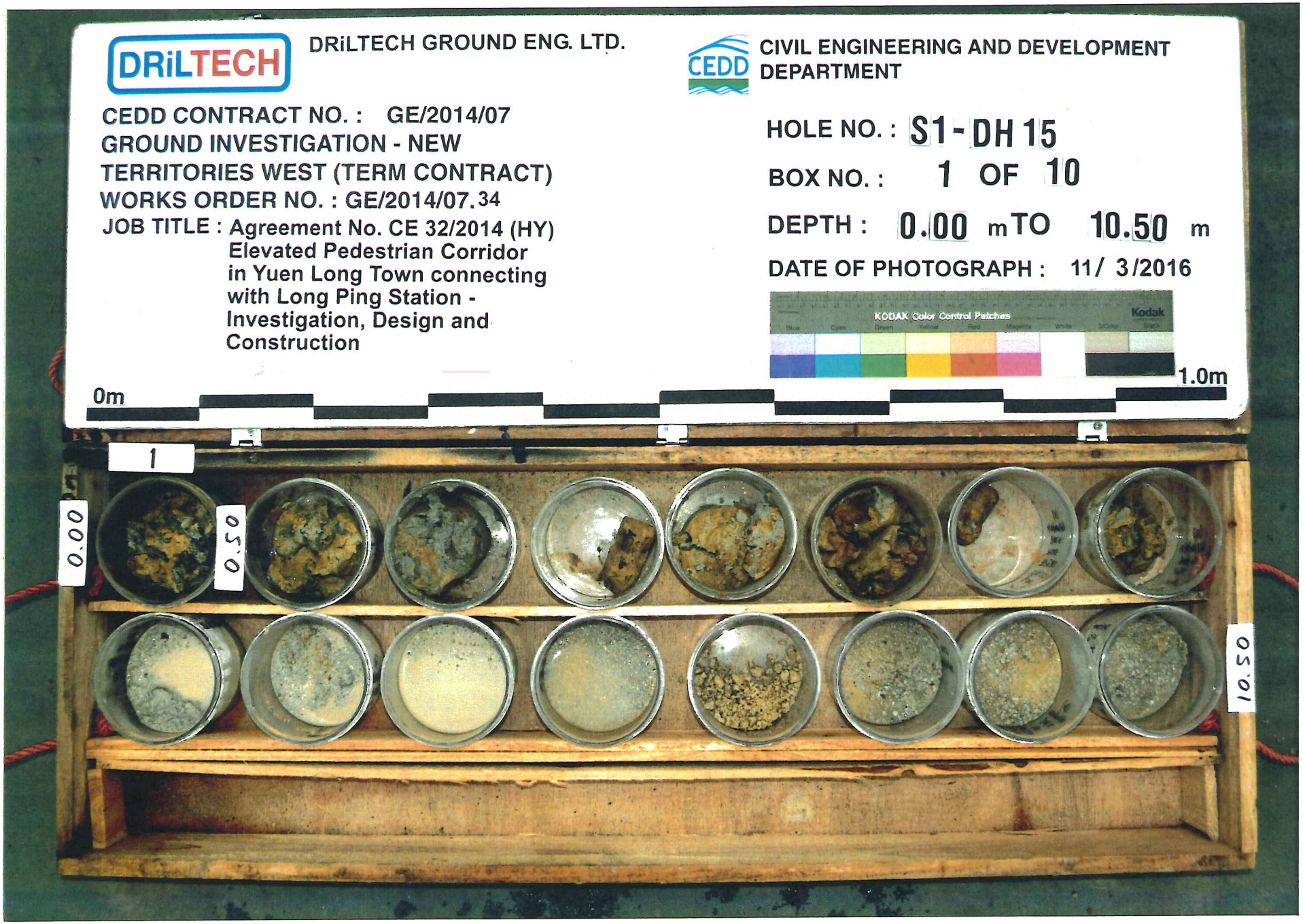
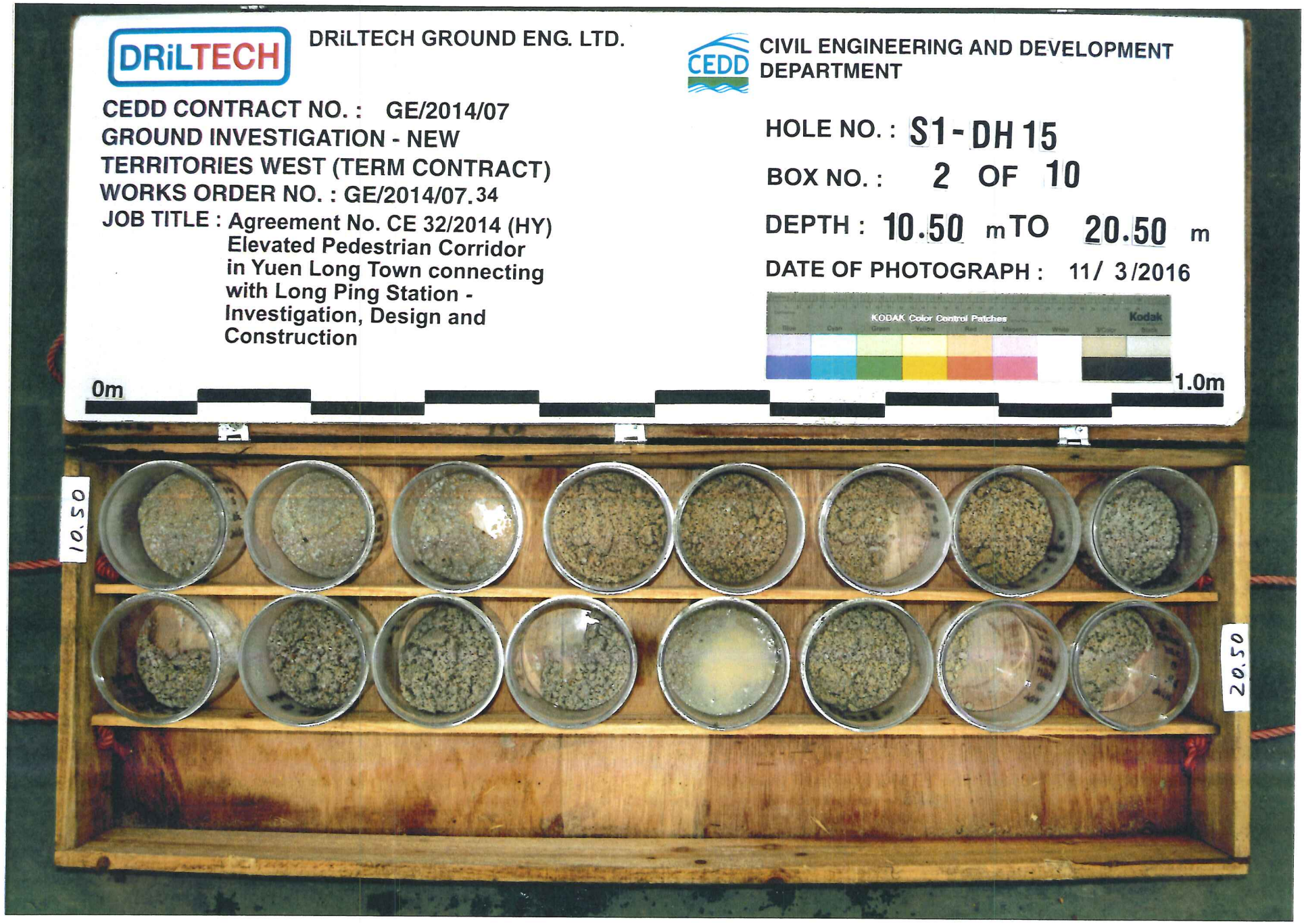

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-DH14
BOX NO. : 18 OF 18
DEPTH : 125.47 m TO 129.96 m
DATE OF PHOTOGRAPH : 21/12/2015
KODAK Color Control Patches
Kodak
0m
1.0m
125.47
126.93
127.99
NR
128.62
NR
128.75 ~ 129.09
129.96
END


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-DH15
BOX NO. : 1 OF 10
DEPTH : 0.00 m TO 10.50 m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
1
0.00
0.50
10.50

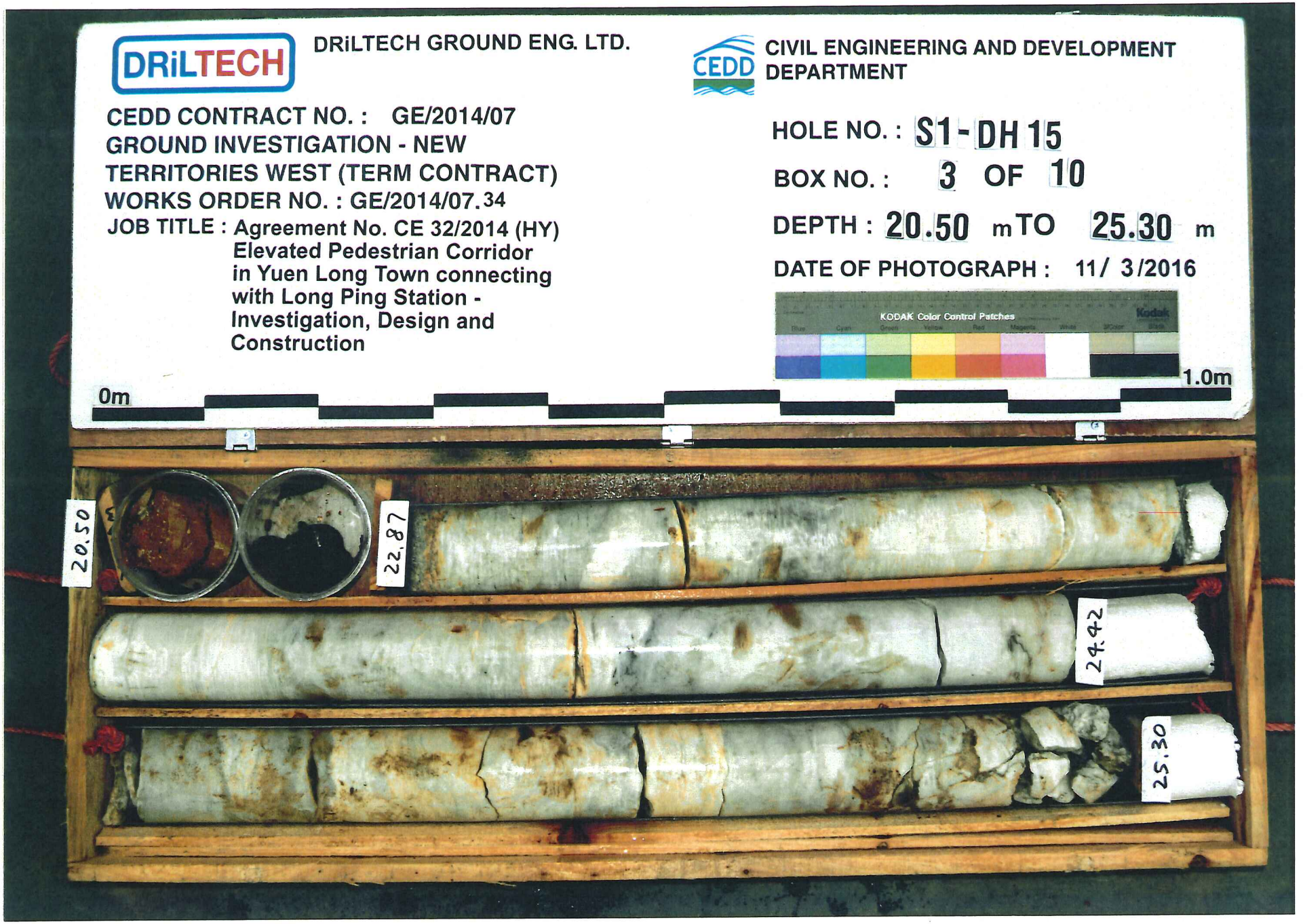

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-DH 15
BOX NO. : 2 OF 10
DEPTH : 10.50 m TO 20.50 m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
10.50
20.50

DRiLTECH GROUND ENG. LTD.

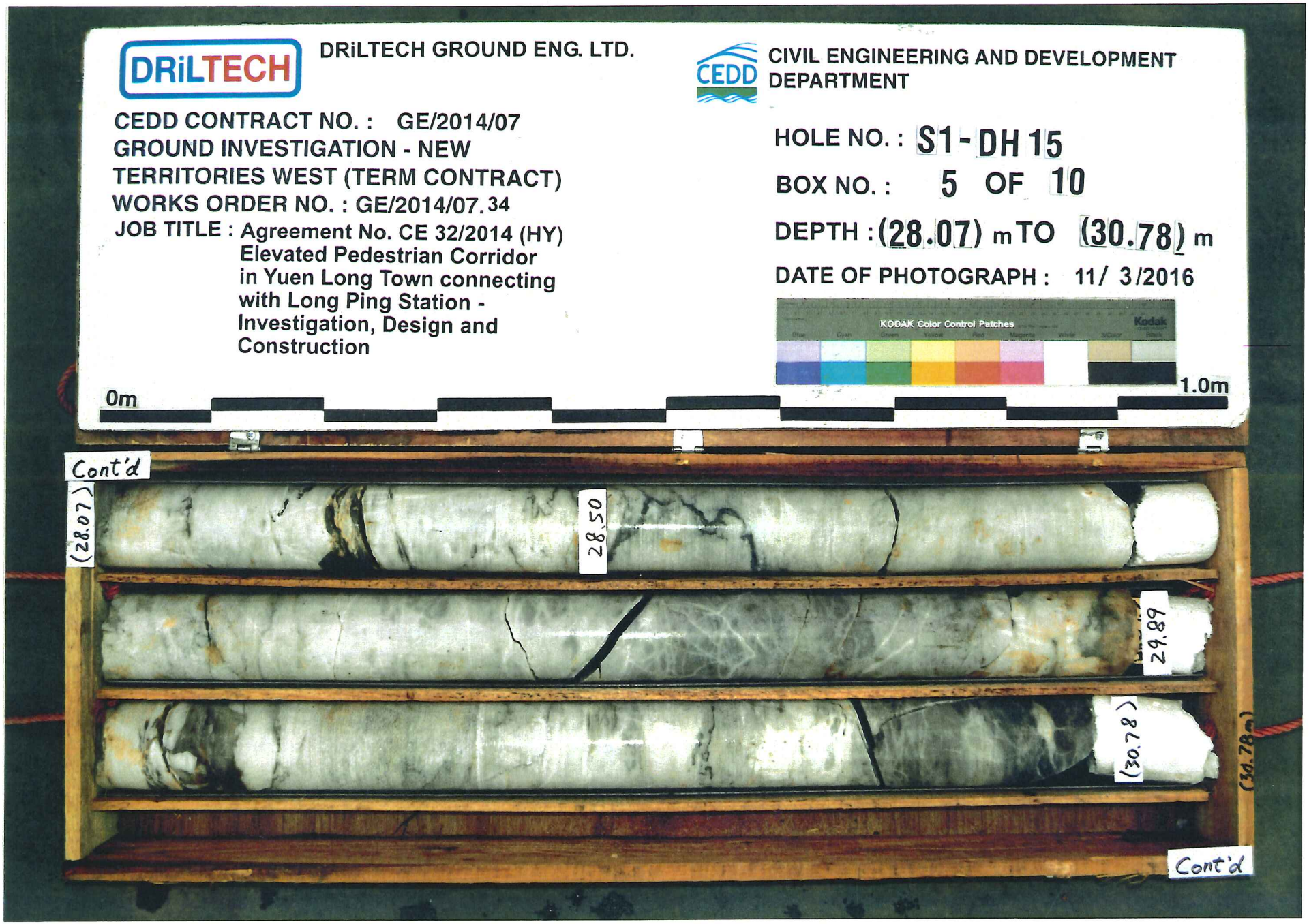
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

HOLE NO. : S1-DH15
BOX NO. : 3 OF 10
DEPTH : 20.50 m TO 25.30 m
DATE OF PHOTOGRAPH : 11/ 3/2016




DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-DH 15
BOX NO. : 4 OF 10
DEPTH : 25.30 m TO (28.07) m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
25.30
26.24
27.19
(28.07)
Cont'd


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-DH 15
BOX NO. : 5 OF 10
DEPTH : (28.07) m TO (30.78) m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
Cont'd
(28.07)
28.50
29.89
(30.78)
(30.78m)
Cont'd


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-DH 15
BOX NO. : 6 OF 10
DEPTH : (30.78) m TO (33.44) m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
Cont'd
(30.78)
31.15
32.53
(33.44)
Cont'd

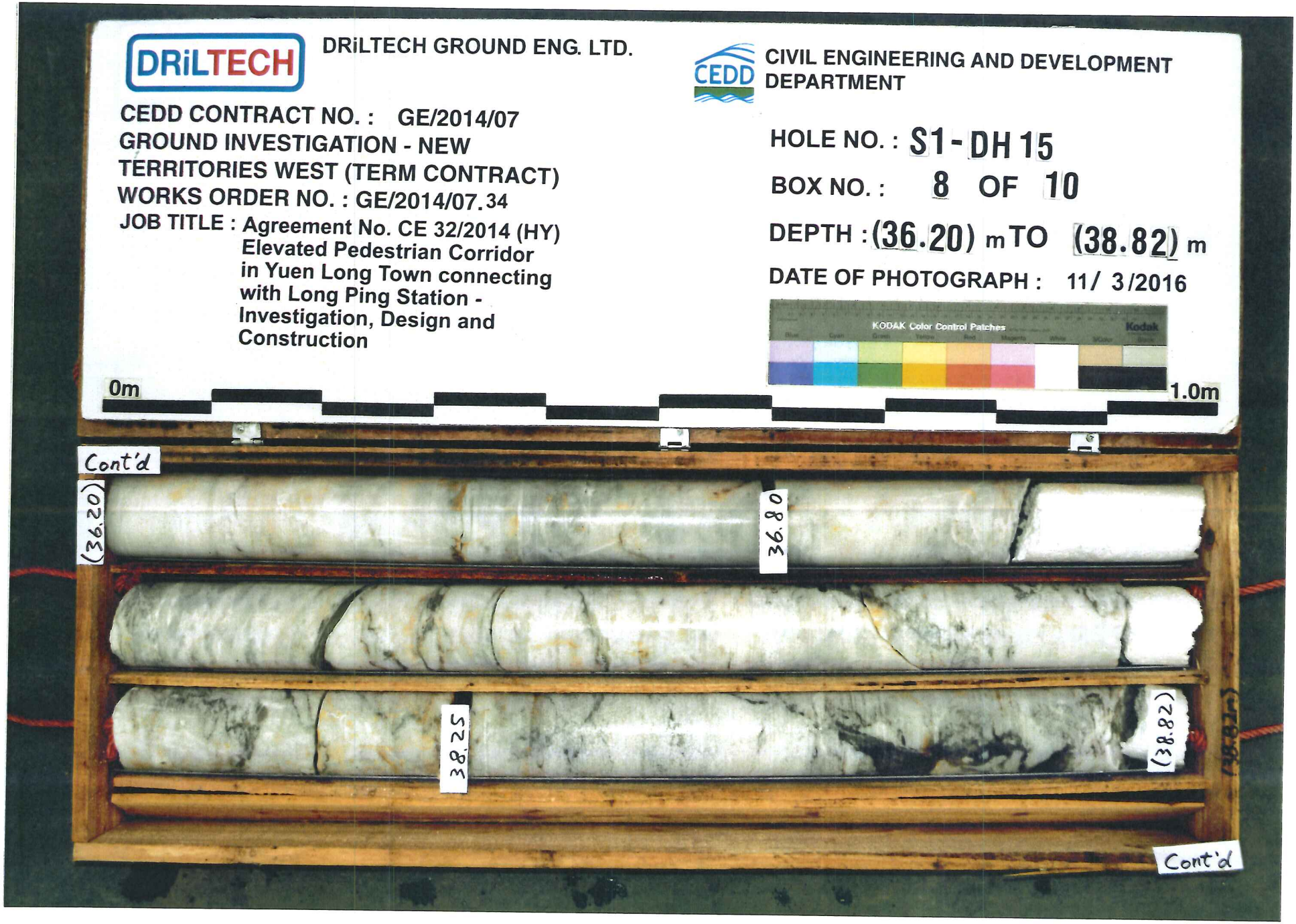

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-DH 15
BOX NO. : 7 OF 10
DEPTH : (33.44) m TO (36.20) m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
0m
1.0m
Cont'd
(33.44)
33.93
35.41
(36.20)
Cont'd

DRiLTECH GROUND ENG. LTD.

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

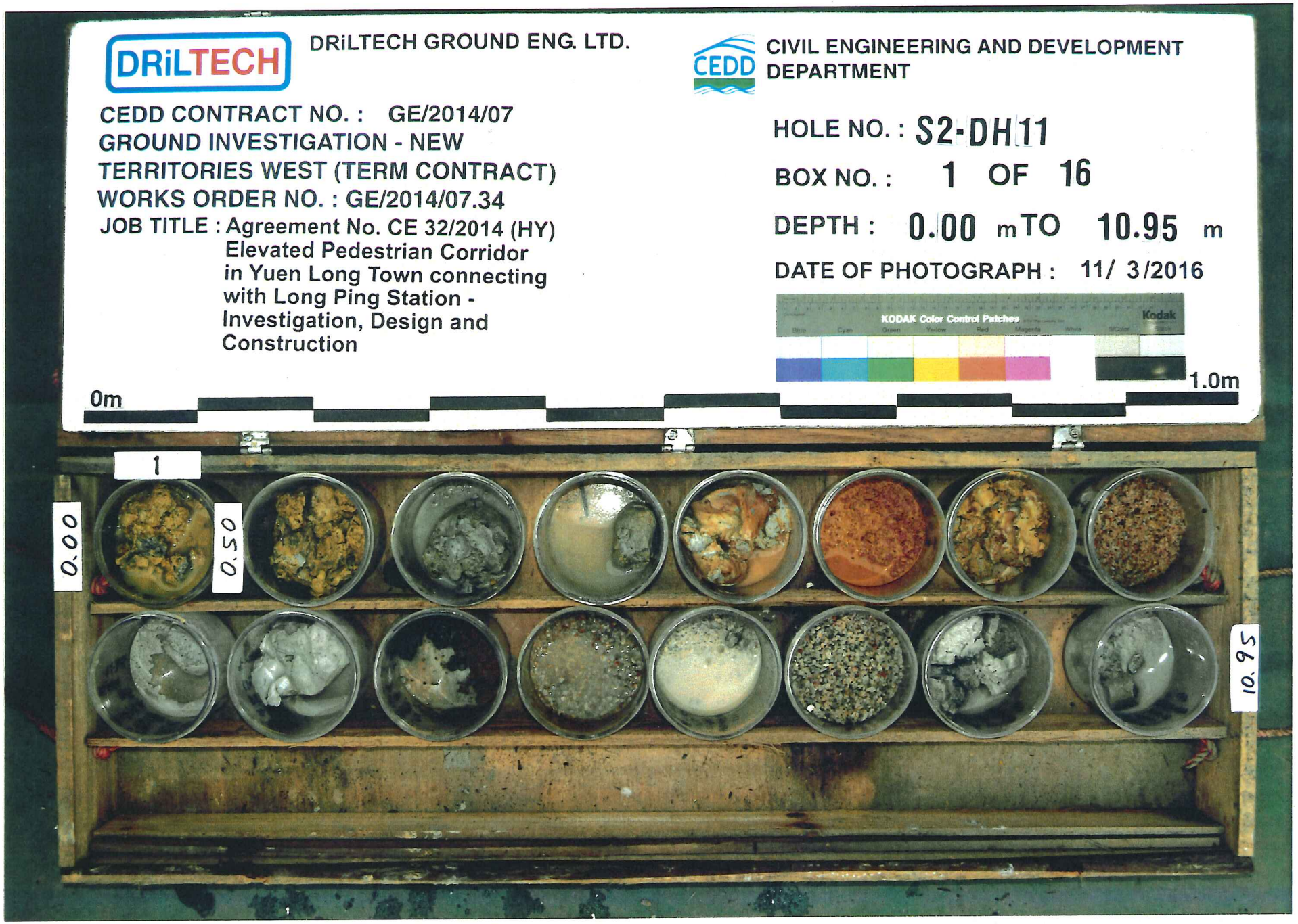
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

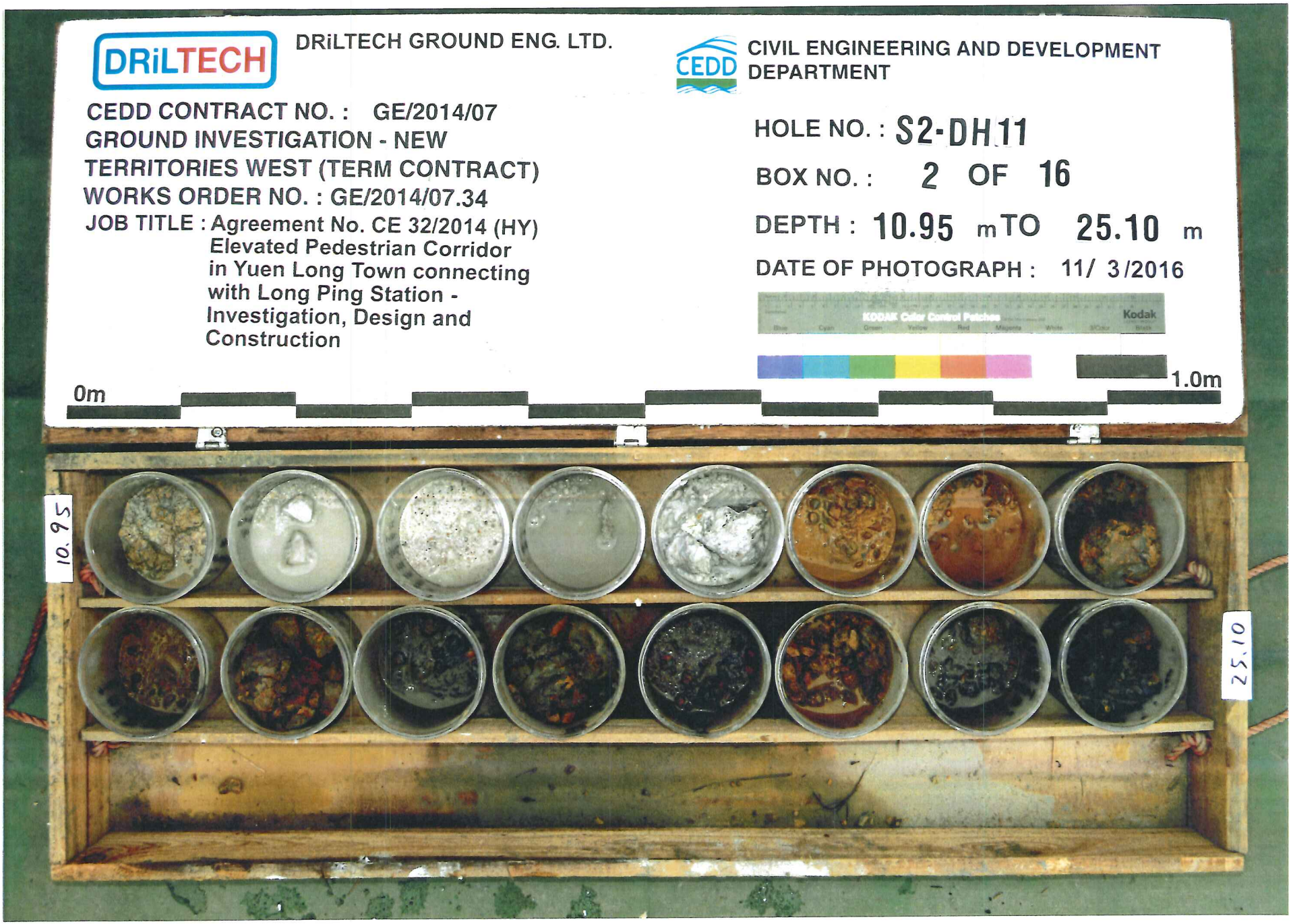
HOLE NO. : S1 - DH 15
BOX NO. : 8 OF 10
DEPTH : (36.20) m TO (38.82) m
DATE OF PHOTOGRAPH : 11/ 3/2016

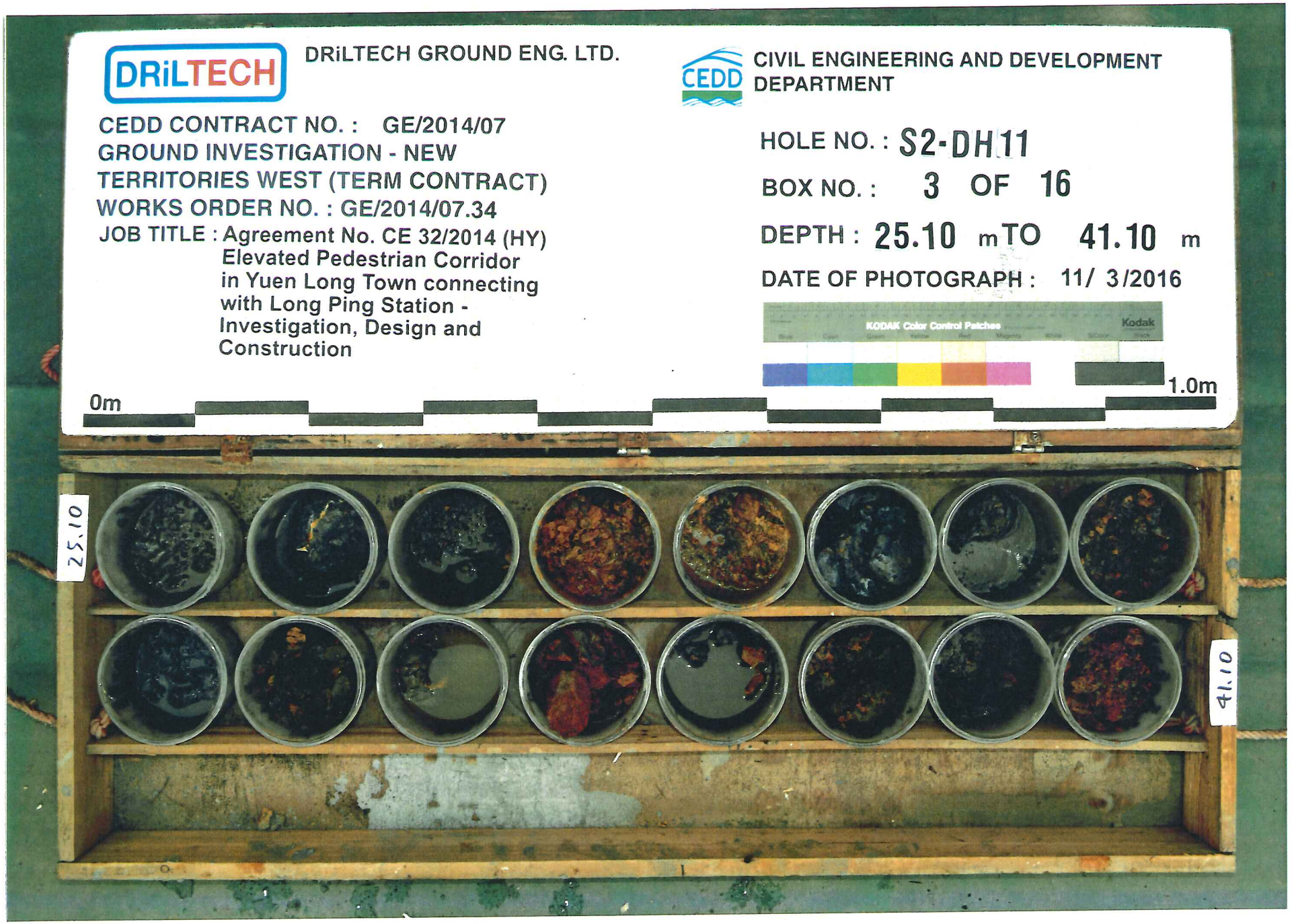


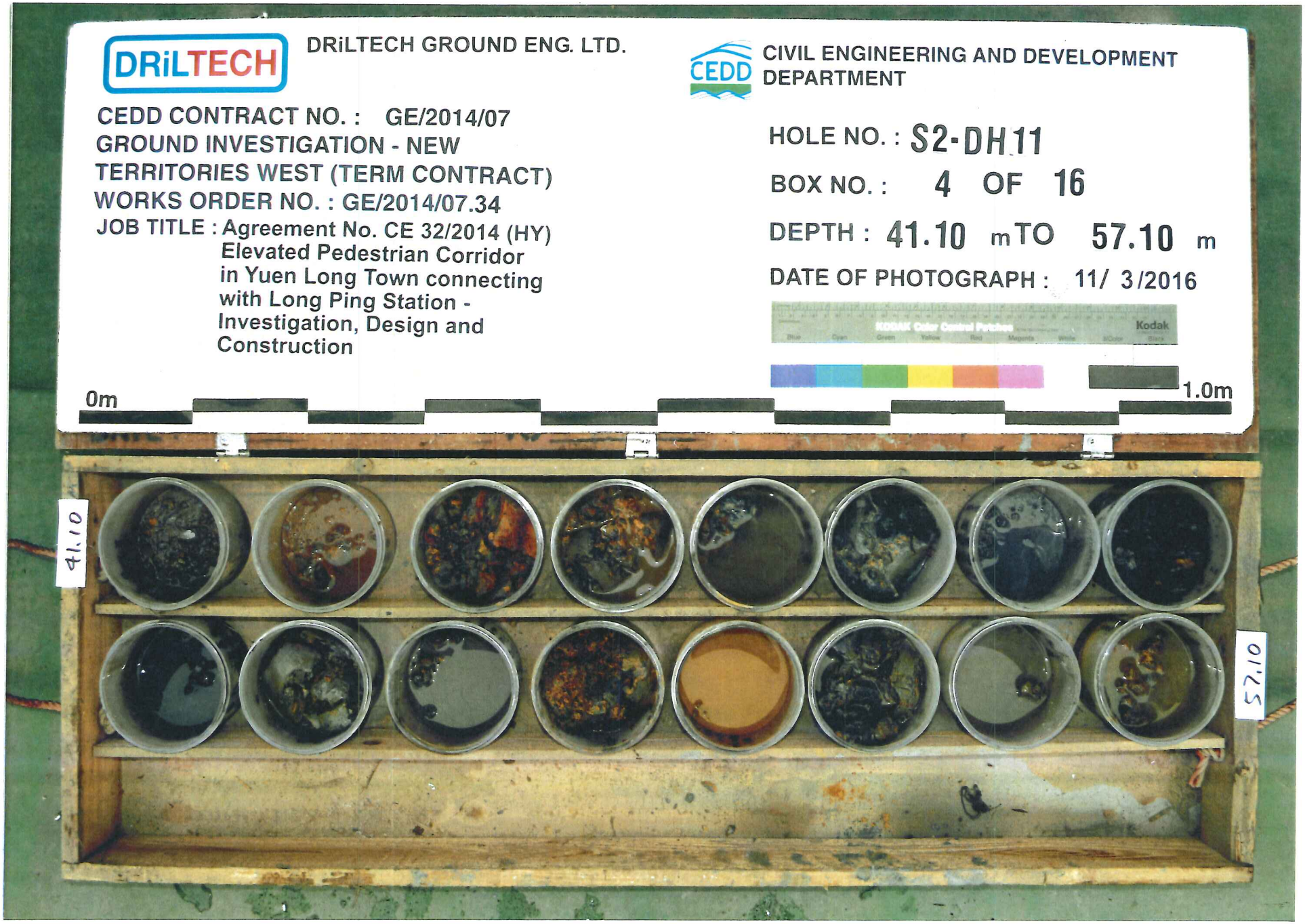

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-DH 15
BOX NO. : 9 OF 10
DEPTH : (38.82) m TO (41.63) m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
0m
1.0m
Cont'd
(38.82)
39.64
41.02
(41.63)
(41.63m)
Cont'd

