#### APPENDIX A

WELL LOGS FOR POTENTIAL WATER WELL LOGS NEAR THE SITE

Third Copy - Driller's Copy 22/5E/7/L STATE OF	WASHINGTON Permit No U
MAD & MARIE MAURITS d/b/a/ KENT NUR	SERYAddress 2170_ East Valley Highway, Kent,
(2) LOCATION OF WELL: County King Bearing and distance from section or subdivision corner 1047 feet	NE & SW Sec 7 T 22 N 5E W
Bearing and distance from section or subdivision corner 104/ 1660	west and 200 it. South of the genter of
(3) PROPOSED USE: Domestic 🖔 Industrial 🗆 Municipal 🗆	(10) WELL LOG:
Irrigation K Test Well Other	Formation: Describe by color, character, size of material and structure, as show thickness of aquifers and the kind and nature of the material in each
(4) TYPE OF WORK: Owner's number of well (if more than one)	stratum penetrated, with at least one entry for each change of formatic  MATERIAL FROM TO
Old Well New well   Method: Dug   Bored	
Deepened Cable Driven Reconditioned Rotary Jetted	
(5) DIMENSIONS: Diameter of well 6" inches.	03.3
Drilled ft. Depth of completed well 300 ft.	Old existing well (1914); Well log and data not
	avaliable
(6) CONSTRUCTION DETAILS: SUPFACE 1S 6" CLOSING Casing installed: no plant from no to no plant from	
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 ft. to ft.	
perforations from ft. to ft.	
perforations from ft. to ft.	
Screens: Yes   No	
Manufacturer's Name 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 fromft. toft.	
Surface seal: Yes   No   To what depth? ft.	
Material used in seal	
Type of water? Depth of strata	
Method of sealing strata off	Prepared by owner July, 1976
(7) PUMP: Manufacturer's Name Gould Century, 5HP	Au 1. Day
Type: OIT 20 III 120 HP OIII	Marts a Marchilan
(8) WATER LEVELS: Land-surface elevation above mean sea levelft.	MADS MAURITSON
Static levelft. below top of well Date	
Artesian water is controlled by (Csp. valve, etc.)	
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started, 19 Completed, 19
Was a pump test made? Yes ☐ No ☐ If yes, by whom?	WELL DRILLER'S STATEMENT:
,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	This well was drilled under my jurisdiction and this report i
# # # # # # # # # # # # # # # # # # #	true to the best of my knowledge and belief.
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	NAME
Time Water Level Time Water Level Time Water Level	(Person, firm, or corporation) (Type or print)
	Address
Date of testhrs. esthrs.	[Signed](Well Driller)
1 flowgpm, Date	
Was a chemical analysis made? Yes No	License No

second Copy — Owner's Copy	ELL REPORT W A C My Permit No
(1) OWNER: Name FIURE SAINATI	Address 20 444 - 844 ) Vent Wash -
(2) LOCATION OF WELL: County King	
(3 OPOSED 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	stratum penetrated, with at least one entry for each change of formation.  MATERIAL FROM TO
(5) DIMENSIONS: Diameter of well inches.  Drilled ft. Depth of completed well ft.	1934- Have one writer
(6) CONSTRUCTION DETAILS:  Casing installed: "Diam. from ft. to f	only other into - constructed with
Perforations:         Yes □ No □           Type of perforator used         In. by in.           SIZE of perforations         ft. to ft.           perforations from ft. to ft.         ft. to ft.           perforations from ft. to ft.         ft. to ft.	Perfort. Contactor agreed to ferrand
Screens: Yes   No	well fensiel with 3" gale
avel packed: Yes \( \) No \( \) Size of gravel:  Gravel placed from \( \) ft. to \( \) ft.  Surface seal: Yes \( \) No \( \) To what depth? \( \) ft.  Material used in seal \( \) Did any strata contain unusable water? Yes \( \) No \( \) Type of water? \( \) Depth of strata \( \) Method of sealing strata off.	Tinal Report has been musplaced in last 384440)
(7) PUMP: Manufacturer's Name NO Rump Necessary	
(8) WATER LEVELS: Land-surface elevation above mean sea level	
(9) WELL TESTS:  Drawdown is amount water level is lowered below static level  Was a pump test made? Yes   No   If yes, by whom?	Work started July 19/93 Completed July # 19/93 WELL DRILLER'S STATEMENT:

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level) Water Level | Time Water Level est......gal/min. with.....ft. drawdown after.... Artesian flow......g.p.m. Date.....

true to the best of my knowledge and belief. NAME in auturn I won adduse
(Person, firm, or corporation) (Type or print)

Addressinson

[Signed]...(Well Driller)

(USE ADDITIONAL SHEETS IF NECESSARY)

License No ....

# STATE OF WASHINGTON DEP: ENT OF CONSERVATION D DEVELOPMENT

WELL	110	Ap	pli,	. #	1212_
	<u>about , 19<b>41</b></u>	Ce	rt.	#6	46-A
Record	by No Driller's Record	_	Ì	į	ļ
Source_		_	-	-	
Location	2 State of WASHINGTON			į	ļ
Cou	nty King	_			
Area	1	_			
Mag			•	į	
t16,	Shinn's Cloverdale Add. to Kent $_{ m E}$ $_{ m 4}$ $_{ m sc}$ $_{ m 7}$ $_{ m T}$ 22 $_{ m N}$ , R 5	·	DIAG	RAM OF	SECTION
Drilling	Co Unknown	` 			
Add	ress				
Met	thod of DrillingDrilled	_Dat	e Unk	now	19
Owner_	Dwight D. Lewis				
	ress Gen. Del., Kent, Wash	1.			
Land su	urface, daturft above below				. 1
CORRI-	MATERIAL		THICK (fee		DEPTH (fect)
	No log available, drill deceased				
	deceased	-			
	Pump Test:				
	Dim.: 149' depth, dia.	611			
	SWL: Artesian Yield: ?				
	DD:				
	Yield: 100 g.p.m. on Cert				
	Casing: 6" dia. from 0	to	14	91	
P	rforations:				
	None				
-					
Turn up	ARTESIAN SH	heet_		_of	sheet

# STATE OF WASHINGTON DEPAR T OF CONSERVATION DEVELOPMENT

	No Appli/ #1/8/
Date April 14 , 19 51	No Appli/. #1787 Cert. #767A
Record by M. H. Hansen	
Source Driller record	
Location State of WASHINGTON	
CountyKing	
Area	🖓
Map	
XXXXXXXXXXX Sec 7 T 22 N, R 5 Drilling Co Tacoma Pump & Wel	E DIAGRAM OF SECTION
Drilling Co Tacoma Pump & Wel	l Drilling Co.
Address Rt. 7, Box 316;	Tacoma, Wn.
Method of Drilling	Date_4-1419_51
Owner O'Brien Water Use	rs Assn. Inc.
Addrest. 2, Box 600; Kent	, Washington
Land surface, datumft above below	
Delow	
CORRE- LATION MATERIAL	THICKNESS DEPTH (feet) (feet)
(Township dellar a tarrangeless hterally but page	hann or noncome in noncombana if
(Transcribe driller's terminology literally but parap- material water bearing so state and record static level if re- surface datum unless otherwise indicated. Correlate with s ing log of materials list all casings perforations screens e	ported Give depths in feet below land tratigraphic column if feasible Follow etc.)
Blue clay & gravel	
	10 10
Brown sand & clay	25 35
Brown sand & clay Sand, gravel, some c	25 35 lay 11 46
Brown sand & clay Sand, gravel, some c Sandy clay - some wa	25 35 lay 11 46 ter 5 51
Brown sand & clay Sand, gravel, some c	25 35 lay 11 46 ter 5 51
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay	25 35 lay 11 46 ter 5 51 vel 4 55 5 60
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay Blue mucky sand & gr	25 35 lay 11 46 ter 5 51 vel 4 55 5 60
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay	25 35 lay 11 46 ter 5 51 vel 4 55 5 60 avel 9 69
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay Blue mucky sand & gr Sand clay w/water	25 35 lay 11 46 ter 5 51 vel 4 55 5 60 avel 9 69 11 80 1 81
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay Blue mucky sand & gr Sand clay w/water Coarse bearing sand	25 35 lay 11 46 ter 5 51 vel 4 55 5 60 avel 9 69 11 80 1 81 ad 39 120
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay Blue mucky sand & gr Sand clay w/water Coarse bearing sand Hard blue clay & san	25 35 lay 11 46 ter 5 51 vel 4 55 5 60 avel 9 69 11 80 1 81 ad 39 120
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay Blue mucky sand & gr Sand clay w/water Coarse bearing sand Hard blue clay & san Coarse sand, gravel	25 35 lay 11 46 ter 5 51 vel 4 55 5 60 avel 9 69 11 80 1 81 ad 39 120 1 121 5 126
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay Blue mucky sand & gr Sand clay w/water Coarse bearing sand Hard blue clay & san Coarse sand, gravel Sandy clay	25 35 lay 11 46 ter 5 51 vel 4 55 5 60 layel 9 69 11 80 1 81 1 81 1 121 5 126 24 150
Brown sand & clay Sand, gravel, some c Sandy clay - some wa Compacted sand & gra Brown sand and clay Blue mucky sand & gr Sand clay w/water Coarse bearing sand Hard blue clay & san Coarse sand, gravel Sandy clay Hard dry green clay	25 35 lay 11 46 ter 5 51 vel 4 55 5 60 layel 9 69 11 80 1 81 1 81 1 121 5 126 24 150

Turn up

E

		-	
-	450	CARL.	
	200	and the same of th	
directly 6	3		
114	_/		

CORRE	Material	THICKNESS (feet)	DEPTH (feet)	
	Depth forward			
	Sand, gravel & water	1	164	-
	Green clay	6	170	-
	Pump test:			-
	Dim: 170' x 8"			
	D.D. 18"	<b>21</b>		- 3
	Yield 100 g.p.m. Casing: 8" dia. ground	level	from	
				-
	1/0 00 1/0			
				-
		1		-
				-
				- 14 -
				- 31 - 13
		-		

(Co)

#### STATE OF WASHINGTON DEPARTI

FLOWING

! OF CONSERVATION EVELOPMENT

VELL	LOG	
VELL	LUG	

No Appla. 4140

Date Oct. 4,

, 1955

Record by J. V. Wilson

Driller's Record Source

Location State of WASHINGTON

King County

Area

Marx Govt Lot 7

SW 4 SW 4 sec 6 T 22 N, R 5

Diagram of Section

Drilling Co J. E. Maxwell

Address 15247 42nd Ave. S.

Seattle, Wask

Method of Drilling Drilled

Date

James W. Wilson

Address Rt 2, Box 1050 Kent, Wn.

Land surface, datum

ft above below

CORRE- LATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
(Tr	anscribe driller s terminology literally but paraphrase as	necessary, in	parentheses

If material water-bearing so state and record static level if reported Give depths in feet below land surface datum unless otherwise indicated Correlate with stratigraphic column if feasible Following log of materials, list all casings, perforations, screens, etc)

Soil	4	4
Clay, Sandy, brown	28	32
Sand, black, coarse	30	62
Clay, sandy	35	97
Sand, hard	6	103
Clay, rubbery blue 80%	63	166
hardpan layers 20%		
Sand, hard-some artesia	n 3	169
water	<u> </u>	
Clay rubbery, blue,	43	212
80% hardpan layers 20%	-	
Pump Test:	2	
Dia: 210' X 6"		
SWL: -/'		
DD:		

Turn up

Sheet

10 22 , 5 N  $\mathbf{W}$ LOG —continueu CORRE-THICKNESS (feet) DEPTH (feet) MATERIAL Depth forward Yield: 1730 g.p.m. Casing: 6" dia standard dr. casing from ground to 202 Perforations: NONE S F No 7442-12-54-3M 46108

S

#### IT OF CONSERVATION DEPAR

DEVEL	OPMI	ENT
WELL LOG Date June , 19 56	No	Appli 4259 Cert. 2887-A
Record by Well driller Source driller's record		
Location State of WASHINGTON County King		
Area Map		
SE ${}^{4}$ NE ${}^{4}$ sec $12  {}^{12}$ 2 ${}^{1}$ N, ${}^{1}$ 4 ${}^{12}$ Drilling Co J. C. Maxwell Address Seattle, Wash		Diagram of Section

Method of Drilling James T. & George Komoto Owner

Kent, Wash. Address

Land surface, datum

Turn up

ft above below

CORRE- LATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)

(Transcribe driller's terminology literally but paraphrase as necessary in parentheses. If material water-bearing so state and record static level if reported. Give depths in feet below land surface datum unless otherwise indicated. Correlate with stratigraphic column if feasible. Following log of materials list all casings perforations screens etc.)

Clay top soil	4	4
Mixed sandy clay, some gr	a-	
vel	135	139
Debris, wood, bark & coal		148
Hardpan	62	210
Sand & gravel, water		
20 gpm. 125 head	8	218
Gravel	8	226
Brown clay & fine gravel	21	247
Sandy clay & small grave.	47	294
Sand & gravel	27	321
PUMP TEST:		
Dim. 321'x6"		
Siviex +-		
Flowing well: Measured di		
75 g.p.m. Shut-in press	ure at	
ground surface 34 lbs. pe	r sq.i	n.
(over)	-	

Sheet

CORRE- LATION	MATERIAL	THICKNESS (feet)	DE (fr
	Depth forward		
	Water is controlled by 4	valve	9
	CASING: 6" diam. from Ot	o 315	ft.
	4" diam. from 315 to 321	ft.	
	PERFORATIONS: 8° of 4" ca forated ‡"x4", 8 slots po	sing	er-
	313 to 321 ft.	er it.	irom
	)1) to )21 1t.		
	<u> </u>		
-			
			-



DEF		SHINGTOF CONSERVATIO OPMENT	N
WELL LOG		No Appli/	5267
Date 7-9	, 19 <b>59</b>		
Record by Well dr	iller		
Source driller's	record		
Location State of WASH	INCTON		
County King	intaron		
Area Shinn's	Cloverdal		
Map Add. to h		*	
	т 22 м, к	E Diagr	am of Section
Drilling Co T. M.	Stimson	2 202	
	it, Washing	rton	,
22442030			, 19 <b>5</b> 9
Method of Drilling	0. 177	Date 5-9	
Owner Raymond R.		e B. Meli	ter
Address	ent, Wash.	-	-
Land surface, datum	ft above below		

CORRE- LATION	MATERIAL	fuckness (feet)	DEPTH (feet)
------------------	----------	-----------------	--------------

(Transcribe driller's terminology literally but paraphrase as necessary in parentheses. If material water bearing so state and record static level if reported. Give depths in feet below land surface datum unless otherwise indicated. Correlate with stratigraphic column, if feasible. Following log of materials list all cisings perforations screens, etc.)

	Topsoil - sand & soft clay	7 55	55
	Black sand	75	130
	Sandy blue clay	8	138
	Soft blue clay streak		
	Soft clay & sand	32	170
_	Water bearing sand & grave	10	180
	PUMP TEST.		
- 1	Dim. 180'x6"		
	SWL: Flowing		
1	DD: 2 ft.		
$\neg$	Yield: 40 g.p.m.		<del>                                     </del>
	Water Temp. 42°F.		
	Type & size of pump: 1 h.	Boo	ster
	FLOWING WELL:	. 500	
	Measured discharge 30 g.p.	m. on	5-9-59
	Shut-in pressure at ground	surf	ace
	12 lbs. per sq.in. on 7-4-	-59	
	Water is controlled by car	and	valve.
	(over) Sheet		

CORRE-	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	Depih forward		,
	CASING: 6" diam. from ground to	.70 ft	
	4" " from 170 to	180	t.
	PERFORATIONS:		
	8 perforations per ft. signature from 170 to 180 ft.	se .050	)x4 <sup>81</sup>
	from 170 to 180 ft.		
			-
		-	
		-	
	7440—12-54—3M 40108		

Third Copy — Driller's Copy STATE OF	WASHINGTON Permit No.		(8)
(1) OWNER: Name City & Kent	Address Z 2,	105-	67 J
	lear center of NE 14 SE 14 Sec. 7 T2	2 N. R	SE W.M
Bearing and distance from section or subdivision corner			
(3) PROPOSED USE: Domestic   Industrial   Municipal	(10) WELL LOG:		
Irrigation   Test Well   Other	Formation: Describe by color, character, size of materi show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each	al and stra the mater	ucture, and rial in each formation
TYPE OF WORK: Owner's number of well ?	MATERIAL	FROM	TO
New well Method: Dug D Bored D Deepened Cable M Driven D	Gray till or Till like they with gravel	0	119
Reconditioned Rotary Jetted		735.4.2	
(5) DIMENSIONS: Diameter of well 12 inches.	Gray Clay with some sound	109	180
Drilled 500 at Depth of completed well 21.35 a	Blut clad	186	220
(6) CONSTRUCTION DETAILS:		- C-	<b>"</b> 特定的
Casing installed: 12 " Diam. from _O_ ft. to 922 ft.	Grey and green Sand i grave	220	223
Threaded D That to ft. to ft.			
Welded Z To Diam. from ft. to ft.	Gray green Till of till like clay,	223	286
Perforations: Yes   No	Gray sand i gravel	286	287
Type of perforator used		200	1100
perforations from ft. to ft.	Gray green Till-like clay sitt,	287	421
perforations from ft. to ft.	Dark, Blue-green Sand w/occ. grave	421	433
Screens: Yes No D Johnson U.O.P.	Blue-green sitty sand and gravel	433	500
Type 304 Stantess Steel Model No.			
Diam. 10"PS Slot size 20 from 422 ft. to 432 ft.  Diam. Slot size from ft. to ft.			3 21 25
			S. Mary
Gravel packed: Yes No Z Size of gravel:			
Gravel placed fromft. toft.	JUN 18 1991		
urface seal: Yes No D To what depth? 18 ft.  Material used in seal CCMENT	July = 5		
Did any strata contain unusable water? Yes No 2	OF ECOLOGI		
Type of water? Depth of strata	DEPARTMENT OF ECOLOGY NORTHWEST REGION		
Method of sealing strata off	NOHILLA		
7) PUMP: Manufacturer's Name			
Туре: Н.Р			
8) WATER LEVELS: Land-surface elevation & 260 n.			
tatic level 125.4 tt. below top of well Date 2/11/8/			
Artesian water is controlled by			
		· • • • • • • • • • • • • • • • • •	··· 4 # (# 12) # # # # # # # # # # # # # # # # # # #
9) WELL TESTS: Drawdown is amount water level is lowered below static level Driffer	Work started Nov 17 , 1980 Completed F.C.	6 18	
ras a pump test made? Yes No If yes, by whom?	WELL DRILLER'S STATEMENT:		
,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	This well was drilled under my jurisdiction a	and this	report is
n n n	true to the best of my knowledge and belief.		
ecovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	NAME Burt Well Drilling	. In	٠.
Time Water Level Time Water Level Time Water Level	(Person, firm, or corporation)	ype or pr	rint)
Sam 136.25 100 min 131.6 500 min 130.68	Address R+ 1 - Box 283 Pouls	OW	9
10 min 134, 35 160 min 131,32	4 0 0 4		
Date of test 2/9/81	[Signed] Design W. But		
dier testgal/min, withft, drawdown afterhrs.	(Well Driller)		
ture of water Was a chemical analysis made? Yes 🔭 No 🛘	License No. 0048 Date 4-16	ž	., 198

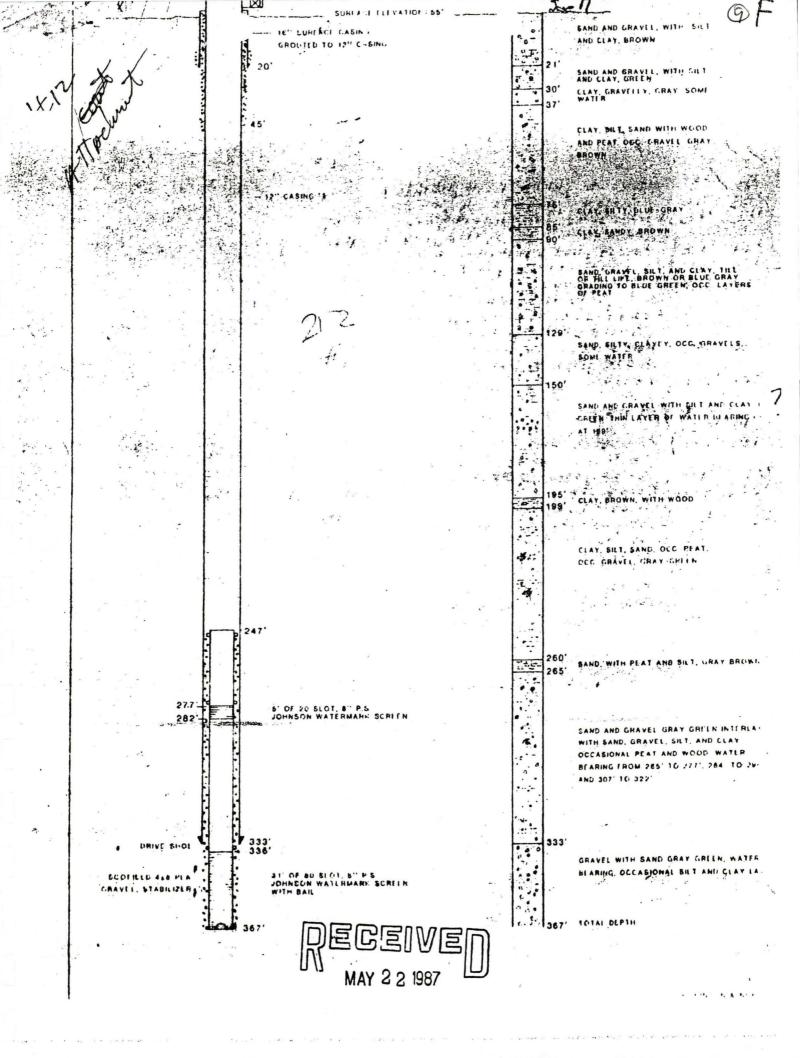
Second Copy — Owner's Copy Third Copy — Driller's Copy  STATE OF	WASHINGTON Permit No	61-2	41701
(1) OWNER: Name CITY OF KENT	Address P.O. DOX 310 KENT, W	A.	9803
(2) LOCATION OF WELL: County KING	SENNW Sec 7FT2	2 N R	5Ewn
Bearing and distance from section or subdivision corner 2100 'E,	1500 ASOF NW COR SEC 7		
PROPOSED USE: Domestic   Industrial   Municipal	(10) WELL LOG:		
Irrigation   Test Well   Other	Formation: Describe by color, character, size of materia show thickness of aquifers and the kind and nature of t stratum penetrated, with at least one entry for each c	l and str	ucture, and
(4) TYPE OF WORK: Owner's number of well 2/2 7# #/		hange of	formation
(4) TYPE OF WORK: (if more than one) New well Method: Dug   Bored	MATERIAL	FROM	10
Deepened Cable Driven	SAND AND GRAVEL, WITH SILT	0	21
Reconditioned   Rotary   Jetted	AND GLAY, BROWN		
(5) DIMENSIONS: Diameter of well 12 inches.	SAND AND GRAVEL, WITH SILT	21	30
Drilled 37/ tt. Depth of completed well 367 ft.	AND CLAY, GREEN.		111111111111111111111111111111111111111
Drilled St. T. It. Depth of completed went to	CLAY, GRAVELLY, GRAY, SOME	30	37
(6) CONSTRUCTION DETAILS:	WATER		
Casing installed: 12 " Diam. from +2.6 ft. to 333 ft.	CLAY, SILT, SAND WITH WOOD	37	76
Threaded \( \tag{Threaded \) \} \} \) \end{Threaded \( \tag{Threaded \( \tag{Threaded \( \tag{Threaded \( \tag{Threaded \( \tag{Threaded \( \tag{Threaded \) \} \} \} \) Threaded \( \tag{Threaded \( \tag{Th	AND PEAT, OCCASIONAL GRAVEL,		-
Welded W Than from ft. to ft.	GRAY BROWN.		
	CLAY, SILTY, RUE-GRAY	76	85
Perforations: Yes   No X	CLAY, SANDY, BROWN	85	90
Type of perforator usedin. byin.	SAND, GRAVEL, SILT, AND CLAY,	90	129
perforations from ft. to ft.	TILL OR TILL KIKE, BROWN		-
perforations from ft. to ft.	OR BLUE GRAY, GRADING TO		
perforations from ft. to ft.	BLUE GREEN, OCCASIONAL		<u> </u>
Screens: Yes X No [	LAYERS OF PEAT	100	
Manufacturer's Name JOHNSON	SAND, SILTY CLAYEY, OCC.	129	150
Type WATERMARK Model No.	ORANELS, SOME WATER	. =	10-
Diam. 8 "PS Slot size 80 from 336 ft. to 367 ft.	SAND AND CRAVEL WITH SILT	150	195
Diam. Slot size from ft. to ft.	TAND GLAY, BLUE GREEN,		<u> </u>
Gravel packed: Yes X No D Size of gravel: PEA	THIN LAYER WATER BEARING		<del></del>
Gravel placed from 367 ft. to 250 ft.	GRAVEL AT 169'	10-	100
	CLAY, BROWN, WITH WOOD	195	199
Surface seal: Yes No   To what depth?45 ft.	CLAY, SILT, SAND, OCC. PEAT,	199	260
Material used in seal	OCC GRAVEL, GRAY-GREEN	240	215
Did any strata contain unusable water? Yes No X Type of water? Depth of strata	SAND, WITH PEAT AND SILT,	260	265
Method of sealing strata off	GRAY BROWN	215	277
	111-11-11-11-11-11-11-11-11-11-11-11-11	265	333
(7) PUMP: Manufacturer's Name	NTER CAYERED WITH SAND,		
Type:HP	BRAVEL SITT AND CLAY, OCC		
(8) WATER LEVELS: Land-surface elevation 5	C PEAT AND WOOD WATER		
Static level 49 the book top of well Date 10/10/82	C 010 207 - 222		
Artesian pressure 21.1 lbs. per square inch Date (9/11/824)	REGRAVEL WITH SAND, GRAY	233	367
Artesian water is controlled by Cap, value etc.)	10000 110000 Date 111	روو	201
3 82	CREEN, WATER REARING		
(9) WELL TESTS: Drawdown is amount water level of lowered below static level Robinston	Work started 6/1 19.82 Completed /0,	111	1982
Was a pump test made? Yes No 🗆 If yes, by whom?*	TOTAL DELIVERY OF THE PROPERTY	<u></u>	, 19
Yield: //94 gal./min. with 99 ft. drawdown after 2 hrs.	WELL DRILLER'S STATEMENT:		
" " " "	This well was drilled under my jurisdiction as	nd this	report is
н н н	true to the best of my knowledge and belief.		
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	Parama Days us	1.1	
Time Water Level   Time Water Level   Time Water Level	NAME TRONG URILLING (Person, firm, or corporation) (T	ype or pr	int)
	107.5 1111 100 5	- C	WA
	Address 10715 66th Age EAST	FUY!	PLLUP
	XV CILA		4837
Date of test 7/82	[Signed]		
test gal/min, with ft. drawdown after hrs. an flow 567 AVG. g.p.m. Date 10/6-8/82	(Well Diviner)		5)
Temperature of water 20° F. Was a chemical analysis made? Yes M No	License No. 00/2 Date 10 -	31	1982
Total and the second se			.,

### WATER WELL REPORT

STATE OF WASHINGTON

Ap	plication	No.	 	$\mathcal{O}$

Third Copy - Driller's Copy	STATE OF WASHINGTON	Permit No		
(1) OWNER: Name City of KEN	Address 220 S	SO, 45 ST, KENT, W	A 980	32
(2) LOCATION OF WELL: County K			THE RESERVE TO A STREET THE PERSON NAMED IN	
Bearing and distance from section or subdivision con	,			. ,
ROPOSED USE: Domestic   Indus	trial   Municipal   (10) WELL LO	G:		
Irrigation [ Test	Well Other Formation: Describe show thickness of ac stratum penetrated,	by color, character, size of materia juifers and the kind and nature of with at least one entry for each c	il and stru the mater hange of	icture, and fal in each formation
(4) TYPE OF WORK: Owner's number of (if more than one).  New well Method:	Dus D Bored D	MATERIAL ATTENDED	PROM	20
W. W	Cable Driven D S+G W/Sil	THELAY, BROWN	10"	21'
	Rotery D Jetted D 3+G W/Si'll	+Clay GLEEN	21	30
(5) DIMENSIONS: Diameter of well	inches CLAY STAVELL	GLAY SOMEWATER	30'	37
Drilled 367 ft. Depth of completed		and U/ WOOD + DEAT,		4.
Dimer 11. Deput of completes	DCC ASIANAS O	eavel, olay blow	37	76
(6) CONSTRUCTION DETAILS:		BLUE- GRAY	761	851
Casing installed: 12 " Diam. from +"	A La Rich M	4 BROWN	851	90'
Threaded Diam. from	ft. to ft.   SANOB, GENTE	BROWD OR BLUE-	<del>                                     </del>	<del>                                     </del>
Welded " Diam. from		to Blue GREED.	20	7,17.
Perforations: Yes   No	2100 12	Lovers of Dear	901	120
Type of perforator used		4. CLAVEN OCCA.	7. 1	100
SIZE of perforationsin.	by in.   a Parich	SOME WATER	1291	1507
perforations from perforations from	п. т.			2 12 -12
perforations from		FWATER BEARING		
	A+_1		150'	195
Screens: Yes A No D No D Name LAOP Color	CLAY BROWN	wi++ wood	195'	1991
	A No SUI	SAND OCCA. PEAT,		
Diam 16 Slot size 10 from	2 n to 3 2 n OCCA, GLAG		199'	2601
Diam. 12 Slot size 222 from 2	AL to EXE IL SAUD, WIPEAT	+SILT, GRAY BROWN	260	265
ravel packed: Yes No D Size of		BRAY BREEN INTERLA		
Gravel placed from 367 ft. to		L sittectay occas		· · · · · ·
,		VATER BEARING PROM		
		322'	2651	333
Did any strata contain unusable water?		NO GRAY GREEN.	202	232
Type of water? Depth of		eing occasional		*
Method of sealing strata off	Silta cla	y LAYERS.	333'	367'
(7) PUMP: Manufacturer's Name				
Type:	нР			
(2) WATER LEVELS. Land-surface elevate	don			
above mean sea lev	POLICE ATTAC	-HMENT		
Static level 17.2 ft. top of well Artesian pressure 2.1 lbs. per square inch	/ 2/			
Artegian water is controlled by	& Valves		i	
	pt valve, etc.)			
(9) WELL TESTS: Drawdown is amount lowered below static	water level is level Work started.	, 19 Completed		19
Was a pump test made? Yes ☑ No ☐ If yes, by wh	om? UriUs			
Yield: 1868 gal./min. with 186 ft. drawdown		R'S STATEMENT:		
H H H	This well was o	drilled under my jurisdiction a f my knowledge and belief.	ind this	report is
Recovery data (time taken as zero when pump turn		. Hy zhowiede und zenen		
measured from well top to water level)  Time Water Level Time Wdtef Level	NAME ARMS	TRONG DRILLING,	TAC.	nint)
	Address /07/5	66 th ALL EAS	+ Pu	MALLY
MAY 2	2 1987	0/10		> '
le of test	[Signed]	-3 (lel)		
test planin, with DET / 14 Araylo	ECOLOGY I	(Well Driller)	1	
10 12 1 HE WEST	mider fails No   License No. OC	012 Date 5-2	20	19.82
The state of the s				.,



