

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 25, 1997

Cathy Frey
AA Enviro Assessment, Inc.
202 Lybarger Rd. NE
Olympia, WA 98506

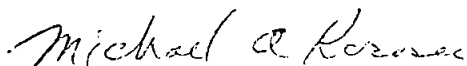
Dear Ms. Frey:

Please find enclosed the data report for analyses of soil samples conducted September 25, 1997, for the Vashon-3 Project on Vashon Island, Washington. The soil samples were analyzed for Gasoline Range Hydrocarbons by WTPH-Gx.

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 AA Enviro Assessment 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.

VASHON-3 PROJECT

Vashon Island, Washington

AA Enviro Assessment, Inc.

Gasoline Range Hydrocarbons in Soil by WTPH-Gx

Sample Number	Date	Recovery (%)	Gasoline mg/kg
Meth. Blank	9/25/97	79	nd
UG-1	9/25/97	99	456
UG-1 Dup	9/25/97	98	539
UG-2	9/25/97	121	579
UG-3	9/25/97	95	489
Method Detection Limit			10

"nd" Indicates not detected at the listed detection limit.

"int" Indicates that Interfering peaks prevent determination.

DATE: 9-25-97 PAGE 1 OF 1
PROJECT NAME: Vashon-3
LOCATION: Vashon Island
COLLECTOR: C. Kren DATE OF COLLECTION: 9/25/97

LABORATORY NOTES:

Please call
Cathy with
herbal results ASAP

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

VASHON AUTO CENTER PROJECT

Vashon Island, Washington

AA Enviro Assessment, Inc.

*Boring
Assessment
Results*

Gasoline, Kerosene, Diesel and Oil in Soil by WTPH-G & WTPH-Dx/Dx-Extended

Sample Number	Date	Recovery %	Gasoline mg/kg	Kerosene mg/kg	Diesel mg/kg	Heavy Oil mg/kg
Meth. Blank	06/24/97	100	nd	nd	nd	nd
B1 5-6'	06/24/97	int	nd	nd	11100	nd
B4 7'	06/24/97	110	178	nd	nd	nd
B4 7' Dup	06/24/97	98	211	nd	nd	nd
B5 7'	06/24/97	87	nd	nd	47	nd
B6 7'	06/24/97	98	nd	nd	nd	nd
MDL			10	20	20	40

"nd" Indicates not detected at the listed detection limit.

"int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

VASHON AUTO CENTER PROJECT

Vashon Island, Washington

AA Enviro Assessment, Inc.

Gasoline (WTPH-Gx) & BTEX (EPA 8020) Analyses for Soils

Sample Number	Date Analyzed	Benzene mg/kg	Toluene mg/kg	Eth Benz mg/kg	Xylene mg/kg	Gasoline mg/kg	Recovery (%)
Meth. Blank	06/24/97	nd	nd	nd	nd	nd	85
B2 6-7'	06/24/97	34.6	110	65.1	340	3350	int
B2 6-7' Dup	06/24/97	27.4	86.4	54.1	276	3100	int
B3 7'	06/24/97	0.06	0.06	nd	nd	19	79
Detection Limits		0.05	0.05	0.05	0.05	10	

"nd" Indicates not detected at the listed detection limits.

"int" Indicates that interferences prevent determination.

CHAIN-OF-CUSTODY RECORD

CLIENT: AA ENVIRO ASSESSMENT
ADDRESS: 202 Lybarger NE
PHONE 357-3566 FAX:
CLIENT PROJECT #: Vashon Auto Center PROJECT MANAGER: C. Fren

DATE: 6/23/97 PAGE 1 OF 1
PROJECT NAME: _____
LOCATION: Vashon Island, WA
COLLECTOR: C Frey DATE OF COLLECTION 6/23/97

[illegible]

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
	6-23-97		6/23/97 18:35
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS

CHAIN OF CUSTODY SEALS Y/N/NA

SEALS INTACT? Y/N/NA

RECEIVED GOOD COND./COLD

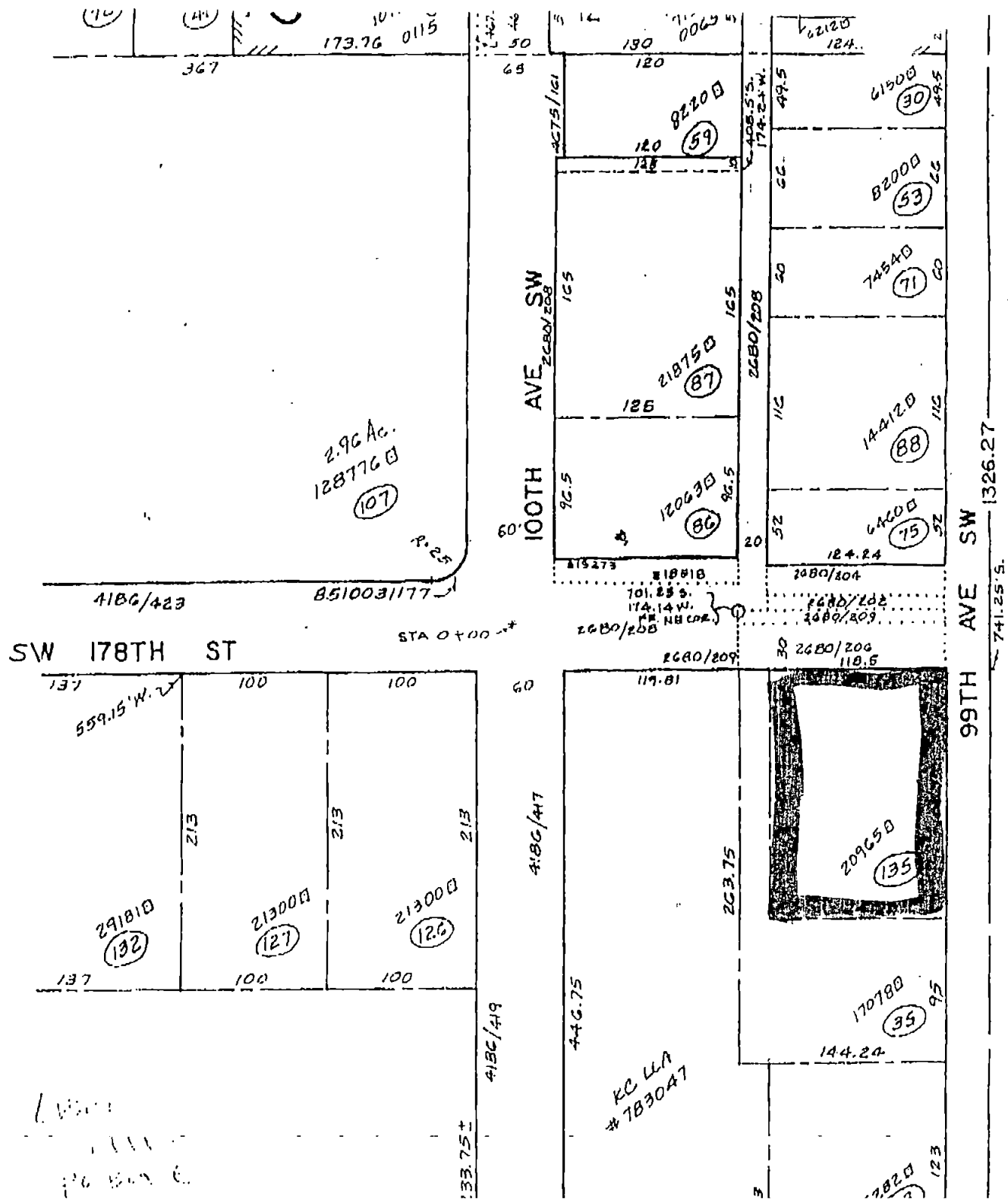
NOTES:

