

BIOSLURPER STATUS REPORT
FOR AUGUST THROUGH NOVEMBER 1999
NAVAL WEAPONS STATION - EARLE
COLTS NECK, NEW JERSEY

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BIOSLURPER STATUS REPORT
SEPTEMBER THROUGH NOVEMBER 1999
NAVAL WEAPONS STATION - EARLE
COLTS NECK, NEW JERSEY

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1.0 INTRODUCTION

This report summarizes the ongoing bioslurper operations at Site 16 at the Naval Weapons Station-Earle facility. The report summarizes the product recovered, groundwater treated, and the analytical results of the air and effluent discharges from the bioslurper systems. The operation period was from September 9, 1999 through November 26, 1999; however, the recovery numbers for the entire operational time (February 1998 through November 1999) are summarized in the report.

Bioslurper Unit #1 (located adjacent to Building C-16) recovers product from the following product extraction wells: 16MW-13, 16MW-14, 16MW-15, MW16-04, and vapor extraction wells: 16MW-22 and 16MW-23. Bioslurper Unit #2 (located north of Building C-50) extracts from 16MW-20, 16MW-16, C17/20MW-07, 16MW-17 and 16MW-19. Figure 1 depicts the locations of the extraction wells and bioslurping systems.

2.0 OPERATIONS AND DIFFICULTIES ENCOUNTERED

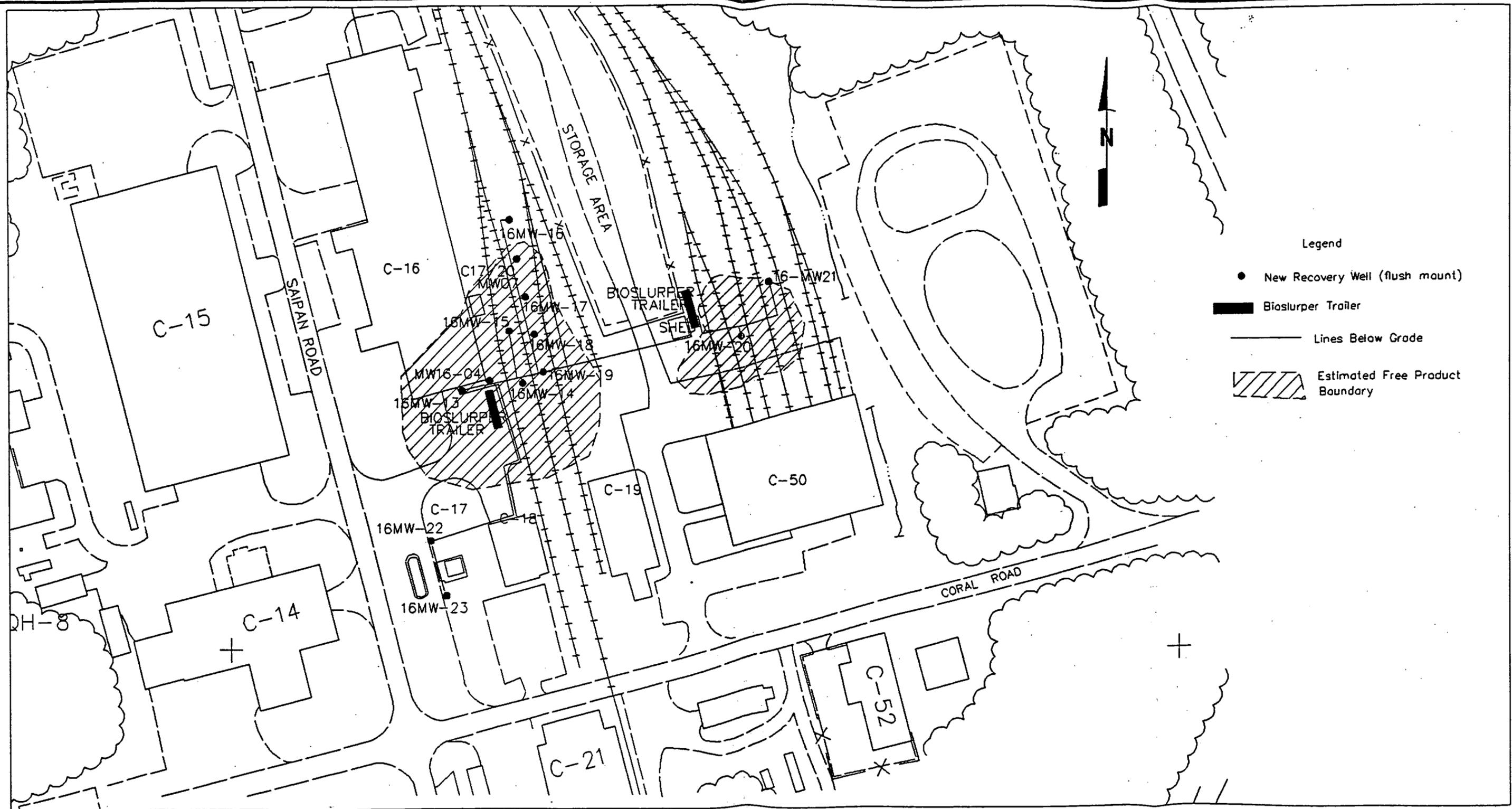
The original scope of work for the initial award was for the installation and operation of the bioslurper systems for a one-year duration. The one-year period of operation was completed at the end of May 1999. The systems were officially turned off June 9, 1999.

Additional funding was awarded, but the Navy did not want the systems re-started until an independent evaluation of the bioslurper systems was conducted. June through August were characterized by low rainfall, and water elevations across the site were lower due to the drought-type conditions over the summer. Upon consultation with the Navy, the systems were operated intermittently from August 17, 1999 through September 9, 1999, in order to remove product in the wells while the water table elevation was lower. At the Navy's request, the systems were turned off September 9, 1999.

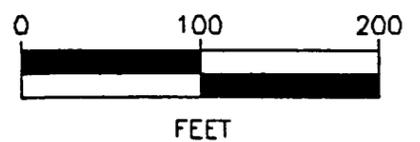
The month of October was characterized by heavy rainstorms, resulting in increased water table elevations and subsequent product thickness measurements in the extraction wells. Upon consultation with the Navy, the systems were restarted in November 1999 to remove the free phase product in the extraction wells.

AUGUST 1999

Bioslurper Unit #1 was operated for a total of 59.5 hours between August 17, 1999 and September 9, 1999, and Bioslurper Unit #2 was operated for a total of 43 hours. The total amount of groundwater extracted during this time period was 13,508 gallons, with approximately 48 gallons of free-phase oil removed. Appendix A provides a graphical representation of the amount of oil/groundwater extracted, and the operational hours for each Unit. Table 1 and 2 summarize the product and water extracted from each unit to date.



- Legend
- New Recovery Well (flush mount)
 - Bioslurper Trailer
 - Lines Below Grade
 - ▨ Estimated Free Product Boundary



U.S. Navy RAC
Naval Weapons Station - Earle

Figure 2-1
Recovery Well/ System Layout

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On August 10, 1999, the four clay units and two activated carbon units associated with the Bioslurper Unit #1 groundwater treatment system were vacuumed out and re-bedded. Approximately 40,000 gallons of water was processed through the clay and carbon filters between April 29, 1999 and August 10, 1999, prior to changing the filter media. Both oil/water separators were cleaned out on August 13, 1999. The oily water was transported off site to Lorco Petroleum for recycling.

No operational difficulties were encountered during the operation of the systems from August and September 1999.

NOVEMBER 1999

Bioslurper Unit #1 was operated for a total of 85 hours between November 1, 1999 and December 1, 1999, and Bioslurper Unit #2 was operated for a total of 81 hours. The total amount of groundwater extracted during this time period was 12,352 gallons, with approximately 80 gallons of free-phase oil removed. Appendix A provides a graphical representation of the amount of oil/groundwater extracted, and the operational hours for each Unit.

The only operational difficulty encountered during November was an unplanned systems start-up due to a power outage. The NWS-Earle experienced a power outage due to weather-related problems the weekend of November 8, 1999, and the systems were shut down. Upon reactivation of the power, both bioslurpers started up automatically. The start up happened over the weekend, and was not observed until Monday morning by Foster Wheeler. No adverse impact occurred from the unplanned start-up. The system is being re-programmed to eliminate the possibility of unplanned start-ups (re-starts) due to power outages.

3.0 EVALUATION OF SITE CONDITIONS

Water level and product thickness measurements have been obtained periodically from the extraction wells since August 1997 to establish product thickness and groundwater elevation trends. Appendix D provides a tabular and graphical representation of the adjusted water levels and product thickness in the extraction wells. All of the extraction wells contained measurable product, with the exception of 16MW-21. As expected, the vapor extraction wells (16MW-22 and 16MW-23) located near the former gas station, did not contain measurable free-product.

At the beginning of August 1999, the groundwater elevations in the recovery wells were at their lowest elevations of the year. The graphs in Appendix D depict the groundwater elevations of the recovery wells over time. Reduced rainfall in the summer months of 1999 resulted in drought-like conditions, which subsequently lowered the water table elevations. As would be anticipated, the increased rainfall in the Fall of 1999 resulted in

an increase in the water table elevations. The groundwater elevations in the recovery wells rose 0.83 to 2.92 feet between August 3, 1999 and December 1, 1999, with the average elevation rise being 1.73 feet. Product thickness concentrations increased in a number of wells with a rise of the water table.

The bioslurper systems were shut down from September 9, 1999 to November 1, 1999 at the request of the Navy. Groundwater elevation and product thickness data were obtained from the recovery wells during the period in which the systems were shut down. Several of the recovery wells continued to exhibit significant adjusted product thickness: 16MW-13 (0.51 ft), 16MW-14 (0.53 ft.), 16MW-04 (0.38 ft.), 16MW-15 (0.57 ft.), and C17/20MW-07 (0.93 ft.).

4.0 PRODUCT RECOVERY DATA

Table 1 summarizes the amount of free-phase oil recovered from the Bioslurper Extraction Units. Appendix A provides a graphical representation of the amount of oil/groundwater extracted and the operational hours of the system. Table 2 summarizes the groundwater extracted/treated to date. Table 3 summarizes the volume of total petroleum hydrocarbons (TPH) removed via the groundwater treatment component of bioslurper systems. Table 4 summarizes the volume of TPH removed via the air extraction component of bioslurper systems. The TPH removal rate for the groundwater and air discharges was calculated using laboratory analytical data and total flow rates for the specific media.

5.0 EFFLUENT AND AIR ANALYSIS

The extracted groundwater effluent and the air discharges from the bioslurper units are routinely sampled to ensure discharges are in compliance with the NJDEP air discharge permit and the requirements set forth by the Navy Weapons Station-Earle Sewer Treatment Plant. The air discharge is sampled for total volatile organics (including benzene) and total petroleum hydrocarbons (TPH). Appendix B summarizes the analytical results of the air discharge samples and the permit limits.

The effluent from the bioslurpers shall be analyzed monthly for TPH in order to ensure the discharge is within the NWS-Earle Sewer Treatment Plant's NJPDES Permit. The decrease in the frequency of the effluent analyses from weekly to monthly is a result of one year operational report, which demonstrated a less frequent sampling regime could be used to reduce the O&M costs, but stay within compliance of the discharge requirements.

Two effluent samples were obtained from the two bioslurper units, one prior to treatment and one after the final carbon treatment unit. Table 5 summarizes the TPH results of the effluent samples. Appendix C contains the laboratory analytical results of the effluent samples.

TABLE 1
NAVAL WEAPONS STATION-EARLE BIOSLURPER UNITS
OIL EXTRACTED TO DATE

1998	Free-Phase Oil Extracted								
	February (gallons)	March (gallons)	April (gallons)	May (gallons)	August (gallons)	September (gallons)	October (gallons)	November (gallons)	December (gallons)
Bioslurper System #1	400	375	275	300	225	250	250	140	225
Bioslurper System #2	25	50	50	20	55	30	40	20	30
Total	425	425	325	320	280	280	290	160	255

1999	Free-Phase Oil Extracted	Total Free-Product Extracted to Date (gallons)					
	January (gallons)	February (gallons)	March (gallons)	April (gallons)	August (gallons)	November (gallons)	
Bioslurper System #1	220	50	125	65	34	66	3,000
Bioslurper System #2	20	15	15	10	14	14	408
Total	240	65	140	75	48	80	3,408

TABLE 2
NAVAL WEAPONS STATION-EARLE BIOSLURPER UNITS
GROUNDWATER EXTRACTED/TREATED TO DATE

1998	Ground-water Extracted								
	February (gallons)	March (gallons)	April (gallons)	May (gallons)	August (gallons)	September (gallons)	October (gallons)	November (gallons)	December (gallons)
Bioslurper System #1	2,675	26,169	23,898	12,799	16,498	34,612	29,974	20,503	40,611
Bioslurper System #2	5,282	20,586	22,607	6,584	13,537	14,451	27,805	16,196	9,141
T tal	7,957	46,755	46,505	19,383	30,035	49,063	57,779	36,699	49,752

1999	Ground-water Extracted	Ground-water Extracted	Ground-water Extracted	Ground-water Extracted	Ground-water Extracted	Total Ground-water Extracted/ Treated to Date (gallons)
	January (gallons)	February (gallons)	March (gallons)	August (gallons)	November (gallons)	
Bioslurper System #1	35,078	6,536	49,834	7,321	9,011	315,519
Bioslurper System #2	8,843	536	12,956	6,187	3,341	168,052
Total	43,921	7,072	62,790	13,508	12,352	483,571

TABLE 3
NAVAL WEAPONS STATION-EARLE BIOSLURPER UNITS
TOTAL PETROLEUM HYDROCARBONS (TPH) REMOVED VIA GROUNDWATER TREATMENT

1998	TPH Extracted Ground- water Treatment								
	February (pounds)	March (pounds)	April (pounds)	May (pounds)	August (pounds)	September (pounds)	October (pounds)	November (pounds)	December (pounds)
Bioslurper System #1	60.75	125.14	306.42	135.56	47.3	---	175.99	179.16	192.96
Bioslurper System #2	4.25	14.17	32.40	9.61	---	13.99	2.37	4.26	11.48
Total	65.00	139.31	338.82	145.17	47.30	13.99	178.36	183.42	204.44

1999	TPH Extracted Ground- water Treatment	TPH Extracted Ground- water Treatment	TPH Extracted Ground- water Treatment	Extracted Ground- water Treatment	Extracted Ground- water Treatment	Total TPH Extracted via Groundwater to Date
	January (pounds)	February (pounds)	March (pounds)	April (pounds)	November (pounds)	(pounds)
Bioslurper System #1	60.48	56.18	394.28	285.29	0.29	2019.80
Bioslurper System #2	3.84	0.21	29.30	15.20	0.014	141.09
Total	64.32	56.39	423.58	300.49	0.30	2160.89

TABLE 4
NAVAL WEAPONS STATION-EARLE BIOSLURPER UNITS
TOTAL PETROLEUM HYDROCARBONS (TPH) REMOVED VIA AIR EXTRACTION

1998	TPH Removed via Vapor Extraction								
	February (pounds)	March (pounds)	April (pounds)	May (pounds)	August (pounds)	September (pounds)*	October (pounds)	November (pounds)	December (pounds)
Bioslurper System #1	22.4	16.95	36.73	34.37	24.79	0	5.54	201.95	45.52
Bioslurper System #2	4.5	7.7	20.74	9.96	18.89	32.4	16.71	0	2.79
Total	26.9	24.65	57.47	44.33	43.68	32.4	22.25	201.95	48.31

1999	TPH Removed via Vapor Extraction	TPH Removed via Vapor Extraction	TPH Removed via Vapor Extraction	TPH Removed via Vapor Extraction	Total TPH Removed via Vapor Extraction to Date
	January (pounds)	February (pounds)	March (pounds)	November (pounds)	(pounds)
Bioslurper System #1	0	0	no data to date	94.24	482.48
Bioslurper System #2	2.60	1.53	no data to date	18.05	135.87
Total	2.60	1.53		112.29	618.35

TABLE 5
NAVAL WEAPONS STATION-EARLE BIOSLURPER UNITS
TPH EFFLUENT RESULTS

Sample No.	TPH Concentration Prior to Treatment	TPH Concentration After Treatment	TPH Discharge Limit
Bioslurper Unit 1			
16(A)99EW62	55 mg/l		
16(A)99EW63		<0.5 mg/l	10 mg/l
Bioslurper Unit 2			
16(B)99EW46	7.26 mg/l		
16(B)99EW47		<0.5 mg/l	10 mg/l

As indicated by the analytical results, both bioslurper units are operating within the permit requirements established for air and treated water discharge.

6.0 CONCLUSIONS

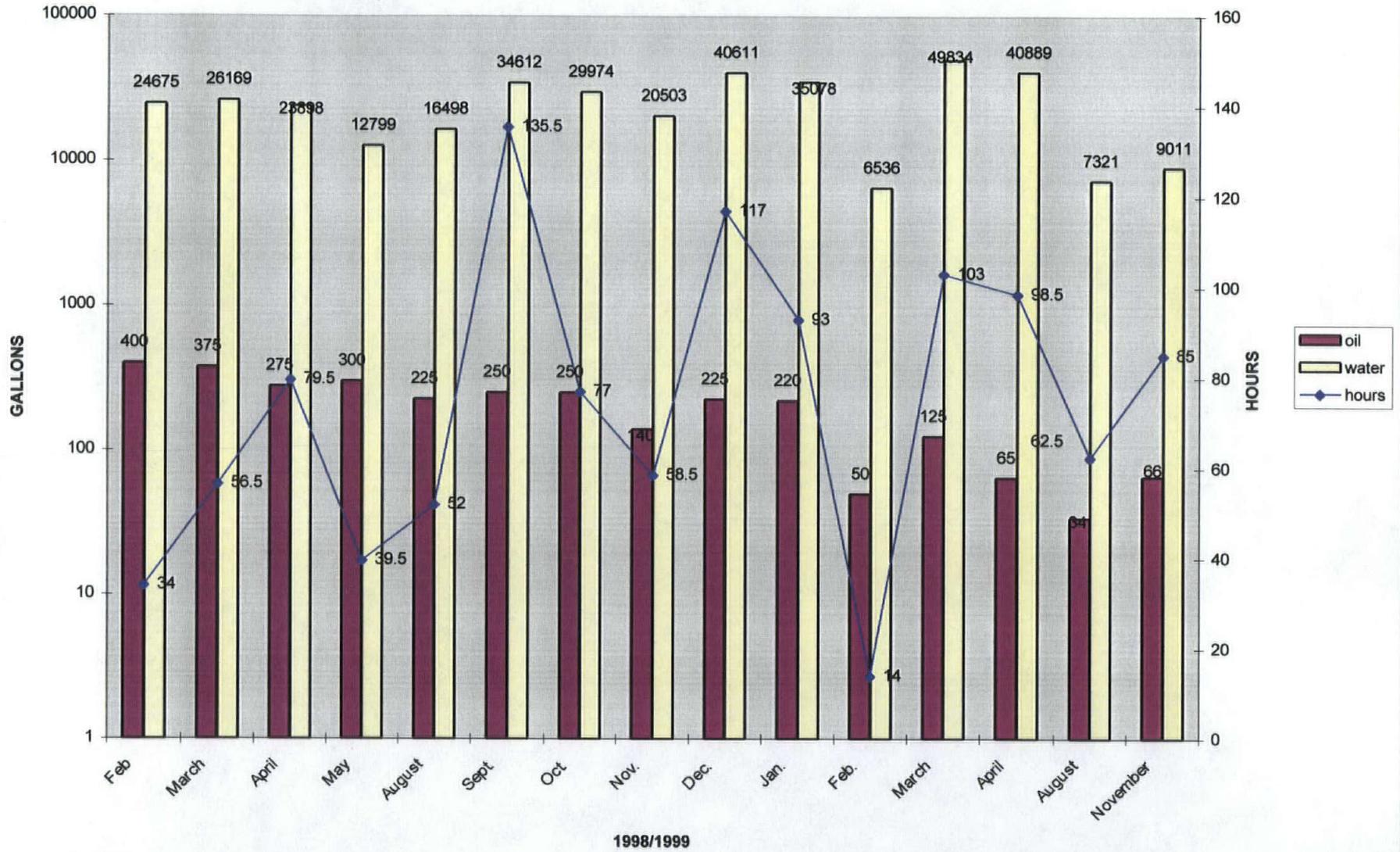
The bioslurper units were operated at a vacuum of between 5 to 10 inches of mercury at each extraction well to extract an average total volume of approximately 0.42 gallons per minute per well in August and November. The systems were only operated one or two days a week to extract the product in the well and minimize the O & M costs. By only operating Bioslurper Unit #1 intermittently, the TPH concentrations of the oil/water separator effluent were the lowest since the initial start-up of the system. The average TPH concentration of the effluent from the oil/water separator of Bioslurper Unit No. 1 was 802 mg/l, while the TPH concentration in November 1999 was 55 mg/l. This fact reinforces the conclusion drawn in the One Year Operational Report; a longer residence time of the extracted water would decrease the TPH concentration of the effluent, and extend the life of the clay and carbon treatment vessels, which in turn decreases the O & M costs. Base on observations of the oil/water separator clarity, the longer the longer the residence time, the clearer the water. Any mechanically emulsified oil appears to settle out over time.

