INDEPENDENT REMEDIAL ACTION REPORT FOR TAX PARCELS #1181441000, 11813320000, & 11813310100 OLYMPIA, WASHINGTON

OSTROM'S INC.
8323 STEILACOOM ROAD S.E.
OLYMPIA, WASHINGTON

Prepared By

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Stemen Environmental, Inc.

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SECTION I

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November 3, 1997

Mr. William Street
Ostrom Farms
8323 Steilacoom Road S.E.
Olympia, Washington 98513

Dear Mr. Street:

RE: TAX PARCELS #1181441000, 11813320000 AND 11813310100.

SITE CHARACTERISTICS AND HISTORY

The Subject Property Consists of approximately 65 acres of undeveloped property consisting of Tax Parcels #1181441000, 11813320000, and 11813310100 and is located in the eastern portion of Section 18, Township 18 North, Range 1 West. The site is situated directly southeast of the intersection of Steillacoom Road and Marvin Road in Northern Thurston County.

The topography of the site is relatively flat on the western and central portions of the property and slopes upward to the east - northeast on the eastern portion of the property.

The site is surrounded by a combination of rural residential properties, commercial properties, an education institution and a fire station. A large above ground steel water reservoir is present near the eastern perimeter of the property.

The site is predominately covered by Scotch Broom and wild grass. Also present are various size stands of oak trees which are located primarily on the eastern portion of the property. Mounds of spent compost are randomly situated throughout the center and western portions of the property. According to available information, these mounds of spent compost were placed here at a time when the property was projected to be the home for many recreational ball fields. The composts were transported on to the subject property from the mushroom growing facility located north of the subject property.

Access to the site is via a network of unpaved/earthen surfaced roads which randomly wind throughout the property.

Depth to groundwater - Average depth to the upper water bearing zone is 38 feet to 42 feet on this site, while depth to the lower aquifer is approximately 175 feet to 200 feet below ground surface. According to available information, all domestic drinking water supply wells in this area use the lower (deeper) aquifer for a source of water.

Direction of groundwater flow - Inferred direction of groundwater flow is to the southwest in the upper aquifer and the east in the lower aquifer (sea level aquifer).

Soils - Spanaway, Nisqually Association: very deep, somewhat excessively drained, nearly level to rolling soils: on glacial outwash terraces.

Our on-site excavations indicate the presence of a layer of gravelly sandy loam to a depth of approximately 36 inches, very gravelly sandy loam/very gravelly sand layer extends to ranging from approximately 20 to 40 feet, where a confining layer of glacial till materials begins.

Ostrom's Inc., has owned this property since 1965. According to available information the majority of the property has not actively been used for agricultural purposes during that period of time or previously. A small area located in the northwest corner of the property was used for a Shitake mushroom growing operation approximately 20 years ago. The operation was suspended after a short time.

After reviewing all available information on the current and past uses of the subject property I was unable to determine how or when Chlorinated Pesticides were introduced to the soils/spent composted materials present at limited locations on the subject property.

A draft copy of a Geoenvironmental review document issued by Terra Associates, Inc., outlines the results of environmental investigations they performed on soils and/or groundwater present on or beneath the surface areas of the subject property. The report issued the following statements.

Based on the work the they have performed to date, the following conclusions can be made:

* There are some locations where near-surface soils indicate pesticide contents (primarily DDT and Chlordane) greater than clean up Method A/Method B clean up values.

* There are also some locations where near-surface soils contain significant pesticide constituents, although below Method A/Method B clean up levels.

* Groundwater samples indicate low but noticeable levels of pesticide constituents, below Method A/Method B clean up levels.

The report recommended that additional testing be performed to verify the lateral and vertical extent of the soil contamination.

The Ostrom's property investigative and remediation projects were focused on three (3) separate areas of the subject property.

AREA S-1/WESTERN PORTION OF PROPERTY

This area of interest is located on the western portion of the property approximately 100 feet south of the northern property line and 500 feet east of the western property line. Our corrective actions were limited to a small mounded stockpile of spent compost.

AREA S-1/CENTRAL PORTION OF PROPERTY

This area of interest is located in the central portion of the property at distances ranging from approximately 200 feet to 375 feet south of the northern property line of the subject property and directly south of the adjacent fire station. Our remediation efforts were focused on a small area surface soils located 200 feet south of the property line and a elongated, mound of spent compost materials is located approximately 375 feet south of northern property line.

FARM WASTE DISPOSAL AREA

This area of interest is located on the eastern portion of the subject property. A former farm waste disposal area was active on this portion of the property for an extended period of time. The clearly defined portion of the farm waste disposal area covers an area 300 feet by 200 feet in size or approximately 1.38 acres. The surface of this area was relatively flat but irregular (disturbed).

As was the practice for many years, open excavations (trenches) were created then predominantly non-toxic farm waste materials were deposited in these excavations and covered with native soils. According to available information and on-site observations these previously uniformly acceptable waste disposal methods were practiced for several years. In recent times these methods have been abandoned in favor of currently acceptable disposal/recycling practices.

Additional waste materials were deposited in this area by unauthorized individuals from the surrounding areas as is a common problem with many vacant properties.

A barn was located near the northwest perimeter of the farm waste disposal area. The barn was demolished several years ago.

In May of 1997, I attended an on-site meeting and walk through at the subject property. In attendance at this meeting were myself, Chuck Lee, representing Terra Associates, Bill Street and Dudley Kirk of Ostrom's, Inc.. The purpose of this meeting was to clearly define the exact locations on the property where Mr. Lee obtained the soil samples documented in his company's reports and more specifically the locations where the presence of above acceptable levels of Chlorinated Pesticides were confirmed.

During this on-site meeting Mr. Lee was unable to provide exact sampling locations but did supply approximate sampling locations.

PHASE II SITE ASSESSMENT

In May of 1997, I initiated a series of on-site environmental investigations of the subject property to obtain information that would assist in confirming and/or further characterizing on-site conditions for the purpose of developing an efficient environmental remediation and corrective actions plan for this site.

On May 23, 1997, I proceeded to excavate a total of eleven (11) investigative test pits in the proximity of the former farm waste disposal area. Test pit locations were determined based on information supplied by Ostrom's staff members who were familiar with the farm waste disposal area during its operational period.

Test pit excavations were extended to a depth of approximately 11 feet below ground surface. Farm waste was present to depths of approximately 10 feet below ground surface in most locations. The farm wastes were intermittently distributed throughout the soils in this area. Farm wastes materials were found to be present in all of the excavations except excavation pit EP-10.

A limited quantity of used petroleum product storage containers and dark colored petroleum product impacted soils were found to be present in soils removed from excavation pits EP-1, EP-2 and EP-6, with the largest portion of these materials being generated from excavation pit EP-1.

One (1) investigative soil sample was obtained from each of the excavation pits. Sampling depths and locations were based on site observations and site specific conditions.

All soil samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides using E.P.A. Method 8080. Additionally selected soil samples EP-1, EP-2 and EP-6 were screened for diesel, Heavy Oil, and Bunker C range T.P.H. (Total Petroleum Hydrocarbons) using E.P.A. Method WTPH-Dx-Dx-Extended.

Laboratory analysis results for soil samples EP-2 (295 PPM) Heavy Oil range T.P.H. and EP-1 (72,000 PPM) Bunker C range T.P.H. confirmed the presence of Heavy Oil/Bunker C range T.P.H. in the soils present in portions of these excavation pits at levels exceeding the Department of Ecology's Method A/Method B clean up levels. Laboratory analysis results for these samples indicated no presence of Chlorinated Pesticides at levels exceeding the Department of Ecology's Method A/Method B clean up levels.

Laboratory analysis results for soil samples EP-4 (1040 PPB) and EP-7 (1620 PPB) confirm the presence of pesticides at levels exceeding the Department of Ecology's Method A/Method B clean up levels and require further actions.

Laboratory analysis results for soil samples EP-3, EP-5, EP-6, EP-8, EP-9, EP-10, and EP-11 indicated no presence of Chlorinated Pesticides and levels exceeding the Department of Ecology's Method A/Method B clean up levels and require no further actions.

These exploratory excavations were immediately backfilled using the excavated materials to insure public safety.

On an occasion closely following the on-site activities documented above, approximately 45 cubic yards of materials were excavated from the location of EP-6. The materials were stockpiled on a 6 mil visqueen liner while soils and farm waste materials were sorted and stockpiled separately. The purpose of this activity was to determine the farm waste materials to soil ratio present in this area. The result of this experiment indicated that the excavated materials consisted of approximately 15% farm waste materials and approximately 85% soil.

Excavation EP-6 was not immediately backfilled upon completion of these on-site activities but was secured for safety reasons.

John Libby of Thurston County Environmental Health Department - Solid Waste Division inspected the separated stockpiles of these materials during an on-site visit along with Gerald Towsley, a Hazardous Waste Specialist with the Thurston County Environmental Health Department.

After observing the composition and limited presence of the farm waste materials in these soils, Mr. Libby stated that the removal of these farm waste materials would not be necessary for environmental regulatory compliance purposes. However he did express concerns about the compaction capabilities of these materials and stated that this area should not be used for any developmental purposes which would require any significant amount of structural stability.

Winn Hoffman of the Department of Ecology's Solid Waste Division - Southwest Regional Office concurred with Mr. Libby's decision on these matters and suggested this area should be capped with a three (3) foot thick earthen cap and set aside as an open space.

AREA S-1/WESTERN PORTION OF PROPERTY

On May 26, 1997, I proceeded to investigate a small mound of spent compost, located in the western portion of the property. According to an earlier report these stockpiled spent compost materials contain above acceptable levels of Chlorinated Pesticides. Soil sample SS-1 was obtained from the center of the mound at an approximate depth of 24 inches below the outer surface of composted materials stockpile. Soil samples SS-2, SS-3, SS-4, and SS-5 were taken from other mounded stockpiles of spent compost material located to the east and southeast of the SS-1 sample location. Additionally a small excavation pit was excavated approximately 35 feet east of location SS-1 to investigate for the presence of farm waste materials in this area of which no significant quantity was found.

All of the soil samples obtained in this vicinity were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides using E.P.A. Method 8080.

Laboratory analysis results for soil sample SS-1 (888 PPB) indicated the significant presence of DDT, but at levels that did not exceed the Department of Ecology's Method A/Method B Clean up level.

Laboratory analysis results for compost stockpile samples SS-2, SS-3, SS-4 and SS-5 as well as excavation pit sample EP-12 indicated no presence of Chlorinated Pesticides at levels exceeding the Department of Ecology's Method A/Method B clean up levels and require no further action.

On June 7, 1997, I proceeded to obtain an additional six (6) investigative soil samples from portions of the composted stockpile associated with soil sample SS-1, native soils and surrounding this mounded spent compost stockpile.

All samples were submitted for appropriate laboratory analysis using E.P.A. Method 8080.

During this sampling event it was discovered that these spent compost materials were stockpiled upon a tightly woven fabric tarp which also partially covered the mounded stockpile. It did not appear that any of the Chlorinated Pesticide impacted compost materials were in contact with native soils.

Laboratory analysis for investigative soil samples SS-9, SS-10, SS-11, SS-12, SS-13 and SS-14 indicated no presence of Chlorinated Pesticides at levels exceeding the Department of Ecology's Method A/Method B clean up levels.

The overall results of the on-site investigations performed on this portion of the property confirm that the presence of significant levels of Chlorinated Pesticides (DDT) are limited to a small mounded stockpile of spent compost materials with a total volume of approximately 10 to 15 cubic yards. Laboratory analysis results indicate that native soils and other spent compost stockpiles in this area have not been significantly impacted by DDT and/or other Chlorinated Pesticides.

AREA S-6/CENTRAL PORTION OF PROPERTY

On May 26, 1997, I proceeded to investigate selected areas present in the center portion of the property. According to information presented in the initial on-site investigation, soils and/or spent compost materials at these locations have been impacted by the presence of above acceptable levels of Chlorinated Pesticides, more specifically Chlordane.

I obtained one (1) discreet soil sample (SS-6) from the mounded spent compost stockpile at previous investigation sample location S-5 and one (1) discreet soil sample (SS-7) from the soils present in the previously excavated test pit (TP-102). Additionally one (1) discreet soil sample S-8 was obtained from a mounded spent compost stockpile located approximately 35 feet west of sample location SS-7/TP-102.

All soil samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides using Method 8080.

Laboratory analysis results for soil sample SS-6 confirmed the presence of Chlorinated Pesticides (Chlordane) at levels exceeding the Department of Ecology's Method A/method B clean up levels.

Laboratory analysis results for soil sample SS-8 confirmed the presence of significant, but acceptable levels of Chlorinated Pesticides in the sampled materials. Laboratory analysis results for sample S-7 indicated no significant presence of Chlorinated Pesticides in the sampled materials.

On June 2, 1997, I proceeded to obtain an additional seven (7) investigative soil samples from selected locations surrounding and beneath the spent compost stockpile (sampling location SS-6), to further characterize the soils/composte materials present in this area

Soil samples SS-15 through SS-21 were obtained from these additional selected locations and submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides.

Laboratory analysis results for investigative soil samples SS-15 through SS-21 indicated no presence of Chlorinated Pesticides in the soils surrounding, beneath and/or directly adjacent to the mounded spent compost materials stockpile where the presence of Chlordane was confirmed by laboratory analysis results for sample SS-6.

On June 12, 1997, I obtained two (2) composite samples from the same spent compost stockpile (which contained sample location SS-6) for the purpose of properly characterizing these materials for proper treatment/disposal purposes. Composite sample SS6-NC was obtained from the northern portion of the stockpile and composite sample SS6-SC was obtained from the southern portion of the stockpile.

These samples were submitted for appropriate laboratory analysis.

Laboratory analysis results for composite sample SS6-NC (500 PPB) confirmed a significant presence of Chlordane but an overall presence in this portion of the stockpile that was below the Department of Ecology's Method A/Method B clean up levels.

Laboratory analysis results for composite soil sample SS6-SC (ND) indicated no significant presence of Chlorinated Pesticides in the southern portion of this stockpile.

The laboratory analysis results for investigative soil sampling for this area confirm the presence of Chlorinated Pesticides (Chlordane) at levels exceeding the Department of Ecology's Method A/Method B clean up levels, in the location of investigative soil sample SS-6.

Laboratory analysis results for soils surrounding, beneath and directly adjacent to this location indicate that the significantly impacted soils/compost materials are limited to a small quantity of materials and that native soils have not been adversely impacted by Chlorinated Pesticides.

Additionally two (2) composite samples were obtained from sample location SS-7 to further characterized the soils in these areas. Composite soil samples TP102-C-1 and TP102-C-2 were composited from soils surrounding sample location SS-7 (TP102 area) and submitted for laboratory analysis.

Laboratory analysis results for these composite samples confirmed the presence of significant levels of Chlorinated Pesticides, but at levels that do not exceed the Department of Ecology's Method A/Method B clean up levels.

GROUND WATER INVESTIGATION

On August 12 and 25, 1997, Individual discreet groundwater samples were obtained from three (3) selected locations on the subject property. These selected locations were located down gradient from the farm waste deposit area. All groundwater samples were obtained from the upper water bearing zone.

