

RECEIVED

By Alameda County Environmental Health 1:58 pm, Apr 28, 2015

SOIL BORING LOGS



SOIL BORING LOG KEY

Major Divisions		Symbols	Typical Names
Coarse Grained Soils (More than 1/2 of soil No. 200 sieve size)	Gravels (More than 50% coarse fraction > No. 4 sieve)	GW	Well-graded gravels or gravel-sand mixtures, little to no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little to no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels or gravel-sand-clay mixtures
	Sands (Less than 50% coarse fraction > No. 4 sieve)	SW	Well-graded sands or gravel-sand mixtures, little to no fines
		SP	poorly-graded sands or gravelly sands, little to no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine Grained Soils (More than 1/2 of soil No. 200 sieve size)	Silts & Clays Liquid limit* less than 50%	ML	Inorganic silts and very fine sands, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy or silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
	Silts & Clays Liquid limit* greater than 50%	MH	Inorganic silts, micaceous or ditomaceous fine sand or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silty clay, organic silts
Highly Organic Soils	Pt	Peat or other highly organic soils	
Fill	Concrete	Concrete	

*Liquid limit represents the moisture content (in percent) of a soil at which point the soil no longer behaves like a plastic and starts to behave like a liquid.

Based on Unified Soil Classification System and ASTM Standard D2487 and D2488

Encountered Groundwater

-  Groundwater, First Observed
-  Groundwater, Static

Sample Moisture

- Dry No Moisture, dry to touch
- Moist Damp but no visible moisture
- Wet Visible free water

Recovery

- X No recovery
- I Recovery

Sample Plasticity (Fine-Grained Soils)

- Non-Plastic - Cannot be rolled at any moisture content
- Low - Barely rolled, lump cannot be formed when drier than plastic limit
- Medium - Easily rolled, lump crumbles when drier than plastic limit
- High - Easily rolled yet takes considerable time to reach the plastic limit, lump can be formed without crumbling when drier than the plastic limit

Partical Size Range (Course-Grained Soils)

- Gravel - Fine, Coarse
- Sand - Fine, Medium, Coarse



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID MW-4A
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (feet)			
MW-4-0.5-1.5		3.0	1	GP	GRAVEL: very dark brown (7.5YR 2.5/3), fine and coarse gravel, abundant rooting, few metal debris, moist from 0.5 ft to 2.0 ft bgs black (N 0.5), slight odor, some metal shavings from 2 to 4 ft bgs void space at 4.5 ft bgs wet	
			2			
	X		3			
	X		4			
	X		5			
		1.1	5	CL	Sandy CLAY: greenish gray (5GY 6/1), fine sand, medium plasticity, no odor, moist at 8.0 ft bgs dark greenish gray (10Y 4/1)	
		0.4	6			
			7			
			8			
		2.2	8			
			9			
		3.1	9			
			10			
		2.5	10			
			11			
			12	SP	Poorly graded SAND: greenish gray (5GY 6/1), fine sand, moist at 13.0 ft bgs wet at 14.0 ft bgs light olive brown (2.5Y 5/3)	
		1.7	12			
			13			
			14			
		1.7	14			
			15			
		1.8	16			
			17			
		1.3	18			
			19			
		2.8	20			

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6060072.66495, 2107713.34989	Notes: 8" diameter borehole Casings 0 ft to 12.83 ft bgs: PVC Sch. 40 blank, 0.154" w all thickness, 2" outer diameter 12.83 ft to 22.25 ft bgs: PVC Sch. 40 screen, 0.154" w all thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 8 ft bgs: Type VII Cement 8 ft to 10 ft bgs: Hydrated Medium Bentonite Chips 10 ft to 22.69 ft bgs: #2/16 Sand Filter Pack 22.69 ft to 50 ft bgs: Medium Bentonite Chips
DRILLING METHOD	Direct-Push / Hollow Stem Auger	SURFACE ELEVATION	8.83	
SAMPLING EQUIPMENT	Dual-tube	DATUM	NAD1983 State Plane California III	
DRILL START DATE	February 11, 2015			
GROUT DATE	February 12, 2015			



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-4A
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY S. Sherman
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
				[Checkered pattern]	SP	at 21.0 ft bgs greenish gray (5GY 6/1)
		2.3	-- 21			
				[Checkered pattern]	SP	at 22 ft bgs increasing clay
			-- 22			
		2.1	-- 23	[Diagonal lines]	CL	Sandy CLAY: greenish gray (5GY 6/1), fine sand, low plasticity, moist
			-- 24			
		2.3	-- 25	[Diagonal lines]	CL	at 23.5 ft bgs decreasing sand
			-- 26			
		1.1	-- 27	[Dotted pattern]	SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
			-- 28			
		2.2	-- 29	[Diagonal lines]	CL	Sandy CLAY: grayish brown (2.5Y 5/2), fine sand, trace fine gravel, low plasticity, moist
			-- 30			
				[Checkered pattern]	SP	Poorly graded SAND: light olive brown (2.5Y 5/3), fine sand, wet
		2.0	-- 31			
	X		-- 32	[Checkered pattern]	SP	
		1.8	-- 33			
				[Dotted pattern]	SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
		2.0	-- 34			
				[Dotted pattern]	SW	
		2.9	-- 35			
	X		-- 36	[Dotted pattern]	SW	
		2.6	-- 37			
				[Diagonal lines]	CL	CLAY: light olive brown (5Y 6/2), trace fine sand, medium plasticity, moist
		2.0	-- 38			
				[Diagonal lines]	CL	
			-- 39			
	X		-- 40	[Diagonal lines]		

DRILLING CONTRACTOR	National EWP	COORDINATES	(Latitude, Longitude) 6060072.66495, 2107713.34989	Notes:
DRILLING METHOD	Direct-Push / Hollow Stem Auger			8" diameter borehole
SAMPLING EQUIPMENT	Dual-tube	SURFACE ELEVATION	8.83	Casings
DRILL START DATE	February 11, 2015	DATUM	NAD1983 State Plane California III	0 ft to 12.83 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
GROUT DATE	February 12, 2015			12.83 ft to 22.25 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size
				Annular Material
				0 ft to 1 ft bgs: Concrete
				1 ft to 8 ft bgs: Type I/II Cement
				8 ft to 10 ft bgs: Hydrated Medium Bentonite Chips
				10 ft to 22.69 ft bgs: #2/16 Sand Filter Pack
				22.69 ft to 50 ft bgs: Medium Bentonite Chips



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID MW-4A
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
	X			CL	CL	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc. at 44.5 ft bgs abundant shells, increasing sand
	X		-- 41			
	X					
	X		-- 42			
	I	2.7				
	I		-- 43			
	I					
	I		-- 44			
	I	1.7				
	I		-- 45			
	X					
	X		-- 46			
	X					
	I	1.9	-- 47			
	I					
	I		-- 48			
	I	2.4				
	I		-- 49			
	I					
	I	1.8	-- 50			
						End of boring at 50 ft

