the IT group

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November 19, 1999
Project 793363

Mr. Charles Cline
Toxics Cleanup Program
P.O. Box 47775
Olympia, Washington 98504-7775

Re: Resolved Issues and Request for No Further Action Status
Under the Voluntary Cleanup Program (VCP) Regarding
McDonald's Site at 715 Plum Street, Olympia

Dear Mr. Cline:

On behalf of McDonald's Corporation (McDonald's), IT Corporation (formerly EMCON) is submitting this letter report documenting final site closure activities at the McDonald's site located at 715 Plum Street in Olympia, Washington (see Figure 1). Final site closure activities included groundwater sampling, soil sampling, and placement of a restrictive covenant on the property deed. These actions were requested by the Washington State Department of Ecology (Ecology) in a meeting held with EMCON on September 17, 1998. During this meeting, Ecology stated these were the only outstanding issues requiring resolution regarding closure of this site and the determination of a no further action (NFA) status.

BACKGROUND

During initial construction of the McDonald's building in 1991, contaminated soil was encountered. At the request of McDonald's, EMCON performed a series of site characterization and remediation activities at the site in 1991 and early 1992. The results of these activities were summarized in the *Site Characterization and Remediation Report* dated October 23, 1992. This report was submitted to Ecology for their review under the Voluntary Cleanup Program (VCP) on August 19, 1998. EMCON and Ecology met on September 17, 1998, to discuss outstanding issues regarding the site, the VCP submittal, and a potential NFA status for the site. At that time, according to Ecology, three outstanding issues needed to be resolved in order to receive an NFA for the site. As noted above, these were:

- Obtain a restrictive covenant for the property deed.

- Sample on-site groundwater monitoring wells to document final groundwater quality.
- Sample the former soil from the site currently stockpiled at the Marvin and Martin Way property.

This letter report documents the results of this additional work.

DEED RESTRICTION

A restrictive covenant has been placed on the property deed currently on file with the Thurston County Assessor's Office. The restrictive covenant was required because a limited area of soil remaining on site after remedial actions were complete contained residual concentrations of petroleum hydrocarbons above Model Toxics Control Act (MTCA) Method A cleanup levels. Specifically, the restrictive covenant:

- Provides a legal description for the property.
- Identifies the portion of the site where residual contamination remains.
- Requires written approval from Ecology for activities that may disturb contaminated soil.

A copy of the recorded restrictive covenant for the property is included as Attachment A of this report.

GROUNDWATER SAMPLING

On September 28, 1998, EMCON collected groundwater samples from on-site groundwater monitoring wells MW-6D, MW-7S, MW-7D, MW-8S, and MW-8D. Depth to groundwater was measured in each well prior to sampling by using an electronic well probe. The depth to groundwater ranged from 0.38 foot in MW-6D to 2.42 feet in wells MW-7S and MW-8S. Groundwater in wells MW-7D and MW-8D was found at the top of the well casing and appeared artesian (flowing above ground level). Groundwater level depths are documented in the Field Sampling Data Sheets provided in Attachment B.

Groundwater samples were collected from each well using disposable bailers, except well MW-7D, which was sampled using a peristaltic pump. A PVC coupler and extension were added to well MW-8D during sampling. Three pore-volumes of water were purged

from each well prior to sampling, except for well MW-8S where slow recharge only allowed for the removal of two pore volumes of water. Groundwater parameters including temperature, pH, and specific conductance were measured following the removal of each pore volume of water. These measurements were recorded on the Field Sampling Data Sheets provided in Attachment B. Following sampling, the purge water was contained and transported to EMCON for treatment.

Groundwater samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using U.S. Environmental Protection Agency (USEPA) Methods 5030A/8020, for total petroleum hydrocarbons (TPH) as gasoline (TPH-G) using Ecology Method WTPH-G, and for TPH as diesel (TPH-D) and oil (TPH-O) using Ecology Method WTPH-D (extended). The groundwater samples were submitted under standard chain-of-custody protocol to Columbia Analytical Services (CAS) of Kelso, Washington.

Groundwater Results

The groundwater results shows that BTEX, TPH-G, TPH-D, and TPH-O were not detected in any groundwater sample above the method reporting limits (MRLs). Table 1 summarizes the groundwater results. The laboratory report is included in Attachment B.

