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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
N. 4601 Monroe, Suite 100 • Spokane, Washington 99205-1295 • (509) 456-2926

August 8, 1991

Mr. Don Sump, Vice President
PureGro Company
3482 Glade North Road
Pasco, WA 99301-9389

Dear Mr. Sump:

Enclosed are copies of the Site Hazard Assessment reports for the PureGro sites at Moses Lake, Ritzville, Warden, Othello, Pasco, Wilbur, and Quincy. These sites, along with other state sites, will be ranked in the near future. The sites will be added to Ecology's Hazardous Sites List, and the ranking will be used, in conjunction with other considerations, to determine the priority for follow-up. You will notified of the status of your sites prior to publication of the Hazardous Sites List in Ecology's Site Register. If a decision is made that no further action is required, this will also be noted in the same register.

Fact sheets describing site hazard assessments, the Washington Ranking Method and Hazardous Sites List are enclosed for your information.

If you have any questions, please contact me at (509) 456-6167.

Sincerely,

Patti Y. Carter

Patti Y. Carter
Site Hazard Assessments
Toxics Cleanup Section

Enclosures

SITE HAZARD ASSESSMENT

PUREGRO COMPANY
OTHELLO SITE
GRANT COUNTY, WASHINGTON

Prepared by
Science Applications International Corporation
626 Columbia Street N.W., Suite 1-C
Olympia, Washington 98501

Submitted to
Washington Department of Ecology
Toxics Cleanup Program
Mailstop PV-11
Olympia, Washington 98504

Ecology Contract No. C0089006
Work Assignment No. 51
SAIC Project No. 1-817-00-395-40

June 28, 1991

TABLE OF CONTENTS

FIGURES

TABLE

1.0 INTRODUCTION

SAIC conducted a Site Hazard Assessment (SHA) at the PureGro Company Othello Site in Othello, Adams County, Washington. Field work was performed May 10, 1991. The purpose of a SHA (in accordance with WAC 173-340-320, Ecology, 1991) is to provide sufficient sampling data and other environmental information to:

a) Confirm or rule out that a release or threatened release of a hazardous substance has occurred;

b) Identify the hazardous substance and provide some information regarding the extent and concentration of the substance;

c) Identify site characteristics that could result in the substance entering and moving through the environment; and

d) Evaluate the potential for the threat to human health and the environment.

This information is then used to compute a score using the Washington Ranking Method (Ecology, 1990) and the priority level of the site relative to the other State cleanup sites.

This report includes a brief description of the facility and its environmental setting in Section 2.0, a description of field sampling methodologies in Section 3.0, sampling results and discussion in Section 4.0, and a list of references in Section 5.0. Appendices include the following materials: (I) Data Collection Summary Sheets (DCSS), (II) Soil Sampling Forms, (III) Analytical Results, (IV) Chain-of Custody Forms, (V) Field Notes.

2.0 FACILITY DESCRIPTION AND ENVIRONMENTAL SETTING

2.1 FACILITY DESCRIPTION

The PureGro Company is a distributor of agricultural chemicals, with several locations throughout eastern Washington. The PureGro Othello Site is located at Bruce, Washington, near the intersection of the Burlington-Northern tracks with Lee Road, in the NE/4, NE/4, Section 33, T16N, R30E, W.M. in Adams County, Washington (Figure 1). The address is 1529 West Lee Road, Othello, Washington 99344. The facility lies on a nearly rectangular property along the railroad track and includes a shop/office/chemical storage building, dry fertilizer storage, several tanks, a rinse pad, and holding pond (Figure 2).

Spills reported at this site include an unknown quantity of chemical rinsate (herbicides, 2,4-D, eptam) in 1983 and 1984; an unknown amount of phosphate in 1984; approximately 1,000 gallons of ammonium poly phosphate fertilizer in 1990; and other spills described below. In the winter of 1984, a green acid (phosphate) tank broke, releasing an unknown volume of liquid. The soil was spread and the liquid was pumped up. No soil was removed from the site.
In 1989, about 750 gallons of urea solution were spilled. Following the spill, PureGro drilled to hard pan and found contamination below that level. Deeper drilling revealed that contamination is still in place.

In December 1990, a valve problem allowed approximately 1,000 gallons of ammonium poly phosphate fertilizer to flow south and west of the aboveground tank, along the railroad siding to a depression where it pooled on the frozen ground. The company had retrieved about 600 gallons at the time it notified Ecology. The product that was pumped up was placed in a separate tank. An area approximately 10 yards wide by 150 yards long was reportedly contaminated. When an Ecology inspector visited the site in March 1991 (George, 1991), there were no visible signs of contamination related to the spill. Some quartz sand was noted spread on the ground near the trees along the back fence. Elemental sulfur was noted in the area.

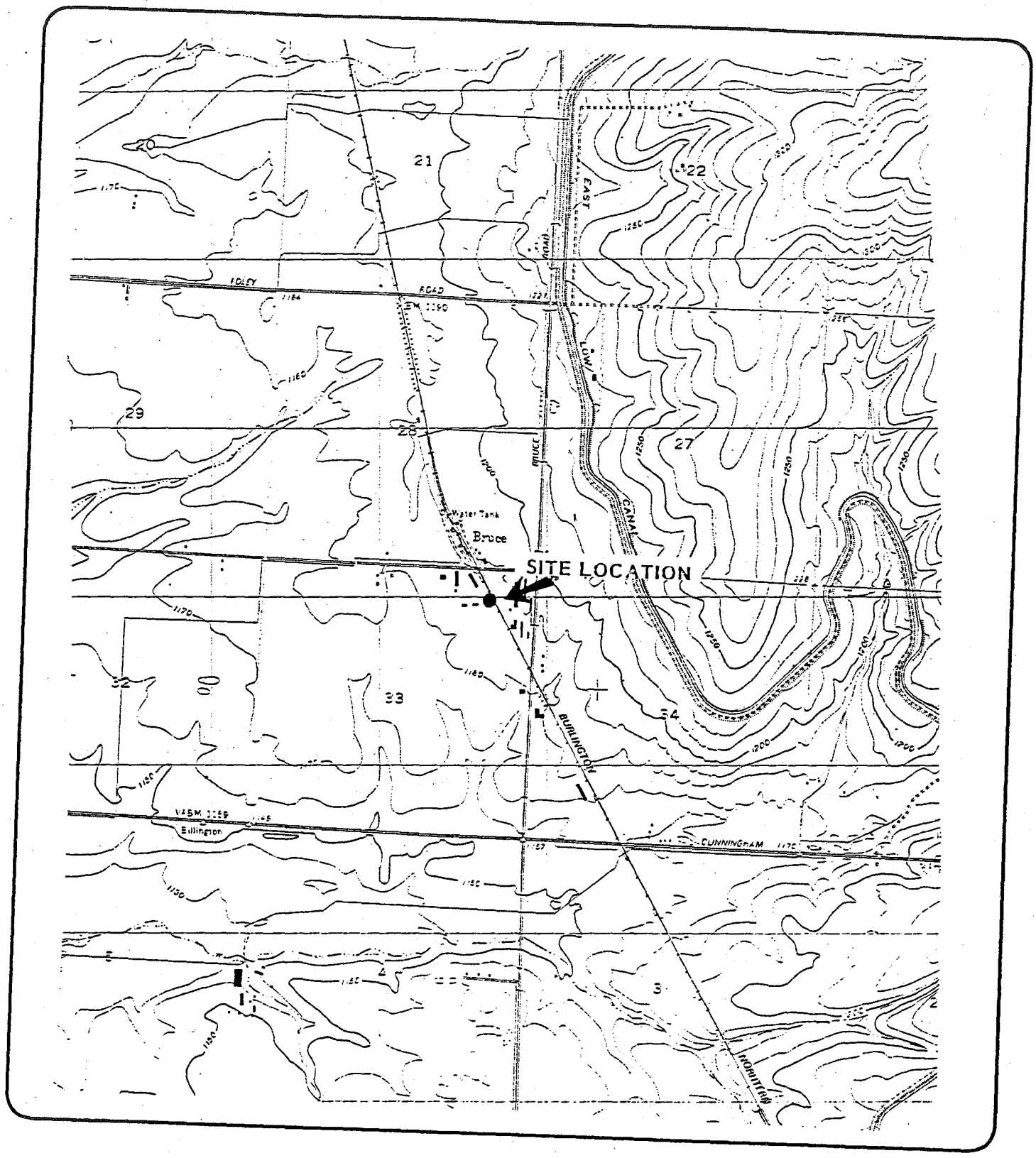


Figure 1

PUREGRO OTHELLO SITE LOCATION
BRUCE, WA 7 1/2 MIN. QUADRANGLE

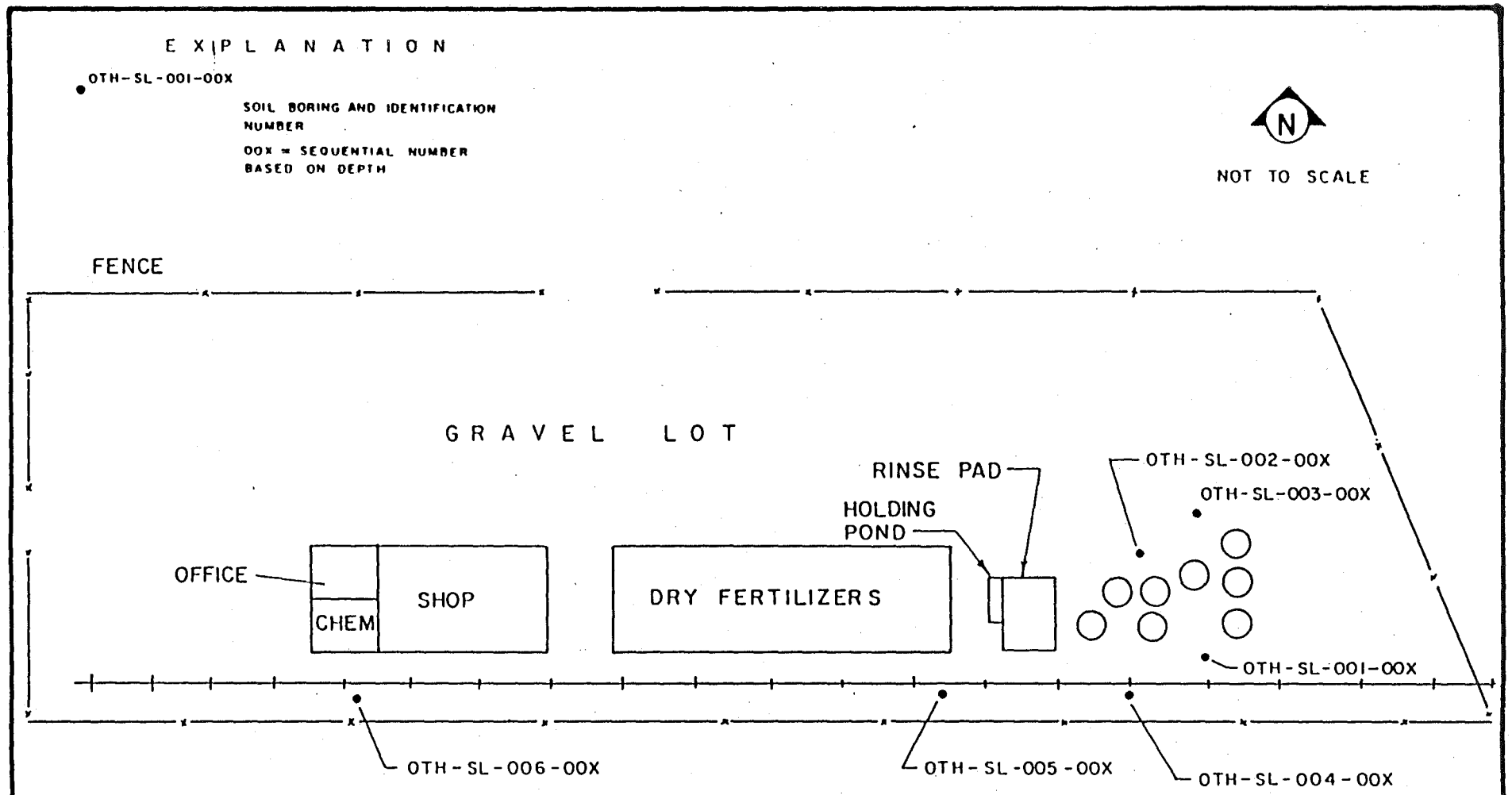


Figure 2

SOIL SAMPLING LOCATIONS, PUREGRO OTHELLO SITE

Small patches of yellow-green staining on the gravels and surface soils near and north of the tank area by the fill manifold were noted (George, 1990). A row of eight-foot deciduous trees behind the property along the fence line shows signs of stress. Two trees immediately southeast (about 45 feet) of the tank area re dead and one is dying. The others onsite appear to be healthy (George, 1990).