SAMPLE DISPOSAL INSTRUCTIONS

☐ TEG DISPOSAL @ \$2.00 each ☐ Return ☐ Pickup

LABORATORY NOTES:

Appendix B



N-MAURY ISLAND BUSINE

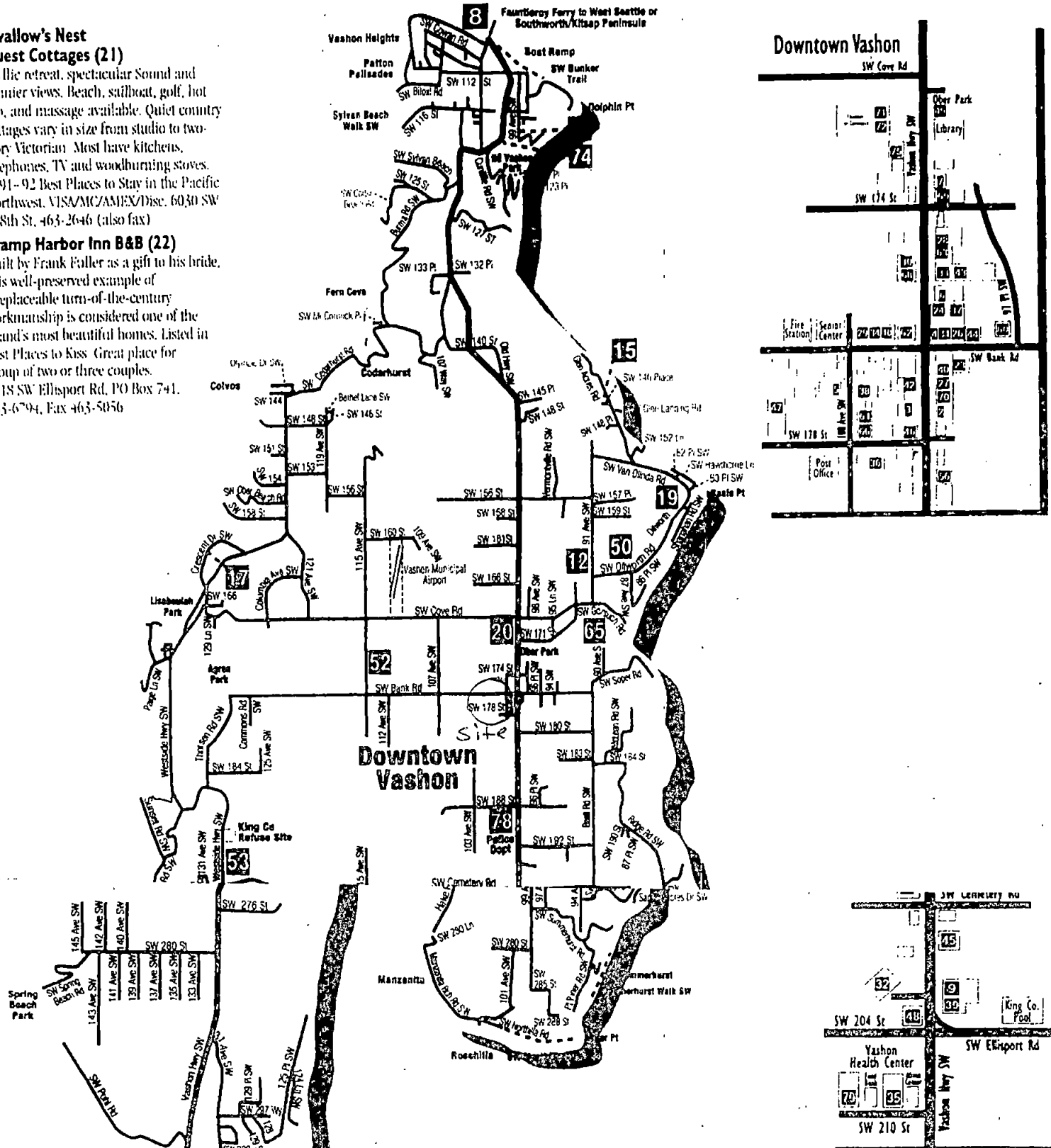
Swallow's Nest

Guest Cottages (21)

