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WASHINGTON STATE DEPARTMENT OF
Natural Resources

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JENNIFER M. BELCHER
Commissioner of Public Lands

September 30, 1997

Tammy Hall
WDOE
Southwest Region Toxic Cleanup
PO Box 47775
Olympia, WA 98504-7775

Dear Tammy:

RE: DNR - WEBSTER NURSERY PROJECT UPDATE

Enclosed are the results of the Department of Natural Resources's (DNR) sampling study conducted this past June 25 and 26. Also, enclosed is a table of chemicals formerly stored at the chemical warehouse and a summary list of all public concerns with DNR responses.

Table 1 presents a sample collection matrix of the test methods for all well locations sampled. Each test method is listed across the top of the table (507, 508 etc.).

- Test methods for residential wells are included under the category "Private Wells." The middle four digits of the coded sample number correspond to a resident's address. Note that one private well sample was lost during Federal Express shipment to the analytical laboratory. Also note, five of eleven private wells (located to the north of DNR property) were sampled for methods 507 and 515 (a total of 21 chemicals). These two pesticide methods include chemicals previously detected in two of DNR's northern-most monitoring wells (Picloram, Bromacil, Atrazine). Residences closest to the former underground storage sump that leaked, received sampling for all chemicals known to have been stored in the adjacent warehouse (a total of 47 chemicals).
- Test methods for DNR monitoring wells are shown under the category "Monitoring Wells." Note that **five** DNR monitoring wells are shown in this table even though only **four** wells exist (MWT-1 through MWT - 4). MWT - 5 is a sample code applied to a duplicate sample of MWT - 2. Duplicate samples are used in sampling studies as a quality control check on the laboratory. The duplicate samples concentration should be a reasonably close match to the project sample concentration.
- Test methods for DNR's water supply well, located on Lathrop Industrial Drive, are shown under the category "Public Supply Wells."

Tables 2 through 6 present sample results for private wells, monitoring wells, and the public water supply well for all pesticides identified in Table 1. An "ND" indicates that each pesticide analyzed, was not detected in the well water. Numerical values indicate the concentration in micrograms per liter (or parts per billion) for a detected pesticide in water. Additional notes may be found at the bottom of each table.

Table 7 presents sample results for Thurston County's "split" samples collected for three of the seventeen wells DNR sampled. A split sample is collected by oversight agencies for comparison to the results of the project samples (the project samples in this case are the DNR collected samples). Typically, two split samples are collected per twenty project samples; however, DNR and Thurston County agreed to sample one additional location to provide additional quality control of the data.

Figure 1 presents a location map of all the wells sampled and well location codes.

Figure 2 presents a groundwater contour map, indicating general groundwater flow direction. The figure is based on data from a groundwater elevation study conducted as part of the June sampling study.

The enclosed warehouse chemicals list contains all known pesticides stored in the warehouse between 1978 to 1982. This was the time period when the leaking concrete underground sump was installed and removed. It is the only time pesticides could have been released at the former sump location. Following that four year period, a metal tank replaced the concrete tank. Upon removal, the metal tank was observed to be free of corrosion or other signs of leakage. The metal tank existed from 1982 to the end of 1995.

The enclosed public concerns list was generated from residents input during the first three public meetings. This updated version, groups similar concerns together to avoid repetitive responses. DNR has retained the original comment numbers previously released to the public; therefore, the comments do not appear in chronologic order.

In summary, the enclosed results of the June 1997 DNR groundwater sampling study show that no chemical pesticides were detected in any residential well or the Lathrop Industrial Drive water supply well (the Nursery's water supply). However, pesticides were detected in three of four DNR monitoring wells, located directly adjacent to the former pesticide sump. This was expected, as previous sampling studies found similar concentrations of pesticides at these wells. Further, water level measurements indicate that the shallow groundwater flow direction is west to northwest, toward the Nursery site, as previously concluded by DNR. Finally, the DNR laboratory control samples and Thurston County split sample results show a good correlation to the DNR project sample results. These results indicate that the collected data is verifiable. At this time the complete data results report is being prepared for submittal to the State Department of Ecology and Thurston County.