While the product recovery quantities have decreased over the operational time of the bioslurper units, a significant amount of product is still being recovered with the systems. As the time-series graphs in Appendix D depict, the oil thickness in the extraction wells rebound when the systems are turned off for any extended duration. The major concentration of product seems to be concentrated in the vicinity of the southeastern corner of Building C-16. The extraction wells (16MW-13, 16MW-04, 16MW-14, 16MW-15 and C17/20MW-07) in this area have consistently yielded the largest quantities of product, and have also demonstrated the most "rebound" after the systems have been turned off.

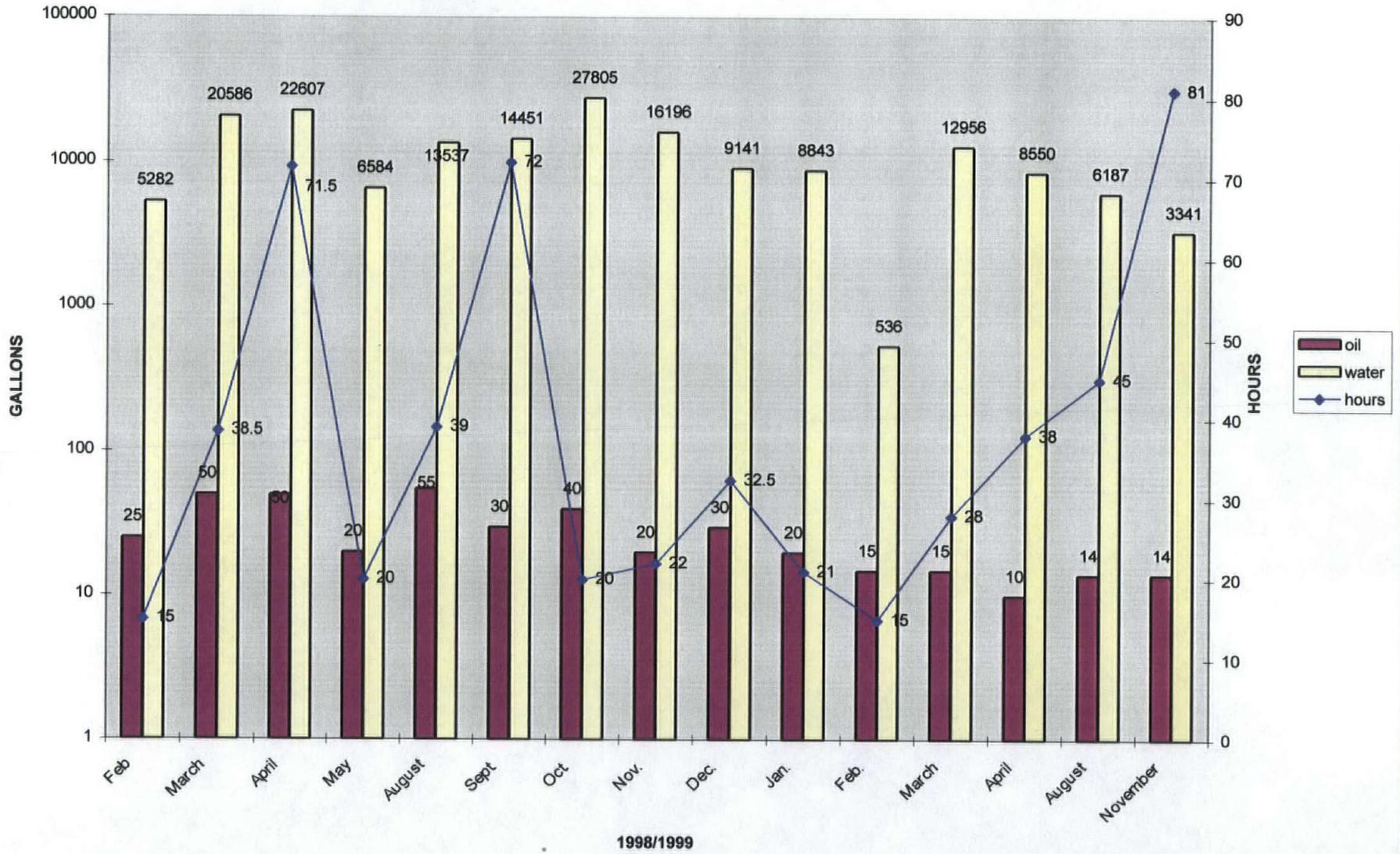
The operation of the bioslurper systems in an intermittent mode appears to yield comparable monthly product quantities, while minimizing the amount of groundwater

extracted. The intermittent operation also appears to reduce the TPH concentration of the effluent from the oil/water separator (due to increased residence time of water in oil/water separator), which in turn will extend the life of the groundwater treatment vessels. Until further direction by the Navy, the bioslurper systems will continue to be operated intermittently.

BIOSLURPER UNIT 1 OIL/WATER RECOVERED VERSUS OPERATIONAL TIME



BIOSLURPER UNIT 2 OIL/WATER RECOVERED VERSUS OPERATIONAL TIME



U.S. Navy RAC Contract No. 62472-94-D-0398
 Naval Weapons Station-Earle: Bioslurper No. 1
 Analytical Results of Air Samples
 After Carbon Units

Bioslurper Unit #1

SAMPLE NO. 16(A)99VD07 Sample Date: 11/12/1999	Molecular Weight (lbs/lbs-mol)	Conversion Constant (cu. ft/lbs-mol)	Time Conversion (min/hr)	Weekly Flow Rate (cu. ft/min)	Compound			
					Compound Conc. (ppm(v))	Emission Limit (ppm(v))	Output Rate (lbs/hr)	Emission Limits (lbs/hr)
Acetone	58.1	384.6	60.0	55.0	0.0	N/A	0.00E+00	
Benzene	78.0	384.6	60.0	55.0	0.000	7.0	0.00E+00	8.00E-03
Toluene	92.0	384.6	60.0	55.0	0.0	N/A	0.00E+00	
Ethylbenzene	106.0	384.6	60.0	55.0	0.0	N/A	0.00E+00	
m,p-Xylenes	106.0	384.6	60.0	55.0	0.000	N/A	0.00E+00	
o-Xylene	106.0	384.6	60.0	55.0	0.1	N/A	1.27E-04	
1,3,5-Trimethylbenzene	120.0	384.6	60.0	55.0	0.000	N/A	0.00E+00	
1,2,4-Trimethylbenzene	120.0	384.6	60.0	55.0	0.0	N/A	0.00E+00	
Total Emissions:					0.100	25	1.27E-04	3.50E-02

Formula: Output Rate per Compound = (Mol. Wt.)x(Time Conv.)x(Concentration)x(Flow Rate)
 (Conv. Constant)x10⁶

U.S. Navy RAC Contract No. 62472-94-D-0398
 Naval Weapons Station-Earle: Bioslurper No. 1
 Analytical Results of Air Samples

Prior to Carbon Units

Bioslurper Unit #1

SAMPLE NO. 16(A)99VD06 Sample Date: 11/12/1999	Molecular Weight (lbs/lbs-mol)	Conversion Constant (cu. ft/lbs-mol)	Time Conversion (min/hr)	Weekly Flow Rate (cu. ft/min)	Compound			
					Compound Conc. (ppm(v))	Emission Limit ppm(v)	Output Rate (lbs/hr)	Emission Limits (lbs/hr)
Acetone	58.1	384.6	60.0	55.0	0.0	N/A	0.00E+00	
Benzene	78.0	384.6	60.0	55.0	5.700	7.0	3.81E-03	8.00E-03
Toluene	92.0	384.6	60.0	55.0	1.6	N/A	1.26E-03	
Ethylbenzene	106.0	384.6	60.0	55.0	4.2	N/A	3.82E-03	
m,p-Xylenes	106.0	384.6	60.0	55.0	5.500	N/A	5.00E-03	
o-Xylene	106.0	384.6	60.0	55.0	2.8	N/A	2.55E-03	
1,3,5-Trimethylbenzene	120.0	384.6	60.0	55.0	1.500	N/A	1.54E-03	
1,2,4-Trimethylbenzene	120.0	384.6	60.0	55.0	6.4	N/A	6.59E-03	
Total Emissions:					27.700	25	2.46E-02	3.50E-02

Formula: Output Rate per Compound = $\frac{(\text{Mol. Wt.}) \times (\text{Time Conv.}) \times (\text{Concentration}) \times (\text{Flow Rate})}{(\text{Conv. Constant}) \times 10^6}$

U.S. Navy RAC Contract No. 62472-94-D-0398
 Naval Weapons Station-Earle: Bioslurper No. 2
 Analytical Results of Air Samples

Bioslurper Unit # 2

SAMPLE NO. 16(B)99VD06		Sample Date: 11/12/1999						
Compound	Molecular Weight (lbs/lbs-mol)	Conversion Constant (cu. ft/lbs-mol)	Time Conversion (min/hr)	Weekly Flow Rate (cu. ft/min)	Compound Conc. (ppm(v))	Compound Emission Limit ppm(v)	Output Rate (lbs/hr)	Emission Limits (lbs/hr)
Acetone	58.1	384.6	60.0	52.0	0.0	N/A	0.00E+00	
Benzene	78.0	384.6	60.0	52.0	0.22	7.0	1.39E-04	8.00E-03
Toluene	92.0	384.6	60.0	52.0	0.00	N/A	0.00E+00	
Ethylbenzene	106.0	384.6	60.0	52.0	0.6	N/A	4.82E-04	
m,p-Xylenes	106.0	384.6	60.0	52.0	0.9	N/A	7.48E-04	
o-Xylene	106.0	384.6	60.0	52.0	0.5	N/A	4.21E-04	
1,3,5-Trimethylbenzene	120.0	384.6	60.0	52.0	0.4	N/A	3.50E-04	
1,2,4-Trimethylbenzene	120.0	384.6	60.0	52.0	2.0	N/A	1.95E-03	
Total Emissions:					4.6	25	4.09E-03	3.50E-02

Formula: Output Rate per Compound = $\frac{(\text{Mol. Wt.}) \times (\text{Time Conv.}) \times (\text{Concentration}) \times (\text{Flow Rate})}{(\text{Conv. Constant}) \times 10^6}$

VOLATILE ORGANIC ANALYSIS

CLIENT NAME: Foster Wheeler Environmental
 PROJECT #: —
 PROJECT NAME: Naval Weapons Station Earle
 MATRIX: Air/Canister
 SAMPLE VOLUME: 0.005 Liter
 INITIAL PRESSURE: 1.00 psia
 FINAL PRESSURE: 1.00 psia
 PRES. DILUTION: 1.00
 DILUTION FACTOR: 1

CLIENT SAMPLE ID: Method Blank
 AAI RFS# 9932002
 AAI ID#: Method Blank

DATE SAMPLED: N/A
 DATE RECEIVED: 11/16/99
 DATE ANALYZED: 11/17/99

ANALYTICAL METHOD: EPA TO14 (GC/MS)

CAS NUMBER	COMPOUND	CONCENTRATION			
		mg/m3	PQL	ppm(v)	PQL
74-87-3	Chloromethane	ND<	1.0	ND<	0.484
74-83-9	Bromomethane	ND<	1.0	ND<	0.258
75-01-04	Vinyl Chloride	ND<	1.0	ND<	0.391
75-00-3	Chloroethane	ND<	1.0	ND<	0.379
75-69-4	Freon 11	ND<	1.0	ND<	0.178
75-35-4	1,1-Dichloroethene	ND<	1.0	ND<	0.252
76-13-1	Freon 113	ND<	1.0	ND<	0.131
75-09-2	Methylene Chloride	ND<	1.0	ND<	0.288
75-35-3	1,1-Dichloroethane	ND<	1.0	ND<	0.247
156-60-5	trans-1,2-Dichloroethene	ND<	1.0	ND<	0.252
156-59-2	cis-1,2-Dichloroethene	ND<	1.0	ND<	0.252
67-66-3	Chloroform	ND<	1.0	ND<	0.205
71-55-5	1,1,1-Trichloroethane	ND<	1.0	ND<	0.183
56-23-5	Carbon Tetrachloride	ND<	1.0	ND<	0.159
71-43-2	Benzene	ND<	1.0	ND<	0.313
107-06-2	1,2-Dichloroethane	ND<	1.0	ND<	0.247
79-01-6	Trichloroethene	ND<	1.0	ND<	0.186
78-87-5	1,2-Dichloropropane	ND<	1.0	ND<	0.216
10061-02-6	trans-1,3-Dichloropropene	ND<	1.0	ND<	0.220
108-88-3	Toluene	ND<	1.0	ND<	0.265
10061-01-5	cis-1,3-Dichloropropene	ND<	1.0	ND<	0.220
79-00-5	1,1,2-Trichloroethane	ND<	1.0	ND<	0.183
127-18-4	Tetrachloroethene	ND<	1.0	ND<	0.148
106-93-4	Ethylene Dibromide	ND<	1.0	ND<	0.130
108-90-7	Chlorobenzene	ND<	1.0	ND<	0.217
100-41-4	Ethylbenzene	ND<	1.0	ND<	0.230
1330-20-7	m,p-Xylene	ND<	1.0	ND<	0.230
95-47-6	o-Xylene	ND<	1.0	ND<	0.230
100-42-5	Styrene	ND<	1.0	ND<	0.235
79-34-5	1,1,2,2-Tetrachloroethane	ND<	1.0	ND<	0.146
108-67-8	1,3,5-Trimethyl Benzene	ND<	1.0	ND<	0.203
95-63-6	1,2,4-Trimethyl Benzene	ND<	1.0	ND<	0.203
541-73-1	1,3-Dichlorobenzene	ND<	1.0	ND<	0.166
106-46-7	1,4-Dichlorobenzene	ND<	1.0	ND<	0.166
100-44-7	Chlorotoluene	ND<	1.0	ND<	0.193
95-50-1	1,2-Dichlorobenzene	ND<	1.0	ND<	0.166
67-64-1	Acetone	ND<	1.0	ND<	0.422
78-93-3	2-Butanone	ND<	1.0	ND<	0.340
108-10-1	4-methyl-2-pentanone	ND<	1.0	ND<	0.245
591-78-6	2-Hexanone	ND<	1.0	ND<	0.244
Surrogate Recovery		% Recovery			
1,2-Dichloroethane-D4 (SS1)		101		70-130	
Toluene-d8 (SS2)		91		70-130	
4-Bromofluorobenzene (SS3)		129		70-130	

ND- Not detected

*Value outside QC limits due to matrix interference.

TR - Trace

Approved by: _____ Date: _____

VOLATILE ORGANIC ANALYSIS

CLIENT NAME: Foster Wheeler Environmental
PROJECT #: —
PROJECT NAME: Naval Weapons Station Earle
MATRIX: Air/Canister
SAMPLE VOLUME: 0.01 Liter
INITIAL PRESSURE: 14.74 psia
FINAL PRESSURE: 16.50 psia
PRES. DILUTION : 1.12
DILUTION FACTOR: 1

CLIENT SAMPLE ID: 16 (A) 99VD06
AAJ RFS# 9932002
AAJ ID#: 9932002-001

DATE SAMPLED: 11/12/99
DATE RECEIVED: 11/16/99
DATE ANALYZED: 11/17/99

ANALYTICAL METHOD: EPA TO14 (GC/MS)

CAS NUMBER	COMPOUND	CONCENTRATION			
		mg/m3	PQL	ppm(v)	PQL
74-87-3	Chloromethane	ND<	0.560	ND<	0.271
74-83-9	Bromomethane	ND<	0.560	ND<	0.144
75-01-04	Vinyl Chloride	ND<	0.560	ND<	0.219
75-00-3	Chloroethane	ND<	0.560	ND<	0.212
75-69-4	Freon 11	ND<	0.560	ND<	0.100
75-35-4	1,1-Dichloroethene	ND<	0.560	ND<	0.141
76-13-1	Freon 113	ND<	0.560	ND<	0.073
75-09-2	Methylene Chloride	ND<	0.560	ND<	0.161
75-35-3	1,1-Dichloroethane	ND<	0.560	ND<	0.138
156-60-5	trans-1,2-Dichloroethene	ND<	0.560	ND<	0.141
156-59-2	cis-1,2-Dichloroethene	ND<	0.560	ND<	0.141
67-66-3	Chloroform	ND<	0.560	ND<	0.115
71-55-6	1,1,1-Trichloroethane	ND<	0.560	ND<	0.103
56-23-5	Carbon Tetrachloride	ND<	0.560	ND<	0.089
71-43-2	Benzene	18	0.560	5.7	0.175
107-06-2	1,2-Dichloroethane	ND<	0.560	ND<	0.138
79-01-6	Trichloroethene	ND<	0.560	ND<	0.104
78-87-5	1,2-Dichloropropane	ND<	0.560	ND<	0.121
10061-02-6	trans-1,3-Dichloropropene	ND<	0.560	ND<	0.123
108-88-3	Toluene	5.9	0.560	1.6	0.149
10061-01-5	cis-1,3-Dichloropropene	ND<	0.560	ND<	0.123
79-00-5	1,1-2-Trichloroethane	ND<	0.560	ND<	0.103
127-18-4	Tetrachloroethene	ND<	0.560	ND<	0.083
106-93-4	Ethylene Dibromide	ND<	0.560	ND<	0.073
108-90-7	Chlorobenzene	ND<	0.560	ND<	0.122
100-41-4	Ethylbenzene	18	0.560	4.2	0.129
1330-20-7	m,p-Xylene	24	0.560	5.5	0.129
95-47-6	o-Xylene	12	0.560	2.8	0.129
100-42-5	Styrene	ND<	0.560	ND<	0.131
79-34-5	1,1,2,2-Tetrachloroethane	ND<	0.560	ND<	0.082
108-67-8	1,3,5-Trimethyl Benzene	7.4	0.560	1.5	0.114
95-63-6	1,2,4-Trimethyl Benzene	31	0.560	6.4	0.114
541-73-1	1,3-Dichlorobenzene	ND<	0.560	ND<	0.093
106-46-7	1,4-Dichlorobenzene	ND<	0.560	ND<	0.093
100-44-7	Chlorotoluene	ND<	0.560	ND<	0.108
95-50-1	1,2-Dichlorobenzene	ND<	0.560	ND<	0.093
67-64-1	Acetone	ND<	0.560	ND<	0.236
78-93-3	2-Butanone	ND<	0.560	ND<	0.190
108-10-1	4-methyl-2-pentanone	ND<	0.560	ND<	0.137
591-78-6	2-Hexanone	ND<	0.560	ND<	0.137
Surrogate Recovery		% Recovery			
1,2-Dichloroethane-D4 (SS1)		101		70-130	
Toluene-d8 (SS2)		88		70-130	
4-Bromofluorobenzene (SS3)		98		70-130	

ND- Not detected
 TR - Trace

*Value outside QC limits due to matrix interference.

