

**WORKSHEET 1
SUMMARY SCORE SHEET****Site Name/Location**

Briggs Debris Field
4407 Henderson Blvd. SE
Olympia, WA 98501
Facility ID: 35797926

Thurston County, S36/T18/R2W
Parcel# 12836230200
Lat: 47° 0' 21.49"
Lon: 122° 52' 50.84"

Site Description

The above site is scored/ranked for the August 27, 2002 update.

Briggs Nursery has been operating for decades at its present location. The site contains a debris field that was used as a solid waste dumping area. This area contains wood, metal, tree stumps, and empty pesticide containers. As a result, soil samples confirmed the presence of pesticides above MTCA Cleanup Standards. The debris field is in the process of being excavated.

Special Considerations

This report assesses the environmental issues associated with the debris field only. The site contains other areas of concern, but will not be addressed until the facility begins closure activities.

There are several factors that should be considered in the final evaluation of this site:

- 1) All routes were scored in this model, since all have the potential to be impacted by the known contamination. However, the ground water route has a much lower impact potential for two reasons: First, based on ground water flow direction, potential contamination is not likely to impact drinking water sources. Second, the ground water depth is 25+ feet below the debris field, thus reducing the possibility of contaminant migration.
- 2) The areas of contamination appear to be limited in extent and contained in small pockets. Based on analytical results, the majority of the debris field displayed a lack of contamination.
- 3) Although the contamination is limited to small areas, the toxicity values used in this scoring method are relatively high. Thus, the final calculated risk is greater than the actual risk.
- 4) The final score is also influenced by the large surrounding population. Even though the area is densely populated, the

contamination does not pose a substantial threat to the local community.

ROUTE SCORES:

Surface Water/Human Health: 25.5

Surface Water/Environ: 47.3

Air/Human Health: 16.3

Air/Environmental: 20.7

Ground Water/Human Health: 52.0

OVERALL RANK: 2

WORKSHEET 2
ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE

List those substances to be considered for scoring. Source: 3,4
DDT, Aldrin, DDD, Dieldrin

Explain basis for choice of substance(s) to be used in scoring.
Levels of contamination exceeds MTCA Method A & B cleanup standards.

List those management units to be considered for scoring. Source: 3,4
Contaminated soil.

Explain basis for choice of unit to be used in scoring.
Levels of contamination exceeds MTCA Method A & B cleanup standards.

2. AIR ROUTE

List those substances to be considered for scoring. Source: 3,4
DDT, Aldrin, DDD, Dieldrin

Explain basis for choice of substance(s) to be used in scoring.
Since the soil has been excavated, the contaminants have the potential to become airborne.

List those management units to be considered for scoring. Source: 3,4
Contaminated soil

Explain basis for choice of unit to be used in scoring.
Levels of contamination exceeds MTCA Method A & B cleanup standards.

3. GROUND WATER ROUTE

List those substances to be considered for scoring. Source: 3,4
DDT, Aldrin, DDD, Dieldrin

Explain basis for choice of substance(s) to be used in scoring.
Levels of contamination exceeds MTCA Method A & B cleanup standards.

List those management units to be considered for scoring. Source: 3,4
Contaminated soil

Explain basis for choice of unit to be used in scoring.
Levels of contamination exceeds MTCA Method A & B cleanup standards.

WORKSHEET 3 (If Required)
SUBSTANCE CHARACTERISTICS WORKSHEET
FOR MULTIPLE UNIT/SUBSTANCE SITES

Unit: NA

| | <u>Combination 1</u> | <u>Combination 2</u> | <u>Combination 3</u> |
|--------------------------------------|--------------------------|--------------------------|--------------------------|
| <u>1. SURFACE WATER ROUTE</u> | | | |
| Substance(s): | | | |
| Human Toxicity Value: | | | |
| Environ. Toxicity Value: | | | |
| Containment Value: | | | |
| Rationale: | | | |
| Surface Water Human Subscore: | (+3)(+1)= () () = | (+3)(+1)= () () = | (+3)(+1)= () () = |
| Surface Water Environ. Subscore: | (+3)(+1)= () () = | (+3)(+1)= () () = | (+3)(+1)= () () = |
| <u>2. AIR ROUTE</u> | | | |
| Substance(s): | | | |
| Human Toxicity/Mobility Value: | | | |
| Containment Value: | | | |
| Rationale: | | | |
| Air Human Subscore: | (+3)(+1)= () () = | (+3)(+1)= () () = | (+3)(+1)= () () = |
| Air Environ. Subscore: | (+3)(+1)= () () = | (+3)(+1)= () () = | (+3)(+1)= () () = |
| <u>3. GROUND WATER ROUTE</u> | | | |
| Substance(s): | | | |
| Human Toxicity Value: | | | |
| Containment Value: | | | |
| Rationale: | | | |
| Ground Water Subscore: | (+3)(+1)= () () = | (+3)(+1)= () () = | (+3)(+1)= () () = |

Based on their respective highest scoring toxicity/containment combinations, the following management units will be used for route scoring:

- Surface Water -
- Air -
- Ground Water -

**WORKSHEET 4
SURFACE WATER ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

| Substance | Drinking Water Standard | | Acute Toxicity | | Chronic Toxicity | | Carcinogenicity | | |
|-------------|-------------------------|------|----------------|-----|------------------|------|-----------------|------|------|
| | µg/L | Val. | mg/kg-bw | Val | Mg/kg/day | Val. | WOE | PF* | Val. |
| 1. DDT | ND | - | 87 RAT | 8 | .0005 | 5 | .8 | .272 | 5 |
| 2. ALDRIN | ND | - | 39 RAT | 10 | 3E-5 | 8 | .8 | 13.6 | 9 |
| 3. DDD | ND | - | 113 RAT | 5 | ND | - | .8 | .192 | 5 |
| 4. DIELDRIN | ND | - | 38.3RAT | 10 | 5E-5 | 8 | .8 | 12.8 | 9 |
| 5. | | | | | | | | | |

PF*= Potency Factor

Source: 1,2

Highest Value:10 (Max.=10) +2 Bonus Points? 2 Final Toxicity Value:12

1.2 Environmental Toxicity

| Substance | (x) Freshwater () Marine Acute Water Quality Criteria | | Non-human Mammalian Acute Toxicity | |
|-------------|---|-------|--|-------|
| | (ug/l) | Value | (mg/kg) | Value |
| 1. DDT | 1.1 | 8 | | |
| 2. ALDRIN | 3 | 8 | | |
| 3. DDD | ND | - | 113 RAT | 5 |
| 4. DIELDRIN | 2.5 | 8 | | |
| 5. | | | | |

Source: 1,2 Value: 8 (Max. =10)

1.3 Substance Quantity: UNKNOWN

Source: 5 Value: 1 (Max. =10)

2.0 MIGRATION POTENTIAL

- 2.1 Containment Source: 3 Value: 10 (Max. =10)
Explain basis: WASTE PILE OUTSIDE
NO RUN-ON, RUNOFF CONTROL
- 2.2 Surface Soil Permeability Source: 5 Value: 1 (Max. =7)
SAND/SILT LOAM
- 2.3 Total Annual Precipitation (inches) Source: 7 Value: 4 (Max. =5)
51 INCHES
- 2.4 Max. 2-yr/24-hr precipitation (inches) Source: 2 Value: 3 (Max. =5)
2.5 INCHES
- 2.5 Flood Plain: NO Source: 5 Value: 0 (Max. =2)
- 2.6 Terrain Slope (5-30%) Source: 5 Value: 5 (Max. =5)

3.0 TARGETS

- 3.1 Distance to Surface Water: 525FT Source: 5 Value: 10 (Max. =10)
(CENTRAL KETTLE)
- 3.2 Population Served within 2 miles Source: 5 Value: 0 (Max. =75)
See WARM Scoring Manual Regarding Direction
pop. = x = n
- 3.3 Area Irrigated within 2 miles Source: 5 Value: 0 (Max. =30)
See WARM Scoring Manual Regarding Direction
0.75 # of acres = 0
0.75 x = 0.75(y) = n
- 3.4 Distance to Nearest Fishery Resource Source: 5 Value: 6 (Max. =12)
3600FT DESCHUTES RIVER
- 3.5 Distance to and Names of Nearest Sensitive Environments
DESCHUTES RIVER 3600FT (FISHERY), WARD LAKE 1400FT (FRESHWATER WETLAND)
Source: 5 Value: 9 (Max. =12)

