

Municipality:	Franklin Township	<u> </u>	lock: 468.08	Lot: 2.02
Soil Log and Inte	erpretation			
1 Soil Log #: 2 Log:	SL-3 Date of Soil	Log: <u>5/6/2020</u> M	lethod: Profile Pi	<u>it</u>
Depth (inches)			nated Textural Class; E Mottling Abundance, Siz	Estimated Volume % Coarse ze and Contrast
0 - 12"	Topsoil;			
12 - 99"	Faint Mottling,		or, 42-99" in Depth;	% Stone; Few, Medium, ; SAB, Moist, Friable;
Seepa Pit Flo	ter Observations: age Observed - Depth (i poded - Depth (inches): Zones (Check ALL app Fractured Rock Substrat Massive Rock Substrat Excessively Coarse Ho Excessively Coarse Sul Hydraulically Restrictive Hydraulically Restrictive Perched Zone of Satura Regional Zone of Satura Regional Zone of Satura	79" after 2 plicable categories): tum - Depth to Top: tum - Depth to Top: tizon - Depth Top to topstratum - Depth To the Horizon - Depth To to Substratum - Depth tition - Depth Top to ation - Depth to Top furnished on this forthe Water Pollution of	Bottom: Top: p to Bottom: n to Top: Bottom: : 42"	- . I am aware that
-	Site Evaluator:	K	Date	5/7/2020
	nd Seal of Professional 24GB04258200	Engineer:		



Municipality:	Franklin T	ownship		Block:	468.08 L	ot:	2.02	_
Soil Log and Inte	erpretation							
1 Soil Log #: 2 Log:	SL-4 D	ate of Soil Log:	5/6/2020	Method:	Profile Pit	_		
Depth (inches)		Color Name & s nts; Structure; C						е
0 - 12"	Topsoi	;						
12 - 132"	Promin	3; Silt Loam; ent Mottling, ge @ 76"; Ma	10YR 7/1	in Color,	42-132" in De			
Pit Flo 4 Soil Limiting 5 I hereby cer falsification subject to po	age Observed anded - Depth odded - Depth odded - Depth of Depth of Depth odded - Depth	- Depth (inches): k ALL applicable k Substratum - Events of Saturation of the Wascribed in N.J.A.	after e categories Depth to To Depth Top Im - Depth to on - Depth tratum - De Depth Top Depth Top Depth to To	to Bottom: to Top: Top to Botto pth to Top: to Bottom: to Bottom: to Top: to Bottom: to Bottom:	and accurate. It (N.J.S.A. 58:1	am aware t 0A-1 et seq		
	f Site Evaluato	r:fessional Engine	eer 2	H_	Date:	5/7/2020		_
	24GB0425		5/7/2020					_



Municipality:	Franklii	n Township		Block:	468.08 L	_ot:	2.02
Soil Log and Inte	rpretatior	ı					
1 Soil Log #: _ 2 Log:	SL-5	_Date of Soil Log:	5/6/2020	Method:	Profile Pit	_	
Depth (inches)		sell Color Name & ments; Structure;					
0 - 14"	Торя	soil;					
14 - 93"	Disti	5/8; Silt Loam; nct Mottling, 10 page @ 90"; Ma	YR 7/1 in	Color, 24-9	96" in Depth		
Pit Flo 4 Soil Limiting	ge Obsended - De Zones (Clean Contractured Massive Rexcessiveled Addressiveled Regional Zerohed Zerohe	ations: red - Depth (inches pth (inches): neck ALL applicab Rock Substratum - ock Substratum - y Coarse Horizon y Coarse Substrat lly Restrictive Hori lly Restrictive Sub- one of Saturation cone of Saturation einformation furnis violation of the W prescribed in N.J.	le categories Depth to Top Depth to Top Depth Top Um - Depth to Depth to Top Um - Depth to Depth to Depth Top Depth Top Depth Top Depth Top Depth Top	to Bottom: to Top: Top to Bottor pth to Top: to Bottom: to Bottom: pth to Top: to Bottom: pp: 24"	nd accurate.	I am aware ti	
Signature of	Site Evalu	ator: 294			Date:	5/7/2020	
	nd Seal of	Professional Engir	neer: <u>4</u> : 5/7/2020	H_			



Municipality:	Franklin Township	_Block:	468.08 Lot:	2.02
Soil Log and Inte	erpretation			
1 Soil Log #: 2 Log:	SL-6 Date of Soil Log: <u>5/6/202</u>	0 Method:	Profile Pit	
Depth (inches)	Munsell Color Name & Symbol; E Fragments; Structure; Consistent			
0 - 14"	Topsoil;			
14 - 40"	5YR 4/6; Silty Clay Loam; 10 Friable;	0% Gravel	, 5% Cobble, 5% Si	tone; SAB, Moist,
40 - 94"	10R 5/8; Silt Loam; 10% Gra Distinct Mottling, 10YR 7/1 i Seepage @ 92"; Machine R	n Color, 48	3-94" in Depth; SAB	
Seepa Pit Flo	ter Observations: age Observed - Depth (inches): groded - Depth (inches	er hou es): Top: 40 op: p to Bottom: n to Top: n Top to Bott Depth to Top: p to Bottom: Top: 48	om:	
	f Site Evaluator:		Date: 5/7/2	:020
	nd Seal of Professional Engineer:	20		



