BORING	LOCATI		Pass N	Marina, Corne	t Bay, WA					Boring Name		KJ-B02
DRILLIN	G COMP	PANY				DRIL	LER Tvic	er Day		Project Name	Ec	ology Cornet Bay
DRILLIN	G METH Direct	OD(S)				DRIL	L BIT(S 2-Ir) SIZE				1196012*00
ISOLATI	ON CAS N/A					FRO		TO	N/A	Project Number ELEVATION AND DATU	и Т	TOTAL DEPTH
BLANK (CASING					FRO	М	то	FT.	bgs DATE STARTED		15.0 ft. bgs DATE COMPLETED
SLOTTE	N/A D CASIN	IG			·	FRO	<u>N/A</u> м	то	N/A FT.	9/12/11		9/12/11
SIZE AN	N/A ID TYPE	OF FIL	TER PA	CK		FRO	<u>N/A</u> м	то	N/A FT.	INITIAL WATER DEPTH 9.0	(F1)	
SEAL	N/A					FRO	N/A	то	N/A FT.	LOGGED BY DKM		
GROUT		uiar B	entoni	te		FRO	0		15 FT.	SAMPLING METHODS	İ	WELL COMPLETION SURFACE HOUSING
	N/A		· · · · · · · · · · · · · · · · · · ·			FRO	N/A		N/A TI	MacroCore w/liner		☐ STAND PIPE FT.
TYPE	RECOV. (FEET)	PENETR. RESIST. 3LOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOG	USCS		SAMPLE DESCRIPTION	AND [DRILLING REMARKS
- SS	2.5		_		-			SM	Brown	SAND with gravel n/tan, slity sand with gra y moist, no odor, no sh	avel, een.	moderately dense,
			5 -		- -	0.1		ML	Tan-g	with sand ray, silt with 15-20% fir rately soft, medium plas 		
SS -	3		_		-	6.8	X	ML/ CL	Gray,	rately soft, moderately	fine high	sand and minor gravel, plasticity, molst, no odor,
			10-		-			ML	Silty Gray, wet, n	CLAY slity clay, moderately s lo odor, no sheen.	itiff, h	nigh plasticity, moist to
- - SS	4		_ XI	KJ-B2-12	-	13.7	<i></i>	SP	Poorl Gray,	y graded SAND medium sand with 5-10 nedium odor, no sheen.	0% si	ilt, moderately dense,
-			15-		-	0.1		ML	Gray,	rately soft, moderately l	nd, so high	ome clay, minor gravel, plasticity, wet, no odor,
NO1 1. R a		issanc ately 1	e groun	dwater sample let bgs.	KJ-B2-RGW collecte	ed. Sc	reen se	-				

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	BORING			Pass I	Marina, Corne	t Bay, WA		-			Boring Name	KJ-B03
	DRILLIN	Caso	ade D	rilling			DRIL	Ty	ler Day			cology Cornet Bay
	DRILLIN	Direc	t-Pus	h			DRIL		s) size Inch		Project Number	1196012*00
	ISOLATI	ON CAS	SING				FRO	M N//	то 4	FT. N/A	ELEVATION AND DATUM	TOTAL DEPTH
	BLANK (N/A					FRO	M N//	то 4	N/A	bgs DATE STARTED 9/12/11	15.0 ft. bgs DATE COMPLETED 9/12/11
	SLOTTE	N/A					FRO	M N//	то 4	N/A	INITIAL WATER DEPTH (FT	
	SIZE AN	ID TYPE N/A	OF FIL	TER PA	CK		FRO	M N//	TO 4	FT. N/A	LOGGED BY	
	SEAL	Gran	ular B	entoni	te		FRO		то 0	15	DKM SAMPLING METHODS	WELL COMPLETION
	GROUT	N/A			•		FRO	M N/A	то 4	N/A	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
	S TYPE	RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLO	GY USCS LOG		SAMPLE DESCRIPTION AND	DRILLING REMARKS
	SS	2				-	0.3		SM	Tan-g	SAND with gravel ray, silty sand with gravel in sheen.	fill, loose, slightly moist, no
	SS	3.5		5 -		<u>-</u> - -	0.4		SP/ SM	Brown round	y graded SAND with silt in to gray-brown, sand with ed to subrounded gravel, so foot, moderately dense, meen.	~20% silt and 10-20% some woody material in
	-			10-	KJ-B3-9	=	5.5	<u> </u>	SP/ SM	Gray,	y graded SAND with silt fine to medium sand with rately dense, wet, medium	up to ~15% silt, odor, no sheen.
12/13/11	SS	4		_		-	0.5		SM	Gray,	SAND with gravel sand with up to 40% silt, 1 , wet, no odor, no sheen.	0-15% gravel, moderately
PJ KJ PNW.GDT				15-		_	0.1		CL/ ML	Silty (CLAY	el, stiff, high plasticity, wet,
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11												•

F-40.1 (6-87) (3-88) (8-90)

	BORING		ION	Marina, Corne	t Boy MA						KJ-B04
	DRILLIN	G COM	PANY		t Bay, WA	DRII	LLER	D		Boring Name	
	DRILLIN	G METH	ade Drillin lop(s)	9		DRII	LL BIT(S)			Project Nameb	Ecology Cornet Bay
	ISOLATI	ON CAS	t-Push ing			FRC	<u>2-In</u> м	nch TO	FT.	Project Number	1196012*00
ı	BLANK (N/A CASING				FRC	N/A	то	N/A FT.	ELEVATION AND DATUM bgs	TOTAL DEPTH 15.0 ft. bgs
	SLOTTE	N/A				FRC	N/A		N/A FT.	DATE STARTED 9/12/11	DATE COMPLETED 9/12/11
		N/A	OF FILTER F	2401/			N/A		N/A	INITIAL WATER DEPTH (FT 7.0	7)
		N/A	OFFILTER	PAUK		FRC	N/A		N/A FT.	LOGGED BY DKM	
	SEAL		ular Bento	nite		FRC	0		15 15	SAMPLING METHODS	WELL COMPLETION
	GROUT	N/A				FRC	M N/A	то	N/A	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
	S/ TYPE	RECOV.	PENETR. DEPT RESIST. (FEET BLOWS/6	H SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS		SAMPLE DESCRIPTION AN	D DRILLING REMARKS
		(FEE1)	BLOWS/6							SAND with gravel ray, slity sand with gravel	fill, no odor, no sheen.
	-				_			ѕм	_		
	SS	2.5						ML	SILT		
٠,	-				-	0		IVIL	Brown	n, silt with fine woody mat , no odor, no sheen.	erial, moderately soft,
	-			5-			_	SM	Green	SAND with gravel hish-gray to gray, silty med	dium to fine sand with
	.		M	- KJ-B4-6	-	0.6			5-15% - sheer	6 gravel, moderately dens I.	e, moist, no odor, no
	ss	4.5			후 -					y clayey SILT with grave	el evel and 5-15% sand, some
	-			1		0.4			_ 1-2" tl	nick såndy interbeds local vet in sandy interbeds, no	ly, stiff to very stiff, moist to
	•			1				1	-		
			10)-				ML/ CL	-		
_											
T 12/13/	ss	4.5	,			0					
W.GD						U		1	Silty	CLAY	
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11			15	<u>,</u>		,		CL/ ML	Gray, moist	slity clay with minor grave no odor, no sheen.	el, very stiff, high plasticity,
T 2011.G								-			
GS SEF											
RINGLO					•						
BAY BC											
CORNE											
OLOGY											
NW EC											
Ž											

DRILLIN	Decept IG COMPA	ion Pass NY	Marina, Corne	t Bay, WA	I DDII	LLER			Boring Name	KJ-B05
		1 N 1								
DRILLIN					1	Tyle	r Day		Project NameE	cology Cornet Bay
	Direct-l	Pùsh				LL BIT(S) : 2-Inc	ch		Project Number	1196012*00
ISOLAT	ION CASIN N/A	iG			FRO	N/A	то	N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH
BLANK	NK CASING NI/A ITED CASING NI/A ITED CASING NI/A IAND TYPE OF FILTER PACK NI/A Granular Bentonite OUT NI/A SAMPLES RECOVI PENETT (FEET) BLUWSIS A 3 A B BACKFILL DETAILS KJ-B5-4 10- 10- 15- 15- 15- 15- 15- 15-				FRO		то	N/A FT.	bgs DATE STARTED	15.0 ft. bgs
SLOTTE	D CASING				FRO		то	N/A	9/12/11 INITIAL WATER DEPTH (FT	9/12/11)
SIZE AN	ID TYPE O	F FILTER PA	ACK		FRO	M	то	FT.	8.5 LOGGED BY	-
SEAL			14		FRO		то	FT.	DKM SAMPLING METHODS	WELL COMPLETION
GROUT		ar Benton	ite		FRO	0 M	то	15 FT.	MacroCore w/liner	□ SURFACE HOUSI
S	AMPLES			BACKFILL DETAILS		N/A		N/A		☐ STAND PIPE.
TYPE		NETR. DEPTH SIST. (FEET)	SAMPLE NUMBER	DOON-ILL DE (AILS	PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AN	D DRILLING REMARKS
- - - -			l.	-	0		SM SP/ SM	- Poorl Dark	SAND with gravel grown, silty sand with grave by graded SAND with silt gray, sand with 10-20% sill, texture varies locally, mono sheen.	and gravel
SS	3.5	- 10-		- - - - -	0		ML/ CL CL/ ML	Gray grave mode Silty Gray, moist	silty clay, minor gravel, ve to wet, no odor, no sheen	nd below ~8 feet, no sheen. ery stiff, high plasticity
ss	5	- 15-			0		CL/ ML	Gray, wet, n	y graded SAND with silt medium sand with 10-15% to odor, no sheen. CLAY silty clay, minor gravel, ve to wet, no odor, no sheen	erv stiff, high plasticity
ss										
F-40.1 (6-87) (3-8	a) (a oo)							······································		1EET1OF

		eption	Pass	Marina, Cornet	t Bay, WA						Boring Name	KJ-B06
	NG COMI Casc	IPANY cade D	Orilling				ILLER Ty	yle	er Day		Project Name	Ecology Cornet Bay
	NG METH Direc	нор(s) ct-Pusi)			DRII	ILL BIT((S) S -Inc	SIZE ch		Project Number _	
	TON CAS N/A	SING				FRO	OM N//	/A	то	FT. N/A	ELEVATION AND DATU	M TOTAL DEPTH
<u> </u>	CASING N/A					FRO		/A	ТО	N/A FT.	DATE STARTED	15.0 ft. bgs DATE COMPLETED
	ED CASII N/A					FRO	OM N//	/A	то	FT. N/A	9/12/11 INITIAL WATER DEPTH	9/12/11 (FT)
		OF FIL	LTER PA	CK		FRO	OM N//	/A_	ТО	FT. N/A	LOGGED BY	
SEAL	Gran	ıular E	Bentoni	ite		FRO	ОМ		то	FT. 15	SAMPLING METHODS	WELL COMPLETION
GROUT	N/A				,	FRO	OM N//	— . / <u>А</u>	то	N/A FT.	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
S TYPE	SAMPLES	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLO		USCS		SAMPLE DESCRIPTION	I AND DRILLING REMARKS
	(FEE1)	BLOWS/61	-	+			1			Silty	SAND with gravel	•
}			-			l			ĺ	Tan/b	rown, silty sand with gr	ravel fill, no odor, no sheen.
	1	!	-			i			SM	-		
ss -	2.5	!				0			l			
		!				i			l			
						0				Green	ly graded SAND with s nish-gray, sand with 10-	-20% silt and 10-20% gravel,
			5-				1		1	textur	re varies locally, modera , moist to wet, no odor,	ately dense to moderately
 					<u> </u>	ı			SP/ SM	-		
- SS			M -	111007		0			1	-		
- 35	4		И -	KJ-B6-7		I			ĺ	-		
		!	-			0			İ		CLAY with gravel	gravel, 5-10% fine sand, stiff,
	<u> </u>	<u> </u>	10-]						mode	rately high plasticity, m	oist, no odor, no sheen.
						Į			İ			
_[1					Į			CL/ ML			
s ss	4.5					į			ML			
	'			1		0			,	-		
	·		-	1		,			İ '	-		
			15_	<u> </u>				\perp				
1. R	TES Reconna	aissanc	e grour	ndwater sample k	KJ-B6-RGW collecte	∍d. Sc	creen s	set				
a	proxim	lately i	70-10 le	eet bgs.								
24												
-												
2												
·												

BORING	Dece	ption	Pass l	Marina, Corne	t Bay, WA					Boring Name	KJ-B07
DRILLIN	Casc	ade D	rilling				LER Tyle	r Day		Project NameE	cology Cornet Bay
DRILLIN	Direc	t-Pus	h				L BIT(S) 2-Inc	ch		Project Number	1196012*00
ISOLAT	N/A					FRO	N/A	то	N/A	ELEVATION AND DATUM bgs	TOTAL DEPTH 20.0 ft. bgs
BLANK	N/A					FRO	N/A	то	N/A	DATE STARTED 9/12/11	DATE COMPLETED 9/12/11
SLOTTE	N/A					FRO	N/A	то	N/A FT.	INITIAL WATER DEPTH (FT) 10.0	
SIZE AN	ID TYPE N/A	OF FIL	TER PA	CK		FRO	M N/A	то	N/A	LOGGED BY DKM	
SEAL	Gran	ular B	enton	ite		FRO)М О	то	FT. 20	SAMPLING METHODS	WELL COMPLETION
GROUT	N/A					FRO	M N/A	то	N/A FT.	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
TYPE	RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AND	DRILLING REMARKS
- - - SS	1.5	SECTION OF	-		-			SM		SAND with gravel rown, silt, sand, and grave	fill, no odor, no sheen.
_			5-		-	0		CL/ ML		CLAY n, silty clay with 5-10% graveen.	vel, stiff, moist, no odor,
SS -	3		10-	KJ-B7-8	<u>-</u>	0.1			Gray, mode	ey SILT with sand clayey silt with 10-15% fine rately soft, moist to wet, sli dium odor ~12-15 feet, no	ght odor ~7-9 feet, slight
SS	3		15-	KJ-B7-13	-	3.7		ML/ CL			
- - SS -	2.5		- - - - 20-		-	0.8			_		
			20								

BORING	3 LOCATI	ION									
DRILLIN	Decel NG COMF		Pass I	Marina, Corne	t Bay, WA	DRIL	LER	*		Boring Name	KJ-B08
	Casca NG METH	ade D	rilling			1		er Day		Project NameE	cology Cornet Bay
	Direct	-Pusi	1				2-i	nch		Project Number	1196012*00
	TON CAS N/A	ING				FRO	M N/A	ТО	N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH
BLANK	CASING N/A					FRO		TO	N/A FT.	bgs DATE STARTED	15.0 ft. bgs DATE COMPLETED
SLOTTE	ED CASIN	IG			·	FRO	М	TO	FT.	9/12/11 INITIAL WATER DEPTH (FT)	9/12/11
SIZE AN	N/A ND TYPE	OF FIL	TER PA	CK		FRO	<u>N/A</u> M	то	N/A FT.	8.0	
SEAL	N/A					FRO	N/A		<u>N/A</u>	LOGGED BY DKM	
<u> </u>	Granu	ıiar B	entoni	te			()	. 15	SAMPLING METHODS	WELL COMPLETION
GROUT	N/A					FRO	м <u>N/A</u>	то \	N/A	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
TYPE	RECOV. (FEET)	PENETR. RESIST.	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOG	USCS		SAMPLE DESCRIPTION AND	DRILLING REMARKS
- SS	2	ESWAV			-	0		SM		SAND with gravel rown, slity sand with gravel	fill, no odor, no sheen.
			5-		-	0		ML/ CL	Brown above moist	y SILT n/gray, clayey silt, stiff, mod ∼4.5 feet, moderately high to moist, no odor, no sheer	below ~4.5 feet, slightly
SS	2		10-		<u>-</u>	0		ML/ CL	Gray, 5-10%	y SILT with sand clayey silt with 10-20% fine gravel, texture varies loca I, locally moderately stiff, n	lly, moderately soft
SS	2.5		15_	KJ-B8-14		0		ML	Sandy Gray, wet, n	/ SILT silt with 20-30% sand, mind o odor, no sheen.	or gravel, some clay, soft,
SS										e	

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DRILLING DRILLING	COMPA	tion Pass	<u>Marina, Corne</u>	Bay, WA					Boring Name	KJ-B09
DRILLING I ISOLATIO	Casca	de Drilling		,		Tyle	r Day		_	cology Cornet Bay
ISOLATIO	METHC	D(S)	, , , , , , , , , , , , , , , , , , , ,		DRILL	BIT(S)	SIZE			
	ON CASI				FROM	1		N/A	ELEVATION AND DATUM	TOTAL DEPTH
BLANK C	ASING				FROM	1	то	FT.	bgs DATE STARTED	DATE COMPLETED
SLOTTED	CASING	3			FROM	1	то	FT.	9/12/11	9/12/11
SIZE AND	TYPE (OF FILTER PA	CK		FROM	1	то	FT.	8.0	
SEAL					FROM	Λ	то	FT.	DKM	MATELL CONTRICTION
GROUT		ar Benton	ite		FROM	Λ	то	FT.		☐ SURFACE HOUSING
DRILLING COMPANY Cascade Drilling DRILLING METHOD(S) Direct-Push Direct-Push Direct-Push DIRECT-Push DIRECT-Push DIRECT-Push DIRECT-Push DIRECT-Push DIRECT-Push DRILL BIT(S) SIZE 2-Inch Project Name DRILL BIT(S) SIZE DIRECT-PUSH Project Name DRILLING METHOD(S) DRILL BIT(S) SIZE DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DIRECT-PUSH DATE STARTED DATE COMPLETED 9/12/11 DATE COMPLETED 9/12/11 DATE COMPLETED 9/12/11 DATE COMPLETED 9/12/11 SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLING DRILLI										
TYPE	RECOV. P (FEET) R	ENETR. DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AND	DRILLING REMARKS
		-		-	0			Tan/b	rown, sllt, sand, gravel fill,	
-		-			,					
-		5-		-				- mode	rately high plasticity, moist	, no odor, no sheen.
-		-			0					e to medium sand. 5-1
- SS - -	3.5	_		\	0			grave	I, Increased sand and less	clayey below ~10 feet,
		10-		_			ML/ CL	_		ı
ss	3.5							_		
·		М	KJ-B9-13		0			-		
-		15		_	0		CL/ ML	Gray,	silty clay with 5-10% sand	, minor gravel, stiff, mo

<u> </u>		eption	Pass I	Marina, Corne	t Bay, WA					Boring Name	KJ-B10
		cade D					LER Ty	ler Day		Project Name	Cology Cornet Bay
	ING MET Dired	ct-Pus					2-	s) size Inch		Project Number	1196012*00
	N/A					FRO	N//	то 4 то	N/A FT.	ELEVATION AND DATUM bgs	TOTAL DEPTH 15.0 ft. bgs
	N/A TED CAS					FRO	N/A		N/A FT.	DATE STARTED 9/12/11	DATE COMPLETED 9/12/11
	N/A ND TYP		TER PA	CK	***************************************	FRO	N//		N/A FT.	INITIAL WATER DEPTH (FT 8.0)
SEAL	N/A					FRO	N//		N/A FT.	LOGGED BY DKM	
GROU		nular B	entoni	te		FRO	(<u>0</u> то	15 FT.	SAMPLING METHODS MacroCore w/liner	WELL COMPLETION SURFACE HOUSING
	N/A SAMPLES		j		BACKFILL DETAILS		N//	Α	N/A	Widologo Willion	☐ STAND PIPE FT.
TYPE	RECO\ (FEET	PENETR. RESIST. BLOWS/6	(FEET)	SAMPLE NUMBER	Briota ILL BETTHEO	PID	LITHOLO	GY USCS LOG		SAMPLE DESCRIPTION AN	D DRILLING REMARKS
-			_		-			SM		SAND with gravel rown, sand, silt, gravel fill	, no odor, no sheen.
ss	3.5		_		-	0		ML			moderately stiff, no odor,
			-				K	CL	Tan/g	CLAY ray, clay, minor silt, stiff, h no sheen.	nigh plasticity, moist, no
-			5 -		-	23.9		ML/ CL	Gray,	y SILT with sand clayey silt with 10-20% sa to wet, low to medium odd	and and fine gravel, soft, or, no sheen.
SS	2.5		10-	KJ-B10-8	\ -	13.7 68.7	X	CL/ ML	Gray, sandle In upp	CLAY with sand slity clay with 10-20% sar er in 1-2" thick layers or poer ~1 foot, stiff to very stif , medium odor, no sheen.	ods, blocky wood material f, medium plasticity, moist
SS SS	4.5				-	0		CL/ ML	Gray,	CLAY slity ciay with some sand city, moist to wet, no odor,	and fine gravel, stiff, high no sheen.
A FINA ECOLOGY CORNET BAT BORING LOGS SEPT AUT. SFJ. KL. PNIV.GDT 12/13/17			15-			0					

BORIN	IG LOCAT Dece		Pass I	Marina, Corne	t Bay, WA				·		Boring Name		KJ-B11
	ING COM Casc	ade D	rilling				LER T	yle	r Day		Project Name	Ec	ology Cornet Bay
DRILLI	ING METH	HOD(S) t-Pus	h		.,	DRII	L BIT	(S) : -Inc	SIZE *	-	Project Number		1196012*00
ISOLA	TION CAS N/A	SING				FRO	M		то	N/A	ELEVATION AND DATUM	vi	TOTAL DEPTH
BLANK	CASING N/A					FRO	M		то	N/A FT.	bgs DATE STARTED		15.0 ft. bgs DATE COMPLETED
SLOTT	ED CASI	NG		11.5.16.18		FRO	M		то	N/A FT.	9/13/11 INITIAL WATER DEPTH ((FT)	9/13/11
SIZE A	ND TYPE	OF FIL	TER PA	CK		FRO	M		то	N/A	7.0 LOGGED BY		
SEAL		ular B	entoni	to		FRO			то	FT.	DKM SAMPLING METHODS	- 1	WELL COMPLETION
GROU		ulai D	GIILOIII	ic .	9784	FRO	M		то	FT.	MacroCore w/liner		☐ SURFACE HOUSING
	SAMPLES	DENETO	DEETH		BACKFILL DETAILS	PID		/A 	Hece	N/A			☐ STAND PIPE FT.
TYPE	RECOV. (FEET)	RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER			LITHOL	.OGY	USCS LOG		SAMPLE DESCRIPTION A	AND D	DRILLING REMARKS
-		:	-		-				SM	-	SAND with gravel rown, sand, silt, gravel (fill, n	o odor, no sheen.
ss	2.5		_			0	,	,	SW/ SM	Tan/b slit, fil	graded SAND with silt rown, medium to coarse I, no odor, no sheen.		gravel nd with gravel and some
			5-	KJ-B11-5	-	70.1	,,,	,	ML	_ Dark (varies	pray, sandy silt with son locally, moderately soft odor, heavy sheen.	ne ci	ay and gravel, texture edium plasticity, molst,
SS	3.5		-		\	4.3			ML	Brown mediu	with sand to dark brown, slit, min m sand, some gravel lo ~6 inches, moderately een.	cally	, woody material in
			1			0	14	$\downarrow \downarrow$	CL/ ML	Silty (CLAY an, silty clay, no odor, r	no sh	neen
13/11			10 - - -			0		,	ML	Sandy Gray,	/ SILT silt with ~30% fine sand sed sand locally, moder	d. sor	me clay and fine gravel.
SPJ KJ PNW.GDT 12/1	4		15-			0			CL	Gray, sandie	CLAY with sand clay, minor silt, 5-10% s er in 1-2" layers or pods, ity, wet, no odor, no she	, stiff	and fine gravel, locally to very stiff, high
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11													