DRILLING CONTRACTOR <u>National EWP</u> DRILLING METHOD <u>Direct-Push / Hollow Stem Auger</u> SAMPLING EQUIPMENT <u>Dual-tube</u> DRILL START DATE <u>February 11, 2015</u> GROUT DATE <u>February 12, 2015</u>	COORDINATES (Latitude, Longitude) <u>6060072.66495, 2107713.34989</u> SURFACE ELEVATION <u>8.83</u> DATUM <u>NAD1983 State Plane California III</u>	Notes: 8" diameter borehole Casings 0 ft to 12.83 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 12.83 ft to 22.25 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 8 ft bgs: Type I/II Cement 8 ft to 10 ft bgs: Hydrated Medium Bentonite Chips 10 ft to 22.69 ft bgs: #2/16 Sand Filter Pack 22.69 ft to 50 ft bgs: Medium Bentonite Chips
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-4B
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY S. Sherman
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION			
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)						
	I				GP	GRAVEL: very dark brown (7.5YR 2.5/3), fine and coarse gravel, abundant rooting, few metal debris, moist from 0.5 ft to 2.0 ft bgs black (N 0.5), slight odor, some metal shavings from 2 to 4 ft bgs void space at 4.5 ft bgs wet			
	I	3.0	-- 1						
	I								
	X		-- 2						
	X		-- 3						
	X		-- 4						
	I	1.1			CL	Sandy CLAY: greenish gray (5GY 6/1), fine sand, medium plasticity, no odor, moist at 8.0 ft bgs dark greenish gray (10Y 4/1)			
	I		-- 5						
	I	0.4	-- 6						
	I		-- 7						
	I	2.2	-- 8						
	I		-- 9						
	I	3.1	-- 10						
	I	2.5	-- 11				SC	Clayey SAND: greenish gray (5GY 6/1), fine sand, moist	
	I		-- 12					SP	Poorly graded SAND: greenish gray (5GY 6/1), fine sand, moist at 13.0 ft bgs wet at 14.0 ft bgs light olive brown (2.5Y 5/3)
	I	1.7	-- 13						
	I		-- 14						
	I	1.7	-- 15						
	I		-- 16						
	I	1.8	-- 17						
	I		-- 18						
	I	1.3	-- 19						
	I		-- 20						
	I	2.8							

DRILLING CONTRACTOR	<u>National EWP</u>	COORDINATES (Latitude, Longitude)	<u>6060068.76512, 2107715.65503</u>	Notes: 8" diameter borehole Casings 0 ft to 26.92 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 26.92 ft to 36.34 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 23 ft bgs: Type I/II Cement 23 ft to 25 ft bgs: Hydrated Medium Bentonite Chips 25 ft bgs to 36.78 ft bgs: #2/16 Sand Filter Pack
DRILLING METHOD	<u>Direct-Push / Hollow Stem Auger</u>	SURFACE ELEVATION	<u>8.89</u>	
SAMPLING EQUIPMENT	<u>Dual-tube</u>	DATUM	<u>NAD1983 State Plane California III</u>	
DRILL START DATE	<u>February 13, 2015</u>			
GROUT DATE	<u>February 13, 2015</u>			



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-4B
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY S. Sherman
APPROVED BY S. Sherman, PG 9240





SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
				[Checkered Pattern]	SP	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc. at 21.0 ft bgs greenish gray (5GY 6/1)
		2.3	-- 21			
				[Checkered Pattern]	SP	at 22 ft bgs increasing clay
			-- 22			
		2.1	-- 23	[Diagonal Lines]	CL	Sandy CLAY: greenish gray (5GY 6/1), fine sand, low plasticity, moist at 23.5 ft bgs decreasing sand
			-- 24			
		2.3	-- 25	[Dotted Pattern]	SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
			-- 26			
		1.1	-- 27	[Diagonal Lines]	CL	Sandy CLAY: grayish brown (2.5Y 5/2), fine sand, trace fine gravel, low plasticity, moist
			-- 28			
		2.2	-- 29	[Checkered Pattern]	SP	Poorly graded SAND: light olive brown (2.5Y 5/3), fine sand, wet
			-- 30			
		2.0	-- 31	[Checkered Pattern]	SP	Poorly graded SAND: light olive brown (2.5Y 5/3), fine sand, wet
	X		-- 32			
		1.8	-- 33	[Dotted Pattern]	SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
			-- 34			
		2.0	-- 35	[Dotted Pattern]	SW	Well graded SAND: light olive brown (2.5Y 5/3), rounded to subrounded fine gravel and fine to medium sand, wet
			-- 36			
		2.9	-- 37	[Diagonal Lines]	CL	CLAY: light olive brown (5Y 6/2), trace fine sand, medium plasticity, moist
	X		-- 38			
		2.6	-- 39	[Diagonal Lines]	CL	CLAY: light olive brown (5Y 6/2), trace fine sand, medium plasticity, moist
			-- 40			
						End of boring at 36.78 ft

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6060068.76512, 2107715.65503	Notes: 8" diameter borehole Casings 0 ft to 26.92 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 26.92 ft to 36.34 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 23 ft bgs: Type I/II Cement 23 ft to 25 ft bgs: Hydrated Medium Bentonite Chips 25 ft bgs to 36.78 ft bgs: #2/16 Sand Filter Pack
DRILLING METHOD	Direct-Push / Hollow Stem Auger	SURFACE ELEVATION	8.89	
SAMPLING EQUIPMENT	Dual-tube	DATUM	NAD1983 State Plane California III	
DRILL START DATE	February 13, 2015			
GROUT DATE	February 13, 2015			



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-5A
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY S. Sherman
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION	
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)				
	I				GC	Clayey GRAVEL with sand: yellowish brown (10YR 5/6), angular fine to coarse sand and fine to coarse gravel, moist	
	I	0.1	--- 1				
	X						
	X		--- 2				
	X						
	X		--- 3				
	X						
	I		--- 4				
	I						
	I	0.1	--- 5	 at 4.9 ft bgs wet			
	X						
	X		--- 6				
	X						
	X		--- 7				
	X						
	X		--- 8				
	I	0.1					
	I		--- 9		SC	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, wet	
	I						
	I	0.4	--- 10				
	I				SP	Poorly graded SAND: grayish brown (2.5Y 5/2), rounded fine sand, wet	
	I		--- 11				
	I						
	I	0.1	--- 12				
	I						
	I		--- 13				
	I						
	I		--- 14				
	I						
	I		--- 15				
	I	0.3	--- 16				
	I						
	I		--- 17				
	I	0.6					
	I		--- 18				
	I						
	I		--- 19				
	I	0.3	--- 20	at 20.0 ft bgs greenish gray (10Y 6/1)			
DRILLING CONTRACTOR	National EWP			COORDINATES (Latitude, Longitude)		6059943.34402, 2107795.81916	Notes: 8" diameter borehole Casings 0 ft to 14.54 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 14.54 ft to 23.96 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 10.5 ft bgs: Type I/II Cement 10.5 ft to 12.5 ft bgs: Hydrated Medium Bentonite Chips 12.5 ft to 24.4 ft bgs: #2/16 Sand Filter Pack
DRILLING METHOD	Direct-Push / Hollow Stem Auger			SURFACE ELEVATION		10.64	
SAMPLING EQUIPMENT	Dual-tube			DATUM		NAD1983 State Plane California III	
DRILL START DATE	February 17, 2015						
GROUT DATE	February 18, 2015						



