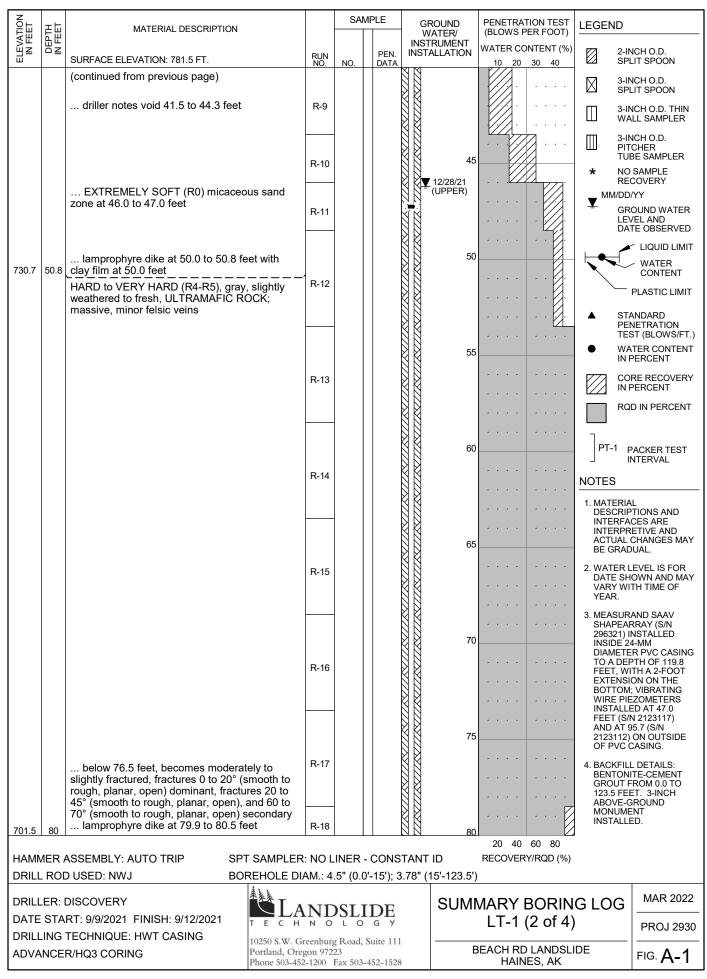


Appendix A: Summary Boring Logs

NOL	- F	····			SA	MF	PLE	G	ROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION						V INS	VATER/ TRUMENT	(BLOWS PER FOOT)		
Ш Ш Ш	٥Z	SURFACE ELEVATION: 781.5 FT.		RUN NO.	NO.		PEN. DATA		ALLATION	WATER CONTENT (%) 10 20 30 40		ICH O.D. LIT SPOON
		MEDIUM DENSE to DENSE, gray, sil to gravel-sized ROCK FRAGMENTS; subangular to angular, gravel- to cobb										NCH O.D. LIT SPOON
		rock fragments; micaceous, moist (COLLUVIUM)	JIC 51264			77	2			· · · · · · · · · · · · · · · · · · ·		NCH O.D. THIN LL SAMPLER
					S-1		2 13 9		5	. •	Ш ріт	NCH O.D. CHER 3E SAMPLER
					S-2		10 7 7					SAMPLE COVERY
					S-3		6 19 27				⊈ GR LE\	OUND WATER /EL AND TE OBSERVED
							11		10			 LIQUID LIMIT WATER CONTENT
					S-4		17 19 10					PLASTIC LIMIT
					S-5		8 17			· · · · · · · · · · · · · · · ·	PEI	ANDARD NETRATION ST (BLOWS/FT.)
766.5	15	HARD to VERY HARD (R4-R5), gray,	slightly						15			TER CONTENT PERCENT
		weathered, ULTRAMAFIC ROCK; ver highly fractured, fractures 0 to 20° (si rough, planar, open) dominant, fracture	mooth to res 30 to	R-1								RE RECOVERY PERCENT
		50° (smooth to rough, planar to undul open), and 60 to 70° (smooth to rough secondary, minor felsic veins, occasio	n, planar)									D IN PERCENT
		extremely soft micaceous sand zones joint surfaces up to 2 inches thick, min stains, minor green mineralization	nor oxide	R-2					20			PACKER TEST NTERVAL
		micaceous sand zones at 16.5, 16. 19.5, and 23.4, feet	8, 17.3,	R-3							NOTES	
		micaceous sand zones at 24.1, 25. 27.4. and 28.0 feet	9, 26.7,						25		INTERFA INTERPR	ETIVE AND CHANGES MAY
		27.4, and 20.0 leet		R-4							2. WATER L DATE SH	EVEL IS FOR OWN AND MAY TH TIME OF
				R-5							YEAR. 3. MEASUR	AND SAAV
		micaceous sand zone at 29.5 to 31	.0 feet						30		296321) I INSIDE 24	RRAY (S/N NSTALLED 4-MM R PVC CASING
				R-6							TO A DEF FEET, WI EXTENSI	PTH OF 119.8 TH A 2-FOOT ON ON THE ; VIBRATING
											WIRE PIE INSTALLE FEET (S/I	ZOMETERS ED AT 47.0 N 2123117)
									35		AND AT 9 2123112) OF PVC 0	ON OUTSIDE
		driller notes void 36.4 to 37.3 feet lamprophyre at 37.9 to 38.4 feet, at to 39.7 feet;	nd at 38.7	R-7							GROUT F	TE-CEMENT ROM 0.0 TO ET. 3-INCH
741.5	40	micaceous sand zones at 38.5 feet 39.7 to 40.3 feet	, and from	R-8					40		MONUME	NT
Нами		ASSEMBLY: AUTO TRIP SPT	SAMPLER:	NOI		_ (CONS	TANT	םו ז	20 40 60 80 RECOVERY/RQD (%)		
DRILL	ER: I	DISCOVERY				T -				MARY BORIN	GLOG	MAR 2022
DATE	STA	RT: 9/9/2021 FINISH: 9/12/2021	T E C H	ND N O			DE _G y			LT-1 (1 of 4)		PROJ 2930
	ANCER/HQ3 CORING			eenburg on 9722 -1200	23				B	EACH RD LANDSLI HAINES, AK	DE	FIG. A-1
AD VA	UNCE		Phone 503-452			3-4	52-1528	8		HAINES, AK		



NUL	тĿ	MATERIAL DESCRIPTION		SA	MF	PLE		GROUND			TION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET		_			PEN.		WATER/ ISTRUMEN STALLATIC		,	PER FOOT) ONTENT (%)		NCH O.D.
	_	SURFACE ELEVATION: 781.5 FT. (continued from previous page)	RUN NO.	NO.	-	DATA				10 20	30 40	SPI	LIT SPOON
		(continued from previous page)											NCH O.D. LIT SPOON
			R-18							· · · ·			NCH O.D. THIN ALL SAMPLER
									85			Ш ріт	NCH O.D. CHER BE SAMPLER
			R-19						00				SAMPLE COVERY
										· · · · ·	· · · · ·		OUND WATER VEL AND TE OBSERVED
		lamprophyre at 88.5 to 88.9 feet							90				
			R-20						00				 WATER CONTENT
		lamprophyre at 92.2 to 93.8 feet											PLASTIC LIMIT
											· · · · ·	PE	ANDARD NETRATION ST (BLOWS/FT.)
		major felsic veins below 93.8 feet						12/28/2	95 1			• WA	ATER CONTENT PERCENT
		very highly fractured and altered rock at felsic vein contact from 95.8 to 96.0 feet	R-21					(DRY)					RE RECOVERY PERCENT
													D IN PERCENT
									100			PT-1 F	PACKER TEST
			R-22									I	NTERVAL
		highly to moderately fractured zone with numerous healed fractures from 101.0 to 105.5 feet											
		lamprophyre at 101.3 to 105.5 feet							105			INTERFA INTERPR	PTIONS AND CES ARE RETIVE AND CHANGES MAY
			R-23									2. WATER L DATE SH	LEVEL IS FOR IOWN AND MAY TH TIME OF
												YEAR.	
									110				RRAY (S/N NSTALLED
			R-24									DIAMETE TO A DEF	ER PVC CASING PTH OF 119.8 ITH A 2-FOOT
												EXTENSI BOTTOM	ON ON THE ; VIBRATING
												INSTALL	EZOMETERS ED AT 47.0 N 2123117)
									115			AND AT 9 2123112) OF PVC 0	ON OUTSIDE
			R-25									4. BACKFIL	
		lamprophyre at 117.5 to 118.5 feet									· · · · ·	GROUT F 123.5 FEI	FROM 0.0 TO ET. 3-INCH
		······································	D 00									ABOVE-O MONUME INSTALLI	ENT
661.5	120		R-26				Ø.S	, ,	120	20 40	60 80		
		ASSEMBLY: AUTO TRIP SPT SAMPLER							5 12	RECOVER	RY/RQD (%)		
		DUSED: NWJ BOREHOLE DI	4IVI.: 4	.ɔ ̈ (U.	.0'-	15); (3.78					0105	MAR 2022
		DISCOVERY RT: 9/9/2021 FINISH: 9/12/2021	ND	۶L		DE		SU	MN		BORIN (3 of 4)	G LOG	PROJ 2930
		TECHNIQUE: HWT CASING R/HQ3 CORING Portland, Ore			l, Sı	uite 11	1		В				
		Phone 503-452			3-4	52-152	8				IES, AK		FIG. A-1

NOL	TH			S	AMPLE	GROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION				WATER/ INSTRUMENT	(BLOWS PER FOOT)		
ЩЦ	۵≧	SURFACE ELEVATION: 781.5 FT.	RUN NO.	NO.	PEN. DATA	INSTALLATION	WATER CONTENT (% 10 20 30 40		NCH O.D. LIT SPOON
		(continued from previous page)							NCH O.D. LIT SPOON
AF7 -			R-26				· · · · · · · · · · · · · · · · · · ·		NCH O.D. THIN ALL SAMPLER
658.0	123.5	Bottom of Boring: 123.5 FT		1				Ш ріт	NCH O.D. CHER BE SAMPLER
						125		* NO	SAMPLE COVERY
									OUND WATER
							· · · · · · · · · · · · · · · · · · ·	DA	VEL AND TE OBSERVED
						130			 WATER CONTENT
									PLASTIC LIMIT
									ANDARD NETRATION
						135		• WA	ST (BLOWS/FT.) ATER CONTENT PERCENT
									RE RECOVERY PERCENT
									D IN PERCENT
						140			PACKER TEST
								NOTES	NTERVAL
								1. MATERIA	AL.
						145		INTERFA INTERPF	PTIONS AND CES ARE RETIVE AND CHANGES MAY DUAL.
							· · · · · · · · · · · · · · · · · · ·	DATE SH VARY WI	LEVEL IS FOR IOWN AND MAY TH TIME OF
							· · · · · · · · · · · ·	3. MEASUR	RRAY (S/N
						150		- INSIDE 2 DIAMETE	NSTALLED 4-MM ER PVC CASING PTH OF 119.8
								FEET, W	ITH A 2-FOOT ON ON THE
								BOTTOM WIRE PIE	; VIBRATING EZOMETERS
						455		FEET (S/ AND AT 9	
						155		2123112) OF PVC 0 4. BACKFIL	
								BENTON GROUT F	FROM 0.0 TO ET. 3-INCH
								ABOVE-C MONUME INSTALL	GROUND ENT
						160	20 40 60 80		
			T SAMPLER: NO I REHOLE DIAM.: 4				RECOVERY/RQD (%)		
				+.J (L	.u-10), c				
		DISCOVERY RT: 9/9/2021 FINISH: 9/12/2021	T E C H N C		LIDE o g y	SUM	MARY BORIN LT-1 (4 of 4		MAR 2022
	VANCER/HQ3 CORING		10250 S.W. Greenbur Portland, Oregon 972 Phone 503-452-1200	223		E	SEACH RD LANDSL HAINES, AK	, 	FIG. A-1

N N N	- ⊢				SA	MF	PLE	G	ROUND	PENETRA		LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION							VATER/ TRUMENT	(BLOWS P	ER FOOT)		
ELE E	⊇۵	SURFACE ELEVATION: 767.6 FT.		RUN NO.	NO.		PEN. DATA		ALLATION	WATER CC 10 20	NTENT (%) 30 40		ICH O.D. LIT SPOON
		MEDIUM DENSE to DENSE, brown to silty, sand- to gravel-sized ROCK FRAGMENTS; subangular to angular	0.1										NCH O.D. LIT SPOON
		gravel-sized rock fragments, micaceou (COLLUVIUM)	us, moist			7	7						NCH O.D. THIN ILL SAMPLER
					S-1		14 9		5	· · .•••	• • • • •	Ш РІТ	NCH O.D. CHER 3E SAMPLER
					S-2		7 11 14			• .		RE MM/DD	SAMPLE COVERY /YY
					S-3		4 13 17			· • · · ·		LE\	OUND WATER /EL AND TE OBSERVED
		becomes dense to very dense below	w 9.5 feet		S-4		17 26 26		12/28/21 ¹⁰ (UPPER)				 LIQUID LIMIT WATER CONTENT
					S-5		3 15			· · · · · ·	/.		PLASTIC LIMIT
					5-5		23		12/28/21	· · · · ·	· · · · · · ·	PEI TES	ANDARD NETRATION ST (BLOWS/FT.) ITER CONTENT PERCENT
									(LOWER)				RE RECOVERY PERCENT
749.1	18.5			R-1	S-6		25 50/5"					RQ	D IN PERCENT
		HARD to VERY HARD (R4-R5), gray, weathered to fresh, ULTRAMAFIC RC highly to highly fractured, numerous ra inclined fractures, scattered sheared a crushed zones, occasional slickenside	OCK; very andomly and es, minor	R-2					20				PACKER TEST NTERVAL
		felsic veins, numerous oxide stains, m mineralization sheared and crushed zone 19.6 to 2 driller notes soil-like drilling from 23	20.4 feet									1. MATERIA	TIONS AND
		feet	.0 10 25.5	R-3					25			INTERPR	ETIVE AND CHANGES MAY
				R-4								DATE SH	EVEL IS FOR OWN AND MAY TH TIME OF
		sheared and crushed zones 28.8 to 30.9 to 31.3, and 32.2 to 32.8 feet; slic on 60° fracture (90° rake) at 31.3 feet, fracture (20° rake) at 32.2 feet	kensides	<u>R-5</u>				<u> </u>	30	· · · · ·		296822) I INSIDE 2 DIAMETE TO A DEF FEET, WI EXTENSI	RRAY (S/N NSTALLED
734.8	32.8	HARD to VERY HARD (R4-R5), gray, weathered to fresh, ULTRAMAFIC RC highly to highly fractured, fractures 50 (rough, planar, open) dominant, fractu 30° and 60 to 70° (smooth to rough , planar)	OCK; very to 70° res 10 to blanar,	R-7				111XA111XA11 111XA111XA11	35	· · · · ·		WIRE PIE INSTALLE FEET (S/I AND AT 7 2123109) OF PVC 0	ZOMETERS ED AT 24.0 N 2123115) '1.5 (S/N ON OUTSIDE CASING.
		open) secondary, occasional slightly c infilling up to 1/8-inch thick, scattered and crushed zones, occasional slicker scattered healed fractures, major gree mineralization, occasional felsic veins	sheared nsides, n									GROUT F	TE-CEMENT ROM 0.0 TO ET. 3-INCH ROUND
727.6	40	healed fractures, occasional oxide sta	ins on	R-8					40	20 40	60 80	INSTALL	
			SAMPLER:							RECOVER			
		DISCOVERY			`		,			,		G LOG	MAR 2022
DATE	STA	RT: 8/28/2021 FINISH: 8/30/2021	тесн)SL		DE _{gy}				(1 of 4)		PROJ 2930
		R/HQ3 CORING	10250 S.W. Gr Portland, Oreg Phone 503-452	gon 9722	23				B	EACH RD HAIN	LANDSLI ES, AK	DE	FIG. A-2

TION	ΞÜ	MATERIAL DESCRIPTION		SA	MPL	E		OUND ATER/		TION TEST PER FOOT)	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 767.6 FT.	RUN NO.	NO.		PEN. DATA	INST	RUMENT		ONTENT (%) 30 40	1 1/4 4-11	ICH O.D. LIT SPOON
		fracture faces slickensides on 60° fracture (70° rake) at 37.8	R-8									ICH O.D. LIT SPOON
		feet slickensides on 70° fracture (75° rake) and 30° fracture (80° rake) at 40.1 and 40.2 feet	R-0									ICH O.D. THIN LL SAMPLER
		slickensides on 70° healed fracture (25° rake) at 40.8 feet									јШ ріт	ICH O.D. CHER
		slickensides on 40° fracture (10° rake) at 43.2 feet very highly fractured, with slightly clayey silt	R-9					45			* NO	BE SAMPLER SAMPLE COVERY
		infilling 44.8 to 45.2 feet oxide-stained, 70° fracture at 45.0 feet major green mineralization 45.8 to 48.9 feet										OUND WATER
		very highly to highly factured 46.1 to 47.2 feet					XVIIXVIIXVI		· · · ·			/EL AND TE OBSERVED
		very highly fractured with sheared and	R-10					50				 LIQUID LIMIT WATER CONTENT
		polished surfaces from 50.3 to 51.5 feet							· · · · ·			PLASTIC LIMIT
		moderately fractured with numerous healed fractures from 52.7 to 55.3 feet									PE	ANDARD NETRATION ST (BLOWS/FT.)
			R-11					55			🕒 🗰 WA	TER CONTENT PERCENT
		very highly fractured 55.8 to 56.5 feet										RE RECOVERY PERCENT
												D IN PERCENT
		very highly to highly fractured 58.5 to 61.5 feet	R-12					60				ACKER TEST
											NOTES	NTERVAL
		moderately fractured with numerous healed fractures from 61.5 to 64.2 feet										TIONS AND
			R-13					65			INTERPR	CES ARE ETIVE AND CHANGES MAY
						×1/1					2. WATER I	EVEL IS FOR
									· · · · ·			TH TIME OF
		very highly to highly fractured with sheared and crushed zones from 68.5 to 86.7 feet	R-14					70			296822) I	RRAY (S/N NSTALLED
		very highly fractured and crushed rock 69.9 to 70.2 feet						10			TO A DEF	4-MM R PVC CASING PTH OF 121.8 TH A 2-FOOT
		sheared and crushed zone 71.1 to 71.3 feet sheared and crushed zone 72.3 to 72.6 feet									EXTENSI BOTTOM	ON ON THE ; VIBRATING ZOMETERS
			R-15								INSTALLI FEET (S/ AND AT 7	ED AT 24.0 N 2123115) '1.5 (S/N
				-				75			OF PVC (
		sheared and crushed zone 76.4 to 76.7 feet	<u>R-16</u>								GROUT F	L DETAILS: TE-CEMENT ROM 0.0 TO ET. 3-INCH
		slickensides on 60° fracture (90° rake) at 80.0	R-17								ABOVE-O MONUME INSTALLI	ROUND
687.6		feet			<u> </u>	K	18	80		60 80]	
		ASSEMBLY: AUTO TRIP SPT SAMPLER D USED: NWJ BOREHOLE DI								:Y/RQD (%)		
			NL	DSL	ID	ЭE		SUM			G LOG	MAR 2022
		TECHNIQUE: HWT CASING 10250 S.W. Gr		g Road						(2 of 4)		PROJ 2930
ADVA	NCE	R/HQ3 CORING Portland, Oreg Phone 503-452	gon 972	23				В) LANDSL IES, AK	IDE	FIG. A-2