2.2 ENVIRONMENTAL SETTING

The soil at the site is a silt loam with fine granular structure. Depth to ground water in this area is not known, but is estimated to be 130 feet. A community well with tank tower lies about 300 yards east of the site. Sampling of that well has not indicated any contamination entering the ground water (George, 1990). Estimated number of persons served by drinking water wells within two miles of the site is 43. In addition, approximately 2,990 acres are irrigated by groundwater within the same proximity. An unnamed creek lies about 7,900 feet south and downgradient of the facility. No canals or other wells or creeks are known in the immediate area.

Total annual precipitation in the Othello area is 8.8 inches per year. The PureGro Othello site does not lie within the flood plain.

Othello lies within the Columbia Basin physiographic province, which is a semi-arid region comprised of grasslands and channeled basalt. The Columbia Plateau (Figure 3) occupies about 55,000 square miles in eastern Washington, northeastern Oregon, and west-central Idaho (Luzier and Burt, 1974). The upper surface of the Plateau is gently rolling and generally slopes to the southwest, except along the northern edge (near Spokane), where it dips toward the north.

Ground water north of this divide flows northward and discharges into the Spokane River, and ground water south of the divide flows south and west, discharging into the Snake or Columbia Rivers (Bauer et al, 1984). The PureGro Othello Site lies south of the divide.

Figure 3

COLUMBIA PLATEAU

The Columbia Plateau is composed of a thick sequence of Tertiary-aged basaltic lava flows known as the Columbia River Basalt Group. Surface erosion between volcanic events resulted in the collection of colluvial deposits atop the existing basaltic surface, which was then covered by later basalt flows, forming an interbedded sequence. The upper surface of the basalt is generally covered with early Quaternary eolian, glacially derived, fluvial and lacustrine sediments ranging in thickness from a few feet to more than 100 feet thick.

3.0 SAMPLING METHODOLOGY

A total of fourteen soil samples were collected at the PureGro Othello site, at six locations with two duplicates. Sampling depths ranged from 0.5 to 5.0 feet below ground surface (bgs). A hand held auger and stainless steel spoon and bowl were used to collect the samples. All samples were analyzed using standard methods SW 8080 (organochlorine pesticides and PCBs), SW 8150 (chlorinated herbicides), SW 9200 (nitrate) (EPA, 1986), and E 351.2 (total Kjeldahl nitrogen) (EPA, 1979). Sample splits were collected for James Lyon of the PureGro Company for all of the soil samples. Specific remarks regarding the location and appearance of each of the soil samples are provided below. Figure 2 depicts the sampling locations.

Sample No. OTH-SL-001-001

Sample was collected at the tank farm, between tanks, at the former spill site. Depth was 0.5 feet bgs. Visual appearance was brown silt with a little clay. A strong ammonia odor was noted during sampling and in the soil collected.

Sample No. OTH-SL-001-002

Composite sample was collected at the tank farm, between tanks, at the former spill site. Depth was 3.0 to 4.0 feet bgs. Visual appearance was brown silt with a little clay. A strong ammonia odor was noted during sampling and in the soil collected.

Sample No. OTH-SL-002-001

Sample was obtained in driveway area north of tank farm. Depth was 0.5 feet bgs. Surface soil was loosened with pickaxe prior to sampling. Visual appearance was gray, silty soil with abundant rocks. Pungent chemical odor noted in sample.

Sample No. OTH-SL-002-002

Composite sample was obtained in driveway area north of tank farm. Depth was 3.0 to 4.0 feet bgs. Surface soil was loosened with pickaxe prior to sampling. Visual appearance was gray, silty soil with abundant rocks. Pungent chemical odor noted in sample.

Sample No. OTH-SL-003-001

Sample was collected in driveway area north of tank farm, northeast of sampling location SL-002-00X. Depth was 0.5 feet bgs. Surface soil was loosened with pickaxe prior to sampling. Visual appearance was gray, silty soil with abundant rocks.

Sample No. OTH-SL-003-002

Composite sample was collected in driveway area north of tank farm, northeast of sampling location SL-002-00X. Depth was 3.0 to 4.0 feet bgs. Surface soil was loosened with pickaxe prior to sampling. Visual appearance was gray, silty soil with abundant rocks.

Sample No. OTH-SL-004-001

Sample was obtained along railroad spur south of tank farm, along path of former spill. Depth was 0.5 feet bgs. Visual appearance was brown silt with a little clay.

Sample No. OTH-SL-004-002

Composite sample was obtained along railroad spur south of tank farm, along path of former spill. Depth was 4.0 to 5.0 feet bgs. Visual appearance was brown silt with a little clay.

Sample No. OTH-SL-005-001

Sample was taken along railroad spur southwest of tank farm, along path of former spill (due west of sampling location SL-004-00X). Depth was 0.5 feet bgs. Visual appearance was brown silt with a little clay.

Sample No. OTH-SL-005-002

Composite sample was taken along railroad spur southwest of tank farm, along path of former spill (due west of sampling location SL-004-00X). Depth was 4.0 to 5.0 feet bgs. Visual appearance was brown silt with a little clay.

Sample No. OTH-SL-006-001

Sample was obtained along the railroad spur, south of the shop building. Depth was 0.5 feet bgs. Visual appearance was brown silt with a little clay.

Sample No. OTH-SL-006-002

Composite sample was obtained along the railroad spur, south of the shop building. Depth was 4.0 to 5.0 feet bgs. Visual appearance was brown silt with a little clay.

Sample No. OTH-SL-007-001

Duplicate of sample No. OTH-SL-001-001.

Sample No. OTH-SL-007-002

Duplicate of sample No. OTH-SL-001-002.

4.0 RESULTS AND DISCUSSION

4.1 SAMPLING RESULTS

Several pesticide compounds were found in some of the soil samples, including aldrin, beta-BHC, lindane, delta-BHC, 4,4-DDT, 4,4-DDD, 4,4-DDE, dieldrin, and heptachlor, and nitrate and total Kjedahl nitrogen (TKN) levels were elevated in some samples. No herbicides were detected in any samples. Pesticides were detected at only seven of the twelve sampling locations. Greatest pesticide contamination was detected in the shallow and deep soils on the north side of the tank farm (SL-002-00X). Concentrations of lindane, 4,4-DDT, 4,4-DDE, and dieldrin exceeded the Method B Cleanup Levels for these compounds at this location.

The shallow soil sample obtained from the tank farm between tanks (SL-001-001) showed the presence of 4,4-DDE and dieldrin at levels exceeding Method B Cleanup Levels. In each of samples SL-004-001, SL-004-002, and SL-005-001, only one compound was detected (lindane, beta-BHC, and delta-BHC, respectively). Heptachlor was detected in sample No. SL-006-002. Concentrations of pesticides ranged from 3.2 to 22 μg/kg in the soil samples.

Elevated nitrate and TKN levels were measured in most of the samples. Nitrate ranged from 3.6 mg/kg (wet weight) in SL-006-001 to 500 mg/kg (wet) in SL-002-002. TKN concentrations ranged from 550 mg/kg (wet) in SL-004-002 to 5700 mg/kg (wet) in SL-002-001.

A summary of analytical results is presented in Table 1. Complete laboratory data are provided in the appendices.

4.2 DISCUSSION

Sampling results indicate that there is low level pesticide contamination and/or elevated nitrate and nitrogen levels in some of the soil samples. The reported spills have been of fertilizer compounds, and the soil samples confirm this. No herbicides were detected in any samples. In all cases, TKN levels were higher in surface samples than in deeper soils at the same location. In general,

TABLE 1

RESULTS OF SOIL SAMPLING AT PUREGRO - OTHELLO, WA.

Compounds Detected µg/kg-day	Sample Number SL-001 001	SL-001 002	SL-002 001	SL-002 002	SL-003 001	SL-003 002	SL-004 001	SL-004 002	SL-005 001	SL-005 002	SL-006 001	SL-006 002	SL-007 001	SL-007 002
Aldrin			3.40											
Beta-BHC .486								3.40						
Lindane .67			6.10				3.90							
Delta-BHC -									22.00					
4,4-DDT 2.6				11.00										
4,4-DDD 3.6				2.80										
4,4-DDE 2.6	3.20		6.90	16.00									5.20	
Dieldrin .055	3.20			8.40									3.80	
Heptachlor .019												5.30		
Nitrate, as N*	120.00	99.00	230.00	500.00	6.10	300.00	4.80	11.00	7.50	200.00	3.60	45.00	140.00	260.00
TKN*	3200	2700	5700	5100	1300	770.00	1700	550.00	2600	1500	4300	1200	4400	2500

* mg/kg-wet

Notes:
- Only compounds detected are noted. All samples analyzed by SW 8080, SW 8150, SW 9200, and E 351-2.
- Blanks in columns mean not detected.

nitrate (as N) was found to be higher in deeper soils than in the corresponding surface soil sample at the same location. (The one exception to this was at SL-001-00X; however, the duplicate samples obtained at this location did not agree with the nitrate values of SL-001-002.)

5.0 REFERENCES

Bauer, H. H., J. J. Vaccaro, R. C. Lane, 1984. Ground water levels in the Columbia River Basalt and overlying materials, Spring 1983, Southeastern Washington State. U.S. Geological Survey Water Resources Investigation 84-4360.

Ecology, 1990. *Washington Ranking Method Scoring Manual*, Publication No. 90-14. Washington Department of Ecology, April 1990.

Ecology, 1991. Model Toxics Control Act Cleanup Regulation, Chapter 173-340 Washington Administrative Code. Washington Department of Ecology, February 1991.

EPA, 1979, *Methods for Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, U.S. Environmental Protection Agency, March 1979.

EPA, 1986, *Test Methods for Evaluating Solid Waste*, SW-846, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, November 1986, as amended 1987.

George, David, 1990. Initial Investigation Data Sheet, PureGro Othello Site, Grant County, Washington. Washington Department of Ecology, August 29, 1990.

George, David, 1991. Initial Investigation Data Sheet, PureGro Othello Site, Grant County, Washington. Washington Department of Ecology, March 6, 1991.

Luzier, J. E. and R. J. Burt, 1974. Hydrology of basalt aquifers and depletion of ground water in east-central Washington. Washington Department of Ecology, Water Supply Bulletin No. 33.

APPENDIX I

DATA COLLECTION SUMMARY SHEETS (DCSS)

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
TOXICS CLEANUP PROGRAM

SITE HAZARD ASSESSMENT DATA COLLECTION SUMMARY SHEETS FOR WASHINGTON RANKING METHOD

Site Name: PureGro Othello

Location: NW1/4, NE1/4, NE1/4, Section 33, T16N, R30E

Site owner/operator: PureGro Company

Address: 1529 West Lee Road, Othello, WA 99344

Any other known PLP(s): _____

Address: _____

Site Number: _____

Date(s) of field site hazard assessment: May 10, 1991

Samples or field measurements: X soil
_____ surface water
_____ air _____ ground water

(Attach copies of pertinent sampling and analytical data, as well as all other supporting documentation.)

Photographs: _____

Weather: _____

Lead inspector: Donna Collins

Other inspectors: Steve Luker, James Lyon (PureGro)

Signature: _____

PART I: Hazardous Substances

NOTE: Page numbers (e.g. SW-2) shown in parentheses throughout this checklist refer to the WARM Scoring Manual. WK- numbers refer to pages of the new scoring sheets (not those in the scoring manual).

A. LIST

List hazardous substances, known or suspected (check k or s), currently at the property, or that have been previously (check c or p) at the property (WK-2,3):

Hazardous Substance	K	S	C	P	Quantity	Units
1. Chemical Rinsate (Herbicides, 2,4-D, Eptam)					Unknown	(1983, 1984)
2. Phosphate					"	(1984)
3. Ammonium Poly Phosphate					~ 1,000 gals.	(1990)
4. Urea solution					750 gal.	(1989)
5.						
6.						
7.						
8.						
9.						

Additional?_____(list on attachment)

By which routes are these available?

Number (from above)	Surface Water	Air	Groundwater
1. All		X	X
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

B. SOURCES

Check those known or observed (WK-3):

____	drums or other containers
____	electrical transformers
X	above ground tanks
____	below ground tanks
____	ponds, pits, or other impoundments
____	pipelines (other than water, sewer, or gas)
____	floor drains
____	exterior drains for rainwater, surface waters, spills, etc.
X	other? Identify: Rinse pad

C. INDICATORS

Check those know or observed:

____	discolored soils
____	disturbed soils
____	discolored standing water
X	unusual or noxious odors
X	sick or dead vegetation
____	groundwater monitoring wells
____	other? Identify:

If any are checked in B or C, explain details including exact locations (identify location in a map or drawing).

