Appendix F Boring Logs



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S	B	HE PLANNING CENTER DC&E				TE	ST BOR	ING REPORT - Geoprob	e			Page	BORIN SG	G NO. -1 of 1
PROJE LOCAT CLIENT CONTR	CT ION ACTOI	High School 5 South of the In Irvine Unified R InterPhase En	5, Optior ntersecti School I ivironme	n A ion of Des District ental	ert Storm Drive	and Irvir	ne Blvd., Irvine,	California		TPC FILE NO. FIELD REP. DATE STARTED	ISD-28. M. Wats 12/9/20	0 son 13		
DRILLE	R	Gilbert ft	Datum		Boring Loc	ation				DATE FINISHED	12/9/20	13		
Type Ouside Length	Dia. (in.) Sleeve (i	Boring Equip	ment Geop	probe	Rig Truck ATV Track	g Make 8	Model Tripod Geoprobe Air Track	Backfill Material Hydrated Bentonite Chip:	s	Drilling Notes: Prob	es installe	d at 5' a	and 15' I	ogs
Type Slo Depth (ft.)	Sample 5 Depth (ft.)	Sample No.	Recovery (in.)	ID Reading	USCS Sym	nbol	other Visual-Manua	I Identification & Description (density/consistency, co description	lor, GROUP NAME & SYME ns, geologic interpretation)	3OL, maximum particle size	*, structure,	odor, moi	isture, opt	^{ional} Time
- 0 -					ML		SILT soft brown (7.5	SYR 5/4) SILT, low plasticity, no odor, no stainir	ng, low moisture					
			31		ML (con	it.)	SILT WITH SA same as above	ND e, with fine sand, medium stiff						
- 5 -					ML (con	it.)	SILT same as above	e, without sand						
			31		CL		CLAY WITH S medium stiff d	AND ark brown (7.5YR 3/4) CLAY with medium sand	l, medium plasticity, n	o odor, no staining, m	oist			
					SC		CLAYEY SAN medium dense	D I light brown (7.5YR 6/4) clayey medium SAND	, nonplastic, no odor,	no staining, low mois	ture			
- 10 -			37		MI		си т							
							medium stiff lig	ght brown (7.5YR 6/3) SILT, low plasticity, no o	dor, no staining, moist	t				
- 15 -			47				medium stiff d	and ark brown (7.5YR 3/4) CLAY with medium sand	l, medium plasticity, n	o odor, no staining, lo	w moistur	e		
							END OF BOR	ING - Total depth 16.0 feet bgs, no groundwate	er encountered					
- 20 -														
							-							
- 25 -							-							
- 30 -							-	Course la ID	Well D's see					
Date	Time	Water L Elapsed Time (hr.)	evel Dat Bottom of Casing	a Depth in Bottom of Hole	feet to: Water	O T U S G	Open End Rod Thin Wall Tube Undisturbed Sau Split Spoon San Geoprobe	sample ID nple pple	well Diagram Riser Pipe Screen Filter Sand Cuttings Grout Qrout	Overburden (Linea Rock Cored (Linea Number of Sample BORING NO.	Sur arft.) arft.) es	mmary S	G-1	
Field	Tests	Dilatancy: Toughness:	R - Ra L - Low	upid S-S v M-Mee	I Slow N - None dium H - High *NOTE NOTE: Soil iden	E: Maxim	Plasticity: Dry Strength: um Particle Size	N - Nonplastic L - Low M - Medium H - High N - None L - Low M - Medium H - High V is determined by direct observation within the li al-manual methods of the LISCS system as provide	Bentonite Seal Very High mitations of sampler si iced by The Planning C	BORING LOG A M. Watson, PG# ze.	ND SAMI ≇8177	PLE RE	VIEW:	

8	B	HE LANNING ENTER PC&E				TE	ST BOR	ING REPORT - Geoprob	e			Page	BORIN SG	G NO. 1-2	1