ET	포뇨	MATERIAL DESCRIPTION			SA	MPI	E		ROUND VATER/	PENETRATION TE (BLOWS PER FO)
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 767.6 FT.		RUN NO.	NO.		PEN. DATA	INS	VATER/ TRUMENT ALLATION	WATER CONTENT	(%)	2-INCH O.D. SPLIT SPOON
		(continued from previous page)		NU. R-17	NU.							3-INCH O.D. SPLIT SPOON
			-								Лп	3-INCH O.D. THIN WALL SAMPLER
				R-18								3-INCH O.D. PITCHER
			-						85			TUBE SAMPLER
680.9	86.7			R-19							///	RECOVERY DD/YY
		HARD to VERY HARD (R4-R5), gray to slightly weathered to fresh, ULTRAMA ROCK; highly to moderately fractured, 50 to 70° (smooth to rough, planar, op	FIC fractures								.] –	GROUND WATER LEVEL AND DATE OBSERVED
		dominant, fractures 10 to 30° (smooth planar, open) and 60 to 80° (smooth planar, open) and 60 to 80° (smooth, planar, open)	to rough,	R-20					90			WATER
		undulating, open) secondary, scattere highly fractured zones, occasional cru	d very shed									CONTENT
		zones, major green mineralization, occ silty sand infilling up to 1/4-inch, occas healed fractures										STANDARD
				R-21					05		·	PENETRATION TEST (BLOWS/FT.) WATER CONTENT
									95			CORE RECOVERY
												RQD IN PERCENT
				R-22						· · · · · · · · · · ·		
									100		PT-1	PACKER TEST
		major green mineralization 101.6 to	107.2								NOTES	
		feet	107.2									RIPTIONS AND
				R-23					105		INTER ACTU	RFACES ARE PRETIVE AND AL CHANGES MAY
		crushed zone with scattered infilling	from								2. WATE	RADUAL.
		105.6 to 107.2 feet		R-24								SHOWN AND MAY WITH TIME OF
			-								· SHAP	URAND SAAV EARRAY (S/N
				R-25					110		INSID	2) INSTALLED E 24-MM ETER PVC CASING
											· FEET, EXTE	DEPTH OF 121.8 WITH A 2-FOOT NSION ON THE DM; VIBRATING
											WIRE INSTA	PIEZOMETERS LLED AT 24.0 (S/N 2123115)
		slickensides on 20° fracture (90° ra 113.6 feet	ke) at	R-26					115		AND A	(3/N 2123115) AT 71.5 (S/N 09) ON OUTSIDE /C CASING.
											4. BACK	FILL DETAILS: ONITE-CEMENT
			-							· · · · · · · · · ·	GROL . 122.5	IT FROM 0.0 TO FEET. 3-INCH E-GROUND
647.6	120	slickensides on 30° fracture (85° ra 119.4 feet	ke) at	R-27					400		. MONU	JMENT
			SAMPLER:	NOI		- 0		TANT	<u>120</u>	20 40 60 8 RECOVERY/RQD		
			SAMPLER.								(,,,)	
		DISCOVERY	LA	ND) SL	IT	DE		SUM	MARY BOR		G MAR 2022
		RT: 8/28/2021 FINISH: 8/30/2021 TECHNIQUE: HWT CASING	T E C H 10250 S.W. Gre		L O					LT-2 (3 of	,	PROJ 2930
ADVA	NCE	R/HQ3 CORING	Portland, Orego Phone 503-452-	on 9722	23				E	BEACH RD LANE HAINES, AI		FIG. A-2

ET	포뇨	MATERIAL DESCRIPTION			SAN	/IPLE	GROUND WATER/	PENETRATION TEST (BLOWS PER FOOT)	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 767.6 FT.		RUN NO.		PEN.	INSTRUMENT	WATER CONTENT (%)	1 1/4	NCH O.D.
		(continued from previous page)		NO.	NO.	DATA		10 20 30 40	-	LIT SPOON NCH O.D.
645.1	122 5	slickensides on 50° fractures (90° 121.8 and 121.9 feet	rake) at	R-27				· · · · · · · · · · ·	SP SP	LIT SPOON NCH O.D. THIN
010.1	122.0	Bottom of Boring: 122.5 FT							Ш wa	LL SAMPLER
							125		Ш ріт	NCH O.D. ICHER BE SAMPLER
										SAMPLE COVERY
								· · · · · · · · · · · · · · · · · · ·		OUND WATER /EL AND
							130			TE OBSERVED
							100			 WATER CONTENT
										PLASTIC LIMIT
								· · · · · · · · · · · · · · · · · · ·	PE	ANDARD NETRATION ST (BLOWS/FT.)
							135			TER CONTENT
										RE RECOVERY PERCENT
										D IN PERCENT
							140		 	
							140] _ i	PACKER TEST NTERVAL
									NOTES	
							145	· · · · · · · · · · · · · · · · · · ·	INTERFA INTERPF	PTIONS AND CES ARE ETIVE AND CHANGES MAY
									2. WATER I DATE SH	EVEL IS FOR OWN AND MAY
									VARY WI YEAR.	TH TIME OF
							150		296822)	RRAY (S/N NSTALLED
							100		TO A DEI	R PVC CASING PTH OF 121.8
									EXTENSI BOTTOM	TH A 2-FOOT ON ON THE ; VIBRATING
									INSTALL	ZOMETERS ED AT 24.0 N 2123115)
							155		AND AT 7	'1.5 (S/N Ó ON OUTSIDE
									4. BACKFIL	L DETAILS:
								· · · · · · · · · · · · · · · · · · ·	GROUT F 122.5 FE	TE-CEMENT ROM 0.0 TO ET. 3-INCH
									ABOVE-C MONUME INSTALL	INT
						0.0110		20 40 60 80		
			T SAMPLER: REHOLE DIA				3.78" (17.0'-122	RECOVERY/RQD (%) 2.5')		
DRILL	ER: I	DISCOVERY		NIT	1011		SUM	MARY BORIN	IG LOG	MAR 2022
		RT: 8/28/2021 FINISH: 8/30/2021 TECHNIQUE: HWT CASING						LT-2 (4 of 4		PROJ 2930
		R/HQ3 CORING	10250 S.W. Gre Portland, Oreg Phone 503-452-	on 9722	23		E	EACH RD LANDSL HAINES, AK	IDE	FIG. A-2

NOL	тĿ				SA	MF	PLE		ROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION						W INST	ATER/ RUMENT	(BLOWS PER FOOT) WATER CONTENT (%		
	□≤	SURFACE ELEVATION: 738.7 FT.		RUN NO.	NO.		PEN. DATA		ALLATION	10 20 30 40	' [// ^ -"	NCH O.D. LIT SPOON
		LOOSE to MEDIUM DENSE, gray, si to gravel-sized ROCK FRAGMENTS subangular to angular gravel- to cobb										NCH O.D. LIT SPOON
		rock fragments; trace oxide stains, m moist (COLLUVIUM)					1			· · · · · · · · · · · · · · · · · · ·		NCH O.D. THIN ALL SAMPLER
					S-1		2 3		5	• • • • • • • • • • • • • • • • • • • •	Ш ріт	NCH O.D. TCHER BE SAMPLER
					S-2		3 4 4					SAMPLE COVERY /YY
					S-3		2 5 6					OUND WATER /EL AND TE OBSERVED
							3		10			 LIQUID LIMIT WATER
726.7	12				S-4 S-5		3 6 15 50/3"					CONTENT PLASTIC LIMIT
		HARD to VERY HARD (R4-R5), gray moderately to slightly weathered, UL ROCK; very highly to highly fractured 40 to 60° (rough, planar, open) domir	TRAMAFIC , fractures nant,	R-1							PEI TES	ANDARD NETRATION ST (BLOWS/FT.)
		fractures 10 to 30° (rough, planar, op secondary, numerous open fractures sand- to gravel-sized rock fragment in	en) with silty						15		INI	TER CONTENT PERCENT
		occasional felsic veins up to 2.0 feet occasional oxide stains, minor green mineralization			S-6	-	50/1"					D IN PERCENT
		driller advanced borehole with case advancer. No core recovery from 14.	ng 0-17.5 feet	<u>R-2</u>					00			
				R-3				KV11KV11KV11KV11KV11KV11KV	20			PACKER TEST NTERVAL
												AL PTIONS AND CES ARE
		no sample recovery from 23.5 to 2 due to core barrel mislatch	4.0 feet						25		INTERPR	ETIVE AND CHANGES MAY
		very highly fractured with sand- to gravel-sized rock fragment infilling from 25.3, 26.3 to 26.4, and 28.0 to 28.8 for 25.3, 26.3 to		R-4							DATE SH	Level is for Iown and may Th time of
708.4	30.3								30			RRAY (S/N NSTALLED
		HARD to VERY HARD (R4-R5), gray weathered to fresh, ULTRAMAFIC R highly to highly fractured, fractures 40	OCK; very) to 60°	R-5				1.KV11.KV11.KV11.KV11.KV 1.KV17.KV17.KV17.KV			TO A DEF FEET, W EXTENSI	ER PVC CASING PTH OF 119.7 ITH A 2-FOOT ON TO THE ; VIBRATING
		(rough, planar, open) dominant, fract 90° (rough, planar to undulating, ope secondary, occasional moderately fra	n) actured							· · · · · /////	WIRE PIE INSTALLI FEET (S/	ZOMETERS ED AT 52.8 N 2123114)
		zones, numerous extremely soft and zones, numerous micaceous zones u feet thick, numerous oxide staining, o	ip to 1.5 occasional	R-6					35		AND AT 8 2123111) OF PVC 0	ON OUTSIDE
		felsic veins up to 3.0 feet thick, minor mineralization moderately fractured from 32.8 to and 34.8 to 36.0 feet	U U								GROUT F	L DETAILS: ITE-CEMENT FROM 0.0 TO ET. 3-INCH
698.7	40	and 54.0 to 50.0 reet		R-7					40		ABOVE-O MONUME INSTALLI	BROUND ENT
										20 40 60 80 RECOVERY/RQD (%)		
			F SAMPLER: REHOLE DIA									
		DISCOVERY	***-		- (0	-	,		-	· ·		MAR 2022
DATE	TE START: 9/4/2021 FINISH: 9/7/2021			ND N O			DE gy		SUM	MARY BORIN LT-3 (1 of 4		PROJ 2930
	ANCER/HQ3 CORING			eenburg on 972 -1200	23				B	BEACH RD LANDSI HAINES, AK	.IDE	FIG. A-3

ET	표표	MATERIAL DESCRIPTION		SA	MPLE			PENETRATION TEST (BLOWS PER FOOT)	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 738.7 FT.	RUN NO.		PE	n. IN	WATER/ NSTRUMENT ISTALLATION	WATER CONTENT (%)	1 r/a 2-11	NCH O.D. LIT SPOON
		(continued from previous page) sheared and crushed zones at 40.0 to 40.4,	NO.	NO.	DA		4		3-11	NCH O.D.
		and 41.1 to 41.5 feet	R-8						1 <u> </u>	LIT SPOON
		EXTREMELY SOFT (R0), sheared and crushed zone with micaceous sand 42.5 to 52.9							 	NCH O.D.
		feet					45		TU	CHER BE SAMPLER SAMPLE
			R-9							COVERY
									GR LE	OUND WATER /EL AND TE OBSERVED
			R-10	1			▼ 12/28/21 (UPPER) ⁵⁰			LIQUID LIMIT
			R-11				(UFPER)			 WATER CONTENT
685.8	52.9									PLASTIC LIMIT
		HARD to VERY HARD (R4-R5), gray, slightly weathered to fresh, ULTRAMAFIC ROCK;							PE TE	NETRATION ST (BLOWS/FT.)
		highly to moderately fractured, fractures 40 to 60° (rough, planar, open) dominant, fractures 10 to 30° (rough, planar, open) and 70 to 90°	R-12				55		IN	TER CONTENT
		(rough, planar to undulating, open) secondary, scattered extremely soft, very highly fractured, and micaceous zones, scattered healed								RE RECOVERY PERCENT
		fractures, numerous felsic veins, major green mineralization								D IN PERCENT
		very highly to highly fractured micaceous zone 56.0 to 58.0 feet					60			PACKER TEST NTERVAL
		very highly to highly fractured micaceous zone 60.4 to 61.7, and 62.0 to 63.0 feet	R-13						NOTES	
										TIONS AND
							65		INTERPE	CES ARE ETIVE AND CHANGES MAY
			R-14						2. WATER I	LEVEL IS FOR
				-				· · · · · · · · · · · · · · · · · · ·		TH TIME OF
										AND SAAV RRAY (S/N NSTALLED
		very highly fractured micaceous zone 69.7 to 69.9 feet	R-15				70		TO A DEI	R PVC CASING PTH OF 119.7
		moderately to slightly fractured 69.9 to 80.5 feet							EXTENSI	ITH A 2-FOOT ON TO THE ; VIBRATING
								· · · · · · · · · · · · · · · · · · ·	INSTALL	EZOMETERS ED AT 52.8 N 2123114)
							75		AND AT 8 2123111) OF PVC	ON OUTSIDE
			R-16					· · · · · · · · · · · · · · · · · · ·		ITE-CEMENT
									122.5 FE ABOVE-0	
658.7	80		R-17				80		MONUME	
НАММ	MER /	ASSEMBLY: AUTO TRIP SPT SAMPLER	: NO L	INER.	- COI	NSTA	NT ID	20 40 60 80 RECOVERY/RQD (%)		
		D USED: NWJ BOREHOLE DI.	AM.: 4	.5" (0.	0'-17.	5'); 3.	- i			
		DISCOVERY RT: 9/4/2021 FINISH: 9/7/2021	NI			[T]>	SUMI	MARY BORIN LT-3 (2 of 4		MAR 2022
	RILLING TECHNIQUE: HWT CASING DVANCER/HQ3 CORING			g Road,		111		BEACH RD LANDSL	·	PROJ 2930
		R/HQ3 CORING Pointand, Ore Phone 503-452			3-452-1	528		HAINES, AK		FIG. A-3

NOL	ᆂᇤ	MATERIAL DESCRIPTION			SAMP			ROUND			LEGEND	
ELEVATION IN FEET	DEPTH IN FEET			RUN		PEN.	INST	/ater/ [rument Allation	(BLOWS PER F	NT (%)		NCH O.D.
ш		SURFACE ELEVATION: 738.7 FT. (continued from previous page)		RUN NO.	NO.	DATA			10 20 30	40		LIT SPOON NCH O.D.
		very highly fractured micaceous zon 80.7 feet		R-17				10/30/21 (DRY)	· · · · · ·	· · / /	SPI	LIT SPOON
		EXTREMELY SOFT (R0) sheared and crushed micaceous zone with slightly c infilling on 60° fracture from 81.3 to 81.	layey silt					. ,				NCH O.D. THIN ILL SAMPLER
		very highly to highly fractured 81.6 to feet	5 83.0					85			Ш РІТ	NCH O.D. ICHER BE SAMPLER
				R-18								SAMPLE COVERY /YY
		very highly fractured 86.9 to 87.4 fee	et				11×411×411×411×411×411×411×411×411×411×		· · · · · ·		⊈ GR LE\	OUND WATER /EL AND TE OBSERVED
								90				
		very highly to highly fractured 89.8 to feet	92.7	R-19				90				 WATER CONTENT
											~	PLASTIC LIMIT
											PEI	ANDARD NETRATION ST (BLOWS/FT.)
		1/8-inch slightly clayey silt infilling or	n 70°					95			• WA	TER CONTENT PERCENT
		fracture at 94.5 feet very highly to highly fractured 95.5 to feet	o 99.8	R-20							777 со	RE RECOVERY PERCENT
											RQ	D IN PERCENT
								400] _{PT-1 6}	
				R-21				100				PACKER TEST NTERVAL
											NOTES	
											1. MATERIA DESCRIP INTERFA	TIONS AND
								105				ETIVE AND CHANGES MAY DUAL.
				R-22							2. WATER L	EVEL IS FOR
		very highly fractured zone 106.8 to 1 slickensides on 60° fracture (80° rake),							· · · · · ·			TH TIME OF
		fracture (60° rake) at 106.8 and 107.2 slickensides with 1/8-inch slightly claye	feet; ey silt				11/2/11/2/11/2/11/2/11/2/11/2/11/2/11/					RRAY (S/N
		infilling on 50° fracture (80° rake) at 100 sheared zone with 1/2-inch slighly cla	ayey silt	R-23				110			INSIDE 2 DIAMETE	R PVC CASING
		infilling, and slickensides on 55° fractur rake) at 110.0 feet	-	11-23					· · · · · ·		FEET, WI	PTH OF 119.7 TH A 2-FOOT ON TO THE
		sheared zone with 1/8-inch slightly c infilling and slickensides on 50° fracture rake) and 80° fracture (30° rake) at 111	e (60°								WIRE PIE	; VIBRATING ZOMETERS ED AT 52.8
		polished fractures 112.5 to 113.0 fee						115			FEET (S/I AND AT 8	N 2123114)
				R-24				110			OF PVC (CASING.
		EXTREMELY SOFT (R0) and shear with slickensides on 50° fracture (80° ra	ed zone ake) from								GROUT F	TE-CEMENT ROM 0.0 TO
		116.4 to 116.8 feet very highly to highly fractured zone from									122.5 FEI ABOVE-0 MONUME	ET. 3-INCH BROUND ENT
618.7	120	to 122.5 feet		R-25				120			INSTALL	
HAM	MER	ASSEMBLY: AUTO TRIP SPT S	SAMPLER	: NO L	INER -	CONS	TANT	ĪD	20 40 60 RECOVERY/RC			
DRILI	RO	D USED: NWJ BORE	EHOLE DI	AM.: 4	.5" (0.0)'-17.5')	; 3.78'	' (17.5'-122	2.5')			
1		DISCOVERY	LA	ND	SLI	DE		SUM				MAR 2022
1	ATE START: 9/4/2021 FINISH: 9/7/2021 RILLING TECHNIQUE: HWT CASING 10250 S.W. G			L O g Road, 2				LT-3 (3			PROJ 2930	
ADVA	ANCER/HQ3 CORING Portland, C Phone 503-				23			B	EACH RD LA HAINES,		DE	FIG. A-3