Approved by: _____ Date: _____

VOLATILE ORGANIC ANALYSIS

CLIENT NAME: Foster Wheeler Environmental
 PROJECT #: —
 PROJECT NAME: Naval Weapons Station Earle
 MATRIX: Air/Canister
 SAMPLE VOLUME: 0.01 Liter
 INITIAL PRESSURE: 14.70 psia
 FINAL PRESSURE: 16.30 psia
 PRES. DILUTION: 1.11
 DILUTION FACTOR: 1

CLIENT SAMPLE ID: 16 (A) 99VD07
 AAI RFS# 9932002
 AAI ID#: 9932002-002

DATE SAMPLED: 11/12/99
 DATE RECEIVED: 11/16/99
 DATE ANALYZED: 11/17/99

ANALYTICAL METHOD: EPA TO14 (GC/MS)

CAS NUMBER	COMPOUND	CONCENTRATION			
		mg/m3	PQL	ppm(v)	PQL
74-87-3	Chloromethane	ND<	0.554	ND<	0.269
74-83-9	Bromomethane	ND<	0.554	ND<	0.143
75-01-04	Vinyl Chloride	ND<	0.554	ND<	0.217
75-00-3	Chloroethane	ND<	0.554	ND<	0.210
75-69-4	Freon 11	ND<	0.554	ND<	0.099
75-35-4	1,1-Dichloroethene	ND<	0.554	ND<	0.140
76-13-1	Freon 113	ND<	0.554	ND<	0.072
75-09-2	Methylene Chloride	ND<	0.554	ND<	0.160
75-35-3	1,1-Dichloroethane	ND<	0.554	ND<	0.137
156-60-5	trans-1,2-Dichloroethene	ND<	0.554	ND<	0.140
156-59-2	cis-1,2-Dichloroethene	ND<	0.554	ND<	0.140
67-66-3	Chloroform	ND<	0.554	ND<	0.114
71-55-6	1,1,1-Trichloroethane	ND<	0.554	ND<	0.102
56-23-5	Carbon Tetrachloride	ND<	0.554	ND<	0.088
71-43-2	Benzene	ND<	0.554	ND<	0.174
107-06-2	1,2-Dichloroethane	ND<	0.554	ND<	0.137
79-01-6	Trichloroethene	ND<	0.554	ND<	0.103
78-87-5	1,2-Dichloropropane	ND<	0.554	ND<	0.120
10061-02-6	trans-1,3-Dichloropropene	ND<	0.554	ND<	0.122
108-88-3	Toluene	ND<	0.554	ND<	0.147
10061-01-5	cis-1,3-Dichloropropene	ND<	0.554	ND<	0.122
79-00-5	1,1,2-Trichloroethane	ND<	0.554	ND<	0.102
127-18-4	Tetrachloroethene	ND<	0.554	ND<	0.062
106-93-4	Ethylene Dibromide	ND<	0.554	ND<	0.072
108-90-7	Chlorobenzene	ND<	0.554	ND<	0.120
100-41-4	Ethylbenzene	ND<	0.554	ND<	0.128
1330-20-7	m,p-Xylene	0.61	0.554	0.14	0.128
95-47-6	o-Xylene	ND<	0.554	ND<	0.128
100-42-5	Styrene	ND<	0.554	ND<	0.130
79-34-5	1,1,2,2-Tetrachloroethane	ND<	0.554	ND<	0.061
108-67-8	1,3,5-Trimethyl Benzene	ND<	0.554	ND<	0.113
95-63-6	1,2,4-Trimethyl Benzene	ND<	0.554	ND<	0.113
541-73-1	1,3-Dichlorobenzene	ND<	0.554	ND<	0.092
106-46-7	1,4-Dichlorobenzene	ND<	0.554	ND<	0.092
100-44-7	Chlorotoluene	ND<	0.554	ND<	0.107
95-50-1	1,2-Dichlorobenzene	ND<	0.554	ND<	0.092
67-64-1	Acetone	ND<	0.554	ND<	0.234
78-93-3	2-Butanone	ND<	0.554	ND<	0.188
108-10-1	4-methyl-2-pentanone	ND<	0.554	ND<	0.136
591-78-6	2-Hexanone	ND<	0.554	ND<	0.135
Surrogate Recovery		% Recovery			
1,2-Dichloroethane-D4 (SS1)		101 70-130			
Toluene-d8 (SS2)		91 70-130			
4-Bromofluorobenzene (SS3)		110 70-130			

ND- Not detected
 TR - Trace

*Value outside QC limits due to matrix interference.

Approved by: _____ Date: _____

VOLATILE ORGANIC ANALYSIS

CLIENT NAME: Foster Wheeler Environmental
 PROJECT #: —
 PROJECT NAME: Naval Weapons Station Earle
 MATRIX: Air/Canister
 SAMPLE VOLUME: 0.01 Liter
 INITIAL PRESSURE: 14.70 psia
 FINAL PRESSURE: 16.30 psia
 PRES. DILUTION: 1.11
 DILUTION FACTOR: 1

CLIENT SAMPLE ID: 16 (B) 99VD06
 AAI RFS# 9932002
 AAI ID#: 9932002-003

DATE SAMPLED: 11/12/99
 DATE RECEIVED: 11/16/99
 DATE ANALYZED: 11/17/99

ANALYTICAL METHOD: EPA TO14 (GC/MS)

CAS NUMBER	COMPOUND	CONCENTRATION			
		mg/m3	PQL	ppm(v)	PQL
74-87-3	Chloromethane	ND<	0.554	ND<	0.269
74-83-9	Bromomethane	ND<	0.554	ND<	0.143
75-01-04	Vinyl Chloride	ND<	0.554	ND<	0.217
75-00-3	Chloroethane	ND<	0.554	ND<	0.210
75-69-4	Freon 11	ND<	0.554	ND<	0.099
75-35-4	1,1-Dichloroethene	ND<	0.554	ND<	0.140
76-13-1	Freon 113	ND<	0.554	ND<	0.072
75-09-2	Methylene Chloride	ND<	0.554	ND<	0.160
75-35-3	1,1-Dichloroethane	ND<	0.554	ND<	0.137
156-60-5	trans-1,2-Dichloroethene	ND<	0.554	ND<	0.140
156-59-2	cis-1,2-Dichloroethene	ND<	0.554	ND<	0.140
67-66-3	Chloroform	ND<	0.554	ND<	0.114
71-55-6	1,1,1-Trichloroethane	ND<	0.554	ND<	0.102
56-23-5	Carbon Tetrachloride	ND<	0.554	ND<	0.088
71-43-2	Benzene	0.69	0.554	0.22	0.174
107-06-2	1,2-Dichloroethane	ND<	0.554	ND<	0.137
79-01-6	Trichloroethene	ND<	0.554	ND<	0.103
76-87-5	1,2-Dichloropropane	ND<	0.554	ND<	0.120
10061-02-6	trans-1,3-Dichloropropene	ND<	0.554	ND<	0.122
108-88-3	Toluene	ND<	0.554	ND<	0.147
10061-01-5	cis-1,3-Dichloropropene	ND<	0.554	ND<	0.122
79-00-5	1,1,2-Trichloroethane	ND<	0.554	ND<	0.102
127-18-4	Tetrachloroethene	ND<	0.554	ND<	0.082
106-93-4	Ethylene Dibromide	ND<	0.554	ND<	0.072
108-90-7	Chlorobenzene	ND<	0.554	ND<	0.120
100-41-4	Ethylbenzene	2.4	0.554	0.56	0.128
1330-20-7	m,p-Xylene	3.8	0.554	0.87	0.128
95-47-6	o-Xylene	2.1	0.554	0.49	0.128
100-42-5	Styrene	ND<	0.554	ND<	0.130
79-34-5	1,1,2,2-Tetrachloroethane	ND<	0.554	ND<	0.061
108-67-8	1,3,5-Trimethyl Benzene	1.8	0.554	0.36	0.113
95-63-6	1,2,4-Trimethyl Benzene	9.8	0.554	2.0	0.113
541-73-1	1,3-Dichlorobenzene	ND<	0.554	ND<	0.092
106-46-7	1,4-Dichlorobenzene	ND<	0.554	ND<	0.092
100-44-7	Chlorotoluene	ND<	0.554	ND<	0.107
95-50-1	1,2-Dichlorobenzene	ND<	0.554	ND<	0.092
67-64-1	Acetone	ND<	0.554	ND<	0.234
78-93-3	2-Butanone	ND<	0.554	ND<	0.188
108-10-1	4-methyl-2-pentanone	ND<	0.554	ND<	0.136
591-78-6	2-Hexanone	ND<	0.554	ND<	0.135
Surrogate Recovery		% Recovery			
1,2-Dichloroethane-D4 (SS1)		116		70-130	
Toluene-d8 (SS2)		118		70-130	
4-Bromofluorobenzene (SS3)		102		70-130	

ND- Not detected
 TR - Trace

*Value outside QC limits due to matrix interference.

Approved by: _____ Date: _____

FACSIMILE COVER PAGE

To : Mike Heffron

From : Leticia Zelaya

Sent : 11/23/99 at 7:16:00 PM

Pages : 3 (including Cover)

Subject 8015M gas results for Naval Weapons Station Earle project.

NOV 23 1999 22:09

Apollo Analytics Inc

PAGE.01

ANALYTICAL RESULTS

AAJ RFS #: 9932002

Client Name: Foster Wheeler Environmental
 Project Name: Naval Weapons Station Earle
 Project #: ---
 Matrix: Air/Canister

Date(s) Sampled: 11/12/99
 Date(s) Analyzed: 11/16/99
 Analytical Method: CARB/EPA
 Chemist: LL

	16 (A) 99VD06	16 (A) 99VD07	16 (B) 99VD08	Method
Units	9932002 -001	9932002 -002	9932002 -003	Blank
EPA 8015mod				
TPH as gasoline (ppm(v))	1,529	83	326	ND<10
<hr/>				
	16 (A) 99VD06	16 (A) 99VD07	16 (B) 99VD08	Method
Units	9932002 -001	9932002 -002	9932002 -003	Blank
EPA 8015mod				
TPH as gasoline (mg/m3)	5,380	290	1,144	ND<1.0

Approved by: _____ Date: _____

QUALITY CONTROL

AAI RFS #: 9932002

Client Name: Foster Wheeler Environmental
 Project Name: Naval Weapons Station Earle
 Project #: ---
 Matrix: Air/Canister

Date(s) Sampled: 11/12/99
 Date(s) Analyzed: 11/16/99
 Analytical Method: CARB/EPA
 Chemist: LL

	Sample Result 9932002-003 (ppm(v))	Duplicate Result 9932002-003 (ppm(v))	RPD (%)	Quality Control Limits (%)
EPA 8015mod				
TPH as gasoline	326	296	10	30
	Sample Result 9932002-003 (mg/m3)	Duplicate Result 9932002-003 (mg/m3)	RPD (%)	Quality Control Limits (%)
EPA 8015mod				
TPH as gasoline	1,144	1,040	10	30

Approved by: _____ Date: _____

NWS-EARLE
 BIOSLURPER UNIT #1 AND #2
 TPH CONCENTRATIONS IN AIR

12/6/1999

BIOSLURPER UNIT 1	
OPERATED (hours):	85
AVERAGE FLOW RATE (cfm):	55
TPH CONCENTRATION (mg/m ³):	5380
(as per analytical) 16(A)99VD	6
	94.23603 = POUNDS OF TPH

BIOSLURPER UNIT 2	
OPERATED (hours):	81
AVERAGE FLOW RATE (cfm):	52
TPH CONCENTRATION (mg/m ³):	1144
(as per analytical) 16(B)99VD	6
	18.05375 = POUNDS OF TPH

POUNDS OF TPH=

$$\text{AVERAGE FLOW RATE (cfm)} * 0.02832 \text{m}^3/\text{ft}^3 * \text{TPH CONC}(\text{mg}/\text{m}^3) * 0.001 \text{g}/\text{mg} * 0.002205 \text{ lbs}/\text{g} * 60 \text{ min}/\text{hr} * \text{OPERATED (hours)}$$

CHEMTECH

CHAIN OF CUSTODY RECORD

110 Route 4
Englewood, NJ 07631
(201) 567-6868
Fax (201) 567-1333

Please check one:
 205 Campus Plaza 1
Edison, NJ 08837
(732) 225-4111
Fax (732) 225-4110

515 Route 9 South
Barnegat, NJ 08005
(609) 698-0199
Fax (609) 698-0910

CHEMTECH JOB NO.: LS94501J
CHEMTECH QUOTE NO.:

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Foster Wheeler Environ
ADDRESS: One Oxford Valley Suite 200
CITY: Lagrange STATE: PA ZIP:
ATTENTION: Mike Hoffman
PHONE: (215) 702-4015 FAX: (215) 702-4045

PROJECT INFORMATION

PROJECT NAME: Naval Weapons - Earle
Bioshoppers
PROJECT NO.:
PROJECT MANAGER: Mike Hoffman
LOCATION: Lagrange, PA
PHONE: (215) 702-4015 FAX: (215) 702-4045

BILLING INFORMATION

BILL TO: Foster Wheeler PO #: 20513
ADDRESS: One Oxford Valley Suite 200
CITY: Lagrange STATE: PA ZIP: 19047
ATTENTION: Sallya Stetson PHONE: (215) 702-4088

DATA TURNAROUND INFORMATION

FAX: 3 DAYS *
HARD COPY: 14 DAYS *
EED: _____ DAYS *
* TO BE APPROVED BY CHEMTECH
** NORMAL TURNAROUND TIME - 14 DAYS

DATA DELIVERABLE INFORMATION

RESULTS ONLY
 RESULTS + QC
 NJ REDUCED
 NJ CIP
 EED FORMAT
 USEPA CIP
 NYS ASP "B"
 NYS ASP "A"
 EED

TPH

1 2 3 4 5 6 7 8 9

CHEMTECH SAMPLE ID	SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		NO. OF BOTTLES	PRESERVATIVES									COMMENTS					
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9						
1. 9485	16(A) EW99W62	AQ		Y	11/14	13:35	1	Y														
2. 94876	16(A) EW99W63					13:40	1	Y														72 hr.
3. 94877	16(B) EW99W46					15:15	1	Y														Turn-Around
4. 94878	16(B) EW99W47					15:35	1	Y														
5.																						
6.																						
7.																						
8.																						

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

REQUISITIONED BY SAMPLE ID 1. <u>[Signature]</u>	DATE/TIME <u>12/1/99</u>	RECEIVED BY 1. <u>[Signature]</u>
REQUISITIONED BY 2. <u>FedEx</u>	DATE/TIME <u>12/3/99</u>	RECEIVED BY 2. <u>[Signature]</u>
REQUISITIONED BY 3.	DATE/TIME <u>12/3/99</u>	RECEIVED FOR LAB BY 3. <u>Sunny Patel</u>

Conditions of bottles or coolers at receipt: Compliant Non-Compliant Temp. of Cooler _____
Comments:
Page 1 of 1
Shipment Complete: Yes No

DEC 05 1999 17:29

DEC 22 1999

DEC 5 1999 5:18 PM CHEMTECH EDISON NO. 893 0.2/6

REPORT OF ANALYSIS

FOSTER WHEELER ENVIRONMENTAL
ONE OXFORD VALLEY
SUITE 200
LANGHORNE, PA 19047-
Attn: MEG WATSON

DATE: 12/06/99

PROJECT # L5945NJ

SAMPLE NUMBER- 94875
DATE SAMPLED- 12/01/99
DATE RECEIVED- 12/03/99
DELIVERED BY- FEDEX

SAMPLE ID- 16(A)EW99W62
TIME SAMPLED- 1335 SAMPLER- CLIENT
TIME RECEIVED- 1000
RECEIVED BY- SP SAMPLE MATRIX- WW

Page 1 of 1

ANALYSIS	METHOD	ANALYSIS			RESULT	UNITS
		DATE	TIME	BY		
TOTAL PETROLEUM HYDROCARBONS	EPA 418.1	12/03/99		JAA	55.0	mg/l

LABORATORY DIRECTOR _____

SL

1 55.

REPORT OF ANALYSIS

FOSTER WHEELER ENVIRONMENTAL
ONE OXFORD VALLEY
SUITE 200
LANGHORNE, PA 19047-
Attn: MEG WATSON

DATE: 12/06/99

PROJECT # L5945NJ

SAMPLE NUMBER- 94876
DATE SAMPLED- 12/01/99
DATE RECEIVED- 12/03/99
DELIVERED BY- FEDEX

SAMPLE ID- 16(A)EW99W63
TIME SAMPLED- 1340 SAMPLER- CLIENT
TIME RECEIVED- 1000
RECEIVED BY- SP SAMPLE MATRIX- WW

Page 1 of 1

ANALYSIS

ANALYSIS	METHOD	ANALYSIS		BY	RESULT	UNITS
		DATE	TIME			
TOTAL PETROLEUM HYDROCARBONS	EPA 418.1	12/03/99		JAA	<0.5	mg/l

LABORATORY DIRECTOR _____

REPORT OF ANALYSIS

FOSTER WHEELER ENVIRONMENTAL
ONE OXFORD VALLEY
SUITE 200
LANGHORNE, PA 19047-
ATTN: MEG WATSON

DATE: 12/06/99

PROJECT # L5945NU

SAMPLE NUMBER- 94877
DATE SAMPLED- 12/01/99
DATE RECEIVED- 12/03/99
DELIVERED BY- FEDEX

SAMPLE ID- 16(B)EW99W46
TIME SAMPLED- 1515 SAMPLER- CLIENT
TIME RECEIVED- 1000
RECEIVED BY- SP SAMPLE MATRIX- WW

Page 1 of 1

ANALYSIS	METHOD	ANALYSIS		BY	RESULT	UNITS
		DATE	TIME			
TOTAL PETROLEUM HYDROCARBONS	EPA 418.1	12/03/99		JAA	7.26	mg/L

LABORATORY DIRECTOR _____

REPORT OF ANALYSIS

FOSTER WHEELER ENVIRONMENTAL
ONE OXFORD VALLEY
SUITE 200
LANGHORNE, PA 19047-
Attn: MEG WATSON

DATE: 12/06/99

PROJECT # L5945NU

SAMPLE NUMBER- 94878
DATE SAMPLED- 12/01/99
DATE RECEIVED- 12/03/99
DELIVERED BY- FEDEX

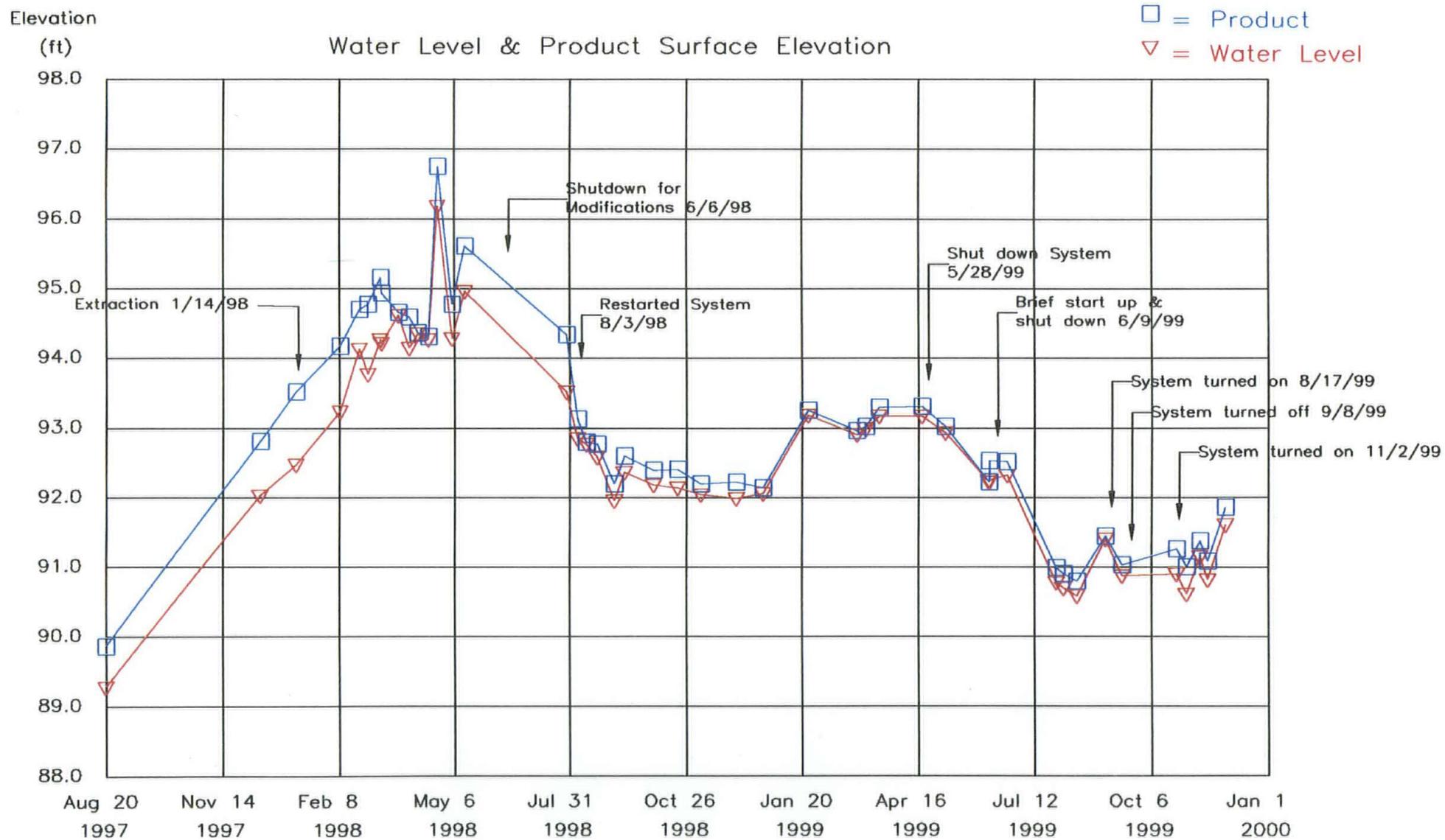
SAMPLE ID- 16(B)EW99W47
TIME SAMPLED- 1530 SAMPLER- CLIENT
TIME RECEIVED- 1000
RECEIVED BY- SP SAMPLE MATRIX- WW

