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Water Quality Monitoring Plan Evaluation
For The West Pasco County Class I Landfill

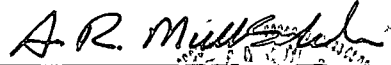
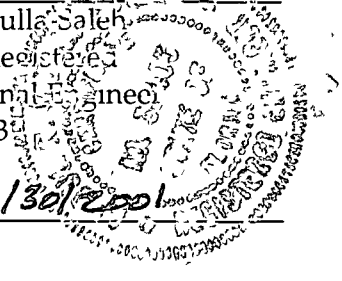
March 30, 2001

Water Quality Monitoring Plan Evaluation For The West Pasco County Class I Landfill

Prepared for
PASCO COUNTY, FLORIDA

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MARCH 30, 2001


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Section 1

Introduction

1.1 Background

The West Pasco Class I Landfill is located in northwest Pasco County on Hays Road, approximately 2.5 miles north of State Road 52. The Class I Landfill is located adjacent to the Pasco County Resource Recovery facility and the West Pasco Class III Landfill. The Class I Landfill is permitted separately from the Class III Landfill. Although at build out the landfill will consist of 16 ten-acre cells, currently only three cells have been constructed, cells A-1, A-2, and SW-1. Cell SW-1 is used for the disposal of municipal solid waste (MSW) whenever the MSW cannot be combusted in the resource recovery facility. By-passed MSW is removed from the cell when capacity is available at the resource recovery facility. Cells A-1 and A-2 are used for the disposal of ash produced from the combustion of MSW at the adjacent resource recovery facility. Cell A-1 has received intermediate closure and Cell A-2 is currently open.

Since May 1997, collected leachate has been treated on-site for the removal of total dissolved solids (TDS) prior to being pumped to the cooling towers at the adjacent resource recovery facility for disposal. The TDS, primarily sodium chloride, removed by evaporation from the leachate during the treatment process, are transported off-site for disposal at an approved landfill.

1.2 Water Quality Monitoring Plan

A draft version of a revised water quality monitoring plan for the West Pasco County Class I Landfill was submitted to the Florida Department of Environmental Protection (FDEP) in February 2001. This plan was generated as a revision to the Water Quality Monitoring Plan for the Class I Landfill dated 1994 that was approved by the FDEP. The original plan was presented in Section 9.0 of a submittal entitled Engineering Report and Application to Construct Disposal Unit A-2, prepared by Law Environmental, revised January 5, 1995. The primary revisions to the original plan include the addition of new and proposed monitor wells and leachate collection systems. However, the water quality data collected at the Class I Landfill to date, and evaluated in this report, have been produced in association with the approved plan. The approved plan consists of periodic monitoring of six surficial aquifer wells (2MW-1, 2MW-2, 2MW-4, 2MW-5, 2MW-6, and 2MW-13D) and eleven Floridan Aquifer wells (4MW-1, 4MW-2, 4MW-4, 4MW-5, 4MW-6, 4MW-11D, 4MW-12D, 4MW-13D, 4MW-14D, 4MW-15D, and 4MW-16D) which are identified in Figure 1-1.

The recently submitted draft version of the revised water quality monitoring plan includes an evaluation of the adequacy of the water quality monitoring frequency and sampling locations, an interpretation of the groundwater contour maps, and provides

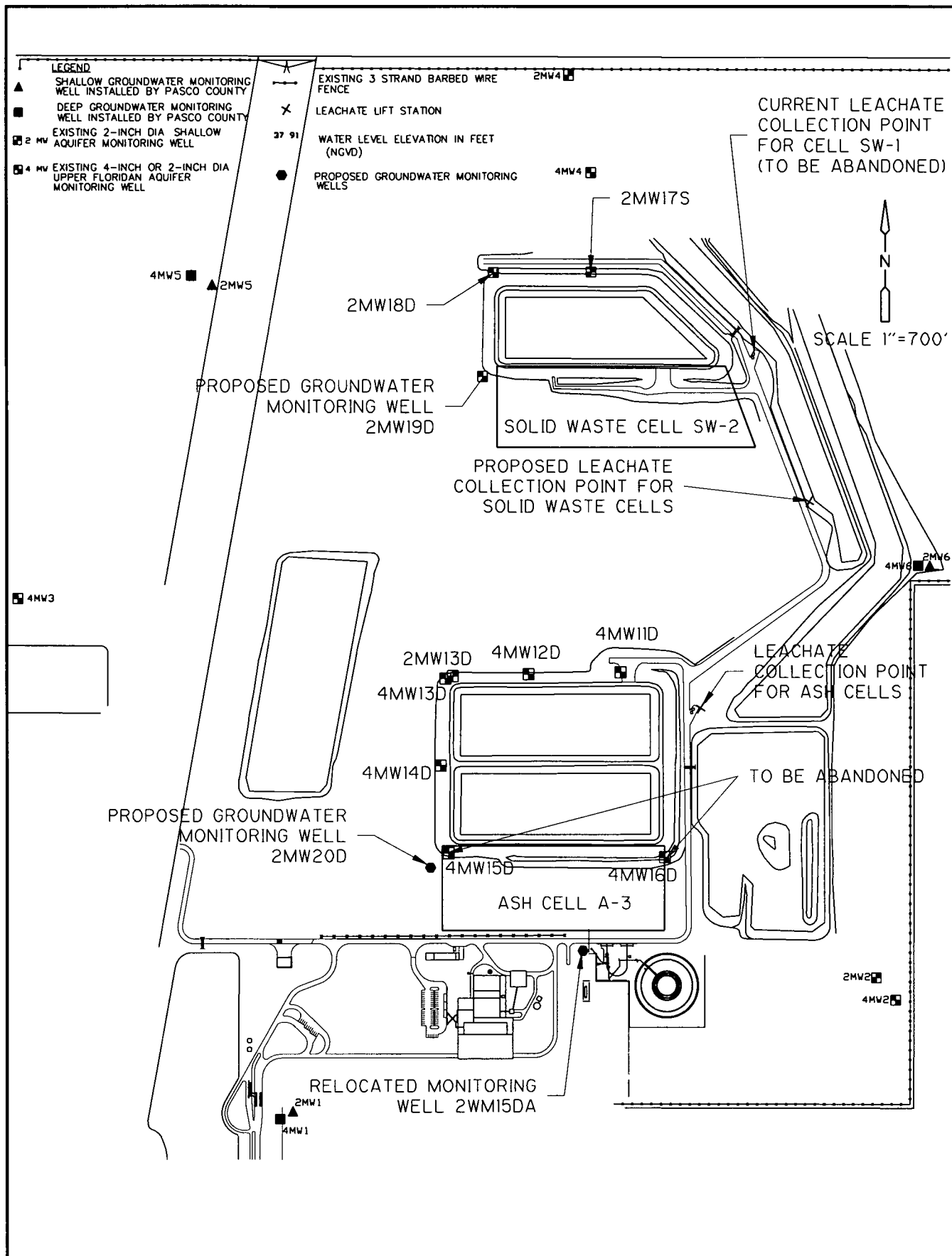


Figure No. 1-1
Map of West Pasco County
Class I Landfill Area

an evaluation of groundwater flow rates. Therefore, discussions regarding these aspects of the water quality monitoring plan are not repeated in this report.

Section 2

Groundwater Quality and Level Data

2.1 Data Tabulation

The last groundwater monitoring plan review for the Class I Landfill, which was submitted to FDEP in January 1999, evaluated data collected from 1995, 1996, 1997, and 1998. Tables A-1 through A-17 in Appendix A present the results of routine (bi-annual) monitoring conducted from the first quarter of 1998 to the third quarter of 2000 in the monitoring wells identified in the water quality monitoring plan. Water level measurements and water quality data are available for all the Floridan Aquifer monitor wells and one of the surficial aquifer monitor wells, 2MW-2. No water level measurements or water quality data are available for the other surficial aquifer monitor wells because these wells were consistently dry.

2.2 Graphical Presentations

Figures B-1 through B-11 in Appendix B present graphical trends of data for which a monitoring parameter was detected during the period from the first quarter of 1998 to the third quarter of 2000. However, due to the inability to collect data from the five surficial aquifer monitor wells that were consistently dry and the limited water quality data available from monitor well 4MW-13D, no data was presented for these wells.

Please note that an organic parameter (methylene chloride) was identified slightly above the detection limit on one occasion in groundwater collected from monitor well 4MW-1. This detection is considered an outlier and because it was only detected one time, there was no graphical trend presented.

2.3 Groundwater Quality Interpretation

Maximum contaminant levels (MCLs) for inorganic compounds are established in Table 1 of Chapter 62-550 of the Florida Administrative Code (F.A.C.). The MCLs for six parameters were periodically exceeded in groundwater monitoring wells sampled at the West Pasco Class I Landfill during the period from the first quarter of 1998 to the third quarter of 2000. These parameters were:

- nitrate - detected above 10 mg/L in two wells, 2MW-2 and 4MW-2,
- antimony - detected above 0.006 mg/L in one well 4MW-1,
- beryllium - detected above 0.004 mg/L in two wells 4MW-2 and 4MW-6,
- lead - detected above 0.015 mg/L in one well 4MW-16D,
- nickel - detected above 0.1 mg/L in one well 4MW-4, and

- thallium - detected above 0.002 mg/L in three wells 4MW-1, 4MW-11D, and 4MW-14D

Of these detections that exceeded the MCLs during the period from the first quarter of 1998 to the third quarter of 2000, only nitrate and thallium were detected at concentrations over their MCLs more than once in any one well. Nitrate was detected above 10 mg/L on three occasions in groundwater from monitor well 2MW-2 and thallium was detected above 0.002 mg/L on two occasions in groundwater from monitor well 4MW-1. However, neither of these parameters were detected more than once at a concentration greater than 10% over the MCL.

Secondary drinking water standards (SDWSs) for various contaminants are established in Table 4 of Chapter 62-550 F.A.C. The SDWSs for five parameters were exceeded in groundwater monitoring wells sampled at the West Pasco Class I Landfill during the period from the first quarter of 1998 to the third quarter of 2000. These parameters were

- pH - detected outside the range of 6.5 – 8.5 *s u* in three wells, 2MW-2, 2MW-13D, and 4MW-2,
- color - detected above 15 PCU in six wells 2MW-13D, 4MW-11D, 4MW-12D, 4MW-13D, 4MW-14D, and 4MW-16D,
- chlorides - detected above 250 mg/L in two wells 4MW-1 and 4MW-14D,
- TDS - detected above 500 mg/L in four wells 4MW-1, 4MW-5, 4MW-14D, and 4MW-15D, and
- iron - detected above 0.3 mg/L in one well 4MW-14D

Of these detections that exceeded the SDWSs during the period from the first quarter of 1998 to the third quarter of 2000, all five of the parameters were detected at concentrations over their SDWSs more than once in at least one well. PH was detected below 6.5 *s u* on all six sampling occasions in groundwater from monitor well 2MW-2. Color was detected above 15 PCU on two occasions in groundwater from monitor wells 4MW-11D and 4MW-16D, and on four occasions in groundwater from monitor well 4MW-14D. Chlorides were detected above 250 mg/L on five occasions in groundwater from monitor well 4MW-1. TDS was detected above 500 mg/L in groundwater from monitor wells 4MW-1 (on all six sampling occasions), 4MW-14D (on three occasions), and 4MW-15D (on four occasions). Iron was detected above 0.3 mg/L on three occasions in groundwater from monitor well 4MW-14D.

The exceedances of the SDWSs for TDS and chlorides in the Floridan Aquifer monitoring well 4MW-1, located upgradient of the Class I landfill, are most likely associated with a previously identified contaminant plume, the source of which is not associated with the Class I landfill.

However, both parameters have shown a decreasing trend over the monitoring period from the first quarter of 1998 to the third quarter of 2000. There is also a direct relationship between the concentrations of both TDS & chlorides that were detected and the measured conductivity of the groundwater collected from monitor well 4MW-1 over the monitoring period.

Two of the three exceedances of the SDWSs for TDS and iron that occur in the Floridan Aquifer monitoring well 4MW-14D, located downgradient of the Cell A-2, coincide in occurrence. Although one of times that the SDWS for TDS is exceeded in 4MW-14D does not coincide with an exceedance of any of the other parameters other than color, during this sampling event, TDS only exceeds the SDWS by 20 mg/L (4% of the SDWS) in this well. The exceedances of SDWSs for TDS in this well may be related to a previously identified contaminant plume, the source of which is not associated with the Class I landfill.

Monitor well 4MW-15D is located upgradient of the currently operating cells of the Class I landfill. During the period from the first quarter of 1998 to the third quarter of 2000, TDS is the only parameter detected above established SDWSs in this monitor well. Although TDS exceeded the SDWS in this well on four occasions during this period, the concentration detected during the third quarter of 2000, the last sampling event in this monitoring period evaluation, had dropped to the SDWS concentration, 500 mg/L. There is also a direct relationship between the concentrations of TDS detected and the conductivity measured in the groundwater collected from monitor well 4MW-15D over the monitoring period.

2.4 Groundwater Level Interpretation

Water level measurements were collected during the sampling events conducted in the first and third quarters of 1998, 1999, and 2000. The water level data collected at each well is presented as feet above the National Geodetic Vertical Datum (NGVD) in the tables and figures associated with this evaluation. Water level measurements were collected at all of the Floridan Aquifer wells and the Surficial aquifer wells 2MW-2 and 2MW-13D. No water level measurements are available for the other surficial aquifer wells because these wells were consistently dry.

The hydrographs in the figures presented in this evaluation for each of the wells reveal a general decline of the piezometric surface of the Floridan Aquifer over the monitoring period from 1998 to 2000. This trend is probably related to the compounding impact of the drought conditions that were present during this period.

Appendix A

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	Dry		Dry		Dry		Dry		Dry		Dry	
pH	s.u	Dry		Dry		Dry		Dry		Dry		Dry	
temperature	° C	Dry		Dry		Dry		Dry		Dry		Dry	
dissolved oxygen	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
turbidity	NTU	Dry		Dry		Dry		Dry		Dry		Dry	
total ammonia	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
chlornides	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
iron	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
mercury	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
nitrate	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
sodium	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
TDS	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
antimony	ug/l												
arsenic	ug/l												
barium	ug/l												
beryllium	ug/l												
cadmium	ug/l												
chromium	ug/l												
cobalt	ug/l												
copper	ug/l												
lead	ug/l												
nickel	ug/l												
selenium	ug/l												
silver	ug/l												
thallium	ug/l												
vanadium	ug/l												
zinc	ug/l												
acetone	ug/l												
acrylonitrile	ug/l												
benzene	ug/l												
bromochloromethane	ug/l												
bromodichloromethane	ug/l												
bromoform	ug/l												
carbon disulfide	ug/l												
carbon tetrachloride	ug/l												
chlorobenzene	ug/l												
chloroethane	ug/l												
chloroform	ug/l												
dibromochloromethane	ug/l												
1,2 Dibromo 3-chloropropane	ug/l												
1,2 Dibromomethane	ug/l												
o dichlorobenzene	ug/l												
p dichlorobenzene	ug/l												
trans 1,4 Dichloro 2 butene	ug/l												
1,1-Dichloroethane	ug/l												
1,2-Dichloroethane	ug/l												
1,1 Dichloroethylene	ug/l												
cis 1,2 Dichloroethylene	ug/l												
trans 1,2 Dichloroethylene	ug/l												
1,2 Dichloropropane	ug/l												
cis 1,3 Dichloropropane	ug/l												
trans 1,3 Dichloropropane	ug/l												
Ethylbenzene	ug/l												
2 Hexanone	ug/l												
Methyl bromide	ug/l												
Methyl chloride	ug/l												
Methylene bromide	ug/l												
Methylene chloride	ug/l												
Methyl ethyl ketone	ug/l												
Methyl iodide	ug/l												
4-Methyl 2 pentanone	ug/l												
Styrene	ug/l												
1,1,1,2 Tetrachloroethane	ug/l												
1,1,2,2 Tetrachloroethane	ug/l												
Tetrachloroethylene	ug/l												
Toluene	ug/l												
1,1,1 Trichloroethane	ug/l												
1,1,2 Trichloroethane	ug/l												
Trichloroethylene	ug/l												
Trichlorofluoromethane	ug/l												
1,2,3 Trichloropropane	ug/l												
Vinyl acetate	ug/l												
Vinyl chloride	ug/l												
Xylenes	ug/l												

Table A-1
Page A-1

Test Site ID # 4051A16506

Well Name 2MW-2

Classification of Groundwater Surficial

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	140		105		165		165		86		164	
pH	s u	5.75		6.13		6.4		4.65		6.15		4.9	
temperature	° C	22.8		23.5		23.6		25.2		23.1		25	
dissolved oxygen	mg/l	2.8		4.8		3.9		3.5		4		4	
turbidity	NTU	0.84		0.58		0.37		0.17		ND		1	
total ammonia	mg/l	ND		ND		ND		0.24		0.07		ND	
chlondes	mg/l	2.82		5.27		5.14		3.62		3.12		4.8	
iron	mg/l	ND		0.06		ND		0.03		0.03		ND	
mercury	mg/l	0.0009		0.0009		0.0006		ND		0.0005		ND	
nitrate	mg/l	11.9		9.93		11.7		0.89		8.07		10.8	
sodium	mg/l	3.09		2.67		3.46		2.97		2.7		3.28	
TDS	mg/l	121		101		184		159		142		152	
Water Level	Feet	38.11		37.76		37.59		32.81		31.01		28.99	
antimony	mg/l	ND		ND		ND		ND		ND			
arsenic	mg/l	ND		ND		ND		0.00155		0.000332		0.000174	
barium	mg/l	0.179		0.13		0.18		0.00694		0.0856		0.159	
beryllium	mg/l	0.0024		ND		ND		0.000296		ND		ND	
cadmium	mg/l	0.00071		ND		0.00082		ND		0.000303		ND	
chromium	mg/l	ND		ND		ND		ND		ND		0.00199	
cobalt	mg/l	0.064		ND		ND		ND		0.000227		ND	
copper	mg/l	0.017		0.007		0.0055		0.00994		0.00761		0.00377	
lead	mg/l	ND		ND		ND		0.000468		0.00103		ND	
nickel	mg/l	ND		ND		0.0022		0.00139		0.000533		ND	
selenium	mg/l	ND		ND		0.0041		0.00337		0.000594		ND	
silver	mg/l	ND		ND		ND		0.000393		0.0107		0.00341	
thallium	mg/l	ND		ND		0.00055		0.00184		ND		ND	
vanadium	mg/l	0.026		ND		ND		0.00756		0.000504		0.000382	
zinc	mg/l	0.025		ND		ND		0.028		0.0193		ND	
acetone	ug/l	ND		ND		ND		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		ND		ND		ND		ND	
benzene	ug/l	ND		ND		ND		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromoform	ug/l	ND		ND		ND		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		ND		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		ND		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
chloroethane	ug/l	ND		ND		ND		ND		ND		ND	
chloroform	ug/l	ND		ND		ND		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromo-3 chloropropane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromomethane	ug/l	ND		ND		ND		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,4-Dichloro-2 butene	ug/l	ND		ND		ND		ND		ND		ND	
1,1 Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2 Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
cis 1,2 Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,2 Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
cis 1,3 Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,3 Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		ND		ND		ND		ND	
2-Hexanone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl bromide	ug/l	ND		ND		ND		ND		ND		ND	
Methyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methylene bromide	ug/l	ND		ND		ND		ND		ND		ND	
Methylene chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl iodide	ug/l	ND		ND		ND		ND		ND		ND	
4 Methyl 2-pentanone	ug/l	ND		ND		ND		ND		ND		ND	
Styrene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Toluene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1 Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Xylenes	ug/l	ND		ND		ND		ND		ND		ND	

Table A-2

Page A-2

Test Site ID # 4051A16506

Well Name 2MW-4

Classification of Groundwater Surficial

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	Dry		Dry		Dry		Dry		Dry		Dry	
pH	s u	Dry		Dry		Dry		Dry		Dry		Dry	
temperature	° C	Dry		Dry		Dry		Dry		Dry		Dry	
dissolved oxygen	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
turbidity	NTU	Dry		Dry		Dry		Dry		Dry		Dry	
total ammonia	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
chlondes	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
iron	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
mercury	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
nitrate	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
sodium	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
TDS	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
Water Level	Feet	Dry		Dry		Dry		Dry		Dry		Dry	
antimony	ug/l												
arsenic	ug/l												
barium	ug/l												
beryllium	ug/l												
cadmium	ug/l												
chromium	ug/l												
cobalt	ug/l												
copper	ug/l												
lead	ug/l												
nickel	ug/l												
selenium	ug/l												
silver	ug/l												
thallium	ug/l												
vanadium	ug/l												
zinc	ug/l												
acetone	ug/l												
acrylonitrile	ug/l												
benzene	ug/l												
bromochloromethane	ug/l												
bromodichloromethane	ug/l												
bromoform	ug/l												
carbon disulfide	ug/l												
carbon tetrachloride	ug/l												
chlorobenzene	ug/l												
chloroethane	ug/l												
chloroform	ug/l												
dibromochloromethane	ug/l												
1 2 Dibromo 3 chloropropane	ug/l												
1 2 Dibromomethane	ug/l												
o dichlorobenzene	ug/l												
p dichlorobenzene	ug/l												
trans 1,4 Dichloro 2-butene	ug/l												
1,1 Dichloroethane	ug/l												
1,2-Dichloroethane	ug/l												
1 1-Dichloroethylene	ug/l												
cis 1 2 Dichloroethylene	ug/l												
trans 1 2 Dichloroethylene	ug/l												
1 2 Dichloropropane	ug/l												
cis 1 3 Dichloropropane	ug/l												
trans 1,3 Dichloropropane	ug/l												
Ethylbenzene	ug/l												
2 Hexanone	ug/l												
Methyl bromide	ug/l												
Methyl chloride	ug/l												
Methylene bromide	ug/l												
Methylene chloride	ug/l												
Methyl ethyl ketone	ug/l												
Methyl iodide	ug/l												
4 Methyl-2 pentanone	ug/l												
Styrene	ug/l												
1,1,1 2 Tetrachloroethane	ug/l												
1 1 2 2 Tetrachloroethane	ug/l												
Tetrachloroethylene	ug/l												
Toluene	ug/l												
1,1,1 Trichloroethane	ug/l												
1,1 2 Trichloroethane	ug/l												
Trichloroethylene	ug/l												
Trichlorofluoromethane	ug/l												
1,2,3 Trichloropropane	ug/l												
Vinyl acetate	ug/l												
Vinyl chloride	ug/l												
Xylenes	ug/l												