Municipality:	Franklin	Township		Block:	468.08 L	.ot:	2.02
Soil Log and Inte	rpretation						
1 Soil Log #: 2 Log:	SL-7	Date of Soil Log:	5/6/2020	Method:	Profile Pit	_	
Depth (inches)		ell Color Name & nents; Structure; (
0 - 17"	Topso	oil;					
17 - 93"	Distin	5/8; Silt Loam; ct Mottling, 10 age @ 72"; Ma	YR 7/1 in	Color, 30-9	93" in Depth		
Pit Flo	ige Observe noded - Dept Zones (Che Fractured R Massive Ro Excessively Excessively Hydraulically	d - Depth (inches	75" after le categories Depth to Top Depth to Top Depth Top um - Depth t zon - Depth	to Bottom: Top to Bottor	of observation	1	
	Perched Zoi	ne of Saturation - ne of Saturation	Depth Top t	o Bottom:	_		
falsification of	of data is a v	nformation furnis riolation of the W rescribed in N.J.	ater Pollution				
Signature of				N. A.	Date:_	5/7/2020	
Signature ar License #:		rofessional Engin 58200 Date:	eer:	4			



Municipality:	Franklin Township	Block:	468.08 Lot:	2.02
Soil Log and Inte	erpretation			
1 Soil Log #: 2 Log:	SL-8 Date of Soil Log: 5/6	/2020 Method:	Profile Pit	
Depth (inches)	Munsell Color Name & Sym Fragments; Structure; Cons	The state of the s	to the first the same of the s	
0 - 12"	Topsoil;			
12 - 54"	5YR 4/6; Silty Clay Loar Prominent Mottling, 2.5			
54 - 108"	10R 5/8; Silt Loam; 10% Distinct Mottling, 10YR Seepage @ 72"; Machii	7/1 in Color, 54	-108" in Depth; S	
Seepa Pit Flo	ter Observations: age Observed - Depth (inches): boded - Depth (inches): g Zones (Check ALL applicable cat Fractured Rock Substratum - Dept Massive Rock Substratum - Dept Excessively Coarse Horizon - Dept Excessively Coarse Substratum - Hydraulically Restrictive Horizon - Hydraulically Restrictive Substratu Perched Zone of Saturation - Dept Regional Zone of Saturation - Dep	regories): th to Top: th to Top: th Top to Bottom: Depth to Top: Depth Top to Bott im - Depth to Top: th Top to Bottom:	om:	
falsification subject to p	tify that the information furnished of data is a violation of the Water Fenalties as prescribed in N.J.A.C.	Pollution Control A	ct (N.J.S.A. 58:10A-1	et seq.) and is
	f Site Evaluator:	7.00	Date:5/7	/2020
-	nd Seal of Professional Engineer: 24GB04258200 Date: 5/7	7/2020		
LIUCIISC #.		12020		



Municipality:	Franklin To	wnship	Block:	468.08 Lot:	2.02
Soil Log and Inte	erpretation				
1 Soil Log #: 2 Log:	SL-9 Date	e of Soil Log: <u>5/6/20</u>	020 Method:	Profile Pit	
Depth (inches)		olor Name & Symbol s; Structure; Consiste			
0 - 18"	Topsoil;				
18 - 98"	Distinct N		in Color, 27-	-98" in Depth; SA	e; Common, Medium B, Moist, Friable;
Seepe Pit Flor 4 Soil Limiting 5 I hereby cer falsification subject to p	Fractured Rock Massive Rock S Excessively Coa Excessively Coa Hydraulically Re Hydraulically Re Perched Zone of Regional Zone of tify that the inform of data is a violal enalties as present.	Depth (inches):	ories): to Top: Top: Top to Bottom: pth to Top: pth Top to Botto - Depth to Top: Top to Bottom: to Top: 27"	and accurate. I am a	et seq.) and is
	f Site Evaluator: nd Seal of Profe	ssional Engineer:	29k_	Date:5/7/	/2020
-	24GB042582	_	020		



Municipality:	Franklin To	wnship		Block:	468.08 L	.ot:	2.02
Soil Log and Inter	pretation						
1 Soil Log #: 2 Log:	<u>SL-11</u> Da	te of Soil Log:	5/6/2020	Method:	Profile Pit	_	
Depth (inches)		Color Name & s its; Structure; C					lume % Coarse rast
0 - 20"	Topsoil;						
20 - 108"	Distinct		YR 7/1 in				fany, Medium Moist, Friable
Pit Floo 4 Soil Limiting 2 F M E H P R	e Observed - ded - Depth (Zones (Check ractured Rock assive Rock xcessively Co xcessively Co ydraulically R ydraulically R erched Zone egional Zone y that the info data is a viol	Depth (inches) inches): ALL applicable Substratum - Deprise Horizon - parse Horizon - parse Substratu estrictive Horiz estrictive Subs of Saturation - of Saturation -	after e categories Depth to To Depth Top Im - Depth to on - Depth tratum - De Depth Top Depth Top Depth to To	to Bottom: o Top: Top to Botton pth to Top: to Bottom: o A0"	nd accurate.	am aware	
Signature of S		1 0.			Date:	5/7/202	0
-	Seal of Prof	essional Engine	eer: <u>4</u>	f_			