4.0 RELEASE

Explain the basis for scoring a release to surface water
NO CONFIRMED/DOCUMENTED RELEASE
Source: _____ Value: 0 (Max. =5)

**WORKSHEET 5
AIR ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

1.1 Introduction (WARM Scoring Manual) - Please review before scoring

1.2 Human Toxicity

| Substance | Air Standard | | Acute Toxicity | | Chronic Toxicity | | Carcinogenicity | | |
|-------------|----------------------|------|----------------------|------|------------------|------|-----------------|-----|------|
| | (ug/m ³) | Val. | (mg/m ³) | Val. | (mg/kg/day) | Val. | WOE | PF | Val. |
| 1. DDT | .01 | 10 | ND | - | ND | - | .8 | .34 | 5 |
| 2. ALDRIN | .0002 | 10 | ND | - | ND | - | .8 | 17 | 9 |
| 3. DDD | ND | - | ND | - | ND | - | ND | ND | - |
| 4. DIELDRIN | .8 | 10 | 13 | 10 | ND | - | .8 | 16 | 9 |
| 5. | | | | | | | | | |

Source: 1,2 Value: 10 (Max. =10)
+2 Bonus Points? 2
Final Toxicity Value: 12

1.3 Mobility

(Use numbers to refer to above listed substances)

1.3.1 Gaseous Mobility (NOT SCORED)

Vapor Pressures (mmHg)

Source: _____ Value: _____ (Max. =4)

- 1.
- 2.
- 3.
- 4.
- 5.

1.3.2 Particulate Mobility

Source: 5 Value: 1 (Max. =4)

Soil Type: SAND/SILT LOAM

Erodibility: 47-86

Climactic Factor: <1

1.4 Highest Human Health Toxicity/Mobility Matrix Value (from Table A-7)

Equals Final Matrix Value

Source: 2 Value: 6 (Max. =24)

1.5 Environmental Toxicity/Mobility

Non-human Mammalian Acute (Table A-7)

| Substance | Inhalation Toxicity (mg/m ³) | Value | Mobility (mmHg) | Value | Matrix Value |
|-------------|--|-------|-----------------|-------|--------------|
| 1. DDT | ND | - | ND | - | - |
| 2. ALDRIN | ND | - | ND | - | - |
| 3. DDD | ND | - | ND | - | - |
| 4. DIELDRIN | 13 | 10 | PARTICULATE | 1 | .5 |
| 5. | | | | | |

Highest Environmental Toxicity/Mobility Matrix Value (From Table A-7) equals
Final Matrix Value: 5 (MAX=24)

1.6 Substance Quantity: UNKNOWN Source: 5 Value: 1 (Max. =10)

2.0 MIGRATION POTENTIAL

2.1 Containment: WASTE PILE OUTDOORS Source: 3 Value: 8 (Max. =10)
PARTIAL COVER OR UNMAINTAINED COVER

3.0 TARGETS

3.1 Nearest Population: <1000FT Source: 5 Value: 10 (Max. =10)

3.2 Distance to and Names of Nearest Sensitive Environments
WARD LAKE 1400FT
Source: 5 Value: 6 (Max. =7)

3.3 Population within 0.5 miles: Source: 5 Value: 42 (Max. =75)
pop. = 1800 = 42.4

4.0 RELEASE

Explain basis for scoring a release to air:
No confirmed/documented release
Source: Value: 0 (Max. =75)

**WORKSHEET 6
GROUND WATER ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

| Substance | Drinking Water Standard | | Acute Toxicity | | Chronic Toxicity | | Carcinogenicity | | |
|-------------|-------------------------|-----|----------------|-----|------------------|-----|-----------------|------|-----|
| | (ug/m ³) | Val | (mg/kg/bw) | Val | (mg/kg/day) | Val | WOE | PF | Val |
| 1. DDT | ND | - | 87 RAT | 8 | .0005 | 5 | .8 | .272 | 5 |
| 2. ALDRIN | ND | - | 39 RAT | 10 | 3E-5 | 8 | .8 | 13.6 | 9 |
| 3. DDD | ND | - | 113 RAT | 5 | ND | - | .8 | .192 | 5 |
| 4. DIELDRIN | ND | - | 38.3 RAT | 10 | 5E-5 | 8 | .8 | 12.8 | 9 |
| 5. | | | | | | | | | |

Source: 1,2 Value: 10 (Max. =10)
+2 Bonus Points? 2
Final Toxicity Value: 12

1.2 Mobility

(Use numbers to refer to above listed substances)

Cations/Anions (NOT SCORED)

- 1.
- 2.
- 3.
- 4.
- 5.

OR Solubility

Source: 1 Value: 0 (Max. =3)

1. DDT - 5.0E-3 = 0
2. ALDRIN - 1.8E-1 = 0
3. DDD - 1.0E-1 = 0
4. DIELDRIN - 2.0E-1 = 0
- 5.

1.3 Substance Quantity

Source: Value: 1 (Max. =10)

Explain basis: UNKNOWN, DEFAULT VALUE

2.0 MIGRATION POTENTIAL

2.1 Containment (WASTE PILE)

Source: 2 Value: 10 (Max. =10)

Explain Basis: NO LINER=3, NO COVER=2, NO COLLECTION SYSTEM=2,
NO RUN-ON/RUNOFF CONTROL=3

2.2 Net Precipitation (inches):

Source: 2 Value: 3 (Max. =5)

27.06 INCHES

2.3 Subsurface Hydraulic Conductivity:

Source: 2 Value: 3 (Max. =4)

10-5 TO 10-3

2.4 Vertical Depth to Ground Water:

Source: 3 Value: 6 (Max. =8)