Kennedy/Jenks Consultants

BORIN	G LOCA	TION									<u> </u>	****
	Dec	eption	Pass Pass	Marina, Corne	t Bay, WA	DDII	LLER				Boring Name	KJ-B12
DRILLI	Cas	cade I	Drilling				Τv	ler D	ay		Project NameE	cology Cornet Bay
DRILLII	NG MET Dire	HOD(S ct-Pus) sh	-		DRII	LL BIT(S	s) sız İnch	E		Project Number	1196012*00
ISOLAT						FRO	M	TO		N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH
BLANK	CASIN	3				FRO		TO		N/A FT.	bgs	15.0 ft. bgs
SLOTTI	N/A ED CAS	ING				FRO	N/A	4 то		N/A FT.	DATE STARTED 9/13/11	DATE COMPLETED 9/13/11
SIZE AL	N/A	E OE EI	LTER PA	CK			N/ <i>A</i>	4		N/A	INITIAL WATER DEPTH (FT) 6.0	
	N/A		LILIVIA			FRO	N/A			N/A	LOGGED BY DKM	
SEAL	Gran	nular E	3enton	ite		FRO		от 0		БТ. 15	SAMPLING METHODS	WELL COMPLETION
GROUT	N/A					FRO	M N/A	OT		N/A	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
	SAMPLES		DEPTH		BACKFILL DETAILS	PID		1,,,	scs	1 1// 1	<u></u>	
TYPE	RECOV (FEET	PENETR RESIST BLOWS/	DEPTH (FEET)	SAMPLE NUMBER			LITHOLOG	GY LO) OG		SAMPLE DESCRIPTION AND	DRILLING REMARKS
											SAND with gravel	
			-					s	М	- Tan/b	rown, sand, slit, gravel fill,	no odor, no sneen.
-			-				, i	II				
SS	3					0	[::	S	w/		graded SAND with silt and rown, medlum to coarse sa	
			-				$\ \cdot\ \ $		М		I, no odor, no sheen.	•
_			-		-		<u> </u>			Sand	y SILT	
	1		5-			0.2				Dark b	orown, silt with 25-35% fine	sand, minor clay, roots
l											er), moderately soft, moist	re varies locally (slitier vs. to wet, no odor, no sheen.
			M^{-}	KJ-B12-6	훅 //////// -	0		M	IL	-		
-	!		Δ -	1.0 2.12 0		U			-	-		
SS	4.5			. •								
								1		Lean	CLAY /gray, clay, mlnor silt, 5-10	19/ cand and fine grove!
			-			0		7	-	stiff to	very stiff, hlgh plasticity, m	noist, no odor, no sheen.
	<u> </u>	-	10-					1	-	-		•
			-			0		/ c	L	-		
- 00			-					1	-			
SS	4							1				
İ								1				
_						0		7				
	<u> </u>	<u> </u>	15_				/_/_	<u>4</u>				
	•											
SS												

F-40.1 (6-87) (3-88) (8-90)

DRILLING COMPANY Cascade Drilling DRILLING METHODS DIRECTURE Project Name Ecology Cornet	BORING	LOCATION	ON tion D		Acrina Corna	at Boy MA				¥		V I D12
DRILL BIT(S) SIZEInch Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direct Push Direc	DRILLIN	IG COMP	ANY		viarina, Come	t Bay, WA	DRI	LLER			Boring Name	KJ-B13
Direct-Push Direct-Push Direct-Push N/A SISOLATION ACSING N/A BLANK CASING N/A BLANK CASING N/A BLANK CASING N/A SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A SAMPLES SAMPLE DEPTH SAMPLING METHODS N/A SAMPLE DEPTH SAMPLING METHODS N/A SAMPLE DEPTH SAMPLING METHODS WELL COMPLE SAMPLE DEPTH SAMPLING METHODS WELL COMPLE STAND PIPE SAMPLE DEPTH SAMPLE DEPTH SAMPLING METHODS WELL COMPLE STAND PIPE SAMPLE DEPTH SAMPLE DEPTH SAMPLING METHODS WELL COMPLE SITY SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLING METHODS WELL COMPLE SITY SAND with gravel Tan/brown, sand, silt, gravel fill, no odor, no sheen. SILT SAND with silt and gravel Tan/brown, medium to coarse sand with gravel as silt, fill, no odor, no sheen. SILT SAND with silt and gravel Tan/brown, medium to coarse sand with gravel as silt, fill, no odor, no sheen. SILT SAND with silt and gravel Tan/brown, medium to coarse sand with gravel as silt, fill, no odor, no sheen. SILT CALY with sand Gravel, increased sand locally, stiff to very stiff, high plasticity, moist, no sheen. SES 4.5	DRILLIN			illing		_ · · · · · · · · · · · · · · · · · · ·	DRI	Tyle (S) LL BIT	r Day size		Project NameE	cology Cornet Bay
BLANK CASING N/A BLANK CASING N/A SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite GROUT N/A SAMPLES SAMPLE SIZE N/A SAMPLES SAMPLE DEPTH SAMPLE NUMBER BACKFILL DETAILS FROM N/A SAMPLES SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DECOVIPERITE (FEET) SAMPLE DESCRIPTION AND DRILLING REMARK SILTS AND With gravel Tan/brown, sand, silt, gravel fill, no odor, no sheen. SW Well-graded SAND with silt and gravel Tan/brown, medium to coarse sand with gravel a silt, fill, no odor, no sheen. SYW SM Well-graded SAND with silt and gravel Tan/brown, medium to coarse sand with gravel a silt, fill, no odor, no sheen. SSP Poorly graded SAND with silt Brown/gray, medium sand with 10-20% silt, mod dense, we, to, odor, no sheen. SITY CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, no coarse, sand clay, stiff to very stiff, no odor, no sheen. SITY CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, no coarse, sand on the clay stiff, high plasticity, moist, no sheen.		Direct-	-Push					2-In	ch	ET.	Project Number	1196012*00
SLOTTED CASING NI/A SLOTTED CASING NI/A SIZE AND TYPE OF FILTER PACK NI/A SEAL Granular Bentonite GROUT NI/A SAMPLES SAMPLES GROUT TYPE RECOVI RESET RECOVI RESET RECOVI RESET RECOVI RESET RECOVI RESET RECOVI RESET RECOVI RESET RECOVI RESET RECOVI RESET RECOVI RESET RESET RECOVI RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET RESET R		N/A						N/A		N/A		TOTAL DEPTH 15.0 ft. bg
SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite GROUT N/A SAMPLES SAMPLES SAMPLE BUSINE TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT TYPE RECOV RESETT SAMPLE DESCRIPTION AND DRILLING REMARK SIIty SAND With silt and gravel Tan/brown, medium to coarse sand with gravel as silt, fill, no odor, no sheen. SYM SYM SYM SYM SYM SYM SYM SY		N/A						N/A		N/A	DATE STARTED	DATE COMPLETED 9/13/11
SEAL AND TYPE OF FILLEN PACK N/A SEAL Granular Bentonite GROUT N/A SAMPLES SAMPLES BECKPIFTEN SAMPLE NUMBER BACKFILL DETAILS PID UTRICLORY SAMPLE DESCRIPTION AND DRILLING REMARK SMY SMY SMY SMY SMY SMY SMY SM		N/A						N/A			INITIAL WATER DEPTH (FT	
GROUT NA SAMPLES SAMPLES SAMPLES SAMPLES SAMPLE DESCRIPTION AND DRILLING REMARK FEED SAMPLE DESCRIPTION AND DRILLING REMARK SM SM SM SM SM SM SM SM SM S	SIZE AN		OF FILT	ER PA	CK		FRO		то	N/A FT.	LOGGED BY	
SAMPLES PENETRY (FEET) N/A SAMPLES PROM N/A SAMPLE NUMBER BACKFILL DETAILS PID UTHOLOGY LOG SAMPLE DESCRIPTION AND DRILLING REMARK SM SILT Dark brown to gray/brown (below −5 feet), sandy minor gravel, soft, molst to wet, no odor, no sheen SS 3 SS 3 PO SP/SM SM SP/SM SW SM SM SILT Dark brown to gray/brown (below −5 feet), sandy minor gravel, soft, molst to wet, no odor, no sheen SS SP/SM CL/ML SS SP/SM SS SP/SM CL/ML SITY CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, more seen as and locally, stiff to very stiff, no dor, no sheen. SS SW SW SM CL/ML SW SM SM SP/SM CL/ML SW SM SM SW SW SW SW SW SW SW SW SW SW SW SW SW	SEAL	Granu	lar Be	ntoni	te		FRO		то	15		WELL COMPLETION
SAMPLES TYPE RECOVERSITE (FEET) SAMPLE NUMBER SAMPLE NUMBER BACKFILL DETAILS PID UTHOLOGY RECOVERSITE (FEET) BLOWSIN FEET) SAMPLE DESCRIPTION AND DRILLING REMARK SM Silty SAND with gravel Tan/brown, sand, silt, gravel fill, no odor, no sheen. SW Silt, fill, no odor, no sheen. SSW Sandy SILT Dark brown to gray/brown (below ~5 feet), sandy minor gravel, soft, moist to wet, no odor, no sheen. SSM SP Poorly graded SAND with silt Brown/gray, medium sand with 10-20% silt, mod dense, wet, no odor, no sheen. SILT Dark brown to gray/brown (below ~5 feet), sandy minor gravel, soft, moist to wet, no odor, no sheen. SILT Dark brown to gray/brown (below ~5 feet), sandy minor gravel, soft, moist to wet, no odor, no sheen. SILT CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, increased sand locally, stiff to very stiff, no odor, no sheen. Lean CLAY with sand Gray to tan/gray, clay, minor silt, 5-15% sand an gravel, stiff to very stiff, high plasticity, moist, no sheen.	GROUT				-		FRO	DM MC	то	FT.	MacroCore w/liner	☐ SURFACE HOUS
SS 2.5 Sity SAND with gravel Tan/brown, sand, slit, gravel fill, no odor, no sher Well-graded SAND with silt and gravel Tan/brown, medium to coarse sand with gravel a silt, fill, no odor, no sheen. Sandy SILT Dark brown to gray/brown (below ~5 feet), sandy minor gravel, soft, moist to wet, no odor, no sheen. SP/SM Poorly graded SAND with silt Brown/gray, medium sand with 10-20% silt, mod dense, wet, no odor, no sheen. Sity CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, increased sand locally, stiff to very stiff, no odor, no sheen. Lean CLAY with sand Gray to tan/gray, clay, minor silt, 5-15% sand an gravel, stiff to very stiff, high plasticity, moist, no sheen.		AMPLES	PENETR. C	EPTH FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID		USCS LOG		SAMPLE DESCRIPTION AND	
SS 2.5 KJ-B13-4 O.1 SW SM Silt, fill, no odor, no sheen. Sandy SiLT Dark brown to gray/brown (below ~5 feet), sandy minor gravel, soft, molst to wet, no odor, no sheen. SS 3 SP/ SM Poorly graded SAND with silt Brown/gray, medium sand with 10-20% silt, mod dense, wet, no odor, no sheen. SIty CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, increased sand locally, stiff to very stiff, no odor, no sheen. SS 4.5	-		LOWS/6	-			-		SM	Tan/b	rown, sand, silt, gravel fill,	
SS 4.5 Dark brown to gray/brown (below ~5 feet), sandy minor gravel, soft, molst to wet, no odor, no sheet Dark brown to gray/brown (below ~5 feet), sandy minor gravel, soft, molst to wet, no odor, no sheet SP/SM Poorly graded SAND with silt Brown/gray, medium sand with 10-20% silt, mod dense, wet, no odor, no sheen. Silty CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, increased sand locally, stiff to very stiff, no sheen. Lean CLAY with sand Gray to tan/gray, clay, minor silt, 5-15% sand an gravel, stiff to very stiff, high plasticity, moist, no sheen.	SS	2.5	V	- 7 -	K1 B12 A					Tan/b siit, fil	rown, medium to coarse s i, no odor, no sheen.	
SS 3 SP/ SM Poorly graded SAND with silt Brown/gray, medium sand with 10-20% silt, mod dense, wet, no odor, no sheen. Silty CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, increased sand locally, stiff to very stiff, no odor, no sheen. Lean CLAY with sand Gray to tan/gray, clay, minor silt, 5-15% sand an gravel, stiff to very stiff, high plasticity, moist, no sheen.	-			M I		V.			ML	Dark I minor	brown to gray/brown (belov gravel, soft, moist to wet,	w ∼5 feet), sandy slit, no odor, no sheen.
Sity CLAY with sand Brown to gray/brown, silty clay with 10-15% sand gravel, increased sand locally, stiff to very stiff, nodor, no sheen. Lean CLAY with sand Gray to tan/gray, clay, minor silt, 5-15% sand an gravel, stiff to very stiff, high plasticity, moist, no sheen.	ss	3				 -			SP/ SM	🕂 Browr	n/gray, medium sand with	
SS 4.5 Gray to tan/gray, clay, minor silt, 5-15% sand an gravel, stiff to very stiff, high plasticity, moist, no sheen.	-			10-			0			Brown grave	n to gray/brown, silty clay v I, increased sand locally, s	with 10-15% sand and tiff to very stiff, mois
	ss -	4.5	3				0		CL	Gray grave	to tan/gray, clay, minor silt i, stiff to very stiff, high pla	, 5-15% sand and fin sticity, moist, no odo
	F-40.1 (6-87) (3-8	8) (8-90)			•						SH	EET <u>1</u> OF

BORING	LOCAT		Page	Marina, Corne	t Boy MA						KJ-B14
DRILLIN	NG COM	PANY		wanna, come	t bay, WA	DRII	LLER			Boring Name	
DRILLIN	Casc NG METI		rilling			DRII	l yle LL BIT(S)	er Day		Project Name 	cology Cornet Bay
ISOLAT	Direction CAS	t-Pus	<u>h</u>			FRC	2-In	ro	FT.	Project Number	1196012*00
	N/A CASING					_	N/A		N/A	ELEVATION AND DATUM bgs	TOTAL DEPTH 15.0 ft. bgs
	N/A					FRC	N/A	то	N/A FT.	DATE STARTED 9/13/11	DATE COMPLETED 9/13/11
SLOTTI	ED CASI N/A	NG				FRC	M N/A	то	N/A	INITIAL WATER DEPTH (FT	
SIZE AI	ND TYPE N/A	OF FIL	TER PA	CK		FRC	M N/A	то	N/A	7.0 LOGGED BY	
SEAL		ular B	entoni	'te		FRC		то	FT. 15	DKM SAMPLING METHODS	WELL COMPLETION
GROUT		uiui D	OTILOTII			FRO	M	то	N/A	MacroCore w/liner	☐ SURFACE HOUSING
	SAMPLES		DEDTU		BACKFILL DETAILS	PID	<u>N/A</u>	ueee	N/A		STAND PIPE FT.
TYPE	RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER		FID	LITHOLOGY	LOG		SAMPLE DESCRIPTION AND	DRILLING REMARKS
									_	SAND with gravel rown, sand, siit, gravel fill,	no odor no obcon
-			-		-			SM	- Tailio	iowii, saiid, siit, gravei iiit,	no odor, no sneen.
-			-		-		•		10/01	graded SAND with silt an	
SS	4					1.2		SW/ SM	Tan/b	rown, medium to coarse sa	
			M	KJ-B14-3		2.6		SP	\	l, no odor, no sheen. y graded SAND	
-					-	0		C ML	√ Dark	grav, sand with some silt a	nd gravel, moderately
<u>-</u>		-	5-		-				F1	, moist, medium odor and CLAY with sand	medium sneen.
_			_					0.57	Gray,	silty clay with 10-20% san	d and fine gravel, moist,
				,				SP/ SM	—	odor, no sheen. y graded SAND with silt	reference and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and complete and comp
- SS	3		-		후 ///// -	1.2			Gray,	medium to fine sand with	
-			_						sheer	/, moderately dense, moisi I.	to wet, no odor, no
-			_							y SILT	
			10-			0	W.	ML	minor	reen/brown, silt with ~30% ciay, some gravel locally,	
			10-						\	o odor, no sheen.	
-			_		-			CL	Greer	n/gray, clay, minor silt, 5-15	5% sand and fine gravel,
-			_		-				moist,	no odor, no sheen.	
SS	2							L			
						0			1	CLAY i-blue/gray, clay, stiff, high	plasticity, moist, no odor.
-			-					CL	no sh		p
	1	1	15_				<u> </u>	<u> </u>	<u> </u>	<u> </u>	
Ī											·

		LOCA Dece	eption	Pass I	Marina, Corne	t Bay, WA					Boring Name	KJ-B15
Ī	ORILLIN	IG COM	PANY	Prilling	·			LER Ty	ler Day			Ecology Cornet Bay
Ī	PRILLIN	IG METI	HOD(S)				DRIL	L BIT(S	s) SIZE Inch		Project Number	1196012*00
Ī	SOLATI	ION CAS N/A					FRO		то	N/A	ELEVATION AND DATUM	TOTAL DEPTH
Ī	BLANK (CASING N/A	;				FRO		ТО	FT.	bgs DATE STARTED	15.0 ft. bgs DATE COMPLETED
•	LOTTE	D CASI	NG				FRO		то	N/A	9/13/11 INITIAL WATER DEPTH (F	9/13/11
ļ	SIZE AN		OF FIL	TER PA	СК		FRO		то	FT.	7.0 LOGGED BY	
ŀ	SEAL		ular B	entoni	to	· · · · · · · · · · · · · · · · · · ·	FRO	М	ч то 0	15/A 15	DKM SAMPLING METHODS	WELL COMPLETION
ŀ	ROUT		ulai D	CITOTI	10		FRO	M	TO		MacroCore w/liner	☐ SURFACE HOUSING
ļ	S	AMPLES		DEDTH		BACKFILL DETAILS	PID	<u> </u>	uses	IN/A		STAND PIPE FT.
	TYPE	RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER		rio	LITHOLOG	LOG		SAMPLE DESCRIPTION AN	ID DRILLING REMARKS
-						-			SM	, -	SAND with gravel rown, silt, sand, gravel fil	, no odor, no sheen.
ig	ss	3		-		_	0		SP	- Browr odor,	y graded SAND with gra norange, sand with ~30% no sheen.	gravel, some silt, fill, no
-				5-	KJ-B15-4	-	0			Gray/l	, moderately dense, mols	10-20% silt, minor gravel
-	ss			-		辛 -	0		SP/ SM	-		
ŀ	55	3		-						-		
-				. =			0		111	Gray,	CLAY with sand slity clay with <20% sand m to high (below ~13 fee	l and fine gravel, stiff, t) plasticity, molst, no odor,
┢				10-	;					_ no she	en.	,, p. a. a. a. a. a. a. a. a. a. a. a. a. a.
-				-						-		
1									CL/ ML			
12/3	ss	4										
N.GDT							0					
Z Z				-						-		
ᇗᆂ	NOT	F6		15-	İ					<u> </u>		
Ş Ş	1. Re	econna	lssance	e groun I-9 feet	dwater sample k	(J-B15-RGW collecte	ed. So	creen s	set			
200	~ -				- g=·							
010												
BOR												
H BA												
SORN												
,0GY												
ECO												
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11												