If questions arise concerning this update, feel free to call me at (360-664-2884) for additional information.

Sincerely,

*Janet V. Bell
for Tony*

Tony Ramirez
Nursery Program Manager

JF/jvb
Enclosures (3)

GROUNDWATER INVESTIGATION SAMPLING PROGRAM
WEBSTER NURSERY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
JUNE 1997

TABLE 1

Sample Number ^a	Analyses ^b													
	507	508	515	531	402	549	548	547	630	131	M1 ^c	M2 ^c	M3 ^c	M4 ^c
Private Wells														
RW-3215-D01	X			X										
RW-9200-D01	X			X										
RW-3111-D01	X			X										
RW-3513-D01	X			X										
RW-9401-D01	X			X										
RW-9824-D01 ^d	X			X										
RW-9906-D01	X			X										
WS-9636-D01	X			X										
RW-9530-D01	X			X										
RW-10031-D01 ^e	X			X										
RW-9636-D01	X			X										
RWS-9900-D01	X			X										
Monitoring Wells														
MWT-1-D01	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MWT-2-D01	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MWT-3-D01	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MWT-4-D01	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MWT-5-D01 ^f	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Public Supply Wells														
PW-LATHROP-D01	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Notes:

- a RW- denotes a residential or privately-owned well, MWT- denotes a monitoring well, PW- denotes a public water supply well, and D01 indicates first sampling round by DNR
- b EPA methods unless otherwise noted
- c M1 Method to determine amitrole is a published method to be validated by the laboratory for this compound
M2 Method to determine fenaminothiazole is a published method to be validated by the laboratory for this compound
M3 Method to determine fosamine ammonium is a published method to be validated by the laboratory for this compound
M4 Method to determine methanearsonic acid is a published method to be validated by the laboratory for this compound
- d Sample was collected but was lost during shipping
- e MS/MSD (matrix spike/matrix spike duplicate) aliquot was collected at 10031 Blomberg Street.
- f Field duplicate collected at MWT-2.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS FOR EPA METHOD 508
DETERMINATION OF CHLORINATED PESTICIDES IN WATER
WEBSTER NURSERY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
JUNE 1997

Sample Number ^a	EPA Method 508 (µg/L)													
	Dichlobenil	Etridiazole	Heptachlor	Heptachlor epoxide	gamma Chlordane	alpha Chlordane	Endosulfan	Oxadiazon	Captan	Endrin	Endosulfan II	Endosulfan Sulfate	Bifenox	PCBs
RW-3215-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-9200-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-3111-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-3513-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-9401-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-9906-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WS-9636-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9530-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-10031-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9636-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RWS-9900-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Monitoring Wells														
MWT-1-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-2-D01	ND	ND	0.132	0.927 D	0.020	0.005	ND	ND	ND	ND	ND	ND	ND	ND
MWT-3-D01	ND	ND	0.026	1.77 D	0.028	0.009	ND	ND	ND	ND	ND	ND	ND	ND
MWT-4-D01	ND	ND	ND	0.055	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-5-D01	ND	ND	0.291	1.38 D	0.073	0.025	ND	ND	ND	ND	ND	ND	ND	ND
Public Supply Well														
PW-LATHROP-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Practical Quantitation Limit	0.010	0.020	0.005	0.005	0.005	0.005	0.010	0.020	0.020	0.010	0.010	0.010	0.020	0.100
Maximum Contaminant Levels (MCLs) ^b	--	--	0.400	0.200	2.00	2.00	--	--	--	2.00	--	--	--	0.500
MTCA Method B Cleanup Levels ^c	--	--	0.019	0.009	0.067	0.067	--	80.0	25.0	4.80	96.0	--	--	0.011

