

SAUDI ARAMCO BORING LOG

GEOTECHNICAL & CIVIL TESTING UNIT

| | | | | | |
|--|--|------------------------|--|--|---------------------------|
| PROJECT NAME: SOIL AND FOUNDATION INVESTIGATION SERVICES | | | FILE NO: 999999/999 | | |
| LOCATION: PLANT AREA | | | FIELD INVESTIGATION: PIER AND CAUSEWAY | | |
| COORDINATES: | | NORTH: 12,345.60 meter | TYPE OF BORING: ROTARY WASH | | BORING NO: F 24 |
| | | EAST: 65,432.10 meter | DIA. OF BORING: 100mm CORE SIZE: NW | | |
| GROUND ELEVATION: | | 3.21 meter | DIA. OF UNDISTURBED SAMPLE: 64mm | | DATE COMMENCED: 11-5-98 |
| DEPTH OF GROUNDWATER TABLE: | | 8.5 meter | CASING HAMMER WT. & DROP: 45Kg/300mm | | DATE COMPLETED: 12-5-98 |
| MEASURED AT: 13:00 | | HOURS ON: 12-05-98 | HAMMER WT. & DROP: 63.5Kg/760mm | | DRILLING SUPERVISOR: A.B. |

| Depth (feet) | Sample Type & Number | Sample Blows per 12 inches | Moisture Content % | CaCO3 % | Passing 200 % | Soil Symbol | Classification | DESCRIPTION | Depth (meters) |
|--------------|----------------------|----------------------------|--------------------|---------|---------------|-------------|----------------|--|----------------|
| 1 | | | | | | | | Asphalt layer (15cm thick). | 0.3 |
| 2 | | | | | | | | Yellowish brown, silty sand with gravel. | 0.6 |
| 3 | SPT-1 | 50 | 8.0 | 15 | 26 | | SM | Ditto but dense and greyish brown. | 0.9 |
| 4 | | | | | | | | | 1.2 |
| 5 | SPT-2 | 87/10" | 16.0 | 12 | 6 | | SP-SM | Very dense, greyish brown, poorly graded sand with silt. | 1.5 |
| 6 | | | | | | | | | 1.8 |
| 7 | | | | | | | | | 2.1 |
| 8 | SPT-3 | 54 | | | | | | Ditto. | 2.4 |
| 9 | | | | | | | | | 2.7 |
| 10 | SPT-4 | 36 | | | | | | Ditto but dense. | 3.0 |
| 11 | | | | | | | | | 3.4 |
| 12 | | | | | | | | | 3.7 |
| 13 | SPT-5 | 80/10" | | | | | | Ditto but very dense. | 4.0 |
| 14 | | | | | | | | | 4.3 |
| 15 | | | | | | | | | 4.6 |
| 16 | | | | | | | | | 4.9 |
| 17 | SPT-6 | 93/10" | | | | | | Ditto. | 5.2 |
| 18 | | | | | | | | | 5.5 |
| 19 | | | | | | | | | 5.8 |
| 20 | SPT-7 | 60/6" | | | | | | Ditto. | 6.1 |
| 21 | | | | | | | | | 6.4 |
| 22 | | | | | | | | | 6.7 |
| 23 | | | | | | | | | 7.0 |
| 24 | | | | | | | | | 7.3 |
| 25 | SPT-8 | 50/4" | | | | | | Ditto. | 7.6 |
| 26 | | | | | | | | | 7.9 |
| 27 | | | | | | | | | 8.2 |
| 28 | | | ▼ | | | | | | 8.5 |
| 29 | | | | | | | | | 8.8 |
| 30 | SPT-9 | 50 | 35.0 | | 43 | | | Dense, yellowish brown, clayey sand. | 9.1 |
| 31 | | | | | | | | | 9.4 |
| 32 | | | | | | | | | 9.8 |
| 33 | | | | | | | | | 10.1 |
| 34 | | | | | | | | | 10.4 |
| 35 | | | | | | | | | 10.7 |

LEGEND:

SPT-1 : STANDARD PENETRATION TEST & NUMBER
 H-1 : HAND SAMPLE & NUMBER
 R-1 : ROCK CORE RUN & NUMBER
 RQD : ROCK QUALITY DESIGNATION
 ▼ : WATER TABLE

REC : ROCK CORE RECOVERY
 HWR : HIGHLY WEATHERED ROCK
 PWR : PARTIALLY WEATHERED ROCK
 ROCK : UNWEATHERED ROCK

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|--------------|----------------------|----------------------------|--------------------|---------|---------------|--|--------------------------|---|----------------|--|----|--|-----------------|
| 36 | SPT-10 | 78/5" | 44.0 | | 87 | | SC | Ditto but very dense. | 11.0 | | | | |
| 37 | | | | | | | | Very dense, yellowish brown, clayey sand. | 11.3 | | | | |
| 38 | | | | | | | | | 11.6 | | | | |
| 39 | | | | | | | | | 11.9 | | | | |
| 40 | | | | | | | | | 12.2 | | | | |
| 41 | SPT-11 | 21 | | | | | | | | | CH | Very stiff, yellowish brown, fat clay. | 12.5 |
| 42 | H-1 | | | | | | | | | | | 12.8 | |
| 43 | | | | | | | | | | | | 13.1 | |
| 44 | | | | | | | | | | | | 13.4 | |
| 45 | SPT-12 | 110/14" | | | | | | | | | | PWR | Ditto but hard. |
| 46 | | | | | | Light brown, moderately weathered, hard Claystone. | 14.0 | | | | | | |
| 47 | | | | | | 14.3 | | | | | | | |
| 48 | | | | | | 14.6 | | | | | | | |
| 49 | | | | | | 14.9 | | | | | | | |
| 50 | R-1 | | | | | REC: 95% | RQD: 50% | 15.2 | | | | | |
| 51 | | | | | | | | 15.5 | | | | | |
| 52 | | | | | | | | 15.8 | | | | | |
| 53 | | | | | | | Ditto. | 16.2 | | | | | |
| 54 | | | | | | | | 16.5 | | | | | |
| 55 | | | | | | | | 16.8 | | | | | |
| 56 | R-2 | | | | | REC: 85% | RQD: 40% | 17.1 | | | | | |
| 57 | | | | | | | | 17.4 | | | | | |
| 58 | | | | | | | | 17.7 | | | | | |
| 59 | | | | | | | | 18.0 | | | | | |
| 60 | | | | | | | END OF BORING AT 18.00m. | 18.3 | | | | | |
| 61 | | | | | | | | 18.6 | | | | | |
| 62 | | | | | | | | 18.9 | | | | | |
| 63 | | | | | | | | 19.2 | | | | | |
| 64 | | | | | | | | 19.5 | | | | | |
| 65 | | | | | | | | 19.8 | | | | | |
| 66 | | | | | | | | 20.1 | | | | | |
| 67 | | | | | | | | 20.4 | | | | | |
| 68 | | | | | | | | 20.7 | | | | | |
| 69 | | | | | | | | 21.0 | | | | | |
| 70 | | | | | | | | 21.3 | | | | | |

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