SOIL SAMPLING

On December 12, 1998, EMCON collected soil samples from the soil stockpile at the Marvin and Martin Way site (Figure 2). This soil was originally transported from the 715 Plum Street Macdonald's site. EMCON identified the extent of the stockpile and excavated one test pit in each of the 12 areas across the stockpile (Figure 3). Each test pit was excavated until the bottom of the stockpile was exposed, which was evidenced by the presence of plastic sheeting which had been placed on the property prior to stockpiling the soil.

A composite soil sample (composited from two opposing sidewalls) was collected from each test pit (total of 12 samples) using stainless steel spoons. A duplicate soil sample was also collected from test pit 5. Soil samples were collected at depths ranging from 3 to 4 feet below the ground surface. No odors or stained soils were noted during soil sampling activities. All sampling equipment was decontaminated between sample points. Following sampling activities, the test pits were backfilled with the original soil. The test pit logs are included in Attachment C.

Thirteen soil samples (TP-1 through TP-13) were submitted to CAS in Kelso, Washington, under standard chain-of-custody protocol. The samples were analyzed for BTEX using USEPA Method 5030A/8020, TPH-G using Ecology Method WTPH-G, and for TPH-D and TPH-O using Ecology Method WTPH-D (extended).

Soil Sampling Results

The soil sample analytical results showed that BTEX and TPH-G were not detected in any soil sample at or above the MRLs. TPH-D was detected in samples TP-3 through TP-12 at concentrations ranging from 46 mg/kg (TP-6) to 124 mg/kg (TP-3). TPH-O was detected in samples TP-3 through TP-9, and in sample TP-11 and TP-12. TPH-O concentrations ranged from 104 mg/kg (TP-9 and TP-12) to 392 mg/kg (TP-3).

None of the TPH-D concentrations detected in the soil samples exceeded the MTCA Method A cleanup level. TPH-O concentrations detected in samples were also below the MTCA Method A cleanup level except for samples TP-3 (392 mg/kg) and TP-4 (221 mg/kg). Although sample TP-5 showed detections of TPH-D and TPH-O, the duplicate sample (TP-13) did not show detections of these analytes. This is common when trying to duplicate soil samples. Table 2 summarizes the soil sample results. The laboratory report is included in Attachment C.

CONCLUSIONS

At Ecology's request, a restrictive covenant was obtained for the property at 715 Plum Street, and soil and groundwater were sampled. Groundwater results show no detections of BTEX, TPH-G, TPH-D, and TPH-O. Stockpile soil sample results from the Martin and Marvin Way property show the following:

- No detections for BTEX and TPH-G.
- TPH-D detections below MTCA Method A cleanup levels.
- TPH-O detections concentrations below the Ecology MTCA Method A cleanup levels, except for samples TP-3 (392 mg/kg) and TP-4 (221 mg/kg).

The two samples that slightly exceed the MTCA Method A cleanup level of 200 mg/kg do not present a risk to human health or the environment based on the most recent Ecology guidance of TPH cleanups. Specifically, the MTCA proposed draft cleanup level for

TPH-O is 4,000 mg/kg[1] and cleanup levels calculated using Ecology's Interim TPH guidance typically range from 3,000 to 4,000 mg/kg for oil-range hydrocarbons.

Based on the information presented in this report and the previous referenced submissions to Ecology, IT Corporation requests that the project site be determined closed, a "no further action" letter issued, and the site's status on Ecology's site register changed accordingly.

If you have any questions or concerns regarding this letter, please call me at (425) 485-5000.

Sincerely,

IT CORPORATION

Brian O'Neal, P.E.
Project Manager

Attachments: Limitations
Figure 1 – Site Location Map
Figure 2 – Location Map for Martin & Marvin Way Stockpile
Figure 3 – Martin & Marvin Way Test Pit Locations
Table 1 – Groundwater Analytical Data
Table 2 – Soil Analytical Data
Attachment A – Restrictive Covenant
Attachment B – Groundwater Sampling Information and Data
Attachment C – Stockpile Soil Sampling Information and Data

cc: Brad Baker; McDonald's Corporation

[1] Table 740-1, December 14, 1998, Draft MTCA Rule Revisions.

LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

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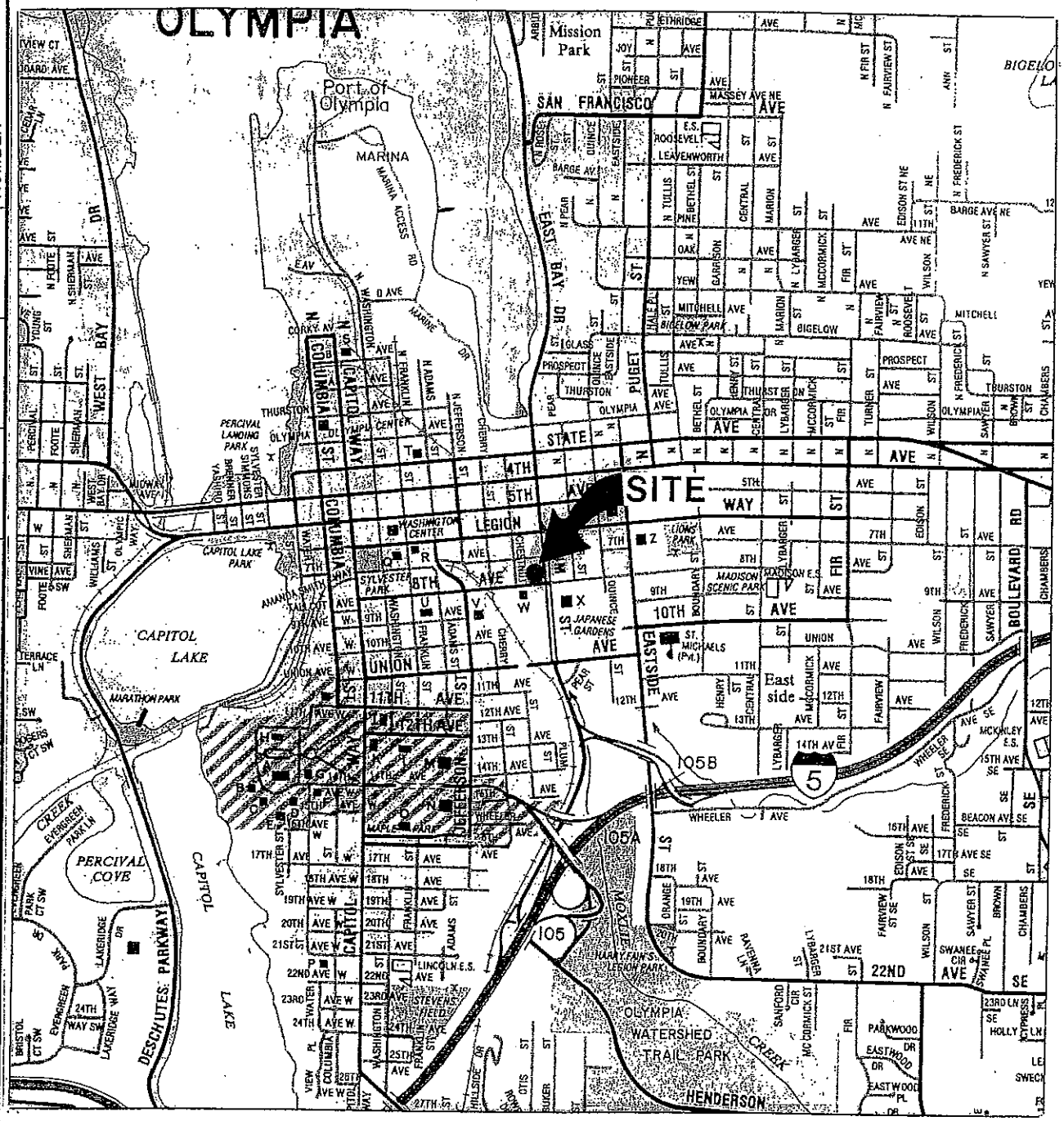

WASHINGTON

SCALE

0 2000 4000 FEET

REFERENCE:

Totem Atlas of Thurston County, Second Edition 1991–1992

IT emcon
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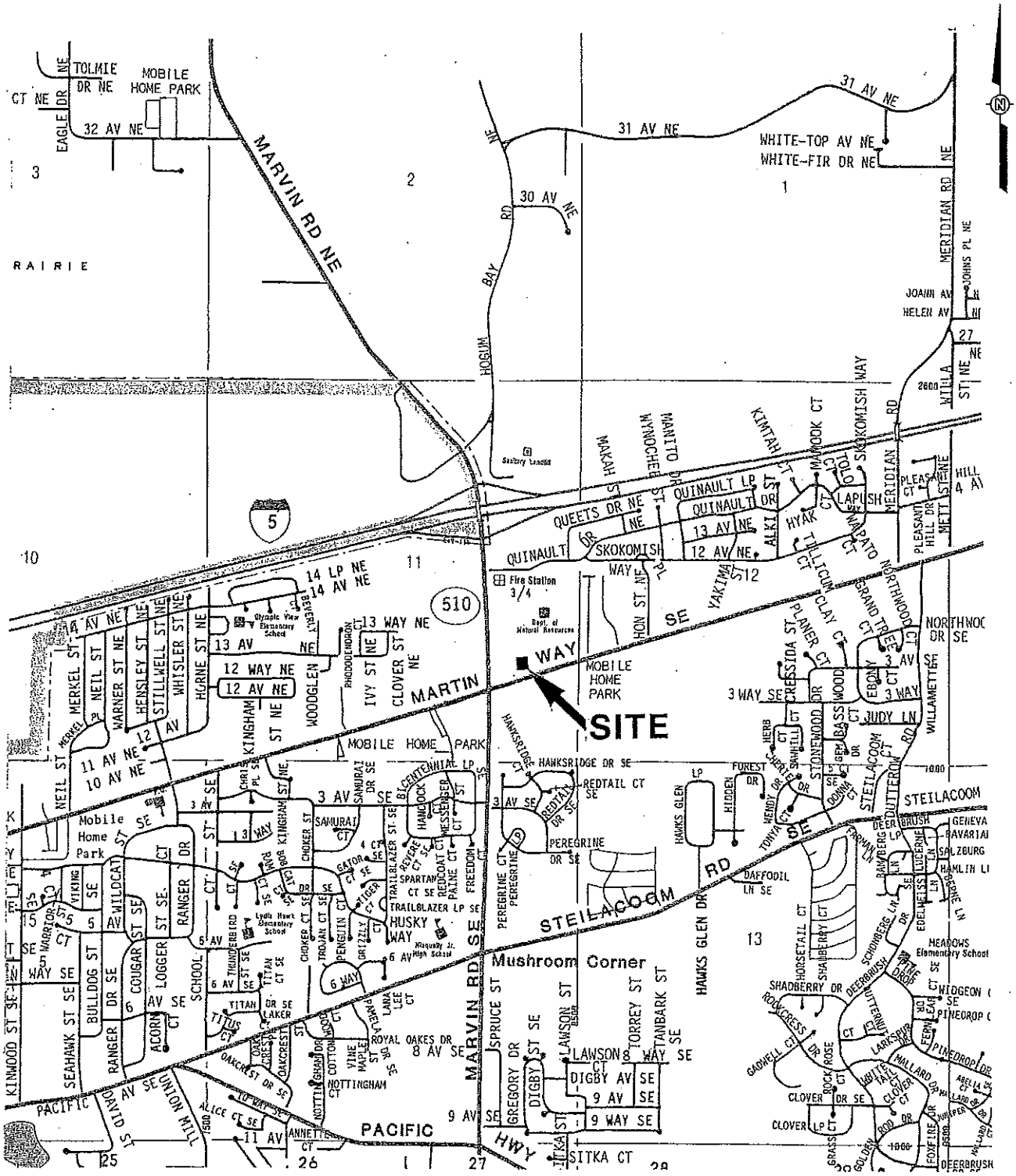
FIGURE 1

SITE LOCATION MAP
McDONALD'S CORPORATION
715 PLUM STREET
OLYMPIA, WASHINGTON

OFFICE	CHECKED BY	APPROVED BY	PROJECT NUMBER
BOTHELL			793363



WASHINGTON

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0 2000 4000 (ft)