Additional information: See sampling forms - odors. Dead trees noted onsite.

PART II: Releases

A. KNOWN OR SUSPECTED RELEASES

List those hazardous substances identified (by number) in I.A. which are known, or suspected, to have been released (WK-2,3):

Substance (#)	Quantity Released	Units	Medium Released To
1	?		Ground
2	?		"
3	1,000 gal.		"
4	750 gal.		"

Additional information/reference?

B. SOURCES AND IMPACTS (Pages SW-5,6; A-9,10; GW-6,7)

List those hazardous substances identified (by number) in II.A. and identify the source and impact:

Substance No.	Source	Impacts/affects To	Area
3	Tank spill	Soil	30' X 450'

Additional information/reference?

III. Migration Potential

A. CONTAINMENT--LANDFILLS (SW-7; A-12; GW-8,9)

Present?_____ How many?_____

Check those that apply:

1. _____An engineered, maintained run-on/run-off control system
2. _____An engineered/maintained cover without ponding
3. _____Unmaintained run-on/runoff control system or cover
4. _____No run-on/runoff control or no cover
5. _____Uncontaminated soil cover greater than 6" thick
6. _____Uncontaminated soil cover less than 6" thick
7. _____Contaminated soil used as cover
8. _____A functioning vapor collection system
9. _____Mixing or agitation used
10. _____No liner
11. _____Single clay or compacted soil liner (permeability_____cm/sec)
12. _____Single synthetic liner (permeability_____cm/sec)
13. _____Double liner system (permeability_____cm/sec)
14. _____Leachate collection system, maintained and functioning
15. _____Leachate collection system, unknown condition or not functioning
16. _____Liquid wastes <u>may</u> have been disposed of
17. _____Liquid wastes <u>were</u> disposed of in landfill
18. _____Reliable evidence <u>no</u> liquid wastes were disposed

Additional comments:_____

B. CONTAINMENT--SURFACE IMPOUNDMENTS (SW-7,8; A-13; GW-10,11)

Present_____ How many?_____

Check those that apply:

1. _____The dike is apparently sound

2. _____The dike is regularly inspected and maintained

3. _____There is evidence of failure, erosion, slumping, or release of contents

4. _____Two feet of freeboard maintained automatically

5. _____The freeboard is manually controlled so that there is at least 2 feet of freeboard

6. _____Evidence of insufficient freeboard (<2 ft.)

7. _____A maintained cover

8. _____Unmaintained cover, no cover

9. _____No liner

10. _____Single synthetic liner

11. _____Single clay or compacted soil liner

12. _____Double liner

13. _____Working leak detection system

14. _____Evidence of loss of fluid (other than by evaporation)

Additional comments:_____

C. CONTAINMENT--DRUMS AND SMALL CONTAINERS (SW-9; A-11; GW-11)

Present_____ How many?_____

Check those that apply:

1. _____No functional containment

2. _____There is secondary containment capacity for the total volume of containers

3. _____There is secondary containment with capacity for at least 110% of volume of the largest container

4. _____The secondary containment is less that 110% of the volume of the largest container

5. _____The containers are stored in single, or double layers on pallets, or in racks

6. _____The containers are stored in an unstable manner

7. _____Some containers are open or have visible liquid

8. _____Some containers are leaking

9. _____Containers are protected from weather

10. _____Containers showing deterioration

11. _____Containment surface is impervious

12. _____Containment surface has cracks or semi-permeable

13. _____No base material/permeable base such as gravel/base materials unknown

14. _____Containment is regularly inspected and maintained

15. _____Evidence of containment failure

Additional comments:_____

D. CONTAINMENT--STORAGE TANKS (SW-9; A-11; GW-11)

Present_____ How many?_____

Check those that apply:

1. _____Secondary containment with a capacity of 110% of the volume of the tanks

2. _____Secondary containment at least 50% of the volume of all tanks

3. _____Containment system with capacity for at least 10% of volume of containers or tanks

4. _____No containment, or less than 10% capacity

5. _____Tank volumes maintained

6. _____Automatic controls used for volume maintenance

7. _____Tanks are covered

8. _____Uncovered tanks have aeration, mixing, or heating of tank contents

9. _____Containers sealed, protected

10. _____Containers sealed, not protected

11. _____Containers deteriorated

12. _____Containers leaking

13. Record the #s of above which apply only to above ground tank
_____

14. Record the #s of above which apply only to below ground tanks
_____

15. Record the #s of above which apply to both above and below ground tanks:
_____

Additional comments:_____
_____
_____
_____
_____

E. CONTAINMENT--WASTE PILES (SW-10; A-13; GW-12,13)

Present_____ How many?_____

Check those that apply:

1. _____Waste pile is outside, no protecting structure

2. _____Waste pile is outside, in open structure with roof

3. _____Waste pile is outside, with partial or unmaintained cover

4. _____Waste pile is outdoors, with maintained cover

5. _____No cover is present

6. _____Waste pile is fully enclosed, intact building

7. _____There is an engineered run-on/run-off control

8. _____The run-on/run-off is maintained

9. _____Run-on/runoff control present, unknown condition

10. _____No run-on/runoff control system present, or unknown if present

11. _____Liner or base present; _____Not present

12. _____Single clay or compacted soil liner

13. _____Single synthetic liner

14. _____Double liner

15. _____Maintained, functioning leachate collection system

16. _____Leachate collection system; _____Unknown condition; or _____Not functioning

Additional comments:_____

F. CONTAINMENT--SPILLS, DISCHARGES, AND CONTAMINATED SOIL (SW-10,11; A-13,14; GW-13)

Check those that apply:

1. _____ Spill, discharge, or contaminated soil only in the subsurface at the site--including dry wells, drain fields, leaking underground storage tanks

2. _____ Soil contamination that has been covered partially excavated and filled with at least 6 inches of clean soil

3. _____ Soil contamination that has been covered or partially excavated and filled with less than 6 inches of clean soil

4. _____ Uncontaminated soil cover >2 feet thick

5. __X__ No cover; or _____ Cover <2 feet, but > 6" thick

6. _____ Spill, discharge, or contaminated soil present at the surface in an area with maintained run-on/run-off controls

7. _____ Spill, discharge, or contaminated soil present at the surface in an area with unmaintained run-on/run-off controls

8. __X__ Spill, discharge, or contaminated soil present at the surface with no run-on/run-off controls or unknown controls

9. _____ Contaminated soil has been disturbed or excavated and stored above grade

10. _____ A functioning vapor recovery system

11. __X__ No vapor recovery system

Additional comments: _____

G. CONTAINMENT--SITE CHARACTERISTICS (SW-11,12; A-6; GW-14; WK-5,6,8)

1. How would you evaluate the site soils? Circle predominant textural class.

_____ Sand, gravel, sandy gravel, well-graded sand, well-graded gravel, gravelly sand, gravelly sand loam, silty sandy loam?

__X__ Poorly-graded sands with fines, silt-sand mixtures, loam, silt loam, sandy silt loam, clayey sand, clay sand loam?

_____ Clayey sands, sand-clay mixtures, clayey gravels, clay-sand-gravel mixtures, inorganic silts, clayey silt loam, silty clay loam, porous rock outcrop, sandy silty clay, sandy clay loam?

_____ Clay (organic and inorganic), clay loam, rock outcrop, peat, peaty clay?

Is the above based on personal observation, lab analysis, or professional judgment by a soil expert? (circle)

2. Total annual precipitation= __8.8__ in./yr (SW-12; WK-5)

3. Max. 2-yr/24-hr precip.= __0.8__ inches (SW-14; WK-5)

4. Net precipitation (see 2.2, GW-13)= __3.5__ in. (WK-9)

5. Is the site not in a flood plain? __X__ (SW-14; WK-5)
Is the site in a 500 year flood plain? _____ Flood insurance
Is the site in a 100 year flood plain? _____ map not available.
Flood Insurance Rate Map Comm. Panel No. _____ Used best profess. judgement.

6. What is the terrain slope to the nearest surface water?
__<2__ % (SW-14,15; WK-6)

7. What is the subsurface hydraulic conductivity?
__$>10^{-5}$ - 10^{-3}__ cm/sec (GW-14; WK-9)

8. What is the vertical depth from the deepest point of known contamination to ground water? _____ feet (GW-15; WK-9)

Additional comments: _____

IV. **Targets**

A. DISTANCE TO SURFACE WATER (SW-16; WK-6)

1. What surface water(s) (lake, stream, river, pond, bay, etc.) is/are within 10,000 feet (downgradient) of the site?

Name	Dist. - ft.	Obs.	Meas.
Unnamed creek (south of site)	7,920 ft.		X

None? X Comments

2. What drinking water intakes are within 2 miles of the site? (all lake intakes, river intakes downstream only) (SW-12; WK-6)

None?

Source	Location	Pop. Served

3. How much acreage (anywhere) is irrigated by surface water intakes (downstream only) or wells (anywhere) within 2 miles of the site? (SW-16; GW-18; W/S 5; WK-6,9)

None?

SURFACE WATER: Acres 0 (1600 acres max.)

Source(s) ;

GROUNDWATER: Acres 2,990 acres (4500 acres max.)

Source(s)

4. What is the distance to the nearest fishery resource (total of overland distance plus downgradient distance)? (SW-17; WK-6)

   Over 10,000 feet? X Distance if less than 10,000 feet?_____ ft.

5. What are the names of, and the distances to the nearest sensitive environments (total of overland distances plus downgradient distances)? (SW-18; A-15; WK-6)

   Over 10,000 feet? X Names and distance if less than 10,000 feet:

   _____
   _____
   _____
   _____

6. Is the aquifer a federally-designated sole source aquifer? No (GW-16; WK-9)

7. Is the ground water used for: (GW-16; WK-9)

X	private supply
	public supply
X	irrigation of human food crops or livestock
	non-food (human) vegetation
	not used due to natural contaminants
	ground water not used, but usable

8. Distance to nearest drinking water well?_____feet (GW-17; WK-9)

9. Is there an alternate source available to groundwater for private or public water supply? (WK-9) No

10. Population served by drinking water wells within 2 miles 43 ? (GW-17; WK-9) PWSSL=40 Water Rights Estimate=3

11. Distance to the nearest population?_____feet (A-15, 16; WK-8)

12. Population within one-half mile radius? 30 (A-16; WK-8)

Additional comments:_____
_____
_____
_____
_____

APPENDIX II

SOIL SAMPLING FORMS

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 0845 to 0905

SAIC Sample Number OTH-SL-001-001

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 1

Sampling Method Grab with spoon Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: 0.5 ft bgs

Sample collected between tanks of tank farm, at site of spill.

Strong odor of ammonia in area as digging, and in soil collected.

Sample OTH-SL-007-001 is duplicate of this sample

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 0905 to 0950

SAIC Sample Number OTH-SL-001-002

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 1

Sampling Method Composite grab Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: Composite 3.0 to 5.0 ft bgs

Sample collected between tanks of tank farm, at site of spill.

Strong odor of ammonia in area as digging, and in soil collected.

Sample OTH-SL-007-002 is duplicate of this sample

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 0950 to 1030

SAIC Sample Number OTH-SL-002-001

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Gray, silty soil with abundant rocks

Sampling Station Othello Borehole 2

Sampling Method Grab with spoon Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: 0.5 ft bgs

Sample collected in driveway area north of tank farm. Took a pickaxe to loosen surface enough to be able to sample. Pungent chemical odor in sample

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Callin 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1105 to 1135

SAIC Sample Number OTH-SL-002-002

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Gray, silty soil with abundant rocks

Sampling Station Othello Borehole 2

Sampling Method Composite grab Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: Composite 3.0 to 4.0 ft bgs

Sample collected in driveway area north of tank farm. Took a pickaxe to loosen surface enough to be able to sample. Pungent chemical odor in sample

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1030 to 1105

SAIC Sample Number OTH-SL-003-001

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Gray, silty soil with abundant rocks

Sampling Station Othello Borehole 3

Sampling Method Grab with spoon Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: 0.5 ft bgs

Sample collected in driveway area north of tank farm. Took a pickaxe to loosen surface enough to be able to sample.

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1135 to 1200

SAIC Sample Number OTH-SL-003-002

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Gray, silty soil with abundant rocks

Sampling Station Othello Borehole 3

Sampling Method Composite grab Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: Composite 3.0 to 4.0 ft bgs

Sample collected in driveway area north of tank farm. Took a pickaxe to loosen surface enough to be able to sample.