Municipality:	Franklin Township	Block:	_468.08 Lot:	2.02
Soil Log and Inte	erpretation			
1 Soil Log #: 2 Log:	SL-12 Date of Soil Log: 5/6	6/2020 Method:	Profile Pit	
Depth (inches)	Munsell Color Name & Sym Fragments; Structure; Cons	at the first proper property and	S 100 Total 17 100	
0 - 14"	Topsoil;			
14 - 113"	10R 5/8; Silt Loam; 109 Distinct Mottling, 10YR Seepage @ 78"; Machi	7/1 in Color, 22	-113" in Depth; SA	
Seep	iter Observations: age Observed - Depth (inches); boded - Depth (inches); <u>74</u>	78" "_after_24_hour	s of observation	
4 Soil Limiting	g Zones (Check ALL applicable ca Fractured Rock Substratum - Dep Massive Rock Substratum - Dept Excessively Coarse Horizon - Dep Excessively Coarse Substratum - Hydraulically Restrictive Horizon - Hydraulically Restrictive Substratu Perched Zone of Saturation - Dep Regional Zone of Saturation - Dep	oth to Top: h to Top: oth Top to Bottom: Depth to Top: Depth Top to Bottom Depth Top to Bottom In Depth to Top: oth Top to Bottom:	=	
falsification	rtify that the information furnished of data is a violation of the Water renalties as prescribed in N.J.A.C.	Pollution Control A		
Signature o	f Site Evaluator:		Date:5/7/2	020
	nd Seal of Professional Engineer: 24GB04258200 Date: 5/			



Municipality:	Franklin Township	Block:	468.08 Lot:	2.02
Soil Log and Inte	erpretation			
1 Soil Log #: 2 Log:	SL-13 Date of Soil Log: 5/6/	2020 Method:	Profile Pit	
Depth (inches)	Munsell Color Name & Symb Fragments; Structure; Consi	The second second	and the same of th	
0 - 18"	Topsoil;			
18 - 116"	10R 5/8; Silt Loam; 10% Distinct Mottling, 10YR 7 Seepage @ 78"; Machir	7/1 in Color, 26	6-116" in Depth; SAI	
Seepa Pit Flo	ter Observations: age Observed - Depth (inches): g Zones (Check ALL applicable cate Fractured Rock Substratum - Depth Massive Rock Substratum - Depth Excessively Coarse Horizon - Depi Excessively Coarse Substratum - I Hydraulically Restrictive Horizon - I Hydraulically Restrictive Substratum Perched Zone of Saturation - Depth Regional Zone of Saturation - Depth	egories): th to Top: to Top: th Top to Bottom: Depth to Top: Depth Top to Bott m - Depth to Top: h Top to Bottom: th to Top: 26	om:and accurate. I am aw	
subject to p	of data is a violation of the Water F enalties as prescribed in N.J.A.C. 7		•	
	f Site Evaluator:	1 111	Date: 5/7/20	020
	nd Seal of Professional Engineer:	- SM-		
License #:	24GB04258200 Date: 5/7	/2020		



Municipality:	Franklin Township	Block:	468.08 Lot:	2.02
Soil Log and Inte	erpretation			
1 Soil Log #: 2 Log:	SL-14 Date of Soil Log:	5/6/2020 Method:	Profile Pit	
Depth (inches)	Munsell Color Name & S Fragments; Structure; Co			
0 - 20"	Topsoil;			
20 - 108"	10R 5/8; Silt Loam; 1 Distinct Mottling, 10Y Seepage @ 80"; Mad	'R 7/1 in Color, 32	2-108" in Depth; SAI	
Seepa Pit Flo	ter Observations: age Observed - Depth (inches) boded - Depth (inches): Zones (Check ALL applicable Fractured Rock Substratum - De Excessively Coarse Horizon - I Excessively Coarse Substratum Hydraulically Restrictive Horizo Hydraulically Restrictive Substreture Perched Zone of Saturation - De	after hour categories): Depth to Top: 20' Depth Top to Bottom: m - Depth Top to Bottom: on - Depth Top to Bottoratum - Depth to Top:		
▼	Regional Zone of Saturation -	Depth to Top: 32	_	
falsification	tify that the information furnishe of data is a violation of the Wat enalties as prescribed in N.J.A.	ter Pollution Control A		
	Site Evaluator:	4 404	Date: 5/7/20	020
	nd Seal of Professional Engine	er: 384		
License #:	24GB04258200 Date:	5/7/2020		