Triird Copy — Driller's Copy STATE OF	WASHINGTO' Permit No		X
(1) OWNER: Name CIT, OF KENT	Address KENT ENG DEPT PO.BOX	Ital	
(2) LOCATION OF WELL: County KING	SE & SW & Sec CO TZ	2	1
Bearing and distance from section or subdivision corner APPROX.		c 6	The same of the sa
(3) PROPOSED USE: Domestic   Industrial   Municipal	(10) THEFT TOG		
Irrigation   Test Well   Other	Formation: Describe by color, character, size of materia show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each ci	I and stre	ucture,
TYPE OF WORK: Owner's number of well 208th CTREE		hange of	formati
New well Method: Dug Bored	MATERIAL	TROM	10
Deepened [] Cable T Driven []	FILL MATERIAL AND OLD ROAD		/*
Reconditioned	DARK GRAY COMPACTED		วบ
(5) DIMENSIONS: Diameter of well Inches.	GRAVEL AND SOLT	of the	1
Drilled 39.5 ft. Depth of completed well 231 ft	DARK CRAY COMPACTED SAND,	24	42
(6) CONSTRUCTION DETAILS:	GRAVEL AND SILT		
Casing installed: 12 " Diam. from + 25 n to 184 n.	LIGHT GRAY COMPACTED	42	80
Threaded   16." Diam. from 0 ft. to 40 ft.	SILTY SAND AND CRAVEL	80	3
Welded Diam. fromft. toft.	GRAY PERBLY PEATY CLAY GRAY SILT WITH GRAVEL	80 93	7.
Perforations: Yes   No X	The second secon	108	1125
Type of perforator used	SILT	A Property	"激演
SIZE of perforations in. by in.  perforations from ft. to ft.	GRAY -GREEN SAND AND	168	260
perforations from ft. to ft.	GRAVEL WITH OCCASIONAL	1-10	787
perforations from ft. to ft.	LIGNITIC CLASTS	7/0	<b>PO</b>
Screens: Yes M No [	GRAY TO GRAY GREEN FINE	260	宝装 此
Manufacturer's Name UOP - JOHASON	ARUNDANT LIGHTIC	ont 4	
Type STAINLESS Model No. Diam 12TS Slot size 80 from 1801 ft. to 221 ft.	CLASTS, OCCASIONAL		2
Diam Slot size from ft, to ft.	GRAVELLY ZONES AND	1 1 1 1 1	400
Gravel packed: Yes   No X Size of gravel:	LAYERS OF SILTY SAND	4.4	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Gravel placed fromft. toft.	AND GRAVEL		361
Surface seal: Yes No D To what depth? 59 n.			1.4.7
Material used in seal CEMENT GROUT			
Did any strata contain unusable water? Yes No			
Type of water? Depth of strata  Method of sealing strata off	PREPARED BY:		
(7) <b>DIIMD.</b>	ROBINSON + NOBLE	INC	
(7) PUMP: Manufacturer's Name H.P.	11 11		
	Martin B. Jebre	1	
About the state of			
Static level			
Artesian water is controlled by			
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started MARCH 1983 Completed . JU	INE	19_€
Was a pump test made? Yes No ☐ If yes, by whom?	WELL DRILLER'S STATEMENT:		
" H H	This well was drilled under my jurisdiction as	nd this	report
н н	true to the best of my knowledge and belief.		
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	NAME ARMSTRON & DRILL (Person, firm, or corporation) (T	/NG	IN
	Address 10715 66 Aug & Pug	14. 9	270
			··•
Date of test	[Signed] July E. Chat		
saller test gal/min, with ft, drawdown after hrs.	(Well Driller)	-3	,
rature of water	License No. GOL7 Date 7	26	., 19.&
	ORIGINAL SIGNED &	av s	٠ م
/*****   W.	- SANCE SIGNED F	17 /	$M \setminus L$

### WATER WELL REPART

Application No. 。江东大、高海大 STATE OF WASHINGTL Permit No. .... (1) OWNER: Name City OF KENT Address 220 SO, 4TH ST. KENT WA. 98032 (2) LOCATION OF WELL: County King- So. 2087 ST. WELL - S.E. S. W. Y Sec. TZZN RSE Bearing and distance from section or subdivision corner (10) WELL LOG: 3) PROPOSED USE: Domestic | Industrial | Municipal Formation: Describe by color, character, size of material and structure show thickness of agu, ers and the kind and nature of the material in stratum penetrated, with at least one entry for each charge of forms Irrigation | Test Well | Other (4) TYPE OF WORK: Owner's number of well (if more than one).... 一个 A MATERIAL New well M. Method: Dug D Bored D FILL MATERIAL Cable Driven D Rotary [] DK. GERY Compacted Gravet Jetted [ Reconditioned [] (5) DIMENSIONS: Diameter of well .. inches DE, april compacted SAVA GRAVIL & SILY ft. Depth of completed well 2.3 Drilled 395 LT. GRAY COMPACTED SILLY (6) CONSTRUCTION DETAILS: SAND + GRAVEL Casing installed: 12 " Diam. from 12 n to 395 n. GRAY PEBBLY PEATY CLAY Threaded [ " Diam. from ... .... ft. to 73/ GRAY SILT WITH GRADEL Welded " Diam. from \_ ft. to GRAY Compacted probby silt GRAY-GREEN SAND+ GRAVEL 1010 Perforations: Yes | No g Type of perforator used. Woccasional Liquitic CLASTS 168 SIZE of perforations . in. by . in. GRAY to GRAY- GREEN FINE + ft. ... perforations from ft. to COARSE SAND WABUNDANT perforations from ft. to # Liquitic CLASTS, occasional ft. to ft. .... perforations from . genuelly zones . Layers of Screens: Yes No D 260' Manufacturer's Name 116P Tohn SAND + 9 PAVEL Manufacturer's Name 1101 Clon To 12

Type Structor Tree Model No 30 Diam. Slot size 80 from 221 n to 184 n 2 7 PA 4 1 ..... Slot size ..... \_\_ from \_\_\_ Gravel packed: Yes | No W Size of gravel: Gravel placed from .... \_\_\_ ft. to .. ft. \* SEE ATTACHMENT Surface seal: Yes No To what depth? 40 Did any strata contain unusable water? Yes [ No a \_\_\_\_ Depth of strata Type of water?.... Method of sealing strata off. (7) PUMP: Manufacturer's Name H.P. Type: -Director Land-surface elevation above mean sea level.... (8) WATER LEVELS: Static level 4.50 -- : Artesian pressure \_\_\_\_\_22 .lbs. per square inch Date 70 Artesian water is controlled by.... (Cap, valve, etc.) Drawdown is amount water level is lowered below static level (9) WELL TESTS: Work started ..... Completed. 19\_ 19..... Was a pump test made? Yes a No lif yes, by whom? Prolace Yield: 600 gal./min. with 36 ft. drawdown after 24 WELL DRILLER'S STATEMENT: hrs. This well was drilled under my jurisdiction and this report . \*\* \* true to the best of my knowledge and belief. Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level) NAME ARM STRONG Water Level | Time Water Level Date of test . [Signed]. gal/min. with (Well Driller) .tt. drawdown after er test...

0012 Date 5-

gpm. Date.

Temperature of water...

...... Was a chemical analysis made? Yes 😭 No 🗆

## WATER WELL REPORT

STATE OF WASHINGTON

-			No				1
		Y		6.	200	*	(1)
	,	****	-7. 67	35.			(1)

(1) OWNER: Name City of KENT	_ Address 220 So. 4 5T. SOKEN	IT, WA	14035
(2) LOCATION OF WELL: County King - So. 2124	ST. WELL# 2 - S.E. W. N. N. u Sec 7 T. T.	ZN. R.	SEWN.
Bearing and distance from section or subdivision corner			
PROPOSED USE: Domestic   Industrial   Municipal	(10) WELL LOG:		
Irrigation   Test Well   Other		al and stru	cture, and
A STATE OF THE STA	Formation: Describe by color, character, size of materic show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each c	the materi change of	ial in each formation.
(4) TYPE OF WORK; Owner's number of well (if more than one)	MATERIAL	FROM	* 10
New well Method: Dug Dered Deepened D Cable Driven D	BROWN CLAY SAND + G-PAVEL	0/	27
Reconditioned   Rotary   Jetted	BROWN SANDICLAY	27	77
(5) DIMENSIONS: Diameter of well 16 inches	GRAYCLEY SILE & SAUD	127/	25
Drilled 463 tt. Depth of completed well 966 ft.		752	<b>22</b>
	GREEN SAUS AND CLAY	0.1	77
(6) CONSTRUCTION DETAILS:	G-EEN SAND AND G-EAVEL	7./	102_
Casing installed: 16 "Diam. from +2 n. to 248 n.	BLUE-GREED SAND + G-RADEL,	1031	158
Threaded 12 "Diam. from 12 ft. to 463 ft.	BLUE-GREEN SANDA GRAVEL,	104	750
Welded 2 ft. to ft.	INTERLANGERED WIDARK GREED	F. S. 1	
Perforations: Yes 🗆 No 😭	SANDY SILT	158	165'
Type of perforator used	GRAYCUAY, SILLASAND OCCA.	sacr. Test	Print.
SIZE of perforations in. by in.  perforations from ft. to ft.	PEAT, OCCA, BRAILL, GRADES		
perforations from ft. to ft.	TO BLUE-GREEN & GRAY GREEN	165	259
perforations from ft. to ft.	GRAY GREEN POORLY SORTED SAND &		
Screens: Yes W No [	GRAVEL SILL LENGLAY OCCA.	4a - 1	
Manufacturer's Name MOP Zolanijo	PEAT + WOOD -		<del></del>
Type That Model No 904	GRAY FIRE TO MEDIUM SAND	12	7
Diam. 10 Slot size 20 from 2.31 ft. to 2.35 ft.		2591	458
	BLUE- green LAMIN AR CLAY,		7
Gravel placed from 356 ft. to 280 ft.	WITH COAL	456	460
	GRAY-SILTY SAND	460'	463'
Surface seal: Yes No   To what depth? #0 T st.			
Did any strata contain unusable water? Yes 🗆 No 🐯			
	R		
Type of water? Depth of strata	DRO		
Method of sealing strata off		7000	
Method of sealing strata off  (7) PUMP: Manufacturer's Name	NECE .		
Method of sealing strata off	MAY 20		
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level.	MAY 22  MEDITAL AMENT PARTY.	1987	
Method of sealing strata off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	MAY 22  * SEE ATTACHMENT PARTMENT OF	]][]/ <sub>[]</sub>	
Method of sealing strata off  (7) PUMP: Manufacturer's Name Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level. Static level + 43 ft. Top of well Date + 13  Artesian pressure 2 lbs. per square inch. Date + 13	* SEE ATTACHMENT WORTHWENT	1987 1987	
Method of sealing strata off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	MAY 22  * SEE ATTACHMENT PARTAGETT OF THE PARTAGETT OF TH	1987 1987	
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	THYPOY!	1987 1987	
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level.  Static level + 43 ft. top of well Date - 73  Artesian pressure 2 lbs. per square inch. Date - 73  Artesian water is controlled by Chi - 74/12  (Cap, valve, etc.)	Work started 19 Completed	1987 1987 1907	
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	THYPOY!	1987 1987	19
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	Work started 19 Completed WELL DRILLER'S STATEMENT:  This well was drilled under my jurisdiction a	1987 2007	19
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level  Static level + 43 ft. top of well Date - 13  Artesian pressure   Ibs. per square inch Date - 13  Artesian water is controlled by Characteristic level   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? Drafter   Yield:   184 gal/min. with   100 ft. drawdown after 2.4 hrs.	Work started 19 Completed WELL DRILLER'S STATEMENT:	1987	peport i
Method of sealing strata off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	Work started 19 Completed WELL DRILLER'S STATEMENT:  This well was drilled under my jurisdiction a	1987	eport i
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	Work started 19 Completed WELL DRILLER'S STATEMENT:  This well was drilled under my jurisdiction a true to the best of my knowledge and belief.  NAME ARMSTRANG DRILLING	1987	<u> </u>
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	Work started 19 Completed  WELL DRILLER'S STATEMENT:  This well was drilled under my jurisdiction a true to the best of my knowledge and belief.  NAME APACE OF THE COMPLETE O	INC	<u> </u>
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	Work started 19 Completed  WELL DRILLER'S STATEMENT:  This well was drilled under my jurisdiction a true to the best of my knowledge and belief.  NAME AP STRONG DRILLING (Person, firm, or corporation) (T	INC	<u> </u>
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	Work started 19 Completed  WELL DRILLER'S STATEMENT:  This well was drilled under my jurisdiction a true to the best of my knowledge and belief.  NAME ARMSTRING DRILLING (Person, firm, or corporation)  Address 19715 AME EM	INC	<u> </u>
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level	Work started 19 Completed  WELL DRILLER'S STATEMENT:  This well was drilled under my jurisdiction a true to the best of my knowledge and belief.  NAME APACE OF THE COMPLETE O	INC	<u> </u>
Method of sealing strats off  (7) PUMP: Manufacturer's Name  Type: HP  (8) WATER LEVELS: Land-surface elevation above mean sea level. The static level T 43 ft. Top of well Date T 3  Artesian pressure I be per square inch Date T 3  Artesian water is controlled by C 12 ft. T 12 ft.  (9) WELL TESTS: Drawdown is amount water level is lowered below static level  Was a pump test made? Yes T No I if yes, by whom? Profice Yield: (1866 gal./min. with 1800 ft. drawdown after 2 ft 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	Work started 19 Completed  WELL DRILLER'S STATEMENT:  This well was drilled under my jurisdiction a true to the best of my knowledge and belief.  NAME ARMSTRADE Drilling (Person, firm, or corporation) (T	INC	<u> </u>

File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy Application No. STATE OF WASHINGT Permit No. .... 29 1282 KENT ENG DEPT POBOX 310 CITY (1) OWNER: Name... (2) LOCATION OF WELL: County.... SE W NW V Sec 7 T 22N R SE WM and distance from section or subdivision corner APAROXEN 2100 ECOND 1500'S. OF NW (ITH WELL LOG: Domestic | Industrial | Winnicipal (3) PROPOSED USE: 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 charge of formation Irrigation D Test Well D Other Owner's number of well SOUTH (if more than one) .... 212th Me2 (4) TYPE OF WORK: MATERIAL A New well X BROWN CLAY SAND GRAVEL
BROWN SAND AND CLAY
GRAY CLAY, SICT AND SAND Driven [] Cable Deepened Reconditioned [] Rotary [] Jetted [ (5) DIMENSIONS: 16 Diameter of well .... inches. FINE SAND 463 Depth of completed well 366.4 n. Drilled..... GREEN SAND AND CLAY GREEN SAND AND BRAVEL (6) CONSTRUCTION DETAILS: BLUE GREEN SAND, GRAVEL, Casing installed: 16 " Diam. from 0 n. to 248 n. SILT, AND CLAY 20 " Diam from 0 tt. to 40 tt. BLUE -GREEN SAND AND GRAVE 158 165 Welded ....." Diam. from ...... ft. to ...... INTERLAYERED WITH DARK Perforations: Yes | No | CARRY CLAY, SILT AND SAND 165 259 Type of perforator used... ... in. by ... SIZE of perforations ..... OCCASIONAL PEAT. ..... ft. to . ..... perforations from .... OCCASIONAL GRAVEL, GRADE ..... perforations from ... .. ft. to . TO BLUE-GREEN AND ..... perforations from ... GRAY-GREEN Screens: Yes No [ CRAY-GREEN, POORLY SORTED 259 APP. U.O.P. - JOHNSON Manufacturer's Name... SAND AND GRAVEL Type STAINLESS Diam. 10.P. Solot size 100 from 331.4 ft. to 356.4 ft. Diam. 10.P. Solot size 20 from 231.6 ft. to 235.6 ft. INTERLAYERED WITH SAND GRAVEL, SILT, AND CLAY, OCCASIONAL PEAT AND WOOD Gravel packed: Yes No [] Size of gravel: PEA GY GRAY FINE TO MEDIUM 420 Gravel placed from \_\_\_\_226 \_\_\_\_ ft. to \_\_\_\_ SAND, SOME COARSE SAND WOOD CHIPS. Surface seal: Yes No | To what depth? APP 50 n. Material used in seal CEMENT GROUT BLUE-GREEN LAMINAR CLAY Did any strata contain unusable water? Yes 🗌 ... WITH COAL ... Depth of strata Type of water?... GRAY SILTY SAND 460 463 Method of sealing strata off. (7) PUMP: Manufacturer's Name... PREPARED BY: Land-surface elevation APPROX 55ft. (8) WATER LEVELS:

(8) WATER LEVELS: Land-surface elevation Appears 55:
above mean sea level. Appears 55:
Static level + 43
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 I if yes, by whom?

Yield: 1860 gal./min. with 162 ft. drawdown after 24 hr.

..

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

Temperature of water...... Was a chemical analysis made? Yes Z No -

WELL DRILLER'S STATEMENT:

Work started MARCH

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

83 Completed JUNE

NAME PRINSTRONG DRILLING //
(Person, firm, or corporation) (Type or print)

Address ( S. J. J. 66 Ave Pucy, Way, 98.
[Signed] Sol 5 Out

License No. OO 12 Date 7-26 19 5

ORIGINAL SIGNED BY DR.

CITY OF KENT SOUTH 2121h STREET WELL NO S.E /4 NW /4 TZZH RSE

GEOLOGIC LOG SWL 143" ABOVE TOP OF CASING -20-INCH CASING GROUTED IN PLACE CEMENT GROUT SUBFACE SEAL 3512147 40' BROWN SAND AND CLAY TY GRAY CLAY, SET, AND, SAND SLUE-GREEN SAND AND GRAVEL BUT AND CLAY 158 BLUE-GREEN SAND AND GRAVEL 168 HYTERLAYERED WITH DARK GREEN SANDY SET GRAY CLAY, SILT AND SAND OCCASIONAL PEAT, OCCABIONAL GRAVEL GRADES TO BLUE-GREEN AND GRAY GREEN GRAY GREEN POORLY SORTED SAND AND GRAVEL, INTERLAYERED WITH SAND, GRAVEL, SILT, AND CLAY, OCCASIONAL PEAT AND WOOD • A. --4'25' OF 10-INCH PIPE SIZE, 100 SLOT, UOP-JOHNSON STAINLESS STEEL SCREEN 4. WITH WELDING RINGS \* 5 +-3 50.3 GRAY FINE TO MEDIUM SAND, SOME COARSE SAND, WOOD CHIPS

0. .

458 BLUE-GREEN LAMINAR CLAY, WITH COAL

CONSTRUCTION DETAIL

50' -16-INCH CASING 200' TOP OF 10-INCH RISER PIPE (THREADED) CEMENT GROUT M 206' TO 226' 231.6'4' OF 10-INCH PIPE SIZE, 235.6'20 SLOT, UOP-JOHNSON STAINLESS STEEL SCREEN 248' WITH WELDING RINGS PERFORATED
OR GROUTING
FROM 230'
TO 244' - DRIVE SHOE - ROTATION INHIBITING LUGS WELDED TO 10-INCH RISER AT 255 TO 260 - PEA GRAVEL BACKFILL 10-INCH BLANK PIPE 366.4' WITH BOTTOM PEA GRAVEL BACKFILL PORTLAND CEMENT GROUT PLUG 12-INCH CASING REMNANT WITH DRIVE SHOE TOTAL DEPTH 463

ROBINSON & NOBLE, INC.

(1) OWNER: Name awen Koopmans	10020-8 E Man Pontes 240 91	0055	
(2) LOCATION OF WELL: County King	- NE W N. W. Sec. 7 T.		
Bearing and distance from section or subdivision corner	- Maria Sec. J. The	N., A	64 Maria. 99 . LT
	(10) WELL LOG:		
PROPOSED USE: Domestic Industrial Municipal Irrigation Test Well Other		I and ste	ucture and
	Formation: Describe by color, character, size of materia show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each c	the mater	ial in each
(4) TYPE OF WORK: Owner's number of wen (if more than one)	NATERIAL	FROM	mint by
New well Method Duf Depend D		42. 性	
Reconditioned   Rotary   Jetted	Topsoil was	0	2
		300	A - An
(5) DIMENSIONS: Diameter of well piches Drilled 55 A. Depth of completed well 55 A.	Blown Gell	K.	47
	Showl + Water	No	1
(6) CONSTRUCTION DETAILS:	- Wast T Water	77_	ડહ
Casing installed: 6 " Diam. from 0 ft. to 5/ ft.			
Threaded Diam. from ft. to ft.	a section of	7.	
Welded 7 Diam. from ft. to		· 1/2:1	
Perforations: Yes   No			1.32
Type of perforator used	TO THE PARTY OF TH	* > 4	not a cu
SIZE of perforations in. by in.		0*172	4,074
perforations from ft. to ft.		The Market State Control	
perforations fromft. toft.		.%.	213 77
Screens: Yes S No D A 0		10.00	
Manufacturer's Name Udinian	38		
Type stainless Model No		1	4.29
Diam. Slot sizefromft. toft. DiamSlot sizefromft. toft.		· (44)	- 43
		, - i i i	10 P
Gravel packed: Yes   No   Size of gravel:	2	***	2.74
Gravel placed from ft. to ft.		1 100	1,111
Surface seal: Yes No   To what depth? ft.			- 70
Material used in seal			- 1 Si
Did any strata contain unusable water? Yes No Xi Type of water?	- water a		
Method of sealing strata off			
7) PIIMP.	10.00 P.S. 11		
7) PUMP: Manufacturer's Name			
o) White Distriction above mean sea level ft.			
ratic level 30 ft. below top of well Date 8/16/84  rtesian pressure lbs. per square inch Date			
Artesian water is controlled by (Cap, valve, etc.)			
(Cap, valve, etc.)			
9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 8/8 1854 Completed 8	111	184
7as a pump test made? Yes 🗌 No 🗋 If yes, by whom?			
ield: gal./min. with ft. drawdown after hrs.	WELL DRILLER'S STATEMENT:		
u H H D	This well was drilled under my jurisdiction a true to the best of my knowledge and belief.	ind this	report 18
ecovery data (time taken as zero when pump turned off) (water level	1,		
measured from well top to water level)	NAME MORRIS DRILLING CO.		·-
Time Water Level Time Water Level Time Water Level	7215 122nd Ave. S. E.	ype or p	rint)
	Address Renton, WA 98056		
	11 12:55		
Date of test	[Signed] Lhomes Morris		
test /6 gal/min, with 5 ft. drawdown after 4 hrs.	(Weil Driller)		

File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy

# ENTERWELL REPORT STATE OF WASHINGTON Water Blont B

Start Card No. W 16294

Water Right Permit No. \_

UNIQUE WELL I.D. 457 956

(1)	OWNER: Name City of Kent Add	recs N/A		
(;	STREET ADDRESS OF WELL (or nearest address) 72 nd Ave S	- SE 1/4 SkJ 1/4 Sec / T.	22 N. R	4 5
(2a)	STREET ADDRESS OF WELL (or nearest address) // Huc S	next to fire station		
(3)	PROPOSED USE: ☐ Domestic Industrial ☐ Municipal ☐ Irrigation ☐ DeWater Test Well 🜠 Other ☐	(10) WELL LOG or ABANDONMENT PROCEDURE I  Formation: Describe by color, character, size of material and structure, an and the kind and nature of the material in each stratum penetrated, with	d show thickne	ess of aquiters
(4)	TYPE OF WORK: Owner's number of well (If more than one)	change of information.	Tur can one	The state of the s
	Abandoned ☐ New we'll 20 Method: Dug ☐ Bored ☐	MATERIAL	FROM	то
	Despened ☐ Cable <b>X</b> Driven ☐ Fleconditioned ☐ Rotary ☐ Jetted ☐	Silt	0	15
(5)	DIMENSIONS: Diameter of well inches.  Drilled 100 feet. Depth of completed well 100 ft.	Silty Sand + wood	15	53
(6)	CONSTRUCTION DETAILS:	Coarse sand some gravel	53	156
(0)	Casing installed:         Diam. from +2 ft. to 8 ft.           Wedded Liner installed □         Diam. from ft. to ft.           Threaded □         Diam. from ft. to ft.	Fine to medium sand	56	160
	Perforations:         Yes         No         No         Yes         Type of perforator used           SIZE of perforations         in. by         in.         in.			
<u> </u>	Screens: Yes X No	RECEIVED		
	Surface seal: Yes No , To what depth? 20 tt.	0CT 1 6 1998	-	<u> </u>
	Material used in seal	- Dako-at	-	-
	Did any strata contain unusable water? Yes No 📉	DEPT OF ECOLOGY		1
	Type of water? Depth of strata Method of sealing strata off	DELT OF ED		
(7)	PUMP: Manufacturer's Name			
	Туре:			
(8)	WATER LEVELS: Land-surface elevation above mean sea level #1.	Work Started 6-23.9519. Completed 6-	25-95	
	Static level	WELL CONSTRUCTOR CERTIFICATION:		
	Artesian water is controlled by (Cap. valve, etc.)	I constructed and/or accept responsibility for construction		
(9)	WELL TESTS: Drawdown is amount water level is lowered below static level  Was a pump test made? Yes   No   If yes, by whom?  If, drawdown afterhrs.	compliance with all Washington well construction standard the information reported above are true to my best knowled NAME (PERSON, FIRM, OR CORPORATION) (TYPE OF	is. Materials ige and belie	used and
	11 11 11 11	Address 10621 Told Kill	2	
	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	(Signed)Licen Contractor's	isø No. <u>/</u> &	099
_		Registration No. 170CTOIL 1260 G-Date 8-	12-9	819
-	Date of test	(USE ADDITIONAL SHEETS IF NECESS	ARY)	
	Bailer testgal./min. with ft. drawdown after hrs.  Airtestgal./min. with stem set at ft. for hrs.  Artesian flow g.p.m. Date	Ecology is an Equal Opportunity and Affirmative Action cial accommodation needs, contact the Water Resource 407-6600. The TDD number is (206) 407-6006.		

File Original and First Copy with Department of Ecology

Start Card No. UNIQUE WELL I.D. # AEH 964

Second Copy — Owner's Copy Third Copy — Driller's Copy STATE OF WASHINGTON

Water Right Permit No.

	OWNER: Name City of Kent Add	ress_N/A-		
(2)	LOCATION OF WELL: County King	. NE 1/4 SE 1/4 Sec 12 T.2	2 N.R	Y ETM.
(2a)	STREET ADDRESS OF WELL (or nearest address) # 2000 x 216	+72 de Kent		
(3)	PROPOSED USE: Domestic Industrial Municipal Dewater Dewater Test Well W Other	(10) WELL LOG or ABANDONMENT PROCEDURE If Formation: Describe by color, character, size of material and structure, and and the kind and nature of the material in each stratum penetrated, with	d show thickne	ss of aquiters
(4)	TYPE OF WORK: Owner's number of well (If more than one)	change of information.		
	Abandoned   New well Method: Dug   Bored   Bored	F L U	FROM	70
	Deepened ☐ Cable X Driven ☐ Reconditioned ☐ Rotary ☐ Jetted ☐	FIVE		
(5)	Drilled S.5 feet. Depth of completed well 8.5 ft.	Silty sand-silt- peat	2	40
(6)	CONSTRUCTION DETAILS:	Silty time sand	140	50
(-)	Casing Installed:         6         Diam. from 72 ft. to 45 ft.           Welded 8         Diam. from 1t. to 1t.           Liner installed 1         Dlam. from 1t. to 1t.           Threaded 0         Dlam. from 1t. to 1t.	Coarse sand some gravel	50	60
	Perforations: Yes No X  Type of perforations In. by in.	Fine to medium sund	Leo	85
	perforations from         ft. to         ft.           perforations from         ft. to			
	Screens: Yes   No	RECEIVED		
	Gravel placed fromft. toft.	OCT 1 6 1990		
	Surface seal: Yes No To what depth?	DEPLUF ECULUGY		
	Type of water? Depth of strata  Method of sealing strata off			
(7)	PUMP: Manufacturer's Name			
(8)	WATER LEVELS: Land-surface elevation above pean sea level ft.  Static level ft. below top of well Date Artesian pressure level ft. below top of well Date  Artesian water is controlled by (Cap, valve, etc.)	Well Constructor Certification:    constructed and/or accept responsibility for construction compliance with all Washington well construction standard		
(9)	WELL TESTS: Drawdown is amount water level is towered below static level  Was a pump test made? Yes No 1/2 If yes, by whom?  Yield:gal./min. with ft. drawdown after hrs.	the information reported above are true to my best knowled		
т	" " " " " " " " " " " " " " " " " " "	WELL DRILLER)	se No / (	099
		Contractor's Registration No. Hol. TMx (36.0 G Date 9 - 2		,19
	Date of test  Baller testgal./min. withft. drawdown afterhrs.  Airtestgal./min. with stem set atft. forhrs.	(USE ADDITIONAL SHEETS JF NECESS  Ecology is an Equal Opportunity and Affirmative Action cial accommodation needs, contact the Water Resource	employer.	
	Artesian flow g.p.m. Date	407-6600. The TDD number is (206) 407-6006.	•	

No 🗆

Temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes

Temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes 🔀

# WATER WELL REPORT

Start Card No. W/16935 UNIQUE WELL I.D. # AEJ 475

(15)

* * * * * * * * * * * * * * * * * * * *	- oop,	Water Hight Permit No.	8 3th	-
(1)	OWNER: Name City of Kent Ad	ress 220 4th Ave South		
(2)	ATION OF WELL: County King	- NE 1/4 SW 1/4 Sec 7 T.	22 N. R	5 6
(2a)	STREET ADDRESS OF WELL (or nearest address) OBVIEW W			
(3)	PROPOSED USE: Domestic Industrial Municipal	(10) WELL LOG or ABANDONMENT PROCEDURE D	ESCRIPT	ION
	□ DeWater Test Well □ Other □	Formation: Describe by color, character, size of material and structure, and the kind and nature of the material in each stratum penetrated, with change of information.		
(4)	TYPE OF WORK: Owner's number of well (If more than one)	MATERIAL	FROM	то
	Abandoned	Gravel Fill	0	2
(5)	DIMENSIONS: Diameter of well 12 11 inches.  Drilled 26 feet. Depth of completed well 252 ft.	Brown silty gravels	2	17
		Gray solty sand + gravel	17	23
(6)	CONSTRUCTION DETAILS:  Casing installed: 12 Diam. from +2 ft. to 192 ft.	Brown silt	23	27
	Welded Diam. from ft. to ft. Liner installed Diam. from ft. to ft. Diam. from ft. to ft.			
-	Perforations: Yes No 🛣	Brown silty sand + gravel	27	65
	Type of perforator usedin. byin.	Gray + green silty sund+ gravel	65	83
	perforations from	Gray Silt-sand-peat	83	90
	ft. toft.	Tight gray sitt	90	120
	Manufacturer's Name  3 6 4 5 + a 1 n (CS) Model No.	Green - gray sibts some sand	120	167
	1. 10 Slot size 60 from 192 ft. to 207 ft.	sand + gravel water	167	257
_	Oiam. Slot size from ft. to ft.  Gravel packed: Yes No Size of gravel  Gravel placed from ft. to ft.	Hard silt coul Bedrock?	257	262
	Surface seal: Yes No To what depth? 40 ft.  Material used in seal Comount			
	Did any strata contain unusable water? Yes No 💢	999 t \$ TOp		
	Type of water? Depth of strata  Method of sealing strata off			
(7)	PUMP: Manufacturer's Name			
(8)	WATER LEVELS: Land-surface elevation above mean sea level ft.	Work Started 6-22-99, 19. Completed 9-2	0-94	19
	Static level Artistan It. below top of well Date	WELL CONSTRUCTOR CERTIFICATION:		
	Artesian pressure lbs. per square inch Date lbs. per square inch Date (Cap. valve. etc.)	I constructed and/or accept responsibility for construction compliance with all Washington well construction standards		
	WELL TESTS: Drawdown is amount water level is lowered below static level  Was a pump test made? Yes X No If yes, by whom? Holf  Yield: 1050 gal./min. with 43.5 ft. drawdown after 24 hrs.	NAME Hold Lower True to my best knowledge NAME True True True OR CORPORATION) TYPE OR CORPORATION) TYPE OR CORPORATION) TYPE OR CORPORATION)	e and belief	
	Yield: 1030 gal./min. wrth 73,3 ft. drawdown after 27 hrs.	Address Po Dox 1890	remary	
	Recovery data (time taken as zero when pump turned off) (water level measured from well	(Signed) RA Hold Licens	e No. 10	94
т	top to water level) ime Water Level Time Water Level Time Water Level	Contractor's Registration		
_		No. HOLTOI 136 0 G Date 10-12-		, 19
	Date of test ft. drawdown after hrs.	(SSE ABBITIONAL OFFICE TO IT THEOLOGY	-	
	Airlestgal./min. with stem set att. forhrs.  Artesian flowg.p.m. Date	Ecology is an Equal Opportunity and Affirmative Action e cial accommodation needs, contact the Water Resources		
	Temporature of water Was a chemical applying made? Vas X No 🗍	407-6600. The TDD number is (206) 407-6006.		

