GROUNDWATER MONITORING REPORT

COMMERCIAL PROPERTY 4030 S. TACOMA WAY TACOMA, WASHINGTON

Prepared By

Paul W. Stemen

Stemen Environmental, Inc.

STEMEN ENVIRONMENTAL, INC.

P.O. BOX 3644 LACEY, WASHINGTON 98501-8212 CONTR. LIC. #STEMEE1081J9

Telephone 360-438-9521 Fax 360-412-1225

August 21, 2002

Mr. Brian Wilson 6525 N. 53rd Street Tacoma, Washington 98407

Dear Mr. Wilson:

ADDITIONAL ENVIRONMENTAL INVESTIGATIONS FOR COMMERCIAL PROPERTY LOCATED AT 4030 SOUTH TACOMA WAY, TACOMA, WASHINGTON. TAX PARCELS # RO220134014, #R0220134015, and #R0220134016.

SITE CHARACTERISTICS

The subject property consists of approximately 2.3 acres of commercially zoned, and commercially developed land located in the Southeast Quarter of Section 13, Township 20 North, Range 2 West, and in the city of Tacoma, Washington.

The site is bordered on the east by South Tacoma Way, an asphalt surfaced public roadway, on the north by a new and used car sales/service facility and a veterinary clinic, on the south by a machine design and manufacturing facility, and on the west by railroad tracks and currently undeveloped commercial land. The currently undeveloped commercial property located to the west and southwest of the subject property is known as the South Tacoma Field Site and is currently an active EPA Superfund Clean Up Site.

The subject property is located in an area that is primarily occupied by light industrial/commercial/retail businesses.

The subject property is currently occupied by the Bruce Titus Nissan Dealership. Current development on the site consists of an approximately 21,000 square foot commercial building.

This building is occupied by sales offices, a vehicle showroom area, administrative offices, and a vehicle service/maintenance/repair area. The building is serviced by a large continuous asphalt surfaced vehicle parking lot. The facility has operated as a retail car sales facility, and a vehicle service/maintenance/repair facility since it's initial construction in 1989

Information contained in a Phase I E.S.A. Report issued by Secor International Inc. (Secor) on July 10, 2001, indicates that from the early 1930's to 1986 the site was operated as a lumber yard, an oil blending and compounding plant, and a used car lot with an associated service center.

Secor's report stated that, during an on-site visit, they observed evidence of poor house keeping practices and staining in the areas of the parts washing station, tool room, the vehicle work station areas, and the used oil tank storage area.

The report states that no underground storage tanks and/or underground hydraulic lift cylinders are present on the subject site. The subject site is serviced by several aboveground storage tanks (A.S.T.'s) which are used to store motor oils, transmission fluids, antifreeze, and used motor oils and aboveground vehicle lifts.

Secor concluded that due to the historic uses of the subject property and the types of materials associated with these historic uses, the subsurface media beneath the subject property may have been adversely impacted and that additional inquiries would be appropriate.

On September 19 and 20, 2001, Secor performed a Phase II E.S.A. on the subject property. Secor supervised the drilling of a total of eight (8) soil borings at selected locations on the subject property. These soil borings were advanced to maximum depths ranging between approximately 30 to 50 feet b.g.s.(below ground surface).

Temporary monitoring wells were installed in two (2) of these investigative soil borings. These temporary monitoring wells were screened at depths ranging between approximately 40 feet and 50 feet b.g.s.

A total of eight (8) soil samples and two (2) groundwater samples were submitted for laboratory analyses. The soil samples and the two (2) groundwater samples were screened for various selected analytes.

Upon the completion of the on-site sampling activities, the pumps and piping associated with the temporary monitoring wells were removed from the two (2) boreholes and all of the boreholes were backfilled using Bentonite.

Laboratory analyses results for the eight (8) soil samples that were submitted for laboratory analyses indicated that the soil showed no presence of the extracted analytes at levels that exceed Ecology's Method "A" Clean Up Levels.

** It should be noted that not all of the selected soil samples that Secor submitted for laboratory analyses were screened for the analytes (V.O.C.'s) that were found to be present in the on-site groundwaters at levels exceeding Ecology's applicable clean up levels.

Laboratory analyses results for both of the groundwater samples (B-4W and B-5W) indicated no presence of PCBs, Benzene, Toluene, Ethylbenzene, Xylenes, Gasoline range T.P.H., Diesel fuel range T.P.H., or Heavy Oil range T.P.H. at levels that exceed Ecology's Method "A" Clean Up Levels.

Laboratory analyses results for groundwater samples B-4W (15 PPB) and B-5W (49 PPB) confirmed the presence Trichloroethene or Trichloroethylene (TCE) at levels that exceed Ecology's Method "A" Clean Up Levels. Methylene Chloride was also found to be present in groundwater sample B-5W at above acceptable levels.

