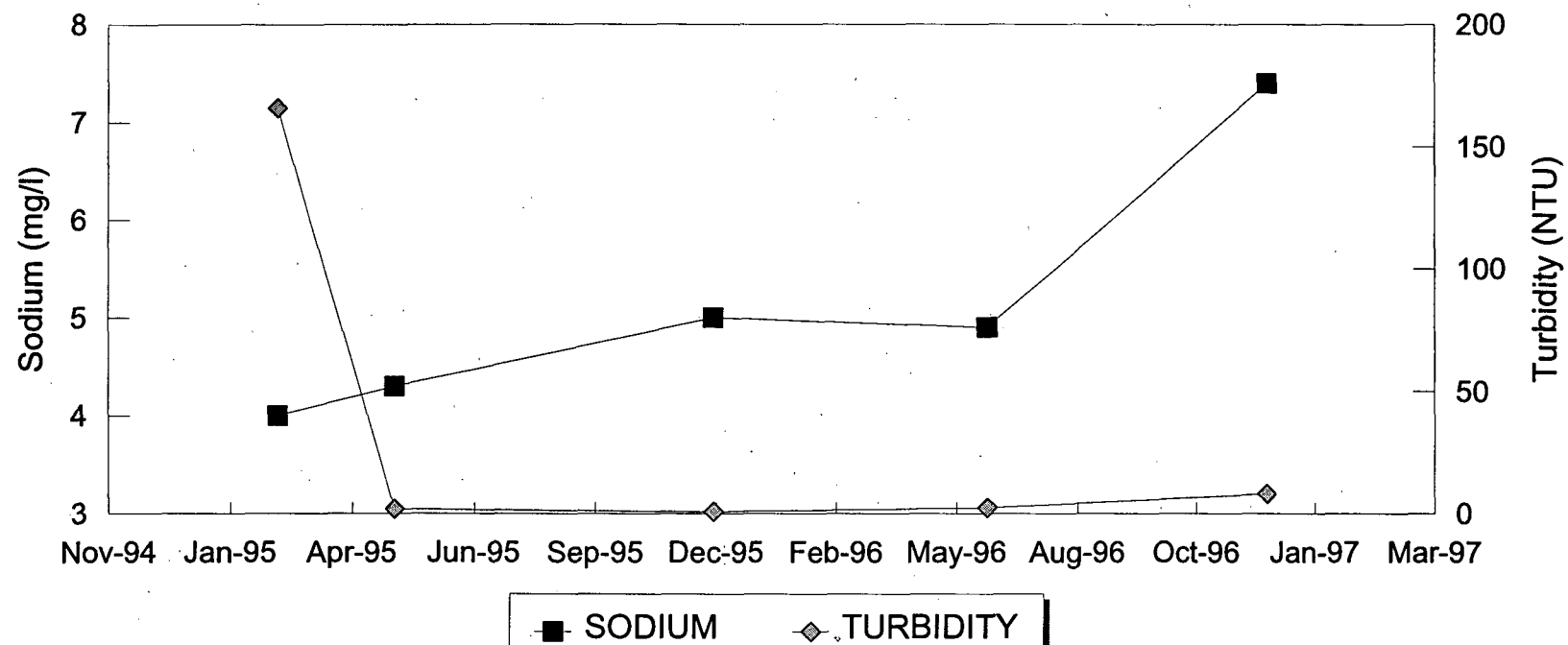
SODIUM VS TURBIDITY

MW-3



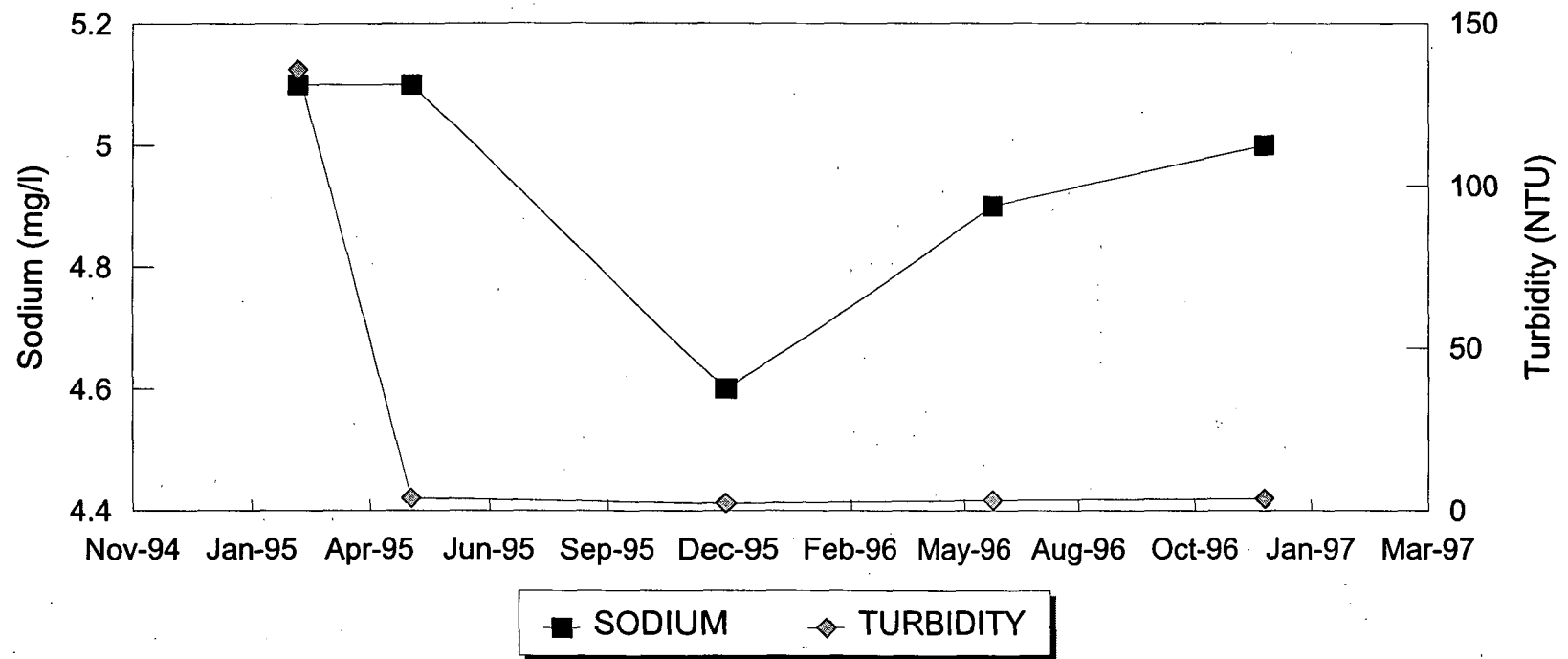
SODIUM VS TURBIDITY

MW-4



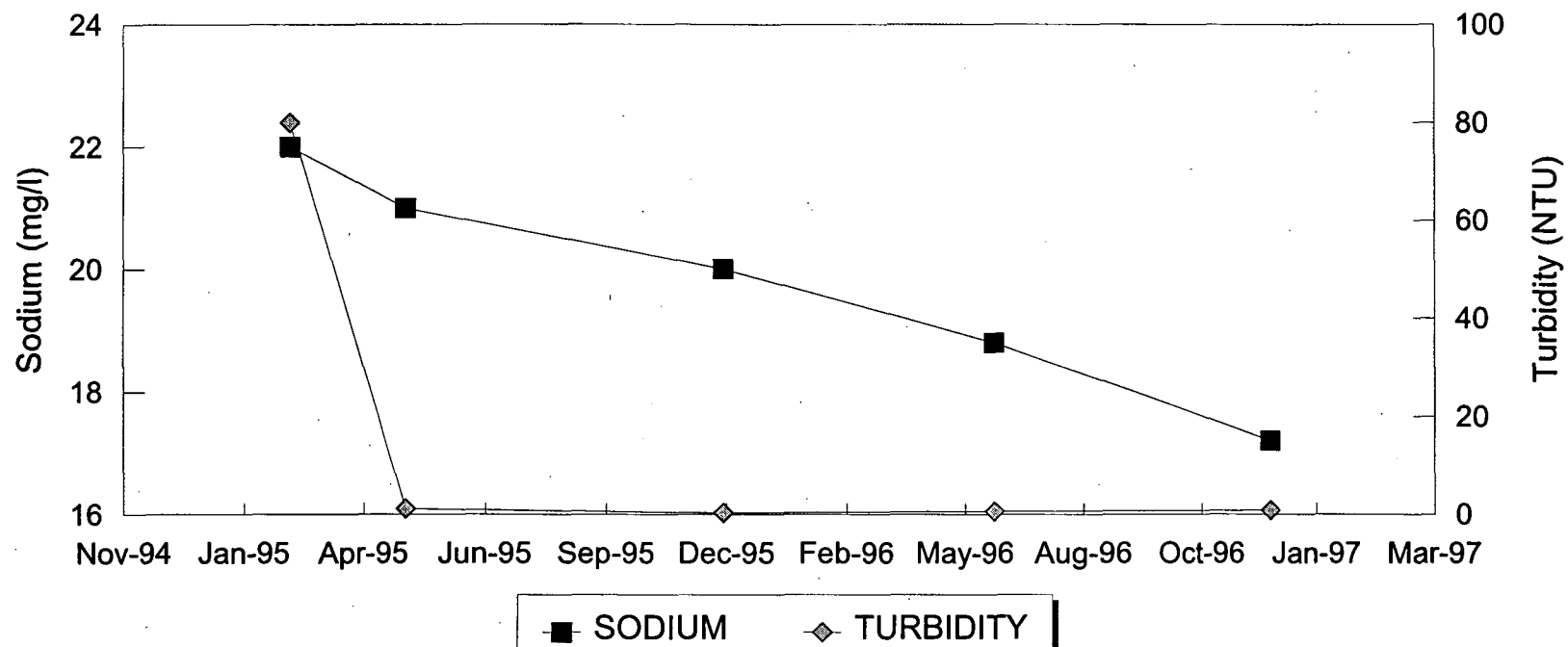
SODIUM VS TURBIDITY

MW-5



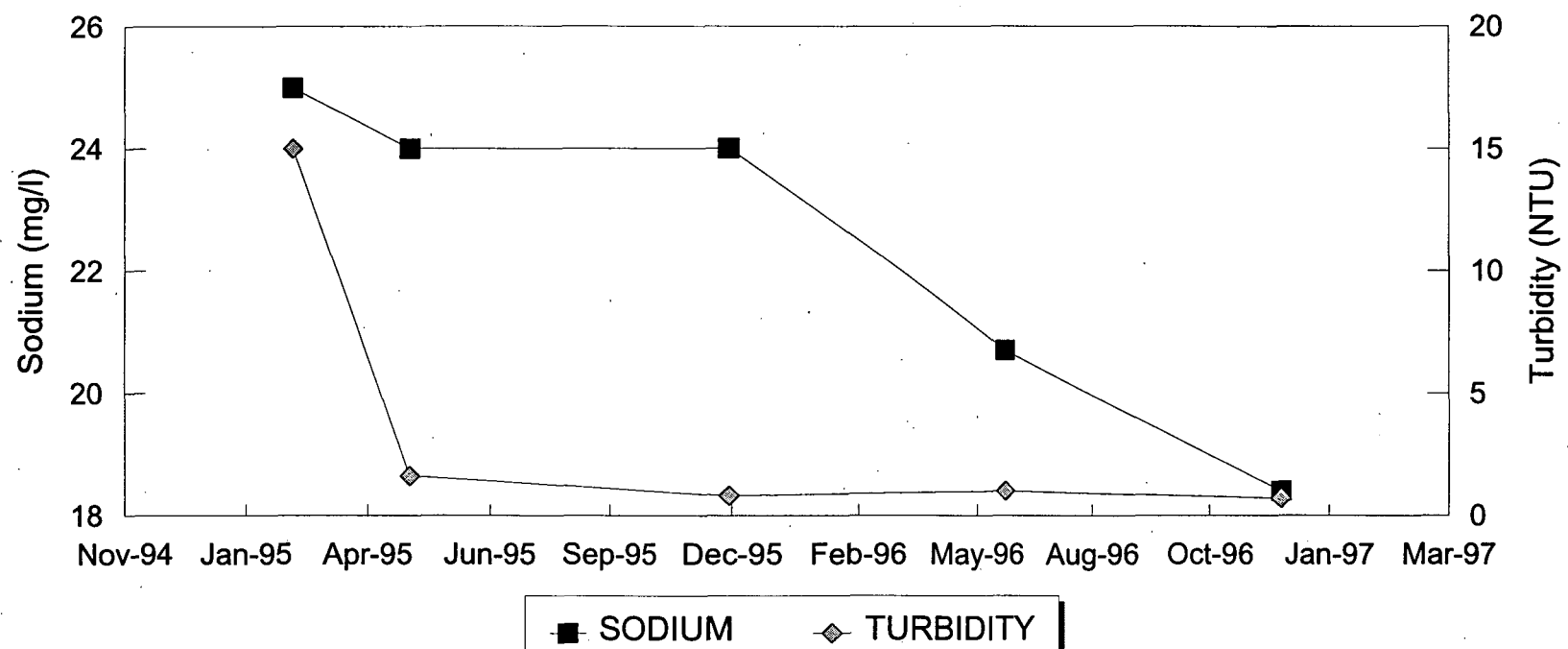
SODIUM VS TURBIDITY

MW-6



SODIUM VS TURBIDITY

MW-7



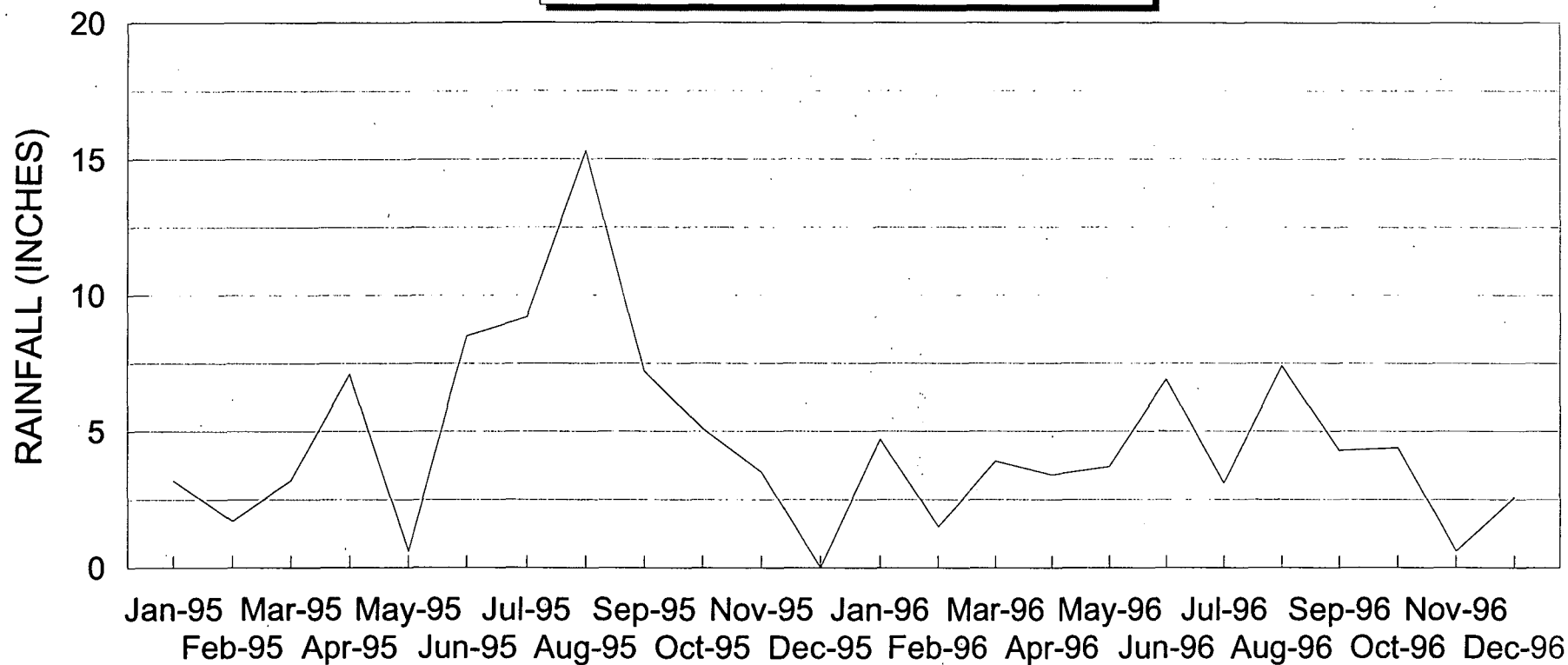
Section 5

HARDEE COUNTY SOLID WASTE MANAGEMENT FACILITY

RAINFALL DATA

RAINFALL VS TIME

HARDEE COUNTY LANDFILL



Section 6

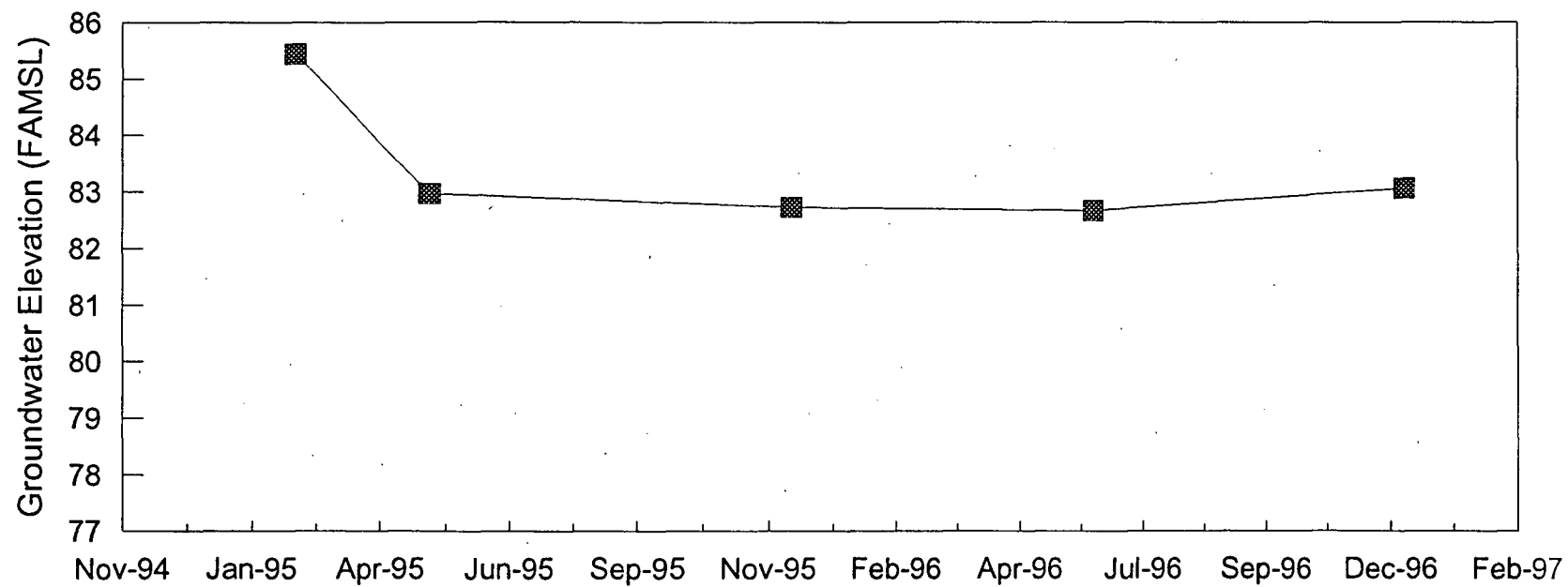
GROUNDWATER LEVEL ELEVATION DATA

Water Level Elevation Data
(Feet Above Mean Sea Level)

Monitor Well	Collection Date				
	09-Dec-96	04-Jun-96	05-Dec-95	09-May-95	21-Feb-95
MW-1	83.07	82.67	82.72	82.97	85.44
MW-2	80.06	80.56	80.66	81.11	82.11
MW-3	78.85	81.20	82.45	82.25	82.93
MW-4	80.26	81.16	81.51	81.41	82.58
MW-5	78.86	80.21	82.06	81.26	81.59
MW-6	78.54	80.34	81.19	80.44	81.94
MW-7	78.31	80.11	80.66	80.51	82.01
P-1	80.57	81.22	82.87	82.02	81.60
P-2	79.06	79.81	82.06	80.91	80.83
P-3	79.45	80.90	82.45	81.55	81.30
P-4	79.74	80.74	81.99	81.01	81.84
P-5	79.65	81.20	82.05	81.25	81.42
P-6	78.04	80.39	80.94	80.44	82.69
P-7	77.84	79.29	79.39	79.21	82.37
P-8	78.14	79.44	79.39	79.57	81.32
P-9	78.31	79.66	81.76	80.81	81.89
P-10	78.36	79.46	81.56	80.64	80.73
P-11	79.36	80.31	81.21	80.91	82.16
P-12	79.11	80.81	81.61	81.21	83.71
P-13	78.85	80.65	80.95	80.85	81.85
P-14	78.45	79.80	80.20	80.25	80.00