econd Copy—Owner's Copy Third Copy—Driller's Copy

### **WATER WELL REPORT**

STATE OF WASHINGTON

Water Right Permit No

1)	OWNER: Name City OF Kent	Address 220 FOURTH AVE S., Kent	WA 980.
(2)	TION OF WELL: County Kins G	SE NW N Sec 7 T22 N.	~ ~ F
(2)	912 tu 5	TROATMENT FACILITY 7	RW.M
2a)		The forest factory	
(8,	PROPOSED USE: Domestic Industrial Municipal Labeled DeWater Test Well Other	(10) WELL LOG or ABANDONMENT PROCEDURE DES	
4)	TYPE OF WORK: Owner's number of well WELL 3	thickness of aquifers and the kind and nature of the material in each strat with at least one entry for each change of information	
٠,		MATERIAL FROM	то
	Abandoned New well New Hethod: Dug Bored Cable Driven	Brown Sity CLAY SAND GRAVE O	40
	Reconditioned	DARKGRAY SAND AND GRAVE! 40	43
,5)	DIMENSIONS: Diameter of well 16/12 inches	BROWN SILTYCLAY BOND SAND+GOLDE 43	50
(-)	Drilled 5 2 2 feet. Depth of completed well 495 ft.	BROWN SILTY CLAY WITH SAND 50	70
		GREEN AND GRAY 5:LT AND CLAY 70	90
3)	CONSTRUCTION DETAILS:	CORAY SICTY SAND MAD GRAVE! 90	100
	Casing installed: 20 Diam from + 3 ft. to 120 ft	GREEN GRAY SILTY CLAY SAND + GRAIN 100	180
	Welded Liner installed Liner i	GRAY GREEN SILTY SAND AND GAND / 180	193.5
	Threaded Diam from 213 ft to 290 ft	GRAY CAREN CLAY 1930	- 195.5
_	Perforations: Yes No No	GRAY BROWN SAND AND SICT 1950	
	Type of perforator used	BLUE GREEN GRAYCLAY 229	244
	SIZE of perforations in by in	GRAY FINE SAND 244	257
	perforations fromft. toft	BLUP GRAY BROWN CLAY Some PLAT 257	290
	perforations fromft toft	GRAY SAND AND ELAVE / WITH 290	_
	perforations fromft toft		490
-	Screens: Yes No	CLAY Layers, wood CNIPS =	522
	Manufacturer's Name UOP JOWN SON	3,217 3400 110	320
	5-1-11/000		
	Slot size 290-300, 320-360 340-360		
	DiamSlot size 365 - 375 yom 385 - 395 tt. to 400 - 410) tt		-
	Gravel packed: Yes No Size of gravel 4 X 8		
	207 //6-		-
	-2/		<del></del>
	Surface seal: Yes No To what depth?ft	RECEI	ED
	Material used in seal GMONT 62017	TEYE!	
	Did-any strata contain unusable water? Yes No	JUI 2 4	20.01
	Type of water?Depth of strata	JUL 4 4	4001
	Method of sealing strata off	DEPT OF EC	OLOGY
")	PUMP: Manufacturer's Name	υς: Τήτες	OLOGI
	Туре Н.Р		
<b>'3</b> )	WATER LEVELS: Land-surface elevation above mean sea level 1		
	Static level ~ 45 About it between Date		
	Artesian pressure ~20 051 bs per square inch Date		
	Artesian water is controlled by CAP + UALUE (Cap, valve, etc.))		
-	WELL TESTS: Drawdows is amount water level is lowered below static level	Work started 4/24 20 Completed 5/11	3801
•	Was a pump test made? Yes No If yes, by whom? HOCT, K+V		
,	Yield 2,500 gal /min. with 66.5 ft drawdown after 12 hrs.	WELL CONSTRUCTOR CERTIFICATION:	
	n n n	I constructed and/or accept responsibility for construction and its compliance with all Washington well construction	
	n n n	Materials used and the information reported above are true	
	Recovery data (time taken as zero when pump turned off) (water level measured	knowledge and belief.	
	rom well top to water level) Time Water Level Time Water Level Time Water Level	Holf 1) the Tue	
3/2	LM FLOWS	NAME 1017 12 F 6 117 1 9 - 4 M C (PERSON, FIRM, OR CORPORATION) (TYPE	OR PRINT)
		Pa 120 1800	
		Address / O DOX V890	
	Date of test	KA WAA- 18	94
	Bailer test gal /min_with ft_drawdown after hrs	(Signed) License No _/ C	
	Artest gal /min with stem set at ft for hrs	Contractor's	
	- 100 M 100	Registration 1360 G Date 6/20/0/	, 19
1	Artesian flow	MICE ADDITIONAL CHIEFTO IS NICOSCO.	A-
		(USE ADDITIONAL SHEETS IF NECESSARY)	

CURRENT

# WATER WELL REPORT

WATER WELL REPORT	Notice of Intent No. WE 0139	é.	
Onginal & 1st copy - Ecology, 2nd copy - owner, 3rd copy - driller	Unique Ecology Well ID Tag NoAF		)
Construction/Decommission ("x" in circle)	Water Right Permit No		
commission ORIGINAL CONSTRUCTION Notice			
of Intent Number	Property Owner Name City of		
PROPOSED USE: Domestic Industrial Municipal	Well Street Address St. 218TH ST.	Creek	< Park
DeWater Imgation Test Well Other	City Kertwa 98032 County		
TYPE OF WORK: Owner's number of well (if more than one)  New Well Reconditioned Method Dug Bored Driven	Location NE1/4- 1/4 SE 1/4 Sec 7	Twn 22 R	SE EWM cur
Deepened			WWM
DIMENSIONS: Diameter of well 16 inches, drilled 690 ft	(s,t,r still		
Depth of completed well 675 ft	REQUIRED) Long Deg 14		c 2/4_
CONSTRUCTION DETAILS	Tax Parcel No. 8802 4000		
Casing Welded $20$ " Diam from $+1$ ft to $293$ ft Installed: $16$ " Diam from $+2$ ft to $696$ ft.			C ALCON
Threaded Diam from ft to ft	kind and nature of the material in each stratum per		
Perforations: Yes No	entry for each change of information Indicate all (USE ADDITIONAL SHEETS IF NECESSARY		rea
Type of perforator used	MATERIAL	FROM	TO
SIZE of perfsin_byin_and no_of perfsfromft_toft	Brown Grovely fill	0'	9
Screens: Yes No K-Pac Location	Grav Comented Gravel	9'	76'
Manufacturer's Name ALLOY Machine worlds  Type 304 5 tain less Steel Model No		176	106'
Diam 10. PS Slot Size 30 from 713 ft to 723 ft	Gray Sifty Clay	100	140'
Diam 10"PS Slot Size 30 from 730 ft to 365 ft	Gray Sandy Silt	140	150'
Gravel/Filter packed: Yes No Size of gravel/sand /ON 20	Gray Sand & Gravel	150	158'
Materials placed from 645 ft to 388 ft	Gran Clay	158'	221'
Surface Seal: Yes No To what depth? 30 ft	Gra, Green Silty Gravel	221	239'
als used in seal Hick Solids Bentuncte	Green Sitty sand without well	239'	285'
ly strata contain unusable water? Yes INO	Green Sitt bound Gravel	283	291'
Type of water? Depth of strata  Method of sealing strata off	Green Silty Clay	291'	548.
PUMP: Manufacturer's Name	Gray Silty Clay	299'	320'
Гурс <u>N.4</u> н Р <u>N.4</u>	Green Gray Clay	320'	390'
WATER LEVELS: Land-surface elevation above mean sea levelft		340	407'
Static level / 49 ft. below top of well Date /-/5-04	Green S. (thound seen) i Gravel	401	490'
Artesian pressurelbs per square inch Date  Artesian water is controlled by		490	580'
(cap.valve, etc.)	Gray Sond med water burn	S'RO'	635'
WELL TESTS: Drawdown is amount water level is lowered below static level	w/some Gracel	120	690'
Was a pump test made? Yes No If yes, by whom? /10/Kaido	Gray Fine Sily sand	635	640
Yield 1000 gal/min, with 32,7 ft drawdown after hrs Yield 1000 gal/min with 37,0 ft drawdown after 12 hrs			
Yield/000 gal/min with 38 2 ft drawdown after 24 hrs	Cut Casing Shoe		
lecovery data (time taken as zero when pump turned off)(water level measured from vell top to water level)	and back Pill From	690	640
Time Water Level Time Water Level Time Water Level	with Hick Solids		650'
5 min 1720 35min 153.7 41th 150.3	Bentonite RECE	IVED	
10 mg 170.5 1 mg 151,9 6,42 149,9	MAD	9 2004	
Date of test	MAR 9.	2 2004	
Airtestgal/min with stem set atft forhrs.	DEPT OF	COLOG	Υ
Artesian flowg p m Date Temperature of waterWas a chemical analysis made?   ✓ Yes □ No	Start Date 8-28-03 Completed Date		
VELL CONSTRUCTION CERTIFICATION: I constructed and/or accept respongton well construction standards. Materials used and the information re	nsignify for construction of this well, and its coported above are true to my best knowledge an	ompliance wi d belief	th all
ler Engineer Trainee Name (Print) Bob Carper			۱C.
piller/Engineer/Trainee Signature Both Carper			
riller or Trainee License No		20000 044	10
TAMES OF FEMALES LINE LINE	- City State Zin GRAHAM WA C	48338-016	11.1

Contractor's If trainee, licensed driller's -Signature and License no.\_\_

Registration No. HOKKADIO17M8 Date

715 66th Ave. East

Puyallup,

5d373 (206) 845-1672

City of Kent 220 So. 4th St. Kent, WA 98032

To whom it may concern:

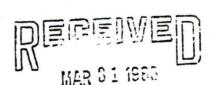
Gentlemen:

We-have been contracted to abandon 4 wells located at 208th & East Valley Highway. The wells consisted of 2-2" diameter sand points, 1-3" diameter and a 6" diameter well. All wells were abandoned in accordance with D.O.E. W.A.C. #173-160-320. (Abandon ment of artesian well).

Cement grout consisting of 6 gallons of water per sack, was pressure pumped into the wells. Using volumn amounts for size of well, an amount equal to at least 1/3 more than casing would hold was induced under pressure. This method insures that an amount of grout was deposited out side the casing through screens, perforation, or open bottom which ever the case may be.

All work was completed on 11-15-85. All wells were checked for water containment and found to be satisfactory.

Yours truly.



DEPARTMENT OF ECOLOGY NORTHWEST REGION

of Ecology

## WATER WELL REPOPT

Appl	icati	on	No.
	161	*	

Permit	No	_		

as:	Driller's Copy	STATE OF V	VASHINGTON	· · · · · · · · ·	Permit No	
0	R: Name	Tranmell & Crow	Address 5601 6	Lave. S.	SEATTL	E, WA
.,-, 1	LOCATION OF W	ELL: County King		W. S. W. Sec	6 122	1. R. S. E. W.
Bearin	ng and distance from sec	tion or subdivision corner 208	- of Aud FA	ot Volley	Hus Kou	Ti was
1	PROPOSED USE:	Domestic   Industrial   Municipal	(10) WELL LOG:		1,	
		Irrigation   Test Well   Other	Formation: Describe by o	color, character, siz	e of material and	1 structure, a
		The second secon	Formation: Describe by a show thickness of aquifer stratum penetrated, with	rs and the kind an at least one entry	A nature of the n y for each chang	naterial in ea
(4) 3	CALL STATE	Owner's number of well (if more than one)		TERIAL	The state of the s	
	New we	The state of the s	4453	AND THE PARTY OF THE		· · · · · · · · · · · · · · · · · · ·
	Deepens	tioned   Rotary   Jetted	and the second	Mark the state of	一个工程工具的证	- X * W- 3
7.3.			CANTE TO	St. To the	a Dyeles	<b>种</b> 学的
` '	DIMENSIONS:	Diameter of wellinches.	About	M ment	シー マ	<b>建</b>
	orilled	Depth of completed well		The state of the s		<b>第</b> 章
(6) (	CONSTRUCTION I	DETAILS:		V. Take	D.T.	
		" Diam. from ft. to ft.	2-2 JANK	s points	APP	- 1
	Threaded []	"Diam. fromft. toft.	110' 0/0	28.		
	Welded	ft. to ft.	1 0 4 1 9 11			120
P	erforations: Yes		1-3 We	( App /	/5	antic California
	Type of perforator	No 🗆	deep	- 18 Mar 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	99	and the state of the
	SIZE of perforation	s in. by in.	1. (11 1.1 1	1 200	20 0	And the same of the
	perforat	tions from ft. to ft.	1-6 Well	THO A	v vcg	2706
		tions from ft. to ft.		145349		
	periorai	tions from ft. to ft.	Allinolle	were A	P-KA	1 11 4
S	creens: Yes   No			1	1 1	- Adding
	Manufacturer's Nam		They wave	= about	assent!	18 T
	Type Slot	model No			DE TOTAL TO	4
		size ft. to ft.	by usin	c Come	<b>经</b> 经验的	6 - 1 / Y - 1 / Y
_	·			/		4
G	Gravel placed from		Growt wi	The bowle	21.16	
	Graver placed from	n. to n.				
S	urface seal: Yes 🗆	No   To what depth? ft.	And puess	WE PHON	P. S.	
	Material used in sea	AND		1 194 5	•	
		tain unusable water? Yes No Depth of strata	down wal	1. USING	A 250	· .
	Method of sealing st		Volume eco	val To A	T	
(7) D	TIMP.		NOIVE SEGI			
(1) 1	UMP: Manufacturer's	Name HP	L-45T Y26	or more	Floan	
(8) W	VATER LEVELS:	Land-surface elevation above mean sea level	CASING WOU	ld hold.	this	
Static le		.ft. below top of well Date				
Artesian	Artesian water is con	lbs, per square inch Date	INDUNE CH	rosel Tol	<u></u>	
	THE POST OF THE PO	(Cap, vaive, etc.)	T 21 17	, 0		
(9) W	ELL TESTS:	Drawdown is amount water level is lowered below static level	Differ of	CASING TE	acted.	
Was a p	oump test made? Yes	No lf yes, by whom?	Work started		pleted	, 19
Yield:	gal./min. with	ft. drawdown after hrs.	WELL DRILLER'S	STATEMENT	C:	
"	, N		This well was drille			his report is
			true to the best of my	Chowledge and	PET TIL	1
Recover	y data (time taken as a sured from well top to v	zero when pump turned off) (water level water level)	A. T.	Man & Min	100 W -	11.1.
Time	Water Level   Time	Water Level   Time Water Level	NAME LIVING IND	arm, or corporate	(Type (	or print
			IADITA C	a A.	ENT	_ ,
	···		Address	MENVO		***************************************
Data	of test		NORT	WES SEA	The same	*
	estgal/min, with	hft, drawdown afterhre.	[Signed]	(Well D	riller)	

gp.m. Dete. 

## File Original and First Copy with

Temperature of water \_\_\_\_\_ Was a chemical analysis made? Yes \_\_\_ No \_\_

### WATER WELL REPC

UNKNOWN Start Card No.

Department of Ecology Second Copy-Owner's Copy STATE OF WASHINGTON Third Copy-Driller's Copy Water Right Permit No. OWNER: Name TRAMMEL CROW 5<del>601</del>0 € TH AVE. S. SEATTLE, WA. 98108 (1) SW x Sec 7 T. 22N N. R 5E WM king SN .OCATION OF WELL: County\_ STREET ADDDRESS OF WELL (or nearest address) 2006 WEST VALLEY HWY KENT, WA. ☐ Domestic PROPOSED USE: (10) WELL LOG ON ABANDONMENT PROCEDURE DESCRIPTION Industrial Municipal (3)XXIrrigation DeWater Test Well Other 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, TYPE OF WORK: Owner's number of well with at least one entry for each change of information. MATERIAL FROM ☐ Method: Dug Abandoned New well Bored 3" PIPE PRESSURE GROUTED ACCORDING TO Deepened Cable Driven Reconditioned Rotary Jetted WASH. ST. SPECS AS ABONDONMENT OF WELL ON PROPERTY AS DESCRIBED ABOVE. (5) DIMENSIONS: Diameter of well inches. \_feet. Depth of completed well\_ CONSTRUCTION DETAILS: Casing installed: Diam. from. Liper installed 
Threaded Welded Diam, from. Perforations: Yes Type of perforator used SIZE of perforations ft. to s from perforation Abandonmen ft. perforations from Screens: Yes UE Manufacturer's Name Model No Type \_ Slot size Slot size \_ravel packed: Yes \_\_ No Gravel placed from ft. Surface seal: Yes To what depth? Material used in seal. Did any strata contain unusable water? Yes Type of water?\_ Method of sealing strata off... RECEIVE (7) PUMP: Manufacturer's Name Type:\_ Land-surface elevation above mean sea level WATER LEVELS: DEPT. OF ECOLOGY Static level\_ \_ ft. below top of well Date Artesian pressure \_ bs. per square inch Date. Artesian water is controlled by .... (Cap, valve, etc.)) 8/8/91 8/8/ Work started 19. Completed WELL TESTS: Drawdown is amount water level is lowered below static level Was a pump test made? Yes No If yes, by whom? WELL CONSTRUCTOR CERTIFICATION: Yield: \_ gal./min. with ft. drawdown after 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. Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level) SLEAD'S CONSTRUCTION, INC. Water Level Water Lavel Water Level (PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT) 2703 EAST 96TH STR. TACOMA WA 98445 Date of test 1762 (Signed) cense No. \_ oal./min. with \_\_ ft. drawdown after Contractor's Airtest \_ \_ gal./min. with stem set at \_ Registration No. SLEAD325KO \_ Date\_ 9/11/ \_, 19\_91 \_ g.p.m. Date

# APPENDIX B UNIVAR KENT BORING LOGS

LOCATION DRILLED BY DRILL METHOD LOGGED BY

PROJECT NAME Van Water & Rogers Inc. Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Nick Garson

BORING NO. **PAGE** 

MW- 1 1 OF 2

GROUND ELEV. TOTAL DEPTH

20.50' DATE COMPLETED 04/13/95

								71.
SAMPLE METHOD AND NUMBER	PID (in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	СОГЛИМ	WELL	LITHOLOGIC DESCRIPTION
SB SB-1-4.5 SB SB-1-6 SB SB-1-7.5	45 100 24 240	12-16-19 37-20-20 13-15-16				0 0		O to 0.8 foot: CONCRETE.  0.8 to 10.0 feet: SAND (SW), brown, fine to medium, few coarse sand, few to little, fine to coarse, angular to subrounded gravel from 0.8 to 3.0 feet, trace to few, fine to medium, subrounded cobbles from 0.8 to 3.0 feet, trace fines, medium dense to dense, damp to wet, very strong acidic to solvent-like odor at 6.0 feet.
SB 		7-12-15		10-				10.0 to 15.0 feet: SILTY SAND (SM), brown to gray, fine, scattered laminated structures 2- to 6-millimeters-thick, occasional wood debris, low plasticity, wet.
SB 	/	13-15-16	-	15 - -				15.0 to 20.5 feet: SILT (ML), brown to gray, trace scattered rootlets and peat-like material, medium plasticity, wet.
SB 		7-8-10	-					



(1) SB = Soil samples collected with Dames & Moore 3-inch split-barrel sampler. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = ground surface(s). HA = Hand augered. (6) Photoionization detector (PID) results in parts per million (ppm).

LOCATION DRILLED BY DRILL METHOD LOGGED BY

PROJECT NAME Van Water & Rogers Inc. Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Nick Garson

BORING NO. PAGE GROUND ELEV. MW- 1 2 OF 2

TOTAL DEPTH DATE COMPLETED O

20.50	
04/13/	

SAMPLE PID METHOD (in ppr AND NUMBER	BLOWS 1) PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	СОГОМИ	WELL	LITHOLOGIC DESCRIPTION
			25 - 30 -				Total depth drilled = 20.5 feet.  Total depth sampled = 20.5 feet.  WELL COMPLETION DETAILS: 0 to 4.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 4.0 to 19.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots.  19.0 to 19.5 feet: 2-inch-diameter threaded end cap.  Ground surface: Flush mount well monument. 0 to 1.0 foot: Concrete. 1.0 to 3.0 feet: Bentonite chips hydrated with potable water. 3.0 to 20.5 feet: #2/12 RMC Monterey sand.



REMARKS

(1) SB = Soil samples collected with Dames & Moore 3-inch split-barrel sampler. (2) Blow counts do not represent SPT results (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = ground surface(s). HA = Hand augered. (6) Photoionization detector (PID) results in parts per million (ppm).

**EMCON** 

LOCATION DRILLED BY DRILL METHOD LOGGED BY

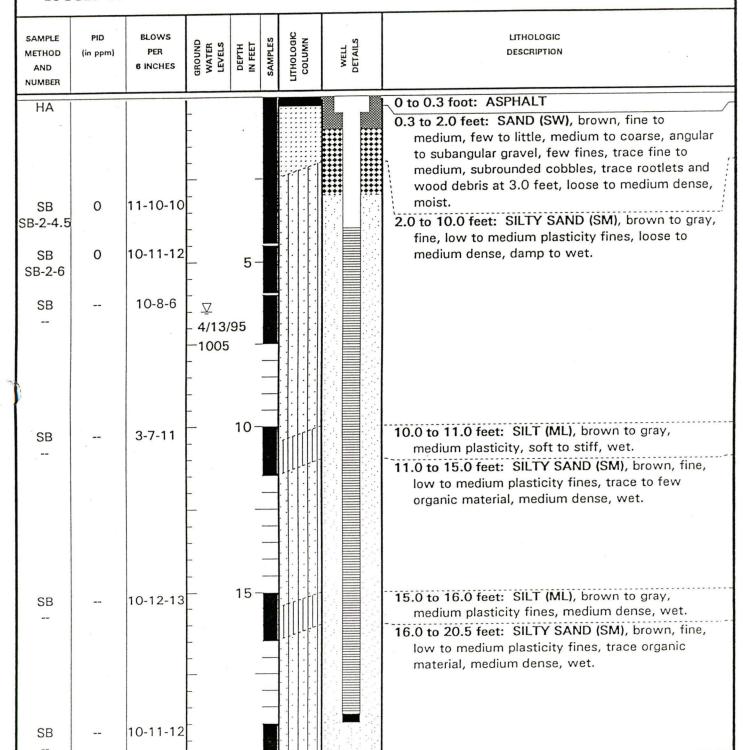
PROJECT NAME Van Water & Rogers Inc. Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Nick Garson

BORING NO. PAGE

MW- 2 1 OF 2

GROUND ELEV. TOTAL DEPTH

20.50' DATE COMPLETED 04/13/95





(1) SB = Soil samples collected with Dames & Moore 3-inch split-barrel sampler. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = ground surface(s). HA = Hand augered. (6) Photoionization detector (PID) results in parts per million (ppm).

DRILLED BY DRILL METHOD LOGGED BY

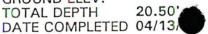
PROJECT NAME Van Water & Rogers Inc. LOCATION Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Nick Garson

BORING NO. PAGE

MW- 2 2 OF 2

GROUND ELEV. TOTAL DEPTH

20.50



SAMPLE METHOD AND NUMBER	PID (in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	СОГИМИ	WELL DETAILS	LITHOLOGIC DESCRIPTION
			-					16.0 to 20.5 feet: SILTY SAND (SM), continued.  Total depth drilled = 20.5 feet.  Total depth sampled = 20.5 feet.
			-	25 -				WELL COMPLETION DETAILS:  0 to 4.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.  4.0 to 19.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots.  19.0 to 19.5 feet: 2-inch-diameter threaded end cap.
			- - - -	-				Ground surface: Flush mount well monument.  0 to 1.0 foot: Concrete.  1.0 to 3.0 feet: Bentonite chips hydrated with potable water.  3.0 to 20.5 feet: #2/12 RMC Monterey sand.
			-	30-				
			- - - -	35 -				
	,		- - - -	-40-				



(1) SB = Soil samples collected with Dames & Moore 3-inch split-barrel sampler. (2) Blow counts do not represent SPT result (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = ground surface(s). HA = Hand augered. (6) Photoionization detector (PID) results in parts per million (ppm).

**EMCON** 

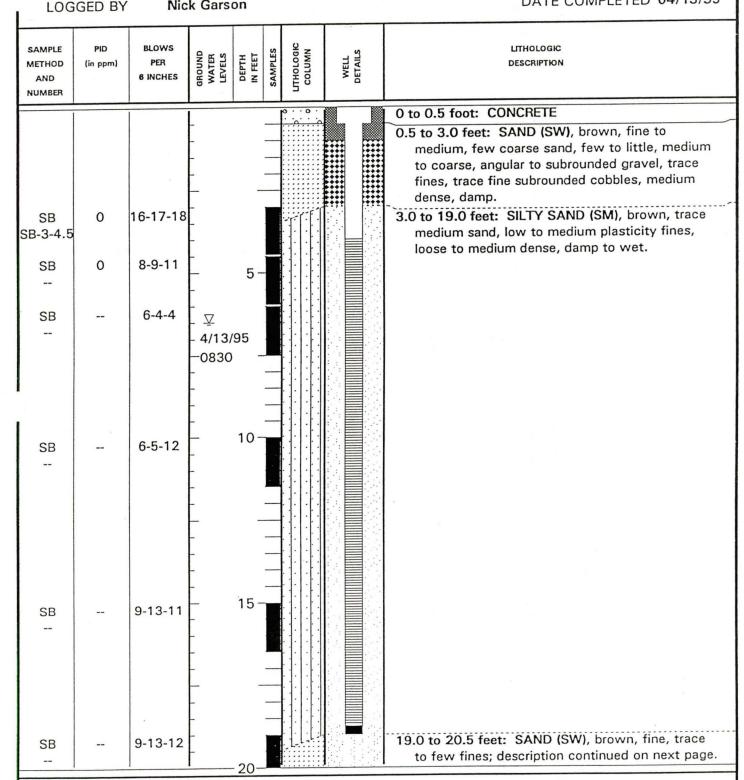
LOCATION DRILLED BY DRILL METHOD

PROJECT NAME Van Water & Rogers Inc. Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Nick Garson

BORING NO. PAGE GROUND ELEV. MW- 3 1 OF 2

TOTAL DEPTH

20.50' DATE COMPLETED 04/13/95





REMARKS

(1) SB = Soil samples collected with Dames & Moore 3-inch split-barrel sampler. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = ground surface(s). HA = Hand augered. (6) Photoionization detector (PID) results in parts per million (ppm).

**EMCON** 

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LOCATION DRILLED BY DRILL METHOD LOGGED BY

PROJECT NAME Van Water & Rogers Inc. Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Nick Garson

BORING NO. MW- 3 2 OF 2 PAGE GROUND ELEV. TOTAL DEPTH 20.50

DATE COMPLETED 04/13

SAMPLE METHOD AND NUMBER	PID (in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	COLUMN	WELL	LITHOLOGIC DESCRIPTION
				30-				19.0 to 20.5 feet: SAND (SW), continued: few medium sand, loose to medium dense, wet.  Total depth drilled = 20.5 feet.  Total depth sampled = 20.5 feet.  WELL COMPLETION DETAILS: 0 to 4.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 4.0 to 19.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots.  19.0 to 19.5 feet: 2-inch-diameter threaded end cap.  Ground surface: Flush mount well monument. 0 to 1.0 foot: Concrete. 1.0 to 3.0 feet: Bentonite chips hydrated with potable water. 3.0 to 20.5 feet: #2/12 RMC Monterey sand.



(1) SB = Soil samples collected with Dames & Moore 3-inch split-barrel sampler. (2) Blow counts do not represent SPT resul (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = ground surface(s). HA = Hand augered. (6) Photoionization detector (PID) results in parts per million (ppm).

LOCATION DRILLED BY

**DRILL METHOD** 

LOGGED BY

PROJECT NAME Van Waters & Rogers Inc.

8201 South 212th St., Kent, Washington Cascade Drilling, Inc.

Hollow Stem Auger Nick Garson

BORING NO. MW- 4 PAGE 1 OF 2 33.20' GROUND ELEV. 15.00' TOTAL DEPTH DATE COMPLETED 08/13/96

				,				Y
SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm) (RECOVERY)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	COLUMN	LITHOLOGIC DESCRIPTION
SB-4-1.5 (SB) SB-4-3 (SB)	1.0 (10/18) 9.0 (8/18)	50/4" 50/6"					O 0	O to 0.4 foot: CONCRETE  0.4 to 8.5 feet: SAND (SP), brown, fine to medium, trace coarse, trace fines, strong organic odor at approximately 7.5 feet bgs, damp to wet. (FILL/ALLUVIUM)
SB-4-7.5	12	12-10-6	- - - - -	5				@ 5.0 feet: sampler refusal.
(SB) SB-4-10 (SB)	6.0 (8/18)	10-8-7	-	10 -				8.5 to 12.5 feet: SILT (ML), brown, low plasticity, trace fine sand, strong organic odor, wet. (ALLUVIUM)
SB-4- 12.5 (SB)	8.0 (14/18)	5-4-4		- 15 - -				12.5 to 15.0 feet: SILT with WOOD DEBRIS (ML), brown, low to medium plasticity, trace fine sand, abundant scattered wood debris, wet. (ALLUVIUM)  Total depth sampled = 14.0 feet. Total depth drilled = 15.0 feet.
			2	20—				See Page 2 for Well Completion Details.



#### REMARKS

(1) SB = Soil sample collected using split barrel sampler (3-inch I.D. by 18-inches long) equipped with stainless steel tube inserts. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = top of PVC. (5) Photoionization detector (PID) results in parts per million (ppm).

**EMCON** 

40931-003.003(02).VWRKT.sa:3.01/20/97...STANDARD

DRILLED BY

LOGGED BY

PROJECT NAME Van Waters & Rogers Inc.
LOCATION 8201 South 212th St., Kent, Washington

Cascade Drilling, Inc. DRILL METHOD Hollow Stem Auger Nick Garson

BORING NO. MW- 4 2 OF 2 **PAGE** GROUND ELEV. 33.20" TOTAL DEPTH 15.0 DATE COMPLETED 08/1\_...3

SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm) (RECOVERY)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	COLUMN	LITHOLOGIC DESCRIPTION
				25 - 30 -				WELL COMPLETION DETAILS: 0 to 4.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 4.5 to 14.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots and a 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap. 0 to 1.0 foot: Steel flush-mount monument. 0 to 1.0 foot: Concrete. 1.0 to 3.0 feet: Bentonite chips hydrated with potable water. 3.0 to 15.0 feet: 20 - 40 Colorado silica sand.



#### **REMARKS**

(1) SB = Soil sample collected using split barrel sampler (3-inch I.D. by 18-inches long) equipped with stainless steel tube inserts. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = top of PVC. (5) Photoionization detector (PID) results in parts per million (ppm).

PROJECT NAME LOCATION DRILLED BY DRILL METHOD

LOGGED BY

PROJECT NAME Van Waters & Rogers Inc.
LOCATION 8201 South 212th St., Kent, Washington

Cascade Drilling, Inc. Hollow Stem Auger Nick Garson BORING NO. MW- 5
PAGE 1 OF 2
GROUND ELEV. 32.77'
TOTAL DEPTH 15.00'
DATE COMPLETED 08/13/96

SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm) (RECOVERY)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	СОГИМИ	LITHOLOGIC DESCRIPTION
SB-5-1.5 (SB) SB-5-3	(12/18)	6-7-6 7-6-6	-					0 to 0.2 foot: ASPHALT  0.2 to 4.0 feet: SAND (SP), reddish-brown, fine, trace fines, damp. (FILL/ALLUVIUM)
(SB) SB-5-5 (SB)	0.8 (15/18)	2-2-1	- -	5				4.0 to 5.5 feet: SILTY SAND (SM), reddish-brown, fine, some low plasticity fines, damp to wet. (ALLUVIUM)  5.5 to 7.5 feet: SANDY SILT (ML), brown, low plasticity, little fine sand, wet. (ALLUVIUM)
SB-5-7.5 (SB) SB-5-10	1.0 (16/18)	2-2-3		10 -				7.5 to 12.5 feet: SILTY SAND (SM), brown, fine, some low plasticity fines, trace rootlets, wet. (ALLUVIUM)
(SB) SB-5- 12.5 (SB)	0.4 (13/18)	1-1-1	-	-				12.5 to 15.0 feet: SAND (SP), brown, fine, trace fines, scattered wood debris, wet. (ALLUVIUM)
,==,				15 - -				Total depth sampled = 14.0 feet.  Total depth drilled = 15.0 feet.
			· :	20—				See Page 2 for Well Completion Details.



#### **REMARKS**

(1) SB = Soil sample collected using split barrel sampler (3-inch I.D. by 18-inches long) equipped with stainless steel tube inserts. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = top of PVC. (5) Photoionization detector (PID) results in parts per million (ppm).