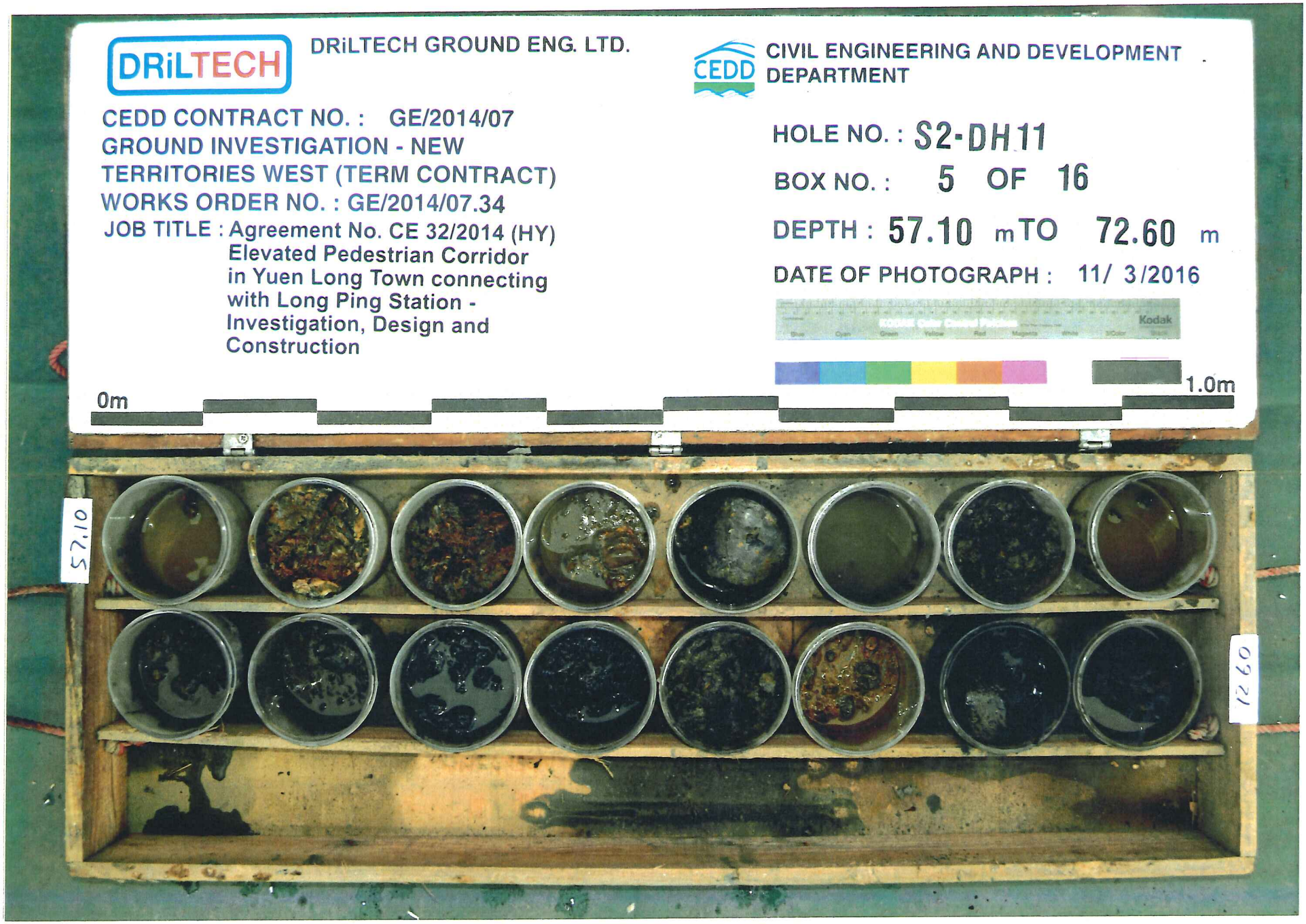

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1 - DH 15
BOX NO. : 10 OF 10
DEPTH : (41.63) m TO 43.42 m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
Cont'd
(41.63)
42.39
43.42
END

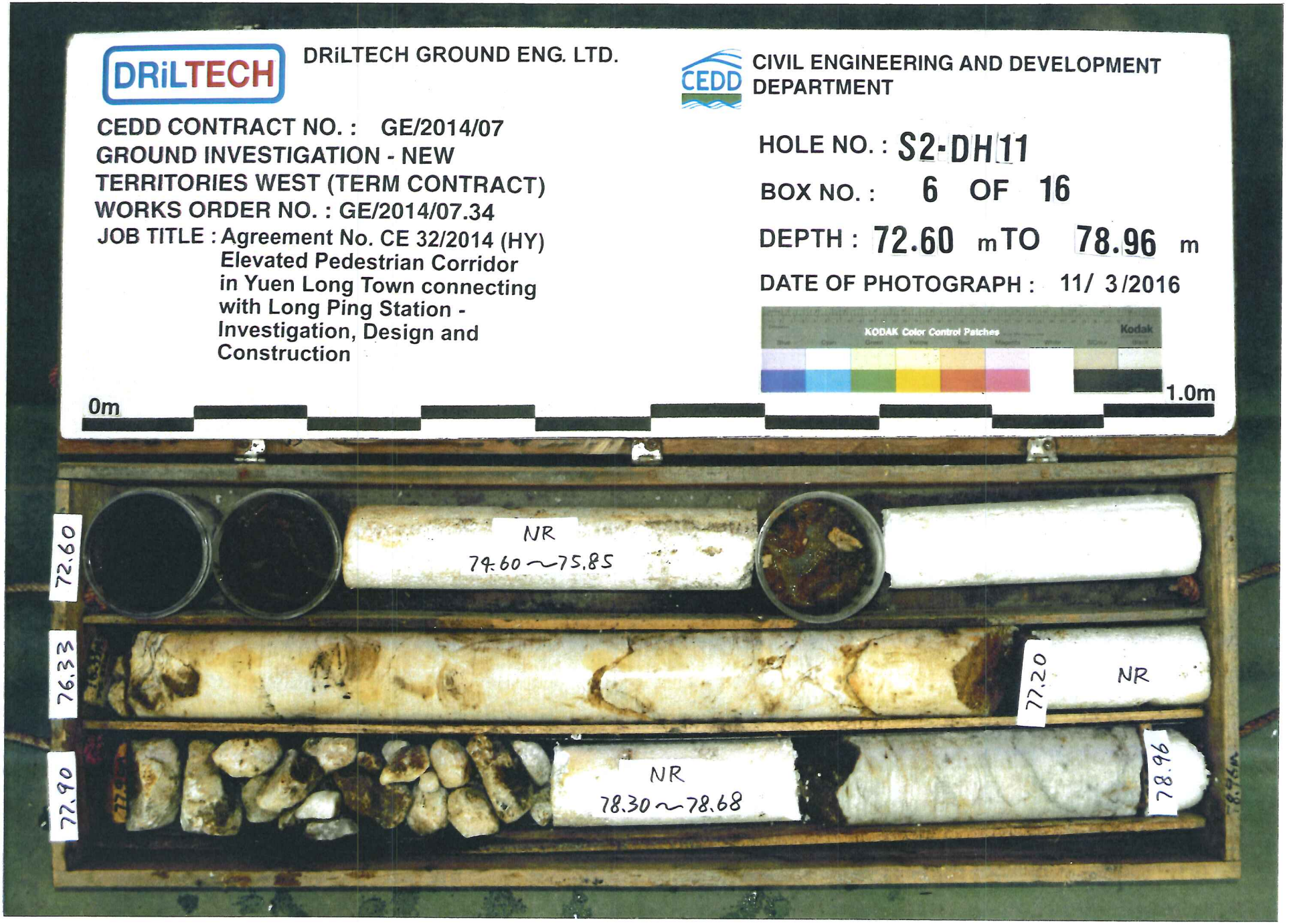

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 1 OF 16
DEPTH : 0.00 m TO 10.95 m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
1
0.00
0.50
10.95


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 2 OF 16
DEPTH : 10.95 m TO 25.10 m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
10.95
25.10


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 3 OF 16
DEPTH : 25.10 m TO 41.10 m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
25.10
41.10


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 4 OF 16
DEPTH : 41.10 m TO 57.10 m
DATE OF PHOTOGRAPH : 11/ 3/2016
0m
1.0m
41.10
57.10


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 5 OF 16
DEPTH : 57.10 m TO 72.60 m
DATE OF PHOTOGRAPH : 11/ 3/2016
Kodak
0m
1.0m
57.10
72.60


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 6 OF 16
DEPTH : 72.60 m TO 78.96 m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
72.60
76.33
77.90
NR
74.60 ~ 75.85
77.20
NR
NR
78.30 ~ 78.68
78.96

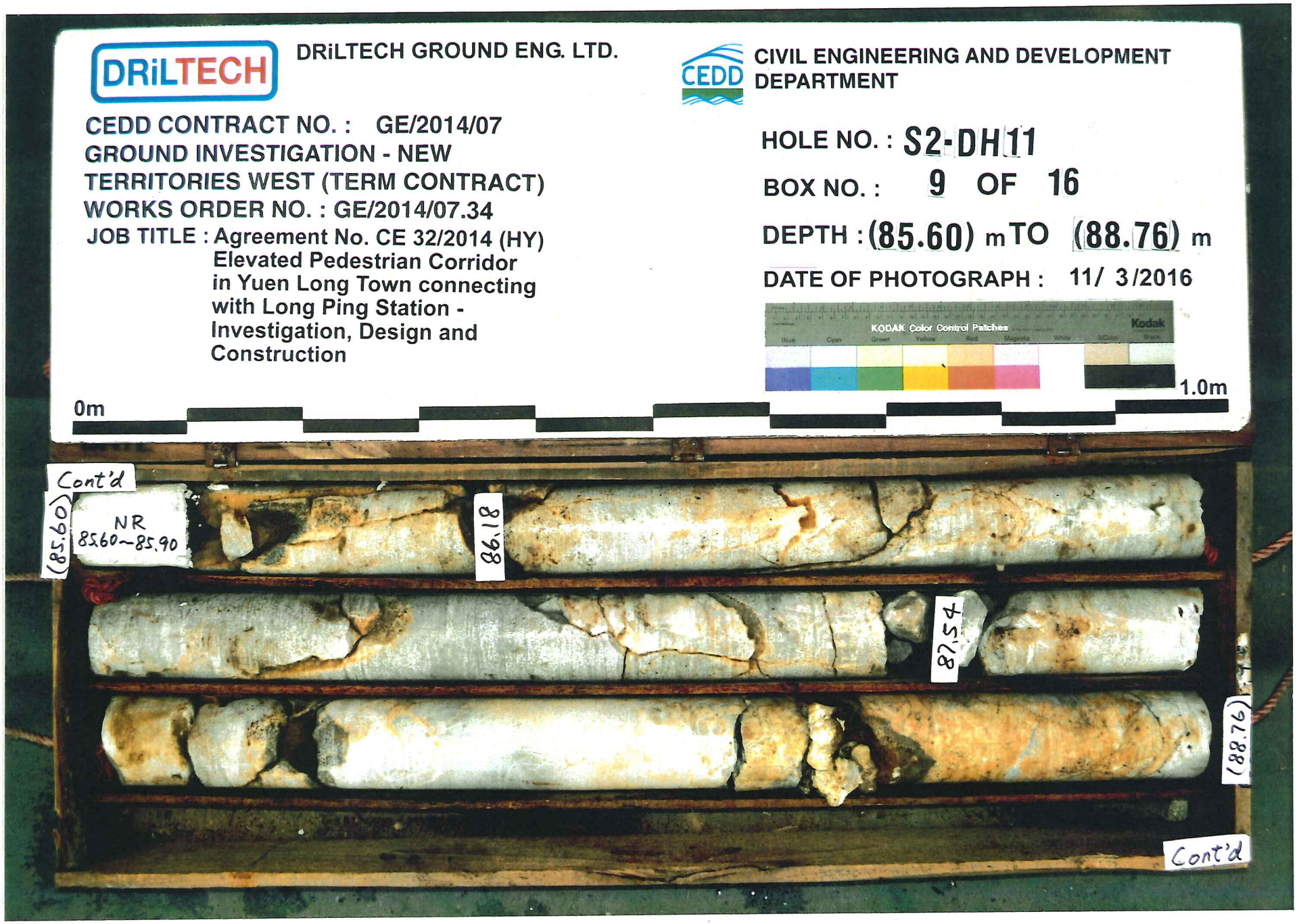
DRiLTECH GROUND ENG. LTD.

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

HOLE NO. : S2-DH11
BOX NO. : 7 OF 16
DEPTH : 78.96 m TO (82.64) m
DATE OF PHOTOGRAPH : 11/ 3/2016

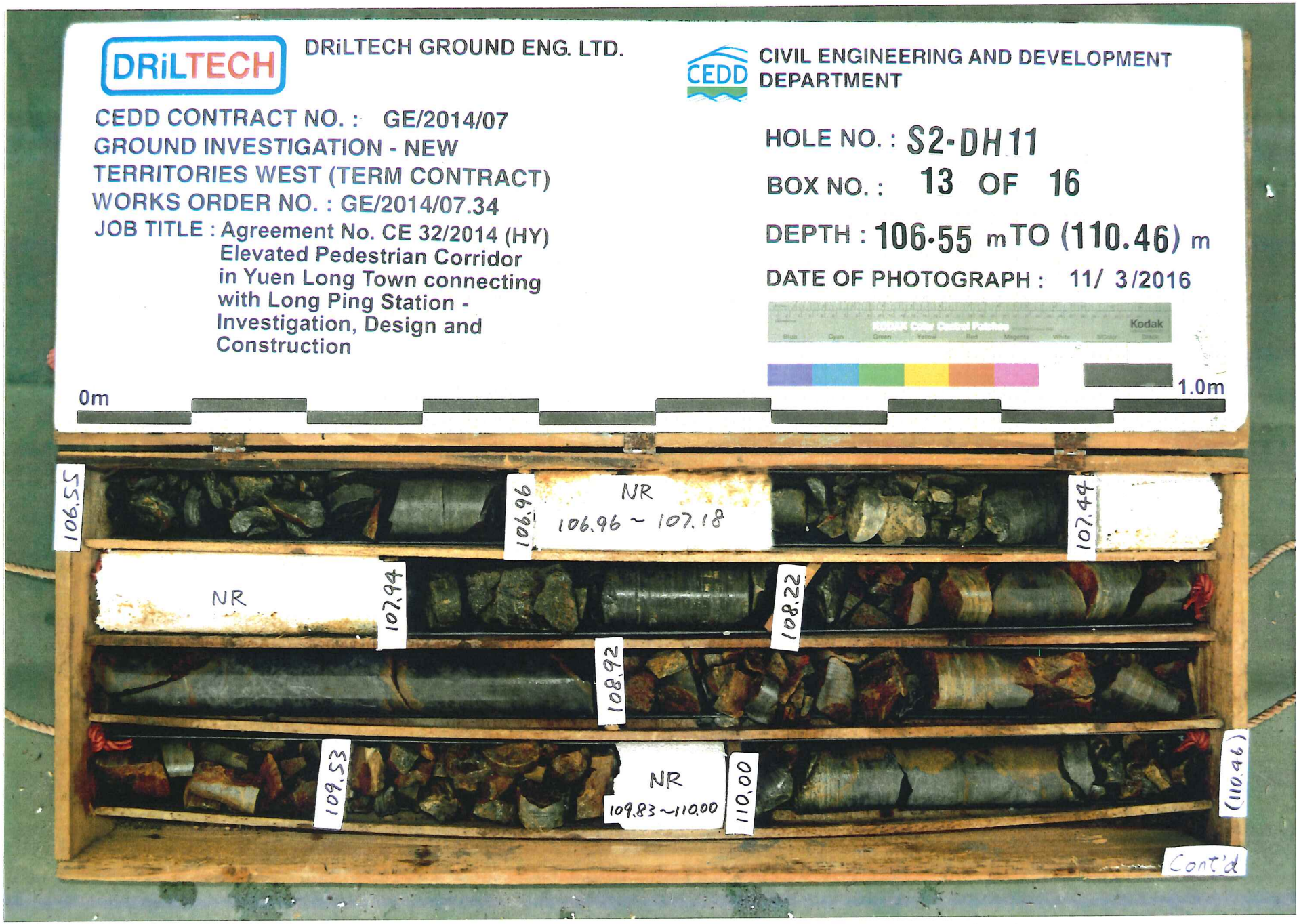

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 8 OF 16
DEPTH : (82.64) m TO (85.60) m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
1.0m
0m
Cont'd
(82.64)
83.14
84.63
(85.60)
Cont'd


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 9 OF 16
DEPTH : (85.60) m TO (88.76) m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
0m
1.0m
Cont'd
(85.60)
NR
8560~85.90
86.18
87.54
(88.76)
Cont'd


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 10 OF 16
DEPTH : (88.76) m TO 92.16 m
DATE OF PHOTOGRAPH : 11/ 3/2016
KODAK Color Control Patches
Kodak
1.0m
0m
Cont'd
(88.76)
88.95
NR
90.14~90.51
90.51
90.90
NR
91.28~91.69
92.16


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 11 OF 16
DEPTH : 92.16 m TO 101.00 m
DATE OF PHOTOGRAPH : 11/ 3/2016
0m
1.0m
92.16
NR 92.56~93.25
93.25
NR 93.55~94.37
94.37
95.18
NR 95.42~96.30
96.30
NR
96.72
NR 97.01~97.50
97.50
NR
98.54
NR 98.69~99.50
99.50
99.85
101.00


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 12 OF 16
DEPTH : 101.00 m TO 106.55 m
DATE OF PHOTOGRAPH : 11/ 3/2016
Kodak
0m
1.0m
101.00
NR
101.75
102.36
102.96
NR
103.10~103.44
104.30
104.71
NR
104.71~105.01
105.51
NR
106.11~106.55
106.55


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 13 OF 16
DEPTH : 106.55 m TO (110.46) m
DATE OF PHOTOGRAPH : 11/ 3/2016
0m
1.0m
106.55
106.96
NR
106.96 ~ 107.18
107.44
NR
107.94
108.22
108.92
109.53
NR
109.83 ~ 110.00
110.00
(110.46)
Cont'd

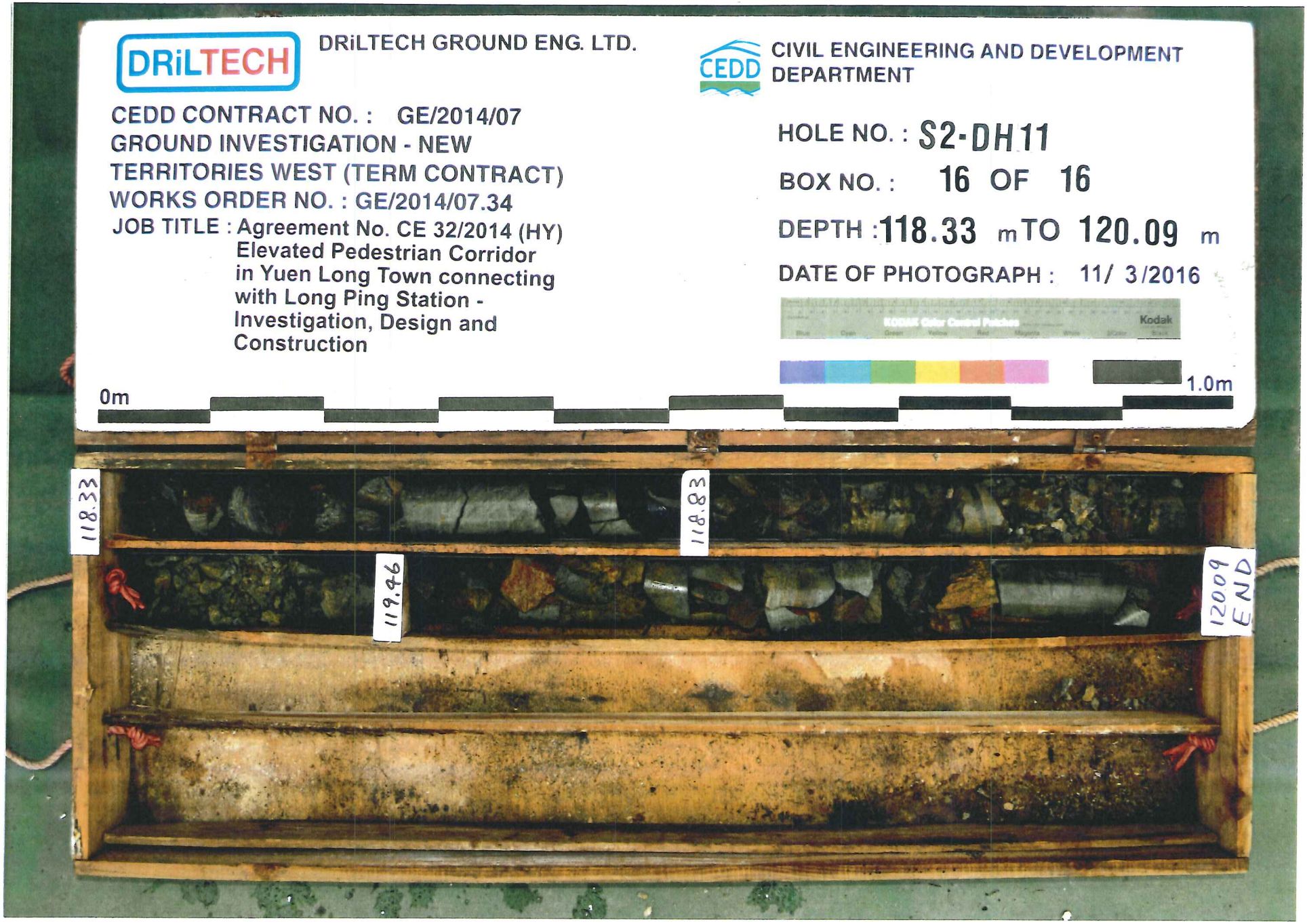
DRiLTECH GROUND ENG. LTD.

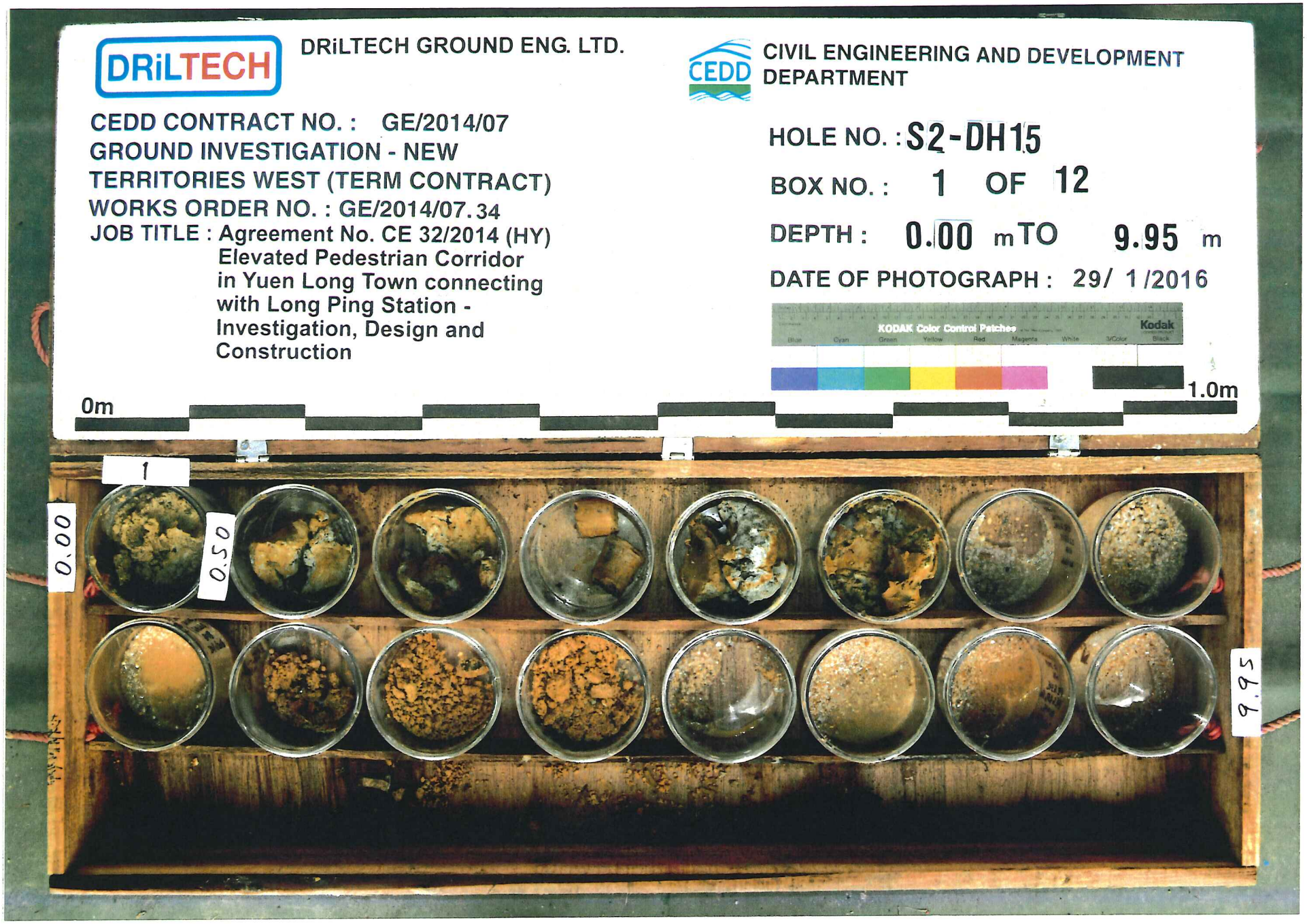
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

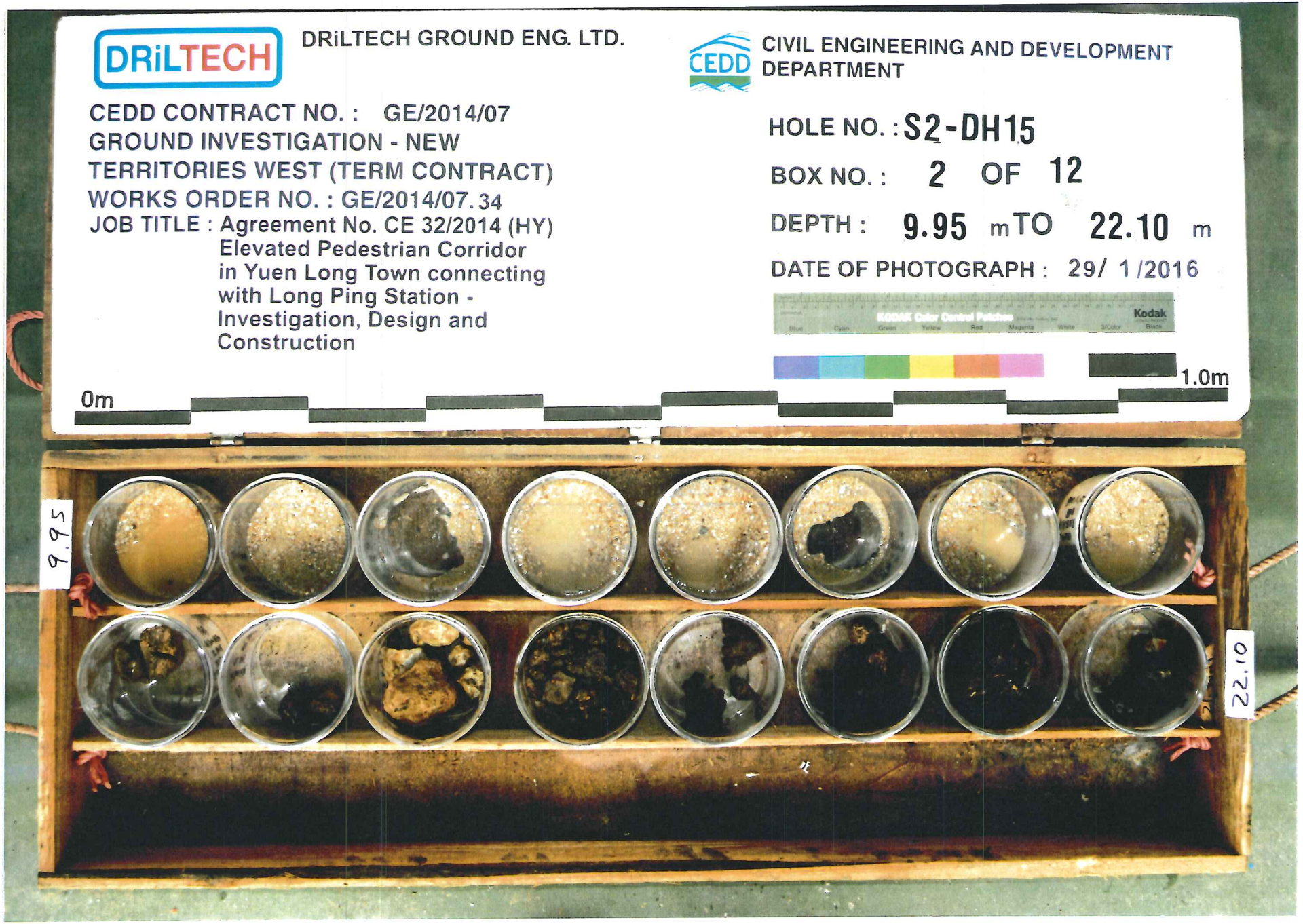
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

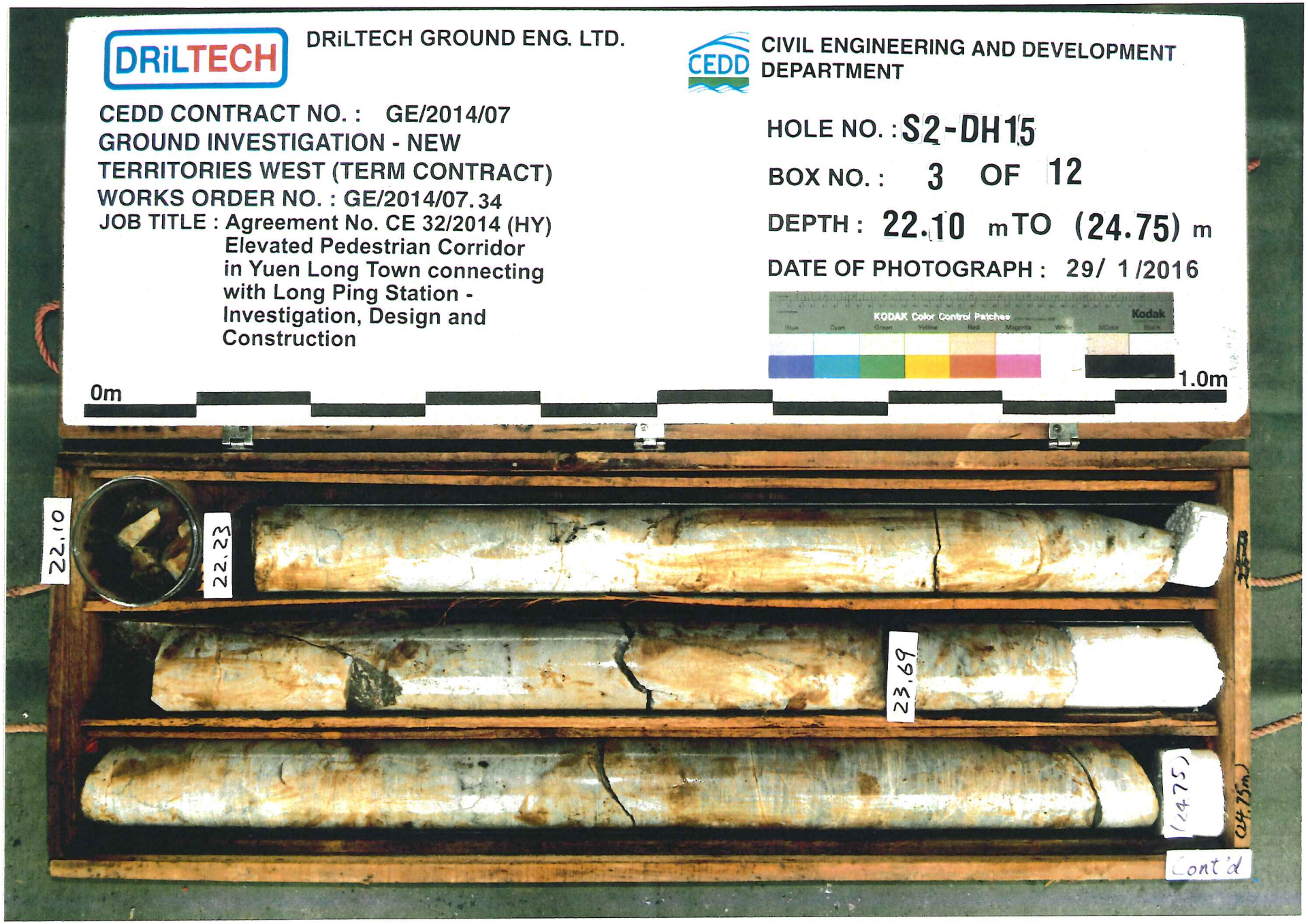
HOLE NO. : S2-DH11
BOX NO. : 14 OF 16
DEPTH : (110.46)m TO 114.90 m
DATE OF PHOTOGRAPH : 11/ 3/2016