PROJE LOCAT CLIEN CONTE DRILLE	CT ION ACTOF	High School South of the I South of the I Irvine Unified InterPhase Er Gilbert	5, Optior ntersecti School I nvironme	n A on of Des District ental	ert Storm Drive a	nd Irvir	ne Blvd., Irvine,	California		TPC FILE NO. FIELD REP. DATE STARTED DATE FINISHED	<u>M. Wat</u> 12/9/20	.0 son 013 013			
Elevatio	n	ft.	Datum		Boring Locat	tion									-
Type Ouside Length Type Sl	Dia. (in.) Sleeve (i eeve	Boring Equip	ment Geop Ace	tate	Rig ✓ Truck ATV Track Skid	Make 8	Model Tripod Geoprobe Air Track other	Backfill Material Hydrated Bentonite Chip	5	Drilling Notes: Prob	es installe	ed at 5' a	ind 15'	bgs	
Depth (ft.)	Sample Depth (ft.)	Sample No.	Recovery (in.)	PID Reading ppm	USCS Symb	ol	Visual-Manua	I Identification & Description (density/consistency, co description	lor, GROUP NAME & SYME s, geologic interpretation)	3OL, maximum particle size	e*, structure	odor, moi	sture, opf	tional .	Time
- 0 -					ML		SILT WITH SA soft brown (7.5	ND SYR 5/4) SILT with fine sand, low plasticity, no o	odor, no staining, low	moisture					
			29		CL		CLAY WITH S stiff brown (7.5	AND SYR 5/4) CLAY with fine sand, medium plasticity	γ, no odor, no staining	, low moisture					
					SM-SP		SILTY SAND below 3.5' bgs	TO POORLY GRADED SAND medium dense poorly graded fine SAND, nonplastic, no odor	brown (7.5YR 5/4) silty , no staining, low mois	r fine SAND, sture					
- 5 -			28		Gr		medium dense	brown (7.5YR 5/4) poorly graded fine SAND,	nonplastic, no odor, n	o staining, low moist	ire				
					ML		SILT medium stiff d	ark brown (7.5YR 4/4) SILT, low plasticity, mica	iceous, no odor, no st	aining, moist					
- 10 -			23		CL		CLAY stiff brown (7.5	YR 4/2) CLAY, medium plasticity, no odor, no	staining, moist						
-					CL (cont.)	CLAY WITH S stiff dark brow	AND n (7.5YR 3/4) CLAY with fine sand, medium pla	sticity, no odor, no sta	ining, low moisture					
- 15 -			48		CL (cont.)	CLAY WITH S same as above	AND 9, reddish brown (5YR 4/4)							
-							END OF BOR	ING - Total depth 16.0 feet bgs, no groundwate	er encountered						
- 20 -															
- 25 -															
							-								
22															
- 30 -		Water	evel Dat	a				Sample ID	Well Diagram	ſ	<u>s</u> ,	mmary			
Date	Time	Elapsed Time (hr.)	Bottom of Casing	a Depth in Bottom of Hole	feet to: Water	O T U S	Open End Rod Thin Wall Tube Undisturbed Sar Split Spoon San	nple	Wein Diagram Riser Pipe Screen Filter Sand Screut	Overburden (Line Rock Cored (Line Number of Sampl	ar ft.) ar ft.) es	minary			
Field	Tests	Dilatancy: Toughness:	R - Ra L - Low	pid S-S / M-Me	Glow N - None dium H - High	G	Geoprobe Plasticity: Dry Strength:	N - Nonplastic L - Low M - Medium H - High N - None L - Low M - Medium H - High V	Concrete Bentonite Seal	BORING NO. BORING LOG A M. Watson, PG#	AND SAM ≇8177	S PLE RE	G-2 VIEW:		
					*NOTE: NOTE: Soil identi	Maxim fication	um Particle Size is based on visu	is determined by direct observation within the li al-manual methods of the USCS system as pract	mitations of sampler sinced by The Planning C	ze. enter DC&E.					