	ı Log								<u>Kennedy</u>	/Jenks Consultar
		Pass I	Marina, Corne	t Bay, WA					Boring Name	KJ-B16
RILLING	COMPANY Cascade D				DRIL	LER Tyler	Dav		_	cology Cornet Bay
RILLING	METHOD(S) Direct-Push				DRIL	L BIT(S) S 2-Inc	SIZE			1196012*00
SOLATION	N CASING N/A	•			FRO		ГО	N/A FT.	Project Number	TOTAL DEPTH
BLANK CA					FRO	M ·	го	FT.	bgs DATE STARTED	10.0 ft. bgs DATE COMPLETED
LOTTED	CASING				FRO		го	N/A FT.	9/13/11 INITIAL WATER DEPTH (FT)	9/13/11
IZE AND	V/A TYPE OF FIL	TER PA	СК	***************************************	FRO		ro	N/A FT.	8.0 LOGGED BY	
EAL	V/A				FRO	<u>N</u> /А	го	N/A FT.	DKM	1
ROUT	Granular B	<u>entoni</u>	te	11-11-11-11-11-11-11-11-11-11-11-11-11-	FRO		ro	10 FT.	SAMPLING METHODS MacroCore w/liner	WELL COMPLETION SURFACE HOUSING
SAM	N/A APLES			BACKFILL DETAILS		N/A		N/A	Wasio Gold William	STAND PIPE FT
TYPE R		DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AND	DRILLING REMARKS
ss	3	-		_			SM	Silty S Tan/b	SAND with gravel rown, siit, sand, gravel fili,	no odor, no sheen.
		/ NI (KJ-B16-4	_	0		SP	Dark I molst,	y graded SAND with graverown, sand with ~30% grand no odor, no sheen.	
ss	KJ-B16-4 5- KJ-B16-4						CL/ ML	Green _ model	CLAY with sand l/gray, slity clay with 10-20 rately stiff to stiff, moist to	% sand and fine gravel, wet, no odor, no sheen.
		10-			0		CL	Gray,	CLAY clay, minor sand and fine to wet, no odor, no sheen.	gravel, stiff to very stiff,

		ception	Pass	Marina, Corne	t Bay, WA				-	Boring Name	KJ-B17
	Ca	OMPANY scade [.LER Tyl	er Da	у	1	Ecology Cornet Bay
Ĺ	Dir	ect-Pus				DRIL	L BIT(S 2-li	nch		Project Number	1196012*00
<u> </u>	ATION O	4				FRO	N/A		FT. N/A	ELEVATION AND DATUM	TOTAL DEPTH 15.0 ft. bgs
	IK CASI N/	4				FRO	M N/A	TO \	FT. N/A	bgs DATE STARTED 9/13/11	DATE COMPLETED 9/13/11
	TED CA	A				FRO	M N/A	то	FT. N/A	INITIAL WATER DEPTH (I	
	N/A	PE OF FI	LTER PA	CK		FRO	M N/A	TO	FT. N/A	LOGGED BY DKM	
SEAL	Gra	anular E	Bentoni	te		FRO	M C	·	FT. 15	SAMPLING METHODS	WELL COMPLETION
GRO	N/ <i>A</i>					FRO	M N/A	то	N/A	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
TYP	SAMPL E REC (FEI	OV PENETR RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOG	USC	S	SAMPLE DESCRIPTION A	ND DRILLING REMARKS
ss	3				-		<u>f</u>	SM	Tan/b	SAND with gravel prown, sand, sllt, gravel fi	ili, no odor, no sheen.
-			M -		-	8.2		SP.	Grav.	y graded SAND with si medlum sand with 10-15 rately dense, moist, no c	It and gravel 5% silt and 25-35% gravel, odor, light sheen below ~3
-			5-	KJ-B17-4	-	0		ML		brown, slit with some sar noist, no odor, no sheen	nd and clay, roots present,
SS	3.	5	10-		⇒ -	0		ML	Gray, locally no sh		10% gravel, some clay, y stiff, moist to wet, no odor,
W.GDT 12/13/11	4				-	0		CL/ ML	Gray,	CLAY with sand slity clay with 10-20% sa locally), moderately stiff city, moist, no odor, no sl	and and fine gravel (amount to stiff, moderately high theen.
GPJ KJ PN			15_			0		CL	Gray,	CLAY clay with some silt and r tiff, high plasticity, moist	ninor sand/gravel, stiff to , no odor, no sheen.
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11											

	BORING	Dece	ption	Pass I	Marina, Corne	t Bay, WA					Boring Name	KJ-B18
	DRILLIN	Caso	ade D	rilling				LER Tyle	er Day			Ecology Cornet Bay
			t-Pus				DRII	L BIT(S 2-Ir			Project Number	1196012*00
	ISOLAT	N/A					FRC	M N/A	то	N/A	ELEVATION AND DATUM	TOTAL DEPTH
	BLANK	CASING N/A	}				FRO		TO	N/A FT.	bgs DATE STARTED	15.0 ft. bgs DATE COMPLETED
	SLOTTE	ED CASI N/A	NG		***************************************		FRO		TO	N/A FT.	9/13/11 INITIAL WATER DEPTH (FI	9/13/11
	SIZE AN	ND TYPE	OF FIL	TER PA	CK		FRO		ТО	N/A	8.0 LOGGED BY	
	SEAL		ular B	entoni	te		FRO		ТО	15 FT.	DKM SAMPLING METHODS	WELL COMPLETION
	GROUT						FRO		то		MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
•	s	AMPLES		DEPTH	SAMPLE NUMBER	BACKFILL DETAILS	PID		Ī	IVA		
	TYPE	(FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	VIIIIIIIII		LITHOLOGY	LOG		SAMPLE DESCRIPTION AN	D DRILLING REMARKS
	-			-		-			SM		SAND with gravel rown, sand, siit, gravel fiil,	, no odor, no sheen.
	- SS	3		-			0.1			-		
	-			-			0.1				graded SAND with grave	
				$X = \begin{bmatrix} 1 \\ 1 \end{bmatrix}$	KJ-B18-4	-	0.9		sw	gravel	, some silt, moderately de oht sheen below ~4 feet, r	v ~4 feet), sand with ~40% ense, moist, medium odor no odor and no sheen
	_			<u> </u>					ML	1	/ SILT , topsoil-like sandy silt, so	oft, moist, no odor, no
	-			_			0		<u> </u>	Sand		
	SS -	3		_		후		\mathbb{N}	ML	Green		ome clay, moderately soft,
ı	_			.]			_		1	\	y SiLT with sand	•
							0		ML/	Gray t	o greenish-gray, silt with o avei, stiff to very stiff, med	clay and 10-15% sand and dium plasticity, moist to
				10-	, i				CL	– wet, n	o odor, no sheen.	
	.			4						_		
13/11	-			4		-		//		Lean	CLAY	
JT 12/	SS	4		1			0			Gray,	clay, minor silt, ~10% san asticlty, moist, no odor, n	d and fine gravel, stiff,
NW.G	_								CL	riigii p	asticity, moist, no odor, in	o suecu.
KIP												:
711.GP	<u> </u>	<u>, </u>		15-		VALUERANIA			ļ			
EPT 2												
968 8												
SINGL												
AY BO												
NET B/												
YCOR											e e	
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11												
₹ EC												
Z P		_	_									

BORING										-	
DRILLIN			Pass I	Marina, Corne	t Bay, WA	DRII	LER			Boring Name	KJ-B19
	Cas	cade D					Tyle	er Day		Project Name	cology Cornet Bay
DRILLIN	IG MET Dire	HOD(S) ct-Pusi	h			DRIL	L BIT(S) 2-In) SIZE nch		Project Number	1196012*00
ISOLAT			-			FRO	М	TO	N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH
BLANK	CASING	3				FRO		ТО	FT.	bgs	15.0 ft. bgs
SLOTTE	N/A D CAS	ING				FRO	<u>N/A</u>	TO	N/A FT.	DATE STARTED 9/13/11	DATE COMPLETED 9/13/11
SIZE AN	N/A		TED DA	01/			N/A		N/A	INITIAL WATER DEPTH (FT 8.0)
	N/A	E OF FIL				FRO	N/A		N/A FT.	LOGGED BY DKM	
SEAL	Gran	nular B	entoni	te		FRO	М 0	то	FT. 15	SAMPLING METHODS	WELL COMPLETION
GROUT	N/A					FRO	M N/A	то	N/A FT.	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
S	AMPLES	Inches	DERTH		BACKFILL DETAILS	PID		HEGE	1,377		
TYPE	RECO\ (FEET	PENETR. RESIST. BLOWS/6	(FEET)	SAMPLE NUMBER		, 10	LITHOLOGY	LOG		SAMPLE DESCRIPTION ANI	D DRILLING REMARKS
-			-		-			SM		SAND with gravel rown, sand, silt, gravel fill,	no odor, no sheen.
			_					 	Lean	CLAY	7701
SS	4		_		_	29.1		CL	Gray, no sh	clay, stiff, moderately high	n plasticitiy, moist, no odor,
-			-			20.7			Silty Grav.	CLAY slity clay, moderately soft	. moderately high
1			\square .	KJ-B19-5		979	И	CL/ ML	plastic	city, moist, slight odor belo	w ~3 feet, no sheen.
			△ 5-								
-			-		-	•			Silty	SAND	
- 1						189			Gray,	medium sand with 25-30%	% silt (varies locally), some
ss	4		XI I	KJ-B19-7		115		SM	odor a	ragments, moderately der and medium to heavy shee	nse, moist to wet, medium en.
					후 //////// -	21.2			-		
-			-			21.2			l ean	CLAY	
			10-			0.6		1	Gray,	clay, some sllt, ~10% san	d and fine gravel, stiff,
								1	nign p	lasticity, moist to wet, no	odor, no sneen.
-			4					1	-		
-			-			12.7		CL	-		
SS	4							1.			
	1							1			
-			-			1.3		1	_		
	<u></u>		15_					<u> </u>			
								-			
SS											
							٠				

	BORING	Dece	ption	Pass	Marina, Corne	t Bay, WA						Boring Name		KJ-B20
	DRILLIN	Casc	ade D	rilling				LER Ty	<u>/ler</u>	Day		Project Name	Ec	ology Cornet Bay
	DRILLIN	Direc	t-Pus	h					s) s Inc			Project Number _		1196012*00
	ISOLAT	N/A		····			FRO	N/.	A	<u>-</u> 0	N/A	ELEVATION AND DATU bgs	М	TOTAL DEPTH 15.0 ft. bgs
	BLANK	N/A					FRO	N//		<u>-</u> 0	N/A	DATE STARTED 9/13/11		DATE COMPLETED 9/13/11
	SLOTTE	N/A					FRO	N/		·o	N/A FT.	INITIAL WATER DEPTH 7.0	(FT)	9/10/11
	SIZE AN	ID TYPE	OF FIL	TER PA	.CK		FRO	M N/		·o	N/A FT.	LOGGED BY DKM		
	SEAL	Gran	ular B	enton	ite		FRO		0	0	FT. 15	SAMPLING METHODS		WELL COMPLETION
	GROUT	N/A					FRO	M N/	٦ A	·O	FT. N/A	MacroCore w/liner		☐ SURFACE HOUSING ☐ STAND PIPE FT.
	TYPE	RECOV. (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLO	жgү	USCS LOG		SAMPLE DESCRIPTION	I AND	DRILLING REMARKS
	_			-		-				SM	_	SAND with gravel rown, sand, slit, gravel	fili, r	no odor, no sheen.
	SS	3.5		-			82.3			CL/ ML	Silty (Gray,		mois	t, slight odor, no sheen.
	-	5-								CL/ ML	Gray,	yers, moderately soft,	d ove mois	erali but locally sandier in st, strong odor, heavy
	_					-	1156							
	SS -	3.5	-	2019			SP/ SM	Gray,	y graded SAND with s medium sand with 10- trong odor, heavy shee	20%	silt, moderately dense,			
	-			× 10-	KJ-B20-10	_	704				Green and 10	CLAY with sand lish-gray to gray (below 0-20% sand and fine go city, molst, slight odor a	ravel	feet), clay with some silt , stiff, moderately high e ~12 feet, no sheen.
T 12/13/11	SS	3.5		_			79.7			CL/ ML				
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11	-			- 15 -		-	5.9							,
EPT 2011.														
SING LOGS S														
T BAY BOF														
CORNE														
, 106Y						·								
V ECO														·
Z PN														

1	BORÍNO	LOCAT	ION										
				Pass I	<u> Marina, Corne</u>	t Bay, WA	l nou					Boring Name	KJ-B21
	DRILLIN	IG COM		rilling			DRIL			er Day		Project NameE	cology Cornet Bay
	DRILLIN	IG METH					DRIL	L BI	T(S) 2-In	SIZE		Project Number	1196012*00
	ISOLAT	ION CAS N/A					FRO		I/A	то	N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH
	BLANK	CASING N/A	i				FRO	M		то	N/A	bgs DATE STARTED	15.0 ft. bgs DATE COMPLETED
	SLOTTE	D CASI	NG				FRO	М	<u>I/A</u>	то	FT.	9/13/11 INITIAL WATER DEPTH (FT)	9/13/11
	SIZE AN	N/A ND TYPE	OF FIL	TER PA	CK		FRO		<u> </u>	то	N/A FT.	6.5	
	SEAL	N/A					FRO		I/A	то	N/A FT.	LOGGED BY DKM	
			ular B	entoni	te				0		15	SAMPLING METHODS	WELL COMPLETION SURFACE HOUSING
	GROUT	N/A					FRO		I/A	то	N/A	MacroCore w/liner	STAND PIPE FT.
	TYPE	RECOV. (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHO	LOGY	USCS		SAMPLE DESCRIPTION AND	DRILLING REMARKS
	-			_		-				SM		SAND with gravel rown, sand, sllt, gravel fill,	no odor, no sheen.
	- SS -	4		$\sqrt{}$	KJ-B21-3	-	1659			CL/ ML		CLAY silty clay, up to 10% sand, im odor, no sheen.	minor gravel, stiff, moist,
	-			5 -		-	1740			CL/ ML	Gray, ~30%	CLAY with sand slity clay, 10-15% sand ov sand, some gravel, moder odor, no sheen.	erall but locally up to ately soft, moist to wet,
	SS	4		_		두 -	2461	1		SP/ SM	- Gray,	y graded SAND with silt medium sand with 10-20% rately dense, wet, strong od	
	-			-			152	IJ,	Щ	ML	SILT		
	-			-							- ∖topsoi	orown, silt, some sand and I-like, soft, wet, medium od	gravel, woody debns, or, no sheen.
				10-			36.2					CLAY with sand	200/ send and fine arrayal
T 12/13/11	SS	3.5		-		-	4.1			CL/ ML	moder	ish-gray, silty clay with 10- rately soft to moderately sti llght odor above ~9.5 feet,	ff (varies locally), molst to
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11	-			15		-	0.2				_		
<u>ğ</u>	<u>NO</u> 1 R		iceano		dwater sample ^M	J-B21-RGW collec	ted S	ree	n er				
Ĕ	a	pproxim	ately 3	1.5-8.5 f	eet bgs.	S-DZ I-ROVY OQUEO	nou. Ol		50				
968													
INGL													
/ BOR													
TBA													
ORNE										•			
SGY C													
SOL													
ξ													:
밁													

	BORING	Dece	ption	Pass I	Marina, Corne	t Bay, WA					Boring Name	KJ-B22
	DRILLIN	Caso	ade D	rilling			1	.LER Tyl	er Day		_	Ecology Cornet Bay
	DRILLIN	Direc	t-Pus	h				L BIT(S 2-Ir	nch		Project Number	1196012*00
	ISOLATI	N/A					FRO	N/A		N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH 15.0 ft. bgs
	BLANK (N/A					FRO	N/A		N/A FT.	DATE STARTED 9/13/11	DATE COMPLETED 9/13/11
	SLOTTE	N/A			014		FRO	N/A		N/A FT.	INITIAL WATER DEPTH (F	
	SIZE AN	N/A	OF FIL	IER PA	CK		FRO	N/A		N/A FT.	LOGGED BY DKM	
	GROUT		ular B	entoni	te		FRO	0	ТО	15 FT. N/A	SAMPLING METHODS MacroCore w/liner	WELL COMPLETION SURFACE HOUSING STAND PIPE FT.
	TYPE	AMPLES	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOG	Hece		SAMPLE DESCRIPTION A	
	_		250000	_		-			SM	-	SAND with gravel rown, sand, sllt, gravel fi	I, no odor, no sheen.
	ss -	3.5		-		_	887 1764		GM CL/ ML	Mediu	, slight odor, no sheen.	th sand and silt, moderately
				X 5-	KJ-B22-5	-	2304		CI√	Gray f gravel sheen	to brown/gray, sllty clay, l, stiff, slightly molst, med	up to 10% sand, minor dium to strong odor, heavy
	-			-		-	398		ML	Gray,	CLAY with sand silty clay, 10-15% sand o typically in <1" thick layer o moderately soft, moist,	
	SS -	4.5					309	1111	ML	odor,	medium sheen.	material, soft, moist, slight
				10-	KJ-B22-9	\	24.2	,	SP/ SM	Gray,	y graded SAND with sil medlum sand with 5-15% to wet, slight odor, light s	6 silt, moderately dense,
12/13/11	ss	3.5		-		_	25.6		CL	Lean Gray,	CLAY clay, stiff, moist to wet, s	
V.GDT	-						1.8		SM	- Silty S	SAND silty sand, moderately de	ense, wet, no odor, no
SPJ KJPN	_			15-			2.5		CL/ ML		CLAY with sand	nd (varies locally), stiff, high
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11											ity, moist to wet, no odor	
KJ PNW ECC												

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Direct-Push 2-Inch SOLATION ASING FROM N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N			Caso	ade D	rilling				T,	yler I	Day		Project NameE	cology Comet Bay
BLANK CASING N/A BLANK CASING N/A SLOTTED CASING N/A SLOTTED CASING N/A SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A SEAL GROUT N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLES PROM N/A SAMPLE DESCRIPTION AND DRILLING REMARKS PID UNIKLOW SAMPLE DESCRIPTION AND DRILLING REMARKS SITTY SAMPLE DESCRIPTION AND DRILLING REMARKS SITTYPE RESCRIPTION AND DRILLING REMARKS SITTY SAMPLE DESCRIPTION AND DRILLING REMARKS SITTY CLAY ML CL/ ML SITY CLAY ML CL/ ML Cl/ ML SITY CLAY SITY CLAY ML Cl/ ML Cl/ ML Cl/ Cray, silly clay, up to 10% sand, minor gravel, stiff, high plasticity, moist to wet, no odor, no sheen. SITY CLAY with sand Gray, clayer sill, some sand, soft, wet, slight odor, no sheen. Clayery Sill, town sand, soft, wet, slight odor, no sheen. ML CL/ ML Cl/ Cl/ Cl/ Cl/ Cl/ Cl/ Cl/ Cl/ Cl/ Cl	L		Direc	t-Pusi	h				2-	-Inch			Project Number	1196012*00
SLOTTED CASING NIA SIZE AND TYPE OF FILTER PACK NIA FROM NIA FIT NIA WATER DEPTH (FT) 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/11 DATE COMPLETED 9/14/			N/A					_	N	/A		N/A		TOTAL DEPTH
SIZE AND TYPE OF FILTER PACK N/A SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite FROM N/A SAMPLES SAMPLES SAMPLES SAMPLE DEPTH SAMPLE NUMBER BACKFILL DETAILS FILE TYPE FILE TYPE FILE SAMPLE DEPTH SAMPLE NUMBER BACKFILL DETAILS FILE SAMPLE DEPTH SAMPLE DEPTH SAMPLE NUMBER BACKFILL DETAILS FILE SAMPLE DEPTH SAMPLE DEPTH SAMPLE NUMBER BACKFILL DETAILS FILE SAMPLE DEPTH SAMPLE DEPTH SAMPLE NUMBER SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMPLE DEPTH SAMP			N/A						N/	<u>/A</u>		N/A	DATE STARTED	DATE COMPLETED
SEAL Granular Bentonite FROM TO 15 FT. SAMPLING METHODS SURFACE HOUSING SAMPLE SCOV FRESET. TYPE RECOV FRESET. (FEET) SAMPLE NUMBER BACKFILL DETAILS FID OA SITTY CLAY ML SITTY CLAY ML SITTY CLAY Gray, silly clay, up to 10% sand, minor gravel, stiff, high plasticity, moist, no odor, no sheen. SS 3.5 SS 3.5 KJ-B23-8 FROM TO 15 FT. SAMPLE DESCRIPTION AND DRILLING REMARKS WELL COMPLETION SAMPLE MacroCore w/liner SAMPLE DESCRIPTION AND DRILLING REMARKS SITTY CLAY Gray, silly clay, up to 10% sand, minor gravel, stiff, high plasticity, moist, no odor, no sheen. SITY CLAY ML SITY CLAY Gray, silly clay, up to 10% sand, minor gravel, stiff, high plasticity, moist no odor, no sheen. SITY CLAY ML CL/ ML SITY CLAY Gray, silly clay, up to 10% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen.			N/A					1	N/	<u>/A</u>		N/A	INITIAL WATER DEPTH (FT)	
GROUT N/A SAMPLES TYPE RECOVIPENETE BLOWSE TYPE RECOVIPENETE BLOWSE TYPE RECOVIPENETE BLOWSE TYPE RECOVIPENETE BLOWSE BACKFILL DETAILS BACKFILL DETAILS BACKFILL DETAILS PID UINKLOOF USCS LOG Silty SAND with gravel Tan/brown, sand, slit, gravel fill, no odor, no sheen. SM CL/ ML Gray, slity clay, up to 10% sand, minor gravel, stiff, high plasticity, molst, no odor, no sheen. Silty CLAY Gray, slity clay, up to 10% sand, some gravel, moderately soft, high plasticity, molst to wet, no odor, no sheen. SSITY CLAY Gray, slity clay, up to 10% sand, some gravel, moderately soft, high plasticity, molst to wet, no odor, no sheen. SILY CLAY Gray, slity clay, up to 10% sand, minor gravel, stiff, high plasticity, molst, no odor, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand, some gravel, moderately soft, high plasticity, molst to wet, no odor, no sheen. Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. ML/ CL Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen.				OF FIL	TER PA	CK 			N/	<u>/A</u>		N/A	LOGGED BY	
SAMPLES TYPE RECOVIPENETR (FEET) SAMPLE NUMBER BACKFILL DETAILS PID UTIKLOGY USCS LOG SAMPLE DESCRIPTION AND DRILLING REMARKS Silty SAND with gravel Tan/brown, sand, silt, gravel fill, no odor, no sheen. SM Silty CLAY with sand Gray, silty clay, up to 10% sand, minor gravel, stiff, high plasticity, moist, no odor, no sheen. SS 3.5 A 3.5 KJ-B23-8 BACKFILL DETAILS PID UTIKLOGY USCS SAMPLE DESCRIPTION AND DRILLING REMARKS Silty CLAY Gray, silty clay, up to 10% sand, minor gravel, stiff, high plasticity, moist, no odor, no sheen. Silty CLAY with sand Gray, silty clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. Clayey Silt with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL ML/CL	L		Gran	ular B	entoni	te				0		15	SAMPLING METHODS	
TYPE RECOV RESIT (FEET) SAMPLE NUMBER SAMPLE NUMBER PID LITIKXOOY USCS LOG SAMPLE DESCRIPTION AND DRILLING REMARKS Silty SAND with gravel Tan/brown, sand, silt, gravel fill, no odor, no sheen. SM CL/ Gray, silty clay, up to 10% sand, minor gravel, stiff, high plasticity, molst, no odor, no sheen. Silty CLAY with sand Gray, silty clay, 10-15% sand, some gravel, moderately soft, high plasticity, molst to wet, no odor, no sheen. SILTY CLAY with sand Gray, silty clay, 10-15% sand, some gravel, moderately soft, high plasticity, molst to wet, no odor, no sheen. SILTY With sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. MIL/ CL								FRO)	N/A F1.	MacroCore w/liner	
SS 2.5 Silty CLAY ML Gray, sllty clay, up to 10% sand, minor gravel, stiff, high plasticity, molst, no odor, no sheen. Silty CLAY with sand Gray, sllty clay, 10-15% sand, some gravel, moderately soft, high plasticity, molst to wet, no odor, no sheen. SS 3.5 KJ-B23-8 Tan/brown, sand, silt, gravel fill, no odor, no sheen. Silty CLAY ML Gray, sllty clay, 10-15% sand, some gravel, moderately soft, high plasticity, molst to wet, no odor, no sheen. Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen.	Ì		RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOL	OGY U	ISCS LOG			DRILLING REMARKS
SS 2.5 O.6 CL/ ML Gray, slity Clay, up to 10% sand, minor gravel, stiff, high plasticity, moist, no odor, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. KJ-B23-8 NL/ CL														no odor, no sheen.
Silty CLAY Gray, slity clay, up to 10% sand, minor gravel, stiff, high plasticity, moist, no odor, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. Clayey SiltT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. MIL OLI MIL CLI MIL CLI MIL CLI MIL CLI MIL CLI MIL CLI MIL CLI MIL CLI MIL CLI MIL CLI CLI	Ī										SM			
Silty CLAY Gray, slity clay, up to 10% sand, minor gravel, stiff, high plasticity, molst, no odor, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. SILY CLAY with sand Gray, slity clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. MIL/ CL MIL/ CL MIL/ CL MIL/ CL MIL/ CL MIL/ CL MIL/ CL MIL/ CL MIL/ CL MIL/ CL MIL/ CL		- SS	2.5					0.6	<u>U</u>			_		
SS 3.5 Sitty CLAY with sand Gray, silty clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. CL/ ML Sitty CLAY with sand Gray, silty clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL ML/ CL	ŀ	-			-									
SS 3.5 12.7 CL/ ML Gray, sllty clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen. Clayey SiLT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. ML/ CL Mith sand Gray, sllty clay, 10-15% sand, some gravel, moderately soft, high plasticity, moist to wet, no odor, no sheen.	ł	-			+					╁┼	ML	Gray, plastic	slity clay, up to 10% sand, city, molst, no odor, no she	minor gravei, stiff, nigh en.
SS 3.5 KJ-B23-8 KJ-B23-8 Soft, hlgn plasticity, moist to wet, no odor, no sheen. Clayey SILT with sand Gray, clayey silt, some sand, soft, wet, slight odor, no sheen. ML/CL	ŀ				5-			0.4	И		CL/			ome gravel, moderately
SS 3.5 Gray, clayey silt, some sand, soft, wet, slight odor, no sheen.	ļ	-			-		-		M		ML	soft, h	ligh plasticity, moist to wet	no odor, no sheen.
SS 3.5 Gray, clayey silt, some sand, soft, wet, slight odor, no sheen.		-					모 /////////	12 7		**				
10- KJ-B23-8 10- 10- 10- -		ss	3.5									Gray,	clayey silt, some sand, so	ft, wet, slight odor, no
					XI I	KJ-B23-8						sneen		
								9.2			VIL/ CL	_		
Sandy SiLT Gray, silt with 20-30% fine to medium sand, minor gravel, some clay, soft, high plasticity, wet, no odor, no sheen. Sandy SiLT Gray, silt with 20-30% fine to medium sand, minor gravel, some clay, soft, high plasticity, wet, no odor, no sheen. Silty CLAY with sand Greenish-gray, silty clay with 10-15% sand and fine gravel, stiff, moderately high plasticity, moist to wet, no odor, no sheen.	ı				10-							-		
Sandy SiLT Gray, silt with 20-30% fine to medium sand, minor gravel, some clay, soft, high plasticity, wet, no odor, no sheen. Silty CLAY with sand Greenish-gray, silty clay with 10-15% sand and fine gravel, stiff, moderately high plasticity, moist to wet, no odor, no sheen.	ŀ	-			-							-		
Silty CLAY with sand Greenish-gray, silty clay with 10-15% sand and fine gravel, stiff, moderately high plasticity, moist to wet, no odor, no sheen.	113/11	ا ي -			-					1		Sandy	 y	
Silty CLAY with sand Greenish-gray, silty clay with 10-15% sand and fine gravel, stiff, moderately high plasticity, moist to wet, no odor, no sheen.	12 12	- 55	3		-			3.0			ML	Gray, some	silt with 20-30% fine to me clay, soft, high plasticity, w	dium sand, minor gravel, vet, no odor, no sheen.
O.8 ML Greenish-gray, silty clay with 10-15% sand and fine gravel, stiff, moderately high plasticity, moist to wet, no odor, no sheen.	PNW.G	-								1		- Silty (CLAY with sand	
sheen.	2 3				15-			8.0		<u> </u>	ML	Green _, stiff, m	ish-gray, silty clay with 10- noderately high plasticity, n	15% sand and fine gravel, noist to wet, no odor, no
	2011.6											sheen	•	
병	SEPT													
	LOGS													
ONING	ORING													
BAX B	BAYB													
	CRNET													
	JGY CK													
	ECOL(•	;
MA II	PNW													