DRILLED BY

DRILL METHOD

LOGGED BY

PROJECT NAME Van Waters & Rogers Inc.
LOCATION 8201 South 212th St., Kent, Washington

Cascade Drilling, Inc. Hollow Stem Auger Nick Garson

BORING NO. MW- 5 **PAGE** 2 OF 2 GROUND ELEV. 32.77' TOTAL DEPTH 15.0 DATE COMPLETED 08/1

	IGED B1	THICK	Garson				DATE CONFLETED 08/1
SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm) (RECOVERY)	BLOWS PER 6 INCHES	GROUND WATER LEVELS DEPTH	IN FEET SAMPLES	WELL	COLUMN	LITHOLOGIC DESCRIPTION
			- 30				WELL COMPLETION DETAILS: 0 to 4.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 4.5 to 14.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots and a 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap. 0 to 1.0 foot: Steel flush-mount monument. 0 to 1.0 foot: Concrete. 1.0 to 3.0 feet: Bentonite chips hydrated with potable water. 3.0 to 15.0 feet: 20 - 40 Colorado silica sand.



#### REMARKS

(1) SB = Soil sample collected using split barrel sampler (3-inch I.D. by 18-inches long) equipped with stainless steel tube inserts. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = top of PVC. (5) Photoionization detector (PID) results in parts per million (ppm).

LOCATION DRILLED BY DRILL METHOD

LOGGED BY

PROJECT NAME Van Waters & Rogers Inc. 8201 South 212th St., Kent, Washington

Cascade Drilling, Inc. Hollow Stem Auger **Nick Garson** 

BORING NO. MW- 6 1 OF 2 **PAGE** 33.33' GROUND ELEV. 15.00' TOTAL DEPTH DATE COMPLETED 08/13/96

SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm) (RECOVERY)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	СОГОМИ	LITHOLOGIC DESCRIPTION
SB-6-1.5 (SB) SB-6-3 (SB)	0.4 (8/18) 0.4 (12/18)	9-8-13 7-5-4	- - - - - - - -	5				O to 0.2 foot: ASPHALT  0.2 to 5.5 feet: SAND (SP), brown, fine, trace fines, damp to wet. (FILL/ALLUVIUM)
SB-6-5 (SB) SB-6-7.5	1.7 (16/18)	3-4-2	-	J -				5.5 to 8.0 feet: SILTY SAND (SM), brown, fine, some low plasticity fines, trace rootlets, wet. (ALLUVIUM)
(SB) SB-6-10	1.7	2-3-3		10 -				8.0 to 10.5 feet: SILT (ML), gray, low to medium plasticity, trace fine sand, wet. (ALLUVIUM)
(SB)	(15/18)		-	-				10.5 to 14.0 feet: SILTY SAND (SM), gray, fine, some low plasticity fines, wet. (ALLUVIUM)
SB-6-14 (SB)	5.0 (15/18)	1-2-1	- 1	15 -				14.0 to 15.0 feet: SILT (ML), gray, low to medium plasticity, trace fine sand, wet. (ALLUVIUM)  Total depth sampled = 15.5 feet.  Total depth drilled = 15.0 feet.
	8	-	2	20-				See Page 2 for Well Completion Details.



#### REMARKS

(1) SB = Soil sample collected using split barrel sampler (3-inch I.D. by 18-inches long) equipped with stainless steel tube inserts. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = top of PVC. (5) Photoionization detector (PID) results in parts per million (ppm).

**EMCON** 

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PROJECT NAME Van Waters & Rogers Inc. LOCATION DRILLED BY

LOGGED BY

8201 South 212th St., Kent, Washington

Cascade Drilling, Inc. Hollow Stem Auger

DRILL METHOD **Nick Garson** 

BORING NO. MW- 6 PAGE 2 OF 2 GROUND ELEV. 33.33' 15.0 TOTAL DEPTH DATE COMPLETED 08/1

SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm) (RECOVERY)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	СОГЛИИ	LITHOLOGIC DESCRIPTION
				25 - 30 -				WELL COMPLETION DETAILS:  0 to 4.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.  4.5 to 14.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots and a 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap.  0 to 1.0 foot: Steel flush-mount monument. 0 to 1.0 foot: Concrete. 1.0 to 3.0 feet: Bentonite chips hydrated with potable water. 3.0 to 15.0 feet: 20 - 40 Colorado silica sand.



#### REMARKS

(1) SB = Soil sample collected using split barrel sampler (3-inch I.D. by 18-inches long) equipped with stainless steel tube inserts. (2) Blow counts do not represent SPT results. (3) White triangle = field estimate of water level at time of drilling. (4) Reference elevation = top of PVC. (5) Photoionization detector (PID) results in parts per million (ppm).

LOCATION DRILLED BY DRILL METHOD LOGGED BY

PROJECT NAME Van Waters & Rogers Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Michelle Lange

BORING NO. MW- 7 **PAGE** 1 OF 2 REFERENCE ELEV. 33.24' TOTAL DEPTH 15.00' DATE COMPLETED 12/12/97

SAMPLE NUMBER	PID (in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVELS DEPTH IN FEET	SAMPLES	WELL	COLUMN	LITHOLOGIC DESCRIPTION
				_			O to 0.3 foot: ASPHALT  0.3 to 2.0 feet: SAND (SP); brown; fine to medium; few coarse sand to fine subangular to
7-2.5	0	4-5-7	-				subrounded gravel; trace fines; loose; damp. (FILL)  2.0 to 5.5 feet: SILTY SAND (SM); mottled brown and red; fine; little nonplastic silt; moist. (FILL/ALLUVIUM)
7-5	0	3-2-1	- - ∑	-			@ 5.5 feet: wet.  5.5 to 12.0 feet: SILTY SAND (SM); brown; fine;
7-7.5	0	1-2-1	-				little nonplastic silt; wet. Lenses of fine sand and silt. (ALLUVIUM)
7-10	0	2-2-2	10				@ 10.0 to 11.5 feet: grades to sand with silt, trace scattered wood debris.
7-12.5	0	2-2-2	-			( - ( - ( - ( - ( - ( - ( - ( - ( - (	12.0 to 15.0 feet: SAND, (SP); gray/brown; fine; trace fines; scattered wood debris; wet. (ALLUVIUM)
			- 15 ·		ge. — We.	. 14 14	Total depth drilled = 15.0 feet.  Total depth sampled = 14.0 feet.
			-				
			20				See Page 2 for Well Completion Details.



#### REMARKS

(1) PID = Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Reference elevation = top of PVC. (3) Open triangle = field estimate of water table at time of drilling. (4) Samples collected with a 2.5-inch inside diameter split-spoon sampler. (5) Blow counts do not represent SPT results. (6) Hand dug to 2 feet for utility clearance,

**EMCON** 

LOCATION DRILLED BY DRILL METHOD LOGGED BY

PROJECT NAME Van Waters & Rogers Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Michelle Lange

BORING NO. MW- 7 PAGE 2 OF 2 33.24 REFERENCE ELEV. TOTAL DEPTH 15.0 DATE COMPLETED 12/1:

SAMPLE NUMBER	PID (in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	LITHOLOGIC	LITHOLOGIC DESCRIPTION
			3	5 —				WELL COMPLETION DETAILS:  0.5 to 4.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.  4.5 to 14.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots.  14.5 to 15.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap.  0 to 2.0 feet: Flush-mount monument and concrete.  2.0 to 3.5 feet: Medium bentonite chips hydrated with potable water.  3.5 to 15.0 feet: 2/12 Lonestar silica sand.



#### REMARKS

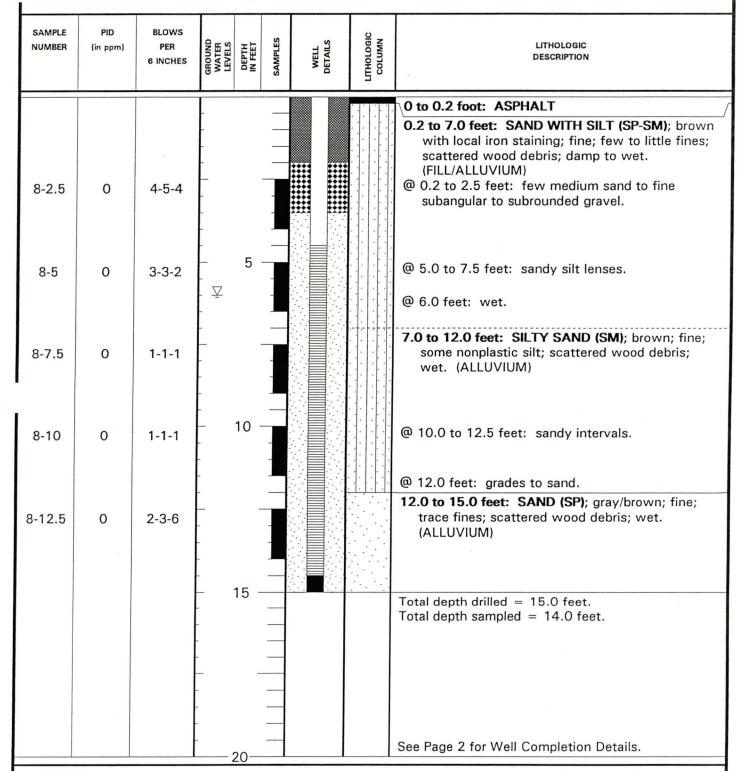
(1) PID = Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Reference elevation = top of PVC. (3) Open triangle = field estimate of water table at time of drilling. (4) Samples collected with a 2.5-inch inside diameter split-spoon sampler. (5) Blow counts do not represent SPT results. (6) Hand dug to 2 feet for utility clearance.

**EMCON** 

LOCATION DRILLED BY DRILL METHOD LOGGED BY

PROJECT NAME Van Waters & Rogers Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Michelle Lange

BORING NO. MW-8 1 OF 2 PAGE REFERENCE ELEV. 33.83' TOTAL DEPTH 15.00' DATE COMPLETED 12/12/97





#### REMARKS

(1) PID = Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Reference elevation = top of PVC. (3) Open triangle = field estimate of water table at time of drilling. (4) Samples collected with a 2.5-inch inside diameter split-spoon sampler. (5) Blow counts do not represent SPT results. (6) Hand dug to 2 feet for utility clearance.

**EMCON** 

LOCATION DRILLED BY DRILL METHOD LOGGED BY

PROJECT NAME Van Waters & Rogers Kent, Washington Cascade Drilling, Inc. Hollow Stem Auger Michelle Lange

BORING NO. MW-8 PAGE 2 OF 2 REFERENCE ELEV. 33.83' TOTAL DEPTH 15.0 DATE COMPLETED 12/1:

SAMPLE NUMBER	PID (in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	COLUMN	LITHOLOGIC DESCRIPTION
				25 30 -				WELL COMPLETION DETAILS:  0.5 to 4.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.  4.5 to 14.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots.  14.5 to 15.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap.  0 to 2.0 feet: Flush-mount monument and concrete.  2.0 to 3.5 feet: Medium bentonite chips hydrated with potable water.  3.5 to 14.5 feet: 2/12 Lonestar silica sand.



#### REMARKS

(1) PID = Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Reference elevation = top of PVC. (3) Open triangle = field estimate of water table at time of drilling. (4) Samples collected with a 2.5-inch inside diameter split-spoon sampler. (5) Blow counts do not represent SPT results. (6) Hand dug to 2 feet for utility clearance.

**EMCON** 

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger Erin McQuillan

BORING NO. PAGE

MW-9 1 of 2

REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED

15.0' 6/26/01

LOGGED BY		rin ivicu	umai	11			DATE GOWIFEETED 3/20/01
SAMPLE SAMPLE NUMBER INTERVAL (SAMPLE (PID TYPE) in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
(0)		L			\(\frac{1}{\rightarrow}\)	0 4 4 0	0 to 7-inches: CONCRETE
(0)		-			<u> </u>		7-inches to 5.0 feet: SILTY SAND (SM), reddish brown, fine sand, little to some silt (20 percent), nonplastic fines, few fine gravels (10 percent, approximately 10 to 20 mm), damp, no noticeable odor. 5.0 to 7.5 feet: SAND (SP), reddish brown, fine sand,
		-	5 -	_			trace fines, damp, no noticeable odor.
(SS) 5-6.5 (0)	6 5 5	-	5-				*
		Δ		_		111	7.5 to 10.0 feet: SANDY SILT (ML), grayish brown, low plasticity, some to little fine sand (15 percent), wet, no
(SS) 7.5-9 (0)	2	_				1	noticeable odor.
	2	-	10 -				10.0 to 13.5 feet: SAND (SP), brown, fine, trace fines (5 percent), wet, no noticeable odor.
(SS) 10-11.5 (0)	5 6 7	-	10				
,							· · · · · · · · · · · · · · · · · · ·
(SS) 12.5-14 (0)	2 4	_	-				
	6	_					13.5 to 15.0 feet: SANDY SILT (ML), brown, medium to low plasticity, little fine sand (20 percent), wet, no noticeable odor.
*		_	15 -				Bottom of boring at 15.0 feet.
		_					
		,					
		_	_	_			
		_		_			See page 2 for Well Completion Details.
			20-			<u> </u>	



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger

BORING NO. PAGE MW-9 2 of 2

REFERENCE ELEV. TOTAL DEPTH

15.0'

SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
			-	25 —				WELL COMPLETION DETAILS  D to 5.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.  5.0 to 15.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots and 2-inch-diameter threaded end cap.  D to 1.0 foot: Concrete.  1.0 to 4.0 feet: Bentonite chips hydrated with potable water.  4.0 to 15.0 feet: 2/12 Monterey sand.  Surface completion: flush mount, traffic rated well box.



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger Erin McQuillan BORING NO.
PAGE
REFERENCE ELEV.
TOTAL DEPTH

1 of 2 15.0'

MW-10

TOTAL DEPTH 15.0'
DATE COMPLETED 6/26/01

SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	COLUMN	LITHOLOGIC DESCRIPTION
(SS)	(0) (0) 5-6.5 (0)	4 4 3	- - - - - - - - - -	5 -				<ul> <li>0 to 7-inches: CONCRETE</li> <li>7-inches to 5.0 feet: SILTY SAND (SM), reddish brown, fine sand, some fines (approximately 30 percent), damp, no noticeable odor.</li> <li>5.0 to 7.5 feet: SANDY SILT (ML), grayish brown, low plasticity, damp, some fine sand (25 percent), no noticeable odor.</li> <li>7.5 to 12.5 feet: SILTY SAND (SM), brown, fine sand, some fines (20 to 30 percent), wet, no noticeable odor,</li> </ul>
(SS)	7.5-9 (0)	1 1 1	- - -	10 -			J/ť	few small silt lenses (<5 mm).
(SS)	10-11.5 (0) 12.5-14	3 3	-	-				12.5 to 15.0 feet: SAND (SP), gray, fine sand, trace fines, wet, no noticeable odor.
(SS)	(0)	6 5 5	8 121	15 -				Rottom of boring at 15.0 feet
			-	_				Bottom of boring at 15.0 feet.
	5			- 20-	_			See page 2 for Well Completion Details.



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Vopak USA, Inc. 8201 South 212th Street, Kent, Washington

Cascade Drilling, Inc. Hollow-stem Auger Erin McQuillan BORING NO. PAGE MW-10 2 of 2

REFERENCE ELEV. TOTAL DEPTH

15.0' 6/26/01

LOGGED BY Erin McQuillan							DATE COMPLETED 6/26/01
SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES		LITHOLOGIC DESCRIPTION
				35 —			WELL COMPLETION DETAILS  0 to 5.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.  5.0 to 15.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots and 2-inch-diameter threaded end cap.  0 to 1.0 foot: Concrete.  1.0 to 4.0 feet: Bentonite chips hydrated with potable water.  4.0 to 15.0 feet: 2/12 Monterey sand.  Surface completion: flush mount, traffic rated well box.



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

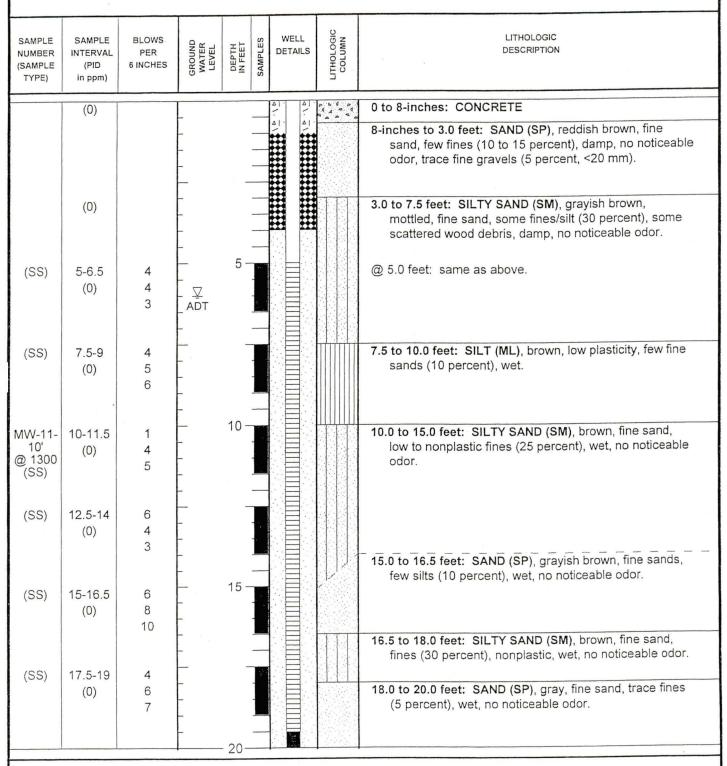
Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger Erin McQuillan BORING NO. PAGE

REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED 1 of 2 20.0'

MW-11

20.0' 6/26/01





REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger Erin McQullan

BORING NO. PAGE

REFERENCE ELEV.

MW-11 2 of 2

TOTAL DEPTH DATE COMPLETED

20.0' 6/26/01

SAMPLE NUMBER (SAMPLE (PID TYPE))  SAMPLE NORTH (PID TYPE)  SAMPLE NORTH (PID TY
WELL COMPLETION DETAILS 0 to 5.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 5.0 to 20.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots and 2-inch-diameter threaded end cap. 0 to 1.0 foot: Concrete. 1.0 to 4.0 feet: Bentonite chips hydrated with potable water. 4.0 to 20.0 feet: 2/12 Monterey sand.  Surface completion: flush mount, traffic rated well box.
- 35 —



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger Erin McQuillan BORING NO. PAGE

REFERENCE ELEV. TOTAL DEPTH

20.0' 6/26/01

MW-12

1 of 2

TOTAL DEPTH DATE COMPLETED

SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
	(0)	,	-	-		<u>a</u>	d g e d	0 to 7-inches: CONCRETE  7-inches to 4.0 feet: SAND (SP), reddish brown, fine sand, little silt (20 percent), few fine gravels (10 percent), damp, no noticeable odor.
(SS)	5-6.5 (0)	4 5 3	- - - - - - \sqrt{2}	5 -				4.0 to 8.75 feet: SILTY SAND (SM), reddish brown, mottled, fine sand, some silt (20 to 30 percent), nonplastic, damp, no noticeable odor.
(SS)	7.5-9	<b>4</b> 5	- <del></del> - -	_				@ 7.0 feet: wet.
(SS)	10-11.5	2 3 7		10 -				8.75 to 11.0 feet: SANDY SILT (ML), brown, low plasticity, few fine sands (10 to 15 percent), wet.  11.0 to 15.0 feet: SILTY SAND (SM), brown, fine sand,
(SS)	12.5-14	2 4 8						some nonplastic fines (20 to 30 percent), wet, no noticeable odor.  @ 12.5 feet: same as above, some scattered wood debris.  15.0 to 16.0 feet: SAND (SP), grayish brown, fine sand,
(SS)	15-16.5	5 7	-	15 -				few silts (5 to 10 percent), wet, no noticeable odor.
(SS)	17.5-19 (0)	11 4 5 7		-				16.0 to 17.5 feet: SILTY SAND (SM), brown, fine sand, some fines (20 to 30 percent), wet, no noticeable odor.  17.5 to 20.0 feet: SAND (SP), gray, fine sand, trace silt/fines (5 percent), wet, no noticeable odor.



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger Erin McQuillan BORING NO. PAGE MW-12 2 of 2

REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED

20.0' 6/26/01

LOGGED BY	En	in McQuilla	ın			DATE COMPLETED 6/26/01
SAMPLE SAMPLE NUMBER INTERVAL (SAMPLE (PID TYPE) in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
		30-				Bottom of boring at 20.0 feet.  WELL COMPLETION DETAILS 0 to 5.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 5.0 to 20.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots and 2-inch-diameter threaded end cap. 0 to 1.0 foot: Concrete. 1.0 to 4.0 feet: Bentonite chips hydrated with potable water. 4.0 to 20.0 feet: 2/12 Monterey sand.  Surface completion: flush mount, traffic rated well box.



REMARKS



JO ME: Univar Kent	
JOB ADDRESS: 8201 S. 212th Stre	et, Kent, WA
JOB NO.: 816.003.01	PROJECT BIII
LOGGED BY: Haldeman	MANAGER: Haldeman
WELL NAME:	EDITED BY:
MW-13	DATE: 3/19/03
DRILLING COMPANY: Cascade Drill	ing Co.
EQUIPMENT:	DRILLER: James Goble
■ 4-1/4" * HOLLOW STEM AUGER	HELPER: Andy
□ * ROTARY WASH	HOURS DRILLED: 3
GALLONS OF WATER USED DURING DRIL	LING: 15 GALLONS
METHOD OF DECONTAMINATION PRIOR TO DRILLING:	Steam pressure wash
DEVELOPMENT	
METHOD OF DEVELOPMENT:	
DEVELOPMENT BEGAN DATE: 3/27/04	TIME:

### ■ LOCK COMBO: PES Master Key ☐ LOCKING STEEL COVER INCH INSIDE DIAMETER TEMPORARY STEEL CONDUCTOR \_TO \_\_\_ 8 INCH DIAMETER **BOREHOLE** 0\_TO\_45.3\_FEET CEMENT SEAL TO 4 FEET TOP OF CASING AT 0.3 FEET ABOVE/AT/ **BELOW GROUND LEVEL** 8 INCH DIAMETER BOREHOLE 0 TO 45.3 FEET 2 INCH DIAMETER SCHEDULE 40 PVC **BLANK CASING** 0 TO 39.6 FEET BENTONITE CHIP SEAL 4\_TO \_37\_ FEET BENTONITE GROUT SEAL \_\_\_TO \_\_\_ FEET BENTONITE PELLET SEAL \_TO \_\_\_ FEET RMC 2/12 NAME NUMBER SAND PACK 37 TO 45.3 FEET 2 INCH DIAMETER SLOTTED Ī 0.020 OR 0.010 INCH PRE-PACK SCREEN 39.6 TO 44.1 FEET 2 INCH DIAMETER SCHEDULE 40 PVC **BLANK SILT TRAP** 44.1 TO 44.6 FEET **BOTTOM WELL CAP AT** 44.6 FEET **BOTTOM OF BOREHOLE** 45.3 FEET

METHOD OF DEVELOPMENT:							
DEVELOPMENT BEG	GAN DATE: 3/27/04	TIME:					
YIELD: 0.25 - 1	TIME FROM:	TO:	DATE:				
YIELD: GP	M TIME FROM:	TO:	DATE:				
TO VATER REM		55	G	SALLONS			
DESCRIPTION OF TURBIDITY AT END DEVELOPMENT:	OF CLEAR-Turb = 16.1  □ MOD. TURBID	☐ SLIGHTL					
ODOR OF WATER:							
WATER DISCHARGE	☐ GROUND SURFAC☐ STORM SEWERS		IK TRUCK DRAGE TAN	ıĸ			
	■ DRUMS	□ отн	HER				
DEPTH TO WATER A DEVELOPMENT:	AFTER		v	FEET			

#### MATERIALS AND EQUIPMENT USED

Sack of Sand	Ft of 2" PVS Blank Casing			
Sacks of Cement	Ft of 2" PVC Slotted Screen			
Sacks of Con Mix	Ft of Steel Conductor			
Yards of Grount				
(14) Sacks of Bentonite Chips	Yd <sup>3</sup> Cement-Sand			
Lbs/Bags of Bentonite pellets	55-Gallon Drums			

#### ADDITIONAL NOTES:

- 1) Prepack screen with 20 x 40 sand;
- 2) 10 x 20 sand around pre-packed assembly;
- 3) nonument flush with grade.
- 4) vvoou plug from 44.6 to 45.0 feet, slough from 45.0 to 45.3 feet.
- 5) See SB-30 for lithologic log.



#### JOB NAME: Univar Kent JOB ADDRESS: 8201 S. 212th Street, Kent, WA JOB NO.: 816.003.01 Bill PROJECT LOGGED BY: McQuillan MANAGER: Haldeman WELL NAME: EDITED BY: MW-14 DATE: 10/7/03 DRILLING COMPANY: Cascade Drilling Co. DRILLER: James Goble EQUIPMENT: HELPER: Steve & Sean \* HOLLOW STEM AUGER HOURS DRILLED: \* ROTARY WASH GALLONS OF WATER USED DURING DRILLING: 40' = GALLONS METHOD OF DECONTAMINATION Steam pressure wash

# PRIOR TO DRILLING: DEVELOPMENT

METHOD OF DEVEL	OPMENT:						
DEVELOPMENT BEG	:						
YIELD: GPI	M TIME FROM:	TO:	DATE:				
YIELD: GPI	M TIME FROM:	TO:	DATE:				
TOTAL WATER REMOVED DURING DEVELOPMENT: GALLONS							
DESCRIPTION OF TURBIDITY AT END DEVELOPMENT:	OF CLEAR		TLY CLOUDY MUDDY				
ODOR OF WATER:							
WATER DISCHARGE TO:	☐ GROUND SUI		ANK TRUCK TORAGE TANK				
	■ DRUMS		THER				
DEPTH TO WATER A	AFTER		FEE	Т			

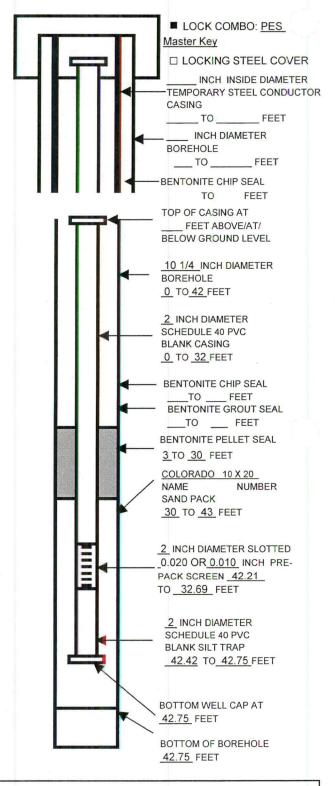
#### MATERIALS AND EQUIPMENT USED

(11) Sack of Sand 10 x 20	32 Ft of 2" PVS Blank Casing
Sacks of Cement	10 Ft of 2" PVC Slotted Screen
Sacks of Con Mix	Ft of Steel Conductor
Yards of Grount	
(12) Sacks of pellets Bentonite	Yd <sup>3</sup> Cement-Sand
50 Lbs/Bags of Bentonite pellets	55-Gallon Drums

#### ADDITIONAL NOTES:

- 1) Prepack Screen with 20 x 40 Sand;
- 2) Around prepack is 10 x 20 Sand;
- 3) Well flush with ground-thea cutoff 4" for 4" bgs surface completion.

# FIELD WELL COMPLETION FORM





Jo ne: Univar Kent								
JOB ADDRESS: 8201	S. 212th S		Master Key  □ LOCKING STEE	EL C				
JOB NO.: 816.003.0	)1	PROJECT E	Bill	ЧН	INCH INSIDE			
LOGGED BY: McQuil	an	MANAGER: H	laldeman		TEMPORARY STEEL			
WELL NAME:		EDITED BY:			CASINGTO	FEE		
MW-	15	DATE: 10/7/0	)3		10 1/4 INCH DIAME			
DRILLING COMPANY:	Cascade [	Orilling Co.		BOREHOLE  _0TO43FE	FT			
EQUIPMENT:		DRILLER: Jan	nes Goble		■ BENTONITE CHIP SEA			
■ * HOLLOW STE	M AUGER	HELPER: Sea	an		TO FEET	Γ		
* ROTARY WAS	Н	HOURS DRILLE	D:	1 ==	TOP OF CASING AT FEET AT			
GALLONS OF WATER U	SED DURING	DRILLING: 40' =	GALLONS		GROUND LEVEL			
METHOD OF DECONTAI	MINATION		,		INCH DIAMET	(FR		
PRIOR TO DRILLING:					BOREHOLE	,		
DEVELOPMENT				11	TOFEET			
METHOD OF DEVELOPM	MENT:				2 INCH DIAMETER			
DEVELOPMENT BEGAN	DATE:	TIME:			SCHEDULE 40 PVC BLANK CASING			
					<u>0.34</u> TO <u>33</u> FEET			
YIELD: GPM	TIME FROM:	TO:	DATE:		BENTONITE CHIP SEA	٩L		
YIELD: GPM	TIME FROM:	TO:	DATE:		TOFEET BENTONITE GROUT	SEAL		
TO VATER REMOVE			0411040		TO FEET			
DU DEVELOPMENT	:		GALLONS		BENTONITE PELLET S	EAL		
DESCRIPTION OF TURBIDITY AT END OF	☐ CLEAR	☐ SLIGHTL	Y CLOUDY		3 TO 31 FEET OGLEBAY/NORTON			
	☐ MOD. TURE	BID   VERY MI	JDDY		COLORADO 10 X 20			
DDOR OF WATER:					NAME NUMI SAND PACK	BER		
	☐ GROUND S	URFACE □ TAN	IK TRUCK		31 TO 44 FEET			
WATER DISCHARGED TO:	☐ STORM SE	WERS □ STC	RAGE TANK	-	2 INCH DIAMETER SL	OTTE		
	■ DRUMS	□ OTH	IER		_0.020 OR_0.010_INC	H PR		
DEPTH TO WATER AFTE	R			II≣	PACK SCREEN <u>33.69</u> TO <u>46.54</u> FEET	_		
DEVELOPMENT:		NT LICED	FEET					
MATERIALS AND					2 INCH DIAMETER SCHEDULE 40 PVC			
(11) Sack of Sand 10		35 Ft of 2" PVS BI			BLANK SILT TRAP			
Sacks of Cement 10					_43.9 TO_44.1_FEE	Γ		
Sacks of Con Mi	x	Ft of Steel C	Conductor					
Yards of Grount				_	BOTTOM WELL CAP AT	Γ		
Sacks of pellets	Bentonite	Yd <sup>3</sup> Cement-S		, -	44.1 FEET			
10 50 Lbs.Bags of Bento	nite pellets	55-Gallon Drun	ns	L	BOTTOM OF BOREHOU	_E		
ADDITIONAL NOTES	3.				44 FEET			

3) vveii ilush with ground-thea cutoff 4" for 4" bgs surface completion.