8	3	HE PLANNING CENTER DC&E	- 0	- 4		TE	ST BOR	ING REPORT - Geoprobe	9		Page	BORING SG	6 NO. - 3 of 1
CLIEN CONTI DRILL	ECT FION T RACTO ER	R InterPhase Er Gilbert	s, Optior ntersecti School I nvironme	ion of Des District ental	ert Storm Drive	and Irvir	ne Blvd., Irvine,	California		FIELD REP. DATE STARTED DATE FINISHED	M. Watson 12/9/2013 12/9/2013		
Elevatio	on	ft. Bering Fault	Datum		Boring Loo	cation	Madel			Delline Neter Dreh	an installed at Cl		
Type Ouside Length Type S	Dia. (in.) Sleeve (Boring Equip	Geop	tate	Truck		Model Tripod Geoprobe Air Track	Backfill Material	3	Drilling Notes: Prob	es installed at 5'	and 15' b	gs
Depth (ft.)	Sample Depth (ft.)	Sample No.	Recovery (in.)	PID Reading	USCS Syr	mbol	Visual-Manua	I Identification & Description (density/consistency, col description	lor, GROUP NAME & SYM Is, geologic interpretation)	3OL, maximum particle size	e*, structure, odor, mo	pisture, optic	^{onal} Time
- 0 -					SM		SILTY SAND medium dense	e brown (7.5YR 5/4) silty fine SAND, nonplastic,	no odor, no staining,	moist			
			28		SP		POORLY GRA	ADED SAND					
- 5 -							medium dense	e brown (7.5YR 5/4) poorly graded fine SAND, r	nonplastic, no odor, n	o staining, low moistu	ire		
			34		SD (cor	*)							
						n.)	same as above	e, primarily medium sand					
					02		stiff brown (7.5	SYR 5/4) CLAY with medium sand, medium plas	sticity, no odor, no sta	ining, low moisture			
- 10 -			45										
							-						
			32		SM		SILTY SAND dense reddish	brown (5YR 4/4) silty medium SAND, nonplasti	ic, no odor, no stainir	g, low moisture			
— 15 —													
							END OF BOR	ING - Total depth 16.0 feet bgs, no groundwate	er encountered				
							-						
- 20 -													
							-						
							-						
- 25 -							-						
							-						
							-						
- 30 -		Water	evel Dot			1		Samnle ID	Well Disgreen		Summer		
Date	Time	Elapsed Time (hr.)	Bottom of Casing	Depth in Bottom of Hole	feet to: Water	O T U S	Open End Rod Thin Wall Tube Undisturbed Sar Split Spoon San	nple	Weit Diagram Riser Pipe Screen Filter Sand Cuttings Grout	Overburden (Line: Rock Cored (Line: Number of Sampl	ar ft.) ar ft.) es		
Field	Tests	Dilatancy: Toughness:	R - Ra L - Low	upid S-S v M-Meo	Slow N - None dium H - High	G	Plasticity: Dry Strength:	N - Nonplastic L - Low M - Medium H - High N - None L - Low M - Medium H - High V -	Concrete Bentonite Seal Very High	BORING NO. BORING LOG A M. Watson, PG#	SAND SAMPLE RI ≇8177	SG-3 EVIEW:	
					*NOT NOTE: Soil ider	E: Maxim ntificatior	um Particle Size ns based on visu	is determined by direct observation within the lin al-manual methods of the USCS system as practic	mitations of sampler si ced by The Planning C	ze. enter DC&E.			