GROUNDWATER LEVEL ELEVATION DATA

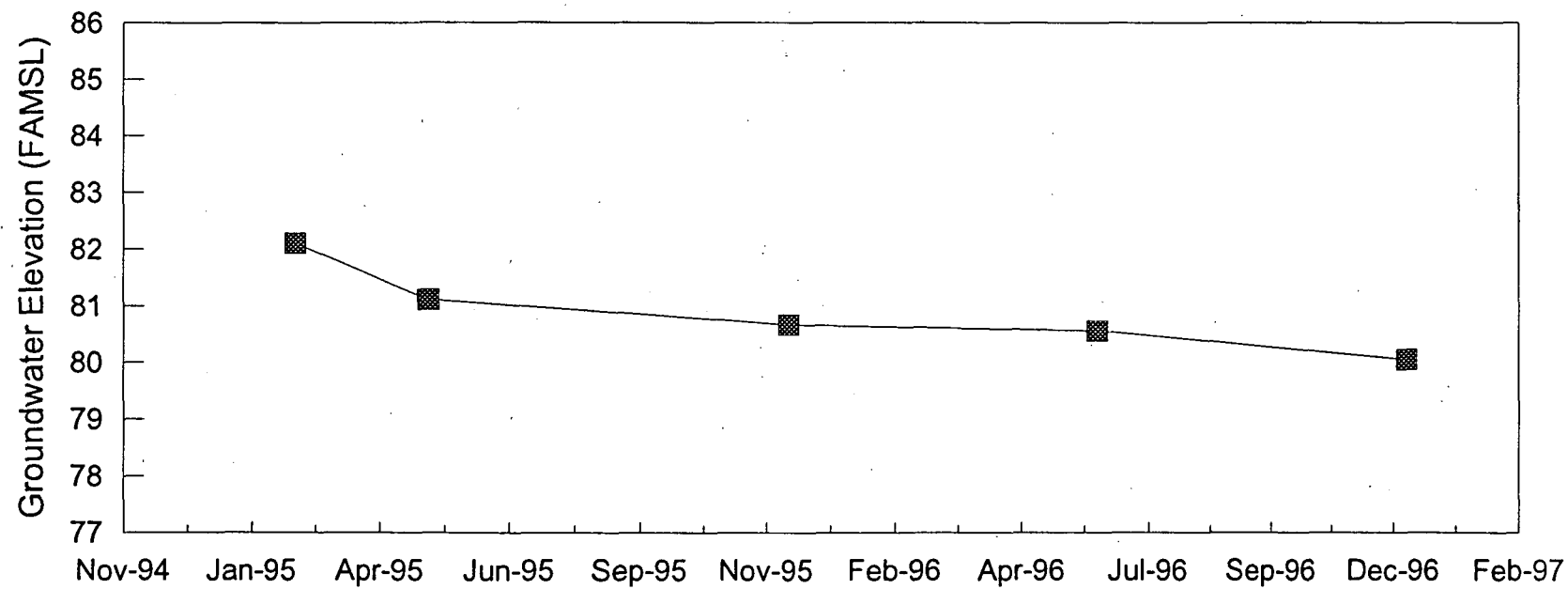
HARDEE COUNTY



MW-1

GROUNDWATER LEVEL ELEVATION DATA

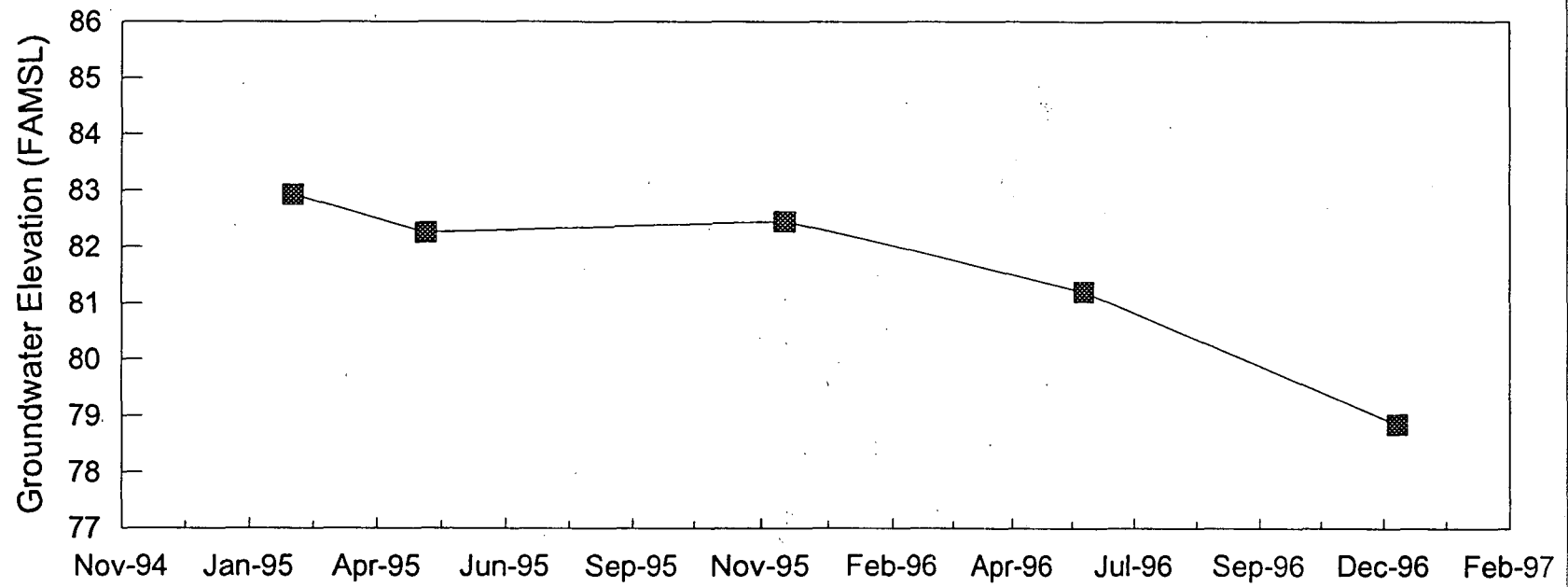
HARDEE COUNTY



MW-2

GROUNDWATER LEVEL ELEVATION DATA

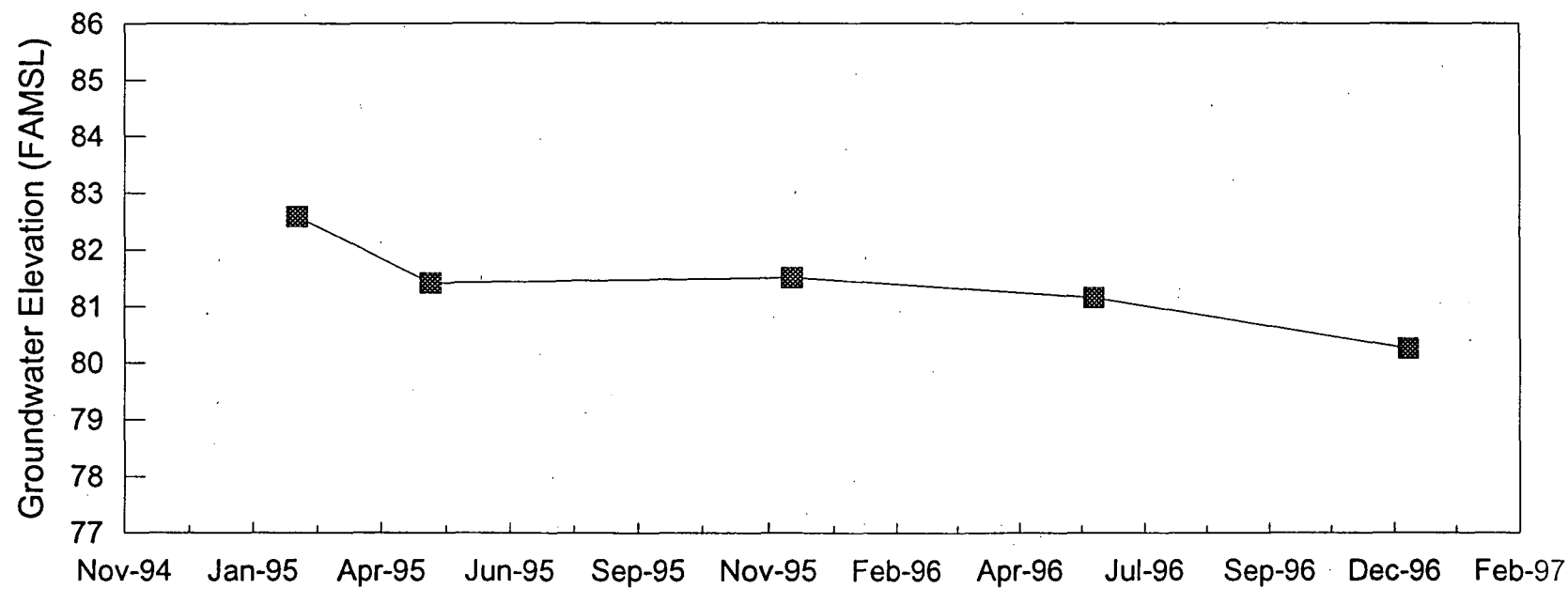
HARDEE COUNTY



MW-3

GROUNDWATER LEVEL ELEVATION DATA

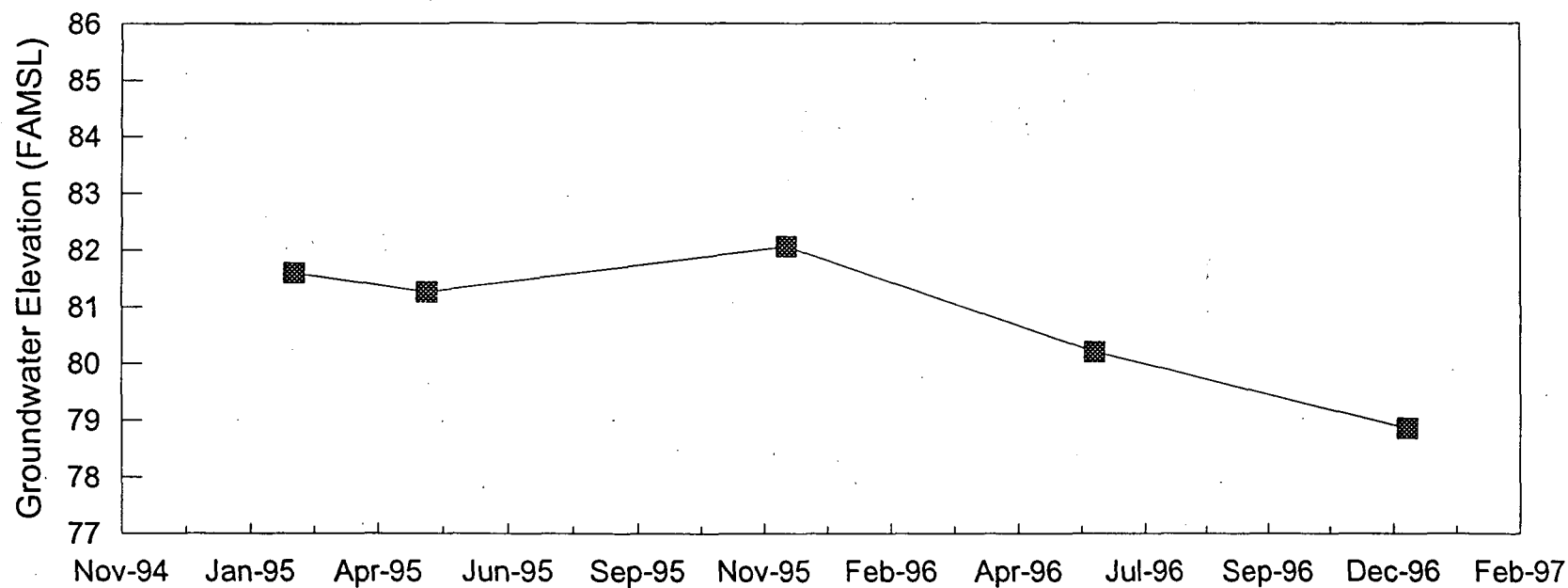
HARDEE COUNTY



MW-4

GROUNDWATER LEVEL ELEVATION DATA

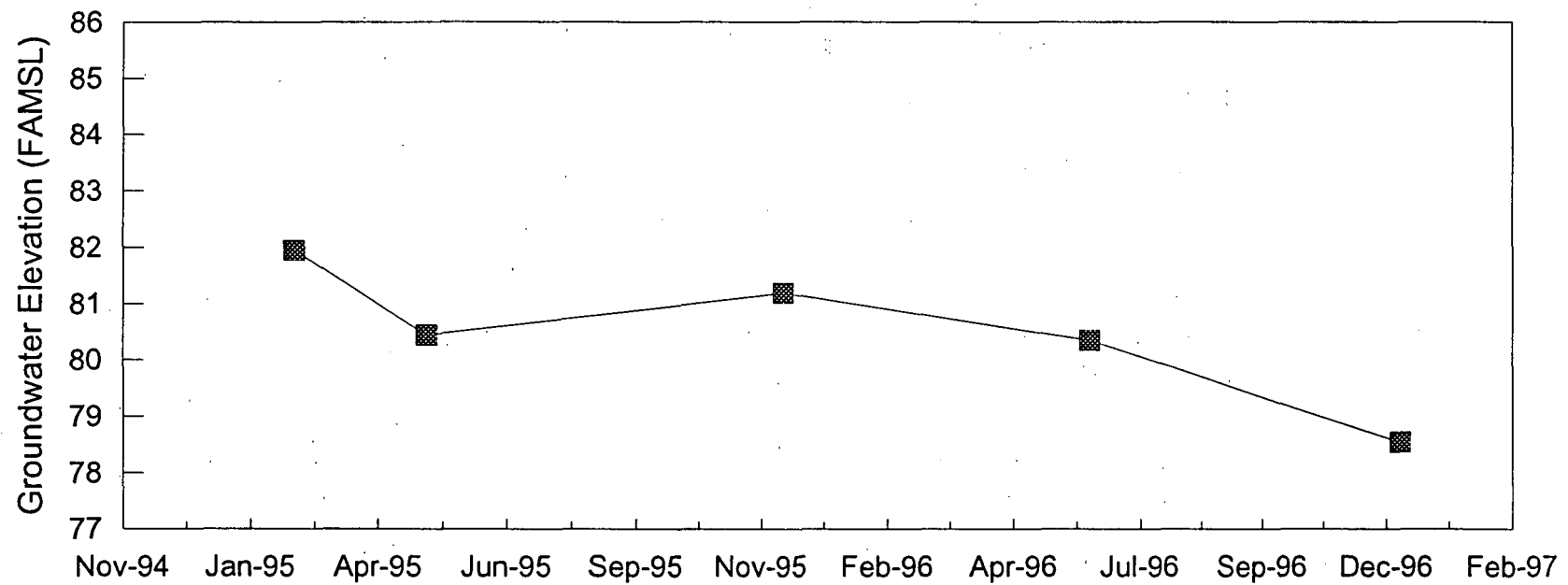
HARDEE COUNTY



MW-5

GROUNDWATER LEVEL ELEVATION DATA

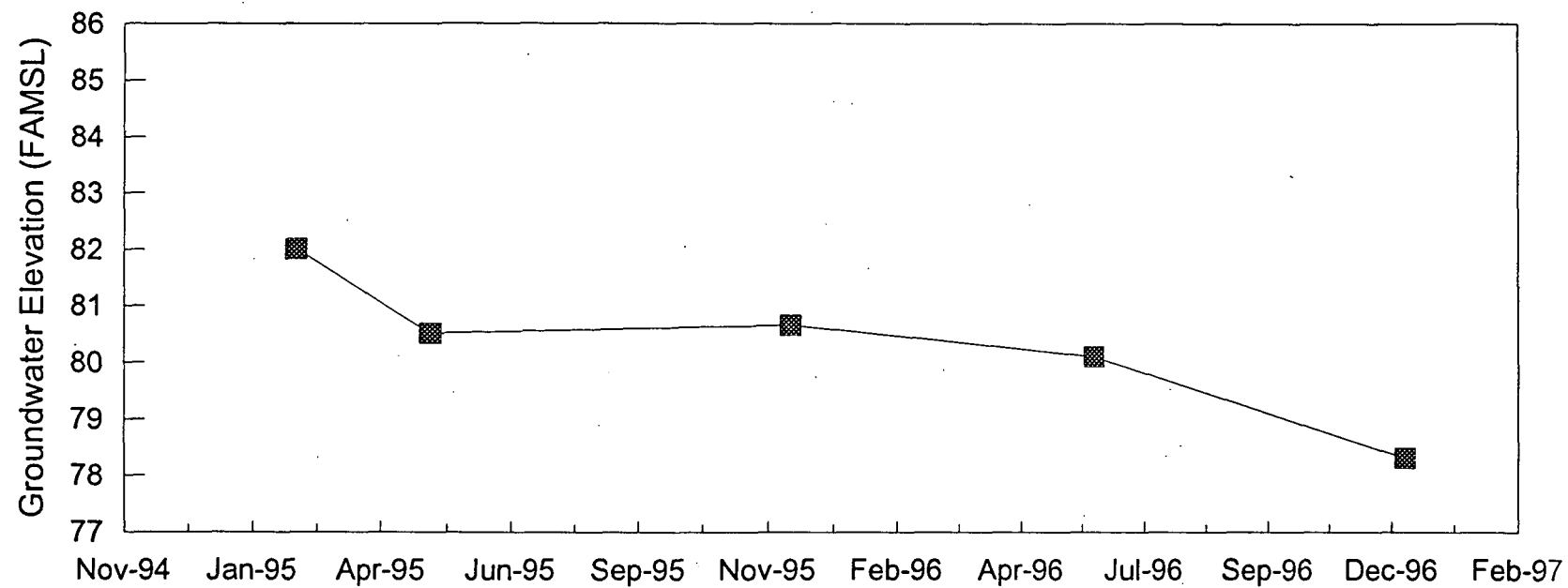
HARDEE COUNTY



MW-6

GROUNDWATER LEVEL ELEVATION DATA

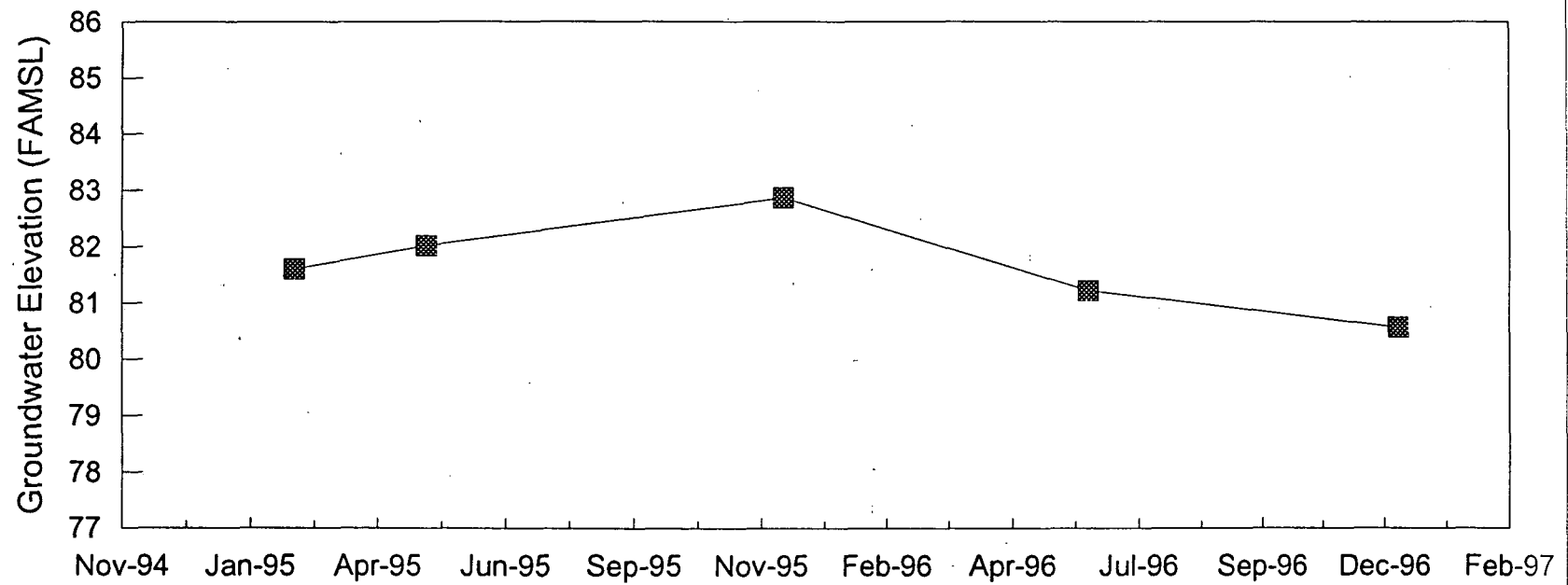
HARDEE COUNTY



MW-7

GROUNDWATER LEVEL ELEVATION DATA

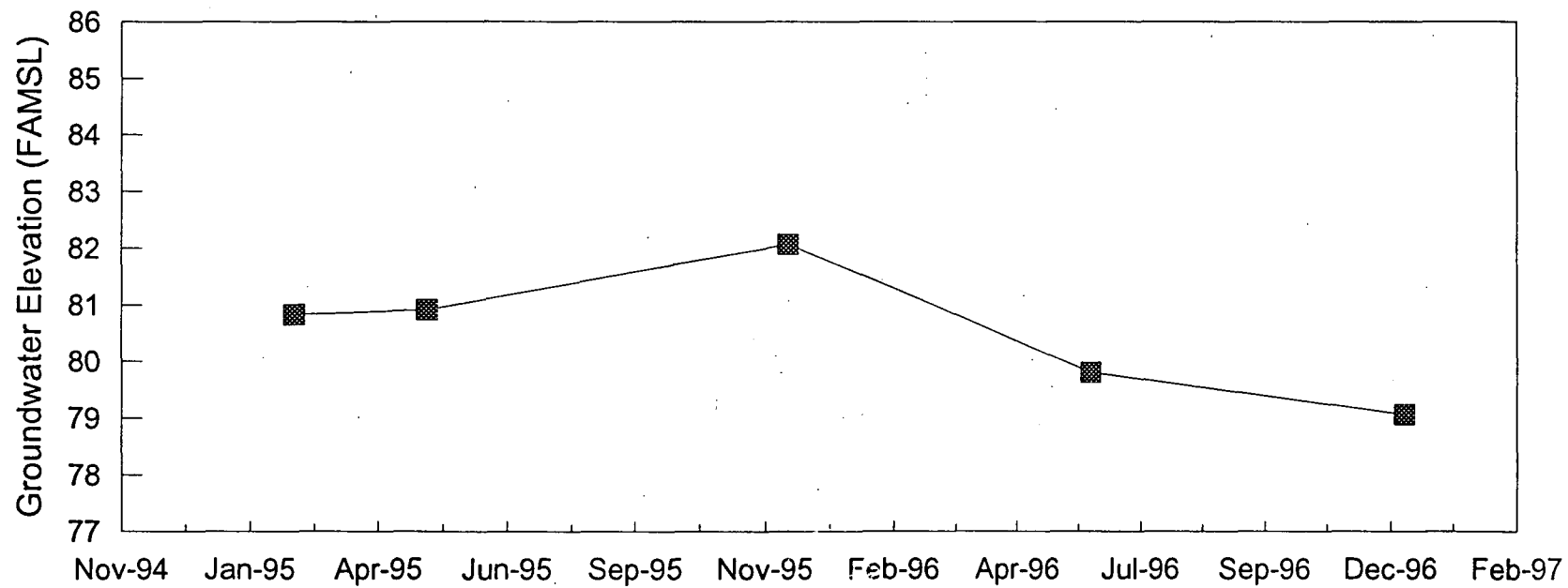
HARDEE COUNTY



P-1

GROUNDWATER LEVEL ELEVATION DATA

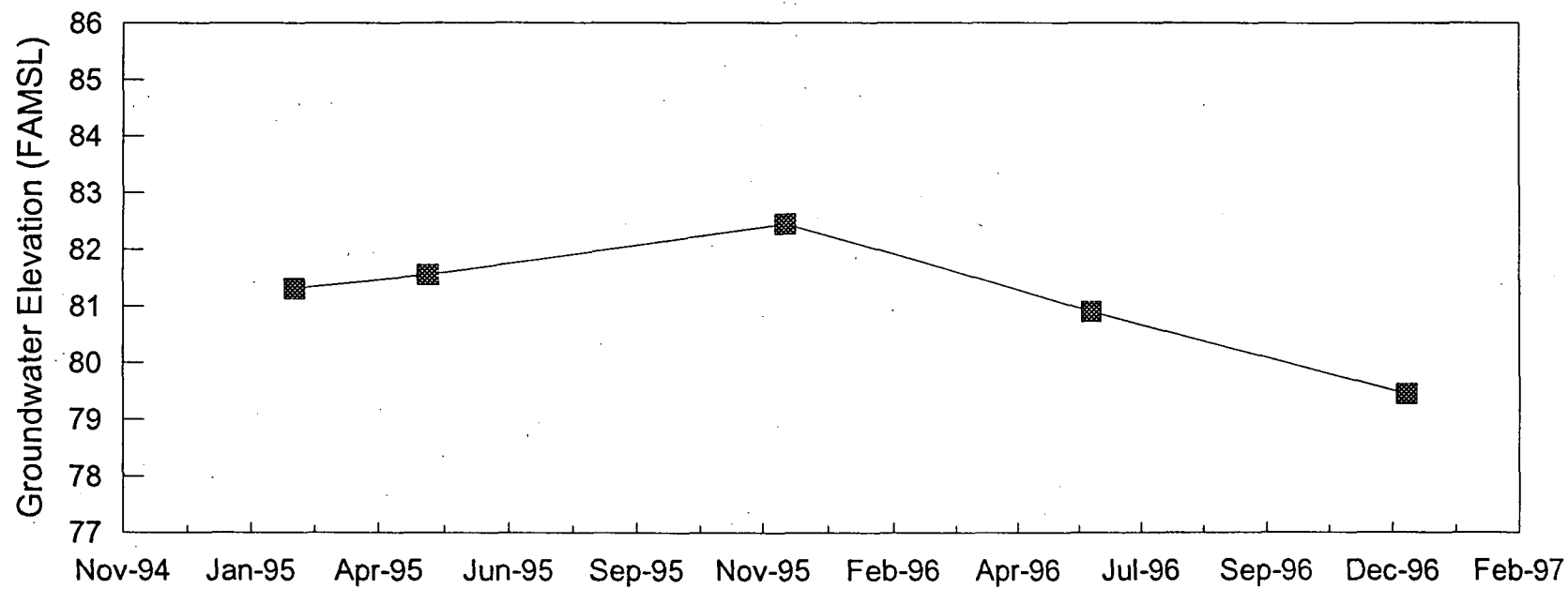
HARDEE COUNTY



P-2

GROUNDWATER LEVEL ELEVATION DATA

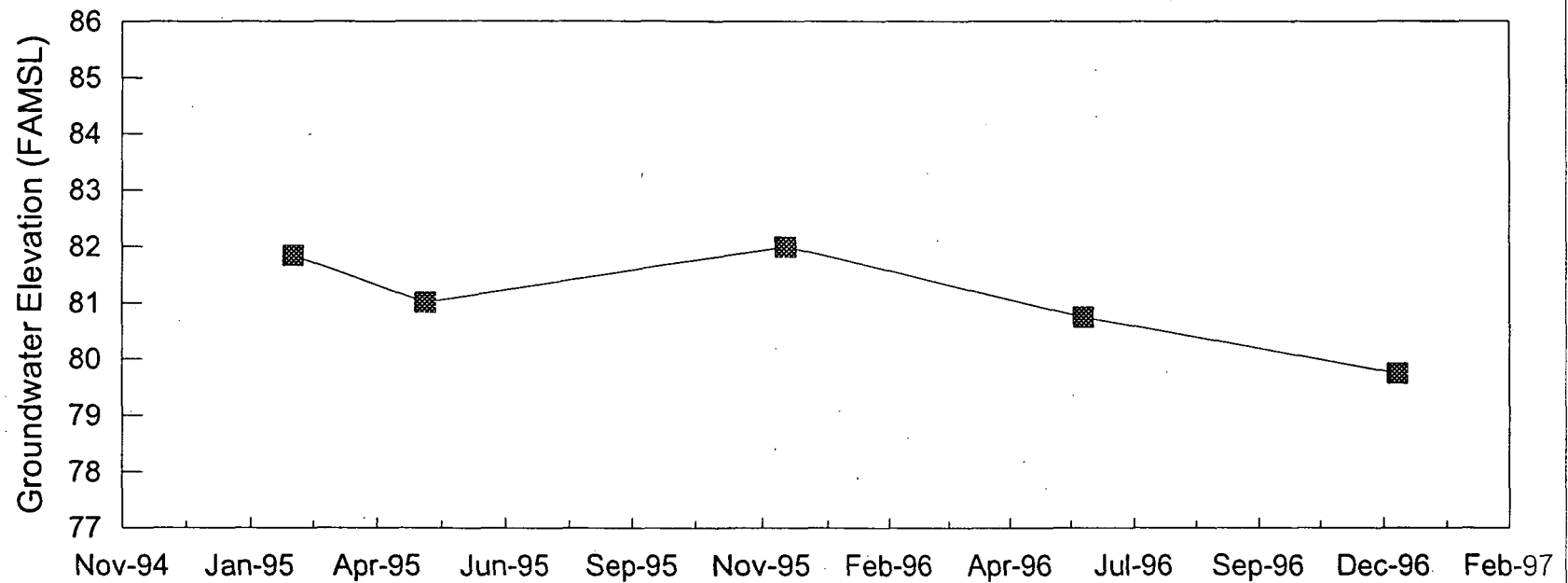
HARDEE COUNTY



P-3

GROUNDWATER LEVEL ELEVATION DATA

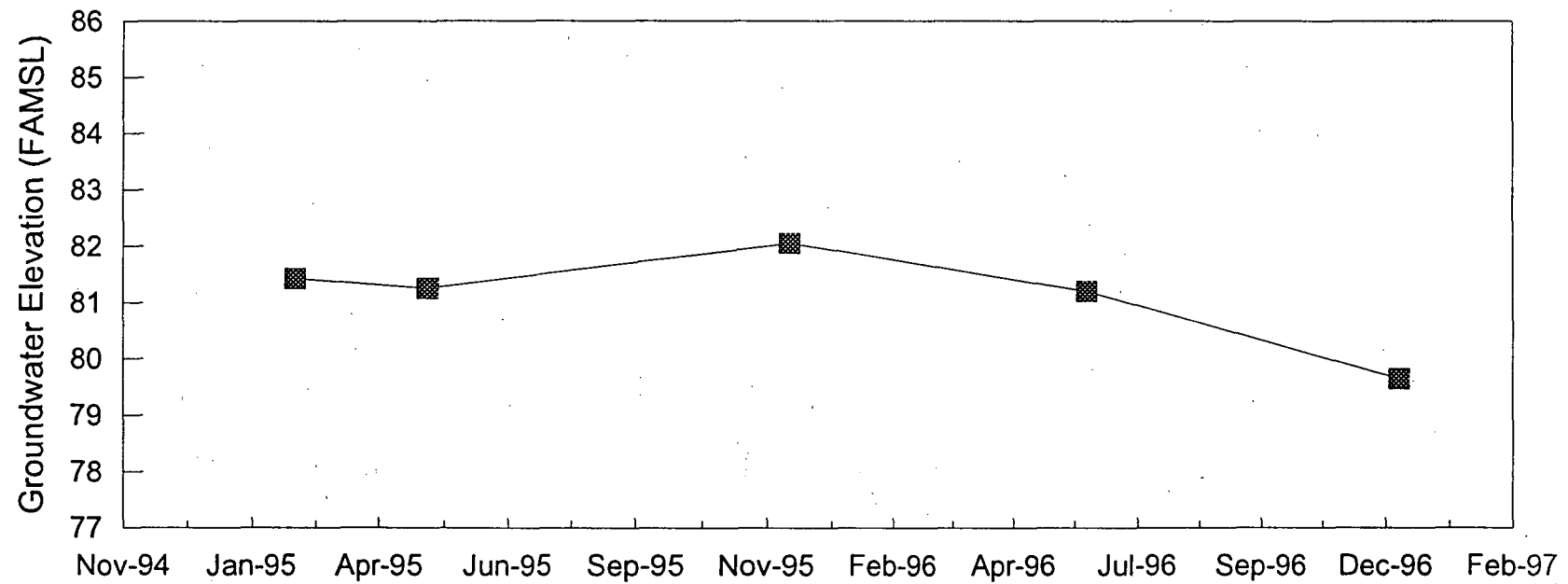
HARDEE COUNTY



P-4

GROUNDWATER LEVEL ELEVATION DATA

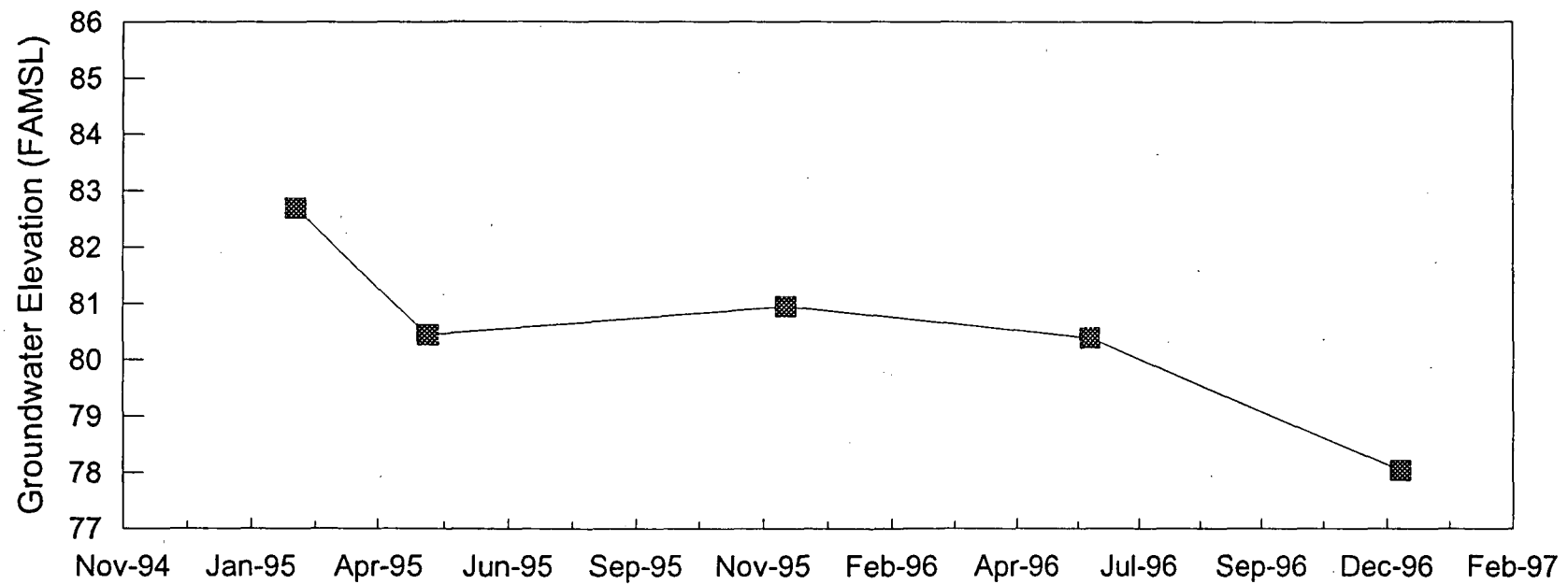
HARDEE COUNTY



P-5

GROUNDWATER LEVEL ELEVATION DATA

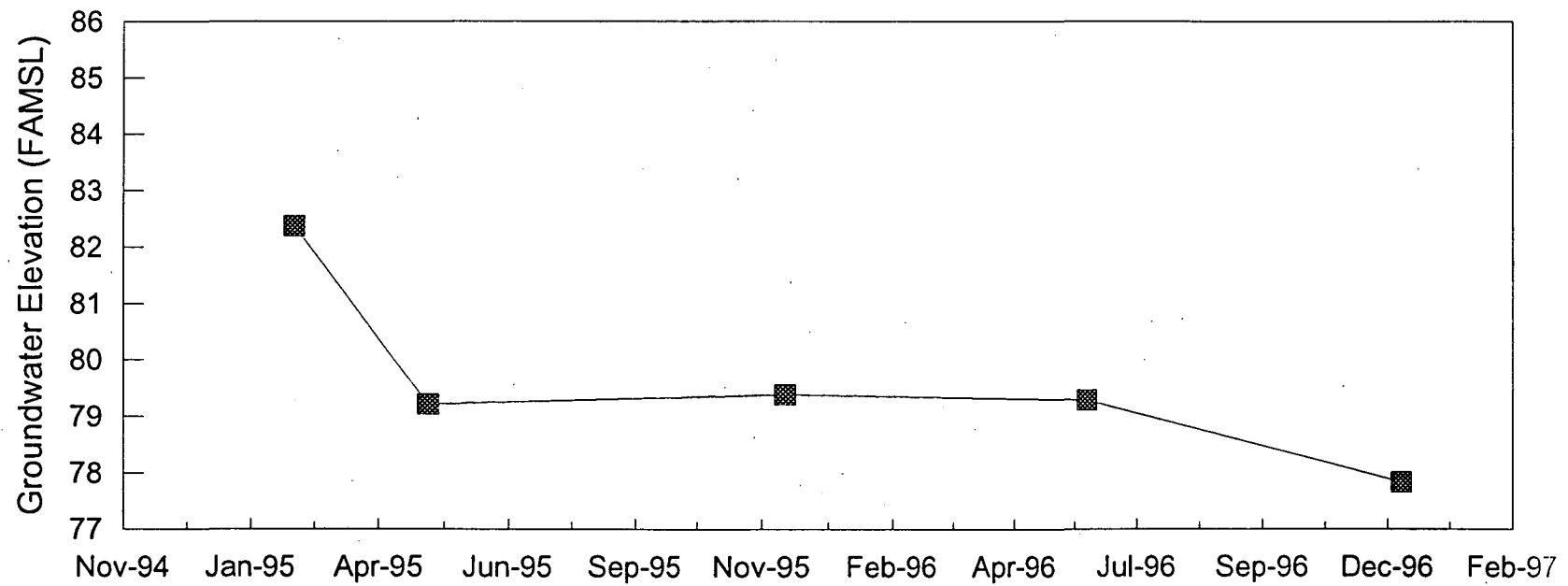
HARDEE COUNTY



P-6

GROUNDWATER LEVEL ELEVATION DATA

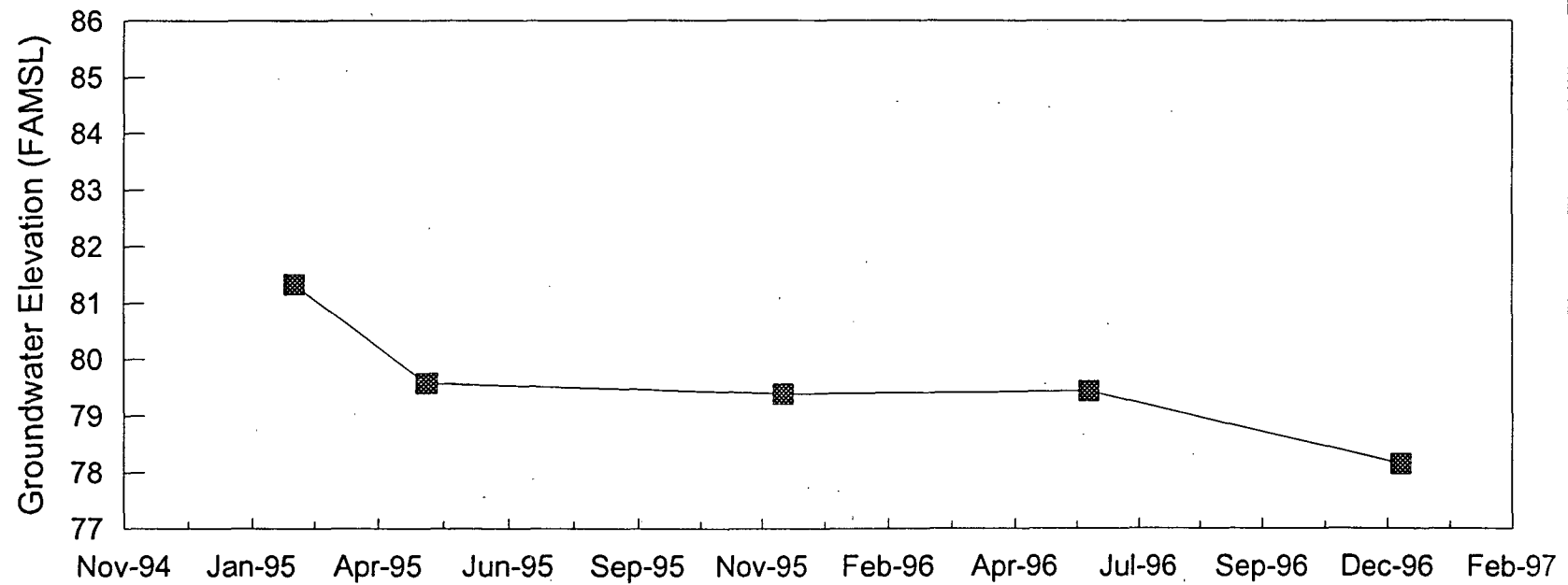
HARDEE COUNTY



P-7

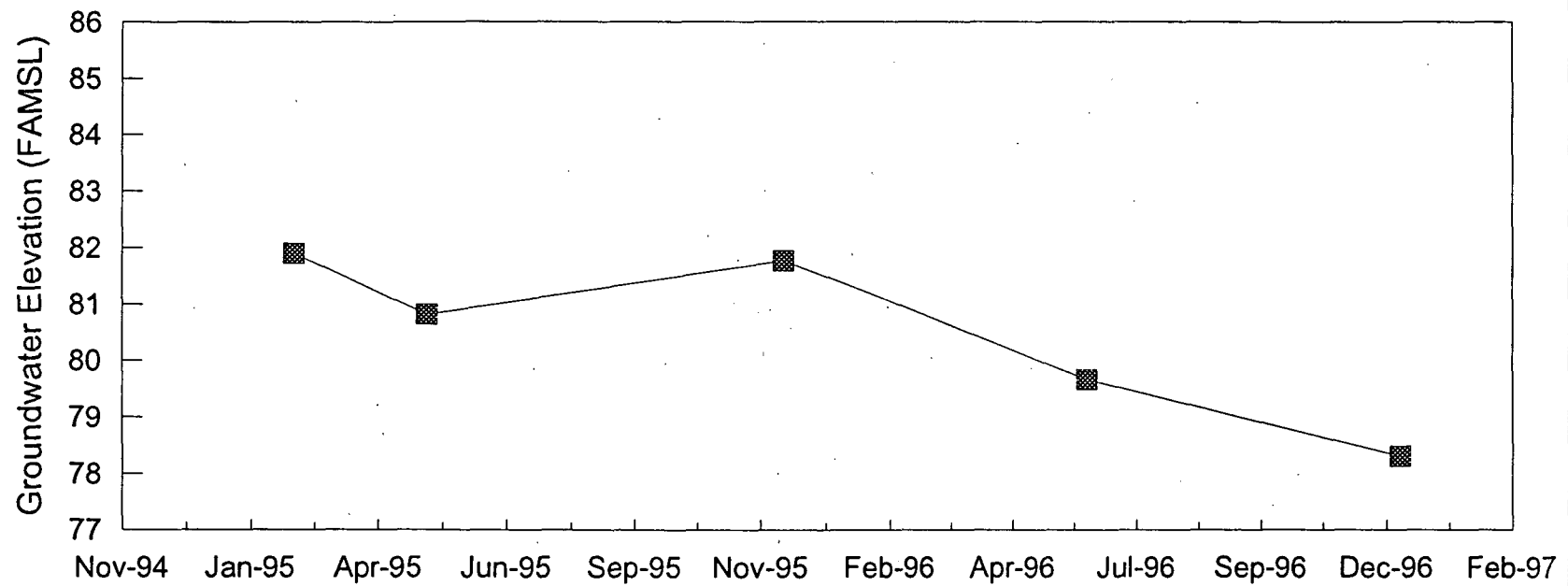
GROUNDWATER LEVEL ELEVATION DATA

HARDEE COUNTY



GROUNDWATER LEVEL ELEVATION DATA

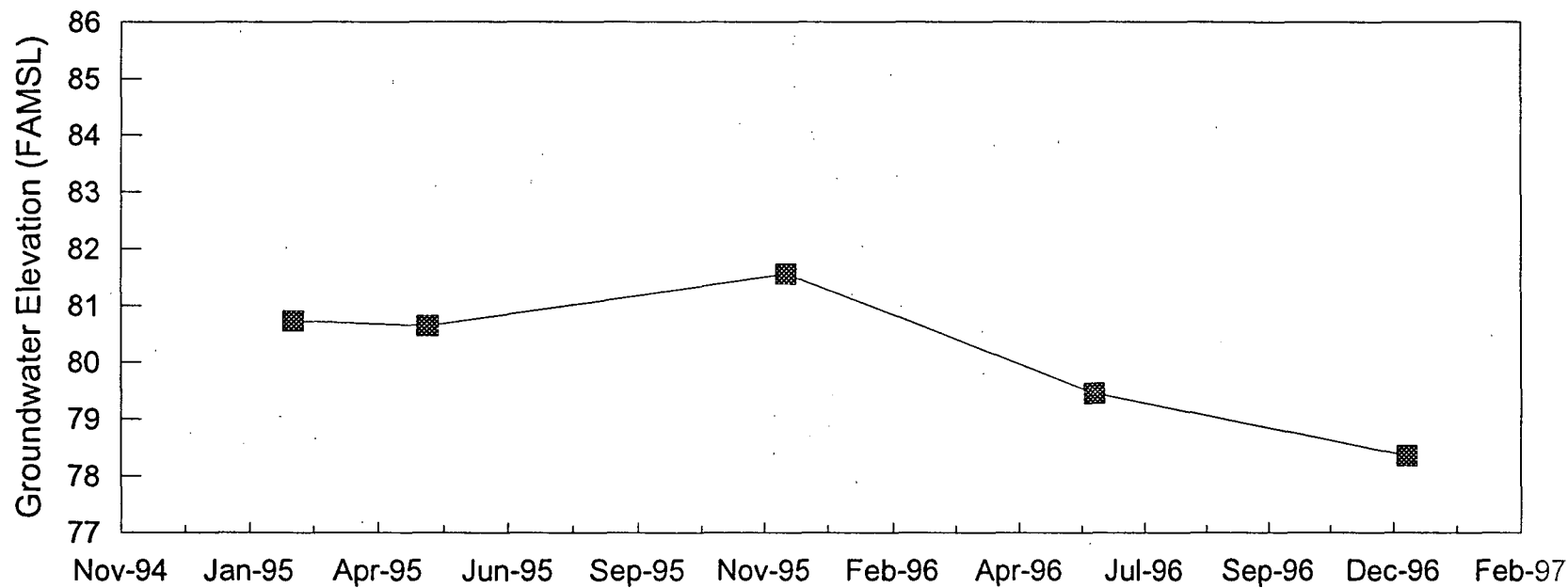
HARDEE COUNTY



P-9

GROUNDWATER LEVEL ELEVATION DATA

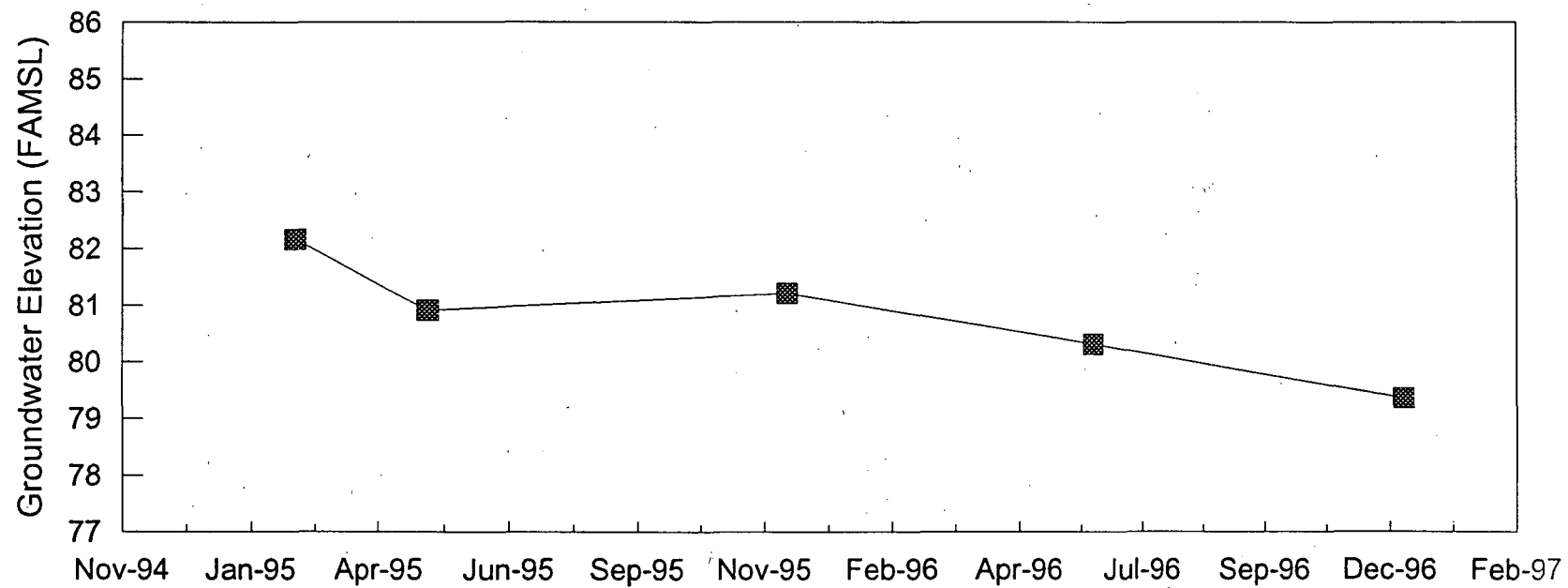
HARDEE COUNTY



P-10

GROUNDWATER LEVEL ELEVATION DATA

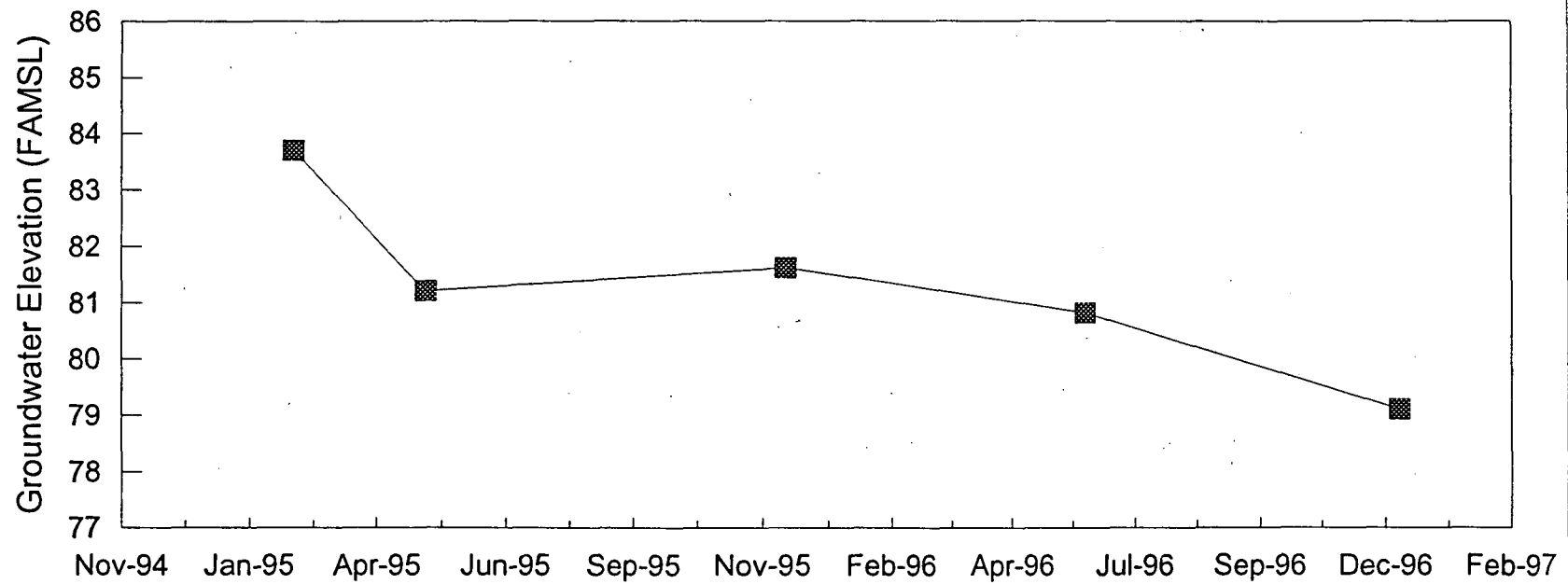
HARDEE COUNTY



P-11

GROUNDWATER LEVEL ELEVATION DATA

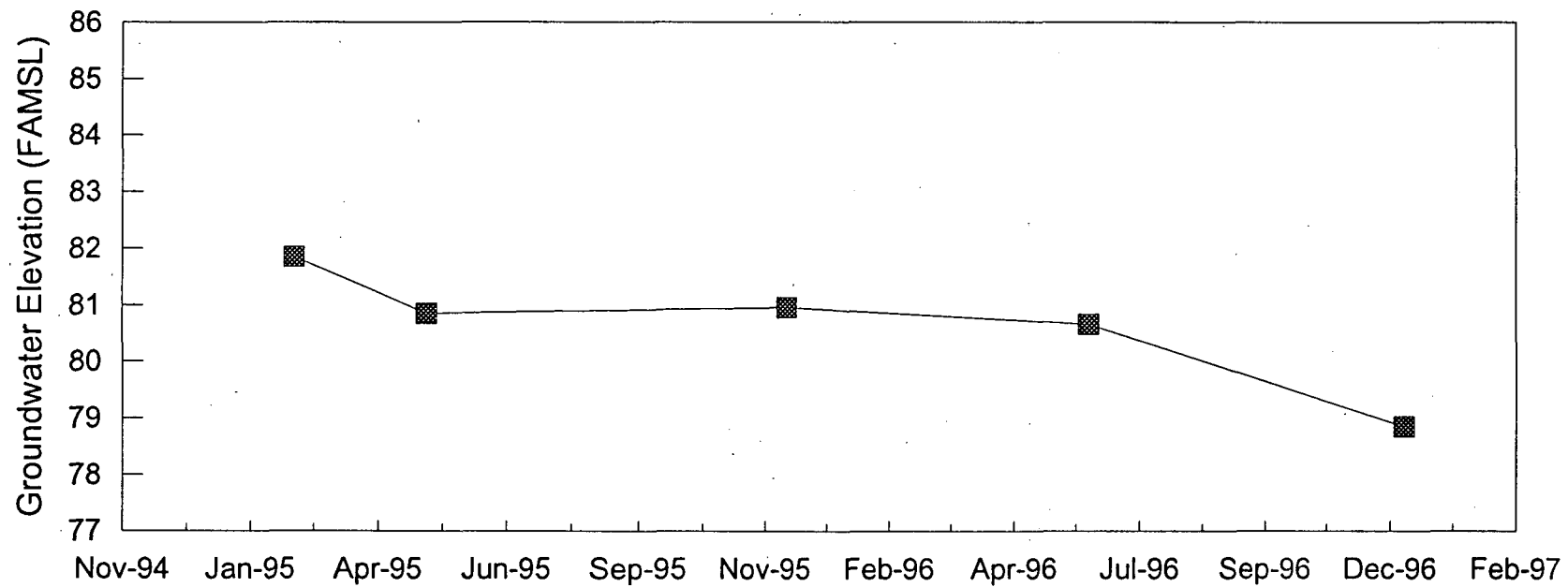
HARDEE COUNTY



P-12

GROUNDWATER LEVEL ELEVATION DATA

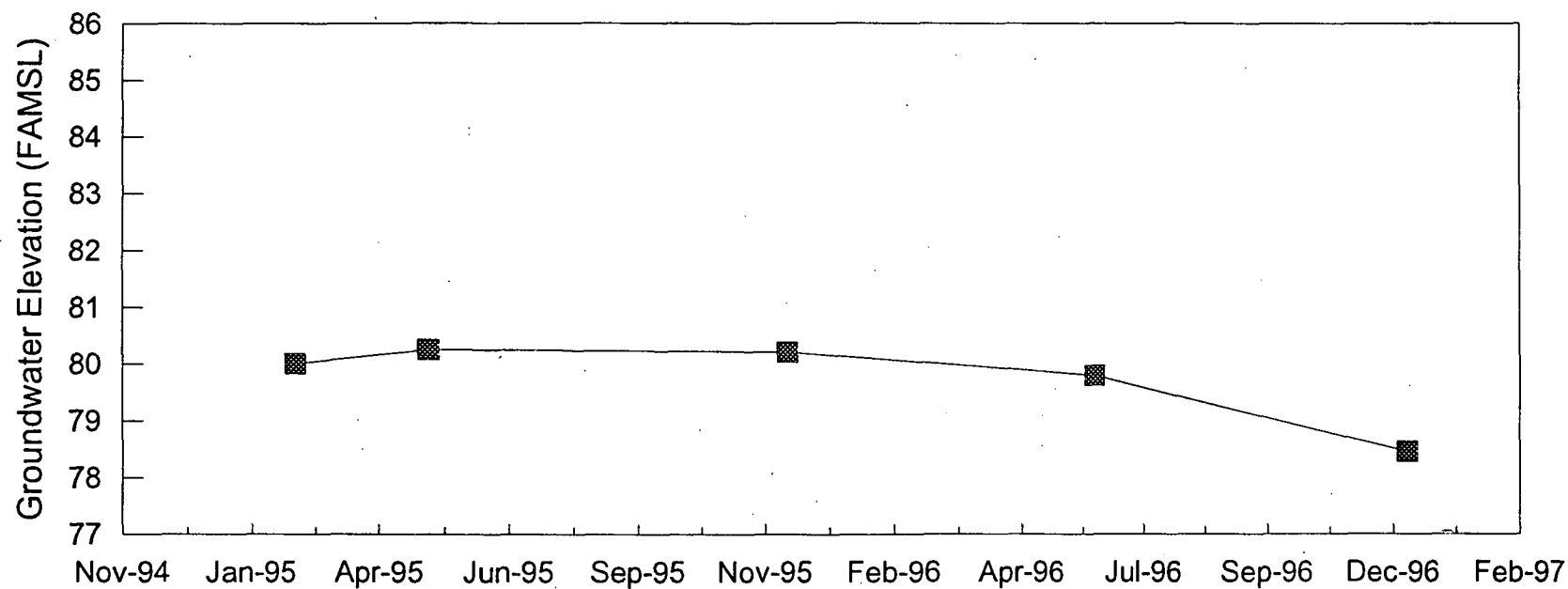
HARDEE COUNTY



P-13

GROUNDWATER LEVEL ELEVATION DATA

HARDEE COUNTY



P-14

Section 7

ION BALANCE STUDY

An ionic balance study was performed as part of this report. A significant difference between the sum of cations and anions could indicate that one or several parameters are not being measured. A balanced cation-anion ratio would indicate that the parameters measured accurately reflect the groundwater chemistry. This summary includes a discussion of the methodology used, the data collected, and concerns raised from the results.

The methodology used for this study was based upon instructions provided by the Florida Department of Environmental Protection (FDEP). These instructions indicate that a closing error of 20% or less would be accepted as balanced.

The recorded concentration of the individual parameter in mg/l (C) was multiplied by a conversion factor defined as the valence charge (V) divided by the atomic weight of the parameter (A) to attain a parameter total (P).

$$P = C(V/A)$$

The following parameters were included in the ionic balance study:

<u>Cations</u>			<u>Anions</u>
As	Hg	Sb	NO3
Ba	Se	Ni	Cl
Cd	Ag	V	
Cr	NH4	Be	
Cu	Zn	Co	
Fe	Tl		
Pb	Na		

The sum of the parameter totals for the cations was compared to the sum of the parameter totals for the anions for each sampling event and well location. If the percent difference between the two sums was less than 20%, the equation was considered to be balanced.

The ion balance calculations for monitoring wells MW-3, MW-6, and MW-7 were balanced throughout the monitoring period. Monitoring wells MW-1 and MW-2 were balanced throughout the monitoring period except for one sampling event for monitoring well MW-1 and two sampling events for monitoring well MW-2. Monitoring wells MW-4 (background well) and MW-5 were not balanced for any one sampling event throughout the monitoring period.

ION BALANCE CALCULATIONS
Hardee County Solid Waste Management Facility

Analyte	12/9/96 MW -1		6/4/96 MW -1		12/5/95 MW -1		5/9/95 MW -1		2/21/95 MW -1	
	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l
Ammonium		0.0E+00		0.0E+00		0.0E+00	0.35	4.7E-03	0.38	5.1E-03
Antimony	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Arsenic	0.008	1.1E-04	0.008	5.0E-04	0.007	4.4E-04	0.009	5.6E-04	0.021	1.3E-03
Barium	BDL	0.0E+00	BDL	0.0E+00	0.03	4.4E-04		0.0E+00		0.0E+00
Beryllium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Cadmium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Chromium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Cobalt	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Copper	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Iron	10.8	3.9E-01	16.8	6.0E-01	15.4	5.5E-01	20.8	7.4E-01	27.4	9.8E-01
Lead	0.002	1.9E-05	BDL	0.0E+00	0.002	1.9E-05	0.001	9.7E-06	0.002	1.9E-05
Mercury	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Nickel	BDL	0.0E+00	BDL	0.0E+00	0.02	6.8E-04		0.0E+00		0.0E+00
Selenium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Silver	BDL	0.0E+00	BDL	0.0E+00	0.001	1.9E-05		0.0E+00		0.0E+00
Sodium	13.5	5.9E-01	15.5	6.7E-01	16	7.0E-01	18	7.8E-01	19	8.3E-01
Thallium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Vanadium	BDL	0.0E+00	BDL	0.0E+00	0.012	2.4E-04		0.0E+00		0.0E+00
Zinc	0.004	1.2E-04	0.006	1.8E-04	0.012	3.7E-04		0.0E+00		0.0E+00
Total cations		0.9739		1.2761		1.2492		1.5326		1.8135
Chloride	34	9.58E-01	43	1.21E+00	42	1.18E+00	94	2.65E+00	55	1.55E+00
Nitrate	BDL	0.00E+00	0.06	9.68E-04	0.04	6.45E-04	0.04	6.45E-04	0.04	6.45E-04
Total anions		0.96		1.21		1.18		2.65		1.55
Charge balance		0.8%		2.6%		2.7%		26.7%		7.8%

ION BALANCE CALCULATIONS
Hardee County Solid Waste Management Facility

Analyte	12/9/96 MW -2		6/4/96 MW -2		12/5/95 MW -2		5/9/95 MW -2		2/21/95 MW -2	
	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l
Ammonium		0.0E+00		0.0E+00		0.0E+00	0.22	2.9E-03	0.17	2.3E-03
Antimony	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Arsenic	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	0.009	5.6E-04
Barium	BDL	0.0E+00	BDL	0.0E+00	0.02	2.9E-04		0.0E+00		0.0E+00