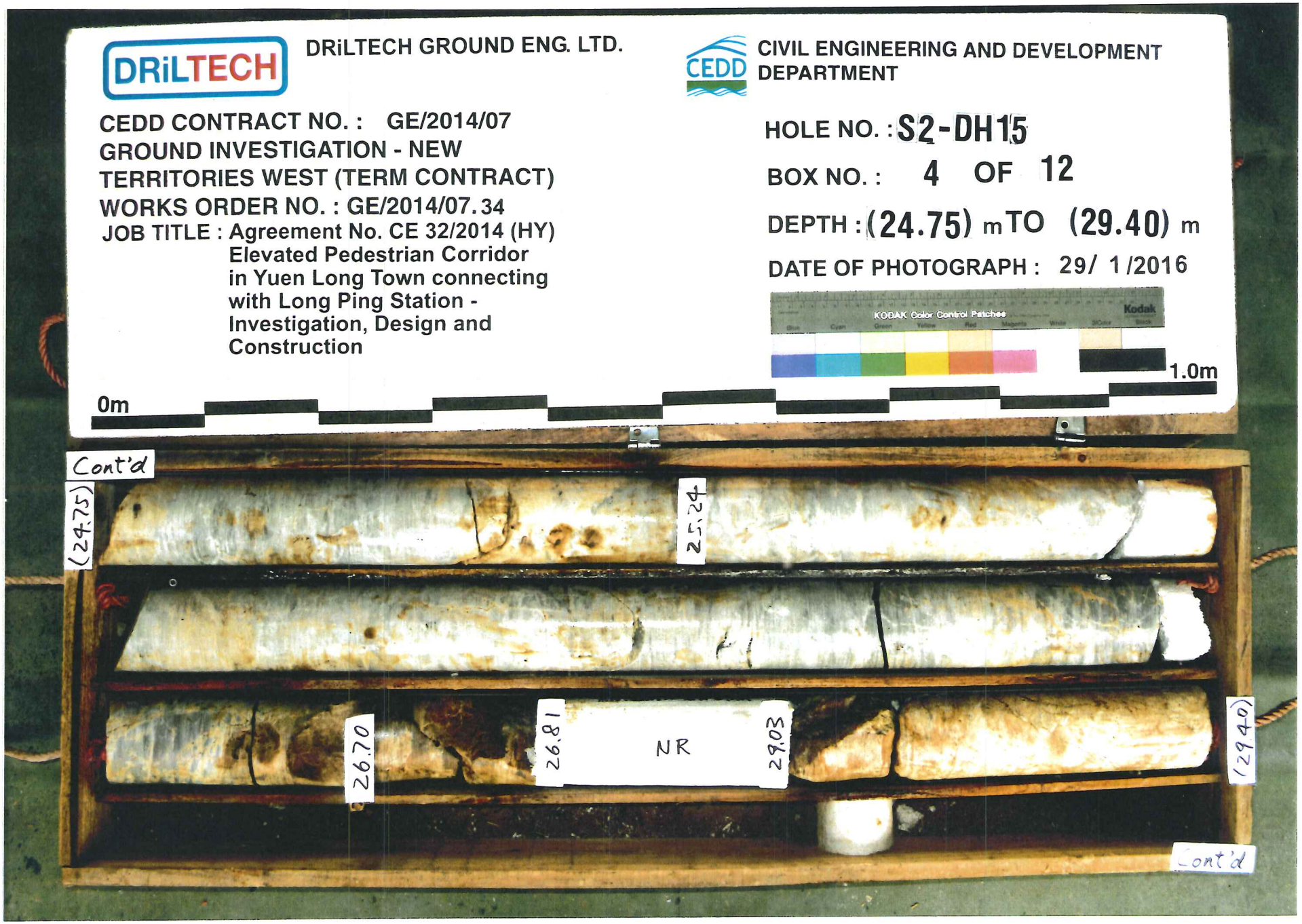

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 15 OF 16
DEPTH : 114.90 m TO 118.33 m
DATE OF PHOTOGRAPH : 11/ 3/2016
Kodak
0m
1.0m
114.90
115.28
116.26
117.04
117.80
117.30
115.77
118.33

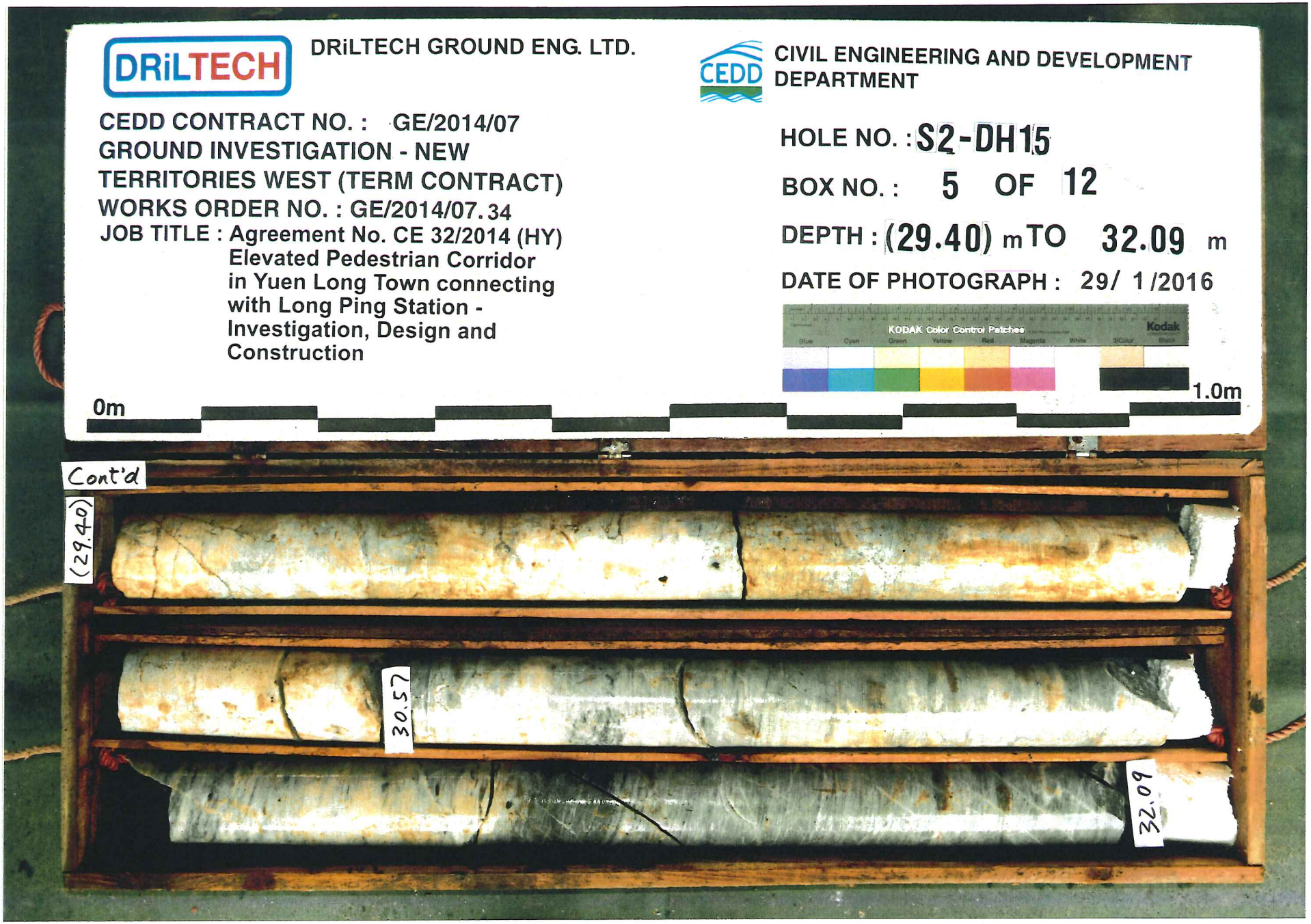

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH11
BOX NO. : 16 OF 16
DEPTH : 118.33 m TO 120.09 m
DATE OF PHOTOGRAPH : 11/ 3/2016
Kodak
0m
1.0m
118.33
119.46
118.83
120.09 END


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 1 OF 12
DEPTH : 0.00 m TO 9.95 m
DATE OF PHOTOGRAPH : 29/ 1/2016
KODAK Color Control Patches
Kodak
0m
1.0m
1
0.00
0.50
9.95


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 2 OF 12
DEPTH : 9.95 m TO 22.10 m
DATE OF PHOTOGRAPH : 29/ 1 /2016
Kodak
1.0m
0m
9.95
22.10


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 3 OF 12
DEPTH : 22.10 m TO (24.75) m
DATE OF PHOTOGRAPH : 29/ 1/2016
KODAK Color Control Patches
Kodak
0m
1.0m
22.10
22.23
23.69
(24.75)
(24.75m)
Cont'd


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 4 OF 12
DEPTH : (24.75) m TO (29.40) m
DATE OF PHOTOGRAPH : 29/ 1 /2016
KODAK Color Control Patches
Kodak
1.0m
0m
Cont'd
(24.75)
25.24
26.70
26.81
NR
29.03
(29.40)
Cont'd

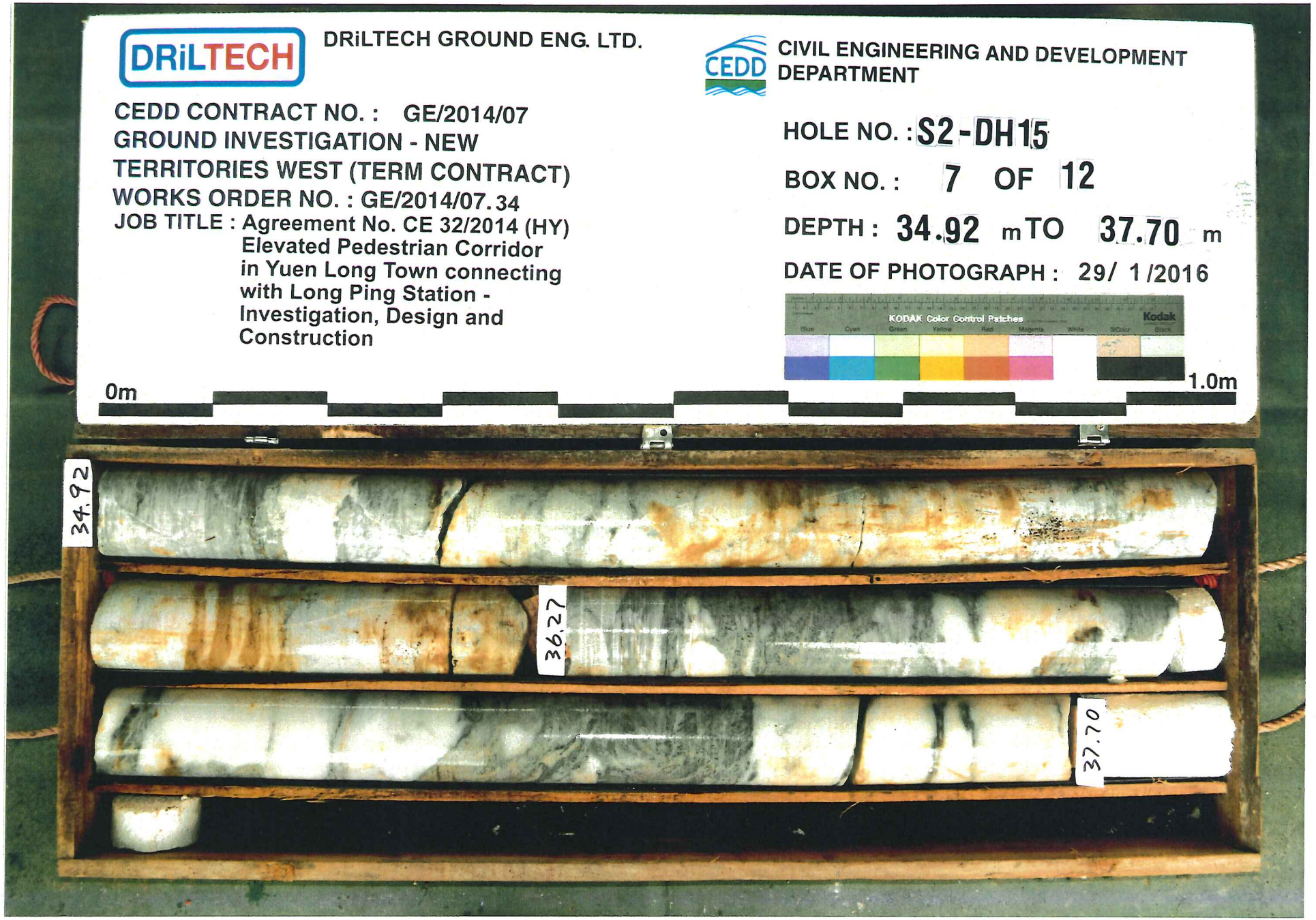

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 5 OF 12
DEPTH : (29.40) m TO 32.09 m
DATE OF PHOTOGRAPH : 29/ 1 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
Cont'd
(29.40)
30.57
32.09

DRiLTECH GROUND ENG. LTD.

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

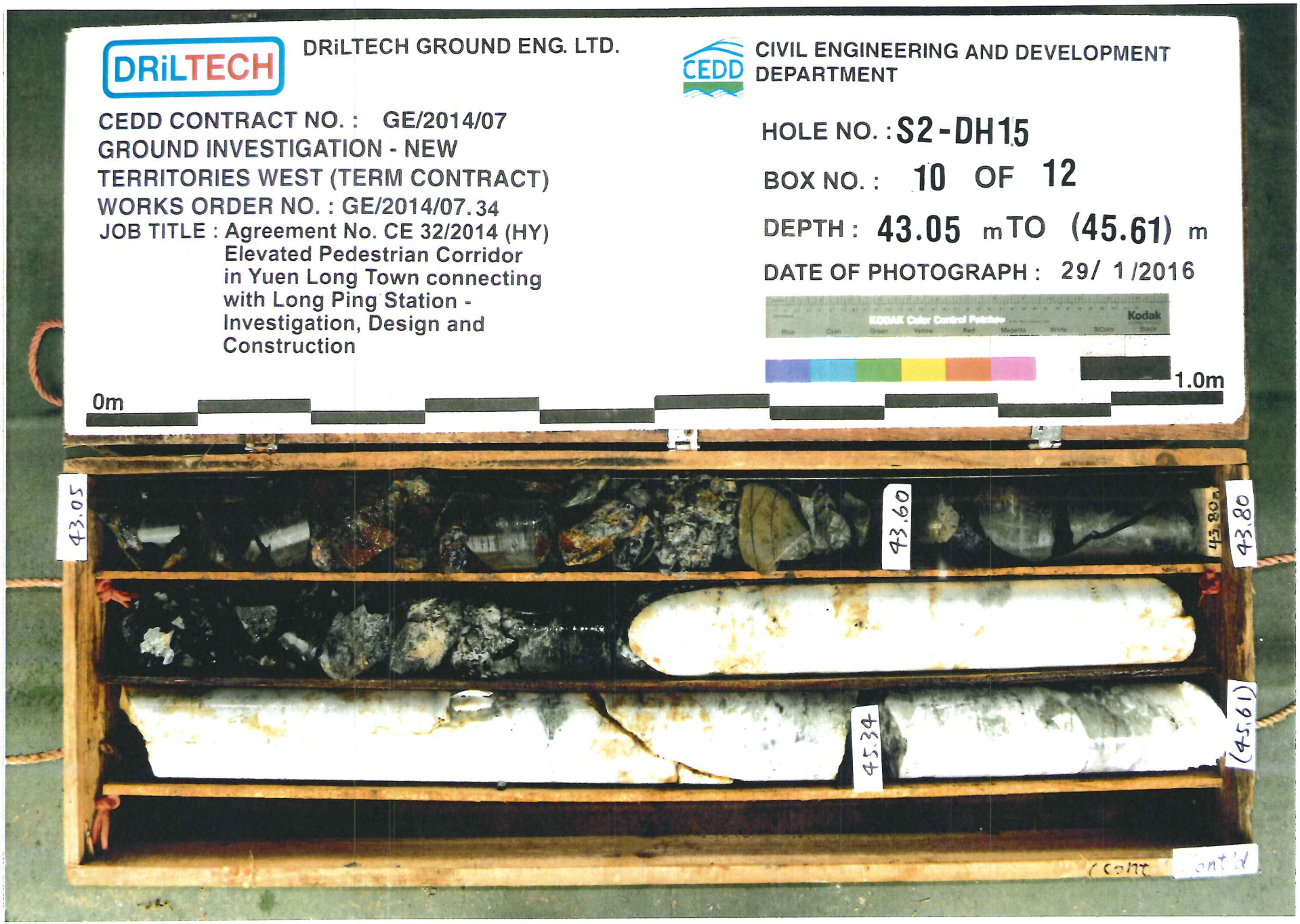
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

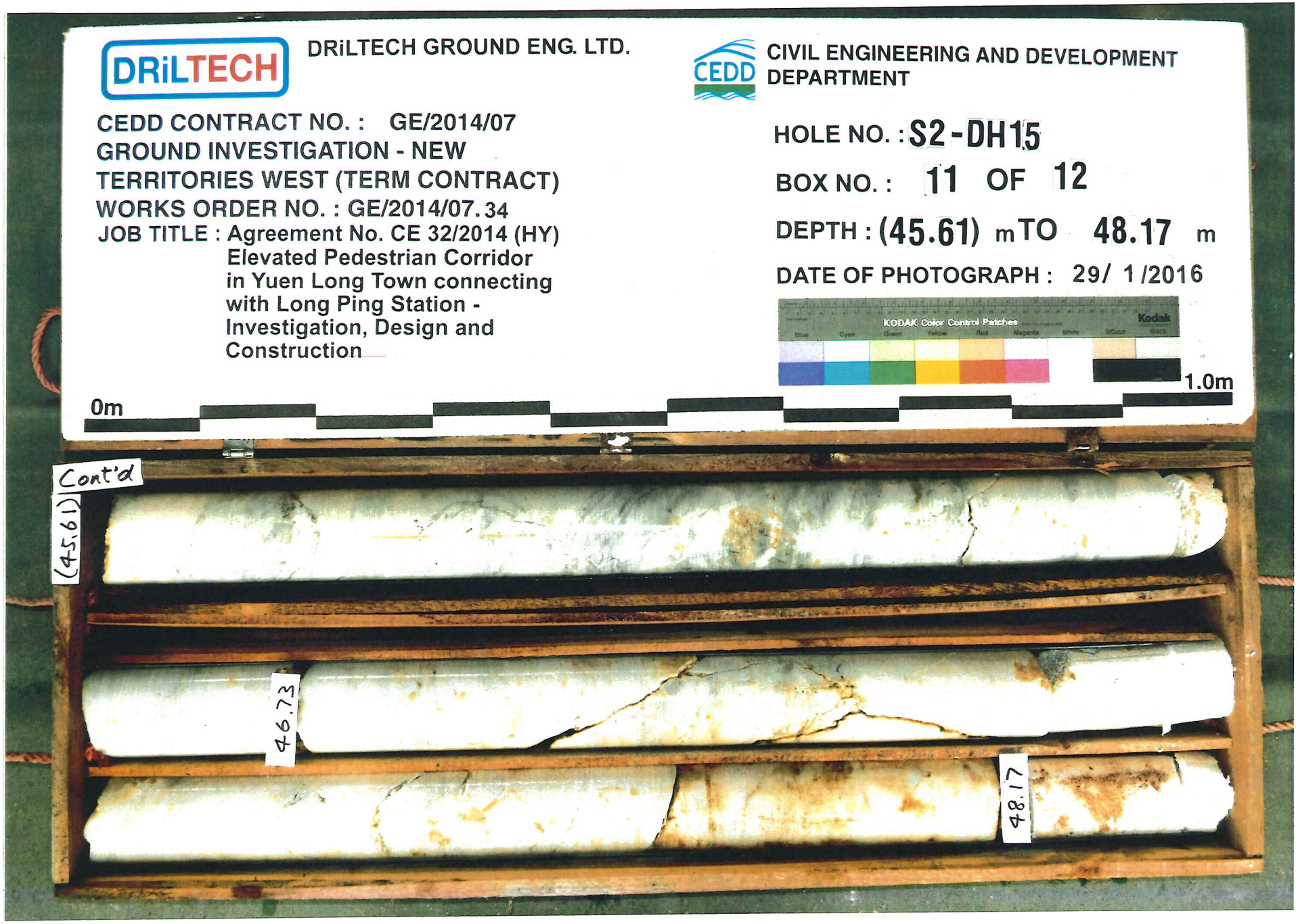
HOLE NO. : S2-DH15
BOX NO. : 6 OF 12
DEPTH : 32.09 m TO 34.92 m
DATE OF PHOTOGRAPH : 29/ 1 /2016


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 7 OF 12
DEPTH : 34.92 m TO 37.70 m
DATE OF PHOTOGRAPH : 29/ 1 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
34.92
36.27
37.70


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 8 OF 12
DEPTH : 37.70 m TO 40.50 m
DATE OF PHOTOGRAPH : 29/ 1 /2016
KODAK Color Control Patches
Kodak
1.0m
0m
37.70
39.05
40.50


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 9 OF 12
DEPTH : 40.50 m TO 43.05 m
DATE OF PHOTOGRAPH : 29/ 1 /2016
KODAK Color Control Patches
Kodak
1.0m
0m
40.50
41.78
43.05


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 10 OF 12
DEPTH : 43.05 m TO (45.61) m
DATE OF PHOTOGRAPH : 29/ 1 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
43.05
43.60
43.80
43.80
45.34
(45.61)
(cont
cont'd

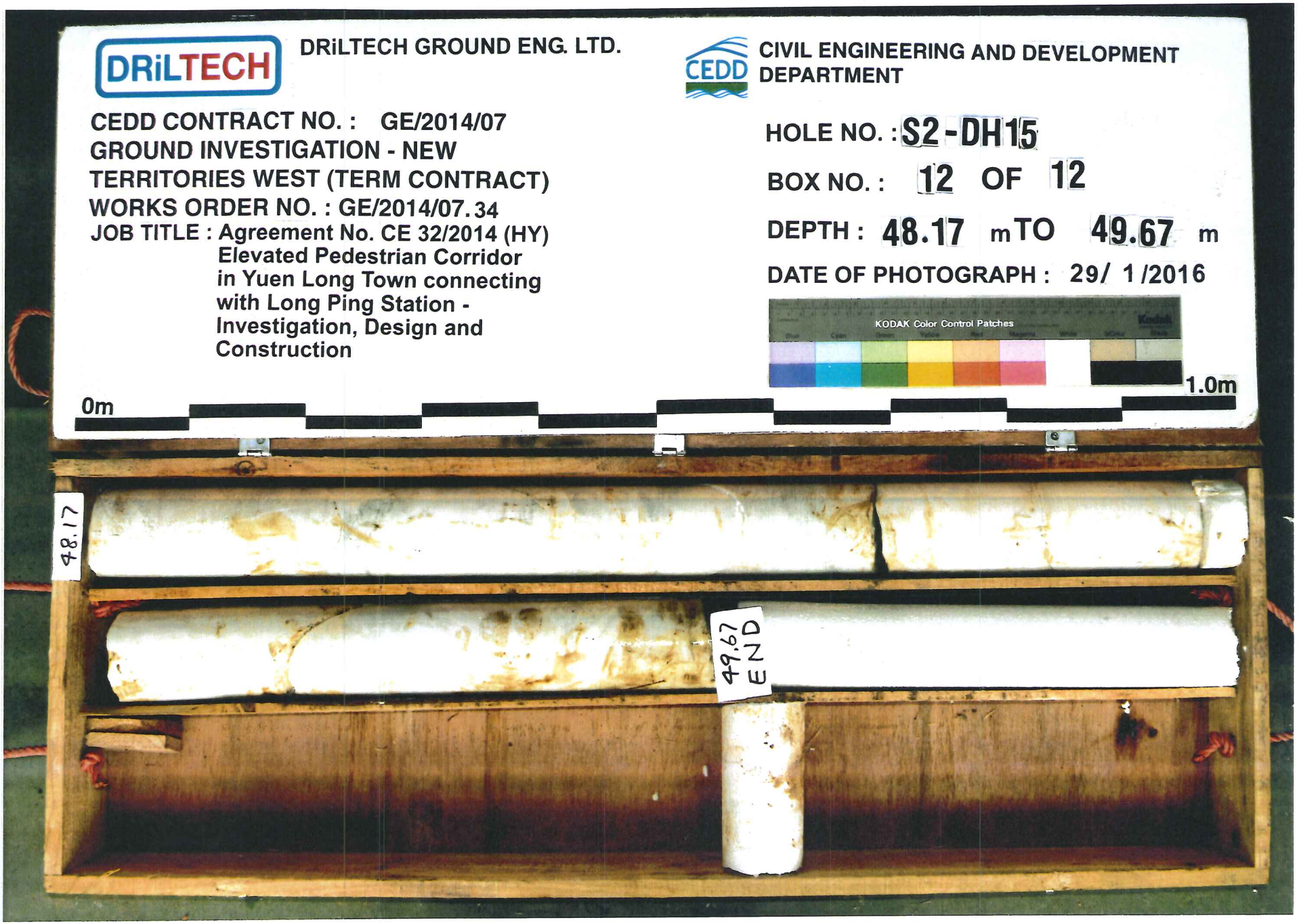

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH15
BOX NO. : 11 OF 12
DEPTH : (45.61) m TO 48.17 m
DATE OF PHOTOGRAPH : 29/ 1 /2016
KODAK Color Control Patches
Kodak
1.0m
0m
Cont'd
(45.61)
46.73
48.17

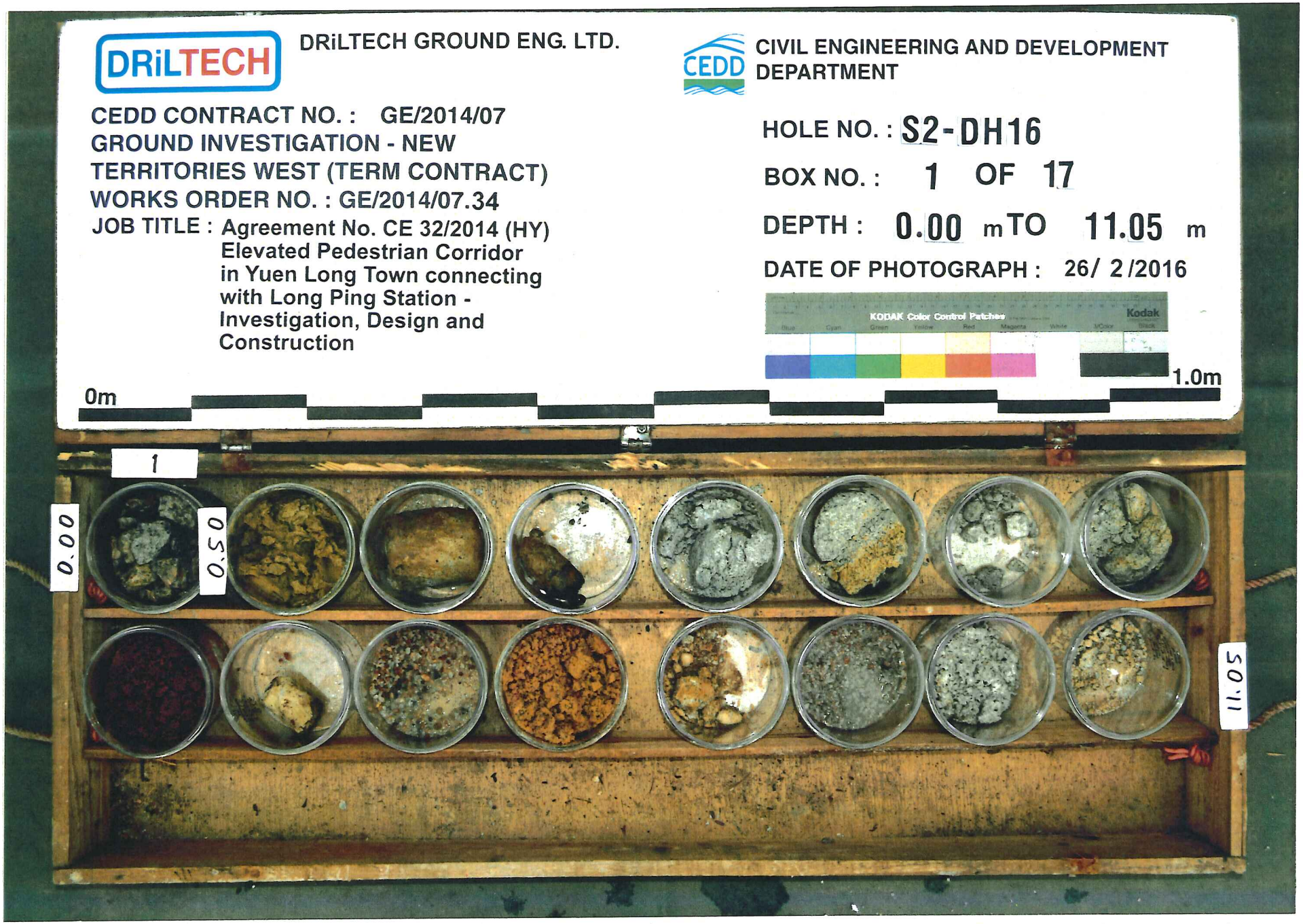
DRiLTECH GROUND ENG. LTD.