1) Prepack Screen with 20 x 40 Sand;

d prepack is 10 x 20 Sand;

2)



ЈОВ NAME: Univar Kent Deep Aquifer							
JOB ADDRESS: 8201 S. 212th Street, Kent, WA							
JOB NO.: 816.003.01	PROJECT BIII						
LOGGED BY: McQuillan	MANAGER: Haldeman						
WELL NAME:	EDITED BY:						
MW-16	DATE: 10/22/03						
DRILLING COMPANY: Cascade Drilling Co.							
EQUIPMENT:	DRILLER: Andy Flaggerty						
■ 4" ID * HOLLOW STEM AUGER	HELPER: Sean						
☐ * ROTARY WASH	HOURS DRILLED:						
GALLONS OF WATER USED DURING DE	RILLING: 20 GALLONS						
METHOD OF DECONTAMINATION PRIOR TO DRILLING:	Steam Pressure Wash						
DEVELOPMENT							
METHOD OF DEVELOPMENT							

### LOCK COMBO: PES Master Key ■ LOCKING STEEL COVER INCH INSIDE DIAMETER TEMPORARY STEEL CONDUCTOR FEET **INCH DIAMETER** BOREHOLE TO\_ 8-SACK CEMENT-SAND SEAL 0 TO 2 FEET TOP OF CASING AT 4 INCH BELOW **GROUND LEVEL**

# **DEVELOPMENT BEGAN DATE:** TIME: TO: **GPM** TIME FROM: DATE:

BENTONITE	CHIP SEAL
TO	_ FEET
BENTONITE	<b>GROUT SEAL</b>
TO	FEET

4 INCH DIAMETER

2 INCH DIAMETER SCHEDULE 40 PVC

**BLANK CASING** 0.34 TO 37.42 FEET

BOREHOLE 0 TO 48 FEET

YIELD:	GPM	TIME FROM:	TO:	DATE:	
TOTAL WATER F				GALLONS	
DESCRIPTION O		☐ CLEAR	☐ SLIGHTLY CLOUDY		
DEVELOPMENT:		☐ MOD. TURBID	□ VERY MUDDY		
ODOR OF WATE	R:				
WATER RICCUA	0050	☐ GROUND SURFACE		TANK TRUCK	
WATER DISCHA	RGED	☐ STORM SEWERS	☐ STORAGE TANK		

☐ OTHER

FEET

	BENTO	NITE	<b>PELLET</b>	SEAL
_	<u>2</u> TO	35	FEET	

COLORADO 10 X 20

DEVELOPMENT: MATERIALS AND EQUIPMENT USED

**■** DRUMS

000	-010	100	10 11 20	
NAN	ΛE		NUMBER	2
SAN	ID P	ACK		
35	TO	42	FEET	

38 Ft of 2" PVS Blank Casing (2) Sack of Sand 10 x 20 10 Ft of 2" PVC Slotted Screen Sacks of Cement Ft of Steel Conductor Sacks of Con Mix Yards of Grount Yd3 Cement-Sand Sacks of pellets Bentonite 55-Gallon Drums Steel open 10 50 Lbs.Bags of Bentonite pellets

2 INCH DIAMETER SLOTTED 0.020 OR 0.010 INCH PRE-PACK SCREEN (20X40 SAND) 37.5 TO 47.5 FEET

2 INCH DIAMETER SCHEDULE 40 PVC

**BLANK SILT TRAP** 

47.42 TO 47.75 FEET **BOTTOM WELL CAP AT** 47.75 FEET **BOTTOM OF BOREHOLE** 

48 FEET

#### ADDITIONAL NOTES:

DEPTH TO WATER AFTER

- 1) Prepack Screen with 20 x 40 Sand;
- 2) Screen slots from 37.17 to 47.17 feet;
- 3) Native Sand (~ 16x30) collapse around prepack 42 to 48 feet;
- 4) 10 x 20 Sand poured around prepack 35 to 42 feet.



JC ME: Univar Kent									
JOB ADDRESS: 8201 S. 212th Street, Kent, WA									
JOB NO.: 816.003.01	PROJECT BIII								
LOGGED BY: McQuillan	манадея: Haldeman								
WELL NAME:	EDITED BY:								
MW-17	DATE:								
DRILLING COMPANY: Cascade Dril	ling Co.								
EQUIPMENT:	driller: Brian								
■ * HOLLOW STEM AUGER	HELPER:								
□ * ROTARY WASH	HOURS DRILLED:								
GALLONS OF WATER USED DURING DRI	LLING: ~30 GALLONS								
METHOD OF DECONTAMINATION PRIOR TO DRILLING:	Steam Clean Pressure Wash								

#### **DEVELOPMENT**

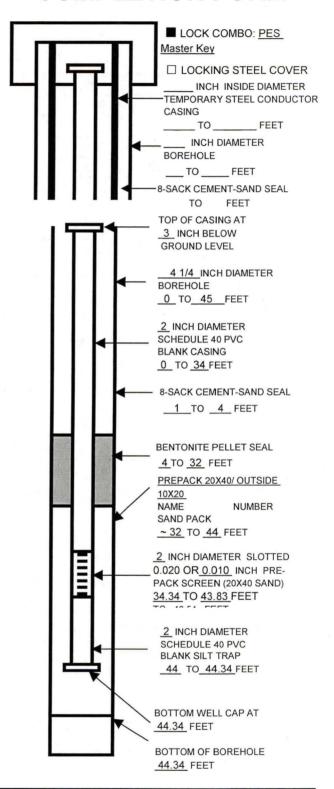
Service of Automotive Service											
METHOD OF DEVELOPMENT: Surge & purge with peristaltic pump											
DEVELOPMENT BEGAN DATE: 10/28/03 TIME: 9:28											
YIELD: 0.75 GPM	TIME FROM: 9:28	то: 10:45	DATE:	10/28/2003							
YIELD: GPM	TIME FROM:	TO:	DATE:								
T WATER REMOV		45		GALLONS							
DESCRIPTION OF TURBIDITY AT END OF DEVELOPMENT:	CLEAR 10.2 NTU  ☐ MOD. TURBID	☐ SLIGHTL		PΥ							
ODOR OF WATER: N	o odor										
WATER DISCHARGED TO:	☐ GROUND SURFACE ☐ STORM SEWERS ■ DRUMS		K TRUCK								
DEPTH TO WATER AF DEVELOPMENT:				FEET							

# MATERIALS AND EQUIPMENT USED

(12) Sack of Sand 10 x 20	34 Ft of 2" PVS Blank Casing
Sacks of Cement	10 Ft of 2" PVC Slotted Screen
Sacks of Con Mix	Ft of Steel Conductor
Yards of Grount	
(12) Sacks of pellets Bentonite	Yd <sup>3</sup> Cement-Sand
50 Lbs.Bags of Bentonite pellets	55-Gallon Drums Steel open

#### ADDITIONAL NOTES:

- 1) Prepack Screen 0.010 slot packed with 20 X 40 sand;
- 2 20 sand around prepack.





#### JOB NAME: Univar Kent Deep Well Installation JOB ADDRESS: 8201 S. 212th Street, Kent, WA JOB NO.: 816.003.01 Bill PROJECT LOGGED BY: McQuillan MANAGER: Haldeman WELL NAME: EDITED BY: MW-18 DATE: DRILLING COMPANY: Cascade Drilling Co. DRILLER: **EQUIPMENT**: HELPER: \* HOLLOW STEM AUGER HOURS DRILLED: \* ROTARY WASH GALLONS OF WATER USED DURING DRILLING: **GALLONS** METHOD OF DECONTAMINATION Steam Clean Pressure Wash PRIOR TO DRILLING:

#### DEVELOPMENT

METHOD OF DEV	ELOP	MENT:				
DEVELOPMENT B	BEGAN	N DATE:	TII	ME: 9:28		
YIELD: (	ЗРМ	TIME FROM:	TO:	DATE:		
YIELD: (	SPM	TIME FROM:	TO:	DATE:		
TOTAL WATER RI DURING DEVELO			45		GAL	LONS
DESCRIPTION OF TURBIDITY AT EN DEVELOPMENT:	ID OF	■ CLEAR 10.2 NTU      MOD. TURBID		HTLY CLOU	YOU	
ODOR OF WATER	R: No	odor				
WATER DISCHAR TO:	GED	☐ GROUND SURFACE ☐ STORM SEWERS ■ DRUMS		TANK TRUC STORAGE		
DEPTH TO WATER DEVELOPMENT:	R AFT	ER			FI	EET

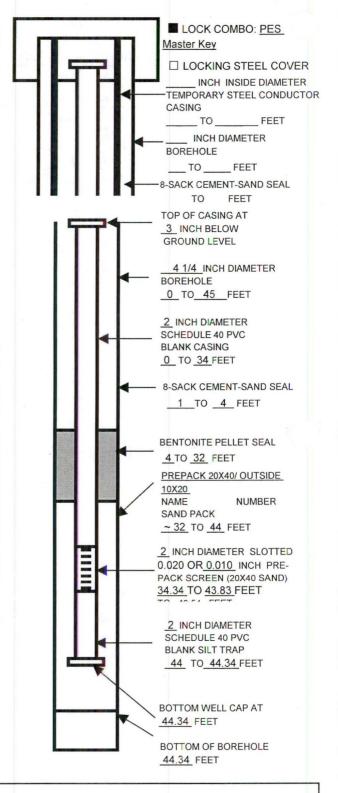
#### MATERIALS AND EQUIPMENT USED

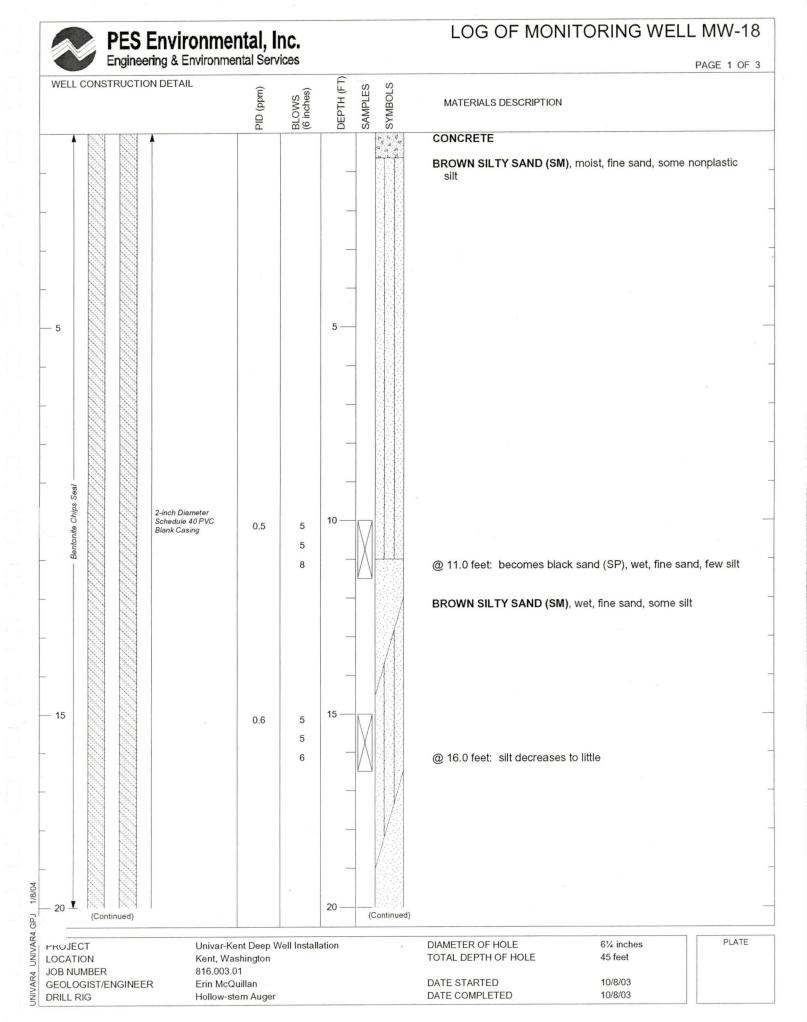
(12) Sack of Sand 10 x 20	34 Ft of 2" PVS Blank Casing
Sacks of Cement	10 Ft of 2" PVC Slotted Screen
Sacks of Con Mix	Ft of Steel Conductor
Yards of Grount	
(12) Sacks of pellets Bentonite	Yd <sup>3</sup> Cement-Sand
50 Lbs.Bags of Bentonite pellets	55-Gallon Drums Steel open

#### ADDITIONAL NOTES:

- 1) Prepack Screen 0.010 slot packed with 20 X 40 sand;
- 2) 10 x 20 sand around prepack.

# FIELD WELL COMPLETION FORM





# LOG OF MONITORING WELL MW-18 PES Environmental, Inc. Engineering & Environmental Services PAGE 2 OF 3 WELL CONSTRUCTION DETAIL DEPTH (FT) PID (ppm) SAMPLES BLOWS (6 inches) MATERIALS DESCRIPTION 20.9 BLACK SAND (SP), wet, fine sand, few fines 5 3 3 Bentonite Chips Seal Becomes fine to medium sand, trace fines 6.1 6 5 5 2-inch Diameter Schedule 40 PVC Blank Casing 30 3.7 6 6 4 Colorado Silica 10/20 Sandpack @ 35.0 feet: driller notes heaving sand 6.2 18 2-inch Diameter Slotted 0.030-inch PVC Screen 40 40 (Continued) (Continued)

PROJECT
LOCATION
JOB NUMBER
GEOLOGIST/ENGINEER
DRILL RIG

GPJ

Univar-Kent Deep Well Installation Kent, Washington 816.003.01 Erin McQuillan Hollow-stern Auger DIAMETER OF HOLE TOTAL DEPTH OF HOLE 6¼ inches 45 feet

DATE STARTED 10/8/03 DATE COMPLETED 10/8/03 PL ..\_

WELL CONSTRUCTION DETAIL    Construction   Construc	Sched Diameter Sched 0 000-inch PPC Sched 1 23 8 6 6 6 45 45 45 45 45 45 45 45 45 45 45 45 45	LL CONSTRUCTION DETAIL			E	(n (n			
Side to 000-sinch PVC Screen 32 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Some South Danater Share South Control of South Part State South Danater Share South Danater Share South Danater Share South South Danater Share S	EL GONGINGONON DEN ME	PID (ppm)	BLOWS (6 inches)	ОЕРТН (Р	SAMPLES SYMBOL9	MATERIALS DESCRIPTION		
GRAYISH BROWN SILT (ML), moist, trace fine sand, low to medium plasticity, organic material-roots  Bottom of boring at 45.0 feet	GRAYISH BROWN SILT (ML), moist, trace fine sand, low to medium plasticity, organic material-roots  Solution of boring at 45.0 feet  Solution of boring at 45.0 feet	2-inch Diameter		5	_				
50 Bottom of boring at 45.0 feet	5 Bottom of boring at 45.0 feet  50  55  66  67  75  68  75  80  80  80  80  80  80  80  80  80  8		32	5	_				Ulavota
Bottom of boring at 45.0 feet	50 Bottom of boring at 45.0 feet  50		23		_		medium plasticity, organic ma	moist, trace fine sand iterial-roots	i, low to
	55—	i		6	45		Bottom of boring at 45.0 feet		
	55—				_				
	55—				_		,		
	55—								
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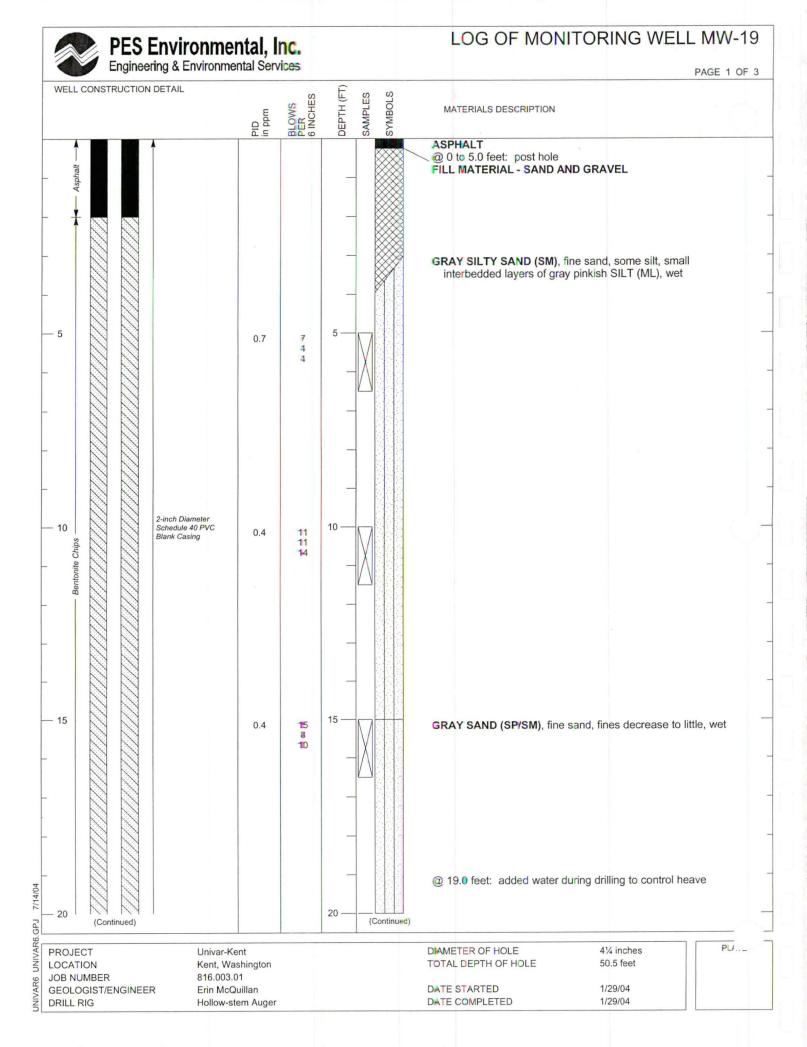
LOG OF MONITORING WELL MW-18

10/8/03

DATE COMPLETED

DRILL RIG

Hollow-stem Auger





816.003.01

Erin McQuillan

Hollow-stem Auger

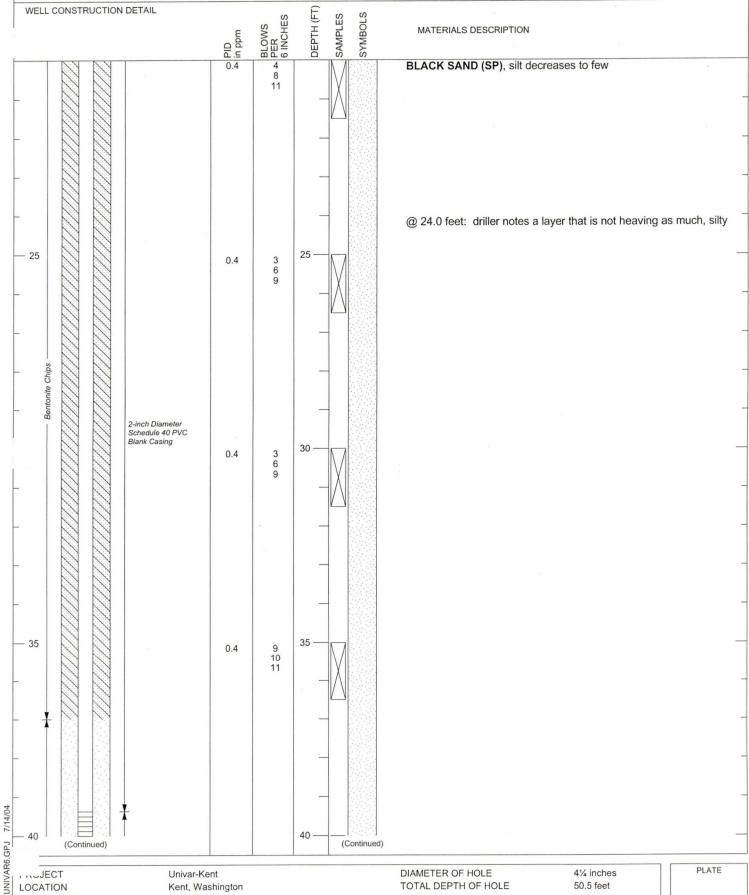
JOB NUMBER

DRILL RIG

GEOLOGIST/ENGINEER

# LOG OF MONITORING WELL MW-19

PAGE 2 OF 3



DATE STARTED

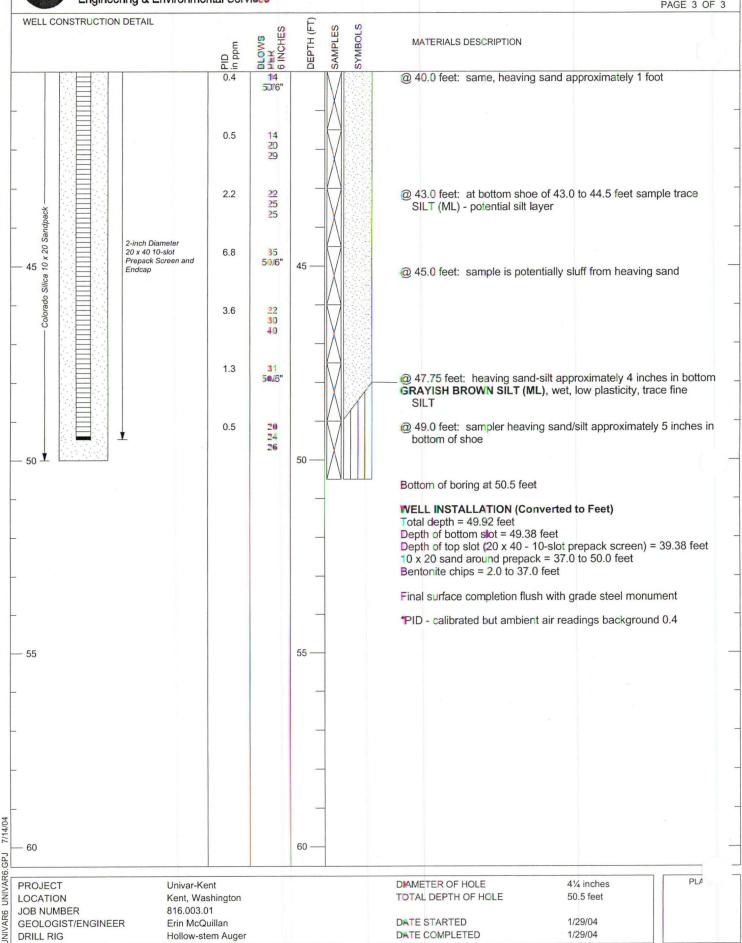
DATE COMPLETED

1/29/04

1/29/04

#### LOG OF MONITORING WELL MW-19

PAGE 3 OF 3



PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Amy Ott

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc. Hollow-stem Auger BORING NO.
PAGE
REFERENCE ELEV.
TOTAL DEPTH
DATE COMPLETED

1 of 2 20.5'

INJ-1

OMPLETED 6/25/01

SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	COLUMN	LITHOLOGIC DESCRIPTION
	~		<u> </u>				1	0 to 1.0 foot: ASPHALT AND BASE GRAVEL
			- - - - -	-		A		1.0 to 6.0 feet: SANDY SILT (ML); brown, medium plasticity, some fine sand, wet, no odor.
(SS)	5-6.5 (0)	5 4 2	_ _ _	5 -		Δ1·		6.0 to 15.0 feet: SILTY SAND (SM), brown, fine, some
(SS)	7-8.5	1 1 2	- - - -	-				silt, wet, no odor.
BT-1 (SS)	9-10.5 (0) 10.5-12	6 7 2 4 5 6	-	10-				@ 9.0 to 12.0 feet: baseline sample collected for chemical oxidation bench study.
(SS)	12.5-14	4 6 7		-				
(SS)	15-16.5 (0)	6 10 10	-	15-				15.0 to 19.0 feet: SAND (SP), dark gray, fine to medium, little silt, wet, no odor.
(SS)	17-17.5 (0)	6 10 10	-	-				
(SS)	19-20.5 (0)	4 6	-					19.0 to 20.5 feet: SAND (SP), brown to gray, fine, little silt, wet, no odor.



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger Amy Ott BORING NO.
PAGE
REFERENCE ELEV.
TOTAL DEPTH

DATE COMPLETED

INJ-1 2 of 2

20.5' 6/25/01

LOGGED B1		illy Ott					DATE COMPLETED 6/23/01
SAMPLE SAMPLE NUMBER INTERVAL (SAMPLE (PID TYPE) in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
	10		35-				Bottom of boring at 20.5 feet.  WELL COMPLETION DETAILS 0 to 10.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 10.0 to 20.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots and 2-inch-diameter threaded end cap.  0 to 6.0 feet: Concrete. 6.0 to 9.0 feet: Bentonite chips hydrated with potable water. 9.0 to 20.5 feet: 20-40 Colorado Silica Sand.  Surface completion: flush mount, traffic rated well box.



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc. Hollow-stem Auger

PAGE REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED

BORING NO.

INJ-2 1 of 2

20.5' 6/25/01

OGGED BY Amy Ott

LITHOLOGIC SAMPLE SAMPLE BLOWS WELL LITHOLOGIC SAMPLES DETAILS NUMBER INTERVAL PER DESCRIPTION (SAMPLE 6 INCHES (PID TYPE) in ppm) 0 to 1.5 feet: CONCRETE 41 · 41 1.5 to 6.0 feet: SILTY SAND (SM), brown, fine, some silt, 01.01.01 damp, no odor. (SS) 5-6.5 (0)6.0 to 8.5 feet: SANDY SILT (ML), brown, medium to low plasticity, some sand, wet, no odor. INJ-2-10 8.5-10 8.5 to 14.5 feet: SILTY SAND (SM), brown, fine, some 3 (SS) silt, wet, no odor. (0)4 5 10 -4 (SS) 10-11.5 (0)4 5 (SS) 11.5-13 7 7 (0)7 13-14.5 2 (SS) 5 (0)7 (SS) 14.5-16 8 14.5 to 19.0 feet: SAND (SM-SP), dark gray to brown, 15 -9 fine, little silt, wet, no odor, grades to medium sand, trace 11 (SS) 16-17.5 4 5 (0)7 (SS) 17.5-19 5 7 (0)8 5 19-20.5 (SS) 19.0 to 20.5 feet: SAND (SP), dark gray, fine to medium, 8 trace silt, wet, no odor. (0)20



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington

Cascade Drilling, Inc. Hollow-stem Auger

BORING NO.

PAGE REFERENCE ELEV.

20.5 6/25/01

INJ-2

2 of 2

Amy Ott

TOTAL DEPTH DATE COMPLETED

LITHOLOGIC WELL SAMPLE SAMPLE BLOWS LITHOLOGIC GROUND WATER LEVEL SAMPLES DEPTH IN FEET NUMBER INTERVAL PER DETAILS DESCRIPTION (PID (SAMPLE 6 INCHES TYPE) in ppm) 8 19.0 to 20.5 feet: SAND (SP), continued. Bottom of boring at 20.5 feet. WELL COMPLETION DETAILS 0 to 10.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 10.0 to 20.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots and 2-inch-diameter threaded end cap. 0 to 6.0 feet: Concrete. 6.0 to 9.0 feet: Bentonite chips hydrated with potable water. 9.0 to 20.5 feet: 20-40 Colorado Silica Sand. Surface completion: flush mount, traffic rated well box. 30 -35 -



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Amy Ott

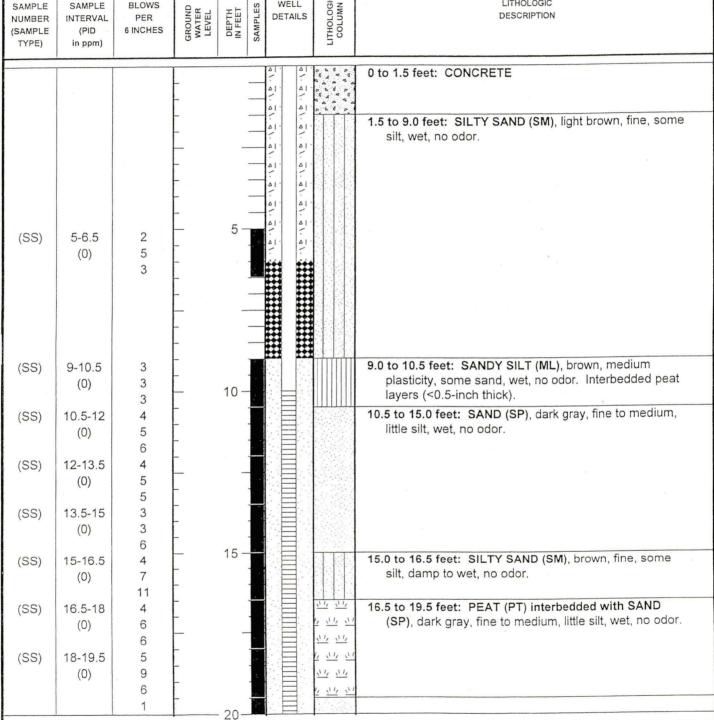
Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc. Hollow-stem Auger BORING NO.
PAGE
REFERENCE ELEV.
TOTAL DEPTH
DATE COMPLETED

21.0' 6/25/01

INJ-3

1 of 2

AMPLE	SAMPLE	BLOWS	ND ER D	H	LES	WELL	OGIC	LITHOLOGIC DESCRIPTION





REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Hollow-stem Auger Amy Ott BORING NO. PAGE

\_\_\_\_

INJ-3 2 of 2

REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED

21.0' 6/25/01

LOGGED BT		ny Ott					DATE COMPLETED 6/25/01
SAMPLE SAMPLE NUMBER INTERVAL (SAMPLE (PID TYPE) in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
(SS) 19.5-21 (0)	5 5		25 335 355				19.5 to 21.0 feet: SAND (SP), dark gray, fine to medium, little silt, wet, no ødor.  Bottom of boring at 21.0 feet.  WELL COMPLETION DETAILS 0 to 10.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 10.0 to 20.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots and 2-inch-diameter threaded end cap.  0 to 6.0 feet: Concrete. 6.0 to 9.0 feet: Bentonite chips hydrated with potable water. 9.0 to 21.0 feet: 20-40 Colorado Silica Sand.  Surface completion: flush mount, traffic rated well box.



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington

Cascade Drilling, Inc. Hollow-stem Auger B. Peters, K. Hansen BORING NO.
PAGE
REFERENCE ELEV.
TOTAL DEPTH

DATE COMPLETED

1 of 1 20.0' 8/30/01

INJ-3A

LITHOLOGIC SAMPLE SAMPLE BLOWS WELL LITHOLOGIC SAMPLES WATER LEVEL DEPTH IN FEET INTERVAL NUMBER PER DETAILS DESCRIPTION (SAMPLE (PID 6 INCHES TYPE) in ppm) Located 3.0 feet west of INJ-3. Overdrilled to 20.0 feet bgs with 61/4-inch I.D. auger. 101 Wood plug inserted on bottom auger. No samples collected from boring. 101 WELL COMPLETION DETAILS 0 to 9.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 9.0 to 19.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined 19.0 to 19.5 feet: 2-inch-diameter threaded end cap. 0.5 to 4.0 feet: Concrete (4 bags). 4.0 to 8.0 feet: Bentonite chips hydrated with potable water (3.5 bags). 8.0 to 20.0 feet: 20-40 Colorado Silica Sand (9 bags). Surface completion: flush mount, traffic-rated well box. Added approximately 25 gallons of water during drilling installation. Total depth of boring at 20.0 feet.