25-50 FT

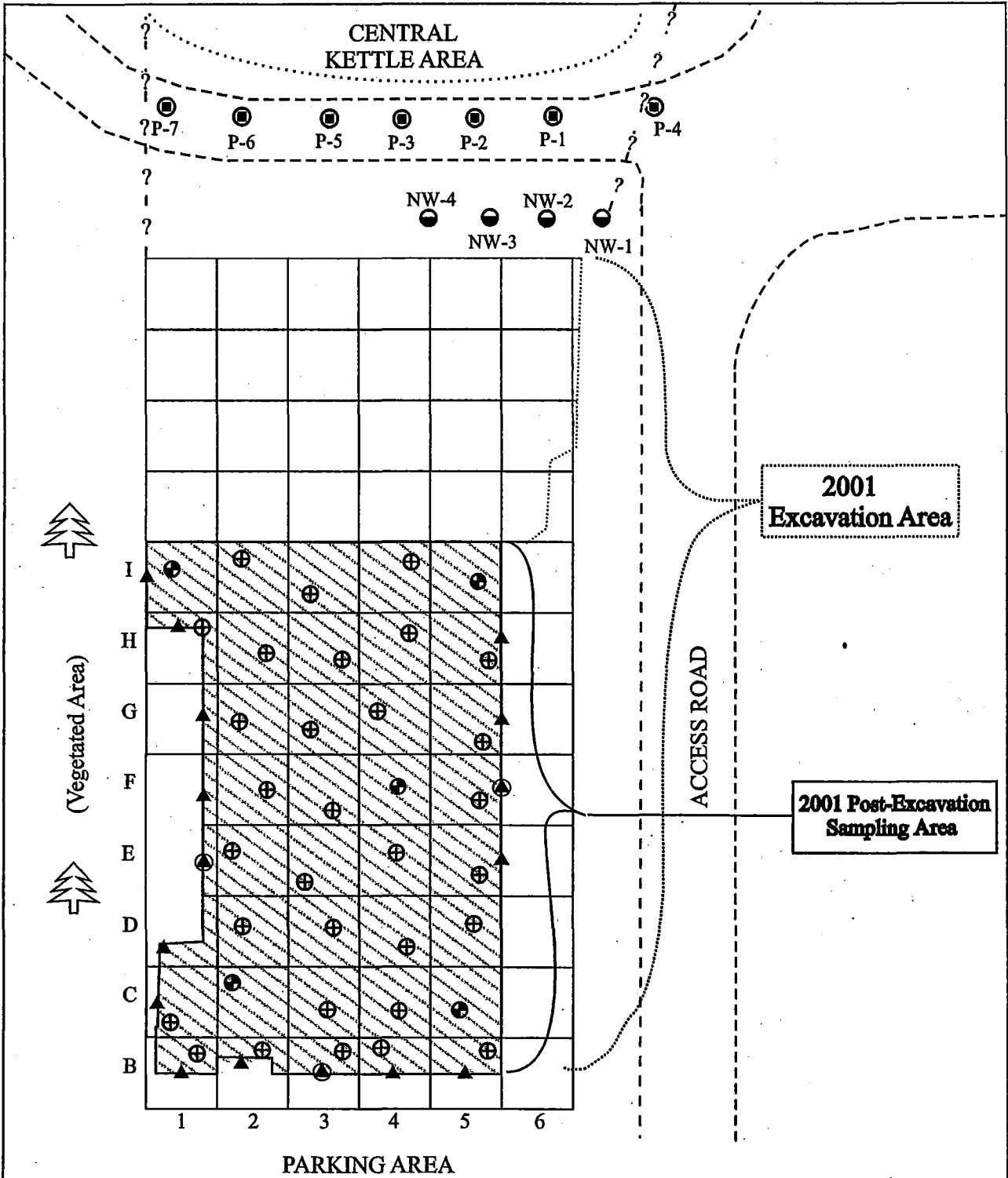
3.0 Targets

- 3.1 Ground Water Usage: Source: 5 Value: 4 (Max. =10)
PUBLIC SUPPLY OR MINIMUM HOOKUP
- 3.2 Distance to Nearest Drinking Well (ft): Source: 5 Value: 5 (Max. =5)
<600 FT
- 3.3 Population Served within 2 miles: Source: 5 Value: 100 (Max. =100)
pop. = 25000 = 158.1
- 3.4 Area irrigated by Wells within 2 miles: Source: 5 Value: 9 (Max. =50)
154 acres, 0.75 154 of acres = 9.3

- 4.0 **RELEASE** Source: Value: 0 (Max. =5)
Explain basis for scoring a release to ground water:
NO CONFIRMED/DOCUMENTED RELEASE

SOURCES USED IN SCORING

1. Wash. Dept. of Ecology, Toxicology Database for Use in WARM Scoring, Jan. 1992.
2. Wash. Dept. of Ecology, Washington Ranking Method, Scoring Manual, April, 1992.
3. Site Report, L.C. Lee and Associates, Inc., Scott R. Stewart, January, 2001.
4. Entrix Environmental Consultants, Analytical Report-Sample Results, May, 2002.
5. Thurston County Geodata, Includes map by Sammy Berg, July, 2002.
6. Table 16 - Estimated Evapotranspiration, E.M. 2462, p42, for Thurston County Airport.
7. City of Olympia Web Site, Precipitation Data, July, 2002.



NOT TO SCALE

- ▲ Sidewall samples analyzed for metals & OC pesticides
- ⊕ Bottom samples analyzed for metals & OC pesticides
- (with ⊕) Sidewall samples analyzed for metals, pesticides, OP pesticides, petroleum Hcs & PAHs
- (with ⊕) Bottom samples analyzed for metals, OC & OP pesticides, petroleum HCs and PAHs
- (with ⊕) 2002 Soil borings; Excavation area
- (with ⊕) 2002 Perimeter borings; Central Kettle



Figure 4. Approximate Locations of Post-Excavation Soil Samples
 Brigg's Nursery, Inc.
 Olympia, Washington

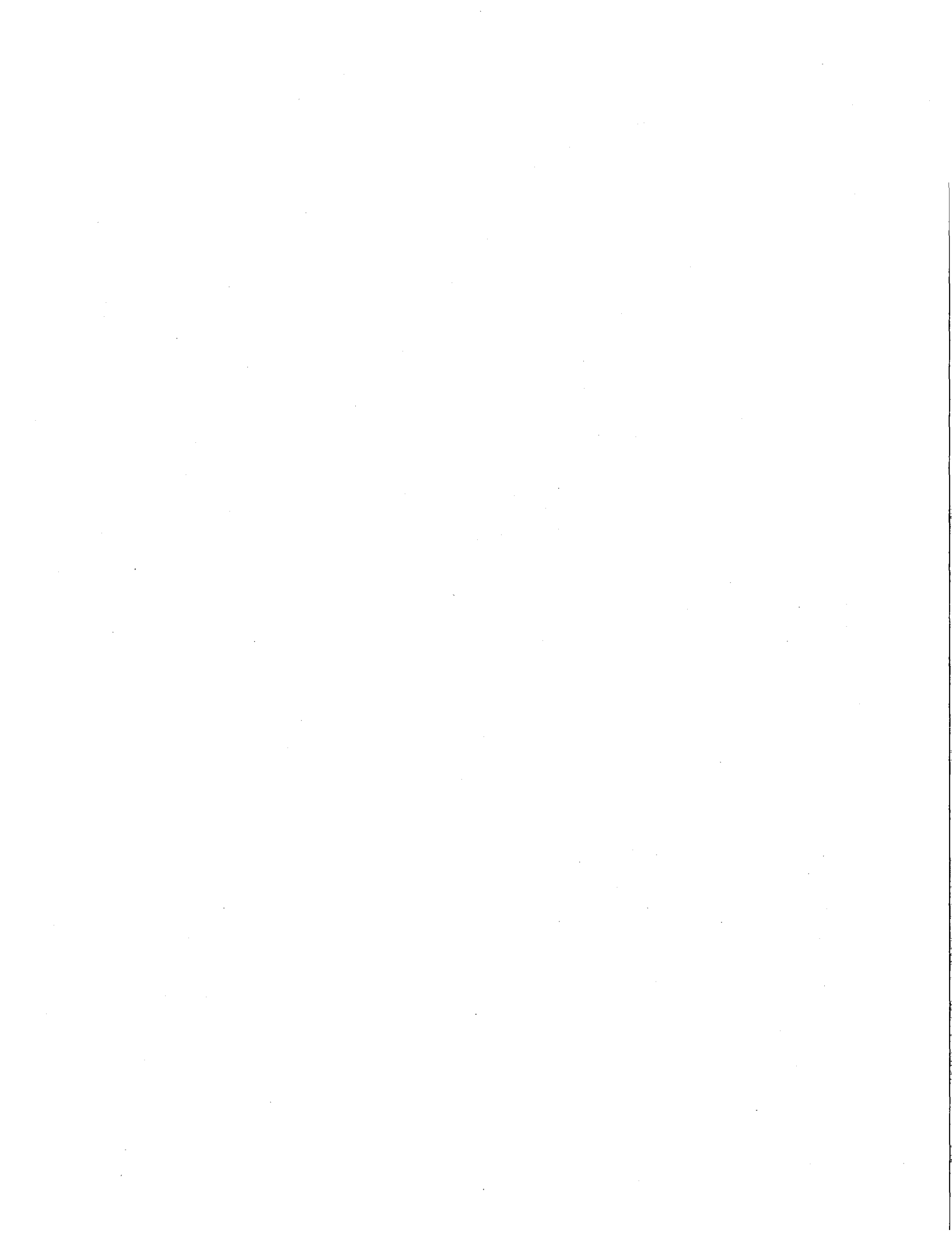


TABLE 2 (Continued)
SUMMARY OF SOIL STOCKPILE ANALYTICAL RESULTS
BRIGGS NURSERY, INC.