Beryllium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Cadmium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Chromium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	0.02	1.2E-03
Cobalt	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Copper	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Iron	4.57	1.6E-01	8.46	3.0E-01	2.95	1.1E-01	8.54	3.1E-01	18.9	6.8E-01
Lead	0.002	1.9E-05	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	0.007	6.8E-05
Mercury	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Nickel	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Selenium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Silver	BDL	0.0E+00	BDL	0.0E+00	0.001	1.9E-05		0.0E+00		0.0E+00
Sodium	10.1	4.4E-01	10.2	4.4E-01	11	4.8E-01	8.3	3.6E-01	10	4.3E-01
Thallium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Vanadium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Zinc	BDL	0.0E+00	BDL	0.0E+00	0.004	1.2E-04		0.0E+00		0.0E+00
Total cations		0.6028		0.7464		0.5843		0.6696		1.1155
Chloride	20	5.63E-01	15	4.23E-01	23	6.48E-01	18	5.07E-01	20	5.63E-01
Nitrate	0.03	4.84E-04	0.03	4.84E-04	BDL	0.00E+00	0.04	6.45E-04	0.03	4.84E-04
Total anions		0.56		0.42		0.65		0.51		0.56
Charge balance		3.3%		27.7%		5.2%		13.8%		32.8%

ION BALANCE CALCULATIONS
Hardee County Solid Waste Management Facility

Analyte	12/9/96 MW -3		6/4/96 MW -3		12/5/95 MW -3		5/9/95 MW -3		2/21/95 MW -3	
	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l
Ammonium		0.0E+00		0.0E+00		0.0E+00	0.08	1.1E-03	0.11	1.5E-03
Antimony	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Arsenic	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Barium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Beryllium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Cadmium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Chromium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	0.02	1.2E-03
Cobalt	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Copper	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Iron	0.79	2.8E-02	0.86	3.1E-02	1.1	3.9E-02	1.08	3.9E-02	3.74	1.3E-01
Lead	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	0.005	4.8E-05
Mercury	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Nickel	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Selenium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Silver	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Sodium	3.1	1.3E-01	2.9	1.3E-01	3.4	1.5E-01	3.2	1.4E-01	3.5	1.5E-01
Thallium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Vanadium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Zinc	0.002	6.1E-05	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Total cations		0.1631		0.1569		0.1872		0.1789		0.2887
Chloride	4.8	1.35E-01	5	1.41E-01	4.9	1.38E-01	6	1.69E-01	7.1	2.00E-01
Nitrate	BDL	0.00E+00	BDL	0.00E+00	BDL	0.00E+00	BDL	0.00E+00	0.03	4.84E-04
Total anions		0.14		0.14		0.14		0.17		0.20
Charge balance		9.4%		5.4%		15.1%		2.8%		18.0%