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID MW-5A
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
				[Checkered Pattern]	SP	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
		0.2	-- 21			
				[Checkered Pattern]	SC	Clayey SAND: greenish gray (10Y 6/1), fine sand, wet
			-- 22			
				[Dotted Pattern]	SC	Clayey SAND: greenish gray (10Y 6/1), fine sand, wet
		0	-- 23			
				[Dotted Pattern]	SC	Clayey SAND: greenish gray (10Y 6/1), fine sand, wet
			-- 24			
			-- 25			End of boring at 24.4 ft

DRILLING CONTRACTOR <u>National EWP</u> DRILLING METHOD <u>Direct-Push / Hollow Stem Auger</u> SAMPLING EQUIPMENT <u>Dual-tube</u> DRILL START DATE <u>February 17, 2015</u> GROUT DATE <u>February 18, 2015</u>	COORDINATES (Latitude, Longitude) <u>6059943.34402, 2107795.81916</u> SURFACE ELEVATION <u>10.64</u> DATUM <u>NAD1983 State Plane California III</u>	Notes: 8" diameter borehole Casings 0 ft to 14.54 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 14.54 ft to 23.96 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 10.5 ft bgs: Type I/II Cement 10.5 ft to 12.5 ft bgs: Hydrated Medium Bentonite Chips 12.5 ft to 24.4 ft bgs: #2/16 Sand Filter Pack
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-5B
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY S. Sherman
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
	I			GC	Clayey GRAVEL with sand: yellowish brown (10YR 5/6), angular fine to coarse sand and fine to coarse gravel, moist	
	I	0.1	--- 1			
	X					
	X		--- 2			
	X					
	X		--- 3			
	X					
	I		--- 4			
	I					
	I	0.1	--- 5			
	X			SC	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, wet	
	X		--- 6			
	X					
	X		--- 7			
	X					
	X		--- 8			
	I	0.1				
	I		--- 9			
	I	0.4	--- 10	SP	Poorly graded SAND: grayish brown (2.5Y 5/2), rounded fine sand, wet	
	I					
	I		--- 11			
	I					
	I	0.1	--- 12			
	I					
	I		--- 13			
	I					
	I		--- 14			
	I					
	I	0.3	--- 16	SP	Poorly graded SAND: grayish brown (2.5Y 5/2), rounded fine sand, wet	
	I					
	I		--- 17			
	I	0.6				
	I		--- 18			
	I					
	I		--- 19	SP	Poorly graded SAND: grayish brown (2.5Y 5/2), rounded fine sand, wet	
	I	0.3	--- 20			
	I					at 20.0 ft bgs greenish gray (10Y 6/1)

DRILLING CONTRACTOR National EWP
DRILLING METHOD Direct-Push / Hollow Stem Auger
SAMPLING EQUIPMENT Dual-tube
DRILL START DATE February 17, 2015
GROUT DATE February 17, 2015

COORDINATES (Latitude, Longitude) 6059939.12904, 2107797.85594
SURFACE ELEVATION 10.84
DATUM NAD1983 State Plane California III

Notes:
8" diameter borehole
Casings
0 ft to 30.55 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter
30.55 ft to 42.85 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size
Annular Material
0 ft to 1 ft bgs: Concrete
1 ft to 27 ft bgs: Type I/II Cement
27 ft to 29 ft bgs: Hydrated Medium Bentonite Chips
29 ft to 43.5 ft bgs: #2/16 Sand Filter Pack
43.5 ft to 50 ft bgs: Medium Bentonite Chips



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-5B
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY S. Sherman
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
				[Checkered pattern]	SP	
		0.2	-- 21			
				[Checkered pattern]	SC	Clayey SAND: greenish gray (10Y 6/1), fine sand, wet
			-- 22			
				[Checkered pattern]	SC	Clayey SAND: greenish gray (10Y 6/1), fine sand, wet
		0	-- 23			
				[Checkered pattern]	CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, medium plasticity, moist at 25.0 ft bgs decreasing sand
		0.1	-- 24			
				[Checkered pattern]	CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, medium plasticity, moist at 25.0 ft bgs decreasing sand
		0.1	-- 25			
				[Checkered pattern]	CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, medium plasticity, moist at 25.0 ft bgs decreasing sand
		0.1	-- 26			
				[Checkered pattern]	CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, medium plasticity, moist at 25.0 ft bgs decreasing sand
		0.1	-- 27			
				[Checkered pattern]	CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, medium plasticity, moist at 25.0 ft bgs decreasing sand
		0.1	-- 28			
				[Checkered pattern]	CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, medium plasticity, moist at 25.0 ft bgs decreasing sand
		0.1	-- 29			
				[Checkered pattern]	CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, medium plasticity, moist at 25.0 ft bgs decreasing sand
		0.1	-- 30			
				[Checkered pattern]	SC	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, moist
		0.1	-- 31			
				[Checkered pattern]	SP	Poorly graded SAND: grayish brown (2.5Y 5/2), fine sand, wet
			-- 32			
				[Checkered pattern]	CL	CLAY with sand: grayish brown (2.5Y 5/2), fine sand, low plasticity, moist at 32 ft bgs increasing fine gravel and fine to coarse sand
		0.1	-- 33			
				[Checkered pattern]	SW	Well graded SAND: grayish brown (2.5Y 5/2), rounded fine to coarse sand, trace subangular gravel, wet
			-- 34			
				[Checkered pattern]	SW	Well graded SAND: grayish brown (2.5Y 5/2), rounded fine to coarse sand, trace subangular gravel, wet
		0.1	-- 35			
	X			[Checkered pattern]	SW	Well graded SAND: grayish brown (2.5Y 5/2), rounded fine to coarse sand, trace subangular gravel, wet
	X		-- 36			
	X			[Checkered pattern]	SW	Well graded SAND: grayish brown (2.5Y 5/2), rounded fine to coarse sand, trace subangular gravel, wet
	X		-- 37			
				[Checkered pattern]	SW	Well graded SAND: grayish brown (2.5Y 5/2), rounded fine to coarse sand, trace subangular gravel, wet
		0.2	-- 38			
				[Checkered pattern]	SW	Well graded SAND: grayish brown (2.5Y 5/2), rounded fine to coarse sand, trace subangular gravel, wet
			-- 39			
				[Checkered pattern]	SW	Well graded SAND: grayish brown (2.5Y 5/2), rounded fine to coarse sand, trace subangular gravel, wet
		0.2	-- 40			

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059939.12904, 2107797.85594	Notes: 8" diameter borehole Casings 0 ft to 30.55 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 30.55 ft to 42.85 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 27 ft bgs: Type I/II Cement 27 ft to 29 ft bgs: Hydrated Medium Bentonite Chips 29 ft to 43.5 ft bgs: #2/16 Sand Filter Pack 43.5 ft to 50 ft bgs: Medium Bentonite Chips
DRILLING METHOD	Direct-Push / Hollow Stem Auger	SURFACE ELEVATION	10.84	
SAMPLING EQUIPMENT	Dual-tube	DATUM	NAD1983 State Plane California III	
DRILL START DATE	February 17, 2015			
GROUT DATE	February 17, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID MW-5B
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
	X			[Dotted pattern]	SW	
	X		-- 41			
	X					
	X		-- 42			
	X					
	X		-- 43			
	I			[Hatched pattern]	CL	Sandy CLAY: grayish brown (2.5Y 5/2), fine sand, medium plasticity, moist
	I		-- 44			
	I	0.1				
	I		-- 45			
	I					
	I		-- 46			
	I	0.1				
	I		-- 47			
	I	0.1				
	I		-- 48			
	I			[Hatched pattern]		at 49 ft bgs abundant shells
	I	0.1	-- 49			
	I		-- 50			End of boring at 50 ft