Table A-3
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parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	Dry		Dry		Dry		Dry		Dry		Dry	
pH	s u	Dry		Dry		Dry		Dry		Dry		Dry	
temperature	° C	Dry		Dry		Dry		Dry		Dry		Dry	
dissolved oxygen	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
turbidity	NTU	Dry		Dry		Dry		Dry		Dry		Dry	
total ammonia	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
chlondes	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
iron	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
mercury	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
nitrate	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
sodium	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
TDS	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
Water Level	Feet	Dry		Dry		Dry		Dry		Dry		Dry	
antimony	ug/l												
arsenic	ug/l												
barium	ug/l												
beryllium	ug/l												
cadmium	ug/l												
chromium	ug/l												
cobalt	ug/l												
copper	ug/l												
lead	ug/l												
nickel	ug/l												
selenium	ug/l												
silver	ug/l												
thallium	ug/l												
vanadium	ug/l												
zinc	ug/l												
acetone	ug/l												
acrylonitrile	ug/l												
benzene	ug/l												
bromochloromethane	ug/l												
bromodichloromethane	ug/l												
bromoform	ug/l												
carbon disulfide	ug/l												
carbon tetrachloride	ug/l												
chlorobenzene	ug/l												
chloroethane	ug/l												
chloroform	ug/l												
dibromochloromethane	ug/l												
1,2-Dibromo 3 chloropropane	ug/l												
1,2-Dibromomethane	ug/l												
o-dichlorobenzene	ug/l												
p-dichlorobenzene	ug/l												
trans-1,4 Dichloro 2 butene	ug/l												
1,1 Dichloroethane	ug/l												
1,2 Dichloroethane	ug/l												
1,1 Dichloroethylene	ug/l												
cis 1,2 Dichloroethylene	ug/l												
trans 1,2-Dichloroethylene	ug/l												
1,2 Dichloropropane	ug/l												
cis 1 3 Dichloropropene	ug/l												
trans 1,3 Dichloropropene	ug/l												
Ethylbenzene	ug/l												
2 Hexanone	ug/l												
Methyl bromide	ug/l												
Methyl chloride	ug/l												
Methylene bromide	ug/l												
Methylene chloride	ug/l												
Methyl ethyl ketone	ug/l												
Methyl iodide	ug/l												
4 Methyl 2 pentanone	ug/l												
Styrene	ug/l												
1,1,1,2-Tetrachloroethane	ug/l												
1,1,2,2 Tetrachloroethane	ug/l												
Tetrachloroethylene	ug/l												
Toluene	ug/l												
1,1 1 Trichloroethane	ug/l												
1,1,2 Trichloroethane	ug/l												
Trichloroethylene	ug/l												
Trichlorofluoromethane	ug/l												
1 2 3 Trichloropropane	ug/l												
Vinyl acetate	ug/l												
Vinyl chloride	ug/l												
Xylenes	ug/l												

Table A-4
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Test Site ID # 4051A16506

Well Name 2MW-6

Classification of Groundwater Surficial

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	Dry		Dry		Dry		Dry		Dry		Dry	
pH	s u	Dry		Dry		Dry		Dry		Dry		Dry	
temperature	° C	Dry		Dry		Dry		Dry		Dry		Dry	
dissolved oxygen	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
turbidity	NTU	Dry		Dry		Dry		Dry		Dry		Dry	
total ammonia	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
chlondes	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
iron	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
mercury	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
nitrate	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
sodium	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
TDS	mg/l	Dry		Dry		Dry		Dry		Dry		Dry	
Water Level	Feet	Dry		Dry		Dry		Dry		Dry		Dry	
antimony	ug/l												
arsenic	ug/l												
barium	ug/l												
beryllium	ug/l												
cadmium	ug/l												
chromium	ug/l												
cobalt	ug/l												
copper	ug/l												
lead	ug/l												
nickel	ug/l												
selenium	ug/l												
silver	ug/l												
thallium	ug/l												
vanadium	ug/l												
zinc	ug/l												
acetone	ug/l												
acrylonitrile	ug/l												
benzene	ug/l												
bromochloromethane	ug/l												
bromodichloromethane	ug/l												
bromoform	ug/l												
carbon disulfide	ug/l												
carbon tetrachloride	ug/l												
chlorobenzene	ug/l												
chloroethane	ug/l												
chloroform	ug/l												
dibromochloromethane	ug/l												
1,2 Dibromo-3-chloropropane	ug/l												
1,2 Dibromomethane	ug/l												
o dichlorobenzene	ug/l												
p dichlorobenzene	ug/l												
trans 1,4 Dichloro 2 butene	ug/l												
1,1 Dichloroethane	ug/l												
1,2 Dichloroethane	ug/l												
1,1 Dichloroethylene	ug/l												
cis 1,2 Dichloroethylene	ug/l												
trans-1,2 Dichloroethylene	ug/l												
1,2 Dichloropropane	ug/l												
cis 1,3 Dichloropropene	ug/l												
trans-1,3 Dichloropropene	ug/l												
Ethylbenzene	ug/l												
2 Hexanone	ug/l												
Methyl bromide	ug/l												
Methyl chloride	ug/l												
Methylene bromide	ug/l												
Methylene chloride	ug/l												
Methyl ethyl ketone	ug/l												
Methyl iodide	ug/l												
4-Methyl 2 pentanone	ug/l												
Styrene	ug/l												
1,1,1,2 Tetrachloroethane	ug/l												
1,1,2,2 Tetrachloroethane	ug/l												
Tetrachloroethylene	ug/l												
Toluene	ug/l												
1,1,1 Trichloroethane	ug/l												
1,1,2 Trichloroethane	ug/l												
Trichloroethylene	ug/l												
Trichlorofluoromethane	ug/l												
1,2,3-Trichloropropane	ug/l												
Vinyl acetate	ug/l												
Vinyl chloride	ug/l												
Xylenes	ug/l												

Table A-5
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Test Site ID #

Well Name 2MW-13DClassification of Groundwater Surficial

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	110		Dry		Damaged		Dry		261		Dry	
pH	s u	5.25		Dry		Damaged		Dry		7.48		Dry	
temperature	°C	26.9		Dry		Damaged		Dry		22.7		Dry	
dissolved oxygen	mg/l	1.9		Dry		Damaged		Dry		1.6		Dry	
turbidity	NTU	10.28		Dry		Damaged		Dry		ND		Dry	
total ammonia	mg/l	0.04		Dry		Damaged		Dry		ND		Dry	
chlondes	mg/l	12.1		Dry		Damaged		Dry		21.1		Dry	
iron	mg/l	0.13		Dry		Damaged		Dry		0.07		Dry	
mercury	mg/l	0.0003		Dry		Damaged		Dry		ND		Dry	
nitrate	mg/l	2.43		Dry		Damaged		Dry		0.42		Dry	
sodium	mg/l	6.91		Dry		Damaged		Dry		3.25		Dry	
TDS	mg/l	85		Dry		Damaged		Dry		184		Dry	
Water Level	Feet	35.54		Dry		Damaged		Dry		26.35		Dry	
antimony	ug/l	ND		NA									
arsenic	ug/l	ND		NA									
barium	ug/l	ND		NA									
beryllium	ug/l	ND		NA									
cadmium	ug/l	ND		NA									
chromium	ug/l	ND		NA									
cobalt	ug/l	ND		NA									
copper	ug/l	ND		NA									
lead	ug/l	ND		NA									
nickel	ug/l	ND		NA									
selenium	ug/l	ND		NA									
silver	ug/l	ND		NA									
thallium	ug/l	ND		NA									
vanadium	ug/l	ND		NA									
zinc	ug/l	0.082		NA									
Color	PCU	30		Dry		Damaged				5		Dry	
acetone	ug/l	ND		NA									
acrylonitrile	ug/l	ND		NA									
benzene	ug/l	ND		NA									
bromochloromethane	ug/l	ND		NA									
bromodichloromethane	ug/l	ND		NA									
bromoform	ug/l	ND		NA									
carbon disulfide	ug/l	ND		NA									
carbon tetrachloride	ug/l	ND		NA									
chlorobenzene	ug/l	ND		NA									
chloroethane	ug/l	ND		NA									
chloroform	ug/l	ND		NA									
dibromochloromethane	ug/l	ND		NA									
1,2-Dibromo-3-chloropropane	ug/l	ND		NA									
1,2-Dibromomethane	ug/l	ND		NA									
o-dichlorobenzene	ug/l	ND		NA									
p-dichlorobenzene	ug/l	ND		NA									
trans-1,4-Dichloro-2-butene	ug/l	ND		NA									
1,1-Dichloroethane	ug/l	ND		NA									
1,2-Dichloroethane	ug/l	ND		NA									
1,1-Dichloroethylene	ug/l	ND		NA									
cis-1,2-Dichloroethylene	ug/l	ND		NA									
trans-1,2-Dichloroethylene	ug/l	ND		NA									
1,2-Dichloropropane	ug/l	ND		NA									
cis-1,3-Dichloropropene	ug/l	ND		NA									
trans-1,3-Dichloropropene	ug/l	ND		NA									
Ethylbenzene	ug/l	ND		NA									
2-Hexanone	ug/l	ND		NA									
Methyl bromide	ug/l	ND		NA									
Methyl chloride	ug/l	ND		NA									
Methylene bromide	ug/l	ND		NA									
Methylene chloride	ug/l	ND		NA									
Methyl ethyl ketone	ug/l	ND		NA									
Methyl iodide	ug/l	ND		NA									
4-Methyl-2-pentanone	ug/l	ND		NA									
Styrene	ug/l	ND		NA									
1,1,1,2-Tetrachloroethane	ug/l	ND		NA									
1,1,2,2-Tetrachloroethane	ug/l	ND		NA									
Tetrachloroethylene	ug/l	ND		NA									
Toluene	ug/l	ND		NA									
1,1,1-Trichloroethane	ug/l	ND		NA									
1,1,2-Trichloroethane	ug/l	ND		NA									
Trichloroethylene	ug/l	ND		NA									
Trichlorofluoromethane	ug/l	ND		NA									
1,2,3-Trichloropropane	ug/l	ND		NA									
Vinyl acetate	ug/l	ND		NA									
Vinyl chloride	ug/l	ND		NA									
Xylenes	ug/l	ND		NA									

Table A-6
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Test Site ID # 4051A16511

Well Name 4MW-1

Classification of Groundwater Flordan

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	1770		1425		1275		1485		1080		1043	
pH	s u	7 12		7 12		7		7		7 02		6 9	
temperature	° C	22 3		24		24 9		25 4		23		24	
dissolved oxygen	mg/l	0 64		0 9		0 7		0 7		1		1	
turbidity	NTU	0 09		0 6		0 07		0 15		ND		ND	
total ammonia	mg/l	1 03		ND		ND		0 04		ND		ND	
chlondes	mg/l	504		356		277		334		257		242	
iron	mg/l	ND		0 06		ND		0 02		0 03		ND	
mercury	mg/l	0 0005		0 0007		0 0009		0 0005		ND		ND	
nitrate	mg/l	1 06		1 22		ND		0 89		0 46		ND	
sodium	mg/l	134		97 3		110		125		80 7		67 6	
TDS	mg/l	1580		1240		1480		1260		980		950	
Water Level	Feet	38 09		36 59		35 58		32 16		29 69		30 96	
antimony	mg/l	ND		ND		ND		0 00276		ND		0 00956	
arsenic	mg/l	ND		ND		ND		0 00181		0 00141		0 000872	
barium	mg/l	0 051		0 049		0 051		0 0543		0 0466		0 0437	
beryllium	mg/l	0 004		ND		ND		ND		ND		ND	
cadmium	mg/l	0 00018		ND		0 00083		ND		0 000326		ND	
chromium	mg/l	ND		ND		ND		ND		0 000617		0 00233	
cobalt	mg/l	0 068		ND		0 0017		ND		0 00122		ND	
copper	mg/l	0 013		ND		ND		0 00123		0 00689		0 000789	
lead	mg/l	ND		ND		ND		ND		0 000556		0 00426	
nickel	mg/l	0 029		0 006		0 0046		0 00161		0 0075		0 00175	
selenium	mg/l	0 0118		ND		ND		0 012		0 0119		0 00126	
silver	mg/l	ND		ND		ND		ND		0 000177		0 00203	
thallium	mg/l	ND		ND		0 0021		ND		0 00431		ND	
vanadium	mg/l	0 01		ND		0 0026		0 00287		0 00403		0 00432	
zinc	mg/l	0 016		ND		ND		0 0134		0 0521		ND	
Color	PCU			ND		ND		ND				5	
acetone	ug/l	ND		ND		ND		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		ND		ND		ND		ND	
benzene	ug/l	ND		ND		ND		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromoform	ug/l	ND		ND		ND		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		ND		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		ND		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
chloroethane	ug/l	ND		ND		ND		ND		ND		ND	
chloroform	ug/l	ND		ND		ND		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromo-3-chloropropane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromomethane	ug/l	ND		ND		ND		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		ND		ND		ND		ND	
2-Hexanone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl bromide	ug/l	ND		ND		ND		ND		ND		ND	
Methyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methylene bromide	ug/l	ND		ND		ND		ND		ND		ND	
Methylene chloride	ug/l	ND		ND		ND		ND		1 04		ND	
Methyl ethyl ketone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl iodide	ug/l	ND		ND		ND		ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND		ND		ND		ND		ND	
Styrene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Toluene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Xylenes	ug/l	ND		ND		ND		ND		ND		ND	

Table A-7
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Test Site ID # 4051A16512

Well Name 4MW-2

Classification of Groundwater Flondan

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	170		165		155		175		167		187	
pH	s u	8		7.41		6.92		7.45		7.75		7.63	
temperature	° C	22		23.9		25.2		24.9		23.2		24.8	
dissolved oxygen	mg/l	0.7		1.4		1.1		1		1.36		1	
turbidity	NTU	0.05		0.45		0.07		0.13		ND		ND	
total ammonia	mg/l	ND		ND		ND		ND		0.21		ND	
chlondes	mg/l	2.29		4.65		4.28		3.65		3.15		4.03	
iron	mg/l	ND		0.05		ND		0.02		0.02		ND	
mercury	mg/l	0.0005		0.0009		0.0009		ND		ND		ND	
nitrate	mg/l	0.46		0.96		1.33		10.2		2.07		2.26	
sodium	mg/l	2.71		2.7		2.7		2.79		2.8		2.87	
TDS	mg/l	98		96		123		121		101		110	
Water Level	Feet	37.91		37.31		37.11		32.39		30.26		28.57	
antimony	ug/l	ND		ND		ND		ND		ND		ND	
arsenic	ug/l	ND		0.005		ND		0.000391		0.00118		0.000661	
barium	ug/l	0.015		0.009		0.0047		0.17		0.00572		0.00772	
beryllium	ug/l	0.02		ND		ND		0.00113		ND		ND	
cadmium	ug/l	0.00017		ND		ND		0.000633		ND		ND	
chromium	ug/l	ND		ND		ND		ND		0.000656		0.00192	
cobalt	ug/l	0.084		ND		ND		ND		0.000247		ND	
copper	ug/l	0.005		ND		ND		0.0142		0.00728		ND	
lead	ug/l	ND		ND		ND		0.000527		0.00126		ND	
nickel	ug/l	ND		ND		ND		0.000967		0.00159		ND	
selenium	ug/l	ND		ND		ND		0.00122		0.000321		0.000917	
silver	ug/l	0.004		ND		ND		0.000481		0.000202		0.0137	
thallium	ug/l	ND		ND		ND		0.000811		ND		ND	
vanadium	ug/l	0.042		ND		0.0052		0.00161		0.00578		0.00492	
zinc	ug/l	0.0032		ND		ND		0.0173		0.000817		ND	
Color	PCU												
acetone	ug/l	ND		ND		ND		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		ND		ND		ND		ND	
benzene	ug/l	ND		ND		ND		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromoform	ug/l	ND		ND		ND		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		ND		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		ND		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
chloroethane	ug/l	ND		ND		ND		ND		ND		ND	
chloroform	ug/l	ND		ND		ND		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromo-3-chloropropane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromomethane	ug/l	ND		ND		ND		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		ND		ND		ND		ND	
2-Hexanone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl bromide	ug/l	ND		ND		ND		ND		ND		ND	
Methyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methylene bromide	ug/l	ND		ND		ND		ND		ND		ND	
Methylene chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl iodide	ug/l	ND		ND		ND		ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND		ND		ND		ND		ND	
Styrene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Toluene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Xylenes	ug/l	ND		ND		ND		ND		ND		ND	

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Test Site ID # 4051A16513

Well Name 4MW-4

Classification of Groundwater Flondan

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	309		300		285		355		290		316	
pH	s u	7.3		6.95		7.3		7.4		7.37		7.22	
temperature	° C	22.2		24.3		23.9		25.5		24		24	
dissolved oxygen	mg/l	1.5		1.9		1.5		1.5		2		2	
turbidity	NTU	1.29		3.19		0.46		0.49		ND		2.1	
total ammonia	mg/l	0.31		ND		ND		ND		ND		0.96	
chlondes	mg/l	6.9		12.5		8.45		10.4		11.2		12.6	
iron	mg/l	0.07		0.17		0.03		0.003		0.03		0.02	
mercury	mg/l	0.0006		0.0008		0.0003		ND		ND		ND	
nitrate	mg/l	0.16		0.44		0.58		8.49		0.49		0.33	
sodium	mg/l	3.21		3.21		3.15		3.36		3.35		3.55	
TDS	mg/l	194		170		252		200		144		197	
Water Level	Feet	32.81		30.51		30.13		25.11		23.06		21.35	
antimony	mg/l	ND		ND		ND		ND		0.000956		ND	
arsenic	mg/l	ND		ND		ND		0.00054		0.000956		0.000351	
barium	mg/l	0.013		0.012		0.0063		0.00756		0.0136		0.00622	
beryllium	mg/l	0.0035		ND		ND		ND		ND		ND	
cadmium	mg/l	ND		ND		ND		0.000195		0.000222		ND	
chromium	mg/l	0.054		ND		ND		ND		0.000861		0.00151	
cobalt	mg/l	0.08		ND		ND		ND		0.000789		ND	
copper	mg/l	0.004		0.009		ND		0.00561		0.00543		ND	
lead	mg/l	ND		ND		ND		0.00421		0.00119		ND	
nickel	mg/l	0.123		ND		ND		0.00233		0.00258		ND	
selenium	mg/l	ND		ND		ND		0.00136		0.00187		0.00133	
silver	mg/l	ND		ND		ND		ND		0.000484		0.0124	
thallium	mg/l	ND		ND		ND		0.000532		0.000298		ND	
vanadium	mg/l	0.031		ND		0.0035		0.00418		0.00399		0.00252	
zinc	mg/l	0.018		ND		ND		0.0141		0.0239		ND	
Color	PCU												
acetone	ug/l	ND		ND		ND		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		ND		ND		ND		ND	
benzene	ug/l	ND		ND		ND		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromoform	ug/l	ND		ND		ND		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		ND		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		ND		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
chloroethane	ug/l	ND		ND		ND		ND		ND		ND	
chloroform	ug/l	ND		ND		ND		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromo-3-chloropropane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromoethane	ug/l	ND		ND		ND		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND				ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND				ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		ND		ND		ND		ND	
2-Hexanone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl bromide	ug/l	ND		ND				ND		ND		ND	
Methyl chloride	ug/l	ND		ND				ND		ND		ND	
Methylene bromide	ug/l	ND		ND				ND		ND		ND	
Methylene chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND				ND		ND		ND	
Methyl iodide	ug/l	ND		ND		ND		ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND		ND		ND		ND		ND	
Styrene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Toluene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Xylenes	ug/l	ND		ND		ND		ND		ND		ND	

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Test Site ID # 4051A16514

Well Name 4MW-5

Classification of Groundwater Flondan

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	413		420		445		550		506		533	
pH	s u	7 65		7 24		7 37		7 38		7 31		7 16	
temperature	° C	21 8		25		23 3		24 4		24		23	
dissolved oxygen	mg/l	1 3		1 5		1 1		1 5		1 7		1 5	
turbidity	NTU	0 09		0 25		0 1		0 43		ND		1 5	
total ammonia	mg/l	4 83		ND		ND		0 04		0 05		ND	
chlondes	mg/l	60		55 6		80 8		91		86 8		102	
iron	mg/l	ND		0 05		ND		ND		0 02		0 02	
mercury	mg/l	0 0008		0 0006		0 0003		ND		0 0002		0 0005	
nitrate	mg/l	0 76		1 08		1 3		1 35		1 23		1 04	
sodium	mg/l	7 62		8 22		9 86		14 7		13 7		15 8	
TDS	mg/l	319		316		682		410		482		480	
Water Level	Feet	33 66		31 31		30 82		25 1		23 81		22 38	
antimony	mg/l	ND		ND		ND		0 00212		0 00022		ND	
arsenic	mg/l	ND		ND		ND		0 00193		0 00134		0 001	
barium	mg/l	ND		0 012		0 0086		0 0154		0 0109		0 0146	
beryllium	mg/l	ND		ND		ND		ND		ND		ND	
cadmium	mg/l	0 00112		ND		ND		ND		ND		ND	
chromium	mg/l	0 034		ND		0 0024		0 00109		0 00102		0 00272	
cobalt	mg/l	0 055		ND		ND		ND		0 000221		ND	
copper	mg/l	0 011		ND		ND		0 466		0 00151		ND	
lead	mg/l	ND		ND		ND		ND		0 000234		ND	
nickel	mg/l	0 098		ND		ND		0 000527		0 00192		ND	
selenium	mg/l	ND		ND		ND		ND		0 00421		ND	
silver	mg/l	ND		ND		ND		ND		0 000187		0 009	
thallium	mg/l	ND		ND		0 0014		ND		0 00156		ND	
vanadium	mg/l	0 047		ND		0 0035		0 00373		0 00329		0 00392	
zinc	mg/l	0 017		ND		ND		0 0152		0 00015		ND	
Color	PCU												
acetone	ug/l	ND		ND		ND		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		ND		ND		ND		ND	
benzene	ug/l	ND		ND		ND		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromoform	ug/l	ND		ND		ND		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		ND		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		ND		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
chloroethane	ug/l	ND		ND		ND		ND		ND		ND	
chloroform	ug/l	ND		ND		ND		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromo-3-chloropropane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromoethane	ug/l	ND		ND		ND		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND				ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND				ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		ND		ND		ND		ND	
2-Hexanone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl bromide	ug/l	ND		ND				ND		ND		ND	
Methyl chloride	ug/l	ND		ND				ND		ND		ND	
Methylene bromide	ug/l	ND		ND				ND		ND		ND	
Methylene chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND				ND		ND		ND	
Methyl iodide	ug/l	ND		ND		ND		ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND		ND		ND		ND		ND	
Styrene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Toluene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Xylenes	ug/l	ND		ND		ND		ND		ND		ND	