Notes:

- a RW- denotes a residential well, MWT- denotes a monitoring well, and PW- denotes a public water supply well; D01 indicates sample was collected during the first round of sampling by DNR
- b National Primary Drinking Water Regulations (40 CFR 141) - Values based on the EPA Drinking Water Regulations and Health Advisories maximum contaminant levels (MCLs), as published by the EPA Office of Water, October 1996.
- c The Model Toxics Control Act Cleanup Regulation [(Chapter 173-340-720(2)(b) WAC, as amended January 1996]. Values based on MTCA Method B criteria from The Cleanup Levels and Risk Calculations (CLARC II) update, February 1996. For those contaminants with both carcinogenic and noncarcinogenic state cleanup levels, the lowest of the two is shown.
- N/A Not analyzed for
- µg/L Micrograms per liter
- D Sample required dilution to bring analyte peak into calibration range of instrument
- ND Not detected at or above the practical quantitation limit
- Bold** Indicates evaluation criteria exceedance

TABLE 3
SUMMARY OF ANALYTICAL RESULTS FOR EPA METHOD 507
DETERMINATION OF NITROGEN- AND PHOSPHORUS-CONTAINING PESTICIDES IN WATER
WEBSTER NURSERY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
JUNE 1997

Sample Number ^a	EPA Method 507 (µg/L)											
	Simazine	Atrazine	Pronamide	Simetryn	Prometryn	Metalaxyl	Terbutryn	Bromacil	Malathion	Chloropyrifos	Diphenamid	Azinphos-methyl
Private Wells												
RW-3215-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9200-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-3111-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-3513-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9401-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9906-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WS-9636-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9530-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-10031-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9636-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RWS-9900-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Monitoring Wells												
MWT-1-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-2-D01	0.640 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-3-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-4-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-5-D01	0.330 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Public Supply Well												
PW-IATHROP-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Practical Quantitation Limit	1.00	1.00	2.00	1.00	1.00	5.00	2.00	5.00	2.00	2.00	2.00	10.0
Maximum Contaminant Levels (MCLs) ^b	4.00	3.00	--	--	--	--	--	--	--	--	--	--
MTCA Method B Cleanup Levels ^c	0.729	0.398	1,200	--	--	960	--	--	320	48.0	480	--
Notes:												
a RW- denotes a residential well, MWT- denotes a monitoring well, and PW- denotes a public water supply well; D01 indicates sample was collected during the first round of sampling by DNR												
b National Primary Drinking Water Regulations (40 CFR 141) - Values based on the EPA Drinking Water Regulations and Health Advisories maximum contaminant levels (MCLs), as published by the EPA Office of Water, October 1996.												
c The Model Toxics Control Act Cleanup Regulation [(Chapter 173-340-720(2)(b) WAC, as amended January 1996]. Values based on MTCA Method B criteria from The Cleanup Levels and Risk Calculations (CLARC ID) update, February 1996. For those contaminants with both carcinogenic and noncarcinogenic state cleanup levels, the lowest of the two is shown.												
d The associated value is an estimate												
e Not analyzed for												
f N/A												
g Micrograms per liter												
h Sample required dilution to bring analyte peak into calibration range of instrument												
i ND Not detected at or above the practical quantitation limit												

TABLE 4
SUMMARY OF ANALYTICAL RESULTS FOR EPA METHOD 515
DETERMINATION OF CHLORINATED ACIDS IN WATER
WEBSTER NURSERY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
JUNE 1997

