



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

BORING NUMBER BH-01

CLIENT SPIA - SOCIEDAD PUERTO INDUSTRIAL AGUADULCE

PROJECT NAME PUERTO AGUADULCE

PROJECT NUMBER 13016

PROJECT LOCATION AGUADULCE, BUENAVENTURA, COLOMBIA

DATE STARTED 29/6/13 COMPLETED 4/7/13

GROUND ELEVATION -5.6 m 0 HOLE SIZE HQ

DRILLING CONTRACTOR Edifica Colombia Ltda

GROUND WATER LEVELS:

DRILLING METHOD Drilling with TP-50D

▽ AT TIME OF DRILLING -5.60 m / Elev 0.00 m

LOGGED BY Roberto Nieves CHECKED BY Luis F Vesga

▼ AT END OF DRILLING -2.60 m / Elev -3.00 m

NOTES Offshore Borehole

AFTER DRILLING --

GEO TECH BH PLOTS GEOTECHNICAL INVESTIGATION FOR SPIA. TEST BORINGS LOGS.GPJ GINT STD CANADA LAB.GDT 5/7/13

| 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 | |
| 0 | | (CH) CLAY, dark gray, high plasticity, moist | SH 1 | | | | | | | | | |
| 0.5 | | | SPT 2 | 100 | 1-1-1 (2) | | | | | | | |
| 1.5 | | | SPT 3 | 100 | 1-1-1 (2) | | | | | | | |
| 3.5 | | (CH) CLAY, dark gray, high plasticity, low moisture | SPT 4 | 100 | 2-3-3 (6) | | | | | | | |
| 4.0 | | No recovery. Soft soil | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |

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|-----------|-------------|---|--------------------|------------------|-----------------------|-------------------|-----------------------------------|-------------|----|----|----|--|
| | | | | | | | | 20 | 40 | 60 | 80 | |
| | | No recovery. Soft soil (continued) | | | | | | | | | | |
| 12 | | (ML) Sandy SILT, dark gray, low plasticity, firm consistency, moist | SPT 5 | 100 | 4-18-36 (54) | | | | | | | |
| 14 | | (SM) Silty SAND, dark gray, presence of silt brown, and red bands | SPT 6 | 100 | 6-10-24 (34) | | | | | | | |
| 16 | | (ML) Sandy SILT, dark gray, low plasticity, firm consistency | SPT 7 | 100 | 4-19-50 (69) | | | | | | | |
| 16 | | Siltstone, dark gray, highly fractured, friable | RC 8 | 30 (0) | | | | | | | | |
| 18 | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | |
| 20 | | Sandstone, dark gray, highly fractured, weathered | RC 9 | 68 (8) | | | | | | | | |

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|-----------|-------------------------|---|--------------------|------------------|-----------------------|-------------------|-----------------------------------|-------------|----|----|----|--|--|--|--|--|--|--|--|
| | | | | | | | | 20 | 40 | 60 | 80 | | | | | | | | |
| 22 | [Dotted pattern] | Sandstone, dark gray, highly fractured, weathered (continued) | RC 10 | 23 (0) | | | | | | | | | | | | | | | |
| 24 | | Siltstone, dark gray, highly fractured, friable | RC 11 | 42 (0) | | | | | | | | | | | | | | | |
| 26 | [Cross-hatched pattern] | | RC 12 | 32 (0) | | | | | | | | | | | | | | | |
| 28 | | | RC 13 | 29 (7) | | | | | | | | | | | | | | | |
| 30 | [Cross-hatched pattern] | | | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | | | |

GEOECHBHPLOTS GEOTECHNICAL INVESTIGATION FOR SPIA. TEST BORINGS LOGS.GPJ GINT STD CANADA LAB.GDT 5/7/13



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|-----------|-------------|---|--------------------|------------------|-----------------------|-------------------|-----------------------------------|-------------|----|----|----|--|
| | | | | | | | | 20 | 40 | 60 | 80 | |
| 34 | | Sandstone, light gray, highly fractured, weathered <i>(continued)</i> | RC 14 | 7 (0) | | | | | | | | |
| 36 | | Sandstone, dark gray, highly fractured, friable | | | | | | | | | | |
| 38 | | | RC 15 | 10 (0) | | | | | | | | |
| | | | | | | | | | | | | |

Bottom of borehole at 39.00 meters.

GEOTECHBHPLOTS GEOTECHNICAL INVESTIGATION FOR SPIA. TEST BORINGS LOGS.GPJ GINT STD CANADA LAB.GDT 5/7/13

Preliminary



EDIFICA
COLOMBIA LTDA

GEOTECHNICAL INVESTIGATION FOR SPIA.
BOREHOLE BH-01

PHOTOGRAPHIC RECORD ROCK CORES