ION BALANCE CALCULATIONS
Hardee County Solid Waste Management Facility

Analyte	12/9/96 MW -4		6/4/96 MW -4		12/5/95 MW -4		5/9/95 MW -4		2/21/95 MW -4	
	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l
Ammonium		0.0E+00		0.0E+00		0.0E+00	0.52	6.9E-03	0.46	6.1E-03
Antimony	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Arsenic	0.026	3.5E-04	0.026	1.6E-03	0.017	1.1E-03	0.029	1.8E-03	0.019	1.2E-03
Barium	BDL	0.0E+00	BDL	0.0E+00	0.02	2.9E-04		0.0E+00		0.0E+00
Beryllium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Cadmium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Chromium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Cobalt	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Copper	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Iron	33.8	1.2E+00	39.5	1.4E+00	31.4	1.1E+00	63.6	2.3E+00	48.1	1.7E+00
Lead	BDL	0.0E+00	BDL	0.0E+00	0.001	9.7E-06	BDL	0.0E+00	BDL	0.0E+00
Mercury	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Nickel	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Selenium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Silver	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Sodium	7.4	3.2E-01	4.9	2.1E-01	5	2.2E-01	4.3	1.9E-01	4	1.7E-01
Thallium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Vanadium	BDL	0.0E+00	BDL	0.0E+00	0.013	2.5E-04		0.0E+00		0.0E+00
Zinc	BDL	0.0E+00	0.002	6.1E-05	0.009	2.8E-04		0.0E+00		0.0E+00
Total cations		1.5323		1.6290		1.3435		2.4728		1.9034
Chloride	26	7.32E-01	18	5.07E-01	15	4.23E-01	9.3	2.62E-01	9.8	2.76E-01
Nitrate	BDL	0.00E+00	0.07	1.13E-03	0.05	8.06E-04	0.05	8.06E-04	0.03	4.84E-04
Total anions		0.73		0.51		0.42		0.26		0.28
Charge balance		35.3%		52.4%		52.1%		80.8%		74.6%

ION BALANCE CALCULATIONS
Hardee County Solid Waste Management Facility

Analyte	12/9/96 MW -5		6/4/96 MW -5		12/5/95 MW -5		5/9/95 MW -5		2/21/95 MW -5	
	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l
Ammonium		0.0E+00		0.0E+00		0.0E+00	0.19	2.5E-03	0.21	2.8E-03
Antimony	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Arsenic	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Barium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Beryllium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Cadmium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Chromium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Cobalt	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Copper	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Iron	4.4	1.6E-01	4.98	1.8E-01	4.99	1.8E-01	5.91	2.1E-01	7.86	2.8E-01
Lead	0.002	1.9E-05	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	0.004	3.9E-05
Mercury	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Nickel	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Selenium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Silver	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Sodium	5	2.2E-01	4.9	2.1E-01	4.6	2.0E-01	5.1	2.2E-01	5.1	2.2E-01
Thallium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Vanadium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Zinc	BDL	0.0E+00	0.004	1.2E-04	BDL	0.0E+00		0.0E+00		0.0E+00
Total cations		0.3749		0.3915		0.3787		0.4359		0.5060
Chloride	6.2	1.75E-01	6.2	1.75E-01	4.9	1.38E-01	6.2	1.75E-01	7.2	2.03E-01
Nitrate	0.04	6.45E-04	0.3	4.84E-03	BDL	0.00E+00	0.07	1.13E-03	0.03	4.84E-04
Total anions		0.18		0.18		0.14		0.18		0.20
Charge balance		36.3%		37.1%		46.6%		42.5%		42.7%

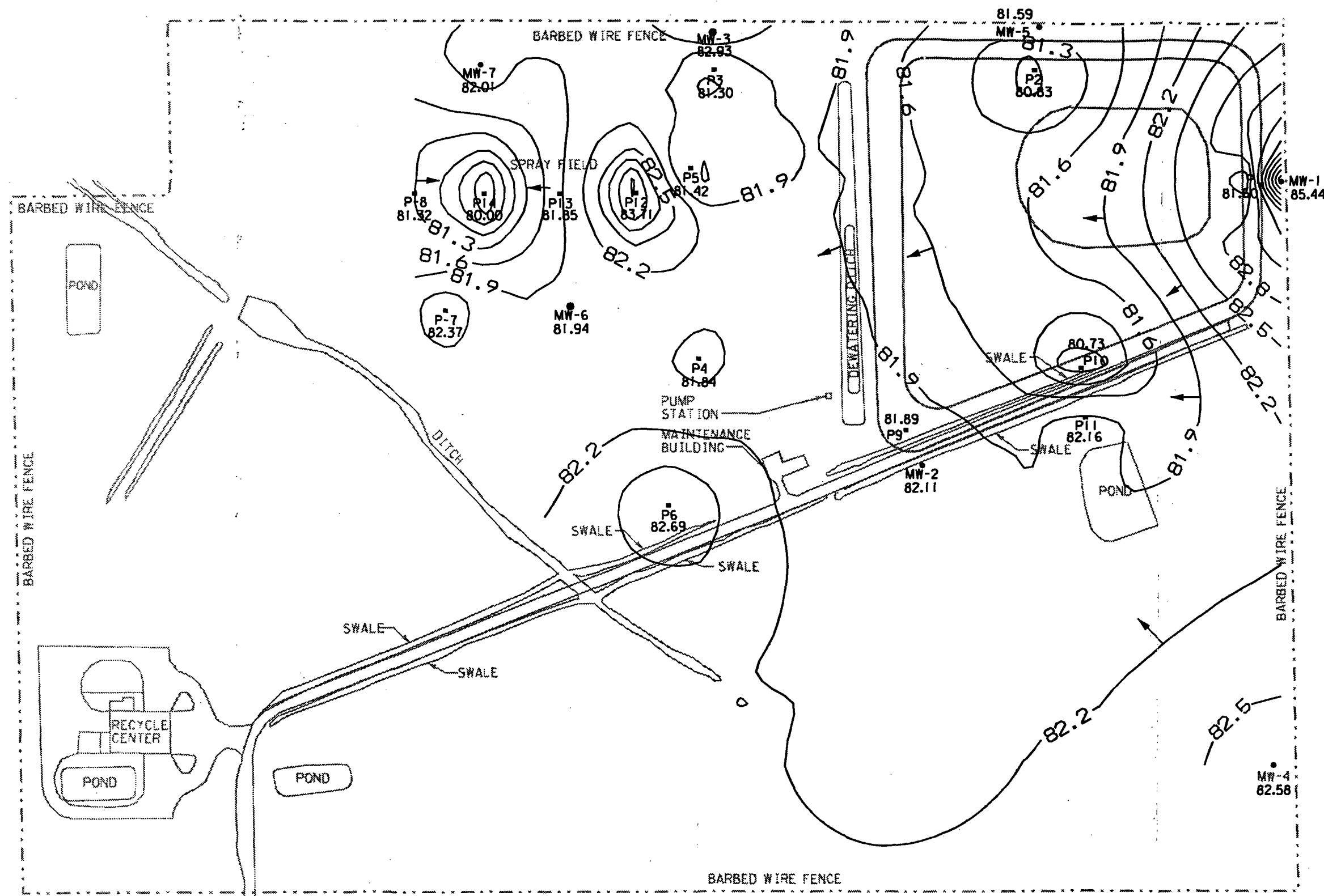
ION BALANCE CALCULATIONS
Hardee County Solid Waste Management Facility

Analyte	12/9/96 MW -6		6/4/96 MW -6		12/5/95 MW -6		5/9/95 MW -6		2/21/95 MW -6	
	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l
Ammonium		0.0E+00		0.0E+00		0.0E+00	0.1	1.3E-03	0.11	1.5E-03
Antimony	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Arsenic	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Barium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Beryllium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Cadmium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Chromium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Cobalt	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Copper	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Iron	4.45	1.6E-01	5.34	1.9E-01	5.78	2.1E-01	7.8	2.8E-01	6.97	2.5E-01
Lead	BDL	0.0E+00	BDL	0.0E+00	0.001	9.7E-06	0.001	9.7E-06	0.001	9.7E-06
Mercury	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Nickel	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Selenium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Silver	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Sodium	17.2	7.5E-01	18.8	8.2E-01	20	8.7E-01	21	9.1E-01	22	9.6E-01
Thallium	BDL	0.0E+00	0.002	2.0E-05	BDL	0.0E+00		0.0E+00		0.0E+00
Vanadium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Zinc	BDL	0.0E+00	0.002	6.1E-05	0.014	4.3E-04		0.0E+00		0.0E+00
Total cations		0.9072		1.0087		1.0769		1.1937		1.2076
Chloride	29	8.17E-01	35	9.86E-01	39	1.10E+00	42	1.18E+00	44	1.24E+00
Nitrate	0.05	8.06E-04	0.03	4.84E-04	0.06	9.68E-04	0.04	6.45E-04	0.03	4.84E-04
Total anions		0.82		0.99		1.10		1.18		1.24
Charge balance		5.2%		1.1%		1.0%		0.4%		1.3%

ION BALANCE CALCULATIONS
Hardee County Solid Waste Management Facility

Analyte	12/9/96 MW -7		6/4/96 MW -7		12/5/95 MW -7		5/9/95 MW -7		2/21/95 MW -7	
	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l
Ammonium		0.0E+00		0.0E+00		0.0E+00	0.37	4.9E-03	0.38	5.1E-03
Antimony	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Arsenic	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Barium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Beryllium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Cadmium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Chromium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Cobalt	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Copper	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Iron	3.26	1.2E-01	4.92	1.8E-01	5.34	1.9E-01	6.7	2.4E-01	7.42	2.7E-01
Lead	0.001	9.7E-06	BDL	0.0E+00	BDL	0.0E+00	0.001	9.7E-06	BDL	0.0E+00
Mercury	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00
Nickel	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Selenium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Silver	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Sodium	18.4	8.0E-01	20.7	9.0E-01	24	1.0E+00	24	1.0E+00	25	1.1E+00
Thallium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Vanadium	BDL	0.0E+00	BDL	0.0E+00	BDL	0.0E+00		0.0E+00		0.0E+00
Zinc	BDL	0.0E+00	BDL	0.0E+00	0.003	9.2E-05		0.0E+00		0.0E+00
Total cations		0.9167		1.0762		1.2348		1.2883		1.3577
Chloride	35	9.86E-01	40	1.13E+00	49	1.38E+00	49	1.38E+00	52	1.46E+00
Nitrate	0.02	3.23E-04	BDL	0.00E+00	0.03	4.84E-04	BDL	0.00E+00	0.02	3.23E-04
Total anions		0.99		1.13		1.38		1.38		1.47
Charge balance		3.7%		2.3%		5.6%		3.4%		3.8%

APPENDIX A

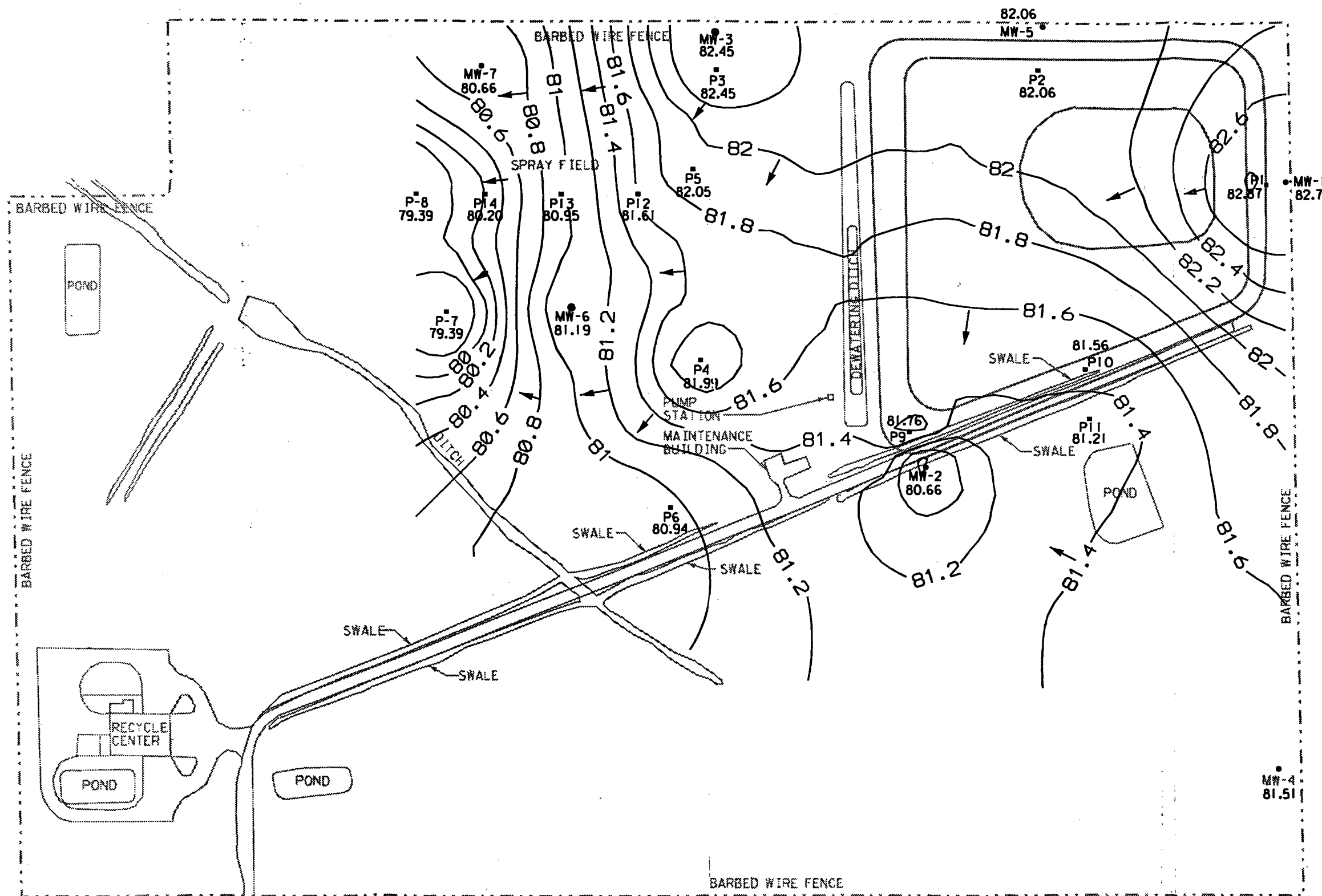


LEGEND

- MW-2 MONITORING WELL
- P11 PIEZOMETER

**HARDEE COUNTY SOLID WASTE MANAGEMENT FACILITY
GROUNDWATER ELEVATION CONTOUR MAP
(FEBRUARY 21, 1995)**

**FIGURE
1**



LEGEND

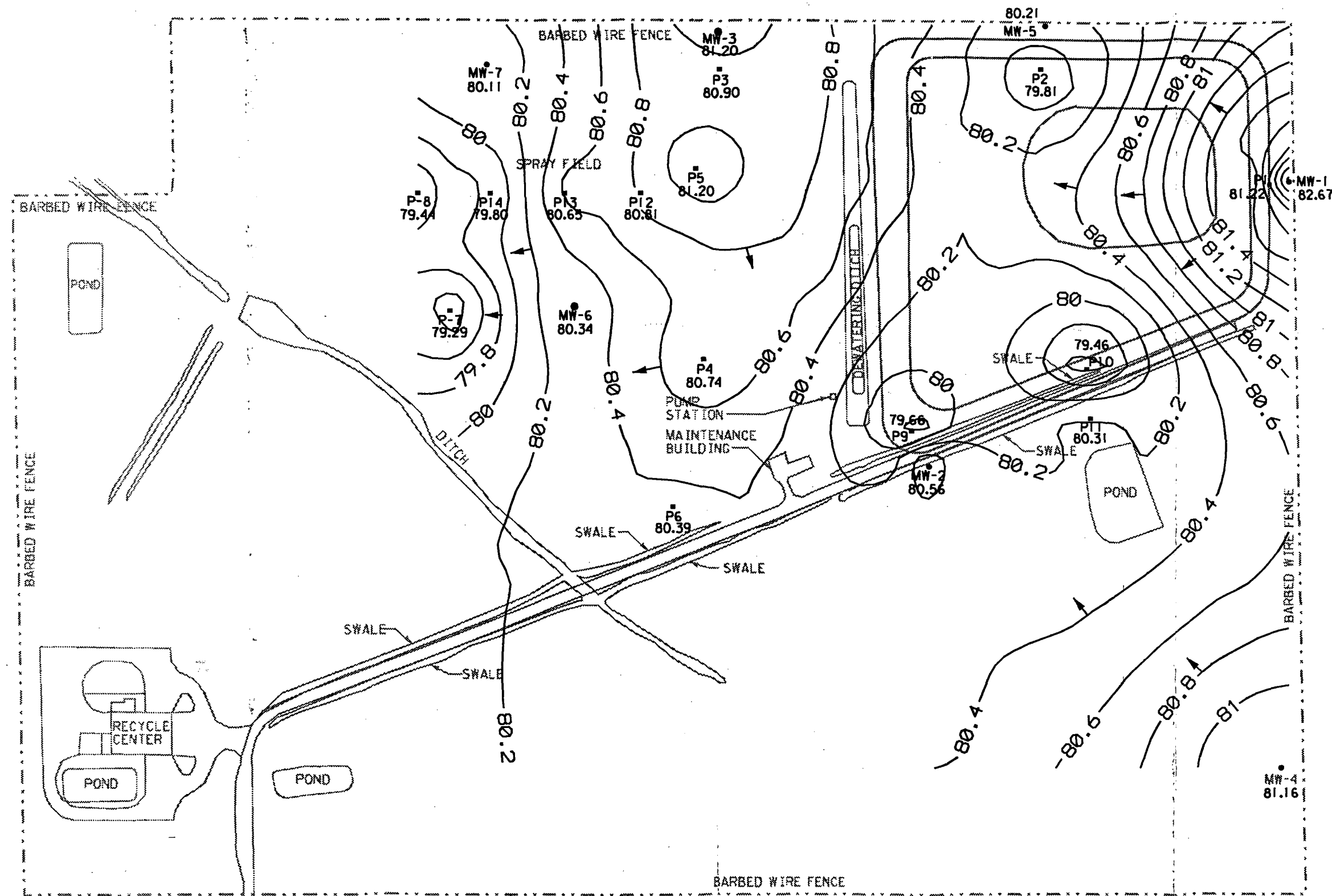
- MW-2 MONITORING WELL
- P-1 PIEZOMETER

**HARDEE COUNTY SOLID WASTE MANAGEMENT FACILITY
GROUNDWATER ELEVATION CONTOUR MAP
(DECEMBER 5, 1995)**

**FIGURE
3**

C:\PROJECTS\HARDEE\HCF10-3.DGN

PBS POST, BUCKLEY, SCHUH & JERNIGAN, INC.



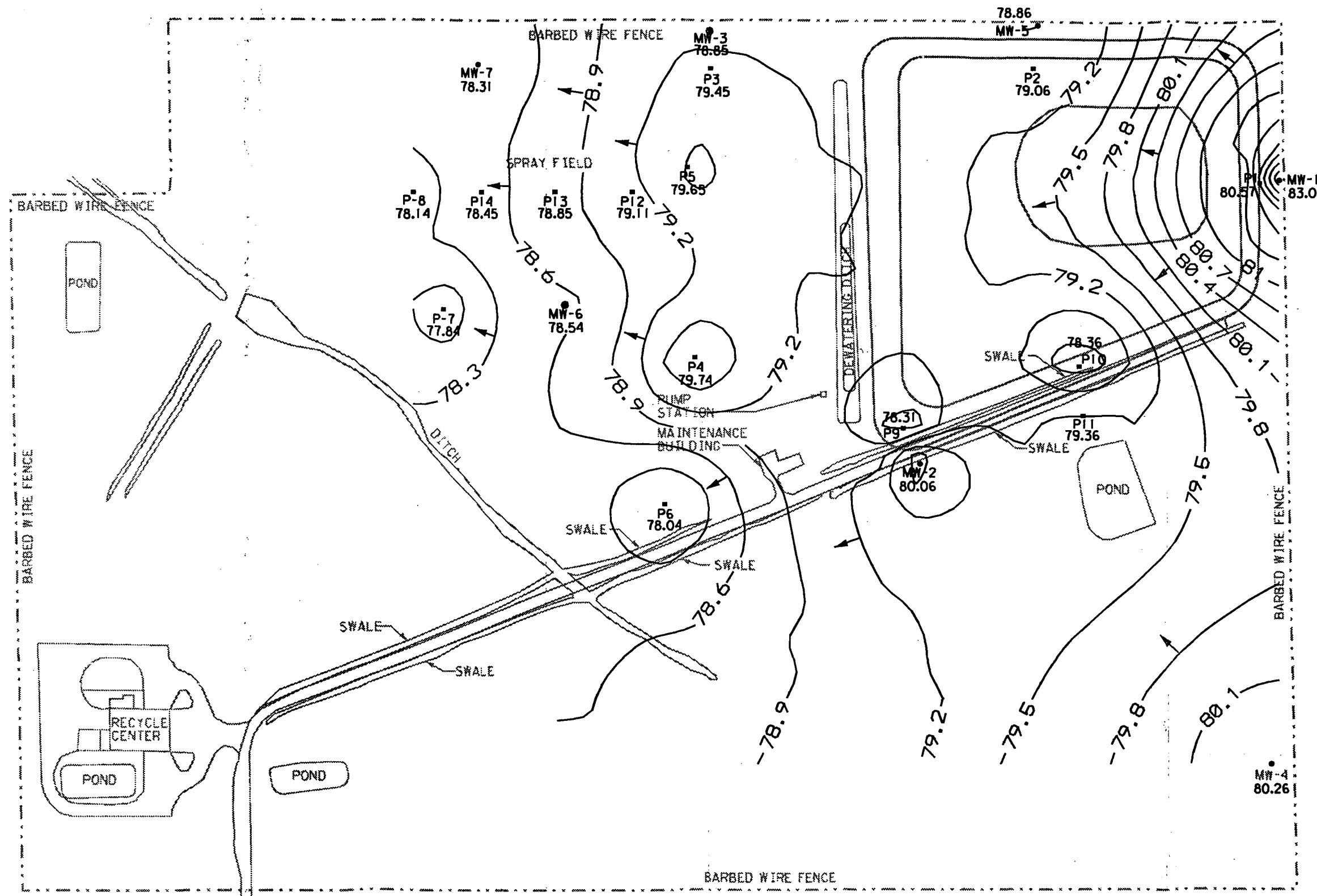
SCALE: 1" = 200'

LEGEND

- MW-2 MONITORING WELL
- P11 PIEZOMETER

HARDEE COUNTY SOLID WASTE MANAGEMENT FACILITY
GROUNDWATER ELEVATION CONTOUR MAP
(JUNE 4, 1996)

FIGURE
4



SCALE: 1" = 200'

LEGEND

MW-2 MONITORING WELL

P11 PIEZOMETER

HARDEE COUNTY SOLID WASTE MANAGEMENT FACILITY
GROUNDWATER ELEVATION CONTOUR MAP
(DECEMBER 9, 1996)

FIGURE 5

C:\PROJECTS\HARDEE\HCF1G-5.DGN

PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.