TON TON	보다	MATERIAL DESCRIPTION		SA	MPLE	GROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET					WATER/ INSTRUMENT	(BLOWS PER FOOT) WATER CONTENT (%)	יינ דק (NCH O.D.
		SURFACE ELEVATION: 738.7 FT.	RUN NO.	NO.	PEN. DATA	INSTALLATION	10 20 30 40	1 1/4 - "	LIT SPOON
		(continued from previous page)	R-25						NCH O.D. LIT SPOON
616.2	122.5	Bottom of Boring: 122.5 FT					· · · · · · · · · · · ·		NCH O.D. THIN ALL SAMPLER
						125		Ш ріт	NCH O.D. CHER BE SAMPLER
						125		RE	SAMPLE COVERY
									/YY OUND WATER VEL AND
						130			 WATER CONTENT
									PLASTIC LIMIT
							· · · · · · · · · · · · · · · · · · ·	PE	ANDARD NETRATION ST (BLOWS/FT.)
						135		• WA	TER CONTENT PERCENT
									RE RECOVERY PERCENT
								RQ	D IN PERCENT
						140			PACKER TEST
								NOTES	NTERVAL
							· · · · · · · · · · · · · · · · · · ·	1. MATERIA	
						145		INTERFA INTERPF	PTIONS AND CES ARE RETIVE AND CHANGES MAY DUAL
								2. WATER I	LEVEL IS FOR
							· · · · · · · · · · · · · · · · · · ·	VARY WI YEAR.	TH TIME OF
						150			RRAY (S/N NSTALLED
								DIAMETE TO A DEI	ER PVC CASING PTH OF 119.7 ITH A 2-FOOT
								EXTENS	ON TO THE
								WIRE PIE INSTALL	EZOMETERS ED AT 52.8
						155		AND AT 8	N 2123114) 31.6 (S/N ON OUTSIDE
								OF PVC	
								BENTON GROUT F	ITE-CEMENT FROM 0.0 TO
							 	ABOVE-C MONUME	ENT
						160	20 40 60 80	INSTALL	EV.
			SAMPLER: NO L				RECOVERY/RQD (%)		
			REHOLE DIAM.: 4	.ɔ (U.	U-17.5');				MAR 2022
DATE	STA	DISCOVERY RT: 9/4/2021 FINISH: 9/7/2021	T E C H N O			SUM	MARY BORIN LT-3 (4 of 4		PROJ 2930
		TECHNIQUE: HWT CASING R/HQ3 CORING	10250 S.W. Greenbur Portland, Oregon 972 Phone 503-452-1200	23			EACH RD LANDSL HAINES, AK	IDE	FIG. A-3

TION	ΗË	MATERIAL DESCRIPTION			SA	AMF	PLE	GROUND WATER/	PENETRATION TEST (BLOWS PER FOOT)	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 416.6 FT.		RUN NO.	NO.		PEN. DATA	INSTRUMENT INSTALLATION		<u>' // 2-11</u>	NCH O.D. LIT SPOON
		DENSE to VERY DENSE, gray, silty numerous moderately weathered grav	vel-sized								NCH O.D. LIT SPOON
		ultramafic rock fragments, trace oxide (COLLUVIUM)	e staining								NCH O.D. THIN ALL SAMPLER
									5	Ш рп	NCH O.D. TCHER BE SAMPLER
								12/28/21 (UPPER)		RE MM/DD) SAMPLE COVERY)/YY
					S-1		17 17 13	▼ 12/28/21 (LOWER)		LE	OUND WATER VEL AND TE OBSERVED
									0		 LIQUID LIMIT WATER
											CONTENT PLASTIC LIMIT
100.0		driller notes loss of circulation at 13 and rock-like drilling below 14.0 feet	3.0 feet,		S-2		27 50 50/3"				ANDARD NETRATION
402.6	14	HARD to VERY HARD (R4-R5), gray gray, slightly weathered, ULTRAMAF highly to moderately fractured, fractur	IC ROCK;						5	• WA	ST (BLOWS/FT.) ATER CONTENT PERCENT
		30° (rough, planar, slightly clayey silt to 1/16-inch) dominant, fractures 60 to	infilling up o 80°								RE RECOVERY PERCENT
		(rough, planar to undulating, open) se occasional very highly fractured zone occasional extremely soft micaceous	s,	R-1							D IN PERCENT
		occasional healed fractures, occasior veins, minor green mineralization	nal felsic					2	0		PACKER TEST NTERVAL
				R-2						NOTES	
									5	INTERFA	PTIONS AND CES ARE RETIVE AND CHANGES MAY
				R-3						DATE SH	LEVEL IS FOR IOWN AND MAY TH TIME OF
											AND SAAV RRAY (S/N INSTALLED
				R-4				3		INSIDE 2 DIAMETE TO A DE	7-MM ER PVC CASING PTH OF 100.3
		very highly fractured, EXTREMEL (R0) micaceous zone, polished 30° fr 31.3 to 31.5 feet	Y SOFT acture at							PIEZÓME INSTALL	BRATING WIRE ETERS ED AT 43.0 N 2123106)
									-	AND AT (68.5 (S/N ON OUTSIDE
				R-5				3	b		L DETAILS: ITE-CEMENT FROM 0.0 TO
										102 FEE ABOVE-0 MONUM	T. 3-INCH GROUND ENT
276.6	40	very highly fractured 38.5 to 38.7 f	eet	R-6						INSTALL	ED.
376.6 HAMN		ASSEMBLY: AUTO TRIP SP1	SAMPLER:		INFR	(NN 4	20 40 60 80 RECOVERY/RQD (%)		
								; 3.78" (14.5'-10			1
			LA	ND	SL	[]	DE	SUM			MAR 2022
			10250 S.W. Gr		, Road			ı	LT-4 (1 of 3		PROJ 2930
ADVA	NCE	R/HQ3 CORING	Portland, Oreg Phone 503-452	gon 9722	23				BEACH RD LANDSI HAINES, AK	.IDE	FIG. A-4

State State Acceleration of the state	NOL				SAM	IPLE	GROUND	PENETRATION TES						
300.5 Ø1 (continued from previous page) R-6 very highly fractured micaceous zones at 44.8 feet R-7 very highly fractured micaceous zone at 44.8 feet R-7 very highly fractured zone at 48.8 to 49.3 feet R-7 very highly fractured micaceous zone at 44.8 feet R-7 very highly fractured zone at 48.8 to 49.3 feet R-7 very highly fractured zone at 46.0 to 62.0 feet R-10 very highly fractured zone at 61.0 to 62.0 feet R-10 very highly fractured zone at 61.0 to 62.0 feet R-10 very highly fractured 77.9 to 78.5 feet R-	.evat In fee	DEPT IN FEE	WATENIAL DESUMPTION				DEN	INSTRUMENT		I)	NCH O.D.			
303.5 661 R-1 very highly fractured microcous zone at 44.8 feet R-7 very highly fractured zone at 48.8 to 49.3 feet R-7 very highly fractured zone at 48.8 to 49.3 feet R-7 very highly fractured zone at 48.8 to 49.3 feet R-7 very highly fractured zone at 48.8 to 49.3 feet R-7 very highly fractured zone at 48.8 to 49.3 feet R-8 very highly fractured zone at 50.0 to 59.8 feet R-9 very highly fractured zone at 50.0 to 59.8 feet R-10 very highly fractured zone at 50.0 to 59.8 feet R-10 very highly fractured zone at 51.0 to 52.0 feet R-11 very highly fractured zone at 50.0 to 59.8 feet R-10 very highly fractured zone at 50.0 to 59.8 feet R-10 very highly fractured zone at 51.0 to 52.0 feet R-11 very highly fractured zone at 50.0 to 59.8 feet R-12 very highly fractured zone at 50.0 to 59.8 feet R-12 very highly fractured zone at 50.0 to 59.8 feet R-12 very highly fractured zone at 50.0 to 59.8 feet R-12 very highly fractured zone at 50.0 to 59.8 feet R-12 very highly fractured zone at					NO.	NO.			10 20 30 40		LIT SPOON			
300.5 601			(sonanded nom provide page)											
41.9 is 42.3 and 42.3 to 43.1 feet					R-6									
360.5 60.1 very highly fractured zone at 48.8 to 49.3 feet R-7 very highly fractured zone at 48.8 to 49.3 feet R-8 very highly fractured zone at 48.8 to 49.3 feet R-8 very highly fractured zone at 48.8 to 49.3 feet R-8 very highly fractured zone at 59.0 to 59.8 feet R-9 very highly fractured zone at 50.0 to 59.8 feet R-10 very highly fractured and sheared. R-11 very highly fractured and sheared. R-11 very highly fractured and sheared. R-11 very highly fractured and sheared. R-12 very highly fractured to fresh. ULTRAMAPC v				nes at						🥍 Ш ріт	CHER			
80.5 0.1			1-inch micaceous zone at 44.8 feet					45		* NC	SAMPLE			
300.5 66.1					R-7									
30.5 651										GR LE	VEL AND			
380.5 651			very highly fractured zone at 48.8 to	49.3 feet										
380.5 66.1 R-10														
380.5 66.1 R-10					R-8						PLASTIC LIMIT			
380.5 66.1										PE PE	NETRATION			
380.5 66.1								55	••••	🖌 🕒 🗤	ATER CONTENT			
360.5 66.1 R-10			major green mineralization below 55	5.6 feet	R-9						RE RECOVERY			
360.5 66.1 Image: Constraint of the const				/							PERCENT			
30.5 66.1 very highly fractured and sheared, EXTREMELY SOFT (R0) micaceous zone from 350.5 86.1 30.5 66.1 HARD to VERY HARD (R4-R5), gray to green fray, sightly weathered to fresh, ULTRAMAFIC ROCK; highly to moderately the moderately to moderately the moderately to mo				e at 57.4					· · · · · · · · · · · · · · · · · · ·					
350.5 66.1 very highly fractured and sheared, EXTREMELY SOFT (R0) micaceous zone from 63.5 to 66.1 R.11 very highly fractured and sheared, EXTREMELY SOFT (R0) micaceous zone from 63.5 to 66.1 R.12 very highly fractured and sheared, EXTREMELY SOFT (R0) micaceous zone from 63.5 to 66.1 very highly fractured fractures in undulating, open dominant, fractures 70 to 90° (rough, planar to undulating, open secondary, scattered healed fractures, numerous felsic veins, major green mineralization R.12 very highly fractured 77.9 to 78.5 feet very highly fractured 77.9 to 78.5 feet 3366 80 very highly fractured 77.9 to 78.5 feet R.14 very highly fractured 77.9 to 78.5 feet very highly fractured 77.9 to 78.5 feet MAMMER ASSEMBLY: AUTO TRIP DRILLER: DISCOVERY DATE START: 106/2021 FINISH: 109/2021 DRILLING TECHNIQUE : HWT CASING ADVANCERY SPT SAMPLER: NO LINER - CONSTANT ID RECOVERY/R0D (%) SUMMARY BORING LOG LT-4 (2 of 3) BEACH RD LANDSLIDE TE C M R NO L D G Y INTER AGAING ADVANCERY SUMMARY BORING LOG LT-4 (2 of 3) MAR 2022 PROJ 2330 DEACH RD LANDSLIDE			very highly fractured zone at 59.0 to	59.8 feet				60						
350.5 66.1			very highly fractured zone at 61.0 to		R-10						NIERVAL			
350.5 66.1				ŀ						1. MATERIA				
350.5 66.1 HARD to VERY HARD (R4-R5), gray to green gray, slightly weathered to fresh, ULTRAMAFIC Dominant, fractures 70 to 30° (rough, planar to undulating, open) secondary, scattered healed fractures, numerous felsic veins, major green mineralization R-12 R-13 R-13 366.8 80 HAMMER ASSEMBLY: AUTO TRIP SPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM: 4.5" (0.0°-14.5'); 3.78" (14.5'-102.0') DRILLER: DISCOVERY DATURE STANG SPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM: 4.5" (0.0°-14.5'); 3.78" (14.5'-102.0') DRILLER: DISCOVERY DATURE STANG MAR 2022 PROJ 2930 DRILLING TECHNIQUE: HWT CASING DAVANCER/H03 CORING PROJ 2930 PROJ 2930			very highly fractured and sheared,		R-11					INTERFA	CES ARE RETIVE AND			
HARD to VERY HARD (R4-R5), gray to green gray, slightly weathered to fresh, ULTRAMAFIC RCK; highly to moderately fractured, fractures 10 to 30° (rough, planar to undulating, open) secondary, scattered healed fractures, numerous felsic veins, major green mineralization R-12 70 VATE BHOWM AND MAY VARY WITH TIME OF YEAR. 70 To 30° (rough, planar to undulating, open) secondary, scattered healed fractures, numerous felsic veins, major green mineralization R-13 70 SHAPEARRAY (SN 306398) INSTALLED INSTALLED TIME VERY AND AT 68.5 (SN 20 40 60 80 336.6 80 R-14 R-14 70 SHAPEARRAY (SN 306399) INSTALLED INSTALLED AT 43.0 FEET, VIBRATING WIRE PIEZOMETERS INSTALLED AT 43.0 FEET, VIBRATING WIRE INSTALLED AT 43.0 FEET, V	250 5	00.4		one from				65						
ROCK; highly to moderately fractures 10 to 30° (rough, planar to undulating, open) dominant, fractures 70 to 90° (rough, planar to undulating, open) secondary, scattered healed fractures, numerous felsic veins, major green mineralization R-13 Image: Comparison of	350.5	00.1		o green	R-12					DATE SH	IOWN AND MAY			
dominant, fractures 70 to 90° (rough, planar to undulating, open) secondary, scattered healed fractures, numerous felsic veins, major green mineralization ro ShaPEARRAY (SM 90389) INSTALLED INSIDE 21-MM DIAMETER PVC CASING TO A DEPTH OF 100.3 FEET (SN 2123106) AND AT 685 (SM 2123102) ON OUTSIDE OF PVC CASING 336.6 80 R-14 R-14 ro ShaPEARRAY (SM 90589) INSTALLED INSIDE 21-MM DIAMETER PVC CASING TO A DEPTH OF 100.3 FEET (SN 2123106) AND AT 685 (SM 2123102) ON OUTSIDE OF PVC CASING 336.6 80 R-14 R-14 R-14 SPET SAMPLER: NO LINER - CONSTANT ID RECOVERY/RQD (%) SPET SAMPLER: NO LINER - CONSTANT ID RECOVERY/RQD (%) BOREHOLE DIAM:: 4.5" (0.0"-14.5"); 3.78" (14.5"-102.0") DRILLER: DISCOVERY DATE START: 10/6/2021 FINISH: 10/9/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/H03 CORING MAR 2022 PROJ 2930 MAR 2022 PROJ 2930 DRILLER: DISCOVERY DATE START: 10/6/2021 FINISH: 10/9/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/H03 CORING MAR 2022 PROJ 2930 MAR 2022 PROJ 2930			ROCK; highly to moderately fractured,	fractures						YEAR.				
Insub_27-MM mineralization R-13 R-13 R-13 R-13 R-14 R-15 R-16 R-17 R-18 R-19 R-14 R-14 R-14 R-15 R-16 R-17			dominant, fractures 70 to 90° (rough, p	lanar to						SHAPEA 306398)	RRAY (S/N INSTALLED			
Image: state in the image: state in			fractures, numerous felsic veins, major	rgreen							ER PVC CASING			
FEET (SN 21306) AND AT 68.5 (SN) 336.6 80 R-14 R-14 R-15 R-14 R-15 R-14 R-14 R-15 R-15 R-14 R-15 R-14 R-14 R-15 R-14 R-15 R-15 R-14 R-15 R-14 R-15 R-14 R-15 R-14 R-14 R-15 R-15 R-15 R-16 R-15 R-17 R-16 R-16 R-15 R-14 R-15 R-14 R-14 R-14 R-14 R-15 R-14 R-15 R-15 R-15 R-15 <td></td> <td></td> <td></td> <td></td> <td>R-13</td> <td></td> <td></td> <td></td> <td></td> <td>FEET; VI PIEZOME</td> <td>BRATING WIRE ETERS</td>					R-13					FEET; VI PIEZOME	BRATING WIRE ETERS			
Amountain and the second se										FEET (S/ AND AT (N 2123106) 68.5 (S/N			
R-14 R-15								75	· · · · · · · ·	2123102)	ON OUTSIDE			
336.6 80 20 40 60 80 Advise and the second seco					R-14					BENTON	ITE-CEMENT			
Image: state of the state					ı x² 14					102 FEE ABOVE-0	T. 3-INCH GROUND			
20 40 60 8020 40 60 80AMMMER ASSEMBLY: AUTO TRIPSPT SAMPLER: NO LINER - CONSTANT IDRECOVERY/RQD (%)DRILL ROD USED: NWJBOREHOLE DIAM.: 4.5" (0.0'-14.5'); 3.78" (14.5'-102.0')MAR 2022DRILLER: DISCOVERYDATE START: 10/6/2021 FINISH: 10/9/2021Image: Colspan="2">Image: Colspan="2">MAR 2022DRILLING TECHNIQUE: HWT CASINGImage: Colspan="2">AND SLIDEADVANCER/HQ3 CORINGImage: Colspan="2">Image: Colspan="2" Colspan="2			very highly fractured 77.9 to 78.5 fee	et -										
HAMMER ASSEMBLY: AUTO TRIP SPT SAMPLER: NO LINER - CONSTANT ID RECOVERY/RQD (%) DRILL ROD USED: NWJ BOREHOLE DIAM.: 4.5" (0.0'-14.5'); 3.78" (14.5'-102.0') MAR 2022 DRILLER: DISCOVERY DATE START: 10/6/2021 FINISH: 10/9/2021 Image: Comparison of the start in	336.6	80			R-15			80		- E				
DRILLER: DISCOVERY DATE START: 10/6/2021 FINISH: 10/9/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORING MAR 2022 T E C H N O L O G Y 10250 S.W. Greenburg Road, Suite 111 Portland, Oregon 97223 BEACH RD LANDSLIDE	НАММ													
DATE START: 10/6/2021 FINISH: 10/9/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORING DVANCER/HQ3 CORING	DRILL	RO	DUSED: NWJ BORI		M.: 4.	.5" (0.0	'-14.5');	3.78" (14.5'-10	2.0')					
DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORING DV ANCER/HQ3 CORING					NΓ	SU	DE	SUM			MAR 2022			
ADVANCER/HQ3 CORING Portland, Oregon 97223 BEACH RD LANDSLIDE							G Y		LT-4 (2 of	3)	PROJ 2930			
1 HOLE 505-452-1200 Tax 505-452-1520 HAINEO, AN				Portland, Orego	on 9722	23		E	BEACH RD LAND HAINES, AK		FIG. A-4			