Ground water sample SPW-1 was obtained at a depth of 49 feet below ground surface, groundwater sample SPW-2 was obtained at a depth of 41.5 feet below ground surface and ground water sample SPW-3 was obtained at a depth of 38.5 feet below ground surface.

We attempted to obtain a groundwater sample from three (3) separate locations which were located in close proximity to the southern perimeter of the farm waste disposal area. The sampling equipment experienced repeated refusals at depths of approximately 29 feet at these selected locations. No significant moisture was present at these shallow depths at these locations.

All discreet ground water samples were obtained using a Strata Probe Sampling System supplied and operated by Transglobal Environmental Geosciences Northwest of Lacey, Washington. Prior to obtaining each ground water sample the sampling system was properly purged as per the Department of Ecology's recommendations.

All ground water samples were immediately submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides using E.P.A. Method 8080.

Laboratory analysis results for discreet groundwater samples SPW-1, SPW-2 and SPW-3 were Non-Detect (ND) for Chlorinated Pesticides which is well below the Department of Ecology's Method A/Method B clean up levels.

The results of these preliminary on-site environmental investigations confirm the presence of Chlorinate Pesticides (DDT/Chlordane) at significant and/or above acceptable (Method A/Method B) clean up levels in limited locations on the subject property.

The materials significantly impacted by Chlorinated solvents in the western and the central portions of the property appear to be limited to selected spent compost stockpiles present on these portions of the subject property. It does not appear that native soils have been adversely impacted by Chlorinated Pesticides in these areas.

The results of this investigation indicate the presence of Chlorinated Pesticides at above acceptable levels (Method A/Method B clean up levels) at selected locations (test pits/environmental excavations) in the farm waste disposal area, which is located on the eastern portion of the subject property.

The results of these investigations confirmed the presence of Heavy Oil/Bunker C range Total Petroleum Hydrocarbons in a limited quantity of the soils present in excavation pits EP-1 and EP-2.

The results of these investigations confirm the intermittent presence of farm waste materials at depths extending to approximately 10 feet below ground service throughout the solid waste disposal area. It appears that farm waste materials account for approximately 15% of the total volume of materials present in this area with the other 85% consisting of soils.

The results of this on-site investigation confirm that the waters present in the upper water bearing zone (groundwater) beneath this site have not been adversely impacted by Chlorinated Pesticides.

REMEDIAL AND CORRECTIVE ACTIONS

Based on the documented results of current and previous on-site environmental investigations as well as discussions of the pertinent information with Ostrom's staff members, County and State regulatory agents and other interested parties, it was determined that the following corrective actions would be performed to remediate the adversely impacted portions of the subject property and bring it into compliance with County and State regulatory standards.

EASTERN PORTION (FARM WASTE DISPOSAL AREA)

On September 8, 1997 our company began the proper excavation and removal of petroleum and/or chlorinated pesticide impacted materials from the farm waste disposal area. Farm waste materials were segregated from the soils and placed in an on-site portable storage container (dumpster) for temporary storage and then transportation to the Thurston County Landfill located at Hawks Prairie for proper disposal.

All excavated soils were placed on a 6 mil visqueen and covered with a 4 mil visqueen tarp for temporary storage.

Excavation EP-1

This excavation was extended vertically to a final excavation depth of approximately 12 feet below ground surface, and horizontally until field screening indicated no presence of petroleum products in the soils remaining in the sidewalls and floor of this excavation.

After removing the soils noticeably impacted by petroleum products, I proceeded to obtain a total of three (3) confirmation soil samples. one (1) sample (EP1-2-WS) was taken from the western sidewall of the excavation at a depth of 72 inches, one (1) sample (EP1-2-SE) was taken from the southern endwall at a depth of 144 inches and one (1) sample (EP1-2-East) was taken from soils present due east and directly adjacent to the excavations opening at a depths of less than 24 inches.

These samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides and Heavy Oils.

Laboratory analysis results for samples EP1-2-WS and EP1-2-SE indicated no presence of Chlorinated Pesticides and/or Heavy Oil range T.P.H. at levels exceeding the Department of Ecology's Method A/Method B clean up levels.

Laboratory analysis results for sample EP1-2-East confirmed the presence of above acceptable levels of Chlorinated Pesticides (DDT) but no presence of Total Petroleum Hydrocarbons.

Based on these laboratory analysis results we proceeded with the shallow excavation of materials from the area surrounding sample location EP1-2-East. The shallow excavation was expanded to a greater extent horizontally than vertically.

I then proceeded to obtain three (3) additional soil samples from this area. One (1) sample EP1-E-2-E was taken from the eastern sidewall of this shallow excavation at a depth of 18 inches, one (1) sample EP1-E-2F was obtained from the center of the floor of the excavation at a depth of 24 inches and one (1) sample EP1-E-2N was taken from the northern endwall of the excavation at a depth of 24 inches.

These samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides.

Laboratory analysis results for soil samples EP1-E-2-E, EP1-E-2F, and EP1-E-2N confirm the successful removal of soils containing above acceptable levels of Chlorinated Pesticides from this shallow excavation.

EXCAVATION PIT EP-2

Excavation pit EP-2 was extended vertically to an approximate depth of 12 feet and horizontally until field screening (a water sheen test) indicated no noticeable presence of petroleum products in the soils remaining in the floor and sidewalls of this excavation.

After removing all the soils noticeably impacted by petroleum products, I proceeded to obtain two (2) confirmation soil samples. one (1) sample EP-2-2-NE was taken from the northern endwall of the excavation at a depth of 102 inches and one (1) sample EP2-2-WS was taken from the western sidewall of the excavation at a depth of 96 inches.

These samples were submitted for appropriate laboratory analysis and screened for Total Petroleum Hydrocarbons and Chlorinated Pesticides.

Laboratory analysis results for these soil samples indicated no remaining presence of Heavy Oil/Bunker C range T.P.H. or Chlorinated Pesticides at above acceptable levels in the soils currently present in this excavation.

EXCAVATION PIT EP-4

Due to on-site observations and on-site specific conditions, a greater emphasis was placed on expanding this excavation horizontally than vertically. The excavation reached a final excavation depth of approximately 78 inches and was approximately 12 feet in diameter.

After completing this excavation I proceeded to obtain two (2) discreet confirmation soil samples. One (1) sample EP-4-2-CF was taken from the floor of the excavation at a depth of 78 inches and one (1) EP-4-2-SE was taken from the southern endwall at a depth of 31 inches.

These samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides.

Laboratory analysis results indicated no presence of Chlorinated Pesticides at levels exceeding the Department of Ecology's Method A/Method B clean up action levels in these soils.

EXCAVATION PIT EP-6

The excavation pit had remained open after the completion of the farm waste material to soil ratio test. Due to the presence of low levels of Chlorinated Pesticides present in the far western portions of the large stockpile generated during these tests and the confirmed presence of slightly above acceptable levels of Chlorinated Pesticides in the original and neighboring excavation pit EP-7 which was located south-southwest of excavation pit EP-6, I decided to obtain two (2) soil samples from the eastern and western portions of the excavation pit. one (1) sample EP-6-2-WS was taken from the southern end of the western sidewall of the excavation at a depth of 36 inches and one (1) sample EP-6-2-SWE was taken from the southern portion of the eastern sidewall at a depth of 64 inches.

These samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides.

Laboratory analysis results for soil sample ER6-2-SWE indicated no presence of above acceptable levels of Chlorinated Pesticides in the eastern portion of this excavation. Additionally the stockpile samples taken from soils excavated from that portion of excavation pit EP-6 indicated no significant presence of pesticides.

Laboratory analysis results for soil sample EP-6-2-WS confirmed the presence of above acceptable levels of Chlorinated Pesticides in the soils present in the southern end of the western endwall of excavation EP-6.

Based on the consensus of laboratory analysis results for this immediate area, I decided to excavate an exploratory trench which would run from the southwest corner of excavation pit EP-6 to the northwest corner of excavation pit EP-7. All soils excavated from the southern portions of excavation pit EP-6, excavation EP-7 and the exploratory trench connecting these two (2) excavations would be properly stockpiled for temporary storage, and finally transported for proper treatment/disposal.

After removing approximately 25 cubic yards of materials from these excavations I proceeded to obtain three (3) discreet soil samples from the excavated trench and one (1) soil sample from the eastern corner of excavation pit EP-7.

All of these samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides.

Laboratory analysis results for trench sidewall samples EP-6-TR-C, EP-6-TR-SE and excavation pit sample EP-7-EC, confirmed the presence of Chlorinated Pesticides (DDT) at levels exceeding the Department of Ecology's Method A/Method B clean up levels.

Laboratory analysis results for trench sample EP-6-TR-NE indicated no remaining presence of Chlorinated Pesticides in the northern end of the excavation trench and/or the southwestern portion of excavation pit EP-6. Sample EP-6-TR-NE also characterized the now remaining soils in the area of previous investigative soil sample EF6-2-WS. The initial excavations of the trench began at this location.

Based on these laboratory analysis results, I proceeded to excavate additional soils from the excavation trenches central and southern portions. Expanding the perimeters of the southern portions of the trench also expanded the western walls of excavation EP-7. Additional excavation activities extended the perimeters of EP-7 in an easterly direction.

After completing these additional excavation activities, I proceeded to obtain four (4) additional discreet soil samples and submitted them for laboratory analysis. One (1) sample EP-6-TR-2-SE was taken from the southern end of the trench at a depth of 21 inches (western wall of EP-7), one (1) sample EP-6-TR-2-C was taken from the center of the trench at a depth of 24 inches, one (1) sample EP7-2-SE was taken from the southern endwall of the excavation pit and one (1) sample EP7-EW was taken from the eastern sidewall of the excavation pit.

Laboratory analysis results for soil samples EP-6-TR-2-SE, EP-6-TR-2-C, and EP7-2-SE indicate no presence of above acceptable levels of Chlorinated Pesticides.

Laboratory analysis results for soil sample EP7-EW (5920 PPB) confirmed the remaining presence of Chlorinated Pesticides (DDT) at levels exceeding the Department of Ecology's Method A/Method B clean up levels.

Based on these laboratory analysis results we proceeded to excavate/remove additional soils from the eastern sidewall of excavation pit EP-7. After removing an additional 10 cubic yards of materials, I proceeded to obtain soil sample EP7-3-EW from the eastern sidewall of the excavation pit and submit it for appropriate laboratory analysis.

Laboratory analysis results for excavation pit sidewall sample EP7-3-EW indicated no remaining presence of Chlorinated Pesticides at levels exceeding the Department of Ecology's Method A/Method B clean up levels.

Based on the final laboratory analysis results, excavation activities in these areas were terminated.

Prior to the backfilling of these excavations and the termination of excavation activities for this site, I attended an on-site meeting/walk through with Dudley Kirk of Ostrom's, Inc. and Charles Cline of the Department of Ecology's Toxic Clean Up Program - Southwest Regional Office. During this meeting I pointed out specific characteristics of the overall site and each corrective action location, ground water sampling locations and discussed the final results of on-site investigations, and corrective actions. It was agreed by all parties that this information should be properly documented so that the corrective actions and remedial activities performed on this site can be properly reviewed.

The consensus opinion of this meeting was that these corrective actions were appropriate for this site and should be acceptable.

AREA S-1/WESTERN PORTION OF PROPERTY

Corrective actions performed in this area were concentrated on the small windrow shaped spent compost stockpile located at the location of investigative soil sample SS-1

The Chlorinated solvent impacted spent compost stockpile was properly loaded into transport vehicles for transportation to the licensed treatment facility. The total quantity of impacted materials removed from this area was approximately 20 cubic yards (25 tons).

After removing these impacted materials I proceeded to obtain two (2) discreet confirmation soil samples from native soils present at this location. One (1) sample S-1-NS-N was taken from the northern portion of this area and one (1) sample S-1-NS-S was taken from soils present on the southern portion of this small area.

These soil samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides.

Laboratory analysis results for confirmation soil samples S-1-NS-N and S-1-NS-S were Non Detect (ND) for Chlorinated Pesticides which is well below the Department of Ecology's Method A/Method B clean up levels and require no further action.

AREA S-6/CENTRAL PORTION OF PROPERTY

The mounded spent compost stockpile located in the center portion of the property in the location of investigative sample SS-6, which contained above acceptable levels of Chlorinated Pesticides was properly loaded into transport vehicles for transportation to a licensed treatment/disposal facility.

Additionally we removed approximately 5 cubic yards of materials from the location of sample S-7 (TP-102) to insure no chlorinated impacted soils were present in this area.

After removing these adversely impacted materials I proceeded to obtain confirmation soil samples from soils/materials remaining in these areas.

One (1) sample SS-6-NNN was taken from native soils present on the northern end of the spent compost stockpile clean up area, one (1) sample SS-6-NSS was taken from the native soils

present on the southern end of the spent compost stockpile clean up area, one (1) sample SS-7-E was taken from native soil present in the eastern portion of the shallow excavation located at original sample location SS-7 and one (1) soil sample SS-7-W was taken from native soils present in the western portion. All of these soil samples were obtained at shallow depths ranging from four (4) to six (6) inches below ground surface.

All samples were submitted for appropriate laboratory analysis and screened for Chlorinated Pesticides.

Laboratory analysis results for confirmation soil samples SS-6-NSN, SS-6-NSN, SS-7-E, and SS-7-W indicated no presence of above acceptable levels and require no further action.

The shallow excavation was backfilled using clean on-site fill materials.

LABORATORY ANALYSIS

All discreet groundwater samples were obtained using a "Strata Probe Sampling System" provided and operated by factory trained technicians from Transglobal Environmental Geosciences Northwest, Inc., Lacey, Washington. Continuous soil corings were extended to a depth of approximately 15 feet from ground surface. Continuous soil coring/samples (split spoon sampler) were laid out in order by depth on the surface to facilitate field screening and observation of the soils obtained from various depths.

All soil samples were taken with hand sampling tools properly cleaned between individual samples to prevent cross sample contamination.

All soil and groundwater samples were then tightly packed in recommended sample jars/vials with no head space, properly refrigerated and transported with proper chain of custody forms, to Transglobal Environmental Geosciences Northwest, Inc., Lacey, Washington, for laboratory analysis.

Selected soil samples were screened for diesel/heavy oil range T.P.H. using method WTPH-D/D-Extended.

All soil and/or groundwater samples were screened for Chlorinated Pesticides using E.P.A. Method 8080.

All laboratory analysis methods and quality controls meet or exceed current Department of Ecology recommendations for Model Toxics Control Act sites.

HEALTH AND SAFETY

1. All on-site work was performed under the Health and Safety guidelines set forth in sections 29 CRF 1910.120 of the Federal Register and Chapter 296-62 WAC which provide

regulations for individuals who are engaged in activities involving hazardous substances, including petroleum, and who perform confined space entry during field activities, also Chapter 296-155 WAC which provides State safety standards for construction work.