Page 1 of 1

ANALYSIS	METHOD	ANALYSIS			RESULT	UNITS
		DATE	TIME	BY		
TOTAL PETROLEUM HYDROCARBONS	EPA 418.1	12/03/99		JAA	<0.5	mg/l

LABORATORY DIRECTOR _____

Well: 16MW-04

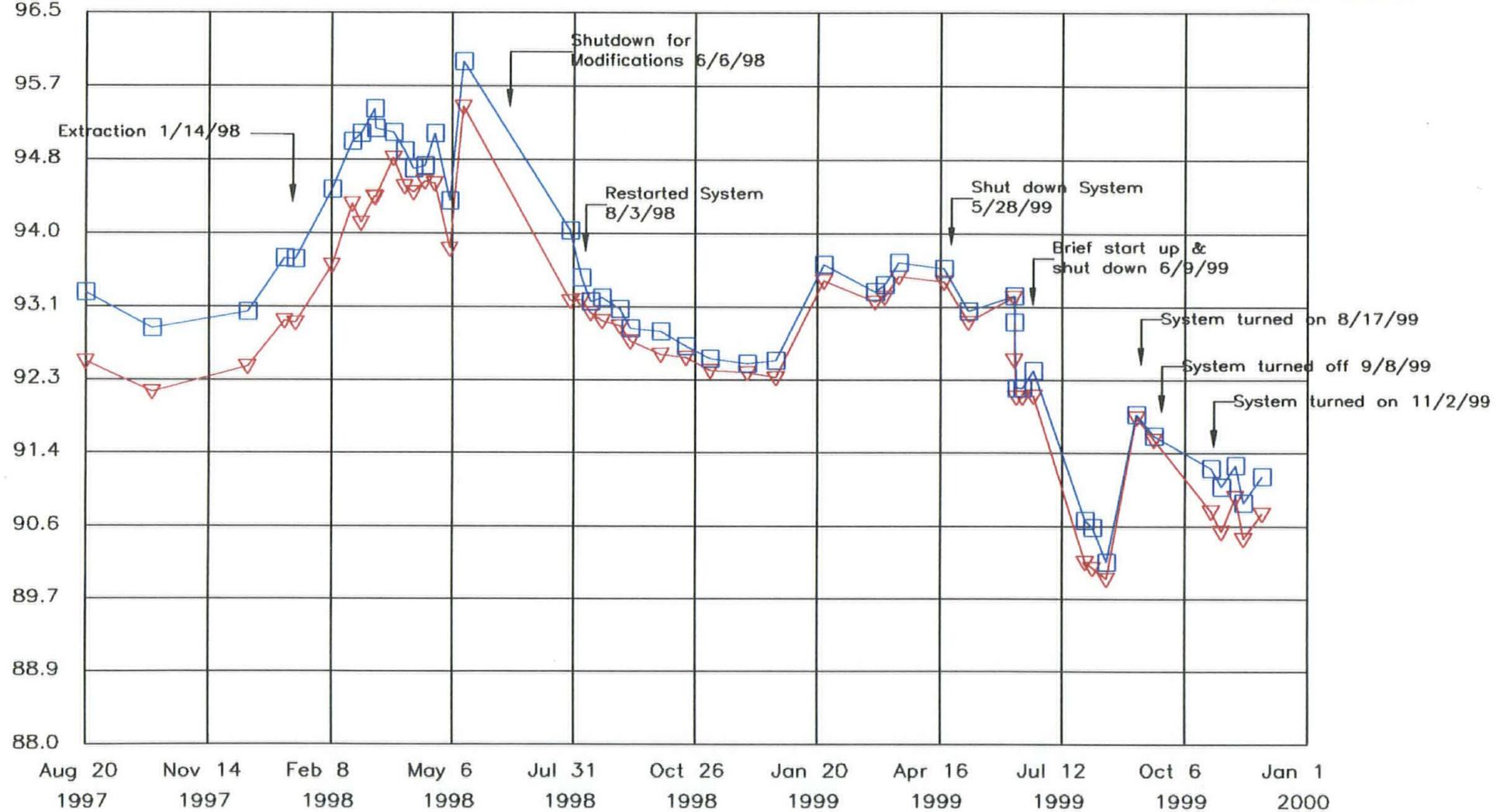


Well: 16MW-13

Elevation
(ft)

Water Level & Product Surface Elevation

□ = Product
▽ = Water Level

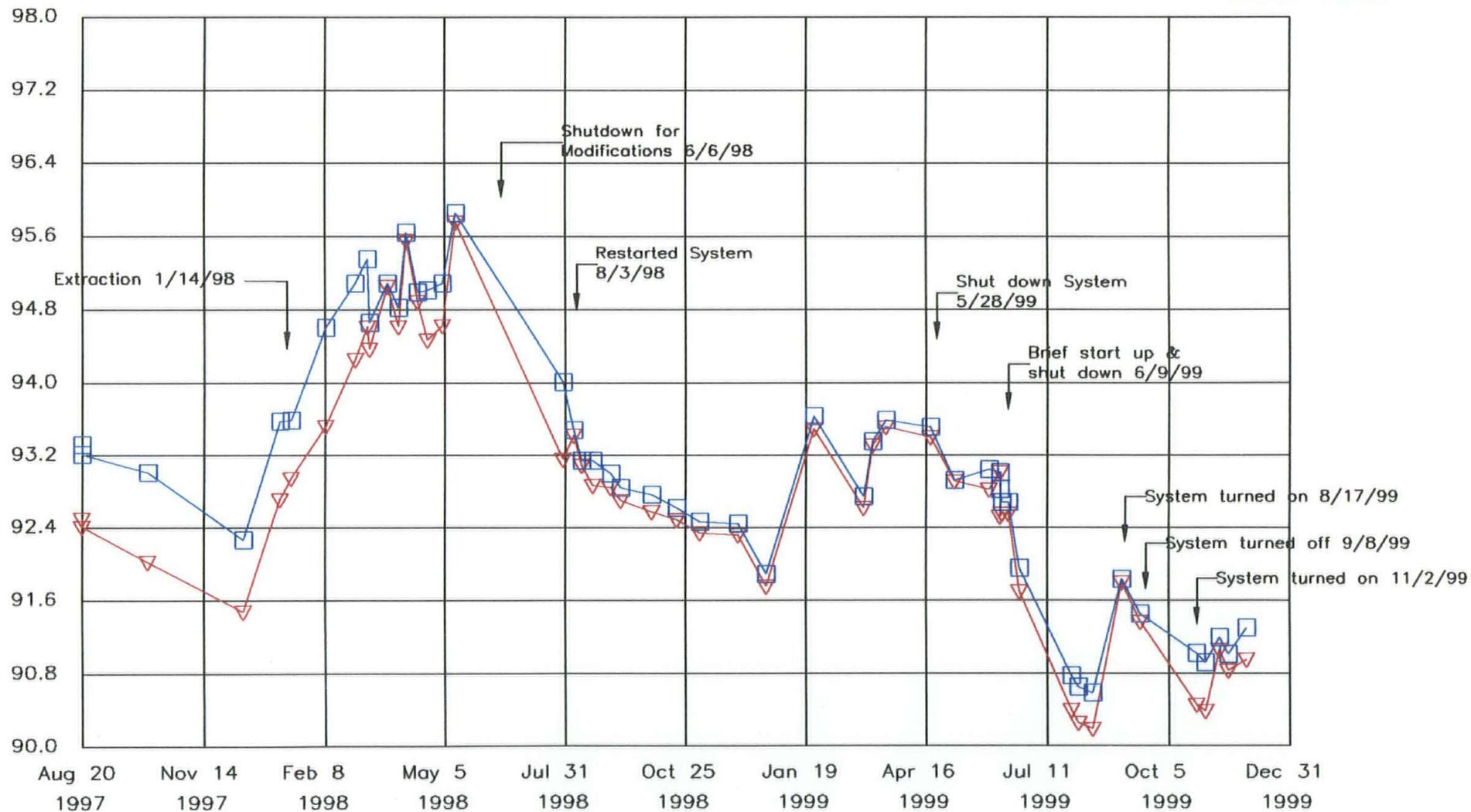


Well: 16MW-14

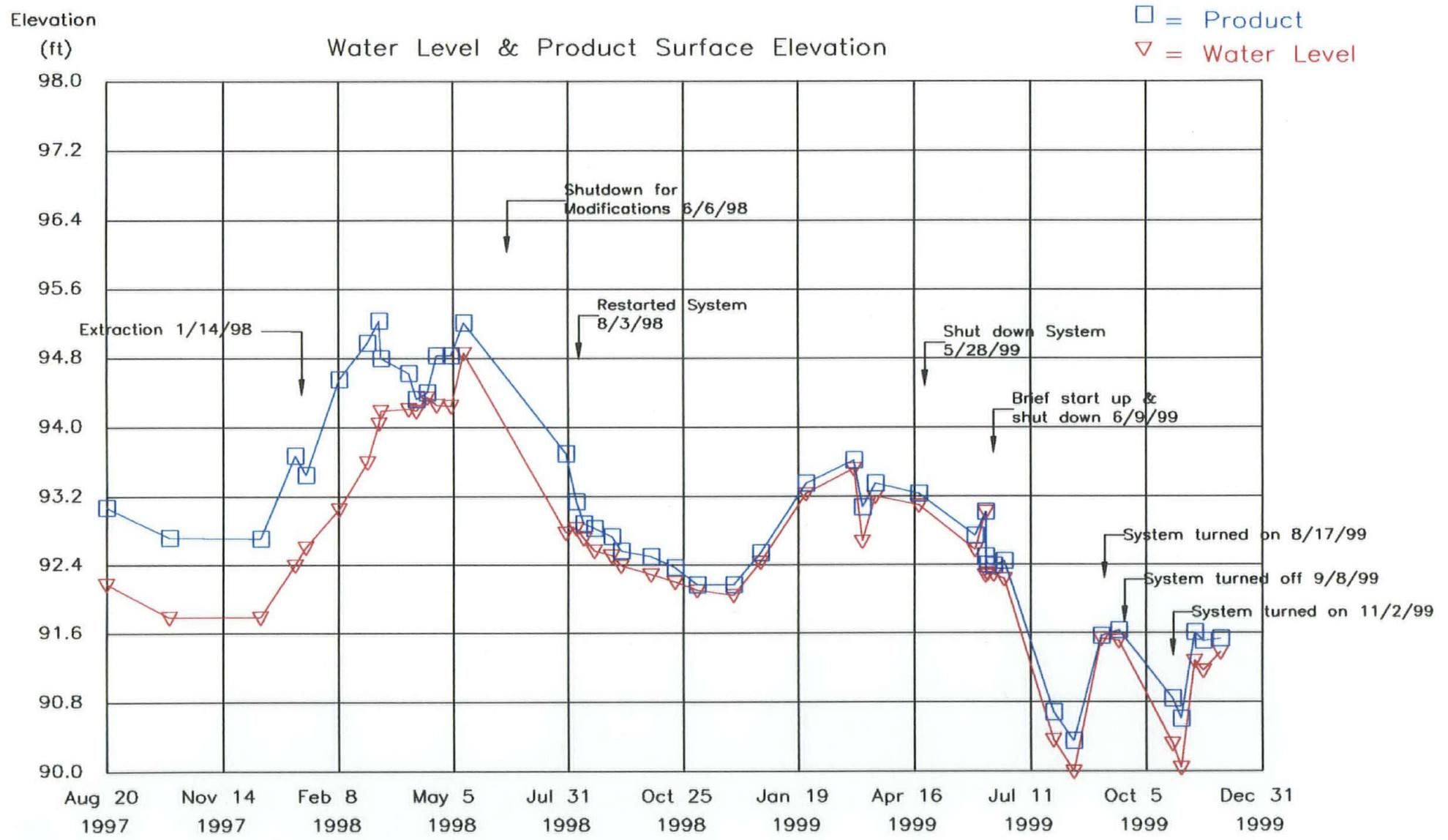
Elevation
(ft)

Water Level & Product Surface Elevation

□ = Product
▽ = Water Level



Well: 16MW-15

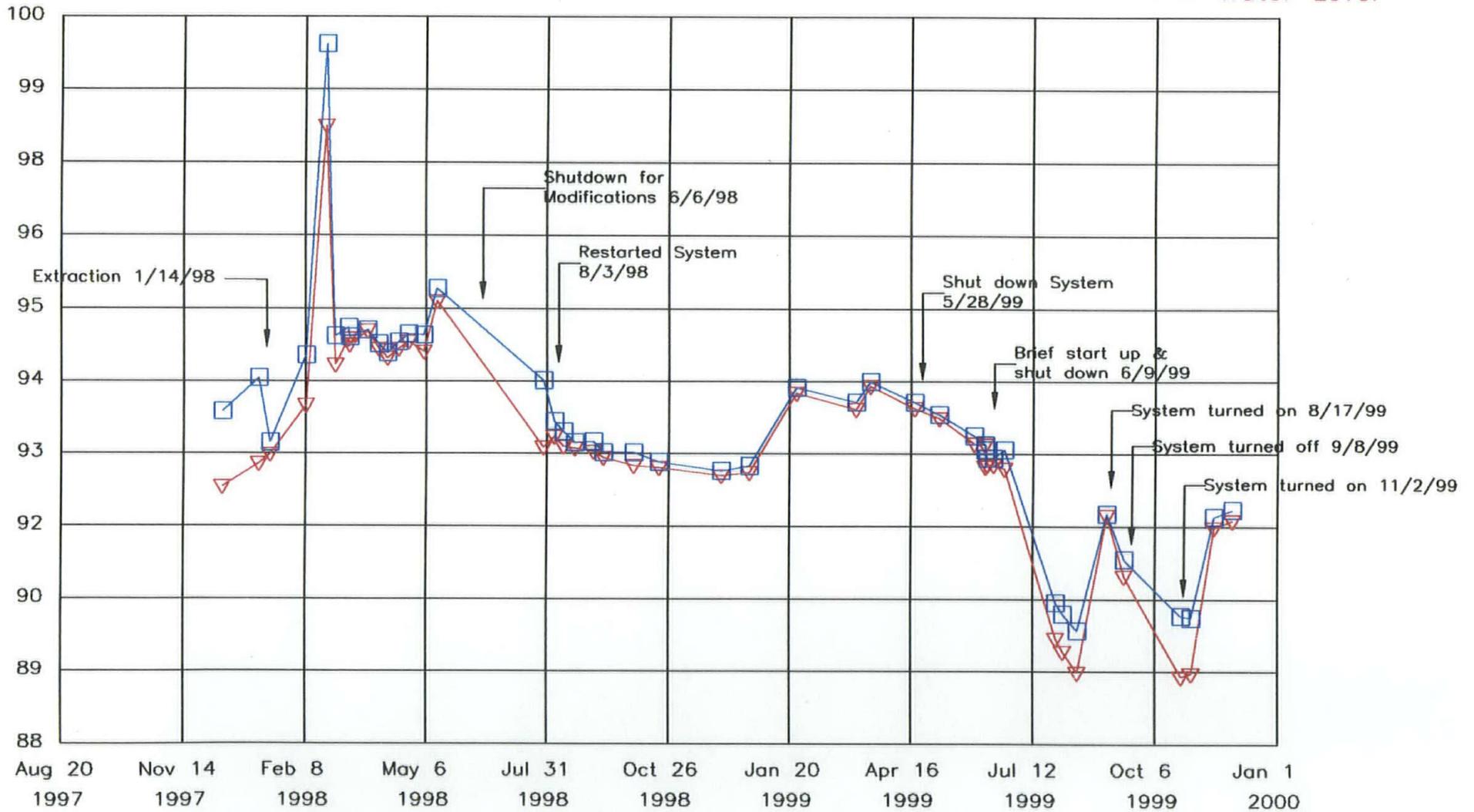


Well: C17MW-07

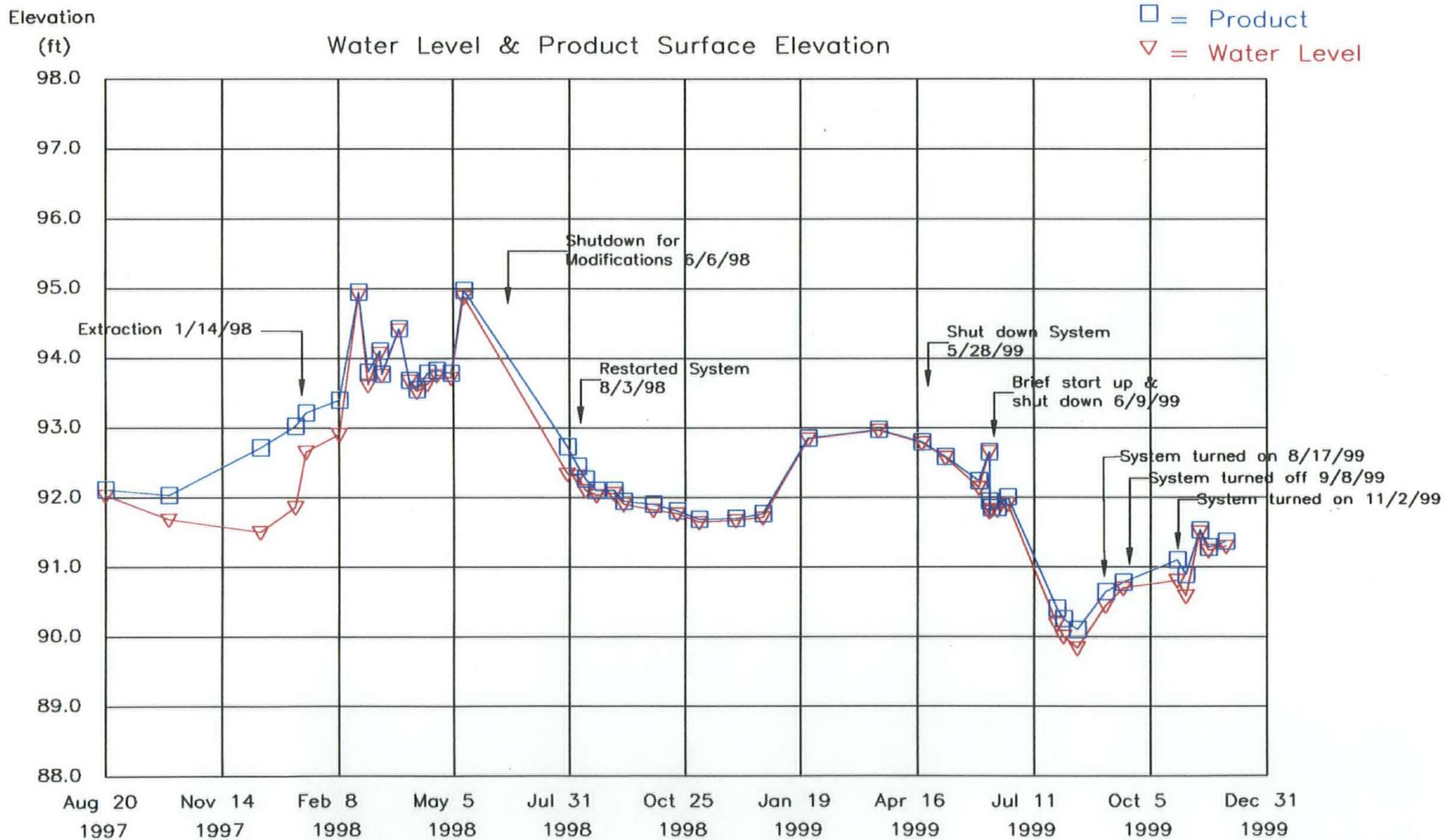
Elevation
(ft)