NOL	보뉴	MATERIAL DESCRIPTION			SA	MPLE			PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET					PEN.	INST	'ATER/ 'RUMENT ALLATION	(BLOWS PER FOOT) WATER CONTENT (%	. 1/4	NCH O.D.
		SURFACE ELEVATION: 416.6 FT. (continued from previous page)		RUN NO.	NO.	DATA	N N		10 20 30 40	7	LIT SPOON NCH O.D.
		、 · · · · · · · · · · · · · · · · · · ·		D 45						SPI SPI	LIT SPOON
				R-15					· · · · · · · · · · · · · · · · · · ·		NCH O.D. THIN ILL SAMPLER
								85	· · · · · · · · · · · ·	Ш ріт	NCH O.D. CHER BE SAMPLER
				R-16						RE	SAMPLE COVERY
							XA11XA11XA11XA11XA11XA11XA11XA11XA11XA1		· · · · · · · · · · · · · · ·	LEV	/YY OUND WATER /EL AND TE OBSERVED
								90			LIQUID LIMIT
				R-17				50			 WATER CONTENT
				12-17							PLASTIC LIMIT
										PE	ANDARD NETRATION ST (BLOWS/FT.)
								95		I 🔹 wa	TER CONTENT PERCENT
				R-18							RE RECOVERY PERCENT
		very highly to highly fractured 46.8 feet	to 48.5								D IN PERCENT
								10-			
				R-19				100			PACKER TEST NTERVAL
314.6	102	Pottom of Poring: 102 FT								NOTES	
		Bottom of Boring: 102 FT								INTERFA	TIONS AND CES ARE
								105	· · · · · · · ·	INTERPR	ETIVE AND CHANGES MAY
										2. WATER I	EVEL IS FOR
									· · · · · · · · · · · · · · · · ·		TH TIME OF
											RRAY (S/N
								110		- INSIDE 2 DIAMETE	R PVC CASING
									· · · · · · · · · · · · · · · · ·		PTH OF 100.3 BRATING WIRE ETERS
										INSTALL	ED AT 43.0 N 2123106)
								115			ON OUTSIDE
								115			ITE-CEMENT
										102 FEET ABOVE-0	
										MONUME	ENT
								120			
HAMN	/IER /	ASSEMBLY: AUTO TRIP SP	T SAMPLER:	NOL	INER	- CONS	TANT	ID	20 40 60 80 RECOVERY/RQD (%)		
DRILL	ROE	DUSED: NWJ BO	REHOLE DIA	AM.: 4	.5" (0.	0'-14.5');	3.78"	(14.5'-102	2.0')		
		DISCOVERY	LA	ND	SL	IDE		SUM			MAR 2022
		RT: 10/6/2021 FINISH: 10/9/2021 TECHNIQUE: HWT CASING	T E C H 10250 S.W. Gr			G Y , Suite 111			LT-4 (3 of 3	·	PROJ 2930
ADVA	NCE	R/HQ3 CORING	Portland, Oreg Phone 503-452	on 9722	23			E	BEACH RD LANDSL HAINES, AK	.IDE	FIG. A-4

Z	MATERIAL DESCRIPTION				SA	MF	PLE	GRO		PENETRA	TION TEST		
VATIO	FEET	MATERIAL DESCRIPTION						WAT	ER/	(BLOWS F	PER FOOT)	LEGEND	
E E E	ΔZ	SURFACE ELEVATION: 480.9 FT.		RUN NO.	NO.		PEN. DATA	INSTALL			ONTENT (%) 30 40		NCH O.D. LIT SPOON
		MEDIUM DENSE to VERY DENSE, g gravel- to boulder-sized ROCK FRAG a matrix of silty SAND; micaceous, ro	MÉNTS in										NCH O.D. LIT SPOON
		fragments are HARD to VERY HARD ultramafic rock, moist (LANDSLIDE D	(R4-R5)								· · · · ·		NCH O.D. THIN ILL SAMPLER
									5			Ш РІТ	NCH O.D. ICHER BE SAMPLER
					S-1		11 9 5			. ● . ▲ 		RE MM/DD	SAMPLE COVERY /YY
												LE	OUND WATER /EL AND TE OBSERVED
					S-2		13 13 50/3"		10	•			 LIQUID LIMIT WATER CONTENT
		driller notes boulder-like drilling 11. feet	5 to 18.5				50/3"			 . 	/		PLASTIC LIMIT
									15			PE TES	ANDARD NETRATION ST (BLOWS/FT.) ITER CONTENT PERCENT
													RE RECOVERY PERCENT
				R-1			58					RQ	D IN PERCENT
					S-3		58 14 3		20				PACKER TEST NTERVAL
		driller notes boulder-like drilling 21. feet	0 to 22.0		S-4		15 50/0"					NOTES	
		loose silty SAND with gravel 22.0 to		R-2								INTERFA INTERPR	PTIONS AND CES ARE ETIVE AND
454.4	00.0	driller notes boulder-like drilling 24.0 feet; sandy, slightly clayey SILT sand- to gravel-sized rock fragmen 26.3 to 26.8 feet		R-3					25			BE GRAD	EVEL IS FOR
454.1	26.8	HARD to VERY HARD (R4-R5), gray, weathered to fresh, ULTRAMAFIC RC	DCK;	R-4								VARY WI YEAR.	OWN AND MAY TH TIME OF
		highly to moderately fractured, fractur 60° (smooth to rough, planar, open, o silty sand on fracture faces) dominant 0 to 20° (smooth to rough, planar, ope	ccasional t, fractures	R-5				12 (U	2/28/21 PPER) ₃₀			306399) I INSIDE 2	RRAY (S/N NSTALLED 7-MM
		to 80° (smooth, planar to undulating, or secondary, scattered very highly fract zones, with slightly clayey silt infilling 1/8-inch on fractures with slickensides	open) ured up to s,	R-6								TO A DEF FEET; VII PIEZOME INSTALLI FEET (S/	ED AT 33.0 N 2123097)
		occasional crushed zones, occasiona joints, numerous felsic veins up to 6 fo occasional micaceous zones, major g mineralization	eet high,						35		· ///	OF PVC	ON OUTSIDE CASING.
		micaceous zone at 31.3 to 33.5 fee very highly fractured from 32.8 to 3 polished 70° fracture with 1/8-inch clayey silt infilling at 36.3 feet very highly fractured zone 37.0 to 3	3.5 feet slightly	R-7						· · · · ·		GROUT F 101 FEET ABOVE-C MONUME	ITE-CEMENT FROM 0.0 TO . 3-INCH BROUND ENT
440.9	40	with scattered slickensides on random oriented fractures		R-8					40			INSTALLI	<u>-</u> U.
			0.000					TANT.	101		60 80		
			SAMPLER:								Y/RQD (%)		
		DISCOVERY	奉奉									G LOG	MAR 2022
		RT: 10/18/2021 FINISH: 10/21/2021	тесн	ND N O		_	DE gy		SUIVIIN		(1 of 3)		PROJ 2930
		TECHNIQUE: HWT CASING R/HQ3 CORING	10250 S.W. Gr Portland, Oreg Phone 503-452	gon 972	23				В	EACH RE	LANDSLI		FIG. A-5
			Phone 503-452	-1200	rax 503	3-45	02-1528			ΠAIN	120, AN		

NOL	포뉴	MATERIAL DESCRIPTION			SAM	MPLE				ATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET						INST	ATER/		PER FOOT) ONTENT (%)		NCH O.D.
		SURFACE ELEVATION: 480.9 FT.		RUN NO.	NO.	PEN. DATA		ALLATION	10 20			LIT SPOON
		(continued from previous page) slickensides on 55° fracture (30° rak 39.5 feet	ke) at									NCH O.D. LIT SPOON
				R-8								NCH O.D. THIN ILL SAMPLER
		slickensides on 60° fracture (30° rake 1/8-inch slightly clayey silt infilling at 42 slickensides on 70° fracture (30° rake	.9 feet				1×111×111×111×111×111×111×111×111×111×	45			Ш РІТ	NCH O.D. CHER BE SAMPLER
		feet very highly to highly fractured zone fr to 44.6 feet; slickensides on 60° fracture relea to 44.4 feet	rom 43.3 e (70°	R-9							RE MM/DD	SAMPLE COVERY /YY
		rake) at 44.1 feet very highly fractured zone from 44.4 feet									LE	OUND WATER /EL AND TE OBSERVED
		1/8-inch slightly clayey silt infilling on fracture at 45.0 feet very highly to highly fractured zone w	<i>v</i> ith					50				LIQUID LIMITWATER
		scattered slightly clayey silt infilling up t 1/8-inch from 46.7 to 50.3 feet	io	R-10								CONTENT PLASTIC LIMIT
		very highly to highly fractured micaca zone with numerous healed fractures b 52.1 to 58.5 feet; numerous slickenside	etween								PE	ANDARD NETRATION
		randomly oriented fractures from 53.8 to feet						55			• WA	ST (BLOWS/FT.) NTER CONTENT PERCENT
				R-11								RE RECOVERY PERCENT
		micaceous zone from 58.2 to 58.3 fe	et				. 🚍 .	12/28/21 (DRY)			RQ	D IN PERCENT
								60				PACKER TEST NTERVAL
				R-12					· · · · ·		NOTES	
		slickensides on 80° fracture (30° rake feet very highly fractured zone from 63.0	·								INTERFA	TIONS AND CES ARE
		feet	10 03.5					65				ETIVE AND CHANGES MAY DUAL.
		very highly fractured from 66.7 to 66. slickensides on 70° fracture (70° rake)		R-13							DATE SH	EVEL IS FOR OWN AND MAY TH TIME OF
		1/8-inch slightly clayey silt infilling at 66 slickensides on 70° fracture (60° rake feet	.9 feet					70			306399) I	RRAY (S/N NSTALLED
		slickensides on 80° fracture (70° rake feet	e) at 70.3	R-14			XV//XV//XV//XV/	10			TO A DE	7-MM R PVC CASING PTH OF 99.7 BRATING WIRE
		very highly fractured 72.3 to 73.6 fee slickensides on 60° fracture (30° rake) a	et; at 72.3						· · · · ·			ED AT 33.0 N 2123097)
		feet						75			2123105) OF PVC (ON OUTSIDE CASING.
		slickensides on 70° fracture (20° rake feet	e) at 75.0	R-15							GROUT F	L DETAILS: ITE-CEMENT ROM 0.0 TO 3-INCH
									••••		ABOVE-O MONUME INSTALLI	BROUND ENT
400.9	80			R-16				80				
1			SAMPLER:						RECOVE	60 80 RY/RQD (%)		
DRILL	RO	D USED: NWJ BORE	HOLE DIA	AM.: 4	.5" (0.0	0'-21.0');	3.78"	(21.0'-10	1.0')			
1		DISCOVERY RT: 10/18/2021 FINISH: 10/21/2021 T	LA	ND	SLI	IDE		SUMI		BORIN		MAR 2022
DRILL	ING	TECHNIQUE: HWT CASING	E C H		g Road,					(2 of 3)		PROJ 2930
ADVA	NCE		ortland, Oreg hone 503-452			-452-1528		E		D LANDSLI NES, AK	νE	FIG. A-5

TION	표현	MATERIAL DESCRIPTION			SAN	MPLE	G	ROUND /ATER/	PENETRATION TEST (BLOWS PER FOOT)	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 480.9 FT.		RUN NO.	NO.	PEN. DATA	INST	RUMENT ALLATION	WATER CONTENT (%) 10 20 30 40	2-IN SPI	ICH O.D. LIT SPOON
		(continued from previous page)			INU.				· · · · · · · ·	<u>⊠</u> 3-II	ICH O.D. LIT SPOON
				R-16						∏ 3-IN	ICH O.D. THIN LL SAMPLER
										Ш РІТ	NCH O.D. CHER 3E SAMPLER
		very highly fractured zone from 84. feet with silty micaceous sand infilling		R-17				85		* NO	SAMPLE COVERY
		1/4-inch					<u>/////////////////////////////////////</u>			LE\	OUND WATER /EL AND
								00		DA	TE OBSERVED
				R-18				90			 WATER CONTENT
		slickensides on 40° fracture (45° ra 91.7 feet	ake) at								PLASTIC LIMIT
		very highly to highly fractured zone to 99.3 feet with slightly clayey silt infi slickensides on 85° fracture (30° rake	illina:					05		PEI TES	NETRATION ST (BLOWS/FT.) TER CONTENT
		feet	e) at 95.5	R-19			X///X///X///X///X///X/	95			PERCENT RE RECOVERY
				R-20							PERCENT D IN PERCENT
								100			ACKER TEST
379.9	101	Bottom of Boring: 101 FT		R-21				100			NTERVAL
		Dettern of Doning. To TTT							· · · · · · · · · · · · · · · · · · ·	1. MATERIA	L TIONS AND
								105		INTERFA INTERPR	CES ARE ETIVE AND CHANGES MAY
										2. WATER L DATE SH	EVEL IS FOR OWN AND MAY
									· · · · · · · · · · · · · · · · · · ·	VARY WI YEAR. 3. MEASUR	TH TIME OF
								110		SHAPEAI 306399) I INSIDE 2	RRAY (S/N NSTALLED 7-MM
										TO A DEF	R PVC CASING PTH OF 99.7 BRATING WIRE
									· · · · · · · · · · · · · · · · · · ·	INSTALL	EL AT 33.0 N 2123097) 88.0 (S/N
								115		2123105) OF PVC (ON OUTSIDE CASING.
										GROUT F	TE-CEMENT ROM 0.0 TO
										ABOVE-G MONUME INSTALLE	INT
								120			
НАМ	/IER /	ASSEMBLY: AUTO TRIP SPT	SAMPLER	: NO L	INER	- CONS	TANT	. ID	20 40 60 80 RECOVERY/RQD (%)		
			REHOLE DI	AM.: 4	.5" (0.0)'-21.0');	3.78'				
		DISCOVERY RT: 10/18/2021 FINISH: 10/21/2021	ТЕСН					SUM	MARY BORIN LT-5 (3 of 3)		MAR 2022 PROJ 2930
		TECHNIQUE: HWT CASING R/HQ3 CORING	10250 S.W. Gr Portland, Oreg Phone 503, 452	gon 972	23			 B	EACH RD LANDSLI HAINES, AK		FIG. A-5
L			Phone 503-452	-1200	rax 503-	-452-1528			HAINES, AN		

	ΗË	MATERIAL DESCRIPTION		SA	AMF	PLE		GROUND WATER/	PENETRATION TEST (BLOWS PER FOOT)	LEGEND			
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 877.5 FT.	RUN NO.	NO.		PEN. DATA	IN	ISTRUMENT STALLATION	WATER CONTENT (%) 10 20 30 40	1 1/1 4-11	NCH O.D. LIT SPOON		
		DENSE to VERY DENSE, dark gray, silty, sand- to gravel-sized ROCK FRAGMENTS;		<u>NO.</u>						- 3-II	NCH O.D. LIT SPOON		
		subangular to angular gravel-sized rock fragments, micaceous, moist (COLLUVIUM)									NCH O.D. THIN ALL SAMPLER		
				S-1		19 26 23		5		ТШ ріт	NCH O.D. CHER BE SAMPLER		
870.5	7			S-2		18 50/5" 30			•		SAMPLE COVERY /YY		
		HARD to VERY HARD (R4-R5), gray to dark gray, slightly weathered to fresh, ULTRAMAFIC ROCK; highly to moderately fractured, fractures	<u>R-1</u>	S-3		50/1"	N///X			GR LE	OUND WATER VEL AND TE OBSERVED		
		20 to 40° (smooth to rough, planar, open) and 60 to 80° (smooth to rough, planar, open) dominant, scattered very highly fractured zones,	R-2					10			 LIQUID LIMIT WATER CONTENT 		
		occasional micaceous zones up to 2 inches thick, occasional slightly clayey silt infilling up to 1/8-inch, numerous oxide stains, occasional									PLASTIC LIMIT		
		felsic veins up to 2 inches thick, scattered healed fractures, minor secondary mineralization micaceous zone from 7.8 to 8.0 feet						15		PE TE	ANDARD NETRATION ST (BLOWS/FT.) ATER CONTENT		
		very highly fractured zones at 11.6 to 12.8 feet, and 13.4 to 13.9 feet	R-3								PERCENT RE RECOVERY PERCENT		
											D IN PERCENT		
			R-4					20			PACKER TEST NTERVAL		
										NOTES			
		very highly fractured zone from 22.2 to 22.8 feet lamprophyre from 24.0 to 24.8 feet					NI/INI/			INTERFA INTERPF	AL PTIONS AND CES ARE RETIVE AND CHANGES MAY		
			R-5					25		BE GRAI 2. WATER I DATE SH			
				-						3. MEASUR			
								30		SHAPEA 306387) INSIDE 2	RRAY (S/N NSTALLED		
			R-6							TO A DE FEET WI EXTENS	PTH OF 121.0 TH A 2-FOOT ON ON THE ; VIBRATING		
										INSTALL	EZOMETERS ED AT 47.5 N 2123108) 32.3 (S/N		
			R-7					35	· · · · · · · · · · · · · · · · · · ·	2123095) OF PVC 4. BACKFIL			
									· · · · · · · · ·	BENTON GROUT	ITE-CEMENT FROM 0.0 TO F. 3-INCH		
837.5	40		R-8					40		MONUM	ENT		
	20 40 60 80 HAMMER ASSEMBLY: AUTO TRIP SPT SAMPLER: NO LINER - CONSTANT ID RECOVERY/RQD (%) DRILL ROD USED: NWJ BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.0')												
		DISCOVERY	NTT)CT	T1					IG LOG	MAR 2022		
		RT: 9/18/2021 FINISH: 9/20/2021 TECHNIQUE: HWT CASING		ySL L G			1		LT-6 (1 of 4)	PROJ 2930		
ADVA	NCE	R/HQ3 CORING Portland, Ore Phone 503-45	egon 972	23				B	EACH RD LANDSL HAINES, AK	IDE	FIG. A-6		