2. All on-site workers were 40 hour Hazmat certified.

3. A copy of the Site Safety Plan was provided to all on-site employees. The contents of this plan and all potential on-site hazards, were discussed during a personnel on-site safety meeting. Based on the contents of this safety plan all workers were required to wear at least Level D protection. First Aid materials and properly trained personnel were present on-site at all times.

FACTS AND CONCLUSIONS

All farm waste materials generated and stockpiled during remedial excavation activities were properly located and transported to Thurston County's Hawks Prairie Landfill for proper disposal. The disposal of these materials was authorized by John Libby of the Thurston County Environmental Health Department - Solid Wasted Division.

A total of 355.09 tons of materials impacted by petroleum products and/or Chlorinated Pesticides were properly loaded and transported to T.P.S. Technologies of Tacoma, Washington for proper treatment/disposal using Thermal Desorption. The treatment of these soils was approved by the Tacoma-Pierce County Health Department - Waste Management Division.

All on-site excavations were properly backfilled using on-site fill materials which were lightly compacted for stability.

All on-site excavation and backfilling activities were performed under grading permit #69339 issued by the Thurston County Public Works - Building Department.

It appears that the Total Petroleum Hydrocarbons were limited to a small quantity of soils present in excavations EP-1 and EP-2 which are located in the farm waste disposal area. It appears that these soils were impacted by small quanities of residual liquids present in the discarded oil containers being accidentally released from these containers and into the surrounding soils. The petroleum impacted soils were successfully removed and transported off-site for proper treatment/disposal.

The ground water beneath this site has not been adversely impacted by Chlorinated Pesticides.

Based on on-site observations, available information and final laboratory analysis results, it appears that the recent remedial and corrective actions performed at various locations on this site have successfully removed all known quantities of materials which contained Chlorinated Pesticides and/or Total Petroleum Hydrocarbons at levels exceeding the Department of Ecology's Method A/Method B clean up levels.

It appears that the Chlorinated Pesticides were limited to aboveground stockpiled spent compost materials in the western and central portions of the property and Chlorinated Pesticides appear to have been limited to relatively shallow depths in the farm waste disposal area.

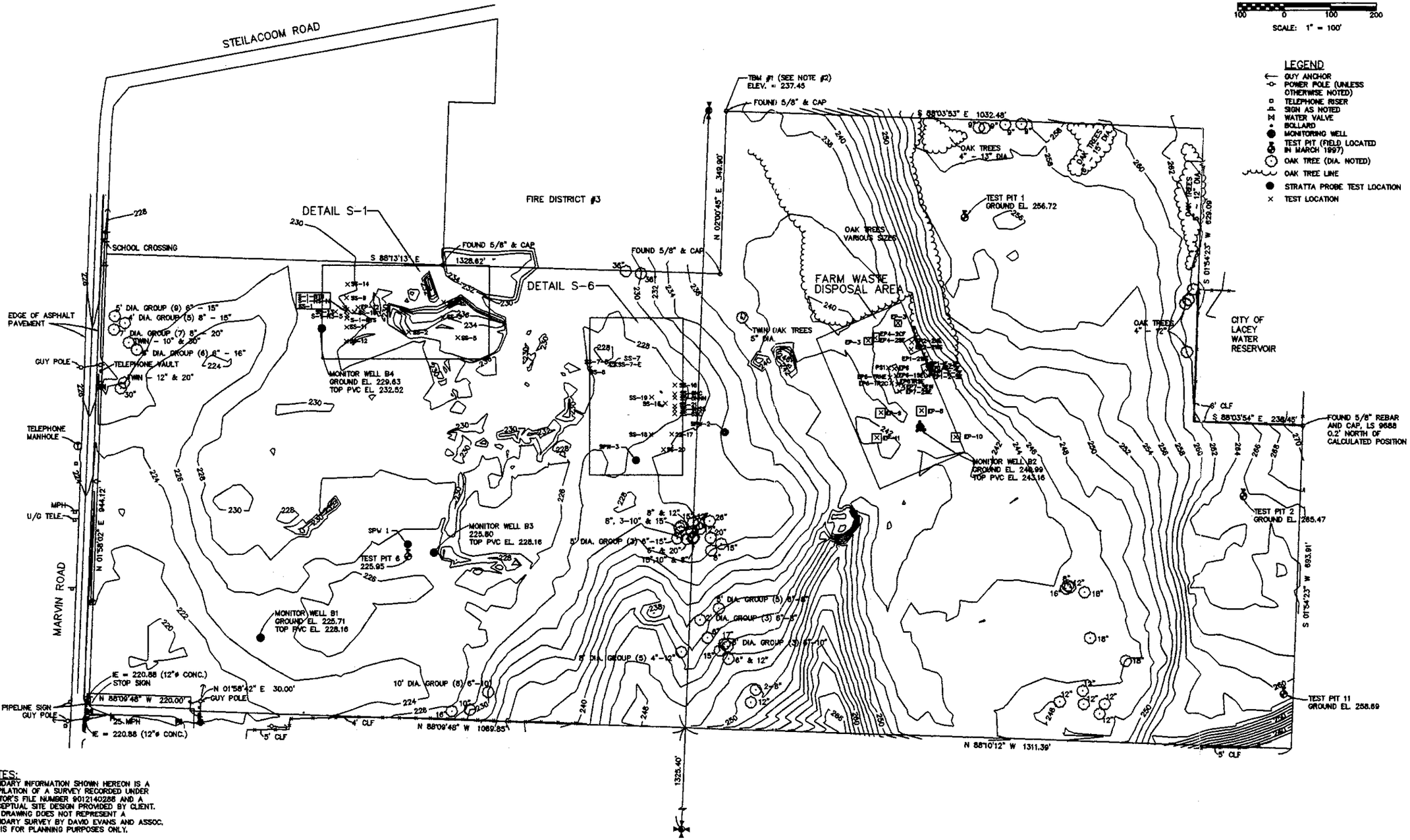
All corrective actions performed on this site meet current industry and regulatory standards for these actions.

All opinions, observations, and recommendations set forth in this report are based on current available information and on-site conditions, and can not predict or report on the impacts of future events and/or regulatory requirements on this site.

Sincerely,

Paul W. Stemen
Ecology-Registered Site Assessor
I.F.C.I. #66494
ASTM Certified

PORTIONS OF THE NW 1/4 OF THE SW 1/4 OF SEC. 13
AND NE 1/4 OF THE SE 1/4 OF SEC. 14,
ALL IN T. 18 N., R. 1 W., W.M.
THURSTON COUNTY, WASHINGTON



LEGEND

- GUY ANCHOR
- POWER POLE (UNLESS OTHERWISE NOTED)
- TELEPHONE RISER
- SIGN AS NOTED
- WATER VALVE
- BOLLARD
- MONITORING WELL
- TEST PIT (FIELD LOCATED IN MARCH 1997)
- OAK TREE (DIA. NOTED)
- OAK TREE LINE
- STRATTA PROBE TEST LOCATION
- TEST LOCATION

NOTES:

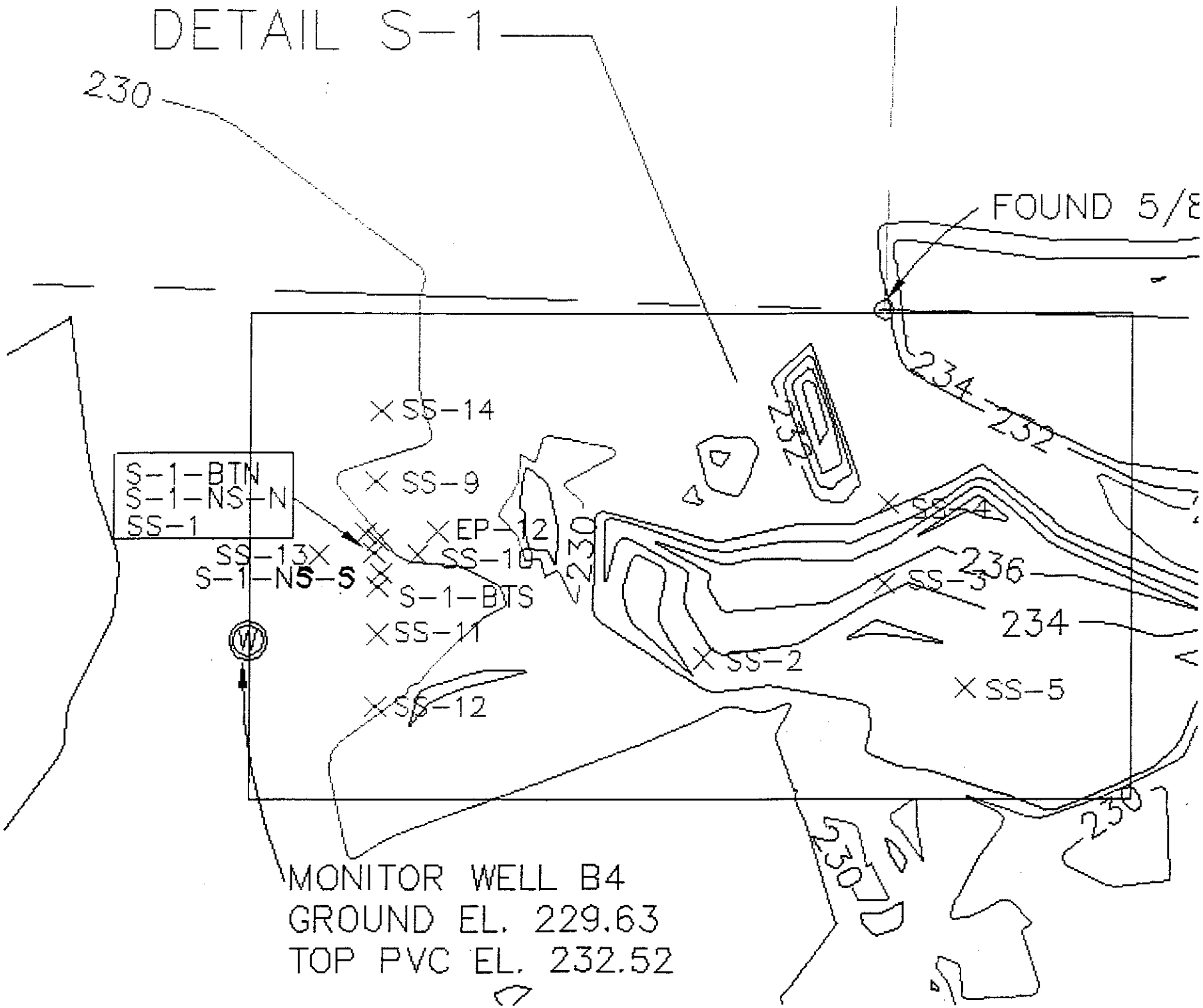
1. BOUNDARY INFORMATION SHOWN HEREON IS A COMPILATION OF A SURVEY RECORDED UNDER AUDITOR'S FILE NUMBER 9012140288 AND A CONCEPTUAL SITE DESIGN PROVIDED BY CLIENT. THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY BY DAVID EVANS AND ASSOC. AND IS FOR PLANNING PURPOSES ONLY.

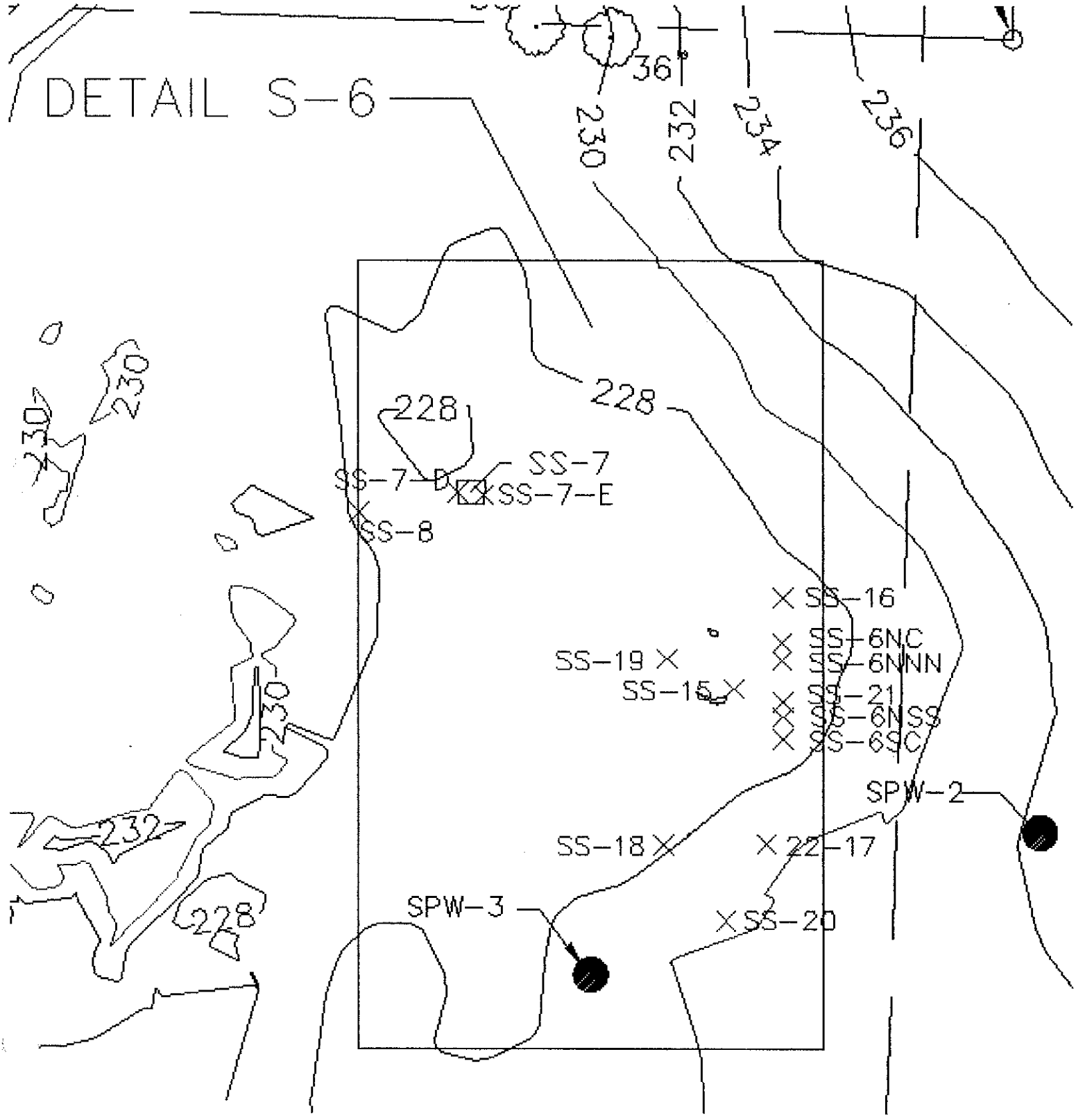
2. VERTICAL DATUM: CITY OF LACEY
   BENCHMARK: CITY OF LACEY BM #581,
   SE. TOP FLANGE BOLT OF FIRE HYDRANT AT THE NE. QUAD. OF THE INTERSECTION OF MARVIN RD. SE. & STEILACOOM RD. SE.
   ELEV = 203.57