| | | Lead | Cadmium | Chromium | Arsenic | Silver | Barium | Selenium | Mercury | Thallium | Aldrin | 4,4' DDD | 4,4' DDE | 4,4' DDT | Dieldrin | Endosulfan I |
|--|----------------|------|---------|----------|---------|------------------|-------------------|------------------|---------|------------------|-------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|------------------|
| MTCA Cleanup Levels (mg/kg) ¹ | | 250 | 2 | 2,000 | 20 | 400 ² | 5600 ² | 400 ² | 2 | 5.6 ² | 0.05 ² /0.1 ³ | 4.17 ² /0.75 ³ | 2.94 ² /0.1 ^{3*} | 3.0 ¹ /1.0 ^{3*} | 0.06 ² /0.07 ³ | 480 ² |
| STOCKPILE 4 | 091401-04a | 7 | <1 | 18 | <5 | <50 | <50 | <50 | <0.5 | <1 | NA ⁵ | NA | NA | NA | NA | NA |
| | 091401-04a Dup | 9 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <1 | NA | NA | NA | NA | NA | NA |
| | 091701-04b | 6 | <1 | 18 | <5 | <50 | <50 | <50 | <0.5 | <1 | NA | NA | NA | NA | NA | NA |
| | 091701-04c | <5 | <1 | 19 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0042 | <0.001 | <0.001 | <0.001 | 0.0056 | <0.001 |
| | 091701-04j | <5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0076 | 0.0036 | <0.001 | 0.0031 | 0.023 | <0.001 |
| | 091701-04d | <5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0018 | 0.0023 | <0.001 | <0.001 | 0.0024 | <0.001 |
| | 091701-04e | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.031 | 0.023 | <0.001 | <0.001 | 0.0021 | 0.0022 |
| | 091801-04f | <5 | <1 | 17 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| | 091801-04g | <5 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| | 091801-04h | <5 | <1 | 18 | <5 | <50 | <50 | <50 | <0.5 | <1 | NA | NA | NA | NA | NA | NA |
| | 091801-04i | <5 | <1 | 20 | <5 | <50 | <50 | <50 | <0.5 | <1 | NA | NA | NA | NA | NA | NA |
| | 092401-04e | <5 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <1 | NA | NA | NA | NA | NA | NA |
| | 092401-04k | <5 | <1 | 17 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0026 | 0.14 | <0.001 | 0.15 | 0.0029 | 0.0018 |
| | 092401-04k Dup | <5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <1 | NA | NA | NA | NA | NA | NA |
| | 092401-04l | <5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0015 | 0.0013 | <0.001 | 0.001 | 0.0012 | 0.0019 |
| | 092401-04m | <5 | <1 | 14 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0059 | 0.0095 | <0.001 | 0.027 | 0.0017 | 0.0019 |
| | 092401-04n | <5 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0099 | 0.007 | <0.001 | 0.01 | 0.001 | <0.001 |
| | 092401-04o | 20 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0017 | 0.021 | <0.001 | 0.034 | 0.0021 | 0.0018 |
| 092401-04p | 6 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0033 | 0.016 | <0.001 | 0.031 | 0.002 | <0.001 | |
| 092401-04q | <5 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.002 | 0.0012 | <0.001 | <0.001 | 0.0011 | 0.0034 | |
| 092401-04r | <5 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0014 | 0.026 | <0.001 | 0.02 | 0.003 | <0.001 | |
| 092401-04s | <5 | <1 | 11 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0039 | 0.023 | 0.0017 | 0.058 | 0.0016 | 0.0033 | |
| 092401-04t | <5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0016 | <0.001 | <0.001 | 0.023 | 0.0019 | 0.0015 | |

Notes:

¹ - MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses unless otherwise noted