8	BBB	HE LANNING ENTER DC&E	- 0 "			TEST BO	RING REPORT - Geoprob	e		Page	BORING I	NO. 1 of 1
PROJE LOCATI CLIENT CONTR		High School 9 South of the I Irvine Unified InterPhase Er	5, Optior ntersecti School I nvironme	n A on of Des District ental	sert Storm Drive and	d Irvine Blvd., Irvin	ə, California		TPC FILE NO. FIELD REP. DATE STARTED	ISD-28.0 M. Watson 12/9/2013		
DRILLE	R	Gilbert	1- 1						DATE FINISHED	12/9/2013		
Elevatio	n	ft. Boring Equip	Datum ment		Boring Location Rig M	on lake & Model	Backfill Material		Drilling Notes: Prob	es installed at 5'	and 15' bgs	3
Type Ouside I Length S Type Sle	Dia. (in.) Sleeve (i eeve	n)	Geop	orobe tate	Truck	☐ Tripod ☑ Geoprobe ☐ Air Track ☐ other	Hydrated Bentonite Chip:	s				
Depth (ft.)	Sample Depth (ft.)	Sample No.	Recovery (in.)	PID Reading ppm	USCS Symbo	J Visual-Man	ual Identification & Description (density/consistency, co description	lor, GROUP NAME & SYMBO ns, geologic interpretation)	L, maximum particle size	*, structure, odor, mo	bisture, optiona	^{al} Tim
- 0 -					SM	SILTY SAN medium der) se brown (7.5YR 4/3) silty fine SAND, nonplastic	, no odor, no staining, m	oist			
			32		SM (cont.)	SILTY SAN same as abo) ve, brown (7.5YR 5/4)					
_												
					SM (cont.)	same as abo	ive, with gravei					-
5 -						stiff dark bro	wn (7.5YR 3/4) CLAY, medium plasticity, no odor	r, no staining, low moist	ıre			
_			31		CL (cont.)		SAND					
						stiff yellowis	n red (5YR 4/6) CLAY with medium sand, occasio	onal rounded gravel, no	odor, no staining, lo	w moisture		
			45									
10 -			45		CL (cont.)	CLAY WITH	SAND					
-						same as abo	ve, reddish brown (5YR 4/4)					
_												
			36		SP	dense reddi	ADED SAND sh yellow (7.5YR 6/6) poorly graded fine SAND, c	occasional rounded grav	el, nonplastic, no o	dor, no staining,		
					SP (cont.)	low moisture POORLY G	ADED SAND					
15						same as abo	ve, light brown (7.5YR 6/3), fine to medium SAN	D				
						END OF BO	RING - Total depth 16.0 feet bgs, no groundwate	er encountered				
_												
_												
_												
20 -												
												-
\vdash												-
25 -												
30					-			1 .		_		
		Water L	evel Dat	a Depth in	feet to:		Sample ID	Well Diagram		Summary		
Date	Time	Elapsed Time (hr.)	Bottom of	Bottom	Water	0 Open End Ro T Thin Wall Tur	d e	Screen	Overburden (Linea Rock Cored (Linea	ar ft.) ar ft.)		
		. ,	Casing	of Hole		U Undisturbed S	ample	Cuttings	Number of Sample	es		
		<u> </u>				G Geoprobe	ampie	Grout Grout Concrete	BORING NO.		SG-4	
Field	Tests	Dilatancv:	R - Ra	pid S-S	Slow N - None	Plasticity:	N - Nonplastic L - Low M - Medium H - Hinh	Bentonite Seal	BORING LOG		EVIEW:	
		Toughness:	L - Low	/ M - Me	dium H - High	Dry Strength	N - None L - Low M - Medium H - High V	- Very High	M. Watson, PG#	8177		
					*NOTE: N NOTE: Soil identifie	Maximum Particle S cations based on vi	ze is determined by direct observation within the li sual-manual methods of the USCS system as practi	mitations of sampler size iced by The Planning Cer	ter DC&E.			_

8	B	HE LANNING CENTER C&E				TE	ST BOR	ING REPORT - Geoprobe	9			Page	BORIN SG	G NO. i -5 of 1
PROJE LOCAT CLIENT CONTR		High School 5 South of the In Irvine Unified R InterPhase En	5, Optior ntersecti School I nvironme	n A ion of Des District ental	ert Storm Drive	and Irvir	ne Blvd., Irvine,	California		TPC FILE NO. FIELD REP. DATE STARTED	ISD-28. M. Wats 12/9/20	0 son 113		