NOF.	тĿ			SA	MPLE		GROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION				INS	WATER/ STRUMENT	(BLOWS PER FOOT) WATER CONTENT (%)		
		SURFACE ELEVATION: 877.5 FT.	RUN NO.	NO.	PEN. DATA	M M	TALLATION	10 20 30 40	1 [// 2 -11	NCH O.D. LIT SPOON
		(continue from previous page)	R-8							NCH O.D. LIT SPOON
			R-8					· · · · · · · · · · · · · · · · · · ·		NCH O.D. THIN ILL SAMPLER
		very highly to highly fractured zone from 44.0 to 48.0 feet; up to 1/8-inch slightly clayey silt	R-9			//////////////////////////////////////	45			NCH O.D. CHER BE SAMPLER
		infilling on high angle fracture faces from 46.0 to 47.5 feet							RE	SAMPLE COVERY
			R-10				12/28/21 (DRY)		LE'	OUND WATER /EL AND TE OBSERVED
							50			 LIQUID LIMIT WATER
			R-11							CONTENT PLASTIC LIMIT
								· · · · · · · ·	L ST/	
							55		TES • WA	NETRATION ST (BLOWS/FT.) TER CONTENT
			R-12						077 CO	PERCENT RE RECOVERY
		very highly to highly fractured zone with up to 1/8-inch slightly clayey silt infilling from 56.5 to								PERCENT D IN PERCENT
		58.0 feet								
		very highly to highly fractured with occasional slightly clayey silt infilling up to 1/16-inch from	R-13				60			PACKER TEST NTERVAL
		59.9 to 65.6 feet							NOTES	
						841184118411841184118411841184118411841		· · · · · · · · · · · · · · · ·	INTERFA INTERPR	L TIONS AND CES ARE ETIVE AND CHANGES MAY
		1/2-inch micaceous sandy zone at 65.6 feet	R-14				65		BE GRAD	
									DATE SH	OWN AND MAY TH TIME OF
		very highly fractured zone from 67.8 to 68.5 feet				XV11/XV11/XV11/XV11/				AND SAAV RRAY (S/N NSTALLED
			R-15				70		INSIDE 2 DIAMETE	
									FEET WI EXTENSI	TH A 2-FOOT ON ON THE
									WIRE PIE	; VIBRATING ZOMETERS ED AT 47.5
							75		AND AT 8	N 2123108) 32.3 (S/N ON OUTSIDE
			R-16						OF PVC	CASING.
							12/28/21 (LOWER)		BENTON GROUT F	TE-CEMENT ROM 0.0 TO
		very highly fractured zone from 78.9 to 79.3	D (-					· · · · · · · · · · · ·	ABOVE-0 MONUME	ENT
797.5	80	feet	R-17			88	80	20 40 60 80	INSTALLI	<u>-</u> U.
		ASSEMBLY: AUTO TRIP SPT SAMPLER						RECOVERY/RQD (%)		
DRILL	RO	D USED: NWJ BOREHOLE DI	АМ.: 4	.5" (0.	.0'-7.0');	3.78"				
		DISCOVERY RT: 9/18/2021 FINISH: 9/20/2021	ND	SL	IDE		SUMN			MAR 2022
DRILL	ING	TECHNIQUE: HWT CASING	eenburg	L C g Road		1		LT-6 (2 of 4	·	PROJ 2930
ADVA	NCE	R/HQ3 CORING Portland, Oreg Phone 503-452	gon 972.	23			В	EACH RD LANDSL HAINES, AK	IDE	FIG. A-6

TION	ΞĒ	MATERIAL DESCRIPTION			SA	MPLE	GROUND WATER/			TION TEST PER FOOT)	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 877.5 FT.		RUN NO.		PEN.	INSTRUMEN INSTALLATIC	п 🛄		ONTENT (%)		ICH O.D. LIT SPOON
		(continue from previous page)		NO.	NO.	DATA			10 20	30 40	⊠ 3-II	ICH O.D.
		very highly to highly fractured zone fi to 81.8 feet; slickensides on 60° fractur rake) at 81.4 feet	rom 81.0 re (80°	R-17							∏ 3-IN	LIT SPOON NCH O.D. THIN LLL SAMPLER
		, -							· · · ·		Ш РІТ	ICH O.D. CHER BE SAMPLER
				R-18				. 85			* NO RE	SAMPLE COVERY
		very highly fractured zone from 87.4 feet	to 88.2						· · ·	· · · ·	LE\	/YY OUND WATER /EL AND TE OBSERVED
				R-19				90				 LIQUID LIMIT WATER CONTENT
		very highly to highly fractured zone f	rom 02.0						· · · ·			PLASTIC LIMIT
		to 93.2 feet	10111 92.0					95	· · ·		PEI TES	ANDARD NETRATION ST (BLOWS/FT.) .TER CONTENT
				R-20							777 CO	PERCENT RE RECOVERY PERCENT
											RQ	D IN PERCENT
		very highly to highly fractured zone f to 102.7 feet; 1/8-inch slightly clayey si at 101.5 feet; micaceous zone from 102 102.7 feet	lt infilling	R-21				100				PACKER TEST NTERVAL
											NOTES	
							1KV11KV11KV11KV11KV11KV11KV11KV11KV11KV	. 105	· · · ·		INTERFA INTERPR	TIONS AND CES ARE ETIVE AND CHANGES MAY
		very highly to highly fractured zone f 106.2 to 108.0 feet	rom	R-22					· · ·		2. WATER L DATE SH	EVEL IS FOR OWN AND MAY TH TIME OF
							11KV11KV11KV11KV11KV	· 110	· · · ·		3. MEASUR SHAPEAI	RRAY (S/N NSTALLED
		very highly to highly fractured zone find the second sec	rom	R-23							DIAMETE TO A DEF FEET WI	R PVC CASING TH OF 121.0 TH A 2-FOOT ON ON THE
											BOTTOM WIRE PIE INSTALLE	; VIBRATING ZOMETERS ED AT 47.5 N 2123108)
				D 04				115			AND AT 8	00 OUTSIDE
		very highly fractured zone from 116.	5 to	R-24				•	· · ·		GROUT F	TE-CEMENT ROM 0.0 TO
		116.8		R-25				•	· · ·		123 FEET ABOVE-G MONUME INSTALLE	ROUND
757.5										60 80		
			SAMPLER EHOLE DI				3.78" (7.0'-12		-COVEF	RY/RQD (%)		
		DISCOVERY	LA	NT)SL	IDE	SU			BORIN		MAR 2022
		RT: 9/18/2021 FINISH: 9/20/2021	E C H	N O			1			(3 of 4)		PROJ 2930
ADVA	NCE	R/HQ3 CORING	ortland, Oreg hone 503-452	gon 972	23			BEA		D LANDSLI NES, AK	DE	FIG. A-6

NOL	тĿ	MATERIAL DESCRIPTION			SAM	PLE	GROUND	PENETRATION TEST	LEGEND		
ELEVATION IN FEET	DEPTH IN FEET	WATERIAL DESCRIPTION					WATER/ INSTRUMENT	(BLOWS PER FOOT) WATER CONTENT (%)			
	□≤	SURFACE ELEVATION: 877.5 FT.	RUN NO.	N	0.	PEN. DATA	INSTALLATION	10 20 30 40	1 1/4 4-11	NCH O.D. LIT SPOON	
		(continue from previous page)								NCH O.D. LIT SPOON	
754.5	123		R-25					· · · · · · · · · · · · · · · · · · ·		NCH O.D. THIN ALL SAMPLER	
		Bottom of Boring: 123 FT					405		Ш ріт	nch o.d. 'Cher Be sampler	
							125		* NO	SAMPLE COVERY	
										/YY OUND WATER	
									LE	VEL AND TE OBSERVED	
							130				
										 WATER CONTENT 	
										PLASTIC LIMIT	
										ANDARD NETRATION	
									TE	ST (BLOWS/FT.)	
							135			TER CONTENT	
										RE RECOVERY PERCENT	
								· · · · · · · · · · · ·		D IN PERCENT	
							140			PACKER TEST	
										NTERVAL	
									NOTES		
										AL PTIONS AND CES ARE	
							145		INTERPF	ETIVE AND CHANGES MAY	
									2. WATER I	EVEL IS FOR	
									VARY WI	OWN AND MAY TH TIME OF	
									3. MEASUR		
							150		SHAPEA	RRAY (S/N NSTALLED	
									DIAMETE	R PVC CASING TH OF 121.0	
									FEET WI EXTENSI	TH A 2-FOOT ON ON THE	
									WIRE PIE	; VIBRATING ZOMETERS	
									FEET (S/	ED AT 47.5 N 2123108)	
							155		AND AT 8 2123095) OF PVC 0	ON OUTSIDE	
									4. BACKFIL		
									GROUT F		
									ABOVE-C		
							160		INSTALL		
				16.17		CON0		20 40 60 80			
			Γ SAMPLER: NO I REHOLE DIAM.: 4					RECOVERY/RQD (%)			
										MAR 2022	
		DISCOVERY RT: 9/18/2021 FINISH: 9/20/2021	T E C H N C	D S	LI	DE	SOM	MARY BORIN LT-6 (4 of 4			
		TECHNIQUE: HWT CASING	10250 S.W. Greenbur					•	-	PROJ 2930	
ADVA	DVANCER/HQ3 CORING Portland, Oregon 97223 BEACH RD LANDSLIDE Phone 503-452-1200 Fax 503-452-1528 HAINES, AK										

NOL	보다	MATERIAL DESCRIPTION				ROUND	PENETRA		LEGEND				
ELEVATION IN FEET	DEPTH IN FEET						PEN.	INS	VATER/ TRUMENT ALLATION		PER FOOT) ONTENT (%)		NCH O.D.
		SURFACE ELEVATION: 858.1 FT. LOOSE, gray, sand- to gravel-sized ROC	к	RUN NO.	NO.		DATA	NN NN		10 20	30 40		LIT SPOON
		FRAGMENTS; subangular to angular gravel-sized rock fragments, moist											NCH O.D. LIT SPOON
		(COLLUVIUM)											NCH O.D. THIN ILL SAMPLER
					S-1		3 5 3		5			Ш ріт	NCH O.D. CHER BE SAMPLER
		becomes VERY DENSE below 5.0 feel	t		S-2		2 16 26		0	∮			SAMPLE COVERY
					S-3		7 48 36			↓			OUND WATER /EL AND TE OBSERVED
848.6	9.5	HARD (R4), gray, moderately to slightly			S-4		50/4"		10				
		weathered, ULTRAMAFIC ROCK; highly fractured, fractures 20 to 45° (smooth to r	rough										 WATER CONTENT
		planar, slightly clayey silt infilling up to 1/4 dominant, fracture 70 to 90° (rough, plana open) secondary, scattered extremely sof	4-inch) ar,	R-1									PLASTIC LIMIT
		micaceous zones, scattered very highly fractured zones, minor oxide stains, mino	F									PE TES	NETRATION ST (BLOWS/FT.)
		veins, minor green mineralization lamprophyre from 10.0 to 17.6 feet; ver	ry	R-2					15				TER CONTENT
		highly fractured zones at 10 to 10.5 feet a 14.7 to 15.5 feet	DLIP	D A									RE RECOVERY PERCENT
		very highly fractured to crushed zone fi 17.5 to 18.6 feet	from	R-3								RQ	D IN PERCENT
		וו נט וס.ט ו כל נ	ſ						20] PT-1 F	
		EXTREMELY SOFT to VERY SOFT (F decomposed to highly weathered, micace zone from 19.8 to 20.3 feet		R-4					20				PACKER TEST NTERVAL
		1-inch micaceous zone at 20.9 feet		R-5								1. MATERIA	
		very highly fractured zone from 22.8 to feet	23.0							· · · ·		DESCRIF INTERFA	TIONS AND CES ARE ETIVE AND
									25				CHANGES MAY
		very highly fractured zone from 25.4 to feet	25.6	R-6								DATE SH	EVEL IS FOR OWN AND MAY TH TIME OF
												YEAR. 3. MEASUR	
			Ī						30			SHAPEAI 306396) I	RRAY (S/N NSTALLED
		EXTREMELY SOFT (R0), highly weath micaceous zone from 30.1 to 30.9 feet	nered,	р - I					50			TO A DE	R PVC CASING PTH OF 122.0
		very highly fractured zone from 33.1 to	33.5	R-7								FEET; VII PIEZOME	BRATING WIRE
824.6	33.5	feet										FEET (S/ AND AT	N 2123104) 107.0 (S/N
		HARD to VERY HARD (R4-R5), gray, slig weathered to fresh, ULTRAMAFIC ROCK highly to moderately fractured, fractures 5	K;						35			OF PVC	
		70° (smooth to rough, planar to undulating open) dominant, fractures 0 to 20° (smooth	g,	R-8									L DETAILS: ITE-CEMENT ROM 0.0 TO
		rough, planar, open) secondary, scattered hgihly fractured zones, occasional extrem	d very	-								123.6 FEI ABOVE-0	ET. 3-INCH GROUND
		soft micaceous zones, occasional healed fractures, minor felsic veins, minor green										MONUME	
818.1	40	mineralization		R-9				<u>ÍÍ</u>	40				
HAM	/IER /	ASSEMBLY: AUTO TRIP SPT SA	MPLER:	NO L	INER	- (CONS	STANT	D		60 80 RY/RQD (%)		
DRILL	RO	D USED: NWJ BOREH		M.: 4.	.5" (0.	.0'-	10.0')	; 3.78	" (10.0'-123	3.6')			
		DISCOVERY	LA	ND)SL	11	DE		SUM			G LOG	MAR 2022
				NO	LC)		1		LT-7	(1 of 4)	1	PROJ 2930
		R/HQ3 CORING Port	50 S.W. Gre tland, Orego ne 503-452-	on 9722	23				B) LANDSLI IES, AK	DE	FIG. A-7
		Phot	ne 505-452-	1200	i aA 303	J-43	-132	0					l

Z				SA	MPLE	C	ROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION				V	VATER/ FRUMENT	(BLOWS PER FOOT)		
ELE ELE	ΩZ	SURFACE ELEVATION: 858.1 FT.	RUN NO.	NO.	PEN. DATA		ALLATION	WATER CONTENT (% 10 20 30 40	. 174 – .	NCH O.D. LIT SPOON
		(continued from previous page) very highly to highly fractured zone from 36.3								NCH O.D. LIT SPOON
		to 38.3 feet lamprophyre from 40.1 to 41.5 feet	R-9							NCH O.D. THIN ALL SAMPLER
							45		/Ш ріт	NCH O.D. CHER BE SAMPLER
			R-10							SAMPLE COVERY
								· · · · · · · · · · · · · · ·		OUND WATER /EL AND TE OBSERVED
			R-11				50	· · · · · · · · ·		 LIQUID LIMIT WATER
		EXTREMELY SOFT (R0), highly weathered, micaceous zone from 51 to 51.2 feet								CONTENT PLASTIC LIMIT
			R-12						PE	ANDARD NETRATION ST (BLOWS/FT.)
							55		IN	TER CONTENT PERCENT
		very highly to highly fractured 56.6 to 57.2 feet	R-13				12/28/21 (DRY)			RE RECOVERY PERCENT D IN PERCENT
		leet								DINFERGENT
			R-14				60			PACKER TEST NTERVAL
			K-14						NOTES	
							65	· · · · · · · · · · · · ·	DESCRIF INTERFA INTERPF	PTIONS AND CES ARE ETIVE AND CHANGES MAY
		VERY SOFT (R1), highly weathered, sheared zone with green mineralization 66.5 to 67.2 feet	R-15					· · · · · · · · · · · · · · · · · · ·	DATE SH	Level is for Iown and may Th time of
							70		306396) INSIDE 2	RRAY (S/N NSTALLED 7-MM
			R-16					· · · · · · · · · · · · · · · · · · ·	TO A DE	ER PVC CASING PTH OF 122.0 BRATING WIRE ETERS
		polished 70° fracture at 72.0 feet							INSTALL FEET (S/ AND AT	ED AT 57.0 N 2123104) I07.0 (S/N
		VERY SOFT (R1), micaceous zone from					75		OF PVC	L DETAILS:
		75.0 to 75.2 feet	R-17					· · · · · · · · · · · · · · · ·	GROUT I	ITE-CEMENT FROM 0.0 TO ET. 3-INCH GROUND
									MONUMI	ENT
778.1	80		R-18				80			
		ASSEMBLY: AUTO TRIP SPT SAMPLER						20 40 60 80 RECOVERY/RQD (%))	
		DUSED: NWJ BOREHOLE DI	AIVI.: 4	.ɔ (U.(u - 10.0°);	3.18				
DATE	STA	DISCOVERY RT: 9/26/2021 FINISH: 9/28/2021	ND N O		IDE _G y		SUM	MARY BORIN LT-7 (2 of 4		MAR 2022 PROJ 2930
		TECHNIQUE: HWT CASING R/HQ3 CORING Portland, Ore Phone 503-453	gon 972	23			B	EACH RD LANDSI HAINES, AK	IDE	FIG. A-7

ET	표교	MATERIAL DESCRIPTION			SAN	/IPLE		GROUND WATER/		ATION TEST PER FOOT)	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 858.1 FT.	RUN NO.	۱ ۱	NO.	PEN. DATA	. IN	STALLATION		ONTENT (%)		NCH O.D. LIT SPOON
		(continued from previous page)			ν Ο.						II-E ∏	NCH O.D. LIT SPOON
			R-18	8			1/////////////////////////////////////				II-E ∏	NCH O.D. THIN
				-							Ш РІТ	NCH O.D. CHER
								85			* NO	BE SAMPLER SAMPLE COVERY
			R-19	9								OUND WATER
				-					· · · · ·			
								90 ▼ 12/28/21 (LOWER)				 LIQUID LIMIT WATER CONTENT
			R-20	0				(LOWER)	· · · · ·			PLASTIC LIMIT
				_							PE	ANDARD NETRATION ST (BLOWS/FT.)
								95			• WA	TER CONTENT PERCENT
			R-2	1					· · · · ·			RE RECOVERY PERCENT
		very highly fractured micaceous zone, on hi angle fractures from 97.0 to 98.0 feet	gh	_							RQ	D IN PERCENT
								100				
			R-2	2							NOTES	NTERVAL
							\X X X X X X X X					TIONS AND
								105			INTERPR	CES ARE ETIVE AND CHANGES MAY
		very highly to highly fractured zone with mid 105.0 to 106.8 feet	a R-2	3							2. WATER I	EVEL IS FOR OWN AND MAY
		103.0 10 100.8 leet							· · · · ·		YEAR.	TH TIME OF
								110			306396) I	RRAY (S/N NSTALLED
			R-24	4							TO A DE	PTH OF 122.0 BRATING WIRE
											PIEZOME INSTALL	
							XVIII			· · · ·	AND AT 2 2123107) OF PVC (ON OUTSIDE
			R-2	5				115				ITE-CEMENT
							1/////////////////////////////////////					
		very highly fractured zone from 118.0 to 118.4 feet	R-20	_					••••		INSTALLI	
738.1		L						<u>120</u>		0 60 80		
		ASSEMBLY: AUTO TRIP SPT SAMPL DUSED: NWJ BOREHOLE								RY/RQD (%)		
			AN	DS	SLI	[DE		SUMI		BORIN		MAR 2022
		RT: 9/26/2021 FINISH: 9/28/2021 TECHNIQUE: HWT CASING 10250 S.W	. Greenbu	ırg P	L O		1			(3 of 4)		PROJ 2930
ADVA	NCE	R/HQ3 CORING Portland, Phone 503	Oregon 97	7223				E		D LANDSLI NES, AK	DE	FIG. A-7