140 West Main Street High Bridge, NJ 08829 T: 908 238 0544 F: 908 238 9572

200 American Metro Blvd Suite 114 Hamilton, NJ 09619 T: 609,454,3433 F: 908,238,9572

Municipality:	Franklin Twp.	Block:	468.08 Lot:	2.02
Form 3f - Pit-Balir	ng Test Data (2 Pages)		3	·
1 Test #:	PB-1 Reference Soil Log:	SL-2	_ Date Tested:	5/6/2020
	erence level established, measure om of pit (ft.), D _{pit} : 7.33		lowing:	
Depth to wate	er level after 2 hr. stabilization peri	od (ft.), D _{water} :	6.42	
Depth to impo	ermeable stratum (ft), D _{stratum} :	7.33		
Height of wat	nknown assume it to be 1.5 times t ter level above impermeable stratu e interval (minutes), T:	7.5		0.92
Time of meas Depth of wate	al chosen, record the following data surement (minutes), t _n er level below reference level (inch e dimensions (feet), I,w		r.	
	following values and enter in the tearea (ft^2), A_{n}	table below:		
Water le∨el ri	ise, h _{rise} (Subtract current value of	dn from previous v	/alue)	
Average water	er surface area (ft²), A _{a√} (Take a∨e	rage of A _n and pre	vious A _n)	
Average heig	iht of water level above impermeat	ble stratum (feet), l	n (Take average of	
	ous value of d _n , convert to feet, and			
Calculate per	meability (in/hr), $K_a = [h_{rise}/T]x[A_a/2]$	$2.27(H^2-h^2)]x60 min$	n/hr	

	t _n	d _n (in)	l (ft)	w (ft)	A_n (ft ²)	h _{rise} (in)	$A_{av}(ft^2)$	h (ft)	Ka
t ₀	0	88.00	0.00	0.00	0.00		=	2	<u>e</u>
t ₁	10	85.00	2.33	2.67	6.22	3.00	3.11	0.13	29.95
t ₂	10	84.00	2.50	2.67	6.68	1.00	6.45	0.29	22.55
t ₃	25	82.00	2.67	2.67	7.13	2.00	6.91	0.42	22.01
t ₄	25	81.00	3.33	2.67	8.89	1.00	8.01	0.54	15.43
t ₅	25	80.00	4.50	2.67	12.02	1.00	10.46	0.62	24.26
t ₆									
t ₇		100							
t ₈									
t ₉		100							
t ₁₀									
t ₁₁									
t ₁₂									
t ₁₃									
t ₁₄									



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Municipality: Form 3f - Pit-Baling To	Franklin Twest Data (2 Pages) -	Action to the contract of the	Block: 46 Reference Soil	88.08 Lot: Log SL-2	2.02
5 Record the follow					
Final Depth of pit	No. of the last of	33			
Depth to imperme	eable stratum (ft) D _{stra}	atum:	7.33		
(If no impermeab	e stratum is encount	ered assume D _{str}	atum = D _{pit})		
Height of standpip	oe above reference le	evel (ft), h _{pipe} :	0.00)	
Depth to water le	vel after 24 hour stab	ilization period (ft), D _{water} :	5.42	
(Take measurem	ent from top of stand	oipe. Subtract h _r	_{iipe})	8	
Height of static w	ater level above impe	rmeable stratum	(ft), H:	1.92	
(H=D _{stratum} -D _{water})					
Average height of	water level above im	permeable stratu	um (ft), h:	0.63	
(Take average of subtract from d _{stra}	dn from beginning ar	nd end of last tim	e interval record	ed in section 4, con	vert this to feet,
6 Re-calculation of	K using data from se	ction 5 above and	d from final time	interval of section 4	:
$K=[h_{rise}/T]x[A_{av}/2.1]$	27(H ² -h ²)]x60 min/hr				
=[1.00 /	25] x [10	.46 /2.27(3.67	- 0.40)]	x60 min/hr=	3.38 in/hr
that falsification o	at the information furn f data is a violation of es as prescribed in N	the Water Pollui	[[전문으로 12] 14 시간 전 12 전 1		
Signature of Site	Evaluator:			_ Date:	5/7/2020
Signature and Se	al of Professional En	gineer:			
License #:	24GB04258200	Date:			5/7/2020