APPENDIX B

**HARDEE COUNTY SOLID WASTE MANAGEMENT FACILITY
OPERATING PERMIT AND MODIFICATIONS**



Lawton Chiles
Governor

Florida Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
813-744-6100

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT

NOV 29 1993

Hardee County Board of
County Commissioners
Mr. James Harrison, Chairman
412 West Orange Street
Wauchula, Florida 33873-2867

Re: Hardee County Solid Waste Disposal Facility


Dear Mr. Harrison:

Enclosed is Permit Number SO25-214306, issued pursuant to Section(s) 403.087(1), Florida Statutes.

Any party to the Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Kim B. Ford, P.E.
Solid Waste Section
Division of Waste Management

KBF/ab

cc: J.R. Prestridge, Hardee County
Steve Dutch, P.E., Wade-Trim
Doug Beason, OGC, Tallahassee
Mary Jean Yon, FDEP Tallahassee
Robert Butera, P.E., FDEP Tampa
Kim Ford, P.E., FDEP Tampa
Allison Amram, P.G., FDEP Tampa
Steve Morgan, FDEP Tampa

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on NOV 29 1993 to the listed persons.

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant
to §120.52(10), Florida
Statutes, with the designated
Department Clerk, receipt of
which is hereby acknowledged.

Anna Black
Clerk

NOV 29 1993
Date



Lawton Chiles
Governor

Florida Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
813-744-6100

Virginia B. Wetherell
Secretary

PERMITTEE

Hardee County Board of
County Commissioners
Mr. James Harrison
Chairman
412 West Orange Street
Wauchula, FL 33873-2867

PERMIT/CERTIFICATION

GMS ID No: 4025C30001
Permit No: S025-214306
Date of Issue: 2/29/97
Expiration Date 6/10/97
County: Hardee
Lat/Long: 27°34'10"
81°47'01"
Sec/Town/Rge: 35/33S/25E
Project: Hardee County
Solid Waste
Disposal Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-3, 17-4, 17-25, 17-160, 17-522, 17-550, 17-701, and 17-711. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

To operate a solid waste Class I sanitary landfill and related facilities (approximately 95 acres), referred to as Hardee County Solid Waste Disposal Facility, subject to the specific conditions attached, disposing of solid waste, near Airport Road and S.R. 64A, northeast of Wauchula, Hardee County, Florida. The specific conditions attached are for the construction of:

1. Class I Landfill Disposal Facility
2. Construction and Demolition Debris Disposal Facility
3. Waste Tire Storage & Processing Facility

Replaces Permit No.: S025-096551

This permit contains compliance items summarized in Attachment 1 that shall be complied with and submitted to the Department by the dates noted. If the compliance dates are not met and submittals are not received by the Department on the dates noted, enforcement action will be initiated.

SPECIFIC CONDITIONS:

1. This site includes operation of a Class I landfill, construction and demolition debris disposal facility, and waste tire storage and processing, and shall be operated in accordance with all applicable requirements of Chapters 17-4, 17-25, 17-522, 17-550, 17-701, and 17-711, Florida Administrative Code. This permit is valid for operation of the Class I landfill and related facilities in accordance with the reports and other information, and the October 1993 plans submitted by Wade-Trim to the FDEP, and in accordance with all applicable requirements of Department rules. Site improvements approved as part of this permit shall be completed within one hundred and eighty (180) days after issuance of this permit. Any construction not previously approved as part of this permit shall require a separate Department permit unless the Department determines a permit modification to be more appropriate.
2. Permits shall be modified in accordance with the requirements of Rule 17-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review by the Department is considered a substantial modification.
3. Within sixty (60) days after all specified construction has been completed and before use, the owner or operator shall submit to the Department a certification of construction completion, Form 17-701.900(2), signed and sealed by a professional engineer, and record drawings showing all modifications to verify conformance with the plans and specifications, and shall arrange for Department representatives to inspect the facility in the company of the permittee, the engineer, and the proposed facility operator. The new systems shall not be operated until the certification has been submitted and approved, all documentation required as a condition of the permit has been submitted, and a facility inspection by Department personnel has been conducted.
4. The prohibitions of the FAC Rule 17-701.300 shall not be violated.
5. Permits shall be renewed at least every five years. Applicants for permit renewal shall demonstrate how they will comply with any applicable new or revised laws or rules relating to construction, operation, or closure of landfills. Closure plans shall be updated at the time of permit renewal to reflect changes in closure design, long-term care requirements, and financial responsibility documentation. Facility information that was submitted to the Department to support the expiring permit, and which is still valid, does not need to be re-submitted for permit renewal. The permit renewal application shall list and reaffirm that the information is still valid.
6. A copy of the Department approved permit, revised construction drawings, operational plan, construction reports and record drawings, and supporting information shall be kept at the facility at all times for reference and inspections.

SPECIFIC CONDITIONS:

7. Landfills shall be designed, constructed, operated, maintained, closed, and monitored throughout its design period to control the movement of waste and waste constituents into the environment so that ground water and surface water quality standards and criteria of Chapters 17-3 and 17-302, F.A.C., will not be violated.

8. Landfills or solid waste disposal units shall not be located in the 100-year floodplain where it will restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain unless compensating storage is provided, or result in a washout of solid waste.

9. All landfills shall be designed so that solid waste disposal units will be constructed and subsequently closed at planned intervals throughout the design period of the landfill.

10. All solid waste disposed of in the Class I disposal area must be covered with at least 6 inches of compacted earth or other suitable material, as approved by the Department, at the end of each working day. An intermediate cover of one (1) foot of compacted earth in addition to the six (6) inch initial cover shall be applied within seven (7) days of cell completion at all landfills if final cover or an additional lift is not to be applied within 180 days of cell completion. Top gradients of intermediate cover shall be designed to prevent ponding or low spots and minimize erosion. Portions of the landfill which have been filled with waste to the extent of designed dimensions shall be closed in accordance with all appropriate requirements of Department rules.

11. The Construction and Demolition Debris (C & D Debris) disposal area shall be limited to those items identified in F.A.C. Rule 17-701.200(17). The permittee shall not allow the disposal of "Garbage" in the C&D debris disposal area. The C & D Debris disposal area shall be operated in accordance with FAC Rules 17-701.730 and 17-701.803. Solid waste other than construction and demolition debris accepted at the Construction and Demolition Debris disposal area, shall be segregated, and recycled or disposed of in accordance with Department rules.

12. Waste tires and processed tires at the waste tire area shall be stored in accordance with the waste tire site requirements in Rule 17-711.510, F.A.C.

13. Storage at the waste tire area is limited to 1000 waste tires. At least 75 percent of both the waste tires and processed tires that are delivered to or are contained on the site of the waste tire area at the beginning of each calendar year must be removed for processing and disposal or recycling from the area during the year. An annual report summarizing these operations shall be submitted to the Department by March 1 of each year, pursuant to F.A.C. Rule 17-711.530(4).

SPECIFIC CONDITIONS:

14. This facility shall have at least one trained operator at the landfill during all times when the landfill receives waste. Trained operators are those who have satisfied the requirements of Chapter 17-703, F.A.C. All landfills shall have at least one spotter at each working face at all times when the landfill receives waste to detect unauthorized wastes. The owner or operator shall implement a load checking program to detect and discourage attempts to dispose of unauthorized wastes at the landfill. The load checking program shall consist of the minimum requirements specified in FDER Rule 17-701.500(6) which includes examining at least three random loads of solid waste received each week by the landfill operator.

15. The landfill owner or operator shall have an operational plan that provides written, detailed instructions for the daily operation of the landfill. The operation plan shall be kept at or near the landfill facility and shall be accessible to landfill operators. The operation plan shall be revised if operational procedures change. The plan shall include procedures for all the items listed in FDER Rule 17-701.500(2). A schedule for routine maintenance of the leachate collection and removal system shall be established to ensure operation of the system. The maintenance schedule shall be a part of the facility operation plan. Operating records shall be maintained as required by FDER Rule 17-701.500(3).

16. The owner or operator of the facility shall weigh all solid waste as it is received. Landfill operators shall record, in tons per day, the amount of solid waste received and shall estimate the amount of wastes listed in FDER Rule 17-701.500(4)(b). Waste reports shall be compiled monthly, and copies shall be submitted to the Department quarterly.

17. The landfill operator is responsible for leachate level monitoring, sampling, analysis of the landfill leachate, and for providing copies of the leachate analysis to the Department. The landfill operator shall have a prepared contingency plan to handle leachate collection, removal, and treatment problems such as those caused by interruptions of discharges to a treatment plant. Quantities of leachate collected by the leachate collection and removal system shall be recorded in gallons per day before on-site treatment or transport off-site. A rain gauge shall be installed, operated, and maintained to record daily precipitation at the landfill. All rain amounts greater than one tenth of an inch shall be recorded. Daily volumes of leachate pumped from the dewatering ditch will be recorded. Daily rainfall and leachate pump volume data will be submitted to the Department monthly. Complete yearly leachate/water balance data to demonstrate continuous compliance with Department rules shall be submitted to the Department annually.

18. The operating authority shall be responsible for the control of odors and fugitive particulates arising from this operation. Such control shall minimize the creation of these nuisance conditions on nearby property. Complaints received from the general public and confirmed by Department personnel upon site inspection shall constitute a nuisance condition and the permittee must take immediate corrective action to abate the nuisance.

SPECIFIC CONDITIONS:

19. Landfills that receive biodegradable wastes shall have a gas monitoring and control system designed to prevent explosions and fires, and to minimize off-site odors and damage to vegetation. The owners or operators shall implement a routine gas monitoring program to ensure that the standards of FDER Rule 17-701.400(10) are met. All monitoring points shall be sampled and the results reported to the Department quarterly. If methane gas levels exceed the lower explosive limits specified in FDER Rule 17-701.400(10)(a), the owner or operator shall:

- a. Immediately take all necessary steps to ensure protection of human health and notify the Department;
- b. Within 7 days of detection, submit to the Department for approval a remediation plan for the methane gas releases. The plan shall describe the nature and extent of the problem and the proposed remedy. The remedy shall be completed within 60 days of detection unless otherwise approved by the Department.

20. The permittee shall not accept hazardous waste or any hazardous substance at this site. Hazardous waste is a solid waste identified by the Department as a hazardous waste in Chapter 17-730, Florida Administrative Code. Hazardous substances are those defined in Section 403.703, Florida Statute or in any other applicable state or federal law or administrative rule.

21. The disposal or control of any "special wastes" at the site shall be in accordance with FAC Rules 17-701.300 and 17-701.520, and any other applicable Department rules, to protect the public safety, health and welfare. "Special Wastes" means solid wastes that can require special handling and management, including but not limited to white goods, waste tires, used oil, mattresses, furniture, lead-acid batteries, asbestos, and biological wastes.

22. The permittee shall maintain a program which prohibits the disposal of bulk industrial wastes which operation personnel reasonably believe to either be or contain hazardous waste, without first obtaining a chemical analysis of the material showing the waste to be non-hazardous. The chemical analysis of any such material so placed in the landfill, along with the customers name and date of disposal, shall be kept on file by the permittee on-site.

23. Open burning of solid waste is prohibited except in accordance with Rule 17-701.520(2), F.A.C. Controlled burning of solid waste is prohibited at this site except for clean vegetative and wood wastes which may be burned in a permitted air curtain incinerator in accordance with Rule 17-2.500(1)(e), F.A.C. Any accidental fires which require longer than one (1) hour to extinguish must be promptly reported to the Department of Environmental Protection.

SPECIFIC CONDITIONS:

24. All solid waste, recovered materials or residues handled at the facility shall be stored in a manner so as not to constitute a fire or safety hazard or a sanitary nuisance, and shall comply with all applicable local and state regulations. Recovered resources resulting from the facility and which may be offered for sale shall comply with applicable regulations of all appropriate state agencies.

25. Yard trash that is delivered to the site of the yard trash mulching area shall be processed within one hundred and eight (180) days and removed for disposal or recycling from the area within twelve (12) months of date delivered. A report summarizing these operations shall be submitted annually by March 1 of each year to the Solid Waste Section, Southwest District Office. Quarterly reports of yard waste are also acceptable to the Department.

26. The owner or operator shall control mosquitoes and rodents or request such control measures from the local mosquito control office, so as to protect the public health and welfare.

27. The permittee shall properly maintain the site. This includes erosion control, maintenance of grass cover, and prevention of ponding, leachate control system maintenance, and gas venting system repairs.

28. In the event of damage to any portion of the landfill site facilities regulated by this permit or failure of any portion of the landfill systems, the permittee shall immediately (within 24 hours) notify the Department of Environmental Protection explaining such occurrence and remedial measures to be taken and time needed for repairs. Written detailed notification shall be submitted to the Department within seven (7) days following the occurrence.

29. A trained supervisor or foreman shall be responsible for maintaining the facility in an orderly, safe, and sanitary manner. Sufficient personnel shall be employed to adequately operate the facility in compliance with this permit.

30. The site shall continue to have a surface water management system designed, constructed, operated, and maintained to prevent surface water from running on to waste filled areas, and a stormwater runoff control system designed, constructed, operated, and maintained to collect and control stormwater to meet the requirements of Chapter 17-25, F.A.C., and the requirements for management and storage of surface water in accordance with Chapter 373, F.S.

31. Stormwater management systems shall be designed to avoid mixing of stormwater with leachate. Stormwater or other surface water which comes into contact with the landfilled solid waste or mixes with leachate shall be considered leachate.

PERMITTEE: Hardee County BCC
Hardee County Solid Waste Disposal Facility

PERMIT NO.: SO25-214306

SPECIFIC CONDITIONS:

32. To prevent unauthorized waste disposal, access to and use of the facility shall be controlled by fencing, gates, or other barriers, as well as signs and facility personnel.

33. In addition to records and reporting required, the landfill owner or operator shall keep records of all information used to develop or support the permit applications and any supplemental information pertaining to construction of the landfill throughout the design period. Records pertaining to the operation of the landfill shall be kept for the design period of the landfill. Records of all monitoring information, including calibration and maintenance records, all original chart recordings for continuous monitoring instrumentation, and copies of all reports required by permit, shall be kept for at least ten years. Background water quality records shall be kept for the design period of the landfill.

34. Within ninety (90) days after issuance of this permit, the water quality monitoring system shall be installed in accordance with the Wade-Trim/Mevers & Associates Water Quality & Leachate Monitoring Plan dated July 21, 1993. All sampling and analysis activities shall be performed by organizations that have Comprehensive Quality Assurance Plans approved in accordance with Rule 17-160.300(8), F.A.C.

35. The groundwater monitoring wells are located as per 3/25/87 submittal, as follows:

Well Number	Aquifer	Location
MW-1	Surficial	As per Permit Figure 1
MW-2	Surficial	As per Permit Figure 1
MW-3	Surficial	As per Permit Figure 1
MW-4	Surficial (background)	As per Permit Figure 1
MW-5	Surficial	As per Permit Figure 1
MW-6	Surficial	As per Permit Figure 1
MW-7	Surficial	As per Permit Figure 1

All wells are to be clearly labelled and easily visible at all times. All wells are considered to be detection wells, with the exception of the background well, MW-4.

Water levels shall be measured quarterly in all site piezometers, P1 through P14, for evaluation of the leachate/groundwater elevations in the landfill and leachate sprayfield. The locations of these piezometers are on Wade-Trim's August 2, 1993 Improvement Site Plan, Sheet 4 of 6. A reduced portion of this plan is presented as Figure 2 of this permit.

SPECIFIC CONDITIONS:

36. Pursuant to F.A.C. Rule 17-522.410, the zone of discharge shall extend horizontally to the property line or one hundred (100) feet beyond the waste management area, whichever is less, and vertically to the base of the surficial aquifer. The permittee shall ensure that the water quality standards for Class G-II groundwaters will not be exceeded at the boundary of the zone of discharge according to Rules 17-520.400 and 17-520.420, F.A.C.

37. Leachate shall be sampled from the leachate collection system prior to entering the dewatering ditch and analyzed quarterly for the indicator parameters listed as follows:

Leachate indicator parameters:

<u>Field parameters</u>	<u>Laboratory parameters</u>
Specific conductivity	Ammonium (NH ₄)
pH	Arsenic
Dissolved oxygen	Bicarbonate
Colors, sheens	Cadmium
	Chlorides
	Chromium
	Iron
	Lead
	Mercury
	Nitrate
	Sodium
	Total dissolved solids (TDS)
	Total organic carbon (TOC)
	EPA 601/602 Analytes

In addition, leachate shall be sampled and analyzed annually for the parameters listed in 40 CFR Part 258, Appendix II. Analytical results shall be submitted to the Solid Waste Section, Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318 by the 15th of the month immediately following the end of the quarter. For landfills which are receiving waste, if this annual analysis indicates that a contaminant listed in 40 CFR 261.24 exceeds the regulatory level listed therein, the permittee shall initiate a monthly sampling and analysis program. If in any three consecutive months the same listed contaminant exceeds the regulatory level, the permittee shall, within 90 days, initiate a program designed to identify the source and reduce the presence of the contaminant in the leachate so that it no longer exceeds the regulatory level. This program may include additional monitoring of waste received and additional up-front separation of waste materials. Any leachate which is not recirculated or taken to a permitted domestic wastewater treatment facility shall be treated or managed so that no contaminant exceeds the regulatory level. If in any three consecutive months no listed contaminant is found to exceed the regulatory level, the permittee may discontinue the monthly sampling and analysis and return to a routine sampling schedule.

PERMITTEE: Hardee County BCC
Hardee County Solid Waste Disposal Facility

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SPECIFIC CONDITIONS:

38. All piezometers listed in Specific Condition #36 shall be constructed in accordance with the construction procedures of the July 21, 1993 Water Quality & Leachate Monitoring Plan submitted July 21, 1993 to the Department, and in accordance with best geological practices. In addition, all piezometers shall have an impermeable barrier at or near ground surface to prevent surface water infiltration to the piezometer. Within ninety (90) days after piezometer installation, the following information shall be submitted to the Solid Waste Section of the Southwest District Office of the Department:

Piezometer identification
Latitude/Longitude
Screen Type and slot size
Screen length
Piezometer seal type and thickness
Elevation at top of piezometer
Elevation at land surface

Lithologic Log
Total depth of piezometer
Casing diameter
Casing type and length

39. Within ninety (90) days after piezometer installation, a surveyed drawing shall be submitted showing the location of all monitor wells (active and abandoned) and piezometers in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing to the nearest .01 foot, National Geodetic Vertical Datum. All surface water monitoring stations shall be surveyed in degrees, minutes and seconds of latitude and longitude. The surveyed drawing shall include the monitor well and piezometer identification number, location and elevation of all permanent benchmark(s) and/or corner monument marker(s) at the site. The survey shall be conducted by a registered Florida land surveyor.

40. All field and laboratory work done in connection with groundwater monitoring shall be conducted by a firm possessing a Generic Quality Assurance Plan or a Comprehensive Quality Assurance Plan approved by the Department in accordance with Chapter 17-160, F.A.C. The Quality Assurance Plan must specifically address the sampling and analytical work that is required by the permit. Documentation of an approved Quality Assurance Plan shall be submitted to the Department annually with the 1st quarterly groundwater sampling report for each year. Documentation shall include the completed signature page and the table of contents of the approved plan. The approved Quality Assurance Plan shall be followed by all persons collecting or analyzing samples related to this permit.

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SPECIFIC CONDITIONS:

41. All detection wells and background wells shall be sampled and analyzed quarterly for the ground water indicator parameters listed in 17-701.510(8)(a) as follows:

Ground water indicator parameters:

Field parameters

Static water level in wells
before purging
Specific conductivity
pH
Dissolved oxygen
Turbidity
Colors, sheens
Temperature

Laboratory parameters

Ammonium (NH₄)
Arsenic
Bicarbonate
Cadmium
Chlorides
Chromium
Iron
Lead
Mercury
Nitrate
Sodium
Total dissolved solids (TDS)
Total organic carbon (TOC)
EPA 601/602 Analytes

Compliance with groundwater standards and/or criteria shall be determined by analysis of unfiltered groundwater samples. Additional samples, wells, and parameters may be required based upon subsequent analysis.

42. In accordance with 17-701.510(7), if at any time background groundwater standards are exceeded in the detection wells, the permittee has fifteen (15) days after the sampling data is received in which to resample the monitor well(s) to verify the original analysis. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current groundwater conditions at the facility. If the exceedance of groundwater standards in the detection wells is confirmed, then assessment monitoring shall be initiated as detailed in 17-701.510(7).

43. If any monitoring well becomes damaged or inoperable, the permittee shall notify the Department of Environmental Protection immediately (within 24 hours). A detailed written report shall follow within seven (7) days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent the recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation and may require a permit modification.

SPECIFIC CONDITIONS:

44. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with methods approved by the Department in accordance with Chapters 17-4.246 and 17-3.401, F.A.C. Approved methods are published by the Department or as published in Standards Methods, A.S.T.M., or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, 40 CFR Part 136.

45. All groundwater monitoring analysis shall be reported on the Department Quarterly Report on Groundwater Monitoring Form 17-1.216(2). The permittee shall submit to the Department the results of the groundwater monitoring well water quality analysis no later than the fifteenth (15) day of the month immediately following the end of each quarter. The results of the piezometer groundwater measurements shall be included in this report. The results shall be sent to the Solid Waste Section, Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8313.

46. Annually and prior to ninety (90) days before the expiration of the Department Permit, the permittee shall submit an evaluation of the Groundwater Monitoring Plan as per F.A.C. Rule 17-701.510(9)(b). The evaluation shall include all applicable information as required by F.A.C. Rule 17-701.510(9), and shall include an assessment of the effectiveness of the existing landfill design and operation as related to the prevention of groundwater contamination. Any groundwater contamination that may exist, shall be addressed as part of a groundwater investigation for the landfill assessment. The Groundwater Monitoring Plan shall be adequate to monitor any modifications to the existing landfill site including but not limited to closure.