ELEVATION IN FEET					SAN	NPLE	GROUND	PENETRATION TEST	LEGEND	
μ́z	DEPTH IN FEET	MATERIAL DESCRIPTION		ŀ			WATER/	(BLOWS PER FOOT)		
ᆸ_	öz∣	SURFACE ELEVATION: 858.1 FT.	RU	JN	NO.	PEN. DATA	INSTALLATION	WATER CONTENT (% 10 20 30 40		NCH O.D. LIT SPOON
		(continued from previous page)		0.	110.	<u> </u>				NCH O.D. LIT SPOON
			R-2	26				· · · · · · · · · · · · · · · · · · ·		NCH O.D. THIN ALL SAMPLER
734.5 1	123.6	Bottom of Boring: 123.6 FT			-				Ш ріт	NCH O.D. CHER BE SAMPLER
							125		* NC	SAMPLE COVERY
										/YY OUND WATER VEL AND
								· · · · · · · · · · · · · · · · · · ·	DA	
							130			 WATER CONTENT
										PLASTIC LIMIT
								· · · · · · · · · · · · · · · · · · ·	PE TE	ANDARD NETRATION ST (BLOWS/FT.)
							135		IN	ATER CONTENT PERCENT
									IN IN	D IN PERCENT
							140			PACKER TEST NTERVAL
									NOTES	
							145	· · · · · · · · · · · · · · · · · · ·	INTERFA INTERPF	AL PTIONS AND CES ARE RETIVE AND CHANGES MAY
							140			DUAL. LEVEL IS FOR IOWN AND MAY
								· · · · · · · · · · · ·	VARY W YEAR.	TH TIME OF
							150		3. MEASUR SHAPEA 306396) INSIDE 2	RRAY (S/N NSTALLED
									DIAMETE TO A DE FEET; VI	ER PVC CASING PTH OF 122.0 BRATING WIRE
										ED AT 57.0
									AND AT	N 2123104) 107.0 (S/N ON OUTSIDE
							155		OF PVC	CASING. L DETAILS:
								· · · · · · · · · · · ·	GROUT I	ITE-CEMENT FROM 0.0 TO ET. 3-INCH FROUND
								 	MONUM	ENT
							160	20 40 60 80		
			SAMPLER: NO					RECOVERY/RQD (%)	
			EHULE DIAM.	. 4.	ວ (ປ.(J-10.0')	; 3.78" (10.0'-12:			
		DISCOVERY RT: 9/26/2021 FINISH: 9/28/2021	T E C H N	$[D_{\circ}]$	SL]	[DE _{Gy}	SUM	MARY BORIN LT-7 (4 of 4		MAR 2022 PROJ 2930
		FECHNIQUE: HWT CASING R/HQ3 CORING	T E C H N O L O G Y 10250 S.W. Greenburg Road, Suite 111 Portland, Oregon 97223 Phone 503-452-1200 Fax 503-452-1528			11 BEACH RD LANDSLIDE			FIG. A-7	

NOL	포뉴	MATERIAL DESCRIPTION			SA	MF	νLE					LEGEND	
ELEVATION IN FEET	DEPTH IN FEET			RUN			PEN.	INS	VATER/ TRUMENT FALLATION	(BLOWS PER WATER CON	TENT (%)		ICH O.D.
ш		SURFACE ELEVATION: 941.8 FT. VERY DENSE, dark gray, sand- to gravel-siz		RUN NO.	NO.		DATA	88		10 20 3	0 40		LIT SPOON
		ROCK FRAGMENTS; subangular to angular gravel-sized rock fragments, moist									· · · · ·	SPI SPI	IT SPOON
		(COLLUVIUM)			S-1		42 50/2"					Ш wa	LL SAMPLER
							50/2"		5				ICH O.D. CHER 3E SAMPLER
934.8	7				S-2		50/3"			•		RE 	SAMPLE COVERY YYY
		HARD to VERY HARD (R4-R5), gray, slightly weathered to fresh, ULTRAMAFIC ROCK; highly to moderately fractured, fractures 10 to		R-1	S-3		50 50/4"			• • • •		LE/	OUND WATER /EL AND FE OBSERVED
		30° (rough, planar, open) dominant, fractures to 80° (rough, planar to undulating, open)	60						10				
		secondary, occasional extremely soft micace zones, scattered felsic veins, major oxide sta		R-2									 WATER CONTENT
		occasional healed fractures, minor green mineralization											PLASTIC LIMIT
			-								· · · /	PEI	ANDARD NETRATION ST (BLOWS/FT.)
									15				TER CONTENT PERCENT
				R-3									RE RECOVERY PERCENT
												RQ	D IN PERCENT
									20		[] _{PT-1} _□	
									20				PACKER TEST
				R-4								NOTES	
			-								 	INTERFA INTERPR	TIONS AND CES ARE ETIVE AND
									25			ACTUAL BE GRAD	CHANGES MAY UAL.
				R-5								DATE SH	EVEL IS FOR OWN AND MAY TH TIME OF
		very highly fractured, micaceous zone fron 28.0 to 28.5 feet	n -								· · · /	3. MEASUR	AND SAAV RRAY (S/N
		20.0 10 20.5 1001							30			306400) I INSIDE 2	NSTALLED 7-MM
				R-6								TO A DEF FEET; VIE	R PVC CASING PTH OF 119.6 BRATING WIRE
											· · · · ·		ELERS ED AT 42.4 N 2123098) 11.5 (S/N
000.0	25.0	EXTREMELY SOFT (R1), very highly fractured and sheared zone with up to 1/2-inc sandy clay infilling from 33.5 to 35.2 feet	ch						35			AND AT 8 2123099) OF PVC 0	ON OUTSIDE
906.6	35.2	HARD to VERY HARD (R4-R5), gray, slightly weathered to fresh, ULTRAMAFIC ROCK;	/	R-7					00				TE-CEMENT
		highly to moderately fractured, fractures 10 to 30° (rough, planar, open) dominant, fractures		17									
		to 90° (rough, planar to undulating, open) secondary, scattered very highly fractured zones, occasional extremely soft to very soft	F								V <u>////</u>	INSTALLE	
901.8	40			R-8				88	40	20 40 6	0 80		
		ASSEMBLY: AUTO TRIP SPT SAMP								RECOVERY/	RQD (%)		
		DUSED: NWJ BOREHOLI		avi.: 4	.5 (0.	0-	<i>ı</i> .u);	J.10					MAR 2022
		DISCOVERY RT: 10/3/2021 FINISH: 10/5/2021	LANDSLIDE				SOM	MARY B LT-8 (1			PROJ 2930		
	RILLING TECHNIQUE: HWT CASING 10250 S.W.				W. Greenburg Road, Suite 111 – , Oregon 97223								
AUVA						3-43	52-1528	3	HAINES, AK			FIG. A-8	

Z H MATERIAL DESCRIPTION SAMPLE GROUND WATER/ INSTRUMENT PENETRATION TEST (BLOWS PER FOOT) LEGEND SURFACE ELEVATION: 941.8 FT. RUN NO. PEN. INSTRUMENT INSTALLATION WATER CONTENT (%) 10 20 30 40 2-INCH O.D. SPLIT SPOOT sheared zones, occasional slickensides, occasional micaceous zone, occasional felsic veins, minor oxide stains, occasional healed D.8 Image: Material content for the stain of the st	
sheared zones, occasional slickensides, occasional micaceous zone, occasional felsic veins, minor oxide stains, occasional healed	
occasional micaceous zone, occasional felsic veins, minor oxide stains, occasional healed	N
	N
fractures, minor green mineralization very highly to highly fractured 37.5 to 38.5	
feet very highly fractured zone from 41.3 to 41.6	
feet: slickensides on 10° fracture (00° rake) at I NN	
very highly to highy fractured zone from 45.8 R-9 to 48.3 feet R-9 MM/DD/YY	
GROUND WA LEVEL AND DATE DASEF	
R-10 PLASTIC	
very highly to highly fractured zone form 52.0	
PENETRATIC TEST (BLOW	
R-11 55 WATER CON IN PERCENT	
EXTREMELY SOFT to VERY SOFT (R0-R1),	
In PERCENT	
In slickensides on 50° fracture (70° rake) at 57.9	
PT-1 PACKER T	TEST
R-13	
Image: Notes Notes	
1. MATERIAL DESCRIPTIONS AN	
INTERPACTIVE AN ACTUAL CHANGES	١D
B-14	
DATE SHOWN AND	D MAY
feet YEAR.	OF
EXTREMELY SOFT (R0), sheared zone with silty sand infilling from 68.8 to 69.3 feet	
R-16 DIAMETER PVC CA FR-16 DIAMETER PVC CA FR-16 DIAMETER PVC CA FR-16 DIAMETER PVC CA FR-16 DIAMETER PVC CA	19.6
PIEZOMETERS INSTALLED AT 42.4	
FEET (S/N 2123098	,
Image: Rest of the second s	SIDE
4. BACKFILL DETAILS BENTONITE-CEME	
R-17 GROUT FROM 0.0 123.5 FEET. 3-INCI	
ABOVE-GROUND MONUMENT INSTALLED.	
78.2 to 78.3 feet	
861.8 80 R-18 ▼ 12/28/21 ₈₀ 20 40 60 80	
HAMMER ASSEMBLY: AUTO TRIP SPT SAMPLER: NO LINER - CONSTANT ID RECOVERY/RQD (%)	
DRILL ROD USED: NWJ BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')	
DRILLER: DISCOVERY	2022
DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING	J 2930
ADVANCER/HQ3 CORING ADVANCER/HQ3 CORING 10250 S.W. Greenburg Road, Suite 111 Portland, Oregon 97223 Phone 503-452-1200 Fax 503-452-1528 HAINES, AK FIG. A	7-8

Setting Setting WATER OF WATER OF Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Setting Seti	NOL	тb	MATERIAL DESCRIPTION			SA	MF	PLE		ROUND	PENETRAT		LEGEND	
Image: continued from previous page) R-16 Image: continued from previous protein on high angle R-16 Image: continued from strenged from the continued from strenged fr	EVATI 7 FEE	A FEE	MATERIAL DESCRIPTION							VATER/ TRUMENT		,		
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R-28 120 120 120 120 120 120 120 20 40 60 80PAMMER ASSEMBLY: AUTO TRIP DRILL ROD USED: NWJSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGMAR 2022 PROJ 2930DRILLING TECHNIQUE: HWT CASING POrtand, Oregon 97223SUMMARY BORING LOG LT-8 (3 of 4)BEACH RD LANDSLIDE			111.3 to 113.5 feet	from									INSTALL	ED AT 42.4
R-28 120 120 120 120 120 120 120 20 40 60 80PAMMER ASSEMBLY: AUTO TRIP DRILL ROD USED: NWJSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGMAR 2022 PROJ 2930DRILLING TECHNIQUE: HWT CASING POrtand, Oregon 97223SUMMARY BORING LOG LT-8 (3 of 4)BEACH RD LANDSLIDE													AND AT	31.5 (S/N
R-28 120 120 120 120 120 120 120 20 40 60 80PAMMER ASSEMBLY: AUTO TRIP DRILL ROD USED: NWJSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGMAR 2022 PROJ 2930DRILLING TECHNIQUE: HWT CASING POrtand, Oregon 97223SUMMARY BORING LOG LT-8 (3 of 4)BEACH RD LANDSLIDE										115			OF PVC	CASING.
R-28 120 120 120 120 120 120 120 20 40 60 80PAMMER ASSEMBLY: AUTO TRIP DRILL ROD USED: NWJSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGMAR 2022 PROJ 2930DRILLING TECHNIQUE: HWT CASING POrtand, Oregon 97223SUMMARY BORING LOG LT-8 (3 of 4)BEACH RD LANDSLIDE					R-27								BENTON	ITE-CEMENT
R-28 120 120 120 120 120 120 120 20 40 60 80PAMMER ASSEMBLY: AUTO TRIP DRILL ROD USED: NWJSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGSPT SAMPLER: NO LINER - CONSTANT ID BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORINGMAR 2022 PROJ 2930DRILLING TECHNIQUE: HWT CASING POrtand, Oregon 97223SUMMARY BORING LOG LT-8 (3 of 4)BEACH RD LANDSLIDE													123.5 FE ABOVE-0	et. 3-INCH Ground
20 40 60 8020 40 60 80AMMMER ASSEMBLY: AUTO TRIPSPT SAMPLER: NO LINER - CONSTANT IDRECOVERY/RQD (%)DRILL ROD USED: NWJBOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5')DRILLER: DISCOVERYDATE START: 10/3/2021 FINISH: 10/5/2021MAR 2022DRILLING TECHNIQUE: HWT CASINGADVANCER/HQ3 CORINGMAR 2022PROJ 2930BEACH RD LANDSLIDEFIG. A. 9														
HAMMER ASSEMBLY: AUTO TRIP DRILL ROD USED: NWJ DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORING DVANCER/HQ3 CORING	821.8	120			R-28					120	••••	••••		
DRILL ROD USED: NWJ BOREHOLE DIAM.: 4.5" (0.0'-7.0'); 3.78" (7.0'-123.5') DRILLER: DISCOVERY DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING Image: Comparison of the portand, Oregon 97223 DRILLING TECHNIQUE: HWT CASING Image: Dot of the portand, Oregon 97223		MER /	ASSEMBLY: AUTO TRIP SPI	SAMPI FR		INFR	- (CONS	TANT	D				
DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORING												. (/		
DATE START: 10/3/2021 FINISH: 10/5/2021 DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORING DV ANCER/HQ3 CORING DATE START: 10/3/2021 FINISH: 10/5/2021 T E C H N O L O G Y 10250 S.W. Greenburg Road, Suite 111 Portland, Oregon 97223 BEACH RD LANDSLIDE BEACH RD LANDSLIDE	DRILI	ER: I	DISCOVERY	T A	NTT	NCT -	11			SUM	MARY F	BORIN	G LOG	MAR 2022
ADVANCER/HQ3 CORING Portland, Oregon 97223 BEACH RD LANDSLIDE				тесн	N O			G Y						PROJ 2930
Phone 503-452-1200 Fax 503-452-1528 HAINES, AK				Portland, Oreg	gon 972	23				B			IDE	FIG. A-8

NO⊢	⊢				SAM	IPLE	GROUND		TION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION		Ī			WATER/ INSTRUMENT		PER FOOT) ONTENT (%)		
	⊔≧	SURFACE ELEVATION: 941.8 FT.	RU	JN D.	NO.	PEN. DATA	INSTALLATION		30 40		NCH O.D. LIT SPOON
		(continued from previous page)									NCH O.D. LIT SPOON
040.0	100 5		R-2	28			×				NCH O.D. THIN ALL SAMPLER
818.3	123.5	Bottom of Boring: 123.5 FT			L		~			Ш ріт	NCH O.D. CHER BE SAMPLER
							125			* NO	SAMPLE COVERY
											/YY OUND WATER /EL AND
										DA	
							130				 WATER CONTENT
											PLASTIC LIMIT
										PE	ANDARD NETRATION
							135			• WA	ST (BLOWS/FT.) TER CONTENT PERCENT
										co	RE RECOVERY PERCENT
											D IN PERCENT
							140	• • • •			PACKER TEST
										NOTES	NTERVAL
										1. MATERIA	
							145			INTERFA INTERPR ACTUAL	PTIONS AND CES ARE ETIVE AND CHANGES MAY
							140			BE GRAD	UAL. LEVEL IS FOR
										DATE SH	IOWN AND MAY TH TIME OF
										3. MEASUR	AND SAAV RRAY (S/N
							150			306400) I INSIDE 2	NSTALLED
										TO A DEF FEET; VII	PTH OF 119.6 BRATING WIRE
											ETERS ED AT 42.4 N 2123098)
										AND AT 8 2123099)	31.5 (S/N ON OUTSIDE
							155			OF PVC 0	CASING. L DETAILS:
									· · · · ·	GROUT F 123.5 FEI	ITE-CEMENT ROM 0.0 TO ET. 3-INCH
										ABOVE-C MONUME INSTALLI	ENT
							400				
Нами		ASSEMBLY: AUTO TRIP SP	T SAMPLER: NO		INFR -	CONS	160 TANT ID		60 80	1	
			REHOLE DIAM.								
		DISCOVERY	TAN	ח	STT	DF		MARY		G LOG	MAR 2022
		RT: 10/3/2021 FINISH: 10/5/2021 TECHNIQUE: HWT CASING					11				PROJ 2930
ADVA	NCE	R/HQ3 CORING	10250 S.W. Greenburg Road, Suite 111 Portland, Oregon 97223 Phone 503-452-1200 Fax 503-452-1528					BEACH RD LANDSLIDE HAINES, AK			FIG. A-8