Sample Number ^a	EPA Method 515 (µg/L)									
	Dalapon	Dicamba	Dichlorprop	2,4-D	Pentachloro-phenol	Triclopyr	2,4,5-TP	2,4,5-T	Picloram	
Private Wells										
RW-3215-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9200-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-3111-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-3513-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9401-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9906-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WS-9636-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9530-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-10031-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9636-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RWS-9900-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Monitoring Wells										
MWT-1-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-2-D01	ND	ND	ND	6.70 D	ND	36.3 D	6.63 D	77.7 D	0.105	
MWT-3-D01	ND	0.462	ND	10.1 D	ND	36.3 D	7.19 D	75.0 D	0.187	
MWT-4-D01	ND	ND	ND	ND	ND	13.4 D	1.48 D	2.48 D	ND	
MWT-5-D01	ND	ND	ND	6.71 D	ND	35.0 D	6.56 D	97.4 D	ND	
Public Supply Well										
PW-LATHROP-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Practical Quantitation Limit ^b	0.625	0.063	0.250-2.50 ^b	0.188-1.88 ^b	0.063	0.313-3.13 ^b	0.063	0.050	0.063	
Maximum Contaminant Levels (MCLs) ^c	200	--	--	70.0	1.00	--	50.0	--	500	
MTCA Method B Cleanup Levels ^d	480	480	--	160	0.729	--	128	160	1,120	

Notes:

- a RW- denotes a residential well, MWT- denotes a monitoring well, and PW- denotes a public water supply well; D01 indicates the sample was collected during the first round of sampling by DNR
- b The practical quantitation limit = range in laboratory reported values
- c National Primary Drinking Water Regulations (40 CFR 141) - Values based on the EPA Drinking Water Regulations and Health Advisories maximum contaminant levels (MCLs), as published by the EPA Office of Water, October 1996.
- d The Model Toxics Control Act Cleanup Regulation (Chapter 173-340-720(2)(b) WAC, as amended January 1996). Values based on MTCA Method B criteria from The Cleanup Levels and Risk Calculations (CLARC II) update, February 1996. For those contaminants with both carcinogenic and noncarcinogenic state cleanup levels, the lowest of the two is shown.
- D The sample was diluted to bring the analyte peak, or in some cases an interfering peak, into the calibration range of the instrument
- µg/L Micrograms per liter
- ND Not detected at or above the practical quantitation limit

TABLE 5
SUMMARY OF ANALYTICAL RESULTS FOR EPA METHODS 531, 402, 549, 548, 547, 630, AND 131
WEBSTER NURSERY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
JUNE 1997

Sample Number ^a	Analysis (µg/L)							
	Carbaryl by EPA Method 531	Benomyl by EPA Method 402 (as Carbendazem)	Diquat by EPA Method 549	Paraquat by EPA Method 549	Endothall by EPA Method 548	Glyphosate by EPA Method 547	Mancozeb & Thiram by EPA Method 630 (as Ziram)	Methyl Isothiocyanate by EPA Method 131
Private Wells								
RW-3215-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-9200-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-3111-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-3513-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-9401-D01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-9906-D01	ND	ND	ND	ND	ND	ND	ND	ND
WS-9636-D01	N/A ^b	ND	ND	ND	ND	ND	ND	ND
RW-9530-D01	ND	ND	ND	ND	ND	ND	ND	ND
RW-10031-D01	ND	ND	ND	ND	ND	ND	ND	ND
RW-9636-D01	ND	ND	ND	ND	ND	ND	ND	ND
RWS-9900-D01	ND	ND	ND	ND	ND	ND	ND	ND
Monitoring Wells								
MWT-1-D01	ND	ND	ND	ND	ND	ND	ND	ND
MWT-2-D01	ND	ND	ND	ND	ND	ND	ND	ND
MWT-3-D01	ND	ND	ND	ND	ND	ND	ND	ND
MWT-4-D01	ND	ND	ND	ND	ND	ND	ND	ND
MWT-5-D01	ND	ND	ND	ND	ND	ND	ND	ND
Public Supply Well								
PW-LATHROP-D01	ND	ND	ND	ND	ND	ND	ND	ND
Practical Quantitation Limit	4.00	100	1.00-1.57 ^c	1.82-2.86 ^c	75.0	100	5.00	2.00
Maximum Contaminant Levels (MCLs) ^d	--	--	20.0	--	100	700	--	--
MTCA Method B Cleanup Levels ^e	1,600	800	352	72.0	320	1,600	80.0	--