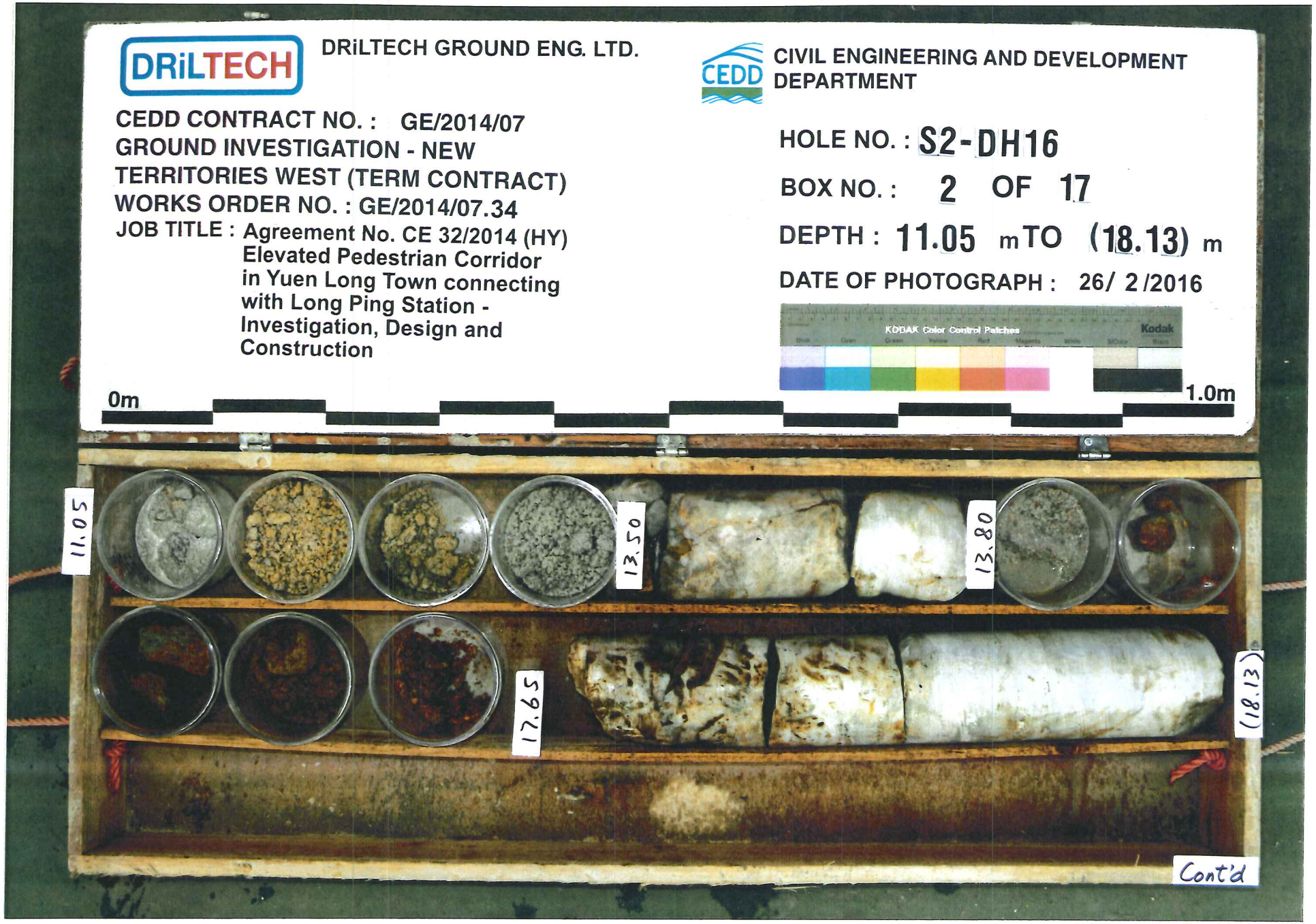
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

HOLE NO. : S2-DH15
BOX NO. : 12 OF 12
DEPTH : 48.17 m TO 49.67 m
DATE OF PHOTOGRAPH : 29/ 1 /2016



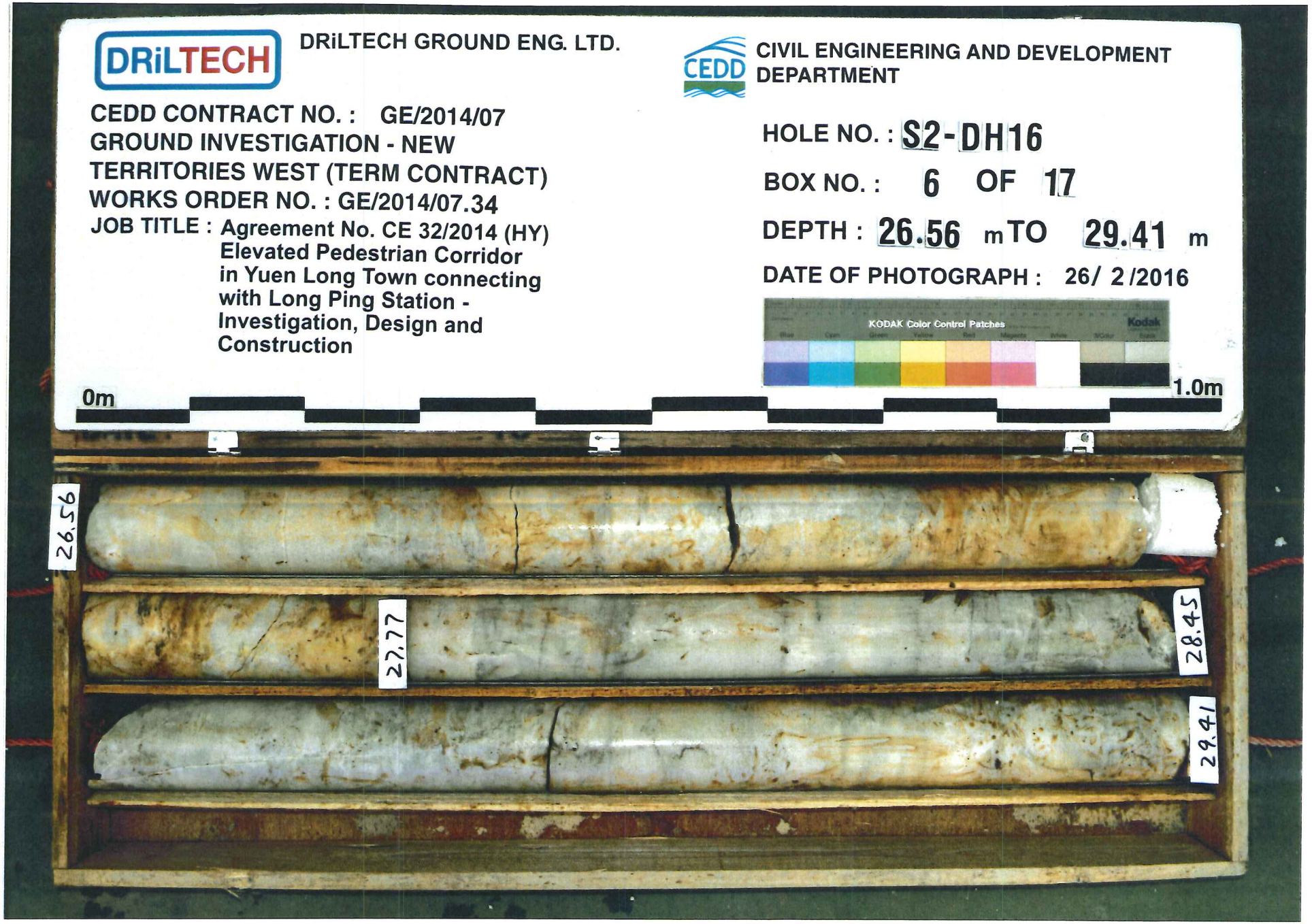

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 1 OF 17
DEPTH : 0.00 m TO 11.05 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
1
0.00
0.50
11.05


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 2 OF 17
DEPTH : 11.05 m TO (18.13) m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
11.05
13.50
13.80
17.65
(18.13)
Cont'd


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 3 OF 17
DEPTH : (18.13) m TO 20.97 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
Cont'd
(18.13)
18.55
19.68
20.97


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 4 OF 17
DEPTH : 20.97 m TO 23.76 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
20.97
22.35
23.76


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 5 OF 17
DEPTH : 23.76 m TO 26.56 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
23.76
25.00
26.56


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 6 OF 17
DEPTH : 26.56 m TO 29.41 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
26.56
27.77
28.45
29.41


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 7 OF 17
DEPTH : 29.41 m TO (32.23) m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
29.41
30.83
(32.23)
Cont'd


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 8 OF 17
DEPTH : (32.23) m TO 35.08 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
Cont'd
(32.23)
32.33
33.83
35.08

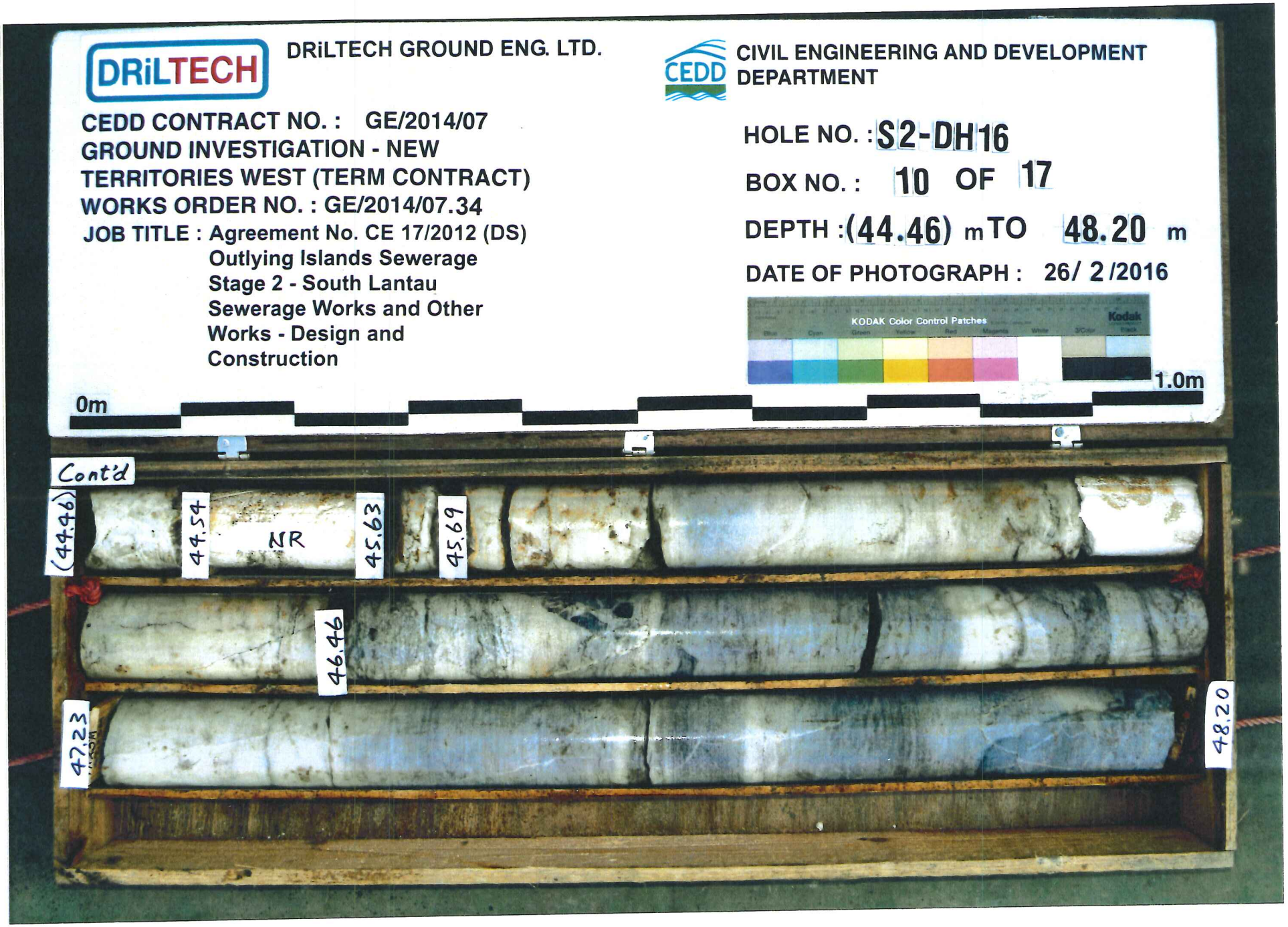

DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 9 OF 17
DEPTH : 35.08 m TO (44.46) m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
35.08
36.49
36.70
NR
43.48
(44.46)
Cont'd

DRiLTECH GROUND ENG. LTD.

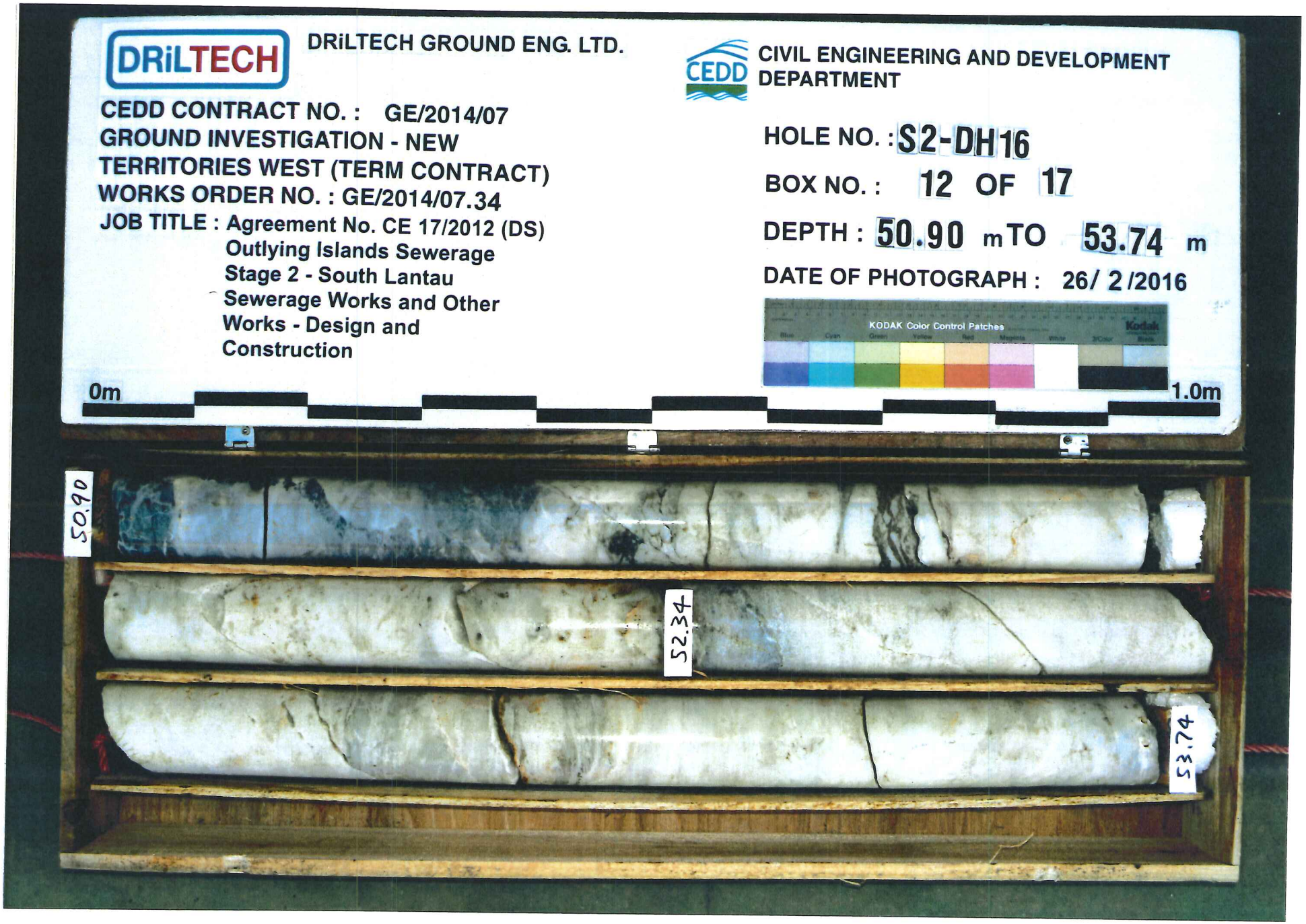
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

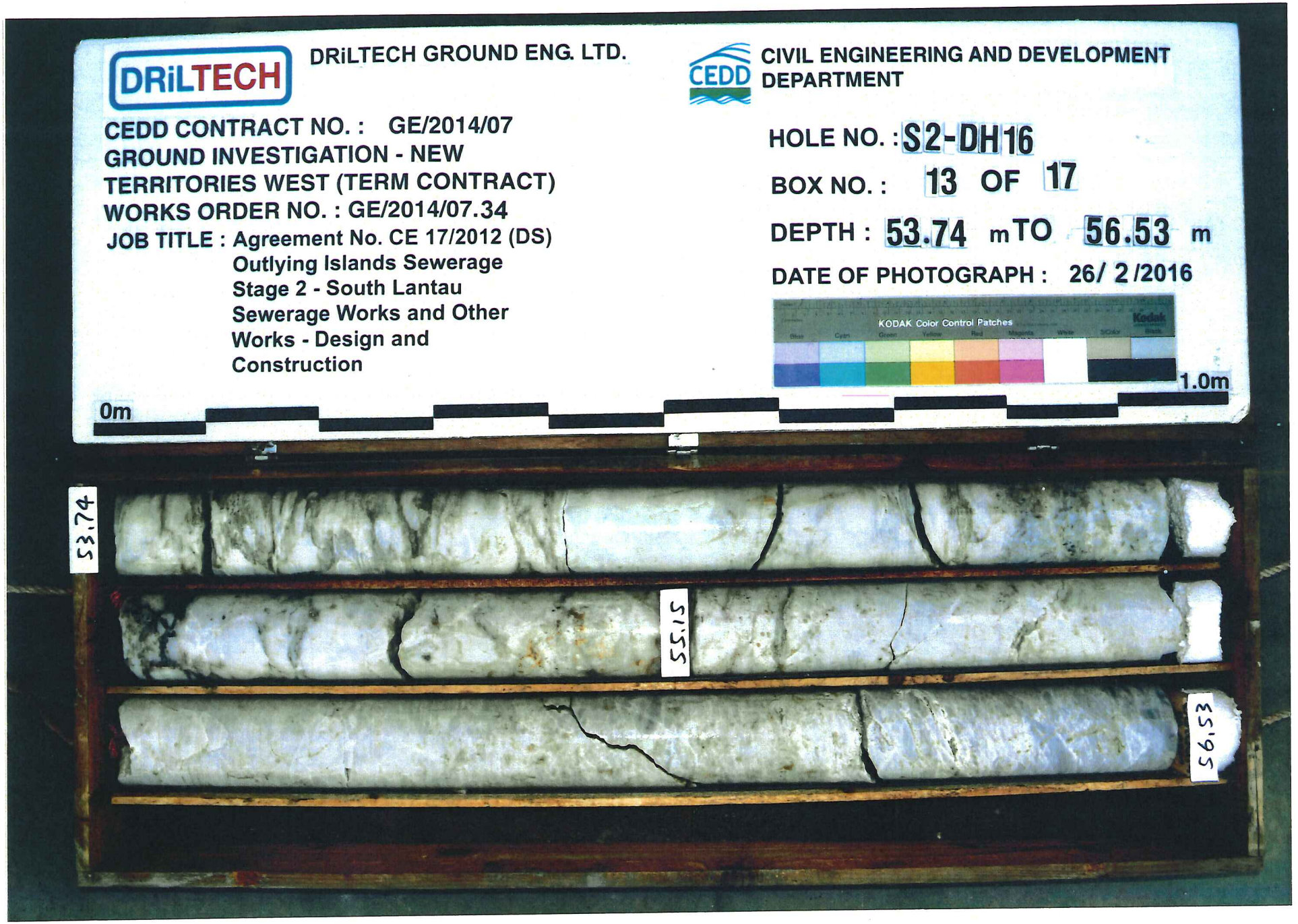
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction

HOLE NO. : S2-DH16
BOX NO. : 10 OF 17
DEPTH : (44.46) m TO 48.20 m
DATE OF PHOTOGRAPH : 26/ 2 /2016




DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 11 OF 17
DEPTH : 48.20 m TO 50.90 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
Kodak
0m
1.0m
48.20
49.27
50.05
50.90


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 12 OF 17
DEPTH : 50.90 m TO 53.74 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
0m
1.0m
50.90
52.34
53.74


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 13 OF 17
DEPTH : 53.74 m TO 56.53 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
1.0m
0m
53.74
55.15
56.53


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction
HOLE NO. : S2-DH16
BOX NO. : 14 OF 17
DEPTH : 56.53 m TO 59.32 m
DATE OF PHOTOGRAPH : 26/ 2 /2016
KODAK Color Control Patches
0m
1.0m
56.53
57.46
58.19
59.32

DRiLTECH GROUND ENG. LTD.

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction

HOLE NO. : S2-DH16
BOX NO. : 15 OF 17
DEPTH : 59.32 m TO 62.00 m
DATE OF PHOTOGRAPH : 26/ 2 /2016

DRiLTECH GROUND ENG. LTD.

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction

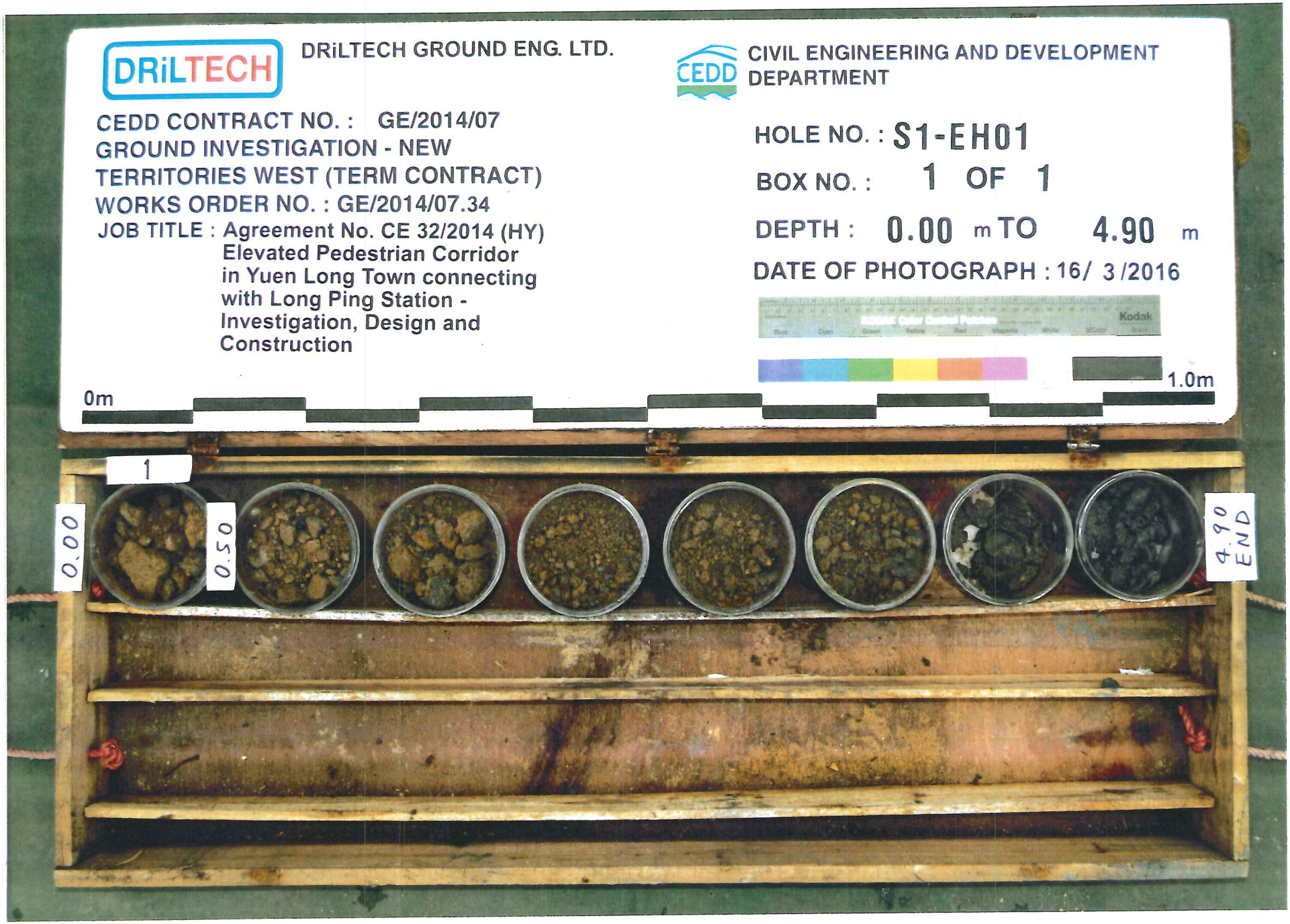
HOLE NO. : S2-DH16
BOX NO. : 16 OF 17
DEPTH : 62.00 m TO 64.75 m
DATE OF PHOTOGRAPH : 26/ 2 /2016

DRiLTECH GROUND ENG. LTD.

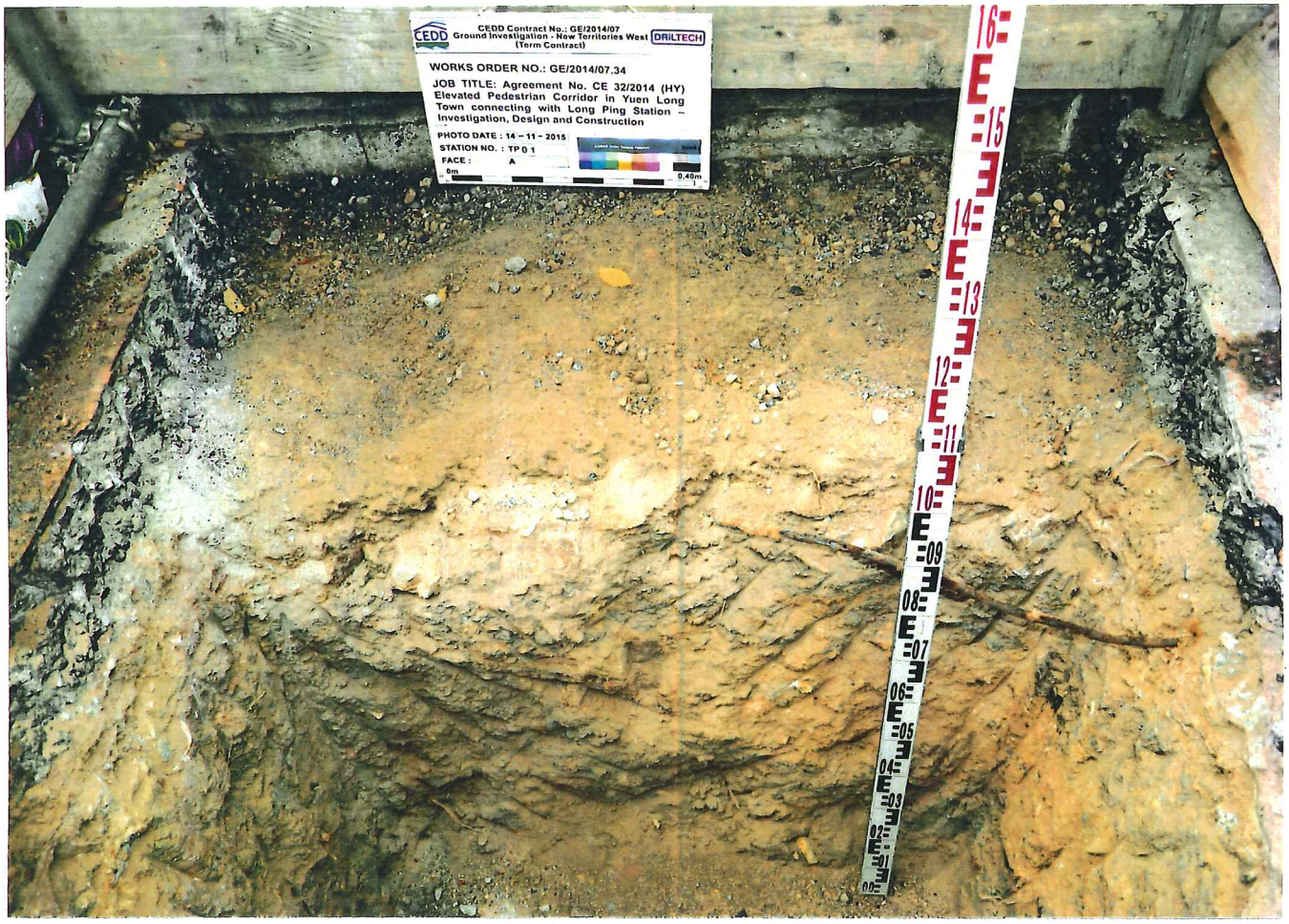
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 17/2012 (DS) Outlying Islands Sewerage Stage 2 - South Lantau Sewerage Works and Other Works - Design and Construction

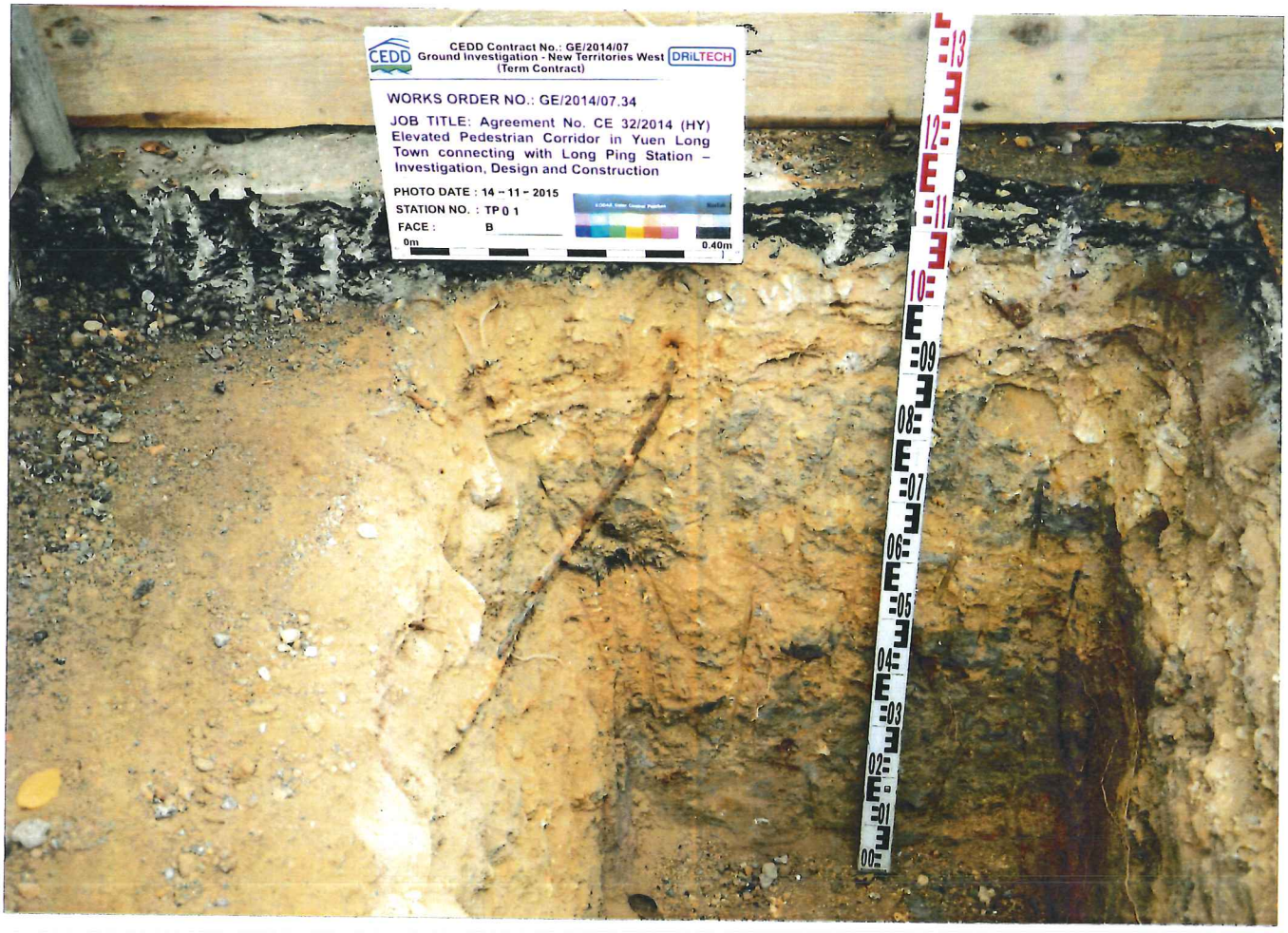
HOLE NO. : S2-DH16
BOX NO. : 17 OF 17
DEPTH : 64.75 m TO 66.40 m
DATE OF PHOTOGRAPH : 26/ 2 /2016


DRiLTECH
DRiLTECH GROUND ENG. LTD.
CEDD
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD CONTRACT NO. : GE/2014/07
GROUND INVESTIGATION - NEW TERRITORIES WEST (TERM CONTRACT)
WORKS ORDER NO. : GE/2014/07.34
JOB TITLE : Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
HOLE NO. : S1-EH01
BOX NO. : 1 OF 1
DEPTH : 0.00 m TO 4.90 m
DATE OF PHOTOGRAPH : 16/ 3 /2016
Kodak
0m
1.0m
1
0.00
0.50
4.90 END

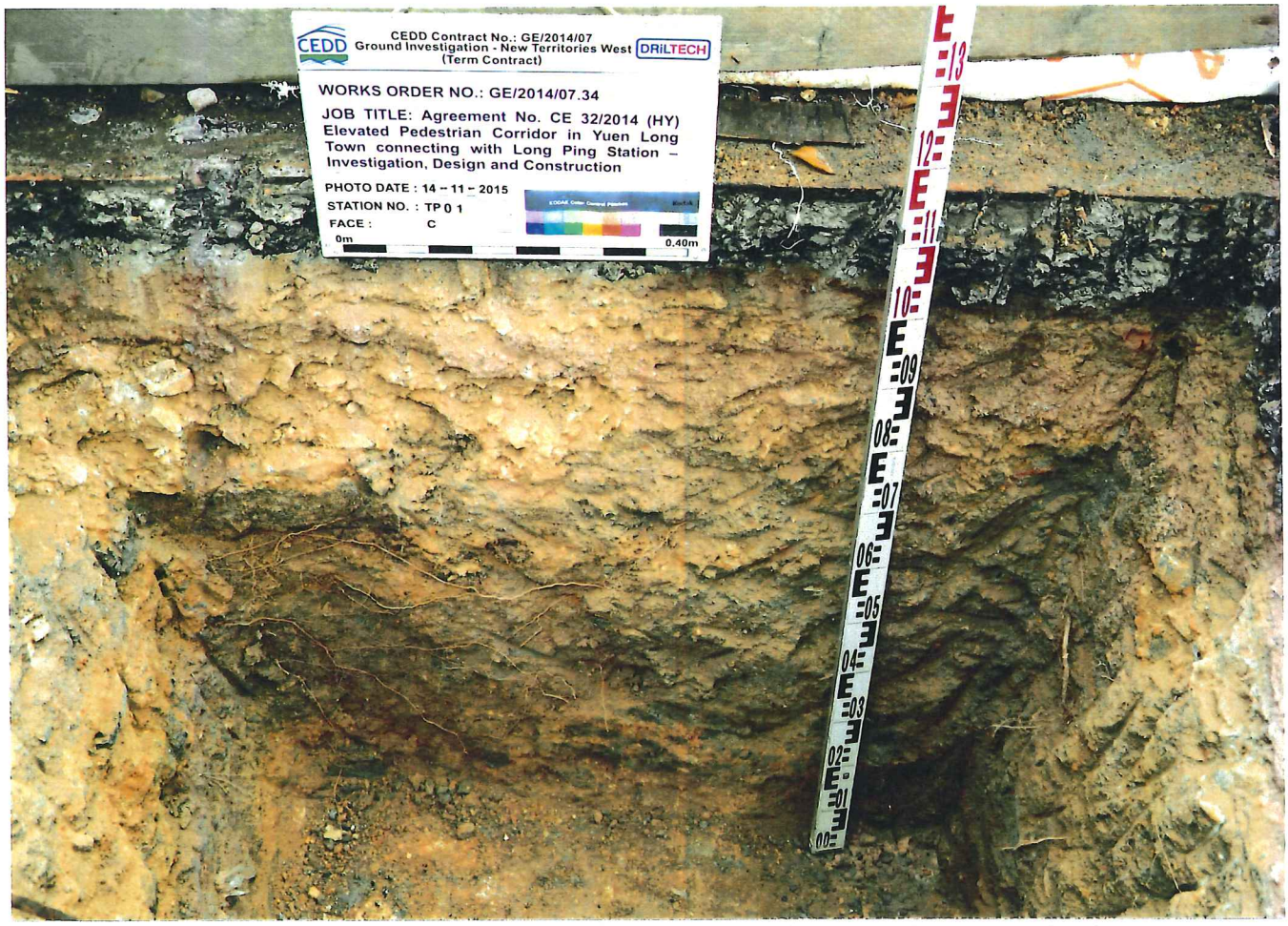
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