DRILLE	R	Gilbert "	Dotum		Boring Loo	ation				DATE FINISHED	12/9/20	13		
Elevatio	n	Boring Equip	ment		Ri	g Make 8	Model	Backfill Material		Drilling Notes: Prob	es installe	d at 5' a	nd 15' l	bgs
Type Ouside Length Type Sle	Dia. (in.) Sleeve (i eeve) in)	Geop	tate	Truck		Tripod Geoprobe Air Track other	Hydrated Bentonite Chips	5					
Depth (ft.)	Sample Depth (ft.)	Sample No.	Recovery (in.)	PID Reading ppm	USCS Syn	nbol	Visual-Manua	I Identification & Description (density/consistency, col description	lor, GROUP NAME & SYME (s, geologic interpretation)	OL, maximum particle size	*, structure,	odor, moi:	sture, opt	^{ional} Time
- 0 -					SM		SILTY SAND medium dense	ə brown (7.5YR 5/4) silty fine SAND, nonplastic,	no odor, no staining,	moist				
			33		SP		POORLY GRA	NDED SAND 9 light brown (7.5YR 6/3) poorly graded fine SA	ND with gravel, nonpla	astic, no odor, no stai	ning, low	moisture	e	
- 5 -			31											
-					CL		CLAY WITH S stiff dark reddi	AND sh brown (5YR 3/4) CLAY with medium sand, m	nedium plasticity, no c	dor, no staining, low	moisture			
- 10 -			42		CL (con	it.)	CLAY WITH S same as above	AND e, reddish brown (2.5YR 4/4)						
					50			n						
			26				dense red (5YI	R 5/6) clayey medium SAND with gravel, nonpla	astic, no odor, no stair	ning, moist				
— 15 —								ING - Total depth 16.0 feet bgs, no groundwate	er encountered					
- 20 -							-							
- 25 -														
							-							
- 30 -														
Date	Time	Elapsed Time (hr.)	evel Dat Bottom of Casing	a Depth in Bottom of Hole	feet to: Water	O T U S G	Open End Rod Thin Wall Tube Undisturbed Sar Split Spoon San Geoprobe	Sample ID	Well Diagram Riser Pipe Screen Filter Sand Scuttings Grout Concrete	Overburden (Line: Rock Cored (Line: Number of Sample BORING NO.	Sur arft.) arft.) es	mmary		
Field	Tests	Dilatancy: Toughness:	R - Ra L - Low	lpid S-S v M-Meo	Blow N - None dium H - High *NOTE: Scilled	E: Maxim	Plasticity: Dry Strength: um Particle Size	N - Nonplastic L - Low M - Medium H - High N - None L - Low M - Medium H - High V - is determined by direct observation within the lin demonum methods of USC2	Bentonite Seal	BORING LOG A M. Watson, PG#	ND SAMI 8177	S PLE RE	G-5 VIEW:	

S	B	HE LANNING ENTER C&E				TE	ST BOR	ING REPORT - Geoprob	e		Pag	BORI SC	NG NO. i-11 of	2
PROJE LOCAT CLIENT CONTE DRILLE	CT ION RACTOF	High School 5 South of the In Irvine Unified InterPhase En Gilbert	5, Optior ntersecti School I wironme	n A on of Des District ental	ert Storm Drive	e and Irvir	ne Blvd., Irvine,	California		TPC FILE NO. FIELD REP. DATE STARTED DATE FINISHED	ISD-28.0 M. Watson 12/10/2013 12/10/2013			
Elevatio	n	ft.	Datum		Boring Loo	cation	Madal	Deal-fill Motorial		Defilie - Notore Deals			101 h ==	
Type Ouside Length	Dia. (in.) Sleeve (i eeve	n)	Geop Geop	orobe tate	R ☐ Truck ☐ ATV ☐ Track ☐ Skid		Model Tripod Geoprobe Air Track other	Backfill Material	s	Drilling Notes: Prob	es installed at	5', 15' & 4	40' bgs	
Depth (ft.)	Sample Depth (ft.)	Sample No.	Recovery (in.)	PID Reading ppm	USCS Syr	mbol	Visual-Manua	I Identification & Description (density/consistency, co descriptio	olor, GROUP NAME & SYM ns, geologic interpretation)	3OL, maximum particle size	*, structure, odor	moisture, o	ptional	Time
— o —					SM		SILTY SAND medium dense	brown (7.5YR 4/4) silty fine SAND, nonplastic	, no odor, no staining,	low moisture				