Notes:

- a RW - denotes a residential well, MWT - denotes a monitoring well, and PW - denotes a public water supply well; D01 indicates sample was collected during first round of sampling by DNR
- b Aliquot for carbaryl analysis was lost during shipping so was not analyzed
- c The practical quantitation limit = range in laboratory reported values
- d National Primary Drinking Water Regulations (40 CFR 141) - Values based on the EPA Drinking Water Regulations and Health Advisories maximum contaminant levels (MCLs), as published by the EPA Office of Water, October 1996.
- e The Model Toxics Control Act Cleanup Regulation [(Chapter 173-340-720(2)(b) WAC, as amended January 1996]. Values based on MTCA Method B criteria from The Cleanup Levels and Risk Calculations (CLARC II) update, February 1996. For those contaminants with both carcinogenic and noncarcinogenic state cleanup levels, the lowest of the two is shown.

N/A Not analyzed for
 µg/L Micrograms per liter
 (D) The associated value is an estimate
 ND Not detected at or above the practical quantitation limit

TABLE 6
 SUMMARY OF DEVELOPMENTAL METHOD ANALYTICAL RESULTS FOR METHANEARSONIC ACID,
 AMITROLE, FOSAMINE AMMONIUM, AND FENAMINOSULF (DEXON)
 WEBSTER NURSERY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 JUNE 1997

