



PROJECT NUMBER 349821	BORING NUMBER MW-1	SHEET 1 OF 3
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SOIL BORING LOG

PROJECT: **UPRR - BEVERLY HILLS (CME-95)** LOCATION: **9315 CIVIC CENTER DR. BH**
 ELEVATION: **Pending** DRILLING CONTRACTOR: **GREGG DRILLING**
 DRILLING METHOD AND EQUIPMENT USED: **HOLLOW STEM AUGER / CONTINUOUS CORE W/ 1.5' Split Spoon**
 WATER LEVELS: **52 fbg** START: **09-14-09** END: LOGGER: **M. OVIEDO**

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)	RECOVERY (%)	SAMPLE #/TYPE	SOIL DESCRIPTION	COMMENTS
					DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, AND INSTRUMENTATION. OVM (ppm):
				SILTY SAND (SM), GRAYISH BROWN (2.5Y 6/2), DRY, 30% FINES, 20% F. SAND, 10% M. SAND, 20% C. SAND, 20% F. GRAVEL, LOOSE, LARGE GRAINS ARE SILTY SAND.	MW-1 (0.5') COLLECTED AT 0.5', 1020. PID = 0.0 ppm @ 0.5'. HAND AUGERED 0'-5'
5	0/6/12		Hand Auger to 5'	1.5' SAME AS ABOVE EXCEPT COLOR CHANGES TO OLIVE BROWN (2.5Y 4/3) MOIST.	
				5.0' SILTY SAND (SM) OLIVE BROWN (2.5Y 4/3) AND MOIST, MEDIUM DENSE.	MW-1 (6') COLLECTED AT 1110 PID = 0.0 ppm @ 6'
10	5/11/12			7.5' SILT (ML), DARK GRAYISH BROWN (2.5Y 4/2), MOIST, 70% FINES, 30% F. SAND, VERY STIFF.	MW-1 (10') COLLECTED AT 1125. PID = 0.0 ppm @ 10'
				13.0' SAME AS ABOVE EXCEPT COLOR CHANGES TO DARK YELLOWISH BROWN (10YR 4/4).	
15	6/11/14			16.5' SANDY SILT (ML), DARK YELLOWISH BROWN (10YR 3/4), MOIST, 60% FINES, 10% F. SAND, 15% M. SAND, 10% C. SAND, 5% F. GRAVEL, SAND AND GRAVEL ARE GRANITE-TYPE ROCK AND SLATE, HARD.	
20	15/24/31			20' SILTY SAND (ML), DARK YELLOWISH BROWN (10YR 4/4), MOIST, 40% FINES, 40% F. SAND, 10% M. SAND, 10% C. SAND, MEDIUM DENSE.	MW-1 & MW-1D (20') COLLECTED AT 1315. PID = 0.0 ppm @ 20'
25	12/13/15			22.5' POORLY GRADED SAND W/ SILT (SP-SM) BROWN (10YR 4/3), MOIST, 10% FINES, 30% F. SAND, 20% M. SAND, 20% C. SAND, 20% GRAVEL, GRAVEL AND C. SAND ARE ANGULAR GRANITE AND SLATE, MED. DENSE.	MW-1 (20') COLLECTED
				26' SANDY CLAY (CL), OLIVE BROWN (2.5Y 4/4) MOIST, 80% FINES, 20% F. SAND, SOFT, LOW-MED PLASTICITY.	MW-1 (30) COLLECTED AT 1408.
30	24/30/34			29.25' POORLY GRADED SAND (SP), MOIST, 70% F. SAND, 20% M. SAND, 10% F. GRAVEL,	PID = 0.0 ppm @ 30'



PROJECT NUMBER 349821	BORING NUMBER MW-1	SHEET 2 OF 3
SOIL BORING LOG		

PROJECT: **UPRR-BEVERLY HILLS** LOCATION: **9315 CIVIC CENTER DR, B.H.**
 ELEVATION: **Pending** DRILLING CONTRACTOR:
 DRILLING METHOD AND EQUIPMENT USED: **HOLLOWSTEM AUGER CME-95 / (Continuous Core w/ 1.5' Split Spoon)**
 WATER LEVELS: **52 ft** START: **09-14-09** END: **09-14-09** LOGGER: **M. OVI EDO**