DRILLING CONTRACTOR <u>National EWP</u> DRILLING METHOD <u>Direct-Push / Hollow Stem Auger</u> SAMPLING EQUIPMENT <u>Dual-tube</u> DRILL START DATE <u>February 17, 2015</u> GROUT DATE <u>February 17, 2015</u>	COORDINATES (Latitude, Longitude) <u>6059939.12904, 2107797.85594</u> SURFACE ELEVATION <u>10.84</u> DATUM <u>NAD1983 State Plane California III</u>	Notes: 8" diameter borehole Casings 0 ft to 30.55 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 30.55 ft to 42.85 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 27 ft bgs: Type I/II Cement 27 ft to 29 ft bgs: Hydrated Medium Bentonite Chips 29 ft to 43.5 ft bgs: #2/16 Sand Filter Pack 43.5 ft to 50 ft bgs: Medium Bentonite Chips
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-6A
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY C. Lyles
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
				[Solid Black]		CONCRETE
		5.1	--- 1			
				[Dotted]	SW	Gravelly SAND: dark olive gray (5Y 3/2), fine to coarse sand, fine gravel, dry
			--- 2			
MW-6-2.5-3.5		4.3	--- 3	[Horizontal Lines]	ML	SILT: black (N 0.5), low plasticity, moist
		5	--- 4	[Diagonal Lines]	CL	CLAY with sand: olive gray (5Y 5/2), fine sand, medium plasticity, moist
	X					
	X		--- 5	[Diagonal Lines]		at 8.5 ft bgs dark yellowish brown (10YR 4/6) mottling, increasing sand
		4	--- 6			
			--- 7	[Diagonal Lines]		at 10.2 ft bgs light olive gray (5Y 6/2)
		6.5	--- 8			
			--- 9	[Diagonal Lines]		at 15 ft bgs pale olive (5Y 6/3)
		9.7	--- 10			
		4.6	--- 11	[Checkered]	SP	at 17 ft bgs light olive brown (2.5Y 5/4)
			--- 12			
		9.7	--- 13	[Checkered]		
	X		--- 14			
	X		--- 15	[Checkered]		
	X		--- 16			
		7.8	--- 17	[Checkered]		
			--- 18			
			--- 19	[Checkered]		
		9.4	--- 20			
		9.1	--- 20			

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6060015.37612, 2107645.85308	Notes: 8" diameter borehole Casings 0 ft to 14.78 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 14.78 ft to 24.2 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 10.5 ft bgs: Type I/II Cement 10.5 ft to 12.5 ft bgs: Hydrated Medium Bentonite Chips 12.5 ft bgs to 24.64 ft bgs: #2/16 Sand Filter Pack
DRILLING METHOD	Direct-Push / Hollow Stem Auger	SURFACE ELEVATION	11.47	
SAMPLING EQUIPMENT	Dual-tube	DATUM	NAD1983 State Plane California III	
DRILL START DATE	February 12, 2015			
GROUT DATE	February 12, 2015			



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-6B
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY C. Lyles
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
				[Solid Black]		CONCRETE
		5.1	--- 1			
				[Dotted]	SW	Gravelly SAND: dark olive gray (5Y 3/2), fine to coarse sand, fine gravel, dry
			--- 2			
MW-6-2.5-3.5		4.3	--- 3	[Horizontal Lines]	ML	SILT: black (N 0.5), low plasticity, moist
		5	--- 4	[Diagonal Lines]	CL	CLAY with sand: olive gray (5Y 5/2), fine sand, medium plasticity, moist
	X					
	X		--- 5	[Diagonal Lines]		at 8.5 ft bgs dark yellowish brown (10YR 4/6) mottling, increasing sand
		4	--- 6			
			--- 7	[Diagonal Lines]		at 10.2 ft bgs light olive gray (5Y 6/2)
		6.5	--- 8			
			--- 9	[Diagonal Lines]		at 15 ft bgs pale olive (5Y 6/3)
		9.7	--- 10			
		4.6	--- 11	[Checkered]	SP	at 17 ft bgs light olive brown (2.5Y 5/4)
			--- 12			
		9.7	--- 13	[Checkered]		
	X		--- 14			
	X		--- 15	[Checkered]		
	X		--- 16			
		7.8	--- 17	[Checkered]		
			--- 18			
			--- 19	[Checkered]		
		9.4	--- 20			
		9.1	--- 20			

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6060019.23198, 2107643.20314	Notes: 8" diameter borehole Casings 0 ft to 28.06 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 28.06 ft to 32.73 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 25 ft bgs: Type I/II Cement 25 ft to 27 ft bgs: Hydrated Medium Bentonite Chips 27 ft to 33.3 ft bgs: #2/16 Sand Filter Pack 33.3 ft to 45 ft bgs: Medium Bentonite Chips 45 ft to 50 ft bgs: Collapsed
DRILLING METHOD	Direct-Push / Hollow Stem Auger	SURFACE ELEVATION	11.38	
SAMPLING EQUIPMENT	Dual-tube	DATUM	NAD1983 State Plane California III	
DRILL START DATE	February 12, 2015			
GROUT DATE	February 13, 2015			



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID MW-6B
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY C. Lyles
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION	
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)				
					SP		
		5.1	-- 21				
			-- 22				
		5.2					
			-- 23				
			-- 24				
			-- 25				
		6.7			CL	Sandy CLAY: gray (5Y 5/1), fine sand, low plasticity, moist	
			-- 26			at 26 ft bgs increasing sand	
		4.8					
			-- 27		SC	Clayey SAND with gravel: greenish gray (10Y 6/1), subrounded fine to coarse sand and fine gravel, low plasticity, moist	
		5.2	-- 28				
			-- 29				
			-- 30		CL	CLAY: grayish brown (2.5Y 5/2), low plasticity, moist	
		5.1					
			-- 31				at 31 ft bgs light olive brown (2.5Y 5/4), medium plasticity, moist
			-- 32				
		0.6	-- 33				
			-- 34				at 34 ft bgs few subrounded fine gravels, moist
			-- 35				
		1.9	-- 36				
			-- 37				
		1.7	-- 38				
			-- 39				from 39 to 42 ft bgs few shell fragments
		3.2	-- 40				