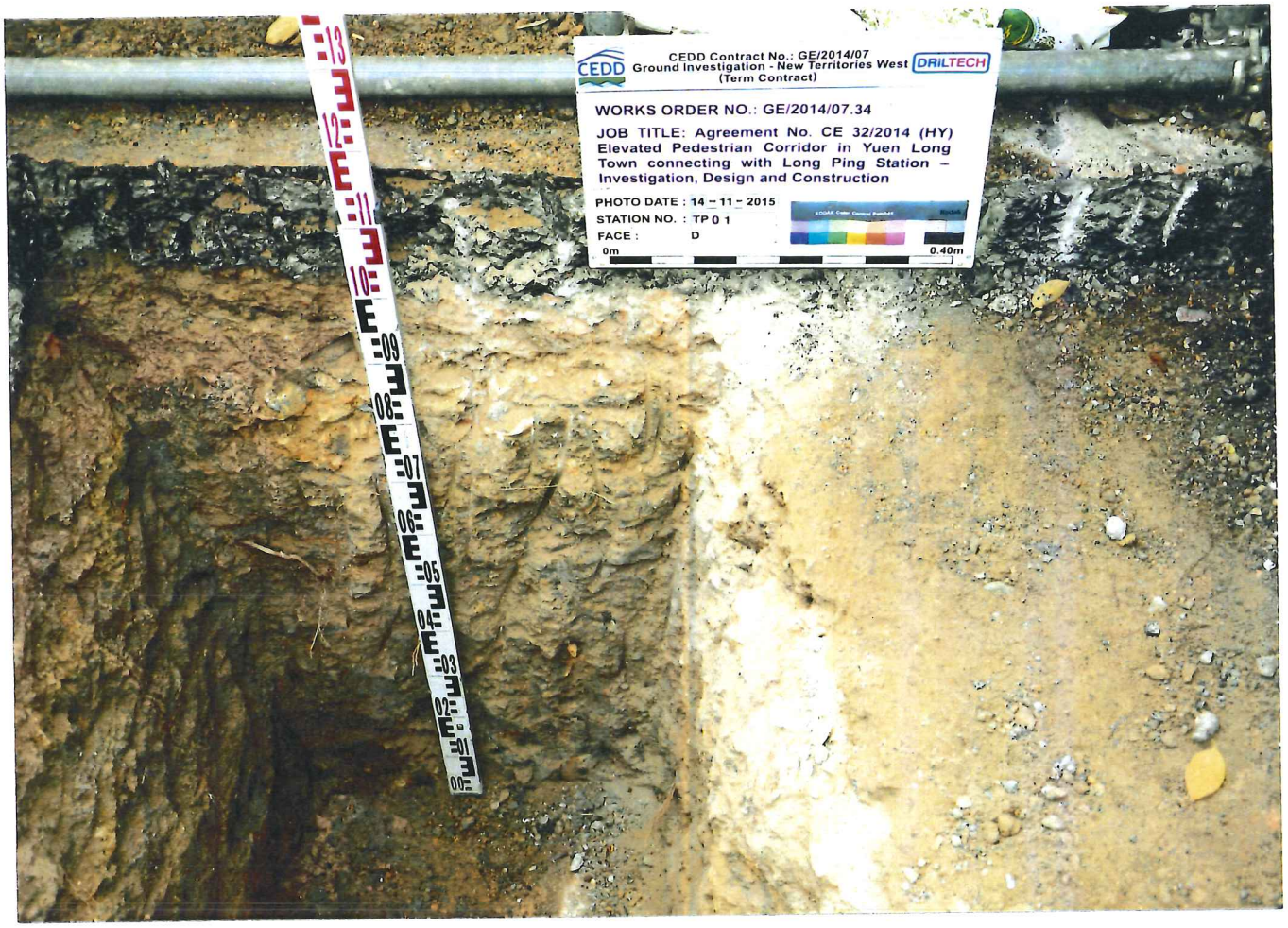
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



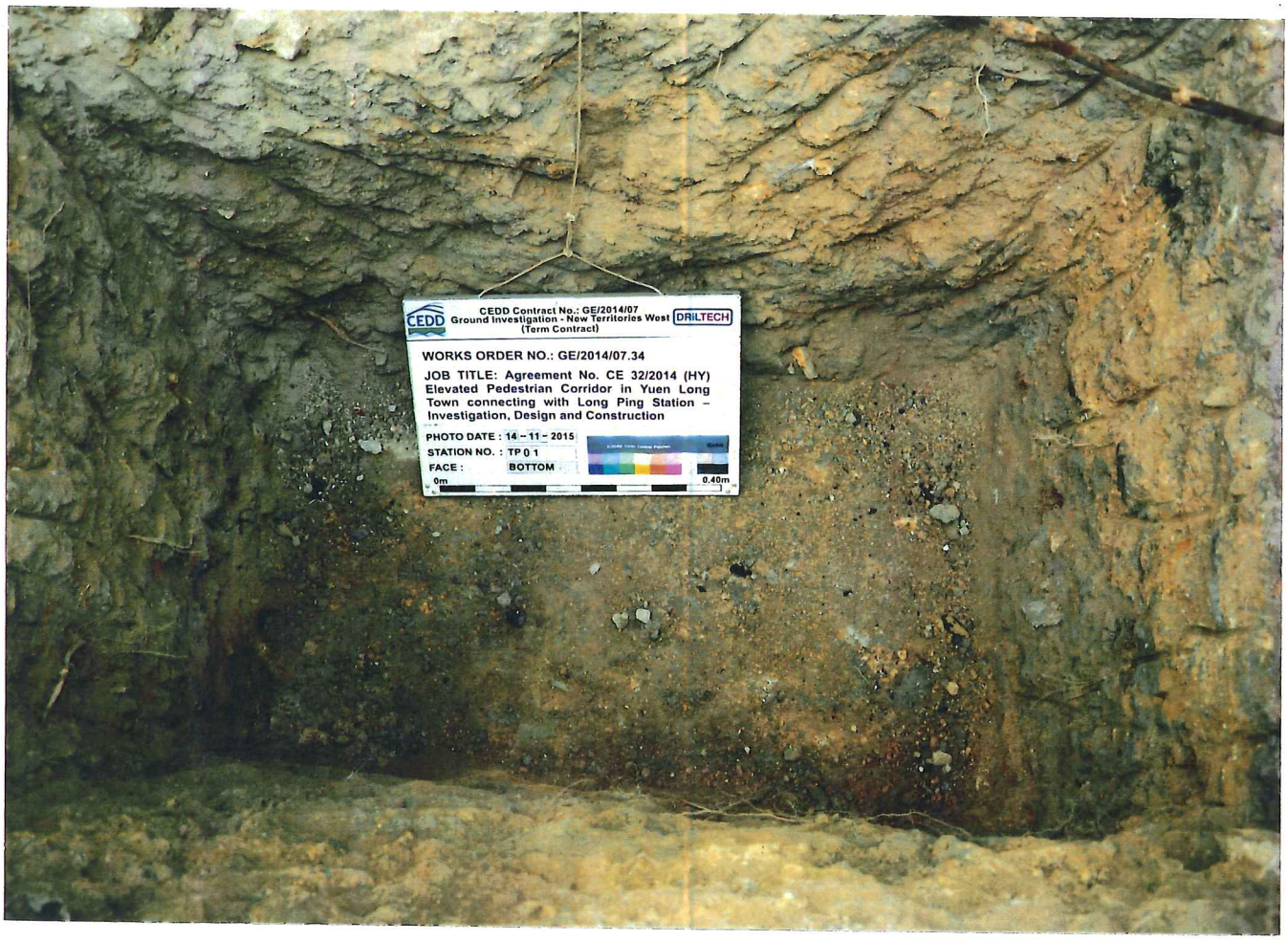
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



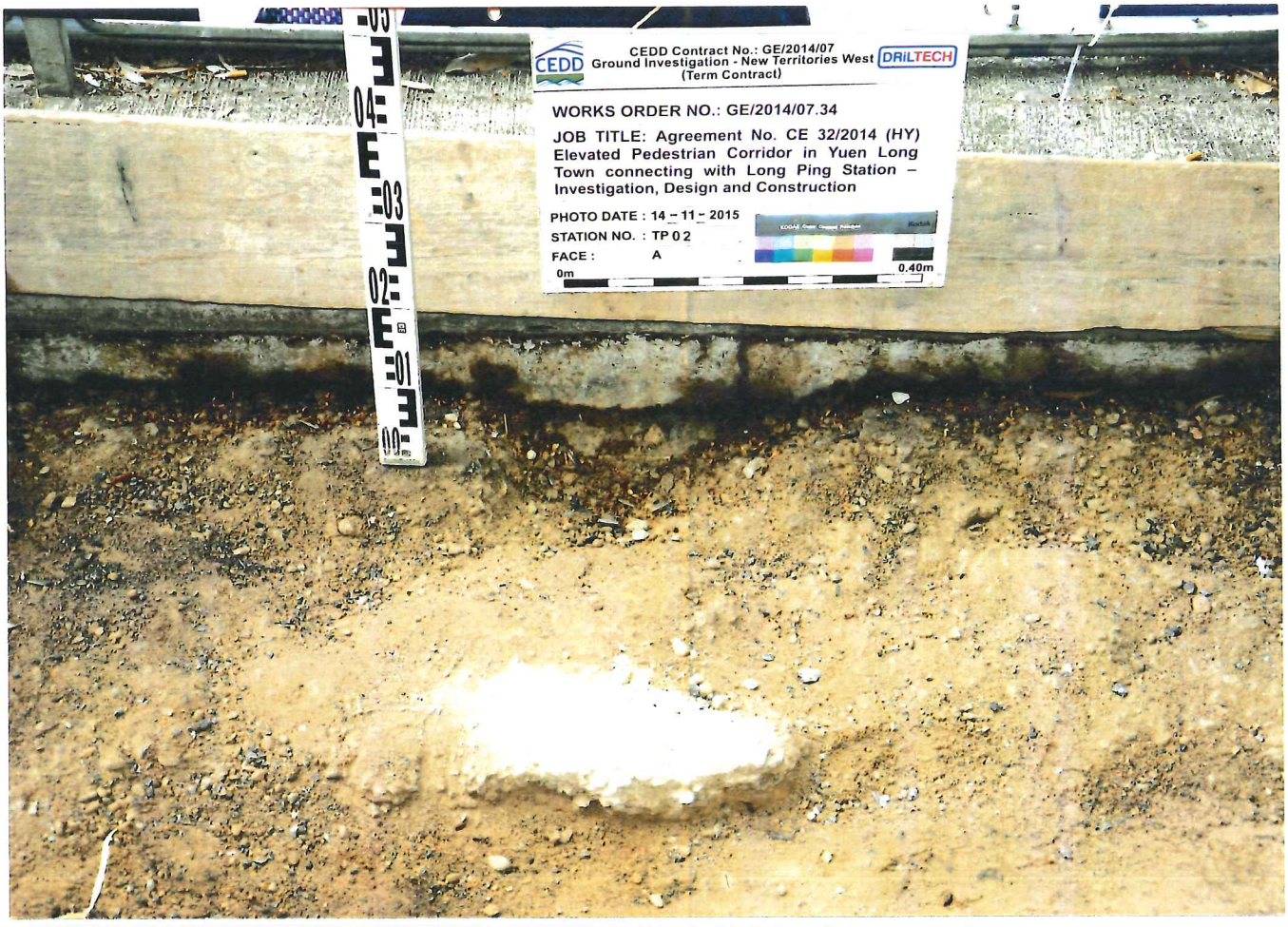
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



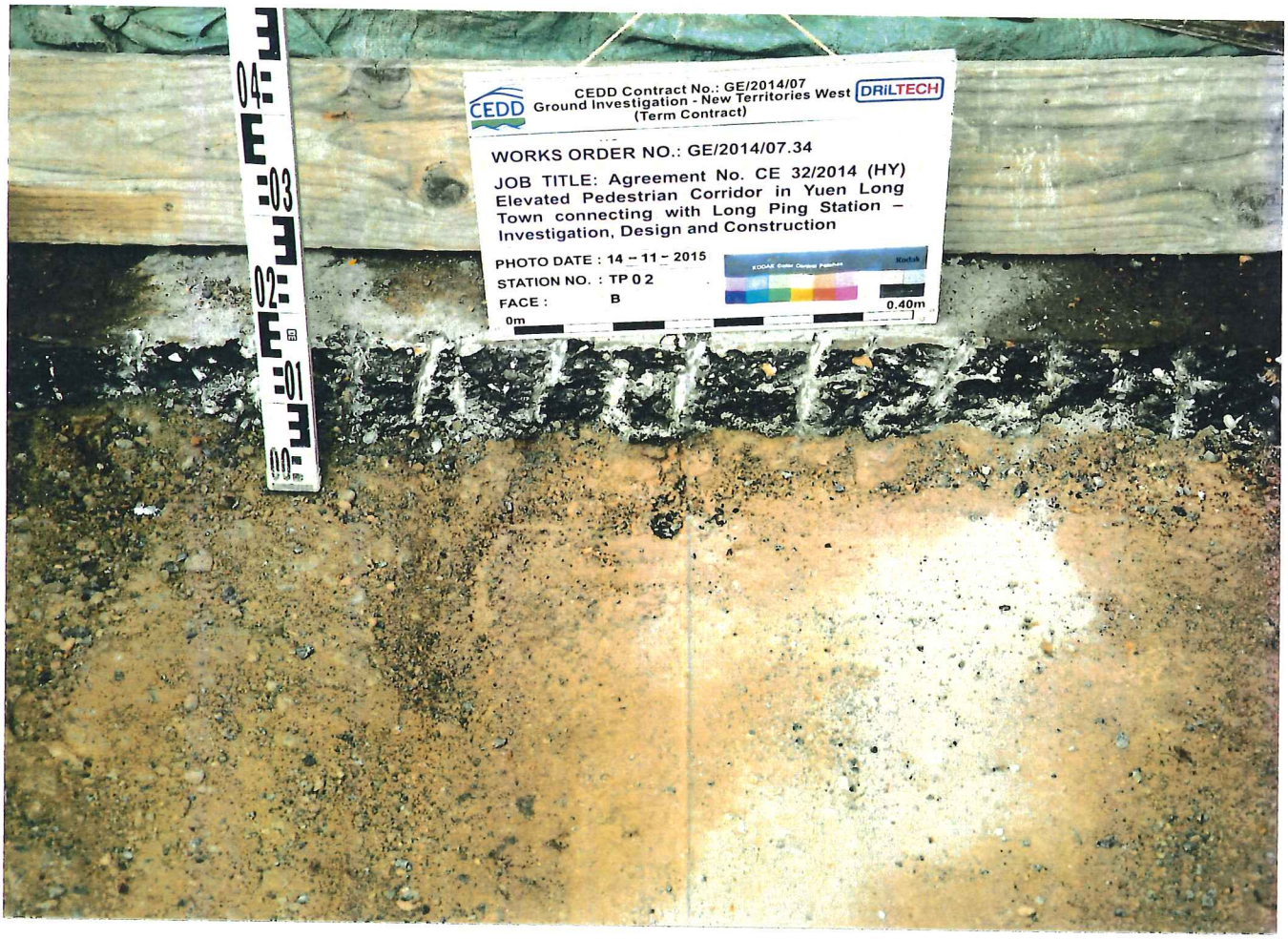
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltecn.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

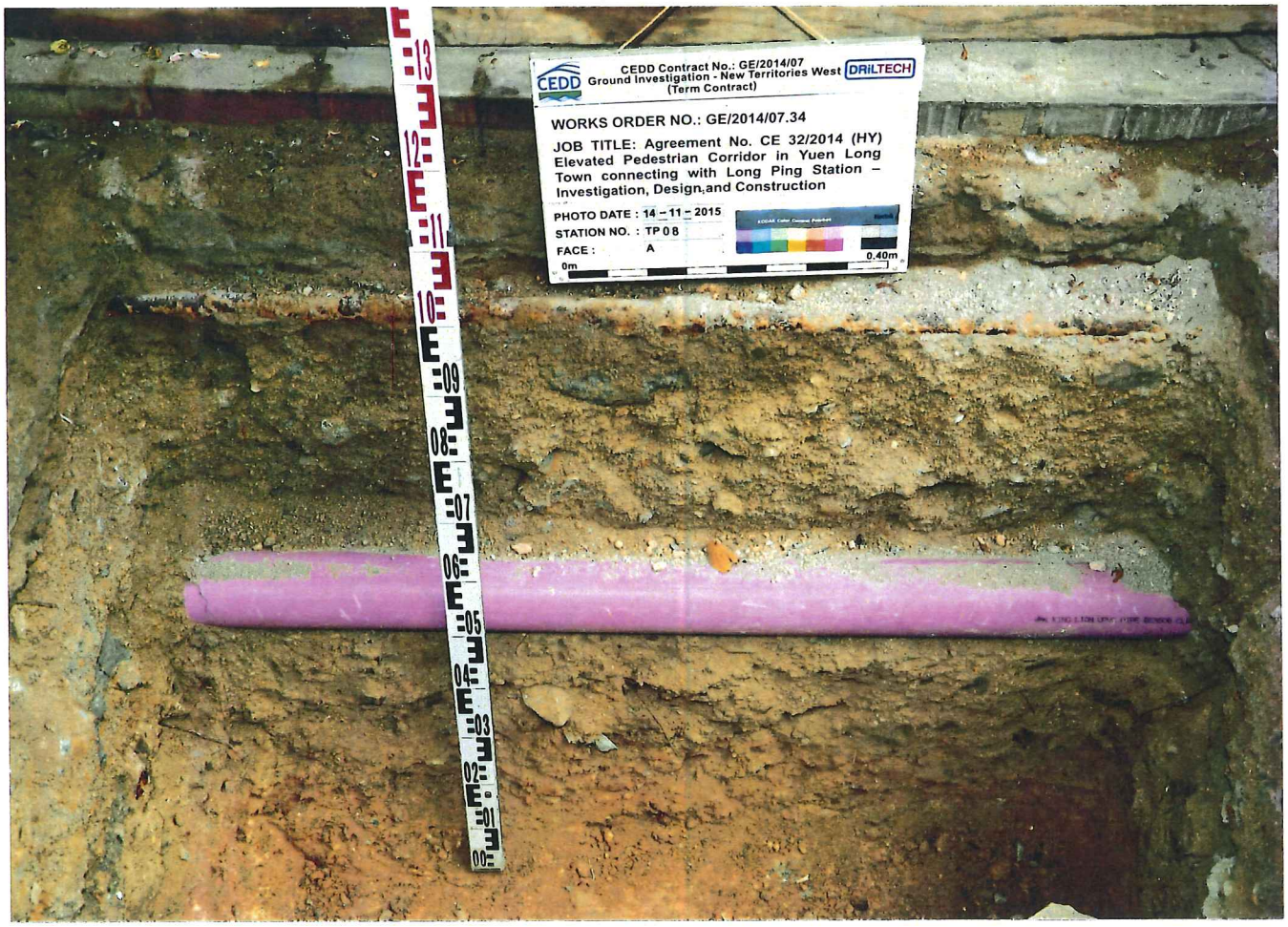


DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

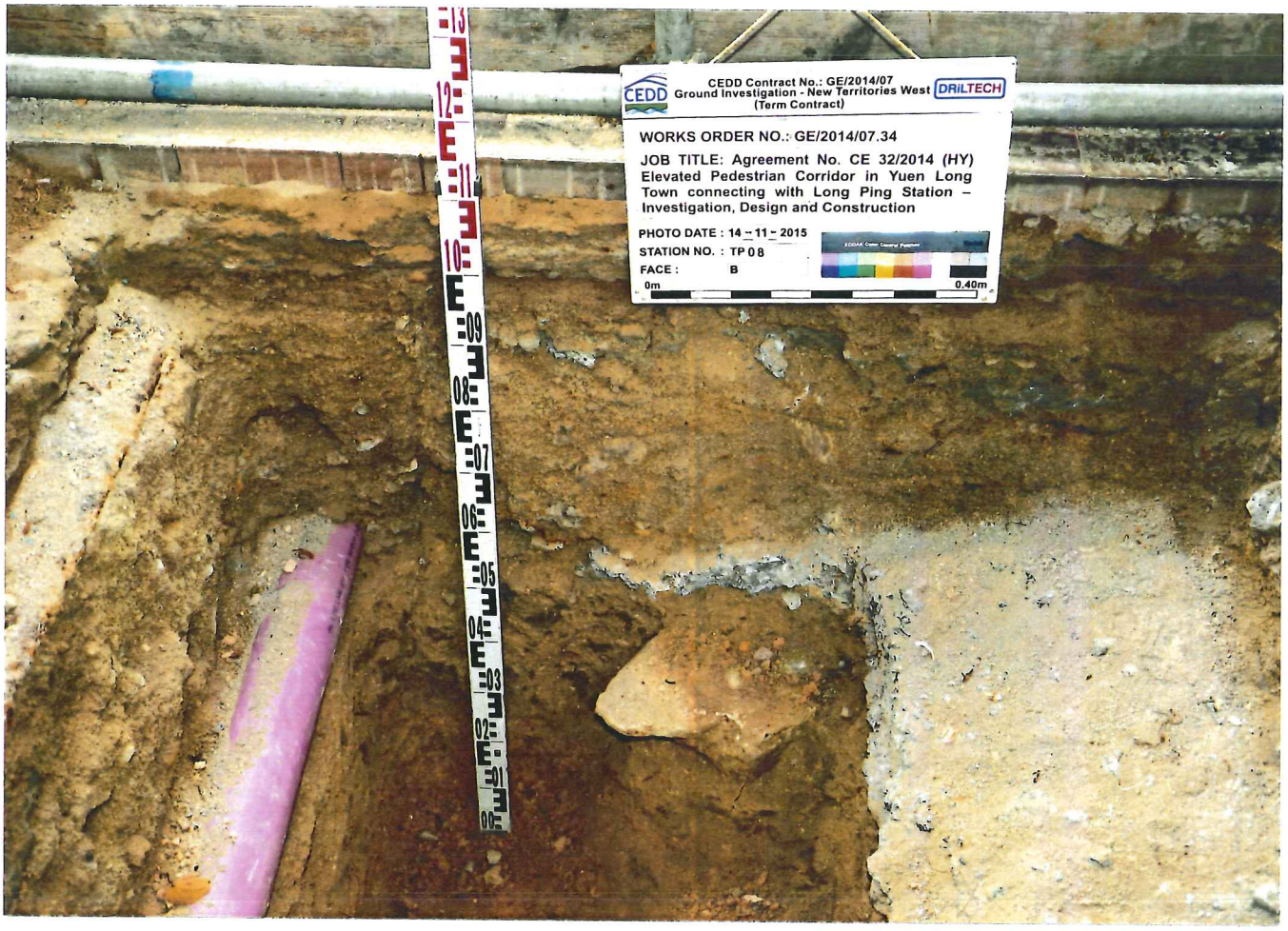
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

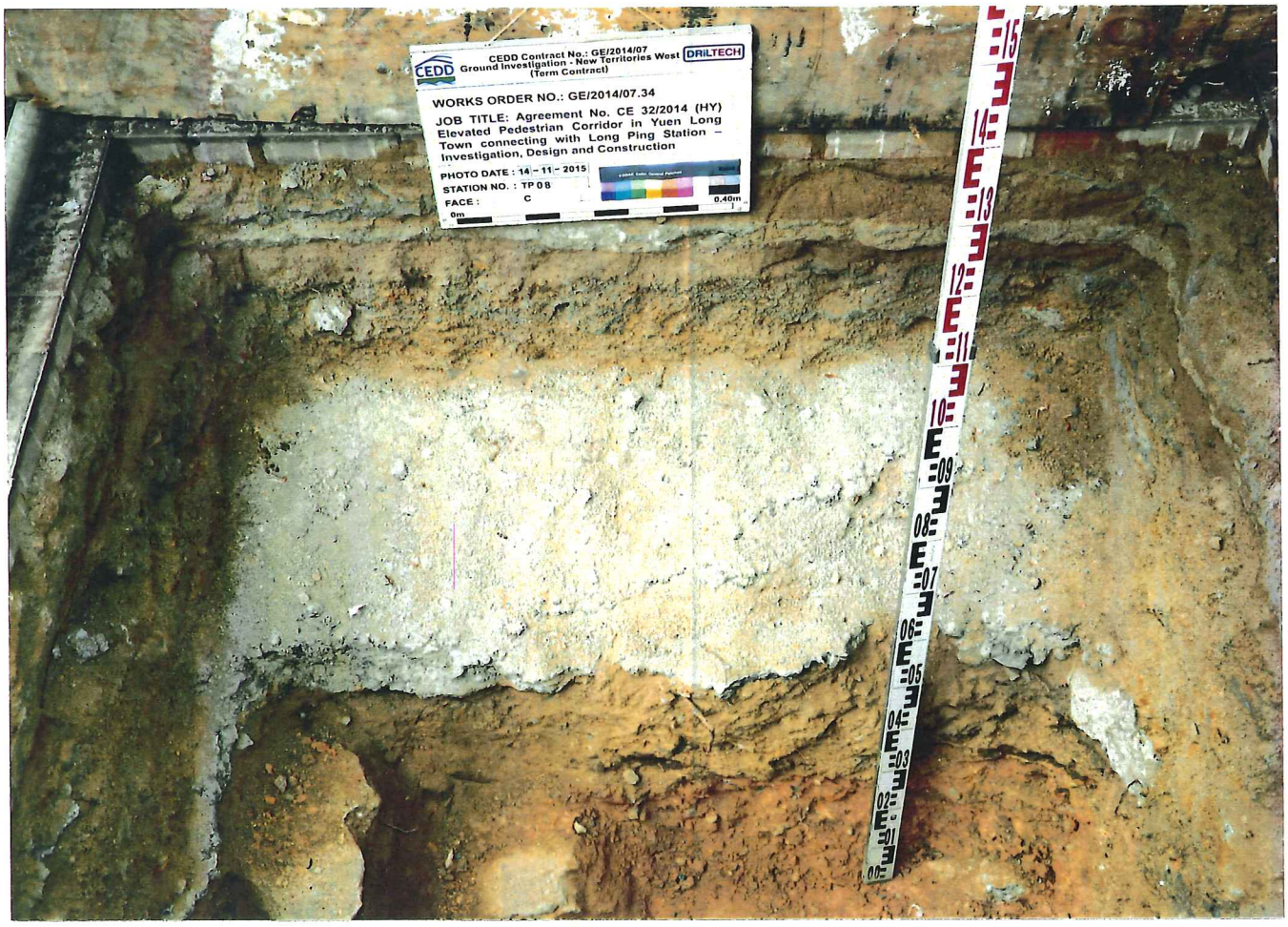
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

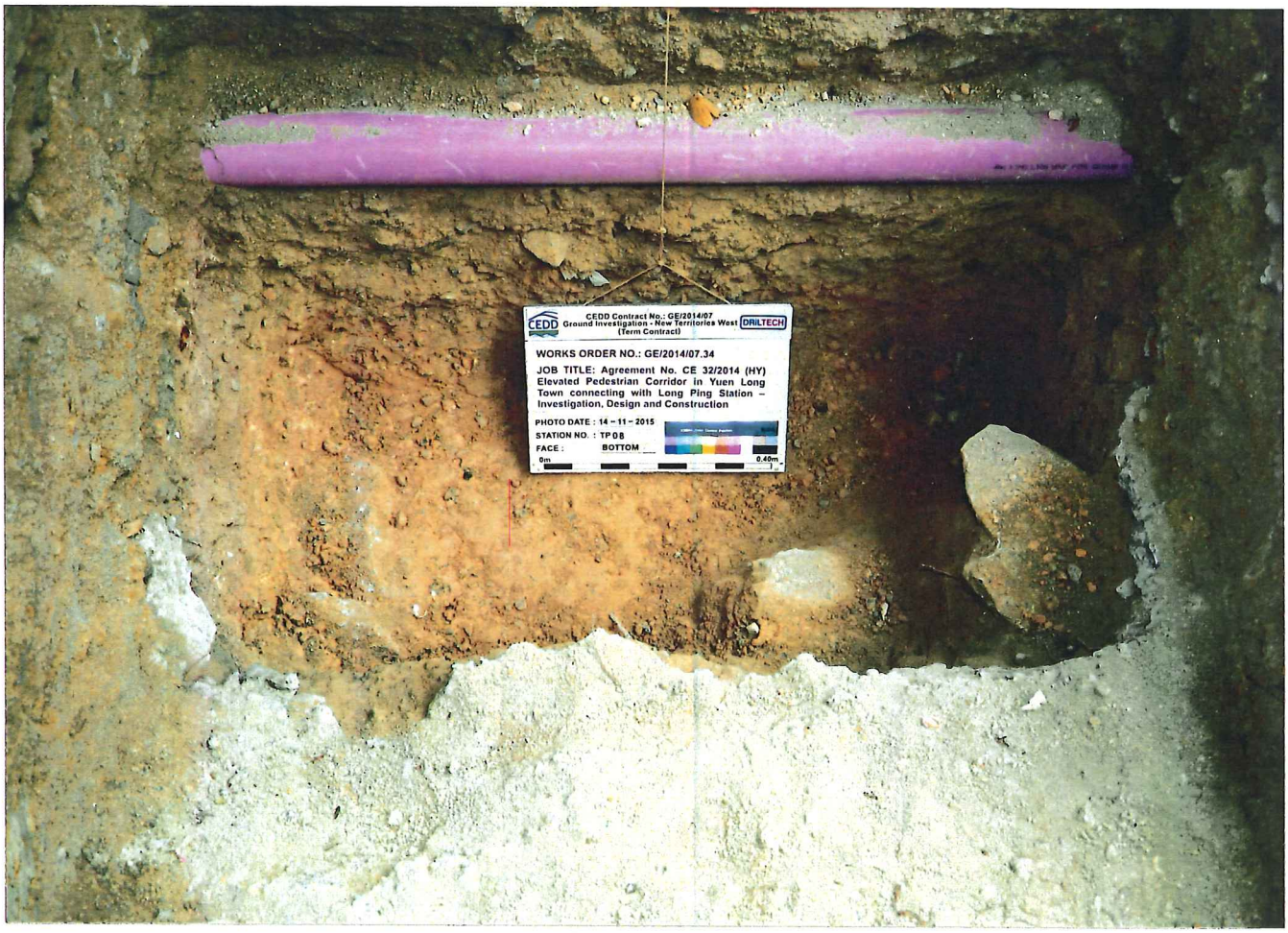


DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

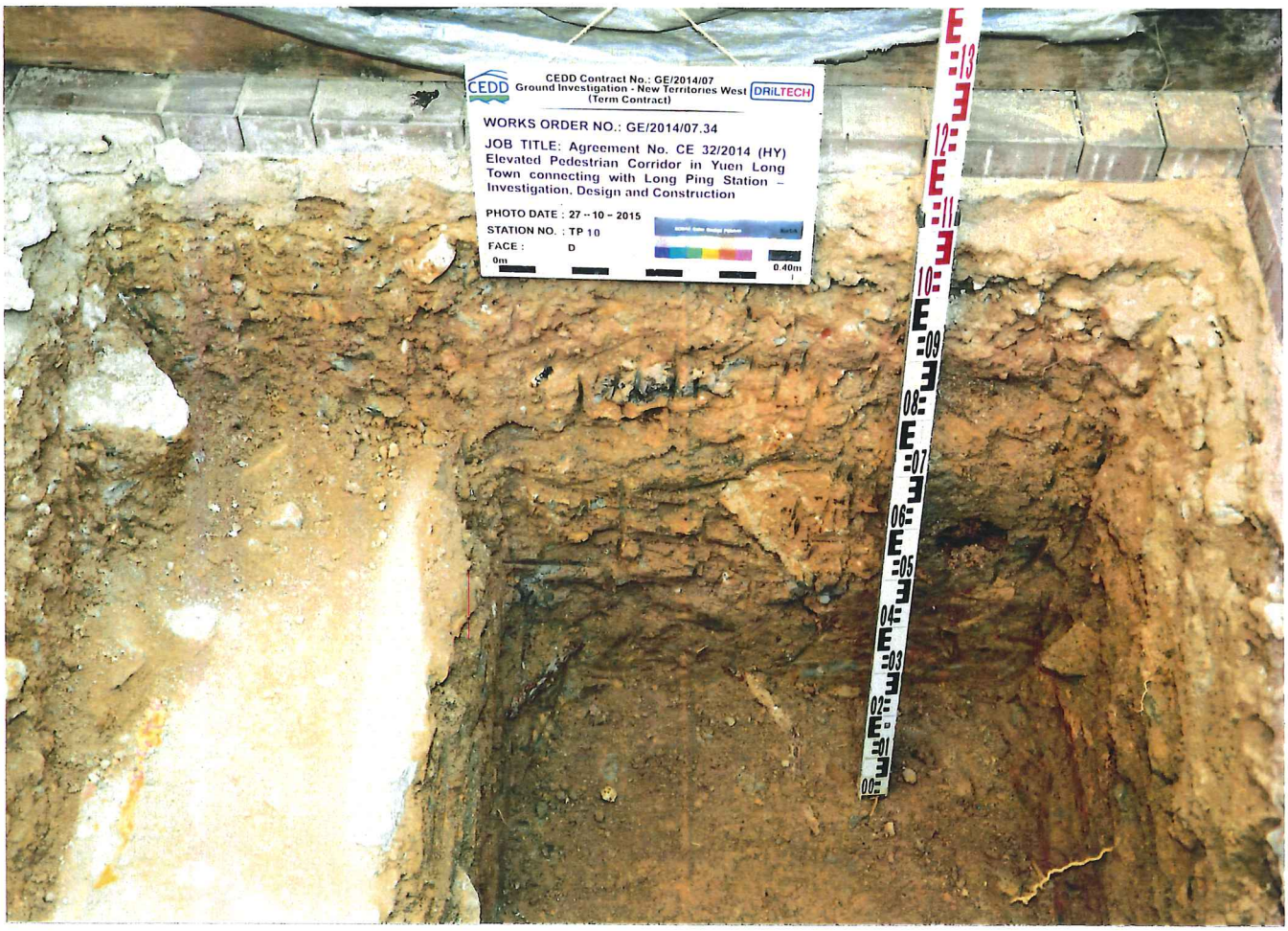


DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

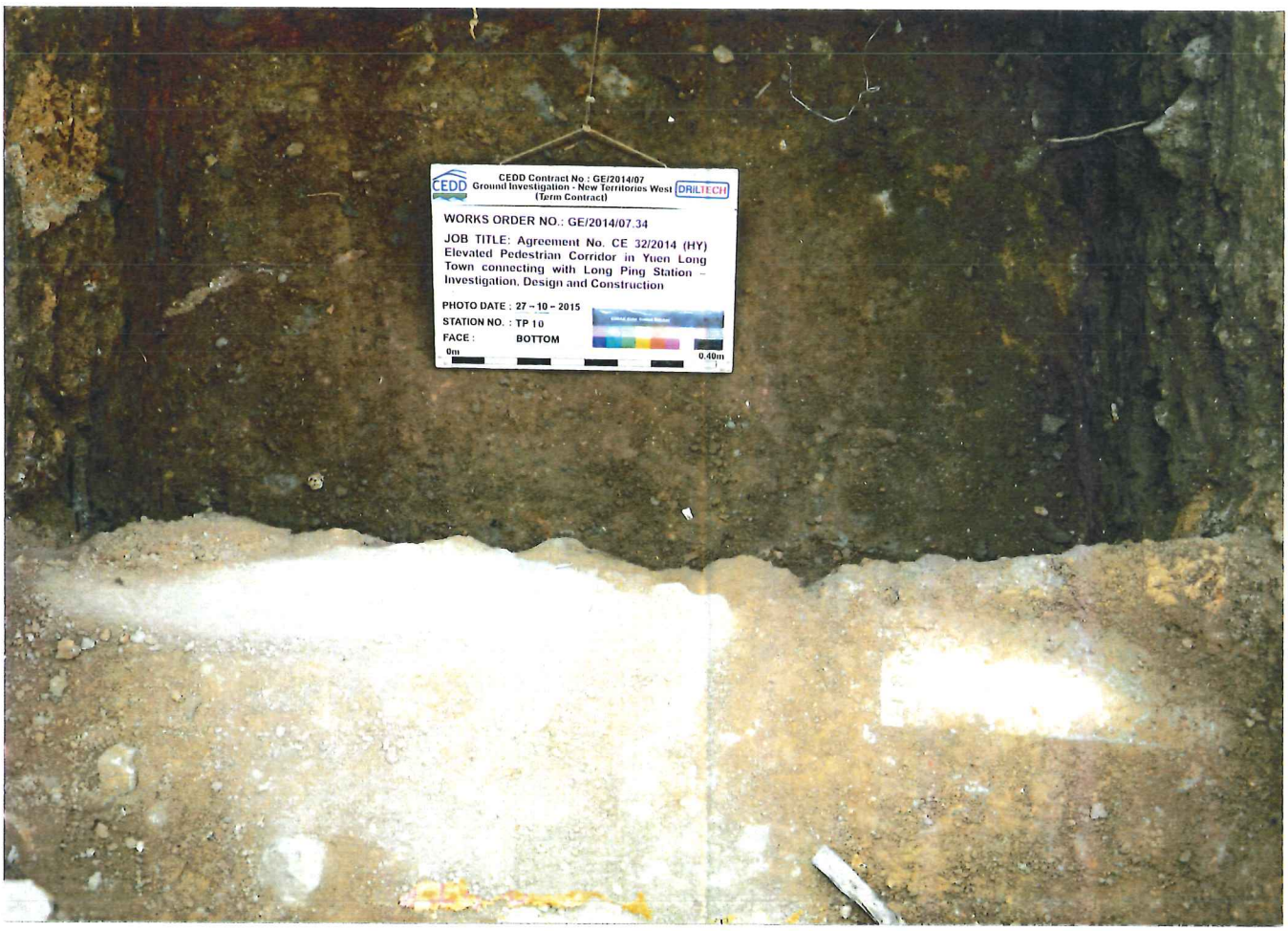
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