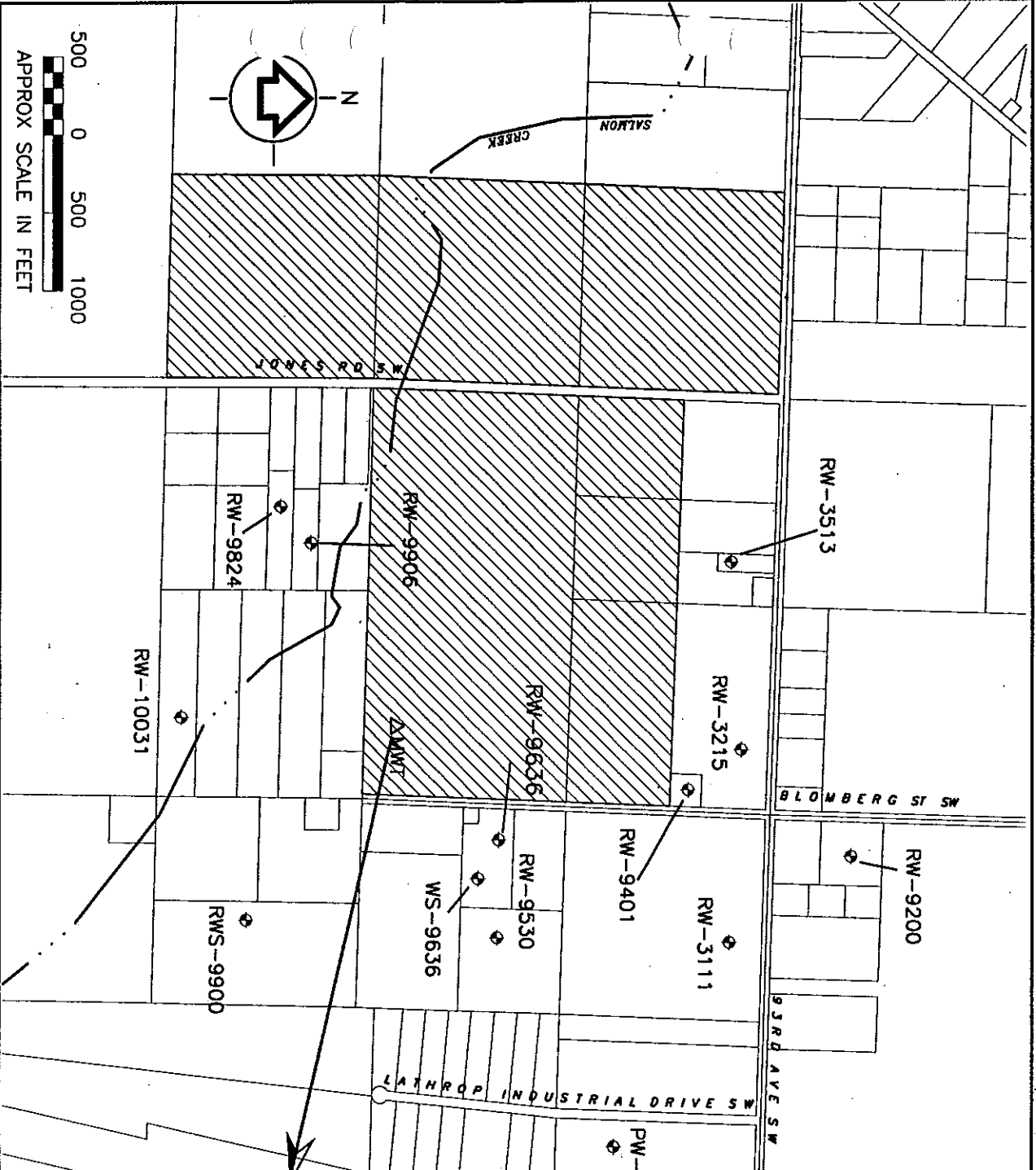
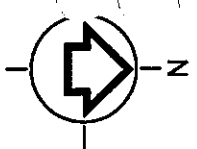
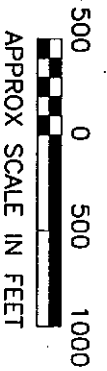
Sample Number ^a	Analysis (µg/L)			
	Methanearsonic Acid	Amitrole	Fosamine Ammonium	Fenaminoisulf (Dexon)
Private Wells				
RW-3215-D01	N/A	N/A	N/A	N/A
RW-9200-D01	N/A	N/A	N/A	N/A
RW-3111-D01	N/A	N/A	N/A	N/A
RW-3513-D01	N/A	N/A	N/A	N/A
RW-9401-D01	N/A	N/A	N/A	N/A
RW-9906-D01	ND	ND	ND	ND
WS-9636-D01	ND	ND	ND	ND
RW-9530-D01	ND	ND	ND	ND
RW-10031-D01	ND	ND	ND	ND
RW-9636-D01	ND	ND	ND	ND
RWS-9900-D01	ND	ND	ND	ND
Monitoring Wells				
MWT-1-D01	ND	ND	ND	ND
MWT-2-D01	ND	ND	ND	ND
MWT-3-D01	ND	ND	ND	ND
MWT-4-D01	ND	ND	ND	ND
MWT-5-D01	ND	ND	ND	ND
Public Supply Well				
PW-LATHROP-D01	ND	ND	ND	ND
Practical Quantitation Limit	100	10,000	10.0	100
Maximum Contaminant Levels (MCLs) ^b	--	--	--	--
MTCM Method B Cleanup Levels ^c	--	--	--	--
Notes:				
a RW - denotes a residential well, MWT - denotes a monitoring well, and PW - denotes a public water supply well; D01 indicates sample was collected during first round of sampling by DNR				
b National Primary Drinking Water Regulations (40 CFR 141) - Values based on the EPA Drinking Water Regulations and Health Advisories maximum contaminant levels (MCLs), as published by the EPA Office of Water, October 1996.				
c The Model Toxics Control Act Cleanup Regulation [(Chapter 173-340-720(2)(b) WAC, as amended January 1996]. Values based on MTCM Method B criteria from The Cleanup Levels and Risk Calculations (CLARC II) update, February 1996. For those contaminants with both carcinogenic and noncarcinogenic state cleanup levels, the lowest of the two is shown.				
N/A Not analyzed for				
µg/L Micrograms per liter				
ND Not detected at or above the practical quantitation limit				