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)		SOIL DESCRIPTION	COMMENTS	
	RECOVERY (IN)	#/TYPE			
			32 POORLY GRADED SAND (SP), OLIVE BROWN (2.5Y 4/4), MOIST, 40% F. SAND, 30% M. SAND, 10% C. SAND, 20% F. GRAVEL. SUBANGULAR, VERY DENSE		SP
35		14/14/25	34 SILTY SAND (SM) OLIVE BROWN (2.5Y 4/4), MOIST, 40% FINES, 60% F. SAND, HARD		SM SP
			34.5 POORLY GRADED SAND (SP), OLIVE BROWN (2.5Y 4/4), MOIST, 50% F. SAND, 30% M. SAND, 20% C. SAND, 10% F. GRAVEL, DENSE.		ML
40		18/25/30	35 SAME AS AT 34.0'. 36.5 SAME AS AT 34.5'.	MW-1 (40') COLLECTED AT 1445	CL SM
			37 SANDY SILT (ML), OLIVE BROWN (2.5Y 4/3) MOIST, 80% FINES, 20% F. SAND,	PID = 0.0 ppm @ 40'	ML
45		8/15/22	39 SANDY CLAY (CL), DARK OLIVE BROWN (2.5Y 3/3), MOIST, 70% FINES, 30% FINE SAND, HARD, LOW PLASTICITY.		SP ML SP ML SP
			40 SILTY SAND (SM) DARK OLIVE BROWN (2.5Y 3/3), MOIST, 20% FINES, 70% F. SAND, 10% M. SAND, TRACE GRAVEL VERY DENSE.		BD SP
50		25/72	40.5 SANDY SILT (ML), OLIVE BROWN (2.5Y 4/3), MOIST, 80% FINES, 20% F. SAND,	MW-1 (50') COLLECTED AT 1525.	SM
			43.5 POORLY GRADED SAND (SP), OLIVE BROWN (2.5Y 4/4), MOIST, 70% F. SAND, 30% M. SAND, LOTS OF SLATE M. SAND,	PID = 0.0 ppm @ 50'	SP
			44.5 SANDY SILT (ML), DARK BROWN (10YR 2/6), MOIST, 70% FINES, 30% F. SAND, HARD, LOW PLASTICITY.		
			45.5 POORLY GRADED SAND (SP) SAME AS AT 43.5'		
			46 SAME AS AT 44.5'		
			46.5 SAME AS AT 45.5'. VERY DENSE. LOARSENS DOWNWARD.		
			47.5 AT 47.5 - BEDROCK IN FORM OF SHALE-TYPE ROCK, GRAY AND BLuish-PURPLE COLOR. ABOUT 44 OF THIS.		
			47.9 SAME AS AT 46.5'		
			48 POORLY GRADED SAND w/ GRAVEL (SP), MOIST, 20% F. SAND, 20% M. SAND, 20% C. SAND, 40% F. GRAVEL.		



PROJECT NUMBER 349821	BORING NUMBER MW-1	SHEET 1 <u>3</u> OF 3
SOIL BORING LOG		

PROJECT: UPRR BEVERLY HILLS LOCATION: 9315 CIVIL CENTER DR.
 ELEVATION: Pending DRILLING CONTRACTOR: GREGG DRILLING
 DRILLING METHOD AND EQUIPMENT USED: HOLLOW STEM AUGER CME-95 / Continuous Core w/ 1.5' Split Spoon
 WATER LEVELS: 52 fbg START: 09-14-09 END: 09-14-09 LOGGER: M. OVIEDO

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)	RECOVERY (IN) #/TYPE	SOIL DESCRIPTION	COMMENTS
50		25/72	<p>49.5 SILTY SAND (SM) OLIVE BROWN (2.5X 4/3), VERY MOIST, 40% FINES, 50% F. SAND, 10% M. SAND,</p> <p>51 POORLY GRADED SAND (SP) OLIVE GRAY (5X 4/2), VERY MOIST, 30% F. SAND, 30% M. SAND, 20% C. SAND, 20% F. GRAVEL, SUBROUND TO SUBANGULAR, VERY DENSE.</p> <p>52 SAME AS ABOVE, EXCEPT WET.</p> <p>52.5 SATURATED, S.A.P.</p>	<p>GROUND WATER AT 52'.</p>
55				
60				
65				
70				
75				
80				

TD = 61' bgs.
 LOGGED TO 54.5' bgs.



CH2MHILL

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PROJECT NUMBER 349821	BORING NUMBER MW-2	SHEET 1 OF 2
SOIL BORING LOG		

PROJECT: **UPRR - BEVERLY HILLS (CME-95)** LOCATION: **9315 CIVIC CENTER DR, B.H.**
 ELEVATION: **Pending** DRILLING CONTRACTOR: **GREGG**
 DRILLING METHOD AND EQUIPMENT USED: **OLLOW STEEL AUGER / Continuous core w/ 1.5' split spoon**
 WATER LEVELS: **~ 28.5 ft** START: **01-15-09** END: **9-16-09** LOGGER: **M. WIEDO**