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Municipality:	Franklin Twp.	Block:	468.08 Lot:	2.02				
Form 3f - Pit-Bal	ing Test Data (2 Pages)							
1 Test #:	PB-2 Reference Soil Log:	SL-3	_Date Tested: _	5/6/2020				
Depth to be Depth to wa	eference level established, measure an attom of pit (ft.), D _{pit} : 8.25 ater level after 2 hr. stabilization period permeable stratum (ft), D _{stratum} :		7.42					
Height of w	(If depth is unknown assume it to be 1.5 times the depth of the pit.) Height of water level above impermeable stratum (ft), H=D _{stratum} -D _{water} = Length of time interval (minutes), T: Varies							
Time of me Depth of wa	val chosen, record the following data in asurement (minutes), t _n ater level below reference level (inches ace dimensions (feet), l,w		r:					
	ne following values and enter in the tabace area (ft^2), A_n	le below:						
A∨erage wa A∨erage he d _n and prev	rise, h_{rise} (Subtract current value of dn ater surface area (ft ²), A_{av} (Take averaging ight of water level above impermeable ious value of d_n , convert to feet, and subtractions value (in/hr), $K_a=[h_{rise}/T]x[A_{av}/2.27]$	ge of A_n and pre stratum (feet), I ubtract from D_{str}	vious A _n) n (Take average of _{atum})					

	t _n	d _n (in)	l (ft)	w (ft)	A_n (ft ²)	h _{rise} (in)	$A_{av}(ft^2)$	h (ft)	Ka
t _o	0	99.00	0.00	0.00	0.00		=	2	8
t ₁	10	96.00	1.00	2.67	2.67	3.00	1.34	0.13	15.68
t ₂	10	94.00	1.33	2.67	3.55	2.00	3.11	0.33	28.08
t ₃	10	93.00	1.67	2.67	4.46	1.00	4.01	0.46	21.95
t ₄	15	92.00	2.00	2.67	5.34	1.00	4.90	0.54	21.43
t ₅	15	91.00	2.08	2.67	5.55	1.00	5.45	0.63	32.28
t ₆									
t ₇									
t _e									
t ₉		100							
t ₁₀									
t ₁₁									
t ₁₂									
t ₁₃									
t ₁₄									



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/lunicipality:	Franklin Tv	The same of the sa	Block:	468.08	_Lot:	2.02
orm 3f - Pit-Balin	g Test Data (2 Pages)	- Continued	Refere	nce Soil Log	SL-3	 Y
5 Record the fol	llowing data:					
Final Depth of	f pit (ft), D _{pit} :8	.25				
Depth to impe	ermeable stratum (ft) D _{st}	ratum:	8.25			
(If no imperm	eable stratum is encoun	tered assume [O _{stratum} = D	oit)		
Height of stan	dpipe above reference	evel (ft), h _{pipe} :	25_	0.00		
Depth to wate	r level after 24 hour stal	oilization period	(ft), D _{water}		6.58	
(Take measur	rement from top of stand	dpipe. Subtract	h _{pipe})			
Height of stati	c water level above imp	ermeable stratu	um (ft), H:	1.6	7	
$(H=D_{stratum}-D_{w}$	ater)					
Average heigh	nt of water level above in	npermeable str	atum (ft),	n:	0.63	
(Take average subtract from	e of dn from beginning a d _{stratum})	ınd end of last t	ime interv	al recorded in	section 4, co	onvert this to feet,
6 Re-calculation	of Kusing data from s	ection 5 above	and from f	nal time interv	al of section	ı 4 :
K=[h _{rise} /T]x[A _a	$\sqrt{2.27}(H^2-h^2)]x60 \text{ min/hi}$					
=[1.00	/ 15] x [5	.45 <i>[</i> 2.27(2.7	8 - 0	i.40)] x60	min/hr=	4.03 in/hr
that falsification	y that the information fu on of data is a violation of alties as prescribed in N	of the Water Po	llution Cor			
Signature of S	Site Evaluator:			Dat	e:	5/7/2020
Signature and	l Seal of Professional Er	ngineer:				
License #:	24GB04258200	Date:				5/7/2020



140 West Main Street High Bridge, NJ 08829 T: 908.238.0544 F: 908.238.9572

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Municipality:		klin Twp.	Block:	468.08 Lot:	2.02
Form 3f - Pit-Ba	ing Test Data (2 Pa	ages)			
1 Test #:	PB-3 Refere	ice Soil Log:	SL-5	_Date Tested:	5/6/2020
Depth to be Depth to w	ttom of pit (ft.), D_{pit} :	lished, measure and 7.75 stabilization period (f (ft), D _{strahur} .		owing: 7.17	
Height of w		to be 1.5 times the cermeable stratum (fs), T:	7.5	9	0.58
Time of me Depth of w	asurement (minutes	rence level (inches),			
Water surfa Water leve Average wa Average he d _n and prev	ce area (ft ²), A _n rise, h _{rise} (Subtract ter surface area (ft ² ght of water level a ous value of d _n , col	current value of dn finds, A_{av} (Take average bove impermeable sovert to feet, and subtract $A_{av} = \frac{1}{2} \left(\frac{1}{2} A_{av} / 2.27 \right)$	rom previous v e of A _n and prev tratum (feet), h otract from D _{stra}	vious A _n) I (Take average of I _{sturn})	

	t _n	d _n (in)	l (ft)	w (ft)	A_n (ft ²)	h _{rise} (in)	$A_{av}(ft^2)$	h (ft)	Ka
t _o	0	93.00	0.00	0.00	0.00		=	2	<u>e</u>
t ₁	20	90.00	1.00	2.67	2.67	3.00	1.34	0.13	16.43
t ₂	20	88.00	1.67	2.67	4.46	2.00	3.57	0.33	40.78
t ₃	20	87.00	2.00	2.67	5.34	1.00	4.90	0.46	50.33
t ₄	20	86.00	2.50	2.67	6.68	1.00	6.01	0.54	163.17
t ₅									
t ₆									
t ₇									
t ₈									
t ₉									
t ₁₀									-
t ₁₁									
t ₁₂									
t ₁₃									
t ₁₄									