TABLE 7
 SUMMARY OF THURSTON COUNTY SPLIT SAMPLE RESULTS FOR EPA METHODS 508 (CHLORINATED PESTICIDES),
 515.1 (CHLORINATED ACIDS), AND 525.2 (SYNTHETIC ORGANIC COMPOUNDS) IN WATER
 WEBSTER NURSERY, WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 JUNE 1997

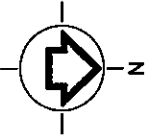
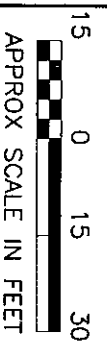
Sample Number ^a	EPA Method 508 (µg/L)				EPA Method 515.1 (µg/L)				EPA Method 525.2 (µg/L)				
	Beta-BHC	Chlordane (Technical)	Heptachlor	Heptachlor epoxide	Dicamba	Dichloro-prop	2,4-D	Silvex (2,4,5-TP)	2,4,5-T	Simazine	Heptachlor	Heptachlor Epoxide	Gamma-chlordane
Private Wells													
WS-9636-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RW-9906-D01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Monitoring Wells													
MW-2	0.023	2.60	0.230	1.50	0.370	0.190	8.70	8.30	49.0	0.480	0.380	1.50	0.270
Practical Quantitation Limit	0.010	0.097	0.010	0.049	0.037	0.044	0.027	0.015	0.600	0.050	0.020	0.020	0.030
Maximum Contaminant Level (MCL) ^a	--	2.00	0.400	0.200	--	--	70.0	50.0	--	4.00	0.400	0.200	2.00
MTCA Method B Cleanup Levels ^b	--	0.067	0.019	0.009	480	--	160	128	160	0.729	0.019	0.009	0.067

Notes:

- a National Primary Drinking Water Regulations (40 CFR 141) - Values based on the EPA Drinking Water Regulations and Health Advisories maximum contaminant levels (MCLs), as published by the EPA Office of Water, October 1996.
- b The Model Toxics Control Act Cleanup Regulation [(Chapter 173-340-720(2)(b) WAC, as amended January 1996]. Values based on MTCA Method B criteria from The Cleanup Levels and Risk Calculations (CLARC II) update, February 1996. For those contaminants with both carcinogenic and noncarcinogenic state cleanup levels, the lowest of the two is shown.
- µg/L Micrograms per liter.
- D Sample required dilution to bring analyte peak into calibration range of instrument.
- ND Not detected at or above the practical quantitation limit.
- Bold** Indicates evaluation criteria exceedance.



- LEGEND**
- DNR PROPERTY
 - RW-3315 RESIDENTIAL WELL-STREET ADDRESS
 - PW PUBLIC WELL
 - WS WATER SUPPLY WELL
 - MWT MONITORING WELL (MWT-1 THROUGH MWT-4 SEE DETAIL BELOW)