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parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	145		135		130		175		132		145	
pH	s u	8.78		7.68		7.51		7.65		7.94		7.5	
temperature	°C	22.5		24.8		23.8		24.9		23.1		24.1	
dissolved oxygen	mg/l	2.18		2.9		3		0.9		3		3	
turbidity	NTU	0.2		0.27		0.31		0.04		ND		ND	
total ammonia	mg/l	0.04		ND		ND		ND		0.07		1.2	
chlondes	mg/l	3.2		11.4		6		4.95		18.4		5.9	
iron	mg/l	ND		ND		ND		ND		0.02		0.04	
mercury	mg/l	0.0004		0.0002		0.0003		ND		ND		ND	
nitrate	mg/l	0.35		0.56		0.68		0.37		1.06		0.88	
sodium	mg/l	2.92		3.02		3.09		3.23		3.19		3.24	
TDS	mg/l	65		99		126		107		116		82	
Water Level	Feet	35.48				34.83				27.43		25.39	
antimony	ug/l	ND		ND		ND		ND		ND		ND	
arsenic	ug/l	ND		ND		ND		0.00127		0.0008		0.000252	
barium	ug/l	0.008		ND		0.0042		0.0185		0.00556		0.00462	
beryllium	ug/l	0.0056		ND		ND		ND		ND		ND	
cadmium	ug/l	ND		ND		ND		0.000429		ND		ND	
chromium	ug/l	0.092		ND		ND		ND		0.000438		0.000572	
cobalt	ug/l	0.107		ND		ND		0.000276		0.000313		ND	
copper	ug/l	0.004		ND		ND		0.0104		0.0106		ND	
lead	ug/l	ND		ND		ND		0.0065		0.000308		ND	
nickel	ug/l	0.048		ND		ND		ND		0.000611		ND	
selenium	ug/l	ND		ND		ND		0.00126		0.00171		0.00109	
silver	ug/l	ND		ND		ND		0.000421		0.0008		0.02	
thallium	ug/l	ND		ND		ND		0.000933		ND		ND	
vanadium	ug/l	0.084		ND		0.0041		0.00534		0.00437		0.00363	
zinc	ug/l	0.2		ND		ND		0.00844		0.00342		ND	
Color	PCU			ND									
acetone	ug/l	ND		ND		ND		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		ND		ND		ND		ND	
benzene	ug/l	ND		ND		ND		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		ND		ND		ND		ND	
bromoform	ug/l	ND		ND		ND		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		ND		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		ND		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
chloroethane	ug/l	ND		ND		ND		ND		ND		ND	
chloroform	ug/l	ND		ND		ND		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromo-3-chloropropane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dibromoethane	ug/l	ND		ND		ND		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND		ND		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		ND		ND		ND		ND	
2-Hexanone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl bromide	ug/l	ND		ND		ND		ND		ND		ND	
Methyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methylene bromide	ug/l	ND		ND		ND		ND		ND		ND	
Methylene chloride	ug/l	ND		ND		ND		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND		ND		ND		ND		ND	
Methyl iodide	ug/l	ND		ND		ND		ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND		ND		ND		ND		ND	
Styrene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Toluene	ug/l	ND		ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		ND		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		ND		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		ND		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		ND		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		ND		ND		ND		ND	
Xylenes	ug/l	ND		ND		ND		ND		ND		ND	

Table A-11
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Test Site ID #

Well Name **4MW-11D**Classification of Groundwater **Flondan**

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	310		305		Damaged		310		384		282	
pH	s u	7.25		7.45		Damaged		7.35		7.17		7.3	
temperature	° C	26.5		25.6		Damaged		25		24.3		24.9	
dissolved oxygen	mg/l	1.3		1.2		Damaged		1.1		1.95		1.8	
turbidity	NTU	3.8		2.1		Damaged		92		ND		NA	
total ammonia	mg/l	0.05		ND		Damaged		0.16		ND		0.15	
chlondes	mg/l	13.2		11.1		Damaged		7.64		18.3		7.45	
iron	mg/l	0.22		0.14		Damaged		0.43		ND		0.21	
mercury	mg/l	0.0005		0.0009		Damaged		0.0004		0.0002		ND	
nitrate	mg/l	0.15		0.3		Damaged		0.29		0.16		0.11	
sodium	mg/l	4.17		3.83		Damaged		3.45		4.85		3.44	
TDS	mg/l	194		275		Damaged		214		256		246	
Water Level	Feet	36.5		35		Damaged		28.8		26.8		25.76	
antimony	ug/l	ND		ND		NA		ND		0.000519		ND	
arsenic	ug/l	ND		ND		NA		0.00157		0.000817		0.000839	
barium	ug/l	0.011		0.011		NA		0.00883		0.00939		0.00667	
beryllium	ug/l	ND		ND		NA		ND		ND		ND	
cadmium	ug/l	ND		ND		NA		0.000202		0.0000294		ND	
chromium	ug/l	ND		ND		NA		0.00583		0.000472		0.000519	
cobalt	ug/l	ND		ND		NA		0.000254		0.000176		ND	
copper	ug/l	ND		ND		NA		0.00357		0.00245		0.000429	
lead	ug/l	ND		ND		NA		0.00178		0.000191		0.00168	
nickel	ug/l	ND		ND		NA		0.00293		0.00228		0.0146	
selenium	ug/l	ND		ND		NA		0.0085		0.000883		ND	
silver	ug/l	ND		ND		NA		ND		0.0000728		0.00296	
thallium	ug/l	ND		ND		NA		0.00461		ND		ND	
vanadium	ug/l	ND		ND		NA		0.00778		0.00155		0.00405	
zinc	ug/l	0.019		ND		NA		0.0051		ND		0.0177	
Color	PCU	15		12		Damaged		120		6		80	
acetone	ug/l	ND		ND		NA		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		NA		ND		ND		ND	
benzene	ug/l	ND		ND		NA		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		NA		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		NA		ND		ND		ND	
bromoform	ug/l	ND		ND		NA		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		NA		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		NA		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
chloroethane	ug/l	ND		ND		NA		ND		ND		ND	
chloroform	ug/l	ND		ND		NA		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dibromo 3 chloropropane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dibromoethane	ug/l	ND		ND		NA		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,4-Dichloro-2 butene	ug/l	ND		ND		NA		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
cis 1,2 Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
trans 1,2 Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
1,2 Dichloropropane	ug/l	ND		ND		NA		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		NA		ND		ND		ND	
trans 1,3-Dichloropropene	ug/l	ND		ND		NA		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		NA		ND		ND		ND	
2 Hexanone	ug/l	ND		ND		NA		ND		ND		ND	
Methyl bromide	ug/l	ND		ND		NA		ND		ND		ND	
Methyl chloride	ug/l	ND		ND		NA		ND		ND		ND	
Methylene bromide	ug/l	ND		ND		NA		ND		ND		ND	
Methylene chloride	ug/l	ND		ND		NA		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND		NA		ND		ND		ND	
Methyl iodide	ug/l	ND		ND		NA		ND		ND		ND	
4-Methyl-2 pentanone	ug/l	ND		ND		NA		ND		ND		ND	
Styrene	ug/l	ND		ND		NA		ND		ND		ND	
1,1,1,2 Tetrachloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1,2,2 Tetrachloroethane	ug/l	ND		ND		NA		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
Toluene	ug/l	ND		ND		NA		ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		NA		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		NA		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		NA		ND		ND		ND	
Xylenes	ug/l	ND		ND		NA		ND		ND		ND	

More parameters have been analyzed

Table 2-12
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Test Site ID #

Well Name **4MW-12D**Classification of Groundwater **Flondan**

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	365		370		Damaged		400		384		427	
pH	s u	6 91		7 27		Damaged		7 2		7 17		6 96	
temperature	° C	26		25 2		Damaged		25 2		24 3		24 9	
dissolved oxygen	mg/l	0 9		1 5		Damaged		NR		1 95		0 7	
turbidity	NTU	1 29		11 4		Damaged		0 92		ND		NA	
total ammonia	mg/l	0 03		ND		Damaged		0 16		ND		ND	
chlondes	mg/l	15 2		14 6		Damaged		12 4		18 3		21 5	
iron	mg/l	0 09		0 13		Damaged		0 02		ND		ND	
mercury	mg/l	0 0007		0 0007		Damaged		0 0005		0 0002		ND	
nitrate	mg/l	ND		ND		Damaged		ND		0 16		0 12	
sodium	mg/l	4 4		4 25		Damaged		4 05		4 85		6 34	
TDS	mg/l	240		230		Damaged		244		256		352	
Water Level	Feet	35 53		33 93		Damaged		?		26 83		25 33	
antimony	ug/l	ND		ND		NA		ND		0 000519		ND	
arsenic	ug/l	ND		ND		NA		0 000867		0 000817		0 000348	
barium	ug/l	0 01		0 01		NA		0 00872		0 00939		0 00889	
beryllium	ug/l	ND		ND		NA		ND		ND		ND	
cadmium	ug/l	ND		ND		NA		0 000169		0 0000294		ND	
chromium	ug/l	ND		ND		NA		ND		0 000472		0 000519	
cobalt	ug/l	ND		ND		NA		0 00014		0 000176		ND	
copper	ug/l	ND		ND		NA		0 00556		0 00245		ND	
lead	ug/l	ND		ND		NA		0 00116		0 000191		0 00035	
nickel	ug/l	ND		ND		NA		0 00115		0 00228		0 00323	
selenium	ug/l	ND		ND		NA		0 00644		0 000883		ND	
silver	ug/l	ND		ND		NA		0 000125		0 0000728		0 0019	
thallium	ug/l	ND		ND		NA		0 00302		ND		ND	
vanadium	ug/l	ND		ND		NA		0 00241		0 00155		0 00164	
zinc	ug/l	0 019		ND		NA		0 0231		ND		0 0537	
Color	PCU	20		8		Damaged		15		6		15	
acetone	ug/l	ND		ND		NA		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		NA		ND		ND		ND	
benzene	ug/l	ND		ND		NA		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		NA		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		NA		ND		ND		ND	
bromoform	ug/l	ND		ND		NA		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		NA		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		NA		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
chloroethane	ug/l	ND		ND		NA		ND		ND		ND	
chloroform	ug/l	ND		ND		NA		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dibromo-3-chloropropane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dibromoethane	ug/l	ND		ND		NA		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND		NA		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		NA		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND		NA		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		NA		ND		ND		ND	
2 Hexanone	ug/l	ND		ND		NA		ND		ND		ND	
Methyl bromide	ug/l	ND		ND		NA		ND		ND		ND	
Methyl chloride	ug/l	ND		ND		NA		ND		ND		ND	
Methylene bromide	ug/l	ND		ND		NA		ND		ND		ND	
Methylene chloride	ug/l	ND		ND		NA		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND		NA		ND		ND		ND	
Methyl iodide	ug/l	ND		ND		NA		ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND		NA		ND		ND		ND	
Styrene	ug/l	ND		ND		NA		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		NA		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
Toluene	ug/l	ND		ND		NA		ND		ND		ND	
1,1,1 Trichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1,2 Trichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		NA		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		NA		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		NA		ND		ND		ND	
Xylenes	ug/l	ND		ND		NA		ND		ND		ND	

More parameters have been analyzed

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Test Site ID #

Well Name **4MW-13D**Classification of Groundwater **Flondan**

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm									490	427	474	
pH	s u									7.1	6.96	7.04	
temperature	°C									24	24.9	25.1	
dissolved oxygen	mg/l									0.7	0.7	0.5	
turbidity	NTU									20	NA	NA	
total ammonia	mg/l									ND	ND	ND	
chlornides	mg/l									51.2	21.5	56.9	
iron	mg/l									0.18	ND	ND	
mercury	mg/l									ND	ND	ND	
nitrate	mg/l									ND	0.12	ND	
sodium	mg/l									8.65	6.34	9.8	
TDS	mg/l									354	352	420	
Water Level	Feet									30.82	25.33		
antimony	ug/l									ND	NA		
arsenic	ug/l									ND	NA	0.000297	
barium	ug/l									ND	NA	0.0122	
beryllium	ug/l									ND	NA	ND	
cadmium	ug/l									ND	NA	ND	
chromium	ug/l									ND	NA	ND	
cobalt	ug/l									ND	NA	ND	
copper	ug/l									ND	NA	ND	
lead	ug/l									ND	NA	ND	
nickel	ug/l									ND	NA	ND	
selenium	ug/l									ND	NA	0.000789	
silver	ug/l									ND	NA	0.000628	
thallium	ug/l									ND	NA	ND	
vanadium	ug/l									ND	NA	0.00487	
zinc	ug/l									ND	NA	0.135	
Color	PCU									35	15		
acetone	ug/l									ND	NA	ND	
acrylonitrile	ug/l									ND	NA	ND	
benzene	ug/l									ND	NA	ND	
bromochloromethane	ug/l									ND	NA	ND	
bromodichloromethane	ug/l									ND	NA	ND	
bromoform	ug/l									ND	NA	ND	
carbon disulfide	ug/l									ND	NA	ND	
carbon tetrachloride	ug/l									ND	NA	ND	
chlorobenzene	ug/l									ND	NA	ND	
chloroethane	ug/l									ND	NA	ND	
chloroform	ug/l									ND	NA	ND	
dibromochloromethane	ug/l									ND	NA	ND	
1,2-Dibromo-3 chloropropane	ug/l									ND	NA	ND	
1,2-Dibromoethane	ug/l									ND	NA	ND	
o-dichlorobenzene	ug/l									ND		ND	
p-dichlorobenzene	ug/l									ND		ND	
trans 1,4 Dichloro 2-butene	ug/l									ND	NA	ND	
1,1-Dichloroethane	ug/l									ND	NA	ND	
1,2 Dichloroethane	ug/l									ND	NA	ND	
1,1 Dichloroethylene	ug/l									ND	NA	ND	
cis-1,2-Dichloroethylene	ug/l									ND	NA	ND	
trans-1,2 Dichloroethylene	ug/l									ND	NA	ND	
1,2-Dichloropropane	ug/l									ND	NA	ND	
cis 1,3 Dichloropropene	ug/l									ND	NA	ND	
trans-1 3 Dichloropropene	ug/l									ND	NA	ND	
Ethylbenzene	ug/l									ND	NA	ND	
2-Hexanone	ug/l									ND	NA	ND	
Methyl bromide	ug/l									ND		ND	
Methyl chloride	ug/l									ND		ND	
Methylene bromide	ug/l									ND		ND	
Methylene chloride	ug/l									ND	NA	ND	
Methyl ethyl ketone	ug/l									ND		ND	
Methyl iodide	ug/l									ND	NA	ND	
4 Methyl 2-pentanone	ug/l									ND	NA	ND	
Styrene	ug/l									ND	NA	ND	
1,1,1,2 Tetrachloroethane	ug/l									ND	NA	ND	
1 1 2 2 Tetrachloroethane	ug/l									ND	NA	ND	
Tetrachloroethylene	ug/l									ND	NA	ND	
Toluene	ug/l									ND	NA	ND	
1,1,1-Trichloroethane	ug/l									ND	NA	ND	
1,1,2-Trichloroethane	ug/l									ND	NA	ND	
Trichloroethylene	ug/l									ND	NA	ND	
Trichlorofluoromethane	ug/l									ND	NA	ND	
1,2,3 Trichloropropane	ug/l									ND	NA	ND	
Vinyl acetate	ug/l									ND	NA	ND	
Vinyl chloride	ug/l									ND	NA	ND	
Xylenes	ug/l									ND	NA	ND	

More parameters have been analyzed

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Test Site ID #

Well Name **4MW-14D**Classification of Groundwater **Flondan**

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	670		540		Damaged		600		504		557	
pH	s u	6.98		7.19		Damaged		7.25		7.29		7.14	
temperature	°C	25		24.8		Damaged		25		25.2		25.2	
dissolved oxygen	mg/l	1.1		1.5		Damaged		0.9		0.8		1.5	
turbidity	NTU	7.55		1.1		Damaged		50		ND		NA	
total ammonia	mg/l	ND		ND		Damaged		0.1		ND		ND	
chlondes	mg/l	144		77.5		Damaged		858		77.5		94.9	
iron	mg/l	0.41		0.09		Damaged		2.12		0.32		ND	
mercury	mg/l	0.0003		0.0008		Damaged		ND		0.0002		ND	
nitrate	mg/l	0.55		0.83		Damaged		0.61		0.4		0.88	
sodium	mg/l	20.8		13		Damaged		16.3		17.3		20.2	
TDS	mg/l	676		434		Damaged		528		476		520	
Water Level	Feet	35.85		34.5		Damaged		28.46		26.3		26.02	
antimony	ug/l	ND		ND				ND		ND		ND	
arsenic	ug/l	ND		ND				0.00194		0.00189		ND	
barium	ug/l	0.02		0.016				0.0249		0.0308		ND	
beryllium	ug/l	ND		ND				0.00031		ND		ND	
cadmium	ug/l	ND		ND				0.000529		0.000264		ND	
chromium	ug/l	ND		ND				0.00123		0.0177		ND	
cobalt	ug/l	ND		ND				0.0141		0.00159		ND	
copper	ug/l	ND		ND				0.00453		0.00889		ND	
lead	ug/l	ND		ND				0.00388		0.00371		ND	
nickel	ug/l	ND		ND				0.00678		0.00822		ND	
selenium	ug/l	ND		ND				0.007		0.0114		ND	
silver	ug/l	ND		ND				ND		0.00644		ND	
thallium	ug/l	ND		ND				0.00313		0.00125		ND	
vanadium	ug/l	ND		ND				0.0151		0.0164		ND	
zinc	ug/l	0.011		ND				0.00778		0.0111		ND	
Color	PCU	25		5		Damaged		200		80		25	
acetone	ug/l	ND		ND				ND		ND		ND	
acrylonitrile	ug/l	ND		ND				ND		ND		ND	
benzene	ug/l	ND		ND				ND		ND		ND	
bromochloromethane	ug/l	ND		ND				ND		ND		ND	
bromodichloromethane	ug/l	ND		ND				ND		ND		ND	
bromoform	ug/l	ND		ND				ND		ND		ND	
carbon disulfide	ug/l	ND		ND				ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND				ND		ND		ND	
chlorobenzene	ug/l	ND		ND				ND		ND		ND	
chloroethane	ug/l	ND		ND				ND		ND		ND	
chloroform	ug/l	ND		ND				ND		ND		ND	
chloromethane	ug/l	ND		ND				ND		ND		ND	
1,2-Dibromo-3-chloropropane	ug/l	ND		ND				ND		ND		ND	
1,2-Dibromoethane	ug/l	ND		ND				ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND				ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND				ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND				ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND				ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND				ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND				ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND				ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND				ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND				ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND				ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND				ND		ND		ND	
Ethylbenzene	ug/l	ND		ND				ND		ND		ND	
2-Hexanone	ug/l	ND		ND				ND		ND		ND	
Methyl bromide	ug/l	ND		ND				ND		ND		ND	
Methyl chloride	ug/l	ND		ND				ND		ND		ND	
Methylene bromide	ug/l	ND		ND				ND		ND		ND	
Methylene chloride	ug/l	ND		ND				ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND				ND		ND		ND	
Methyl iodide	ug/l	ND		ND				ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND				ND		ND		ND	
Styrene	ug/l	ND		ND				ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND				ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND				ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND				ND		ND		ND	
Toluene	ug/l	ND		ND				ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND				ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND				ND		ND		ND	
Trichloroethylene	ug/l	ND		ND				ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND				ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND				ND		ND		ND	
Vinyl acetate	ug/l	ND		ND				ND		ND		ND	
Vinyl chloride	ug/l	ND		ND				ND		ND		ND	
Xylenes	ug/l	ND		ND				ND		ND		ND	