Idyllic retreat, spectacular Sound and Rainier views. Beach, sailboat, golf, hot tub, and massage available. Quiet country cottages vary in size from studio to two-story Victorian. Most have kitchens, telephones, TV and woodburning stoves. 1991-92 Best Places to Stay in the Pacific Northwest. VISA/MC/AMEX/Disc. 6030 SW 248th St. 463-2646 (also fax)

Tramp Harbor Inn B&B (22)

Built by Frank Fuller as a gift to his bride, this well-preserved example of irreplaceable turn-of-the-century workmanship is considered one of the island's most beautiful homes. Listed in Best Places to Kiss. Great place for group of two or three couples. 8518 SW Ellsford Rd. PO Box 741. 463-6794, Fax 463-5056



TEL.

Jan 23, 97 10:48 No. 001 F. 01

King City
Will logs: JNW Region
Richard Layborn
206-649-4239

VASHON Auto Center
17803 VASHON Hwy
VASHON WA

RANDY ROWLAND
206 463-9306

TAX Acct #

312303 9135-02

LOT	BLOCK	CODE	SEC	TWP	R6
31-23-03	9135	4060	31	23	03

W 124.24 FT OF E 154.24 FT OF S
168.75 FT OF N 910 FT OF NE 1/4
OF NE 1/4

PROPERTY ADDRESS 17803 VASHON
Hwy SW

No. 2313-31E.

Address RT 2 Box 149 VASHON WA 98

Sec. 1/4 NW 1/4 Sec. 31 T. 23 N. R. 3 W. M.

Sec. 1/4 NW 1/4 Sec. 31 T. 23 N. R. 3 W. M

(10) WELL LOG:

Formation; Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL.	FROM	TO
BROWN Lead	2	7'

9 pm - 9.45 pm	7	30'
----------------	---	-----

[illegible]

green cemented gravel	2.7'	8.0'
-----------------------	------	------

	86
Brown sand - with Bricks	19' 2"

20	73
20	73

BRANK S. B. N. B.	95	121
-------------------	----	-----

127	130
128	131

water pumping	120	135
---------------	-----	-----

2011-12	Year 12	3 AND	135-140
2011-12	Year 12	3 AND	135-140

140	160
-----	-----

Type of perforator used.....

SIZE of perforations in. by in.

..... perforations from ft. to ft.

..... perforations from ft. to ft.

..... perforations from ft. to ft.

Screens: Yes ☒ No ☐
 Manufacturer's Name Johnson
 Type Telescoping Model No. STAINLESS
 Diam. Slot size from ft. to ft.
 Diam. 6 Slot size 0.12 from 1.36 ft. to 1.40 ft.

Gravel packed: Yes ☐ No ☒ Size of gravel: _____
Gravel placed from _____ ft. to _____ ft.

Surface seal: Yes ☒ No ☐ To what depth? 18 ft.
Material used in seal: Beato nite
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? _____ Depth of strata _____
Method of sealing strata off _____

4) PUMP: Manufacturer's Name.....
Type: H P.....

(8) **WATER LEVELS:** Land-surface elevation 380-400 ft.
 Static level 129 ft. above mean sea level.....
 Above top of well Date 5-17-74
 Artesian pressure _____ lbs. per square inch Date _____
 Artesian water is controlled by _____ (Cap. valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level

Was a pump test made? Yes ☐ No ☐ If yes, by whom?

Yield:	gal./min. with	st. drawdown after	hrs.
"	"	"	"
"	"	"	"
"	"	"	"

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test

Packer test 2.5 gal./min. with 5 ft. drawdown after... 2 min.

