



Terracon

EXPLORATION LOG

SHEET 1 OF 4

START DATE 2/8/12

END DATE 2/8/12

JOB DESCRIPTION Project NEON Phase 1 Final Design

STATION GCW 37+51.76

LOCATION Westbound Charleston Blvd, Betw. I-15 & Grand Central Pkwy

OFFSET RT 30.1'

BORING B-11-043

ENGINEER REE

PROJECT No. 64115029

GROUNDWATER LEVEL		
DATE	DEPTH (ft)	ELEV. (ft)
2/9/12	15.7	0.0

EQUIPMENT CME 95

GROUND ELEV. 2041.64' ft. (NAVD 88)

OPERATOR Jeff Cothron

HAMMER DROP SYSTEM Auto Hammer

DRILLING METHOD 3-7/8" Bit, Mud Rotary

BACKFILLED Yes DATE 2/8/12

ELEV. (ft)	DEPTH (ft)	SAMPLE		BLOW COUNT		Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS	
		NO.	TYPE	6 inch Increments	Last 1 foot						
	1							FILL	1.00	FILL - SILTY GRAVEL WITH SOME SAND, light brown, dry, fine to coarse grained, sub-rounded to sub-angular	Drilling method HSA ID 4 1/2" from 0' to 15'
	2.00							FILL	2.00	FILL - CLAYEY SAND WITH TRACE GRAVEL, light brown, damp, fine to coarse grained, sub-rounded to sub-angular	
	3	0	BS				CORR			NATIVE DEPOSITS - FAT CLAY WITH SOME SAND, brown, high plasticity, moist, stiff -trace gypsum, very stiff	Pocket Penetrometer (pp) results in TSF
	5.00										
	6	1	RS	19	45	67%	PI,DS	CH			Sample #1 split: 1a@5.5' & 1b@6'
	6.50			21							
	7										
	8										
	9								9.00		
	10							SC		CLAYEY SAND WITH SOME CALCAREOUS GRAVEL, light brown, moist, very dense, fine to coarse grained, sub-rounded to sub-angular -cemented lenses (9.5' to 11')	2 min/foot w/750 psi
	10.00										
	11	2	SS	14	50/2"	100%	W,S		11.00		
	11.17			38							
	12			50/2"				CALICHE		CALICHE, light brown, dry, moderately strong	
	13								13.00		
	14							CL		SANDY CLAY, light reddish brown, medium plasticity, moist, very stiff	Switch Drilling Method: 3-7/8" Bit Mud Rotary, 15' to 101.5'
	15										
	15.00								15.50		
	16	3	RS	18	50/2"	67%	W,UW	SC	16.17	CLAYEY SAND WITH SOME GRAVEL, light reddish brown, wet, very dense, fine to coarse grained, sub-rounded to sub-angular	Sample #3 split: 3a@15.5' & 3b@16' 2 min/foot w/1000 psi
	16.17			32							
	17			50/2"				CGS		CEMENTED SAND AND GRAVEL, light brown, dry, moderately strong	
	18								18.00		
	19									GRAVELLY, CLAYEY SAND, light brown, wet, very dense, fine to coarse grained, sub-rounded to sub-angular -with cemented lenses (19' to 22')	
	20								20.00		
	21	4	SS	48	50/3"	87%	W,S	SC			
	21.25			17							
	22			50/3"							
	23									-dense	
	24								23.50		
	25							CH		FAT CLAY WITH SOME SAND, brown, high plasticity, stiff	Shelby Tube (25' to 26.5'), refusal with 500 psi pp = 4.5, 2.0, 3.0, 4.5 @ 26', 26.5', 27', 27.5'
	25.00										
	26	5	ST			94%	PI,UU,C		26.00		
	26.50										
	27	6	SS	11	50/5"	67%		CL		SANDY CLAY, occasional cemented lenses, light reddish brown, medium plasticity, wet, very stiff -cemented lenses at 27.5', hard	
	27.92										
	28			50/5"							
	29										
	30								30.00		

NEVADA DOT GINT PHASE I.GPJ NV DOT GDT 3/7/12

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Terracon

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DATE	DEPTH (ft)	ELEV. (ft)
2/9/12	15.7	0.0