47. The permittee shall provide financial assurance for this landfill site in accordance with F.A.C. Rule 17-701.630. All cost estimates for closure and long-term care shall be adjusted and submitted annually to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318. Proof that the financial assurance has been funded adequately shall be submitted annually to the FDEP District Office and to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

48. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

PERMITTEE: Hardee County BCC

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Hardee County Solid Waste Disposal Facility

SPECIFIC CONDITIONS:

49. A closure permit application shall be required ninety (90) days prior to final acceptance of waste for each landfill portion of the site. The final cover shall be placed over the entire surface of each completed portion of the filled areas within one hundred and eighty (180) days after final waste deposit date for each area.

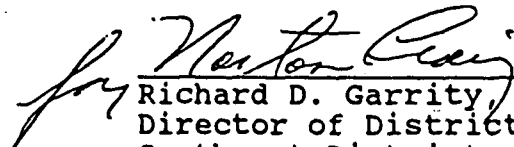
50. Prior to 90 days before the expiration of the Department Permit, the permittee shall apply for a renewal of a permit on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules.

51. The permittee shall be aware of and operate under the attached "General Conditions". General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.

52. By acceptance of this Permit, the permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein and also including date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

ATTACHMENT 1

PERMITTEE: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS
 HARDEE COUNTY SOLID WASTE DISPOSAL FACILITY
 PERMIT NO.: 8025-214306

SPECIFIC CONDITION	SUBMITTAL DUE DATE	REQUIRED ITEM
1.	180 days after issuance of permit	Site improvements completed
3.	60 days following construction	Certification and record drawings
13.	March 1/Annually	Waste tire report
16.	Quarterly	Waste quantity report
17.	Monthly	Rainfall and leachate volume data
17.	Annually	Leachate/water balance data
19	Quarterly	Gas monitoring results
25.	Annually	Yard trash report
34.	90 days after issuance of permit	Water quality monitoring system installed
37.	Quarterly	Leachate sampled/analyzed
37.	Annually	Leachate sampled/analyzed 40 CFR Part 258, Appendix II
38.	90 days after installation	Piezometer construction data
39.	90 days after installation	Survey of wells and piezometers
40.	Annually with 1st quarterly report	Documentation of QA plan approval
41.	Quarterly	Wells sampled/analyzed
45.	Quarterly	Analysis results
46.	Annually & 90 days prior to permit expiration	Evaluation of GWM Plan

<u>SPECIFIC CONDITION</u>	<u>SUBMITTAL DUE DATE</u>	<u>REQUIRED ITEM</u>
47.	Annually	Updated cost estimates for closure and long-term care
47.	Annually	Proof of funding for financial assurance
49.	90 days prior to final acceptance of waste	Closure Permit Application
50.	90 days prior to permit expiration	Apply for permit renewal

Permit Figure 1.

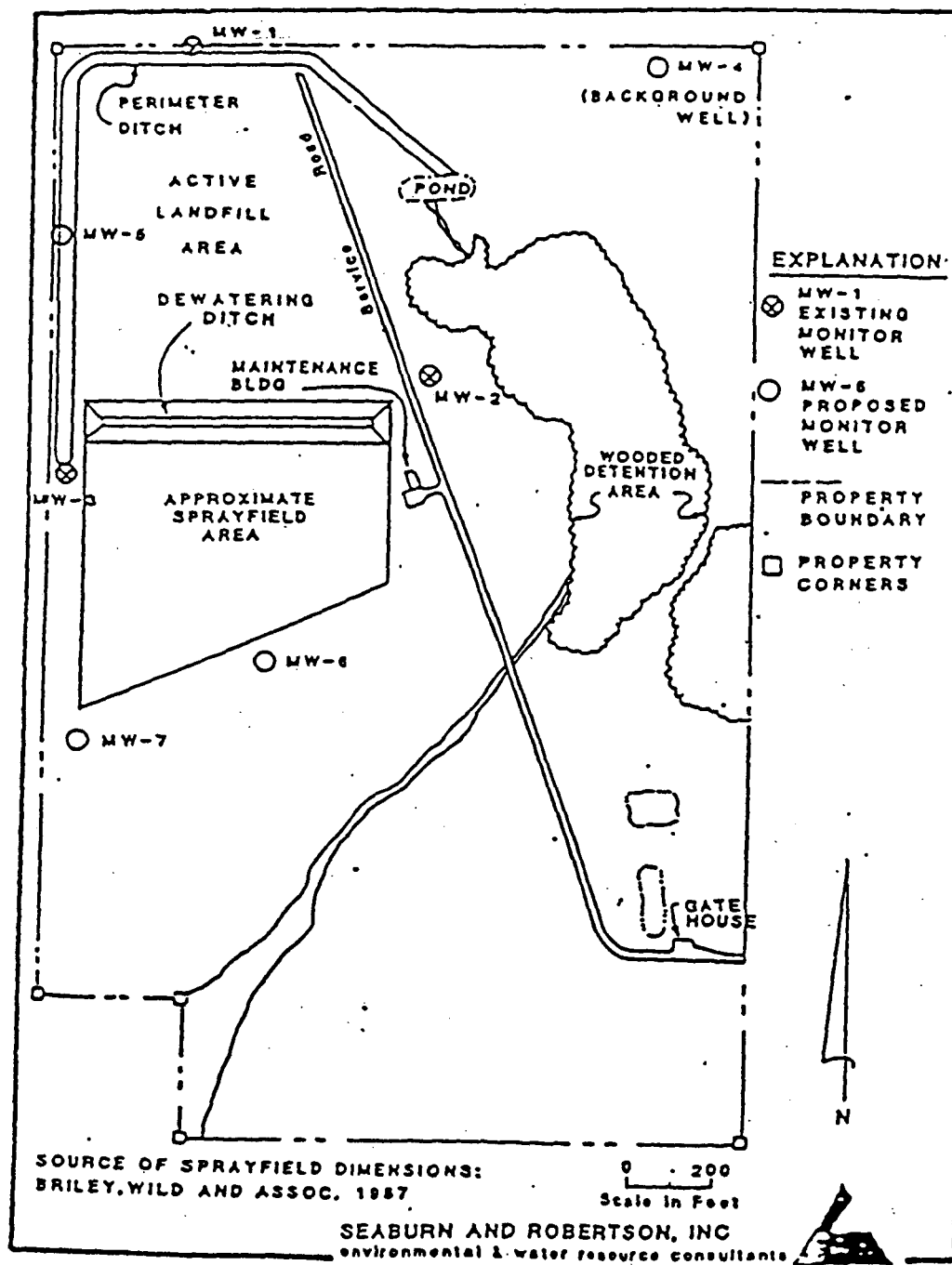


FIGURE 1.- LOCATION OF MONITOR WELLS.

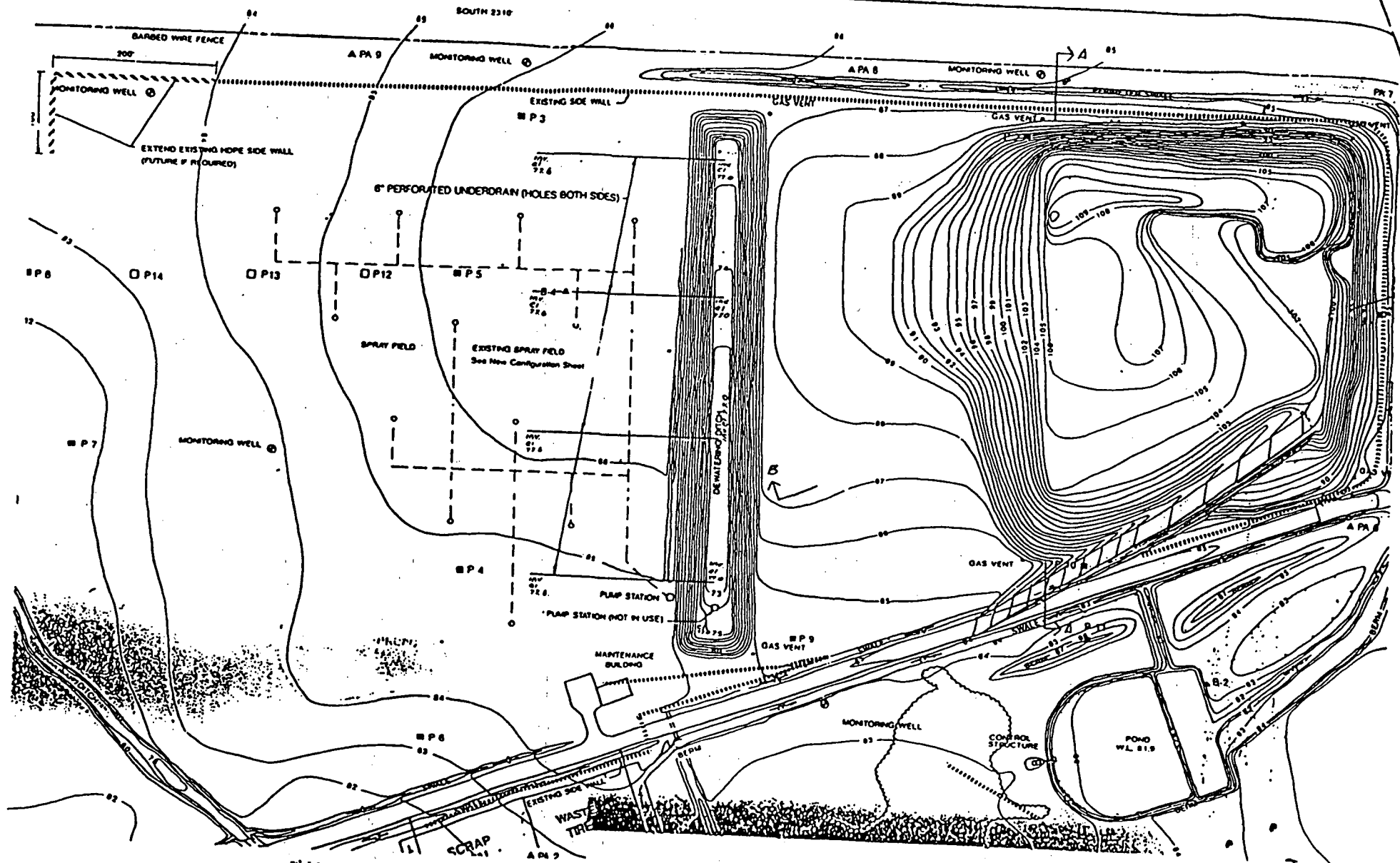


Figure 2. Improvement Site Plan (per 8/2/93 Wade-Trim Sheet 4/6)

ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

(a) Have access to and copy any records that must be kept under conditions of the permit;

(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

- The
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

4. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



Department of Environmental Protection

Janice's Copy

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

AUG 24 1995

PERMITTEE

Mr. J.R. Prestridge, for
Hardee County Board of
County commissioners
412 West Orange Street
Wachula, Florida 33873-2867

RE: Modification to existing operation
Permit No. 8025-214306, Hardee County
Hardee County Solid Waste Disposal Facility

Dear Mr. Prestridge:

We are in receipt of your request for permit modifications for groundwater and leachate monitoring for solid waste operational permit No. 8025-214306 at the Hardee County Solid Waste Disposal Facility. The following conditions have been modified.

<u>SPECIFIC CONDITIONS</u>	<u>FROM</u>	<u>TO</u>	<u>TYPE OF MODIFICATION</u>
#37	Existing	Amended	Leachate Sampling
#41	Existing	Amended	Groundwater Monitoring Parameters
#45	Existing	Amended	Water Quality Reporting
#46	Existing	Amended	Groundwater Monitoring Plan Evaluation

In addition, the FDEP rule references have been renumbered from Chapter 17 to Chapter 62. These changes have been made in this permit modification. This letter and its attachments constitute a complete permit and replace all previous permits and permit modifications for the above referenced facility.

Sincerely,

Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

RDG/aa
Attachments

SPECIFIC CONDITIONS:

36. Pursuant to F.A.C. Rule 62-522.410, the zone of discharge shall extend horizontally to the property line or one hundred (100) feet beyond the waste management area, whichever is less, and vertically to the base of the surficial aquifer. The permittee shall ensure that the water quality standards for Class G-II groundwaters will not be exceeded at the boundary of the zone of discharge according to Rules 62-520.400 and 62-520.420, F.A.C.

37. Leachate shall be sampled from the leachate collection system prior to entering the dewatering ditch and analyzed every 6 months for the indicator parameters listed as follows:

Leachate indicator parameters:

Field parameters

Specific conductivity
pH
Dissolved oxygen
Colors, sheens

Laboratory parameters

Total Ammonia - N
Bicarbonate
Chlorides
Iron
Mercury
Nitrate
Sodium
Total dissolved solids (TDS)
Those parameters listed in
40 CFR Part 258, Appendix I

In addition, leachate shall be sampled and analyzed annually for the parameters listed in 40 CFR Part 258, Appendix II. For landfills which are receiving waste, if this annual analysis indicates that a contaminant listed in 40 CFR 261.24 exceeds the regulatory level listed therein, the permittee shall initiate a monthly sampling and analysis program. If in any three consecutive months the same listed contaminant exceeds the regulatory level, the permittee shall, within 90 days, initiate a program designed to identify the source and reduce the presence of the contaminant in the leachate so that it no longer exceeds the regulatory level. This program may include additional monitoring of waste received and additional up-front separation of waste materials. Any leachate which is not recirculated or taken to a permitted domestic wastewater treatment facility shall be treated or managed so that no contaminant exceeds the regulatory level. If in any three consecutive months no listed contaminant is found to exceed the regulatory level, the permittee may discontinue the monthly sampling and analysis and return to a routine sampling schedule.

Amended AUG 24 1995.

SPECIFIC CONDITIONS:

36. Pursuant to F.A.C. Rule 62-522.410, the zone of discharge shall extend horizontally to the property line or one hundred (100) feet beyond the waste management area, whichever is less, and vertically to the base of the surficial aquifer. The permittee shall ensure that the water quality standards for Class G-II groundwaters will not be exceeded at the boundary of the zone of discharge according to Rules 62-520.400 and 62-520.420, F.A.C.

37. Leachate shall be sampled from the leachate collection system prior to entering the dewatering ditch and analyzed every 6 months for the indicator parameters listed as follows:

Leachate indicator parameters:

<u>Field parameters</u>	<u>Laboratory parameters</u>
Specific conductivity	Total Ammonia - N
pH	Bicarbonate
Dissolved oxygen	Chlorides
Colors, sheens	Iron
	Mercury
	Nitrate
	Sodium
	Total dissolved solids (TDS)
	Those parameters listed in
	40 CFR Part 258, Appendix I

In addition, leachate shall be sampled and analyzed annually for the parameters listed in 40 CFR Part 258, Appendix II. For landfills which are receiving waste, if this annual analysis indicates that a contaminant listed in 40 CFR 261.24 exceeds the regulatory level listed therein, the permittee shall initiate a monthly sampling and analysis program. If in any three consecutive months the same listed contaminant exceeds the regulatory level, the permittee shall, within 90 days, initiate a program designed to identify the source and reduce the presence of the contaminant in the leachate so that it no longer exceeds the regulatory level. This program may include additional monitoring of waste received and additional up-front separation of waste materials. Any leachate which is not recirculated or taken to a permitted domestic wastewater treatment facility shall be treated or managed so that no contaminant exceeds the regulatory level. If in any three consecutive months no listed contaminant is found to exceed the regulatory level, the permittee may discontinue the monthly sampling and analysis and return to a routine sampling schedule.

Amended AUG 24 1995.

PERMITTEE: Hardee County BCC
Hardee County Solid Waste Disposal Facility

PERMIT no.: SO25-214306

SPECIFIC CONDITIONS:

41. All detection wells and background wells shall be sampled and analyzed every 6 months for the ground water indicator parameters listed in 62-701.510(8)(a) as follows:

Ground water indicator parameters:

Field parameters	Laboratory parameters
Static water level in wells before purging	Total Ammonia - N
Specific conductivity	Chlorides
pH	Iron
Dissolved oxygen	Mercury
Turbidity	Nitrate
Colors, sheens	Sodium
Temperature	Total dissolved solids (TDS)
	Those parameters listed in 40 CFR Part 258, Appendix I

Compliance with groundwater standards and/or criteria shall be determined by analysis of unfiltered groundwater samples. Additional samples, wells, and parameters may be required based upon subsequent analysis.

Amended AUG 24 1995.

42. In accordance with 62-701.510(7), if at any time background groundwater standards are exceeded in the detection wells, the permittee has fifteen (15) days after the sampling data is received in which to resample the monitor well(s) to verify the original analysis. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current groundwater conditions at the facility. If the exceedance of groundwater standards in the detection wells is confirmed, then assessment monitoring shall be initiated as detailed in 62-701.510(7).

43. If any monitoring well becomes damaged or inoperable, the permittee shall notify the Department of Environmental Protection immediately (within 24 hours). A detailed written report shall follow within seven (7) days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent the recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation and may require a permit modification.

SPECIFIC CONDITIONS:

44. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with methods approved by the Department in accordance with Chapters 62-4.246 and 62-3.401, F.A.C. Approved methods are published by the Department or as published in Standards Methods, A.S.T.M., or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, 40 CFR Part 136.

45. All water quality monitoring analyses shall be reported on the Department Quarterly Report on Groundwater Monitoring Form 62-522.900(2). The permittee shall submit to the Department the results of the water quality analysis, by July 15th and January 15th for the semi-annually periods January - June and July - December, respectively. The results shall be sent to the Solid Waste Section, Department of Environmental Protection, Southwest District office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8313. In addition to the completed reporting form and analytical sheets, the report shall include a water table contour map for the date of the sampling event and a summary of all groundwater standard exceedances, as required by FAC 62-701.510(9)(a).
Amended AUG 24 1995.

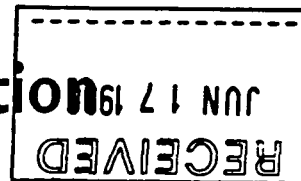
46. Every two years and prior to ninety (90) days before the expiration of the Department Permit, the permittee shall submit an evaluation of the Groundwater Monitoring Plan as per F.A.C. Rule 62-701.510(9)(b). The evaluation shall include all applicable information as required by F.A.C. Rule 62-701.510(9), and shall include an assessment of the effectiveness of the existing landfill design and operation as related to the prevention of groundwater contamination. Any groundwater contamination that may exist, shall be addressed as part of a groundwater investigation for the landfill assessment. The Groundwater Monitoring Plan shall be adequate to monitor any modifications to the existing landfill site including but not limited to closure.
Amended AUG 24 1995.

47. The permittee shall provide financial assurance for this landfill site in accordance with F.A.C. Rule 62-701.630. All cost estimates for closure and long-term care shall be adjusted and submitted annually to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318. Proof that the financial assurance has been funded adequately shall be submitted annually to the FDEP District Office and to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

Permits



Department of Environmental Protection



Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JUN 13 1996

NOTICE OF PERMIT

Hardee County Board of County Commissioners
Mr. J.R. Prestridge, Assistant County Manager
412 West Orange St.
Wauchula, Florida 33873-2867

RE: Modification Number 286397 to existing operation
Permit No. 8025-214306, Hardee County
Hardee County Solid Waste Disposal Facility

Dear Mr. Prestridge:

Attached is modified permit number 8025-214306, issued pursuant to Section(s) 403.087(1), Florida Statutes. The following Conditions have been revised in modification number 286397:

<u>SPECIFIC CONDITIONS</u>	<u>FROM</u>	<u>TO</u>	<u>TYPE OF MODIFICATION</u>
#53.	----	New	Leachate/Stormwater Management Plan, Revised Sequence of Filling

This letter and its attachments constitute a complete permit and replace all previous permits and permit modifications for the above referenced facility.

A person whose substantial interests are affected by this modification of permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, 32399-2400, within fourteen (14) days of receipt of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within fourteen (14) days shall constitute a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

The petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of Department's action, or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends warrant reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

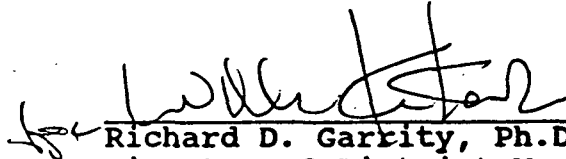
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This modified permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 62-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this transfer of permit will not be effective until further Order of the Department.

When the Order is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


Richard D. Garrity, Ph.D.
Director of District Management
Southwest District


RDG/sjp
Attachment

cc: Janice Williamson, Hardee County, PO Box 246, Wauchula, Fl. 33873
C. Edward Hilton, P.E., PBSJ, 1560 Orange Ave., Ste. 700, Winter Park,
Fl. 32789
Kathy Anderson, FDEP Tallahassee
Fred Wick, FDEP Tallahassee
Doug Beason, OGC Tallahassee
Robert Butera, P.E., FDEP Tampa
Steve Morgan, Permit Notebook, FDEP Tampa

CERTIFICATE OF SERVICE

This undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on JUN 13 1996 to the listed persons.
(date stamp)

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant
to Section 120.52(10), Florida
Statutes, with the designated
Department, Clerk, receipt of
which is hereby acknowledged.


Clerk

JUN 13 1996
Date



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

PERMITTEE

Hardee County Board of
County Commissioners
Mr. James Harrison
Chairman
412 West Orange Street
Wauchula, FL 33873-2867

PERMIT/CERTIFICATION

GMS ID No: 4025C30001
Permit No: SO25-214306
Date of Issue: 11/29/93
Expiration Date 6/10/97
County: Hardee
Lat/Long: 27°34'10"
81°47'01"
Sec/Town/Rge: 35/33S/25E
Project: Hardee County
Solid Waste
Disposal Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-3, 62-4, 62-25, 62-160, 62-522, 62-550, 62-701, and 62-711. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

To operate a solid waste Class I sanitary landfill and related facilities (approximately 95 acres), referred to as Hardee County Solid Waste Disposal Facility, subject to the specific conditions attached, disposing of solid waste, near Airport Road and S.R. 64A, northeast of Wauchula, Hardee County, Florida. The specific conditions attached are for the construction of:

1. Class I Landfill Disposal Facility
2. Construction and Demolition Debris Disposal Facility
3. Waste Tire Storage & Processing Facility

This permit contains compliance items summarized in Attachment 1 that shall be complied with and submitted to the Department by the dates noted. If the compliance dates are not met and submittals are not received by the Department on the dates noted, enforcement action will be initiated.

This permit includes all previous modifications, dated 8-24-95.