REMARKS

20

# PROJECT: Exxon Service Station No. 73383 W.O.W-6975-1 WELL NO. MW-4

	on reference: 100.00 foot Well con surface elevation: 99.53 Casing e				992		AS-BUILT DESIGN	Page 1
DEPTH (feet)	SOIL DESCRIPTION	SAMPLE	SAMPLE	BLOW	OVM READING	GROUND	Flush-mounted steel monument  Top of casing	TESTIN
0	Asphalt over gravel paving  Medium Dense, molst, brown, silty fine to coarse SAND; with some gravel.  Loose, molst, gray to brown, gravelly,	-						
5	fine to medium SAND; with some slit.  Soft, wet, fine sandy SILT with some organic SAND gravel		S-1   -	5	76 ·		Casing (Schedule-40 4-Inch I.D. PVC)	
10 -	Loose, wet, to saturated, gray to dark brown, slity, fine to medium SAND.		S-2	4	9	ATD	10-20 silica sand filter pack  Screen (4-Inch I.D. PVC with ,010 -inch slots)	8015 8020 7420
15	Loose, saturated, gray, slity, fine to medium SAND; with some gravel and organics.		S-3	3	0		Threaded end cap	
20 -	Bottom of boring at 15 feet.	-	-					
5 -				-				
30		erved gr = at tim					RZA AGRA, Inc. Geofechnical & Environmental Group	
							11335 NE 122nd Way, Suite 100 Kirkland, Washington 98034-6918	

Drilling started:

23 March 1992

Drilling completed:

23 March 1992

Logged by:

JTC

#### PROJECT: Exxon Service Station No. 73383 W.O.W-6975-1 WELL NO. MW-5 Elevation reference: 100.00 feet Well completed: 23 March 1992 Page 1 AS-BUILT DESIGN Casing elevation: 100.01 Ground surface elevation: 100.36 OVM READING GROUND SAMPLE BLOW Flush-mounted TESTING SOIL DESCRIPTION DI steel monument Top of casing 0 Asphalt paving - 2' Loose, moist, brown, silty, fine to Concrete medium SAND; with some gravel. BentonIte 0 S-1 4 Casing (Schedule-40 4-inch I.D. PVC) 5 Grading to wet 10-20 sllica sand filter pack ATD S-2 2 0 Very loose, saturated, brown, slity, fine 8015 to medium SAND; with some gravel. 8020 7420 Screen (4-Inch I.D. PVC 10 with .010 -Inch slots) Very loose, saturated, gray, slity, fime to S-3 2 0 medium SAND; with some gravel. Threaded end cap Bottom of boring at 15 feet. 20 25 30 RZA AGRA, Inc. LEGEND 24nch O.D. Observed groundwater level Geotechnical & Environmental Group ATD = at time of drilling split-spoon sample 11335 NE 122nd Way, Suite 100 Sample not recovered Kirkland, Washington 98034-6918

Drilling started:

23 March 1992

Drilling completed:

23 March 1992

Logged by:

JTC

#### PROJECT: Exxon Service Station No. 73383 W.O.W-6975-1 WELL NO. MW-6 Well completed: 25 March 1992 Elevation reference: 100.00 feet Page AS-BUILT DESIGN Ground surface elevation: 100.36 Casing elevation: 99.98 OVM SAMPLE BLOW GROUND SAMPLE Flush-mounted DEPTH (feet) TEST SOIL DESCRIPTION steel monument Top of casing 0 Asphalt Paving - 2' - Concrete Loose, molst, brown, slity fine to medium SAND; with some gravel. Bentonite S-1 3 12 Decreasing gravel content. Casing Grading to wet (Schedule-40 4-inch I.D. PVC) 5 10-20 sand filter pack ATD 8015 Very loose, wet to saturated, silty, S-2 1 8020 grayish brown, silty fine to medium 7420 Screen (4-inch I.D. PVC wlth 10 .010 -Inch slots) Loose, wet, dark brownlsh gray, silty 5-3 3 18 fine to medium SAND. Threaded end cap 15 Bottom of boring at 15 feet. 20 25 30 RZA AGRA, Inc. LEGEND Geotechnical & Environmental Group Observed groundwater level 24nch O.D. ATD = at time of drilling split-spoon sample 11335 NE 122nd Way, Suite 100 Kirkland, Washington 98034-6918

Drilling completed:

25 March 1992

Drilling started:

25 March 1992

Logged by:

DAS

#### PROJECT: Exxon Service Station No. 73383 W.O.W-6975-1 WELL NO. MW-7 Well completed: 25 March 1992 Elevation reference: 100,00 feet Page 1 AS-BUILT DESIGN Ground surface elevation: 100.31 Casing elevation: 99.96 OVM READING BLOW GROUND Flush-mounted TESTING (feet) SOIL DESCRIPTION steel monument Top of casing 0 Landscaping Bark Concrete Loose, damp to molst, brown, silty fine Bentonite to medium SAND. S-1 4 3 Increasing gravel. Casing (Schedule-40 4-inch I.D. PVC) 5 10-20 sand filter pack 8015 Loose, moist, brown silty fine to 3 15 S-2 8020 medium SAND 7420 Screen (4-Inch I.D. PVC 10 with .010 -Inch slots) ATD Loose, wet, gray, silty, fine to medium S-3 9 4 SAND. 15 5 S-4 1 Threaded end cap 20 Bottom of boring at 20 feet. 25 30 LEGEND RZA AGRA, Inc. 24nch O.D. Observed groundwater level Geotechnical & Environmental Group split-spoon sample ATD = at time of drilling 11335 NE 122nd Way, Suite 100 Kirkland, Washington 98034-6918

Drilling started:

25 March 1992

Drilling completed:

25 March 1992

Logged by:

DAS

LOCATION

PROJECT NAME Van Waters & Rogers, Inc. Kent, Washington

**TEG** 

DRILLED BY DRILL METHOD Strataprobe LOGGED BY

Michelle Lange

BORING NO. **PAGE** 

**GP-1** 1 OF 1

GROUND ELEV.

TOTAL DEPTH 8.50 DATE COMPLETED 10/10

AAMPLE NUMBER TYPE  1-2 (GP)  2 70  1-2 (GP)  70  1-2 (GP)  70  1-2 (GP)  70  1-3 (GP)  70  1-4 (GP)  70  1-5 (GP)  70  1-5 (GP)  70  1-6 (GP)  70  1-7 (GP)  70  70  70  70  70  70  70  70  70  7		_	TONC L					DATE COMPLETED 10/ N
1-2 (GP)  2 70  0.2 to 3.0 feet: SAND WITH SILT (SP-SM); grayish brown; fine; few medium sand; few nonplastic silt; trace coarse sand to medium subangular to subrounded gravel; loose; damp. (FILL/ALLUVIUM)  Boring not logged below 3 feet. See EMW-7 for deeper lithology.  5 Total depth drilled = 8.5 feet. Total depth sampled = 4.0 feet.  Groundwater sample collected from a temporary screen installed between 6 and 8.5 feet bgs. Boring was backfilled with hydrated bentonite chips from 8.5 to 3.0 feet bgs, and asphalt from 3 to 0 feet bgs.	NUMBER (in ppm) (SAMPLE		GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	LITHOLOGIC	
20		70		10 -				O.2 to 3.0 feet: SAND WITH SILT (SP-SM); grayish brown; fine; few medium sand; few nonplastic silt; trace coarse sand to medium subangular to subrounded gravel; loose; damp. (FILL/ALLUVIUM)  Boring not logged below 3 feet. See EMW-7 for deeper lithology.  Total depth drilled = 8.5 feet. Total depth sampled = 4.0 feet.  Groundwater sample collected from a temporary screen installed between 6 and 8.5 feet bgs. Boring was backfilled with hydrated bentonite chips from 8.5 to 3.0 feet bgs, and asphalt from



- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

LOCATION DRILLED BY DRILL METHOD

LOGGED BY

PROJECT NAME Van Waters & Rogers, Inc. Kent, Washington

**TEG** 

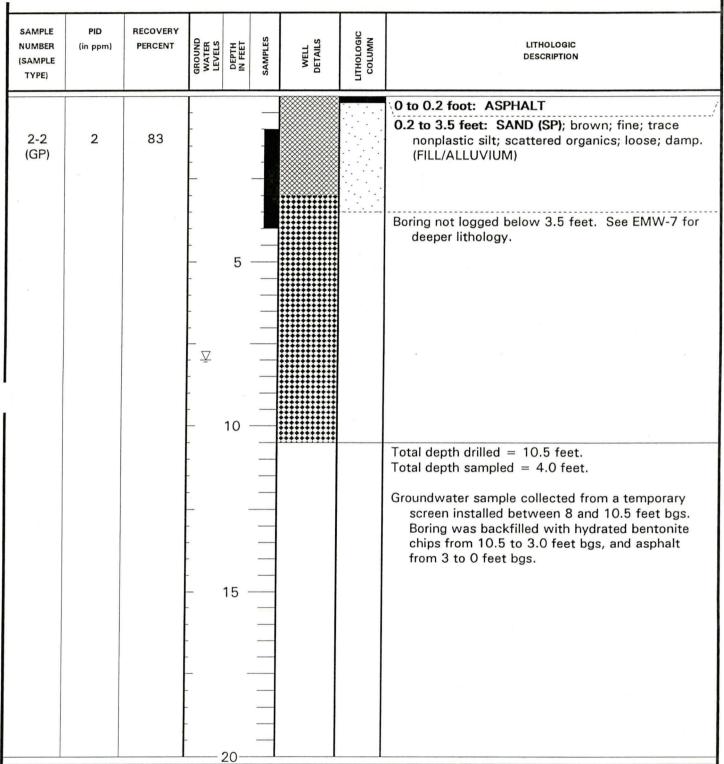
Strataprobe Michelle Lange BORING NO. PAGE

GP- 2 1 OF 1

GROUND ELEV.

10.50'

TOTAL DEPTH DATE COMPLETED 10/10/97





- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

LOCATION

PROJECT NAME Van Waters & Rogers, Inc. Kent, Washington

TEG

PAGE

BORING NO.

**GP-3** 1 OF 1

GROUND ELEV.

TOTAL DEPTH 10.5 DATE COMPLETED 10/1

DRILLED BY DRILL METHOD LOGGED BY

Strataprobe Michelle Lange

RECOVERY SAMPLE PID LITHOLOGIC WATER LEVELS DEPTH IN FFET WELL NUMBER PERCENT LITHOLOGIC (in ppm) DESCRIPTION (SAMPLE TYPE) 0 to 0.2 foot: ASPHALT 0.2 to 2.5 feet: SAND WITH SILT (SP-SM); brown 3-2 2 50 with local iron staining; fine; few nonplastic silt; (GP) trace medium to coarse sand; scattered organics; loose; damp. (FILL/ALLUVIUM) Boring not logged below 2.5 feet. See MW-5 for deeper lithology.  $\bar{\Delta}$ 10 Total depth drilled = 10.5 feet. Total depth sampled = 4.0 feet. Groundwater sample collected from a temporary screen installed between 8 and 10.5 feet bgs. Boring was backfilled with hydrated bentonite chips from 10.5 to 3.0 feet bgs, and asphalt from 3 to 0 feet bgs.



- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

PROJECT NAME Van Waters & Rogers, Inc.

LOCATION **TEG** 

Kent, Washington

DRILLED BY

Strataprobe

DRILL METHOD LOGGED BY

Michelle Lange

BORING NO.

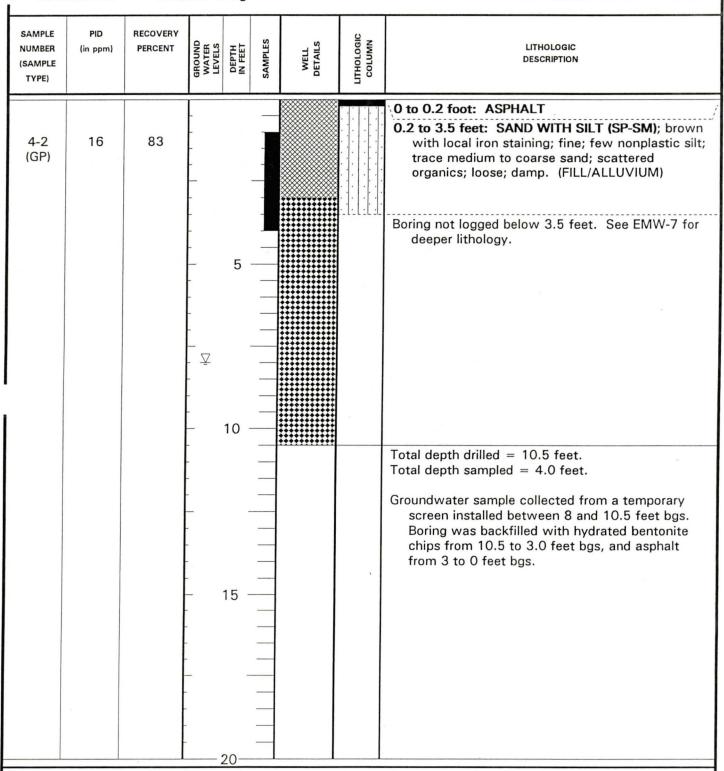
**PAGE** 

**GP-4** 1 OF 1

GROUND ELEV.

TOTAL DEPTH

10.50' DATE COMPLETED 10/10/97





- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

PROJECT NAME Van Waters & Rogers, Inc. LOCATION Kent, Washington

**TEG** 

DRILLED BY DRILL METHOD Strataprobe LOGGED BY

Michelle Lange

BORING NO. PAGE

GP-5 1 OF 1

GROUND ELEV.

TOTAL DEPTH 10.5 DATE COMPLETED 10/1

100	GED B1	IVIICI	ielle L	ange				DATE COMPLETED 10/11
SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm)	RECOVERY PERCENT	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	LITHOLOGIC	LITHOLOGIC DESCRIPTION
5-2 (GP)	0	67		10 -				O to 0.5 foot: CONCRETE  0.5 to 3.0 feet: SAND WITH SILT (SP-SM); grayish brown with reddish grains; fine; few nonplastic silt; trace medium sand to fine subangular to subrounded gravel; scattered organics; loose; damp. (FILL/ALLUVIUM)  Boring not logged below 3 feet. See MW-5 for deeper lithology.  Total depth drilled = 10.5 feet. Total depth sampled = 4.0 feet.  Groundwater sample collected from a temporary screen installed between 8 and 10.5 feet bgs. Boring was backfilled with hydrated bentonite chips from 10.5 to 3.0 feet bgs, and concrete from 3 to 0 feet bgs.



- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

LOCATION

PROJECT NAME Van Waters & Rogers, Inc.

Kent, Washington

DRILLED BY **TEG** 

DRILL METHOD LOGGED BY

Strataprobe Michelle Lange BORING NO.

**PAGE** 

**GP-6** 1 OF 1

GROUND ELEV.

TOTAL DEPTH 10.50' DATE COMPLETED 10/10/97

SAMPLE PII NUMBER (in pi (SAMPLE TYPE)	to the second se	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	LITHOLOGIC	LITHOLOGIC DESCRIPTION
6-2 (GP)	67		10 -				O to 0.5 foot: CONCRETE  O.5 to 3.0 feet: SAND WITH SILT (SP-SM); grayish brown; fine; few nonplastic silt; trace medium sand to fine subangular to subrounded gravel; loose; damp. (FILL/ALLUVIUM)  Grades to silty sand.  Boring not logged below 3 feet. See MW-4 for deeper lithology.  Total depth drilled = 10.5 feet. Total depth sampled = 4.0 feet.  Groundwater sample collected from a temporary screen installed between 8 and 10.5 feet bgs. Boring was backfilled with hydrated bentonite chips from 10.5 to 3.0 feet bgs, and concrete from 3 to 0 feet bgs.



- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

LOCATION

PROJECT NAME Van Waters & Rogers, Inc.

Kent, Washington

DRILLED BY

**TEG** 

DRILL METHOD LOGGED BY

Strataprobe Michelle Lange BORING NO.

**GP-7** 1 OF 1

**PAGE** 

GROUND ELEV.

10.50

TOTAL DEPTH DATE COMPLETED 10/1(

			10110 1			<b>7</b>		DATE CONTIEETED TOTAL
SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm)	RECOVERY PERCENT	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	COLUMN	LITHOLOGIC DESCRIPTION
7-2 (GP)	33	67		5 -				O to 0.5 foot: CONCRETE  0.5 to 3.0 feet: SAND WITH SILT (SP-SM); brown; fine; few medium sand; few nonplastic silt; trace coarse sand to fine subangular to subrounded gravel; loose; damp. (FILL/ALLUVIUM)  Boring not logged below 3 feet. See MW-5 for deeper lithology.
			- - - <u>प</u> - - -	10 -				Total depth drilled = 10.5 feet.
				15 -				Total depth sampled = 4.0 feet.  Groundwater sample collected from a temporary screen installed between 8 and 10.5 feet bgs. Boring was backfilled with hydrated bentonite chips from 10.5 to 3.0 feet bgs, and concrete from 3 to 0 feet bgs.
			-	- 20—				



- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with  $\varepsilon$  1.5-inch inside-diameter split-spoon sampler.

LOCATION

PROJECT NAME Van Waters & Rogers, Inc.

Kent, Washington

**TEG** 

DRILLED BY DRILL METHOD LOGGED BY

Strataprobe Michelle Lange

BORING NO. **PAGE** 

**GP-8** 1 OF 1

GROUND ELEV.

TOTAL DEPTH 10.50' DATE COMPLETED 10/10/97

	GLD D1		2	3				DATE COMITEETED TOTTOTO
SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm)	RECOVERY PERCENT	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	LITHOLOGIC	LITHOLOGIC DESCRIPTION
8-2 (GP)	2	100	-					O to 0.2 foot: ASPHALT  0.2 to 4.0 feet: SAND WITH SILT (SP-SM); brown; fine; few medium sand; few nonplastic silt; trace coarse sand to medium subangular to subrounded gravel; loose; damp. (FILL/ALLUVIUM)  Boring not logged below 4 feet. See MW-5 for deeper lithology.
			- - - - - - - -	10				deeper lithology.
			_					Total depth drilled = 10.5 feet.  Total depth sampled = 4.0 feet.  Groundwater sample collected from a temporary screen installed between 8 and 10.5 feet bgs. Boring was backfilled with hydrated bentonite chips from 10.5 to 3.0 feet bgs, and asphalt from 3 to 0 feet bgs.



- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

PROJECT NAME Van Waters & Rogers, Inc.

LOCATION DRILLED BY Kent, Washington TEG

DRILL METHOD LOGGED BY

Strataprobe Michelle Lange BORING NO.

PAGE

**GP-9** 1 OF 1

GROUND ELEV. TOTAL DEPTH

10.50

DATE COMPLETED 10/1(

LOGGED	1 11110	nene Lang	-			DATE CONFESTED 10/10
SAMPLE PID NUMBER (in ppn (SAMPLE TYPE)	RECOVERY PERCENT	GROUND WATER LEVELS DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
9-2 2 (GP)	83	- a				0 to 0.2 foot: ASPHALT  0.2 to 3.5 feet: SAND (SP); brown with localized iron staining; fine; trace medium sand; trace nonplastic silt; loose; damp. (FILL/ALLUVIUM)  Boring not logged below 3.5 feet. See MW-5 for
		- 5 				deeper lithology.
		15				Total depth drilled = 10.5 feet.  Total depth sampled = 4.0 feet.  Groundwater sample collected from a temporary screen installed between 8 and 10.5 feet bgs.  Boring was backfilled with hydrated bentonite chips from 10.5 to 3.0 feet bgs, and asphalt from 3 to 0 feet bgs.



- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

LOCATION

PROJECT NAME Van Waters & Rogers, Inc.

Kent, Washington

TEG

DRILLED BY DRILL METHOD LOGGED BY

Strataprobe Michelle Lange BORING NO.

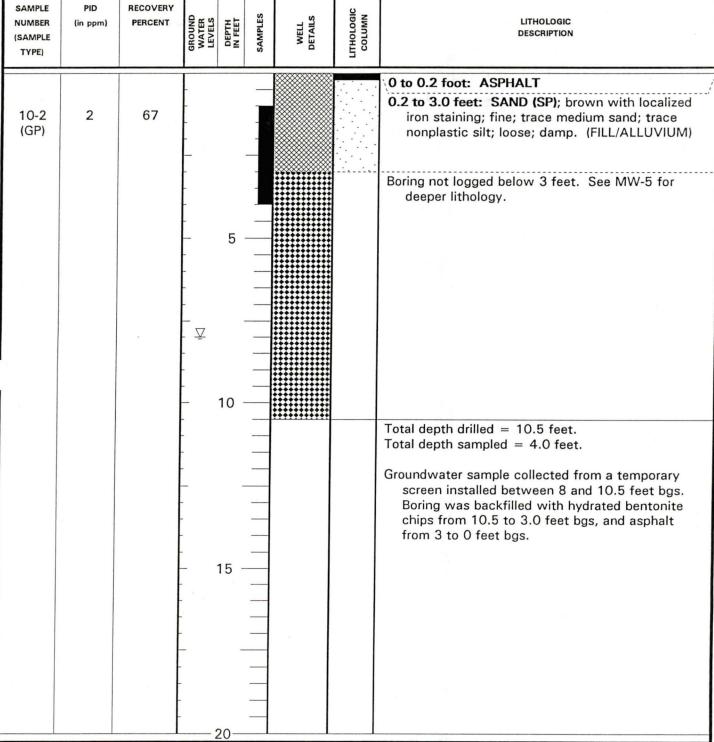
PAGE

**GP-10** 1 OF 1

GROUND ELEV. TOTAL DEPTH

10.50' DATE COMPLETED 10/10/97

RECOVERY





- (1) Photoionization detector calibrated using +/- 100 ppm isobutylene gas. (2) Background PID reading = 2 ppm.
- (3) Reference elevation = ground surface. (4) Open triangle = field estimate of water table at time of drilling.
- (5) GP = Samples collected with a 1.5-inch inside-diameter split-spoon sampler.

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Van Waters & Rogers Facility Kent, Washington Cascade Drilling, Inc. Geoprobe Michelle Macias

BORING NO.
PAGE
GROUND ELEVATION
TOTAL DEPTH
DATE COMPLETED
GP-11
1 OF 3
34.20'
46'
1/6/99

SAMPLE NUMBER	SAMPLE TYPE	PID (ppm)	GROUND WATER LEVEL DEPTH IN FT.	WELL DETAILS	LITHO- LOGIC COLUMN	LITHOLOGIC DESCRIPTION
11-0	GP*					0.0 to 0.2 foot: ASPHALT.  0.2 to 2.0 feet: SAND WITH SILT (SP-SM); dark brown; fine, trace medium sand; few nonplastic silt;
11-3	GP*		_			damp. (FILL)  2.0 to 6.0 feet: SAND (SP); mottled brown and orange; fine; trace silt; moist to wet. (FILL/ALLUVIUM)  @ 4.0 to 5.0 feet: sand with silt interbed.
11-6	GP		-	>		<ul> <li>© 5.5 to 5.6 feet: silt interbed.</li> <li>6.0 to 10.0 feet: SILTY SAND (SM); mottled brown and orange; fine; some nonplastic to low-plasticity silt; wet. (ALLUVIUM)</li> </ul>
11-8	GP			-> < < < <		@ 6.75 feet: orange; trace organic debris. @ 8.0 to 10.0 feet: brown.
11-10	GP		- 10-	>		@ 9.75 feet: grading to sand.  10.0 to 44.0 feet: SAND (SP); dark gray to black with reddish grains; fine; wet. (ALLUVIUM)  @ 10.6 to 10.7 feet: trace silt.
11-12	GP		- 4			@ 12.0 to 14.0 feet: sand with silt laminations.
11-14	GP		- 15 -	> 0 0 0		
11-16	GP			-> < < < < < < < < < < < < < < < < < < <		@ 15.4 feet: 1/2-inch-thick sandy silt interbed.
11-18	GP			- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
			20	100		



#### REMARKS

(1) PID = Photoionization detector calibrated to +/- 100 parts per million (ppm). At 38.0 to 48.0 feet: background PID = 2 ppm. (2) GP\* = Sample collected with a 3-foot-long by 1.4-inch inside diameter split spoon sampler. (3) GP = Sample collected with a 2-foot-long by 1-inch inside diameter sampler lined with a plastic sleeve. (4) White triangle = Field estimate of water table at time of drilling.

40931-003.003\vwrkent.gpj..

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Van Waters & Rogers Facility Kent, Washington Cascade Drilling, Inc. Geoprobe Michelle Macias BORING NO. GP-11
PAGE 2 OF 3
GROUND ELEVATION 34.20'
TOTAL DEPTH 46'
DATE COMPLETED 1/6/99

SAMPLE NUMBER	SAMPLE TYPE	PID (ppm)	GROUND WATER LEVEL	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO- LOGIC COLUMN	LITHOLOGIC DESCRIPTION
11-20	GP			17		> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		@ 20.0 to 32.0 feet: increasing medium sand.
11-22	GP	0		-	I	> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
11-24	GP	0		25 –		> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
11-26	GP	0			I			
28	GP	0		-		> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
11-30	GP	0	_	30 -				
11-32	GP	0		_				
11-34	GP	0		35 —				
11-36	GP	0						@ 36.0 to 38.0 feet: trace scattered light brown silt nodules.
11-38	GP	2		40		> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		@ 38.0 to 38.7 feet: sandy silt (SM), brownish gray, fine, some nonplastic silt.



#### REMARKS

(1) PID = Photoionization detector calibrated to +/- 100 parts per million (ppm). At 38.0 to 48.0 feet: background PID = 2 ppm. (2) GP\* = Sample collected with a 3-foot-long by 1.4-inch inside diameter split spoon sampler. (3) GP = Sample collected with a 2-foot-long by 1-inch inside diameter sampler lined with a plastic sleeve. (4) White triangle = Field estimate of water table at time of drilling.

40931-003.003\vwrkent.gpj..

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Van Waters & Rogers Facility Kent, Washington Cascade Drilling Inc. Geoprobe Michelle Macias BORING NO.
PAGE
GROUND ELEVATION
TOTAL DEPTH
DATE COMPLETED
GP-11
3 OF 3
4.20'
46'
1/6/99

SAMPLE NUMBER	SAMPLE TYPE	PID (ppm)	GROUND WATER LEVEL	DEPTH IN FT.		WELL DETAILS	LITHO- LOGIC COLUMN	LITHOLOGIC DESCRIPTION
11-40	GP	2			->	000		
11-42	GP	3		_	>			@ 41.5 feet: 1/2-inch-thick silt lamination.
11-44	GP	2		45 -	>			44.0 to 48.0 feet: SILT (ML); brown; low plasticity; some organic and wood debris.
11-46	GP	2			> < >			<ul> <li>@ 45.25 to 46.0 feet: sand (SP), dark gray to black with reddish grains, fine, wet.</li> <li>@ 46.0 to 48.0 feet: gray, low to medium plasticity.</li> </ul>
				50 —				Total depth drilled = 46.0 feet.  Total depth sampled = 48.0 feet.
				55 —				Boring abandoned with grout to 6 feet below ground surface, medium bentonite chips to 2 inches below ground surface and sealed with an asphalt patch.



### REMARKS

(1) PID = Photoionization detector calibrated to +/- 100 parts per million (ppm). At 38.0 to 48.0 feet: background PID = 2 ppm. (2) GP\* = Sample collected with a 3-foot-long by 1.4-inch inside diameter split spoon sampler. (3) GP = Sample collected with a 2-foot-long by 1-inch inside diameter sampler lined with a plastic sleeve. (4) White triangle = Field estimate of water table at time of drilling.

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PROJECT NAME LOCATION DRILLED BY DRILL METHOD

LOGGED BY

Van Waters & Rogers Facility Kent, Washington Cascade Drilling, Inc. Geoprobe Michelle Macias

BORING NO. GP-12
PAGE 1 OF 1
GROUND ELEVATION 34.20'
TOTAL DEPTH 40'
DATE COMPLETED 1/6/99

SAMPLE SAMPLE NUMBER TYPE	PID (ppm)	GROUND WATER LEVEL	DEPTH IN FT. SAMPLES	WELL DETAILS	LITHO- LOGIC COLUMN	LITHOLOGIC DESCRIPTION
			5 —	> > > > > > > > > > > > > > > > > > > >		See GP-11 boring log for lithologic description.
12-15-0199 GP 315			15	> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
12-23-0199 GP @1330			25	> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
12-31-0199 GP @1400		_	30 —	> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Total depth drilled = 40.0 feet.  Total depth sampled = 40.0 feet.  Boring abandoned with grout to 6 feet below ground
2-39-0199 GP @1430			40	> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	,	surface, medium bentonite chips to 2 inches below ground surface and sealed with an asphalt patch.



- (1) GP = Groundwater samples collected by exposing a 1-inch-diameter by 1-foot-long screen.
- (2) See GP-11 boring log for lithology.

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Van Waters & Rogers Facility Kent, Washington Cascade Drilling, Inc. Mobile B61/Hollow Stem Auger Michelle Macies

BORING NO.
PAGE
GROUND ELEVATION
TOTAL DEPTH
DATE COMPLETED

P-1
1 OF 2
33.85'
44.5'
1/7/99

SAMPLE NUMBER	SAMPLE TYPE	PID (ppm)	GROUND WA'TER LEVEL	DEPTII IN FT.	SAMPLES	WELL DETAILS	LITHO- LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				10 - 15 - 20 - 25 - 30 - 35 -				PIEZOMETER COMPLETION DETAILS: 0.38 to 39.0 feet: 2-inch inside diameter, flush-threaded Schedule 40 PVC blank riser pipe. 39.0 to 44.0 feet: 2-inch inside diameter, flush-threaded Schedule 40 PVC well screen with 0.010-inch machine-cut slots. 44.0 to 44.5 feet: 2-inch inside diameter, flush-threaded Schedule 40 PVC end cap. 0.0 to 2.0 feet: flush-mount monument and concrete. 2.0 to 37.0 feet: medium bentonite chips. 37.0 to 44.5 feet: 20/40 CSSI sand. 44.5 to 46.5 feet: slough/boring collapse.



- (1) Reference elevation = top of PVC.
- (2) See GP-11 boring log for Imology.
- (3) U = Undisturbed Shelby tube sample.

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Van Waters & Rogers Facility Kent, Washington Cascade Drilling, Inc. Mobile B61/Hollow Stem Auger Michelle Macias BORING NO. P-1
PAGE 2 OF 2
GROUND ELEVATION 33.85'
TOTAL DEPTH 44.5'
DATE COMPLETED 1/7/99

SAMPLE NUMBER	SAMPLE TYPE	PID (ppm)	GROUND WATER LEVEL	DEPTH IN FT.	WELL DETAILS	LITHO- LOGIC COLUMN	LITHOLOGIC DESCRIPTION
1-44.5	U			45 –			Total depth drilled = 44.5 feet. Total depth sampled = 46.5 feet.
				50 —			Total deput sampled = 40.3 feet.



- (1) Reference elevation = top of PVC.
- (2) See GP-11 boring log for lithology.
- (3) U = Undisturbed Shelby tube sample.

PROJECT NAME VWR LOCATION

DRILLED BY

Kent Facility

Cascade, Inc. Drilling

Hollow Stem Auger (6 1/4" ID) DRILL METHOD

LOGGED BY Nick Garson BORING NO.

PAGE

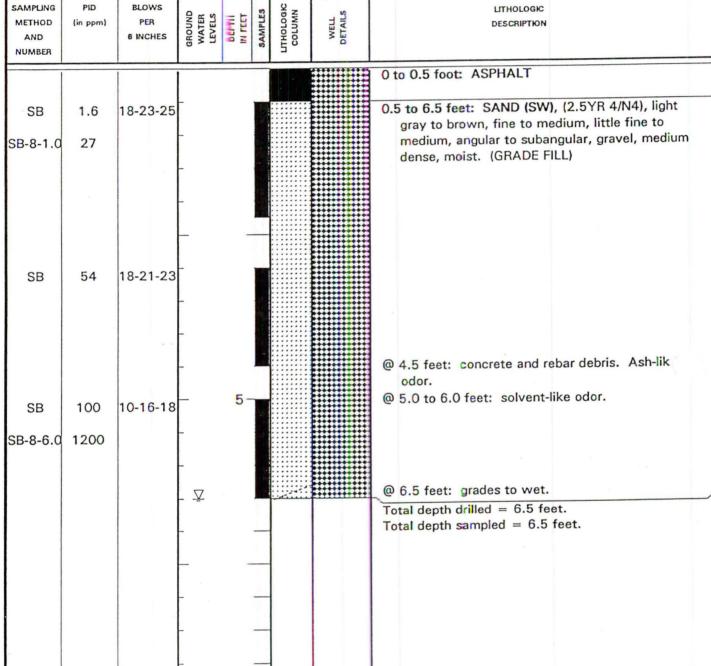
SB- 8 1 OF 1

GROUND ELEV.

TOTAL DEPTH

6.50 DATE COMPLETED 08/1

SAMPLING METHOD	PID (in ppm)	BLOWS PER	UND TER ELS	111	PLES	LOGIC	FIL	LITHOLOGIC DESCRIPTION
AND	(in ppm)	B INCHES	- tu	1	MP	10 C	WEL	DESCRIPTION



#### REMARKS

(1) Boring was drilled using a 4 1/4-inch I.D./9.5 O.D. hollow-stem auger. (2) SB = Samples collected with split-barrel sampler using stainless steel tubes. (3) Sampler was dropped 30-inches and driven with a 140 pound hammer. (4) Whi triangle = field estimate of water at time of drilling. (5) Sample numbers preceded by SB (Eg. SB-1-0.5). (6) Reference elevation = ground surface.

EMCON Northwest, Inc.

0931-003.01(01).VWR.L59/sa:2.09/14/94...VWR

PROJECT NAME LOCATION DRILLED BY DRILL METHOD

PROJECT NAME Van Water & Rogers Inc.