ELEV. (ft)	DEPTH (ft)	SAMPLE		BLOW COUNT		Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		NO.	TYPE	6 inch Increments	Last 1 foot					
31.42	31	7	RS	10 30 50/5"	50/5"	71%	W,UW,S	SC	CLAYEY SAND WITH SOME CALCAREOUS GRAVEL, occasional cemented lenses, light reddish brown, wet, very dense, fine to coarse grained, sub-angular	Sample #7 split: 7a@30.5' & 7b@31'
33.00	33							SM	SILTY SAND, light reddish brown, wet, medium dense, fine to medium grained, sub-rounded to sub-angular	
35.00	35									pp = 1.0 from 35' to 36.5'
36.50	36	8	SS	4 5 3	8	100%	W,PI	CH	FAT CLAY WITH TRACE SAND, light brown, high plasticity, wet, medium stiff	
40.00	40							CH	-with cemented lenses (40' to 42'), hard	
45.00	45									Shelby Tube (45' to 45.5'), refusal with 750 psi
45.50	45	10	ST			100%	PI,C	CH	FAT CLAY, with occasional cemented lenses, pink, high plasticity, wet, hard	pp = 4.5, 4.0, 3.0, 2.0 @ 45', 45.5', 46', 46.5'
47.00	47	11	SS	21 17 15	32	100%		CH		
50.00	50									
50.99	50	12	RS					CL	SANDY LEAN CLAY, cemented lenses (49.5' to 52'), white, medium plasticity, wet, hard	
55.00	55									
56.50	56	13	SS	32 42 50	92	72%	W,S,PI	CL		
57.00	57							CALICHE	CALICHE, white, dry, moderately strong	2 min/foot, 750 psi
58.50	58									
60.00	60							CL	SANDY CLAY, light gray, medium plasticity, wet, medium stiff	
										-occasional clayey sand lenses

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SHEET 3 OF 4

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2/9/12	15.7	0.0

ELEV. (ft)	DEPTH (ft)	SAMPLE		BLOW COUNT		Percent Recov'd	LAB TESTS	USCS Group	MATERIAL DESCRIPTION	REMARKS
		NO.	TYPE	6 inch Increments	Last 1 foot					
61	61.50	14	RS	6 6 12	18	67%	W,UW,S	CL	SANDY CLAY, light gray, medium plasticity, wet, medium stiff	Sample #14 split: 14a@60.5' & 14b@61'
62										
63										
64									64.00	
65	65.00							ML	SANDY SILT WITH TRACE CLAY, light gray, wet, stiff	Shelby Tube (65' to 67') pp = 2.0, 2.0, 3.0, 2.5 @ 65.5', 66', 66.5', 66')
66		15	ST			100%	S,H,PI, UU,C			
67	67.00							CL	LEAN CLAY WITH TRACE SAND, white, medium to high plasticity, wet, very stiff -trace calcareous gravel	
68	68.50	16	SS	8 11 9	20	89%				
69									69.50	
70	70.42	17	RS	100/5"	100/5"	60%	W,UW	CL	SANDY LEAN CLAY, cemented lenses (69.5' to 72.5'), light reddish brown, medium plasticity, wet, hard -light gray, medium stiff	
71										
72										
73										
74										
75	75.00							CL	-occasional sand lenses	pp = 0.5, 0.5, 1.0 @ 75', 75.5', 76'
76	76.50	18	SS	3 5 10	15	100%	W,S,PI			
77										
78										
79									79.00	
80	80.00							CH	FAT CLAY WITH TRACE SAND, light reddish brown, high plasticity, wet, medium stiff	Sample #19 split: 19a@80.5' & 19b@81'
81	81.50	19	RS	7 7 7	14	67%	W,UW			
82										
83										
84										
85	85.00									
86		20	ST			0%				
87	87.00									
88	88.50	21	SS	3 4 5	9	100%	W,PI			
89										
90	90.00									

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Connecting Communities

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		NO.	TYPE	6 inch Increments	Last 1 foot	Percent Recov'd				
91.00	91	22	RS	45 50/6"	50/6"	100%	W,UW	CH	FAT CLAY WITH TRACE SAND, cemented lenses (90' to 92.5'), reddish brown, high plasticity, wet, hard	Sample #22 split: 22a@90' & 22b@90.5'
92.50	92							CL	SANDY CLAY, light reddish brown, medium plasticity, wet, very stiff -with cemented lenses (94' to 97'), hard	
95.00	95	23	SS	50/3"	50/3"	33%				
97.00	97							CH	FAT CLAY WITH SOME SAND, reddish brown, high plasticity, wet, very stiff -occasional cemented lenses	
100.00	100	24	RS	14 22 18	40	67%	W,UW			Sample #24 split: 24a@100.5' & 24b@101'
101.50	101								End of Boring = 101.5'	
102	102									
103	103									
104	104									
105	105									
106	106									
107	107									
108	108									
109	109									
110	110									
111	111									
112	112									
113	113									
114	114									
115	115									
116	116									
117	117									
118	118									
119	119									

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