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6060019.23198, 2107643.20314	Notes: 8" diameter borehole Casings 0 ft to 28.06 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 28.06 ft to 32.73 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 25 ft bgs: Type I/II Cement 25 ft to 27 ft bgs: Hydrated Medium Bentonite Chips 27 ft to 33.3 ft bgs: #2/16 Sand Filter Pack 33.3 ft to 45 ft bgs: Medium Bentonite Chips 45 ft to 50 ft bgs: Collapsed
DRILLING METHOD	Direct-Push / Hollow Stem Auger	SURFACE ELEVATION	11.38	
SAMPLING EQUIPMENT	Dual-tube	DATUM	NAD1983 State Plane California III	
DRILL START DATE	February 12, 2015			
GROUT DATE	February 13, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID MW-6B
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
	I			CL	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.	
	I					
	I	3.5	-- 41			
	I					
	I		-- 42			
	I					
	I		-- 43			
	I	3.0				
	I		-- 44			
	X					
	X		-- 45			
	X					
	X		-- 46			
	X					
	X		-- 47			
	X					
	X		-- 48			
	X					
	X		-- 49			
	X					
	X		-- 50			
					End of boring at 50 ft bgs	

DRILLING CONTRACTOR <u>National EWP</u> DRILLING METHOD <u>Direct-Push / Hollow Stem Auger</u> SAMPLING EQUIPMENT <u>Dual-tube</u> DRILL START DATE <u>February 12, 2015</u> GROUT DATE <u>February 13, 2015</u>	COORDINATES (Latitude, Longitude) <u>6060019.23198, 2107643.20314</u> SURFACE ELEVATION <u>11.38</u> DATUM <u>NAD1983 State Plane California III</u>	Notes: 8" diameter borehole Casings 0 ft to 28.06 ft bgs: PVC Sch. 40 blank, 0.154" wall thickness, 2" outer diameter 28.06 ft to 32.73 ft bgs: PVC Sch. 40 screen, 0.154" wall thickness, 2" outside diameter, 0.01" milled slot size Annular Material 0 ft to 1 ft bgs: Concrete 1 ft to 25 ft bgs: Type I/II Cement 25 ft to 27 ft bgs: Hydrated Medium Bentonite Chips 27 ft to 33.3 ft bgs: #2/16 Sand Filter Pack 33.3 ft to 45 ft bgs: Medium Bentonite Chips 45 ft to 50 ft bgs: Collapsed
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-11
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
				[Solid black]		CONCRETE
			1			
				[Horizontal lines]	ML	Sandy SILT: very dark grayish brown (10YR 3/2), low plasticity, moist
SB-11-2.0-2.5		1.2	2			
		1.0	3			at 3.0 ft bgs black (N 0.5)
			4			
		0.5	5	[Diagonal hatching]	CL	CLAY: dark gray (5Y 4/1), medium plasticity, moist
			6			at 5.5 ft bgs increasing sand
		1.7	6			at 6 ft bgs olive gray (5Y 5/2), decreasing sand
			7			
		2.0	8			at 8 ft bgs dark yellowish brown (10YR 4/6) mottling
SB-11-9.5-10.0		2.0	9.5			at 9.5 ft bgs increasing sand
			10			Not logged beyond 10 ft bgs
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR <u>National EWP</u>	COORDINATES (Latitude, Longitude) <u>6059903.862, 2107755.373</u>	Notes: Sample SB-11-GW groundwater hydropunch sample collected from 15-20 ft bgs.
DRILLING METHOD <u>Geoprobe 7730DT</u>	SURFACE ELEVATION <u>11.43</u>	
SAMPLING EQUIPMENT <u>Macrocore</u>	DATUM <u>NAD1983 State Plane California II</u>	
DRILL START DATE <u>February 19, 2015</u>		
GROUT DATE <u>February 19, 2015</u>		



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-12
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION		
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)					
	I				ML	CONCRETE		
	I	0.0	1			SILT with sand: brown (10YR 4/3), fine to coarse sand, few subangular gravels, low plasticity, moist from 1.25 ft to 1.5 ft bgs abundant poorly graded fine gravel		
	I		2			at 1.5 ft bgs hydrocarbon-like odor in material that is black (7.5 YR 2.5/1)		
SB-12-2.5-3.5	I	1.9	3			at 3.0 ft bgs black (10YR 2/1), medium to coarse sand, strong hydrocarbon-like odor, few glass fragments		
	I		4					
	I	0.5	5					
	I		6					
	I	0.1	7			CL	CLAY with sand: dark gray (10YR 4/1), fine sand, low plasticity, moderate hydrocarbon-like odor, moist	
	I		8					at 8 ft bgs brown (10YR 5/3), few to some dark yellowish brown (10YR 4/6) mottling
	I	0.0	9					
	I	0.0	10					
	X		10					
SB-12-11.0-12.0	I	0.1	11	ML	Sandy SILT: yellowish brown (10YR 5/4), fine sand, low plasticity, no odor, moist			
	I		12			at 12.5 ft bgs increasing sand		
	I	0	13		SP	Poorly graded SAND: yellowish brown (10YR 5/4), fine sand, wet		
	I		14					
	I	0	15					
						End of boring at 15.5 ft bgs		

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059903.862, 2107755.373	Notes: Groundwater sample SB-12-GW collected using installed temporary well. No LNAPL observed in temporary well.
DRILLING METHOD	Geoprobe 7730DT	SURFACE ELEVATION	11.43	
SAMPLING EQUIPMENT	Macrocore	DATUM	NAD1983 State Plane California II	
DRILL START DATE	February 13, 2015			
GROUT DATE	February 13, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-13
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
						1 ft bgs to concrete surface
	I		1			CONCRETE
	I		2			
	I		3			
SB-13-3.0-4.0	I	34.2	4			
	I		5		ML	SILT with sand: black (N 0.5), fine sand, some gray (2.5Y 5.1), low plasticity, strong hydrocarbon-like odor, moist
	I		6			
	X	30.1	7			
	X		8			
	I		9		CL	CLAY with sand: gray (5Y 5/1), fine sand, low plasticity, strong hydrocarbon-like odor, moist
	I	12.8	10			
	I	3.0	11			
	I		12			
SB-13-12.0-13.0	I	0.1	13		SP	Poorly graded SAND: yellowish brown (10YR 5/4), fine sand, dark yellowish brown (10YR 4/6) mottling, no odor, moist
	I		14			
	I	2.0	15		ML	SILT with sand: dark yellowish brown (10YR 4/4), low plasticity, moist
	I		16			
	I	0.4	17			
	I	0.0	18			
						at 7 ft bgs gray (5Y 5/1), increasing sand
						from 10 ft to 13 ft bgs dark yellowish brown (10YR 4/6) mottling
						at 17 ft bgs yellowish brown (10YR 5/4)
						End of boring at 18 ft bgs.