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1415 to 1425

SAIC Sample Number OTH-SL-004-001

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 4

Sampling Method Grab with spoon Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: 0.5 ft bgs

Sample collected along railroad spur south of tank farm, and along path of spill

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1440 to 1500

SAIC Sample Number OTH-SL-004-002

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 4

Sampling Method Composite grab Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: Composite 4.0 to 5.0 ft bgs

Sample collected along railroad spur south of tank farm, and along path of spill

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1425 to 1430

SAIC Sample Number OTH-SL-005-001

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 5

Sampling Method Grab with spoon Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: 0.5 ft bgs

Sample collected along railroad spur southwest of tank farm, and along path of spill

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1500 to 1515

SAIC Sample Number OTH-SL-005-002

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 5

Sampling Method Composite grab Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: Composite 4.0 to 5.0 ft bgs

Sample collected along railroad spur southwest of tank farm, and along path of spill

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Callin 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1430 to 1440

SAIC Sample Number OTH-SL-006-001

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 6

Sampling Method Grab with spoon Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: 0.5 ft bgs

Sample collected along railroad spur southwest of tank farm, and along path of spill

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 1515 to 1530

SAIC Sample Number OTH-SL-006-002

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 6

Sampling Method Composite grab Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: Composite 4.0 to 5.0 ft bgs

Sample collected along railroad spur southeast of tank farm, and along path of spill

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-11-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 0845 to 0905

SAIC Sample Number OTH-SL-007-001

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 1

Sampling Method Grab with spoon Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: 0.5 ft bgs

Sample collected between tanks of tank farm, at site of spill.

Strong odor of ammonia in area as digging, and in soil collected

Duplicate of OTH-SL-001-001

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

SOIL/SEDIMENT SAMPLING FORM

Site ID PureGro Company Date May 10, 1991

Othello, Washington Sampling Time 0905 to 0950

SAIC Sample Number OTH-SL-007-002

Sample Splits Collected for James Lyon, PureGro Company

Sampler Type Stainless-steel spoon and bowl

Visual Appearance of Sample Brown silt, little clay

Sampling Station Othello Borehole 1

Sampling Method Composite grab Blow Count

Weather Conditions Now Sunny, overcast, 60° F

Precipitation Past Day Sunny, overcast

Comments/Remarks Depth: Composite 3.0 to 5.0 ft bgs

Sample collected between tanks of tank farm, at site of spill.

Strong odor of ammonia in area as digging, and in soil collected.

Duplicate of OTH-SL-001-002

Analyses: SW 8080, SW 8151, SW 9200, E 351-2

Collected by Donna Collins 5-10-91
Signature Date

Collected by
Signature Date

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)
14062 Denver West Parkway
Building 52, Suite 200
Golden, Colorado 80401

APPENDIX III

ANALYTICAL RESULTS

NET Pacific, Inc.
National Environmental Testing
San Diego Division

TABLE 1

Project Name: SAIC-Puregro

NET SAMPLE ID	CLIENT SAMPLE ID	MATRIX	CL PEST 8080	CL HERB 8150/8151	NITRATE 353.1	TKN 353.1	VOA 8020
JOB #: 91.0057							
91008801	WIL-SL-001-001	SOIL	X	X	X	X	
91008802	WIL-SL-001-002	SOIL	X	X	X	X	
91008803	WIL-SL-002-001	SOIL	X	X	X	X	
91008804	WIL-SL-002-002	SOIL	X	X	X	X	
91008805	WIL-SL-003-001	SOIL	X	X	X	X	
91008806	WIL-SL-003-002	SOIL	X	X	X	X	
91008807	WIL-SL-004-001	SOIL	X	X	X	X	
91008808	WIL-SL-004-002	SOIL	X	X	X	X	
JOB #: 91.0058							
91008901	RTZ-5L-001-001	SOIL	X	X	X	X	
91008902	RTZ-5L-001-002	SOIL	X	X	X	X	
91008903	RTZ-5L-002-001	SOIL	X	X	X	X	
91008904	RTZ-5L-002-002	SOIL	X	X	X	X	
91008905	RTZ-5L-003-001	SOIL	X	X	X	X	
91008906	RTZ-5L-003-002	SOIL	X	X	X	X	
91008907	RTZ-5L-004-001	SOIL	X	X	X	X	
91008908	RTZ-5L-004-002	SOIL	X	X	X	X	
91008909	RTZ-5L-005-001	SOIL	X	X	X	X	
91008910	RTZ-5L-005-002	SOIL	X	X	X	X	
91008911	RTZ-5L-006-001	SOIL	X	X	X	X	
91008912	RTZ-5L-006-002	SOIL	X	X	X	X	
91008913	RTZ-5L-007-001	SOIL	X	X	X	X	
91008914	RTZ-5L-007-002	SOIL	X	X	X	X	
91008915	RTZ-5L-008-001	SOIL	X	X	X	X	
91008916	RTZ-5L-008-002	SOIL	X	X	X	X	
91008917	RTZ-EQ-003-001	AQ	X	X	X	X	
91008918	RTZ-EQ-007-001	AQ	X	X	X	X	
JOB #: 91.0058							
91009001	ML-SL-001-001	SOIL	X	X	X	X	
91009002	ML-SL-001-002	SOIL	X	X	X	X	
91009003	ML-SL-002-001	SOIL	X	X	X	X	
91009004	ML-SL-003-001	SOIL	X	X	X	X	
91009005	ML-SL-003-002	SOIL	X	X	X	X	
91009006	ML-SL-004-001	SOIL	X	X	X	X	
91009007	ML-SL-004-002	SOIL	X	X	X	X	
91009008	ML-SL-005-001	SOIL	X	X	X	X	
91009009	ML-SL-005-002	SOIL	X	X	X	X	
91009010	ML-EQ-001-001	AQ	X	X	X	X	
JOB #: 91.0060							
91009201	GCY-SL-001-001	SOIL	X		X	X	
91009202	GCY-SL-001-002	SOIL	X		X	X	

NET Pacific, Inc.
National Environmental Testing
San Diego Division

TABLE 1

Project Name: SAIC-Puregro

NET SAMPLE ID	CLIENT SAMPLE ID	MATRIX	CL PEST 8080	CL HERB 8150/8151	NITRATE 353.1	TKN 353.1	VOA 8020
91009203	GCY-SL-002-001	SOIL	X		X	X	
91009204	GCY-SL-002-002	SOIL	X		X	X	
91009205	OTH-SL-001-001	SOIL	X	X	X	X	
91009206	OTH-SL-001-002	SOIL	X	X	X	X	
91009207	OTH-SL-002-001	SOIL	X	X	X	X	
91009208	OTH-SL-002-002	SOIL	X	X	X	X	
91009209	OTH-SL-003-001	SOIL	X	X	X	X	
91009210	OTH-SL-003-002	SOIL	X	X	X	X	
JOB #: 91.0063							
10873	PSC-SL-001-001	SOIL	X	X	X	X	
10874	PSC-SL-001-002	SOIL	X	X	X	X	
10875	PSC-SL-001-003	SOIL	X	X	X	X	
10876	PSC-SL-002-001	SOIL	X	X	X	X	
10877	PSC-SL-002-002	SOIL	X	X	X	X	
10878	PSC-SL-002-003	SOIL	X	X	X	X	
10879	PSC-SL-003-001	SOIL	X	X	X	X	
10880	PSC-SL-003-002	SOIL	X	X	X	X	
10881	PSC-SL-003-003	SOIL	X	X	X	X	
10882	PSC-SL-004-001	SOIL	X	X	X	X	
10883	PSC-SL-004-002	SOIL	X	X	X	X	
10884	PSC-SL-004-003	SOIL	X	X	X	X	
10885	PSC-SL-005-001	SOIL	X	X	X	X	
10886	PSC-SL-006-001	SOIL	X	X	X	X	
10887	PSC-SL-006-002	SOIL	X	X	X	X	
10888	PSC-SL-006-003	SOIL	X	X	X	X	
10889	PSC-EQ-001-001	AQ	X	X	X	X	
10890	PSC-GW-001-001	AQ	X	X	X	X	
10891	PSC-GW-002-001	AQ	X	X	X	X	
10892	OTH-SL-004-001	SOIL	X	X	X	X	
10893	OTH-SL-004-002	SOIL	X	X	X	X	
10894	OTH-SL-005-001	SOIL	X	X	X	X	
10895	OTH-SL-005-002	SOIL	X	X	X	X	
10896	OTH-SL-006-001	SOIL	X	X	X	X	
10897	OTH-SL-006-002	SOIL	X	X	X	X	
10898	OTH-SL-007-001	SOIL	X	X	X	X	
10899	OTH-SL-007-002	SOIL	X	X	X	X	
JOB #: 91.0076							
11028	WDN-SL-001-001	SOIL	X	X	X	X	X
11029	WDN-SL-001-002	SOIL	X	X	X	X	
11030	WDN-SL-001-003	SOIL	X	X	X	X	
11031	WDN-SL-002-001	SOIL	X	X	X	X	
11032	WDN-SL-002-002	SOIL	X	X	X	X	
11033	WDN-SL-002-003	SOIL	X	X	X	X	
11034	WDN-SL-003-001	SOIL	X	X	X	X	
11035	WDN-SL-003-002	SOIL	X	X	X	X	

NET Pacific, Inc.
National Environmental Testing
San Diego Division

TABLE 1

Project Name: SAIC-Puregro

NET SAMPLE ID	CLIENT SAMPLE ID	MATRIX	CL PEST 8080	CL HERB 8150/8151	NITRATE 353.1	TKN 353.1	VOA 8020
11036	WDN-SL-003-003	SOIL	X	X	X	X	
11037	WDN-SL-004-001	SOIL	X	X	X	X	
11038	WDN-SL-004-002	SOIL	X	X	X	X	
11039	WDN-SL-004-003	SOIL	X	X	X	X	
11040	WDN-SL-005-001	SOIL	X	X	X	X	
11041	WDN-SL-005-002	SOIL	X	X	X	X	X
11042	WDN-SL-005-003	SOIL	X	X	X	X	X
11043	WDN-SL-006-001	SOIL	X	X	X	X	
11044	WDN-SL-006-002	SOIL	X	X	X	X	X
11045	WDN-SL-006-003	SOIL	X	X	X	X	
11046	WDN-SL-007-001	SOIL	X	X	X	X	
11047	WDN-SL-007-002	SOIL	X	X	X	X	
11048	WDN-SL-007-003	SOIL	X	X	X	X	
11049	WDN-SL=008-001	SOIL	X	X	X	X	
11050	WDN-SL-008-002	SOIL	X	X	X	X	
11051	WDN-SL-008-003	SOIL	X	X	X	X	
11052	WDN-EQ-001-001	AQ	X	X	X	X	
11053	WDN-EQ-001-002	AQ	X	X	X	X	
11054	WDN-TB-001-001	AQ					X

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Chlorinated Pesticides
Method 8080

Project Name: D.O.E. - Puregro
Batch No: PS460
Matrix: SOIL

Client Sample ID:		GCY-SL-001-002	GCY-SL-002-001	GCY-SL-002-002	OTH-SL-001-002	OTH-SL-001-002	OTH-SL-002-001	OTH-SL-002-002
NET Sample ID:		91009202	91009203	91009204	91009205	91009206	91009207	91009208
Date Extracted:		5/14/91	5/14/91	5/14/91	5/14/91	5/14/91	5/14/91	5/14/91
Date Analyzed:		5/30/91	6/14/91	6/14/91	6/14/91	5/28/91	5/28/91	5/29/91
Dilution Factor:		1	1	1	1	1	1	1
Job No:		91.0060	91.0060	91.0060	91.0060	91.0060	91.0060	91.0060
Parameter		ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry
ALDRIN		2.50 U	2.60 U	2.60 U	2.60 U	2.50 U	3.40	2.60 U
BETA-BHC		1.90 U	1.90 U	1.90 U	1.90 U	1.90 U	1.90 U	1.90 U
GAMMA-BHC (LINDANE)		25.00	2.10 U	2.20 U	2.20 U	2.10 U	6.40	0.97 J
DELTA-BHC		2.40 U	2.50 U	6.20	2.50 U	2.40 U	2.50 U	2.50 U
CHLORDANE		18.00 U	18.00 U	19.00 U	19.00 U	18.00 U	19.00 U	19.00 U
4,4'-DDT		1.20 J	1.50 J	0.87 J	0.61 J	7.30 U	2.10 J	11.00
4,4'-DDD		2.40 U	2.50 U	2.50 U	1.10 J	1.70 J	1.30 J	2.80
4,4'-DDE		2.50 U	3.00	1.80 J	3.20	2.50 U	6.90	16.00
DIELDRIN		24.00	2.40	2.40	3.20	2.20 U	3.50	8.40
ENDOSULFAN SULFATE		3.00 U	3.00 U	3.10 U	3.10 U	3.00 U	3.10 U	3.10 U
ENDOSULFAN-I		2.30 U	2.30 U	2.30 U	2.30 U	2.30 U	2.30 U	2.30 U
ENDOSULFAN-II		3.30 U	2.90 U	3.00 U	3.00 U	2.90 U	1.10 J	3.00 U
ENDRIN		3.40 U	3.40 U	0.17 J	0.83 J	3.40 U	0.53 J	3.50 U
ENDRIN ALDEHYDE		2.30 J	2.90 U	3.00 U	3.00 U	2.90 U	3.00 U	3.00 U
HEPTACHLOR EPOXIDE		2.30 U	2.30 U	2.30 U	2.30 U	2.30 U	2.30 U	2.30 U
METHOXYCHLOR		9.10 U	9.20 U	9.30 U	9.30 U	9.10 U	3.50 J	9.30 U
Surrogates - % recovery	QC LIMITS							
TCMX	6-141	130	69	97	71	69	92	79
DBC	35-139	170 *	100	120	110	140 *	110	110