Water Level & Product Surface Elevation

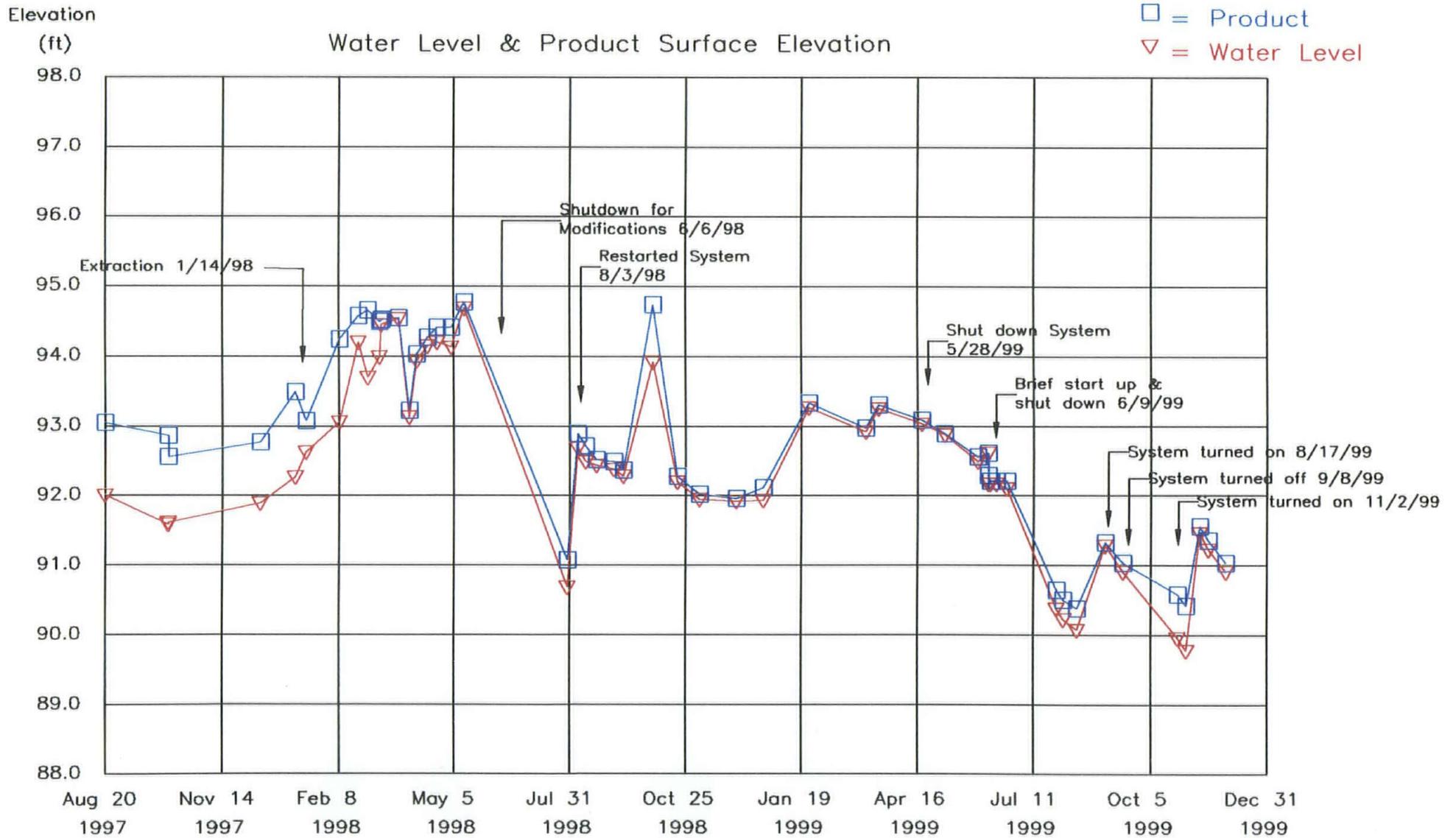
□ = Product
▽ = Water Level



Well: 16MW-16



Well: 16MW-17

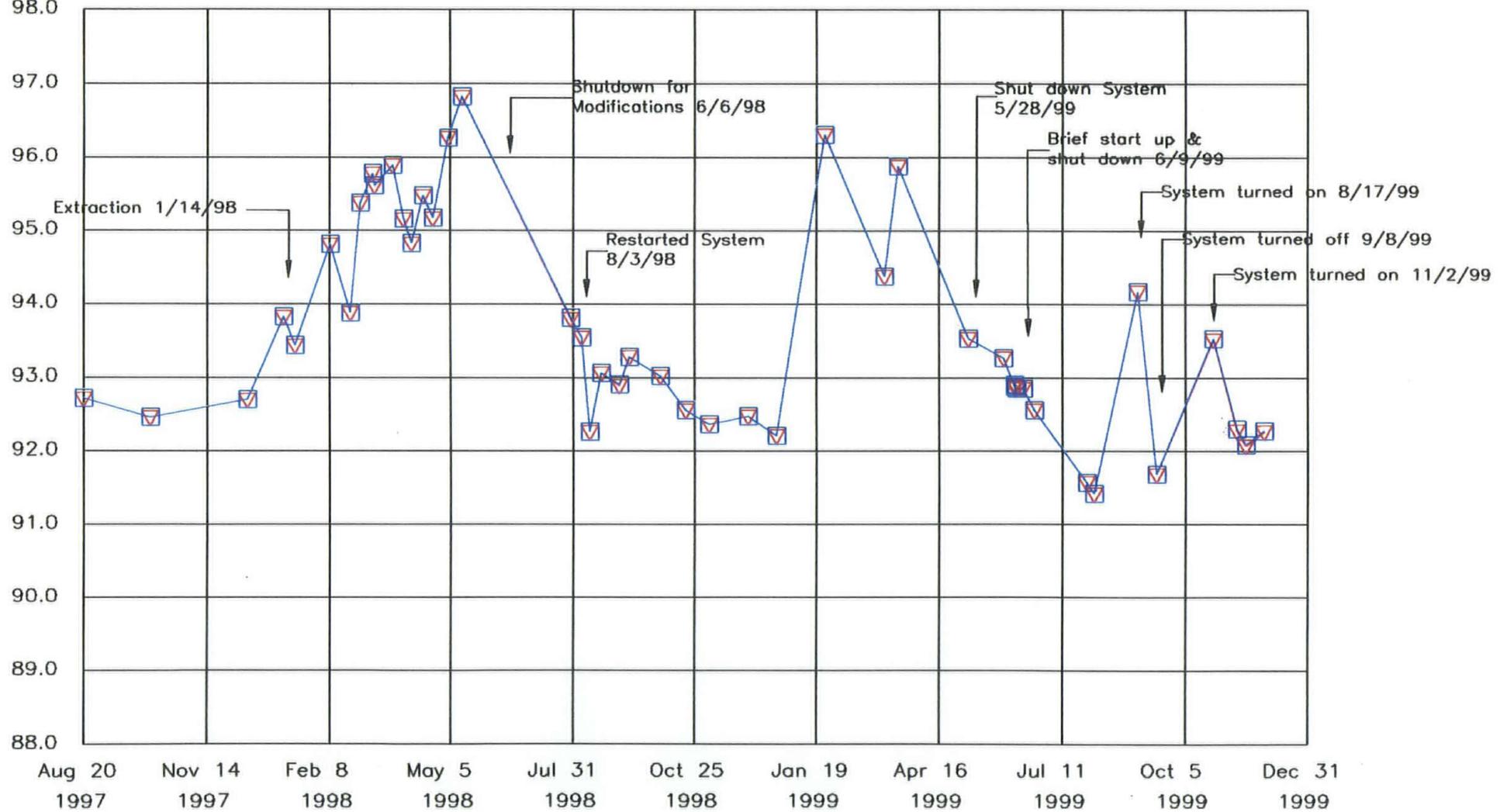


Well: 16MW-18

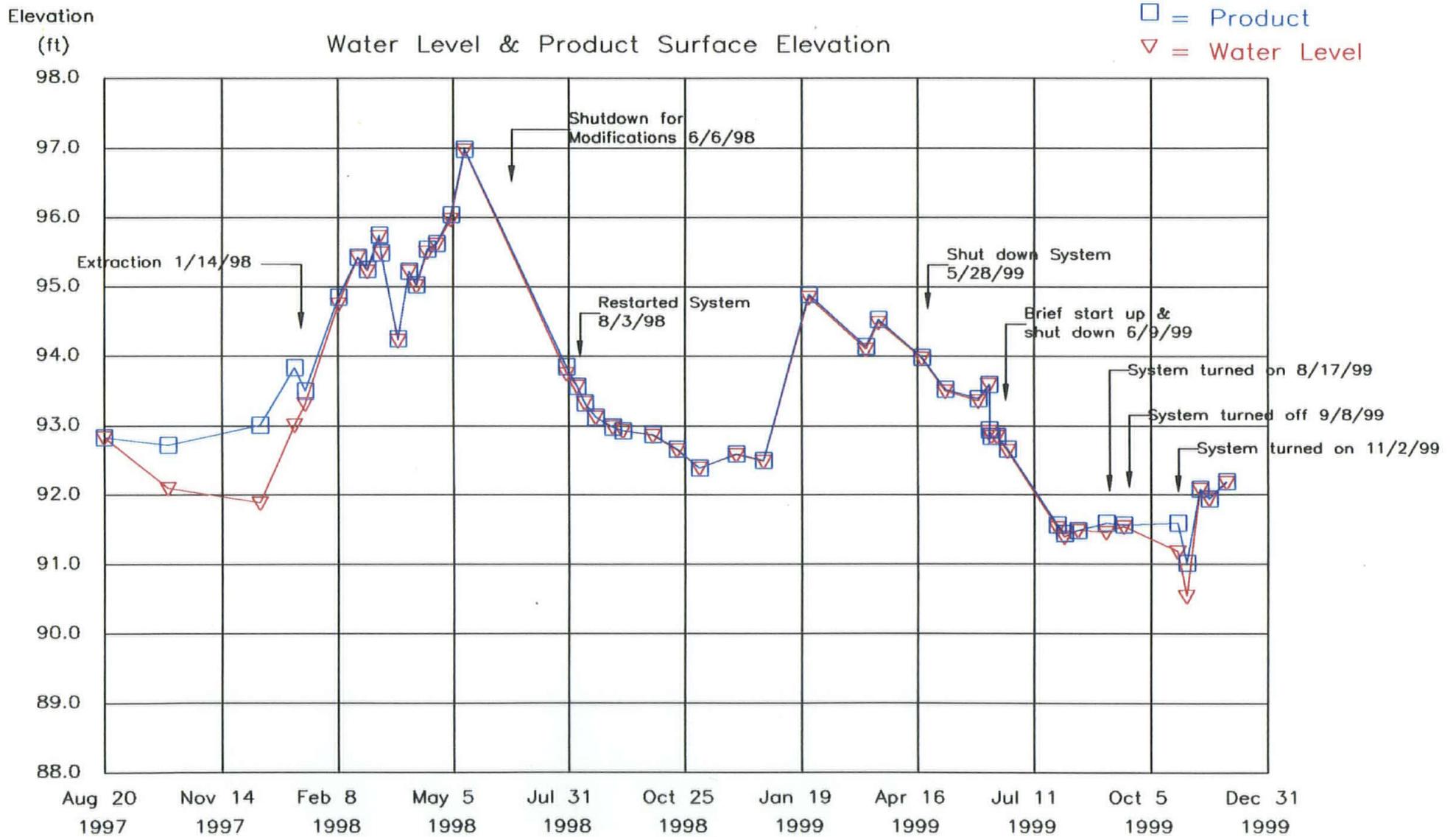
Elevation
(ft)

Water Level & Product Surface Elevation

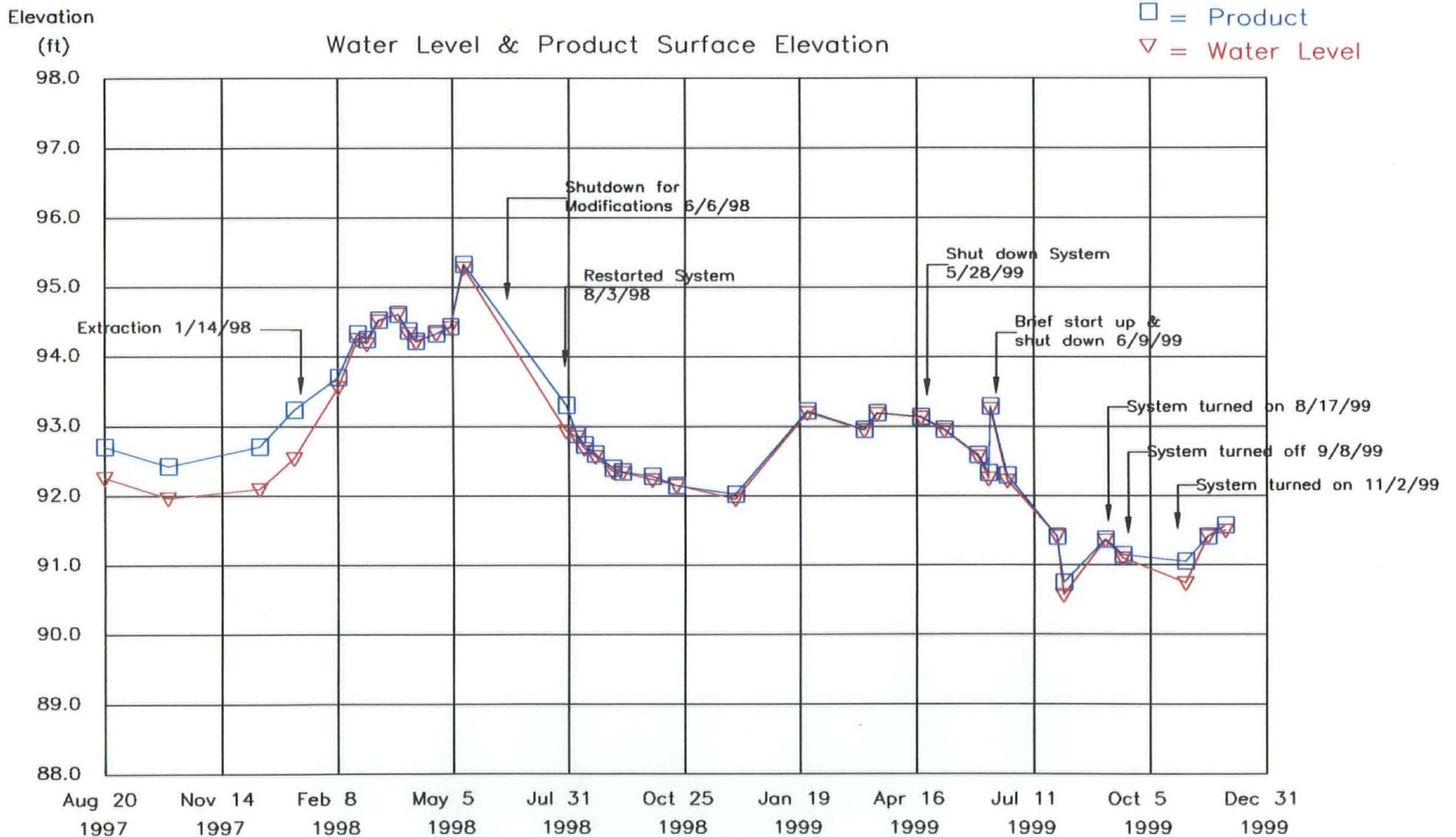
□ = Product
▽ = Water Level



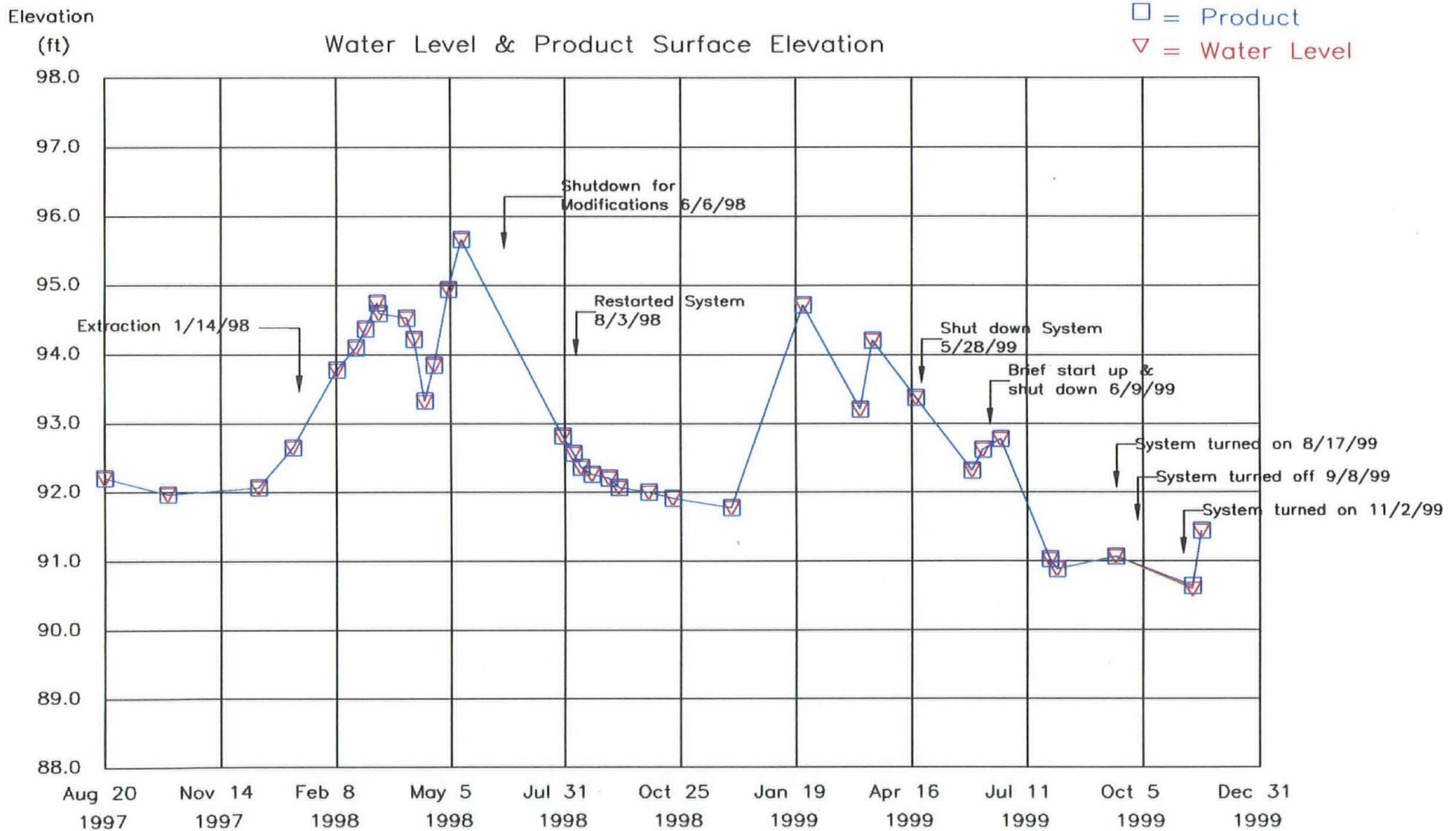
Well: 16MW-19



Well: 16MW-20



Well: 16MW-21

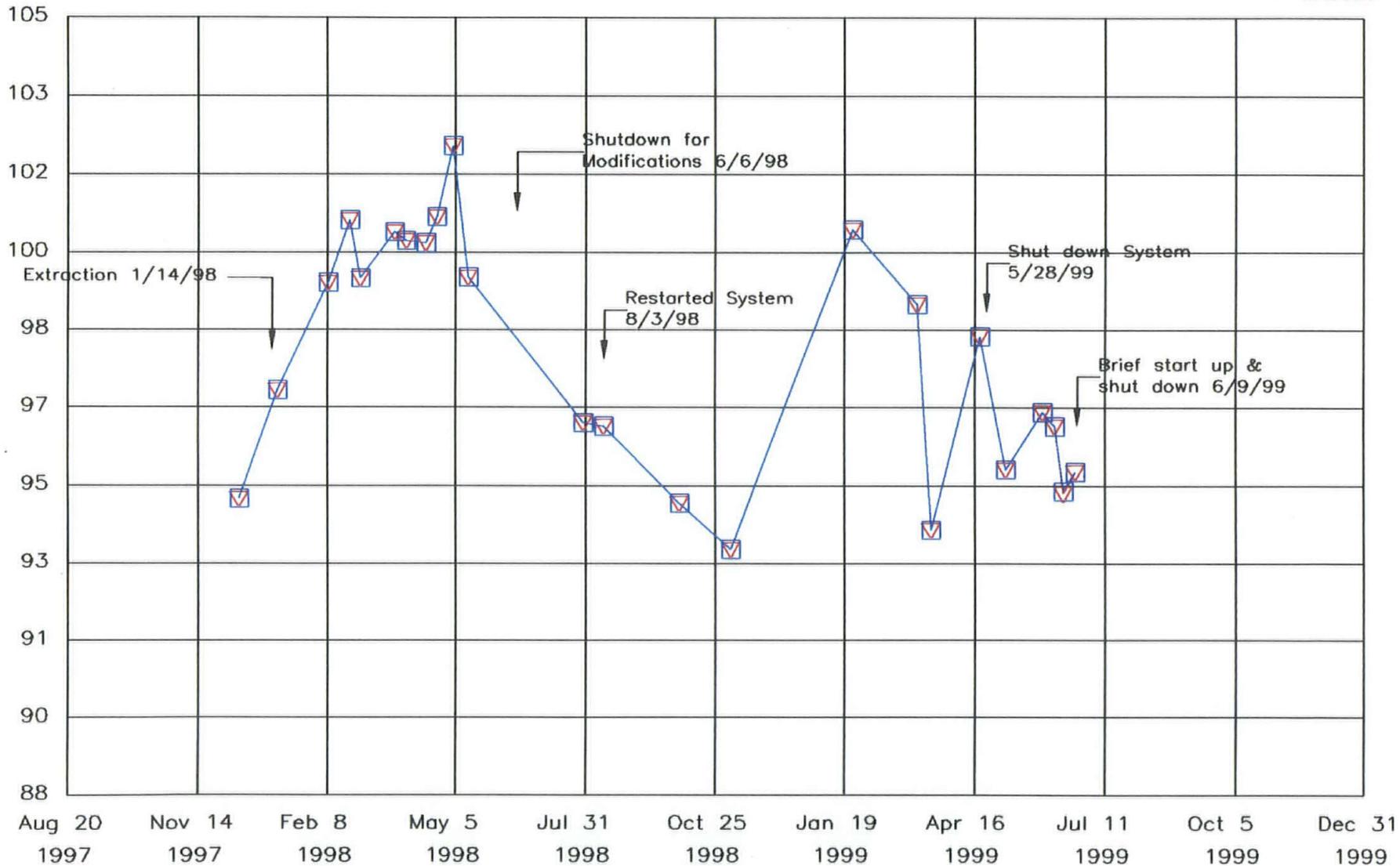


Well: 16MW-22

Elevation
(ft)