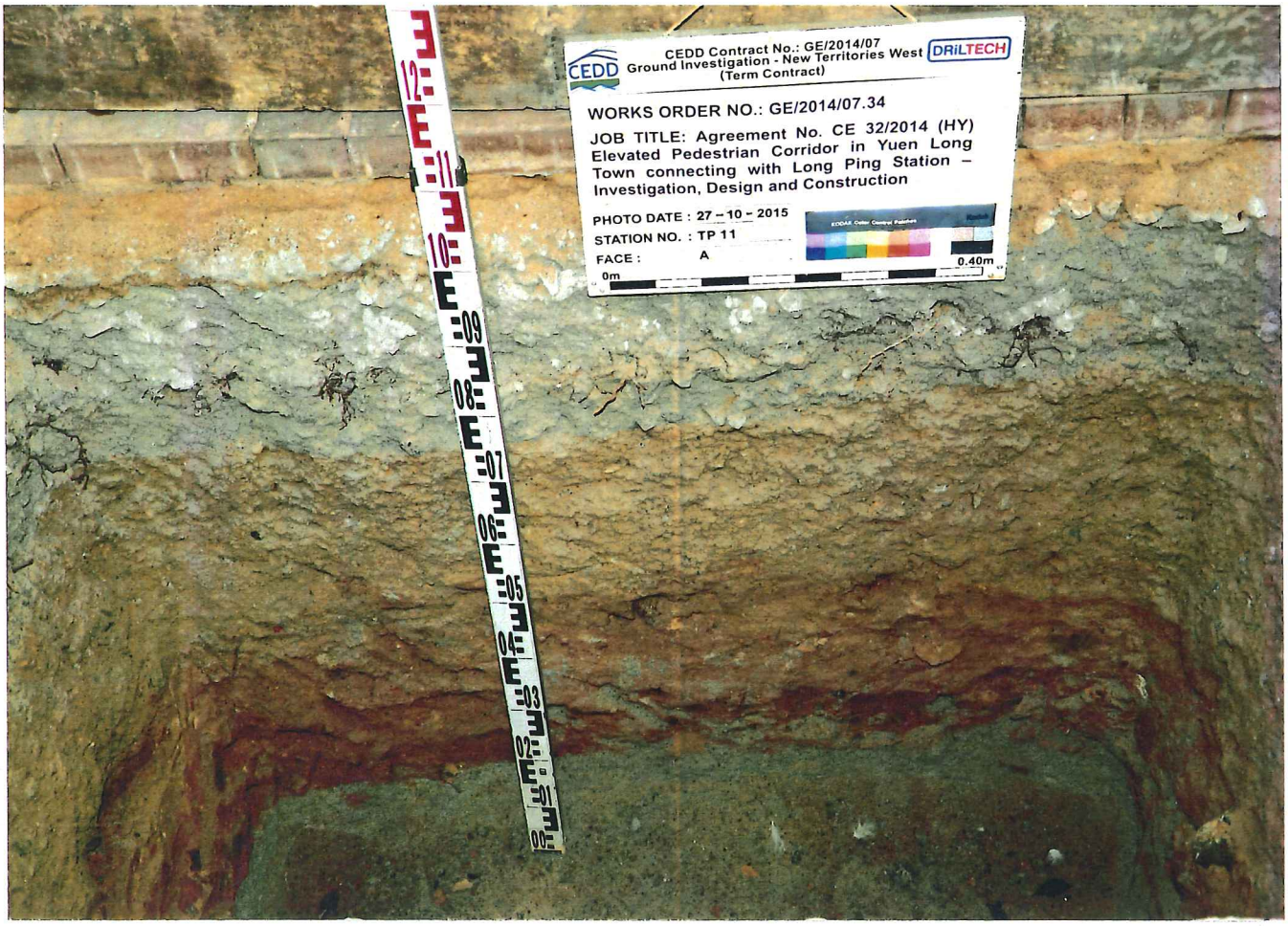
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



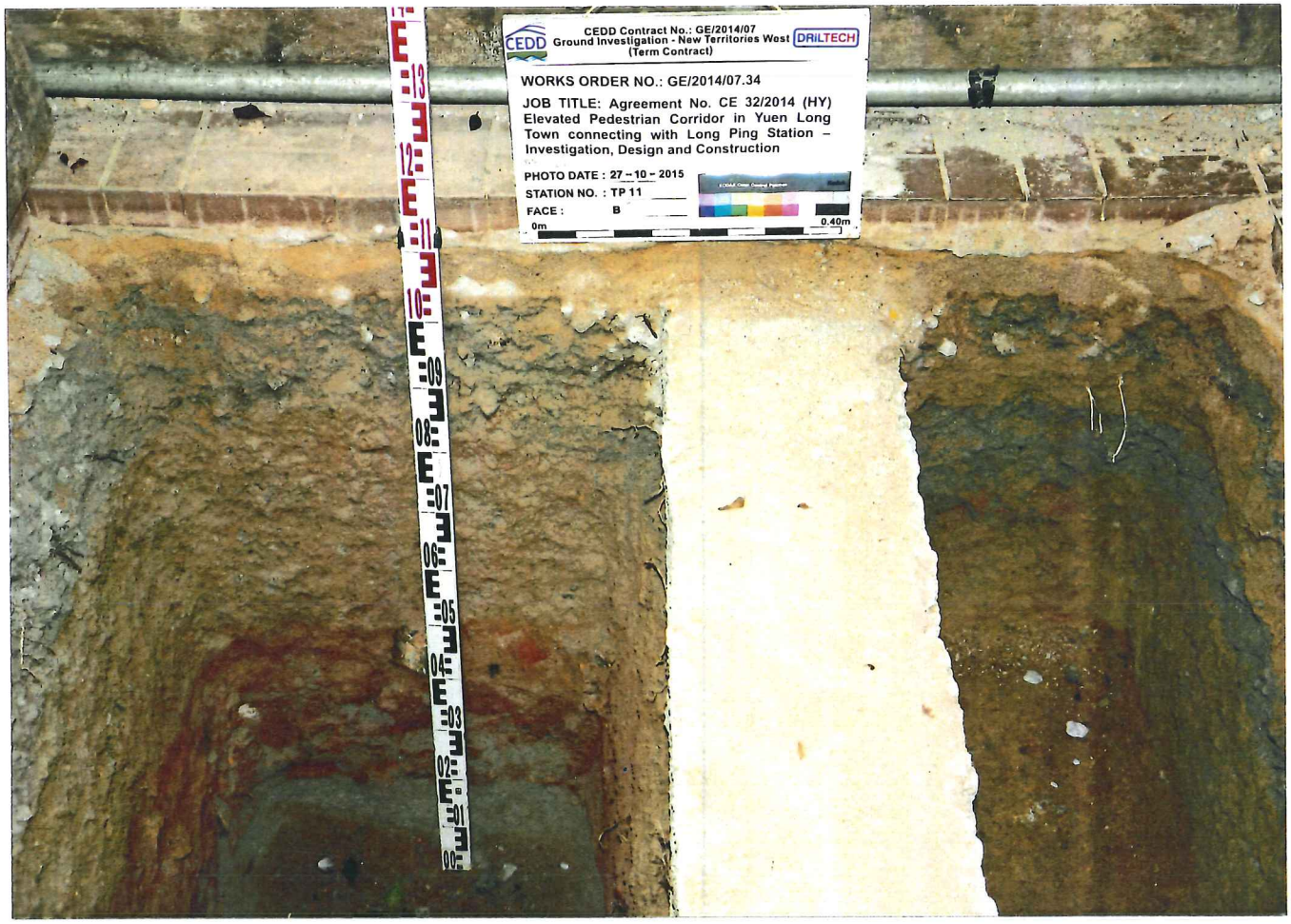
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



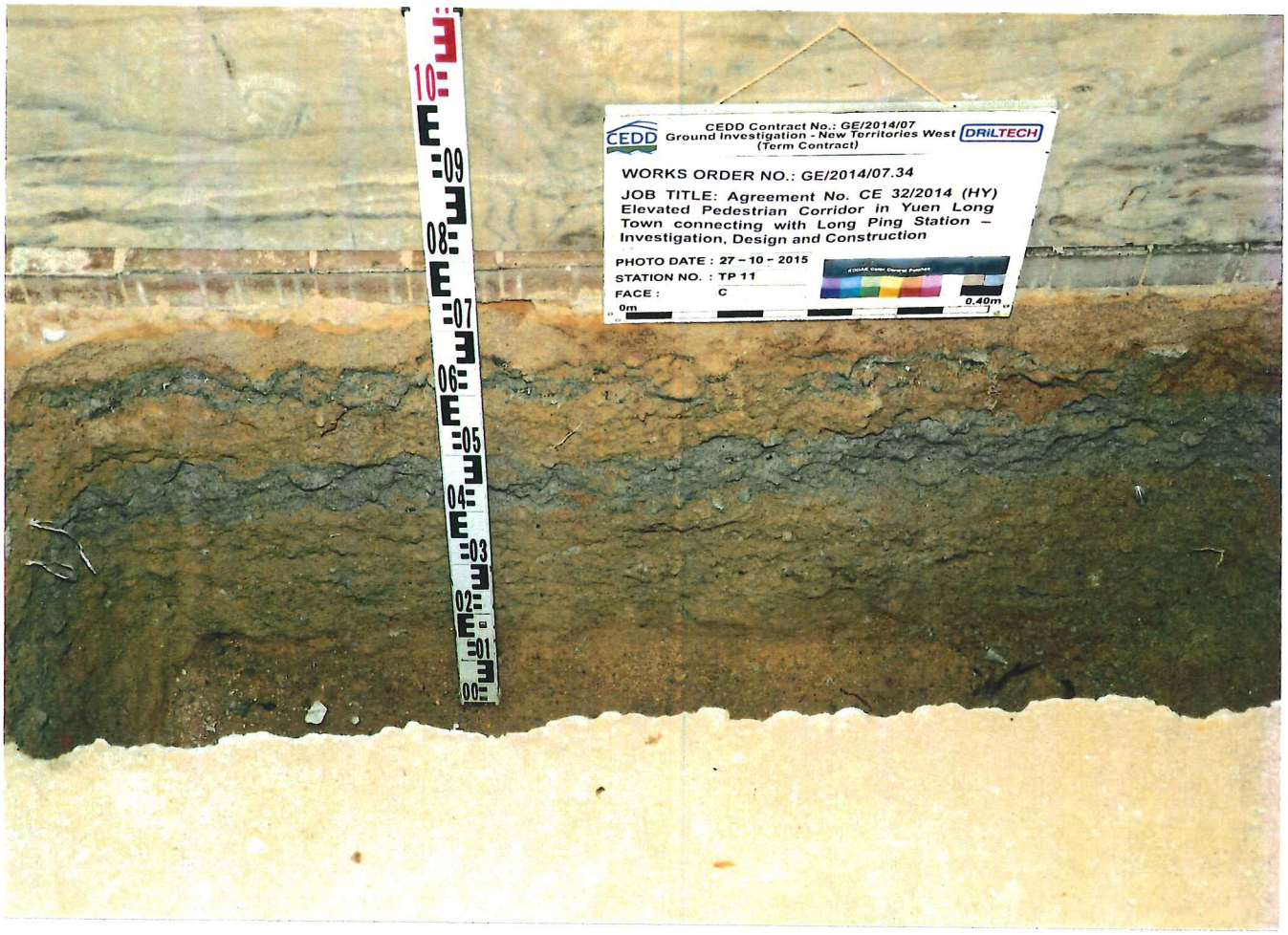
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

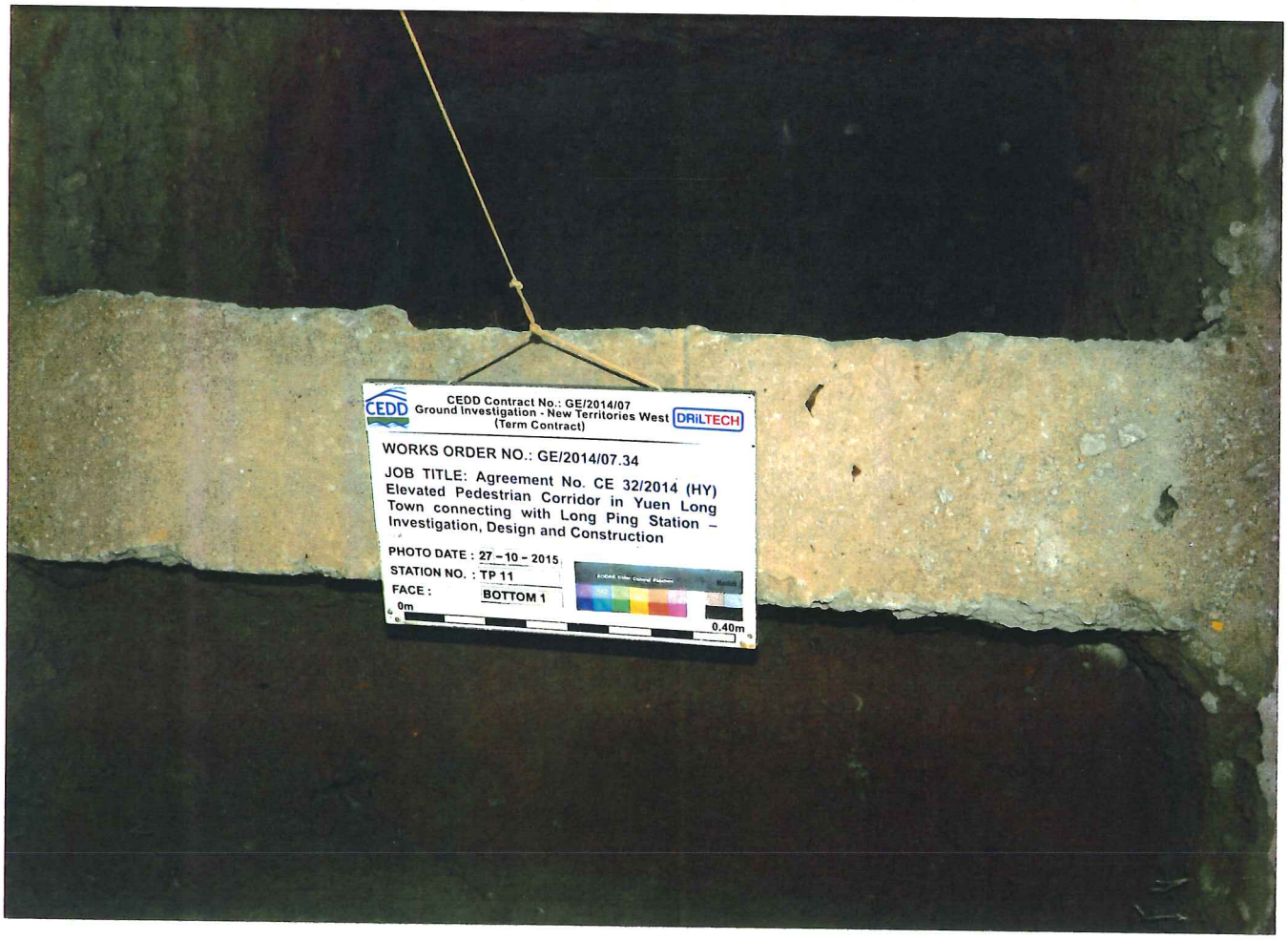


DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

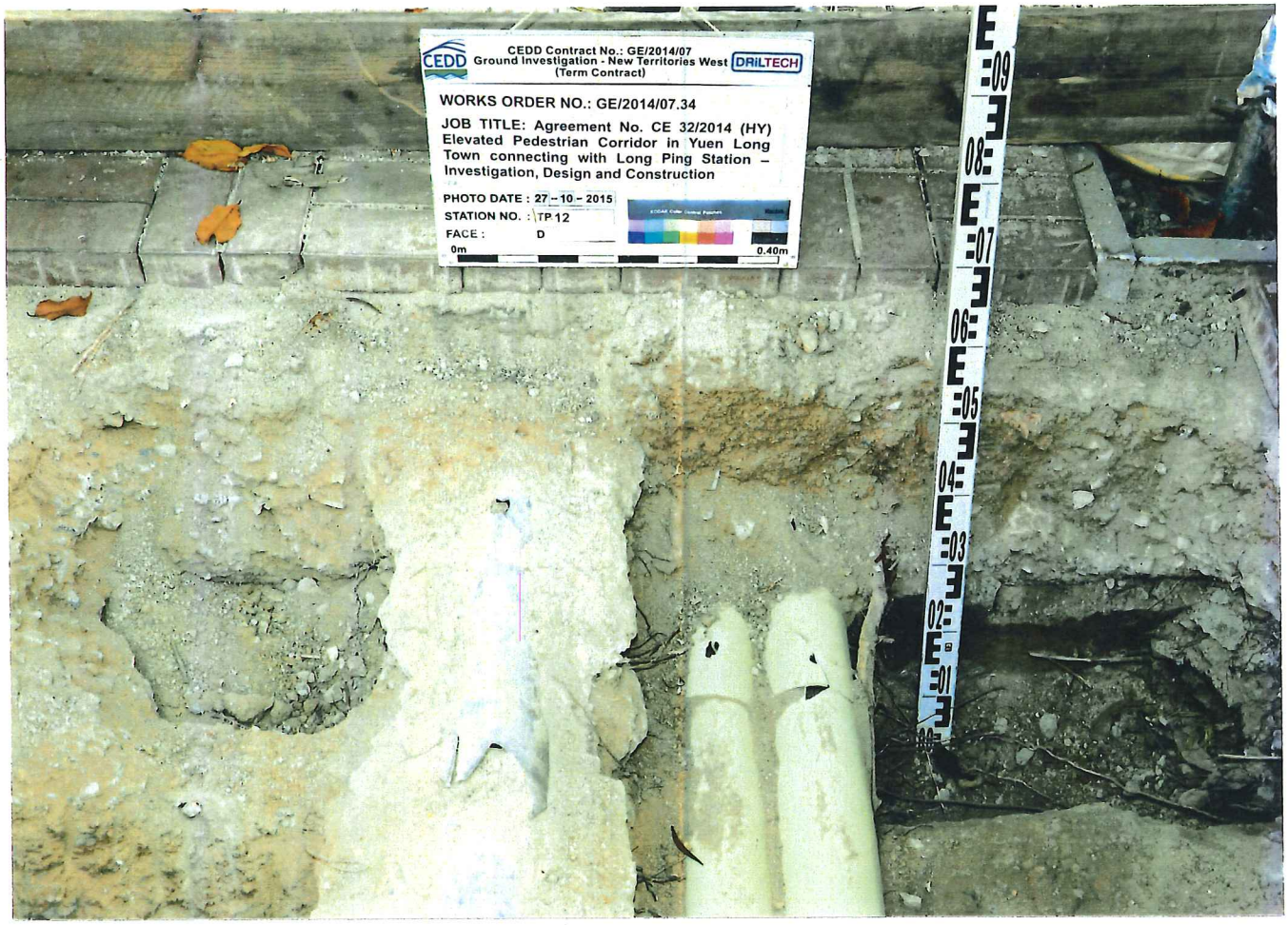


DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

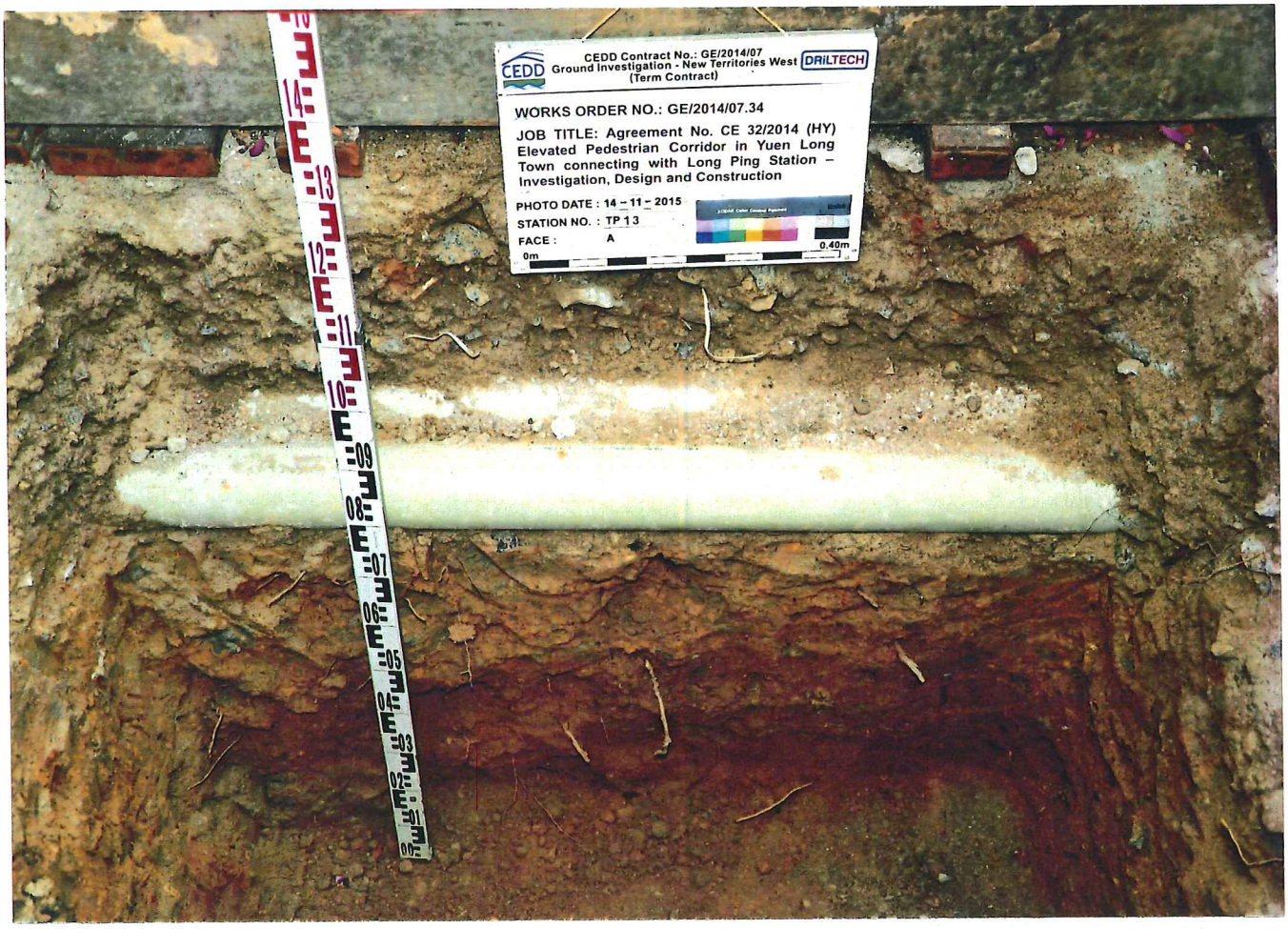
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



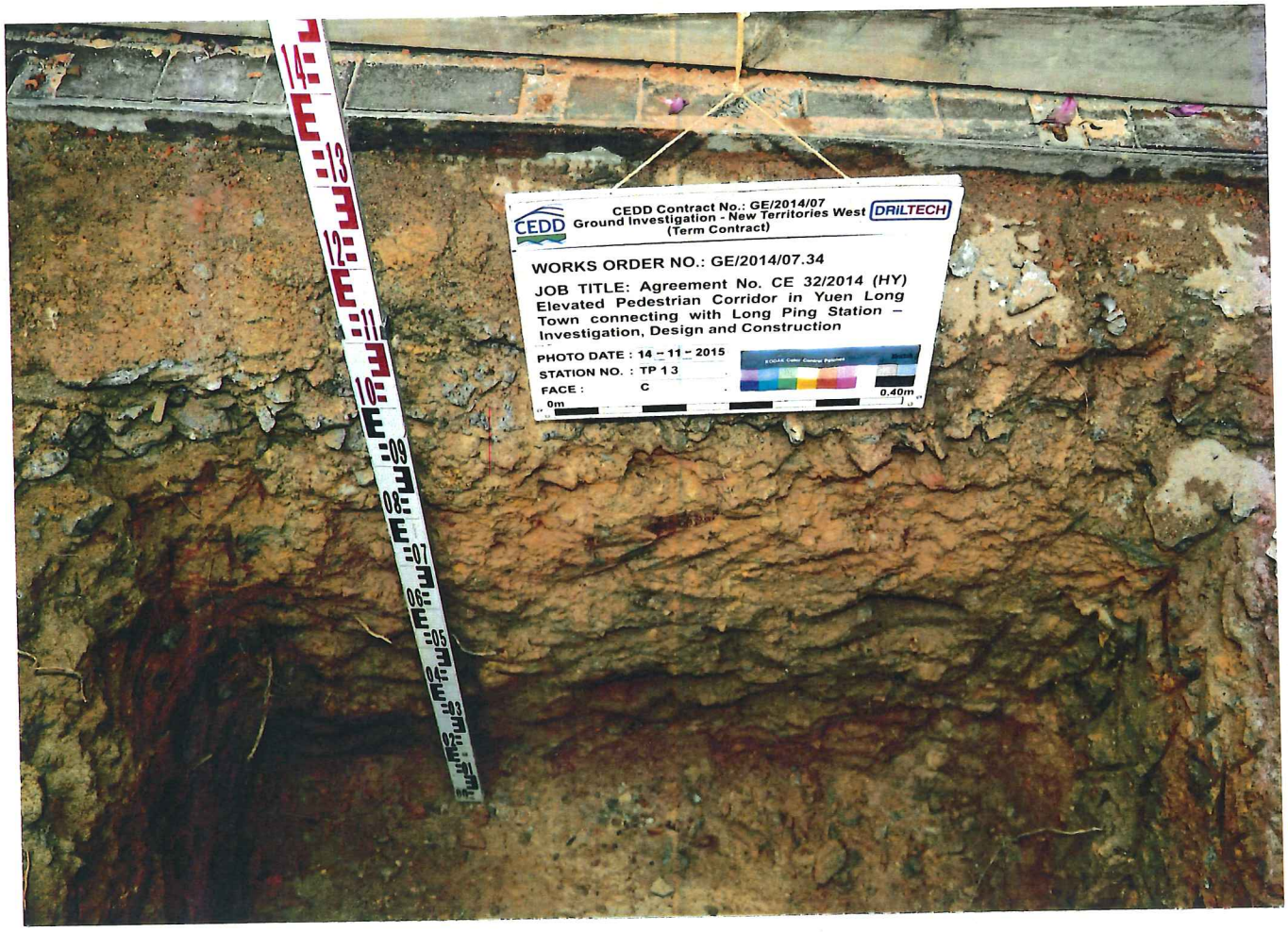
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



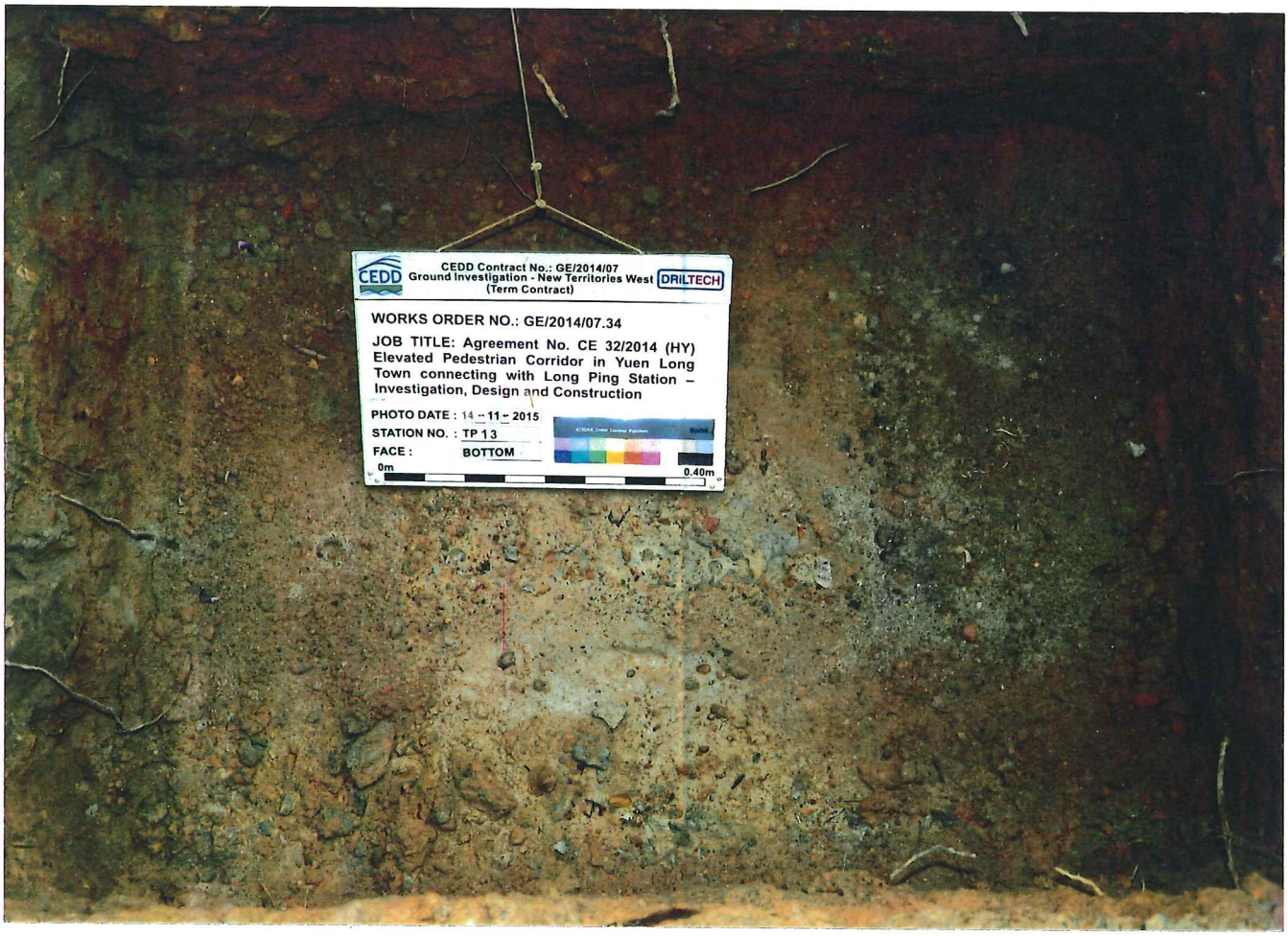
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