U-compound was not detected as is below the reported detection limit
J-compound reported below dete ction limit and is an estimated value
*-value outside of QC limits

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Chlorinated Pesticides
Method 8080

Project Name: D.O.E. - Puregro
Batch No: PS460
Matrix: SOIL

Client Sample ID:		OTH-SL-003-001	OTH-SL-003-002	METHOD BLANK
NET Sample ID:		91009209	91009210	MB460
Date Extracted:		5/14/91	5/14/91	5/14/91
Date Analyzed:		5/29/91	5/29/91	5/24/91
Dilution Factor:		1	1	1
Job No:		91.0060	91.0060	NA
Parameter		ug/Kg-dry	ug/Kg-dry	ug/Kg-dry
ALDRIN		0.72 J	2.70 U	2.30 U
BETA-BHC		1.80 U	2.00 U	1.70 U
GAMMA-BHC (LINDANE)		1.50 J	2.20 U	1.90 U
DELTA-BHC		2.30 U	2.60 U	2.20 U
CHLORDANE		17.00 U	19.00 U	17.00 U
4,4'-DDT		1.60 J	7.70 U	2.00 J
4,4'-DDD		2.30 U	2.60 U	2.20 U
4,4'-DDE		0.64 J	2.60 U	2.30 U
DIELDRIN		1.00 J	2.30 U	1.70 J
ENDOSULFAN SULFATE		2.90 U	3.20 U	2.80 U
ENDOSULFAN-I		2.20 U	2.40 U	2.10 U
ENDOSULFAN-II		0.82 J	3.10 U	2.70 U
ENDRIN		1.40 J	3.60 U	1.60 J
ENDRIN ALDEHYDE		2.80 U	3.10 U	2.70 U
HEPTACHLOR EPOXIDE		2.20 U	2.40 U	2.10 U
METHOXYCHLOR		1.30 J	9.60 U	8.30 U
Surrogates -				
% recovery	QC LIMITS			
TCMX	6-141	84	84	54
DBC	35-139	85	96	94

U-compound was not detected as is below the reported detection limit
J-compound reported below dete ction limit and is an estimated value
*-value outside of QC limits

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Chlorinated Pesticides
Method 8080

Project Name: D.O.E. - Puregro
Batch No: PS466
Matrix: SOIL

Client Sample ID:	PSC-SL-006-001	PSC-SL-006-002	PSC-SL-006-003	OTH-SL-004-001	OTH-SL-004-002	OTH-SL-005-001	OTH-SL-005-002	METHOD BLANK
NET Sample ID:	10886	10887	10888	10892	10893	10894	10895	MB466
Date Extracted:	5/16/91	5/16/91	5/16/91	5/16/91	5/16/91	5/16/91	5/16/91	5/16/91
Date Analyzed:	6/01/91	6/01/91	6/01/91	5/31/91	5/31/91	5/31/91	5/29/91	5/29/91
Dilution Factor:	1	1	1	1	1	1	1	1
Job No:	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	
Parameter	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry
ALDRIN	2.40 U	2.40 U	47.00	2.80 U	2.60 U	2.80 U	2.70 U	2.30 U
BETA-BHC	1.70 U	1.80 U	1.80 U	2.00 U	3.40	2.00 U	2.00 U	1.70 U
GAMMA-BHC (LINDANE)	2.00 U	2.00 U	41.00	3.90	2.20 U	0.99 J	2.30 U	1.90 U
DELTA-BHC	2.30 U	2.30 U	2.30 U	2.70 U	2.50 U	22.00	2.60 U	2.20 U
CHLORDANE	18.00	12.00 J	17.00 U	20.00 U	19.00 U	20.00 U	19.00 U	16.00 U
4,4'-DDT	6.90 U	1.20 J	130.00	8.00 U	3.60 J	5.20 J	7.80 U	6.60 U
4,4'-DDD	2.30 U	2.30 U	1.40 J	2.70 U	2.50 U	2.70 U	2.60 U	2.20 U
4,4'-DDE	2.30 U	2.40 U	2.40 U	2.70 U	2.60 U	0.44 J	2.60 U	2.20 U
DIELDRIN	2.10 U	2.10 U	120.00	2.50 U	2.30 U	2.40 U	2.40 U	2.00 U
ENDOSULFAN SULFATE	2.80 U	2.90 U	2.90	3.30 U	3.10 U	3.30 U	3.20 U	2.70 U
ENDOSULFAN-I	2.20 U	2.20 U	2.20 U	2.50 U	2.40 U	0.69 J	2.40 U	2.10 U
ENDOSULFAN-II	2.70 U	2.80 U	2.80 U	3.20 U	3.00 U	3.20 U	3.10 U	2.60 U
ENDRIN	3.20 U	2.10 J	160.00	3.70 U	3.50 U	3.70 U	3.60 U	3.10 U
ENDRIN ALDEHYDE	2.70 U	2.80 U	2.80 U	3.20 U	3.00 U	3.20 U	3.10 U	2.60 U
HEPTACHLOR	2.30 U	2.30 U	44.00	2.70 U	2.50 U	2.70 U	2.60 U	2.20 U
HEPTACHLOR EPOXIDE	2.20 U	2.20 U	2.20 U	2.50 U	2.40 U	2.50 U	2.40 U	2.10 U
METHOXYCHLOR	8.60 U	8.60 U	8.70 U	10.00 U	9.40 U	2.10 J	1.00 J	8.20 U
Surrogates - % recovery	QC LIMITS							
TCMX	6-141	120	110	120	84	100	140 *	110	120
DBC	35-139	110	95	130	98	130	160 *	100	120

U-compound was not detected as is below the reported detection limit
J-compound reported below dete ction limit and is an estimated value
*-values are outside of QC limits

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Chlorinated Pesticides
Method 8080

Project Name: D.O.E - Puregro
Batch No: PS475
Matrix: SOIL

Client Sample ID:	OTH-SL-006-001	OTH-SL-006-002	OTH-SL-007-001	OTH-SL-007-002	METHOD BLANK
NET Sample ID:	10896	10897	10898	10899	MB475
Date Extracted:	5/24/91	5/24/91	5/24/91	5/24/91	5/24/91
Date Analyzed:	6/4/91	6/4/91	6/4/91	6/4/91	6/3/91
Dilution Factor:	1	1	1	1	1
Job No:	91.0063	91.0063	91.0063	91.0063	91.0063
Parameter:	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry	ug/Kg-dry
ALDRIN	2.70 U	2.70 U	0.09 J	2.60 U	2.30 U
4,4'-DDT	7.70 U	7.60 U	0.62 J	7.40 U	6.50 U
4,4'-DDD	2.60 U	2.50 U	1.70 J	2.50 U	2.20 U
4,4'-DDE	2.60 U	2.60 U	5.20	1.60 J	2.20 U
DIELDRIN	2.40 U	2.30 U	3.80	1.30 J	2.00 U
ENDRIN	3.60 U	3.50 U	3.50 U	0.37 J	3.00 U
HEPTACHLOR	2.40 J	5.30	2.50 U	2.50 U	2.20 U

Surrogate - % recovery	QC LIMITS					
TCMX	6-141	98	71	120	49	4*
DBC	35-139	120	100	160*	87	100

U - compound was not detected and is below the reported detection limit.
J - value is an estimate because it is less than the method quantitation reporting limit.

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Nitrate
Method 353.1

Project Name: D.O.E - Puregro
Matrix: SOIL

Client Sample ID:	GCY-SL-002-001	GCY-SL-002-002	OTH-SL-001-001	OTH-SL-001-002	OTH-SL-002-001	OTH-SL-002-002	OTH-SL-003-001	OTH-SL-003-002	PSC-SL-001-001
NET Sample ID:	91009203	91009204	91009205	91009206	91009207	91009208	91009209	91009210	10873
Date Analyzed:	5/30/91	5/30/91	5/30/91	5/30/91	5/30/91	5/30/91	5/30/91	5/30/91	5/30/91
Job No:	91.0060	91.0060	91.0060	91.0060	91.0060	91.0060	91.0060	91.0060	91.0063
Parameter:	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet
Nitrate, as N	120	150	120	99	230	500	6.1	300	6.9

U - compound was not detected and is below the reported detection limit.

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Nitrate
Method 353.1

Project Name: D.O.E - Puregro
Matrix: SOIL

Client Sample ID:	PSC-SL-004-001	PSC-SL-004-002	PSC-SL-004-003	PSC-SL-005-001	PSC-SL-006-001	PSC-SL-006-002	PSC-SL-006-003	OTH-SL-004-001	OTH-SL-004-002
NET Sample ID:	10882	10883	10884	10885	10886	10887	10888	10892	10893
Date Analyzed:	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91
Job No:	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063
Parameter:	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet
Nitrate, as N	140	640	610	78	73	57	90	4.8	11

U - compound was not detected and is below the reported detection limit.

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Nitrate
Method 353.1

Project Name: D.O.E - Puregro
Matrix: SOIL

Client Sample ID:	OTH-SL-005-001	OTH-SL-005-002	OTH-SL-006-001	OTH-SL-006-002	OTH-SL-007-001	WDN-SL-001-001	WDN-SL-001-002	WDN-SL-001-003
NET Sample ID:	10894	10895	10896	10897	10898	11028	11029	11030
Date Analyzed:	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91			
Job No:	91.0063	91.0063	91.0063	91.0063	91.0063	91.0076	91.0076	91.0076
Parameter:	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet
Nitrate, as N	7.5	200	3.6	45	140	13	72	32

U - compound was not detected and is below the reported detection limit.

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Nitrate
Method 353.1

Project Name: D.O.E - Puregro
Matrix: SOIL

Client Sample ID:	PSC-SL-001-002	OTH-SL-007-002	PSC-SL-001-003	PSC-SL-002-001	PSC-SL-002-002	PSC-SL-002-003	PSC-SL-003-001	PSC-SL-003-002	PSC-SL-003-003
NET Sample ID:	10874	10899	10875	10876	10877	10878	10879	10880	10881
Date Analyzed:	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91	6/3/91
Job No:	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063
Parameter:	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet
Nitrate, as N	110	260	120	110	62	78	690	1100	650

U - compound was not detected and is below the reported detection limit.

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Total Kjeldahl Nitrogen
Method 351.2

Project Name: D.O.E - Puregro
Matrix: SOIL

Client Sample ID:	GCY-SL-002-001	GCY-SL-002-002	OTH-SL-001-001	OTH-SL-001-002	OTH-SL-002-001	OTH-SL-002-002	OTH-SL-003-001	OTH-SL-003-002	PSC-SL-001-001
NET Sample ID:	91009203	91009204	91009205	91009206	91009207	91009208	91009209	91009210	10873
Date Analyzed:	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91
Job No:	91.0060	91.0060	91.0060	91.0060	91.0060	91.0060	91.0060	91.0060	91.0063
Parameter:	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet
TKN	1,100	1,200	3,200	2,700	5,700	5,100	1,300	770	2,700

U - compound was not detected and is below the reported detection limit.

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Total Kjeldahl Nitrogen
Method 351.2

Project Name: D.O.E - Puregro
Matrix: SOIL

Client Sample ID:	PSC-SL-004-001	PSC-SL-004-002	PSC-SL-004-003	PSC-SL-005-001	PSC-SL-006-001	PSC-SL-006-002	PSC-SL-006-003	OTH-SL-004-001	OTH-SL-004-002
NET Sample ID:	10882	10883	10884	10885	10886	10887	10888	10892	10893
Date Analyzed:	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91
Job No:	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063	91.0063
Parameter:	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet
TKN	1,700	1,000	990	2,100	640	790	1,100	1,700	550

U - compound was not detected and is below the reported detection limit.