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059903.862, 2107755.373	Notes: Groundwater sample SB-13-GW collected using installed temporary well. No LNAPL observed in temporary well.
DRILLING METHOD	Geoprobe 7730DT	SURFACE ELEVATION	11.43	
SAMPLING EQUIPMENT	Macrocore	DATUM	NAD1983 State Plane California II	
DRILL START DATE	February 13, 2015			
GROUT DATE	February 13, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-14
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
						1 ft bgs to concrete surface
			-- 1			CONCRETE
			-- 2			
			-- 3			
			-- 4			
SB-14-4.0-4.5			-- 4			
		0.0	-- 5		CL	Sandy CLAY: light olive brown (2.5Y 5.3), fine sand, low plasticity, slight sewage-like odor, moist at 6.5 ft bgs increasing clay, no odor, few dark yellowish brown (10YR 4/6) and black (7.5YR 2.5/1) mottling at 9 ft bgs increasing sand
			-- 6			
		1.5	-- 7			
			-- 8			
		2.4	-- 8			
			-- 9			
SB-14-9.5-10.0		2.9	-- 10			
			-- 11			
			-- 12			
			-- 13			
			-- 14			
			-- 15			
			-- 16			
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR <u>National EWP</u>	COORDINATES (Latitude, Longitude) <u>6059922.80077, 2107652.03158</u>	Notes: Groundwater sample SB-14-GW collected from 15-20 ft bgs with hydropunch.
DRILLING METHOD <u>Geoprobe 7730DT</u>		
SAMPLING EQUIPMENT <u>Macrocore</u>	SURFACE ELEVATION <u>11.43</u>	
DRILL START DATE <u>February 18, 2015</u>	DATUM <u>NAD1983 State Plane California II</u>	
GROUT DATE <u>February 18, 2015</u>		



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-15
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
						1 ft bgs to concrete surface
			-- 1			CONCRETE
			-- 2			
			-- 3			
			-- 4			
	X					no recovery; operator noted gravel base rock likely present from 4.0 to 4.5 ft bgs
SB-15-5.0-5.5		7.5	-- 5		CL	Sandy CLAY: dark greenish gray (10Y 4/1), fine sand, low plasticity, sewage-like odor, wet
			-- 6			
			-- 7			at 7 ft bgs grayish brown (2.5Y 5/2), increasing clay, no odor, moist
		0.5	-- 7			
			-- 8			
			-- 9			
SB-15-9.5-10.0		0.2	-- 9			
			-- 10			
			-- 11			Not logged beyond 10 ft bgs
			-- 12			
			-- 13			
			-- 14			
			-- 15			
			-- 16			
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	<u>National EWP</u>	COORDINATES (Latitude, Longitude)	<u>6059922.80077, 2107652.03158</u>	Notes: Groundwater sample SB-15-GW collected from 15-20 ft bgs with hydropunch.
DRILLING METHOD	<u>Geoprobe 7730DT</u>	SURFACE ELEVATION	<u>11.43</u>	
SAMPLING EQUIPMENT	<u>Macrocore</u>	DATUM	<u>NAD1983 State Plane California II</u>	
DRILL START DATE	<u>February 18, 2015</u>			
GROUT DATE	<u>February 18, 2015</u>			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-16
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
						1 ft bgs to concrete surface
			-- 1	[Solid Black]		CONCRETE
			-- 2			
			-- 3			
SB-16-3.0-3.5			-- 3	[Horizontal Lines]	ML	SILT: black (N 0.5), low plasticity, strong hydrocarbon-like odor, moist from 3.0 ft to 3.2 ft bgs NAPL present from 3.2 ft to 4.2 ft bgs slight hydrocarbon-like odor, no NAPL from 4.2 ft bgs increasing fine sand, dark greenish gray (10Y 4/1)
		2.0	-- 4			
		0.0	-- 5			
			-- 6			
		8.4	-- 6	[Diagonal Hatching]	CL	Sandy CLAY: dark greenish gray (10Y 4/1), fine sand, low plasticity, moist
			-- 7			
		0.4	-- 7			
			-- 8			
			-- 9			
SB-16-9.5-10.0		2.1	-- 10	[Dotted Pattern]	SC	Clayey SAND: grayish brown (2.5Y 5/2), fine sand, few dark yellowish brown (10YR 4/6) and black (7.5YR 2.5/1) mottling, moist at 11 ft bgs increasing silt and sand
			-- 11			
		2.1	-- 11			
			-- 12			
		0.3	-- 13			
			-- 13	[Checkerboard]	SP	Poorly graded SAND: dark greenish gray (10Y 4/1), wet at 14 ft bgs olive brown (2.5Y 4/3)
		1.1	-- 14			
			-- 15			Not logged beyond 15 ft bgs
	X		-- 15			
	X		-- 16			
	X		-- 17			
	X		-- 18			
	X		-- 19			
	X		-- 20			
						End of boring at 20 ft bgs

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059870.91698, 2107687.7129	Groundwater sample SB-16-GW collected using installed temporary well. No LNAPL observed in temporary well.
DRILLING METHOD	Geoprobe 7730DT	SURFACE ELEVATION	11.43	
SAMPLING EQUIPMENT	Macrocore	DATUM	NAD1983 State Plane California II	
DRILL START DATE	February 18, 2015			
GROUT DATE	February 18, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-17
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
						1 ft bgs to concrete surface
			-- 1			CONCRETE
			-- 2			
			-- 3			
			-- 4			
			-- 5			
SB-17-5.0-6.0		2.4			ML	SILT: from 5.0 to 5.2 ft bgs black (N 0.5), low plasticity, moderate hydrocarbon-like odor, moist
			-- 6			from 5.2 ft to 5.7 ft bgs dark greenish gray (10Y 4/1), no odor
			-- 7			at 5.7 ft bgs pale olive (5Y 6/3)
		0.7	-- 8			
			-- 9			at 8 ft bgs few dark yellowish brown (10YR 4/6) and black (7.5YR 2.5/1) mottling
SB-17-9.0-10.0		0.7			SC	Clayey SAND: pale olive (5Y 6/3), fine sand, wet
			-- 10			
		0.4	-- 11			
			-- 12			
		0.7	-- 13			
			-- 14		SP	Poorly graded SAND: dark greenish gray (10GY 4/1), fine sand, wet
			-- 15			at 13.5 ft bgs olive brown (2.5Y 4/3)
		0.0	-- 16			Not logged beyond 15 ft bgs
			-- 17			
			-- 18			
			-- 19			
			-- 20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	<u>National EWP</u>	COORDINATES (Latitude, Longitude)	<u>6059843.91396, 2107703.34804</u>	Notes: Groundwater sample SB-17-GW collected from 15-20 ft bgs with hydropunch. Collected DUP-021815 from this location.
DRILLING METHOD	<u>Geoprobe 7730DT</u>	SURFACE ELEVATION	<u>11.43</u>	
SAMPLING EQUIPMENT	<u>Macrocore</u>	DATUM	<u>NAD1983 State Plane California II</u>	
DRILL START DATE	<u>February 18, 2015</u>			
GROUT DATE	<u>February 18, 2015</u>			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-18
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
	I					CONCRETE
	I		1		SW-SC	Gravelly SAND with clay: dark yellowish brown (10YR 4/4), angular fine gravel, subrounded fine to coarse sand, moist
	I	0.4				
	I		2		ML	Sandy SILT: black (N 0.5), fine sand, low plasticity, moist
	I		3			
	I	2.8				
	I		4			
	I		5		CL	Sandy CLAY: dark greenish gray (5GY 4/1), fine sand, low plasticity, slight hydrocarbon odor, moist
SB-18-5.0-6.0	I	5.1				
	I		6			
	I		7			at 6.5 ft bgs no odor at 7 ft bgs greenish gray (10Y 5/1)
	I	2.2				
	I		8			at 8 ft bgs dark yellowish brown (10YR 4/6) mottling
	I		9			
SB-18-9.0-10.0	I	1.8				
	I		10			
	X		11		SP	Poorly graded SAND: grayish brown (2.5Y 5/3), fine sand, wet
	I		12			
	I	2.4				
	I		13			
	I		14			at 14 ft bgs dark greenish gray (10GY 4/1)
	I	2.2				at 14.7 ft bgs olive gray (5Y 4/2)
	I		15			End of boring at 15 ft bgs