More parameters have been analyzed

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Test Site ID #

Well Name **4MW-15D**Classification of Groundwater **Flondan**

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	695		690		Damaged		695		634		627	
pH	s u	7.1		7.29		Damaged		7.25		7.29		7.18	
temperature	°C	25		25.4		Damaged		24.4		24.3		24.8	
dissolved oxygen	mg/l	1.3		1.4		Damaged		1.4		1.3		1.2	
turbidity	NTU	9.9		0.8		Damaged		0.97		ND		NA	
total ammonia	mg/l	ND		ND		Damaged		ND		ND		ND	
chlondas	mg/l	155		146		Damaged		103		110		116	
iron	mg/l	0.16		0.07		Damaged		0.04		0.02		ND	
mercury	mg/l	0.0026		0.0007		Damaged		ND		ND		ND	
nitrate	mg/l	0.92		0.92		Damaged		1.83		0.5		0.34	
sodium	mg/l	29.1		35.6		Damaged		25.3		30.5		0.01	
TDS	mg/l	656		548		Damaged		664		594		500	
Water Level	Feet	36.63		35.33		Damaged		29.49		27.23		27.23	
antimony	ug/l	ND		ND		NA		0.00197		ND		ND	
arsenic	ug/l	ND		ND		NA		0.00129		0.000867		0.000247	
barium	ug/l	ND		0.019		NA		0.0184		0.0202		0.0158	
beryllium	ug/l	ND		ND		NA		ND		ND		ND	
cadmium	ug/l	ND		ND		NA		0.000142		ND		ND	
chromium	ug/l	ND		ND		NA		0.000354		ND		ND	
cobalt	ug/l	ND		ND		NA		0.000171		0.000169		ND	
copper	ug/l	ND		ND		NA		0.0134		0.00315		ND	
lead	ug/l	ND		ND		NA		0.00106		0.000353		ND	
nickel	ug/l	ND		ND		NA		0.00223		0.00267		ND	
selenium	ug/l	ND		ND		NA		0.00535		0.0101		0.00372	
silver	ug/l	ND		ND		NA		0.000299		ND		0.000994	
thallium	ug/l	ND		ND		NA		0.0016		0.00142		ND	
vanadium	ug/l	ND		ND		NA		0.00172		0.00135		0.00133	
zinc	ug/l	0.014		ND		NA		0.0187		0.00113		ND	
Color	PCU	13		10		Damaged		5		10		10	
acetone	ug/l	ND		ND		NA		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		NA		ND		ND		ND	
benzene	ug/l	ND		ND		NA		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		NA		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		NA		ND		ND		ND	
bromoform	ug/l	ND		ND		NA		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		NA		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		NA		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
chloroethane	ug/l	ND		ND		NA		ND		ND		ND	
chloroform	ug/l	ND		ND		NA		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dibromo-3 chloropropane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dibromoethane	ug/l	ND		ND		NA		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND		NA		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		NA		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND		NA		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		NA		ND		ND		ND	
2-Hexanone	ug/l	ND		ND		NA		ND		ND		ND	
Methyl bromide	ug/l	ND		ND		NA		ND		ND		ND	
Methyl chloride	ug/l	ND		ND		NA		ND		ND		ND	
Methylene bromide	ug/l	ND		ND		NA		ND		ND		ND	
Methylene chloride	ug/l	ND		ND		NA		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND		NA		ND		ND		ND	
Methyl iodide	ug/l	ND		ND		NA		ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND		NA		ND		ND		ND	
Styrene	ug/l	ND		ND		NA		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		NA		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
Toluene	ug/l	ND		ND		NA		ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		NA		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		NA		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		NA		ND		ND		ND	
Xylenes	ug/l	ND		ND		NA		ND		ND		ND	

More parameters have been analyzed

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Test Site ID #

Well Name **4MW-16D**Classification of Groundwater **Flondan**

parameter	units	1998				1999				2000			
		1Q98	2Q98	3Q98	4Q98	1Q99	2Q99	3Q99	4Q99	1Q00	2Q00	3Q00	4Q00
conductivity	umhos/cm	305		315		Damaged		300		241		263	
pH	s u	7.1		7.24		Damaged		7.4		7.48		7.45	
temperature	°C	25		25.6		Damaged		24.5		23.8		25	
dissolved oxygen	mg/l	1.2		1.3		Damaged		2.3		1.6		2.2	
turbidity	NTU	1.29		1.3		Damaged		82.5		28		ND	
total ammonia	mg/l	ND		ND		Damaged		ND		ND		ND	
chlondes	mg/l	13.8		13.5		Damaged		11.8		19.8		8.84	
iron	mg/l	0.09		0.1		Damaged		0.16		0.25		0.05	
mercury	mg/l	0.0005		0.0009		Damaged		ND		0.0003		ND	
nitrate	mg/l	0.47		0.84		Damaged		0.99		0.74		ND	
sodium	mg/l	6.4		5.69		Damaged		4.1		3.61		3.65	
TDS	mg/l	206		216		Damaged		216		162		222	
Water Level	Feet	35.07		36.22		Damaged		30.43		27.72		27.97	
antimony	ug/l	ND		ND		NA		0.00065		0.00124		0.000105	
arsenic	ug/l	ND		ND		NA		0.00109		0.000733		ND	
barium	ug/l	0.016		0.015		NA		0.0274		0.013		0.0104	
beryllium	ug/l	ND		ND		NA		0.000906		ND		ND	
cadmium	ug/l	ND		ND		NA		0.000396		ND		0.000546	
chromium	ug/l	ND		ND		NA		0.023		0.00384		0.00922	
cobalt	ug/l	ND		ND		NA		0.00139		0.000594		ND	
copper	ug/l	ND		ND		NA		0.00794		0.00728		0.000561	
lead	ug/l	ND		ND		NA		0.00466		0.00154		0.0209	
nickel	ug/l	ND		ND		NA		0.00639		0.00311		ND	
selenium	ug/l	ND		ND		NA		0.00272		0.00149		0.00176	
silver	ug/l	ND		ND		NA		0.000415		ND		0.000694	
thallium	ug/l	ND		ND		NA		0.000303		ND		ND	
vanadium	ug/l	ND		ND		NA		0.0106		0.00371		0.00333	
zinc	ug/l	0.011		ND		NA		0.0164		0.00922		0.0154	
Color	PCU	10		4		Damaged		60		90		15	
acetone	ug/l	ND		ND		NA		ND		ND		ND	
acrylonitrile	ug/l	ND		ND		NA		ND		ND		ND	
benzene	ug/l	ND		ND		NA		ND		ND		ND	
bromochloromethane	ug/l	ND		ND		NA		ND		ND		ND	
bromodichloromethane	ug/l	ND		ND		NA		ND		ND		ND	
bromoform	ug/l	ND		ND		NA		ND		ND		ND	
carbon disulfide	ug/l	ND		ND		NA		ND		ND		ND	
carbon tetrachloride	ug/l	ND		ND		NA		ND		ND		ND	
chlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
chloroethane	ug/l	ND		ND		NA		ND		ND		ND	
chloroform	ug/l	ND		ND		NA		ND		ND		ND	
dibromochloromethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dibromo-3-chloropropane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dibromoethane	ug/l	ND		ND		NA		ND		ND		ND	
o-dichlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
p-dichlorobenzene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,4-Dichloro-2-butene	ug/l	ND		ND		NA		ND		ND		ND	
1,1-Dichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
cis-1,2-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,2-Dichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
1,2-Dichloropropane	ug/l	ND		ND		NA		ND		ND		ND	
cis-1,3-Dichloropropene	ug/l	ND		ND		NA		ND		ND		ND	
trans-1,3-Dichloropropene	ug/l	ND		ND		NA		ND		ND		ND	
Ethylbenzene	ug/l	ND		ND		NA		ND		ND		ND	
2-Hexanone	ug/l	ND		ND		NA		ND		ND		ND	
Methyl bromide	ug/l	ND		ND		NA		ND		ND		ND	
Methyl chloride	ug/l	ND		ND		NA		ND		ND		ND	
Methylene bromide	ug/l	ND		ND		NA		ND		ND		ND	
Methylene chloride	ug/l	ND		ND		NA		ND		ND		ND	
Methyl ethyl ketone	ug/l	ND		ND		NA		ND		ND		ND	
Methyl iodide	ug/l	ND		ND		NA		ND		ND		ND	
4-Methyl-2-pentanone	ug/l	ND		ND		NA		ND		ND		ND	
Styrene	ug/l	ND		ND		NA		ND		ND		ND	
1,1,1,2-Tetrachloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1,2,2-Tetrachloroethane	ug/l	ND		ND		NA		ND		ND		ND	
Tetrachloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
Toluene	ug/l	ND		ND		NA		ND		ND		ND	
1,1,1-Trichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
1,1,2-Trichloroethane	ug/l	ND		ND		NA		ND		ND		ND	
Trichloroethylene	ug/l	ND		ND		NA		ND		ND		ND	
Trichlorofluoromethane	ug/l	ND		ND		NA		ND		ND		ND	
1,2,3-Trichloropropane	ug/l	ND		ND		NA		ND		ND		ND	
Vinyl acetate	ug/l	ND		ND		NA		ND		ND		ND	
Vinyl chloride	ug/l	ND		ND		NA		ND		ND		ND	
Xylenes	ug/l	ND		ND		NA		ND		ND		ND	

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Appendix B

Well Name 2MW-2

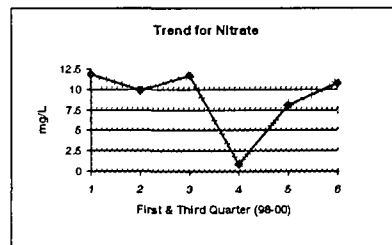
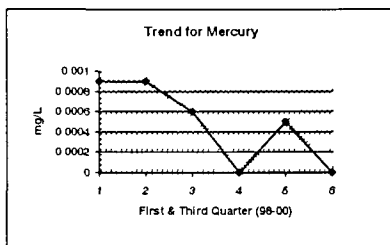
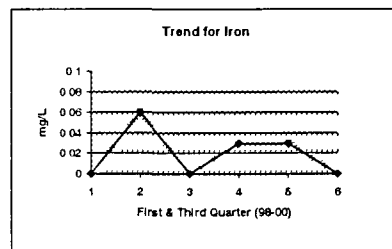
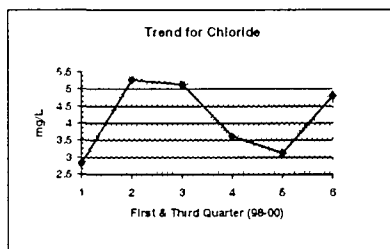
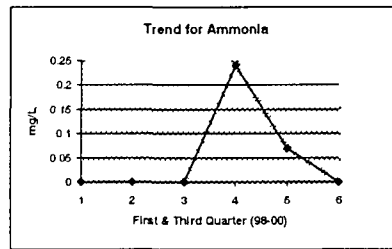
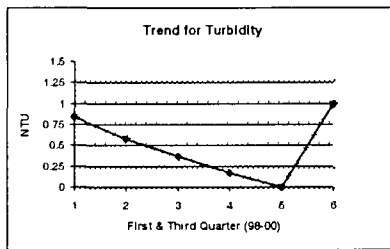
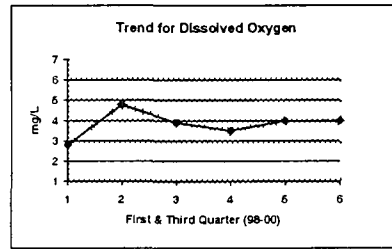
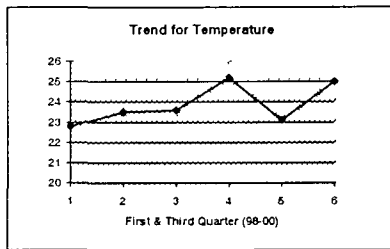
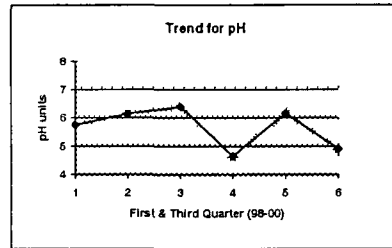
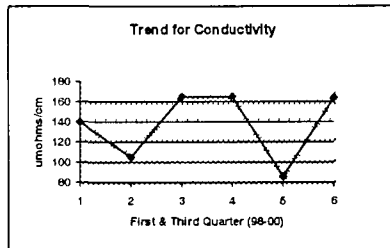


Figure B-1
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Well Name 2MW-2

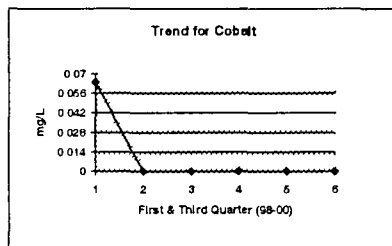
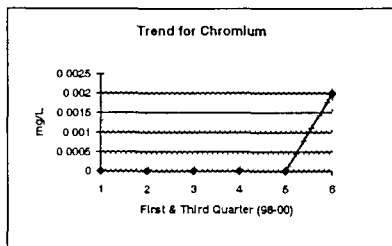
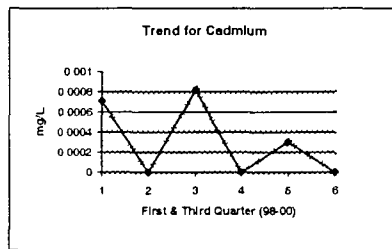
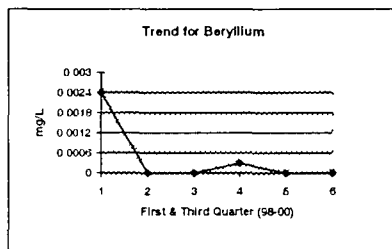
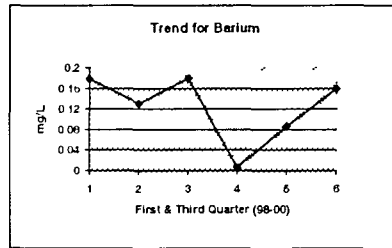
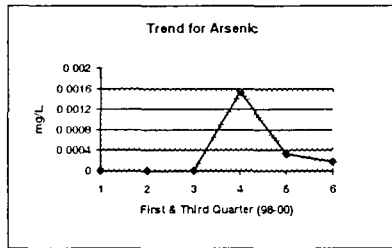
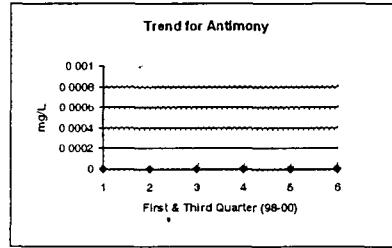
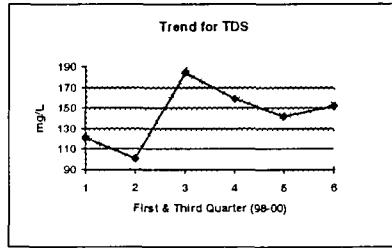
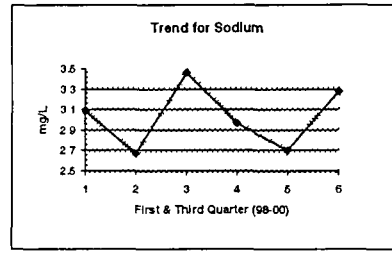
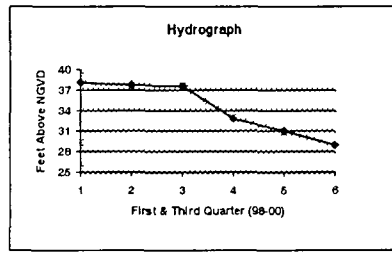


Figure B-1
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Well Name 2MW-2

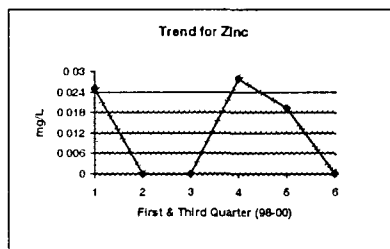
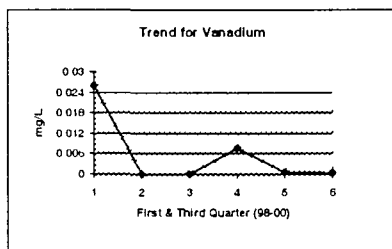
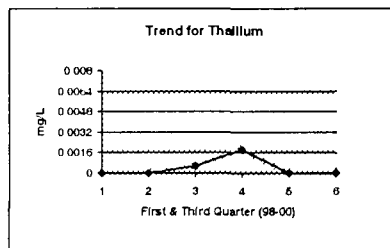
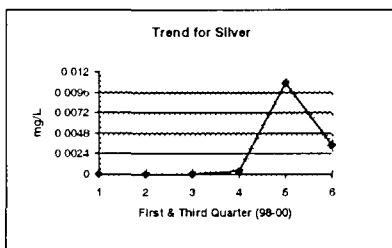
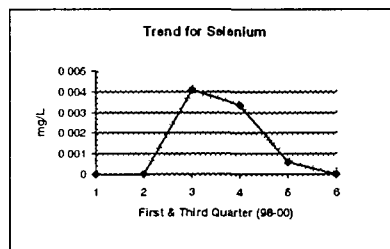
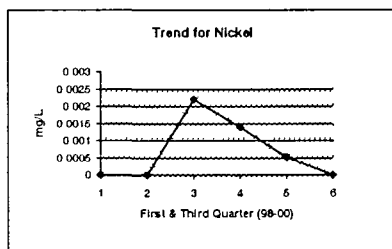
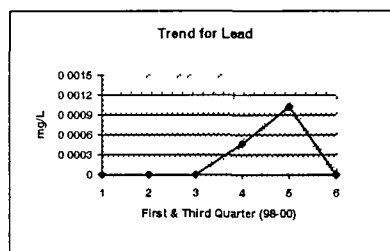
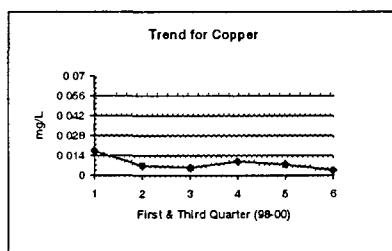


Figure B-1
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Well Name 4MW-1

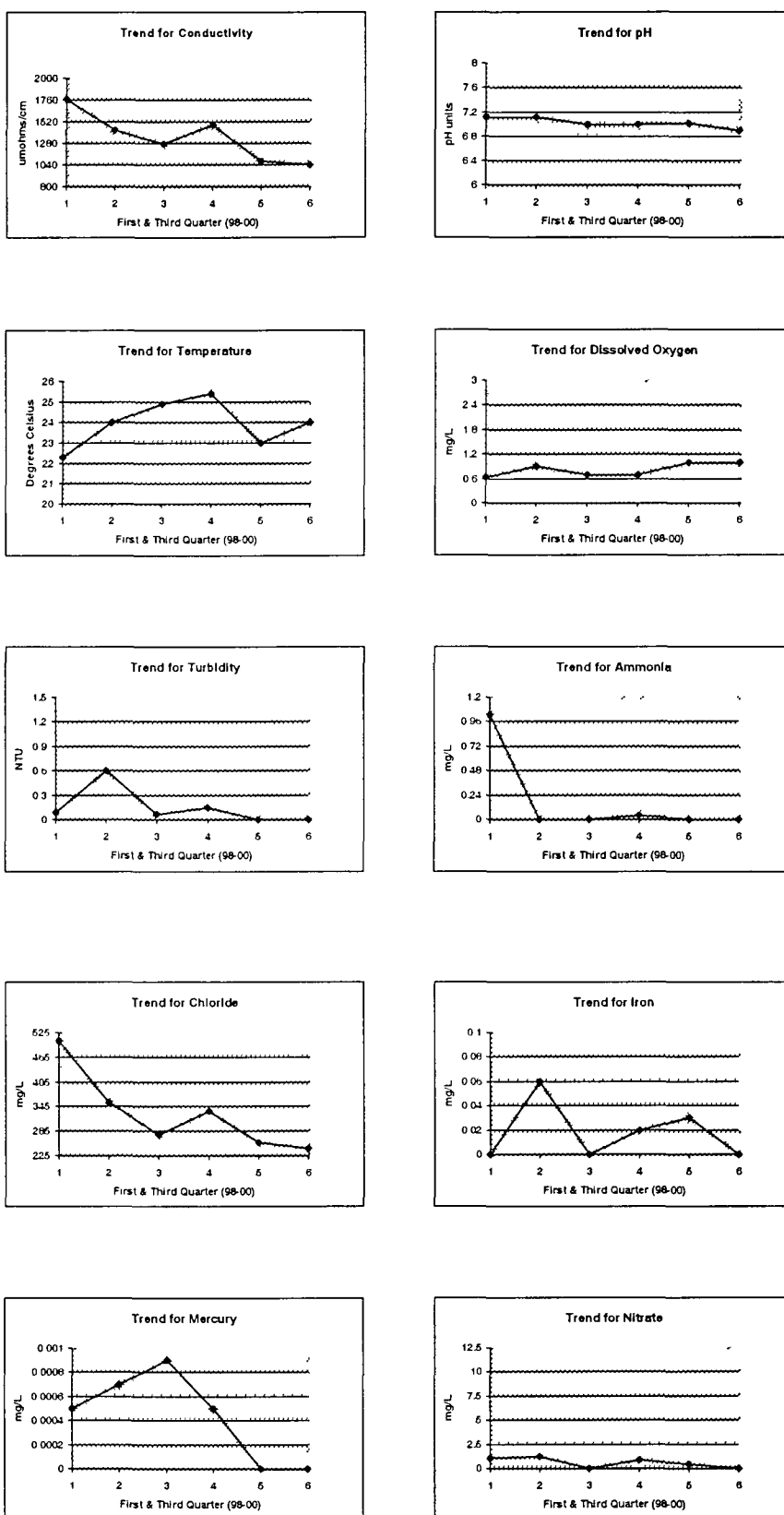
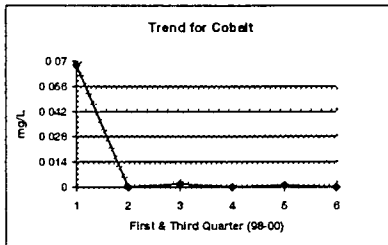
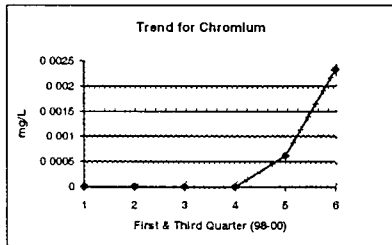
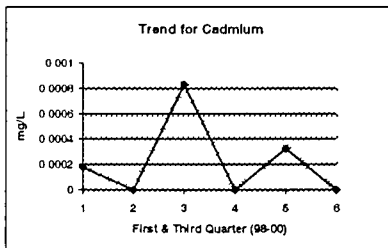
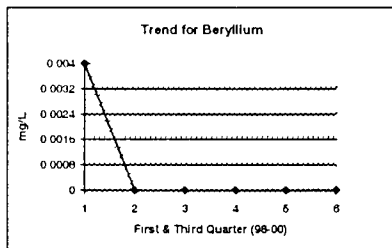
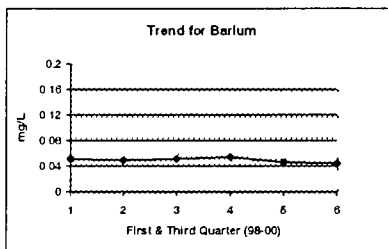
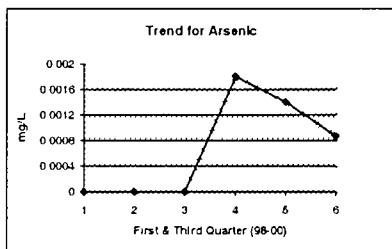
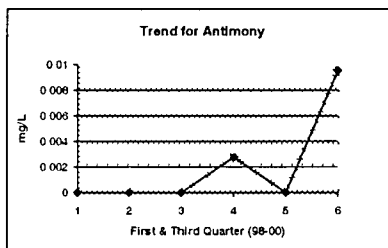
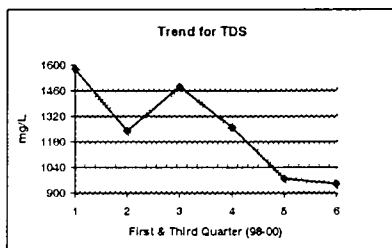
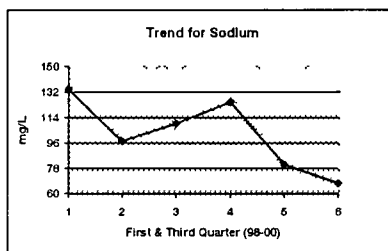
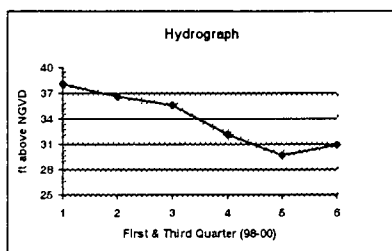