NET Pacific, Inc.
National Environmental Testing
San Diego Division

EXECUTIVE SUMMARY TABLE

Total Kjeldahl Nitrogen
Method 351.2

Project Name: D.O.E - Puregro
Matrix: SOIL

Client Sample ID:	OTH-SL-005-001	OTH-SL-005-002	OTH-SL-006-001	OTH-SL-006-002	OTH-SL-007-001	WDN-SL-001-001	WDN-SL-001-002	WDN-SL-001-003
NET Sample ID:	10894	10895	10896	10897	10898	11028	11029	11030
Date Analyzed:	5/31/91	5/31/91	5/31/91	5/31/91	5/31/91			
Job No:	91.0063	91.0063	91.0063	91.0063	91.0063	91.0076	91.0076	91.0076
Parameter:	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet	mg/Kg-wet
TKN	2,600	1,500	4,300	1,200	4,400	340	970	1100

U - compound was not detected and is below the reported detection limit.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10860

Client Sample ID: OTH-SL-001-001

Project Name: PUREGRO | File: T01U45

BatchNo: HS471 | Project No:

Matrix: SOIL | Date Sampled: 05/10/91

Sample wt/vol: 10.0 (g/mL) G | Date Received: 05/11/91

Final vol (mL): 10ML | Date Extracted: 05/21/91

% Dry: 87.8% | Date Analyzed (P): 06/02/91

Dilution Factor: 1 | Date Analyzed (S): "

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	230.00	U
	2,4-DB	230.00	U
	2,4,5-T	23.00	U
	2,4,5-TP	23.00	U
	DALAPON	570.00	U
	DICAMBA	23.00	U
	MCPP	23000.00	U
	DICHLOROPROP	230.00	U
	DINOSEB	110.00	U
	MCPA	23000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS (%)	RECOVERY (%)	Q
DCAA	1000	368	20- 150	37	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10861

Client Sample ID: OTH-SL-001-002

Project Name: PUREGRO

File: T01U49

BatchNo: HS471

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.0 (g/mL) G

Date Received: 05/11/91

Final vol (mL): 10ML

Date Extracted: 05/21/91

% Dry: 91.1%

Date Analyzed (P): 06/02/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	220.00	U
	2,4-DB	220.00	U
	2,4,5-T	22.00	U
	2,4,5-TP	22.00	U
	DALAPON	550.00	U
	DICAMBA	22.00	U
	MCPP	22000.00	U
	DICHLOROPROP	220.00	U
	DINOSEB	110.00	U
	MCPA	22000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	502	20- 150	50	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10862

Client Sample ID: OTH-SL-002-001

Project Name: PUREGRO

File: T01U50

BatchNo: HS471

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.0 (g/mL) G

Date Received: 05/11/91

Final vol (mL): 10ML

Date Extracted: 05/21/91

% Dry: 88.0%

Date Analyzed (P): 06/02/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	700.00	P
	2,4-DB	230.00	U
	2,4,5-T	23.00	U
	2,4,5-TP	23.00	U
	DALAPON	570.00	U
	DICAMBA	23.00	U
	MCPP	23000.00	U
	DICHLOROPROP	230.00	U
	DINOSEB	110.00	U
	MCPA	23000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	2000	20- 150	200	*

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10863

Client Sample ID: OTH-SL-002-002

Project Name: PUREGRO

File: T01U51

BatchNo: HS471

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.1 (g/mL) G

Date Received: 05/11/91

Final vol (mL): 10ML

Date Extracted: 05/21/91

% Dry: 88.2

Date Analyzed (P): 06/02/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	220.00	U
	2,4-DB	220.00	U
	2,4,5-T	22.00	U
	2,4,5-TP	22.00	U
	DALAPON	560.00	U
	DICAMBA	22.00	U
	MCPP	22000.00	U
	DICHLOROPROP	220.00	U
	DINOSEB	110.00	U
	MCPA	22000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	410	20- 150	41	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10864

Client Sample ID: OTH-SL-003-001

Project Name: PUREGRO

File: T02U2

BatchNo: HS471

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.1 (g/mL) G

Date Received: 05/11/91

Final vol (mL): 10ML

Date Extracted: 05/21/91

% Dry: 93.6%

Date Analyzed (P): 06/03/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	210.00	U
	2,4-DB	210.00	U
	2,4,5-T	21.00	U
	2,4,5-TP	21.00	U
	DALAPON	530.00	U
	DICAMBA	21.00	U
	MCPP	21000.00	U
	DICHLOROPROP	210.00	U
	DINOSEB	110.00	U
	MCPA	21000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	570	20- 150	57	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10865

Client Sample ID: OTH-SL-003-002

Project Name: PUREGRO

File: T02U3

BatchNo: HS471

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.0 (g/mL) G

Date Received: 05/11/91

Final vol (mL): 10ML

Date Extracted: 05/21/91

% Dry: 86.4%

Date Analyzed (P): 06/03/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	230.00	U
	2,4-DB	230.00	U
	2,4,5-T	23.00	U
	2,4,5-TP	23.00	U
	DALAPON	580.00	U
	DICAMBA	23.00	U
	MCPP	23000.00	U
	DICHLOROPROP	230.00	U
	DINOSEB	120.00	U
	MCPA	23000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	560	20- 150	56	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. MB471

Client Sample ID: LAB BLANK

Project Name: File: T02U4

BatchNo: HS471 Project No:

Matrix: SOIL Date Sampled: N/A

Sample wt/vol: 10.0 (g/mL) G Date Received: N/A

Final vol (mL): 10ML Date Extracted: 05/21/91

% Dry: 100% Date Analyzed (P): 06/03/91

Dilution Factor: 1 Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	200.00	U
	2,4-DB	200.00	U
	2,4,5-T	20.00	U
	2,4,5-TP	20.00	U
	DALAPON	500.00	U
	DICAMBA	20.00	U
	MCPP	20000.00	U
	DICHLOROPROP	200.00	U
	DINOSEB	100.00	U
	MCPA	20000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	178	20- 150	18	*

FORM I 1/87 Mod.

NET PACIFIC, INC. SAN DIEGO DIVISION
ENVIRONMENTAL CHEMISTRY

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

HERBICIDES
Method 8151
(Solid)

Client Name: PUREGRO/SAIC

NET Sample ID: 10861
Client Sample ID: OTH-SL-001-002

PARAMETERS	CONC. SPIKE ADDED(ug/Kg)	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. SPIKE ADDED(ug/Kg)	CONC. MSD	% RECOVERY	RPD	CONTROL LIMITS RECOVERY
2,4,-DB	1100.000	0.0	890.000	81%	1100.000	1400.000	127%	45%	20-150
2,4,5-TP	1100.000	0.0	910.000	83%	1100.000	700.000	64%	26%	20-150

COMMENTS:

Prepared by: VK

Release Authorized by: HS

The accompanying narrative is an integral part of this report.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10861MS

Client Sample ID: OTH-SL-001-002

Project Name: PUREGRO

File: T02U18

BatchNo: HS471

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.1 (g/mL) G

Date Received: 05/11/91

Final vol (mL): 10ML

Date Extracted: 05/21/91

% Dry: 91.1%

Date Analyzed (P): 06/04/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	220.00	U
	2,4-DB	900.00	S
	2,4,5-T	22.00	U
	2,4,5-TP	910.00	S
	DALAPON	540.00	U
	DICAMBA	22.00	U
	MCPP	22000.00	U
	DICHLOROPROP	220.00	U
	DINOSEB	110.00	U
	MCPA	22000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	588	20- 150	59	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10861MSD

Client Sample ID: OTH-SL-001-002

Project Name: PUREGRO

File: T02U19

BatchNo: HS471

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.0 (g/mL) G

Date Received: 05/11/91

Final vol (mL): 10ML

Date Extracted: 05/21/91

% Dry: 91.1%

Date Analyzed (P): 06/04/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	220.00	U
	2,4-DB	1400.00	S
	2,4,5-T	22.00	U
	2,4,5-TP	700.00	S
	DALAPON	550.00	U
	DICAMBA	22.00	U
	MCPP	22000.00	U
	DICHLOROPROP	220.00	U
	DINOSEB	110.00	U
	MCPA	22000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	341	20- 150	34	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10893

Client Sample ID: OTH-SL-004-002

Project Name: PUREGRO File: T04U25

BatchNo: HS472 Project No:

Matrix: SOIL Date Sampled: 05/10/91

Sample wt/vol: 10.2 (g/mL) G Date Received: 05/14/91

Final vol (mL): 10ML Date Extracted: 05/23/91

% Dry: 85.8% Date Analyzed (P): 06/05/91

Dilution Factor: 1 Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	230.00	U
	2,4-DB	230.00	U
	2,4,5-T	23.00	U
	2,4,5-TP	23.00	U
	DALAPON	570.00	U
	DICAMBA	23.00	U
	MCPP	23000.00	U
	DICHLOROPROP	230.00	U
	DINOSEB	110.00	U
	MCPA	23000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	1077	20- 150	110	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10894

Client Sample ID: OTH-SL-005-001

Project Name: PUREGRO | File: T04U26

BatchNo: HS472 | Project No:

Matrix: SOIL | Date Sampled: 05/10/91

Sample wt/vol: 10.4 (g/mL) G | Date Received: 05/14/91

Final vol (mL): 10ML | Date Extracted: 05/23/91

% Dry: 83.0% | Date Analyzed (P): 06/05/91

Dilution Factor: 1 | Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	230.00	U
	2,4-DB	230.00	U
	2,4,5-T	23.00	U
	2,4,5-TP	23.00	U
	DALAPON	580.00	U
	DICAMBA	23.00	U
	MCPP	23000.00	U
	DICHLOROPROP	230.00	U
	DINOSEB	120.00	U
	MCPA	23000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS (%)	RECOVERY (%)	Q
DCAA	1000	467	20- 150	47	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10895

Client Sample ID: OTH-SL-005-002

Project Name: PUREGRO

File: T04U27

BatchNo: HS472

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.3 (g/mL) G

Date Received: 05/14/91

Final vol (mL): 10ML

Date Extracted: 05/23/91

% Dry: 84.8%

Date Analyzed (P): 06/05/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	230.00	U
	2,4-DB	230.00	U
	2,4,5-T	23.00	U
	2,4,5-TP	23.00	U
	DALAPON	570.00	U
	DICAMBA	23.00	U
	MCPP	23000.00	U
	DICHLOROPROP	230.00	U
	DINOSEB	110.00	U
	MCPA	23000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS (%)	RECOVERY (%)	Q
DCAA	1000	256	20- 150	26	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10896

Client Sample ID: OTH-SL-006-001

Project Name: PUREGRO File: T04U28

BatchNo: HS472 Project No:

Matrix: SOIL Date Sampled: 05/10/91

Sample wt/vol: 10.9 (g/mL) G Date Received: 05/14/91

Final vol (mL): 10ML Date Extracted: 05/23/91

% Dry: 83.8% Date Analyzed (P): 06/05/91

Dilution Factor: 1 Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	220.00	U
	2,4-DB	220.00	U
	2,4,5-T	22.00	U
	2,4,5-TP	22.00	U
	DALAPON	550.00	U
	DICAMBA	22.00	U
	MCPP	22000.00	U
	DICHLOROPROP	220.00	U
	DINOSEB	110.00	U
	MCPA	22000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	226	20- 150	23	

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10897

Client Sample ID: OTH-SL-006-002

Project Name: PUREGRO

File: T04U29

BatchNo: HS472

Project No:

Matrix: SOIL

Date Sampled: 05/10/91

Sample wt/vol: 10.5 (g/mL) G

Date Received: 05/14/91

Final vol (mL): 10ML

Date Extracted: 05/23/91

% Dry: 86.4%

Date Analyzed (P): 06/05/91

Dilution Factor: 1

Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	220.00	U
	2,4-DB	220.00	U
	2,4,5-T	22.00	U
	2,4,5-TP	22.00	U
	DALAPON	550.00	U
	DICAMBA	22.00	U
	MCPP	22000.00	U
	DICHLOROPROP	220.00	U
	DINOSEB	110.00	U
	MCPA	22000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	22	20- 150	2	*

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10898

Client Sample ID: OTH-SL-007-001

Project Name: PUREGRO File: T04U30

BatchNo: HS472 Project No:

Matrix: SOIL Date Sampled: 05/10/91

Sample wt/vol: 10.1 (g/mL) G Date Received: 05/14/91

Final vol (mL): 10ML Date Extracted: 05/23/91

% Dry: 87.5 Date Analyzed (P): 06/05/91

Dilution Factor: 1 Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	230.00	U
	2,4-DB	230.00	U
	2,4,5-T	23.00	U
	2,4,5-TP	23.00	U
	DALAPON	570.00	U
	DICAMBA	23.00	U
	MCPP	23000.00	U
	DICHLOROPROP	230.00	U
	DINOSEB	110.00	U
	MCPA	23000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	44	20- 150	4	*

FORM I 1/87 Mod.