-			26		SP		POORLY GRA	DED SAND brown (7.5YR 5/4) poorly graded fine SAND,	nonplastic, no odor, n	o staining, low moistu	re			
- 5 -			20		sc		CLAYEY SAN medium dense	D e dark brown (7.5YR 3/4) clayey fine SAND, no	nplastic, no odor, no s	taining, low moisture				
			30		SM		SILTY SAND medium dense	e reddish brown (5YR 4/4) silty fine SAND, non	plastic, no odor, no st	aining, low moisture				
			32		SP		POORLY GRA	DED SAND brown (7.5YR 5/4) poorly graded fine SAND,	nonplastic, no odor, n	o staining, low moistu	re			
- 10 -			52		SC		CLAY WITH S stiff dark reddi low moisture	AND sh brown (5YR 3/4) CLAY with fine sand, occa:	sional concretions, me	dium plasticity, no od	or, no stainin	<u>],</u>		
			46				-							
- 15 -			40		SC		CLAYEY SAN							
-							inedian dense		o with gravel, nonpla		ng, iow moist	16		
			33		SP		POORLY GRA	DED SAND strong brown (7.5YR 5/6) poorly graded med	ium SAND, nonplastic	, no odor, no staining,	low moisture			
- 20 -														
-			31				-							
- 25 -							-							
			30		SP (cor	nt.)	POORLY GRA	DED SAND ə, with gravel						
			20				-							
- 30 -			33											
Date	Time	Water L Elapsed Time (hr.)	evel Dat Bottom of Casing	a Depth in Bottom of Hole	feet to: Water	O T U	Open End Rod Thin Wall Tube Undisturbed Sar	Sample ID	Well Diagram Image: Riser Pipe Image: Screen Image: Filter Sand Image: Cuttings	Overburden (Linea Rock Cored (Linea Number of Sample	Summa ar ft.) ar ft.) es	iry		
Field	Tests	Dilatancy:	R - Ra	pid S-S	Slow N - None	S G	Split Spoon San Geoprobe Plasticity:	nple N - Nonplastic L - Low M - Medium H - High	Grout Concrete Bentonite Seal	BORING NO.	ND SAMPLE	SG-11 REVIEW	:	
		Toughness:	L - Low	/ M - Meo	dium H - High *NOT NOTE: Soil ide	E: Maxim	Dry Strength: um Particle Size is based on visu	N - None L - Low M - Medium H - High \check{V} is determined by direct observation within the li al-manual methods of the USCS system as pract	- Very High mitations of sampler si iced by The Planning C	M. Watson, PG# ze. enter DC&E.	8177			

	가						BORING NO.
$\Sigma \times$	KC	ENTER			TE	ST BORING REPORT	SG-11
S		C&E	~				Page 2 of 2
Depth (ft.)	Sample Depth (ft.)	Sample No.	Recovery in/ir	PID Reading (ppm)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optiona interpretation)	al descriptions, geologic Time
_ 30 _					SP (cont.)		
					SP (cont.)	medium dense strong brown (7.5YR 5/6) poorly graded medium SAND with gravel, nonplast	tic, no odor,
						no staining, low moisture	
			32		CL	CLAY - very stiff brown (7.5YR 4/4) CLAY, medium plasticity, no odor, no staining, low moist	ure
					SP	POORLY GRADED SAND - medium dense strong brown (7.5YR 5/6) poorly graded mediun with gravel, nonplastic, no odor, no staining, low moisture	n SAND
- 35 -					CL	CLAY	turo
			36				
					CL (cont.)	CLAY - same as above, stiff with gravel	
					CL (cont.)		
			36			ווויפטונווו אווד brown (אד איא אין ULAY, occasional concretions, medium plasticity, no odor, n low moisture	o staining,
40							
						באש טר סטאוואש - דטומו מפטוו אדו.ט זפפו bgs, no grounawater encountered	
Γ -							
L _							
Γ							
L _							
┝ -							
NOTE			I	I		FILE NO. ISD-28.0 BORING NO	SG-11
Probes	installe	d at 5', 15' & 4	40' bgs.	*NOT	E: Maximum Particle	Size is determined by direct observation within the limitations of sampler size.	
I			N	OTE: Soil ide	ntifications based on	visual-manual methods of the USCS system as practiced by The Planning Center DC&E.	