² - Standard MTCA Method B Cleanup Level

³ - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3

* - Total: 4,4' DDT, DDD, & DDE

⁴ - Concentration Not Detected above Cleanup Level

⁵ - Not Analyzed

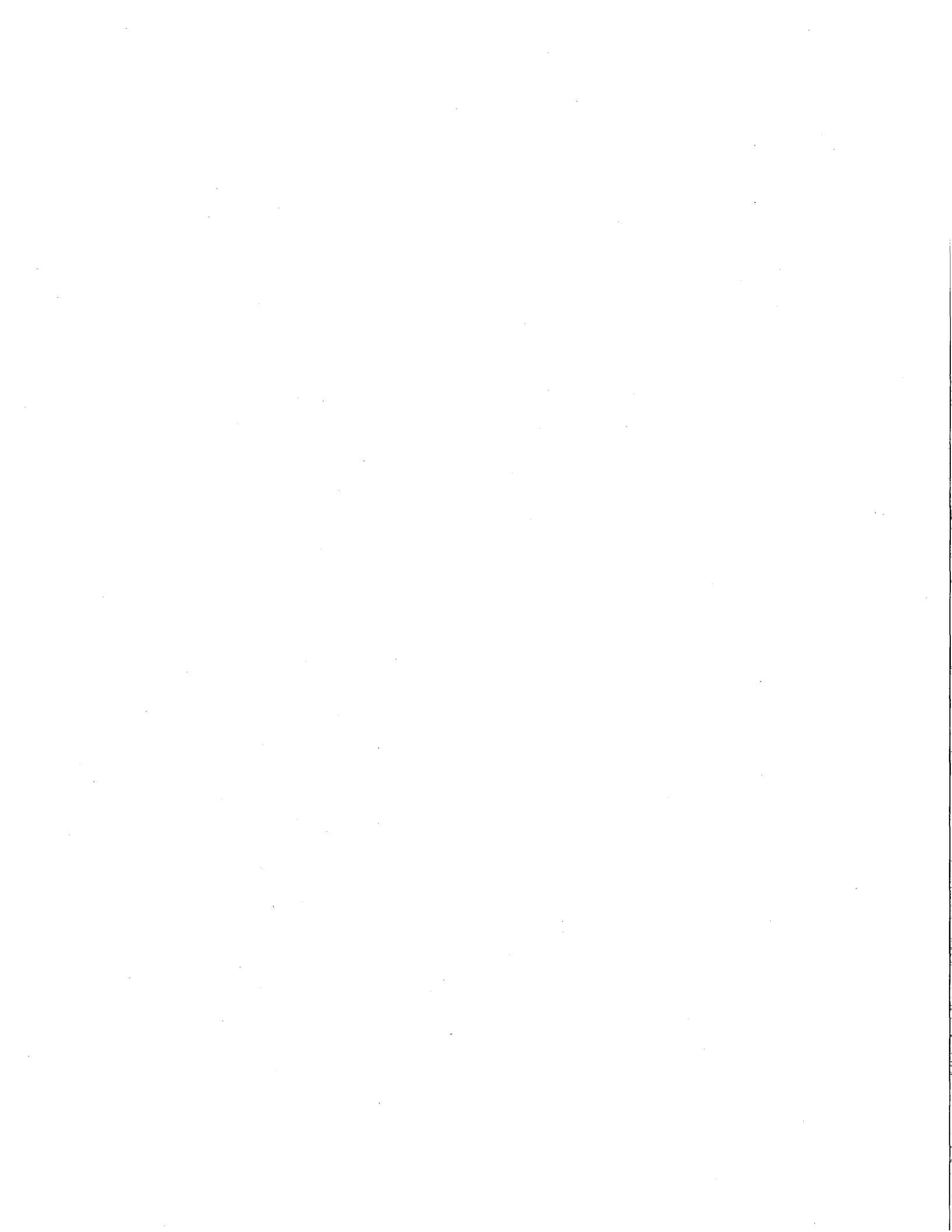


TABLE 2 (Continued)
 STOCKPILES 4, 5 & 6
 ANALYTICAL RESULTS

| | Soil Metals (mg/kg) | | | | | | | | | | Pesticides (mg/kg) | | | | | |
|--|---------------------|---------|----------|---------|---------------------|---------------------|-----------------------|---------|-----------------------|-------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|------------------|--------|
| | Lead | Cadmium | Chromium | Arsenic | Silver ² | Barium ² | Selenium ² | Mercury | Thallium ² | Aldrin | 4,4' DDD | 4,4' DDE | 4,4' DDT | Dieldrin | Endosulfan I | |
| MTCA Cleanup Levels (mg/kg) ¹ | 250 | 2 | 2,000 | 20 | 400 | 5,600 | 400 | 2 | 5.6 | 0.05 ² /0.1 ⁴ | 4.17 ² /0.75 ⁴ | 2.94 ² /0.1 ^{4*} | 3.0 ² /1.0 ^{4*} | 0.06 ² /0.07 ⁴ | 480 ² | |
| STOCKPILE 5 | 091801-05b | NA | NA | NA | NA | NA | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| | 091801-05c | NA | NA | NA | NA | NA | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| | 100101-5a | 9 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | 0.0048 | 0.0078 | 0.0045 | <0.001 | <0.001 |
| | 100101-5b | 10 | <1 | 17 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | 0.03 | 0.0057 | 0.048 | <0.001 | <0.001 |
| | 100101-5c | <5 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | 0.0055 | 0.0054 | 0.0059 | <0.001 | <0.001 |
| | 100101-5c Dup | NA | NA | NA | NA | NA | NA | NA | NA | NA | <0.001 | 0.0055 | 0.0055 | 0.0064 | <0.001 | <0.001 |
| | 100301-5a | 15 | <1 | 31 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.027 | 0.0044 | <0.001 | 0.0029 | 0.0034 | <0.001 |
| | 100301-5b | 12 | <1 | 22 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0049 | 0.0027 | <0.001 | 0.0015 | 0.0049 | <0.001 |
| | 100301-5c | <5 | <1 | 23 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.038 | 0.002 | <0.001 | 0.0015 | 0.0065 | <0.001 |
| | 100301-5c Dup | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.036 | 0.0033 | <0.001 | 0.0014 | 0.0064 | <0.001 |
| STOCKPILE 6 | 101001-6a | 6 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | 0.043 | 0.0078 | 0.33 | 0.0087 | <0.001 |
| | 101001-6b | 13 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | 0.011 | 0.0082 | 0.067 | <0.001 | <0.001 |
| | 101001-6b Dup | 10 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | 0.011 | 0.0084 | 0.068 | <0.001 | <0.001 |
| | 101201-6a | 14 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0018 | <0.001 | <0.001 | 0.32 | <0.001 | <0.001 |
| | 101201-6b | 8 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.04 | 0.034 | <0.001 | 0.16 | 0.0023 | <0.001 |
| | 101201-6c | 5 | <1 | 11 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | <0.001 | <0.001 | 0.019 | <0.001 | <0.001 |
| | 101201-6c Dup | NA | NA | NA | NA | NA | NA | NA | NA | NA | <0.001 | <0.001 | <0.001 | 0.019 | <0.001 | <0.001 |
| | 101501-6a | 22 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0035 | <0.001 | <0.001 | 0.049 | 0.0019 | <0.001 |
| | 101501-6b | 103 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0011 | <0.001 | <0.001 | 0.6 | <0.001 | <0.001 |
| | 101501-6c | <5 | <1 | 14 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0014 | 0.015 | <0.001 | 0.097 | <0.001 | <0.001 |
| | 101501-6c Dup | <5 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0014 | 0.015 | <0.001 | 0.095 | <0.001 | <0.001 |
| | 101701-6a | 21 | <1 | 10 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.0031 | 0.025 | <0.001 | 0.063 | <0.001 | <0.001 |
| | 101701-6a Dup | 24 | <1 | 10 | <5 | <50 | <50 | <50 | <0.5 | <1 | NA | NA | NA | NA | NA | NA |
| | 101701-6b | 28 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <1 | 0.93 | 0.89 | <0.001 | 6.6 | <0.001 | <0.001 |
| | 101701-6c | 23 | <1 | 14 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | 0.018 | <0.001 | 0.016 | <0.001 | <0.001 |
| 101901-6a | 5 | <1 | <5 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| 101901-6b | 11 | <1 | 6 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | 0.53 | <0.001 | 2.1 | <0.001 | <0.001 | |
| 101901-6c | 16 | <1 | <5 | <5 | <50 | <50 | <50 | <0.5 | <1 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |

Notes:

¹ - MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses

² - Standard MTCA Method B Cleanup Level

³ - Natural Background Soil Metal Concentrations in Washington State: Puget Sound

⁴ - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3

* - Total: 4,4' DDT, DDD, & DDE

⁵ - Concentration Not Detected above Cleanup Level

⁶ - Not Analyzed



**TABLE 4
POST-EXCAVATION SOIL GRID SAMPLING ANALYTICAL RESULTS
BRIGGS NURSERY, INC.
FARM DEBRIS EXCAVATION
OLYMPIA, WA**

| MTCA Cleanup Levels (mg/kg) ¹ | Metals | | | | | | | | | Diesel Range | | | Pesticides | | | | | | | | | | | All Compounds | | | |
|--|--------|---------|----------|---------|------------------|-------------------|------------------|---------|------------------|--------------|-------|-------|-------------------------------------|--------|---------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|------------------|---------------|---------------------------------------|---------------------|--------------------------------------|-------------------|--------|----|
| | Lead | Cadmium | Chromium | Arsenic | Silver | Barium | Selenium | Mercury | Thallium | 2,000 | 2,000 | 4,000 | Aldrin | a-BHC | Lindane | 4,4' DDD | 4,4' DDE | 4,4' DDT | Dieldrin | Endosulfan I | Endosulfan II | Heptachlor Epoxide | Endrin | | Heptachlor | | |
| | 250 | 2 | 2,000 | 20 | 400 ² | 5600 ² | 400 ² | 2 | 5.6 ² | 2,000 | 2,000 | 4,000 | 0.05 ² /0.1 ³ | NE | 0.01 | 4.17 ² /0.75 ⁵ | 2.94 ² /0.1 ^{3*} | 3.0 ¹ /1.0 ^{3*} | 0.06 ² /0.07 ⁵ | 480 ² | NE | 0.11 ² /0.4 ^{2**} | 0.2/24 ² | 0.4 ^{**} /0.22 ² | Compound Specific | | |
| 101101 B1-B ⁷ | <5 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 B2-B Dup | <5 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0058 | <0.001 | <0.001 | 0.0099 | 0.0033 | 0.0290 | 0.0240 | 0.0059 | <0.001 | 0.0021 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 B3-B | <5 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 B3-S Dup | 5 | <1 | 6 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.0010 | NA | NA | NA | NA | NA | ND |
| 101101 B4-S | 6 | <1 | 6 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0078 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 B5-B | <5 | <1 | 14 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0150 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 C1-B | 10 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | 0.0190 | <0.001 | 0.1160 | 0.0650 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 C2-B | 10 | <1 | 11 | <5 | <50 | <50 | <50 | <0.5 | <50 | ND | ND | ND | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 C4-B | 5 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | 0.0054 | 0.0019 | 0.0200 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 C5-B Dup | <5 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0012 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 D2-B | <5 | <1 | 14 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0012 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 D4-B | <5 | <1 | 13 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0062 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 D5-B | <5 | <1 | 10 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0170 | 0.0039 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 E2-B | <5 | <1 | 8 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0130 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0036 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 E4-B | <5 | <1 | 11 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0026 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 E5-S | 10 | <1 | 11 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0011 | <0.001 | <0.001 | 0.0280 | 0.0085 | 0.0130 | 0.0980 | 0.0140 | <0.001 | 0.0260 | <0.001 | <0.001 | <0.001 | <0.001 | ND |

NOTES:

¹ - MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses unless otherwise noted