Based on the data collected during the Phase II Subsurface Investigation, Secor stated that the source of the identified groundwater contamination was not evident, and they recommended that additional assessments including the installation and sampling of groundwater monitoring wells be conducted on the subject property to further assess potential on-site and off-site sources for the TCE in the groundwater.

On November 20 and 21, 2001, Secor supervised the installation of a total of four (4) permanent groundwater monitoring wells at selected locations on the subject property.

GROUNDWATER ELEVATIONS

Groundwater elevations were measured using an electronic water level indicator and verified with a steel tape coated with water detection paste. Depth to water was measured from the top of the monitoring well monument (ground surface).

GROUND WATER SAMPLING

On April 21, 2000, I proceeded with the sampling of the groundwaters present beneath the subject site. Water sample MW-1 was obtained from waters present at a depth of 43.95 feet b.g.s. in monitoring well MW-1, water sample MW-2 was obtained from waters present in monitoring well MW-2 at a depth of 44.2 feet b.g.s., water sample MW-3 was obtained from waters present in monitoring well MW-3 at a depth of 44.9 feet b.g.s., and water sample MW-4 was obtained from waters present in monitoring well MW-4 at a depth of 44.85 feet b.g.s. These water samples were immediately submitted for appropriate laboratory analyses and screened for Volatile Organic Compounds (V.O.C.'s).

Prior to sampling, the monitoring wells were properly purged by removing a minimum of three (3) casing volumes of water from the wells using a disposable bailer.

All waters generated during purging activities were placed in appropriate containers for transportation to an appropriate treatment/disposal facility.

The water level in the monitoring wells was stabilized to near original levels, then representative groundwater samples were obtained using a peristaltic pump. The sampled waters were transferred directly from the pump to laboratory supplied containers for temporary storage.

Laboratory analyses results for groundwater samples MW-1, MW-2, MW-3, and MW-4 confirmed the presence of Trichloroethene at levels that exceed the Department of Ecology's Method "A" Clean Up Levels in these sampled waters.

Laboratory analyses results for groundwater samples MW-1, MW-2, MW-3, and MW-4 indicated no detectable presence of any other V.O.C.'s in these sampled waters.

Groundwater sampling was performed by Paul Stemen (myself).

LABORATORY ANALYSES

All sampling devices were properly cleaned between individual samples to prevent cross sample contamination. All samples were then tightly packed in recommended containers with no head space, properly refrigerated and transported with proper chain of custody forms to Transglobal Environmental Geochemistry Northwest, Inc., of Lacey, Washington for appropriate laboratory analyses

Groundwater samples were screened for Volatile Organic Compounds (V.O.C.'s) using E.P.A. method 8260. These analytical methods meet all current Department of Ecology recommendations for groundwater sample analyses and quality control.

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.

4. The immediate perimeter of the work area was secured at all times by orange hazard cones.

SUMMARY AND CONCLUSIONS

The following summary and conclusions are based on information gathered during the on-site investigations described in this report.

- 1. Groundwater was present at selected locations beneath this site on October 12, 2002, at depths ranging from 43.95 feet b.g.s. to 44.90 feet b.g.s.
- 2. <u>Laboratory analyses results for groundwater samples obtained during this on-site investigation confirmed the presence of Trichloroethene at levels that exceed the Department of Ecology's Method "A" Cleanup Levels in the groundwaters beneath selected locations on the subject property.</u>

If you have any questions or need further information please feel free to contact us at the above phone number.

Sincerely,

Paul W. Stemen

Ecology-Registered Site Assessment Supervisor

ASTM Certificate

IFCI #0874201-26

cc: Bruce Titus

Department of Ecology

EPA

File

October 23, 2002

Paul Stemen Stemen Environmental PO Box 3644 Lacey, WA 98509

Dear Mr. Stemen:

Please find enclosed the analytical data report for the Bruce Titus Nissan Project site in Tacoma, Washington. Water samples were analyzed for VOC's by Method 8260 on October 16, 2002.