Replaces Permit No.: SO25-096551

GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403-859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - (a) Determination of Best Available Control Technology (BACT)
 - (b) Determination of Prevention of Significant Deterioration (PSD)
 - (c) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
 - (d) Compliance with New Source Performance Standards
14. The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 1. the date, exact place, and time of sampling or measurements;
 2. the person responsible for performing the sampling or measurements;
 3. the dates analyses were performed
 4. the person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.

PERMITTEE: Hardee County BCC

PERMIT no.: SO25-214306

Hardee County Solid Waste Disposal Facility

GENERAL CONDITIONS:

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. This site includes operation of a Class I landfill, construction and demolition debris disposal facility, and waste tire storage and processing, and shall be operated in accordance with all applicable requirements of Chapters 62-4, 62-25, 62-522, 62-550 62-701, and 62-711, Florida Administrative Code. This permit is valid for operation of the Class I landfill and related facilities in accordance with the reports and other information, and the October 1993 plans submitted by Wade-Trim to the FDEP, and in accordance with all applicable requirements of Department rules. Site improvements approved as part of this permit shall be completed within one hundred and eighty (180) days after issuance of this permit. Any construction not previously approved as part of this permit shall require a separate Department permit unless the Department determines a permit modification to be more appropriate.
2. Permits shall be modified in accordance with the requirements of Rule 62-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review by the Department is considered a substantial modification.
3. Within sixty (60) days after all specified construction has been completed and before use, the owner or operator shall submit to the Department a certification of construction completion, Form 62-701.900(2), signed and sealed by a professional engineer, and record drawings showing all modifications to verify conformance with the plans and specifications, and shall arrange for Department representatives to inspect the facility in the company of the permittee, the engineer, and the proposed facility operator. The new systems shall not be operated until the certification has been submitted and approved, all documentation required as a condition of the permit has been submitted, and a facility inspection by Department personnel has been conducted.
4. The prohibitions of the FAC Rule 62-701.300 shall not be violated.
5. Permits shall be renewed at least every five years. Applicants for permit renewal shall demonstrate how they will comply with any applicable new or revised laws or rules relating to construction, operation, or closure of landfills. Closure plans shall be updated at the time of permit renewal to reflect changes in closure design, long-term care requirements, and financial responsibility documentation. Facility information that was submitted to the Department to support the expiring permit, and which is still valid, does not need to be re-submitted for permit renewal. The permit renewal application shall list and reaffirm that the information is still valid.
6. A copy of the Department approved permit, revised construction drawings, operational plan, construction reports and record drawings, and supporting information shall be kept at the facility at all times for reference and inspections.

SPECIFIC CONDITIONS:

7. Landfills shall be designed, constructed, operated, maintained, closed, and monitored throughout its design period to control the movement of waste and waste constituents into the environment so that ground water and surface water quality standards and criteria of Chapters 62-3 and 62-302, F.A.C., will not be violated.
8. Landfills or solid waste disposal units shall not be located in the 100-year floodplain where it will restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain unless compensating storage is provided, or result in a washout of solid waste.
9. All landfills shall be designed so that solid waste disposal units will be constructed and subsequently closed at planned intervals throughout the design period of the landfill.
10. All solid waste disposed of in the Class I disposal area must be covered with at least 6 inches of compacted earth or other suitable material, as approved by the Department, at the end of each working day. An intermediate cover of one (1) foot of compacted earth in addition to the six (6) inch initial cover shall be applied within seven (7) days of cell completion at all landfills if final cover or an additional lift is not to be applied within 180 days of cell completion. Top gradients of intermediate cover shall be designed to prevent ponding or low spots and minimize erosion. Portions of the landfill which have been filled with waste to the extent of designed dimensions shall be closed in accordance with all appropriate requirements of Department rules.
11. The Construction and Demolition Debris (C & D Debris) disposal area shall be limited to those items identified in F.A.C. Rule 62-701.200(17). The permittee shall not allow the disposal of "Garbage" in the C&D debris disposal area. The C & D Debris disposal area shall be operated in accordance with FAC Rules 62-701.730 and 62-701.803. Solid waste other than construction and demolition debris accepted at the Construction and Demolition Debris disposal area, shall be segregated, and recycled or disposed of in accordance with Department rules.
12. Waste tires and processed tires at the waste tire area shall be stored in accordance with the waste tire site requirements in Rule 62-711.510, F.A.C.
13. Storage at the waste tire area is limited to 1000 waste tires. At least 75 percent of both the waste tires and processed tires that are delivered to or are contained on the site of the waste tire area at the beginning of each calendar year must be removed for processing and disposal or recycling from the area during the year. An annual report summarizing these operations shall be submitted to the Department by March 1 of each year, pursuant to F.A.C. Rule 62-711.530(4).

SPECIFIC CONDITIONS:

14. This facility shall have at least one trained operator at the landfill during all times when the landfill receives waste. Trained operators are those who have satisfied the requirements of Chapter 62-703, F.A.C. All landfills shall have at least one spotter at each working face at all times when the landfill receives waste to detect unauthorized wastes. The owner or operator shall implement a load checking program to detect and discourage attempts to dispose of unauthorized wastes at the landfill. The load checking program shall consist of the minimum requirements specified in FDER Rule 62-701.500(6) which includes examining at least three random loads of solid waste received each week by the landfill operator.
15. The landfill owner or operator shall have an operational plan that provides written, detailed instructions for the daily operation of the landfill. The operation plan shall be kept at or near the landfill facility and shall be accessible to landfill operators. The operation plan shall be revised if operational procedures change. The plan shall include procedures for all the items listed in FDER Rule 62-701.500(2). A schedule for routine maintenance of the leachate collection and removal system shall be established to ensure operation of the system. The maintenance schedule shall be a part of the facility operation plan. Operating records shall be maintained as required by FDER Rule 62-701.500(3).
16. The owner or operator of the facility shall weigh all solid waste as it is received. Landfill operators shall record, in tons per day, the amount of solid waste received and shall estimate the amount of wastes listed in FDER Rule 62-701.500(4)(b). Waste reports shall be compiled monthly, and copies shall be submitted to the Department quarterly.
17. The landfill operator is responsible for leachate level monitoring, sampling, analysis of the landfill leachate, and for providing copies of the leachate analysis to the Department. The landfill operator shall have a prepared contingency plan to handle leachate collection, removal, and treatment problems such as those caused by interruptions of discharges to a treatment plant. Quantities of leachate collected by the leachate collection and removal system shall be recorded in gallons per day before on-site treatment or transport off-site. A rain gauge shall be installed, operated, and maintained to record daily precipitation at the landfill. All rain amounts greater than one tenth of an inch shall be recorded. Daily volumes of leachate pumped from the dewatering ditch will be recorded. Daily rainfall and leachate pump volume data will be submitted to the Department monthly. Complete yearly leachate/water balance data to demonstrate continuous compliance with Department rules shall be submitted to the Department annually.

SPECIFIC CONDITIONS:

18. The operating authority shall be responsible for the control of odors and fugitive particulates arising from this operation. Such control shall minimize the creation of these nuisance conditions on nearby property. Complaints received from the general public and confirmed by Department personnel upon site inspection shall constitute a nuisance condition and the permittee must take immediate corrective action to abate the nuisance.

19. Landfills that receive biodegradable wastes shall have a gas monitoring and control system designed to prevent explosions and fires, and to minimize off-site odors and damage to vegetation. The owners or operators shall implement a routine gas monitoring program to ensure that the standards of FDER Rule 62-701.400(10) are met. All monitoring points shall be sampled and the results reported to the Department quarterly. If methane gas levels exceed the lower explosive limits specified in FDER Rule 62-701.400(10)(a), the owner or operator shall:

- a. Immediately take all necessary steps to ensure protection of human health and notify the Department;
- b. Within 7 days of detection, submit to the Department for approval a remediation plan for the methane gas releases. The plan shall describe the nature and extent of the problem and the proposed remedy. The remedy shall be completed within 60 days of detection unless otherwise approved by the Department.

20. The permittee shall not accept hazardous waste or any hazardous substance at this site. Hazardous waste is a solid waste identified by the Department as a hazardous waste in Chapter 62-730, Florida Administrative Code. Hazardous substances are those defined in Section 403.703, Florida Statute or in any other applicable state or federal law or administrative rule.

21. The disposal or control of any "special wastes" at the site shall be in accordance with FAC Rules 62-701.300 and 62-701.520, and any other applicable Department rules, to protect the public safety, health and welfare. "Special Wastes" means solid wastes that can require special handling and management, including but not limited to white goods, waste tires, used oil, mattresses, furniture, lead-acid batteries, asbestos, and biological wastes.

22. The permittee shall maintain a program which prohibits the disposal of bulk industrial wastes which operation personnel reasonably believe to either be or contain hazardous waste, without first obtaining a chemical analysis of the material showing the waste to be non-hazardous. The chemical analysis of any such material so placed in the landfill, along with the customers name and date of disposal, shall be kept on file by the permittee on-site.

Hardee County Solid Waste Disposal Facility

SPECIFIC CONDITIONS:

23. Open burning of solid waste is prohibited except in accordance with Rule 62-701.520(2), F.A.C. Controlled burning of solid waste is prohibited at this site except for clean vegetative and wood wastes which may be burned in a permitted air curtain incinerator in accordance with Rule 62-2.500(1)(e), F.A.C. Any accidental fires which require longer than one (1) hour to extinguish must be promptly reported to the Department of Environmental Protection.
24. All solid waste, recovered materials or residues handled at the facility shall be stored in a manner so as not to constitute a fire or safety hazard or a sanitary nuisance, and shall comply with all applicable local and state regulations. Recovered resources resulting from the facility and which may be offered for sale shall comply with applicable regulations of all appropriate state agencies.
25. Yard trash that is delivered to the site of the yard trash mulching area shall be processed within one hundred and eight (180) days and removed for disposal or recycling from the area within twelve (12) months of date delivered. A report summarizing these operations shall be submitted annually by March 1 of each year to the Solid Waste Section, Southwest District Office. Quarterly reports of yard waste are also acceptable to the Department.
26. The owner or operator shall control mosquitoes and rodents or request such control measures from the local mosquito control office, so as to protect the public health and welfare.
27. The permittee shall properly maintain the site. This includes erosion control, maintenance of grass cover, and prevention of ponding, leachate control system maintenance, and gas venting system repairs.
28. In the event of damage to any portion of the landfill site facilities regulated by this permit or failure of any portion of the landfill systems, the permittee shall immediately (within 24 hours) notify the Department of Environmental Protection explaining such occurrence and remedial measures to be taken and time needed for repairs. Written detailed notification shall be submitted to the Department within seven (7) days following the occurrence.
29. A trained supervisor or foreman shall be responsible for maintaining the facility in an orderly, safe, and sanitary manner. Sufficient personnel shall be employed to adequately operate the facility in compliance with this permit.
30. The site shall continue to have a surface water management system designed, constructed, operated, and maintained to prevent surface water from running on to waste filled areas, and a stormwater runoff control system designed, constructed, operated, and maintained to collect and control stormwater to meet the requirements of Chapter 62-25, F.A.C., and the requirements for management and storage of surface water in accordance with Chapter 373, F.S.

SPECIFIC CONDITIONS:

31. Stormwater management systems shall be designed to avoid mixing of stormwater with leachate. Stormwater or other surface water which comes into contact with the landfilled solid waste or mixes with leachate shall be considered leachate.

32. To prevent unauthorized waste disposal, access to and use of the facility shall be controlled by fencing, gates, or other barriers, as well as signs and facility personnel.

33. In addition to records and reporting required, the landfill owner or operator shall keep records of all information used to develop or support the permit applications and any supplemental information pertaining to construction of the landfill throughout the design period. Records pertaining to the operation of the landfill shall be kept for the design period of the landfill. Records of all monitoring information, including calibration and maintenance records, all original chart recordings for continuous monitoring instrumentation, and copies of all reports required by permit, shall be kept for at least ten years. Background water quality records shall be kept for the design period of the landfill.

34. Within ninety (90) days after issuance of this permit, the water quality monitoring system shall be installed in accordance with the Wade-Trim/Meyers & Associates Water Quality & Leachate Monitoring Plan dated July 21, 1993. All sampling and analysis activities shall be performed by organizations that have Comprehensive Quality Assurance Plans approved in accordance with Rule 62-160.300(8), F.A.C.

35. The groundwater monitoring wells are located as per 3/25/87 submittal, as follows:

<u>Well Number</u>	<u>Aquifer</u>	<u>Location</u>
MW-1	Surficial	As per Permit Figure 1
MW-2	Surficial	As per Permit Figure 1
MW-3	Surficial	As per Permit Figure 1
MW-4	Surficial (background)	As per Permit Figure 1
MW-5	Surficial	As per Permit Figure 1
MW-6	Surficial	As per Permit Figure 1
MW-7	Surficial	As per Permit Figure 1

All wells are to be clearly labeled and easily visible at all times. All wells are considered to be detection wells, with the exception of the background well, MW-4.

Water levels shall be measured quarterly in all site piezometers, P1 through P14, for evaluation of the leachate/groundwater elevations in the landfill and leachate sprayfield. The locations of these piezometers are on Wade-Trim's August 2, 1993 Improvement Site Plan, Sheet 4 of 6. A reduced portion of this plan is presented as Figure 2 of this permit.

SPECIFIC CONDITIONS:

36. Pursuant to F.A.C. Rule 62-522.410, the zone of discharge shall extend horizontally to the property line or one hundred (100) feet beyond the waste management area, whichever is less, and vertically to the base of the surficial aquifer. The permittee shall ensure that the water quality standards for Class G-II groundwaters will not be exceeded at the boundary of the zone of discharge according to Rules 62-520.400 and 62-520.420, F.A.C.

37. Leachate shall be sampled from the leachate collection system prior to entering the dewatering ditch and analyzed every 6 months for the indicator parameters listed as follows:

Leachate indicator parameters:

<u>Field parameters</u>	<u>Laboratory parameters</u>
Specific conductivity	Total Ammonia - N
pH	Bicarbonate
Dissolved oxygen	Chlorides
Colors, sheens	Iron
	Mercury
	Nitrate
	Sodium
	Total dissolved solids (TDS)
	Those parameters listed in
	40 CFR Part 258, Appendix I

In addition, leachate shall be sampled and analyzed annually for the parameters listed in 40 CFR Part 258, Appendix II. For landfills which are receiving waste, if this annual analysis indicates that a contaminant listed in 40 CFR 261.24 exceeds the regulatory level listed therein, the permittee shall initiate a monthly sampling and analysis program. If in any three consecutive months the same listed contaminant exceeds the regulatory level, the permittee shall, within 90 days, initiate a program designed to identify the source and reduce the presence of the contaminant in the leachate so that it no longer exceeds the regulatory level. This program may include additional monitoring of waste received and additional up-front separation of waste materials. Any leachate which is not recirculated or taken to a permitted domestic wastewater treatment facility shall be treated or managed so that no contaminant exceeds the regulatory level. If in any three consecutive months no listed contaminant is found to exceed the regulatory level, the permittee may discontinue the monthly sampling and analysis and return to a routine sampling schedule.
Amended 08-24-95.

SPECIFIC CONDITIONS:

38. All piezometers listed in Specific Condition #36 shall be constructed in accordance with the construction procedures of the July 21, 1993 Water Quality & Leachate Monitoring Plan submitted July 21, 1993 to the Department, and in accordance with best geological practices. In addition, all piezometers shall have an impermeable barrier at or near ground surface to prevent surface water infiltration to the piezometer. Within ninety (90) days after piezometer installation, the following information shall be submitted to the Solid Waste Section of the Southwest District Office of the Department:

Piezometer identification	Lithologic Log
Latitude/Longitude	Total depth of piezometer
Screen Type and slot size	Casing diameter
Screen length	Casing type and length
Piezometer seal type and thickness	
Elevation at top of piezometer	
Elevation at land surface	

39. Within ninety (90) days after piezometer installation, a surveyed drawing shall be submitted showing the location of all monitor wells (active and abandoned) and piezometers in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing to the nearest .01 foot, National Geodetic Vertical Datum. All surface water monitoring stations shall be surveyed in degrees, minutes and seconds of latitude and longitude. The surveyed drawing shall include the monitor well and piezometer identification number, location and elevation of all permanent benchmark(s) and/or corner monument marker(s) at the site. The survey shall be conducted by a registered Florida land surveyor.

40. All field and laboratory work done in connection with groundwater monitoring shall be conducted by a firm possessing a Generic Quality Assurance Plan or a Comprehensive Quality Assurance Plan approved by the Department in accordance with Chapter 62-160, F.A.C. The Quality Assurance Plan must specifically address the sampling and analytical work that is required by the permit. Documentation of an approved Quality Assurance Plan shall be submitted to the Department annually with the 1st quarterly groundwater sampling report for each year. Documentation shall include the completed signature page and the table of contents of the approved plan. The approved Quality Assurance Plan shall be followed by all persons collecting or analyzing samples related to this permit.

SPECIFIC CONDITIONS:

41. All detection wells and background wells shall be sampled and analyzed every 6 months for the ground water indicator parameters listed in 62-701.510(8)(a) as follows:

Ground water indicator parameters:

Field parameters	Laboratory parameters
Static water level in wells before purging	Total Ammonia - N
Specific conductivity	Chlorides
pH	Iron
Dissolved oxygen	Mercury
Turbidity	Nitrate
Colors, sheens	Sodium
Temperature	Total dissolved solids (TDS)
	Those parameters listed in 40 CFR Part 258, Appendix I

Compliance with groundwater standards and/or criteria shall be determined by analysis of unfiltered groundwater samples. Additional samples, wells, and parameters may be required based upon subsequent analysis.
Amended 08-24-95.

42. In accordance with 62-701.510(7), if at any time background groundwater standards are exceeded in the detection wells, the permittee has fifteen (15) days after the sampling data is received in which to resample the monitor well(s) to verify the original analysis. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current groundwater conditions at the facility. If the exceedance of groundwater standards in the detection wells is confirmed, then assessment monitoring shall be initiated as detailed in 62-701.510(7).

43. If any monitoring well becomes damaged or inoperable, the permittee shall notify the Department of Environmental Protection immediately (within 24 hours). A detailed written report shall follow within seven (7) days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent the recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation and may require a permit modification.

44. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with methods approved by the Department in accordance with Chapters 62-4.246 and 62-3.401, F.A.C. Approved methods are published by the Department or as published in Standards Methods, A.S.T.M., or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, 40 CFR Part 136.

SPECIFIC CONDITIONS:

45. All water quality monitoring analyses shall be reported on the Department Quarterly Report on Groundwater Monitoring Form 62-522.900(2). The permittee shall submit to the Department the results of the water quality analysis, by July 15th and January 15th for the semi-annually periods January - June and July - December, respectively. The results shall be sent to the Solid Waste Section, Department of Environmental Protection, Southwest District office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8313. In addition to the completed reporting form and analytical sheets, the report shall include a water table contour map for the date of the sampling event and a summary of all groundwater standard exceedances, as required by FAC 62-701.510(9)(a).

Amended 08-24-95.

→ 46. Every two years and prior to ninety (90) days before the expiration of the Department Permit, the permittee shall submit an evaluation of the Groundwater Monitoring Plan as per F.A.C. Rule 62-701.510(9)(b). The evaluation shall include all applicable information as required by F.A.C. Rule 62-701.510(9), and shall include an assessment of the effectiveness of the existing landfill design and operation as related to the prevention of groundwater contamination. Any groundwater contamination that may exist, shall be addressed as part of a groundwater investigation for the landfill assessment. The Groundwater Monitoring Plan shall be adequate to monitor any modifications to the existing landfill site including but not limited to closure.

Amended 08-24-95.

47. The permittee shall provide financial assurance for this landfill site in accordance with F.A.C. Rule 62-701.630. All cost estimates for closure and long-term care shall be adjusted and submitted annually to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318. Proof that the financial assurance has been funded adequately shall be submitted annually to the FDEP District Office and to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

48. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

49. A closure permit application shall be required ninety (90) days prior to final acceptance of waste for each landfill portion of the site. The final cover shall be placed over the entire surface of each completed portion of the filled areas within one hundred and eighty (180) days after final waste deposit date for each area.

SPECIFIC CONDITIONS:

50. Prior to 90 days before the expiration of the Department Permit, the permittee shall apply for a renewal of a permit on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules.

51. The permittee shall be aware of and operate under the attached "General Conditions". General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.

52. By acceptance of this Permit, the permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein and also including date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.

53. This permit is valid for the revised method and sequence of filling and leachate/stormwater management plan in accordance with the following information submitted by Post, Buckley Schuh & Jernigan, Inc. (PBSJ):

Information dated February 22, 1996 (received February 28, 1996);

Information dated April 3, 1996 (received April 5, 1996);

"Proposed Stormwater Design Final Buildout and Details," Sheet 1 received April 5, 1996;

"Proposed Stormwater Design Operational Sequencing Plan," Sheet 2 received April 5, 1996; and

"Depth of Cover Field Investigation," Sheet 3, received February 28, 1996.

a. This plan shall be implemented within 30 days of receipt of this permit modification.

b. The silt screens shall be checked each work day and cleaned or replaced as necessary to promote adequate stormwater drainage.

New JUN 13 1996.

Attachment 1

PERMITTEE: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS
HARDEE COUNTY SOLID WASTE DISPOSAL FACILITY
PERMIT NO.: SO25-214306

SPECIFIC CONDITION	SUBMITTAL DUE DATE	REQUIRED ITEM
1.	180 days after issuance of permit	Site improvements completed
3.	60 days following construction	Certification and record drawings
13.	March 1/Annually	Waste tire report
16.	Quarterly	Waste quantity report
17.	Monthly	Rainfall and leachate volume data
17.	Annually	Leachate/water balance data
19.	Quarterly	Gas monitoring results
25.	Annually	Yard trash report
34.	90 days after issuance of permit	Water quality monitoring system installed
37.	Quarterly	Leachate sampled/analyzed
38.	90 days after installation	Piezometer construction data
39.	90 days after installation	Survey of wells and piezometers
40.	Annually with January 15th analysis results	Documentation of QA plan approval
41.	Every 6 months	Wells sampled/analyzed
45.	Each January 15th and July 15th	Analysis results
46.	March 1997	Evaluation of GWM Plan