Water Level & Product Surface Elevation

□ = Product
▽ = Water Level

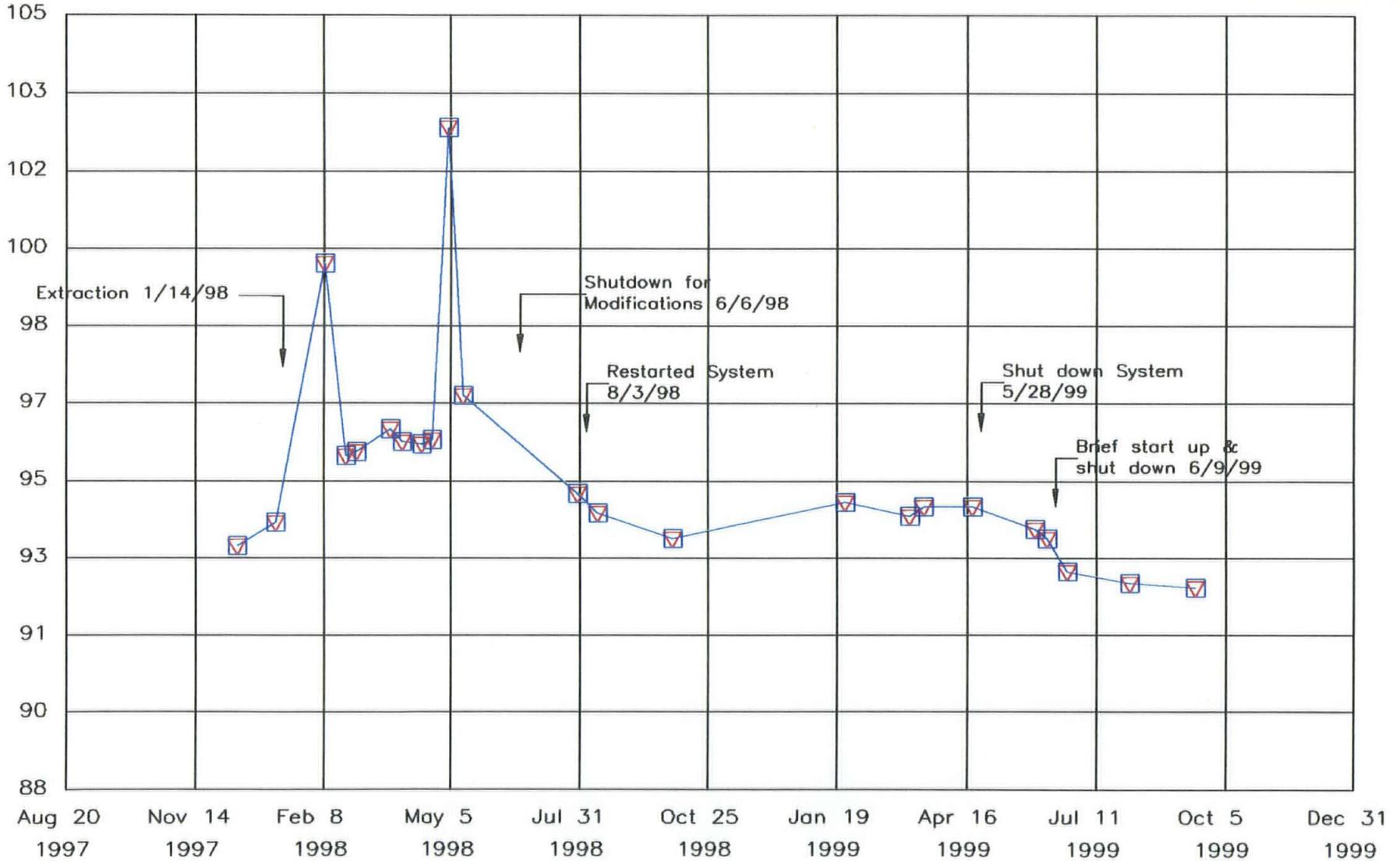


Well: 16MW-23

Elevation
(ft)

Water Level & Product Surface Elevation

□ = Product
▽ = Water Level



Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-04	08/20/97	101.23	11:34	11.92	0.57	89.30	NA	89.79
16MW-04	12/12/97	101.23	00:00	9.18	0.78	92.04	2.73	92.71
16MW-04	01/07/98	101.23	11:02	8.73	1.03	92.49	0.45	93.37
16MW-04	02/10/98	101.23	00:00	7.97	0.93	93.25	0.76	94.05
16MW-04	02/24/98	101.23	00:00	7.08	0.56	94.14	0.89	94.62
16MW-04	03/03/98	101.23	00:00	7.45	1.00	93.78	-0.36	94.63
16MW-04	03/12/98	101.23	00:00	6.94	0.88	94.28	0.50	95.03
16MW-04	03/13/98	101.23	00:00	6.99	0.71	94.23	-0.05	94.84
16MW-04	03/26/98	101.23	00:00	6.60	0.05	94.62	0.39	94.67
16MW-04	04/03/98	101.23	00:00	7.06	0.44	94.16	-0.46	94.54
16MW-04	04/09/98	101.23	00:00	6.86	0.01	94.36	0.20	94.37
16MW-04	04/17/98	101.23	00:00	6.94	0.04	94.29	-0.07	94.32
16MW-04	04/24/98	101.23	00:00	5.03	0.57	96.19	1.90	96.68
16MW-04	05/05/98	101.23	00:00	6.93	0.48	94.29	-1.90	94.78
16MW-04	05/15/98	101.23	00:00	6.24	0.65	94.98	0.69	95.54
16MW-04	07/30/98	101.23	00:00	7.69	0.81	93.53	-1.45	94.22
16MW-04	08/07/98	101.23	00:00	8.36	0.27	92.87	-0.66	93.10
16MW-04	08/13/98	101.23	00:00	8.44	0.02	92.79	-0.08	92.80
16MW-04	08/21/98	101.23	00:00	8.63	0.19	92.60	-0.19	92.76
16MW-04	09/03/98	101.23	00:00	9.25	0.23	91.98	-0.62	92.17
16MW-04	09/10/98	101.23	00:00	8.85	0.24	92.38	0.40	92.58
16MW-04	10/02/98	101.23	00:00	9.02	0.20	92.20	-0.17	92.38
16MW-04	10/20/98	101.23	00:00	9.07	0.26	92.16	-0.04	92.38
16MW-04	11/06/98	101.23	00:00	9.17	0.16	92.05	-0.10	92.19
16MW-04	12/03/98	101.23	00:00	9.22	0.23	92.00	-0.05	92.20
16MW-04	12/23/98	101.23	00:00	9.15	0.08	92.07	0.07	92.14
16MW-04	01/26/99	101.23	00:00	8.03	0.07	93.19	1.11	93.25
16MW-04	03/03/99	101.23	00:00	8.31	0.06	92.92	-0.27	92.97
16MW-04	03/09/99	101.23	00:00	8.22	0.02	93.01	0.09	93.02
16MW-04	03/19/99	101.23	00:00	8.04	0.12	93.19	0.18	93.29
16MW-04	04/20/99	101.23	00:00	8.03	0.13	93.19	0.00	93.30
16MW-04	05/07/99	101.23	00:00	8.28	0.08	92.95	-0.24	93.01
16MW-04	06/09/99	101.23	00:00	8.99	0.00	92.24	-0.71	92.24
16MW-04	06/09/99	101.23	00:01	8.95	0.27	92.27	0.03	92.50
16MW-04	06/22/99	101.23	08:55	8.89	0.19	92.34	0.06	92.50
16MW-04	07/29/99	101.23	00:00	10.43	0.20	90.80	-1.54	90.97

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

Date: 12/14/99

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-04	08/03/99	101.23	00:00	10.51	0.20	90.72	-0.08	90.89
16MW-04	08/13/99	101.23	00:00	10.62	0.20	90.61	-0.11	90.78
16MW-04	09/03/99	101.23	00:00	9.80	0.03	91.43	0.82	91.46
16MW-04	09/15/99	101.23	13:35	10.34	0.16	90.89	-0.54	91.02
16MW-04	10/26/99	101.23	00:00	10.30	0.35	90.93	0.04	91.23
16MW-04	11/02/99	101.23	00:00	10.60	0.38	90.63	-0.30	90.95
16MW-04	11/12/99	101.23	00:00	10.05	0.21	91.18	0.55	91.35
16MW-04	11/18/99	101.23	00:00	10.39	0.26	90.84	-0.34	91.06
16MW-04	12/01/99	101.23	00:00	9.60	0.25	91.63	0.79	91.84
16MW-13	08/20/97	100.97	00:00	8.50	0.80	92.47	NA	93.15
16MW-13	08/20/97	100.97	08:45	8.50	0.80	92.47	0.00	93.15
16MW-13	10/06/97	100.97	10:45	8.85	0.74	92.11	-0.35	92.74
16MW-13	12/12/97	100.97	08:30	8.56	0.64	92.40	0.29	92.95
16MW-13	01/07/98	100.97	09:35	8.03	0.73	92.94	0.53	93.56
16MW-13	01/15/98	100.97	07:30	8.05	0.74	92.91	-0.02	93.54
16MW-13	02/10/98	100.97	00:00	7.38	0.87	93.58	0.67	94.33
16MW-13	02/24/98	100.97	00:00	6.66	0.71	94.30	0.71	94.91
16MW-13	03/03/98	100.97	00:00	6.90	1.04	94.07	-0.23	94.95
16MW-13	03/12/98	100.97	00:00	6.59	1.02	94.37	-0.30	95.24
16MW-13	03/13/98	100.97	00:00	6.60	0.80	94.36	-0.01	95.05
16MW-13	03/26/98	100.97	00:00	6.14	0.30	94.82	0.46	95.08
16MW-13	04/03/98	100.97	00:00	6.46	0.41	94.50	-0.32	94.85
16MW-13	04/09/98	100.97	00:00	6.53	0.26	94.43	-0.07	94.65
16MW-13	04/17/98	100.97	00:00	6.41	0.18	94.56	0.12	94.71
16MW-13	04/24/98	100.97	00:00	6.43	0.57	94.53	-0.02	95.02
16MW-13	05/05/98	100.97	00:00	7.19	0.55	93.77	-0.75	94.33
16MW-13	05/15/98	100.97	00:00	5.54	0.51	95.42	1.64	95.94
16MW-13	07/30/98	100.97	00:00	7.79	0.81	93.17	-2.25	93.86
16MW-13	08/07/98	100.97	00:00	7.78	0.26	93.18	0.01	93.40
16MW-13	08/13/98	100.97	00:00	7.94	0.14	93.03	-0.15	93.14
16MW-13	08/21/98	100.97	00:00	8.03	0.27	92.94	-0.09	93.17
16MW-13	09/03/98	100.97	00:00	8.09	0.20	92.88	-0.06	93.05
16MW-13	09/10/98	100.97	00:00	8.26	0.15	92.71	-0.17	92.83
16MW-13	10/02/98	100.97	00:00	8.41	0.27	92.55	-0.15	92.78
16MW-13	10/20/98	100.97	00:00	8.46	0.14	92.51	-0.04	92.62

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-13	11/06/98	100.97	00:00	8.60	0.13	92.36	-0.14	92.48
16MW-13	12/03/98	100.97	00:00	8.63	0.10	92.33	-0.03	92.42
16MW-13	12/23/98	100.97	00:00	8.69	0.20	92.28	-0.05	92.45
16MW-13	01/26/99	100.97	00:00	7.55	0.18	93.41	1.13	93.57
16MW-13	03/03/99	100.97	00:00	7.80	0.11	93.17	-0.24	93.26
16MW-13	03/09/99	100.97	00:00	7.74	0.14	93.22	0.05	93.34
16MW-13	03/19/99	100.97	00:00	7.50	0.15	93.46	0.23	93.59
16MW-13	04/20/99	100.97	00:00	7.56	0.14	93.40	-0.06	93.52
16MW-13	05/07/99	100.97	00:00	8.04	0.13	92.92	-0.48	93.04
16MW-13	06/09/99	100.97	00:00	7.74	0.00	93.22	0.30	93.22
16MW-13	06/09/99	100.97	00:01	8.48	0.44	92.49	-0.73	92.86
16MW-13	06/10/99	100.97	00:00	8.90	0.09	92.06	-0.42	92.14
16MW-13	06/14/99	100.97	13:05	8.90	0.09	92.06	0.00	92.14
16MW-13	06/22/99	100.97	08:55	8.90	0.28	92.07	0.00	92.31
16MW-13	06/22/99	100.97	09:45	8.90	0.28	92.07	0.00	92.31
16MW-13	07/29/99	100.97	00:00	10.83	0.49	90.14	-1.93	90.55
16MW-13	08/03/99	100.97	00:00	10.90	0.47	90.07	-0.07	90.47
16MW-13	08/13/99	100.97	00:00	11.03	0.20	89.94	-0.13	90.11
16MW-13	09/03/99	100.97	00:00	9.15	0.03	91.82	1.88	91.84
16MW-13	09/15/99	100.97	13:30	9.41	0.04	91.56	-0.26	91.60
16MW-13	10/26/99	100.97	00:00	10.24	0.49	90.73	-0.83	91.15
16MW-13	11/02/99	100.97	00:00	10.47	0.51	90.50	-0.23	90.93
16MW-13	11/12/99	100.97	00:00	10.07	0.36	90.90	0.40	91.21
16MW-13	11/18/99	100.97	00:00	10.56	0.41	90.41	-0.49	90.76
16MW-13	12/01/99	100.97	00:00	10.26	0.42	90.71	0.30	91.07
16MW-14	08/20/97	100.66	00:00	8.15	0.82	92.50	NA	93.20
16MW-14	08/20/97	100.66	08:48	8.24	0.80	92.42	-0.08	93.10
16MW-14	10/06/97	100.66	10:45	8.63	0.99	92.02	-0.39	92.87
16MW-14	12/12/97	100.66	08:30	9.18	0.79	91.48	-0.54	92.15
16MW-14	01/07/98	100.66	09:49	7.94	0.86	92.72	1.24	93.45
16MW-14	01/07/98	100.66	09:56	7.94	0.86	92.72	0.00	93.45
16MW-14	01/15/98	100.66	07:30	7.70	0.63	92.95	0.23	93.49
16MW-14	02/10/98	100.66	00:00	7.12	1.07	93.53	0.57	94.45
16MW-14	03/03/98	100.66	00:00	6.39	0.83	94.26	0.73	94.97
16MW-14	03/12/98	100.66	00:00	6.04	0.74	94.61	0.34	95.24

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-14	03/13/98	100.66	00:00	6.28	0.28	94.37	-0.24	94.61
16MW-14	03/26/98	100.66	00:00	5.60	0.03	95.05	0.68	95.08
16MW-14	04/03/98	100.66	00:00	6.03	0.20	94.62	-0.43	94.79
16MW-14	04/09/98	100.66	00:00	5.10	0.09	95.55	0.93	95.63
16MW-14	04/17/98	100.66	00:00	5.76	0.09	94.89	-0.66	94.97
16MW-14	04/24/98	100.66	00:00	6.18	0.54	94.47	-0.42	94.93
16MW-14	05/05/98	100.66	00:00	6.03	0.46	94.63	0.15	95.02
16MW-14	05/15/98	100.66	00:00	4.90	0.10	95.76	1.13	95.84
16MW-14	07/30/98	100.66	00:00	7.49	0.85	93.16	-2.59	93.89
16MW-14	08/07/98	100.66	00:00	7.22	0.05	93.43	0.26	93.47
16MW-14	08/13/98	100.66	00:00	7.56	0.05	93.10	-0.33	93.14
16MW-14	08/21/98	100.66	00:00	7.78	0.27	92.87	-0.22	93.10
16MW-14	09/03/98	100.66	00:00	7.81	0.16	92.85	-0.02	92.98
16MW-14	09/10/98	100.66	00:00	7.96	0.15	92.70	-0.15	92.82
16MW-14	10/02/98	100.66	00:00	8.07	0.18	92.58	-0.11	92.74
16MW-14	10/20/98	100.66	00:00	8.16	0.13	92.49	-0.09	92.61
16MW-14	11/06/98	100.66	00:00	8.30	0.11	92.35	-0.14	92.45
16MW-14	12/03/98	100.66	00:00	8.33	0.12	92.32	-0.03	92.43
16MW-14	12/23/98	100.66	00:00	8.90	0.14	91.75	-0.56	91.87
16MW-14	01/26/99	100.66	00:00	7.17	0.15	93.49	1.73	93.61
16MW-14	03/03/99	100.66	00:00	8.03	0.12	92.62	-0.86	92.73
16MW-14	03/09/99	100.66	00:00	7.33	0.03	93.32	0.69	93.35
16MW-14	03/19/99	100.66	00:00	7.14	0.08	93.51	0.19	93.58
16MW-14	04/20/99	100.66	00:00	7.25	0.11	93.40	-0.10	93.50
16MW-14	05/07/99	100.66	00:00	7.74	0.01	92.92	-0.48	92.92
16MW-14	06/01/99	100.66	00:00	7.83	0.21	92.83	-0.09	93.01
16MW-14	06/09/99	100.66	00:00	7.64	0.00	93.01	0.18	93.01
16MW-14	06/09/99	100.66	00:01	8.13	0.30	92.52	-0.49	92.78
16MW-14	06/10/99	100.66	00:00	8.10	0.13	92.55	0.03	92.66
16MW-14	06/14/99	100.66	13:10	8.10	0.13	92.55	0.00	92.66
16MW-14	06/22/99	100.66	09:00	8.95	0.25	91.71	-0.84	91.92
16MW-14	07/29/99	100.66	00:00	10.25	0.37	90.41	-1.30	90.72
16MW-14	08/03/99	100.66	00:00	10.40	0.40	90.26	-0.15	90.60
16MW-14	08/13/99	100.66	00:00	10.46	0.39	90.20	-0.06	90.53
16MW-14	09/03/99	100.66	00:00	8.85	0.03	91.81	1.61	91.83
16MW-14	09/15/99	100.66	13:40	9.29	0.09	91.37	-0.44	91.44