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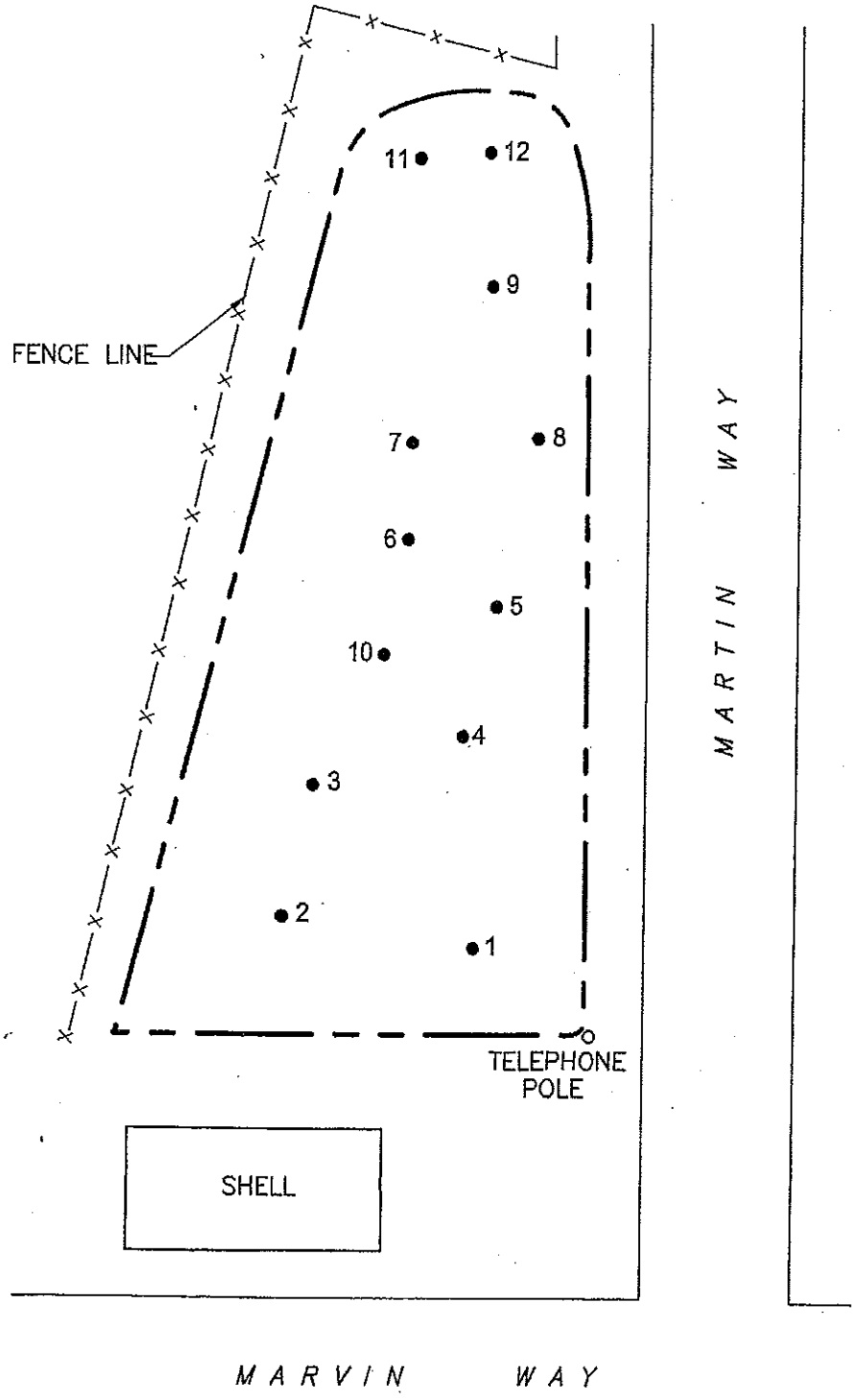
FIGURE 2

LOCATION MAP FOR MARTIN & MARVIN WAY STOCKPILE SITE

McDONALD'S CORPORATION
715 PLUM STREET
OLYMPIA, WASHINGTON



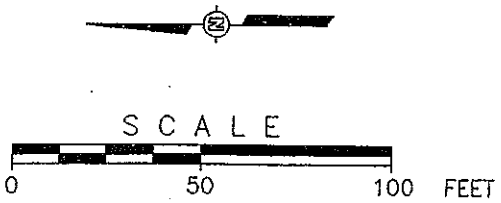


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FIGURE 3

MARTIN & MARVIN WAY STOCKPILE SITE
& EXPLORATORY TEST PIT LOCATIONS
McDONALD'S CORPORATION

Table 1
McDonald's Corporation
715 Plum Street, Olympia, Washington
Groundwater Analytical Data