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6"-6" (N)	SOIL DESCRIPTION	COMMENTS
0-5			1 POORLY GRADED GRAVEL w/ SAND (GA) GRAYISH BROWN (2.5Y 5/2), DRY, 20% F. SAND, 10% M. SAND, 10% C. SAND, 60% GRAVEL - SUBANGULAR.	MW-2 (0.5') COLLECTED AT 1320. PID = 0.0 ppm AT 0.5'. HAND AUGER FROM 0'-5'.
5-10		10/12/14	2 POORLY GRADED SAND w/ SILT (SP-SM), DRY, 10% FINES, 70% F. SAND, 10% M. SAND, 10% C. SAND.	MW-2 (5') COLLECTED AT 5'.
10-15		13/9/12	3 SILTY SAND (SM), OLIVE BROWN (2.5Y 4/3), DRY, 40% FINES, 60% F. SAND, MEDIUM DENSE.	MW-2 (10') COLLECTED AT 1355. PID = 0.0 ppm AT 10'.
15-20			4 SAME AS ABOVE, EXCEPT 40% FINES, 50% F. SAND, 10% M. SAND - GRANITIC.	
20-25		14/11/21	12.5' SANDY SILT (ML), OLIVE BROWN (2.5Y 4/3), DRY, 60% FINES, 40% F. SAND, MED. DENSE. 13' SAME AS ABOVE AT 6'-12.5'. 16.75' SANDY SILT (ML), VERY DARK GRAYISH BROWN (10YR 3/2), DRY, 70% FINES, 20% F. SAND, 10% FINE GRAVEL OF GRANITE, AND SHALE - SLATE OF VARYING COLORS (RED, GRAY, BLACK), HARD, LOW PLASTICITY.	MW-2 (20') COLLECTED AT 1530 (2) BOTTLES FOR MS/MSD. PID = 0.0 ppm AT 20'.
25-30			23.0' SILTY SAND (SM), DARK YELLOWISH BROWN (10YR 4/4), DRY, 40% FINES, 60% F. SAND, HARD. 24.0-24.5' NO RECOVERY. 24.5-24.75' SANDY SILT (ML) DARK YELLOWISH BROWN (10YR 4/4), 60% FINES, 40% F. SAND, LOW PLASTICITY. 24.75' SILTY SAND (SM) SAME COLOR,	

MOIST, 30% FINES, 70% F. SAND,
26' SAME AS AT 24.5'. (ML)
27' SAME AS AT 24.75'. (SM)
29.25' SANDY SILT (ML) BROWN (10YR 4/3), MOIST, 80% FINES, 20% F. SAND, MED PLASTICITY.



PROJECT NUMBER 349821	BORING NUMBER MW-2	SHEET 2 OF 2
SOIL BORING LOG		

PROJECT: UPRR - BEVERLY HILLS LOCATION: 9315 CIVIC CENTER DR.
 ELEVATION: Pending DRILLING CONTRACTOR: GREGG DRILLING
 DRILLING METHOD AND EQUIPMENT USED: Hollow Stem Auger
 WATER LEVELS: 39.8 fbg START: 09-15-09 END: 9-16-09 LOGGER: M. OVIEDO

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)		STANDARD PENETRATION TEST RESULTS 6"-6"-6"-6" (N)	SOIL DESCRIPTION	COMMENTS
	RECOVERY (IN)	#/TYPE			
30	ML SM SP SM		9/14/17	29.25 SANDY SILT (ML) SM (SEE ABOVE FOR DESCRIPTION). 30 SANDY SILT (ML) SAME COLOR, 60% FINES, 40% F. SAND, LOW PLASTICITY, HARD.	MW-2 (30') COLLECTED AT 1635. PIDE 0.0 ppm MOIST, MW-2 (36') COLLECTED AT 1635.
35	SM ML SP			30.6 SILTY SAND (SM), BROWN (10YR 4/3), MOIST, 30% FINES, 70% F. SAND, DENSE 31.5 POORLY GRADED SAND (SP) OLIVE BROWN (2.5Y 4/4), MOIST, 60% F. SAND, 30% M. SAND, 10% C. SAND, 32.5 SILTY SAND (SM), BROWN (10YR 4/3), 30% FINES, 30% F. SAND, 20% M. SAND, 10% C. SAND, 10% F. GRAVEL.	GROUNDWATER = 39.8'
40	GP MS		No Too much Water.	34.75 SILTY SAND (SM) BROWN (10YR 4/4), WET, 40% FINES, 50% F. SAND, TRACE GRAVEL. 37 SANDY SILT (ML), SAME COLOR, WET, 80% FINES, 20% F. SAND, MEDIUM PLASTICITY, TRACE GRAVEL. 40 SAND (SP), SATURATED.	
45				46 POORLY GRADED GRAVEL (GP) w/ SAND DARK GRAYISH BROWN (2.5Y 4/2), SATURATED, 40% FINES, 10% FINE SAND, 10% M. SAND, 10% C. SAND, 60% FINE TO COARSE GRAVEL, SUBANGULAR. 47 SILT w/ SAND (ML), VERY DARK GRAYISH BROWN (10YR 3/2), SATURATED, 80% FINES, 20% F. C. SAND, NON PLASTIC.	
50					

TD = 49' bgs
 Logged to 47.5' bgs