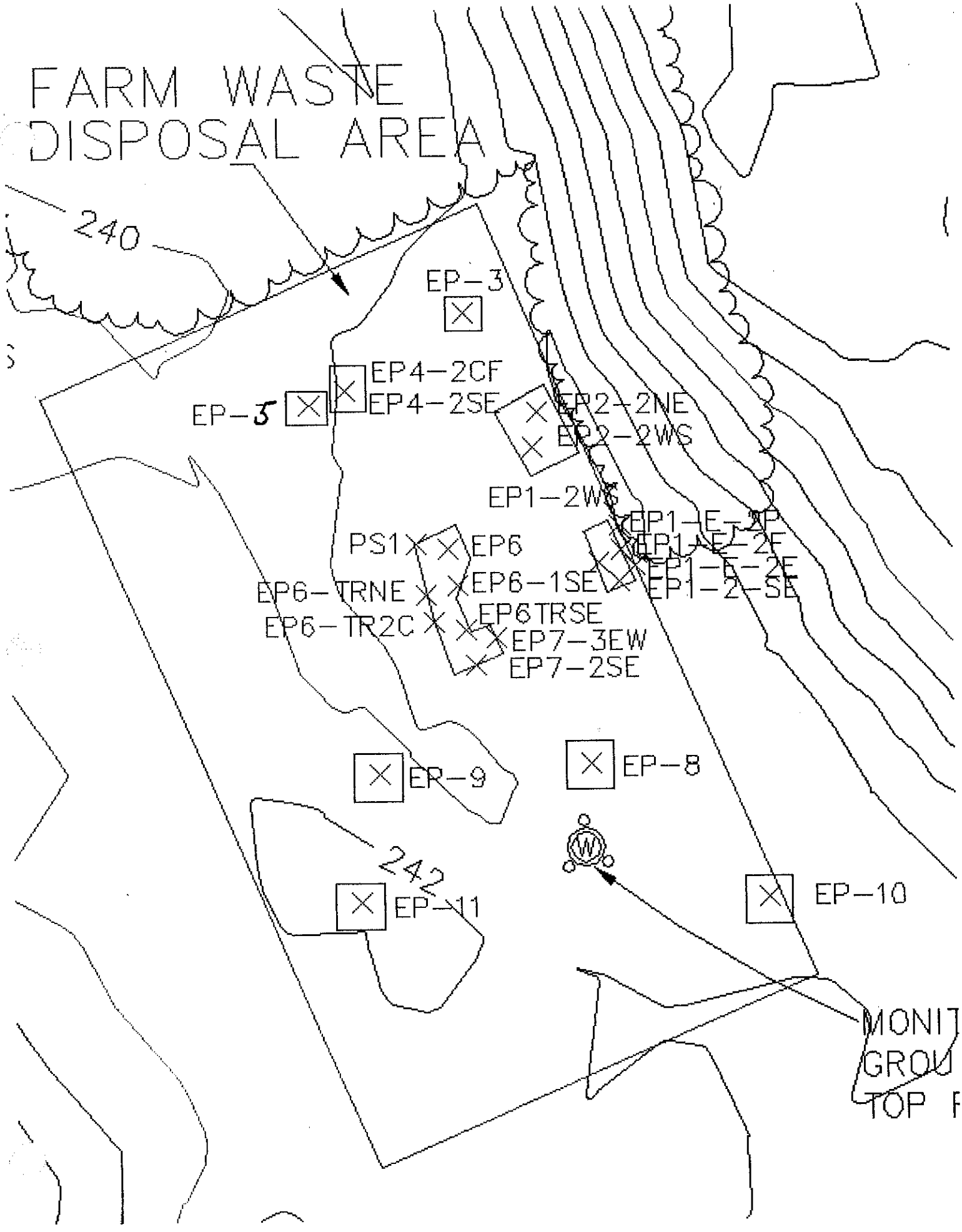
   TEMPORARY BENCHMARK #1 (TBM #1),
   TOP OF FOUND 5/8" REBAR AND CAP IN CONC. WITH 3" DIA. STEEL FENCE POST AT CORNER ON N. LINE 38.00' SE. OF W. 1/4 COR. OF SEC. 13.
   ELEV. = 237.45

UTILITY WARNING:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.


DETAIL S-1
230
FOUND 5/8
234
232
SS-14
SS-9
S-1-BTN
S-1-NS-N
SS-1
EP-12
SS-10
SS-13
S-1-NS-S
S-1-BTS
SS-11
SS-12
SS-4
SS-3
SS-2
SS-5
236
234
230
250
MONITOR WELL B4
GROUND EL. 229.63
TOP PVC EL. 232.52


DETAIL S-6
236
234
232
230
228
230
230
228
SS-7
SS-7-D
SS-7-E
SS-8
SS-16
SS-6NC
SS-6NNN
SS-19
SS-15
SS-21
SS-6NSS
SS-6SC
SPW-2
232
SS-18
22-17
228
SPW-3
SS-20


FARM WASTE
DISPOSAL AREA
240
EP-3
EP4-2CF
EP4-2SE
EP-5
EP2-2NE
EP2-2WS
EP1-2WS
EP1-E-2F
EP1-E-2E
EP1-2-SE
PS1
EP6
EP6-TRNE
EP6-1SE
EP6-TR2C
EP6TRSE
EP7-3EW
EP7-2SE
EP-9
EP-8
242
EP-11
EP-10
MONIT
GROU
TOP F

SOIL SAMPLE DATA SHEETS

			CHLORINATED PESTICIDES												
SAMPLE-NUMBER	EP-1	EP-2	EP-3	EP-4	EP-5	EP-6	EP-7	EP-8	EP-9	EP-10	EP-11	EP-12	SS-1	SS-2	SS-3
DATE	5-23-97	5-23-97	5-23-97	5-23-97	5-23-97	5-23-97	5-23-97	5-23-97	5-23-97	5-23-97	5-23-97	5-26-97	5-26-97	5-26-97	5-26-97
Depth	108"	76"	60"	36"	96"	72"	36"	24"	48"	24"	24"	36"	24"	24"	24"
a-BHC	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
b-BHC	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
g-BHC	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
d-BHC	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.011	ND	0.015
Endosulfan I	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'DDE	<.020	ND	0.096	0.224	0.035	0.162	0.39	0.158	0.184	0.298	0.024	0.023	0.456	0.05	0.058
Endrin	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	<.020	ND	0.434	0.762	0.086	0.332	1.44	0.266	0.54	0.246	ND	0.022	0.26	0.005	0.01
Endrin aldehyde	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	<.020	ND	0.336	1.04	0.008	0.088	1.62	0.37	0.094	0.548	0.032	0.019	0.888	0.03	0.025
Chlordane	<.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline	ND	ND				ND									
Diesel	ND	ND				ND									
Heavy Oil	ND	295				ND									
Bunker C	72000	ND				ND									

SOIL SAMPLE DATA SHEETS

			CHLORINATED PESTICIDES												
SAMPLE-NUMBER	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13	SS-14	SS-15	SS-16	SS-17	SS-18
DATE	5-26-97	5-26-97	5-26-97	5-26-97	5-26-97	6-2-97	6-2-97	6-2-97	6-2-97	6-2-97	6-2-97	6-2-97	6-2-97	6-2-97	6-2-97
Depth	24"	24"	24"	24"	24"	24"	12"	18"	12"	12"	10"	12"	24"	24"	24"
a-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
b-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
g-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
d-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.009	ND	ND	ND	ND
Heptachlor	ND	ND	0.102	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	0.012	ND	0.262	ND	ND	ND	ND	ND	ND	ND	0.006	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025	0.032
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'DDE	0.192	0.162	0.376	0.042	0.312	ND	ND	ND	ND	ND	0.015	0.016	0.006	0.007	0.009
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	0.125	0.076	0.19	0.078	0.418	ND	ND	ND	ND	ND	0.091	ND	0.006	0.005	0.013
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	0.046	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.23	0.048	0.158	0.037	0.042	0.011	ND	0.006	ND	ND	0.013	0.011	ND	ND	0.005
Chlordane	0.13	ND	6.86	ND	0.34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

SOIL SAMPLE DATA SHEETS

				CHLORINATED PESTICIDES							
SAMPLE-NUMBER	SS-19	SS-20	SS-21	SS6-SC	SS6-NC	TP102-C-1	TP102-C-2	EP6-SP-1	EP6-SP-2	EP6-SP-3	EP6-SP-4
DATE	6-2-97	6-2-97	6-2-97	6-12-97	6-12-97	6-12-97	6-12-97	6-13-97	6-13-97	6-13-97	6-13-97
Depth	18"	24"	48"	Various	Various	Various	Various	Various	Various	Various	Various
a-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
b-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
g-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
d-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	0.012	ND	0.009	ND	0.041	ND	ND	ND	ND	ND	ND
Endosulfan I	0.024	ND	0.029	ND	ND	ND	ND	0.003	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	0.008	0.009	ND	ND	ND	ND
4,4'DDE	0.012	0.008	0.009	ND	ND	ND	ND	0.02	ND	0.01	0.024
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	0.012	ND	ND	ND	ND	0.107	0.003	0.025	0.05
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	0.013	ND	ND	ND	ND	0.116	0.003	0.096	0.017
Chlordane	ND	ND	ND	ND	0.5	0.232	0.37	ND	ND	ND	ND

SOIL SAMPLE DATA SHEETS

				CHLORINATED PESTICIDES							
SAMPLE-NUMBER	S-1-BTN	S-1-BTS	EP-1-2-WS	EP-1-2-East	EP-1-2-SE	EP-2-2-NE	EP-2-2-WS	EP-4-2-CF	EP-6-2-WS	EP-6-2-SWE	EP-4-2-SE
DATE	6-16-97	6-16-97	9-9-97	9-9-97	9-9-97	9-9-97	9-9-97	9-9-97	9-9-97	9-9-97	9-9-97
Depth	6"	6"	92"	6'24"	144"	102"	96"	78"	36"	64"	31"
a-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
b-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
g-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
d-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'DDE	ND	ND	ND	0.133	ND	0.008	ND	0.011	0.354	0.033	0.0157
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	0.149	ND	ND	ND	0.018	0.722	0.048	0.402
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	1.49	ND	0.03	ND	0.025	1.62	0.032	0.532
Chlordane	ND	ND	ND								
Diesel			ND	ND	ND	ND	ND				
Heavy Oil			ND	ND	ND	ND	ND				

SOIL SAMPLE DATA SHEETS

				CHLORINATED PESTICIDES							
SAMPLE-NUMBER	EP-6-TR-C	EP-6-TR-NE	EP-6-TR-SE	EP-7-EC	S-1-NS-N	S-1-NS-S	EP1-E-2-E	EP1-E-2-F	EP1-E-2N	EP6-TR-2-SE	EP6-TR-2-C
DATE	9-12-97	9-12-97	9-12-97	9-12-97	9-12-97	9-12-97	9-22-97	9-22-97	9-22-97	9-22-97	9-22-97
Depth	24"	24"	24"	24"	24"	24"	18"	24"	24"	21"	24"
a-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
b-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
g-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
d-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	0.003	ND	ND
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	0.004	ND	0.025	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'DDE	0.184	0.102	0.213	0.3	ND	ND	0.008	ND	0.052	0.094	0.072
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003	ND
4,4'-DDD	0.868	0.311	1.86	1.25	ND	ND	0.016	ND	0.087	0.113	0.115
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	1.01	0.27	1.44	1.39	ND	ND	0.025	ND	0.16	0.052	0.132
Chlordane											

SOIL SAMPLE DATA SHEETS

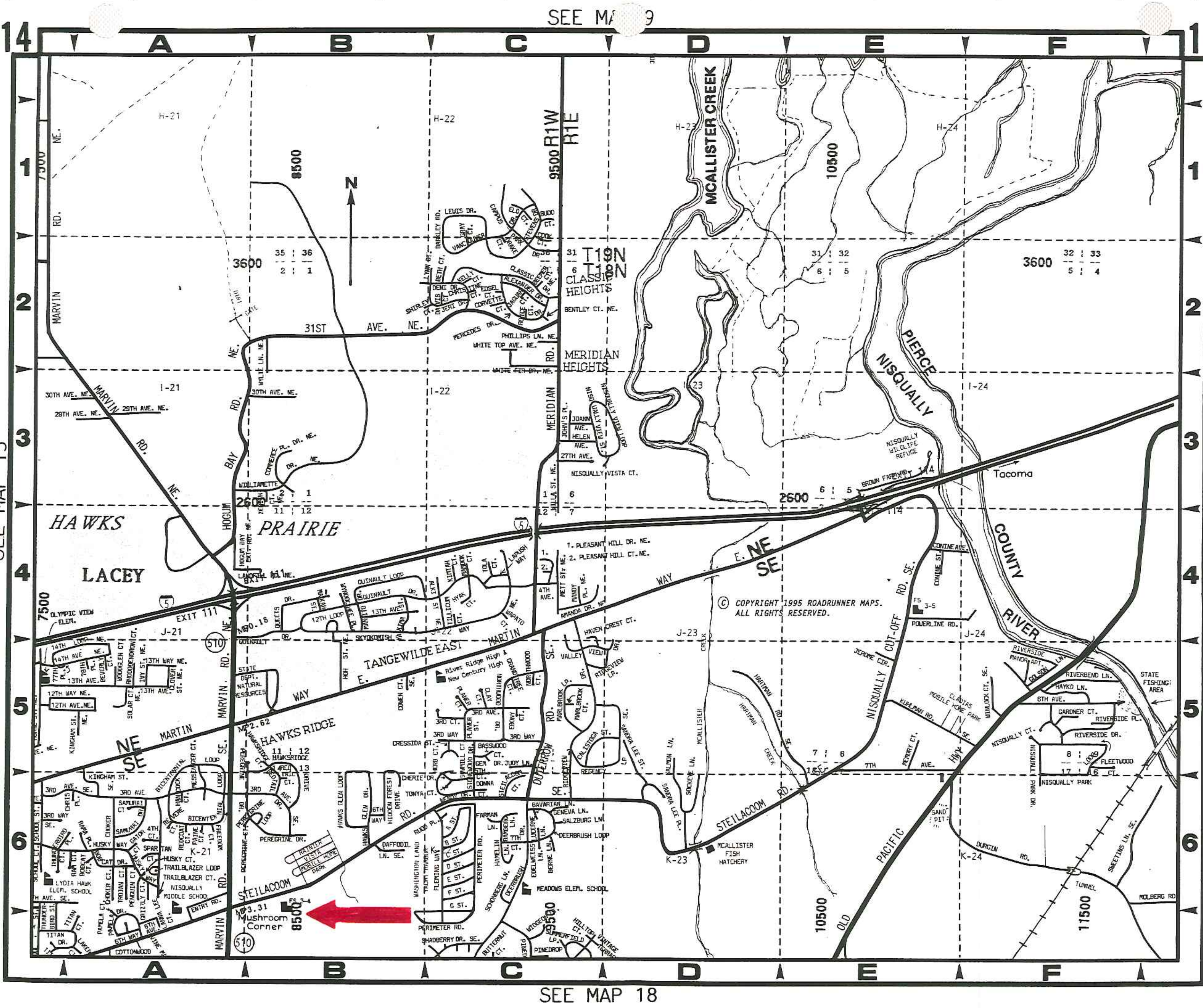
				CHLORINATED PESTICIDES							
SAMPLE-NUMBER	EP7-2-SE	EP7-EW	SS-6-NSS	SS-6-NNN	SS-7-E	SS-7-W	EP7-3-EW	PS-1			
DATE	9-22-97	9-22-97	9-22-97	9-22-97	9-22-97	9-22-97	9-23-97	8-20-97			
Depth	28"	30"	4"	4"	6"	6"	28"	36"			
a-BHC	ND	ND	ND	ND	ND	ND	ND	ND			
b-BHC	ND	ND	ND	ND	ND	ND	ND	ND			
g-BHC	ND	ND	ND	ND	ND	ND	ND	ND			
d-BHC	ND	ND	ND	ND	ND	ND	ND	ND			
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND			
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND			
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	ND			
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND			
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND			
4,4'DDE	0.051	0.76	0.003	ND	0.016	ND	0.148	ND			
Endrin	ND	ND	ND	ND	ND	ND	ND	ND			
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND			
4,4'-DDD	0.06	2.72	0.005	ND	ND	ND	0.238	ND			
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND			
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND			
4,4'-DDT	0.042	5.92	0.012	0.001	0.004	ND	0.573	ND			