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

ESN 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,

Sherry L. Chilcutt Vice President

ESN Job Number:

S21015-1

Client:

STEMEN ENVIRONMENTAL

Client Job Name:

BRUCE TITUS

Client Job Number:

BRUCE TITUS

Analytical Results

8260, μg/L		MTH BLK	LCS	MW-1	MW-2	MW-3	MW-4
Matrix	Water	Water	Water	Water	Water	Water	Water
Date extracted Date analyzed	Reporting Limits	10/16/02	10/16/02	10/16/02	10/16/02	10/16/02	10/16/02
Date analyzed	Littilis	10/10/02	10/10/02	10/10/02	10/10/02	10/10/02	10/10/02
Dichlorodifluoromethane	1.0	nd		nd	nd	nd	nd
Chloromethane	1.0	nd		nd	nd	nd	nd
Vinyl chloride	0.2	nd		nd	nd	nd	nd
Bromomethane	1.0	nd		nd	nd	nd	nd
Chloroethane	1.0	nd		nd	nd	nd	nd
Trichlorofluoromethane	1.0	nd		nd	nd	nd	nd
1,1-Dichloroethene	1.0	nd		nd	nd	nd	nd
Methylene chloride	1.0	nd		nd	nd	nd	nd
trans-1,2-Dichloroethene	1.0	nd		nd	nd	nd	nd
1,1-Dichloroethane	1.0	nd		nd	nd	nd	nd
cis-1,2-Dichloroethene	1.0	nd		nd	nd	nd	nd
2,2-Dichloropropane	1.0	nd		nd	nd	nd	nd
Chloroform	. 1.0	nd		nd	nd	nd	nd
Bromochloromethane	1.0	nd		nd	nd	nd	nd
1,1,1-Trichloroethane	1.0	nd		nd	nd	nd	nd
1,2-Dichloroethane	1.0	nd		nd	nd	nd	nd
1,1-Dichloropropene	1.0	nd		nd	nd	nd	nd
Carbon tetrachloride	1.0	nd	NAMES OF THE PARTY	nd	nd	nd	nd
Benzene	1.0	nd	78%	nd	nd	nd	nd
Trichloroethene	1.0	nd	77%	92	38	99	10
1,2-Dichloropropane	1.0	nd		nd	nd	nd	nd
Dibromomethane	1.0	nd		nd	nd	nd	nd
Bromodichloromethane	1.0	nd		nd	nd	nd	no
cis-1,3-Dichloropropene	1.0	nd		nd	nd	nd	no
Toluene	1.0	nd	78%	nd	nd	nd	no
trans-1,3-Dichloropropene	1.0	nd		nd	nd	nd	no
1,1,2-Trichloroethane	1.0	nd		nd	nd	nd	no
1,3-Dichloropropane	1.0	nd		nd	nd	nd	no
Dibromochloromethane	1.0	nd		nd	nd	nd	no
Tetrachloroethene	1.0	nd		nd	nd	nd	no
1,2-Dibromoethane (EDB)(*)	0.01	nd		nd	nd	nd	no
Chlorobenzene	1.0	nd	78%	nd	nd	nd	no
1,1,1,2-Tetrachloroethane	1.0	nd		nd	nd	nd	no
Ethylbenzene	1.0	nd		nd	nd	nd	no
Xylenes	1.0	nd		nd	nd	nd	no
Styrene	1.0	nd		nd	nd	nd	no
Bromoform	1.0	nd		nd	nd	nd	no
1,1,2,2-Tetrachloroethane	1.0	nd		nd	nd	nd	ne
Isopropylbenzene	1.0	nd		nd	nd	nd	no
1,2,3-Trichloropropane	1.0	nd		nd	nd	nd	no
Bromobenzene	1.0	nd		nd	nd	nd	no
n-Propylbenzene	1.0	nd		nd	nd	nd	no
2-Chlorotoluene	1.0	nd		nd	nd	nd	n
4-Chlorotoluene	1.0	nd		nd	nd	nd	n
1,3,5-Trimethylbenzene	1.0	nd		nd	nd	nd	n
tert-Butylbenzene	1.0	nd		nd	nd	nd	n
1,2,4-Trimethylbenzene	1.0	nd		nd	nd	nd	n
sec-Butylbenzene	1.0	nd		nd	nd	nd	n
1,3-Dichlorobenzene	1.0	nd		nd	nd	nd	n
1,4-Dichlorobenzene	1.0	nd		nd	nd	nd	n
Isopropyltoluene	1.0	nd		nd	nd	nd	
1,2-Dichlorobenzene	1.0	nd		nd	nd	nd	n
n-Butylbenzene	1.0	nd		nd	nd	nd	n
1,2-Dibromo-3-Chloropropane	1.0	nd		nd	nd	nd	n
1,2,4-Trichlorobenzene	1.0			nd	nd	nd	n
Naphthalene	1.0			nd	nd	nd	n
Hexachloro-1,3-butadiene	1.0			nd	nd	nd	n
1,2,3-Trichlorobenzene	1.0	nd		nd	nd	nd	r

^{*-}instrument detection limits

ESN Job Number:

S21015-1

Client:

STEMEN ENVIRONMENTAL

Client Job Name:

BRUCE TITUS

Client Job Number:

BRUCE TITUS

Analytical Results

8260, µg/L		MTH BLK	LCS	MW-1	MW-2	MW-3	MW-4
Matrix	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	10/16/02	10/16/02	10/16/02	10/16/02	10/16/02	10/16/02
Date analyzed	Limits	10/16/02	10/16/02	10/16/02	10/16/02	10/16/02	10/16/02
Surrogate recoveries							
Dibromofluoromethane		102%	100%	101%	101%	100%	101%
Toluene-d8		100%	100%	99%	100%	99%	100%
4-Bromofluorobenzene		99%	99%	99%	100%	99%	103%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits Acceptable Recovery limits: 65% TO 135%

Acceptable RPD limit: 35%

ESN Job Number:

S21015-1

Client:

STEMEN ENVIRONMENTAL

Client Job Name:

BRUCE TITUS

Client Job Number:

BRUCE TITUS

	MW-4	MW-4	MW-4
Water			Water
			10/16/02
Limits	10/16/02	10/16/02	10/16/02
1.0			
1.0			
0.2			
1.0			
1.0			
1.0			
1.0			
1.0			
1.0			
1.0			
1.0			
1.0			
1.0			
1.0			
1.0			
1.0	80%		1%
1.0	80%	80%	1%
1.0			
1.0			
1.0			
1.0			
1.0	80%	79%	19
1.0			
1.0			
1.0			
	80%	79%	19
1.0			
	1.0 1.0 1.0 0.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Water Water Reporting 10/16/02 Limits 10/16/02 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 80% 1.0 80% 1.0 80% 1.0 80% 1.0 80% 1.0 80% 1.0 80% 1.0 80% 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Water Water Water Reporting 10/16/02 10/16/02 Limits 10/16/02 10/16/02 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 80% 80% 1.0 1.0 80% 79% 1.0 1.0 80% 79% 1.0 1.0 79% 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

ESN Job Number:

S21015-1

Client:

STEMEN ENVIRONMENTAL

Client Job Name:

BRUCE TITUS

Client Job Number:

BRUCE TITUS

Analytical Results		MS	MSD	RPD
8260, µg/L		MW-4	MW-4	MW-4
Matrix	Water	Water	Water	Water
Date extracted	Reporting	10/16/02	10/16/02	10/16/02
Date analyzed	Limits	10/16/02	10/16/02	10/16/02
Surrogate recoveries	Y			
Dibromofluoromethane	25	99%	101%	
Toluene-d8		98%	99%	
4-Bromofluorobenzene		99%	99%	

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
Acceptable Recovery limits: 65% TO 135%

Acceptable RPD limit: 35%



52/015-1

CHAIN-OF-CUSTODY RECORE

CLIENT: STEMEN ENVIRONMENTE IT							PROJECT NAME: BRUCETINS MISSON SITE										_											
ADDRESS:																												
PHONE: 360-438-552/ FAX:							LOCATION: TACOMA, WA.																					
PHONE: 360-439-952/ FAX: CLIENT PROJECT #: BRIEFTINS PROJECT MANAGER: PANE STOME						COLLECTOR: PANC STEM & DATE OF COLLECTION /4										14.	12											
Sample Number	Depth	Time	Sample Type	Container Type	44 20 20 20 20 20 20 20 20 20 20 20 20 20	10 / ST / S	To lo la	\$10 8 10 8	15/00/1	ine state	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	100	1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 /8	10 10 10 10 10 10 10 10 10 10 10 10 10 1	1	Strands	Statist Liet	CHOTH			NC NC	OTES			y."	Total Number of Containers	Laboratory Note Number
1. MW-1			1/20	VIRZ	N N				1																		3	
2. MW-2 3. MW-3			ė,	Ł					1																		N	
3. MW-3			4	*	X				17.				٠,														3	
4. Mw-4			4	K	1				1.																		3	
5.					\perp				1.																			
6									:																			
7.																												
8.				<i></i>			\perp		1																			
9.									1																			
10.						\sqcup		\perp																				
11.		- 540	and the second of the second o						1																			
12.									L							1		\perp										
13.									1									\perp										
14.								-	i							1												
15.																			\perp									
6.							_		+	1						\perp												
7.							1																					
8.																	\perp									(100)		
RELINQUISHED BY (Signatu	LINQUISHED BY (Signature) DATE/TIME RECEIVED BY (Signature) DATE/TIME					SAMPLE RECEIPT						LABORATORY NOTES:																
Atht	10	-14/	62-	MO	FUNM	01	10	7-19	10,2		OTAL								_	\dashv			1					
ELINQUISHED BY (Signatu			E/TIME	RECEIVE	BY (Sign:	ature)		DATE		CI	HAIN	OF C	CUST	ODY	SEA	LS Y	/N/N/	4	\perp									
				1/6/1	lou	10	1/	5/0	72	SI	EAL\$	INTA	CT?	Y/N/	NA											1		
					ECEI	CEIVED GOOD COND./COLD																						