Artesian flow..... g.p.m. Date.....

Temperature of water..... Was a chemical analysis made? Yes ☐ No ☒

Work started May, 1974 Completed May, 1974

WELL DRILLER'S STATEMENT

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Evergreen Dealing
(Person, firm, or corporation) (Type or print)

Address 25627-5E 192 Maple Valley

[Signed].....*Poland Zuping*.....
(Well Drilled)

License No. 0139 Date May 19 74

(1) OWNER: Name RANDALL DAVIS Address PO Box 4110 - Seattle, WA
(2) LOCATION OF WELL: County King NW 1/4 NW 1/4 Sec 31 T 23 N, R 3 W.M.
Bearing and distance from section or subdivision corner

(3) PROPOSED USE: Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(4) TYPE OF WORK: Owner's number of well (if more than one)

New well	☒	Method: Dug	☐	Bored	☐
Deepened	☐	Cable	☒	Driven	☐
Reconditioned	☐	Rotary	☐	Jetted	☐

(5) **DIMENSIONS:**
 Drilled 17.3 ft. Diameter of well 6 inches.
 Depth of completed well 16.9 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 6" Diam. from 0- ft. to 164' ft.
Threaded ☐ " Diam. from " ft. to " ft.
Welded ☒ " Diam. from " ft. to " ft.

Perforations: Yes ☐ No ☒

Type of perforator used.....

SIZE of perforations in. by in.

..... perforations from ft. to ft.

..... perforations from ft. to ft.

..... perforations from ft. to ft.

Screens: Yes ☒ No ☐

Manufacturer's Name: Johnson
Type: Telescoping Model No: STAINLESS
Diam. _____ Slot size _____ from _____ ft. to _____ ft.
Diam. 6" Slot size 0.15 from 164 ft. to 169 ft.

Gravel packed: Yes ☐ No ☒ Size of gravel: _____
Gravel placed from: _____ ft. to _____ ft.

Surface seal: Yes ☒ No ☐ To what depth? 18 ft.
Material used in seal Beaten se
Did any strata contain unusable water? Yes ☐ No ☐
Type of water? _____ Depth of strata _____
Method of sealing strata on _____

(7) PUMP: Manufacturer's Name.....
Type: H.P.

(8) **WATER LEVELS:** Land-surface elevation above mean sea level... 576 ft.
 Static level 145 ft. below top of well Date 3-30-82
 Artesian pressure _____ lbs. per square inch Date _____
 Artesian water is controlled by _____ (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level

Was a pump test made? Yes ☐ No ☒ If yes, by whom?

Yield:	gal./min. with	ft. drawdown after	hrs
"	"	"	"
"	"	"	"
"	"	"	"

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level
.....					
.....					
.....					

Date of test.....
 Baller test..... gal/min. with..... ft. drawdown after..... hrs.
 Artesian flow..... g.p.m. Date.....
 Temperature of water..... Was a chemical analysis made? Yes ☐ No ☐

(10) WELL LOG:

Formation: Describes by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated; with at least one entry for each change of formation.

MATERIAL	FROM	TO
Brown Till - Compact	0	43
gray Till - Compact	43'	151
Brown sandy loam with marls.	151'	161'
Brown sand - Tight dirty - progressively getting cleaner -	161'	169
Brown clay - mastic	169	173

Work started March 1982 Completed March 1982

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Cuyper Drilling
(Person, firm, or corporation) (Type or print)

Address. 25627 SE 194 Maple Valley

[Signed] Robert E. Sanders
(Wm. Driller)

License No. 0134 Date 3-31 1982

Water Right Permit No. 23/36/3/13

(1) OWNER: NAME TIMOTHY F SOMMERS

Address 10427 SW PARK RD VASHON WA 98070

(2) LOCATION OF WELL: Country KUWS

(2a) STREET ADDRESS OF WELL (or nearest address) 10427 SW BANK RD VASHAW WA 98070