GROUNDWATER SAMPLE DATA SHEET

CHLORINATED PESTICIDES			
SAMPLE-NUMBER	SPW-1	SPW-2	SPW-3
DATE	8-12-97	8-25-97	8-25-97
Depth	54'	60'	44'
a-BHC	ND	ND	ND
b-BHC	ND	ND	ND
g-BHC	ND	ND	ND
d-BHC	ND	ND	ND
Heptachlor	ND	ND	ND
Aldrin	ND	ND	ND
Heptachlor Epoxide	ND	ND	ND
Endosulfan I	ND	ND	ND
Dieldrin	ND	ND	ND
4,4'DDE	ND	ND	ND
Endrin	ND	ND	ND
Endosulfan II	ND	ND	ND
4,4'-DDD	ND	ND	ND
Endrin aldehyde	ND	ND	ND
Endosulfan sulfate	ND	ND	ND
4,4'-DDT	ND	ND	ND
Chlordane	ND	ND	ND

SECTION II

AERIAL PHOTOS AND MAPS


SEE MAP 9
SEE MAP 13
SEE MAP 18
14
A B C D E F
1 2 3 4 5 6
MCALLISTER CREEK
PIERCE
NISQUALLY
COUNTY
RIVER
HAWKS
PRAIRIE
LACEY
MERIDIAN HEIGHTS
CLASSIC HEIGHTS
T19N
T18N
R1W
R1E
TANGEWILDE EAST
HAWKS RIDGE
MARTIN WAY
STEILACOOM RD.
NISQUALLY CUT-OFF RD. SE.
OLD PACIFIC HWY
MARVIN RD.
HOGUM BAY RD.
MERIDIAN RD.
31ST AVE. NE.
EXIT 111
Tacoma
NISQUALLY WILDLIFE REFUGE
STATE FISHING AREA
MCALLISTER FISH HATCHERY
River Ridge High & New Century High
MEADOWS ELEM. SCHOOL
NISQUALLY MIDDLE SCHOOL
LYDIA HAWK ELEM. SCHOOL
OLYMPIC VIEW ELEM.
Mushroom Corner
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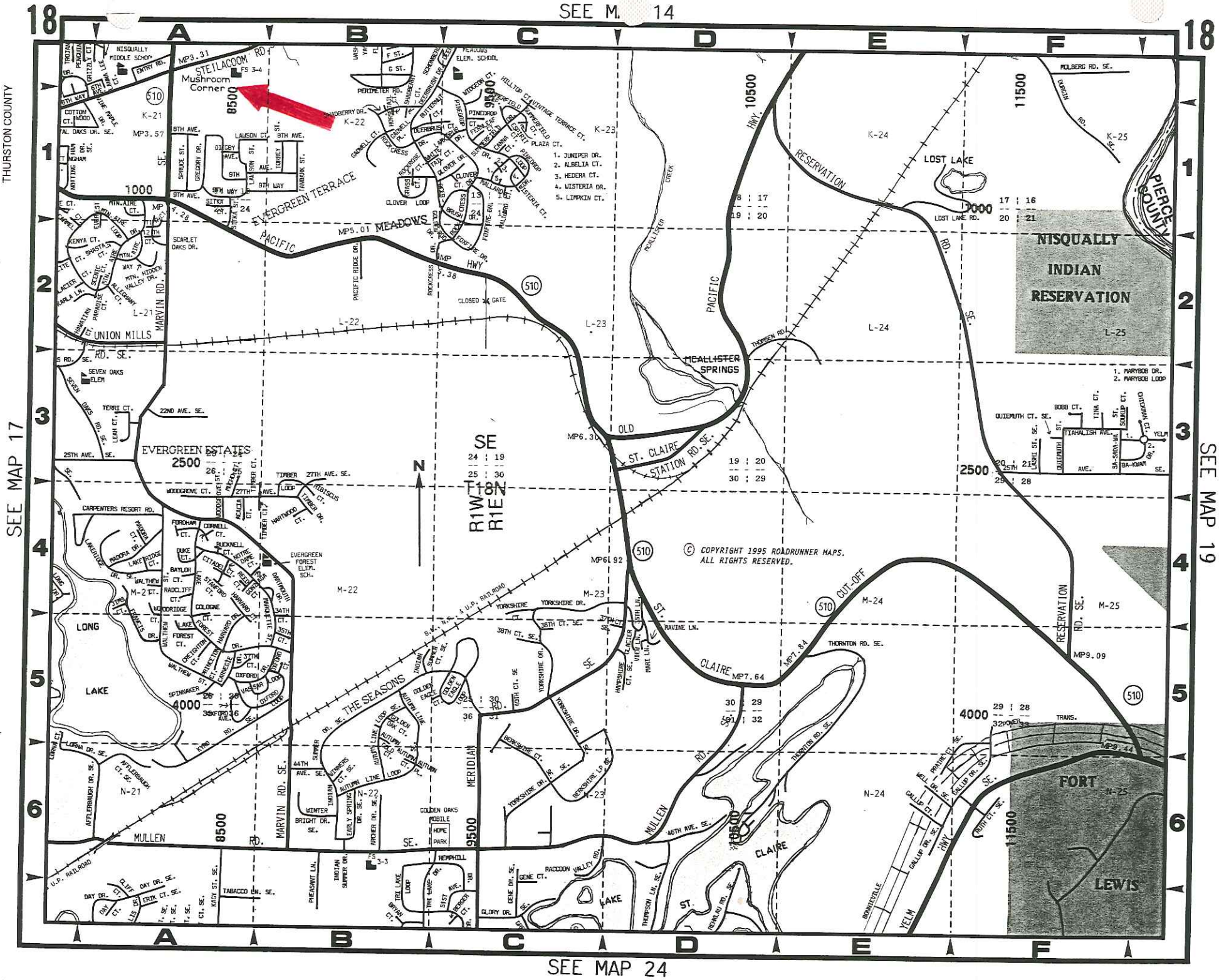
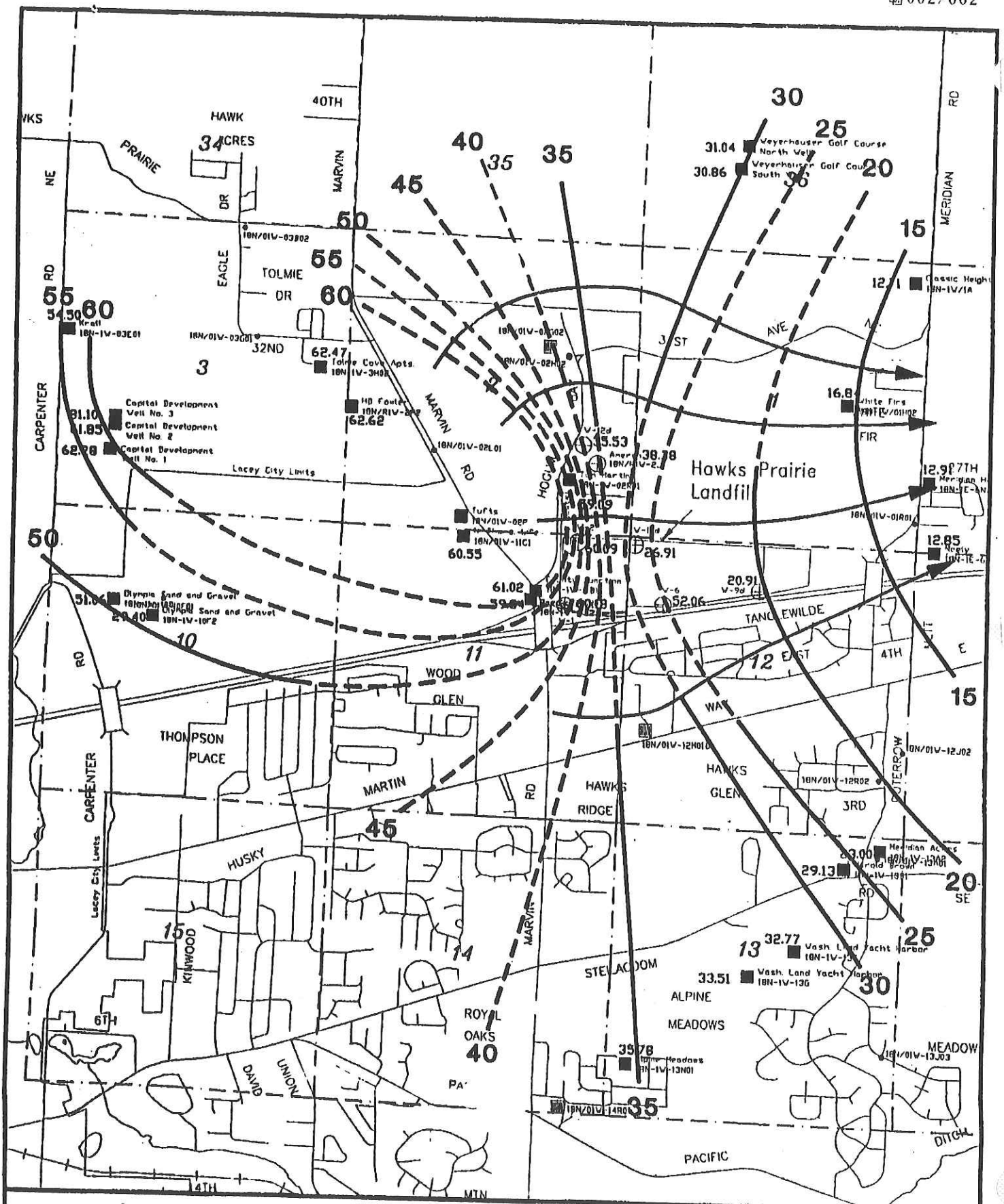

SEE M 14
SEE MAP 17
SEE MAP 19
SEE MAP 24
THURSTON COUNTY
Mushroom Corner
STEILACOOM RD.
EVERGREEN TERRACE
MEADOWS
PACIFIC
MARVIN RD.
UNION MILLS
EVERGREEN ESTATES
LONG LAKE
THE SEASONS
MULLEN RD.
CLAIRE
LOST LAKE
NISQUALLY INDIAN RESERVATION
MEALLISTER SPRINGS
OLD STATION RD. SE.
ST. CLAIRE
CUT-OFF
THORNTON RD. SE.
FORT LEWIS
T18N
R1W
R1E
SE
N
1. JUNIPER DR.
2. ALBELIA CT.
3. HEDERA CT.
4. WISTERIA DR.
5. LIMPKIN CT.
1. MARYBOB DR.
2. MARYBOB LOOP
© COPYRIGHT 1995 ROADRUNNER MAPS. ALL RIGHTS RESERVED.



30 — Water Level Contour (feet MSL) and Flow Direction

62.62 ⊕ V-1 — Landfill Well, with owner name, local number, and groundwater elevation (feet MSL)

62.47 ■ Tolmie Cove Apts. 18N-1W-3H02 — Offsite well used for water level monitoring network

N

FIGURE 4

Water Level Contours Map and Flow Direction
Sea Level Aquifer


KMT-65, 35 A-1


5-18-78


24-81


8 26 93 12500 12
SW93
28
65 250

SECTION III

ADDITIONAL PERTINENT INFORMATION

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **(360) 459-4670**
Fax: **(360) 459-3432**

June 2, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the data report for analyses conducted off-site May 27, 1997, for soil samples from the Ostroms Property Project in Olympia, Washington. The soil samples were analyzed for Gasoline, Diesel Oil and Bunker C by WTPH-Gx and WTPH-Dx/Dx Extended and Chlorinated Pesticides by EPA Method 8080.

The results of these analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec
President

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/-accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4° C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

TPH-Gasoline, TPH-Diesel
(Gasoline and/or Diesel, Modified EPA 8015, WTPH-Gx and WTPH-Dx)

A check standard is run at the beginning of the day. 1) A close standard is run at the end of the day. 2) Both open and close standards must be within 15% of the continuing calibration curve value. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135% unless high sample concentrations interfere with the determination of the recovery percentage. A duplicate sample is run at a rate of 1 per 10 samples. At least 1 method blank is run per 20 samples analyzed.