² - Standard MTCA Method B Soil Cleanup Level

³ - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3

* - Total: 4,4' DDT, DDD, & DDE NE - Not established

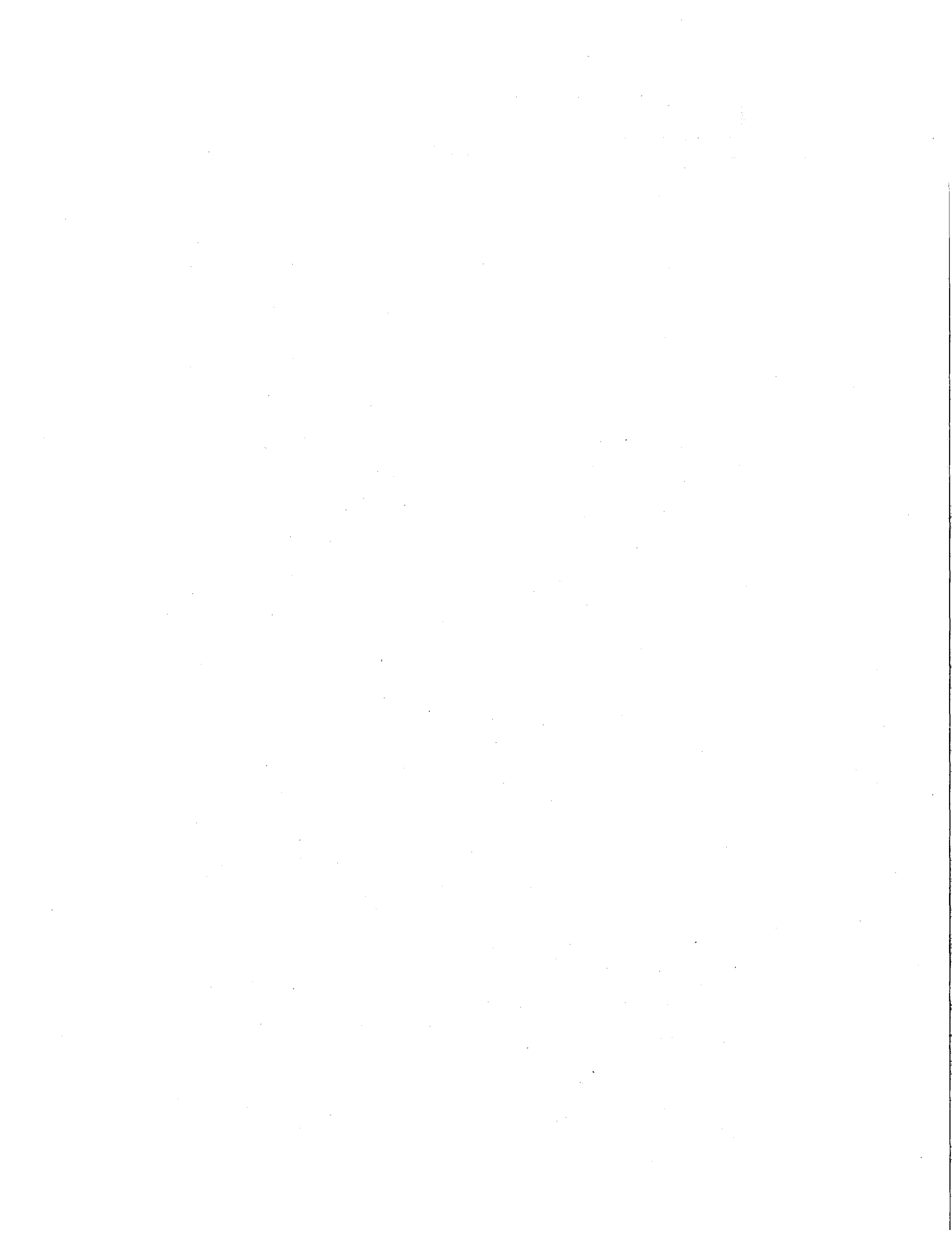
⁴ - S = Sidewall Sample

⁵ - Not Analyzed

⁶ - Concentration Not Detected above Laboratory Detection Limits

** - Total: Heptachlor, Heptachlor Epoxide

⁷ - B = Bottom of Excavation Sample



**TABLE 4
POST-EXCAVATION SOIL GRID SAMPLING ANALYTICAL RESULTS
BRIGGS NURSERY, INC.
FARM DEBRIS EXCAVATION
OLYMPIA, WA**

| MTCA Cleanup Levels (mg/kg) ¹ | Inorganic | | | | | | | | Organic | | | | | | | | | | | | | All Compounds | | | | | |
|--|-----------|---------|----------|---------|------------------|-------------------|------------------|---------|------------------|--------------|------------|-------------|-------------------------------------|--------|---------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|------------------|---------------|---------------------------------------|---------------------|---------------------------------------|-------------------|--------|----|
| | Lead | Cadmium | Chromium | Arsenic | Silver | Barium | Selenium | Mercury | Thallium | Diesel Range | Heavy Oils | Mineral Oil | Aldrin | a-BHC | Lindane | 4,4' DDD | 4,4' DDE | 4,4' DDT | Dieldrin | Endosulfan I | Endosulfan II | | Heptachlor Epoxide | Endrin | Heptachlor | | |
| | 250 | 2 | 2,000 | 20 | 400 ² | 5600 ² | 400 ² | 2 | 5.6 ² | 2,000 | 2,000 | 4,000 | 0.05 ² /0.1 ³ | NE | 0.01 | 4.17 ² /0.75 ³ | 2.94 ² /0.1 ^{3*} | 3.0 ¹ /1.0 ^{3*} | 0.06 ² /0.07 ³ | 480 ² | NE | 0.11 ² /0.4 ^{3**} | 0.2/24 ² | 0.4 ^{3**} /0.22 ² | Compound Specific | | |
| 101101 F1-S | 5 | <1 | 9 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 F2-B | 17 | <1 | 17 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | 0.0057 | <0.001 | <0.001 | 0.0033 | 0.0013 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 F2-B | 5 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0034 | <0.001 | <0.001 | 0.004 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 F4-B | <5 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <50 | ND | ND | ND | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0015 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 F5-B Dup | 12 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0160 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0650 | 0.0041 | <0.001 | 0.0200 | <0.001 | 0.0023 | <0.001 | 0.0023 | ND |
| 101101 F5-S | 11 | <1 | 18 | <5 | <50 | <50 | <50 | <0.5 | <50 | ND | ND | ND | 0.0160 | <0.001 | <0.001 | 0.0012 | <0.001 | <0.001 | 0.0156 | 0.0033 | 0.0026 | <0.001 | <0.001 | 0.0023 | <0.001 | 0.0023 | ND |
| 101101 F6-S Dup | NA | NA | NA | NA | NA | NA | NA | NA | <50 | ND | ND | ND | 0.0011 | <0.001 | <0.001 | 0.0054 | <0.001 | <0.001 | 0.0220 | 0.0042 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 G1-S | 5 | <1 | 10 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 G2-B | <5 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0028 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 G3-B | <5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0017 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 G4-B | <5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0012 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0034 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 G5-S | 9 | <1 | 15 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0011 | <0.001 | <0.001 | 0.0034 | <0.001 | <0.001 | 0.0280 | <0.001 | <0.001 | 0.0029 | 0.0017 | 0.0024 | <0.001 | 0.0024 | ND |
| 101101 H1-S | 5 | <1 | 10 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0026 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 H2-B | <5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0020 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0062 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 H3-B | 5 | <1 | 16 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | 0.0024 | <0.001 | <0.001 | 0.0038 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 H4-B | 11 | <1 | 10 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0076 | 0.0041 | 0.0059 | 0.0044 | <0.001 | <0.001 | 0.0058 | 0.0015 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 H5-B | 9 | <1 | 14 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | 0.0076 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0032 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 H5-S | <5 | <1 | 14 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 I1-S | 5 | <1 | 10 | <5 | <50 | <50 | <50 | <0.5 | <50 | ND | ND | ND | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 I1-S Dup | NA | NA | NA | NA | NA | NA | NA | NA | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 I1-S | 11 | <1 | 10 | <5 | <50 | <50 | <50 | <0.5 | <50 | ND | ND | ND | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0051 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 I2-B | 14 | <1 | 9 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0021 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 I2-B Dup | NA | NA | NA | NA | NA | NA | NA | NA | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0032 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 I3-B | 10 | <1 | 7 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0045 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 I4-B | 10 | <1 | 8 | <5 | <50 | <50 | <50 | <0.5 | <50 | NA | NA | NA | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0024 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |
| 101101 I5-B | 9 | <1 | 12 | <5 | <50 | <50 | <50 | <0.5 | <50 | ND | ND | ND | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.0016 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | ND |

NOTES:

¹ - MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses unless otherwise noted

² - Standard MTCA Method B Soil Cleanup Level

³ - Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals, WAC 173-340, Table 749-3