Kent Facility

Cascade, Inc. Drilling

Hollow Stem Auger (4 1/4" ID)

LOGGED BY Nick Garson

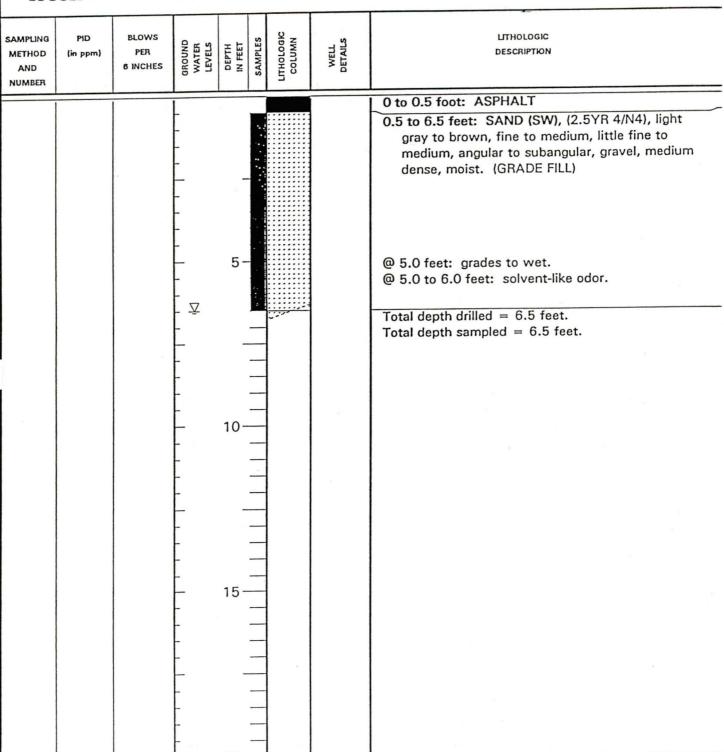
BORING NO. PAGE

SB- 9 1 OF 1

GROUND ELEV. TOTAL DEPTH

6.50'

DATE COMPLETED 01/20/95





REMARKS

(1) Boring was drilled using a 4 1/4-inch I.D./9.5 O.D. hollow-stem auger. (2) Boring logged by observing cuttings. (3) White triangle = field estimate of water at time of drilling. (4) Reference elevation = ground surface.

LOCATION

PROJECT NAME Van Waters & Rogers Inc.

8201 South 212th St., Kent, Washington

Cascade Drilling, Inc. DRILL METHOD Hollow Stem Auger

**PAGE** GROUND ELEV. TOTAL DEPTH

BORING NO.

SB-10 1 OF 1 NA

9.00 DATE COMPLETED 08/1....

DRILLED BY LOGGED BY

Nick Garson

SAMPLE NUMBER (SAMPLE TYPE)	PID (in ppm) (RECOVERY)	PER 6 INCHES	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL	СОГЛИМИ СОГЛИНО	LITHOLOGIC DESCRIPTION
SB-10- 1.5 (PD) SB-10-3 (PD)	1.7 (NA) 1.7 (NA)	NA NA		10 -			л о	O to 0.4 foot: CONCRETE  0.4 to 4.5 feet: SAND (SP), brown, fine, trace fines, slight organic odor, damp to wet.  (FILL/ALLUVIUM)  4.5 to 9.0 feet: see MW-1 boring log for lithology.  Total depth sampled = 3.5 feet. Total depth drilled = 9.0 feet.  TEMPORARY WELL POINT DETAILS: 0 to 4.0 feet: Temporary 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 4.0 to 9.5 feet: Temporary 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.020-inch machined slots and a 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap.  0 to 1.0 foot: Concrete. 1.0 to 9.0 feet: Bentonite chips hydrated with potable water.
				_				



#### REMARKS

(1) PD = Soil samples collected using posthole digger. (2) White triangle = field estimate of water level at time of drilling. (3) Reference elevation = ground surface. (4) Photoionization detector (PID) results in parts per million (ppm).

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Geoprobe Amy Ott

SB-11 BORING NO. PAGE 1 of 1 REFERENCE ELEV. 12.0' TOTAL DEPTH DATE COMPLETED

6/13/01

SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	COLUMN	LITHOLOGIC DESCRIPTION
, ,	1-3 (0)		-					0 to 0.2 foot: ASPHALT 0.2 to 3.5 feet: SAND (SP), brown, fine to medium, little silt, dry, no odor.
SB-11-4 SB-11-6	3-5 (0) 5-7 (0)		- - - - - - - - - -	5 -				<ul> <li>3.5 to 5.0 feet: SILTY SAND (SM), mottled brown/orange, fine to medium, little silt, dry, no odor.</li> <li>5.0 to 6.0 feet: SAND (SP), brown to orange, fine, few medium gravel, damp, unidentifiable odor.</li> <li>6.0 to 7.0 feet: SANDY SILT (ML), brown, low plasticity, some sand, wet, unidentifiable odor.</li> <li>② 7.0 feet: no sample recovery.</li> <li>8.0 to 12.0 feet: screen set.</li> </ul>
			- - - - -	10 -				Bottom of boring at 12.0 feet.
				15 -				Boring abandoned with bentonite and completed with an asphalt patch. Water sample taken (SB-11).



PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Geoprobe Amy Ott BORING NO. PAGE REFERENCE ELEV. SB-12 1 of 1

TOTAL DEPTH DATE COMPLETED

10.0' 6/13/01

SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	COLUMN	LITHOLOGIC DESCRIPTION
SB-12-2	1-3 (0)		-		The second second second			O to 0.2 foot: ASPHALT  0.2 to 1.5 feet: SAND (SP), brown, fine, dry, trace medium gravel, no odor.  1.5 to 3.0 feet: SAND (SP), brown to orange, mottled, medium, dry, no odor.  3.0 to 5.5 feet: SILTY SAND (SM), light brown, mottled
SB-12-4	5-7		-	5 -				orange, some silt, damp, unidentifiable odor.
SB-12-6	(0)		- - Ā					5.5 to 7.0 feet: SANDY SILT (ML), light brown, low to medium plasticity, some sand, wet, unidentifiable odor.
			-	-				@ 7.0 feet: no sample recovery.  8.0 to 10.0 feet: screen set.
				15 -				Bottom of boring at 10.0 feet.  Boring abandoned with bentonite and completed with an asphalt patch.  Water sample taken (SB-12).
			-	20-				



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Geoprobe Amy Ott BORING NO. PAGE SB-13 1 of 1

REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED

10.0' 6/13/01

		GGED BY A	Amy Ott	DATE COMPLETED 6/13/01
SAMPLE SAMPLE BLOWS PER (SAMPLE (PID in ppm))  SAMPLE (PID in ppm)  SAMPLE (PID in ppm)	NUMBER (SAMPLE	INTERVAL PER (PID 6 INCHES	GROUND WATER LEVEL DEPTH IN FEET SAMPLES STITES	
5-7 wet.	SB-13-4	(0) 3-5 (0) 5-7 (0)		O.2 to 5.5 feet: SAND (SP), brown, fine, trace silt, dry to damp, no odor.   ② 3.5 feet: medium sand (6-inches thick). ② 4.0 to 4.5 feet: interbedded silt layers (1- to 2-cm thick), wet.  5.5 to 7.0 feet: SANDY SILT (ML), gray to light brown, low plasticity, some sand, wet, no odor.  ② 7.0 feet: no sample recovery.  8.0 to 10.0 feet: screen set.  Bottom of boring at 10.0 feet.  Boring abandoned with bentonite and completed with an asphalt patch.



PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

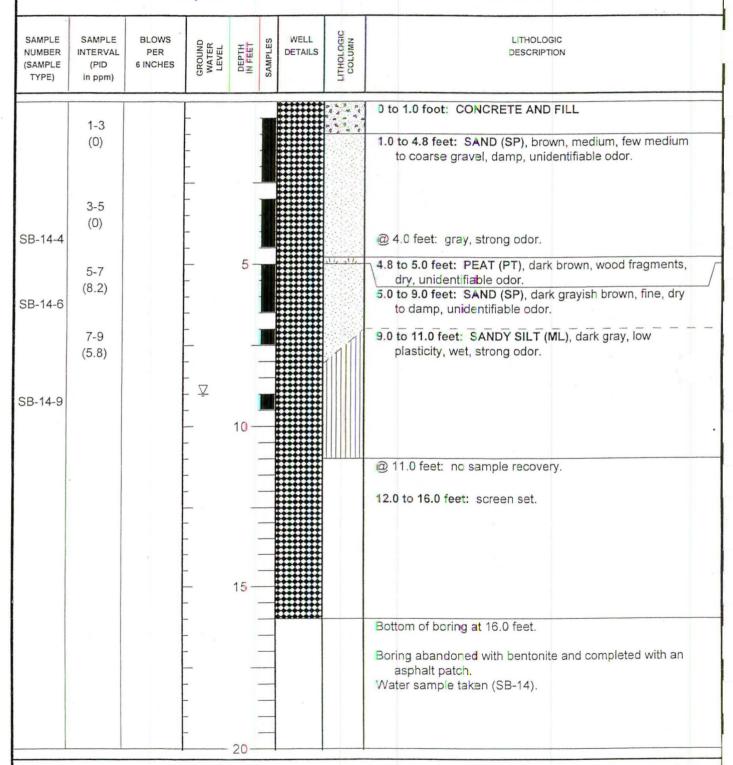
Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Geoprobe Amy Ott BORING NO. PAGE SB-14 1 of

REFERENCE ELEV.

TOTAL DEPTH 16.
DATE COMPLETED 6/1

16.0' 6/13/01





PROJECT NAME LOCATION DRILLED BY DRILL METHOD

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Geoprobe

BORING NO. PAGE SB-15 1 of 1

REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED

4.5' 6/13/01

LOG	GED BY	A	my Ott				(6)	DATE COMPLETED 6/13/01
SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	COLUMN	LITHOLOGIC DESCRIPTION
							9	0 to 1.0 foot: ASPHALT AND FILL
	1-3		-					1.0 to 3.0 feet: SAND (SP), brown, coarse to medium, few medium gravel, dry, unidentifiable odor.
			_					Refusal at 4.5 feet.
			- - -				,	Boring abandoned with bentonite and completed with an asphalt patch.
r			_	5 -				
			_	-				
a			_					
			_	10 -				
				10 -	_			
				_	_			
			- :					
			-					
			_	15 -				
				_				
			-					**
			_	20-	_			



PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Vopak USA, Inc. 8201 South 212th Street, Kent, Washington

Cascade Drilling, Inc.

Geoprobe Amy Ott BORING NO. PAGE SB-16 1 of 1

REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED

14.0' 6/13/01

	GED D1		my Ott					DATE COMPLETED 6/13/01
SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	COLUMN	LITHOLOGIC DESCRIPTION
			-					0 to 1.0 foot: CONCRETE AND FILL
	1-3		-				g = q	1.0 to 5.0 feet: SAND (SP), brownish orange, medium, little medium to coarse gravel, damp, unidentifiable odor.
SB-16-4	3-5 (0)		- -					@ 4.8 feet: gray, damp, unidentifiable odor.
00 10 4				5 -	1			
SB-16-6	5-7 (0)						<u> </u>	5.0 to 5.5 feet: PEAT (PT), dark brown, wood fragments, damp.  5.5 to 7.5 feet: SAND (SP), dark grayish brown, fine, trace silt, dry to damp, unidentifiable odor.
SB-16-8	7-9 (0)		_ - ⊻ -	-				<ul><li>7.5 to 9.0 feet: SANDY SILT (ML), dark gray, low to medium plasticity, some fine sand, no odor.</li><li>8.0 feet: wet.</li></ul>
				10 -				<ul><li>9.0 feet: no sample recovery.</li><li>10.0 to 14.0 feet: screen set.</li></ul>
		1	_					
			_			*******		Bottom of boring at 14.0 feet.
				15 -			*	Boring abandoned with bentonite and completed with an asphalt patch. Water sample taken (SB-16).
			- - - -	20-				



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington

Cascade Drilling, Inc. Geoprobe

BORING NO.

PAGE

SB-17 1 of 1

REFERENCE ELEV. TOTAL DEPTH

14.0' 6/13/01

	L METH GED BY		eoprob my Ott	е			2	DATE COMPLETED 6/13/01
SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
SB-17-6 SB-17-8	1-3 (0) 3-5 (0) 5-7 (0) 7-9 (0)			10 -				1.0 to 5.0 feet: SAND (SP), brownish orange, medium, little medium to coarse gravel, damp, unidentifiable odor.  5.0 to 5.5 feet: PEAT (PT), dark brown, wood fragments, damp, 5.5 to 7.5 feet: SAND (SP), dark grayish brown, fine, trace silt, dry to damp, unidentifiable odor.  7.5 to 9.0 feet: SANDY SILT (ML), dark gray, low to medium plasticity, some sand, wet, no odor.  ② 9.0 feet: no sample recovery.  10.0 to 14.0 feet: screen set.  Bortom of boring at 14.0 feet.  Boring abandoned with bentonite and completed with an asphalt patch.  Water sample taken (SB-17).
				- 20-				



REMARKS

PROJECT NAME Vopak USA, Inc. LOCATION DRILLED BY DRILL METHOD LOGGED BY

8201 South 212th Street, Kent, Washington

Cascade Drilling, Inc. Geoprobe

Amy Ott

BORING NO.

PAGE

SB-18 1 of 1

REFERENCE ELEV. TOTAL DEPTH

10.0" 6/13/01

	GED BY		my Ott	Е				DATE COMPLETED 6/13/01
SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID in ppm)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTII IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
								0 to 1.0 foot: ASPHALT AND FILL
SB-18-2	1-3		-	_				1.0 to 3.0 feet: SAND (SP), gray, medium, few fine to medium gravel, damp, no odor.
	3-5 (0)		-				<u> </u>	3.0 to 4.0 feet: PEAT (PT), dark brown, wood fragments, damp, no odor.
SB-18-4	(0)		- - Ā					4.0 to 5.0 feet: SANDY SILT (ML), dark gray, some sand, wet, no odor.
				5-				@ 5.0 feet: no sample recovery.  6.0 to 10.0 feet: screen set.
			<u>.</u>	10 -	1	•••••		Bottom of boring at 10.0 feet.
				15 -				Boring abandoned with bentonite and an asphalt patch. Water sample taken (SB-18).



REMARKS

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY Vopak USA, Inc. 8201 South 212th Street, Kent, Washington Cascade Drilling, Inc.

Geoprobe K. Hansen BORING NO. PAGE SB-19 1 of 1

REFERENCE ELEV. TOTAL DEPTH DATE COMPLETED

11.0' 11/20/01

LOC	GED BY	ĸ.	. Hansei	11				DATE GOWN ELTES
SAMPLE NUMBER (SAMPLE TYPE)	SAMPLE INTERVAL (PID	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC	LITHOLOGIC DESCRIPTION
SB-19- 11201	(0)			10-				9.0 to 10.5 feet: FINE SILTY SAND (SM), dark brown, fine to medium (medium sand <5 percent), moist to very wet, no sheen or odor.  10.5 to 11.0 feet: FINE SILTY SAND (SM), light brown, fine, wet, fines 50 percent, no sheen or odor.  Bottom of boring at 11.0 feet.  Boring abandoned with bentonite and a concrete patch to surface.



REMARKS

Boring located approximately 3.0 feet from monitoring well MW-11.

VOPAK4.gds:2.9/11/01.VOPAK4...793480

PROJECT NAME LOCATION DRILLED BY DRILL METHOD LOGGED BY

Vopak USA, Inc. 8201 South 212th Street, Kent, Washington

Cascade Drilling, Inc.

Geoprobe K. Hansen BORING NO.

PAGE

REFERENCE ELEV.

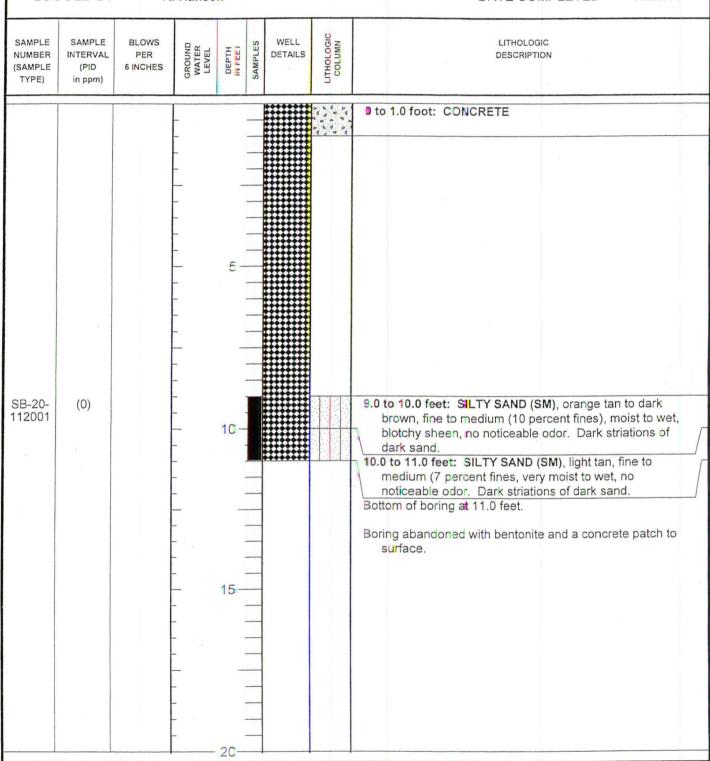
11.0'

SB-20

1 of 1

TOTAL DEPTH DATE COMPLETED

11/20/01

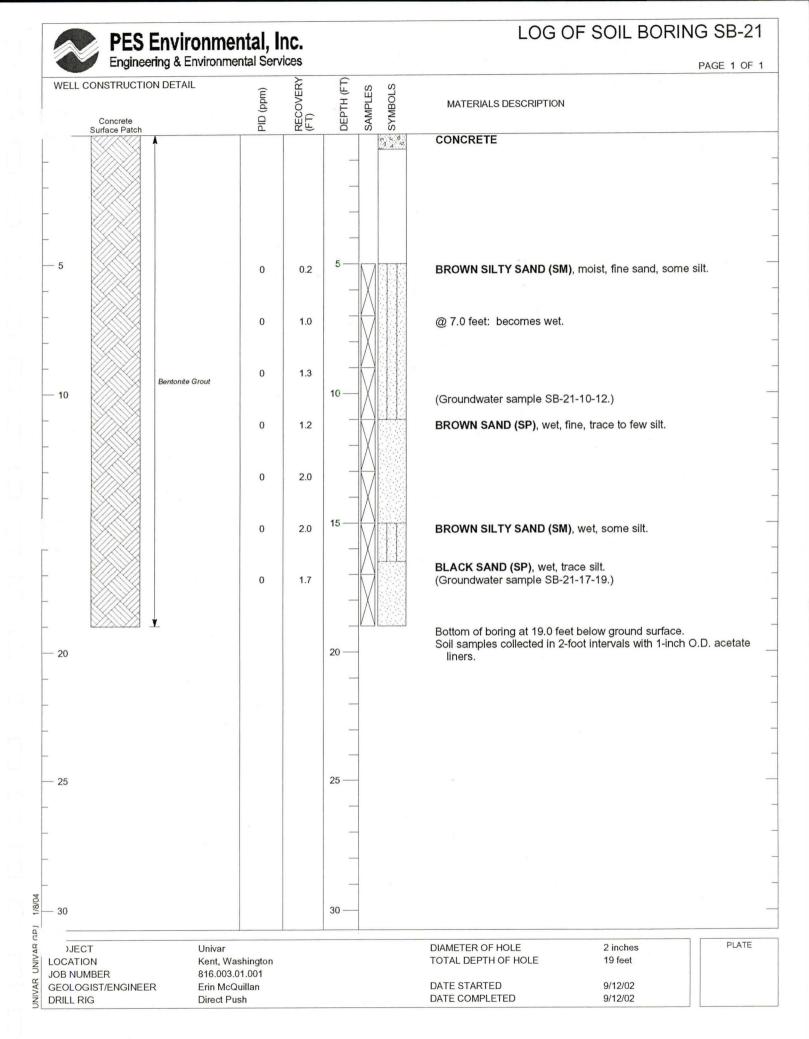




REMARKS

Boring located approximately 3.0 feet from injection well INJ-2.

VOPAK4.gds;2.9/11/01.VOPAK4...793480



JECT
LOCATION
JOB NUMBER
GEOLOGIST/ENGINEER
DRILL RIG

30

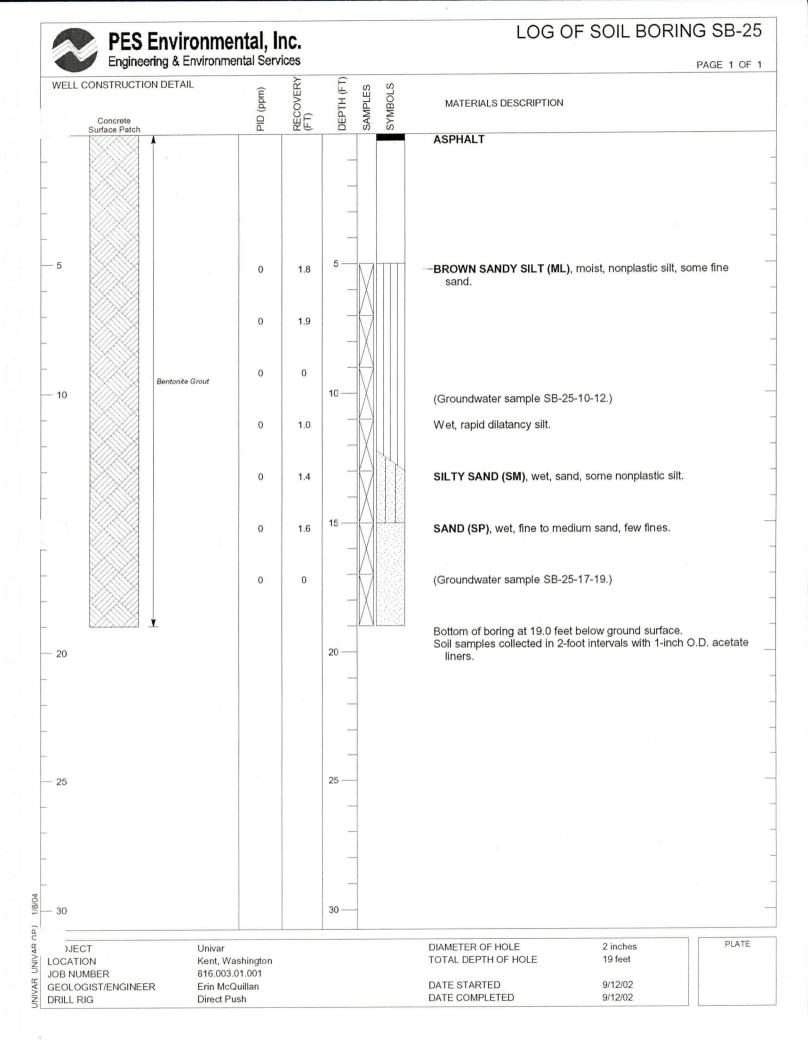
UNIVAR. GPJ

Univar Kent, Washington 816.003.01.001 Erin McQuillan Direct Push 30 -

DIAMETER OF HOLE TOTAL DEPTH OF HOLE 2 inches 19 feet

DATE STARTED
DATE COMPLETED

9/12/02 9/12/02

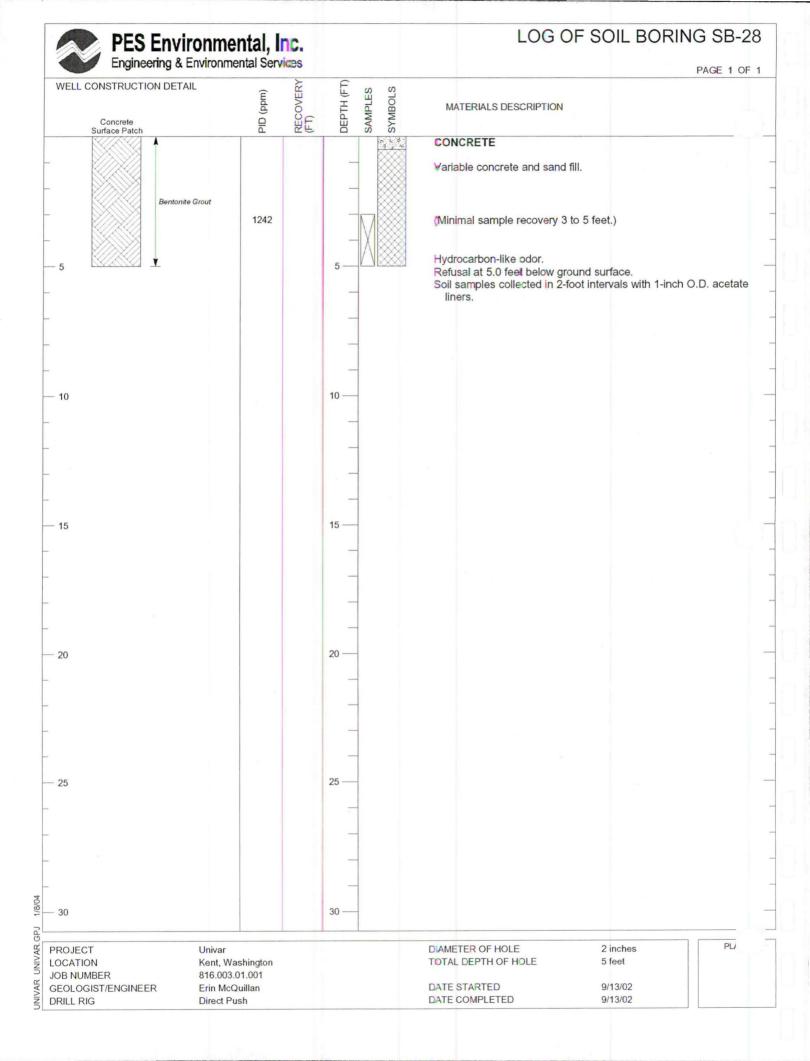


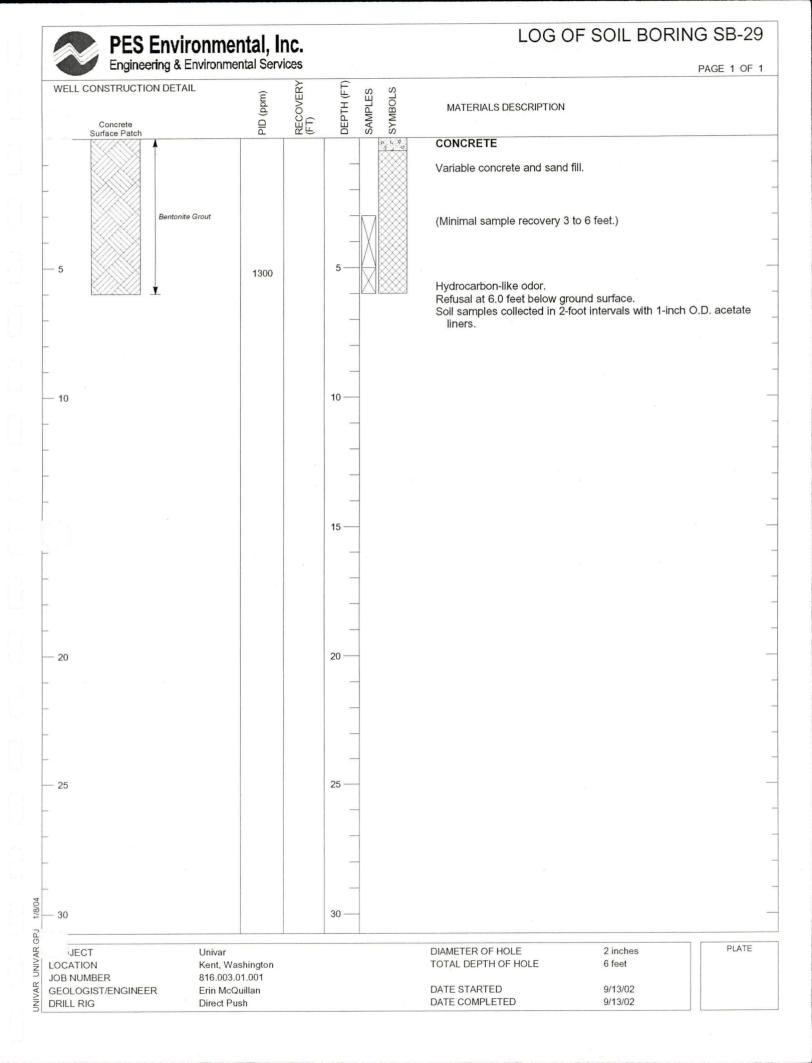
DATE COMPLETED

Direct Push

DRILL RIG

9/13/02





**PROJECT** LOCATION JOB NUMBER GEOLOGIST/ENGINEER DRILL RIG

(Continued)

30

Kent, Washington 816.003.01.001 Erin McQuillan Direct Push

19.0

20

30

(Continued)

DIAMETER OF HOLE TOTAL DEPTH OF HOLE 46 feet

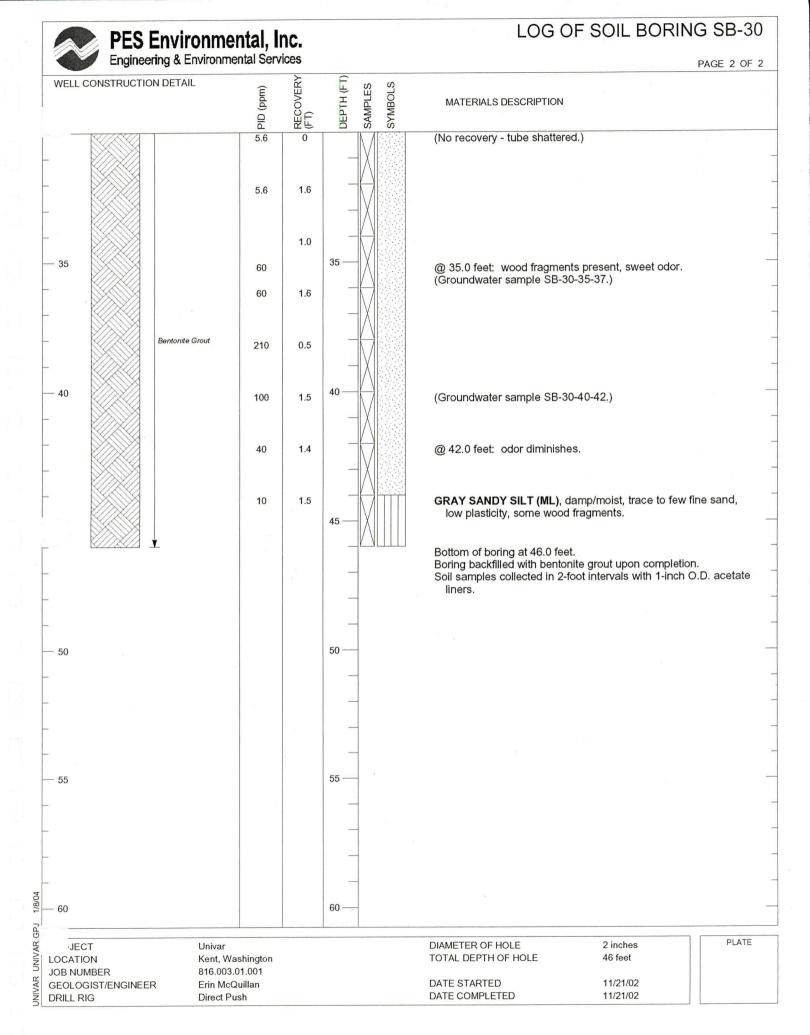
11/21/02

11/21/02

BLACK SAND (SP), wet, fine to medium sand, trace fines.