PCBs and Chlorinated Pesticides
(EPA 8080, 8081)

A method blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The check standard may be run at the end of the day. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. Samples which measure outside of the linear range of the calibration curve must be carefully diluted to fall into the upper range of the linear calibration. A duplicate sample is run at a rate of 1 per 10 samples. At least 1 method blank is run per 20 samples analyzed.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Gasoline, Diesel Oil and Bunker C in Soil by WTPH-Gx and WTPH-Dx/Dx-Extended

Sample Number	Date	Recovery %	Gasoline mg/kg	Diesel mg/kg	Heavy Oil mg/kg	Bunker C mg/kg
Meth. Blank	05/27/97	117	nd	nd	nd	nd
EP 1	05/27/97	127	nd	nd	nd	72000
EP 2	05/27/97	110	nd	nd	295	nd
EP 2 Dup	05/27/97	115	nd	nd	233	nd
EP 6	05/27/97	108	nd	nd	nd	nd
MDL			10	20	40	40

"nd" Indicates not detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	EP - 1	EP - 2	EP - 3	EP - 4	EP - 5
Date		05/27/97	05/27/97	05/27/97	05/27/97	05/27/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	<.020	nd	nd	nd	nd
b-BHC	0.001	<.020	nd	nd	nd	nd
g-BHC	0.001	<.020	nd	nd	nd	nd
d-BHC	0.001	<.020	nd	nd	nd	nd
Heptachlor	0.001	<.020	nd	nd	nd	nd
Aldrin	0.001	<.020	nd	nd	nd	nd
Heptachlor Epoxide	0.001	<.020	nd	nd	nd	nd
Endosulfan I	0.001	<.020	nd	nd	nd	nd
Dieldrin	0.001	<.020	nd	nd	nd	nd
4,4'DDE	0.001	<.020	nd	0.096	0.224	0.035
Endrin	0.001	<.020	nd	nd	nd	nd
Endosulfan II	0.001	<.020	nd	nd	nd	nd
4,4'-DDD	0.001	<.020	nd	0.434	0.762	0.086
Endrin aldehyde	0.001	<.020	nd	nd	nd	nd
Endosulfan sulfate	0.001	<.020	nd	nd	nd	nd
4,4'-DDT	0.001	<.020	nd	0.336	1.04	0.008
Chlordane	0.100	<.020	nd	nd	nd	nd
Spike Recovery (%)		int	107	110	114	114

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	EP - 6	EP - 7	EP - 8	EP - 9	EP - 10
Date		05/27/97	05/27/97	05/27/97	05/27/97	05/27/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd	nd
4,4'DDE	0.001	0.162	0.390	0.158	0.184	0.298
Endrin	0.001	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd
4,4'-DDD	0.001	0.332	1.440	0.266	0.540	0.246
Endrin aldehyde	0.001	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd
4,4'-DDT	0.001	0.088	1.620	0.370	0.094	0.548
Chlordane	0.100	nd	nd	nd	nd	nd
Spike Recovery (%)		109	105	97	119	109

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	EP - 11	EP - 12	EP - 12 Dup	0.1 PPM MS	0.1 PPM MSD
Date		05/27/97	05/27/97	05/27/97	05/27/97	05/27/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	0.105	0.098
b-BHC	0.001	nd	nd	nd	0.104	0.100
g-BHC	0.001	nd	nd	nd	0.104	0.100
d-BHC	0.001	nd	nd	nd	0.103	0.097
Heptachlor	0.001	nd	nd	nd	0.103	0.097
Aldrin	0.001	nd	nd	nd	0.103	0.094
Heptachlor Epoxide	0.001	nd	nd	nd	0.102	0.106
Endosulfan I	0.001	nd	nd	nd	0.100	0.095
Dieldrin	0.001	nd	nd	nd	0.101	0.094
4,4'DDE	0.001	0.024	0.023	0.033	0.101	0.095
Endrin	0.001	nd	nd	nd	0.113	0.094
Endosulfan II	0.001	nd	nd	nd	0.101	0.094
4,4'-DDD	0.001	nd	0.022	0.016	0.105	0.102
Endrin aldehyde	0.001	nd	nd	nd	0.830	0.092
Endosulfan sulfate	0.001	nd	nd	nd	0.950	0.095
4,4'-DDT	0.001	nd	0.032	0.019	0.950	0.094
Chlordane	0.100	nd	nd	nd	--	nd
Spike Recovery (%)		118	91	118	int	int

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	SS - 1	SS - 2	SS - 3	SS - 4	SS - 5
Date		05/27/97	05/27/97	05/27/97	05/27/97	05/27/97	05/27/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	0.011	nd	0.015	0.012	nd
Endosulfan I	0.001	nd	nd	nd	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd	nd	nd
4,4'DDE	0.001	nd	0.456	0.050	0.058	0.192	0.162
Endrin	0.001	nd	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd	nd
4,4'-DDD	0.001	nd	0.260	0.005	0.010	0.125	0.076
Endrin aldehyde	0.001	nd	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	0.888	0.030	0.025	0.230	0.048
Chlordane	0.100	nd	nd	nd	nd	0.13	nd
Spike Recovery (%)		100	96	144	92	88	103

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	SS - 6	SS - 7	SS - 8	SS - 8 Dup	
Date		05/27/97	05/27/97	05/27/97	05/27/97	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
a-BHC	0.001	nd	nd	nd	nd	
b-BHC	0.001	nd	nd	nd	nd	
g-BHC	0.001	nd	nd	nd	nd	
d-BHC	0.001	nd	nd	nd	nd	
Heptachlor	0.001	0.102	nd	nd	nd	
Aldrin	0.001	0.290	nd	nd	nd	
Heptachlor Epoxide	0.001	0.262	nd	nd	nd	
Endosulfan I	0.001	nd	nd	nd	nd	
Dieldrin	0.001	nd	nd	nd	nd	
4,4'DDE	0.001	0.376	0.042	0.312	0.350	
Endrin	0.001	nd	nd	nd	nd	
Endosulfan II	0.001	nd	nd	nd	nd	
4,4'-DDD	0.001	0.190	0.078	0.418	0.348	
Endrin aldehyde	0.001	nd	nd	nd	nd	
Endosulfan sulfate	0.001	0.046	nd	nd	nd	
4,4'-DDT	0.001	0.158	0.037	0.042	0.068	
Chlordane	0.100	6.86	nd	0.34	0.40	
Spike Recovery (%)		111	94	123	101	

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

teg TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTOD RECORD

CLIENT: STEMEN ENVIRONMENTAL INC.
ADDRESS: 120-State Ave N.E #145 Olympia, WA
PHONE (360) 438-9541 FAX:
CLIENT PROJECT #: OSTROMS PROP. PROJECT MANAGER: PAUL STEMEN

DATE: 5/23/97 PAGE 1 OF 1
PROJECT NAME: OSTROMS PROPERTY
LOCATION: Olympia, WA
COLLECTOR: PAUL STEMEN DATE OF COLLECTION 5/23

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
EP-1	108"	1200P	Soil	JAR						X			X									
EP-2	76"	1230P		"						X			X									
EP-3	60"	1300P		"									X									
EP-4	36"	1320P		"									X									
EP-5	96"	1340P		"									X									
EP-6	72"	1350P		"						X			X									
EP-7	36"	1410P		"									X									
EP-8	24"	1420P		"									X									
EP-9	48"	1430P		"									X									
EP-10	24"	1445P		"									X									
EP-11	24"	1500P		"									X									

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	5/27/97	[signature]	5/27
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS
☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	11
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	4
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **(360) 459-4670**
Fax: **(360) 459-3432**

June 9, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the data report for analyses conducted off-site June 3 and 4, 1997, for soil samples from the Ostroms Property Project in Olympia, Washington. The soil samples were analyzed for Chlorinated Pesticides by EPA Method 8080.

The results of these analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	SS - 9	SS - 10	SS - 11	SS - 12	SS - 12dup
Date		6/3/97	6/3/97	6/3/97	6/3/97	6/3/97	6/3/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	nd	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd	nd	nd
4,4'DDE	0.001	nd	nd	nd	nd	nd	nd
Endrin	0.001	nd	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd	nd
4,4'-DDD	0.001	nd	nd	nd	nd	nd	nd
Endrin aldehyde	0.001	nd	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	0.011	nd	0.006	nd	nd
Chlordane	0.100	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		100	76	88	72	81	86

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	SS - 13	SS - 14	M.Blank	SS - 15	SS - 16	SS - 17
Date		05/27/97	06/03/97	06/04/97	06/04/97	06/04/97	06/04/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd	nd
d-BHC	0.001	nd	0.009	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	0.006	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	nd	nd	nd	0.025
Dieldrin	0.001	nd	nd	nd	nd	nd	nd
4,4'DDE	0.001	nd	0.015	nd	0.016	0.006	0.007
Endrin	0.001	nd	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd	nd
4,4'-DDD	0.001	nd	0.091	nd	nd	0.006	0.005
Endrin aldehyde	0.001	nd	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	0.013	nd	0.011	nd	nd
Chlordane	0.100	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		96	109	100	101	79	63

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	SS - 18	SS - 19	SS - 20	SS - 21	100 PPB MS	100 PPB MSD
Date		06/04/97	06/04/97	06/04/97	06/04/97	06/04/97	06/04/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	0.100	0.101
b-BHC	0.001	nd	nd	nd	nd	0.100	0.102
g-BHC	0.001	nd	nd	nd	nd	0.099	0.102
d-BHC	0.001	nd	nd	nd	nd	0.099	0.100
Heptachlor	0.001	nd	nd	nd	0.004	0.099	0.100
Aldrin	0.001	nd	nd	nd	nd	0.098	0.100
Heptachlor Epoxide	0.001	nd	nd	nd	0.009	0.099	0.100
Endosulfan I	0.001	0.032	0.024	nd	0.029	0.099	0.100
Dieldrin	0.001	nd	nd	nd	nd	0.099	0.100
4,4'DDE	0.001	0.009	0.012	0.008	0.009	0.099	0.990
Endrin	0.001	nd	nd	nd	nd	0.101	0.100
Endosulfan II	0.001	nd	nd	nd	nd	0.100	0.101
4,4'-DDD	0.001	0.013	nd	nd	0.012	0.100	0.111
Endrin aldehyde	0.001	nd	nd	nd	nd	0.098	0.920
Endosulfan sulfate	0.001	nd	nd	nd	nd	0.101	0.970
4,4'-DDT	0.001	0.005	nd	nd	0.013	0.101	0.970
Chlordane	0.100	nd	nd	nd	nd	--	--
Spike Recovery (%)		55	86	108	83	int	int

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STRAUB ENVIRONMENTAL INC

ADDRESS: 120-STATE AVE NE #145 OLYMPIA, WA

PHONE (360) 438-9521 FAX:

CLIENT PROJECT #: OSTROM PROP. PROJECT MANAGER: PAUL STRAUB

DATE: 6/2/97 PAGE 1 OF 1

PROJECT NAME: OSTROM PROPERTY

LOCATION:

COLLECTOR: PAUL STRAUB DATE OF COLLECTION 6/2/97

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
SS-9	24"	1100A	SOIL	JAR										X								
SS-10	12"	1105												X								
SS-11	18"	1130												X								
SS-12	12"	1140												X								
SS-13	12"	1145												X								
SS-14	10"	1150												X								
SS-15	12"	1210												X								
SS-16	24"	1215												X								
SS-17	24"	1220												X								
SS-18	24"	1240												X								
SS-19	18"	100												X								
SS-20	24"	120												X								
SS-21	48"	150P												X								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	6/2/97	[signature]	6-2-97 1430
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	13
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	Y
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **(360) 459-4670**
Fax: **(360) 459-3432**

June 16, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the data report for analyses conducted off-site June 12 and 13, 1997, for soil samples from the Ostroms Property Project in Olympia, Washington. The soil samples were analyzed for Chlorinated Pesticides by EPA Method 8080 and Diesel and Oil by WTPH-Dx/Dx Extended.

The results of these analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	SS6 - SC	SS6 - NC	TP 102-C-1	TP 102-C-2
Date		6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	0.041	nd	nd
Dieldrin	0.001	nd	nd	nd	0.008	0.009
4,4'DDE	0.001	nd	nd	nd	nd	nd
Endrin	0.001	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd
4,4'-DDD	0.001	nd	nd	nd	nd	nd
Endrin aldehyde	0.001	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	nd	nd	nd	nd
Chlordane	0.100	nd	nd	0.500	0.232	0.370
Spike Recovery (%)		109	112	101	103	89

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	EP6-SP-1	EP6-SP-2	EP6-SP-3	EP6-SP-4
Date		6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd	nd
Endosulfan I	0.001	nd	0.003	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd	nd
4,4'DDE	0.001	nd	0.020	nd	0.010	0.024
Endrin	0.001	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd
4,4'-DDD	0.001	nd	0.107	0.003	0.025	0.050
Endrin aldehyde	0.001	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	0.116	0.003	0.096	0.017
Chlordane	0.100	nd	nd	nd	nd	nd
Spike Recovery (%)		92	92	136	81	71

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	0.100 PPM MS	0.100 PPM MSD
Date		6/12/97	6/12/97
	mg/kg	mg/kg	mg/kg
a-BHC	0.001	0.092	0.089
b-BHC	0.001	0.094	0.091
g-BHC	0.001	0.094	0.092
d-BHC	0.001	0.095	0.103
Heptachlor	0.001	0.095	0.096
Aldrin	0.001	0.096	0.098
Heptachlor Epoxide	0.001	0.094	0.095
Endosulfan I	0.001	0.095	0.092
Dieldrin	0.001	0.095	0.102
4,4'DDE	0.001	0.096	0.101
Endrin	0.001	0.109	0.101
Endosulfan II	0.001	0.096	0.091
4,4'-DDD	0.001	0.093	0.094
Endrin aldehyde	0.001	0.091	0.091
Endosulfan sulfate	0.001	0.101	0.106
4,4'-DDT	0.001	0.101	0.107
Chlordane	0.100	--	--
Spike Recovery (%)		100	76

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Diesel and Oil in Soil by WTPH-Dx/Dx-Extended

Sample Number	Date	Recovery %	Diesel mg/kg	Heavy Oil mg/kg
Meth. Blank	06/13/97	89	nd	nd
EP6-SP-1	06/13/97	86	nd	nd
EP6-SP-2	06/13/97	119	nd	nd
EP6-SP-3	06/13/97	108	nd	nd
EP6-SP-3 Dup	06/13/97	94	nd	nd
EP6-SP-4	06/13/97	93	nd	nd
MDL			20	40

"nd" Indicates not detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	0.100 PPM MS	0.100 PPM MSD
Date		6/13/97	6/13/97
	mg/kg	mg/kg	mg/kg
a-BHC	0.001	0.092	0.091
b-BHC	0.001	0.094	0.095
g-BHC	0.001	0.094	0.094
d-BHC	0.001	0.095	0.102
Heptachlor	0.001	0.094	0.099
Aldrin	0.001	0.094	0.101
Heptachlor Epoxide	0.001	0.113	0.099
Endosulfan I	0.001	0.094	0.098
Dieldrin	0.001	0.096	0.097
4,4'DDE	0.001	0.096	0.097
Endrin	0.001	0.097	0.109
Endosulfan II	0.001	0.094	0.099
4,4'-DDD	0.001	0.097	0.096
Endrin aldehyde	0.001	0.082	0.096
Endosulfan sulfate	0.001	0.099	0.109
4,4'-DDT	0.001	0.099	0.110
Chlordane	0.100	--	--
Spike Recovery (%)		int	int

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

tey TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STEMEN ENVIRONMENTAL INC

ADDRESS: 120 - STATE AVE N.E #145 Olympia, WA

PHONE (360) 438-9521 FAX:

CLIENT PROJECT #: OSTROMS PROJECT MANAGER: PAUL STEMEN

DATE: June 12, 1997 PAGE 1 OF 1

PROJECT NAME: OSTROMS PROJECT

LOCATION: Olympia, WA

COLLECTOR: PAUL STEMEN DATE OF COLLECTION 6/12/97

Sample Number	Depth	Time	Sample Type	Container Type	PAH 610/8100	Total Number of Containers	Laboratory Note Number	FIELD NOTES
SSL-SC	VAR	1000	SOIL	JAR	4	1		
SSL-NC	VAR	935	"	"	4	1		
TP102-C-1	VAR	940	"	"	4	1		
TP102-C-2	VAR	945	"	"	4	1		

ANALYSES: VOA 601/8010; VOA 602/8020; VOA 624/8240; Semi Vol 625/8270; TPH 418.1; TPH 8015 (gasoline); TPH (8015 (diesel); TPH 8015 (g & d); PAH 610/8100; PEST/PCBs 8080; HEX CHROME; ORGANIC LEAD; TOTAL LEAD; pH; ASBESTOS

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	6/12/97	[signature]	6-12-97 1045
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	4
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	4
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTOD' RECORD

CLIENT: STEMEN ENVIRONMENTAL INC

ADDRESS: 120 - STATE AVE N.E #145 OLYMPIA, WA

PHONE (360) 438-9521 FAX:

CLIENT PROJECT #: OSTROMS PROJECT MANAGER: PAUL STEMEN

DATE: 6/13/97 PAGE 1 OF 1

PROJECT NAME: OSTROMS PROPERTY

LOCATION: OLYMPIA, WA

COLLECTOR: PAUL STEMEN DATE OF COLLECTION 6/13

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
EP6-SP-1	VAR	1200	SOIL	JAR						X			X									
EP6-SP-2		1010		"						X			X							LOCATED		
EP6-SP-3		1220		"						X			X							STOCKPILE		
EP6-SP-4		1230		"						X			X							SAMPLES FROM		
																				AREA OF EP-6		

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	6/13/97	[signature]	1320 6-13-97
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	4
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	4°
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: (360) 459-4670
Fax: (360) 459-3432

June 18, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the data report for analyses conducted off-site June 16, 1997, for soil samples from the Ostroms Property Project in Olympia, Washington. The soil samples were analyzed for Chlorinated Pesticides by EPA Method 8080.