GAS CHROMATOGRAPHY ANALYSIS DATA SHEET
Method: 8151

NET LIMS NO. 10899

Client Sample ID: OTH-SL-007-002

Project Name: PUREGRO File: T04U31

BatchNo: HS472 Project No:

Matrix: SOIL Date Sampled: 05/10/91

Sample wt/vol: 10.2 (g/mL) G Date Received: 05/14/91

Final vol (mL): 10ML Date Extracted: 05/23/91

% Dry: 87.6% Date Analyzed (P): 06/05/91

Dilution Factor: 1 Date Analyzed (S):

CAS NUMBER	COMPOUND NAME	UNITS ug/Kg	Q
	2,4-D	220.00	U
	2,4-DB	220.00	U
	2,4,5-T	22.00	U
	2,4,5-TP	22.00	U
	DALAPON	560.00	U
	DICAMBA	22.00	U
	MCPP	22000.00	U
	DICHLOROPROP	220.00	U
	DINOSEB	110.00	U
	MCPA	22000.00	U

SURROGATE DATA	SPIKED	FOUND	QC LIMITS(%)	RECOVERY(%)	Q
DCAA	1000	12	20- 150	1	*

FORM I 1/87 Mod.

NET PACIFIC, INC. SAN DIEGO DIVISION
ENVIRONMENTAL CHEMISTRY

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

HERBICIDES
Method 8151
(Solid)

Client Name: PUREGRO/SAIC

NET Sample ID: 10882
Client Sample ID: PSC-SL-004-001

PARAMETERS	CONC. SPIKE ADDED(ug/Kg)	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. SPIKE ADDED(ug/Kg)	CONC. MSD	% RECOVERY	RPD	CONTROL LIMITS RECOVERY
2,4,-DB	1000.000	0.0	0.0	0%	1100.000	0.0	0%	0%	20-150
2,4,5-TP	1000.000	0.0	0.0	0%	1100.000	0.0	0%	0%	20-150

COMMENTS:

Prepared by: VF

Release Authorized by: [signature]

The accompanying narrative is an integral part of this report.

APPENDIX IV

CHAIN-OF-CUSTODY FORMS

NET PACIFIC, INC.

National Environmental Testing, Inc.
4224 Campus Point Ct., Suite 100
San Diego Division
San Diego, CA 92121
Attn: Sample Custodian
(619) 535-7415

CHAIN OF CUSTODY RECORD

Shipment #: 3
Field Charge #: 1-826-00-395-10
Lab Charge #:

SHIP TO	CLIENT/PROJECT INFORMATION	SAMPLING INFORMATION
Name: NET Pacific	Client: SAIC	Location: Othello Quincy
Address: 4224 Campus Pt. Ct. Suite 100 San Diego, CA 92121	Project: Pure Go	
Contact: Joe Alaska	Contact: Donna Collins	Sampler: Donna Collins
Phone #: 619-535-7415	Phone #: 303-279-7242	Phone #: 303-279-7242

Lab Sample ID	Client Sample ID	Sampling Date	Sampling Time	# of Containers	Sample Description/Remarks	Sample Type (Container/Preservative/Parameter Type)										Samples Intact Upon Receipt? (Y/N)
						Glass jar Cool 4°C SW 8080	Glass jar Cool 4°C SW 8151	Glass jar Cool 4°C SW 9200	Glass jar Cool 4°C SW 351-2	Glass bottle Cool 4°C SW 8080	Glass bottle Cool 4°C SW 8150	Glass bottle Cool 4°C SW 9200	Glass bottle Cool 4°C SW 351-2			
	QCY-TB-001-001	5-9-91	1715	1	Trip blank	✓		✓	✓	✓	✓	✓	✓			
	QCY-SL-001-001	5-9-91	1545	2	Soil 6" depth	✓		✓	✓							
	QCY-SL-001-002	5-9-91	1615	2	Soil 1' depth	✓		✓	✓							
	QCY-SL-002-001	5-9-91	1645	2	Soil 6" depth	✓		✓	✓							
	QCY-SL-002-002	5-9-91	1700	2	Soil 3' depth	✓		✓	✓							
	OTH-SL-001-001	5-10-91	0905	2	Soil 6" depth	✓	✓	✓	✓							
	OTH-SL-001-002	5-10-91	0950	2	Soil 3-5' depth composite	✓	✓	✓	✓							
	OTH-SL-002-001	5-10-91	1030	2	Soil 6" depth	✓	✓	✓	✓							
	OTH-SL-002-002	5-10-91	1135	2	Soil 3-4' depth composite	✓	✓	✓	✓							
	OTH SL-003-001	5-10-91	1105	2	Soil 6" depth	✓	✓	✓	✓							
	OTH SL-003-002	5-10-91	1200	2	Soil 3-4' depth composite	✓	✓	✓	✓							

Possible Hazards:

Total Containers: 21

Comments, Observations, Special Instructions

(Signature and Company Name)

Relinquished by:	Date/Time	Received by/Location:	Date/Time	Relinquished by:	Date/Time	Received by/Location:	Date/Time
D. Collins SAIC	5-10-91 / 1200						

NET PACIFIC, INC.
National Environmental Testing, Inc.
4224 Campus Point Ct., Suite 100
San Diego Division
San Diego, CA 92121
Attn: Sample Custodian
(619) 535-7415

CHAIN OF CUSTODY RECORD

Shipment #: 4 / 10
Field Charge #: 1-820-00-395-20
Lab Charge #:

SHIP TO
Name: NET Pacific, Inc.
Address: 4224 Campus Pt. Ct. Suite 100 San Diego, CA 92121
Contact:
Phone #:

CLIENT/PROJECT INFORMATION
Client: SAIC
Project: PureGro
Contact: Donna Collins
Phone #: 303-279-7242

SAMPLING INFORMATION
Location: Quincy, WA
Sampler: D. Collins, J. Luker
Phone #: 303-279-7242

Lab Sample ID	Client Sample ID	Sampling Date	Sampling Time	# of Containers	Sample Description/Remarks	Sample Type (Container/Preservative/Parameter Type): Glass jar Cool 4°C / SW8080	" / SW8151	" / Nitrate SW7200	" / Total N E351-2	Glass bottle Cool 4°C / SW8080	SW8150	SW9200	E351-2				Samples Intact Upon Receipt? (Y/N)
	OTH-SL-004-001	5-10-91	1425	2	Soil, 6"	✓	✓	✓	✓								
	OTH-SL-004-002	"	1500	2	" Composite 4-5'	✓	✓	✓	✓								
	OTH-SL-005-001	"	1430	2	" 6"	✓	✓	✓	✓								
	OTH-SL-005-002	"	1515	2	" Composite 4-5'	✓	✓	✓	✓								
	OTH-SL-006-001	"	1440	2	" 6"	✓	✓	✓	✓								
	OTH-SL-006-002	"	1530	2	" Composite 4-5'	✓	✓	✓	✓								
	OTH-SL-007-001	"	0905	2	" 6"	✓	✓	✓	✓								
	OTH-SL-007-002	"	0950	2	" Composite 3-5'	✓	✓	✓	✓								

Possible Hazards:

Total Containers: 16

Comments, Observations, Special Instructions

(Signature and Company Name)

Relinquished by:	Date/Time	Received by/Location:	Date/Time	Relinquished by:	Date/Time	Received by/Location:	Date/Time
Donna Collins	5-13-91						

APPENDIX V

PHOTOGRAPH LOG

APPENDIX VI

FIELD NOTES

Quincy 5-7-91

Samples QCY-SL-001-001 6" soil Very rocky
-SL-001-002 1 ft.
Very rocky, grey silty soil w/ chemical odor

This sample was supposed to be taken at 4' but 10 holes pinched out 1 ft. was deepest that could be attained

QCY-SL-002-001 6"
QCY-TB-001-001
QCY-SL-002-002 3'

5:30 p.m.

Phone line out - GTE checking out hole by digging cable up by hand

Took pix of our sample area before + by dug.

Cables cut - 2; one completely, the other partially
pix of whole thing

5-10-91 Othello

6 sites marked - 3 in tank area
3 along RR spur

OTH-SL-001-001 } duplicates 6"
OTH-SL-007-001 } silty, little clay
Brown soil between tanks
cut site by spill. Odor of ammonia while digging dual rim sump collected

OTH-SL-001-002 } Duplicates - 1
OTH-SL-007-002 } Composite 3-5'

OTH-SL-002-001 Very hard
grey silty soil w/ rocks sampled @ 10:30 digging - pickax
Pungent, chemical odor

OTH-SL-005-001 6" hard, grey, silty soil w/ rocks

0

5-10-91 Calls

11:19 NET Herb SW 8150 (water) / 8151 (soil)
Pest/PCB SW 8080
Sample prep different { Nitrate SW 9200
Total N EPA 351-2

Barb Morson - need lab SOW for PureGro

Othello FAX 509-488-9851

Patti Carter - no word from Jerry Nevin again.
Doug left after delivering water sampling.
Cathy called - drilling ok
checking utilities

Called Jerry Nevin

Called Motel 6 Spokane - advised of Fedex arrival

Eva - BJ Carney / Nancy Gannister / drillers

SPA for BOMARC

PO for Teledyne

OTH-SL-004-001 1425
6" brown silty soil

OTH-SL-005-001 1430
5 DC
brown, silty soil 6"

OTH-SL-006-001 1440
brown, silty soil, some clay 6"

OTH-SL-004-002 1500
brown, silty soil, little clay
4-5' depth

OTH-SL-005-002 1515
brown silt
4-5'

OTH-SL-006-002 1530

5/9/91 THUR - 5/10 FRI

17:20 DEPART QUINCY (ACTUALLY in GEORGE, WA) PUREGRO FACILITY

19:00 GAS TRUCK & HICCER

19:10 ARRIVE @ MOTEL 6; "RECHECK" IN

BAG ICE & APPLY 20 CENTIES in COINS

19:30 TO THE ROOM...

* PHONE CALL HOME

5/10/91 FRIDAY

"OTH" = OTHELLO in LABELS

7:25 ARRIVE @ OTHELLO PUREGRO FACILITY

SITE MGR =

001 @ 6" DEPTH, DIRECTLY BETWEEN (TANK 15 ON) CONCRETE PAD & ADJACENT TANK (w/ OUT a TAG)

1ST DUPLICATE TAKEN HERE: OTH-91-007-001 (2 JARS) <> <> 6" DEPTH

2ND DUPE = "-007-002 -> @ 3.5'-5' DEPTH

002 ~ 10 m @ ASPHALT; 12 m @ STORAGE TANK LINE; 002-002 @ 3'-4' DEPTH

HARDPAN ASSOCIATED W/ GRAVEL AREA & SPIKES in GRAVEL AREA 002, (DUE TO PUREGRO EMPLOYEE).

003 ~ 25 m @ TANK LINE; 003-002 @ 3-4' DEPTH

FUTURE ITEMS:

① FED-EX, ARRIVING PACKAGE, @ MOTEL 6 in MOSES LAKE.

② UPDATE SAMPLE LOGBOOK

5/7 = 12 HRS 5/11 = 11 HRS

5/8 = 11 " 5/12 = 11 HRS

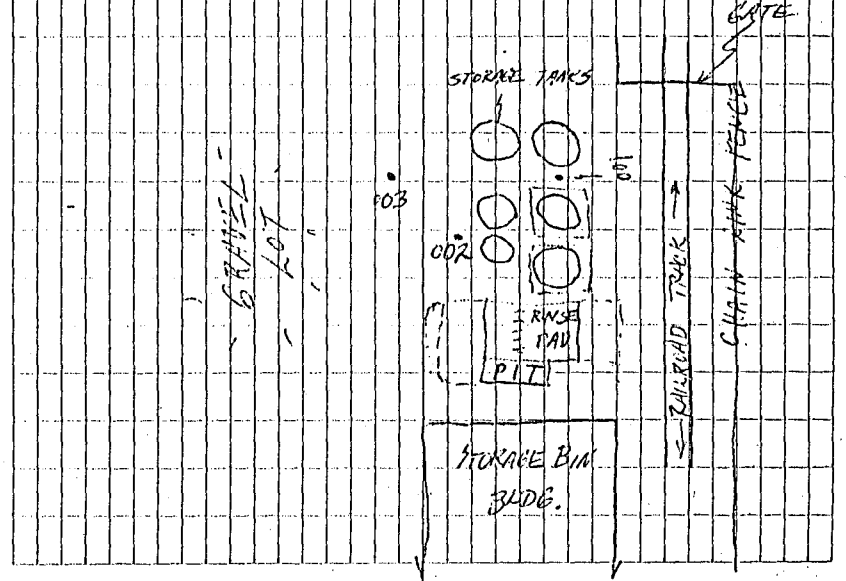
5/9 = 11 " 5/

5/10 = 12 "

- CONTACT CHRIS re: PAYMENT @ MOSES LAKE @ ~ 7:45 PST, 5/10/91

ESTIMATE EXTRACTION WORKWEEK -- (ABOVE)

MISC/GW TASKS to CHARGE #'S



6:20 LOADING SAMPLES FOR FED-EX - -

3:00 - 14:00 LUNCH ; RETURN TO SITE @ 14:00

004 - 001 1.5 m @ W FENCE

CONCRETE DOCK is ELEVATED 5-6' HIGH

004, 005, + 006 LOCATIONS ~ 1.5 m @ the FENCE ; 005 IS 1 m @ NEAREST BLDG CORNER ; 006 ~ 25' @ OFFICE BLDG LENGTH. ALL of the WIRES SHARPED @ 4-5' (in addition to the 6" DEPTH)

5:45 FINISHED SAMPLING ; COLLECT EQUIPMENT into TRUCK, esp. THAT REQUIRED @ D ENGINEER TODAY.