(3) PROPOSED USE: ☐ Domestic ☐ Industrial ☐ Municipal ☐
 NA ☐ Irrigation ☐ Test Well ☐ Other ☐
☐ DeWater

(4) TYPE OF WORK: Owner's number of wells (If more than one) _____

Abandoned ☒ New well ☐ Method: Dug ☒ Bored ☐
 Deepened ☐ Cable ☐ Driven ☐
 Reconditioned ☐ Rotary ☐ Jetted ☐

(5) DIMENSIONS: Diameter of well 4 feet inches.
Drilled _____ feet. Depth of completed well 36 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 46 Diam. from G.S ft. to 4 ft.
 Welded ☐ Diam. from _____ ft. to _____ ft.
 Liner installed ☐ Diam. from _____ ft. to _____ ft.
 Threaded ☐ Diam. from _____ ft. to _____ ft.

Perforations: Yes ☐ No ☐

Type of perforator used

SIZE of perforations _____ in by _____ in.

_____ perforations from _____ ft to _____ ft.

_____ perforations from _____ ft. to _____ ft.

_____ perforations from _____ ft. to _____ ft.

Screens: Yes ☐ No ☐

Manufacturer's Name

Type _____ Model No. _____
 Diam. _____ Slot size _____ from _____ ft. to _____ ft.
 Diam. _____ Slot size _____ from _____ ft. to _____ ft.

Gravel packed: Yes ☐ No ☐ Size of gravel _____
Gravel placed from _____ ft. to _____ ft.

Surface seal: Yes ☐ No ☒ To what depth? _____ ft.

Material used in 1981

Did any strata contain unusable water? Yes ☐ No ☐

Type of water? _____ Depth of strata _____

Method of sealing strais off

(7) PUMP: Manufacturer's Name NA
Type: _____

(B) **WATER LEVELS:** Land-surface elevation above mean sea level
 Static level 7 ft. below top of well Date 6-2-74
 Artesian pressure N/A lbs. per square inch Date _____
 Artesian water is controlled by _____ (Cap. valve, etc.)

(9) **WELL TESTS:** Drawdown is amount water level is lowered below static level:
 Was a pump test made? Yes ☐ No ☐ If yes, by whom? _____
 Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.

01	17	24	02
02	01	25	03

~~Recovery data (Time taken at each when pump turned off) (water level measured from well top to water level)~~

Time	Water Level	Time	Water Level	Time	Water Level
-----------------	------------------------	-----------------	------------------------	-----------------	------------------------

DATE: 11/11/11

Bailer test _____ gal./min. with _____ ft. drawdown after _____ hrs.
 Arrest _____ gal./min. with _____ ft. drawdown after _____ hrs.

Artesian flow _____ ft. per _____ hrs.
 Date: _____
 Temperature of water: _____ Was a chemical analysis made? Yes ☐ No ☐

(10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

Formation: Describe by color, character, size of material and structure, and show thickness of aquifer and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information.

MATERIAL

FROM

TO

RECEIVED

OCT 03 1994

~~Gen. of Eucalypt~~

Work Started 8/12 194 Completed 9/22 1944

WELL CONSTRUCTOR CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME TIMOTHY F. SUMMERS
(PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)

Address 10427 S.W. BEAUF. RD

(Signed) By owner License No. ALA

Contractor's Registration No. NA Date 9 22 10 91

(USE ADDITIONAL SHEETS IF NECESSARY)

WATER WELL REPORT

STATE OF WASHINGTON

Application No. 61-2254

Permit No. 23/03-31

(1) OWNER: Name. KING COUNTY WATER DISTRICT 19 Address P.O. Box T, Vashon, Washington 98070
(2) LOCATION OF WELL: County. KING SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 31 T. 23 N. R. 3E W.M.
Bearing and distance from section or subdivision corner

(3) PROPOSED USE: Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☒ Other ☐

(4) TYPE OF WORK: Owner's number of well (if more than one) 1
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

(5) DIMENSIONS: Diameter of well 6 inches.
Drilled 1005 ft. Depth of completed well 670 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 6" Diam. from 0 ft. to 608 1/2 ft.
Threaded ☐ 8" Diam. from 0 ft. to 30 ft.
Welded ☒ 5" Diam. from 635 ft. to 649 ft.