DATE STARTED DATE COMPLETED

PLA



DATE COMPLETED

11/21/02

11/21/02

JOB NUMBER

DRILL RIG

GEOLOGIST/ENGINEER

816.003.01.001

Erin McQuillan

Direct Push

JECT
LOCATION
JOB NUMBER
GEOLOGIST/ENGINEER
DRILL RIG

60

Univar Kent, Washington 816.003.01.001 Erin McQuillan Direct Push 60

DIAMETER OF HOLE TOTAL DEPTH OF HOLE 2 inches 48 feet

DATE STARTED
DATE COMPLETED

11/21/02 11/21/02

DATE COMPLETED

GEOLOGIST/ENGINEER

DRILL RIG

Erin McQuillan

Direct Push

11/22/02

11/22/02

DIAMETER OF HOLE

DATE STARTED

DATE COMPLETED

TOTAL DEPTH OF HOLE

UNIVAR. GPJ

JECT

GEOLOGIST/ENGINEER

LOCATION JOB NUMBER

DRILL RIG

Kent, Washington

816.003.01.001

Erin McQuillan

Direct Push

LOG OF SOIL BORING SB-33

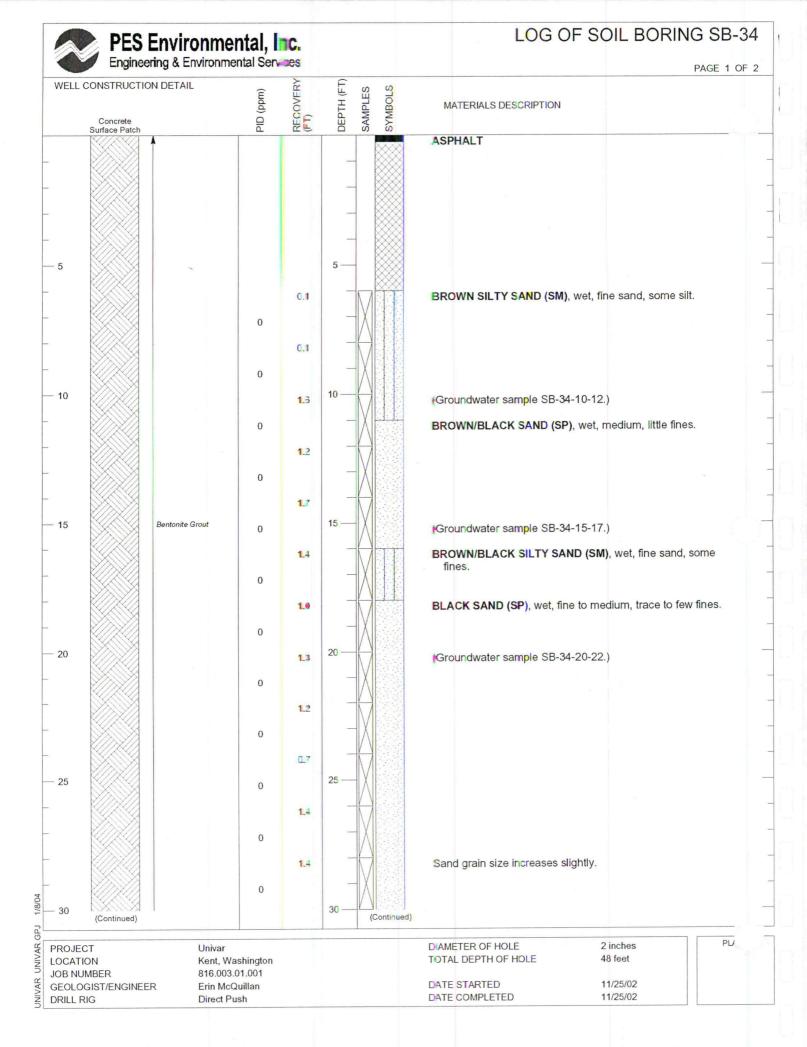
PLATE

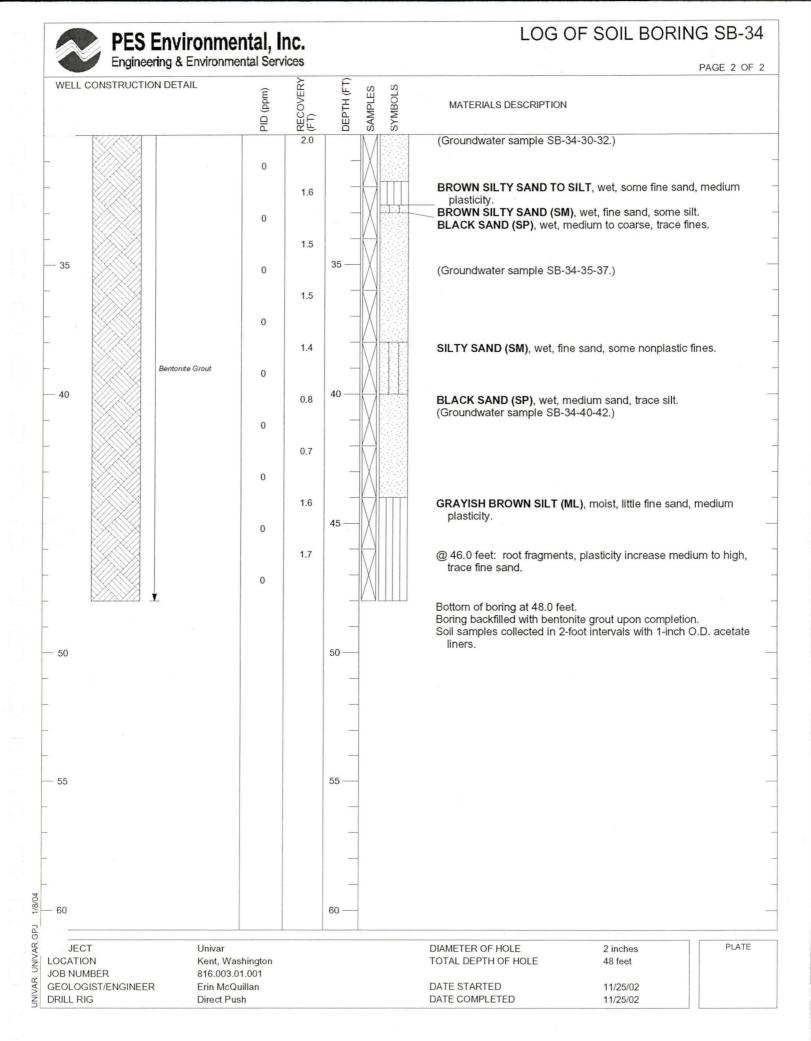
2 inches

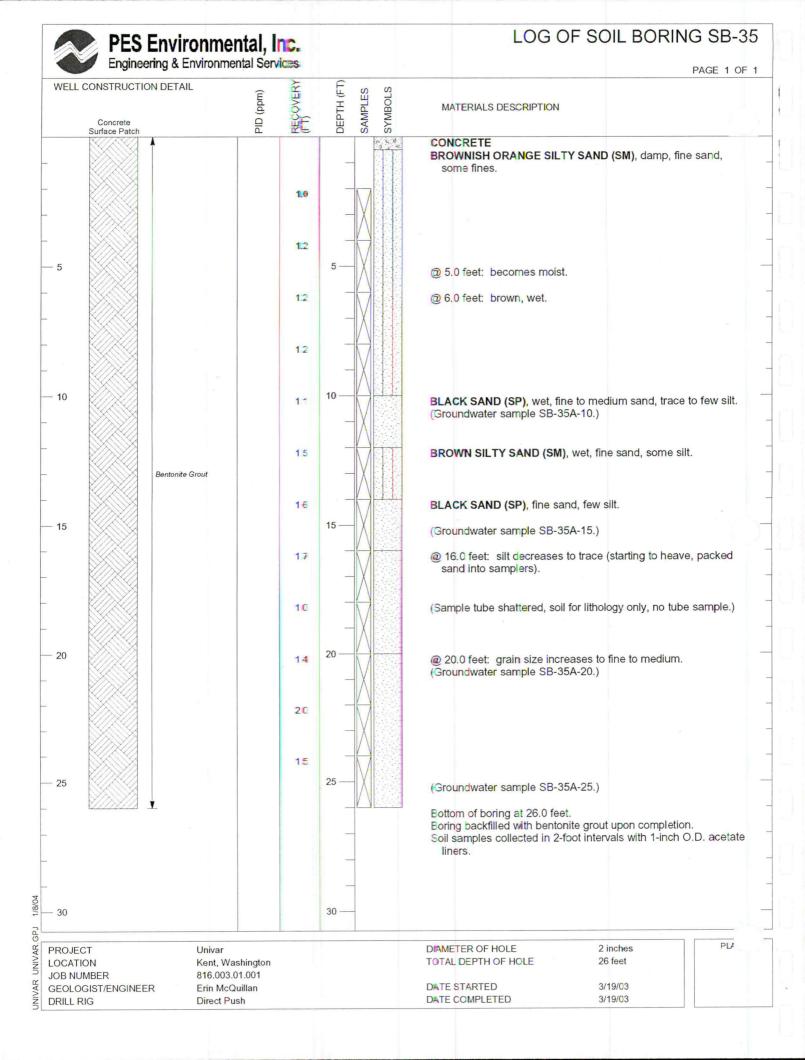
11/22/02

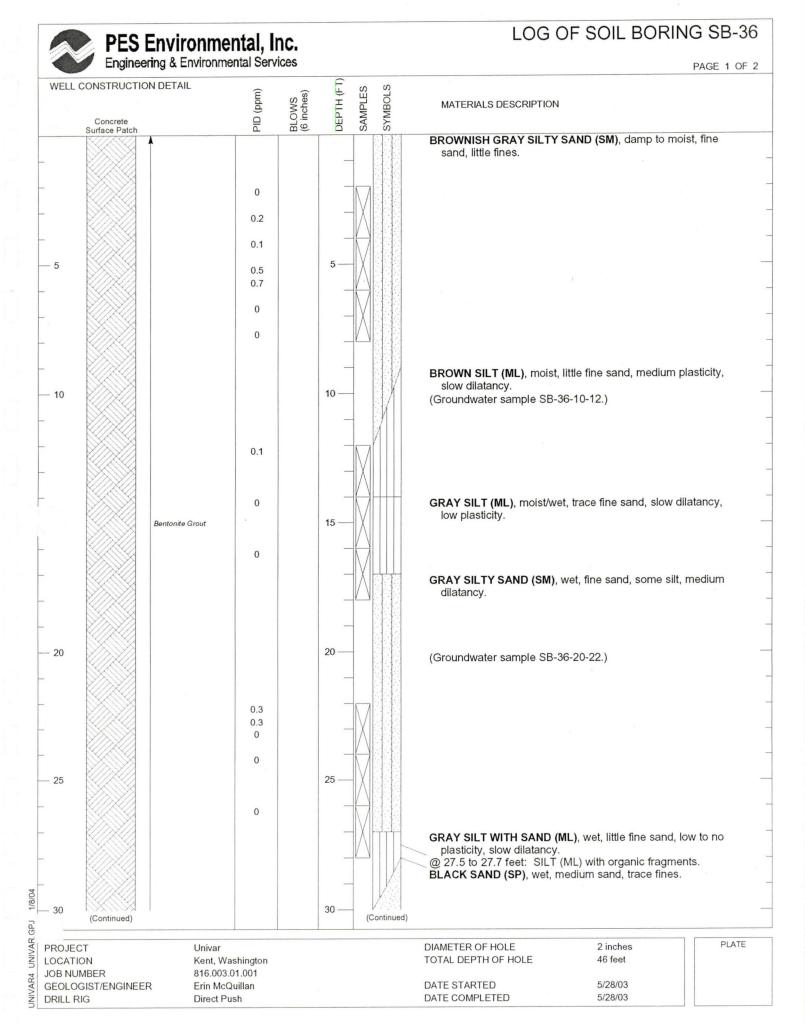
11/22/02

48 feet









DATE COMPLETED

5/28/03

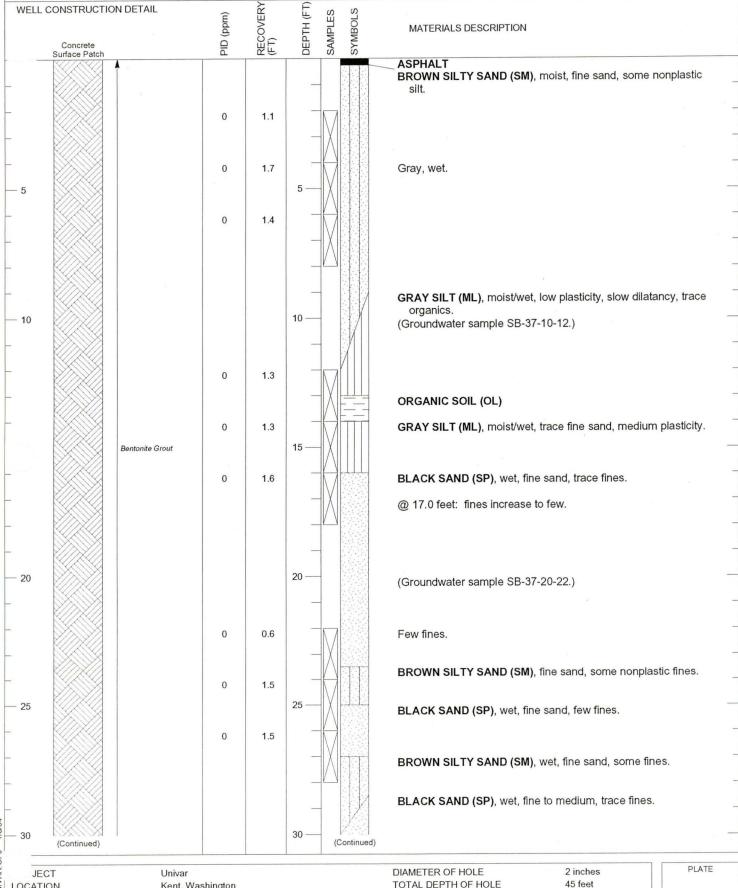
5/28/03

Erin McQuillan

Direct Push

GEOLOGIST/ENGINEER

DRILL RIG



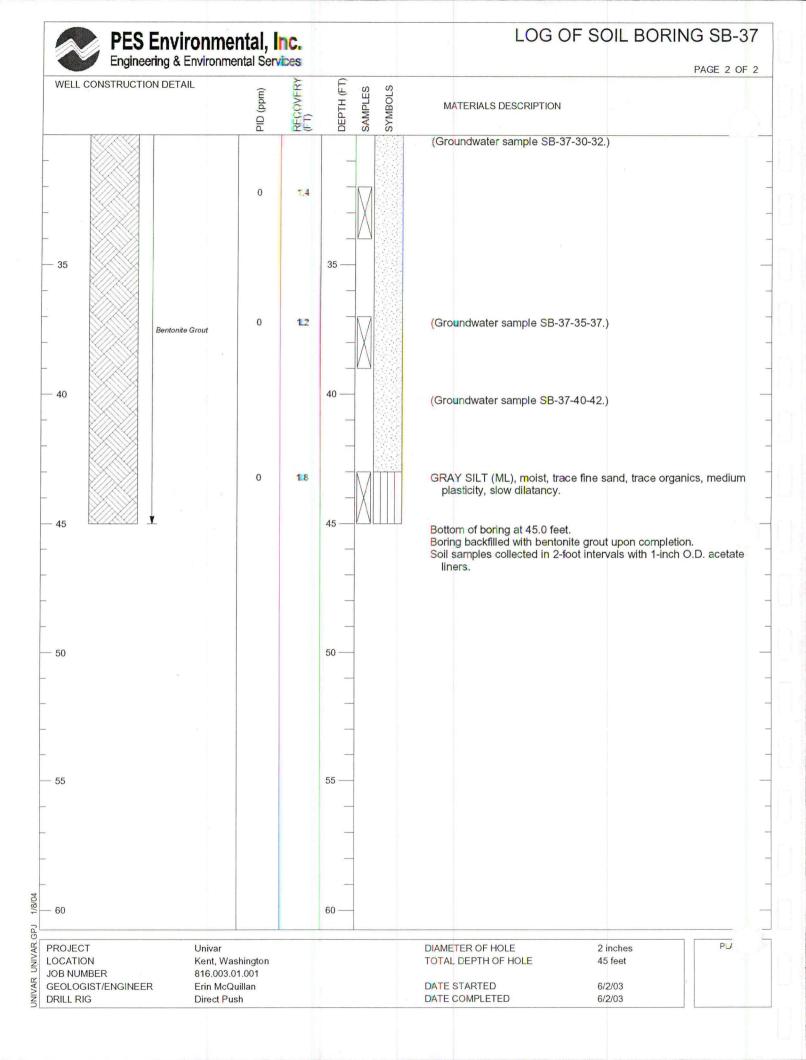
LOCATION JOB NUMBER GEOLOGIST/ENGINEER DRILL RIG

Kent, Washington 816.003.01.001 Erin McQuillan Direct Push

TOTAL DEPTH OF HOLE

45 feet

DATE STARTED DATE COMPLETED 6/2/03 6/2/03



DATE COMPLETED

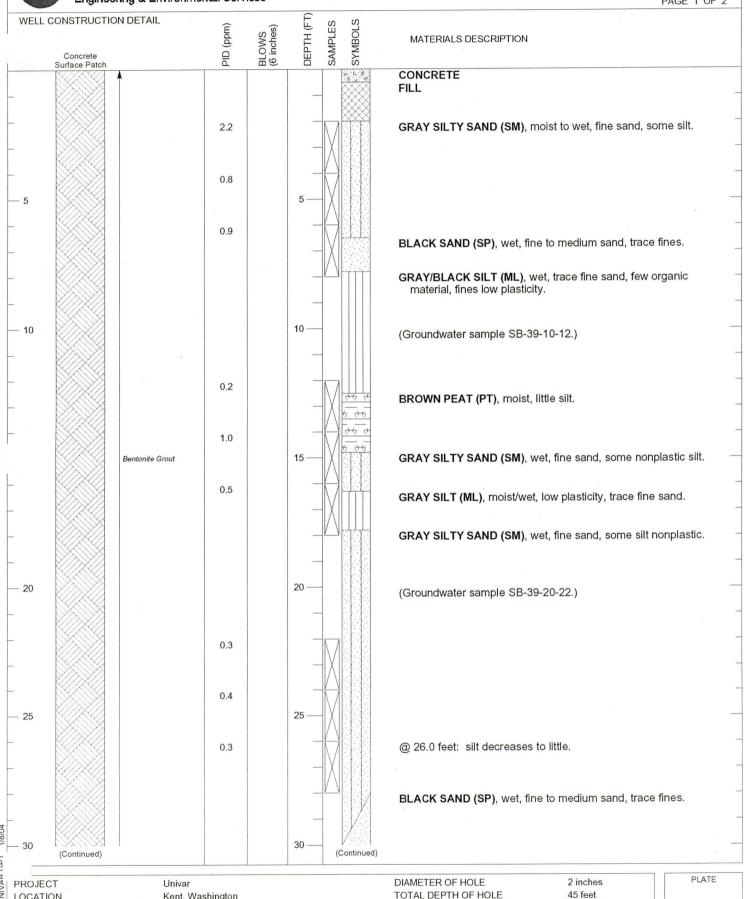
5/28/03

GEOLOGIST/ENGINEER

DRILL RIG

Frin McQuillan Direct Push

PAGE 1 OF 2



LOCATION JOB NUMBER GEOLOGIST/ENGINEER DRILL RIG

Kent, Washington 816.003.01.001 Erin McQuillan Direct Push

TOTAL DEPTH OF HOLE

DATE STARTED

DATE COMPLETED

5/29/03 5/29/03

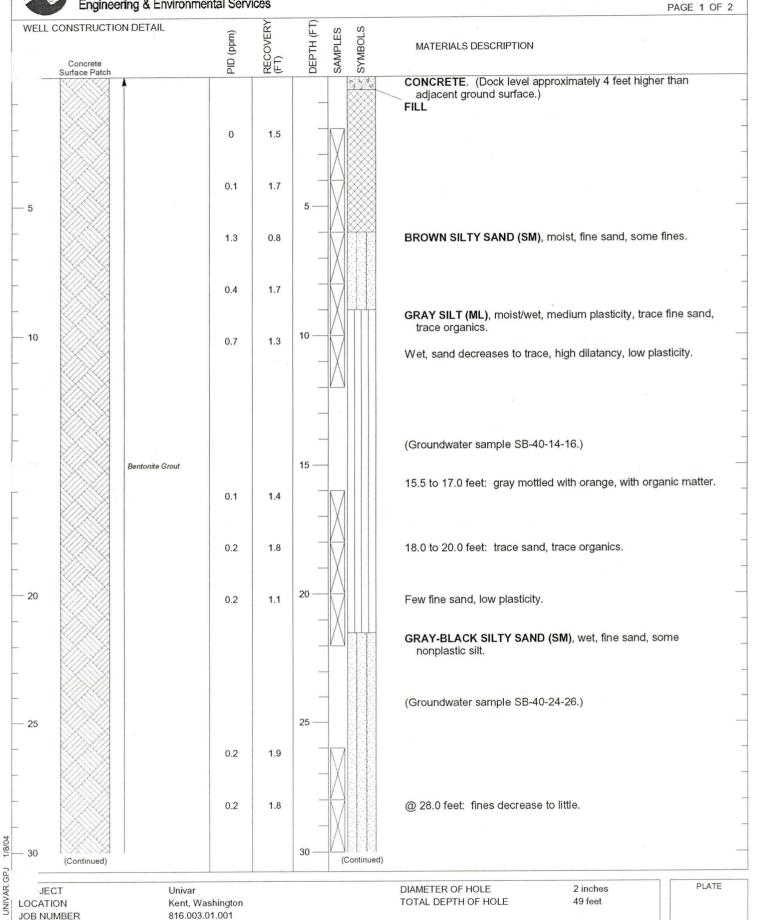
Direct Push

**DRILL RIG** 

LOG OF SOIL BORING SB-39

5/29/03

DATE COMPLETED



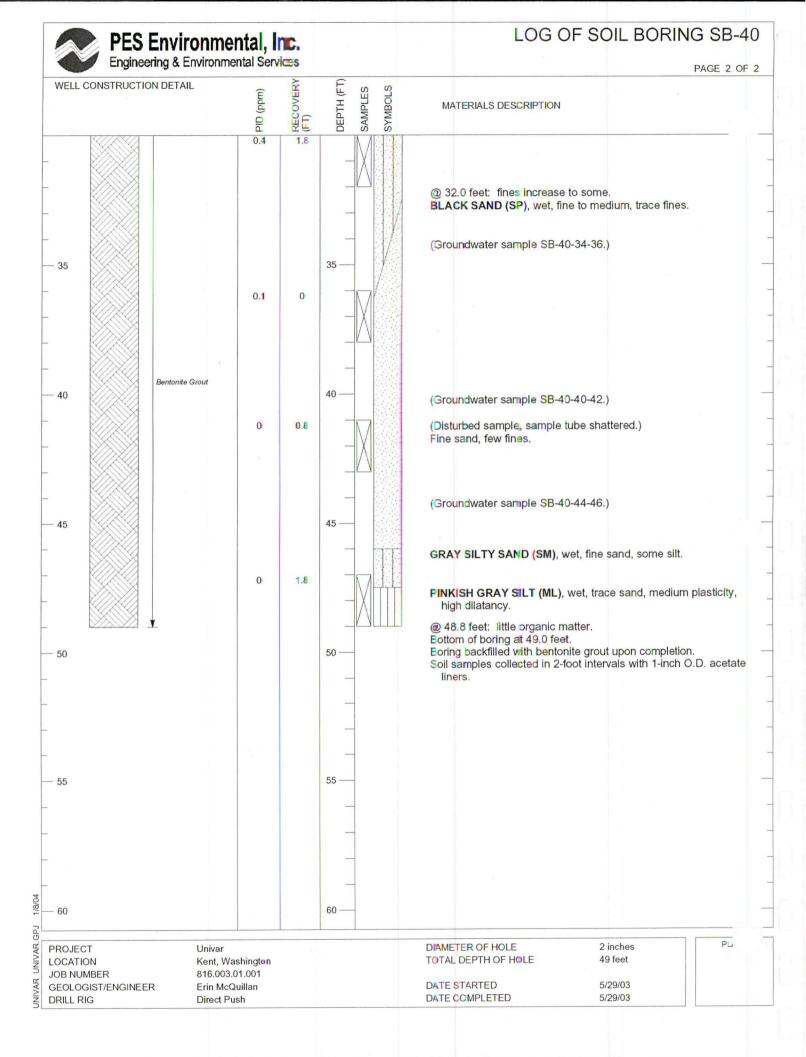
DATE COMPLETED

GEOLOGIST/ENGINEER

DRILL RIG

Erin McQuillan Direct Push 5/29/03

5/29/03



DIAMETER OF HOLE

DATE STARTED

DATE COMPLETED

TOTAL DEPTH OF HOLE

**PROJECT** 

LOCATION JOB NUMBER

DRILL RIG

GEOLOGIST/ENGINEER

Kent, Washington

816.003.01.001

Erin McQuillan Direct Push

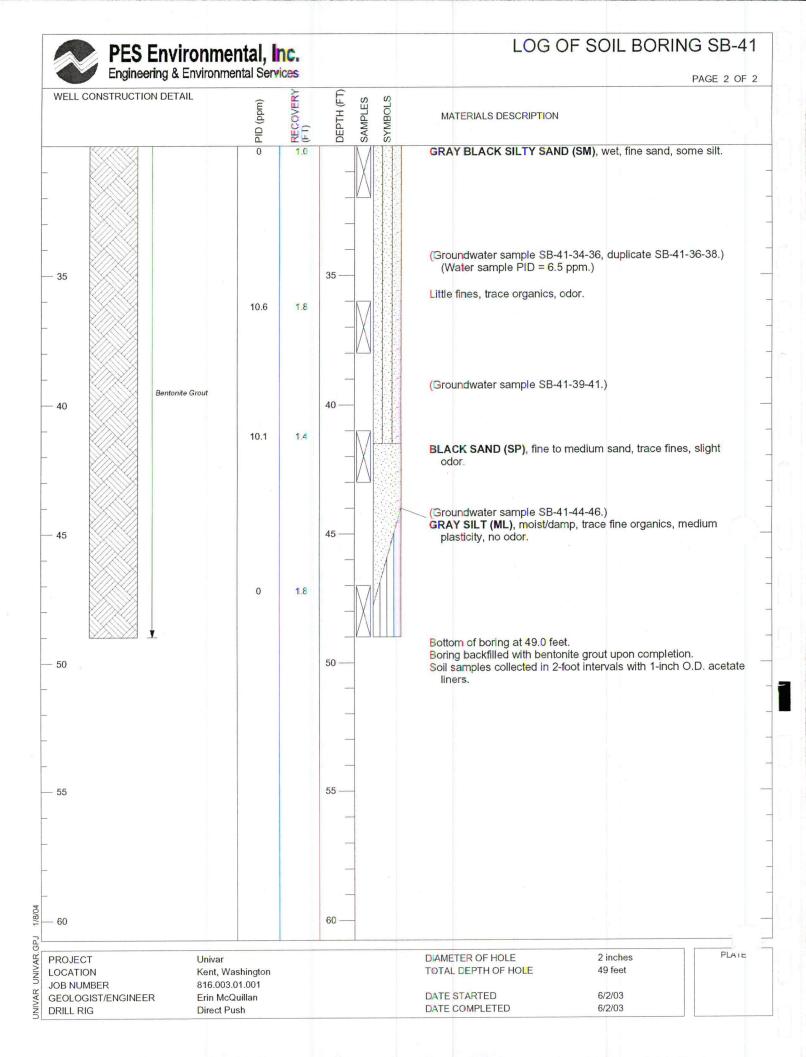
PLATE

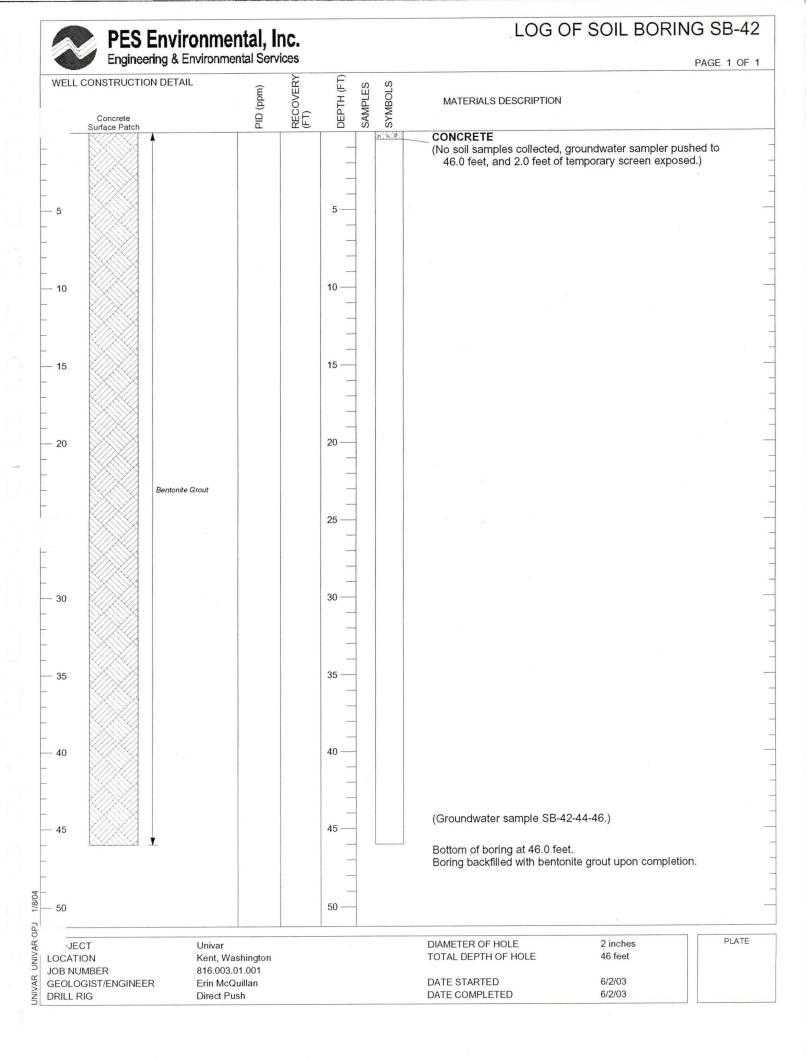
2 inches

49 feet

6/2/03

6/2/03





@ 18.0 to 20.0 feet: (Groundwater sample SB-43-18-021204)

PROJECT
LOCATION
JOB NUMBER
GEOLOGIST/ENGINEER
DRILL RIG

(Continued)

15

20

Univar-Kent Kent, Washington 816.003.01 Erin McQuillan Geoprobe

0

0

0

48

15

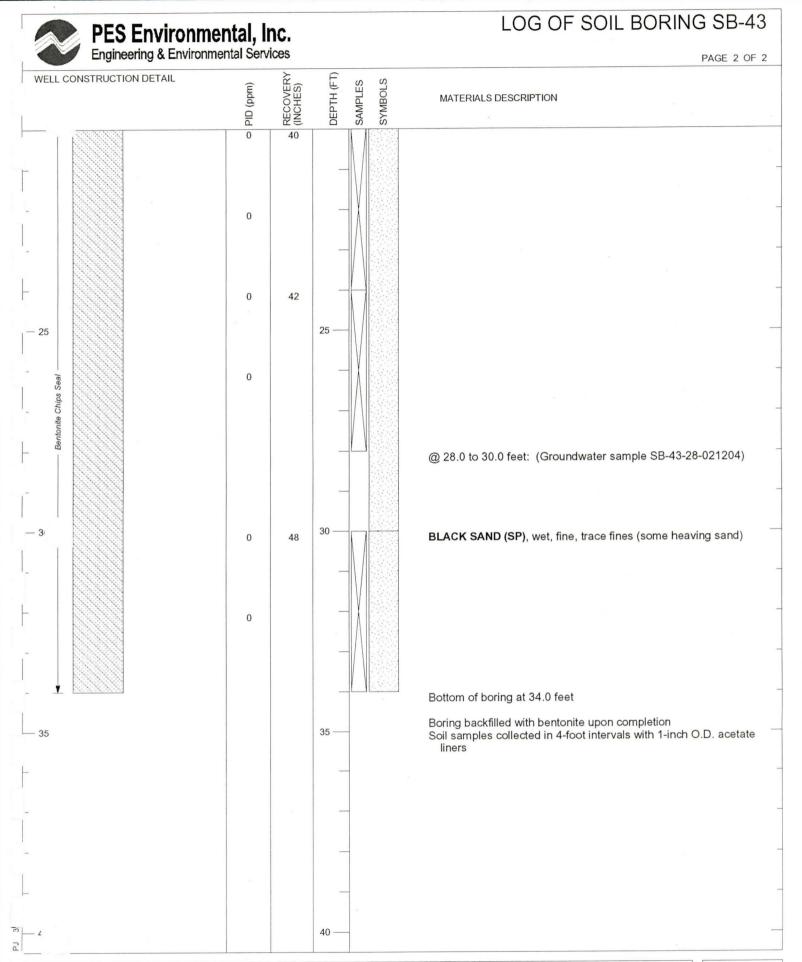
20

(Continued)

DIAMETER OF HOLE TOTAL DEPTH OF HOLE 2 inches 34 feet

DATE STARTED
DATE COMPLETED

2/12/04 2/12/04



PROJECT

LOCATION

JOB NUMBER

GEOLOGIST/ENGINEER

DRILL RIG

Univar-Kent Kent, Washington 816.003.01 Erin McQuillan Geoprobe DIAMETER OF HOLE TOTAL DEPTH OF HOLE 2 inches 34 feet

DATE STARTED

DATE COMPLETED

2/12/04 2/12/04