NOL		···			SA	MF	νLE	GI	ROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION						N	ATER/	(BLOWS PER FOOT)		
	ΞZ	SURFACE ELEVATION: 712.5 FT.		RUN NO.	NO.		PEN. DATA		ALLATION	WATER CONTENT (%) 10 20 30 40	2-11	ICH O.D. LIT SPOON
710.5	2	VERY DENSE, dark gray, sand- to gr ROCK FRAGMENTS; subangular to a gravel-sized rock fragments up to 1 in	angular									NCH O.D. ∟IT SPOON
110.0	-	(DECOMPOSED ULTRAMAFIC ROC	к)									ICH O.D. THIN LL SAMPLER
		HARD to VERY HARD (R4-R5), dark slightly weathered, ULTRAMAFIC RO highly to highly fractured, fractures 10 (rough, planar, open) and fractures 40 (rough, planar to stepped, open) dom fractures 70 to 80° (rough, planar to s open) secondary, numerous extremel very soft and sheared zones, numero	OCK; very to 30° to 60° inant, tepped, y soft to us	R-1	S-1		50/5"	<u>KUTKUTKUTKUTKUTKUTKUTKUTKUTKUTKUTKUTKU</u> KUTKUTKUTKUTKUTKUTKUTKUTKUTKUTKUTKUTKU	5	•	₩ PIT TUI ★ NO RE ^I <u>▼</u> MM/DD GR	NCH O.D. CHER BE SAMPLER SAMPLE COVERY YY OUND WATER /EL AND
		micaceous zones up to 2 feet thick, n healed fractures, minor green mineral major oxide stains and black mineraliz	ization,									TE OBSERVED
		minor felsic veins open fracture filled with organic silt 5.1 to 5.2 feet	infilling at	R-2					10			 WATER CONTENT
		EXTREMELY SOFT (R0) micaceou from 6.3 to 6.9 feet	us zone									PLASTIC LIMIT
				<u>R-3</u>							PEI TES	ANDARD NETRATION ST (BLOWS/FT.)
				R-4					15		INI	TER CONTENT PERCENT RE RECOVERY
	1/4-inch clayey silt infilling on 60° fracture a 16.2 feet											PERCENT
												D IN PERCENT
				R-5					20 12/28/21 (UPPER)			PACKER TEST NTERVAL
											NOTES	
		EXTREMELY SOFT (R0) micaceou from 22.7 to 22.8 feet	us zone								INTERFA INTERPR	TIONS AND CES ARE ETIVE AND
		EXTREMELY SOFT to VERY SOF sheared zone from 24.4 to 26.5 feet	T (R0-R1)	R-6					25		BE GRAD	CHANGES MAY WAL. .EVEL IS FOR
		SOFT to MEDIUM HARD (R2-R3) zone at 26.5 to 28.4 feet	micaceous	R-7							DATE SH	OWN AND MAY TH TIME OF
		EXTREMELY SOFT (R0) micaceou a high angle fracture from 31.2 to 32.3	us zone on 5 feet	R-8				1×411×411×411×411×411×411×411×41	30		306401) I INSIDE 2 DIAMETE TO A DEF FEET; VIE PIEZOME INSTALLE	RRAY (S/N NSTALLED 7-MM R PVC CASING PTH OF 120.6 BRATING WIRE ITERS ED AT 73.0
		SOFT to MEDIUM HARD (R2-R3), moderately weathered, micaceous zo 33.0 to 34.0 feet	ne from	<u>R-9</u>							FEET (S/I AND AT 1 2123101) OF PVC (N 2123100) 07.0 (S/N ON OUTSIDE CASING.
		33.0 10 54.0 1001		R-10					35		GROUT F	L DETAILS: TE-CEMENT ROM 0.0 TO ET. 3-INCH
672.5	40	EXTREMELY SOFT to VERY SOF micaceous zone from 37.2 to 38.0 fee EXTREMELY SOFT to VERY SOF sheared zone from 39.7 to 41.7 feet	et Ó	R-11					40		ABOVE-G MONUME INSTALL	ROUND
НАММ	IER A	ASSEMBLY: AUTO TRIP SPT	SAMPLER	: NO L	INER	- (CONS	TANT	ID	20 40 60 80 RECOVERY/RQD (%)		
			REHOLE DIA									
DRILL	.ER: [DISCOVERY	A .	T					SUM		GLOG	MAR 2022
		RT: 10/10/2021 FINISH: 10/15/2021	тесн	LANDSLIDE					SUMMARY BORING LOG LT-9 (1 of 4)			PROJ 2930
	ILLING TECHNIQUE: HWT CASING VANCER/HQ3 CORING			H N O L O G Y W. Greenburg Road, Suite 111 , Oregon 97223)3-452-1200 Fax 503-452-1528							FIG. A-9	

ZOL					SAM	MPLE	GI	ROUND	PENETRATION TES		
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION					W	ATER/	(BLOWS PER FOO		
ĽЩ Z Ш	۵z	SURFACE ELEVATION: 712.5 FT.		RUN NO.	NO.	PEN. DATA		ALLATION	WATER CONTENT (10 20 30 40	· · · · · ·	NCH O.D. LIT SPOON
		(continued from previous page)									NCH O.D. LIT SPOON
				R-12							NCH O.D. THIN
				R-13						Ш w/ 7/	ALL SAMPLER
		moderately fractured zone from 43. feet	2 to 45.2					45		УШ РП	NCH O.D. ICHER BE SAMPLER
				R-14				45		* NC	SAMPLE COVERY
										- GF	ROUND WATER VEL AND TE OBSERVED
				R-15				50			 WATER CONTENT
				14-15							PLASTIC LIMIT
											ANDARD
										TE	NETRATION ST (BLOWS/FT.)
		moderately fractured zone from 55.	0 to 56.3	5.40				55			ATER CONTENT PERCENT
		feet		R-16							RE RECOVERY
											D IN PERCENT
		moderately fractured zone from 59.	9 to 61.3					60			PACKER TEST
		feet		R-17						NOTES	
		1/4-inch silty sand infilling with slick on 30° fracture (40° rake) at 61.7 feet								1. MATERIA	
				R-18						INTERFA	PTIONS AND ACES ARE RETIVE AND
		slickensides on 20° fracture (30° ra 64.5 feet	ake) at	R-19				65			CHANGES MAY
		EXTREMELY SOFT (R0) sheared . 65.5 to 66.8 feet	zone from								LEVEL IS FOR IOWN AND MAY
645.1	67.4	EXTREMELY SOFT to VERY SOFT (R-20						VARY W YEAR.	ITH TIME OF
		gray, pervasively sheared and diced w reduced to sandy clay, ULTRAMAFIC	vith zones	R-21							RAND SAAV RRAY (S/N
		······································		R-22				70		INSIDE 2	INSTALLED 17-MM ER PVC CASING
										· TO A DE	PTH OF 120.6 BRATING WIRE
				R-23							ETERS ED AT 73.0 N 2123100)
638.5	74									AND AT 2123101	107.0 (S/N) ON OUTSIDE
		HARD to VERY HARD HARD (R4-R5 gray, slightly weathered to fresh, ULT						75			CASING. L DETAILS:
		ROCK, highly to moderately fractured 10 to 30° (smooth to rough, planar, or	ben)	R-24						BENTON GROUT	ITE-CEMENT FROM 0.0 TO
		dominant, fractures 50 to 70° (smooth planar to undulating, open) secondary	',							ABOVE-0	ET. 3-INCH GROUND
		occasional very highly fractured and n zone, occasional felsic veins, major g	nicaceous							MONUMI INSTALL	
632.5	80	mineralization		R-25				80			
НАММ	MER /	ASSEMBLY: AUTO TRIP SPT	SAMPLER	: NO L	INER	- CONS	TANT	ID	20 40 60 80 RECOVERY/RQD (1	%)	
									')		1
DRILL	ER: I	DISCOVERY		NIT	ICT 1	IDE		SUM	MARY BORI	NG LOG	MAR 2022
		RT: 10/10/2021 FINISH: 10/15/2021	TECH	N O		G Y			LT-9 (2 of		PROJ 2930
			Portland, Oreg				BEACH RD LANDSLIDE		FIG. A-9		
		····	Portland, Oregon 97223 Phone 503-452-1200 Fax 503-452-1528					HAINES, AK			

NO⊢					SA	MPLE	G	ROUND		ATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION					V INS	/ATER/ FRUMENT	(BLOWS	PER FOOT)		
	۵Z	SURFACE ELEVATION: 712.5 FT.		RUN NO.	NO.	PEN. DATA		ALLATION		ONTENT (%) 30 40		ICH O.D. LIT SPOON
		(continued from previous page) slickensides on 50° fractures (15° r	ake) at									ICH O.D. LIT SPOON
		78.1 feet		R-25					· · · · ·			ICH O.D. THIN LL SAMPLER
								85			Ш PIT TUI	NCH O.D. CHER BE SAMPLER
		very highly fractured zone from 86.0) to 86.3	R-26							RE MM/DD	SAMPLE COVERY /YY
		feet									LE\	OUND WATER /EL AND TE OBSERVED
				R-27				90				 LIQUID LIMIT WATER CONTENT
				12-27								PLASTIC LIMIT
		slickensides on 20° fracture (75° ra	ke) at 93.4								PEI	ANDARD NETRATION ST (BLOWS/FT.)
		feet		R-28				95			INF	TER CONTENT PERCENT
											IN F	RE RECOVERY PERCENT
												D IN PERCENT
				R-29				100				PACKER TEST NTERVAL
											NOTES	
		very highly fractured zone from 104	5 to					105			INTERFA INTERPR	TIONS AND CES ARE ETIVE AND CHANGES MAY
		104.6 feet very highly to highly fractured zone slightly clayey silt infilling up to 1/4-inc 105.8 to 108.0 feet	, with	R-30				12/28/21 (LOWER)			2. WATER L DATE SH	evel is for own and may th time of
								110			306401) I INSIDE 2	RRAY (S/N NSTALLED 7-MM
		very highly to highly fractured zone 110.8 to 114.0 feet	from	R-31							TO A DEF	R PVC CASING PTH OF 120.6 BRATING WIRE TERS
											FEET (S/I AND AT 1	ED AT 73.0 N 2123100) 07.0 (S/N ON OUTSIDE
				D 22				115			OF PVC (CASING. L DETAILS:
		horomor you highly to highly to	rod bolow	R-32					· · · · ·		GROUT F	TE-CEMENT ROM 0.0 TO T. 3-INCH ROUND
		becomes very highly to highly fractu 117.0 feet	area delow								MONUME	NT
				R-33			38	120	00 40	60 00		
			SAMPLER						RECOVE	60 80 RY/RQD (%)		
			REHOLE DIA	-\ivi.: 4	.ə (U.(J-3.U'); (o.78 ^{°°}					
		DISCOVERY RT: 10/10/2021 FINISH: 10/15/2021	те Сн	ND N O		IDE _G y		SUM		BORIN (3 of 4)		MAR 2022 ——— PROJ 2930
	DVANCER/HQ3 CORING Portland, Or				6.W. Greenburg Road, Suite 111 — d, Oregon 97223 503-452-1200 Fax 503-452-1528			BEACH RD LANDSLIDE			FIG. A-9	
L			1 none 505-432	-1200 .	i an 303	-734-1328		HAINES, AK				

NOL	포뉴	MATERIAL DESCRIPTION		SA	MPLE	GROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET				PEN.	WATER/ INSTRUMENT INSTALLATION	(BLOWS PER FOOT) WATER CONTENT (%)	- 1/4	NCH O.D.
		SURFACE ELEVATION: 712.5 FT. (continued from previous page)	RUN NO.	NO.	DATA		10 20 30 40	1	
			R-33					SP SP	NCH O.D. LIT SPOON
589.5	123				\square				NCH O.D. THIN ALL SAMPLER
		Bottom of Boring: 123 FT				125		Ш ріт	NCH O.D. CHER BE SAMPLER
								RE	SAMPLE COVERY
									OUND WATER
							· · · · · · · · · · · · · · · · · · ·		VEL AND TE OBSERVED
						130			LIQUID LIMITWATER
									CONTENT PLASTIC LIMIT
							· · · · · · · · · · · ·		ANDARD
								PE	NETRATION ST (BLOWS/FT.)
						135			ATER CONTENT PERCENT
									RE RECOVERY PERCENT
									D IN PERCENT
						140			PACKER TEST NTERVAL
								NOTES	
									AL PTIONS AND CES ARE
						145		INTERPF ACTUAL	RETIVE AND CHANGES MAY
								BE GRAD	LEVEL IS FOR
									IOWN AND MAY TH TIME OF
								3. MEASUR	AND SAAV RRAY (S/N
						150		306401) I INSIDE 2	NSTALLED 7-MM
								TO A DEI FEET; VI	ER PVC CASING PTH OF 120.6 BRATING WIRE
							· · · · · · · · · · ·	PIEZOME INSTALL FFFT (S/	ETERS ED AT 73.0 N 2123100)
								AND AT 2123101)	107.0 (S/N ON OUTSIDE
						155		OF PVC	L DETAILS:
								GROUT F	ITE-CEMENT FROM 0.0 TO ET. 3-INCH
								ABOVE-C MONUME INSTALL	GROUND ENT
								INGTALL	LD.
				1		160	20 40 60 80]	
			「 SAMPLER: NO L REHOLE DIAM.: 4				RECOVERY/RQD (%)		
		DISCOVERY			,				MAR 2022
		RT: 10/10/2021 FINISH: 10/15/2021	T E C H N O	SEL	IDE G y	E SUMMARY BORING L LT-9 (4 of 4)			PROJ 2930
		TECHNIQUE: HWT CASING R/HQ3 CORING	10250 S.W. Greenburg Road, Suite 111 – Portland, Oregon 97223				BEACH RD LANDSLIDE		
			Phone 503-452-1200		3-452-152	3	HAINES, AK		FIG. A-9

NOL	тĿ				SA	MF	νLE	GR	OUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION						W/	ATER/ RUMENT	(BLOWS PER FOOT) WATER CONTENT (%		
ЭЧ Ш	⊔≤	SURFACE ELEVATION: 290.0 FT.		run NO.	NO.		PEN. DATA		LLATION	10 20 30 40	1 1/4 4-11	NCH O.D. LIT SPOON
		MEDIUM DENSE to DENSE, gray, silty SAND numerous organics, micaceous, occasional boulders up to 4.0 feet, moist (COLLUVIUM)							12/05/21 UPPER)			NCH O.D. LIT SPOON
		driller notes boulder like drilling 2.5 to 6.5 fe	et							· · · · · · · · · · · · ·		NCH O.D. THIN ALL SAMPLER
									5		Ш ріт	NCH O.D. CHER BE SAMPLER
									-		RE	SAMPLE COVERY
					S-1		7 15 18		12/05/21 LOWER)	$\begin{vmatrix} \cdot \cdot \cdot \cdot \cdot \\ \cdot \cdot \cdot \cdot \\ \begin{vmatrix} \cdot \cdot \cdot \cdot \\ \bullet \\ \bullet \\ \bullet \\ \end{vmatrix} $	LE	OUND WATER VEL AND TE OBSERVED
									10			 LIQUID LIMIT WATER CONTENT
					• •		17					PLASTIC LIMIT
275.5	14.5	VERY DENSE, light gray, slightly silty, sand- to			S-2		19 24		15		PE TE	ANDARD NETRATION ST (BLOWS/FT.) ATER CONTENT PERCENT
		gravel-sized ROČK FRAGMENTS; subangular to angular gravel-sized rock fragments, moist (COLLUVIUM))		PERCENT
		х ,			S-3		19 44 52					D IN PERCENT
									20			PACKER TEST NTERVAL
					S-4		50/0"				NOTES	NIERVAL
266.3	23.7	HARD to VERY HARD (R4-R5), grav to	F	२-1	3-4		30/0			· · · · · · · · · · · · · · · · · · ·	INTERFA	AL PTIONS AND CES ARE RETIVE AND
		green-gray, slightly weathered to fresh, ULTRAMAFIC ROCK; very highly to highly	F	२-२					25			CHANGES MAY
		fractured, fractures 10 to 30 ° (rough, planar, open) and fractures 50 to 70° (rough, planar, open) dominant, fractures 70 to 90° (rough, planar, open) secondary, occasional sheared	F	र-3							DATE SH	LEVEL IS FOR IOWN AND MAY ITH TIME OF
		and crushed zones, numerous slickensides, occasional micaceous zones up to 2 inches thick, occasional slighly clayey silt infilling up to 1/2-inch thick, occasional felsic veins up to 10 feet thick, major green mineralization		२-4					30		306402) I INSIDE 2 DIAMETE	RRAY (S/N INSTALLED
		slickensides on 75° fracture (80° rake) with 1/8-inch thick slightly clayey silt infilling at 31.3		(-4							FEET; VI PIEZOME INSTALL	BRATING WIRE ETERS ED AT 24.0
		feet slickensides on 50° fracture (70° rake) at 31 feet		२-5							AND AT 8	ON OUTSIDE
		slickensieds on 50° fracture (40° rake) at 33 feet slickensides on 10° fracture (85° rake) at 35							35		4. BACKFIL BENTON	L DETAILS: ITE-CEMENT
		feet; sheared and crushed zone with slickensides on numerous randomly inclined fractures with up to 1/4-inch thick slightly clayey silt infilling	F	र-6								ENT
250.0	40	from 35.6 to 37.6 feet	F	२-७					40			
HAMM	1ER 4	ASSEMBLY: AUTO TRIP SPT SAMPLI	ER: N	10 L	INER	- (D	20 40 60 80 RECOVERY/RQD (%)		
		USED: NWJ BOREHOLE								. ,		
DRILL	.ER: [A N		ост	т			SUM	MARY BORIN	IG LOG	MAR 2022
							G Y			LT-10 (1 of 3		PROJ 2930
	DVANCER/HQ3 CORING Portland, O				S.W. Greenburg Road, Suite 111 — Id, Oregon 97223 503-452-1200 Fax 503-452-1528				BEACH RD LANDSLIDE HAINES, AK		FIG. A-10	