Perforations: Yes ☐ No ☒

Type of perforator used.....
SIZE of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

Screens: Yes ☒ No ☐

Manufacturer's Name UOP-Johnson
Type Telescope Model No. 304 SS
Diam. 6" Slot size 20/30 from 608 1/2 ft. to 635 ft.
Diam. 6" Slot size 25 from 649 ft. to 665 ft.

Gravel packed: Yes ☐ No ☒ Size of gravel:.....
Gravel placed from ft. to ft.

Surface seal: Yes ☒ No ☐ To what depth? 20 ft.
Material used in seal cement
Did any strata contain unusable water? Yes ☐ No ☐
Type of water?..... Depth of strata.....
Method of sealing strata or.....

(7) PUMP: Manufacturer's Name.....
Type:..... H.P.

(8) WATER LEVELS: Land-surface elevation above mean sea level 411.53 ft.
Static level 382.6 ft. below top of well Date 9/24/79
Artesian pressure lbs. per square inch Date.....
Artesian water is controlled by..... (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level Robinson
Was a pump test made? Yes ☒ No ☐ If yes, by whom? & Noble, Inc
Yield: 250 gal./min. with 53 1/2 ft. drawdown after 24 hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level
5 min.	408.3	120 min.	400.2		
15 min.	406.6				
30 min.	405.0				

Date of test 9/25/79

Flow test..... gal./min. with..... ft. drawdown after..... hrs.

Artesian flow..... s.p.m. Date.....

Temperature of water..... Was a chemical analysis made? Yes ☒ No ☐

(10) WELL LOG:

Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL	FROM	TO
Brown weathered till	0	3
Gray till	3	68
Gray fine sand and gravel	68	112
Gray fine-medium pebbly sand	112	120
Gray poorly sorted sand and gravel	120	133
Gray sand	133	135
Brown silty sand and gravel	135	147
Brown sand	147	150
Brown silty sand and gravel	150	156
Gray silty sand	156	175
Gray clayey silt	175	442
Gray silty clay	442	444
Peat	444	446
Gray sandy silt	446	458
Gray silty clay	458	495
Silty fine sand and gravel	495	522
Gray pebbly silt	522	534
Gray clayey silt	534	562
Gray sand and gravel	562	671
Gray clayey silt	671	986
Very compact gray silt	986	1005

MAY 15 1980

Work started August 16, 1979. Completed Sept. 26, 1979.

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME OLYMPIC WEST DRILLING, INC.
(Person, firm, or corporation) (Type or print)

Address 9512 State Highway 16 NW
Gig Harbor, Washington 98335

(Signed) [Signature]
(Well Driller)

License No. 0851 Date 9/25/79, 1979

Appendix C

MTCA Method A Cleanup Standards

Cleanup Levels

<u>Hazardous Substance</u>	<u>Ground Water</u>	<u>Soil</u>
Benzene	5 ppb ¹	0.5 ppm
Ethylbenzene	30 ppb	20.0 ppm
Toluene	40 ppb	40.0 ppm
Xylene	20 ppb	20.0 ppm
Total Petroleum Hydrocarbons (TPH):		
Gasoline TPH	1000 ppb	100.0 ppm
Diesel & Other TPH	1000 ppb	200.0 ppm
Total Lead	5 ppb	250.0 ppm

¹ If the amount of benzene in ground water is above 1 ppb, the owner or operator must submit a state remedial investigation/feasibility report (WAC 173-340-450(5)(a)(i).