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059806.27285, 2107731.75121	Notes: Groundwater sample SB-18-GW collected from 10 ft bgs at an alternate location 10 feet to the south of this soil boring in an adjacent concrete pit. The alternate location was advanced via hand auger with refusal in coarse gravel.
DRILLING METHOD	Geoprobe 7730DT	SURFACE ELEVATION	11.43	
SAMPLING EQUIPMENT	Macrocore	DATUM	NAD1983 State Plane California II	
DRILL START DATE	February 19, 2015			
GROUT DATE	February 19, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-19
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
						2 ft bgs to concrete surface
			1			
			2			
			3			CONCRETE
			4			
			5			
			6		GP	Poorly graded GRAVEL: angular fine gravel, residual NAPL, hydrocarbon-like odor
SB-19-5.5-6.5		63.8	6		ML	SILT with sand: gray (2.5Y 5/1), fine sand, black (N 0.5) mottling, residual NAPL, strong hydrocarbon-like odor, moist
			7		CL	CLAY with sand: olive gray (5Y 5/2), fine sand, low plasticity, hydrocarbon-like odor, moist
			8			from 8 ft to 9 ft bgs black (7.5YR 2.5/1) nodules
SB-19-8.5-9.5			9			from 9 ft to 10 ft bgs dark yellowish brown (10YR 4/6) mottling
		69.1	10			
	X		11		SP	Poorly graded SAND: yellowish brown (10YR 5/4), fine sand, low plasticity, hydrocarbon-like odor, wet
		23.1	12			
			13			at 12.5 ft bgs dark gray (10YR 4/1)
		6.4	14			at 14 ft bgs grades to brown (10YR 5/3)
			15			
		11.1	16			
			17			
			18			
			19			
			20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059829.0409, 2107682.27026	Notes: Measured 0.7 ft of LNAPL thickness in installed temporary well. Poor recovery during purging for sampling on 2/13/15. Collected groundwater sample SB-19-GW on 2/17/15 with hydropunch from 15-20 ft bgs.
DRILLING METHOD	Geoprobe 7730DT	SURFACE ELEVATION	11.43	
SAMPLING EQUIPMENT	Macrocore/Dual-tube	DATUM	NAD1983 State Plane California II	
DRILL START DATE	February 12, 2015			
GROUT DATE	February 17, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-20
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
			1			2.2 ft bgs to concrete surface
			2			CONCRETE
			3			
			4			
			5			
			6			
SB-20-6.0-7.0		2.7	6		ML	Sandy SILT: gray (N 6/), fine sand, low plasticity, indiscernible odor, moist
			7			
			8		CL	CLAY with sand: grayish brown (10YR 5/2), fine sand, low plasticity, indiscernible odor, moist
		1.8	8			from 8.5 ft to 9.5 ft bgs few black (N 0.5) nodules
			9			
			10			from 9.5 ft to 10.5 ft bgs dark yellowish brown (10YR 4/6) mottling
SB-20-10.5-11.5		0.2	10			
		0.1	11			
			12			at 12 ft bgs increasing sand
		0.1	13			at 13 ft bgs wet
			14		SP	Poorly graded SAND: dark bluish gray (5B 4/1), fine sand, no odor, wet
		0.1	15			
	X		15			
		0.1	16			at 16 ft bgs light yellowish brown (2.5Y 6/3), fine and medium sand
			17			
		0.1	18			
			19			
		0.1	20			
			20			End of boring at 20.5 ft bgs

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059872.64863, 2107654.47375	Notes: Poor recovery from temporary well installed to 15.5 ft bgs on 2/13/15. Groundwater sample SB-20-GW collected on 2/17/15 with hydropunch from 15.5 to 20.5 ft bgs.
DRILLING METHOD	Geoprobe 7730DT	SURFACE ELEVATION	11.43	
SAMPLING EQUIPMENT	Macrocore	DATUM	NAD1983 State Plane California II	
DRILL START DATE	February 13, 2015			
GROUT DATE	February 17, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-21
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.	
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)				
						CONCRETE	
					GC	Clayey GRAVEL with sand: brown (7.5YR 4/4), angular to subrounded fine to coarse gravel and medium to coarse sand, dry	
SB-21-1.0-2.0		5.1	1			ML	Sandy SILT: black (N 0.5), fine sand, low to no plasticity, moist
			2				
		4.3	3				at 3 ft bgs very dark grayish brown (10YR 3/2), decreasing sand
			4			CL	Sandy CLAY: light yellowish brown (2.5Y 6/3), fine sand, low plasticity, moist
		5.2	5				
		0.9	6				
			7				at 7 ft bgs decreasing sand
		0.8	8				
			9				
		0.9	10				
		1.0	11				at 10.5 ft bgs increasing sand
			12			SP	Poorly graded SAND: greenish gray (10Y 5/1), fine sand, moist
		0.8	13			SC	Clayey SAND: light olive brown (2.5Y 5/4), fine sand, moist
			14			SP	Poorly graded SAND: greenish gray (5GY 5/1), fine sand, moist
		0.8	15				at 15 ft bgs light olive brown (2.5Y 5/3)
		0.9	16				at 16 ft bgs wet
			17				
		0.9	18				
			19			at 19 ft bgs moist	
		0.8	20				

DRILLING CONTRACTOR	National EWP
DRILLING METHOD	Geoprobe 7730DT
SAMPLING EQUIPMENT	Dual-tube
DRILL START DATE	February 11, 2015
GROUT DATE	February 11, 2015

COORDINATES (Latitude, Longitude)	6059872.64863, 2107654.47375
SURFACE ELEVATION	11.43
DATUM	NAD1983 State Plane California II

Notes:



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-21
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
					SP	USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc. at 21.5 ft bgs wet
		3.3	-- 21			
			-- 22			
		3.2	-- 23			
					SP	at 23.5 ft bgs greenish gray (10Y 5/1) at 24 ft bgs moist at 25 ft bgs increasing clay, wet
			-- 24			
		3.1	-- 25			
		6.1	-- 26			
			-- 27			
					CL	Sandy CLAY: greenish gray (5GY 5/1), fine sand, medium plasticity, moist at 26.5 ft bgs decreasing sand
		3.1	-- 28			
	X		-- 29			
	X		-- 30			
	X		-- 31			
					SP	Poorly graded SAND: greenish gray (10Y 6/1), fine sand, wet
		5.1	-- 32			
			-- 33			
		4.9	-- 34			
					CL	CLAY: greenish gray (10Y 6/1), low plasticity, moist at 34.5 ft bgs increasing sand
			-- 35			
		4.6	-- 36			
			-- 37			
			-- 38			
					SC	Clayey SAND with gravel: greenish gray (10Y 6/1), subrounded fine gravel and fine to coarse sand, wet at 37 ft bgs moist
		2.9	-- 39			
			-- 40			
		3.8	-- 41			
			-- 42			
					CL	CLAY: greenish gray (10Y 5/1), trace gravel, medium plasticity, moist
		3.9	-- 43			
			-- 44			