Figure B-2
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Well Name 4MW-1



Well Name 4MW-1

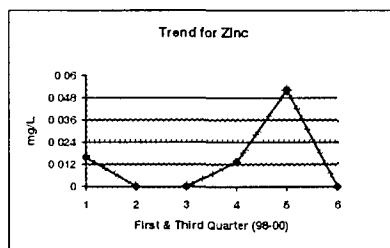
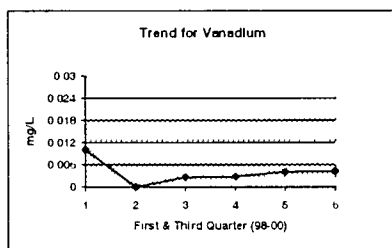
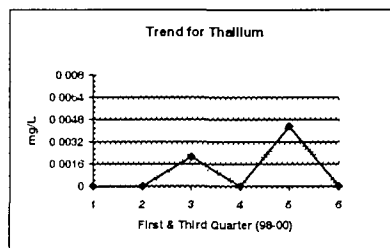
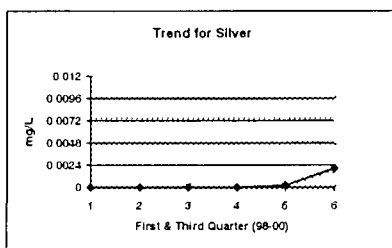
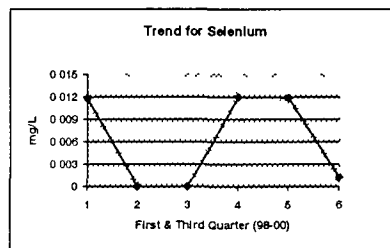
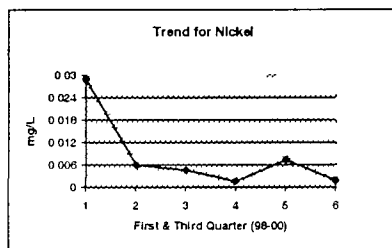
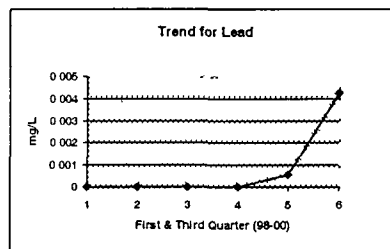
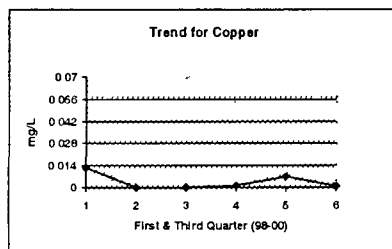


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Well Name 4MW-2

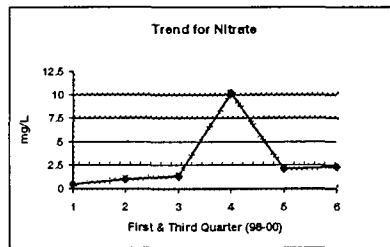
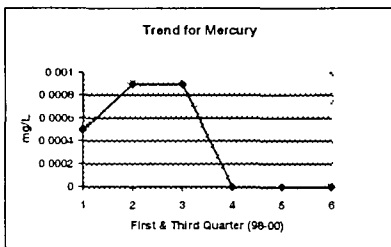
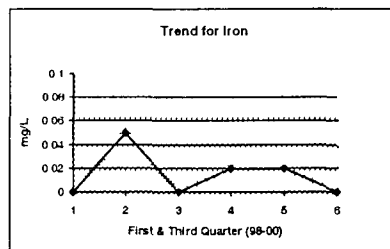
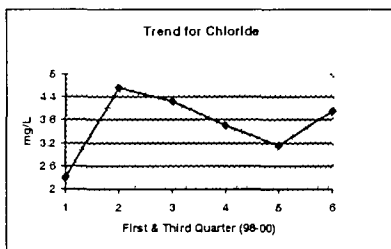
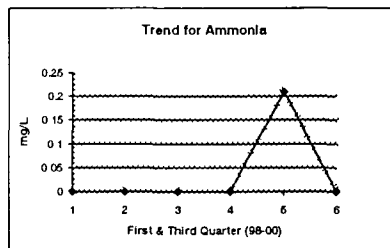
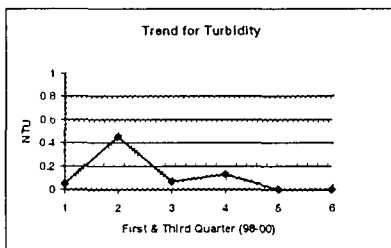
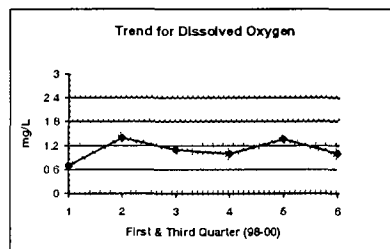
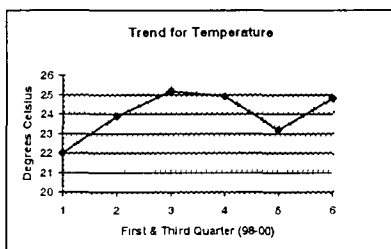
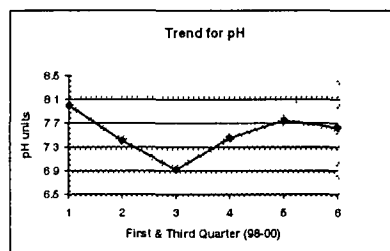
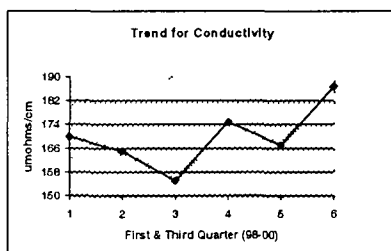
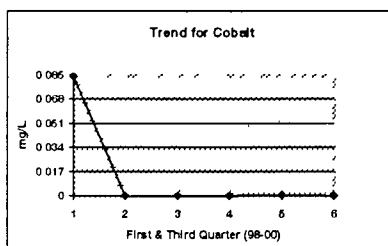
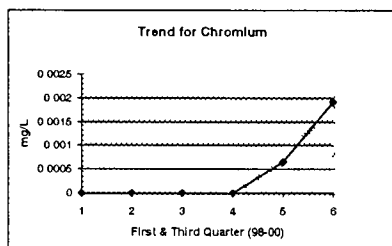
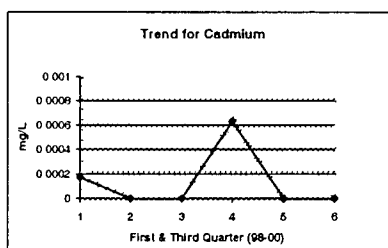
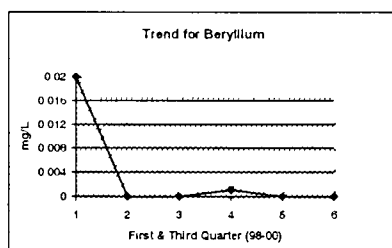
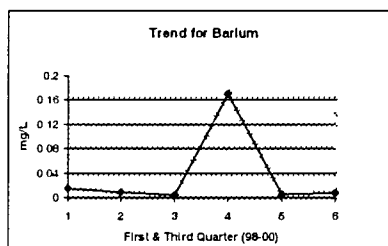
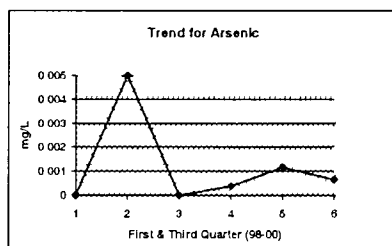
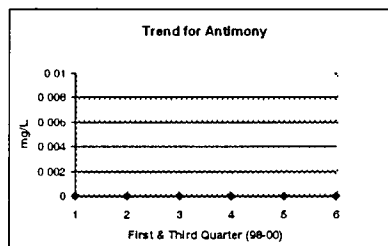
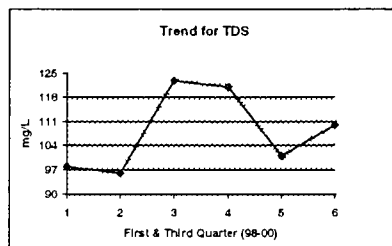
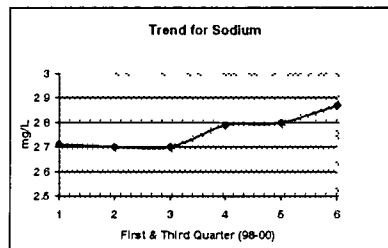
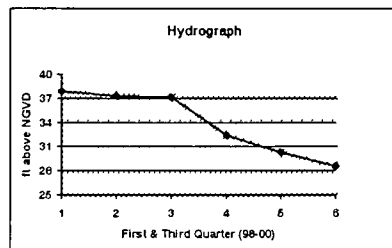


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Well Name 4MW-2



Well Name 4MW-2

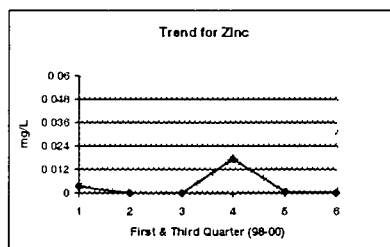
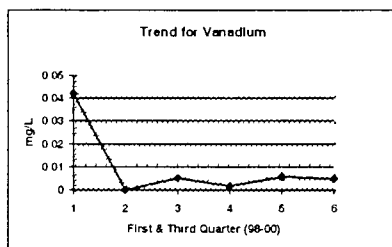
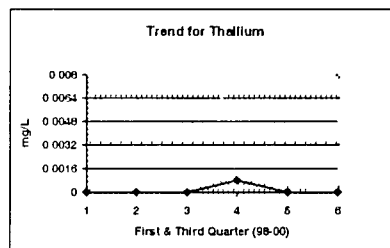
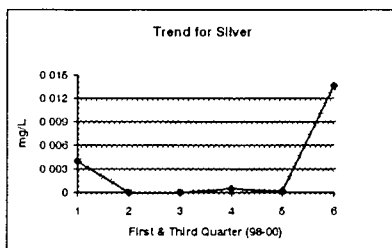
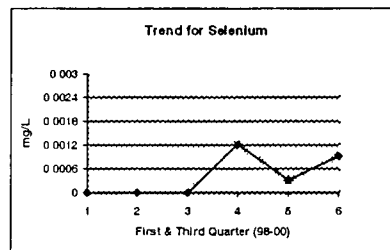
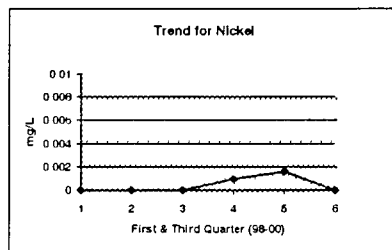
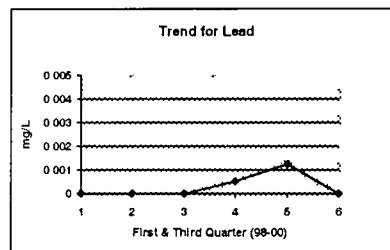
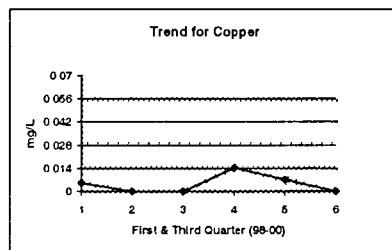


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Well Name 4MW-4

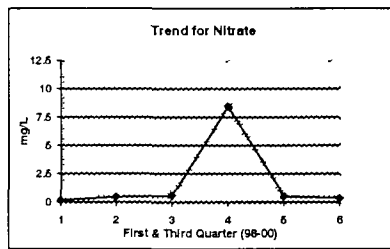
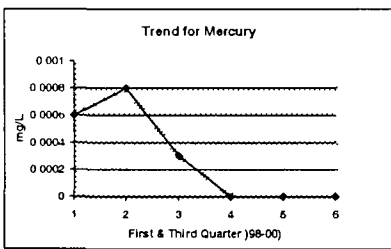
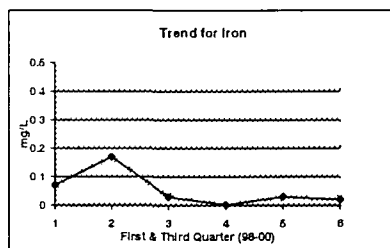
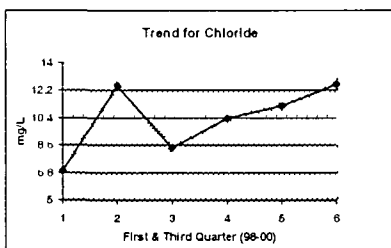
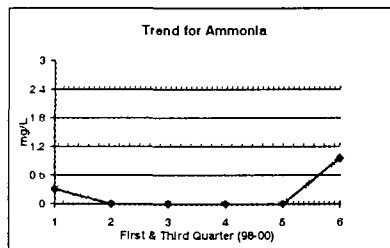
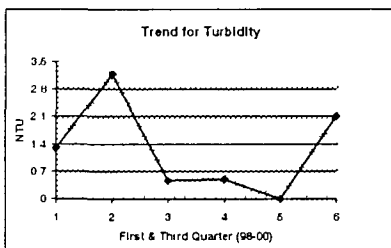
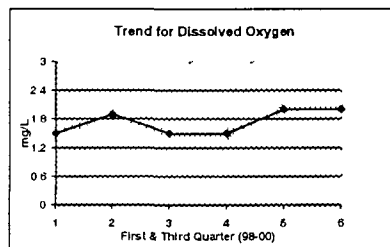
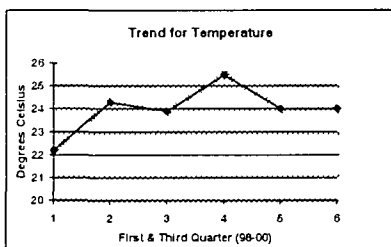
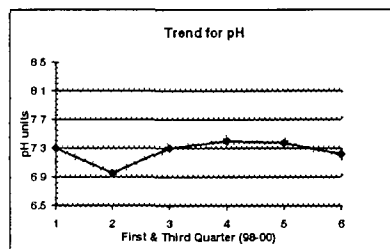
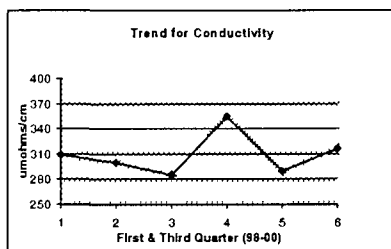


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Well Name 4MW-4

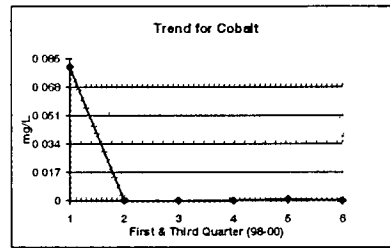
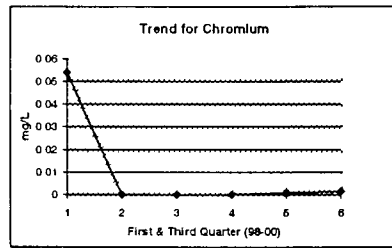
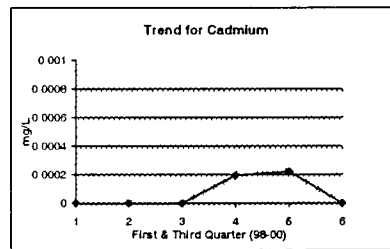
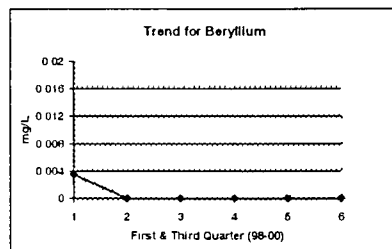
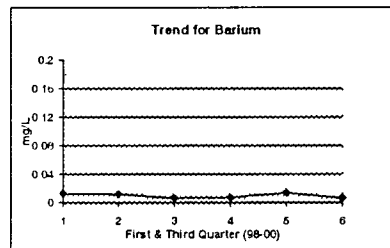
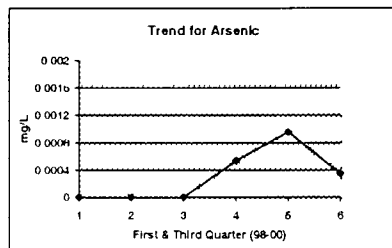
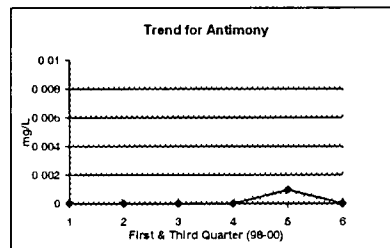
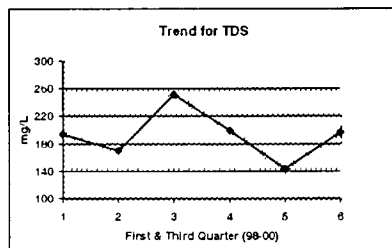
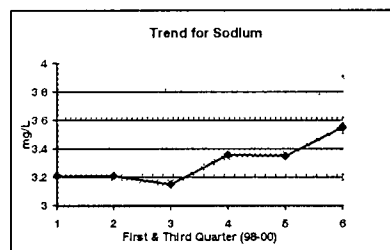
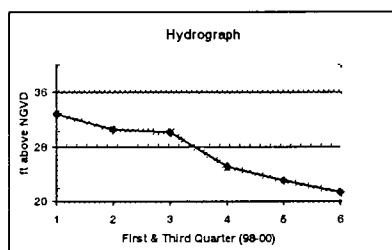


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Well Name 4MW-4

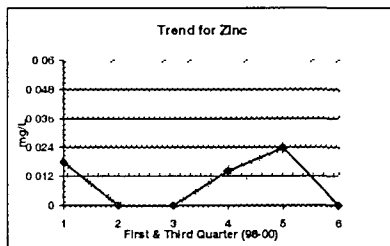
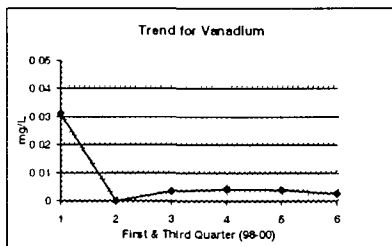
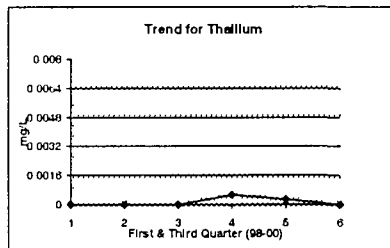
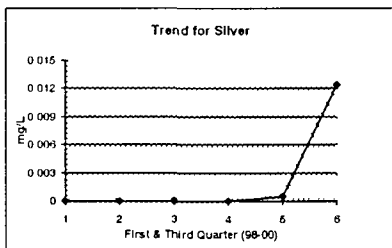
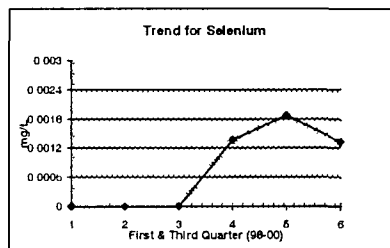
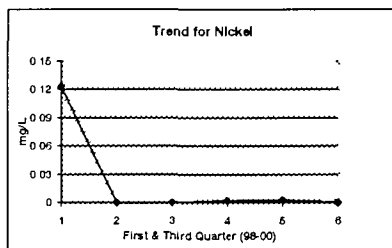
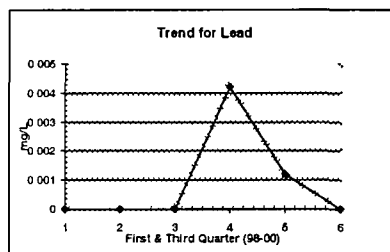
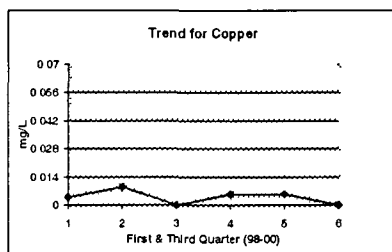