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-14	10/26/99	100.66	00:00	10.20	0.57	90.46	-0.91	90.94
16MW-14	11/02/99	100.66	00:00	10.26	0.53	90.40	-0.06	90.85
16MW-14	11/12/99	100.66	00:00	9.60	0.15	91.06	0.66	91.18
16MW-14	11/18/99	100.66	00:00	9.82	0.17	90.84	-0.22	90.98
16MW-14	12/01/99	100.66	00:00	9.70	0.34	90.96	0.12	91.25
16MW-15	08/20/97	100.98	00:00	8.79	0.89	92.18	NA	92.94
16MW-15	08/20/97	100.98	08:55	8.79	0.89	92.18	0.00	92.94
16MW-15	08/20/97	100.98	09:12	8.79	0.89	92.18	0.00	92.94
16MW-15	10/06/97	100.98	10:45	9.18	0.93	91.79	-0.38	92.59
16MW-15	12/12/97	100.98	08:30	9.18	0.92	91.79	-0.00	92.58
16MW-15	01/07/98	100.98	10:05	8.57	1.27	92.41	0.61	93.49
16MW-15	01/15/98	100.98	07:30	8.36	0.84	92.62	0.21	93.33
16MW-15	02/10/98	100.98	00:00	7.91	1.49	93.06	0.44	94.33
16MW-15	03/03/98	100.98	00:00	7.37	1.37	93.60	0.54	94.77
16MW-15	03/12/98	100.98	00:00	6.93	1.19	94.05	0.44	95.06
16MW-15	03/13/98	100.98	00:00	6.78	0.60	94.19	0.14	94.71
16MW-15	04/03/98	100.98	00:00	6.76	0.41	94.21	0.02	94.56
16MW-15	04/09/98	100.98	00:00	6.78	0.13	94.19	-0.02	94.31
16MW-15	04/17/98	100.98	00:00	6.62	0.05	94.35	0.16	94.40
16MW-15	04/24/98	100.98	00:00	6.71	0.57	94.26	-0.09	94.75
16MW-15	05/05/98	100.98	00:00	6.73	0.59	94.25	-0.01	94.84
16MW-15	05/15/98	100.98	00:00	6.12	0.36	94.86	0.61	95.16
16MW-15	07/30/98	100.98	00:00	8.19	0.92	92.78	-2.07	93.57
16MW-15	08/07/98	100.98	00:00	8.13	0.30	92.84	0.05	93.10
16MW-15	08/13/98	100.98	00:00	8.26	0.17	92.72	-0.12	92.86
16MW-15	08/21/98	100.98	00:00	8.41	0.27	92.57	-0.15	92.80
16MW-15	09/03/98	100.98	00:00	8.46	0.22	92.52	-0.05	92.70
16MW-15	09/10/98	100.98	00:00	8.58	0.17	92.39	-0.12	92.54
16MW-15	10/02/98	100.98	00:00	8.68	0.20	92.29	-0.10	92.46
16MW-15	10/20/98	100.98	00:00	8.77	0.16	92.21	-0.08	92.34
16MW-15	11/06/98	100.98	00:00	8.87	0.06	92.10	-0.10	92.15
16MW-15	12/03/98	100.98	00:00	8.92	0.11	92.05	-0.05	92.15
16MW-15	12/23/98	100.98	00:00	8.54	0.11	92.44	0.38	92.53
16MW-15	01/26/99	100.98	00:00	7.74	0.12	93.23	0.79	93.34
16MW-15	03/03/99	100.98	00:00	7.45	0.10	93.52	0.29	93.61

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

Date: 12/14/99

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	 WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-15	03/09/99	100.98	00:00	8.30	0.40	92.68	-0.84	93.02
16MW-15	03/19/99	100.98	00:00	7.76	0.14	93.21	0.53	93.33
16MW-15	04/20/99	100.98	00:00	7.88	0.14	93.10	-0.11	93.21
16MW-15	06/01/99	100.98	00:00	8.40	0.17	92.58	-0.52	92.72
16MW-15	06/09/99	100.98	00:00	7.95	0.00	93.02	0.44	93.02
16MW-15	06/09/99	100.98	00:01	8.69	0.22	92.28	-0.74	92.47
16MW-15	06/10/99	100.98	00:00	8.67	0.10	92.30	0.01	92.39
16MW-15	06/14/99	100.98	13:15	8.68	0.10	92.29	-0.01	92.38
16MW-15	06/22/99	100.98	09:00	8.74	0.20	92.24	-0.05	92.41
16MW-15	07/29/99	100.98	00:00	10.61	0.32	90.37	-1.87	90.64
16MW-15	08/13/99	100.98	00:00	10.98	0.36	90.00	-0.37	90.30
16MW-15	09/03/99	100.98	00:00	9.44	0.03	91.54	1.54	91.56
16MW-15	09/15/99	100.98	13:45	9.46	0.12	91.52	-0.02	91.62
16MW-15	10/26/99	100.98	00:00	10.65	0.52	90.33	-1.19	90.77
16MW-15	11/02/99	100.98	00:00	10.93	0.57	90.05	-0.28	90.53
16MW-15	11/12/99	100.98	00:00	9.70	0.34	91.28	1.23	91.56
16MW-15	11/18/99	100.98	00:00	9.81	0.35	91.17	-0.11	91.46
16MW-15	12/01/99	100.98	00:00	9.60	0.16	91.38	0.21	91.51
16MW-16	08/20/97	98.82	00:00	6.77	0.08	92.05	NA	92.11
16MW-16	08/20/97	98.82	09:12	6.77	0.08	92.05	0.00	92.11
16MW-16	10/06/97	98.82	10:45	7.12	0.35	91.69	-0.35	91.99
16MW-16	12/12/97	98.82	08:30	7.29	1.20	91.52	-0.16	92.55
16MW-16	01/07/98	98.82	10:10	6.94	1.15	91.87	0.35	92.85
16MW-16	01/15/98	98.82	07:30	6.15	0.56	92.67	0.79	93.14
16MW-16	02/10/98	98.82	00:00	5.90	0.49	92.91	0.24	93.33
16MW-16	02/24/98	98.82	00:00	3.90	0.05	94.92	2.00	94.96
16MW-16	03/03/98	98.82	00:00	5.18	0.17	93.63	-1.28	93.78
16MW-16	03/12/98	98.82	00:00	4.72	0.02	94.09	0.45	94.11
16MW-16	03/13/98	98.82	00:00	5.05	0.02	93.76	-0.32	93.78
16MW-16	03/26/98	98.82	00:00	4.39	0.01	94.43	0.66	94.43
16MW-16	04/03/98	98.82	00:00	5.13	0.01	93.68	-0.74	93.69
16MW-16	04/09/98	98.82	00:00	5.28	0.02	93.53	-0.14	93.55
16MW-16	04/17/98	98.82	00:00	5.17	0.14	93.64	0.11	93.77
16MW-16	04/24/98	98.82	00:00	5.05	0.07	93.76	-0.11	93.82
16MW-16	05/05/98	98.82	00:00	5.09	0.07	93.72	-0.04	93.80

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

Date: 12/14/99

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-16	05/15/98	98.82	00:00	3.92	0.10	94.89	1.16	94.98
16MW-16	07/30/98	98.82	00:00	6.47	0.39	92.35	-2.54	92.68
16MW-16	08/07/98	98.82	00:00	6.50	0.14	92.32	-0.03	92.43
16MW-16	08/13/98	98.82	00:00	6.70	0.17	92.11	-0.20	92.26
16MW-16	08/21/98	98.82	00:00	6.77	0.07	92.04	-0.07	92.10
16MW-16	09/03/98	98.82	00:00	6.74	0.04	92.08	0.03	92.11
16MW-16	09/10/98	98.82	00:00	6.89	0.04	91.93	-0.15	91.96
16MW-16	10/02/98	98.82	00:00	6.98	0.08	91.84	-0.09	91.90
16MW-16	10/20/98	98.82	00:00	7.04	0.04	91.78	-0.06	91.81
16MW-16	11/06/98	98.82	00:00	7.15	0.03	91.66	-0.11	91.69
16MW-16	12/03/98	98.82	00:00	7.13	0.03	91.68	0.01	91.71
16MW-16	12/23/98	98.82	00:00	7.09	0.06	91.73	0.04	91.78
16MW-16	01/26/99	98.82	00:00	5.95	0.00	92.86	1.13	92.86
16MW-16	03/19/99	98.82	00:00	5.83	0.00	92.98	0.12	92.98
16MW-16	04/20/99	98.82	00:00	6.02	0.01	92.80	-0.18	92.80
16MW-16	05/07/99	98.82	00:00	6.23	0.01	92.59	-0.21	92.59
16MW-16	06/01/99	98.82	00:00	6.66	0.09	92.16	-0.43	92.24
16MW-16	06/09/99	98.82	00:00	6.15	0.00	92.67	0.51	92.67
16MW-16	06/09/99	98.82	00:01	7.01	0.16	91.80	-0.86	91.94
16MW-16	06/10/99	98.82	00:00	6.97	0.02	91.84	0.03	91.86
16MW-16	06/14/99	98.82	13:40	6.97	0.02	91.84	0.00	91.86
16MW-16	06/22/99	98.82	09:30	6.90	0.09	91.92	0.07	92.00
16MW-16	07/29/99	98.82	00:00	8.62	0.22	90.20	-1.72	90.39
16MW-16	08/03/99	98.82	00:00	8.80	0.24	90.02	-0.18	90.22
16MW-16	08/13/99	98.82	00:00	8.97	0.27	89.85	-0.17	90.08
16MW-16	09/03/99	98.82	00:00	8.35	0.19	90.47	0.62	90.63
16MW-16	09/15/99	98.82	14:20	8.10	0.08	90.72	0.25	90.79
16MW-16	10/26/99	98.82	00:00	8.00	0.30	90.82	0.10	91.07
16MW-16	11/02/99	98.82	00:00	8.22	0.31	90.60	-0.22	90.86
16MW-16	11/12/99	98.82	00:00	7.30	0.02	91.52	0.92	91.54
16MW-16	11/18/99	98.82	00:00	7.57	0.04	91.25	-0.27	91.28
16MW-16	12/01/99	98.82	00:00	7.51	0.07	91.31	0.06	91.37
16MW-17	08/20/97	99.79	00:00	7.76	1.03	92.02	NA	92.90
16MW-17	08/20/97	99.79	09:07	7.76	1.03	92.02	0.00	92.90
16MW-17	10/06/97	99.79	00:00	8.19	1.28	91.60	-0.42	92.69

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-17	10/06/97	99.79	10:45	8.15	0.94	91.63	0.03	92.44
16MW-17	12/12/97	99.79	08:30	7.87	0.87	91.91	0.27	92.66
16MW-17	01/07/98	99.79	10:23	7.50	1.21	92.28	0.37	93.32
16MW-17	01/15/98	99.79	07:30	7.13	0.43	92.65	-0.36	93.02
16MW-17	02/10/98	99.79	00:00	6.70	1.17	93.08	0.43	94.08
16MW-17	02/24/98	99.79	00:00	5.57	0.37	94.21	1.13	94.53
16MW-17	03/03/98	99.79	00:00	6.07	0.95	93.71	-0.50	94.52
16MW-17	03/12/98	99.79	00:00	5.77	0.49	94.01	0.30	94.43
16MW-17	03/13/98	99.79	00:00	5.32	0.07	94.46	0.45	94.52
16MW-17	03/26/98	99.79	00:00	5.24	0.01	94.54	0.08	94.55
16MW-17	04/03/98	99.79	00:00	6.64	0.10	93.14	-1.40	93.23
16MW-17	04/09/98	99.79	00:00	5.83	0.09	93.95	0.81	94.03
16MW-17	04/17/98	99.79	00:00	5.63	0.13	94.15	0.20	94.27
16MW-17	04/24/98	99.79	00:00	5.57	0.20	94.21	0.06	94.38
16MW-17	05/05/98	99.79	00:00	5.64	0.27	94.15	-0.06	94.42
16MW-17	05/15/98	99.79	00:00	5.09	0.09	94.70	0.55	94.77
16MW-17	07/30/98	99.79	00:00	9.09	0.39	90.70	-4.00	91.03
16MW-17	08/07/98	99.79	00:00	7.09	0.21	92.70	2.00	92.87
16MW-17	08/13/98	99.79	00:00	7.28	0.22	92.50	-0.19	92.69
16MW-17	08/21/98	99.79	00:00	7.34	0.09	92.44	-0.06	92.52
16MW-17	09/03/98	99.79	00:00	7.40	0.12	92.39	-0.05	92.49
16MW-17	09/10/98	99.79	00:00	7.48	0.07	92.30	-0.08	92.37
16MW-17	10/02/98	99.79	00:00	5.85	0.81	93.94	1.63	94.63
16MW-17	10/20/98	99.79	00:00	7.58	0.09	92.21	-1.73	92.28
16MW-17	11/06/98	99.79	00:00	7.82	0.07	91.96	-0.24	92.02
16MW-17	12/03/98	99.79	00:00	7.85	0.04	91.93	-0.03	91.97
16MW-17	12/23/98	99.79	00:00	7.83	0.17	91.95	0.02	92.10
16MW-17	01/26/99	99.79	00:00	6.50	0.07	93.28	1.33	93.34
16MW-17	03/09/99	99.79	00:00	6.85	0.05	92.93	-0.35	92.97
16MW-17	03/19/99	99.79	00:00	6.51	0.05	93.27	0.34	93.32
16MW-17	04/20/99	99.79	00:00	6.73	0.05	93.05	-0.22	93.10
16MW-17	05/07/99	99.79	00:00	6.90	0.02	92.89	-0.16	92.90
16MW-17	06/01/99	99.79	00:00	7.29	0.07	92.50	-0.39	92.56
16MW-17	06/09/99	99.79	00:00	7.15	0.00	92.63	0.13	92.63
16MW-17	06/09/99	99.79	00:01	7.60	0.12	92.18	-0.45	92.28
16MW-17	06/10/99	99.79	00:00	7.60	0.04	92.18	0.00	92.22

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-17	06/14/99	99.79	13:30	7.60	0.04	92.18	0.00	92.22
16MW-17	06/22/99	99.79	09:20	7.67	0.11	92.12	-0.06	92.21
16MW-17	07/29/99	99.79	00:00	9.40	0.27	90.39	-1.73	90.62
16MW-17	08/03/99	99.79	00:00	9.55	0.28	90.24	-0.15	90.47
16MW-17	08/13/99	99.79	00:00	9.70	0.30	90.09	-0.15	90.34
16MW-17	09/03/99	99.79	00:00	8.49	0.04	91.30	1.21	91.33
16MW-17	09/15/99	99.79	14:05	8.86	0.11	90.93	-0.37	91.02
16MW-17	10/26/99	99.79	00:00	9.81	0.62	89.98	-0.95	90.51
16MW-17	11/02/99	99.79	00:00	9.99	0.63	89.80	-0.18	90.34
16MW-17	11/12/99	99.79	00:00	8.31	0.10	91.48	1.68	91.56
16MW-17	11/18/99	99.79	00:00	8.55	0.12	91.24	-0.24	91.34
16MW-17	12/01/99	99.79	00:00	8.87	0.12	90.92	-0.32	91.02
16MW-18	08/20/97	100.69	00:00	7.96	0.00	92.73	NA	92.73
16MW-18	08/20/97	100.69	09:03	7.96	0.00	92.73	0.00	92.73
16MW-18	10/06/97	100.69	10:45	8.21	0.00	92.48	-0.25	92.48
16MW-18	12/12/97	100.69	08:30	7.98	0.00	92.71	0.23	92.71
16MW-18	01/07/98	100.69	10:30	6.85	0.00	93.84	1.13	93.84
16MW-18	01/15/98	100.69	07:30	7.24	0.00	93.45	-0.39	93.45
16MW-18	02/10/98	100.69	00:00	5.86	0.00	94.83	1.38	94.83
16MW-18	02/24/98	100.69	00:00	6.80	0.00	93.89	-0.94	93.89
16MW-18	03/03/98	100.69	00:00	5.30	0.00	95.39	1.50	95.39
16MW-18	03/12/98	100.69	00:00	4.89	0.00	95.80	0.41	95.80
16MW-18	03/13/98	100.69	00:00	5.06	0.00	95.63	-0.17	95.63
16MW-18	03/26/98	100.69	00:00	4.78	0.00	95.91	0.28	95.91
16MW-18	04/03/98	100.69	00:00	5.51	0.00	95.18	-0.73	95.18
16MW-18	04/09/98	100.69	00:00	5.85	0.00	94.84	-0.34	94.84
16MW-18	04/17/98	100.69	00:00	5.20	0.00	95.49	0.65	95.49
16MW-18	04/24/98	100.69	00:00	5.50	0.00	95.19	-0.30	95.19
16MW-18	05/05/98	100.69	00:00	4.40	0.00	96.29	1.10	96.29
16MW-18	05/15/98	100.69	00:00	3.85	0.00	96.84	0.55	96.84
16MW-18	07/30/98	100.69	00:00	6.87	0.01	93.81	-3.02	93.82
16MW-18	08/07/98	100.69	00:00	7.13	0.00	93.55	-0.25	93.55
16MW-18	08/13/98	100.69	00:00	8.40	0.00	92.29	-1.26	92.29
16MW-18	08/21/98	100.69	00:00	7.61	0.00	93.08	0.79	93.08
16MW-18	09/03/98	100.69	00:00	7.77	0.00	92.91	-0.16	92.91

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-18	09/10/98	100.69	00:00	7.39	0.00	93.29	0.38	93.29
16MW-18	10/02/98	100.69	00:00	7.66	0.00	93.03	-0.26	93.03
16MW-18	10/20/98	100.69	00:00	8.12	0.00	92.57	-0.46	92.57
16MW-18	11/06/98	100.69	00:00	8.31	0.00	92.38	-0.19	92.38
16MW-18	12/03/98	100.69	00:00	8.20	0.00	92.49	0.11	92.49
16MW-18	12/23/98	100.69	00:00	8.46	0.00	92.22	-0.26	92.22
16MW-18	01/26/99	100.69	00:00	4.36	0.00	96.33	4.10	96.33
16MW-18	03/09/99	100.69	00:00	6.30	0.00	94.39	-1.94	94.39
16MW-18	03/19/99	100.69	00:00	4.80	0.00	95.89	1.50	95.89
16MW-18	05/07/99	100.69	00:00	7.14	0.00	93.55	-2.34	93.55
16MW-18	06/01/99	100.69	00:00	7.40	0.00	93.29	-0.26	93.29
16MW-18	06/09/99	100.69	00:00	7.79	0.00	92.90	-0.39	92.90
16MW-18	06/09/99	100.69	00:01	7.77	0.00	92.92	0.02	92.92
16MW-18	06/10/99	100.69	00:00	7.82	0.00	92.87	-0.05	92.87
16MW-18	06/14/99	100.69	13:25	7.82	0.00	92.87	0.00	92.87
16MW-18	06/22/99	100.69	09:15	8.12	0.00	92.57	-0.30	92.57
16MW-18	07/29/99	100.69	00:00	9.10	0.00	91.59	-0.98	91.59
16MW-18	08/03/99	100.69	00:00	9.25	0.00	91.44	-0.15	91.44
16MW-18	09/03/99	100.69	00:00	6.50	0.00	94.19	2.75	94.19
16MW-18	09/15/99	100.69	14:00	8.99	0.00	91.70	-2.49	91.70
16MW-18	10/26/99	100.69	00:00	7.15	0.01	93.54	1.84	93.55
16MW-18	11/12/99	100.69	00:00	8.39	0.02	92.30	-1.24	92.31
16MW-18	11/18/99	100.69	00:00	8.60	0.01	92.09	-0.21	92.10
16MW-18	12/01/99	100.69	00:00	8.41	0.01	92.28	0.19	92.29
16MW-19	08/20/97	100.54	08:57	7.70	0.00	92.84	NA	92.84
16MW-19	10/06/97	100.54	10:45	8.43	0.62	92.11	-0.73	92.63
16MW-19	12/12/97	100.54	08:30	8.64	1.12	91.89	-0.21	92.85
16MW-19	01/07/98	100.54	10:37	7.52	0.82	93.01	1.12	93.71
16MW-19	01/15/98	100.54	07:30	7.21	0.18	93.32	0.31	93.48
16MW-19	02/10/98	100.54	00:00	5.78	0.09	94.75	1.42	94.83
16MW-19	02/24/98	100.54	00:00	5.10	0.00	95.44	0.68	95.44
16MW-19	03/03/98	100.54	00:00	5.30	0.01	95.23	-0.20	95.24
16MW-19	03/12/98	100.54	00:00	4.80	0.01	95.73	0.50	95.74
16MW-19	03/13/98	100.54	00:00	5.05	0.00	95.49	-0.24	95.49
16MW-19	03/26/98	100.54	00:00	6.31	0.03	94.23	-1.26	94.25
(1) Change in Water Elevation since last reported measurement						D = Dry	NA = Not Available	
(2) Measurements Based on Mean Sea Level								