* - Total: 4,4' DDT, DDD, & DDE

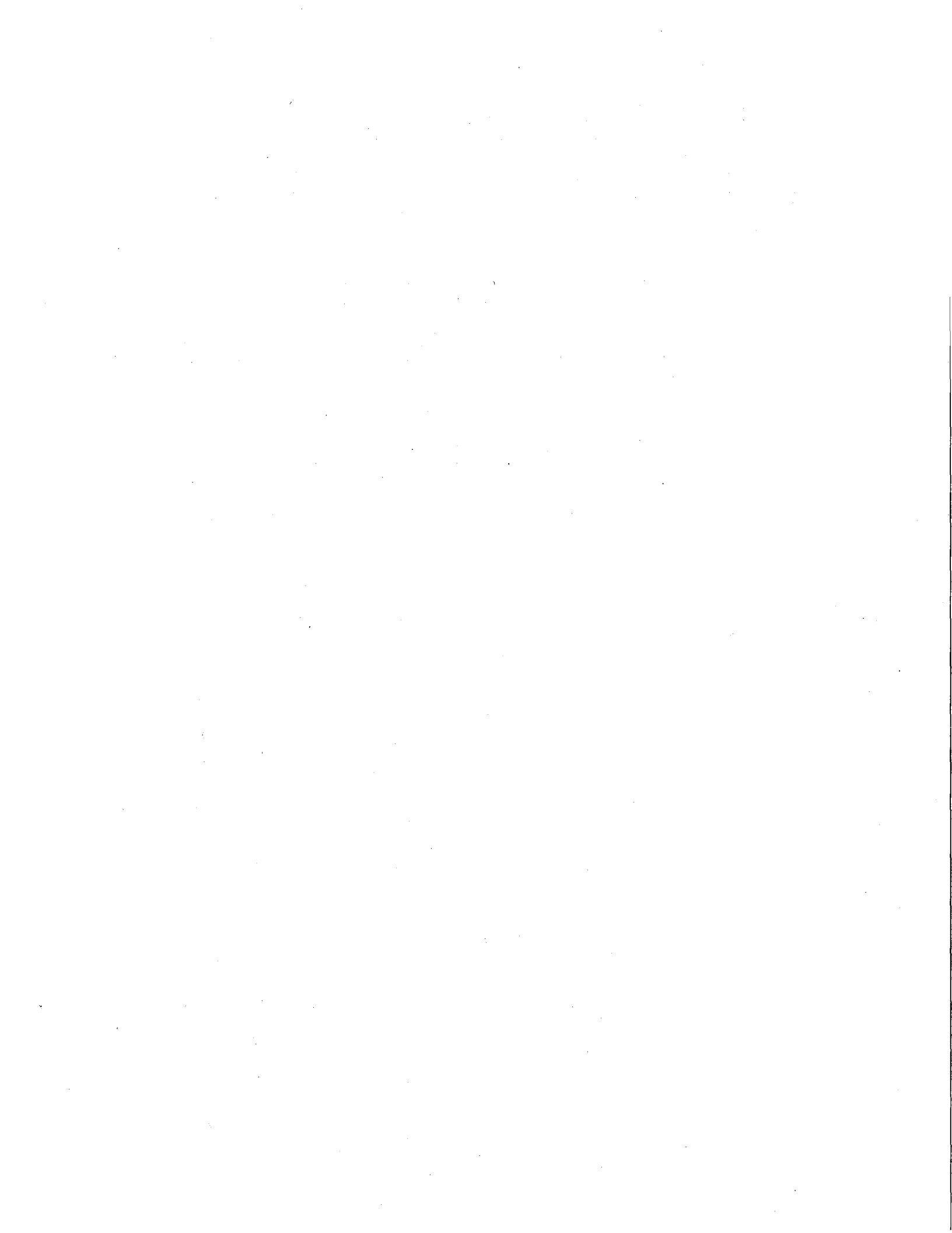
⁴ - S = Sidewall Sample

⁵ - Not Analyzed

⁶ - Concentration Not Detected above Laboratory Detection Limits

** - Total: Heptachlor, Heptachlor Epoxide

⁷ - B= Bottom of Excavation Sample



**TABLE 5
PERIMETER BORINGS AND NW PIT SAMPLES
BRIGGS NURSERY, INC.
FARM DEBRIS EXCAVATION
OLYMPIA, WA**

| | Concentration (mg/kg) | | | | | | | | | | | | Vol% |
|---|-------------------------------------|-----------------|---------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|------------------|---------------|--------------------------------------|------------------|--------------------|------------------|
| | Aldrin | α -BHC | Lindane | 4,4' DDD | 4,4' DDE | 4,4' DDT | Dieldrin | Endosulfan I | Endosulfan II | Heptachlor Epoxide | Endrin | Heptachlor Epoxide | Isopropyltoluene |
| MTCA Cleanup Levels (mg/kg) ¹ | 0.05 ² /0.1 ³ | NE ⁴ | 0.01 | 4.17 ² /0.75 ³ | 2.94 ² /0.1 ^{3*} | 3.0 ¹ /1.0 ^{3*} | 0.06 ² /0.07 ³ | 480 ² | NE | 0.11 ² /0.4 ^{**} | 2.4 ² | 1.1 ² | |
| Perimeter Borings | | | | | | | | | | | | | |
| P1-10 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P1-15 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P1-25 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P2-10 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P2-15 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P2-25 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P3-10 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P3-15 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P3-25 | 0.650 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 1.6 | <0.001 | <0.001 | <0.001 | <0.001 | 0.058 | |
| P4-10 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.14 |
| P4-15 | 0.0012 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 5.2 |
| P4-25 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.05 |
| P5-10 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P5-15 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P5-25 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P6-10 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P6-15 | <0.001 | <0.001 | <0.001 | 0.07 | <0.001 | 0.14 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P6-25 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P7-10 | <0.001 | <0.001 | <0.001 | 0.65 | <0.001 | <0.001 | 0.24 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P7-15 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| P7-25 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |



**TABLE 5
PERIMETER BORINGS AND NW PIT SAMPLES
BRIGGS NURSERY, INC.
FARM DEBRIS EXCAVATION
OLYMPIA, WA**

| | Organic Pesticides (mg/kg) | | | | | | | | | | | | WCS |
|---|-------------------------------------|-----------------|---------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|------------------|---------------|--------------------------------------|------------------|--------------------|------------------|
| | Aldrin | α -BHC | Lindane | 4,4' DDD | 4,4' DDE | 4,4' DDT | Dieldrin | Endosulfan I | Endosulfan II | Heptachlor Epoxide | Endrin | Heptachlor Epoxide | Isopropyltoluene |
| MTCA Cleanup Levels (mg/kg) ¹ | 0.05 ² /0.1 ³ | NE ⁴ | 0.01 | 4.17 ² /0.75 ³ | 2.94 ² /0.1 ^{3*} | 3.0 ¹ /1.0 ^{3*} | 0.06 ² /0.07 ³ | 480 ² | NE | 0.11 ² /0.4 ^{**} | 2.4 ² | 1.1 ² | |
| NW Corner of Pit Borings | | | | | | | | | | | | | |
| NW1-10 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| NW1-15 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| NW2-12 | 0.42 | <0.001 | <0.001 | 0.066 | <0.001 | <0.001 | 5.6 | 0.1 | <0.001 | <0.001 | <0.001 | <0.001 | |
| NW2-17 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| NW2-22 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| NW3-10 | 0.14 | <0.001 | <0.001 | 0.30 | 0.49 | 50.0 | 5.5 | 0.10 | <0.001 | <0.001 | 0.33 | 0.16 | |
| NW3-15 | 7.80 | <0.001 | <0.001 | 0.071 | <0.001 | <0.001 | 6.7 | <0.001 | <0.001 | <0.001 | <0.001 | 0.40 | |
| NW3-25 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| NW4-12 | 0.82 | <0.001 | <0.001 | 0.7 | <0.001 | 1.2 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| NW4-17 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |
| NW4-22 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | |

NOTES:

¹ - MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses unless otherwise noted

² - Standard MTCA Method B Soil Cleanup Level

³ - Ecological Indicator Soil Concentrations [†] ⁵ - Not Analyzed

4 - NE - Not established

5 - Concentration Not Detected above Laboratory Detection Limits

* - Total: 4,4' DDT, DDD, & DDE



Site Hazard Assessment: Briggs Nursery "Pit"

- Wells*
- ~ Streams
- Roads
- Minor Roads
- Major Roads

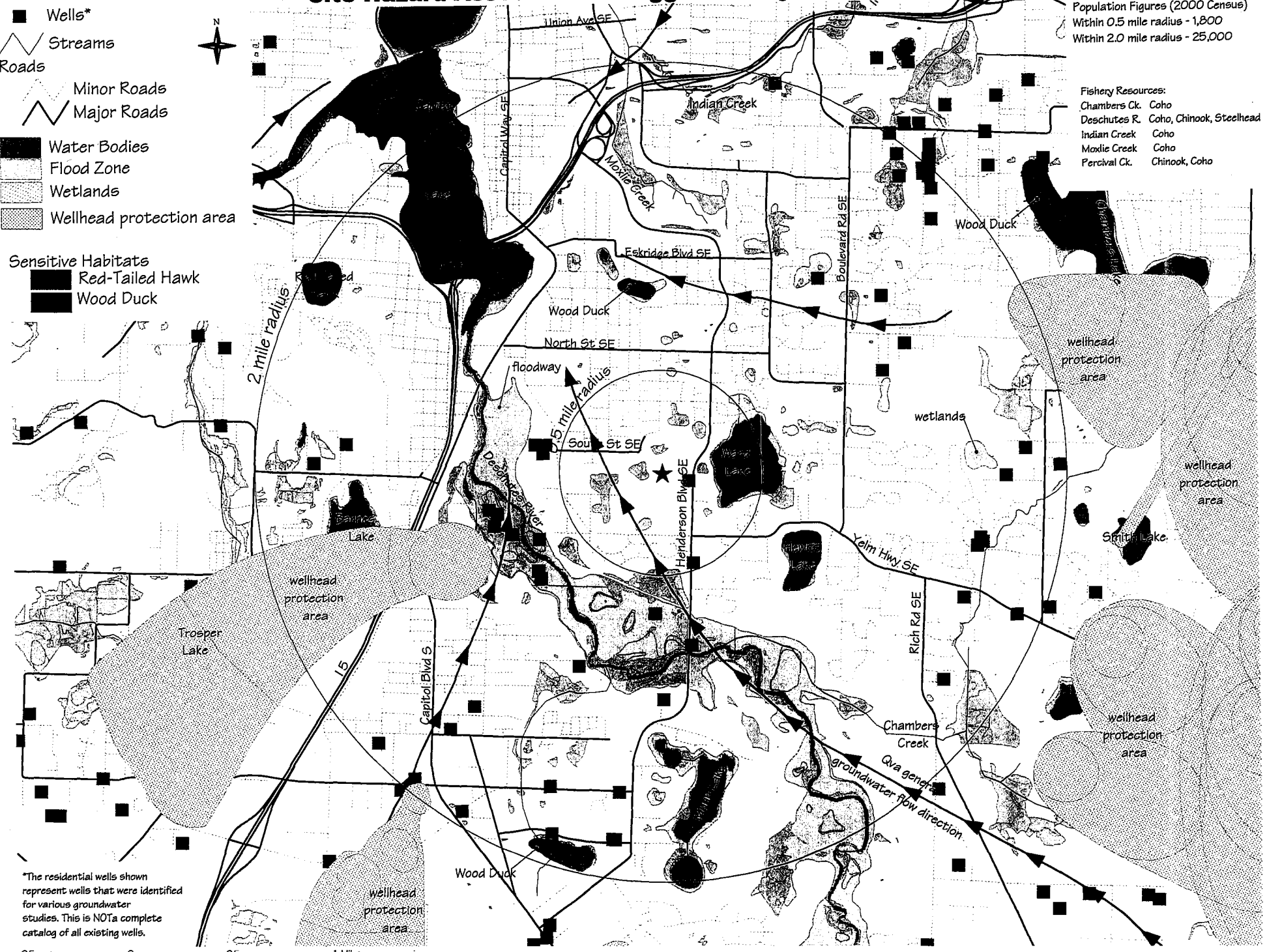
- Water Bodies
- ▨ Flood Zone
- ▨ Wetlands
- ▨ Wellhead protection area