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Well Name 4MW-5

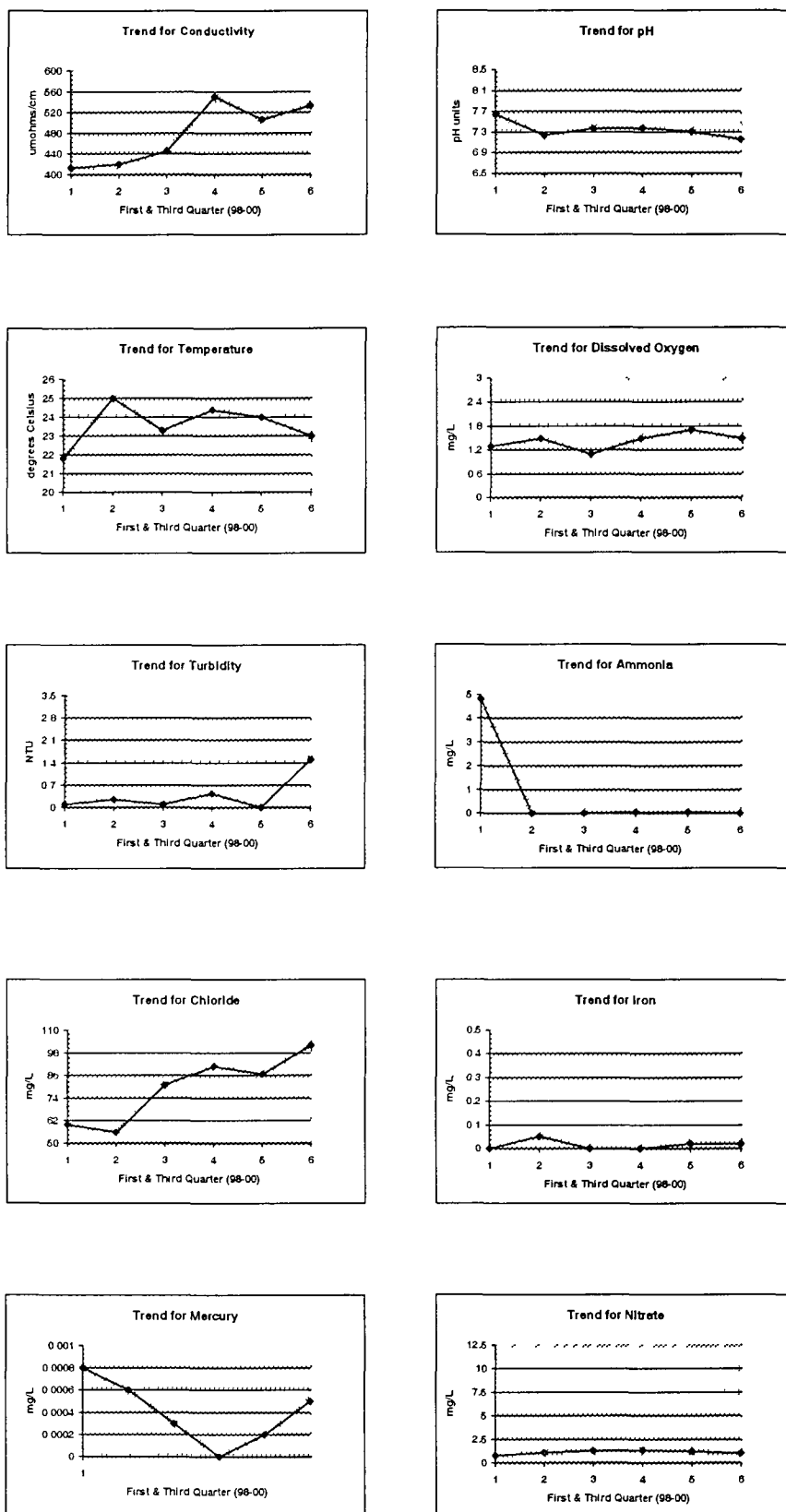


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Well Name 4MW-5

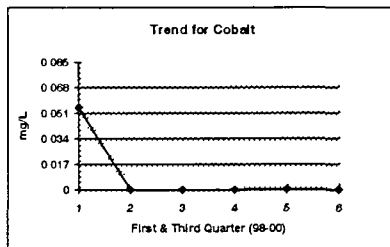
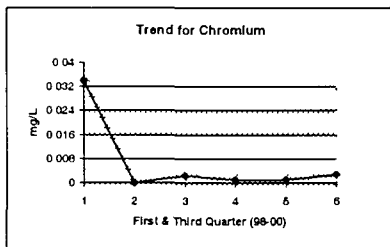
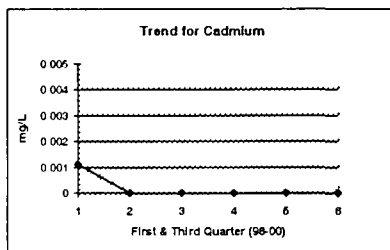
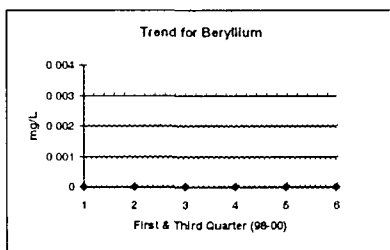
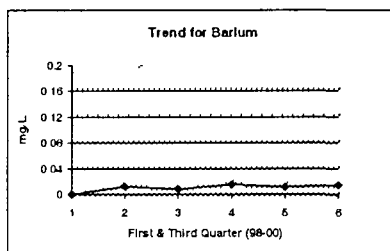
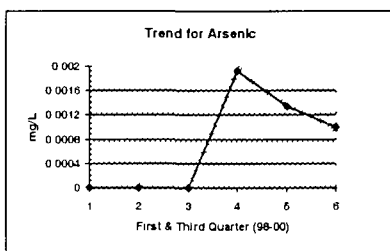
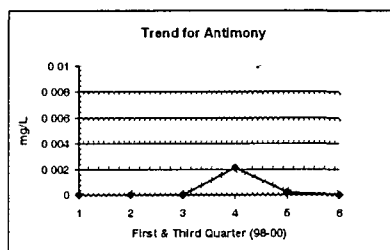
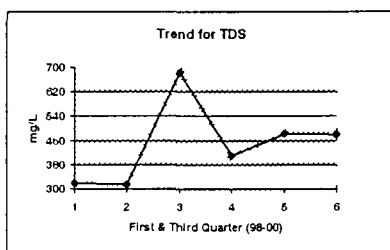
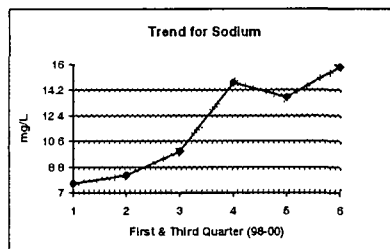
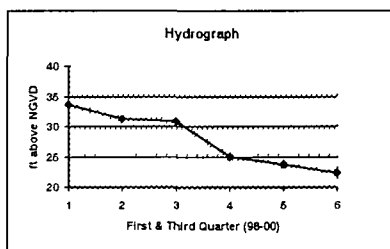


Figure B-5
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Well Name 4MW-5

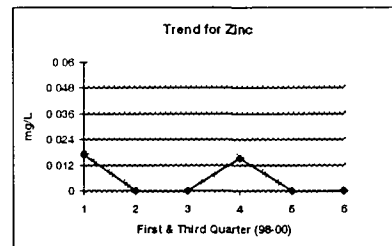
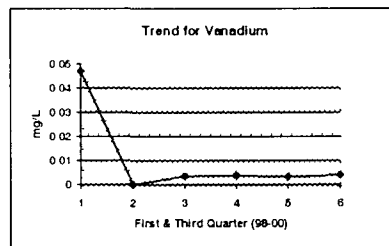
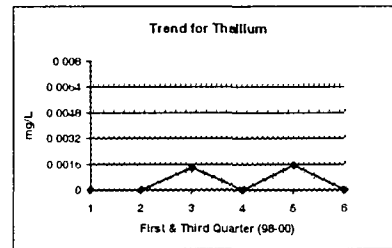
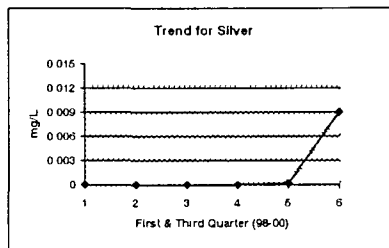
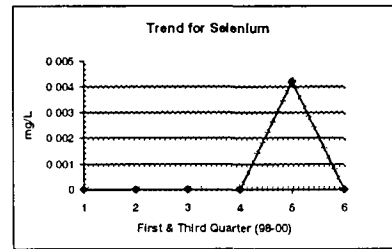
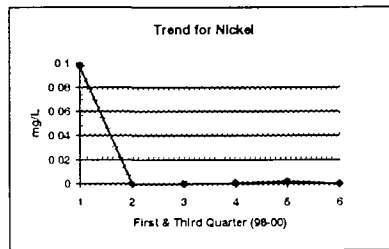
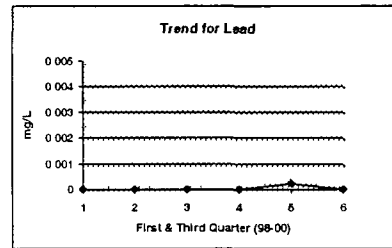
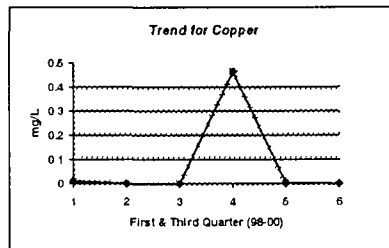


Figure B-5
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Well Name 4MW-6

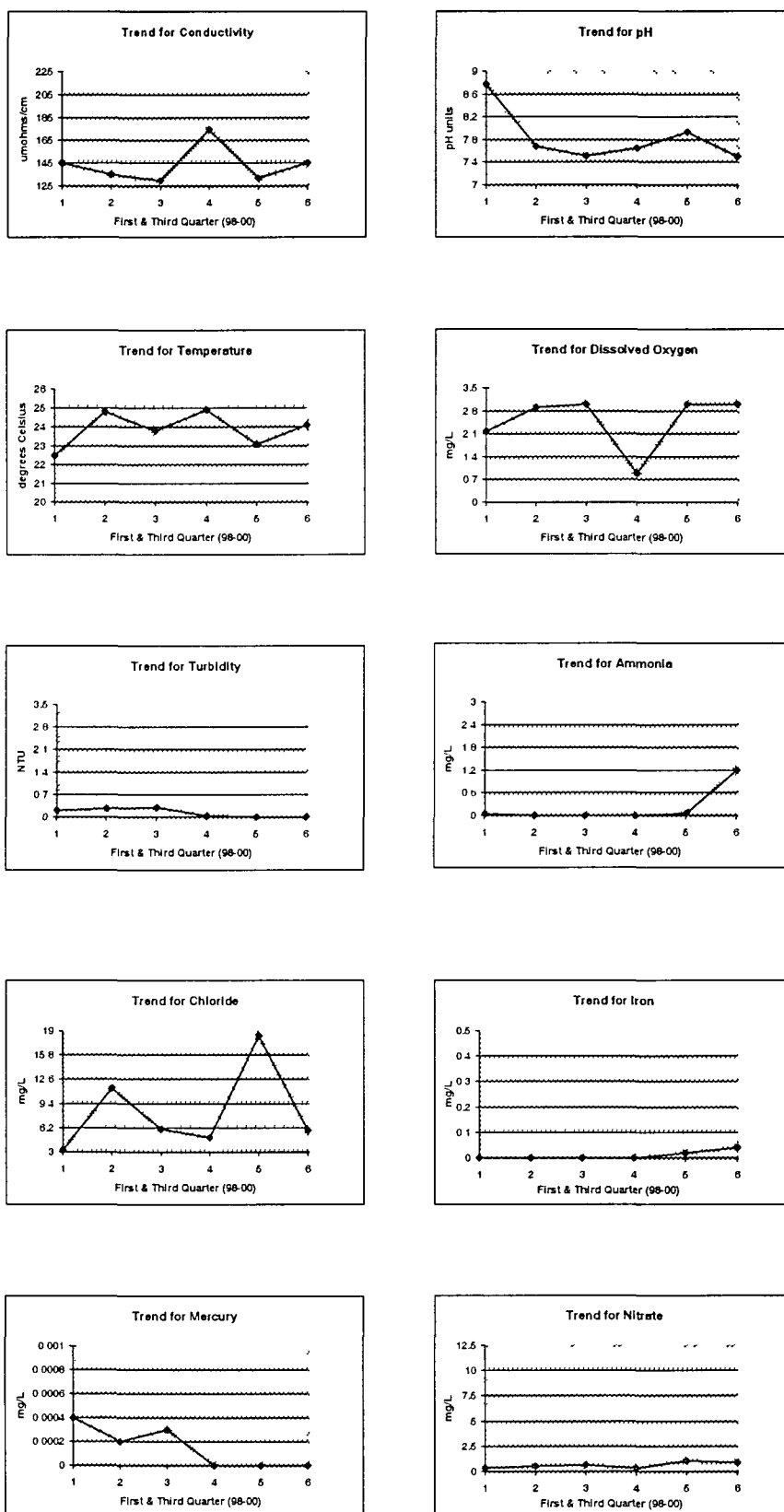
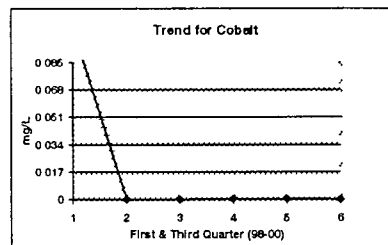
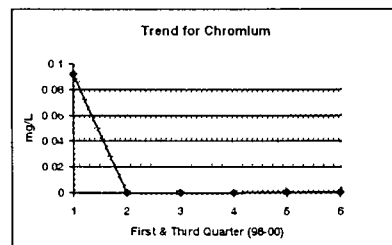
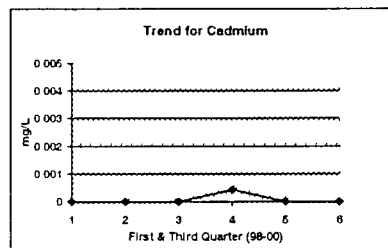
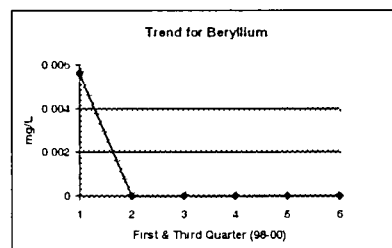
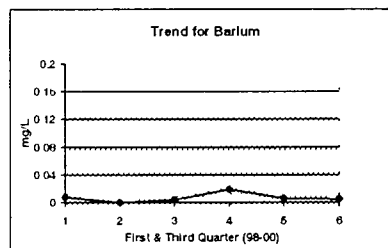
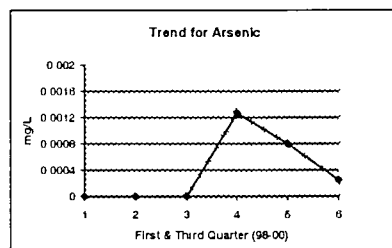
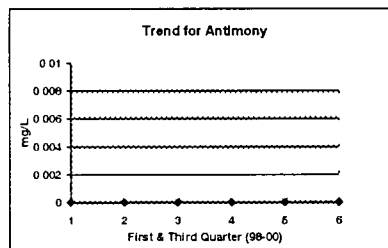
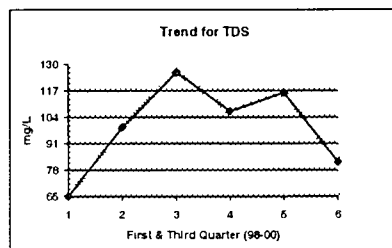
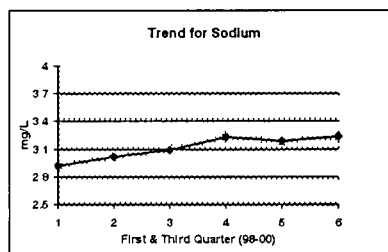
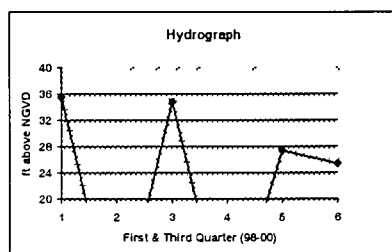


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Well Name 4MW-6



Well Name 4MW-6

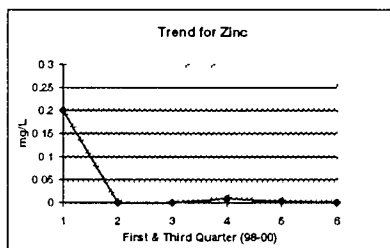
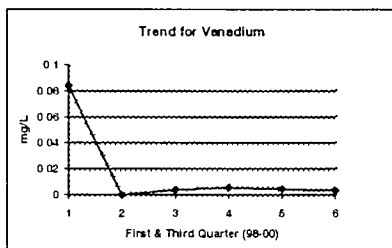
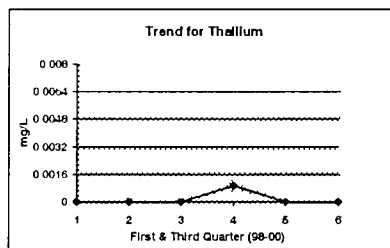
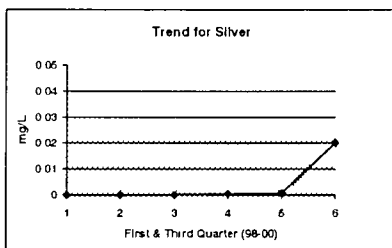
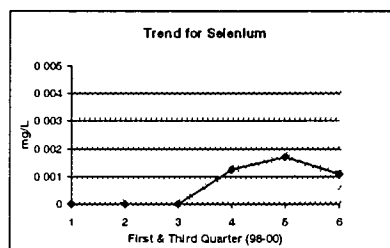
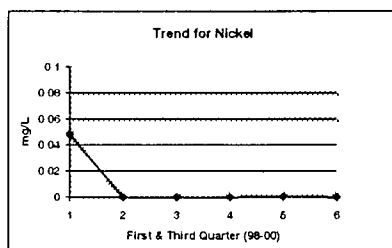
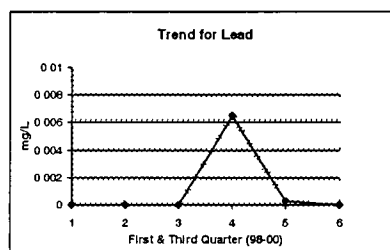
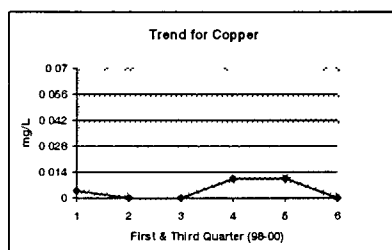


