



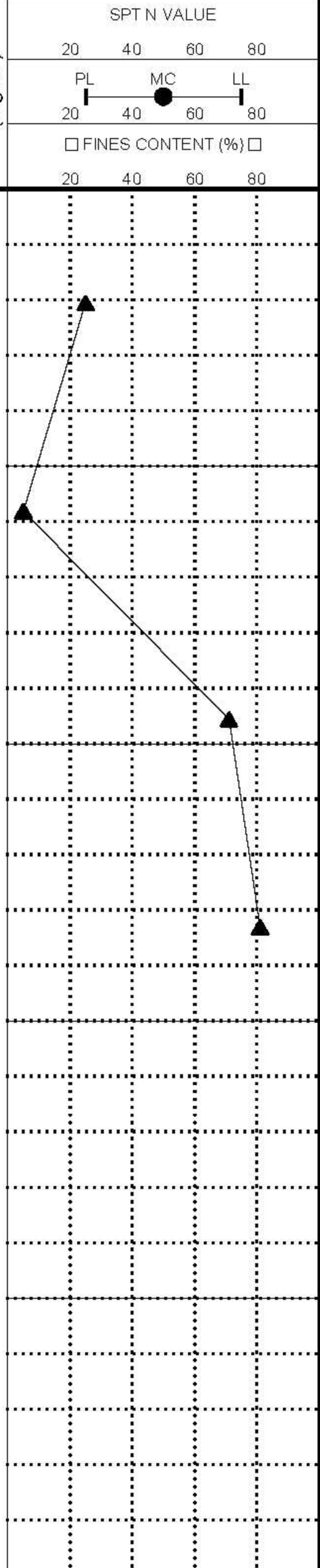
Edifica Colombia Ltda
 Cra 48 No. 98-57
 Bogotá D.C. Colombia
 Telephone: (057) 5086013
 Fax: (057) 2362121

BORING NUMBER BH-04

CLIENT SPIA - SOCIEDAD PUERTO INDUSTRIAL AGUADULCE PROJECT NAME PUERTO AGUADULCE
 PROJECT NUMBER 13016 PROJECT LOCATION AGUADULCE, BUENAVENTURA, COLOMBIA
 DATE STARTED 20/6/13 COMPLETED 22/6/13 GROUND ELEVATION -7.5 m 0 HOLE SIZE HQ
 DRILLING CONTRACTOR Edifica Colombia Ltda GROUND WATER LEVELS:
 DRILLING METHOD Drilling with TP-50D ▽ AT TIME OF DRILLING -7.50 m / Elev 0.00 m
 LOGGED BY Roberto Nieves CHECKED BY Luis F Vesga ▼ AT END OF DRILLING -8.50 m / Elev 1.00 m
 NOTES Offshore borehole AFTER DRILLING --

DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (kPa)	DRY UNIT WT. (Mg/m ³)	SPT N VALUE			
								PL	MC	LL	
		(ML) SILT, gray, dense to very dense, low plasticity, moist	SH 1	100							
			SPT 2	100	3-9-16 (25)						
2		(ML) SILT, dark gray, dense to very dense, low plasticity, moist	SPT 3	100	1-2-3 (5)						
4			SPT 4	100	9-21-50 (71)						
			SPT 5	100	8-31-50 (81)						
6		No recovery. Soft Rock. Wash sample. Sandstone dark gray, friable	RC 6	0 (0)							
8											
10											

Preliminary



GEOTECHBHPLOTS GEOTECHNICAL INVESTIGATION FOR SPIA. TEST BORINGS LOGS.GPJ GINT STD CANADA LAB.GDT 29/6/13



Edifica Colombia Ltda
 Cra 48 No. 98-57
 Bogotá D.C. Colombia
 Telephone: (057) 5086013
 Fax: (057) 2362121

BORING NUMBER BH-04

CLIENT SPIA - SOCIEDAD PUERTO INDUSTRIAL AGUADULCE

PROJECT NAME PUERTO AGUADULCE

PROJECT NUMBER 13016

PROJECT LOCATION AGUADULCE, BUENAVENTURA, COLOMBIA

DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (kPa)	DRY UNIT WT. (Mg/m ³)	SPT N VALUE						
								20	40	60	80			
		No recovery. Soft Rock. Wash sample. Sandstone dark gray, friable (continued)	RC 7	0 (0)										
12														
14			RC 8	0 (0)										
16			RC 9	0 (0)										
18														
20			RC 10	0 (0)										

GEOECHBHPLOTS GEOTECHNICAL INVESTIGATION FOR SPIA. TEST BORINGS LOGS.GPJ GINT STD CANADA LAB.GDT 29/6/13

(Continued Next Page)



Edifica Colombia Ltda
 Cra 48 No. 98-57
 Bogotá D.C. Colombia
 Telephone: (057) 5086013
 Fax: (057) 2362121

BORING NUMBER BH-04

CLIENT SPIA - SOCIEDAD PUERTO INDUSTRIAL AGUADULCE

PROJECT NAME PUERTO AGUADULCE

PROJECT NUMBER 13016

PROJECT LOCATION AGUADULCE, BUENAVENTURA, COLOMBIA

DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (kPa)	DRY UNIT WT. (Mg/m ³)	SPT N VALUE						
								20	40	60	80			
22	[Dotted pattern]	No recovery. Soft Rock. Wash sample. Sandstone dark gray, friable (continued)	RC 11	0 (0)										
24														
26														
28		[Cross-hatch pattern]	Siltstone, dark gray, weathered, highly fractured	RC 12	0 (0)									
30	[Cross-hatch pattern]	No recovery. Soft Rock. Wash sample. Sandstone dark gray, friable	RC 13	27 (0)										
32	[Dotted pattern]		RC 14	0 (0)										

GEOECHBHPLOTS GEOTECHNICAL INVESTIGATION FOR SPIA. TEST BORINGS LOGS.GPJ GINT STD CANADA LAB.GDT 29/6/13

(Continued Next Page)



Edifica Colombia Ltda
 Cra 48 No. 98-57
 Bogotá D.C. Colombia
 Telephone: (057) 5086013
 Fax: (057) 2362121

BORING NUMBER BH-04

CLIENT SPIA - SOCIEDAD PUERTO INDUSTRIAL AGUADULCE

PROJECT NAME PUERTO AGUADULCE

PROJECT NUMBER 13016

PROJECT LOCATION AGUADULCE, BUENAVENTURA, COLOMBIA

DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (kPa)	DRY UNIT WT. (Mg/m ³)	SPT N VALUE					
								20	40	60	80		
34		No recovery. Soft Rock. Wash sample. Sandstone dark gray, friable (continued)	RC 15	0 (0)									
36			RC 16	0 (0)									
38													
40													

Bottom of borehole at 40.00 meters.

GEOTECHBHPLOTS GEOTECHNICAL INVESTIGATION FOR SPIA. TEST BORINGS LOGS.GPJ GINT STD CANADA LAB.GDT 29/6/13

Preliminary



EDIFICA
COLOMBIA LTDA

GEOTECHNICAL INVESTIGATION FOR SPIA.
BOREHOLE BH-04

PHOTOGRAPHIC RECORD ROCK CORES



Preliminary