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Municipality:	Franklin Tv		Block:	468.08	Lot:	2.02
Form 3f - Pit-Baling T	est Data (2 Pages) -	Continued	Refere	nce Soil Log	SL-5	1/4
5 Record the follow	ving data:					
Final Depth of pit	t (ft), D _{pit} :7	.75				
Depth to imperm	eable stratum (ft) D _{st}	ratum:	7.75			
(If no impermeat	ole stratum is encoun	tered assume	D _{stratum} = D	pit)		
Height of standp	ipe above reference l	evel (ft), h _{pipe} :	25-	0.00		
Depth to water le	evel after 24 hour stat	oilization period	l (ft), D _{water}	1	6.50	
(Take measurem	ent from top of stand	lpipe. Subtrac	t h _{pipe})	8		
Height of static w	vater level above imp	ermeable strat	um (ft), H:	1.2	25	
(H=D _{stratum} -D _{water})					
Average height o	of water level above in	npermeable st	ratum (ft),	h:	0.54	— 0
(Take average of subtract from d _{sb}	f dn from beginning a _{ratum})	nd end of last	time interv	al recorded in	section 4, o	onvert this to feet,
6 Re-calculation of	f K using data from se	ection 5 above	and from f	inal time inter	val of section	n 4:
$K=[h_{rise}/T]x[A_{av}/2]$.27(H ² -h ²)]x60 min/hr					
=[1.00 /	20] x [6	.01 /2.27(1.5	66 - 0).29)] x60	0 min/hr=	6.25_in/hr
that falsification	nat the information fur of data is a violation o ies as prescribed in N	of the Water Po	ollution Cor			
Signature of Site	Evaluator:			Da	te:	5/7 <i>1</i> 2020
Signature and Se	eal of Professional Er	ngineer:				
License #:	24GB04258200	Date:				5/7/2020



140 West Main Street High Bridge, NJ 08829 T: 908 238 0544 F: 908 238 9572

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Municipality:	Franklin	Twp.	Block:	468.08 Lot:	2.02
Form 3f - Pit-Ba	ing Test Data (2 Pages	s)			
1 Test #:	PB-4 Reference	Soil Log:	SL-7	_Date Tested:	5/6/2020
	eference level establishe ttom of pit (ft.), D _{pit} :	ed, measure and 7.75	record the fol	lowing:	
Depth to wa	iter level after 2 hr. stab	ilization period (fl	t.), D _{water} :	7.17	
Depth to im	permeable stratum (ft),	D _{stratum} :	7.75		
Height of w	unknown assume it to b ater level above imperm me interval (minutes), T	eable stratum (ft), H=D _{stratum} -D		0.58
Time of me Depth of wa	val chosen, record the for asurement (minutes), t _n ater level below reference ace dimensions (feet), l,v	e level (inches),		r:	
	ne following values and ence area (ft²), A _n	enter in the table	below:		
Water level	rise, h _{rise} (Subtract curre	ent ∨alue of dn fr	om previous v	/alue)	
Average wa	iter surface area (ft²), A	₃√ (Take average	of A _n and pre	vious A _n)	
A∨erage he	ight of water level above	e impermeable st	ratum (feet), l	n (Take average of	
d _n and prev	ious value of d _n , convert	t to feet, and sub	tract from D _{str}	_{atum})	
Calculate p	ermeability (in/hr), K ₌ =[h	rica/Tlx[Aa./2.27(H	$+^2-h^2$)1x60 mir	n/hr	

	t _n	d _n (in)	l (ft)	w (ft)	A_n (ft ²)	h _{rise} (in)	$A_{av}(ft^2)$	h (ft)	Ka
t _o	0	93.00	0.00	0.00	0.00		=	2	2
t ₁	15	90.00	1.00	2.67	2.67	3.00	1.34	0.13	21.91
t ₂	15	89.00	1.83	2.67	4.89	1.00	3.78	0.29	26.00
t ₃	25	88.00	2.17	2.67	5.79	1.00	5.34	0.38	28.82
t ₄	25	87.00	2.50	2.67	6.68	1.00	6.24	0.46	51.27
t ₅									
t ₆									
t ₇									
t ₈									
t ₉									
t ₁₀									
t ₁₁									
t ₁₂									
t ₁₃									
t ₁₄									