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	Δ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-19	04/03/98	100.54	00:00	5.31	0.00	95.23	1.00	95.23
16MW-19	04/09/98	100.54	00:00	5.51	0.00	95.02	-0.20	95.03
16MW-19	04/17/98	100.54	00:00	5.03	0.03	95.50	0.48	95.53
16MW-19	04/24/98	100.54	00:00	4.92	0.01	95.62	0.11	95.62
16MW-19	05/05/98	100.54	00:00	4.55	0.05	95.98	0.36	96.04
16MW-19	05/15/98	100.54	00:00	3.56	0.01	96.97	0.99	96.98
16MW-19	07/30/98	100.54	00:00	6.79	0.11	93.75	-3.22	93.84
16MW-19	08/07/98	100.54	00:00	6.97	0.00	93.57	-0.18	93.57
16MW-19	08/13/98	100.54	00:00	7.20	0.00	93.33	-0.23	93.33
16MW-19	08/21/98	100.54	00:00	7.41	0.00	93.13	-0.20	93.13
16MW-19	09/03/98	100.54	00:00	7.54	0.00	92.99	-0.13	92.99
16MW-19	09/10/98	100.54	00:00	7.60	0.00	92.93	-0.06	92.93
16MW-19	10/02/98	100.54	00:00	7.66	0.00	92.87	-0.06	92.87
16MW-19	10/20/98	100.54	00:00	7.87	0.00	92.66	-0.21	92.66
16MW-19	11/06/98	100.54	00:00	8.14	0.00	92.39	-0.27	92.39
16MW-19	12/03/98	100.54	00:00	7.94	0.00	92.59	0.20	92.59
16MW-19	12/23/98	100.54	00:00	8.04	0.01	92.49	-0.10	92.50
16MW-19	01/26/99	100.54	00:00	5.69	0.04	94.85	2.35	94.88
16MW-19	03/09/99	100.54	00:00	6.43	0.03	94.11	-0.74	94.13
16MW-19	03/19/99	100.54	00:00	6.05	0.05	94.49	0.38	94.53
16MW-19	04/20/99	100.54	00:00	6.56	0.01	93.97	-0.51	93.98
16MW-19	05/07/99	100.54	00:00	7.03	0.02	93.50	-0.47	93.52
16MW-19	06/01/99	100.54	00:00	7.17	0.02	93.37	-0.13	93.39
16MW-19	06/09/99	100.54	00:00	6.94	0.00	93.60	0.23	93.60
16MW-19	06/09/99	100.54	00:01	7.62	0.03	92.92	-0.68	92.94
16MW-19	06/10/99	100.54	00:00	7.68	0.00	92.86	-0.06	92.86
16MW-19	06/14/99	100.54	13:20	7.68	0.00	92.86	0.00	92.86
16MW-19	06/22/99	100.54	09:10	7.90	0.02	92.64	-0.22	92.66
16MW-19	07/29/99	100.54	00:00	9.01	0.05	91.53	-1.11	91.57
16MW-19	08/03/99	100.54	00:00	9.14	0.05	91.40	-0.13	91.44
16MW-19	08/13/99	100.54	00:00	9.05	0.00	91.49	0.09	91.49
16MW-19	09/03/99	100.54	00:00	9.07	0.14	91.47	-0.02	91.58
16MW-19	09/15/99	100.54	13:55	8.99	0.02	91.55	0.08	91.56
16MW-19	10/26/99	100.54	00:00	9.35	0.41	91.19	-0.36	91.54
16MW-19	11/02/99	100.54	00:00	9.99	0.46	90.55	-0.64	90.94
16MW-19	11/12/99	100.54	00:00	8.45	0.00	92.09	1.54	92.09

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-19	11/18/99	100.54	00:00	8.59	0.00	91.95	-0.14	91.95
16MW-19	12/01/99	100.54	00:00	8.35	0.01	92.19	0.24	92.19
16MW-20	08/20/97	100.82	09:26	8.54	0.44	92.27	NA	92.65
16MW-20	10/06/97	100.82	10:45	8.84	0.46	91.98	-0.29	92.37
16MW-20	12/12/97	100.82	08:30	8.71	0.61	92.10	0.12	92.62
16MW-20	01/07/98	100.82	10:49	8.27	0.69	92.54	0.43	93.13
16MW-20	02/10/98	100.82	00:00	7.25	0.15	93.56	1.02	93.69
16MW-20	02/24/98	100.82	00:00	6.56	0.08	94.26	0.69	94.32
16MW-20	03/03/98	100.82	00:00	6.63	0.07	94.18	-0.07	94.24
16MW-20	03/12/98	100.82	00:00	6.30	0.02	94.51	0.33	94.53
16MW-20	03/26/98	100.82	00:00	6.20	0.00	94.61	0.10	94.61
16MW-20	04/03/98	100.82	00:00	6.48	0.04	94.34	-0.27	94.37
16MW-20	04/09/98	100.82	00:00	6.61	0.02	94.20	-0.13	94.22
16MW-20	04/24/98	100.82	00:00	6.48	0.00	94.34	0.13	94.34
16MW-20	05/05/98	100.82	00:00	6.39	0.00	94.42	0.08	94.43
16MW-20	05/15/98	100.82	00:00	5.53	0.05	95.28	0.86	95.33
16MW-20	07/30/98	100.82	00:00	7.87	0.36	92.94	-2.34	93.25
16MW-20	08/07/98	100.82	00:00	7.96	0.04	92.85	-0.09	92.89
16MW-20	08/13/98	100.82	00:00	8.13	0.05	92.68	-0.16	92.73
16MW-20	08/21/98	100.82	00:00	8.25	0.05	92.57	-0.11	92.61
16MW-20	09/03/98	100.82	00:00	8.47	0.06	92.35	-0.22	92.40
16MW-20	09/10/98	100.82	00:00	8.47	0.01	92.34	-0.00	92.35
16MW-20	10/02/98	100.82	00:00	8.57	0.05	92.24	-0.09	92.29
16MW-20	10/20/98	100.82	00:00	8.66	0.00	92.16	-0.08	92.16
16MW-20	12/03/98	100.82	00:00	8.85	0.06	91.97	-0.19	92.02
16MW-20	01/26/99	100.82	00:00	7.61	0.02	93.20	1.23	93.22
16MW-20	03/09/99	100.82	00:00	7.87	0.02	92.94	-0.25	92.96
16MW-20	03/19/99	100.82	00:00	7.63	0.01	93.19	0.24	93.19
16MW-20	04/20/99	100.82	00:00	7.68	0.00	93.13	-0.05	93.13
16MW-20	05/07/99	100.82	00:00	7.86	0.01	92.95	-0.18	92.96
16MW-20	06/01/99	100.82	00:00	8.25	0.03	92.57	-0.38	92.59
16MW-20	06/09/99	100.82	00:01	8.56	0.08	92.26	-0.31	92.32
16MW-20	06/10/99	100.82	00:00	7.57	0.05	93.25	0.99	93.29
16MW-20	06/22/99	100.82	09:35	8.59	0.08	92.23	-1.02	92.30
16MW-20	07/29/99	100.82	00:00	9.40	0.00	91.42	-0.81	91.42

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-20	08/03/99	100.82	00:00	10.25	0.19	90.57	-0.85	90.73
16MW-20	09/03/99	100.82	00:00	9.45	0.01	91.37	0.80	91.38
16MW-20	09/15/99	100.82	14:30	9.72	0.06	91.10	-0.27	91.15
16MW-20	11/02/99	100.82	00:00	10.08	0.32	90.74	-0.36	91.01
16MW-20	11/18/99	100.82	00:00	9.40	0.00	91.42	0.68	91.42
16MW-20	12/01/99	100.82	00:00	9.31	0.08	91.51	0.09	91.57
16MW-21	08/20/97	99.78	00:00	7.56	0.00	92.21	NA	92.21
16MW-21	08/20/97	99.78	09:35	7.56	0.00	92.21	0.00	92.21
16MW-21	10/06/97	99.78	10:45	7.80	0.00	91.98	-0.23	91.98
16MW-21	12/12/97	99.78	08:30	7.70	0.00	92.08	0.10	92.08
16MW-21	01/07/98	99.78	10:58	7.12	0.00	92.66	0.58	92.66
16MW-21	02/10/98	99.78	00:00	6.00	0.00	93.78	1.12	93.78
16MW-21	02/24/98	99.78	00:00	5.67	0.00	94.11	0.33	94.11
16MW-21	03/03/98	99.78	00:00	5.40	0.00	94.38	0.27	94.38
16MW-21	03/12/98	99.78	00:00	5.03	0.00	94.75	0.37	94.75
16MW-21	03/13/98	99.78	00:00	5.17	0.00	94.61	-0.14	94.61
16MW-21	04/03/98	99.78	00:00	5.25	0.00	94.53	-0.08	94.53
16MW-21	04/09/98	99.78	00:00	5.55	0.00	94.23	-0.30	94.23
16MW-21	04/17/98	99.78	00:00	6.45	0.01	93.32	-0.90	93.34
16MW-21	04/24/98	99.78	00:00	5.93	0.00	93.85	0.52	93.85
16MW-21	05/05/98	99.78	00:00	4.83	0.00	94.95	1.10	94.95
16MW-21	05/15/98	99.78	00:00	4.10	0.00	95.68	0.73	95.68
16MW-21	07/30/98	99.78	00:00	6.95	0.00	92.83	-2.85	92.83
16MW-21	08/07/98	99.78	00:00	7.21	0.00	92.57	-0.26	92.57
16MW-21	08/13/98	99.78	00:00	7.41	0.00	92.37	-0.20	92.37
16MW-21	08/21/98	99.78	00:00	7.51	0.00	92.27	-0.10	92.27
16MW-21	09/03/98	99.78	00:00	7.57	0.00	92.21	-0.06	92.21
16MW-21	09/10/98	99.78	00:00	7.70	0.00	92.08	-0.13	92.08
16MW-21	10/02/98	99.78	00:00	7.77	0.00	92.01	-0.07	92.01
16MW-21	10/20/98	99.78	00:00	7.86	0.00	91.92	-0.09	91.92
16MW-21	12/03/98	99.78	00:00	8.00	0.00	91.78	-0.14	91.78
16MW-21	01/26/99	99.78	00:00	5.05	0.00	94.73	2.95	94.73
16MW-21	03/09/99	99.78	00:00	6.57	0.00	93.21	-1.52	93.21
16MW-21	03/19/99	99.78	00:00	5.56	0.00	94.22	1.01	94.22
16MW-21	04/20/99	99.78	00:00	6.40	0.00	93.38	-0.84	93.38

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

Date: 12/14/99

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-21	06/01/99	99.78	00:00	7.45	0.00	92.33	-1.05	92.33
16MW-21	06/09/99	99.78	00:01	7.15	0.00	92.63	0.30	92.63
16MW-21	06/22/99	99.78	09:40	7.00	0.00	92.78	0.15	92.78
16MW-21	07/29/99	99.78	00:00	8.75	0.00	91.03	-1.75	91.03
16MW-21	08/03/99	99.78	00:00	8.89	0.00	90.89	-0.14	90.89
16MW-21	09/15/99	99.78	14:35	8.70	0.00	91.08	0.19	91.08
16MW-21	11/12/99	99.78	00:00	9.17	0.03	90.61	-0.47	90.63
16MW-21	11/18/99	99.78	00:00	8.33	0.00	91.45	0.84	91.45
16MW-22	12/12/97	102.22	00:00	7.70	0.00	94.52	NA	94.52
16MW-22	01/07/98	102.22	00:00	5.34	0.00	96.88	2.36	96.88
16MW-22	02/10/98	102.22	00:00	2.98	0.00	99.24	2.36	99.24
16MW-22	02/24/98	102.22	00:00	1.60	0.00	100.62	1.38	100.62
16MW-22	03/03/98	102.22	00:00	2.87	0.00	99.35	-1.27	99.35
16MW-22	03/26/98	102.22	00:00	1.85	0.00	100.37	1.02	100.37
16MW-22	04/03/98	102.22	00:00	2.05	0.00	100.17	-0.20	100.17
16MW-22	04/17/98	102.22	00:00	2.10	0.00	100.12	-0.05	100.12
16MW-22	04/24/98	102.22	00:00	1.52	0.00	100.70	0.58	100.70
16MW-22	05/05/98	102.22	00:00	0.00	0.00	102.22	1.52	102.22
16MW-22	05/15/98	102.22	00:00	2.86	0.00	99.36	-2.86	99.36
16MW-22	07/30/98	102.22	00:00	6.03	0.00	96.19	-3.17	96.19
16MW-22	08/13/98	102.22	00:00	6.10	0.00	96.12	-0.07	96.12
16MW-22	10/02/98	102.22	00:00	7.78	0.00	94.44	-1.68	94.44
16MW-22	11/06/98	102.22	00:00	8.79	0.00	93.43	-1.01	93.43
16MW-22	01/26/99	102.22	00:00	1.81	0.00	100.41	6.98	100.41
16MW-22	03/09/99	102.22	00:00	3.45	0.00	98.77	-1.64	98.77
16MW-22	03/19/99	102.22	00:00	8.38	0.00	93.84	-4.93	93.84
16MW-22	04/20/99	102.22	00:00	4.15	0.00	98.07	4.23	98.07
16MW-22	05/07/99	102.22	00:00	7.05	0.00	95.17	-2.90	95.17
16MW-22	06/01/99	102.22	00:00	5.81	0.00	96.41	-1.24	96.41
16MW-22	06/09/99	102.22	00:01	6.11	0.00	96.11	-0.30	96.11
16MW-22	06/14/99	102.22	13:45	7.57	0.05	94.65	-1.46	94.69
16MW-22	06/22/99	102.22	10:15	7.11	0.00	95.11	0.46	95.11
16MW-23	12/12/97	102.58	08:30	9.19	0.00	93.39	NA	93.39
16MW-23	01/07/98	102.58	09:35	8.67	0.00	93.91	0.52	93.91

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
16MW-23	01/07/98	102.58	09:49	8.67	0.00	93.91	0.00	93.91
16MW-23	02/10/98	102.58	00:00	2.98	0.00	99.60	5.69	99.60
16MW-23	02/24/98	102.58	00:00	7.20	0.00	95.38	-4.22	95.38
16MW-23	03/03/98	102.58	00:00	7.10	0.00	95.48	0.10	95.48
16MW-23	03/26/98	102.58	00:00	6.60	0.00	95.98	0.50	95.98
16MW-23	04/03/98	102.58	00:00	6.90	0.00	95.68	-0.30	95.68
16MW-23	04/17/98	102.58	00:00	6.95	0.00	95.63	-0.05	95.63
16MW-23	04/24/98	102.58	00:00	6.84	0.00	95.74	0.11	95.74
16MW-23	05/05/98	102.58	00:00	0.00	0.00	102.58	6.84	102.58
16MW-23	05/15/98	102.58	00:00	5.89	0.00	96.69	-5.89	96.69
16MW-23	07/30/98	102.58	00:00	8.03	0.00	94.55	-2.14	94.55
16MW-23	08/13/98	102.58	00:00	8.46	0.00	94.12	-0.43	94.12
16MW-23	10/02/98	102.58	00:00	9.03	0.00	93.55	-0.57	93.55
16MW-23	01/26/99	102.58	00:00	8.21	0.00	94.37	0.82	94.37
16MW-23	03/09/99	102.58	00:00	8.53	0.00	94.05	-0.32	94.05
16MW-23	03/19/99	102.58	00:00	8.31	0.00	94.27	0.22	94.27
16MW-23	04/20/99	102.58	00:00	8.32	0.00	94.26	-0.01	94.26
16MW-23	06/01/99	102.58	00:00	8.80	0.00	93.78	-0.48	93.78
16MW-23	06/09/99	102.58	00:01	9.01	0.00	93.57	-0.21	93.57
16MW-23	06/22/99	102.58	10:00	9.75	0.00	92.83	-0.74	92.83
16MW-23	08/03/99	102.58	00:00	10.00	0.00	92.58	-0.25	92.58
16MW-23	09/15/99	102.58	15:00	10.11	0.00	92.47	-0.11	92.47
C17MW-07	12/12/97	100.16	00:00	7.91	1.26	92.25	NA	93.32
C17MW-07	01/07/98	100.16	00:00	7.52	1.42	92.64	0.39	93.84
C17MW-07	01/15/98	100.16	00:00	7.36	0.19	92.79	0.15	92.96
C17MW-07	02/10/98	100.16	00:00	6.54	0.83	93.61	0.82	94.32
C17MW-07	02/24/98	100.16	00:00	1.95	1.35	98.21	4.59	99.36
C17MW-07	03/03/98	100.16	00:00	5.89	0.49	94.27	-3.94	94.68
C17MW-07	03/12/98	100.16	00:00	5.45	0.18	94.71	0.44	94.86
C17MW-07	03/13/98	100.16	00:00	5.55	0.13	94.60	-0.10	94.72
C17MW-07	03/26/98	100.16	00:00	5.31	0.01	94.84	0.24	94.85
C17MW-07	04/03/98	100.16	00:00	5.62	0.09	94.53	-0.31	94.61
C17MW-07	04/09/98	100.16	00:00	5.77	0.08	94.38	-0.15	94.45
C17MW-07	04/17/98	100.16	00:00	5.62	0.12	94.53	0.15	94.64
C17MW-07	04/24/98	100.16	00:00	5.50	0.13	94.65	0.12	94.77

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level

Water Level Product Thickness Data

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	△ WATER ELEV. ⁽¹⁾ (feet)	EQUIV. FRESH WATER HEAD (feet)
C17MW-07	05/05/98	100.16	00:00	5.66	0.27	94.49	-0.16	94.77
C17MW-07	05/15/98	100.16	00:00	4.83	0.22	95.32	0.83	95.51
C17MW-07	07/30/98	100.16	00:00	7.25	1.12	92.91	-2.41	93.86
C17MW-07	08/07/98	100.16	00:00	7.06	0.24	93.09	0.18	93.30
C17MW-07	08/13/98	100.16	00:00	7.23	0.25	92.93	-0.16	93.14
C17MW-07	08/21/98	100.16	00:00	7.27	0.11	92.88	-0.04	92.98
C17MW-07	09/03/98	100.16	00:00	7.31	0.15	92.85	-0.03	92.97
C17MW-07	09/10/98	100.16	00:00	7.41	0.08	92.74	-0.10	92.81
C17MW-07	10/02/98	100.16	00:00	7.54	0.20	92.61	-0.13	92.78
C17MW-07	10/20/98	100.16	00:00	7.58	0.10	92.58	-0.03	92.66
C17MW-07	12/03/98	100.16	00:00	7.72	0.08	92.44	-0.14	92.50
C17MW-07	12/23/98	100.16	00:00	7.67	0.12	92.49	0.05	92.59
C17MW-07	01/26/99	100.16	00:00	6.35	0.10	93.81	1.32	93.89
C17MW-07	03/09/99	100.16	00:00	6.61	0.11	93.54	-0.26	93.64
C17MW-07	03/19/99	100.16	00:00	6.22	0.07	93.93	0.38	93.99
C17MW-07	04/20/99	100.16	00:00	6.60	0.10	93.55	-0.37	93.64
C17MW-07	05/07/99	100.16	00:00	6.77	0.07	93.38	-0.17	93.44
C17MW-07	06/01/99	100.16	00:00	7.19	0.13	92.97	-0.41	93.08
C17MW-07	06/09/99	100.16	00:00	7.20	0.00	92.96	-0.01	92.96
C17MW-07	06/09/99	100.16	00:01	7.56	0.27	92.59	-0.36	92.82
C17MW-07	06/10/99	100.16	00:00	7.54	0.13	92.62	0.02	92.73
C17MW-07	06/14/99	100.16	13:35	7.54	0.13	92.62	0.00	92.73
C17MW-07	06/22/99	100.16	09:25	7.60	0.31	92.56	-0.06	92.83
C17MW-07	07/29/99	100.16	00:00	10.40	0.59	89.76	-2.80	90.26
C17MW-07	08/03/99	100.16	00:00	10.62	0.63	89.54	-0.22	90.07
C17MW-07	08/13/99	100.16	00:00	10.96	0.70	89.20	-0.34	89.20
C17MW-07	09/03/99	100.16	00:00	8.37	0.04	91.79	2.59	91.82
C17MW-07	09/15/99	100.16	14:15	9.37	0.29	90.79	-1.00	90.81
C17MW-07	10/26/99	100.16	00:00	11.04	1.02	89.12	-1.67	89.99
C17MW-07	11/02/99	100.16	00:00	10.99	0.93	89.17	0.05	89.17
C17MW-07	11/18/99	100.16	00:00	8.56	0.16	91.60	2.43	91.74
C17MW-07	12/01/99	100.16	00:00	8.45	0.18	91.71	0.11	91.86

(1) Change in Water Elevation since last reported measurement

D = Dry NA = Not Available

(2) Measurements Based on Mean Sea Level