MWT-1 THROUGH MWT-4 DETAIL

PESTICIDE STORAGE AREA

MWT-1

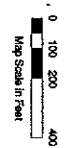
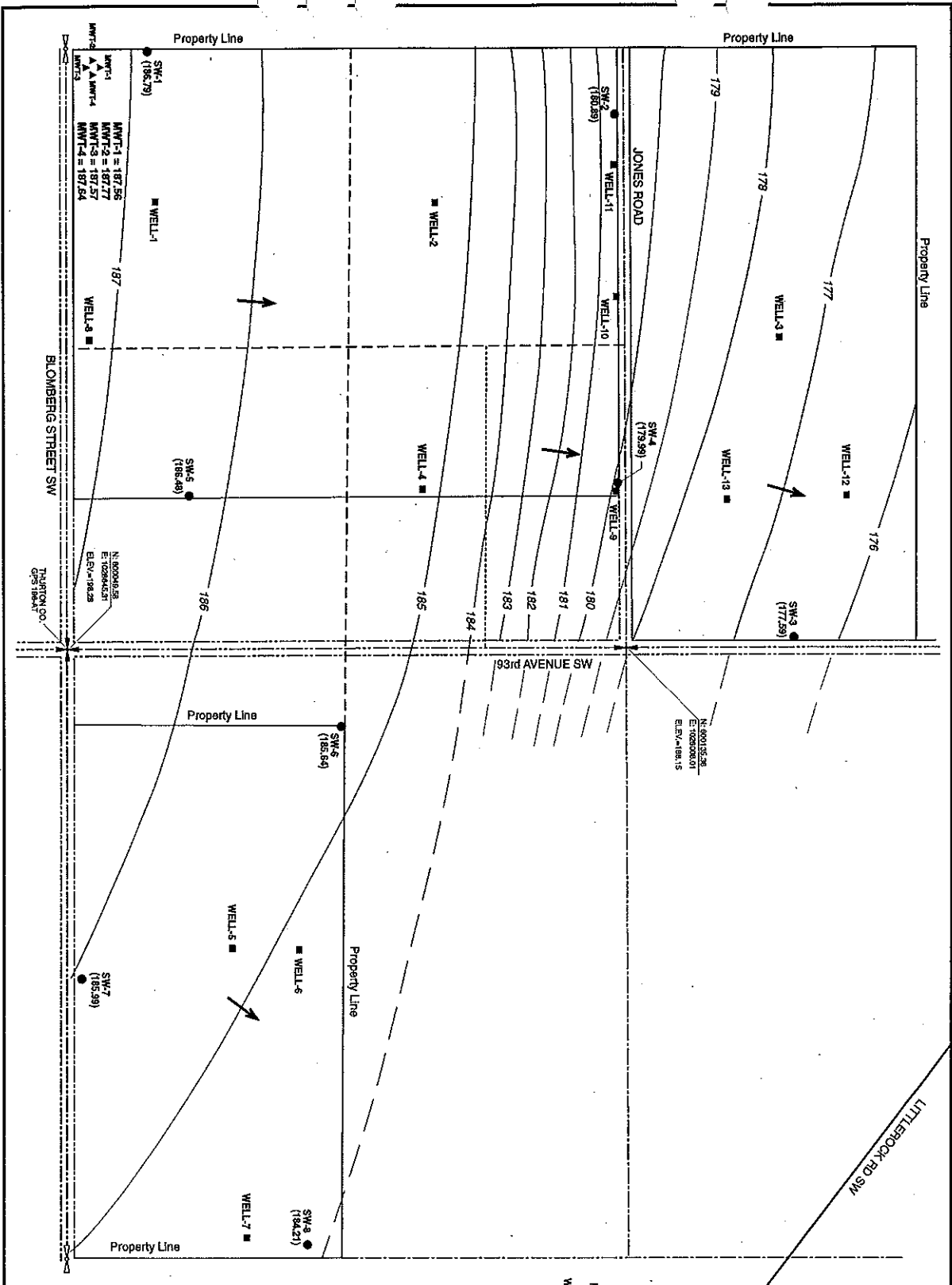
MWT-2

MWT-3

MWT-4

Figure 1

Groundwater Sample Location Map
Webster Nursery and Surrounding Residential Areas
 Washington State Department of Natural Resources, Thurston County, Washington



LEGEND

- (186.49) Groundwater Elevation
- SW-1 ● Shallow Monitoring Well
- MWT-1 ▲ UST Area Monitoring Well
- WELL-1 ■ Water Supply/Irrigation Well
- ↖ Direction of Groundwater Flow

Figure 2
 Static Groundwater Elevation Contour Map, Webster Nursery Property, Washington State Department of Natural Resources, Thurston County, Washington.