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Municipality:	Franklin Tv	vp.	Block:	468.0	8_Lot:	2.02
Form 3f - Pit-Baling	Test Data (2 Pages)	- Continued	Refere	nce Soil Log	SL-7	
5 Record the foll	owing data:					
Final Depth of	pit (ft), D _{pit} : 7	.75				
Depth to imper	rmeable stratum (ft) D _{st}	ratum:	7.75			
(If no imperme	able stratum is encoun	tered assume	D _{stratum} = D	pit)		
Height of stand	dpipe above reference l	evel (ft), h _{pipe} :	24	0.00		
Depth to water	level after 24 hour stal	oilization period	d (ft), D _{water}		6.25	
(Take measure	ement from top of stand	dpipe. Subtrac	t h _{pipe})			
Height of station	water level above imp	ermeable strat	um (ft), H:	1.	50	
(H=D _{stratum} -D _{wa}	ter)				• "	
Average heigh	t of water level above ir	npermeable st	ratum (ft),	h:	0.46	_ 0
(Take average subtract from o	of dn from beginning a d _{stratum})	ınd end of last	time interv	al recorded in	n section 4, co	nvert this to feet,
6 Re-calculation	of K using data from se	ection 5 above	and from f	inal time inte	rval of section	4:
K=[h _{rise} /T]x[A _{av}	/2.27(H ² -h ²)]x60 min/hr	4				
=[1.00	7 25] x [6	.24 /2.27(2.2	25 - (0.21)] x6	0 min/hr=	3.24 in/hr
that falsificatio	that the information fund of data is a violation of data is a violation of alties as prescribed in N	of the Water Po	ollution Cor			
Signature of S	ite Evaluator:			Da	ate:	5/7 <i>1</i> 2020
Signature and	Seal of Professional Er	ngineer:				
License #:	24GB04258200	Date:				5/7 <i>1</i> 2020



140 West Main Street High Bridge, NJ 08829 T: 908 238 0544 F: 908 238 9572

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Municipality:	Frank	in Twp.	Block:	468.08 _ Lot:	2.02	
Form 3f - Pit-Bal	ing Test Data (2 Pag	jes)		8 3		
1 Test #:	PB-5 Reference	e Soil Log:	SL-9	Date Tested:	5/6/2020	
	eference level establis ttom of pit (ft.), D _{pit} :	shed, measure a 8.17	nd record the fol	llowing:		
Depth to wa	iter le∨el after 2 hr. st	abilization period	(ft.), D _{water} :	7.83		
Depth to im	permeable stratum (f	t), D _{stratum} :	8.17			
Height of w	unknown assume it to ater level above impe me interval (minutes)	rmeable stratum	75	100	0.33	
Time of me Depth of wa	ral chosen, record the asurement (minutes) iter level below refere ce dimensions (feet)	t _n nce level (inche		<i>r</i> .		
	e following ∨alues an ce area (ft²), A _n	d enter in the tal	ole below:			
Water level	rise, h _{rise} (Subtract co	ırrent ∨alue of dı	n from previous v	/alue)		
Average wa	ter surface area (ft²),	A _{av} (Take avera	ge of A _n and pre	evious A _n)		
Average he	ight of water le∨el ab	ove impermeable	e stratum (feet), l	h (Take average of		
d _n and prev	ious value of d _n , conv	ert to feet, and s	subtract from D _{str}	atum)		
Calculate p	ermeability (in/hr), K	=[h _{riso} /T]x[A _{av} /2.2	$27(H^2-h^2)1x60 mir$	n/hr		

	t _n	d _n (in)	l (ft)	w (ft)	A_n (ft ²)	h _{rise} (in)	$A_{av}(ft^2)$	h (ft)	Ka
t _o	0	98.00	0.00	0.00	0.00		===	=	=
t ₁	20	97.00	0.67	2.67	1.79	1.00	0.90	0.04	10.86
t ₂	25	96.00	1.08	2.67	2.88	1.00	2.34	0.12	25.58
t ₃	25	95.00	1.17	2.67	3.12	1.00	3.00	0.21	47.33
t ₄									
t ₅									
t ₆									
t ₇									
t ₈									
t ₉									
t ₁₀									
t ₁₁									
t ₁₂									
t ₁₃									
t ₁₄									



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200 American Metro Blvd Suite 114 Hamilton, NJ 09619 T: 609.454.3433 F: 908.238.9572