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Well Number 4MW-11D

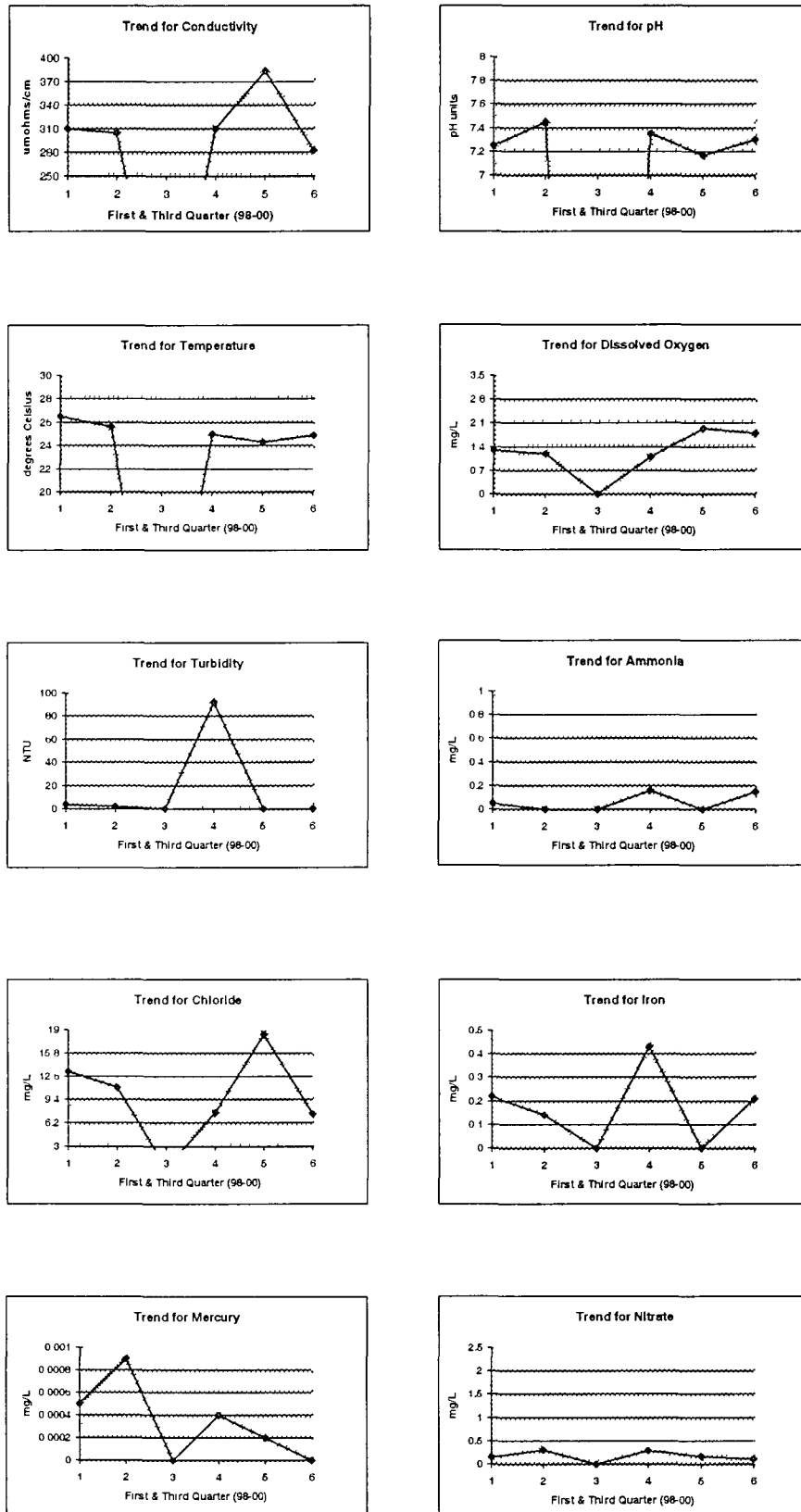
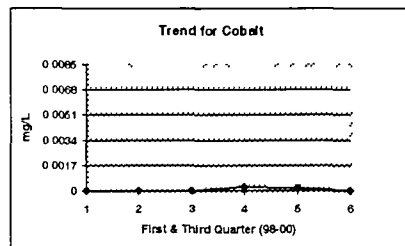
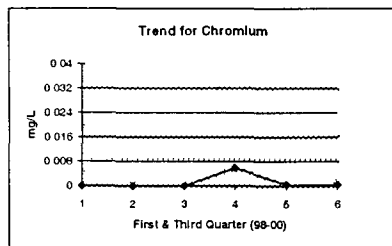
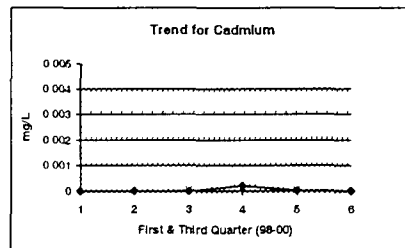
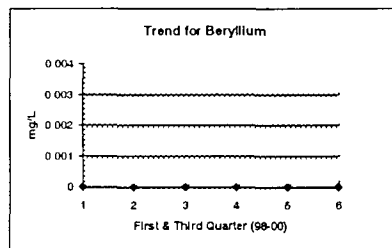
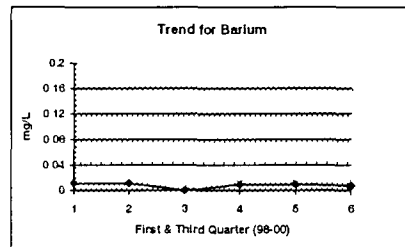
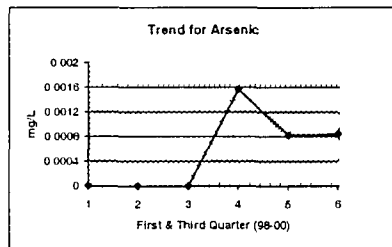
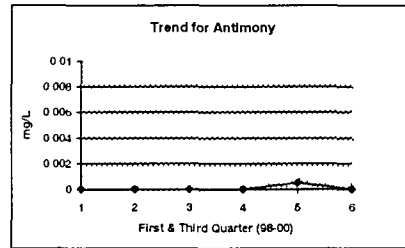
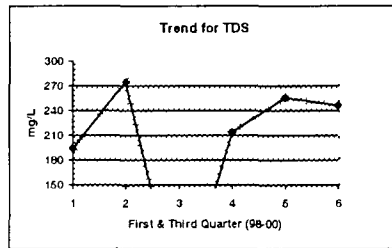
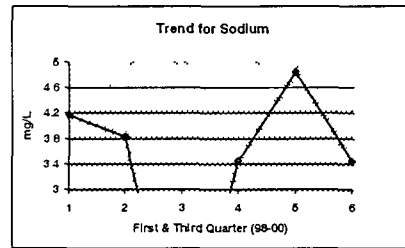
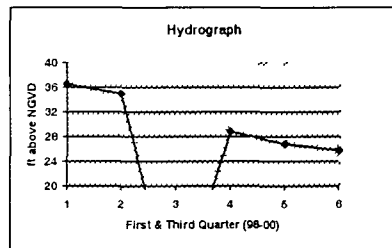
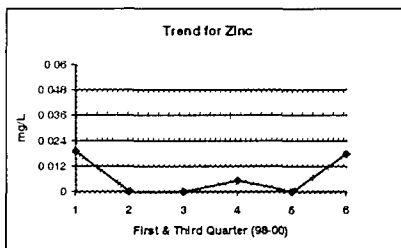
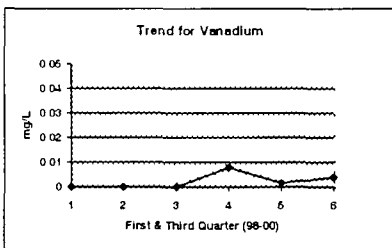
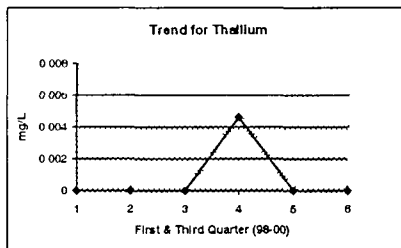
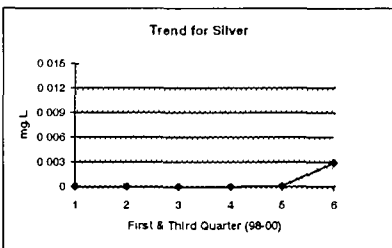
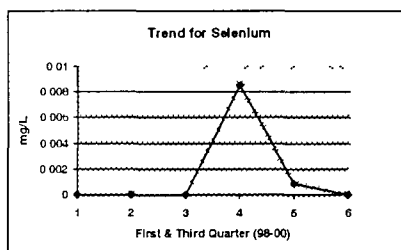
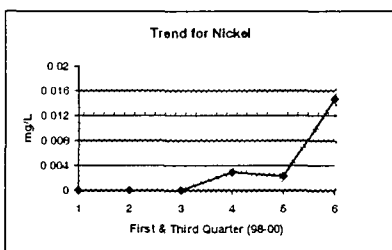
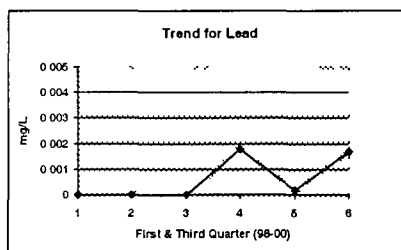
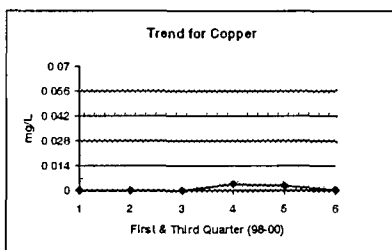


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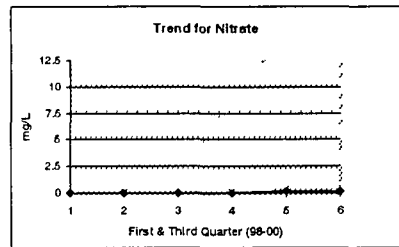
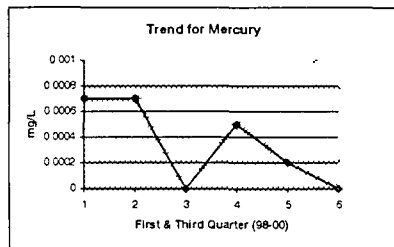
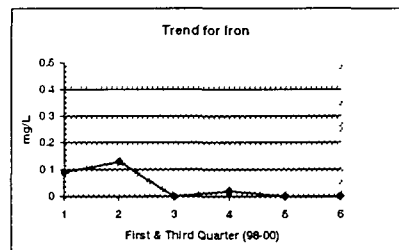
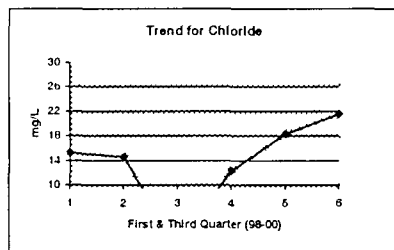
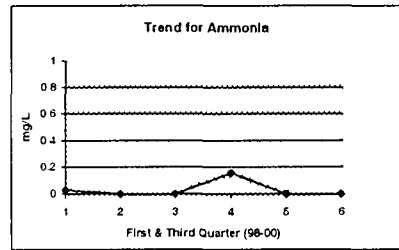
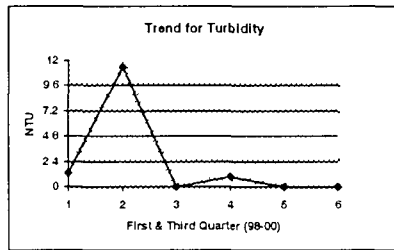
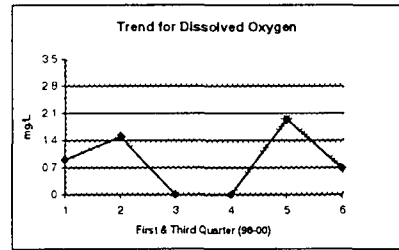
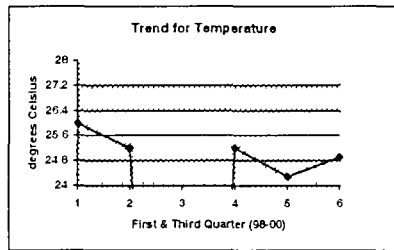
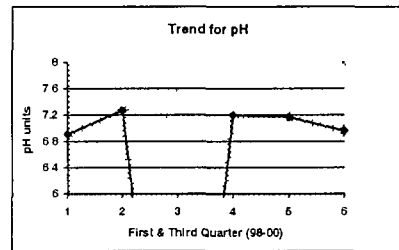
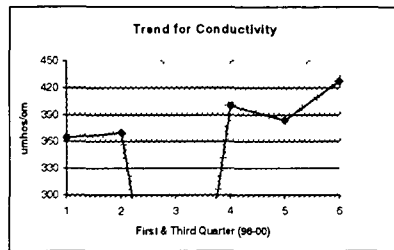
Well Number 4MW-11D



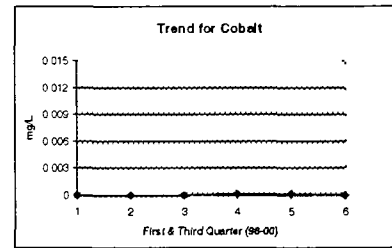
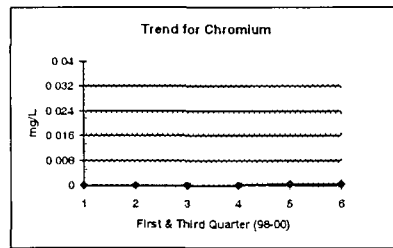
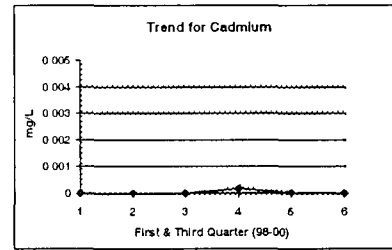
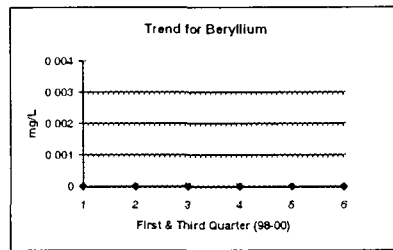
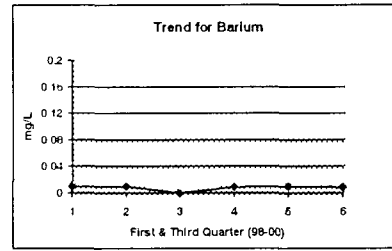
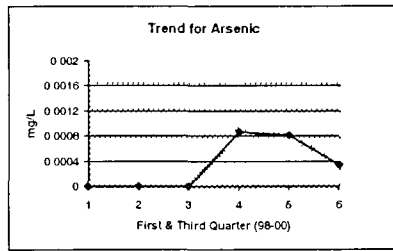
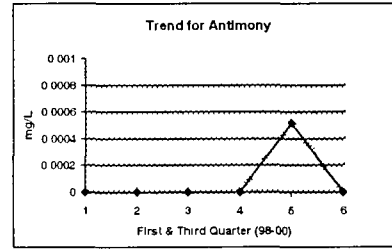
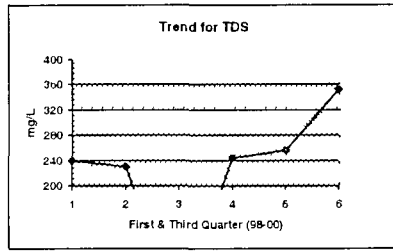
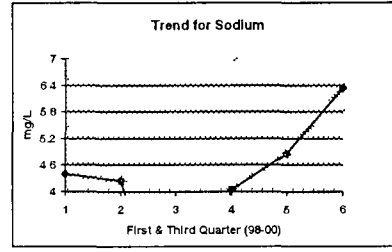
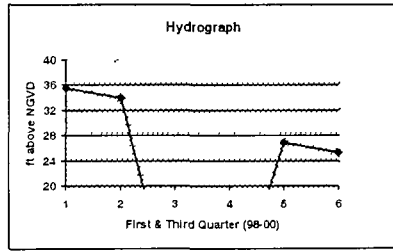
Well Number 4MW-11D



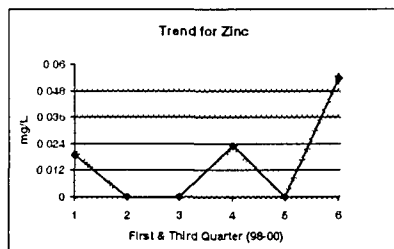
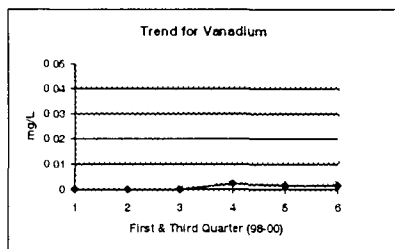
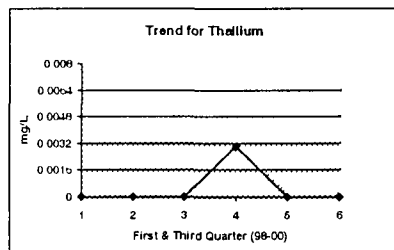
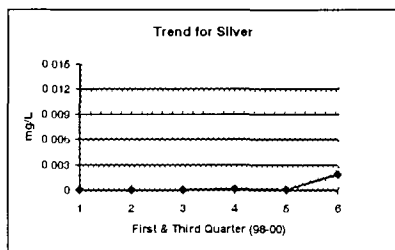
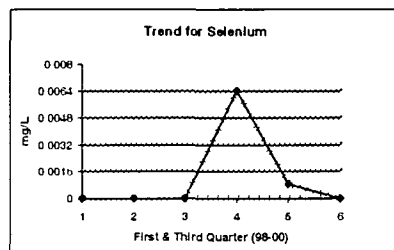
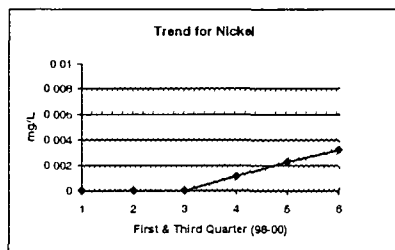
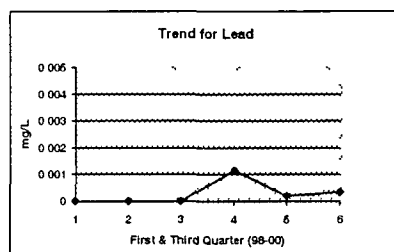
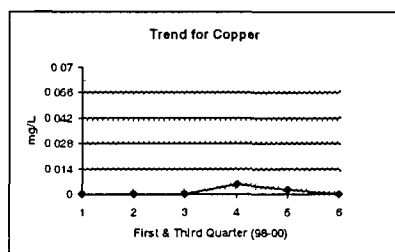
Well Number 4MW-12D



Well Number 4MW-12D



Well Number 4MW-12D



Well Number 4MW-14D

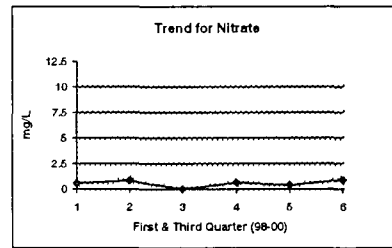
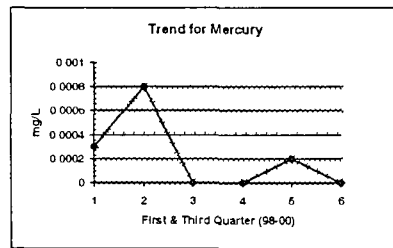
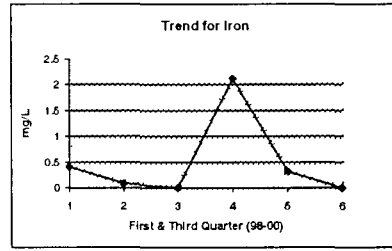
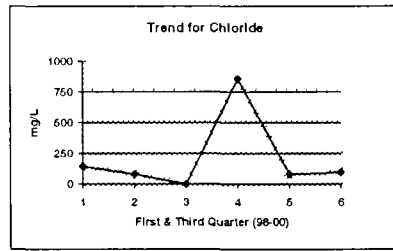
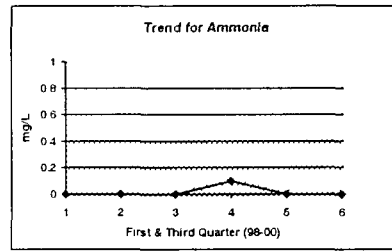
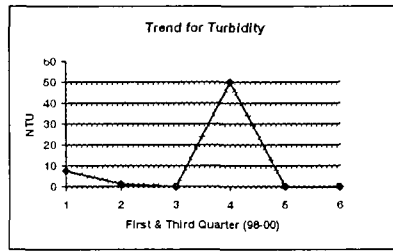
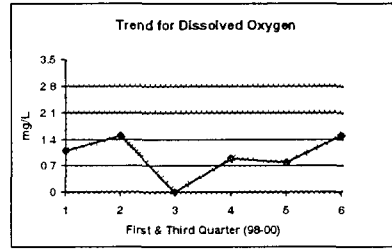
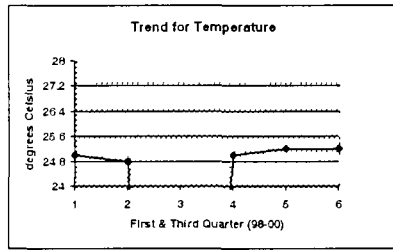
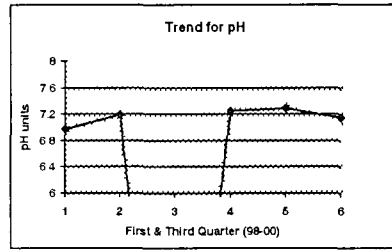
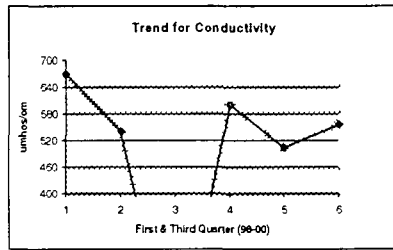
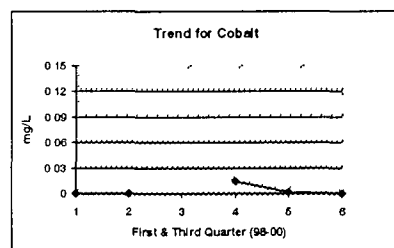
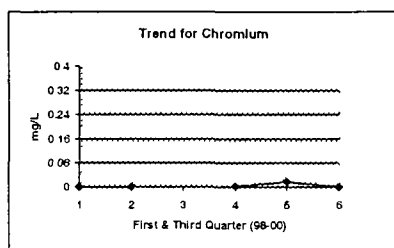
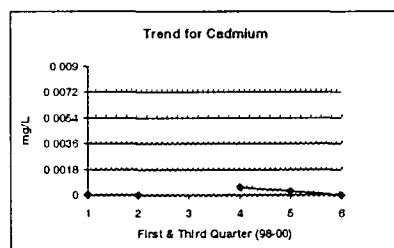
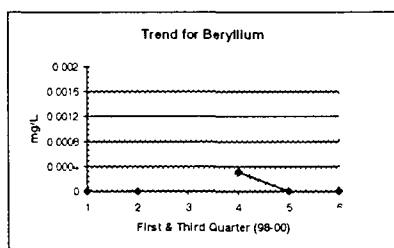
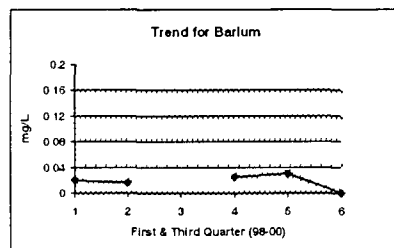
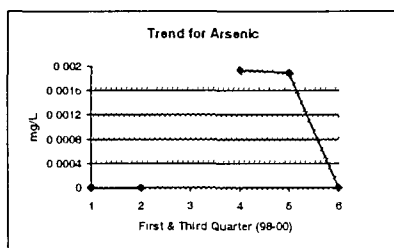
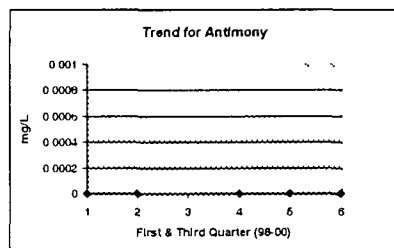
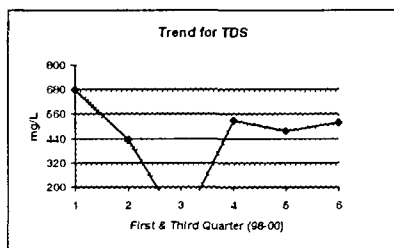
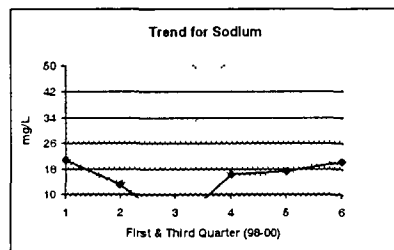
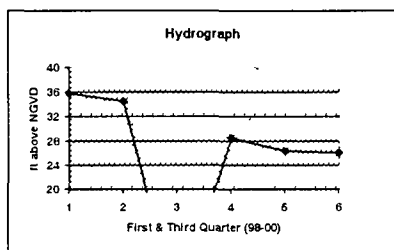
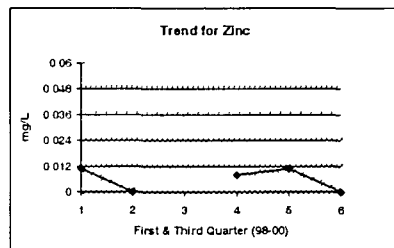
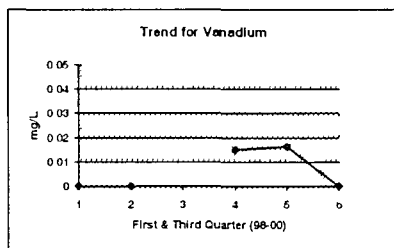
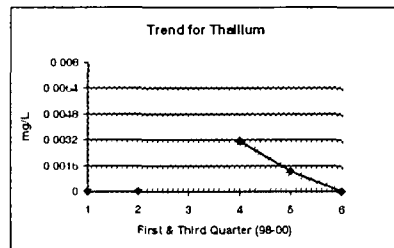
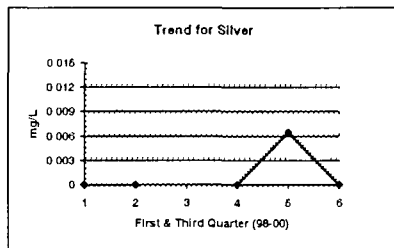
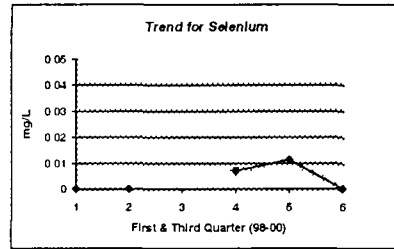
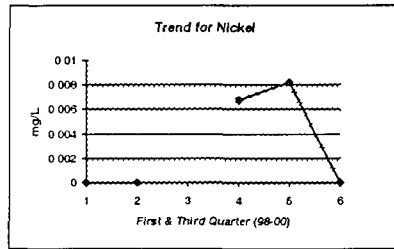
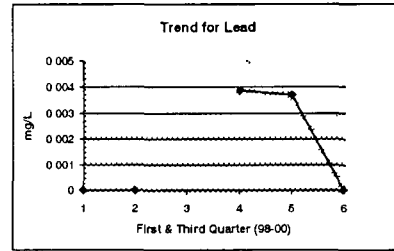
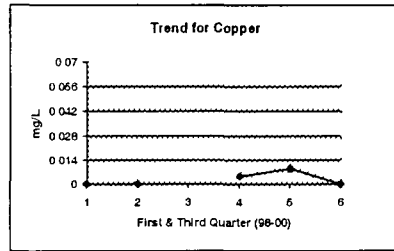