PNW.GDT

(6-87) (3-88) (8-90)

BORIN	IG LOCA Dec	TION eption	Pass	Marina, Corne	t Bav. WA					Boring Name	KJ-B26
DRILLI	NG CON	PANY	Drilling			DRII	LER Tvl	er Day		_	cology Cornet Bay
DRILLI	NG MET					DRII	LL BIT(S	s) SIZE nch			1196012*00
ISOLA	TION CA		1.1			FRC	M	то	FT.	Project Number	TOTAL DEPTH
BLANK	N/A CASIN	3				FRC		то	N/A FT.	bgs	15.0 ft. bgs
SLOTT	N/A ED CAS	ING		-		FRC	N/A	TO	N/A FT.	DATE STARTED 9/14/11	DATE COMPLETED 9/14/11
SIZE A	N/A ND TYP	E OF FIL	TER PA	CK		FRC	N/A	то	N/A FT.	INITIAL WATER DEPTH (FT 7.0)
SEAL	N/A					FRC	N/A		N/A FT.	LOGGED BY DKM	
GROU		nular B	entoni	te			0)	15	SAMPLING METHODS	WELL COMPLETION SURFACE HOUSING
	N/A					FRO	^{'™} N/A	то	N/A	MacroCore w/liner	STAND PIPE FT.
TYPE	RECOV (FEET	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOG	USCS LOG		SAMPLE DESCRIPTION AND	D DRILLING REMARKS
-			_		-			SM		SAND with gravel rown, sand, silt, gravel fill,	no odor, no sheen.
SS	3.5		_		-	0.7		CL/ ML	sand silty/c	CLAY ray to gray (below ~4 feet) occurring in thin (typically layey sand, moderately sti rately soft, high plasticity,	<1" thick) interbeds of iff to stiff overall, locally
SS	5- - - - - - - - - - - - - - - - - - -						X		Gray, overal	y SILT with grave! silt, some clay, 20-30% sa I, sand/gravei content vari In bottom ~6 inches, soft,	es iocally, increased
	3		10-			1.2		CL/ ML	 Green stiff to 	CLAY with sand ish-gray, silty clay with 5-' very stiff, moderately high or, no sheen.	15% sand and fine gravel, n plasticity, moist to wet,
25.110			15-					-	,		
250											
									•		
P P P P P P P P P P P P P P P P P P P											
E CO											

BORING	LOCAT	ion otlon	Pass N	Marina, Cornet	t Bay, WA					Boring Name	KJ-B27
DRILLIN	IG COMP	PANY				DRIL	LER Tvle	er Day		_	cology Cornet Bay
DRILLI	IG METH Direc	IOD(S)				DRIL	L BIT(S) 2-In	SIZE		Project Number	1196012*00
ISOLAT	ION CAS					FRO		TO	N/A	ELEVATION AND DATUM	TOTAL DEPTH
BLANK	N/A CASING					FRO	M	то	FT.	bgs DATE STARTED	20.0 ft. bgs DATE COMPLETED
SLOTTI	N/A ED CASIR	NG		 		FRO		то	N/A FT.	9/14/11 INITIAL WATER DEPTH (FT)	9/14/11
SIZE AI	N/A ND TYPE	OF FIL	TER PA	CK		FRO		то	N/A FT.	8.0	
SEAL	N/A					FRO	N/A	то	N/A FT.	LOGGED BY DKM	
GROUT		ular B	entoni	te		FRO	0	то	20 FT.	SAMPLING METHODS MacroCore w/liner	WELL COMPLETION SURFACE HOUSING
	N/A					PRO	N/A	10	N/A	Macrocore willier	☐ STAND PIPE FT.
TYPE	RECOV.	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS		SAMPLE DESCRIPTION AND	DRILLING REMARKS
	(FEET)	BLOWS/6							Silty	SAND with gravei	
_			_							rown, sand, sllt, gravel fill,	no odor, no sheen.
	:							SM			
ss	1.5		_				则				
ŀ								L	L		
-			-			0.6				CLAY with sand silty clay with 10-15% san	d and fine gravel, soft to
			5-			1.0			mode	rately stiff (below ~5 feet), , no odor, no sheen.	moderately high plasticity,
			5				И	CL/	1110101	, no odor, no oncom	
-	ļ		_					ML			
-			_			1.2	[-		
SS	2.5				-	L	L				
					= /////////				Grav.	y SILT sllt with 25-30% sand, sor	ne clay, some gravel
			-			0.8				y, soft, medlum plasticity, v no sheen.	vet, slight odor below ~11
-	-		10-		-		4	ML	 		
_			-		-				-		
_						4.7					
SS	4		M	KJ-B27-12							
			_ ك		-	0.9				CLAY with sand nish-tan to greenish-gray (t	pelow ~16 feet), slity clay
-			-		-				└ with 1	10-15% sand, minor gravel city, moist to wet, no odor,	, stiff to very stiff, high
2	<u> </u>		15-			_			_		
	:		_					CL/ ML			
3	\parallel ,		-		-	0			-		
SS] 3				-				-		
			_	·							
5								-			
			20	<u> </u>		_	1./	-			
										J	

BORING	LOCAT	ION											
	Dece	ption	Pass I	Marina, Corne	t Bay, WA	Loon	1.50			Boring Name	KJ-B28		
		ade D	rilling				LER Tyle L BIT(S)	er Day		Project Name	Cology Cornet Bay		
		t-Pùs					2-In	ch		Project Number	1196012*00		
	ION CAS N/A					FRC	M N/A	то	N/A	ELEVATION AND DATUM	TOTAL DEPTH		
BLANK	CASING N/A	ł			•	FROM TO FT			N/A FT.	bgs DATE STARTED	20.0 ft. bgs DATE COMPLETED		
SLOTT	D CASI	NG							FT.	9/14/11 INITIAL WATER DEPTH (FI	9/14/11		
SIZE AN		OF FIL	TER PA	СК		FROM TO FT			N/A FT.	8.0 LOGGED BY			
SEAL		ular D	entoni	4		FRO		то	20 FT.	DKM SAMPLING METHODS	WELL COMPLETION		
GROUT		ulai D	enton	le		FRO		то	FT.	MacroCore w/liner	☐ SURFACE HOUSING		
	N/A AMPLES				BACKFILL DETAILS	DID	N/A		N/A	İ	☐ STAND PIPE FT.		
TYPE	RECOV. (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER		PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AN	D DRILLING REMARKS		
SS 2.5 -								SM	Tan/b	SAND with gravel rown, sand, silt, gravel fill terials, no odor, no sheen	, mixure of several different		
- - -	5-							CL/ ML	plastic	LAY silty clay, moderately soft, moderately high ty, moist, no odor, no sheen.			
SS -	2.5		-		\	1.3		CL/ ML	Gray, odor,	silty clay, moderately stiff no sheen. y SILT	to stiff, moist to wet, no		
			10 -		-				Greer grave	lsh-gray to gray, silt with	~30% sand, some clay and n plasticity, wet, slight odor		
- SS -	4			KJ-B28-12	-	8.2		ML	_				
			- 15-		-	1.4			Gray,	CLAY with sand slity clay with 10-15% sar lasticity, moist to wet, no	nd and fine gravel, stiff, odor, no sheen.		
KJ-B28-16								CL/ ML	_				

			ption I	Pass I	Marina, Corne	Boring Name	KJ-B29						
		IG COMP	ade D	rilling					er Day		Project Name		
	•	IG METH Direc	<u>t-Push</u>	1				L BIT(S) 2- i r	nch		Project Number	1196012*00	
		ION CAS N/A					FRO	N/A		N/A FT.	ELEVATION AND DATUM bgs	TOTAL DEPTH 20.0 ft. bgs	
	BLANK (N/A D CASIN					N/A N/A				DATE STARTED 9/14/11	DATE COMPLETED 9/14/11	
		N/A ID TYPE	•-			***	N/A N/A			N/A FT.	INITIAL WATER DEPTH (FT) 8.0		
	SEAL SEAL	N/A	OF FIL	IER PA				FROM TO N/A			LOGGED BY DKM		
	GROUT	Granu	ular Be	entoni	te		FRO	0	то	20 FT.	SAMPLING METHODS WELL COMPLETION		
						PRO	N/A		N/A -1.	MacroCore w/liner	STAND PIPE FT.		
	SAMPLES TYPE RECOV RESIST. (FEET) BLOWS/6 SAMPLE NUMBER BACKFILL DETAILS BACKFILL DETAILS							LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION ANI	D DRILLING REMARKS	
	ss	3.5		-		-	0.8		SM	Tan/b	SAND with gravel rown, sand, silt, gravel fill,	no odor, no sheen.	
	SS 3.5									Brown overal silt an	y SILT n/gray, siit with 30-40% sa I, texture varies locally wit d stiff silt with some clay, no sheen.	nd and ~10% gravel th layered sand/gravel with moderately stiff, moist, no	
	SS	1		- - - - r	KJ-B29-7	<u>-</u> - -	17.4		ML 	Sandy			
				10-		-				Gray to some		~30% sand, 5-10% gravel, oft, wet, slight to medium	
3DT 12/13/11	SS	3.5		-		_	10.9		ML	_	,		
1.GPJ KJ PNW.				15-		-	1.3		CL	Lean (Tan, c high p		el locally, stiff to very stiff, odor, no sheen.	
SEPT ZU				+			1.8			_			
ORING LOGS	ss	4.5		 - - - -	KJ-B29-18	-	11.7		SP	Gray, i	r graded SAND medium sand with 5-10% so odor, no sheen.	silt, moderately dense,	
KNET BAY B				20	OE0-10		1.2		CL/ ML	Silty C Gray, s no she	silty clay, stiff, high plastic	ity, moist to wet, no odor,	
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11													

	BORING LOCATION Deception Pass Marina, Cornet Bay, WA PRILLING COMPANY DRILLER											Boring Name	KJ-B30	
DRILLI	IG COM Casc	PANY ade D	rilling			DRII	LLE		le	r Day		Project NameEcology Cornet Bay		
DRILLI	IG METH					DRII	ILL I	BIT(S 2-l		SIZE ch		Project Number	1196012*00	
ISOLAT	ION CAS N/A					FROM TO FT N/A N/A				N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH		
BLANK	CASING N/A	ì				FROM TO FT			то	N/A FT.	bgs DATE STARTED	20.0 ft. bgs DATE COMPLETED		
SLOTT	D CASI	NG				FROM TO FT			то	N/A FT.	9/14/11 INITIAL WATER DEPTH (F	9/14/11 T) ·		
SIZE A	SIZE AND TYPE OF FILTER PACK N/A									то	N/A FT.	8.0 LOGGED BY		
SEAL		ulor P	enton	ito		FRC	MC	N/A		то	20 FT.	DKM SAMPLING METHODS	WELL COMPLETION	
GROUT	•	ulai D	CHILOH	ilo .		FRC	MC		_	то	FT. N/A		☐ SURFACE HOUSING	
	N/A SAMPLES	DENETO	DEDTH		BACKFILL DETAILS	PID	T	N/A		LISCS	IN/A		☐ STAND PIPE FT.	
TYPE	RECOV. (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER		110	u	THOLOG	GY	USCS LOG		SAMPLE DESCRIPTION AI	ND DRILLING REMARKS	
-			: -		_					SM	-	SAND with gravel rown, sand, silt, gravel fil	I, no odor, no sheen.	
- SS -	3.5		-		-	2.1			7	ML	Brown	y SILT with gravel n, sllt with 30% fine to me rately stiff, moist, no odo	dium sand, 10-15% gravel, r, no sheen.	
			_			2.0								
-	SS 3 KJ-B30-8								,			dy SILT with gravel		
ss -										ML	Dark of mode	gray, silt with 30% sand,	silt with 30% sand, 10-20% gravel, some clay, soft, moist to wet, medium to strong odor,	
-			10 -		- -			<u> </u>	,			<i>-</i>		
- - -	3		-		-	2.6				CL/	stiff to	ish-gray, slity clay with 5	-10% sand and fine gravel, moist to wet, slight odor	
-			15 -		-	1.8				CL/ ML	-			
- SS -	4		20-	KJ-B30-17	-	2.1			X	CL	Grav.	CLAY clay, some silt, moderate to wet, no odor, no sheer	ly stiff, high plasticity, i.	

BORING	Dece	ption	Pass I	Marina, Corne	Boring Name		KJ-B31					
DRILLIN	G COM	PANY ade D	rilling			DRIL	LER Tyle	r Day		Project NameEcology Cornet Bay		
DRILLIN	G METH	iod(s)	h			DRIL	L BIT(S) 2-In			Project Number _		96012*00
ISOLATI						FRO	M N/A	ТО	N/A	ELEVATION AND DATU		AL DEPTH
BLANK (i				FRO		то	FT.	bgs DATE STARTED	DAT	15.0 ft. bgs E COMPLETED
SLOTTE		NG				FRO	М	то	N/A FT.	9/14/11 9/14/11 INITIAL WATER DEPTH (FT)		
SIZE AN	ID TYPE	OF FIL	TER PA	СК		FRO	FROM N/A		N/A	9.0 OGGED BY		
SEAL	N/A	l D		<u></u>		FRO		то	FT.	DKM SAMPLING METHODS	WEI	L COMPLETION
GROUT		ular B	entoni	te		FRO	<u>0</u>	то	15 FT.	MacroCore w/liner	□s	SURFACE HOUSING
s	N/A AMPLES				BACKFILL DETAILS	DID	N/A	11000	N/A		DS	TAND PIPE FT.
TYPE	RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER		PID	LITHOLOGY	LOG	SCS OG SAMPLE DESCRIPTION AND DRILLING REMARKS			
-			-		-			SM		SAND with gravel rown, sand, silt, gravel	fill, no od	or, no sheen.
ss	SS 3.5							ML	Brown	y SILT with gravel n, silt with sand and gra no sheen.	vel, stiff,	slightly moist, no
-								sw	Brown	graded SAND with gra n/orange, medium to co l, moderately dense, m	arse san	d with 10-20% dor, no sheen.
			X ₅₋	KJ-B31-4	_	0.9		sw	Well-	graded SAND with gramedium sand, some c	avel oarse sar	nd, ~40% gravel,
-			-		-	0.4				silt, some shell fragme or, no sheen.	ents, mode	erately defise, moist,
SS -	4		-			0.1		ML		n, silt with woody mater no sheen.	ial, some	sand, soft, moist, no
-			-		<u></u>	0.4		SM	Brown	SAND n/gray, silty fine sand, s , no odor, no sheen.	ome clay	, moderately soft,
			10-		-	0.5		SP/ SM	Gray	y graded SAND with s to greenish-gray, fine s I, moderately dense, w	and with	10-20% silt, 10 - 15%
SS	4		-		-	0.6		CL/ ML	Grav.	CLAY with sand silty clay with 10-15% stiff, moist to wet, no od	sand and lor, no sh	fine gravel, stiff to een.
בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני בייני			15-									

	D		Pass I	Marina, Corne	Boring Name	KJ-B32							
	C	OMPANY ascade [LER Tyle	r Day		Project Name	Ecology Corne	et Bay	
DRILL	ING N D	rect-Pus	h			DRIL	L BIT(S) 2-Ine			Project Number _	1196012*0	00	
	N.					FRO	N/A	то	N/A FT.	ELEVATION AND DATU	M TOTAL DEPTH	ft. bgs	
BLAN	K CAS N					FRO	M N/A	то	N/A FT.	DATE STARTED	DATE COMPL		
SLOT	TED C	ASING A				FRO	M N/A	то	N/A FT.	9/14/11 INITIAL WATER DEPTH		4/11	
SIZE	AND T	YPE OF FI	LTER PA	CK		FRO	M N/A	то	N/A FT.	9.0 LOGGED BY			
SEAL	G	ranular E	Bentoni	te		FRO	М 0	то	FT. 15	DKM SAMPLING METHODS	WELL COMPL		
GRO	JT N	/A				FRO	M N/A	то	N/A FT.	MacroCore w/liner	☐ SURFACE		
TYPE	SAMPLES TYPE RECOV PENETR. (FEET) RESIST. (FEET) BLOWS/61 RECOV PENETR. (FEET) SAMPLE NUMBER							USCS LOG		SAMPLE DESCRIPTION AND DRILLING REMARKS			
-			_		-			SM	_	SAND with gravel rown, sand, silt, gravel	fill, no odor, no sh	een.	
SS -		3.5	_		-	52.0		CL/ ML	Gray,	CLAY with sand silty clay with 10-15% rately stiff to stiff, sligh	sand and fine grav	rel, no sheen.	
-	5-KJ-B32-4							SW	Gray,	graded SAND with gr medium to coarse san fragments below ~4.5 f to medium odor, no sh	nd with 10-20% gravieet, moderately de	vel, some nse, moist,	
SS	4	1.5			- - -	44.6 4.5		ML/ CL	Brown	y SILT n, clayey silt with wood , no odor, no sheen.	y material, modera	tely soft,	
			- 10 -		-	0.8		ML	Green	y SILT with gravel nlsh-gray, sandy silt wit y, moderately soft, wet,	th 10-15% gravel, s , no odor, no sheen	some clay I.	
SS		4			-	0.4		CL/ ML	Silty Tan/g	CLAY ray, silty clay, some sa plasticity, moist to wet,	and and gravel loca no odor, no sheen.	lly, stiff,	
SLOGS SEPT 2011.6										•			
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11													
A PNW ECOLO									<u> </u>				

		eption	Pass i	Marina, Corne	t Bay, WA			Boring Name	KJ-B33			
		ade D	Orilling					r Day	,		cology Cornet Bay	
		ct-Pus				DRII	LL BIT(S) 2-ln			Project Number	1196012*00	
	TION CA					FRC	M N/A	то	N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH	
BLANK	CASING N/A	3			· ·	FROM TO N/A			N/A FT.	bgs DATE STARTED	15.0 ft. bgs DATE COMPLETED	
SLOTT	ED CASI N/A	NG		···		FRC		то	N/A FT.	9/15/11 INITIAL WATER DEPTH (FT)	9/15/11	
SIZE A	ND TYPE	E OF FIL	TER PA	СК		FROM TO N/A			N/A FT.	8.0 LOGGED BY		
SEAL	Gran	ular B	entoni	te		FRO		то	15 FT.	DKM SAMPLING METHODS	WELL COMPLETION	
GROU	T N/A					FRO	M N/A	то	N/A FT.	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.	
TYPE	SAMPLES DEPTH SAMPLE NUMBER BACKFILL DETAILS						LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AND		
	SS 3.5							SM		SAND with gravel own, sand, slit, gravel fill, no odor, no sheen.		
- SS								GW		graded GRAVEL with san e/brown, gravel and sand i		
- -								sw	Gray,	graded SAND with gravel medium to coarse sand with 30-35% gravel, rately dense, moist, medium odor, light sheen.		
	5_ K.J-B33-4				_	18.6	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	GW	_ Brown	graded GRAVEL with san I, gravel with ~40% medlun ately dense, moist, mediur	n to fine sand, some sllt,	
ss									Sandy	,		
-			10-		\frac{1}{2}			ML	woody	o brown, sandy sllt, some gravel locally, some material locally, soft, molst to wet, slight to medium to sheen.		
-			-			0.9			 Sandy			
KJ PNW.GDT 12/13/11	SS 4.5					0.8		ML	some	Ish gray, slit with 30-35% n clay, minor gravel, some th ds locally, moderately stiff	In (<1" thick) sandy	
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11			_15_									