- Sensitive Habitats**
- Red-Tailed Hawk
 - Wood Duck

Population Figures (2000 Census)
 Within 0.5 mile radius - 1,800
 Within 2.0 mile radius - 25,000

Fishery Resources:

| | |
|--------------|--------------------------|
| Chambers Ck. | Coho |
| Deschutes R. | Coho, Chinook, Steelhead |
| Indian Creek | Coho |
| Moxie Creek | Coho |
| Percival Ck. | Chinook, Coho |

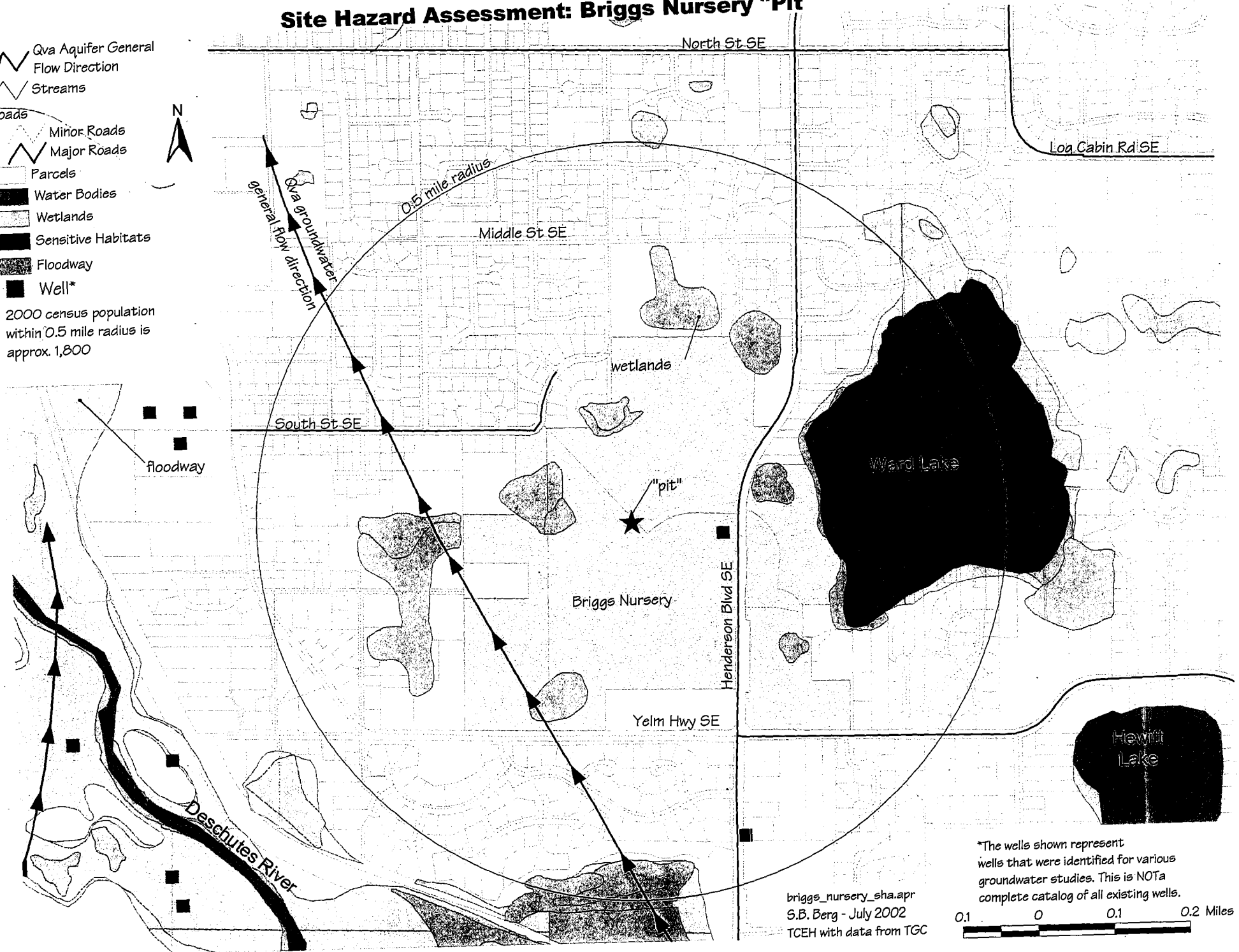


*The residential wells shown represent wells that were identified for various groundwater studies. This is NOT a complete catalog of all existing wells.



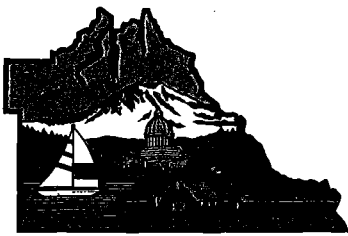
Site Hazard Assessment: Briggs Nursery "Pit"

- Qva Aquifer General Flow Direction
 - Streams
 - Roads**
 - Minor Roads
 - Major Roads
 - Parcels
 - Water Bodies
 - Wetlands
 - Sensitive Habitats
 - Floodway
 - Well*
- 2000 census population within 0.5 mile radius is approx. 1,800



briggs_nursery_sha.apr
 S.B. Berg - July 2002
 TCEH with data from TGC

*The wells shown represent wells that were identified for various groundwater studies. This is NOT a complete catalog of all existing wells.



THURSTON COUNTY
WASHINGTON
SINCE 1852

COUNTY COMMISSIONERS

Cathy Wolfe
District One

Diane Oberquell
District Two

Kevin J. O'Sullivan
District Three

**PUBLIC HEALTH AND
SOCIAL SERVICES DEPARTMENT**

Patrick M. Libbey, Director
Diana T. Yu, MD, MSPH
Health Officer

August 8, 2002

Gary Briggs
4407 Henderson Blvd. SE
Olympia, WA 98501

Subject : Briggs Nursery Debris Field, 4407 Henderson Blvd. SE, Olympia, WA 98501

Dear Mr. Briggs:

The Thurston County Health Department has completed the site hazard assessment (SHA) for the above location, as required under the Model Toxics Control Act. The SHA provides an estimation of the potential threat to human health and/or environment relative to all other Washington state sites assessed at this time. Your site has been determined to be a 2, where 1 represents the highest risk and 5 the lowest.

For your information, Ecology will be publishing the ranking of this and other recently assessed sites in the August 27, 2002 special issue of the site register. The site hazard ranking will be used in conjunction with other site-specific considerations in determining Ecology's priority for future actions.

If you have any inquiries or comments about the site scoring and ranking process, please contact me at 360-754-4111 x6451 or Michael Spencer, Department of Ecology at 360-407-7195

Sincerely,

Brad Zulewski
Environmental Health Specialist

Cc: Michael Spencer, Washington Department of Ecology - HQ
Dan Alexanian, DOE - TCP