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Well Number 4MW-14D



Well Number 4MW-14D



Well Number 4MW-15D

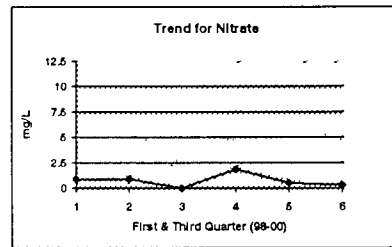
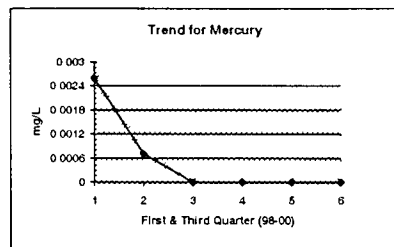
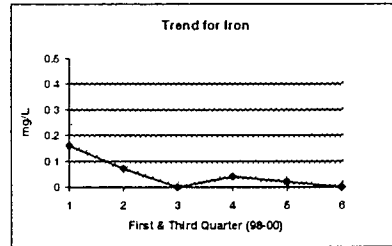
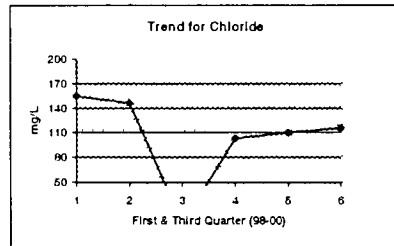
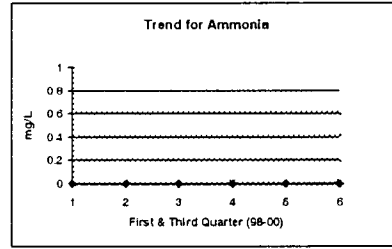
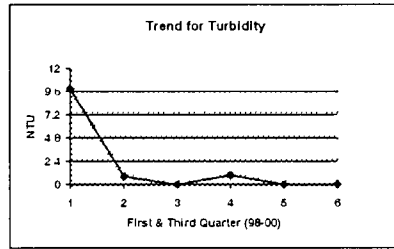
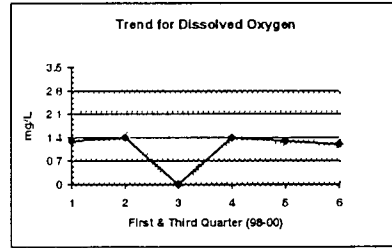
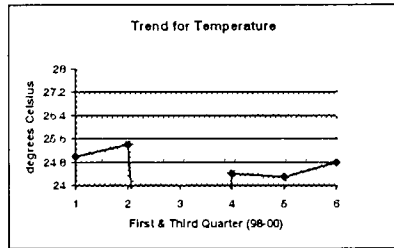
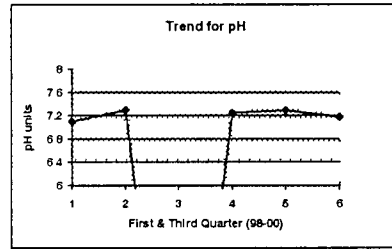
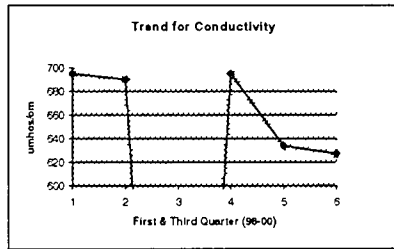
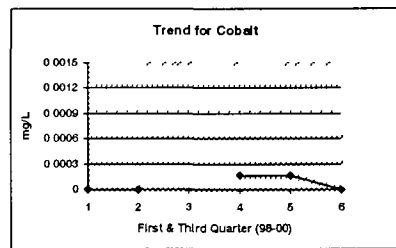
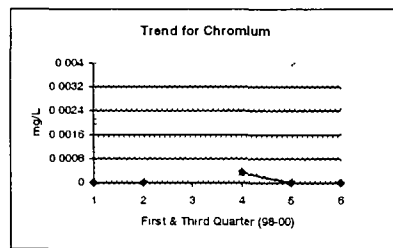
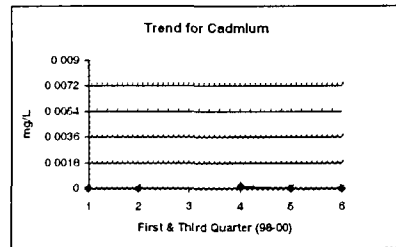
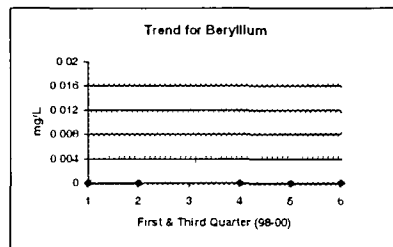
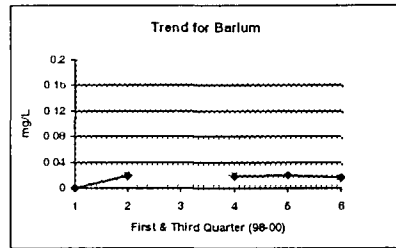
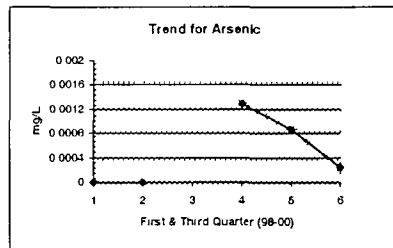
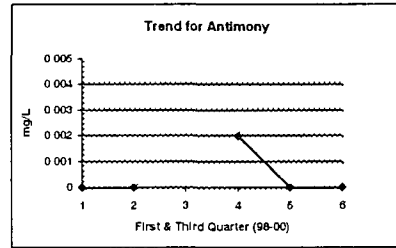
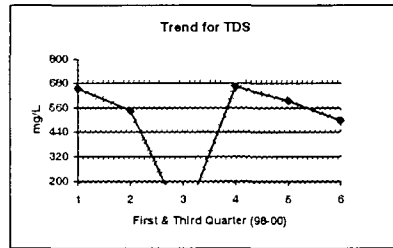
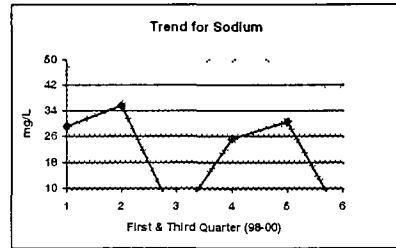
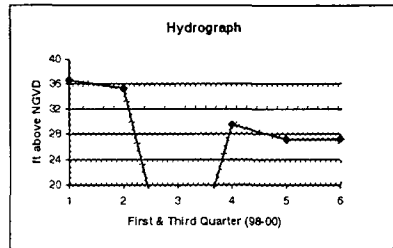


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Well Number 4MW-15D



Well Number 4MW-15D

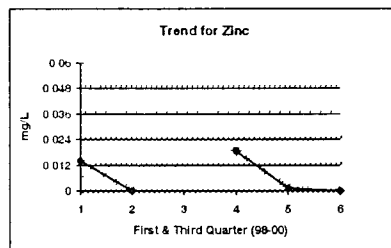
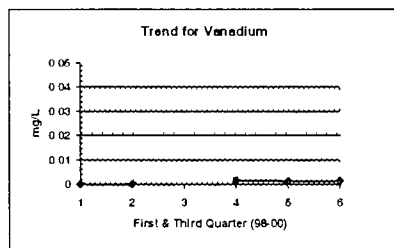
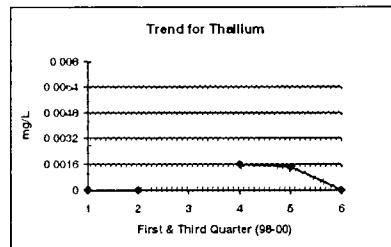
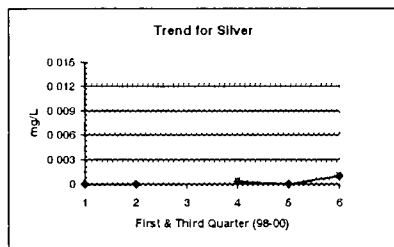
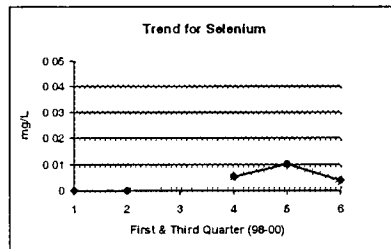
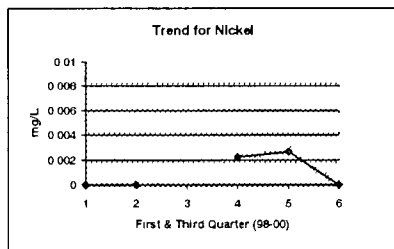
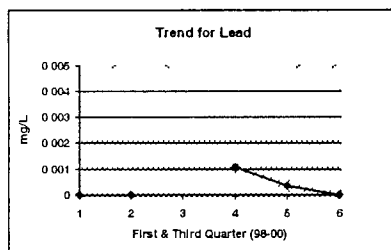
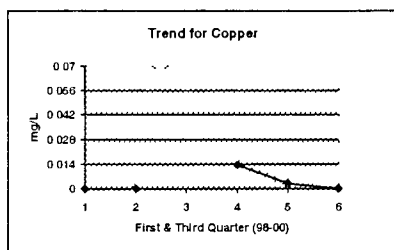


Figure B-10
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Well Number 4MW-16D

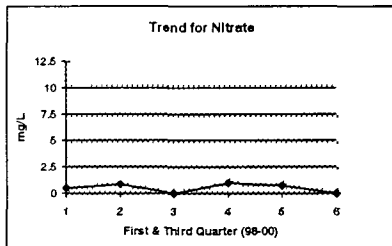
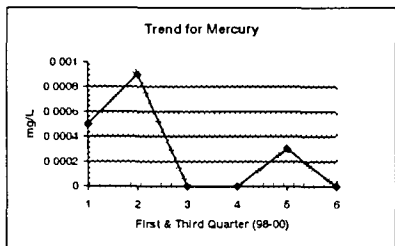
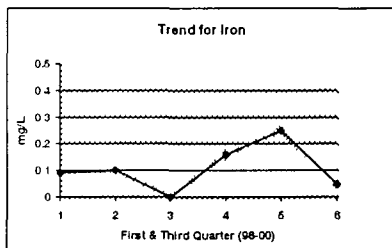
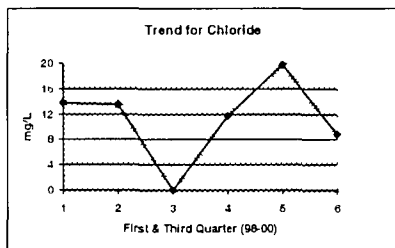
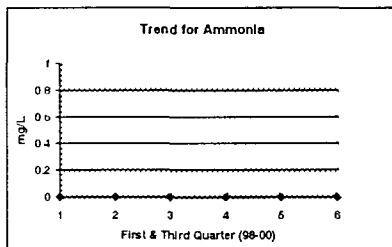
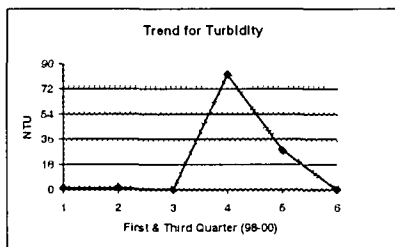
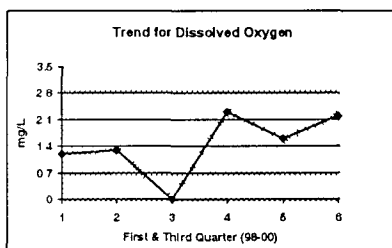
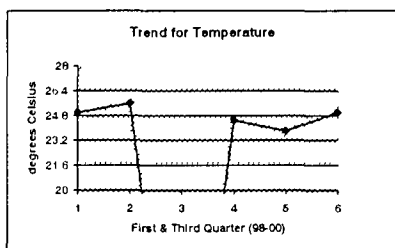
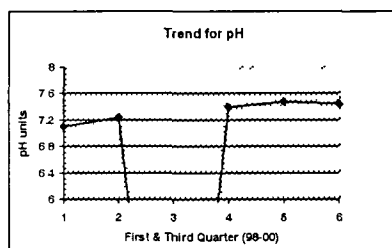
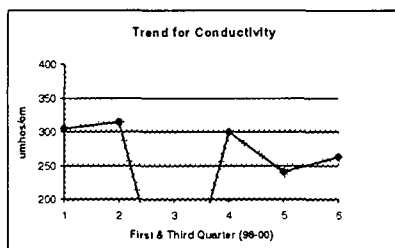


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Well Number 4MW-16D

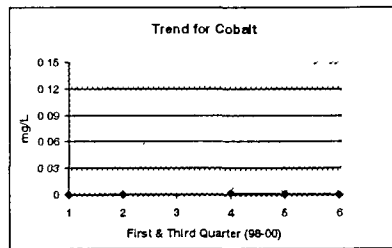
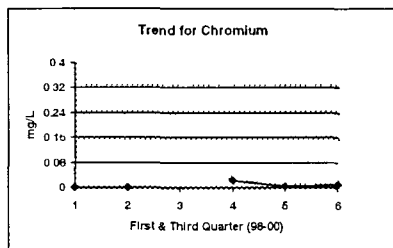
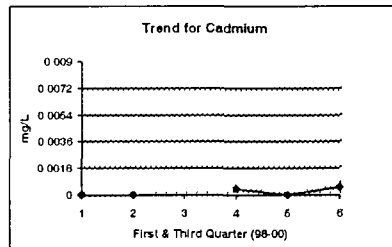
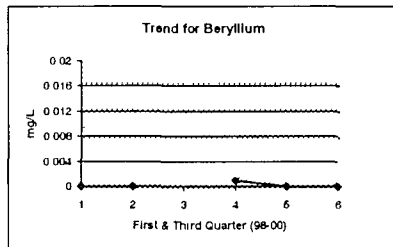
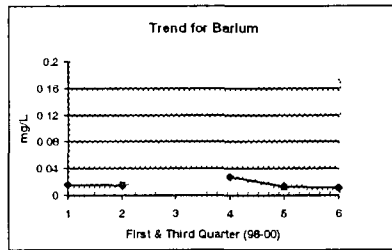
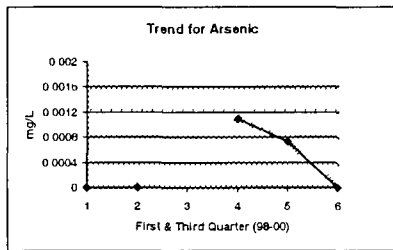
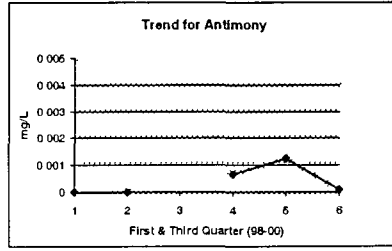
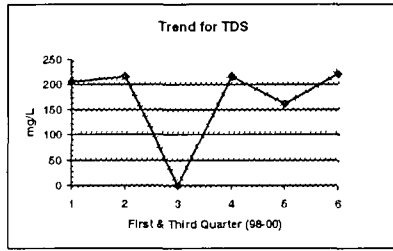
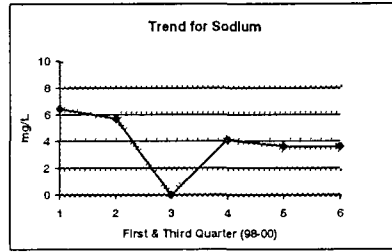
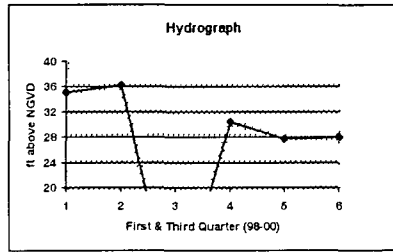


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Well Number 4MW-16D

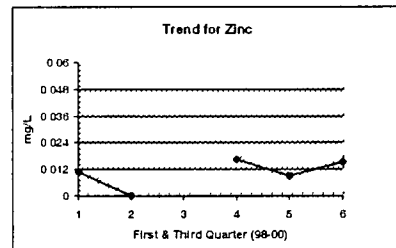
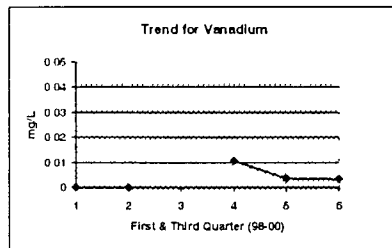
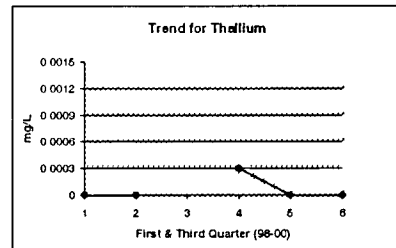
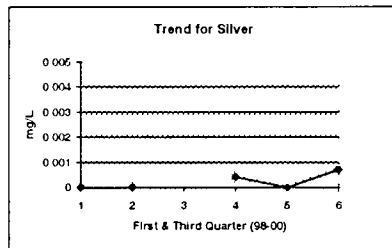
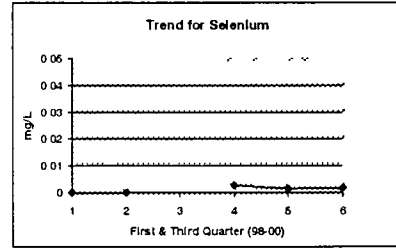
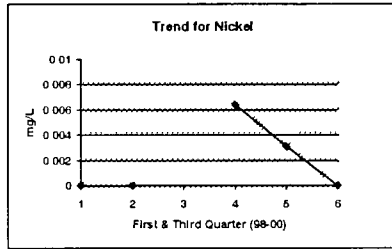
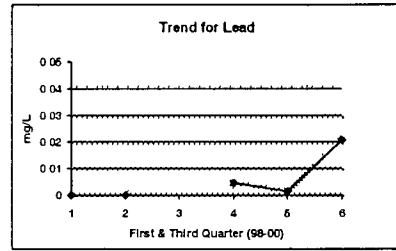
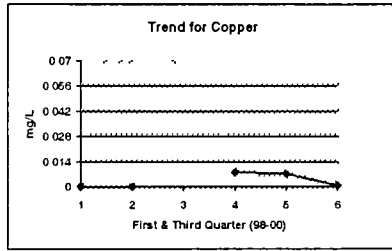


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