Sample Identification	Well Number	Date Collected	Analytical Results (µg/L)						
			EPA Methods 5030A/8020				Ecology Method WTPH-G	Ecology Method WTPH-D	
			Benzene	Toluene	Ethylbenzene	Xylenes	TPH-G	TPH-D	TPH-O
MTCA Method A Cleanup Levels[a]			5	40	30	20	1,000		
MW-6D-0998	MW-6D	09/28/98	< 0.5	< 1	< 1	< 1	<50	<250	<750
MW-7S-0998	MW-7S	09/28/98	< 0.5	< 1	< 1	< 1	<50	<250	<750
MW-7D-0998	MW-7D	09/28/98	< 0.5	< 1	< 1	< 1	<50	<250	<750
MW-8S-0998	MW-8S	09/28/98	< 0.5	< 1	< 1	< 1	<50	<250	<750
MW-8D-0998	MW-8D	09/28/98	< 0.5	< 1	< 1	< 1	<50	<250	<750

NOTE: mg/L = micrograms per liter (ppb).

< = not detected at or above the given method reporting limit (MRL).

TPH-G = Total petroleum hydrocarbons as gasoline.

TPH-D = Total petroleum hydrocarbons as diesel.

TPH-O = Total petroleum hydrocarbons as oil (quantified using 30 weight motor oil as a standard).

[a] Chapter 173-340 WAC, *The Model Toxics Control Act Cleanup Regulations, Method A Cleanup Levels*.

Table 2
McDonalds Corporation
715 Plum Street, Olympia, Washington
Soil Analytical Data (Test Pit Samples)

Sample Identification	Date Collected	Sample Depth (feet - bgs)	Analytical Results (mg/kg)						
			EPA Methods 8030A/8020				Ecology Method WTPH-G	Ecology Method WTPH-D	
			Benzene	Toluene	Ethylbenzene	Xylenes	TPH-G	TPH-D	TPH-O
MTCA Method A Cleanup Levels[a]			0.5	40	20	20	100	200	200
TP-1	12/28/98	4.00	< 0.05	<0.1	<0.1	<0.1	< 5	<25	<100
TP-2	12/28/98	4.00	< 0.05	<0.1	<0.1	<0.1	< 5	<25	<100
TP-3	12/28/98	4.75	< 0.05	<0.1	<0.1	<0.1	< 5	124	**392**
TP-4	12/28/98	4.00	< 0.05	<0.1	<0.1	<0.1	< 5	63	**221**
TP-5	12/28/98	3.00	< 0.05	<0.1	<0.1	<0.1	< 5	62	137
TP-6	12/28/98	4.00	< 0.05	<0.1	<0.1	<0.1	< 5	46	117
TP-7	12/28/98	3.75	< 0.05	<0.1	<0.1	<0.1	< 5	58	168
TP-8	12/28/98	2.50	< 0.05	<0.1	<0.1	<0.1	< 5	51	123
TP-9	12/28/98	3.50	< 0.05	<0.1	<0.1	<0.1	< 5	72	104
TP-10	12/28/98	3.00	< 0.05	<0.1	<0.1	<0.1	< 5	48	<100
TP-11	12/28/98	4.00	< 0.05	<0.1	<0.1	<0.1	< 5	55	113
TP-12	12/28/98	4.00	< 0.05	<0.1	<0.1	<0.1	< 5	51	104
TP-13 (dup)	12/28/98	Duplicate of TP-5	< 0.05	<0.1	<0.1	<0.1	< 5	<25	<100

NOTE: mg/kg = milligrams per kilogram (ppm).
bgs = below ground surface.
< = not detected at or above the given method reporting limit (MRL).
Bold indicates the result exceeds the MTCA Method A cleanup level.
TPH-G = total petroleum hydrocarbons as gasoline.
TPH-D = total petroleum hydrocarbons as diesel.
TPH-O = total petroleum hydrocarbons as oil (quantified using 30 weight motor oil as a standard).

[a] Chapter 173-340 WAC, *The Model Toxics Control Act Cleanup Regulations, Method A Cleanup Levels*.