unicipality: orm 3f - Pit-Baling Te	Franklin Twp. st Data (2 Pages) - Co		lock: 40	88.08 Lot: _oa SL-9	2.02
5 Record the following					
Final Depth of pit (ft), D _{pit} : 8.67	•			
Depth to imperme	able stratum (ft) D _{stratun}	n: 8.	67		
(If no impermeable	stratum is encounter	ed assume D _{stratı}	_{um} = D _{pit})		
Height of standpip	e above reference leve	el (ft), h _{pipe} :	0.0)	
Depth to water leve	el after 24 hour stabiliz	ation period (ft),	D _{water} :	7.67	
(Take measureme	nt from top of standpip	oe. Subtract h _{pipe}	<u>.</u>)		
Height of static wa	ter level above impern	neable stratum (f	t), H:	1.00	
$(H=D_{stratum}-D_{water})$					
Average height of	water level above impe	ermeable stratum	n (ft), h:	0.71	
(Take average of o subtract from d _{strate}	dn from beginning and _{um})	end of last time	inter∨al record	ed in section 4, conv	vert this to feet,
	Cusing data from secti	on 5 above and t	from final time	interval of section 4	
$K=[h_{rise}/T]x[A_{av}/2.2]$	7(H ² -h ²)]x60 min/hr				
=[1.00 /	25] x [3.00) /2.27(1.01	- 0.50)]	x60 min/hr=	6.31 in/hr
that falsification of	t the information furnis data is a violation of th s as prescribed in N.J.	he Water Pollutio			
Signature of Site E	valuator:			_Date:	5/7/2020
Signature and Sea	l of Professional Engir	neer:			
License #: 2	24GB04258200	Date:			5/7/2020
Note: Final depth t	o bottom modified to c	reate 12" rise fro	om true final de	pth in order to not in	nflate permeability



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Municipality: Form 3f - Pit-Bal	Franklin Twp. ing Test Data (2 Pages)	Block:	468.08Lot:	2.02
1 Test #:	PB-6 Reference Soil Log:	SL-12	_Date Tested: _	5/6/2020
	eference level established, measure a ttom of pit (ft.), D _{pit} : 9.42	nd record the foll	owing:	
Depth to wa	ter level after 2 hr. stabilization period	d (ft.), D _{water} :	8.08	
Depth to im	permeable stratum (ft), D _{stratum} :	9.42		
Height of w	unknown assume it to be 1.5 times the ater level above impermeable stratum me interval (minutes), T:	75	9	1.33
Time of me Depth of wa	r al chosen, record the following data in asurement (minutes), t_n tter level below reference level (inchesce dimensions (feet), l,w		:	
	e following values and enter in the table ce area (ft^2), A_n	ole below:		
Average wa Average he d _n and prev	rise, h _{rise} (Subtract current value of dr ter surface area (ft ²), A _{av} (Take avera ight of water level above impermeable ious value of d _n , convert to feet, and s ermeability (in/hr), K.=Ih/TIVIA/2.2	ige of A _n and preversity and preve	vious A _n) ı (Take average of _{ıtum})	

	t _n	d _n (in)	l (ft)	w (ft)	A_n (ft ²)	h _{rise} (in)	$A_{av}(ft^2)$	h (ft)	Ka
t _o	0	113.00	0.00	0.00	0.00	(2)	20	2	=
t ₁	10	108.00	2.50	2.67	6.68	5.00	3.34	0.21	25.46
t ₂	10	106.00	3.00	2.67	8.01	2.00	7.35	0.50	25.43
t ₃	10	104.00	4.00	2.67	10.68	2.00	9.35	0.67	37.19
t ₄	10	103.00	4.67	2.67	12.47	1.00	11.58	0.79	26.53
t ₅	10	102.00	5.08	2.67	13.56	1.00	13.02	0.87	33.71
t ₆									
t ₇									
t ₈									
t ₉									
t ₁₀									
t ₁₁									
t ₁₂									
t ₁₃									
t ₁₄									



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Municipality:	Franklin Tw		Block:	468.08	_Lot:	2.02
orm 3f - Pit-Baling T	est Data (2 Pages) -	Continued	Referen	ce Soil Log	SL-9	-10
5 Record the follow	ing data:					
Final Depth of pit	(ft), D _{pit} : 9.	42				
Depth to imperme	eable stratum (ft) D _{str}	atum:	9.42			
(If no impermeab	le stratum is encount	ered assume	D _{stratum} = D _p	t)		
Height of standpi	pe above reference le	evel (ft), h _{pipe} :	<u> </u>	0.00		
Depth to water le	vel after 24 hour stab	ilization period	d (ft), D _{water} :	N-	6.17	_ny
(Take measurem	ent from top of stand	pipe. Subtrac	t h _{pipe})			
Height of static w	ater level above impe	ermeable strat	um (ft), H:	3.2	5	
(H=D _{stratum} -D _{water})						
A∨erage height o	f water level above in	npermeable st	ratum (ft), h	·	0.88	
(Take average of subtract from d _{str}	dn from beginning al	nd end of last	time interva	l recorded in	section 4, co	nvert this to feet,
6 Re-calculation of	K using data from se	ction 5 above	and from fir	nal time interv	al of section	4:
$K=[h_{rise}/T]x[A_{av}/2.$	27(H ² -h ²)]x60 min/hr					
=[1.00 /	10] x [13	.02 /2.27(10.	56 - 0.	77)] x60	min/hr=	3.52 in/hr
that falsification of	at the information fur if data is a violation o es as prescribed in N	f the Water Po	ollution Cont			
Signature of Site	Evaluator:			Dat	e:	5/7/2020
Signature and Se	al of Professional En	gineer:				
License #:	24GB04258200	Date:				5/7 <i>1</i> 2020