BORING	Dece	ption	Pass I	Marina, Corne	Boring Name	KJ-B34								
DRILLIN	Casc	ade D	rilling					er Day		Project NameEcology Cornet Bay				
DRILLIN	IG METH Direc	IOD(S)	h			DRIL	L BIT(S 2-Ir			Project Number	1196012*00			
ISOLAT						FRO		то	N/A FT.	ELEVATION AND DATUM	M TOTAL DEPTH			
BLANK	CASING N/A					FROM TO FT N/A			N/A FT.	bgs DATE STARTED	15.0 ft. bgs DATE COMPLETED			
SLOTTE	• • •	NG				FROM TO FT			FT.	9/15/11 INITIAL WATER DEPTH (9/15/11 (FT)			
SIZE AN	ID TYPE	OF FIL	TER PA	СК					FT.	7.0 LOGGED BY				
SEAL	N/A					FRO	N/A M	то	N/A FT.	DKM				
GROUT		ular B	entoni	te		FRO	0 15 FROM TO FT			SAMPLING METHODS MacroCore w/liner	WELL COMPLETION SURFACE HOUSING			
	N/A						N/A		N/A	Wadioooic William	☐ STAND PIPE FT.			
TYPE	SAMPLES TYPE RECOV RESIST. (FEET) BLOWS/6 SAMPLE NUMBER BACKFILL DETAILS BACKFILL DETAILS							USCS		SAMPLE DESCRIPTION AND DRILLING REMARKS				
-					-			SM	-	SAND with gravel rown, sand, silt, gravel fill, no odor, no sheen.				
SS -	3.5		-			7.1		CL/ ML	Tan/g	CLAY ray, silty clay with some city, slightly moist, no o	e sand, stiff, moderately high dor, no sheen			
			- X1 -	KJ-B34-5	_	33.7 1220		CL/ ML	Gray,	present below ~3.5 fee	sand, sandy interbeds (<1" t, moderately soft,			
-	5-10-834-5								sheer Well-	n. graded SAND with silt				
- SS	3.5	158 ·							10-15	e, moist to wet, medium	d with ~30% gravel and low ~6.5 feet, moderately odor, medium to heavy			
-			-			4		ML/ CL	Brown	Clayey SILT Brown to dark brown, clayey sllt with woody material in upper ~6 inches, soft, moist, slight odor, no sheen.				
-			10-		-	5		ML	Greer some		% sand, 10-15% gravel, nedlum plasticity, wet, slight			
SS -	SS 3							CL/ ML	Silty (Gray/ high p		sand and fine gravel, stiff, no odor, no sheen.			
			15-			0.1			L					

	cring Log												
BORING	LOCAT	TON otion	Pass I	Marina, Corne		Boring Name	KJ-B35						
DRILLIN	G COM	PANY	rilling		7.11-11.	DRIL	LER Tvle	er Day		Project Name Ecology Cornet Bay			
DRILLIN	G METI				- 1/4 8/	DRIL	L BIT(S) 2-In	SIZE		Project Number	1196012*00		
ISOLAT						FRO	M N/A	то	N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH		
BLANK					100				N/A	DATE STARTED	15.0 ft. bgs DATE COMPLETED		
SLOTTE	D CASI	NG				FROM TO FI			FT.	9/15/11 INITIAL WATER DEPTH (FT)	9/15/11		
SIZE AN		OF FIL	TER PA	СК					FT.	9.0			
SEAL	N/A					FRO		то	N/A FT.	DKM SAMPLING METHODS WELL COMPLETION			
GROUT		ular B	entoni	ite		FRO	<u>О</u>	то	15 FT.	SAMPLING METHODS MacroCore w/liner	☐ SURFACE HOUSING		
	N/A		1				N/A		N/A	mas, occio mino	☐ STAND PIPE FT.		
TYPE	SAMPLES TYPE RECOV PENETR DEPTH SAMPLE NUMBER BACKFILL DETAILS SAMPLE NUMBER BACKFILL DETAILS SAMPLE NUMBER BACKFILL DETAILS SAMPLE NUMBER BACKFILL DETAILS SAMPLE NUMBER BACKFILL DETAILS SAMPLE NUMBER BACKFILL DETAILS SAMPLE NUMBER BACKFILL DETAILS SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER NUMBER NUMBER SAMPLE NUMBER NUMBER NUMBER NUMBER NUMBER NUMBER NUMBER NUMBER NUMBER NUMBER NUMBER						LITHOLOGY	LOG		SAMPLE DESCRIPTION AND DRILLING REMARKS			
	BLUWSIO									Silty SAND with gravel Tan/brown, sand, silt, gravel fill, no odor, no sheen.			
			_					SM					
- SS	4		-		-	404							
- 33	*		-		-	131			Grav.	CLAY with sand silty clay with 10-15% me	dium to fine sand with		
			<u> </u>		_				- interb	gravel overall (variable), lo leds of silty sand and poorl	v graded sand, some shell		
			\mathbb{N}_{-}	KJ-B35-4		1513 CL/ frag			fragm soft (ments in lower portion, moderately stiff to moderately (varies locally), molst, medium to strong odor, heavy			
			5 -				M	ML	sheer	า.			
+			-	-	-			1	_				
-			-		-				-				
SS	3		L .			11.9		ML/		ey SILT			
			X	KJ-B35-8				CL		n to dark brown, clayey silt , slight odor, no sheen.	with woody material, sort,		
			-		-	6.8	Silty CLAY with sand CL/ Greenish-gray, silty clay with 10-15% sand, so				-15% sand some gravel		
			10-		-			ML	stiff, i	moist to wet, slight odor, lig	tht sheen.		
-			-	-	-			├	Sand				
			_			0.9		ML	Gray	/tan, sandy silt, some clay a wet, slight odor, no sheen.	and gravel, moderately		
SS	4.5						W		Sun, V	wer, angrit odor, no an ce n.			
			-	1 .				 		CLAY with sand , silty clay with 10-15% san			
-			-			1.5		CL/ ML	high I	plasticity, moist to wet, no	odor, no sheen.		
2	<u>L</u>		15-					<u> </u>	<u></u>				
300													
2													
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										-			
50													
3													
2													

BORING	LOCATION	V										
DBILLIA	Decepti IG COMPAN		<u>Marina, Corne</u>	Boring Name		KJ-B36						
	Cascad	e Drilling	***			LLER Tyl	er Day		Project Name <u>Ecology Cornet Bay</u>			
DRILLIN	IG METHOD Direct-F				DRII	LL BIT(S 2-Ir			Project Number _		1196012*00	
ISOLAT	ION CASING				FRC		TO	N/A	ELEVATION AND DATU		TOTAL DEPTH	
BLANK	CASING				FROM TO			FT.	bgs DATE STARTED		15.0 ft. bgs DATE COMPLETED	
SLOTTE	N/A D CASING				FRO	N/A N/A			9/15/11		9/15/11	
SIZE AN	N/A ID TYPE OF	FILTER PA	CK		EDO	N/A TO			INITIAL WATER DEPTH (FT) 7.0			
SEAL	N/A					N/A		N/A FT.	LOGGED BY DKM			
		r Bentoni	te		FRO	0		15 15	SAMPLING METHODS WELL COMPLETION			
GROUT	N/A				FRO	M N/A	то	N/A	MacroCore w/liner		☐ SURFACE HOUSING ☐ STAND PIPE FT.	
TYPE	RECOV. RES	IETR. DEPTH SIST. (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	LIEGE		SAMPLE DESCRIPTION AND DRILLING REMARKS			
-		_					SM	1	SAND with gravel prown, sand, silt, gravel fill, no odor, no sheen.			
ss	4	-		-	0		SM	Gray, slighti	SAND with gravel slity sand with 20-30% y moist, slight odor, no	grav shee	rel, moderately loose, en.	
-		-		_	14.1		CL/ ML	Silty (Gray, slight	CLAY silty clay, ~10% sand, odor, no sheen.	some	e gravel, stiff, moist,	
-		5 -		-	10.1		CL/ ML	Gray, in thin	CLAY with sand silty clay, 10-15% sand (<1") layers or pods, no sheen.	d, son noder	me gravel, locally sandier rately soft, moist, slight	
ss -	3		KJ-B36-8	\ -	295		 SM	Gray,	SAND with gravel silty sand, ~30% grave m odor, medium to hea	el, mo avy sl	derately loose, wet,	
		10-		_	30.1		ML	Gray,	∕ SILT silt with ~30% sand, 5- ately soft, wet, medium	10% 1 odo	gravel, some clay, r, medium to heavy	
SS	4	-		-	0.7		ML	Green			, some clay, 5-10% ist to wet, slight odor, no	
SS		15_		_	0.8		CL/ ML	Silty (Tan/gr high p		nd an	nd fine gravel, very stiff, or, no sheen.	

SS 0.5

SS 0.5

SS 0.5

SIlty CLAY Gray, slilty clay, 5-10% fine sand, stiff, high plasticity, wet, no odor, no sheen.

SP SILTY CLAY Gray, slilty clay, 5-10% fine sand, stiff, high plasticity, wet, no odor, no sheen.

SHEET 1 OF 1

BORING	LOCATION		Marina, Corne	t Bay WA					Boring Name	KJ-B38
DRILLIN	IG COMPAN Cascade	Y	vianna, como	t Day, TTT	DRIL	LER Tyle	er Day		Boring Name	Ecology Cornet Bay
DRILLIN	IG METHOD	(S)			DRIL	L BIT(S)	SIZE		Project Name	
ISOLATI	Direct-P				FRO		TO	FT.	Project Number	1196012*00
BLANK	N/A CASING				FRO	<u>N/A</u> м	то	N/A FT.	bgs	15.0 ft. bgs
SLOTTE	N/A ED CASING				FRO	N/A M	то	N/A FT.	DATE STARTED 9/16/11	DATE COMPLETED 9/16/11
<u> </u>	N/A ND TYPE OF	FII TED DA	nk .	· · · · · · · · · · · · · · · · · · ·	FRO	N/A	TO	N/A FT.	INITIAL WATER DEPTH (FT)
SEAL	N/A	TILILATION				N/A		N/A	LOGGED BY DKM	
		r Bentoni	te		FRO	0	то	15 	SAMPLING METHODS	WELL COMPLETION SURFACE HOUSING
GROUT	N/A				FRO	M N/A	то	N/A	MacroCore w/liner	STAND PIPE FT.
TYPE	RECOV PENI RECOV RES (FEET) BLOV	ETR. DEPTH IST. (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION A	AND DRILLING REMARKS
-				-	-		SM	_	SAND with gravel rown, sand, silt, gravel f	ill, no odor, no sheen.
SS -	3.5	-		-	3.9		ML/ CL	Browr slightl	y moist, slight odor, ligh	sand, some gravel, stiff, t sheen.
		5-		_	301		CL/ ML	Brown	CLAY with sand a/gray, silty clay with 5-1 or sandier in thin (<1") lay noist, medium odor, ligh	ers of sandy silt, moderately
- SS	3.5		KJ-B38-7	\frac{\frac{1}{2}} -	315		SM	Gray,		% silt, 10-15% gravel, um to strong odor, heavy
-		10-		-	10.1		ML/ CL	Claye Gray, grave mode	y SILT with sand clayey silt with 10-20% , local sand and silt laye	medium to fine sand, some ers typically 1-2" thick, gh plasticity, wet, slight
- -		-		-	2.7		ML	Brown	y SILT I to dark brown, sandy s nedium plasticity, wet, n	ilt, topsoil-like, moderately o odor, no sheen.
SS -	3.5		KJ-B38-13	-	15.1		SP/ SM	Poorl Green	y graded SAND with si ish-gray, sand with 10-2 rately dense, wet, slight	ilt 20% silt, some gravel,
		15_			0.8		CL/ ML	Gray,	CLAY with sand silty clay, 10-15% sand lasticity, moist to wet, n	, stiff to very stiff, moderately o odor, no sheen.
SS										
		·								

Kennedy/Jenks Consultants

BORING	Dece	ption	Pass!	Marina, Corne	t Bay, WA					Boring Name	KJ-B39
DRILLIN	G COM Casc	PANY ade D	rilling				LLER Tyl	er Day		Project Name	Ecology Cornet Bay
DRILLIN	G METH Direc	iod(s) t-Pus	h			DRII	LL BIT(S 2-l	s) SIZE nch		Project Number	1196012*00
ISOLATI				·		FRC		TO	N/A FT.	ELEVATION AND DATUM	1 TOTAL DEPTH
BLANK						FRC		TO	N/A FT.	bgs DATE STARTED	15.0 ft. bgs DATE COMPLETED
SLOTTE		NG				FRC		TO	N/A	9/16/11 INITIAL WATER DEPTH (I	9/16/11 FT)
SIZE AN	D TYPE	OF FIL	TER PA	.CK		FRC	M	то	N/A FT.	6.0	,
SEAL	N/A			<u> </u>		FRC		то	FT.	DKM SAMPLING METHODS	WELL COMPLETION
GROUT		ular B	enton	ite		FRC)M N/A	то	15 FT. N/A	MacroCore w/liner	☐ SURFACE HOUSING ☐ STAND PIPE FT.
TYPE	AMPLES	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOG	LICOC		SAMPLE DESCRIPTION A	AND DRILLING REMARKS
_			-		-			SM	_	SAND with grave! rown, sand, sllt, gravel f	ill, no odor, no sheen.
SS -	3.5		_		-	1.1		ML	SILT Brown	n, silt, some sand and gr or, no sheen.	ravel, very stiff, slightly moist,
-			5-		-	3.2		CL/ ML	Silty Gray,	CLAY	and fine gravel, moderately ist, no odor, no sheen.
- - SS	4		-		-	6.5		ML	Gray,	y SILT with gravel sandy silt, some clay, 1 no sheen.	0-15% gravel, soft, wet, no
-	1		\mathbb{X}^{-1}	KJ-B39-8	-	11.6		SM	Gray,	SAND fine sand with 20-30% s rately dense, wet, slight	silt, some shell fragments, odor, no sheen.
			10-		_	9.6			Gray, mode		and and fine gravel, igh plasticity, wet, no odor,
- SS	3.5		-		-	1.2		CL/ ML	no sh	een.	
-			-			2.1			_		
-			-		_	3.1 0.8		CL/ ML		SAND silty sand, moderately d l.	lense, wet, no odor, no
	<u> </u>	,	15 <u></u>	'				_	Gray,	CLAY with sand silty clay, 10-20% sand vet, no odor, no sheen.	and fine gravel, moderately
										,	
											·

F-40.1 (6-87) (3-88) (8-90)

BORIN	IG LOCA	TION	_									
DRILL	Dec		Pass	Marina, Corne	t Bay, WA	DRII	LER			Boring Name		KJ-B40
	Cas	cade [Drilling				Tyle	er Day		Project Name	Ec	ology Cornet Bay
		<u>ct-Pùs</u>				DRII	.L вп(s) 2-Ir			Project Number _		1196012*00
ISOLA	TION CA N/A	SING				FRO	M N/A	то	N/A FT.	ELEVATION AND DATUM	vI	TOTAL DEPTH
BLAN	CASIN	G				FRO	M	ТО	FT.	bgs DATE STARTED		15.0 ft. bgs DATE COMPLETED
SLOT	TED CAS	ING				FRO		то	N/A FT.	9/16/11		9/16/11
SIZE A	N/A ND TYP	E OF FII	TER PA	.CK		FRO	N/A	то	N/A FT.	INITIAL WATER DEPTH ((FT)	
SEAL	N/A						N/A		N/A	LOGGED BY DKM		
		nular E	entoni	ite		FRO	0		15	SAMPLING METHODS		WELL COMPLETION
GROU	T N/A					FRO	M N/A	то	N/A FT.	MacroCore w/liner		☐ SURFACE HOUSING ☐ STAND PIPE FT.
TYPE	RECOV (FEET	PENETR RESIST.	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	LICOS		SAMPLE DESCRIPTION	AND I	
		DECWOID .							_	SAND with gravel		
-			-		-			SM	Tan/b	rown, sand, silt, gravel	fill, n	o odor, no sheen.
-	Ш		_						,			
SS	3					2.6			Clave	y SILT with sand		
			_			3.1		ML/ CL	Gray,	clayey silt, 10-20% san	id, s	ome gravel, stiff, slightly
-			<u> </u>		-	3.1	·	sw	⊦	no odor, no sheen. graded SAND with gra	vol	
			∭ ₅ _	KJ-B40-4		8.0	ŻŢ		Brown	, medium to coarse sar	nd. 2	0-30% gravel, some silt,
1			J					CL/	·	rately dense, moist, no	odor	, no sheen.
t			_					ML	Brown	, silty clay with ~30% s	and,	soft, moist, no odor, no
-			-		<i> </i>		\mathcal{U}		sheen			
SS	3.5					1.7		ci^	Green	CLAY with sand insh-gray, silty clay, 20	-30%	6 sand, moderately soft
								ML	to mod	derately stiff (varies loca lasticity, wet, no odor, r	ally),	medium to moderately
<u> </u>			-						Silty (
-	-	-	10-			1.1			Gray,	silty clay, ~10% sand a igh plasticity, moist to w	nd fi vet. r	ne gravel, stiff to very
L									•	, , , , , , , , , , , , , , , , , , , ,	•,	,
SS	, ,		-			1.2		CL/ ML				
3	4.5		4						-	٠		
<u> </u>												
2						0.8			_			
2	<u> </u>	<u> </u>	15_	<u> </u>			$\angle \perp \Box$		•••			
3												
Ś												
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SS												
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<u> </u>			1									
2												