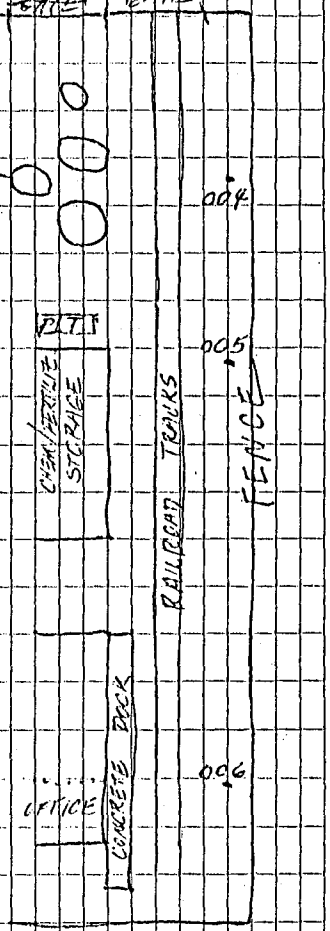
6:30 DEPART CHEMG TREATG FACILITY ; DESIGNED FOR MOSES LAKE WATER 6 TO OBTAIN FED-EX PACKAGE ; THEN TO PASCO, WA.

7:00 DEPART @ MOTEL 6 in MOSES LAKE, WA ; GOING TO PASCO

- MISC. NOTES - - BARRICADE 001 + 002 BOTH HAD VERY LONGEST ARMS ; #2 ESPECIALLY as I MAY'S BY A PICK-UP TO BREAK THROUGH the SYNTHETIC MATERIAL.

D. ENGINEER ARRIVED @ 12:30 from the PASCO w/ WATER SAMPLING SUPPLIES.

WEATHER TODAY = SUNNY, - PARTLY CLOUDY ; WARM (45 - 68°F)



SAMPLE LOG

05/07/91

SOIL SAMPLES

COLUMNS: SAMPLE ID, TYPE, ANALYSIS, DATE TAKEN, " SENT, SAMPLER

COMMENTS

"WIL" = WILBUR RTE = RITZVILLE

JL = JIM LYON w/ PUREGRO

DC = Donna Collins

SL = Steve Luker

JL = James Lyon (PureGro)

CT = Chris Timm, Jr.

SAMPLE ID	TYPE	SAMPLER	DATE TAKEN	DATE SHIPPED	ANALYSIS	COMMENTS
WIL-SL-001-001	SOIL	DC, JL, SL	05 07 91	05 08 91	NITRATES, PESTICIDE, HERBICIDE	
WIL-SL-001-002	"	DC, JL, SL	05 07 91	"	PESTICIDE, HERBICIDE, NITRATES	
WIL-SL-002-001	"	" " "	"	"	"	JL = JIM LYON
WIL-SL-002-002	"	" " "	"	"	"	
WIL-SL-003-001	"	" " "	"	"	"	
WIL-SL-003-002	"	" " "	"	"	"	
WIL-SL-004-001	"	" " "	"	"	"	
WIL-SL-004-002	"	" " "	"	"	"	
WIL-TB-001-001	TRIP BLANK	" " "	"	"	"	
RTE-SL-001-001	SOIL	DC, SL, JL	05 07 91	05 09 91	"	
RTE-SL-001-002	"	"	"	"	"	
RTE-SL-002-001	"	"	"	"	"	
RTE-SL-002-002	"	"	"	"	"	
RTE-SL-003-001	"	"	"	"	"	
RTE-SL-003-002	"	"	"	"	"	
RTE-SL-004-001	"	"	"	"	"	
RTE-SL-004-002	"	"	"	"	"	
RTE-SL-005-001	"	"	"	"	"	
RTE-SL-005-002	"	"	"	"	"	
RTE-SL-006-001	"	"	"	"	"	
RTE-SL-006-002	"	"	"	"	"	
RTE-SL-007-001	"	"	"	"	"	
RTE-SL-007-002	"	"	"	"	"	
RTE-TB-001-001	TRIP BLANK	"	"	"	"	
RTE-TB-002-001	" "	"	"	"	"	
RTE-EQ-003-001	EQUIPMENT BLANK	"	"	"	"	
RTE-EQ-007-001	"	"	"	"	"	
RTE-SL-008-001	SOIL	"	"	"	"	DUPLICATE of 007-001.
RTE-SL-008-002	SOIL	"	"	"	"	DUPLICATE of 003-002

SAMPLE TIME	DEPTH (BELOW SURFACE)	— EPA — ANALYSIS METHODS	# of CONTAINERS
~~17:15~~			+
17:~~30~~ 15	6"	SW 8080, 8151, 9200	1
17:30	3'	"	1
17:45	6"	"	1
18:00	3'	"	1
18:15	6"	"	2
18:30	3'	"	2
18:45	6"	"	2
19:00	3'	"	2
—	NA	"	1
1000	6"	SW 8080, 8151, 9200	2
1030	18"	"	2
1045	6"	"	2
1100		"	2
1115	6"	"	2
1230		"	2
1430	6"	"	2
1440		"	2
1500	6"	"	2
1505		"	2
1520	6"	"	2
1535		"	2
1550	6"	"	2
1610		"	2
1643		"	1
1643		"	1
1245		"	3
1620		"	3
1550	6"	"	2
1230		"	2

SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLER	DEPTH	EPA ANALYSIS METHOD	DATE SHIPPED
ML-SL-001-001	05 09 91	9:15	DC, SL, JL	0.5 FT	SW 8080, 8151, 9200	05 09 91
ML-SL-001-002	"	9:45	"	4 FT	"	"
ML-SL-002-001	"	10:00	"	0.5 FT	"	"
ML-SL-003-001	"	11:15	"	"	"	"
ML-SL-003-002	"	11:30	"	4 FT	"	"
Dup of 003-001 ML-SL-004-001	"	11:15	"	0.5 FT	"	"
Dup of 001-002 ML-SL-004-002	"	9:45	"	4 FT	"	"
ML-SL-005-001	"	11:45	"	0.5 FT	"	"
ML-SL-005-002	"	11:50	"	4 FT	"	"
ML-EQ-001-001	"	10:20	"	EQUIPMENT BLANK (H_2O)	"	"
ML-TB-001-001	"	12:00	"	TRIP BLANK	"	"
QCY-SL-001-001	5-9-91	1545	DC, SL, JL	0.5 FT	SW 8080, 8151, 9200,	5-10-91
QCY-SL-001-002	"	1615	"	1.0 FT	"	5-10-91
QCY-SL-002-001	"	1645	"	0.5 FT	"	5-10-91
QCY-SL-002-002	"	1700	"	3.0 FT	"	5-10-91
QCY-TB-001-001		1715	"			"
OTH-SL-001-001	5-10-91	09:05	"	0.5	SW, 8080, 8151 9200, 351-2	"
OTH-SL-001-002	"	0950	"	composite 3-5	"	"
OTH-SL-002-001	"	1030	"	6"	"	"
OTH-SL-002-002	"	1135	"	composite 3-4'	"	"
OTH-SL-003-001	"	1105	"	6"	"	5-10-91
OTH-SL-003-002	"	1200	"	composite 3-4'	"	5-10-91
OTH-SL-004-001	"	14:25 ~~14:05~~ ~~15:00~~	"	6" COMPOSITE	"	
OTH-SL-004-002	"	~~14:30~~	"	4-5'	"	
OTH-SL-005-001	"	14:30	"	6"	"	
OTH-SL-005-002	"	15:15	"	COMPOSITE 4-5'	"	
OTH-SL-006-001	"	14:40	"	6"	"	

SAMPLE ID	DATE	TIME	PERSONNEL	DEPTH (ft)	EPA METHODS	SHIPMENT DATE	COMMENTS
				COMPOSITE	SW 8080, 8151		
OTH-SL-006-002	5-10-91	1530	DC, SL, JL	4'-5'	9200, 351-2		
OTH-SL-007-001	5-10-91	09:05	"	0.5'	"		
OTH-SL-007-002	5-10-91	09:50	"	3-5'	"		
					SW 8080, 8151		
PSC-SL-001-001	5-11-91	0910	DC, SL, JL	2'-3'	9200, 351-2		2 JARS FOR EACH SAMPLE
PSC-SL-001-002	"	0920	"	3-4'	"		
PSC-SL-001-003	"	0935	"	4-4.5'	"		
PSC-SL-002-001	"	0955	"	2-3	"		
PSC-SL-002-002	"	1005	"	3-4	"		
PSC-SL-002-003	"	1010	"	4-5	"		
PSC-SL-003-001	"	1030	"	2-3	"		
PSC-SL-003-002	"	1035	"	3-4	"		
PSC-SL-003-003	"	1040	"	4-5	"		
PSC-SL-004-001	"	1105	"	2-3	"		
PSC-SL-004-002	"	1115	"	3-4			
PSC-SL-004-003	"	1125	"	4-5			
PSC-SL-005-001	"	1220	"	2-3			
PSC-SL-006-001	"	0955	"	2-3			002-001 DUPLICATE
PSC-SL-006-002	"	1005	"	3-4			002-002 DUPLICATE
PSC-SL-006-003	"	1010	"	4-5			002-003 DUPLICATE
					SW 8080, 8150		5 BOTTLES
PSC-ER-001-001	"	1250	"	N/A	9200, 351-2		EQUIPMENT BLANK
PSC-TB-001-001	"		"	N/A	"		TRIP BLANK
PSC-TB-001-002	"		"	N/A	"		TRIP BLANK
Well 1 PSC-R-GW-001-001	"	1335	"	N/A	"		5 BOTTLES
Well 2 PSC-GW-002-001	"	1425	"	N/A	"		5 BOTTLES

Sample ID	Date	Time	Personnel	Depth (ft)	EPA Methods	Shipment Date	Comments
WDN-SL-001-001	5-23-91	1350	DC, CT	0.5	SW8080 8151, 9200	5-25-91	
WDN-SL-001-002	"	1440	"	2-3'		"	
WDN-SL-001-003	"	1445	"	4-6'		"	
WDN-SL-002-001	"	1400	"	0.5		"	
WDN-SL-002-002	"	1450	"	2-3		"	
WDN-SL-002-003	"	1500	"	3-4		"	
WDN-SL-003-001	"	1415	"	0.5		"	
WDN-SL-003-002	"	1515	"	2-3		"	Duplicate WDN-SL-008-002
WDN-SL-003-003	"	1525	"	3-4		"	Duplicate WDN-SL-008-003
WDN-SL-004-001	"	1540	"	0.5		"	Duplicate WDN-SL-008-001
WDN-SL-004-002	"	1555	"	2-3		"	
WDN-SL-004-003	"	1605	"	3.5-4		"	
WDN-SL-005-001	"	1705	"	0.5	" +xylene	"	VOA
WDN-SL-005-002	"	1720	"	2-3	" +xylene	"	VOA
WDN-SL-005-003	"	1730	"	3-4	" +xylene	"	VOA
WDN-SL-006-001	"	1745	"	0.5	SW8080 8151, 9200	"	
WDN-SL-006-002	"	1755	"	2-3	+Xylene	"	VOA
WDN-SL-006-003	"	1800	"	4-5	SW8080 8150, 9200	"	
WDN-SL-007-001	"	1810	"	0.5	"	"	
WDN-SL-007-002	"	1815	"	2-3	"	"	
WDN-SL-007-003	"	1825	"	4-5	"	"	
WDN-SL-008-001	"	1540	"	0.5	"	"	Duplicate of WDN-SL-004-001
WDN-SL-008-002	"	1515	"	2-3	"	"	Duplicate of WDN-SL-003-002
WDN-SL-008-003	"	1525	"	~~3-4~~ 3-4	"	"	Duplicate of WDN-SL-003-003
WDN-EQ-001-001	"	1610	"	N/A	"	"	Water
WDN-EQ-001-002	"	1830	"	N/A	"	"	Water