The results of these analyses are summarized in the attached table. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	S-1-BTS	S-1-BTS Dup	S-1-BTN
Date		6/16/97	6/16/97	6/16/97	6/16/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd
4,4'DDE	0.001	nd	nd	nd	nd
Endrin	0.001	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd
4,4'-DDD	0.001	nd	nd	nd	nd
Endrin aldehyde	0.001	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd
4,4'-DDT	0.001	nd	nd	nd	nd
Chlordane	0.100	nd	nd	nd	nd
Spike Recovery (%)		87	117	108	88

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	0.100 PPM MS	0.100 PPM MSD
Date		6/16/97	6/16/97
	mg/kg	mg/kg	mg/kg
a-BHC	0.001	0.101	0.092
b-BHC	0.001	0.101	0.092
g-BHC	0.001	0.106	0.092
d-BHC	0.001	0.103	0.098
Heptachlor	0.001	0.103	0.088
Aldrin	0.001	0.102	0.094
Heptachlor Epoxide	0.001	0.102	0.095
Endosulfan I	0.001	0.101	0.095
Dieldrin	0.001	0.102	0.096
4,4'DDE	0.001	0.103	0.097
Endrin	0.001	0.086	0.090
Endosulfan II	0.001	0.099	0.097
4,4'-DDD	0.001	0.099	0.093
Endrin aldehyde	0.001	0.113	0.097
Endosulfan sulfate	0.001	0.101	0.099
4,4'-DDT	0.001	0.114	0.099
Chlordane	0.100	--	--
Spike Recovery (%)		int	int

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

teg TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTOD' RECORD

CLIENT: STEMEN ENVIRONMENTAL INC.

ADDRESS: 120 STATE AVE N.E #145 OLYMPIA, WA

PHONE (360) 438-9521 FAX:

CLIENT PROJECT #: OSTROMS PROJECT MANAGER: PAUL STEMEN

DATE: 6/16/97 PAGE 1 OF 1

PROJECT NAME: OSTROMS PARKING

LOCATION: OLYMPIA, WA

COLLECTOR: PAUL STEMEN DATE OF COLLECTION 6/16

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
S-1-6TN	6"	1200	SOIL	JAR									X								1	
S-1-6TS	6"	1215	"	"									X								1	

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	6/16/97	[signature]	1320 6-16-97
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	2
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	4
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: 360-459-4670
Fax: 360-459-3432

August 15, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the analytical data report for the Ostroms Property Project in Olympia, Washington. The StrataProbe collected one water sample at the Project site on August 12, 1997. This sample was analyzed on August 13, 1997, for Chlorinated Pesticides by EPA Method 8080.

The results of these analyses are summarized in the attached table. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided geosampling and analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	SPW-1	SPW-1 Dup		
Date		8/13/97	8/13/97	8/13/97		
	ug/l	ug/l	ug/l	ug/l		
a-BHC	1	nd	nd	nd		
b-BHC	1	nd	nd	nd		
g-BHC	1	nd	nd	nd		
d-BHC	1	nd	nd	nd		
Heptachlor	1	nd	nd	nd		
Aldrin	1	nd	nd	nd		
Heptachlor Epoxide	1	nd	nd	nd		
Endosulfan I	1	nd	nd	nd		
Dieldrin	1	nd	nd	nd		
4,4'DDE	1	nd	nd	nd		
Endrin	1	nd	nd	nd		
Endosulfan II	1	nd	nd	nd		
4,4'-DDD	1	nd	nd	nd		
Endrin aldehyde	1	nd	nd	nd		
Endosulfan sulfate	1	nd	nd	nd		
4,4'-DDT	1	nd	nd	nd		
Chlordane	50	nd	nd	nd		
Spike Recovery (%)		86	123	118		

"nd" Indicates Not Detected at the listed detection limit.

"int" Indicates that interference peaks prevent determination.

"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	100 PPB MS	100 PPB MSD
Date		8/13/97	8/13/97
	ug/l	ug/l	ug/l
a-BHC	1	76	72
b-BHC	1	75	70
g-BHC	1	75	70
d-BHC	1	75	70
Heptachlor	1	70	78
Aldrin	1	79	80
Heptachlor Epoxide	1	76	82
Endosulfan I	1	93	82
Dieldrin	1	89	83
4,4'DDE	1	89	84
Endrin	1	89	77
Endosulfan II	1	80	77
4,4'-DDD	1	95	82
Endrin aldehyde	1	94	83
Endosulfan sulfate	1	90	75
4,4'-DDT	1	90	81
Chlordane	50	--	--
Spike Recovery (%)		int	int

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STEMEN ENVIRONMENTAL INC.

ADDRESS: 120 STATE AVE N.E #145 Olympia, WA

PHONE (360) 438-9521 FAX:

CLIENT PROJECT #: OSTROMS PROPERTY PROJECT MANAGER:

DATE: 8/12/97 PAGE 1 OF 1

PROJECT NAME: OSTROMS PROPERTY

LOCATION: LACEY, WA

COLLECTOR: PAUL SEM[illegible] DATE OF COLLECTION 8/12

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
SPW-1	54'	1045A	H2O	VIAL										X						STRATA PROBE SAMPLE		

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	8/12	[signature]	8-12-97 3:30 pm

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	1
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: 360-459-4670
Fax: 360-459-3432

August 28, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed an invoice for StrataProbe work conducted on August 25, 1997, at the Ostroms Project site in Olympia, Washington.

TEG Northwest appreciates the opportunity to have provided geosampling services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **(360) 459-4670**
Fax: **(360) 459-3432**

August 28, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the data report for analyses conducted on August 27, 1997, for samples from the Ostroms Property Project in Olympia, Washington. One soil sample and two water samples were analyzed for Chlorinated Pesticides by EPA Method 8080.

The results of these analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	SPW-2	SPW-3		
Date		8/27/97	8/27/97	8/27/97		
	ug/l	ug/l	ug/l	ug/l		
a-BHC	1	nd	nd	nd		
b-BHC	1	nd	nd	nd		
g-BHC	1	nd	nd	nd		
d-BHC	1	nd	nd	nd		
Heptachlor	1	nd	nd	nd		
Aldrin	1	nd	nd	nd		
Heptachlor Epoxide	1	nd	nd	nd		
Endosulfan I	1	nd	nd	nd		
Dieldrin	1	nd	nd	nd		
4,4'DDE	1	nd	nd	nd		
Endrin	1	nd	nd	nd		
Endosulfan II	1	nd	nd	nd		
4,4'-DDD	1	nd	nd	nd		
Endrin aldehyde	1	nd	nd	nd		
Endosulfan sulfate	1	nd	nd	nd		
4,4'-DDT	1	nd	nd	nd		
Chlordane	50	nd	nd	nd		
Spike Recovery (%)		93	112	115		

"nd" Indicates Not Detected at the listed detection limit.

"int" Indicates that interference peaks prevent determination.

"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	100 PPB MS	100 PPB MSD
Date		8/27/97	8/27/97
	ug/l	ug/l	ug/l
a-BHC	1	96	86
b-BHC	1	96	86
g-BHC	1	96	85
d-BHC	1	97	88
Heptachlor	1	104	86
Aldrin	1	104	90
Heptachlor Epoxide	1	105	87
Endosulfan I	1	100	88
Dieldrin	1	99	90
4,4'DDE	1	99	91
Endrin	1	100	90
Endosulfan II	1	100	92
4,4'-DDD	1	90	92
Endrin aldehyde	1	91	92
Endosulfan sulfate	1	83	94
4,4'-DDT	1	84	98
Chlordane	50	--	--
Spike Recovery (%)		int	int

"nd" Indicates Not Detected at the listed detection limit.

"int" Indicates that interference peaks prevent determination.

"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	PS-1	PS-1 Dup		
Date		8/27/97	8/27/97	8/27/97		
	mg/kg	mg/kg	mg/kg	mg/kg		
a-BHC	0.001	nd	nd	nd		
b-BHC	0.001	nd	nd	nd		
g-BHC	0.001	nd	nd	nd		
d-BHC	0.001	nd	nd	nd		
Heptachlor	0.001	nd	nd	nd		
Aldrin	0.001	nd	nd	nd		
Heptachlor Epoxide	0.001	nd	nd	nd		
Endosulfan I	0.001	nd	nd	nd		
Dieldrin	0.001	nd	nd	nd		
4,4'DDE	0.001	nd	nd	nd		
Endrin	0.001	nd	nd	nd		
Endosulfan II	0.001	nd	nd	nd		
4,4'-DDD	0.001	nd	nd	nd		
Endrin aldehyde	0.001	nd	nd	nd		
Endosulfan sulfate	0.001	nd	nd	nd		
4,4'-DDT	0.001	nd	nd	nd		
Chlordane	0.100	nd	nd	nd		
Spike Recovery (%)		92	88	97		

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Olympia, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	0.1 PPM MS	0.1 PPM MSD
Date		8/27/97	8/27/97
	mg/kg	mg/kg	mg/kg
a-BHC	0.001	0.087	0.084
b-BHC	0.001	0.098	0.095
g-BHC	0.001	0.101	0.098
d-BHC	0.001	0.098	0.098
Heptachlor	0.001	0.103	0.097
Aldrin	0.001	0.094	0.096
Heptachlor Epoxide	0.001	0.100	0.097
Endosulfan I	0.001	0.101	0.098
Dieldrin	0.001	0.101	0.098
4,4'DDE	0.001	0.101	0.098
Endrin	0.001	0.104	0.105
Endosulfan II	0.001	0.102	0.100
4,4'-DDD	0.001	0.103	0.100
Endrin aldehyde	0.001	0.096	0.095
Endosulfan sulfate	0.001	0.112	0.102
4,4'-DDT	0.001	0.096	0.095
Chlordane	0.100	--	--
Spike Recovery (%)		int	int

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STREMEL ENVIRONMENTAL INC.

ADDRESS: 120 STATE AVE N.E #145 Olympia, WA

PHONE (360) 438-9521 FAX:

CLIENT PROJECT #: OSTROMS PROJECT MANAGER: PAUL STREMEL

DATE: 8/20/97 PAGE 1 OF 1

PROJECT NAME: OSTROMS PROPERTY

LOCATION: CASEY, WA

COLLECTOR: PAUL STREMEL DATE OF COLLECTION 8/20

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel))	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS						FIELD NOTES	Total Number of Containers	Laboratory Note Number
PS-1	36"	1200	Soil	Jar										X											Permanent		

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	8/20/97	[signature]	12:35 8/20
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STRATUS ENVIRONMENTAL INC

ADDRESS: 126 - STATE AVENUE #145 Olympia, WA

PHONE (360) 438 4524 FAX:

CLIENT PROJECT #: USTRONICS INC PROJECT MANAGER: DAVE STRATUS

DATE: 8/25/97 PAGE 1 OF 1

PROJECT NAME: USTRONICS INC

LOCATION:

COLLECTOR: DV DATE OF COLLECTION 8/25/97

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
SPW2	60'	1100	H_2O	VOA's									X								4	
SPW3	44'	1300	"	"									X							STRATUS PRIVATE WATER SAMPLES	4	

RELINQUISHED BY (Signature) DATE/TIME: 8/25/97 RECEIVED BY (Signature) DATE/TIME: 1321 8/25/97

RELINQUISHED BY (Signature) DATE/TIME RECEIVED BY (Signature) DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **(360) 459-4670**
Fax: **(360) 459-3432**

September 11, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the data report for analyses conducted on September 10, 1997, for soil samples from the Ostroms Property Project in Lacey, Washington. The soil samples were analyzed for Diesel and Oil by WTPH-Dx/Dx Extended and Chlorinated Pesticides by EPA Method 8080.

The results of these analyses are summarized in the attached table. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Lacey, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	EP-1-2-WS	EP-1-2-East	EP-1-2-East Dup	EP-1-2-SE	EP-2-2-NE	EP-2-2-WS
Date		09/10/97	09/10/97	09/10/97	09/10/97	09/10/97	09/10/97	09/10/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	nd	nd	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'DDE	0.001	nd	nd	0.133	0.148	nd	0.008	nd
Endrin	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'-DDD	0.001	nd	nd	0.149	0.176	nd	nd	nd
Endrin aldehyde	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	nd	1.49	1.71	nd	0.030	nd
Spike Recovery (%)		88	85	118	114	99	120	130

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Lacey, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	EP-4-2-CF	EP-6-2-WS	EP-6-2-SWE	EP-4-2-SE
Date		09/10/97	09/10/97	09/10/97	09/10/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd
4,4'DDE	0.001	0.011	0.354	0.033	0.157
Endrin	0.001	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd
4,4'-DDD	0.001	0.018	0.722	0.048	0.402
Endrin aldehyde	0.001	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd
4,4'-DDT	0.001	0.025	1.620	0.032	0.530
Spike Recovery (%)		116	int	98	115

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Lacey, Washington
Stemen Environmental, Inc.