Deception Pass Marina, Cornet Bay, WA DRILLING COMPANY Cascade Drilling DRILLING Tyler Day DRILL BIT(S) SIZE 2-Inch ISOLATION CASING DIRECt-Push ISOLATION CASING N/A BLANK CASING N/A SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite GROUT N/A SAMPLES TYPE RECOVY RESIST, (FEET) SAMPLE NUMBER BACKFILL DETAILS PID UTHOLOGY SM SM SM SM SM SM SM SM SM S	DRILLER Tyler Day DRILL BIT(S) SIZE 2-Inch FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A SAMPLING METHODS MacroCore w/liner SAMPLE DESCRIPTION AND DRILLING REMARKS Silty SAND with gravel Tan/brown, sand, slit, gravel fill, no odor, no sheen. Silty SAND with gravel Orange/brown, slity medium to fine sand with 5-15% gravel, moderately loose, moist, no odor, no sheen. Silty SAND with gravel Gray, medium plasticity, moist, slight odor, light to medium sheen. Silty SAND with gravel Gray, medium to fine sand with ~30% silt, 10-15% sand, moderately soft, medium plasticity, moist, slight odor, light to medium sheen.	BORING	LOCAT	ΓΙΟΝ									
Cascade Drilling DRILLING METHOD(S) Direct-Push DRILL BIT(S) SIZE 2-Inch N/A FROM TO N/A BLANK CASING N/A SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A GROUT N/A SAMPLES TYPE RECOV. RESAIT (FEET) BLOWSS SSS 3.5 SS 3.5 SS 3.5 AND TO BLOWSS DRILL BIT(S) SIZE 2-Inch N/A FROM TO N/A FROM TO N/A FROM TO N/A TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A SAMPLES TYPE RECOV. RESAIT BLOWSS SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D CL/ Tan/brown, sand, slit, gravel fill, no Gray/brown, locally greenish-gray, moderately loose, moist, n TO SIITY SAND with gravel Orange/brown, slity medium to fine gravel, moderately dense, wet, slight odor odor below -8 feet, no sheen.	Tyler Day DRILL BIT(S) SIZE 2-Inch FROM NA TO NA FROM NA TO NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA FROM NA		Dece	ption	Pass I	Marina, Corne	t Bay, WA	ויפח ו	IED			Boring Name	KJ-B41
DRILLIBRITS) SIZE Direct-Push SOLATION CASING N/A BLANK CASING N/A SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A SAMPLES TYPE RECON/ PERETRI DEPTH SAMPLE NUMBER SS 3.5 A SS 3.5 A KJ-B41-8 SS 4 A DRILL BRITS) SIZE 2-Inch Project Number ELEVATION AND DATUM bgs DATE STARTED 9/16/11 INITIAL WATER DEPTH (FT) 7. LEVATION AND DATUM bgs DATE STARTED 9/16/11 INITIAL WATER DEPTH (FT) 7. LOGGED BY DKM SAMPLING METHODS MacroCore w/liner SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SILTY SAND with gravel Tan/brown, sand, slit, gravel fill, no silty SAND with gravel Tan/brown, locally greenish-gray, moderately sore, molst, n SILTY SAND with gravel Tan/brown, locally greenish-gray, moderately sore, medium plasticity to medium sheen. SILTY SAND with gravel Gray medium to fine sand with -3 moderately dense, wet, slight odor odor below -8 feet, no sheen.	DRILL BIT(S) SIZE 2-Inch FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO		Casc	ade D				1	Tyle	r Day	· 	Project Name	Ecology Cornet Bay
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SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite GROUT N/A SAMPLES TYPE RECOVIPERIT (FEET) BLOWSS SAMPLE NUMBER SAMPLE NUMBER BACKFILL DETAILS FROM N/A TO N/A FROM N/A FROM N/A FROM N/A FROM N/A TO N/A TO N/A SAMPLING METHODS MacroCore w/liner N/A SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SAMPLE DESCRIPTION AND D SM SIITY SAND with gravel Orange/brown, slity medium to fine gravel, moderately loose, moist, n SIITY SAND with gravel Orange/brown, locally greenish-gray, moderately soft, medium plasticity to medium sheen. SIITY SAND with gravel Gray/brown, locally greenish-gray, moderately soft, medium plasticity to medium sheen. SIITY SAND with gravel Gray/brown, locally greenish-gray, moderately soft, medium plasticity to medium sheen. SIITY SAND with gravel Gray, medium to fine sand with ~3 moderately dense, wet, slight odor odor below ~8 feet, no sheen.	FROM N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A	3LANK	CASING	i				FRC	M	то	FT.	DATE STARTED	DATE COMPLETED
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SEAL Granular Bentonite GROUT N/A SAMPLES TYPE RECOV RESIST. (FEET) SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER BACKFILL DETAILS PID UTHOLOGY USCS LOG SILTY SAND With gravel Tan/brown, sand, slit, gravel fill, no gravel, moderately loose, moist, no gravel, moderately loose, moist, no sheen. KJ-B41-6 SSM FROM TO N/A FROM N/A TO N/A TO N/A SAMPLING METHODS MacroCore w/liner SAMPLE DESCRIPTION AND D SILTY SAND with gravel Orange/brown, slity medlum to fine gravel, moderately loose, moist, no gravel, moderately soft, medlum plasticity to medium sheen. SILTY SAND with gravel Orange/brown, locally greenish-gray, moderately soft, medlum plasticity to medium sheen. SILTY SAND with gravel Gray/brown, locally greenish-gray, moderately soft, medlum plasticity to medium sheen. Silty SAND with gravel Gray, medlum to fine sand with ~3 moderately dense, wet, slight odor odor below ~8 feet, no sheen.	FROM TO TO N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM TO N/A FROM N/A FROM N/A FROM N/A FROM TO N/A FROM N/A FROM N/A FROM TO N/A FROM N/A FROM N/A FROM TO N/A FROM N/A FROM N/A FROM TO N/A FROM N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A FROM TO N/A SAMPLING METHODS MACROCORE W/liner SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS Silty SAND with gravel Orange/brown, sand, silt, gravel fill, no odor, no sheen. Silty CLAY with sand Gray/brown, locally greenish-gray, silty clay, 10-15% san moderately soft, medium plasticity, moist, slight odor, light to medium sheen. Silty SAND with gravel Gray, medium to fine sand with ~30% silt, 10-15% gravel moderately dense, wet, slight odor in upper ~1 foot, no odor below ~8 feet, no sheen. Silty CLAY with sand Gray, silty clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen.	SIZE AN	ID TYPE	OF FIL	TER PA	СК		FRC	M	то	FT.	7.0	
SAMPLES TYPE RECOV PENETR (FEET) SAMPLE NUMBER BACKFILL DETAILS PID UTHOLOGY USC'S LOG SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT OF TAIL SAMPLE DESCRIPTION AND DISTRICT O	BACKFILL DETAILS PID UTROLOGY USC'S SAMPLE DESCRIPTION AND DRILLING REMARKS	SEAL						FRC	M	то	FT.	DKM	WELL COMPLETION
SAMPLES TYPE RECOV PENETR (FEET) BLOWS6 SS 3.5 SS 3.5 SS 4 N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	MBER BACKFILL DETAILS PID UNITIOLOGY USC'S SAMPLE DESCRIPTION AND DRILLING REMARKS Silty SAND with gravel Tan/brown, sand, slit, gravel fill, no odor, no sheen. Silty SAND with gravel Orange/brown, slity medium to fine sand with 5-15% gravel, moderately loose, moist, no odor, no sheen. Silty CLAY with sand Gray/brown, locally greenish-gray, slity clay, 10-15% san moderately soft, medium plasticity, moist, slight odor, light to medium sheen. Silty SAND with gravel Gray, medium to fine sand with ~30% silt, 10-15% gravel moderately dense, wet, slight odor in upper ~1 foot, no odor below ~8 feet, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen.	GROUT		ular B	<u>sentoni</u>	ite		FRC	M	ТО	FT.		☐ SURFACE HOUSING
SS 3.5 SS 4 KJ-B41-6 SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER SILTY SAND with gravel Tan/brown, sand, slit, gravel fill, no gravel, moderately loose, moist, no gravel, moderately loose, moist, no gravel, moderately soft, medium plasticity to medium sheen. SILTY SAND with gravel Orange/brown, locally greenish-gray, moderately soft, medium plasticity to medium sheen. Silty SAND with gravel Gray/brown, locally greenish-gray, moderately soft, medium plasticity to medium sheen. SILTY SAND with gravel Gray/brown, locally greenish-gray, moderately soft, medium plasticity to medium sheen. SILTY SAND with gravel Gray/brown, locally greenish-gray, moderately dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddreadly dense, wet, slight odd oddrea	Silty SAND with gravel Tan/brown, sand, slit, gravel fill, no odor, no sheen. Silty SAND with gravel Orange/brown, slity medium to fine sand with 5-15% gravel, moderately loose, moist, no odor, no sheen. Silty CLAY with sand Gray/brown, locally greenish-gray, slity clay, 10-15% sand moderately soft, medium plasticity, moist, slight odor, ligh to medium sheen. Silty SAND with gravel Gray, medium to fine sand with ~30% silt, 10-15% gravel, moderately dense, wet, slight odor in upper ~1 foot, no odor below ~8 feet, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen.	s	AMPLES		1		BACKEII I DETAILS		N/A		1		☐ STAND PIPE
SS 3.5 2.3 Silty SAND with gravel Tan/brown, sand, slit, gravel fill, no Silty SAND with gravel Orange/brown, slity medium to fine gravel, moderately loose, moist, no Silty CLAY with sand Gray/brown, locally greenish-gray, moderately soft, medium plasticity to medium sheen. SS 4 Silty SAND with gravel Gray, moderately soft, medium plasticity to medium sheen. SIITY SAND with gravel Gray, moderately soft, medium plasticity moderately dense, wet, slight odor odor below ~8 feet, no sheen.	2.3 Silty SAND with gravel Orange/brown, sllty medlum to fine sand with 5-15% gravel, moderately loose, moist, no odor, no sheen. Silty CLAY with sand Gray/brown, locally greenish-gray, sllty clay, 10-15% sand moderately soft, medlum plasticity, moist, slight odor, ligh to medium sheen. Silty SAND with gravel Gray, medlum to fine sand with ~30% silt, 10-15% gravel, moderately dense, wet, slight odor in upper ~1 foot, no odor below ~8 feet, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen.		RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	PACACILL DETAILS	PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AN	D DRILLING REMARKS
SS 3.5 SM Orange/brown, slity medium to fine gravel, moderately loose, moist, not gravel, moderately loose, moist, not gravel, moderately loose, moist, not gravel, moderately soft, medium plasticity to medium sheen. Silty CLAY with sand Gray/brown, locally greenish-gray, moderately soft, medium plasticity to medium sheen. Silty SAND with gravel Gray, medium to fine sand with ~3 moderately dense, wet, slight odor odor below ~8 feet, no sheen.	Orange/brown, sllty medlum to fine sand with 5-15% gravel, moderately loose, moist, no odor, no sheen. Silty CLAY with sand Gray/brown, locally greenish-gray, sllty clay, 10-15% san moderately soft, medlum plasticity, moist, slight odor, light to medium sheen. Silty SAND with gravel Gray, medlum to fine sand with ~30% silt, 10-15% gravel moderately dense, wet, slight odor in upper ~1 foot, no odor below ~8 feet, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen.			ELOWAR	_				//	SM			, no odor, no sheen.
SS 4 KJ-B41-6 KJ-B41-6 KJ-B41-6 Silty SAND with gravel Gray, medium to fine sand with ~3 moderately dense, wet, slight odor odor below ~8 feet, no sheen.	Gray/brown, locally greenish-gray, silty clay, 10-15% sand moderately soft, medium plasticity, moist, slight odor, light to medium sheen. Silty SAND with gravel Gray, medium to fine sand with ~30% silt, 10-15% gravel, moderately dense, wet, slight odor in upper ~1 foot, no odor below ~8 feet, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen. CL/ ML	SS	3.5		_			2.3		SM	Orang	ge/brown, slity medium to	fine sand with 5-15% t, no odor, no sheen.
KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 KJ-B41-6 Silty SAND with gravel Gray, medlum to fine sand with ~3 moderately dense, wet, slight odor odor below ~8 feet, no sheen.	Silty SAND with gravel Gray, medium to fine sand with ~30% silt, 10-15% gravel moderately dense, wet, slight odor in upper ~1 foot, no odor below ~8 feet, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen.				5-			16.8					
SS 4 - 1.2 Gray, medium to fine sand with ~3 moderately dense, wet, slight odor odor below ~8 feet, no sheen. SM -	Gray, medium to fine sand with ~30% silt, 10-15% gravel moderately dense, wet, slight odor in upper ~1 foot, no odor below ~8 feet, no sheen. Silty CLAY with sand Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen. CL/ ML					KJ-B41-6	77	61.6		CL/ ML	mode	rately soft, medium plastic	ay, silty clay, 10-15% san city, moist, slight odor, ligh
10-	Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen.	SS	4				=	1.2		SM	Gray, mode	medium to fine sand with rately dense, wet, slight o	~30% silt, 10-15% grave dor in upper ~1 foot, no
· II	Gray, slity clay, 10-15% sand and fine gravel, stiff, high plasticity, moist to wet, no odor, no sheen.				10-						-		
0.8 Gray, slity clay, 10-15% sand and		ss	4.5					0.8			Gray,	slity clay, 10-15% sand a	nd fine gravel, stiff, high , no sheen.
					_			0.6		CL/ ML	-		
					_								

PNW

KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT

KJ PNW

뎡 Gray, medium sand, moderately dense, wet, no odor, no sheen. SP BORING SS 1.5 0 Silty CLAY 0 ML Gray, slity clay with up to 10% sand and fine gravel, stiff, moderately high plasticity, molst, no odor, no sheen. ECOLOGY KJ PNW (6-87) (3-88) (8-90) SHEET __1_OF _

POPIN	IG LOCAT	TON								- Comountain
	Dece	ption Pass	s Marina, Corne	et Bay, WA	l ppi				Boring Name	KJ-B46
		Northwest	<u>, </u>				rlos		Project NameE	cology Cornet Bay
		t-Push			DRI	LL BIT(S 2-i	s) SIZE nch		Project Number	1196012*00
ISOLA.	TION CAS N/A	ING			FRO	M N/A	то	N/A	ELEVATION AND DATUM	TOTAL DEPTH
BLANK	CASING N/A				FRC		то	N/A FT.	bgs DATE STARTED	16.0 ft. bgs DATE COMPLETED
SLOTT	TED CASIN	NG			FRC	M	то	FT.	11/10/11 INITIAL WATER DEPTH (FT)	11/10/11
SIZE A		OF FILTER I	PACK		FRC	N/A	ТО	FT.	7.0	
SEAL		den Dente			FRC		ТО	N/A FT.	DKM SAMPLING METHODS	I WELL COMPLETED
GROU	Т	ular Bento	nite		FRC		ТО	16 FT.	MacroCore w/liner	WELL COMPLETION SURFACE HOUSING
	N/A SAMPLES			BACKFILL DETAILS		N/A	· .	N/A		STAND PIPE FT.
TYPE	RECOV. (FEET)	PENETR. DEPT RESIST. (FEET BLOWS/6	SAMPLE NUMBER	DIGINIEL DE VAILE	PID	LITHOLOG	USCS LOG	O:III	SAMPLE DESCRIPTION AND	DRILLING REMARKS
-							SM	Tan/b	SAND with gravel rown, sand, slit, gravel fill, I	no odor, no sheen.
- ss	4				0		1	Gray	ey SILT to tan, clayey silt with up to	10% sand and fine
							1	below	l, moderately stiff above ~9 v ~9 feet, moderate plasticit	feet, moderatiey soft y, moist to wet below ~7
					0		1	feet, r	no odor, no sheen.	
			-				1	_		
-		5	j -	-			1	-		
- ss							ML/ CL			
							1			
				흦 /// -			1	-		
			1	-			1	-		
-			-	-		NZ	1	-		3
- ss	3	10	_		0					
									y SIL T bove ~10.5 feet changing a	bruptly to gray below
		X	KJ-B46-11		0.1	Ш	ML	~10.5	feet, sandy silt, some clay, o odor, no sheen.	moderately soft to soft,
			-					Silty (CLAY	-
-			-		0.3			Gray, locally	slity clay, some thin (<2 inc , stiff, moist, no odor, no sh	hes) sandy interbeds leen.
- SS	3.5						Cľ.		. , , , , , , , , , , , , , , , , , , ,	
		,-					ML			
		X 15	KJ-B46-15		0			_		
- SS - NO 1. R	TES					/ 1	!			
1. R	Reconnais	ssance grou ately 5-10 fe	indwater sample K et bgs.	J-B46-RGW collecte	ed. So	reen s	et			
	• •	•							•	
	4									
l										
										:

KJ PNW.GDT Silty CLAY with sand SEPT 2011.GPJ 15 SP Gray-green, silty clay with 10-15% sand and fine gravel, 0 stiff to very stiff, medium plasticity, moist, no odor, no sheen. Pooriy graded SAND SS 1.5 Gray, medium sand with minor silt, moderately dense to CL/ dense, wet, no odor, no sheen. ML Silty CLAY with sand Gray-green, slity clay with 10-15% sand and fine gravel, 0 stiff to very stiff, medium plasticity, moist, no odor, no sheen. CORNET SS 3.5 20 Poorly graded SAND Gray, medium sand, minor silt overall but 10-15% silt in SP upper ~1 foot, moderately dense to dense, wet, no odor, ECOLOGY 0 no sheen. ₹ M CL/ (See next page for lithology description) ML

(6-87) (3-88) (8-90)

SHEET ___1__OF __

Projec	ct Nam	16	Е	cology Cornet	Bay P	roject	Numbe	er	1196012*00 Boring Name KJ-B47
TYPE	RECOV. (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS LOG	SAMPLE DESCRIPTION AND DRILLING REMARKS
- SS -	4		25-		-	0			Silty CLAY Gray, sllty clay with up to 10% sand (varies locally), stlff overall, locally moderately stlff to moderately soft, moderately high plasticitiy, moist to wet, no odor, no sheen. (Continued)
- - SS -	4		30-		-	0		CL/ ML	

KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11 F-40.1 (6-87) (3-88) (8-90)

SHEET __2_OF __2_

NOTES

1. Reconnalssance groundwater sample KJ-B47-RGW collected. Screen set approximately 5-10 feet bgs.

	LOCATION								- Itolinou,	//Jenks Consultai
DRILLIN	Deception G COMPANY		Marina, Corne	t Bay, WA	DRII	LER			Boring Name	KJ-B48
	ESN Nort	hwest				Car L BIT(S)			Project Name	Cology Cornet Bay
	Direct-Pu	sh				2-ln	ich		Project Number	1196012*00
	N/A				FRC	N/A		N/A FT.	ELEVATION AND DATUM bgs	TOTAL DEPTH 12.0 ft. bgs
	CASING N/A				FRC	M N/A	то	N/A	DATE STARTED 11/10/11	DATE COMPLETED 11/10/11
	ED CASING N/A				FRC	M N/A	то	N/A	INITIAL WATER DEPTH (F	
SIZE AN	ND TYPE OF F N/A	ILTER PA	CK		FRO	M N/A	то	N/A FT.	LOGGED BY	
SEAL	Granular	Bentoni	ite		FRO	м 0	то	FT. 12	DKM SAMPLING METHODS	WELL COMPLETION
GROUT	N/A				FRO	M N/A	то	N/A	MacroCore w/ilner	☐ SURFACE HOUSING ☐ STAND PIPE F
	AMPLES PENET	R. DEPTH	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS		SAMPLE DESCRIPTION AN	
TYPE	RECOV PENET (FEET) RESIS' BLOWS	T. (FEET) /61				11111111111111	LOG	Citt		D DIVILLING INCIDENCE
		_		-			SM	, -	SAND with gravei rown, sand, slit, gravei fili	, no odor, no sheen.
ss	3.5	-		골 -	1.2		CL/ ML	Gray,	CLAY with sand slity clay with up to 15% s rately stiff to stiff, moist, n	sand and fine gravel, o odor, no sheen.
		M	KJ-B48-3	-	282.7				graded SAND with grave	el rel mainly in upper ~1 foot,
						 : : : :	sw	some	silt, moderately dense, w	
		5-		-	88.0		1 "	no sh	een below ~5 feet.	am oneon above to look
ss	3	-		-				-		
		-		-	1.2		ML	Brown		oody material, moderately
					0,0			<u> </u>	vet, no odor, no sheen. y graded SAND with gra	wol
		_		-	0.3		SP	Gray,	sand with up to 15% grav rately dense, wet, no odor	el and some silt,
SS	3	10-		-	0		CL/ ML	Gray,	CLAY with sand silty clay with 10-15% sar tiff, medium plasticity, mo	
NOT 1. R.		ce grour 5-10 fee	ndwater sample K	J-B48-RGW collec	ted. S	creen se	et			