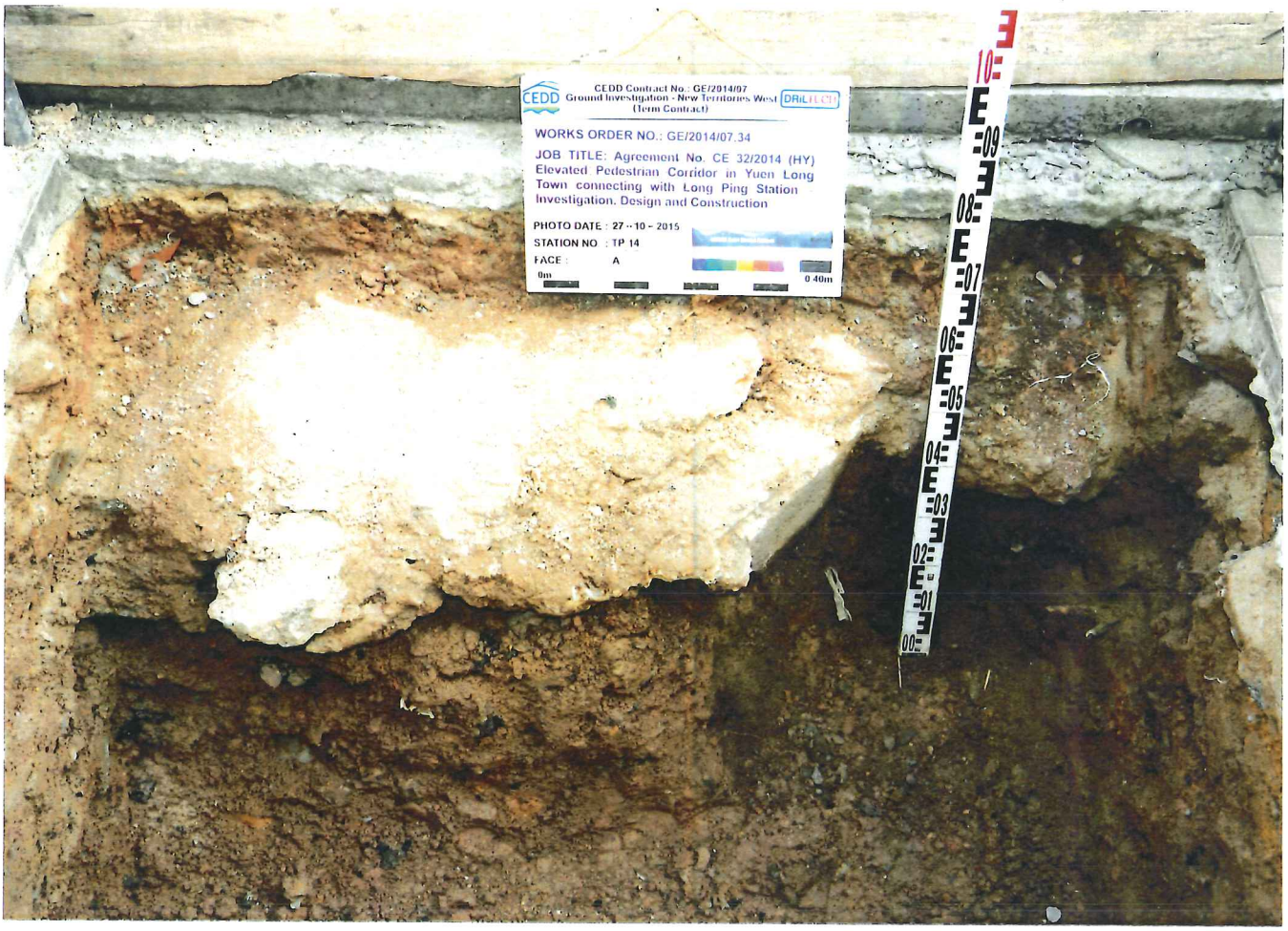


DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

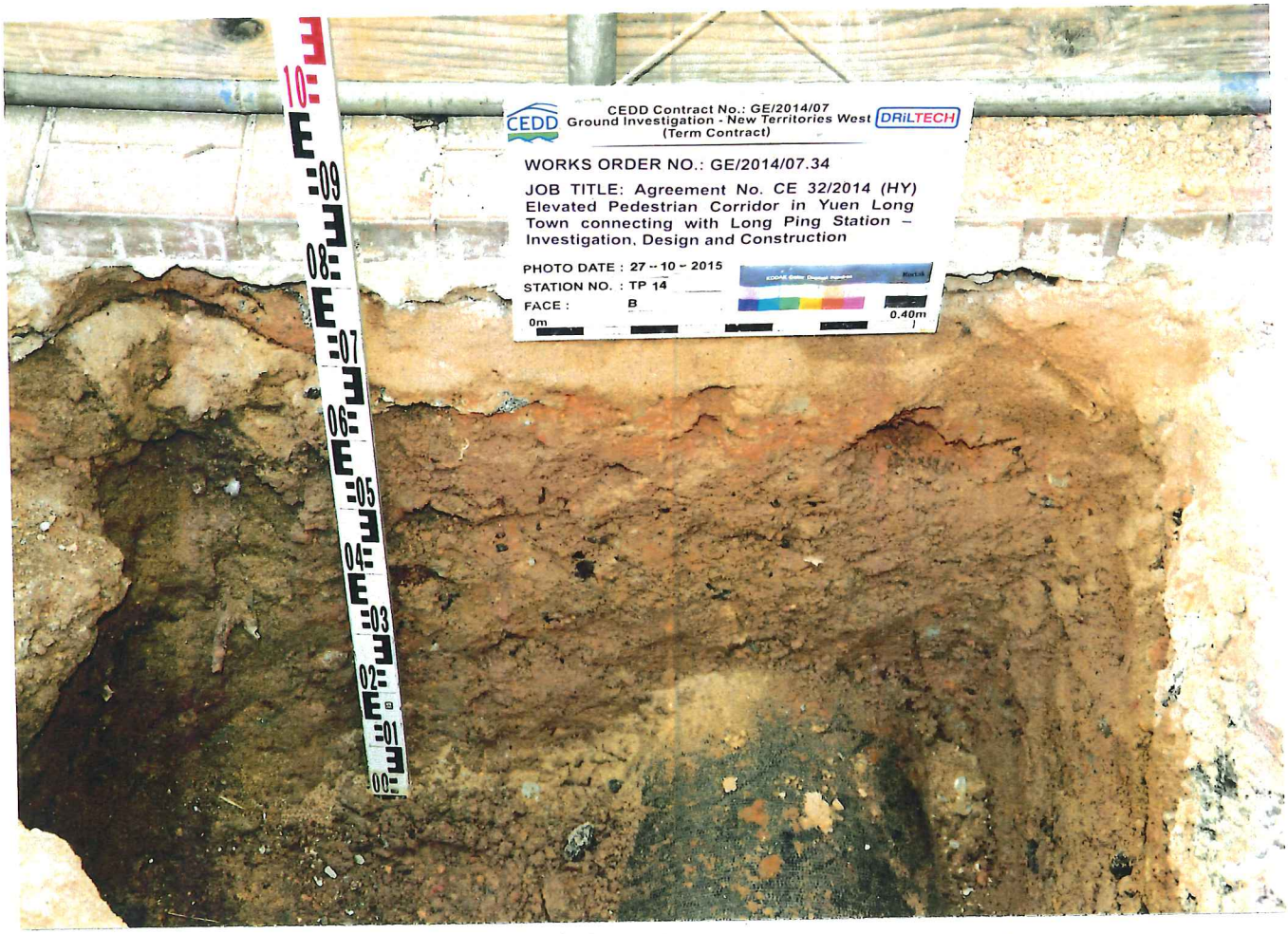
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



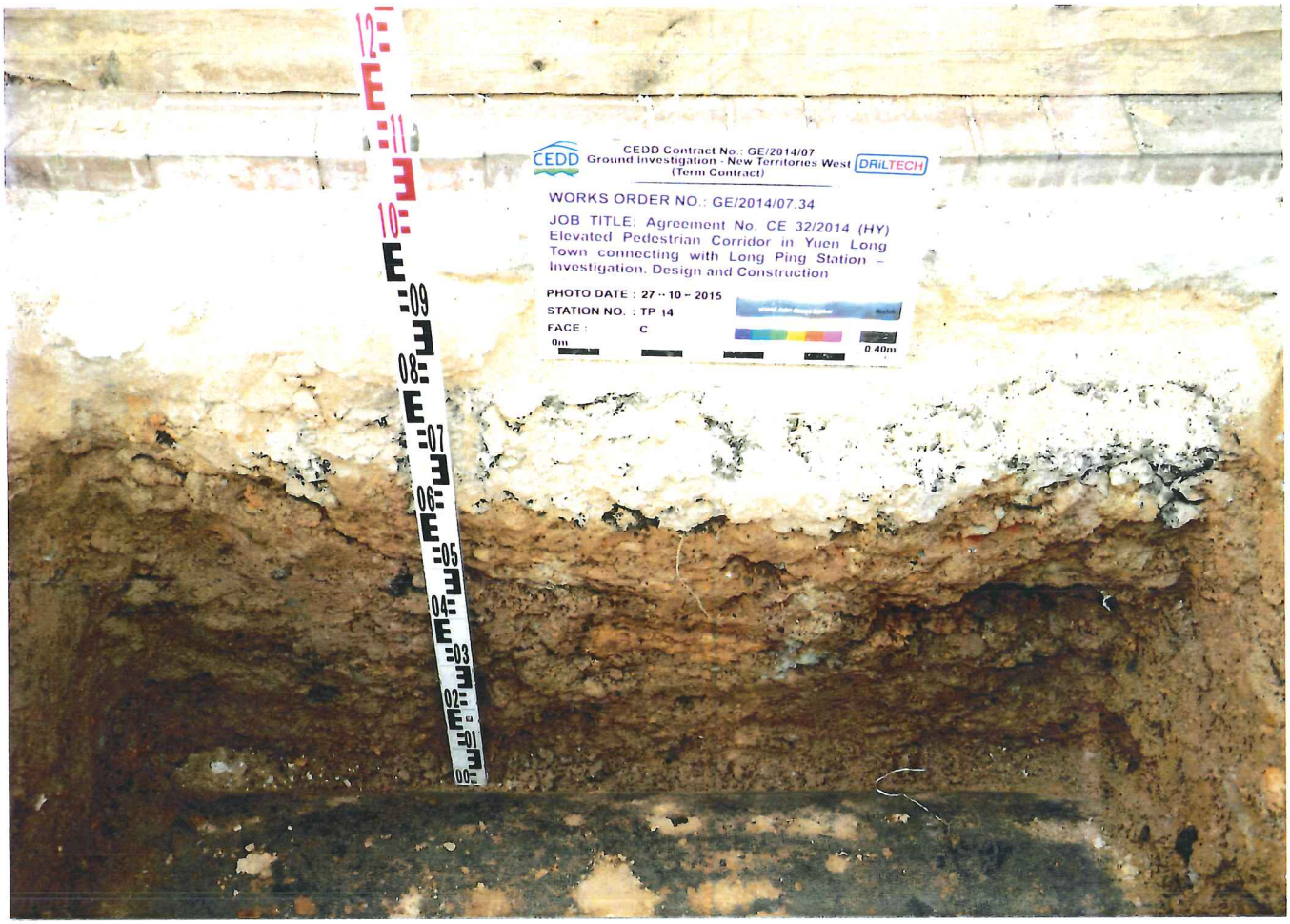
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



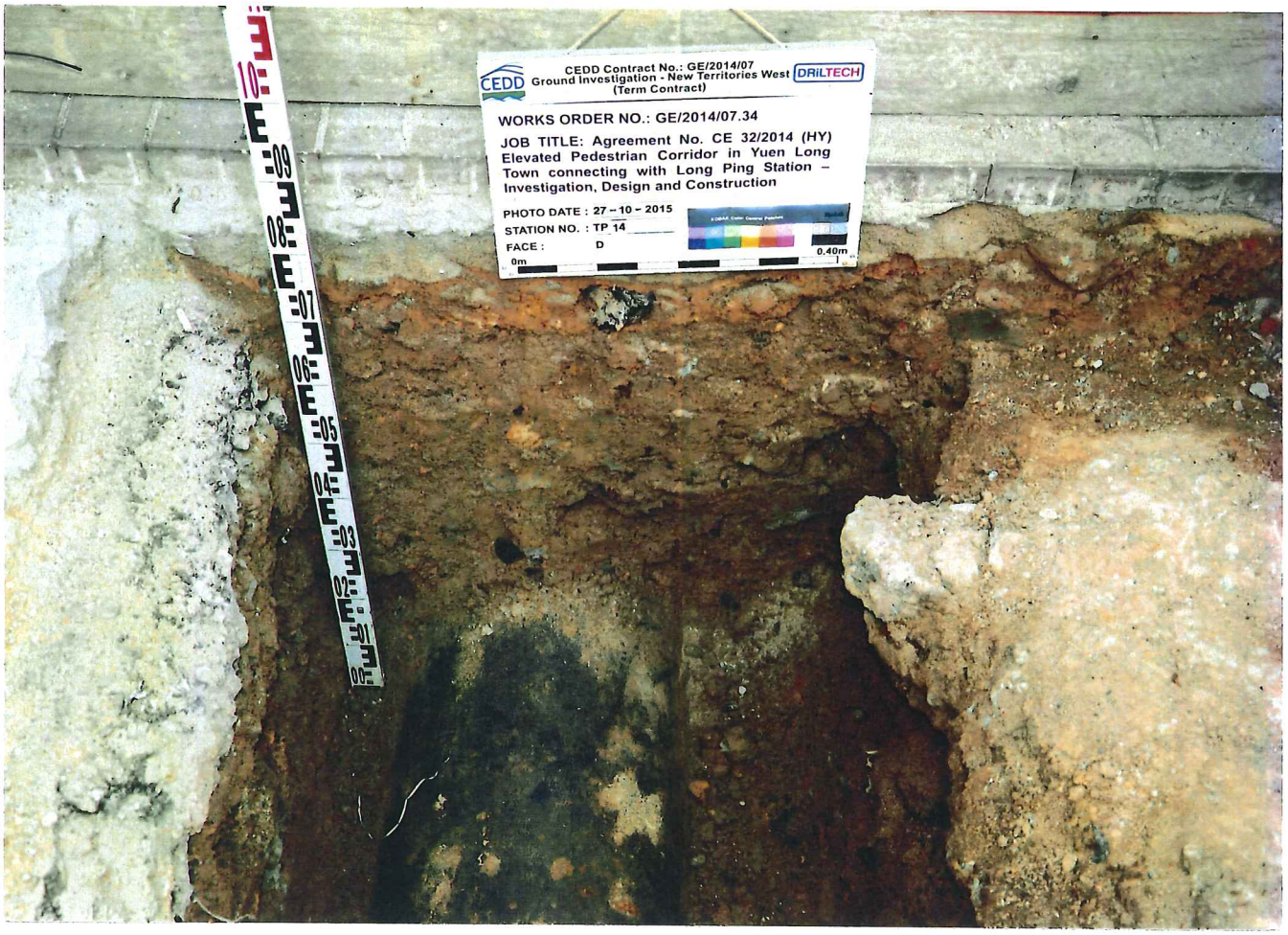
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



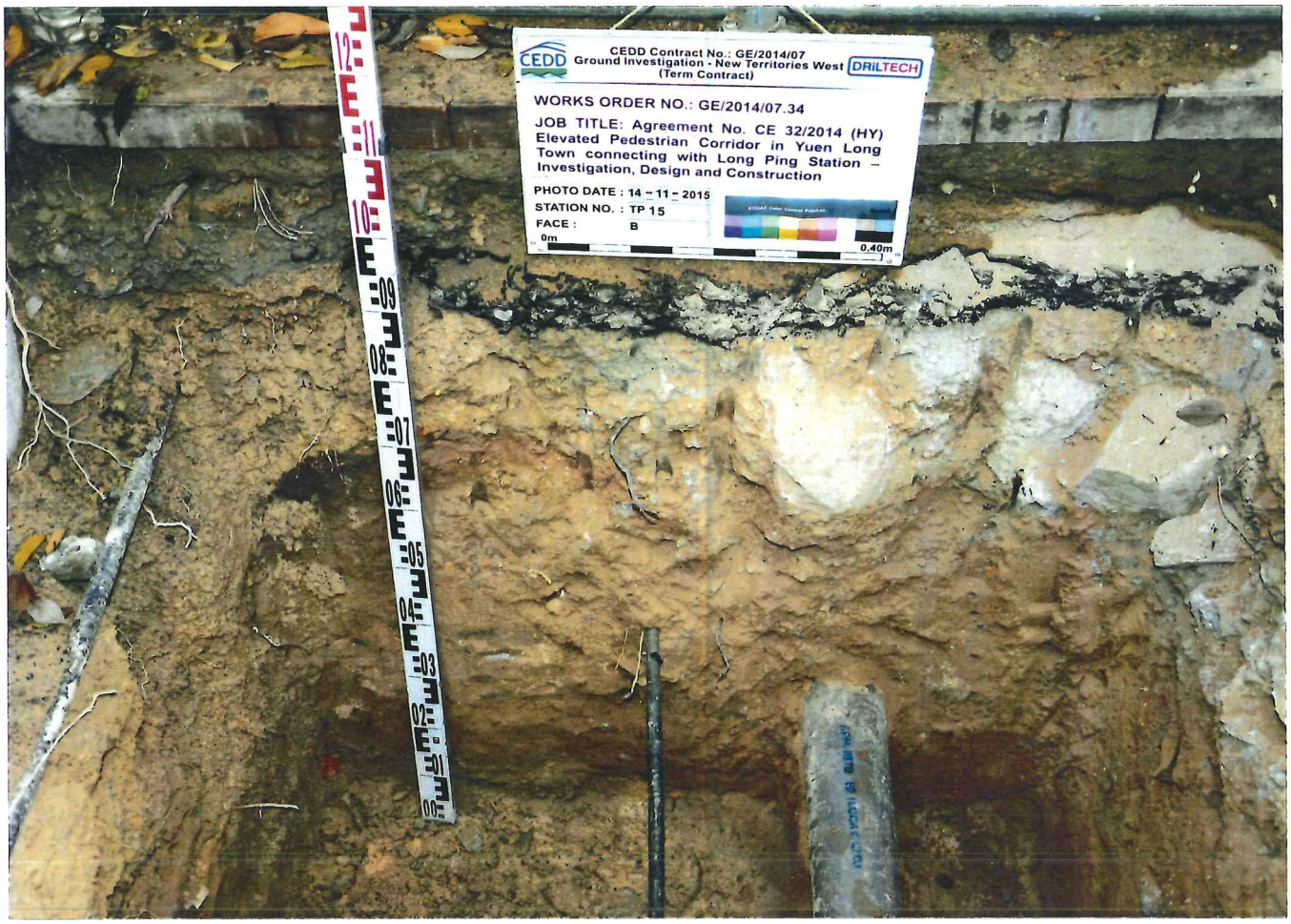
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



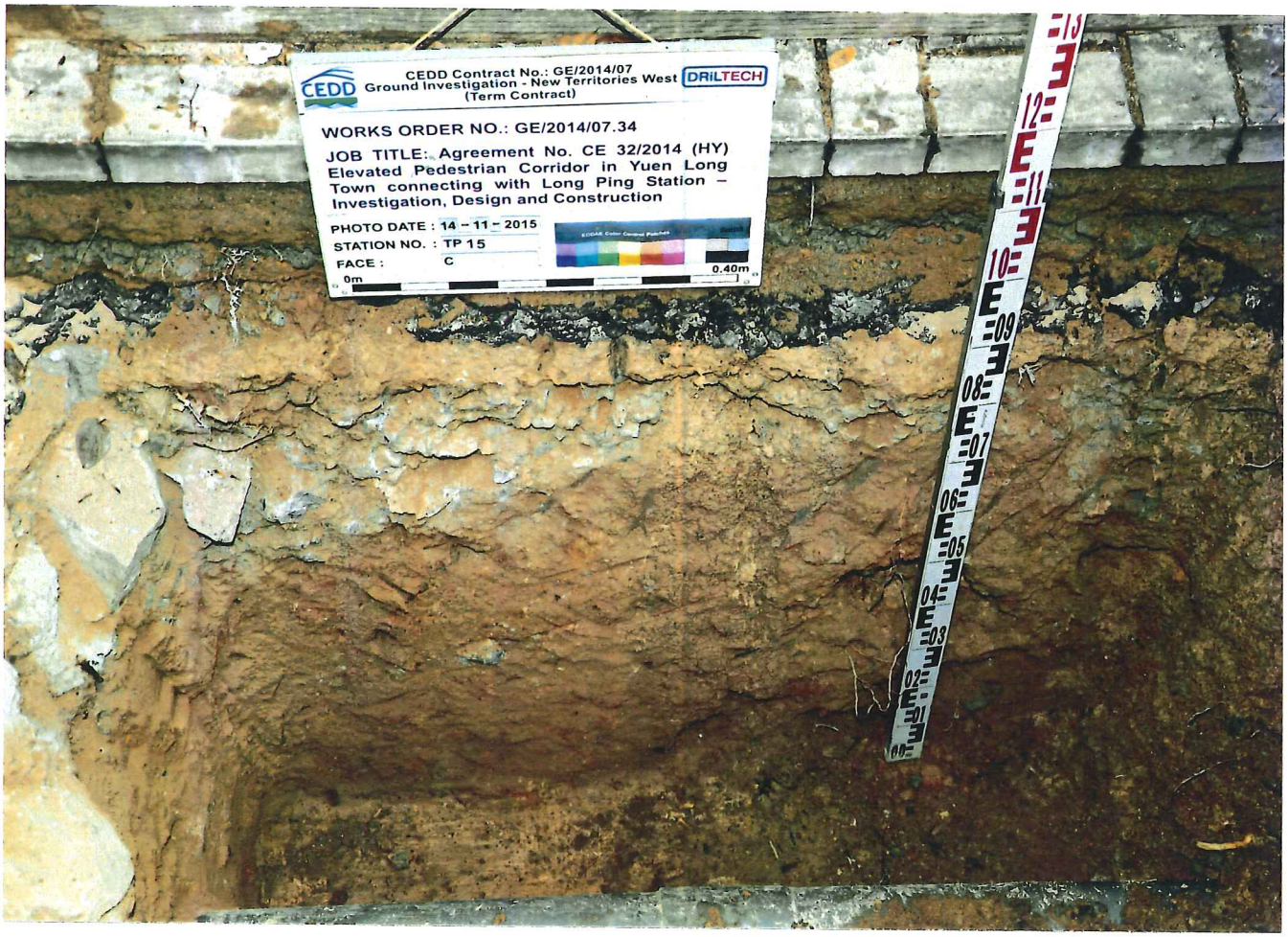
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

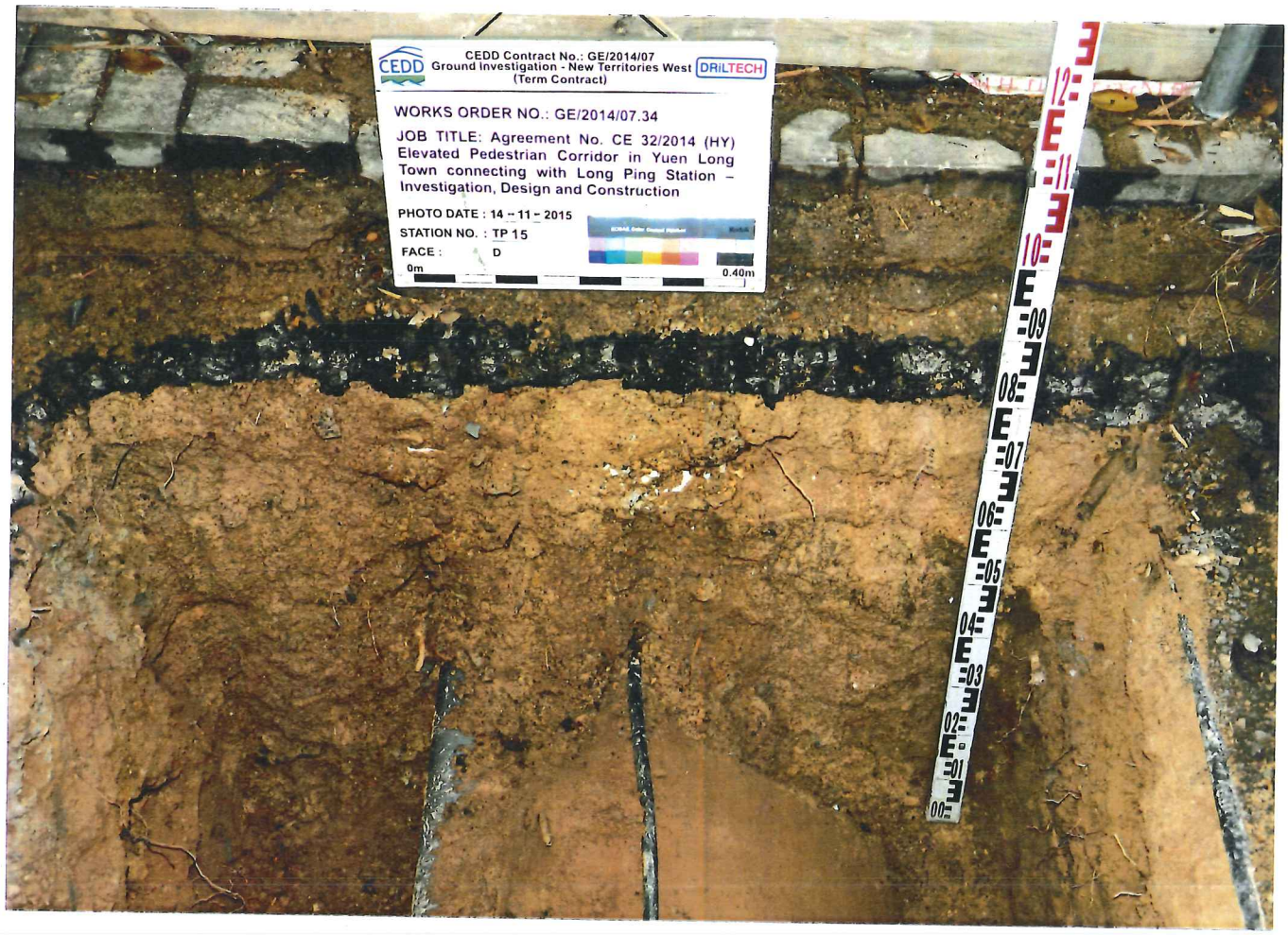
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: drilltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

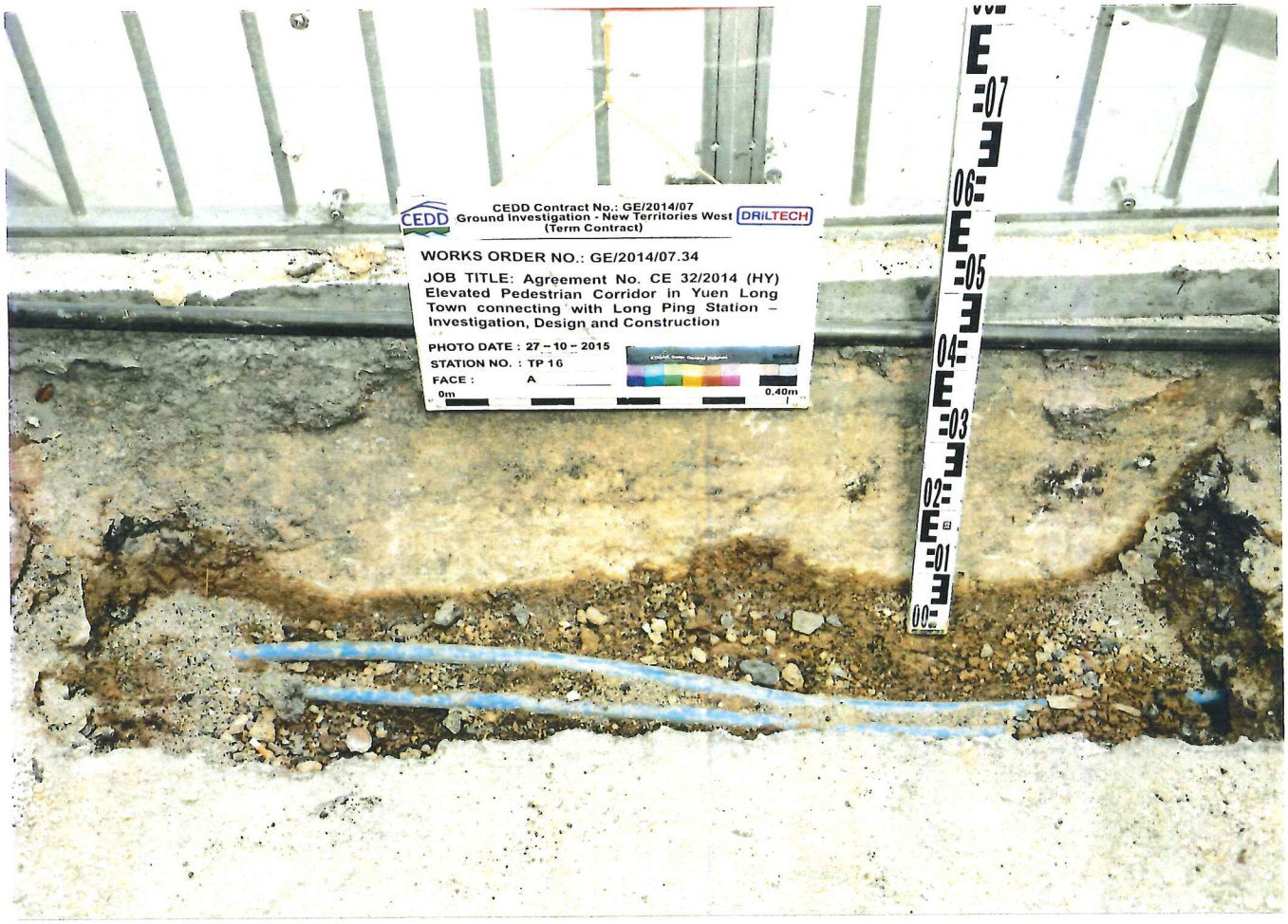


DrilTech Ground Engineering Ltd.
BLK A & B, 9/F HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

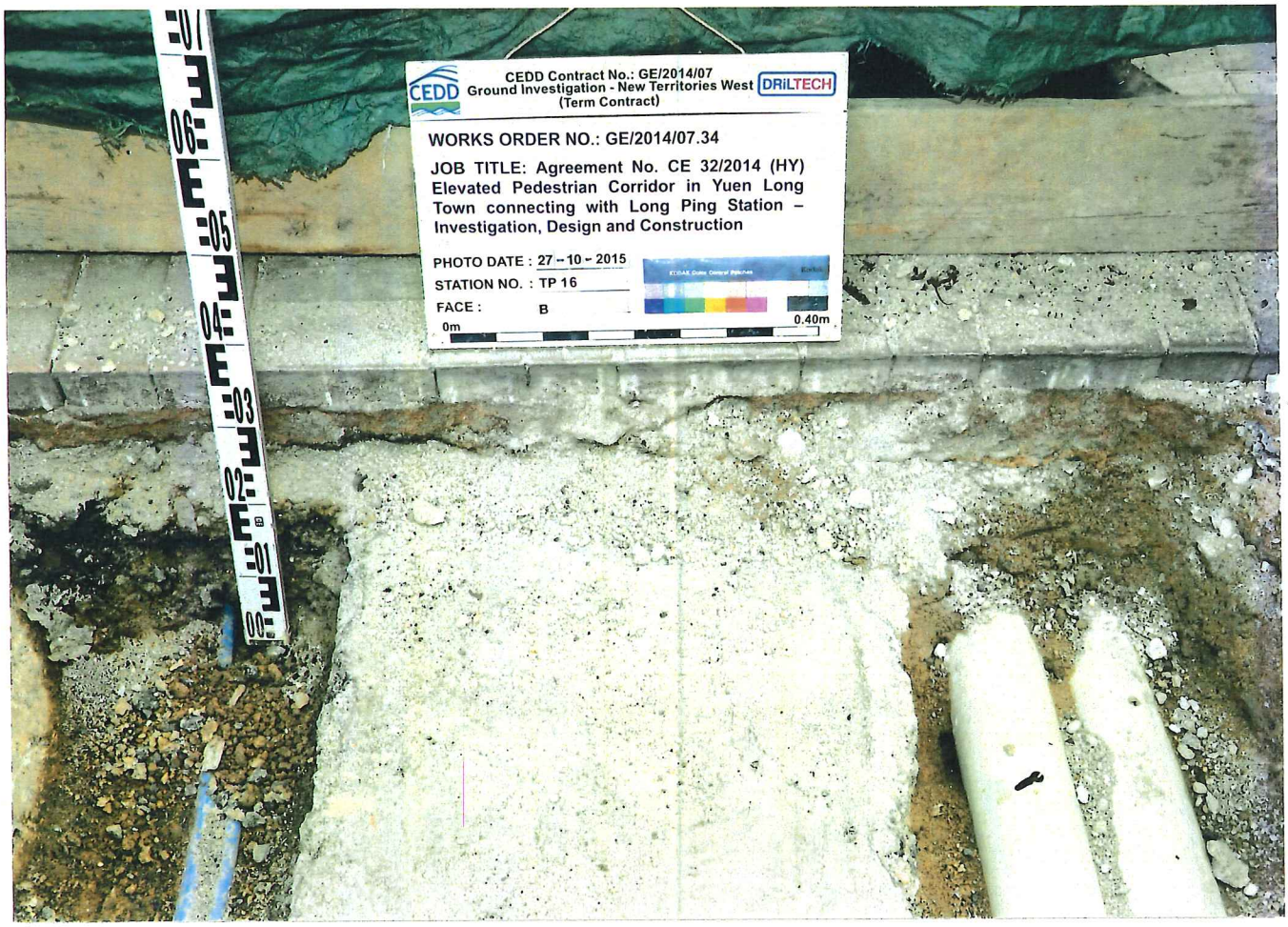


DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

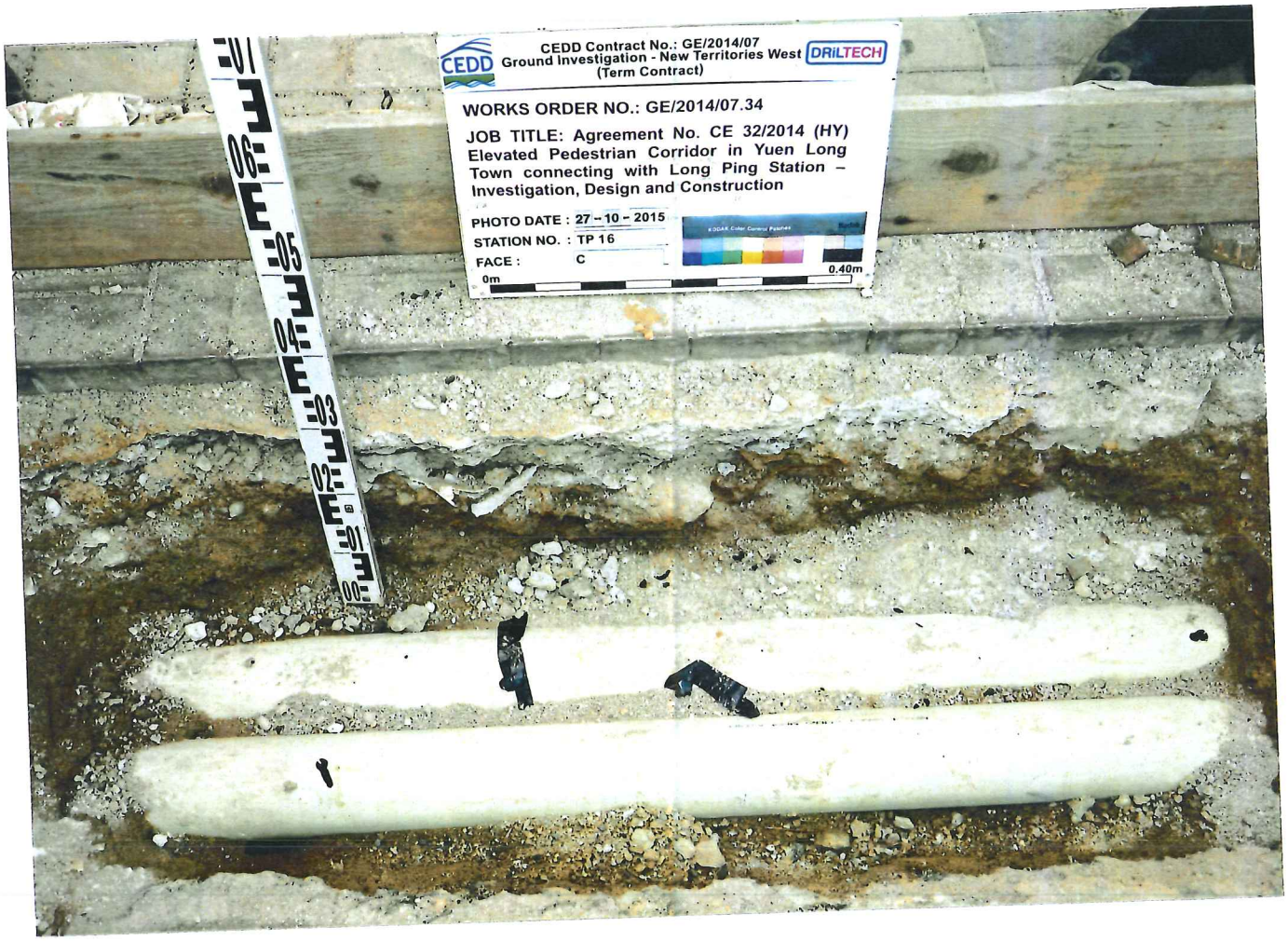
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