DRILLING CONTRACTOR	<u>National EWP</u>	COORDINATES (Latitude, Longitude)	<u>6059872.64863, 2107654.47375</u>	Notes:
DRILLING METHOD	<u>Geoprobe 7730DT</u>	SURFACE ELEVATION	<u>11.43</u>	
SAMPLING EQUIPMENT	<u>Dual-tube</u>	DATUM	<u>NAD1983 State Plane California II</u>	
DRILL START DATE	<u>February 11, 2015</u>			
GROUT DATE	<u>February 11, 2015</u>			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-21
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
				[Checkered Pattern]	SP	Poorly graded SAND: greenish gray (10Y 5/1), fine sand, wet
		3.4	-- 41			
				[Diagonal Hatching]	CL	CLAY: greenish gray (10Y 5/1), trace fine sand, medium plasticity, moist at 43.5 ft bgs light olive brown (2.5Y 5/5) mottling at 45 ft bgs greenish gray (10Y 5/1) at 47 ft bgs increasing sand at 48.5 ft bgs decreasing sand at 49.5 ft bgs abundant shell fragments
			-- 42			
		5.3	-- 43			
			-- 44			
		4.3	-- 45			
			-- 46			
		3.2	-- 47			
			-- 48			
		3.5	-- 49			
		2.7	-- 50			
						End of boring at 50 ft bgs

DRILLING CONTRACTOR <u>National EWP</u>	COORDINATES (Latitude, Longitude) <u>6059872.64863, 2107654.47375</u>	Notes:
DRILLING METHOD <u>Geoprobe 7730DT</u>		
SAMPLING EQUIPMENT <u>Dual-tube</u>	SURFACE ELEVATION <u>11.43</u>	
DRILL START DATE <u>February 11, 2015</u>	DATUM <u>NAD1983 State Plane California II</u>	
GROUT DATE <u>February 11, 2015</u>		



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-22
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY C. Lyles
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
	I		1			0.5 ft bgs to concrete surface CONCRETE
	I		2			
	I		3			
	I		4			
SB-22-4.0-5.0	I	0.8	4		ML	SILT with sand: black (10YR 2/1), low plasticity, strong sewage-like odor, moist at 5 ft bgs gray (N 6/), increasing fine sand
	I		5			
	I		6			
	I	0.4	6			
	X		7			
	X		7			
	X		8			
	X		8			
	X		9			
	I	0.1	9		CL	CLAY with sand: brown (10YR 5/3), medium plasticity, indiscernible odor, moist
	I		10			
SB-22-11.0-12.0	I	2.1	11			
	I		12			
	I		13			
	I		13	▽		at 13 ft bgs increasing sand, wet
	I	1.1	14		SM	Silty SAND: yellowish brown (10YR 5/4), fine sand, no odor, wet
	I		15			
	I		16			
	I	0.2	16		SP	Poorly graded SAND: grayish brown (10YR 5/2), fine sand, wet
	I		17			
	I		18			
	I	0.0	19			
			19			Not logged beyond 19 ft bgs
			20			Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059896.51554, 2107637.43649	Notes: Measured 0.9 ft of LNAPL thickness in installed temporary well. Poor recovery during purging for sampling on 2/13/15. Collected groundwater sample SB-19-GW on 2/17/15 with hydropunch from 15-20 ft bgs.
DRILLING METHOD	Geoprobe 7730DT	SURFACE ELEVATION	11.43	
SAMPLING EQUIPMENT	Macrocore	DATUM	NAD1983 State Plane California II	
DRILL START DATE	February 13, 2015			
GROUT DATE	February 17, 2015			



115 Sansome St, Suite 200
San Francisco, CA 94104
(415) 393-4750

STATION ID SB-23
PROJECT Allied Engineering
LOCATION Alameda, California
PROJECT NUMBER C1374
LOGGED BY S. Sherman
APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION USCS group name, color, grain size range, minor constituents, plasticity, odor, sheen, moisture content, texture, weathering, cementation, geologic interpretation, etc.
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
						CONCRETE
		1.3	1		SW-SC	Gravelly SAND with Clay: dark yellowish brown (10YR 4/4), angular fine gravel, subrounded fine to coarse sand, dry
			2			CONCRETE
		2.1	3		ML	Sandy SILT: black (N 0.5), fine sand, low plasticity, moist
			4			
		1.5	5			
			6		CL	CLAY: very dark gray (10YR 3/1), medium plasticity, moist
		2.4	7			at 6 ft bgs dark gray (5Y 4/1)
			8			at 7 ft bgs olive gray (5Y 5/2)
		1.8	9			at 8 ft bgs increasing sand
			10		SP	Poorly graded SAND: greenish gray, (10Y 6/1), moist
		2.2	11			Not logged beyond 10 ft bgs
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			
						Hydropunch to 20 ft bgs; end of boring

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	<u>6059987.89247, 2107572.13678</u>	Notes: Groundwater sample SB-23-GW collected with hydropunch from 15 ft to 20 ft bgs.
DRILLING METHOD	Geoprobe 7730DT	SURFACE ELEVATION	<u>11.43</u>	
SAMPLING EQUIPMENT	Macrocore	DATUM	<u>NAD1983 State Plane California III</u>	
DRILL START DATE	February 19, 2015			
GROUT DATE	February 19, 2015			



115 Sansome St, Suite 200
 San Francisco, CA 94104
 (415) 393-4750

STATION ID SB-24
 PROJECT Allied Engineering
 LOCATION Alameda, California
 PROJECT NUMBER C1374
 LOGGED BY S. Sherman
 APPROVED BY S. Sherman, PG 9240

SAMPLE INFORMATION				STRATA	Group Symbol	DESCRIPTION
SAMPLE ID	Recovery	PID (ppm)	Depth (Feet)			
			1			2.8 ft bgs to concrete surface
			2			
			3			CONCRETE from 2.8 ft to 3.2 ft bgs
SB-24-3.2-3.8			4		ML	Sandy SILT: black (N 0.5), fine sand, low plasticity, strong hydrocarbon-like odor, moist
		42	5			
			6		CL	Sandy CLAY: greenish gray (5GY 5/1), fine sand, low plasticity, slight hydrocarbon-like odor, moist
		72	7			
SB-24-7.0-7.3		13	8		SC	Clayey SAND: greenish gray (5GY 5/1), fine sand, slight hydrocarbon-like odor, moist
			9			at 9 ft bgs wet
		2.7	10			
			11		SP	Poorly graded SAND: greenish gray (5GY 5/1), fine sand, slight hydrocarbon-like odor, wet
		1.8	12			at 11.5 ft bgs no odor
			13			
		1.8	14			at 14 ft bgs light olive brown (2.5Y 5/4)
			15			
		2.8	16			End of boring at 16 ft bgs

DRILLING CONTRACTOR	National EWP	COORDINATES (Latitude, Longitude)	6059990.44793, 2107626.3355	Notes: Boring location is adjacent to pit sump. Groundwater sample SB-24-GW collected using installed temporary well. No LNAPL observed in temporary well.
DRILLING METHOD	NA	SURFACE ELEVATION	11.43	
SAMPLING EQUIPMENT	Hand Auger 3.25" diameter	DATUM	NAD1983 State Plane California III	
DRILL START DATE	February 18, 2015			
GROUT DATE	February 18, 2015			