NOTES

1. Reconnalssance groundwater sample KJ-B48-RGW collected. Screen set approximately 5-10 feet bgs.

Deception Pass Marine, Cornet Bay, WA PORILLER GLOSS DORILLER GLOSS DORILLER GLOSS DORILLER GLOSS DORILLER GLOSS DORILLER GLOSS DORILLER GLOSS DORILLER GLOSS DORILLER GLOSS DORILLER GLOSS DORILLER GLOSS PROM NAT NAFT. SEAN CASNAG FROM NAT NAFT. SEAN CASNAG FROM NAT NAFT. SEAN CASNAG FROM NAT NAFT. SEAN CASNAG FROM NAT NAFT. SEAN CASNAG FROM NAT NAFT. SEAN GRANDER DORINLER GLOSS SEAN GRANDER DORINLER GLOSS SEAN GRANDER DORINLER GLOSS SEAN GRANDER DORINLER GLOSS SEAN GRANDER GLOSS SEAN GRANDER GLOSS SEAN GRANDER GLOSS SEAN GRANDER GLOSS SEAN GRANDER GLOSS SEAN GRANDER GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN GLOSS SEAN G	BORING	G LOCA	TION										
DRILLE BIT(S) SIZE Z-Inch Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver Driver	DRILLIN	NG COM	/PANY		Marina, Corne	t Bay, WA	DRII	LLER				Boring Name	KJ-B49
Direct-Puish 2-Inch N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A TO N/A T	DRILLIN						DRII	C	arlo	S		Project NameE	cology Cornet Bay
BLANK CASING N/A BLANK CASING N/A SLOTTED CASING N/A SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite GROUT N/A SAMPLES TYPE RECOVER RESIST, FEET SAMPLE NUMBER SAMPLE NUMBER BACKFILL DETAILS PID UNIDCOOT USCS LOG SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE SECONT, RESIST, FEET SAMPLE NUMBER SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS SILT Tan/brown, sand, slit, gravel fill, no odor, no sheen. SM Clayer SILT with sand Tan/gray in upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fire gravel, increased sand in bottom -1 foot, noderately soft, moist to wet below -7 feet, no odor, no sheen.		Dire	ct-Pus	h				2-	-Inc	<u>h</u>		Project Number	1196012*00
SLOTTED CASING SLOTTED CASING N/A SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite GROUT N/A SAMPLES TYPE FECON/RESST. FEETT TYPE FECON/RESST. FEETT TYPE FEETT SAMPLE NUMBER BACKFILL DETAILS PID UNICOCOT USCS SAMPLE DESCRIPTION AND DRILLING REMARKS SILT Tan/brown, sand, slit, gravel fill, no odor, no sheen. SM Sandy SILT Tan, slit with fine sand, stiff, crumbly, dry to slightly moist, no odor, no sheen. SS 2.5 10- 0 MIL TIME TO N/A SAMPLE DESCRIPTION AND DRILLING REMARKS SILT Tan/brown, sand, slit, gravel fill, no odor, no sheen. Clayer SILT with sand Tan/gray in upper 2-3 feet grading to gray, clayery silt with up to 15% sand and fire gravel, increased sand in bottom -1 foot, moderately soft, moist to wet below -7 feet, no odor, no sheen.	1	N/A					FRC			го 	N/A FT.		TOTAL DEPTH
N/A SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite FROM N/A TO N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A SAMPLEN METHODS MacroCore w/liner DEPTH SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS SILT TYPE RECOV. RESIST. (FEET) SAMPLE DESCRIPTION AND DRILLING REMARKS SILT Tan/brown, sand, slit, gravel fili, no odor, no sheen. SM Sample DESCRIPTION AND DRILLING REMARKS SILT Tan, slit with fine sand, sliff, crumbly, dry to slightly molst, no odor, no sheen. Clayey SiLT Tan/gray in upper 2-3 feet grading to gray, clayey slit with up to 15% and and fine gravel, increased sand in bottom -1 foot, moderately soft, moist to wet below -7 feet, no odor, no sheen.	BLANK		G				FRC		/A	го	N/A FT.	DATE STARTED	DATE COMPLETED
SIZE AND TYPE OF FILTER PACK N/A SEAL Granular Bentonite FROM N/A TO N/A FROM TO N/A FROM TO N/A TO N/A TO N/A TO N/A TO N/A SAMPLING METHODS USUNFACE HOUSING USCO SAMPLE DESCRIPTION AND DRILLING REMARKS SILTY SAND With gravel Tan/brown, sand, slit, gravel fill, no odor, no sheen. SM Sandy SILT Tan, slit with fine sand, stiff, crumbly, dry to slightly molst, no odor, no sheen. SS 2.5 Ciayey SILT with sand Tan/gray in upper 2-3 feet grading to gray, clayey slit with up to foot, moderately soft, moist to wet below ~7 feet, no odor, no sheen. SS 2.5 SS 2.5 MIL Ciayey SILT with sand Tan/gray in upper 2-3 feet grading to gray, clayey slit with up to sign to moderately soft, moist to wet below ~7 feet, no odor, no sheen. SM MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL CIAYERS MIL MIL MIL MIL MIL MIL MIL MI	SLOTTI	ED CAS	ING	•			FRC	M	1	ГО	FT.		11/10/11
SEAL Granular Bentonite FROM TO TO TO TO TO TO TO	SIZE A	ND TYP	E OF FIL	TER PA	СК	· · · · · · · · · · · · · · · · · · ·	FRC	M		го	FT.	7.0	
GROUT N/A SAMPLES TYPE RECOVIDENT RESIST. (FEET) BLOWS6 SAMPLE NUMBER BACKFILL DETAILS PID UNKNOW LOG LOG SAMPLE DESCRIPTION AND DRILLING REMARKS SAMPLE DESCRIPTION AND DRILLING REMARKS SILT Tan/brown, sand, slit, gravel fill, no odor, no sheen. SM Sandy SILT Tan, slit with fine sand, stiff, crumbly, dry to slightly moist, no odor, no sheen. SS 2 Clayey SILT with sand Tan/gray in upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom -1 foot, moderately soft, moist to wet below -7 feet, no odor, no sheen.	SEAL						FRC			го	FT.	DKM	1
N/A N/A DESTAND PIPE FIT SAMPLES TYPE RECOVERING (FEET) SAMPLE NUMBER BACKFILL DETAILS PID UNBOON USCS (FEET) BLOWS SAMPLE DESCRIPTION AND DRILLING REMARKS SILTY SAND With gravel Tan/brown, sand, slit, gravel fill, no odor, no sheen. SM Sandy SILT Tan, slit with fine sand, stiff, crumbly, dry to slightly molst, no odor, no sheen. SS 2 2 Clayey SILT with sand Tan/gray in upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom -1 foot, moderately soft, moist to wet below -7 feet, no odor, no sheen. ML	GROUT	ſ	nular B	sentoni	te		FRO	M		го	FT.		F
TYPE RECOVER RESET. (FEET) SAMPLE NUMBER SAMPLE DESCRIPTION AND DRILLING REMARKS SILTY SAND with gravel Tan/brown, sand, slit, gravel fill, no odor, no sheen. SM Sandy SILT Tan, slit with fine sand, stiff, crumbly, dry to slightly moist, no odor, no sheen. SS 2 Clayey SILT with sand Tan/gray in upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom -1 foot, moderately soft, moist to wet below -7 feet, no odor, no sheen. ML ML Clayey SILT with sand Tan/gray in upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom -1 foot, moderately soft, moist to wet below -7 feet, no odor, no sheen.								<u>N/</u>	/Α		N/A	Made do do William	☐ STAND PIPE FT.
SS 2.5 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOL	OGY	USCS LOG			DRILLING REMARKS
SS 2.5													no odor, no sheen.
SS 2.5 2.5 3 2.5 3 2.5 3 3 3 3 3 3 3 3 3	-			_						SM		, , , . , . , .	
Tan, sllt with fine sand, stiff, crumbly, dry to slightly molst, no odor, no sheen. SS 2 Clayey SILT with sand Tan/gray In upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom ~1 foot, moderately soft, moist to wet below ~7 feet, no odor, no sheen. ML SS 2.5 10- O ML/ CL	- ss	2.5		-			0			JIVI	-		
Tan, slit with fine sand, stiff, crumbly, dry to slightly molst, no odor, no sheen. Clayey SILT with sand Tan/gray In upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom ~1 foot, moderately soft, moist to wet below ~7 feet, no odor, no sheen. ML/ CL				-		-					L		
SS 2 Clayer SILT with sand Tan/gray In upper 2-3 feet grading to gray, clayer silt with up to 15% sand and fine gravel, increased sand in bottom ~1 foot, moderately soft, moist to wet below ~7 feet, no odor, no sheen. ML Clayer SILT with sand Tan/gray In upper 2-3 feet grading to gray, clayer silt with up to 15% sand and fine gravel, increased sand in bottom odor, no sheen. MIL CL MIL CL							0						phiv dry to slightly moist
SS 2 Clayey SILT with sand Tan/gray In upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom ~1 foot, moderately soft, moist to wet below ~7 feet, no odor, no sheen. ML/ CL										ML	no od	or, no sheen.	ibly, dry to slightly moist,
Clayey SILT with sand Tan/gray In upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom ~1 foot, moderately soft, moist to wet below ~7 feet, no odor, no sheen. ML/ CL				5-							_	·	
Tan/gray In upper 2-3 feet grading to gray, clayey silt with up to 15% sand and fine gravel, increased sand in bottom ~1 foot, moderately soft, moist to wet below ~7 feet, no odor, no sheen. ML/ CL -	- ss	2		-		-			k		Clave	v SII T with sand	
- SS 2.5 10 0 ML/ - CL	-					모	٥		1		Tan/a	ray in upper 2-3 feet grading	g to gray, clayey silt with
- SS 2.5 10- ML/ - CL						-	U		/		~1 foc	ot, moderately soft, moist to	ncreased sand in bottom wet below ~7 feet, no
		1		-							_ odor,	no sheen.	
KJ-B49-13 O CL Silty CLAY Gray, slity clay with up to 10% sand and fine gravel, stiff.	-			-		-			4		_		
KJ-B49-13 O CL Silty CLAY Gray, slity clay with up to 10% sand and fine gravel, stiff.	- ss	2.5		10-						ML/	_		
- SS 3 Silty CLAY CL/ Gray, silty clay with up to 10% sand and fine gravel, stiff.									1	CL			
SS 3 Silty CLAY CL/ Gray, silty clay with up to 10% sand and fine gravel, stiff.							0		1		_		
SS 3 Silty CLAY CL/ Gray, silty clay with up to 10% sand and fine gravel, stiff.		1		-		+			4		_		
SS 3 - KJ-B49-13 - 0 - Silty CLAY - Gray, silty clay with up to 10% sand and fine gravel, stiff, molst, no odor, no sheen.	-								1		-		
Silty CLAY CL/ Gray, sllty clay with up to 10% sand and fine gravel, stiff, molst, no odor, no sheen.	۔ وو			XI J	KJ-B49-13		0		4		_		
15- CL/ Gray, slity clay with up to 10% sand and fine gravel, stiff, molst, no odor, no sheen.	55	"						1	1		Silty (CLAY	
				15-						CL/ ML	Gray,	siity clay with up to 10% sa	nd and fine gravel, stiff,
		<u></u>					· ·	<u> </u>	<u> </u>			caci, no onoon.	

ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/1

PN

Kennedy/Jenks Consultants

BORING	LOCAT Dece	rion eption	Pass I	Marina, Corne	t Bay, WA					Boring Name	KJ-B51
DRILLIN	IG COM	PANY North				DRI	LLER Cari	los		1	cology Cornet Bay
DRILLIN	IG METH					DRI	LL BIT(S) 2-In	SIZE			1196012*00
ISOLATI	ION CAS		11		***************************************	FRO	DM MC	TO	N/A FT.	Project Number	TOTAL DEPTH
BLANK (;			•	FRO		то	N/A FT.	bgs DATE STARTED	12.0 ft. bgs
SLOTTE	N/A D CASI	NG				FRO		то	N/A FT.	11/10/11	11/10/11
SIZE AN	N/A ID TYPE	OF FIL	TER PA	CK		FRO	N/A	то	N/A FT.	INITIAL WATER DEPTH (FT) 6.0)
SEAL	N/A					FRO	N/A	TO	N/A FT.	LOGGED BY DKM	
GROUT		ular E	entoni	ite		FRO	0	TO	12	SAMPLING METHODS	WELL COMPLETION SURFACE HOUSE
	N/A					FRC	N/A	10	N/A TI	MacroCore w/ilner	☐ STAND PIPE
TYPE	RECOV. (FEET)		DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AND	DO DRILLING REMARKS
		BLOWGIO					Щ	ML		y SILT sandy topsoil with grass.	
•			-				: • :		F	graded SAND with gravel	
ss	2		-				• : :		Tan,	sand with 25-30% gravel, s e, molst, no odor, no sheen	some silt, moderately
.			_			0	: • ::			,	
l						J		sw			
]. · :				
.			5-						-		
- ss	3		_		후 //////// -	0	1:		-		
			L -						- Silty	SAND	
			X	KJ-B51-7		0		sм		slity fine sand, moderately	loose, wet, no odor,
						0		-cı/		 Clay	
			-	,			H	ML	Grav.	slity clay with up to 10% s rately soft, wet, no odor, no	and and fine gravel, o sheen.
- ss	3.5		10-					CL/	Slity	CLAY	
.			-			0		ML	Gray,	silty clay with 5-15% sand y), stiff, moderately high pla	and fine gravel (variasticity, moist, no oda
									sheer	1 . ·	
-	,										
							٠				
-40.1 6-87) (3-88	B) (8-90)									SH	HEET1OF

BORIN	G LOCAT	TION									
DUNIN			Pass	Marina, Corne	et Bav. WA					Boring Name	KJ-B52
DRILLI	NG COM		•			DRII	LLER			Boring Name	TO-DOZ
	ESN	North	west				Carl			Project NameE	cology Cornet Bay
DRILLIN	NG METH	HOD(S)	·			DRII	LL BIT(S)				
1001.47			<u>h (adv</u>	ranced by hand	<u>d)</u>	<u> </u>	2-In			Project Number	1196012*00
ISOLAT	ION CAS N/A	SING				FRO		то	NI/A FT.	ELEVATION AND DATUM	TOTAL DEPTH
BLANK	CASING	<u> </u>				FRO	<u>N/A</u>	то	N/A	bgs	7.0 ft. bgs
DENIN	N/A	,				FRU	N/A	10	N/A FT.	DATE STARTED	DATE COMPLETED
SLOTT	ED CASI	NG		-		FRO		то	FT.	11/10/11	11/10/11
	N/A					'''	N/A	10	N/A TI	INITIAL WATER DEPTH (FT)	
SIZE AN		OF FIL	LTER PA	CK		FRO	M	то	FT.	3.0	
<u> </u>	N/A					<u> </u>	N/A		N/A	LOGGED BY DKM	
SEAL	C	lan F	1-m4-m	!1_		FRO		то	_FT.	SAMPLING METHODS	THE LOCKET STON
ODO! IT		ular b	<u>Bentoni</u>	te	,	<u> </u>	0				WELL COMPLETION
GROUT	N/A					FRO		то	NI/A FT.	MacroCore w/ilner	☐ SURFACE HOUSING
	SAMPLES					Щ_	N/A		N/A		STAND PIPE FT.
			DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS		CAMPLE DECODIDATION AND	SSULE SELLENG
TYPE	(FEET)	PENETR. RESIST. BLOWS/6	(FEET)	SAMPLE NOWBER			LIHOLOGI	LOG		SAMPLE DESCRIPTION AND	DRILLING REMARKS
<u> </u>	+	DLUVIA	\vdash				 		Wall-	graded SAND with gravel	
	. '	'	1 '	[]		1	` . · .			rown, sand with 25-30% gra	aval same allt
F	. [1	ا ا	1		1	 ∙∙. ⁺∤	1		rately dense, moist to wet, r	
1	'	!	'			1	∤·∵¹	ĺ	111000	atory doriso, moist to mat, i	io oddi, no sneen.
ss	2	1 1				1	1 1	sw	L		
	'		'	[]		,	. ` .				
L	'	!	1 - 1	. 1	후 //////	0	h 1	l			
1 1	1 /	1	1 1		₹	0		l			
	<u> '</u>	<u> </u>	<u> </u>			-	<u> </u>	1			
	T		1 7	1				F	Silty S	SAND	
1	.] /	1 1	1 _ !	ı J		1			, -	silty fine sand, moderately I	loose, wet, slight odor, no
r _	1	1	5-	1		6.6		SM	sheen	i.	, , , , , , , , , , , , , , , , , , ,
SS	2	1 1	IXI I	KJ-B52-5		-		!			
t l	.] !	1 <i>1</i>	۲ ۲	i		-			Silty C	PLAV	
1 1		1 1	1	i		0	I/I	CL/ ML		silty clay with up to 10% sa	and and fine groups stiff
	<u> </u>							1411	moist.	no odor, no sheen.	nd and mie graver, sun,
NOT	FEC							,	\	no oder, no oncor.	

NOTES

1. Top of boring approximately 3-4 feet below site grade adjacent to pond area.

F-40.1 (6-87) (3-88) (8-90)

KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11

BORING	LOCAT										
		ption	Pass I	Marina, Cornet	Bay, WA	וומח	LER			Boring Name	KJ-B53
	ESN	North:	west			ł	Car			Project NameE	cology Cornet Bay
ORILLIN	IG METH Direc	lOD(S) t-Pusl	<u>1</u>			DRIL	L BIT(S) 2- i n			Project Number	1196012*00
SOLATI	ION CAS					FRO		то	N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH
BLANK (CASING	i				FRO	М	то	FT.	bgs DATE STARTED	12.0 ft. bgs DATE COMPLETED
SLOTTE	N/A D CASII	NG				FRO		то	N/A FT.	11/10/11	11/10/11
SIZE AN	N/A ID TYPE	OF FIL	TER PA	CK		FRO	N/A	то	N/A FT.	INITIAL WATER DEPTH (FT) 5.0	
SEAL	N/A					FRO	N/A	то	N/A FT.	LOGGED BY DKM	
		ular B	entoni	te			0		12	SAMPLING METHODS	WELL COMPLETION SURFACE HOUSING
GROUT	N/A					FRO	N/A	то	N/A FT.	MacroCore w/liner	☐ STAND PIPE
TYPE	RECOV. (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	uscs Log		SAMPLE DESCRIPTION AND	DRILLING REMARKS
					_		, 5,	GW		graded GRAVEL n/orange, gravel/sand fill.	
_								ML	SILT	n, silt with up to 10% sand a	and fine gravel stiff
ss	3.5		=			0	·	1	slight	y moist, no odor, no sheen	
			abla	KJ-B53-3	-		: : :	sw		g <mark>raded SAND with gravel</mark> n/gray/orange-brown (layer	
_			Δ _	1/0-000-0		0.9			gray b	pelow ~3 feet, sand with 25 rately dense, moist, slight of	-30% gravel, some slit,
			. 5-		꽃 💹 -			 	below	~3 feet.	
			. •		-	0		sм	_	SAND slity fine to medium sand,	abundant shell fragment
SS	3.5		_						mode	rately dense, moist to wet,	no odor, no sheen.
			_					ļ	SILT		
	_		-			0				n, silt with abundant woody no odor, no sheen.	material, moderately so
								ML			
1								İ			
SS	2		10-			0		 		y SILT with sand	
			-			0		ML/ CL	Gray/	green, clayey slit with 15-26 noist, no odor, no sheen.	0% sand, minor gravel,
NO1 1. R	res econna pproxim	Ilssanc lately 5	e groun i-10 fee	dwater sample K	(J-B53-RGW collec	eted. S	creen se	et .			

NOTES

1. Reconnalssance groundwater sample KJ-B53-RGW collected. Screen set approximately 5-10 feet bgs.

PODIN	IG LOCA	TION									yroomic Comountari
	Dece	eption Pa	ass I	Marina, Corne	t Bay, WA					Boring Name	KJ-B54
DRILLI	NG COM ESN	PANY Northw	əst			DRI	LLER Ca	arlos		_	Ecology Cornet Bay
DRILLI	NG MET		-		11 (A) d 1	DRI	LL BIT(S	S) SIZE			
ISOLA	TION CA					FRO	OM .	TO	FT.	Project Number	
BLANK	N/A CASING	}				FRO	N/A	<u>4</u> то	N/A FT.	ELEVATION AND DATUM bgs	TOTAL DEPTH 12.0 ft. bgs
	N/A ED CASI						N/ <i>A</i>	4	N/A	DATE STARTED 11/10/11	DATE COMPLETED 11/10/11
ł	N/A					FRO	ом <u>N/A</u>	то	N/A	INITIAL WATER DEPTH (F	
SIZE A	ND TYPE N/A	OF FILTE	R PA	CK		FRO	OM N/A	OT A	N/A	3.0 LOGGED BY	
SEAL	Gran	ular Ber	ntoni	te		FRO	DM	ТО	12 FT.	DKM SAMPLING METHODS	WELL COMPLETION
GROUT	Т	<u>u,u, </u>	10111			FRO	DM	TO	FT.	MacroCore w/liner	☐ SURFACE HOUSING
	N/A SAMPLES		1	·	BACKFILL DETAILS	<u> </u>	N/ <i>A</i>		N/A		☐ STAND PIPE FT.
TYPE	RECOV (FEET)	PENETR. DI RESIST. (F BLOWS/6	EET)	SAMPLE NUMBER	BACK IEE BETAILS	PID	LITHOLOG	USCS LOG		SAMPLE DESCRIPTION AN	D DRILLING REMARKS
-			-		-			ML ———	Silty	y SILT sandy topsoll with grass.	
- S S	1.5						[]	gw		graded GRAVEL with sa n, gravel and sand fill, mo	n d derately dense, molst, no
	''Ŭ					0	M	CL/	odor,	no sheen. ————————————	
1			+		<i>-</i>			ML	Siity Brown	CLAY n, silty clay, stiff, moist, no	odor, no sheen
i	H		-		-	0	-		Silty	SAND with gravel	
-			5-		-			SM	Dark I	prown, sllty sand with grav	vel, loose, wet, no odor, no
									Siity	SAND	
- SS	3.5	М	1	KJ-B54-6		0			Gray/g	green, silty fine sand, som	e gravel, moderately
F			-		-	U		SM	loose,	wet, no odor, no sheen.	
								1	Sandy	/ clayey SiLT	
			1	·		0		ML/ CL	- Gray,	silt with sand and clay, m no sheen.	oderately soft, wet, no
- ss	3		10-					1	- Silty (
						^		CL/ ML	Gray,	sllty clay with up to 10% s tiff, molst, no odor, no she	sand and fine gravel, stiff to
_						0	И	IVIL	73,70	an, moist, no odor, no sine	Jon.
	<u></u>		١	J			VA_{\perp}				
7											
2											
200											
à											
50											
										•	,
NATION ECOLUGI CORNEL BAT BORING LOGS SEPT 2011.GPJ KJ PNW.GDJ 12/13/17											
Ž											

BORING LOCATION		***************************************	-			_		
	n Pass Marina, Cornet	Bay, WA	DRIL	LEB		Boring Name	KJ-B55	
DRILLING COMPANY ESN Nort	hwest			Carlos		Project NameE	cology Cornet Bay	
RILLING METHOD(S Direct-Pu			DRIL	L BIT(S) SIZE 2-Inch		Project Number	1196012*00	
SOLATION CASING N/A			FRO	м то N/A	N/A FT.	ELEVATION AND DATUM	TOTAL DEPTH 12.0 ft. bgs	
LANK CASING N/A	`		FROM TO FT		N/A FT.	bgs DATE STARTED	DATE COMPLETED	
LOTTED CASING N/A			FRO		N/A FT.	11/10/11 INITIAL WATER DEPTH (FT	11/10/11	
IZE AND TYPE OF F	ILTER PACK		FRO		N/A	3.0 LOGGED BY		
EAL	Bentonite		FRO		12 FT.	DKM SAMPLING METHODS WELL COMPLETION		
ROUT	Bentonite		FRO		FT.		☐ SURFACE HOUSING	
N/A SAMPLES	SAMPLES BACKELL DETAILS				IN/A		•	
TYPE RECOV PENET RESIS	R. DEPTH T. (FEET) SAMPLE NUMBER		PID	LITHOLOGY USCS LOG		SAMPLE DESCRIPTION AND	D DRILLING REMARKS	
				- - - ML_	h	y SILT y sllt topsoll with grass.		
	-	-	-	. sw	Weii-	graded SAND with grave		
SS 3	-	-	-	C⊔	Brown molst	n, sand with up to 40% gra , no odor, no sheen.	vel fill, moderately dense	
		후 🎾 -		ML	Silty	CLAY		
	KJ-B55-3		367.2	•	Brown to stif	n, silty clay, some sand an f, molst, no odor, no sheer	d gravel, moderately stlff ગ.	
						graded SAND with grave		
	5-	-	81.7	. · SW	prese	sand with 25-30% gravel, ent locally, moderately den	se, wet, moderate odor	
SS 3	-	-	01.7		decre	easing below ~5 feet, light s	sneen above ~5 feet.	
		-				SAND	nobes woody material at	
			0.2			n/gray, silty fine sand, ~3 i noderately loose, wet, no c		
				SM				
	1		1					
ss 1	10-	<i>-</i>	1		H			
		-	0	<u> </u>		CLAY	-	
				CL/ ML	Gray,	, silty clay with up to 10% s , no odor, no sheen.	sand and fine gravel, stiff,	
NOTES 1. Reconnaissar approximately	nce groundwater sample h	(J-B55-RGW collec	cted. S	creen set				

NOTES1. Reconnaissance groundwater sample KJ-B55-RGW collected. Screen set approximately 5-10 feet bgs.

BORING			Pass	Marina, Corne	t Bav. WA					Boring Name	KJ-B56	
DRILLIN						DRIL	LER			Doing Name		
	ESN	North					Car			Project NameE	cology Cornet Bay	
DRILLIN	IG METI	HOD(S)				DRIL	L BIT(S)	SIZE		1		
		t-Pùś	<u>h</u>			<u> </u>	2-In			Project Number	1196012*00	
ISOLAT	ION CAS N/A	SING				FROM TO F			NI/A FT.	ELEVATION AND DATUM	TOTAL DEPTH	
BLANK		<u> </u>							FT.	bgs	8.0 ft. bgs	
DENTITY	N/A	•				N/A			N/A	DATE STARTED	DATE COMPLETED	
SLOTTE		NG				FROM TO			FT.	11/11/11	11/11/11	
	N/A					ļ	N/A		N/A	INITIAL WATER DEPTH (FT) 3.0		
SIZE AN	ID TYPE N/A	OF FIL	.TER PA	CK		FRO	M N/A	то	N/A FT.	LOGGED BY		
SEAL	14//	-				FRO		ТО	FT.	DKM		
	Gran	ular B	entoni	te		1100	~ 0	10	8 ''	SAMPLING METHODS	WELL COMPLETION	
GROUT						FRO		то	FT.	MacroCore w/liner	☐ SURFACE HOUSING	
	N/A						N/A		N/A		STAND PIPE FT.	
	AMPLES				BACKFILL DETAILS	PID						
TYPE	RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER		PID UTHOLOGY USCS LOG				SAMPLE DESCRIPTION AND	DRILLING REMARKS	
						1 4 84			Sand	y SILT	-	
L							$\lceil \lfloor \lfloor \rfloor \rfloor \rfloor$	WIL	Sandy	y sllt topsoll with grass.		
]				[· · ·]		Weli-	graded SAND with gravel		
- ss	2					_	• • •	sw	1	n/gray, sand with up to 40%	gravel fill, some silt.	
33	^					0		300	mode	rately dense, moist, no odo	r, no sheen.	
_			L, _		-		٠,٠,					
			M I	KJ-B56-3	<i>₹ ((((((((((((((((((((((((((((((((((((</i>					y SILT		
				NO-DOO-5		0		ML/	Brown	n, clayey sllt with up to 10%	sand and fine gravel,	
	l						L(L)	CL	mode	rately stiff, molst to wet, no	odor, no sheen.	
L I			5-				I NY	L	L			
i i			5-				HZ		Claye	y SILT with sand		
- ss	3						NM	ML/ CL	Gray/	green, clayey sllt with 15-20)% sand and fine gravel,	
"	ľ			İ					mode	rately stiff, wet, no odor, no	sheen.	
L			1			0		CL∕		CLAY with sand		
	1					٠		ML	Gray/g	green, slity clay with up to 1	5% sand and fine gravel,	
			١ .						Stiff, N	molst, no odor, no sheen.		