Diesel and Oil in Soil by WTPH-Dx/Dx-Extended

Sample Number	Date	Recovery %	Diesel mg/kg	Heavy Oil mg/kg
Meth. Blank	09/10/97	84	nd	nd
EP-1-2-WS	09/10/97	116	nd	nd
EP-1-2-SE	09/10/97	87	nd	nd
EP-1-2-East	09/10/97	105	nd	nd
EP-2-2-NE	09/10/97	111	nd	nd
EP-2-2-WS	09/10/97	90	nd	nd
EP-2-2-WS Dup	09/10/97	113	nd	nd
MDL			20	40

"nd" Indicates not detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.

teg TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STEMER ENVIRONMENTAL INC.
ADDRESS: 120 - STATE AVE NE #145 OLYMPIA, WA
PHONE (360) 438-8521 FAX:
CLIENT PROJECT #: OSTREMS PROJECT MANAGER:

DATE: 9/9/97 PAGE 1 OF 1
PROJECT NAME: OSTREMS PROPERTY
LOCATION: ~~ACCT~~, WA
COLLECTOR: PAUL STEMER DATE OF COLLECTION 9/9

Sample Number	Depth	Time	Sample Type	Container Type	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	FIELD NOTES	Total Number of Containers	Laboratory Note Number
EP-1-2-WS	92"	1000A	SOIL	JAR	X		X				
EP-1-2-SE	144"	1010A	"	"	X		X				
EP-1-2 EAST	6-24"	1015A	"	"	X		X				
EP2-2-NE	102"	1100A		"	X		X				
EP2-2-WS	96"	1110A	"	"	X		X				
EP-4-2-CF	78"	1130A		"			X				
EP6-2-WS	36"	1140A		"			X				
EP6-2-SW	64"	1150A					X				
EP-4-2-SE	31"	1210P					X				
							X				

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	9/10/97	Michael Azevedo	9/10/97
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS
☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **(360) 459-4670**
Fax: **(360) 459-3432**

September 15, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the data report for analyses conducted on September 12, 1997, for soil samples from the Ostroms Property Project in Lacey, Washington. The soil samples were analyzed for Chlorinated Pesticides by EPA Method 8080.

The results of these analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Lacey, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	EP-6-TR-C	EP-6-TR-NE	EP-6-TR-SE	EP-7-EC	EP-7-EC Dup	S-1-NS-N
Date		09/12/97	09/12/97	09/12/97	09/12/97	09/12/97	09/12/97	09/12/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	nd	nd	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'DDE	0.001	nd	0.184	0.102	0.213	0.300	0.270	nd
Endrin	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'-DDD	0.001	nd	0.868	0.311	1.860	1.250	1.320	nd
Endrin aldehyde	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	1.010	0.270	1.440	1.390	1.180	nd
Spike Recovery (%)		89	71	87	112	128	112	123

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Lacey, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	S-1-NS-S	0.100 PPM MS	0.100 PPM MSD
Date		09/12/97	09/12/97	09/12/97
	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	0.115	0.115
b-BHC	0.001	nd	0.118	0.115
g-BHC	0.001	nd	0.115	0.113
d-BHC	0.001	nd	0.117	0.111
Heptachlor	0.001	nd	0.118	0.111
Aldrin	0.001	nd	0.115	0.113
Heptachlor Epoxide	0.001	nd	0.118	0.112
Endosulfan I	0.001	nd	0.115	0.108
Dieldrin	0.001	nd	0.102	0.097
4,4'DDE	0.001	nd	0.102	0.097
Endrin	0.001	nd	0.115	0.100
Endosulfan II	0.001	nd	0.119	0.120
4,4'-DDD	0.001	nd	0.119	0.119
Endrin aldehyde	0.001	nd	0.119	0.118
Endosulfan sulfate	0.001	nd	0.119	0.117
4,4'-DDT	0.001	nd	0.115	0.114
Spike Recovery (%)		103	int	int

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STEMEN ENVIRONMENTAL INC.

ADDRESS: 120 STATE AVENUE #145 OLYMPIA, WA

PHONE (360) 438-9521 FAX:

CLIENT PROJECT #: OSTROM'S PROP PROJECT MANAGER: PAUL STEMEN

DATE: 9/12/97 PAGE 1 OF 1

PROJECT NAME: OSTROM'S PROPERTY

LOCATION: CHEHALIS, WA

COLLECTOR: PAUL STEMEN DATE OF COLLECTION 9/12

Sample Number	Depth	Time	Sample Type	Container Type	VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
EPG-TR-C	24	900A	SOIL	JAR									X									
EPG-TR-NE	24"	710A	"	"									X									
EPG-TR-SE	24"	915A	"	"									X									
EPG-EC	24"	925A	"	"									X									
S-1-NS-N	24"	935A	"	"									X									
S-1-NS-S	24"	950A	"	"									X									
				"																		

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	9/12/97	[signature]	9-12-97
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	6
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	Y
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE
Lacey, Washington 98503

Mobile Environmental Laboratories
Environmental Sampling Services

Telephone: **(360) 459-4670**
Fax: **(360) 459-3432**

September 24, 1997

Paul Stemen
Stemen Environmental
120 State Avenue NE. #145
Olympia, WA 98501

Dear Mr. Stemen:

Please find enclosed the analytical data report for the Ostroms Property Project in Lacey, Washington. Soil samples were analyzed for Chlorinated Pesticides by Method 8080 on September 22 and 23, 1997.

The results of these analyses are summarized in the attached table. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Stemen Environmental for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

OSTROMS PROPERTY PROJECT
Lacey, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	EP1-E-2-E	EP1-E-2-E Du	EP1-E-2-F	EP1-E-2N	EP6-TR-2-SE	EP6-TR-2-C
Date		09/22/97	09/22/97	09/22/97	09/22/97	09/22/97	09/22/97	09/22/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	0.003	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan I	0.001	nd	0.004	0.006	nd	0.025	nd	nd
Dieldrin	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'DDE	0.001	nd	0.008	0.009	nd	0.052	0.094	0.072
Endrin	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd	0.003	nd
4,4'-DDD	0.001	nd	0.016	0.018	nd	0.087	0.113	0.115
Endrin aldehyde	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	0.025	0.033	nd	0.160	0.052	0.132
Spike Recovery (%)		97	96	98	91	100	112	102

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Lacey, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	EP7-2-SE	EP7-2-EW	0.100 PPM MS	0.100 PPM MSD		
Date		09/22/97	09/22/97	09/22/97	09/22/97		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
a-BHC	0.001	nd	nd	0.118	0.113		
b-BHC	0.001	nd	nd	0.116	0.119		
g-BHC	0.001	nd	nd	0.122	0.114		
d-BHC	0.001	nd	nd	0.122	0.117		
Heptachlor	0.001	nd	nd	0.125	0.114		
Aldrin	0.001	nd	nd	0.114	0.123		
Heptachlor Epoxide	0.001	nd	nd	0.112	0.118		
Endosulfan I	0.001	nd	nd	0.11	0.112		
Dieldrin	0.001	nd	nd	0.112	0.114		
4,4'DDE	0.001	0.051	0.76	0.115	0.114		
Endrin	0.001	nd	nd	0.118	0.111		
Endosulfan II	0.001	nd	nd	0.122	0.114		
4,4'-DDD	0.001	0.060	2.72	0.121	0.114		
Endrin aldehyde	0.001	nd	nd	0.115	0.116		
Endosulfan sulfate	0.001	nd	nd	0.115	0.116		
4,4'-DDT	0.001	0.042	5.92	0.116	0.117		
Spike Recovery (%)			119	int	int		

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

OSTROMS PROPERTY PROJECT
Lacey, Washington
Stemen Environmental, Inc.

Chlorinated Pesticides by EPA Method 8080

Sample-Number	MDL	M. Blank	SS-6-NSS	SS-6-NNN	SS-7-E	SS-7-W	EP7-3-EW	EP7-3-EW Dup
Date		09/23/97	09/23/97	09/23/97	09/23/97	09/23/97	09/23/97	09/23/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
a-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
b-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
g-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
d-BHC	0.001	nd	nd	nd	nd	nd	nd	nd
Heptachlor	0.001	nd	nd	nd	nd	nd	nd	nd
Aldrin	0.001	nd	nd	nd	nd	nd	nd	nd
Heptachlor Epoxide	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan I	0.001	nd	nd	nd	nd	nd	nd	nd
Dieldrin	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'DDE	0.001	nd	0.003	nd	0.016	nd	0.158	0.148
Endrin	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan II	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'-DDD	0.001	nd	0.005	nd	nd	nd	0.320	0.238
Endrin aldehyde	0.001	nd	nd	nd	nd	nd	nd	nd
Endosulfan sulfate	0.001	nd	nd	nd	nd	nd	nd	nd
4,4'-DDT	0.001	nd	0.012	0.001	0.004	nd	0.735	0.573
Spike Recovery (%)		112	97	98	115	98	108	111

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.
"--" Indicates that component co-elutes with previous component.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STEMEN ENVIRONMENTAL INC

ADDRESS: 120 - STATE AVE NE, #145 OLYMPIA, WA

PHONE (360) 438-5521 FAX:

CLIENT PROJECT #: OSTROMS PROPERTY PROJECT MANAGER: PAUL STEMEN

DATE: 9/22/97 PAGE 1 OF 1

PROJECT NAME: OSTROMS PROPERTY

LOCATION: OLYMPIA, WA.

COLLECTOR: PAUL STEMEN DATE OF COLLECTION 9/17

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
EP1-E-2-E	18"	1000	SOIL	TAL									X									
EP1-E-2-F	24"	1150	"	"									X									
EP1-E-2N	24"	1250	"	"									X									
EP6-TR-2-SE	21"	1350	"	"									X									
EP6-TR-2-CE	24"	1405	"	"									X									
EP7-2-SE	28"	1501	"	"									X									
EP7-2-EW	30"	1551	"	"									X									
SS-6-NSS	4"	2251	"	"									X									
SS-6-NNW	4"	2401	"	"									X									
SS 7-E	6"	2501	"	"									X									
SS-7-W	6"	3001	"	"									X									

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	9/22/97	[signature]	9/22/97
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: STEMEN ENVIRONMENTAL INC

ADDRESS: 120 - STATE AVE N.E #148 Olympia, WA

PHONE (360) 438-9521 FAX:

CLIENT PROJECT #: OSTROM'S PROPERTY PROJECT MANAGER: PAUL STEMEN

DATE: 9/23/97 PAGE 1 OF 1

PROJECT NAME: OSTROM PROPERTY

LOCATION: LACEY, WA

COLLECTOR: PAUL STEMEN DATE OF COLLECTION 9/23

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	TPH 418.1	TPH 8015 (gasoline)	TPH (8015 (diesel)	TPH 8015 (g & d)	PAH 610/8100	PEST/PCBs 8080	HEX CHROME	ORGANIC LEAD	TOTAL LEAD	pH	ASBESTOS	FIELD NOTES	Total Number of Containers	Laboratory Note Number
ESP7-3-EW	28"	1100A	SOIL	JAR									X							RESAMPLING AFTER EXCAVATION		

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
	9/23/97		9-23-97
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Customer Job Report

Gross & Tare Weight Codes: M=Manual; S=Scale; T=Trk File

Job Number Name	SiteAddress	SiteCity	State	ZipCode
A03 -- 01339 OSTROM'S	8323 STEILACOOM ROAD S.E.	OLYMPIA	WA	98513

Load #	Date & Time Out	Transporter #	Truck & Trailer Number	Gross (lb)	Tare (lb)	Net (lb)	Net Wt (tons)
1	09/10/97 08:04	1001800	STEVE	66,320M	33,860M	32,460	16.23
2	09/10/97 08:05	1001800	STEVE	80,720M	33,860M	46,860	23.43
3	09/10/97 08:05	1001800	STEVE	80,400M	33,860M	46,540	23.27
4	09/10/97 08:06	1001800	STEVE	81,780M	33,860M	47,920	23.96
5	09/11/97 08:28	1001800	STEVE	84,160M	33,860M	50,300	25.15
6	09/11/97 08:28	1001800	STEVE	85,480M	33,860M	51,620	25.81
7	09/11/97 08:29	1001800	STEVE	87,120M	33,860M	53,260	26.63
8	09/11/97 08:29	1001800	STEVE	90,320M	33,860M	56,460	28.23

Completed Loads	Manifests Received	Completed Weight	Estimated Weight	TOTAL Net Wt:
40.00%	8	48.20%	400.00(tons)	192.71 (tons)

Customer Job Report

Gross & Tare Weight Codes: M=Manual; S=Scale; T=Trk File

Job Number Name	SiteAddress	SiteCity	State	ZipCode
A03 -- 01339 OSTROM'S	8323 STEILACOOM ROAD S.E.	OLYMPIA	WA	98513

Load #	Date & Time Out	Transporter #	Truck & Trailer Number	Gross (lb)	Tare (lb)	Net (lb)	Net Wt (tons)
9	09/17/97 08:07	1001800	STEVE	95,560M	36,980M	58,580	29.29
10	09/17/97 08:08	1001800	STEVE	102,700M	36,980M	65,720	32.86
11	09/17/97 08:09	1001800	STEVE	104,400M	36,980M	67,420	33.71
12	09/17/97 08:10	1001800	STEVE	104,880M	36,980M	67,900	33.95
13	10/02/97 09:36	1001800	PAUL	27,660M	11,920M	15,740	7.87
14	10/02/97 09:37	1001800	PAUL	29,680M	11,920M	17,760	8.88
15	10/02/97 09:38	1001800	PAUL	30,080M	11,920M	18,160	9.08
16	10/02/97 09:38	1001800	PAUL	25,400M	11,920M	13,480	6.74

Completed Loads	Manifests Received	Completed Weight	Estimated Weight	TOTAL Net Wt:
80.00%	16	88.80%	400.00(tons)	162.38(tons)

Soil Recycling Certificate

TPS Technologies Inc. does hereby certify that 162.38 tons of petroleum - contaminated soil received from

Ostrom's
Stemen Environmental (Consultant)
8323 Steilacoom Road, SE
Olympia, WA

Petroleum Contamination and Chlorinated Pesticides soil
Under Manifest/authorization number 03-01339

have been properly recycled to approved regulatory standards at our Soil Recycling Facility in Tacoma, WA

Dated this 15th day of Oct. , 19 97

Sworn and Attested by:
TPS Technologies Inc.

By: _____

Soil Recycling Certificate

TPS Technologies Inc. does hereby certify

that 192.71 tons of petroleum - contaminated soil

received from

Ostrom's
Stemen Environmental, Inc. (Consultant)
8323 Steilacoom Road, SE
Olympia, WA

Petroleum Contamination & Chlorinated Pesticides Soils

Under Manifest/authorization number 03-01339

have been properly recycled to approved regulatory standards

at our Soil Recycling Facility in Tacoma, WA

Dated this 23rd day of Sept., 19 97

Sworn and Attested by:
TPS Technologies Inc.

By: _____

THURSTON COUNTY
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

786-5489

GRADING PERMIT

THURSTON COUNTY

PERMIT NO. 69339 ADDRESS 8323 STEILACOOM RD SE

OWNER OSTROM'S MUSHROOM JOB DESCRIPTION GRADING

CONTRACTOR _____ ISSUED BY John Jackson DATE 1/30/97

INSPECTIONS REQUIRED:

PARTIAL

FINAL

DO NOT PROCEED BEYOND EACH STAGE UNTIL APPROVALS ARE GIVEN.
CALL FOR INSPECTIONS AT LEAST 24 HOURS IN ADVANCE OF TIME NEEDED.

POST THIS CARD IN A CONSPICUOUS PLACE ON THE FRONT OF PREMISES CONVENIENT FOR MAKING REQUIRED ENTRIES.