Z					SAN	/IPLE		_	PENETRATION TEST		
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION					GROUN WATER INSTRUM	2/	(BLOWS PER FOOT)	LEGEND	
ELEV	ΔZ	SURFACE ELEVATION: 290.0 FT.		RUN NO.	NO.	PEN. DATA	INSTALLAT	TION	WATER CONTENT (% 10 20 30 40	' [// 4-"	NCH O.D. LIT SPOON
		(continued from previous page)				2				3-11	NCH O.D.
				R-7							
		slickensides on 70° fracture (25° rake	e) at 42.4	17							NCH O.D. THIN ALL SAMPLER
		feet micaceous sand zone from 43.3 to 4								∕јШ рп	NCH O.D. TCHER
		slickensides on 50° fracture (70° rake) a feet; slickensides with 1/16-inch clay inf						45		4	BE SAMPLER
		40° fracture (70° rake) at 43.5 feet	-	R-8							COVERY
											OUND WATER
										DA	VEL AND TE OBSERVED
								50			
											 WATER CONTENT
		slickensides on 55° fracture (10° rake	e) at 51.5	R-9							PLASTIC LIMIT
		feet									ANDARD NETRATION
		slickensides on 50° fracture (60° rake on 30° fracture (80° rake) at 53.7 and 54	e), and							TE	ST (BLOWS/FT.)
		on 30 Tracture (80 Take) at 53.7 and 54	4.4 ieet					55			PERCENT
		moderately fractured zone from 56.1	to 57.3	R-10							RE RECOVERY PERCENT
		feet									D IN PERCENT
		slickensides on 20° fracture (50° rake	e) at 58.6								
		feet slickensides on 30° fracture (90° rake	,					60			PACKER TEST NTERVAL
		on 70° fracture (85° rake) at 59.5 and 6		R-11					· · · · ·	NOTES	NIERVAL
		crushed zone from 62.0 to 62.4 feet								1. MATERIA	
		slickensides on 30° fracture (40° rake	e) at 63.0	R-12						DESCRIF	AL PTIONS AND ACES ARE
		feet slickensides on 50° fracture (75° rake	e) at 63.6					65		INTERPF ACTUAL	RETIVE AND CHANGES MAY
		feet slickensides on 50° fracture (80° rake	e) at 63.9							BE GRAD	DUAL. LEVEL IS FOR
		feet slickensides on 80° fracture (10° rake	e) at 64.2	R-13						DATE SH	IOWN AND MAY
		feet crushed zone from 64.7 to 64.9 feet	,							YEAR.	
		slickensides on 60° fracture (60° rake 1/8-inch thick clay infilling at 66.4 feet	e) with						· · ·		AND SAAV RRAY (S/N INSTALLED
		slickensides on 50° fracture (40° rake	e) at 67.0					70		INSIDE 2	
218.2	71.8			R-14						FEET; VI	PTH OF 102.1 BRATING WIRE
		VERY SOFT to SOFT (R1-R2), green-g highly to moderately weathered, ULTRA	ray, MAFIC								ED AT 24.0 N 2123116)
		ROCK; very highly to highly fractured, fr 10 to 30° (smooth to slickensided, plana	actures							AND AT 2 2123096)	86.0 (S/N ON OUTSIDE
		dominant, fractures 50 to 70° (rough, pla undulating, open) secondary, pervasivel	anar to					75			CASING. L DETAILS:
		sheared with major clay infilling that is EXTREMELY SOFT (R0), numerous	· <i>J</i>	R-15					· ////////////////////////////////////	BENTON	L DETAILS: ITE-CEMENT FROM 0.0 TO
		slickensides on randomly oriented fractu		r-13					· ////////////////////////////////////	102.4 FE ABOVE-0	ET. 3-INCH GROUND
		scattered fragments of HARD (R4) rock 1.0-foot thick between sheared zones,								MONUMI INSTALL	
210.0	80	occasional lamprophyre dikes up to 0.6- thick, major green mineralization	-100ľ	R-16				80			
						00110			20 40 60 80	_	
							TANT ID ; 3.78" (22'-	102 4	RECOVERY/RQD (%))	
		*	**-),					MAR 2022
		DISCOVERY RT: 10/16/2021 FINISH: 10/18/2021	LA	ND	SLI	DE	SU	JMI	MARY BORIN LT-10 (2 of 3		
			есн 250 S.W. Gr		L O	G Y Suite 111			•	, 	PROJ 2930
ADVA	NCE	R/HQ3 CORING	ortland, Oreg	gon 972	23			В	BEACH RD LANDSL HAINES, AK	IDE	FIG. A-10
L		F 11	June 303-+32	land, Oregon 97223 ne 503-452-1200 Fax 503-452-1528							

NOL	- F			SA	MPLE	GROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	MATERIAL DESCRIPTION				WATER/ INSTRUMENT	(BLOWS PER FOOT)		
Ľ E E	ŏ₹	SURFACE ELEVATION: 290.0 FT.	RUN NO.	NO.	PEN. DATA	INSTALLATION	WATER CONTENT (%) 10 20 30 40	- 1/4 - "	NCH O.D. LIT SPOON
		(continued from previous page) slickensides on 70° fracture (80° rake) at 72.0							NCH O.D. LIT SPOON
		feet slickensides on 30° fracture (85° rake), and on 20° fracture (40° rake) at 74.1 and 74.7 feet	R-17			85			NCH O.D. THIN ILL SAMPLER
						85		Ш ріт	NCH O.D. CHER BE SAMPLER
			R-18					* NO RE	SAMPLE COVERY
						90 90 90 91 91 92 95 95 100		LEV	/YY OUND WATER /EL AND TE OBSERVED
						90			LIQUID LIMITWATER
			R-19						CONTENT PLASTIC LIMIT
								PE	ANDARD NETRATION ST (BLOWS/FT.)
			R-20			95		🔶 wa	TER CONTENT PERCENT
				_					RE RECOVERY PERCENT
			R-21						D IN PERCENT
			R-22			100			PACKER TEST NTERVAL
187.6	102.4							NOTES	
107.0	102.4	Bottom of Boring: 102.4 FT		-		105	· · · · · · · · · · · · · · · · · · ·	INTERFA INTERPR	PTIONS AND CES ARE ETIVE AND CHANGES MAY
							· · · · · · · · · · · · · · · · · · ·	2. WATER L DATE SH	EVEL IS FOR OWN AND MAY TH TIME OF
						110	· · · · · · · · · · · · · · · · · · ·	306402) I	RRAY (S/N NSTALLED
						110		TO A DEF	7-MM R PVC CASING PTH OF 102.1 BRATING WIRE
									ED AT 24.0
								AND AT 8	ON OUTSIDE
						115		4. BACKFIL BENTON	
								102.4 FEI ABOVE-C MONUME	et. 3-inch Bround Ent
						120			Ξυ.
		ASSEMBLY: AUTO TRIP SPT SAMPLE					20 40 60 80 RECOVERY/RQD (%)		
DRILL	RO	D USED: NWJ BOREHOLE D	0IAM.: 4	.5" (0.	.0'-22.0');	3.78" (22'-102.4	4')		
		DISCOVERY RT: 10/16/2021 FINISH: 10/18/2021		DSL	IDE	SUMI	MARY BORIN LT-10 (3 of 3		MAR 2022 PROJ 2930
DRILL	.ING	TECHNIQUE: HWT CASING 10250 S.W. 0 Portland, On	W. Greenburg Road, Suite 111 - d, Oregon 97223				BEACH RD LANDSLIDE		
		Phone 503-4	52-1200	Fax 50.	3-452-1528		HAINES, AK FIG. A-		

NOL	포뉴	MATERIAL DESCRIPTION			SA	MF	PLE			PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET						PEN.	INST	/ATER/ TRUMENT ALLATION	(BLOWS PER FOOT) WATER CONTENT (%)	2-11	NCH O.D.
		SURFACE ELEVATION: 105.8 FT.		RUN NO.	NO.		DATA	NN	ALLATION	10 20 30 40		LIT SPOON
		DENSE, gray, silty sand-to gravel-size FRAGMENTS; subangular to angular gravel-sized rock fragments, organic of	debris,							· · · · · · · · · · · · · · · · · · ·	SP	NCH O.D. LIT SPOON NCH O.D. THIN
		micaceous, moist to wet (LANDSLIDE	,									ALL SAMPLER
		driller notes boulder-like drilling from 7.0 feet	m 3.0 to						5		Ш ріт	NCH O.D. TCHER BE SAMPLER
) SAMPLE COVERY)/YY
					S-1		21 18 17				GR LE	OUND WATER VEL AND TE OBSERVED
95.8	10							₿ §¶	12/28/21 ₁₀ (UPPER)			
		STIFF, light gray, slighly clayey to clay trace coarse sand- to gravel-sized roc	k 🛛						(UPPER)	. \		 WATER CONTENT
		fragment, scattered shell fragments (N SEDIMENT)	MARINE				11					PLASTIC LIMIT
					S-2	Ø	21 30				PE	ANDARD NETRATION
									15		• WA	ST (BLOWS/FT.) ATER CONTENT PERCENT
												RE RECOVERY PERCENT
					S-3		19 24 34		12/28/21			D IN PERCENT
									(LOWER)]	
									20		1 1 '	PACKER TEST NTERVAL
83.8	22						20			\	NOTES	
			E, gray, gravel- to cobble-sized ROCK MENTS; silty sand infilling, subrounded agments (DELTA DEPOSITS/TILL?)		S-4 S-5		20 26 42 50/0"			· · · · • · · · · · · ·	INTERFA INTERPF	PTIONS AND CES ARE RETIVE AND
80.0	25.8								25		BE GRAD	CHANGES MAY DUAL.
		HARD to VERY HARD (R4-R5), gray to green-gray, slightly weathered to fresh, ULTRAMAFIC ROCK; highly to moderately	R-1							DATE SH	LEVEL IS FOR IOWN AND MAY ITH TIME OF	
		fractured, fractures 40 to 60° (rough, popen) dominant, fractures 80 to 90° (s	smooth to	ooth to							3. MEASUR	AND SAAV RRAY (S/N
		rough, planar, open) secondary, occa mica sand and slightly clayey silt infilli 1/8-inch, major green mineralization							30		306397) INSIDE 2	NSTALLED
		very highly fractured 26.4 to 26.8 feet		R-2							TO A DE FEET; VI	PTH OF 38.6 BRATING WIRE
												ED AT 26.9 N 2123094)
		slightly clayey silt infilling on high angle fracture from 33.0 to 33.5 feet very highly to highly fractured zone from 33.5 to 34.4 feet; slickensides on 60° fracture (85°		-						AND AT 2123103	37.0 (S/N ON OUTSIDE	
								35		OF PVC	L DETAILS:	
		rake) at 33.5 feet		R-3							GROUT I	TE-CEMENT ROM 0.0 TO
											ABOVE-0 MONUM	ENT
				R-4							INSTALL	ED.
65.8	40			г<-4					40	20 40 60 80		
HAMMER ASSEMBLY: AUTO TRIPSPT SAMPLER: NO LINER - CONSTANT IDRECOVERY/RQD (%)DRILL ROD USED: NWJBOREHOLE DIAM.: 4.5" (0.0'-24.0'); 3.78" (24.0'-43.4)												
DRILL									SUM	MARY BORIN		MAR 2022
							DE _{gy}			LT-11 (1 of 2		PROJ 2930
	DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORING Devitand, Ore Devitand, Ore								E	BEACH RD LANDSLIDE		
			Phone 503-452	e 503-452-1200 Fax 503-452-1528						HAINES, AK		

		MATERIAL DESCRIPTION			SA	AMPLE		GROUND	PENETRATION TEST	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET						PEN.	WATER/ INSTRUMENT INSTALLATION	(BLOWS PER FOOT) WATER CONTENT (%		NCH O.D.
<u> </u> <u> </u> <u> </u>		SURFACE ELEVATION: 105.8 FT. (continued from previous page)	F	RUN NO.	NO.		DATA		10 20 30 40	SP 2	LIT SPOON
		(continuos nom provious paye)									NCH O.D. LIT SPOON
62.4	43.4	very highly fractured zone from 42. feet	8 to 43.1	R-4				×	· · · · · · · · · · ·		NCH O.D. THIN ALL SAMPLER
02		Bottom of Boring: 43.4 FT						45		Ш ріт	NCH O.D. TCHER BE SAMPLER
								43			SAMPLE
											/YY OUND WATER
										LE	VEL AND TE OBSERVED
								50			 LIQUID LIMIT WATER
											CONTENT
											PLASTIC LIMIT
									· · · · · · · · · · · · · · · · · · ·	PE	NETRATION ST (BLOWS/FT.)
								55			ATER CONTENT PERCENT
											RE RECOVERY PERCENT
											D IN PERCENT
								60			PACKER TEST NTERVAL
									 	NOTES	
									1. MATERIA DESCRIF	AL PTIONS AND	
										INTERFA INTERPF	CES ARE RETIVE AND CHANGES MAY
								65		BE GRAD	DUAL.
										2. WATER LEVEL IS FOR DATE SHOWN AND MA VARY WITH TIME OF	IOWN AND MAY
										YEAR. 3. MEASUR	
								70		SHAPEA 306397) I	RRAY (S/N NSTALLED
								10			7-MM ER PVC CASING PTH OF 38.6
										FEET; VI PIEZOME	BRATING WIRE
										FEET (S/ AND AT 3	
								75	· · · · · · · · · · · ·	2123103) OF PVC 0	ON OUTSIDE CASING.
											ITE-CEMENT
										43.4 FEE ABOVE-0	
										MONUME	ENT
								80			
		ASSEMBLY: AUTO TRIP SPT	SAMPLER: N	101	INER	- C(ONS.	TANT ID	20 40 60 80 RECOVERY/RQD (%)	
	DRILL ROD USED: NWJ BOREHOLE DIAM.: 4.5" (0.0'-24.0'); 3.78" (24.0'-43.4)										
DRILI	ER: I			IN TO		Ē	SUM		IG LOG	MAR 2022	
									LT-11 (2 of 2		PROJ 2930
		R/HQ3 CORING	10250 S.W. Greenburg Road, Suite 111 Portland, Oregon 97223 Phone 503-452-1200 Fax 503-452-1528						BEACH RD LANDSLIDE HAINES, AK		
			Phone 503-452-1	200 I	rax 503-	-452	-1528		HAINES, AK		FIG. A-11

Z O⊢				SAMPLE		G	ROUND		TION TEST	LEGEND			
ELEVATION IN FEET							V INS	VATER/ TRUMENT	(BLOWS F	PER FOOT)		ICH O.D.	
		SURFACE ELEVATION: 113.1 FT.	hthy citte	RUN NO.	NO.		PEN. DATA		ALLATION		30 40	SPI SPI	IT SPOON
		MEDIUM DENSE, gray to brown, slig sand- to gravel-sized ROCK FRAGMI subangular to angular gravel-sized ro	ENTS;						(LOWER)				ICH O.D. .IT SPOON
		fragments, micaceous (LANDSLIDE I	DEBRIS)						12/28/21 (UPPER)		· · · · ·		ICH O.D. THIN LL SAMPLER
									5			Ш ріт	ICH O.D. CHER 3E SAMPLER
					S-1		7 7 11						SAMPLE COVERY
										$ \cdot \cdot$		⊈ LE\	OUND WATER E AND OBSERVED
									10	· · /. · /			LIQUID LIMIT
		becomes VERY DENSE below 10.0 feet HARD to VERY HARD (R4-R5), dark gray, slightly weathered, ULTRAMAFIC ROCK; very			S-2		27 34 38		10				 WATER CONTENT
100.6	12.5						30						PLASTIC LIMIT
												PE	NDARD NETRATION ST (BLOWS/FT.)
		highly to highly fractured, fractures 50 (smooth to rough, planar, open) and f	ractures		S-3 *		50/0"		15			🕒 wa	TER CONTENT PERCENT
		10 to 30° (smooth to rough, planar, or dominant, occasional felsic veins, occ mica sand infilling, minor green miner	casional								· · · · ·	777 CO	RE RECOVERY PERCENT
		minor oxide stains		R-1								RQ	D IN PERCENT
				R-2					20				ACKER TEST
				R-3								NOTES	NTERVAL
												1. MATERIA	L TIONS AND
				<u>R-4</u>					25			INTERFA INTERPR	CES ARE ETIVE AND CHANGES MAY
		becomes fresh below 25.2 feet										2. WATER L	EVEL IS FOR OWN AND MAY
										· · · · ·			TH TIME OF
													AND SAAV RRAY (S/N NSTALLED
									30				7-MM R PVC CASING PTH OF 39.9
				R-6								FEET; VIE PIEZOME	BRATING WIRE TERS
												FEET (S/I AND AT 3	
									35			OF PVC (
				R-7									L DETAILS: TE-CEMENT ROM 0.0 TO
													r. 3-inch Round
												INSTALLE	ED.
73.1	40		R-8				88	40	20 40	60 80	REPORTI WATER L	NG ARTESIAN EVEL OF 0.3	
	HAMMER ASSEMBLY: AUTO TRIP SPT SAMPLER: NO LINER - CONSTANT ID RECOVERY/RQD (%) SURFACE ON DRILL ROD USED: NWJ BOREHOLE DIAM.: 4.5" (0.0'-17.0'); 3.78" (17.0'-42.6') 12/28/2021												
				<u>- 1vi.:</u> 4	.5 (0.	.0 -	17.0)	, <i>ა.1</i> 8		,		0100	MAR 2022
	DRILLER: DISCOVERY DATE START: 10/20/2021 FINISH: 10/20/2021									SUMMARY BORIN LT-12 (1 of 2			PROJ 2930
	DRILLING TECHNIQUE: HWT CASING ADVANCER/HQ3 CORING Portland, Ord				reenburg Road, Suite 111								
	-1200 Fax 503-452-1528					HAINES, AK				FIG. A-12			

ET	포뇨	MATERIAL DESCRIPTION		5		MPLE	GROUND	PENETRATION TEST (BLOWS PER FOOT)	LEGEND	
ELEVATION IN FEET	DEPTH IN FEET	SURFACE ELEVATION: 113.1 FT.	F	RUN NO.		PEN.	WATER/ INSTRUMENT INSTALLATION	WATER CONTENT (%)	1 [// 2 -11	NCH O.D. LIT SPOON
-		(continued from previous page)		INU.	NO.	DATA		10 20 <u>30 40</u>	- M 3-II	NCH O.D. LIT SPOON
70.5	42.6			R-8					<u> </u>	NCH O.D. THIN
		Bottom of Boring: 42.6 FT						· · · · · · · · · · · · · · · · · · ·	III- III 3-II	NCH O.D.
							45		TU * NO	BE SAMPLER SAMPLE
								· · · · · · · · · · · · · · · · · · ·		
									LEV	OUND WATER /EL AND TE OBSERVED
							50			 LIQUID LIMIT WATER
										CONTENT PLASTIC LIMIT
										ANDARD NETRATION
							55		TES WA	ST (BLOWS/FT.)
									co	PERCENT RE RECOVERY
										PERCENT D IN PERCENT
							60			PACKER TEST NTERVAL
									NOTES	
								· · · · · · · · · · · ·	DESCRIF INTERFA	TIONS AND CES ARE ETIVE AND
							65		BE GRAD	
								· · · · · · · · · · · · · · · · · · ·	DATE SH VARY WI	EVEL IS FOR OWN AND MAY TH TIME OF
									3. MEASUR	AND SAAV RRAY (S/N
							70		306404) I INSIDE 2	NSTALLED
									TO A DEF	PTH OF 39.9 BRATING WIRE
									INSTALL	ED AT 23.5 N 2123113) 34.0 (S/N
							75		2123110) OF PVC (ON OUTSIDE CASING.
									GROUT F	TE-CEMENT ROM 0.0 TO
								 	ABOVE-0 MONUME	ENT
									5. LOWER	/WP
Нами		ASSEMBLY: AUTO TRIP SP	Γ SAMPLER: N				80 TANT ID	20 40 60 80 RECOVERY/RQD (%)	REPORTING ARTESIAN WATER LEVEL OF 0.3 FEET ABOVE GROUND SURFACE ON	
							; 3.78" (17.0'-42.		12/28/202	
	DRILLER: DISCOVERY				SLI		SUM			MAR 2022
DRILL	DATE START: 10/20/2021 FINISH: 10/20/2021 DRILLING TECHNIQUE: HWT CASING			nburg	g Road,	G Y Suite 111		LT-12 (2 of 2		PROJ 2930
ADVA	NCE	R/HQ3 CORING	Portland, Oregon Phone 503-452-1	n 9722 200 l	23 Fax 503-	-452-1528		EACH RD LANDSL HAINES, AK	IUE	FIG. A-12