OGY CORNET BAY BORING LOGS SEPT 2011.GPJ 1

F-40.1 (6-87) (3-88) (8-90)

		ption	Pass	Marina, Corne	t Bay, WA	I =				Boring Name	KJ-B57
		North	west				LER Car	los		_	Ecology Cornet
DRILLI	NG METH Direc	t-Pus	า			DRIL	L BIT(S) 2-In	SIZE		Project Number	1196012*00
ISOLAT	TION CAS N/A					FRO		TO	N/A	ELEVATION AND DATUM	TOTAL DEPTH
BLANK	CASING N/A	l				FRO		то	N/A	bgs DATE STARTED	8.0 ft. I
SLOTT	ED CASI	NG				FRO	M	то	FT.	11/11/11 INITIAL WATER DEPTH (F	11/11
SIZE AI	N/A ND TYPE	OF FIL	TER PA	CK		FRO	N/A M	ТО	N/A FT.	3.0	1)
SEAL	N/A					FRO	N/A M	то	N/A FT.	LOGGED BY DKM	
GROUT	T	ular B	enton	ite		FRO	<u>О</u>	TO	8 FT.	SAMPLING METHODS MacroCore w/liner	WELL COMPLET ☐ SURFACE HO
	N/A SAMPLES					1	N/A	1	N/A	Waciocole Willier	☐ STAND PIPE
TYPE	RECOV. (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	BACKFILL DETAILS	PID	LITHOLOGY	USCS LOG	_l	SAMPLE DESCRIPTION A	ND DRILLING REMARKS
- - SS -	1		-		-	0		SM		SAND with gravei rown, sand, sllt, gravel fil	l, no odor, no shee
			_ 5−					ML	Gray,	y SiLT with gravei sand/silt mixture, some o	gravel, very soft, we
			M	KJ-B57-5		0		SM	\	no sheen SAND with gravel	· · · · · · · · · · · · · · · · · · ·
· SS	3.5		_						│ Dark I	prown, sand with 30-40% rately dense, wet, no odo	silt and some grav
-						0		CL/ ML	Silty (CLAY with sand green, sllty clay with up to very stlff, moist, no odor	o 15% sand and fin
										- P.,	
											1
										,	
									* 4		
									·		

BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11

ECOLOGY CORNET BAY

PNV

(6-87) (3-88) (8-90)

12/13/1

Direct-Push 2-Inch	ESN N RILLING METHO	rthwest (S)		DRII	Car L BIT(S)	los SIZF		Project NameE	cology Cornet I	
ANK CASING N/A ANK CASING N/A OTTED CASING N/A N/A ANK CASING N/A ANK CASING N/A OTTED CASING N/A N/A FROM N/A FROM N/A FROM N/A TO N/A CE AND TYPE OF FILTER PACK N/A SAMPLES RECOV PRISST. (FEET) SAMPLE NUMBER BACKFILL DETAILS PID UTRACOF CIA Brow Over SAMPLES SAMPLES SAMPLE NUMBER BACKFILL DETAILS PID UTRACOF CIA Brow Over SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES CIA Brow Over SAMPLES SAMPLES SAMPLES SAMPLE NUMBER BACKFILL DETAILS PID UTRACOF CIA Brow Over SAMPLES SAMPLES SAMPLE NUMBER BACKFILL DETAILS PID UTRACOF CIA Brow Over SAMPLES SAMPLES SAMPLES SAMPLE NUMBER BACKFILL DETAILS PID UTRACOF CIA Brow Over SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLES SAMPLE	Dlrect-	ush			2-In	<u>ich</u>		Project Number	1196012*00	
N/A OTTED CASING N/A OTTED CASING N/A OTTED CASING N/A OTTED CASING N/A OTTED CASING N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A SAMPLES SAMPLES SAMPLE SUMSE FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N/A FROM N	N/A	, , , , , , , , , , , , , , , , , , ,			N/A		N/A	ELEVATION AND DATUM bgs	TOTAL DEPTH 30.0 ft.	
N/A	N/A	, a			N/A		N/A	DATE STARTED	DATE COMPLETE 11/11/	
N/A AN/A SAL Granular Bentonite FROM TO 30 FROM N/A SAMPLES SAMPLES SAMPLES SAMPLE NUMBER BACKFILL DETAILS PID UTROLOGY USCS LOG SAMPLES SAMPLE NUMBER BACKFILL DETAILS PID UTROLOGY USCS Clay Brown Over below Sheet SAMPLE NUMBER AL Grav Grav Grav Grav mode SAMPLE NUMBER BACKFILL DETAILS PID UTROLOGY USCS LOG SAMPLE NUMBER ML Grav Grav mode SAMPLE NUMBER AL SAMPLE NUMBER SAMPLE NUMBER SAMPLE NUMBER BACKFILL DETAILS PID UTROLOGY USCS LOG SAMPLE NUMBER SAM Grav Grav mode Silty Grav mode ML Grav Silty Grav mode Silty Grav mode ML Grav Silty Grav mode Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode mode ML Grav Silty Grav mode mode mode ML Grav Silty Grav mode mode ML Grav Silty Grav mode ML Grav Silty Grav mode mode ML Grav Silty Grav mode mode mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Silty Grav mode ML Grav Grav ML Grav Silty Grav mode ML Grav Grav ML Grav Grav ML Grav ML Grav Grav ML Grav ML Grav Grav ML Grav ML Grav Grav ML Grav ML Grav Grav ML Grav Grav ML Grav Grav ML Grav Grav ML Grav ML Grav Grav ML Grav Grav ML Grav Grav ML Grav Grav ML Grav Grav ML Grav Grav ML Grav Grav ML Grav ML Grav Grav ML Grav Grav ML Grav Grav ML Gr	N/A	FILTER PACK			N/A		N/A	INITIAL WATER DEPTH (FT 6.5		
Granular Bentonite Granular Bentonite O 30 FROM N/A SAMPLES YPPE RECONS, FEBERT, FEET) BLOWS SS 3 O UTINGLOOF USCS Clay BROW DEPTH SAMPLE NUMBER BACKFILL DETAILS PID UTINGLOOF USCS Clay BROW DEPTH SAMPLE NUMBER O ML Grat Clay BROW Over Delor Shee SS 3 TO O SIIty Gray mode SS 1.5 KJ-B80-14 SS 1.5 CL/ SIIty Gray mode SS 1.5 CL/ SIIty Gray mode SS 1.5 CL/ SIIty Gray mode SS 1.5 CL/ SIIty Gray mode SS 1.5 CL/ SIIty Gray mode SS 1.5 CL/ SIIty Gray mode SS 1.5 CL/ SIIty Gray mode SS 1.5 CL/ SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SS 1.5 CL/ ML SIIty Gray mode SIIty Gray mode SIIty Gray mode SS 1.5	N/A	TITLITAGE			N/A N/A			LOGGED BY DKM		
SAMPLES SAMPLES SAMPLES SAMPLES SAMPLE NUMBER BACKFILL DETAILS PID UTHOLOGY USCS Clay Brow Over belor shee SS 3 10- 0 San Gray no si SS 2	Granul	Bentonite			0		30	SAMPLING METHODS	WELL COMPLETI	
SECON PRIDER DEPTH SAMPLE NUMBER BACK-ILL DETAILS PID	N/A SAMPLES				N/A	10	N/A FI.	MacroCore w/liner	☐ STAND PIPE	
SS 3 10- SS 2	YPE RECOV. PI (FEET) BL	TR. DEPTH ST. (FEET) SAMPLE N IS/6	IUMBER BACKFILL DETAIL	S PID	LITHOLOGY	USCS LOG		SAMPLE DESCRIPTION AND	D DRILLING REMARKS	
SS 3						ML		y SILT s and topsoil.		
S 3 10- S 3 10- S 3 10- S 3 10- S 3 10- S 3 10- S 3 10- S 3 11				-				ey SILT with sand		
S 3 10- Sant Gray no sl ML Gray no sl ML Gray no sl Silty Brow grav mode mode moisi sheet	SS 3			1 0			overa	n, clayey silt with 10-15% s II, some sandier intervals, v ~5.5 feet, moist to wet be	stiff at top, modera	
S 3 10- S 3 10- S 3 10- S 3 10- S 3 10- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3		-		-			sheer	7 0.0 1001, MOISE IO WEE DE 1.	10 00 T 1881, NO 00	
S 3 10- S 3 10- S 3 10- S 3 10- S 3 10- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3 11- S 3		_		-		ЙΓ\	-	,		
S 1.5 Silty Brow grave mode moiss sheet		5-		4		UL.	-			
S 1.5 Silty Brow grave mode moiss sheet	SS 3									
S 3 10- S 3 10- S 2			훅	0						
S 3 10- S 3 10- S 2							Cond	v Cli T with ground		
S 2		-		+			Gray,	y SILT with gravel sandy silt with 10-20% gra	avel, loose, wet, no	
S 2				-		ML	no sn	een.		
S 2 Silty Brow grave mode Silty Brow grave mode moist sheet	SS 3	10-		- 0			-			
S 2 Silty Brow grave mode Silty Brow grave mode moist sheet						CL/	- Silty (CLAY		
S 2 S S S S S S S S S				9.5			Gray,	silty clay, stiff, moist, no o	dor, no sheen.	
S							Silty S Brown	to dark brown, silty fine to	medium sand wit	
S 1.5 Silty Gray mode moist sheet						SM	├ gravel	i, brown silty material with i rately dense, wet, slight od	roots in upper 1-2	
S 1.5 Silty Gray mode moist sheet	SS 2	KJ-B60-14		21						
S 1.5 - Gray mode moist sheet		17 (1		- 3.1			Silty (- 	
S 1.5		4		-			Gray, moder	sllty clay, minor sand and grately stiff by ~25 feet, mod	Jerately high plasti	
S 3 20-KJ-B60-20	S 1.5						moist, sheen	slight odor above ~16 feet	t, no odor otherwis	
S 3 20-KJ-B60-20										
S 3 20-KJ-B60-20						CL/				
S 3 20-KJ-B60-20						ML	-			
	S 3	N /		4			-			
				-						
		4 4		0			_			
							_			
	.1 ') (3-88) (8-90)						***		EET1OF	

Projec	ct Nam	10	Е	cology Cornet	Вау	roject	Numbe	er	1196012*00 Boring Name KJ-B60
S	AMPLES				BACKFILL DETAILS				
TYPE	RECOV (FEET)	PENETR. RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER		PID	LITHOLOGY	LOG	SAMPLE DESCRIPTION AND DRILLING REMARKS
- SS -	3.5		25-		-	0			Silty CLAY Gray, sllty clay, minor sand and gravel, stiff at top, moderately stiff by ~25 feet, moderately high plasticitly, moist, slight odor above ~16 feet, no odor otherwise, no sheen. (Continued)
- SS	3.5		30-		-	0		CL/ ML	

KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11

F-40.1 (8-87) (3-88) (8-90)

SHEET __2_OF __2_

KJ PNW.GDT

KJ PNW ECOLOGY CORNET BAY

12/13/1

KJ PNW.GDT

CORNET

ECOLOGY

K PNW

- 1		LOCAT Dece	ption	Pass I	Marina, Corne	t Ba	y, WA					Well Name	MW-06		
DI	RILLIN	IG COM		rilling				DRI	LLER Tvl	er Day			cology Cornet Bay		
DI	RILLIN	IG METH						DRI	LL BIT(S 2-Ir) SIZE		Project Number	1196012*00		
īs	OLATI	ON CAS						FRO		то	N/A	ELEVATION AND DATUM	TOTAL DEPTH		
В	LANK	CASING	hedul	e 40 F	VC Pipe			FRO		то	FT. 4.5	bgs DATE STARTED	20.0 ft. bgs DATE COMPLETED		
SI	LOTTE	D CASI	NG		/C Pre-Pack 0	010	n" Slote	FRO		TO	14.5	9/15/11 INITIAL WATER DEPTH (FT	9/15/11		
SI	ZE AN	ID TYPE	OF FIL	TER PA				FRO	FROM 4		FT. 14.5	8.0 LOGGED BY			
S	EAL					anu	Above	FRO		TO	FT.	DKM SAMPLING METHODS	WELL COMPLETION		
G	Granular Bentonite GROUT Concrete								<u>1</u> Эм О	то	4 FT. 1	MacroCore w/liner	■ SURFACE HOUSING □ STAND PIPE		
<u></u>	SAMPLES TYPE RECOV RESIST. (FEET) BLOWS/6 SAMPLE NUMBER WELL CONSTRUCTION WELL CONSTRUCTION							N PID	LITHOLOG	USCS LOG		SAMPLE DESCRIPTION AND DRILLING REMARKS			
-										sw		graded SAND with grave rown, sand, silt, gravel fill,			
	ss	3		3.8 Tan								igh plasticity, moist, slight	, some gravel, moderately odor below ~3.5 feet, no		
-				5-	KJ-MW6-4			55.3		00/	Gray, grave	y graded SAND with silt fine to medium sand with , moderately dense, moist medium to heavy sheen.	10-15% silt and 5-15%		
-	SS	1		_		볼		20.1		SP/ SM	_				
_				10-							Gray,	y SILT with gravel sandy silt, 10-15% gravel, ~13 feet, soft, wet, mediu	woody material present m odor, medium sheen.		
GDT 12/13/11	ss	3		_				303		ML					
PT 2011.GPJ KJ PNW				15-	KJ-MW6-14		× × × × × × × × × × × × × × × × × × ×	3.0		ML	Green	y SILT iish-gray, silt with ~30% sa rately stiff, wet, slight to me	nd, some clay and gravel, edium odor, light sheen.		
KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11	ss	3		20-			X X X X X X X X X X X X X X X X X X X	0		CL/ ML	Silty (Gray, plastic	CLAY silty clay, 5-10% sand and sity, moist to wet, no odor,	fine gravel, stiff, high no sheen.		
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ECOLOGY CORNET BAY BORING LOGS SEPT 2011

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ECOLOGY CORNET BAY

N. N.

DRILLI	Dece	TION Option	Pass	Marina, Corne	et Bay, WA	DRIL	LER			Well Name	MW-09
	ESN	North	west	1970 -			Car	los		Project NameE	cology Cornet Ba
		ct-Pus	h				L BIT(S) 2-In	ich		Project Number	1196012*00
	TION CA N/A		******		· · · · · · · · · · · · · · · · · · ·	FRO	N/A		N/A	ELEVATION AND DATUM bgs	TOTAL DEPTH 13.0 ft. b
		chedu	le 40 F	PVC Pipe		FRO	0		3 FT.	DATE STARTED 11/9/11	DATE COMPLETED
	ED CAS 2" SI	nedule	40 P	VC Pre-Pack	0.010" Slots	FRO	3		13 FT.	INITIAL WATER DEPTH (FT 4.0	
	ND TYPI 10/2	e of fil 0 San	TER PA d (Pre	ск -Pack); 2/12 S	Sand Above	FRO	2.5		FT. 13	LOGGED BY DKM	
SEAL		ıular E	Benton	ite		FRO	м1	то	FT. 2.5	SAMPLING METHODS	WELL COMPLETIO
GROUT	Cond	crete				FRO	м 0	ТО	FT. 1	MacroCore w/liner	■ SURFACE HOU:
TYPE	RECOV (FEET)	PENETR RESIST. BLOWS/6	DEPTH (FEET)	SAMPLE NUMBER	WELL CONSTRUCTION	N PID	LITHOLOGY	USCS		SAMPLE DESCRIPTION AND	D DRILLING REMARKS
		D.C.Waru	_	·	A 500			SM		SAND with gravel rown, sand, silt, gravel fill,	no odor, no sheen.
- ss	3		_			- 0		SM		SAND	
-			-					J SIVI	Gray, grave	medium to fine sand with I, moderately dense, moist	~30% silt, minor cla t, no odor, no sheen
_			5-		₩			ML 	Brown odor,	n, silt with woody material, no sheen.	soft, moist to wet, r
- SS	3			KJ-MW9-5		0		SM	Brown	SAND n to gray, silty fine sand, so	ome gravel, soft, we
									\	no sheen. y SILT with sand	
			_						Grav/	green, clayey silt with up to I, some thin (1-2 inch) sand	o 15% sand and fine
			-						very	ettff, moist, no odor, no she	en.
-			_			-		MI/	-		
- ss	3.5		10-			-		ML/ CL	-		
_											
						0					
U											
		1	ائے ا	<u> </u>					<u> </u>		
1											
F-40.1											

	<u> </u>				3				1		· j · · · · · · · · · · · · · · · · · · ·
BORING			t Nov	t to K I Dag							VD 4
DRILLIN			it ivex	t to KJ-B36		DDI	LLER			Well Name	VP-1
DRILLIN			rilling		•	DKI		er Day	,		Ecology Cornet Bay
DRILLIN			mmig			DBI	I BIT/S	SIZE	'	Project Name	Ecology Cornet Bay
DRILLIN		ct-Pus	h			DRILL BIT(S) SIZE 2-Inch				Droiget Number	1196012*00
ISOLATI						FRO	FROM TO F			Project Number	
	N/A						N/A		N/A	ELEVATION AND DATUM	
BLANK (FRO		TO	FT.	bgs	4.0 ft. bgs
			Tubin	ng .			0		3.25	DATE STARTED 9/16/11	DATE COMPLETED 9/16/11
SLOTTE			~.			FRO		TO	FT.	INITIAL WATER DEPTH (
				l Vapor Impla	nt Screen		3.25		3.75	N/A	F1)
SIZE AND TYPE OF FILTER PACK							OM 2	то	FT. 4	LOGGED BY	
10/20 Sand							FROM TO		FT.	DKM	
Hydraded Granular Bentonite						FRC	0		3 "	SAMPLING METHODS	WELL COMPLETION
GROUT							DM M	то	FT.	MacroCore w/liner	☐ SURFACE HOUSING
	N/A						N/A		N/A	Waciocole Willie	■ STAND PIPE N/A FT.
S	AMPLES				WELL CONSTRUCTION						
TYPE	RECOV (FEET)	PENETR. RESIST. BLOWS/6	(FEET)	SAMPLE NUMBER		PID	LITHOLOGY	LOG		SAMPLE DESCRIPTION A	AND DRILLING REMARKS
									Silty	SAND with gravel	
			÷					SM	Tan/b	rown, sand, silt, gravel f	ill, no odor, no sheen.
			_				11.14.17	ı		_	
	١.								Silty	SAND with gravel	
Γ	n/a		_					SM			gravel, moderately loose,
								0	slight	y moist, slight odor, no s	sheen.
Ī			\neg	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				CL/	Silty	CLAY	
				VP-1 Cornet			V_{\parallel}	ML			me gravel, stiff, moist, slight
110-			_				1 /1	-		no sheen.	
NOT	ES										

1. Lithology based on boring KJ-B36. Refer to the boring log for KJ-B36 for additional information.

2. Vapor sampling point was installed in the boring after advancing the boring to 4 feet bgs. Bentonite granules were installed in 1-foot lifts and hydrated after each lift. Installation was completed at 0800; sample collection was performed at 0925.
3. Sample VP-1 Cornet was collected as a grab sample using a 1/2 liter SUMMA canister prepared by the analytical laboratory.

BORING			-4 N.L.								\/D 0	
DOIL IN	<u>-</u> _		it ivex	t to KJ-B35		DDII	LLER			Well Name	VP-2	
DRILLIN			Drilling	•		DIXII		er Day		Project Name	Ecology Cornet Bay	
DRILLIN	G MET					DRII	LL BIT(S) 2-In) SIZE		Project Number	1196012*00	
ISOLATI		SING				FRC	DM MC	то	FT.			
	N/A						<u>N/A</u>		N/A	ELEVATION AND DATUM bgs	TOTAL DEPTH 4.0 ft. bgs	
BLANK (1/4"	Teflor	Tubir	ng		FRC	ом О		3.25 FT.	DATE STARTED 9/16/11	DATE COMPLETED 9/16/11	
SLOTTE	6" St	ainles		el Vapor Impla	nt Screen	FRC	ом 3.25	то	3.75 FT.	INITIAL WATER DEPTH (F		
SIZE AN		OF FIL San		ACK		FRC	ЭМ <u>3</u>	то	FT. 4	LOGGED BY DKM		
SEAL	Hydr	aded	Granu	lar Bentonite		FRC	FROM TO		FT. 3	SAMPLING METHODS	WELL COMPLETION	
GROUT	N/A	·				FRC	M N/A	то	N/A FT.	MacroCore w/liner	☐ SURFACE HOUSING ■ STAND PIPE N/A FT.	
TYPE	RECOV (FEET)	DENETO	DEPTH (FEET)	SAMPLE NUMBER	WELL CONSTRUCTION	PID	LITHOLOGY	11000		SAMPLE DESCRIPTION A	ND DRILLING REMARKS	
_	n/a		-		-			SM	Tan/b	SAND with gravel prown, sand, silt, gravel fi	ll, no odor, no sheen.	
			 - -	VP-2 Cornet				CL/ ML	Gray, some	Ity CLAY with sand ray, silty clay with 10-15% medium to fine sand with ome gravel overall (variable), local thin (typically <1") terbeds of silty sand and poorly graded sand, some shell		
NOT		, booo	d on ho	ring I/ I D25 Do	for to the begins less t	or K I	D25 for	-	\ fragm	ients in lower portion, mo	derately stiff to moderately	

Lithology based on boring KJ-B35. Refer to the boring log for KJ-B35 for additional Information.

Vapor sampling point was installed in the boring after advancing the boring to 4 feet bgs. Bentonite granules were installed in 1-foot lifts and hydrated after each lift. Installation was completed at 0820; sample collection was performed at 0935.
 Sample VP-2 Cornet was collected as a grab sample using a 1/2 liter SUMMA canister prepared by the analytical laboratory.

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KJ PNW ECOLOGY CORNET BAY BORING LOGS SEPT 2011.GPJ KJ PNW.GDT 12/13/11