INCO - LAB

FOR TESTING MATERIALS, SOIL, SURVEYING & ENVIRONMENTAL RESEARCH





BOREHOLE LOG

BH No.: BH-07

Ground Level: 113.19

Page: 1/2

Coordinates:

P.O Box: 21073, Safat 13071, Kuwait, Tel (965)4710780, Fax (965)4716526

Soil Investigation for Cross Country Pipeline (CCP) Project:

Owner: Kuwait National Petroleum Co. (KNPC) - Local Marketing

Contractor: Vision International Gen. Trading & Cont. Co.

Consultant: AMEC - Foster Wheeler

Location: KNPC MAA, SHU to Al Mutla Depot, State of Kuwait N 3,258,492.712 , E 758,862.749

Drill Rig No.: D-50MB Boring Diameter: 125mm Location: near Rd.80 Boring Method: Augering

Date Started: 21/11/2015 Job Order No.: 15-928 Date Completed: 21/11/2015 Operator: Syed

		Sai	nples			T Reco	oras	SYME	OLS			Grou
Scale (m)	Type	Number Symbol	Depth (m)	0-15 cm	Field Rec 15-30 cm	30-45 cm	N Blows	Legend	uscs	Description	Elevation (m)	Wa Lev (m
-0		'				<u> </u>				Note: No groundwater was encountered down to end of boring	113	
_	SPT	1	0.5 - 0.95	3	5	7	12		SM	Medium dense, pale brown, fine to coarse silty SAND , strong reaction with dilute hydrochloric acid, moist.	<u>-</u>	
-1	SPT	2	1 - 1.45	5	5	8	13				112	
	SPT	3	1.5 - 1.95	10	11	15	26				-	
2	SPT	4	2 - 2.4	12	18	32/10	50/25			Becomes very dense.	111	
	SPT	5	2.5 - 2.81	20	38	12/1	50/16				-	
-3	SPT	6	3 - 3.21	25	50/6	-	50/6		sc	Very dense, pale brown, fine to coarse clayey SAND , strong reaction with dilute hydrochloric acid, moist.	110.2 110	2
											<u>-</u>	
4	SPT	7	4 - 4.2	25	50/6	-	50/6				 _ _ 109	
											<u>-</u>	
-5	SPT	8	5 - 5.25	25	50/10	-	50/10				 	
											<u>-</u>	
6	SPT	9	6 - 6.31	23	39	11/1	50/16				107	
											<u>-</u>	
7	SPT	10	7 - 7.2	25	50/5	-	50/5				106	
-8	SPT	44	8 - 8.32	25	36	14/2	50/17				Ē	
	SF I	11	0 - 0.32	25	30	14/2	30/17				- 105 - - -	
-9						45.11					_	
	SPT	12	9 - 9.31	25	40	10/1	50/16				104	
-10											E	

Dilute HCL Testing Per ASTM D2488, Clauses 10.6 &14.2.5 for checking the presence of CaCO3 which may indicate false soil strength

■ D & M : Dames & Moore Sampler : Bulk Sample

Logged By: M.E.T

■ CORE : Core Sample

G.W.L.: Ground Water Level E.G.L.: Existing Ground Level E.E.L.: Existing Excavation Level

Checked By: R.Q.V.

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Drill Rig No.: D-50MB Boring Method: Augering Boring Diameter: 125mm Location: near Rd.80

Date Started: 21/11/2015 Job Order No.: 15-928 Date Completed: 21/11/2015 Operator: Syed

Scale	Samples				T Reco		SYMBOLS			Elevation	Grou Wat	
m)	Туре	Number	Depth (m)	0-15	15-30	30-45	N Blows	Legend	USCS	Description	(m)	Lev (m
10	SPT	13	10 - 10.21	cm 25	cm 50/6	cm -			sc	Very dense, pale brown, fine to coarse clayey SAND, strong reaction with dilute hydrochloric acid, moist.	+	
ı								77.27.77.27.2		strong reaction with dilute hydrochloric acid, moist.	103 103.0	Ф
										Bottom of borehole.	F	
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Note									SAMPLE	KEY ▼ Ground Wa	ter Table	
The	mea	sured G	.W.L. is app	roximate	and has b	een reco	ded after a	t least	SPT	: Standard Penetration Test G.W.L.: Ground Wa		
24 h	nours	from co	mpletion of	drilling.						: Dames & Moore Sampler E.G.L.: Existing Gro		ı.

Dilute HCL Testing Per ASTM D2488, Clauses 10.6 &14.2.5 for checking the presence of CaCO3 which may indicate false soil strength

: Bulk Sample ■ CORE : Core Sample

Logged By: M.E.T

E.G.L.: Existing Ground Level E.E.L.: Existing Excavation Level

Checked By: R.Q.V.