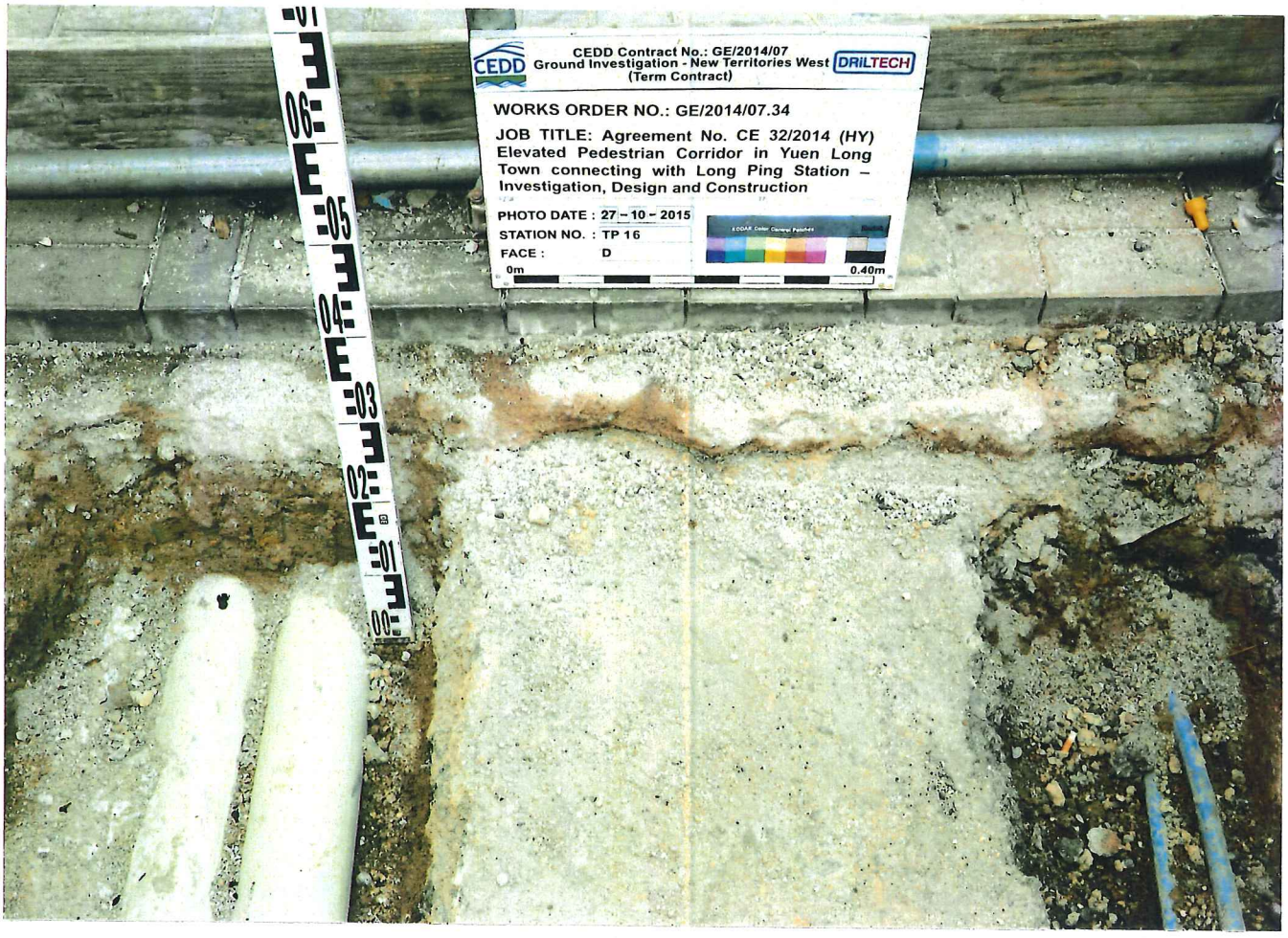
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

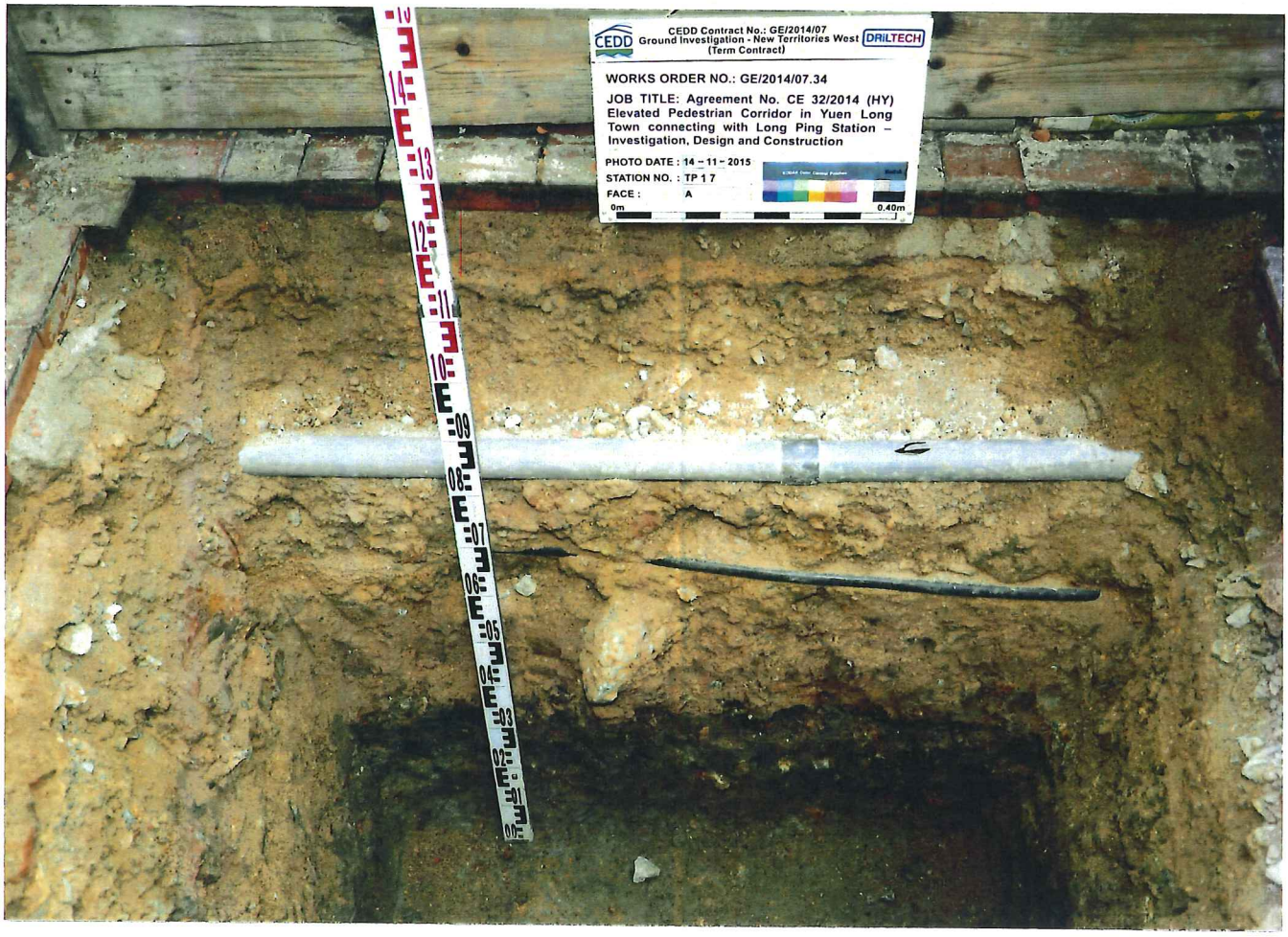


DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



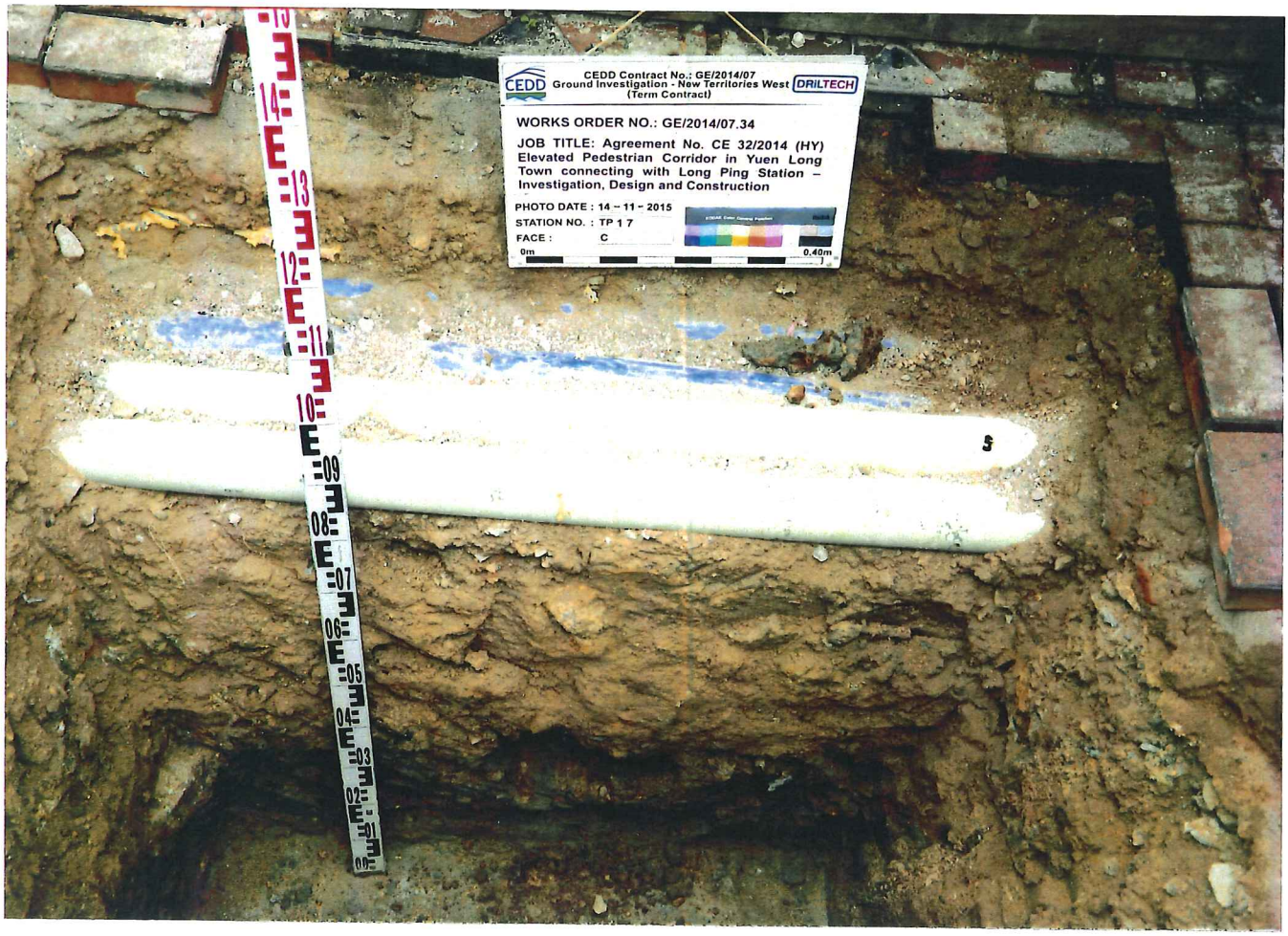
DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG, PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN, HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk



DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F. HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

DRiLTECH
DrilTech Ground Engineering Ltd.
BLK A & B, 9/F, HONG KONG SPINNERS IND. BLDG. PHASE VI,481-483 CASTLE PEAK RD, KLN. HONG KONG
TEL: 2371 0008 FAX: 2744 1037 E-Mail: driltech@driltech.com.hk WEBSITE: driltech.com.hk

Appendix E

Constant Head Permeability Test Results

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

Drillhole No. **S1-DH02**

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project :
Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

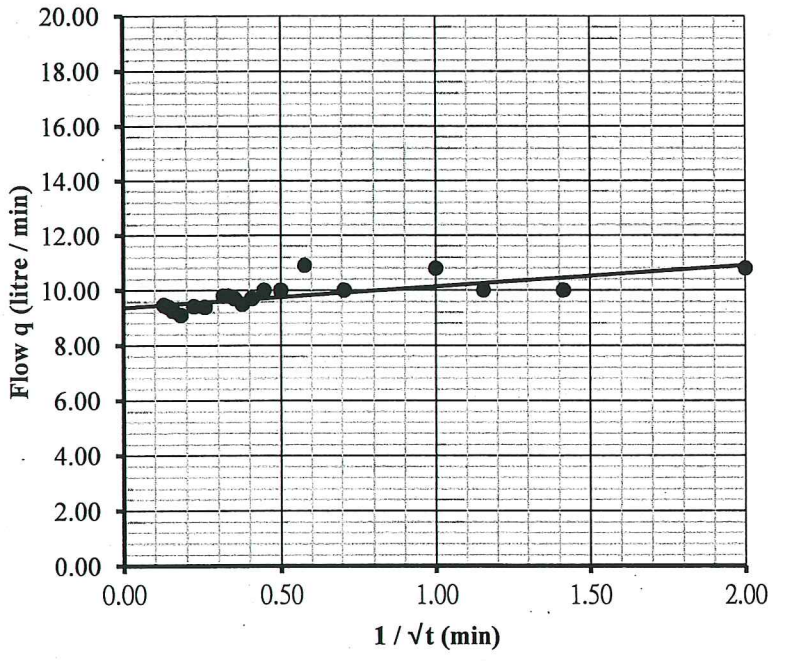
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-027

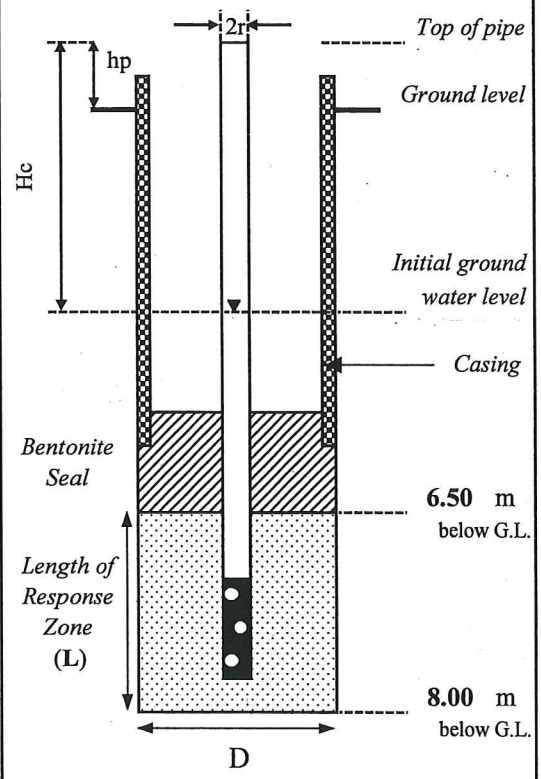
Date of Test : 25/Feb/16
Co-ordinates :
E : 820718.39
N : 833994.72

Ground Level : +0.98 mPD
Test Zone : 6.50 m to 8.00 m
Initial Water Level : 0.52 m above G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	217.0	363.8	0.00	9.40
0.25	20	2.00	0.22	219.7	410.9	10.80	9.42
0.50	25	1.41	0.20	222.2	457.5	10.00	9.32
0.75	30	1.15	0.18	224.7	503.0	10.00	9.10
1	40	1.00	0.16	227.4	595.4	10.80	9.24
2	50	0.71	0.14	237.4	689.5	10.00	9.41
3	60	0.58	0.13	248.3	784.2	10.90	9.47
4		0.50		258.3		10.00	
5		0.45		268.3		10.00	
6		0.41		278.0		9.70	
7		0.38		287.5		9.50	
8		0.35		297.2		9.70	
9		0.33		307.0		9.80	
10		0.32		316.8		9.80	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	0.90 m
Constant water head	Hc	=	0.48 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\mathrm{Ln}[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/√t tends to zero)

q = 9.37 l / min

which q = **1.56E-04** m^3 / sec

Permeability

k = q / (F Hc)

k = **8.87E-05** m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 6.50m to 8.00m: ALLUVIUM (Clayey silty fine to coarse SAND / Slightly clayey silty sandy fine to coarse GRAVEL)

Remarks :

Checked by : R. Chu
Date : 25/Feb/16

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

Drillhole No. **S1-DH03**

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project :
Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

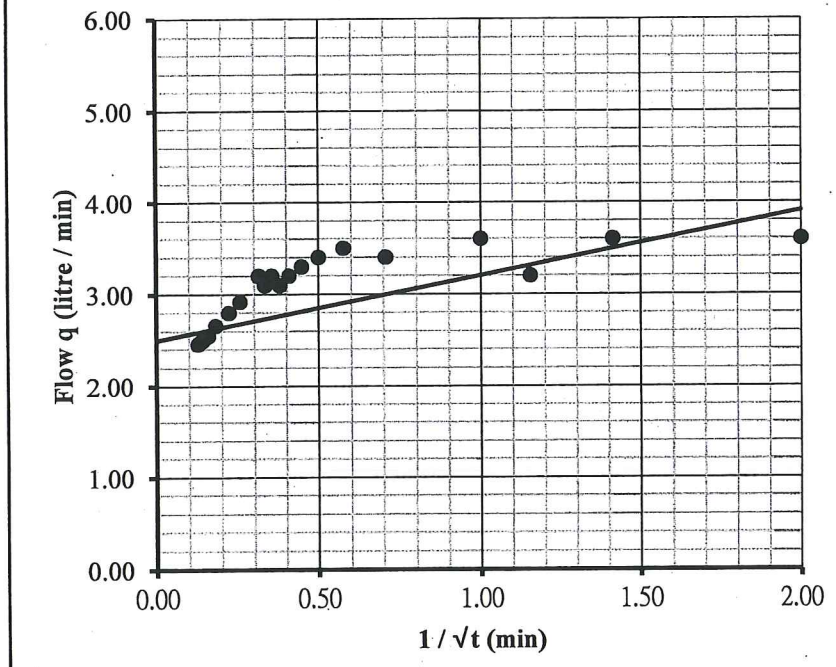
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-028

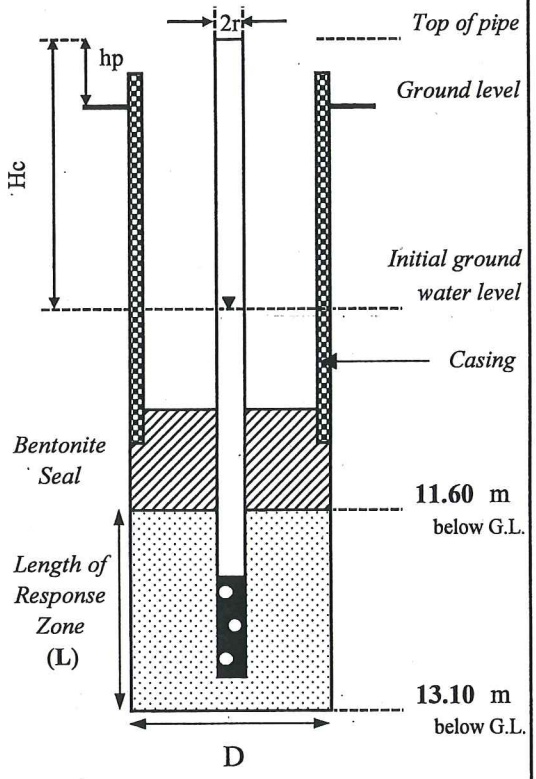
Date of Test : 22/Jan/16
Co-ordinates :
E : 820730.40
N : 834196.99

Ground Level : +0.92 mPD
Test Zone : 11.60 m to 13.10 m
Initial Water Level : 0.25 m above G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	703.0	750.5	0.00	2.92
0.25	20	2.00	0.22	703.9	764.5	3.60	2.80
0.50	25	1.41	0.20	704.8	778.7	3.60	2.84
0.75	30	1.15	0.18	705.6	792.0	3.20	2.66
1	40	1.00	0.16	706.5	817.5	3.60	2.55
2	50	0.71	0.14	709.9	842.5	3.40	2.50
3	60	0.58	0.13	713.4	867.1	3.50	2.46
4		0.50		716.8		3.40	
5		0.45		720.1		3.30	
6		0.41		723.3		3.20	
7		0.38		726.4		3.10	
8		0.35		729.6		3.20	
9		0.33		732.7		3.10	
10		0.32		735.9		3.20	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.141 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	1.10 m
Constant water head	Hc	=	0.85 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{Ln[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.49** m

From the graph, when t tends to infinity (i.e. When 1/ √t tends to zero)

q = **2.50** l / min
which q = **4.17E-05** m^3 / sec

Permeability

k = q / (F Hc)

k = 1.40E-05 m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 11.60m to 13.10m: ALLUVIUM (Slightly silty clayey fine to coarse SAND)

Remarks :

Checked by : R. Chu
Date : 22/Jan/16

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

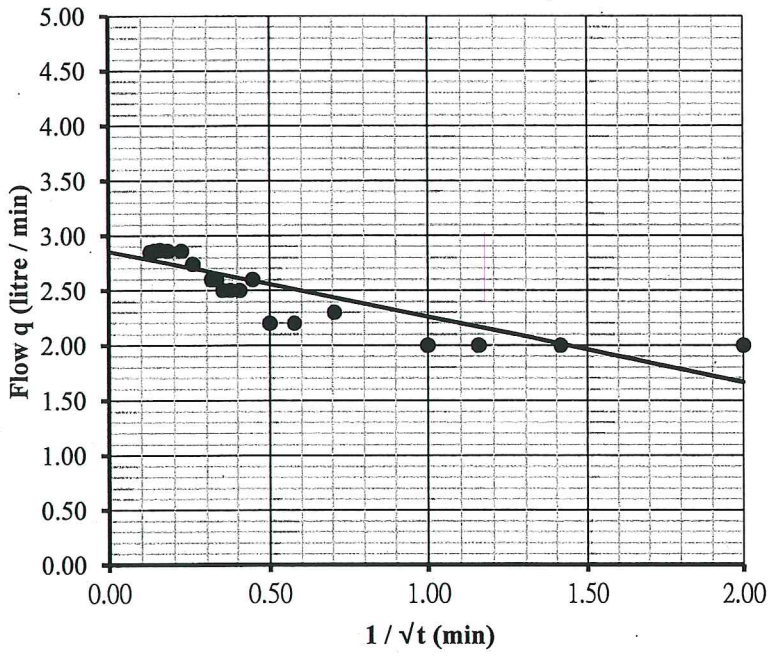
Drillhole No. **S1-DH07**

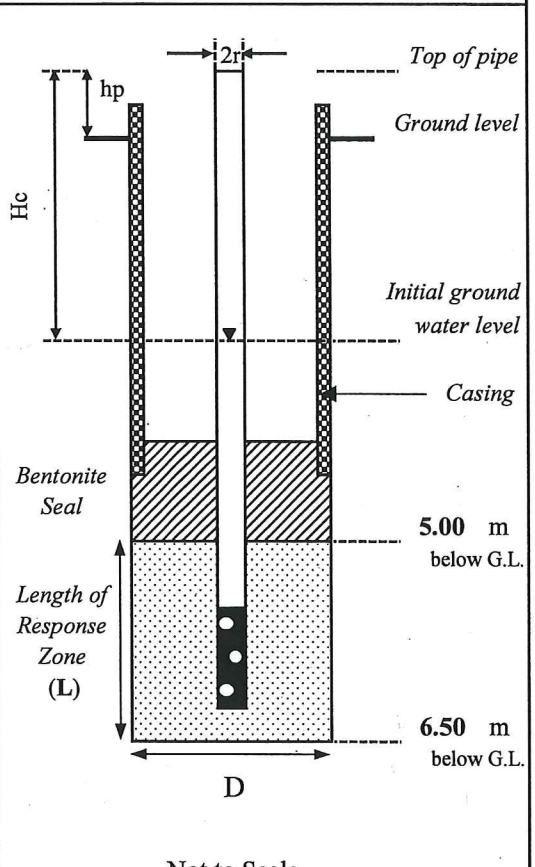
Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project : Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-028

Date of Test : 27/Nov/15
Co-ordinates :
E : 820697.12
N : 834114.81
Ground Level : +4.35 mPD
Test Zone : 5.00 m to 6.50 m
Initial Water Level : 3.75 m below G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	680.0	717.7	0.00	2.74
0.25	20	2.00	0.22	680.5	732.0	2.00	2.86
0.50	25	1.41	0.20	681.0	745.6	2.00	2.72
0.75	30	1.15	0.18	681.5	759.9	2.00	2.86
1	40	1.00	0.16	682.0	788.6	2.00	2.87
2	50	0.71	0.14	684.3	817.2	2.30	2.86
3	60	0.58	0.13	686.5	845.7	2.20	2.85
4		0.50		688.7		2.20	
5		0.45		691.3		2.60	
6		0.41		693.8		2.50	
7		0.38		696.3		2.50	
8		0.35		698.8		2.50	
9		0.33		701.4		2.60	
10		0.32		704.0		2.60	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	0.81 m
Constant water head	Hc	=	4.56 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{Ln[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/ √t tends to zero)

q = **2.86** l / min

which q = **4.77E-05** m^3 / sec

Permeability

k = q / (F Hc)

k = 2.85E-06 m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 5.00m to 6.50m: ALLUVIUM (Slightly silty very clayey fine to coarse SAND / Slightly sandy silty CLAY)

Remarks :

Checked by : R. Chu
Date : 27/Nov/15

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

Drillhole No. **S1-DH08**

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project :
Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

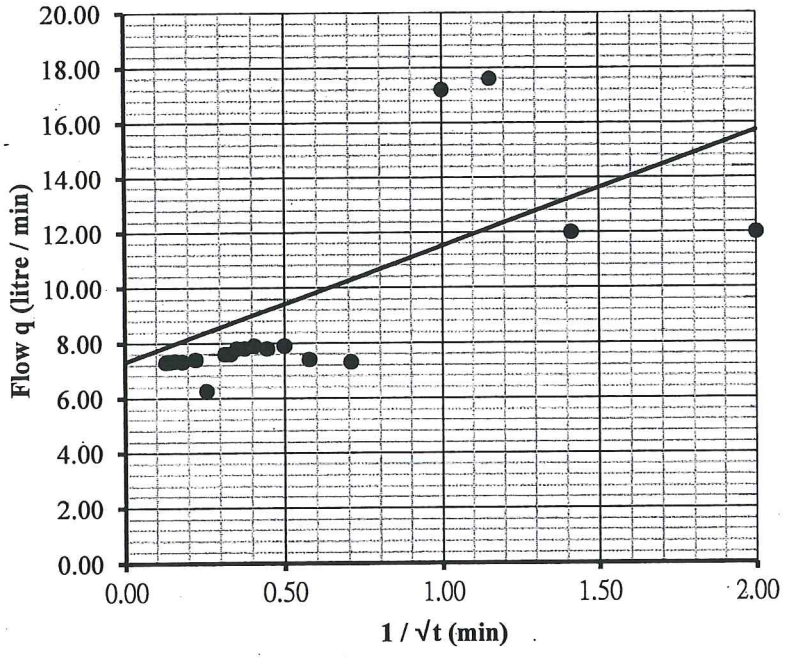
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-028

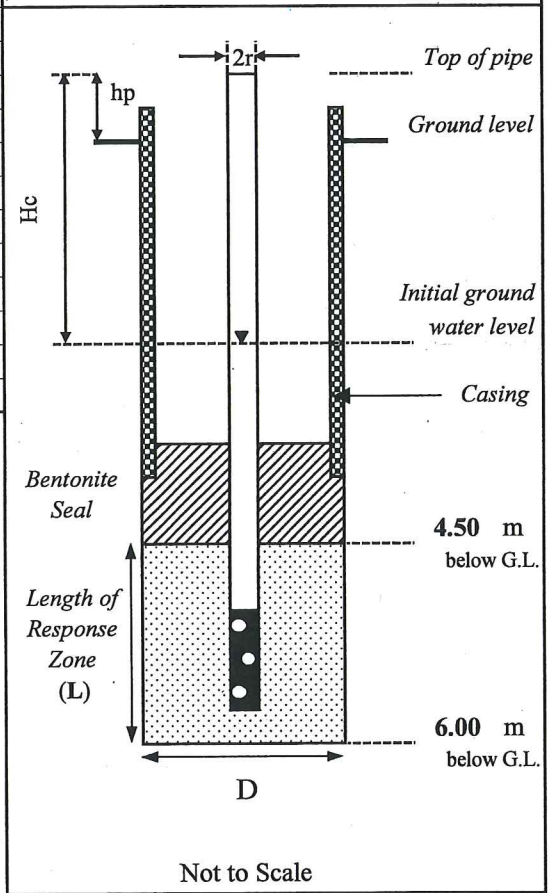
Date of Test : 29/Feb/16
Co-ordinates :
E : 820706.33
N : 834047.85

Ground Level : +0.78 mPD
Test Zone : 4.50 m to 6.00 m
Initial Water Level : 0.00 m above G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	4005.0	4120.1	0.00	6.26
0.25	20	2.00	0.22	4008.0	4157.1	12.00	7.40
0.50	25	1.41	0.20	4011.0	4193.9	12.00	7.36
0.75	30	1.15	0.18	4015.4	4230.5	17.60	7.32
1	40	1.00	0.16	4019.7	4303.9	17.20	7.34
2	50	0.71	0.14	4027.0	4376.9	7.30	7.30
3	60	0.58	0.13	4034.4	4449.8	7.40	7.29
4		0.50		4042.3		7.90	
5		0.45		4050.1		7.80	
6		0.41		4058.0		7.90	
7		0.38		4065.8		7.80	
8		0.35		4073.6		7.80	
9		0.33		4081.2		7.60	
10		0.32		4088.8		7.60	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	0.80 m
Constant water head	Hc	=	0.80 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\mathrm{Ln}[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/√t tends to zero)

q = **7.31** l / min

which q = **1.22E-04** m^3 / sec

Permeability

k = q / (F Hc)

k = 4.15E-05 m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 4.50m to 6.00m: ALLUVIUM (Slightly clayey silty fine to coarse SAND)

Remarks :

Checked by : R. Chu
Date : 29/Feb/16

DGEL\Site-F6C 11/02 STD

DRiLTECH

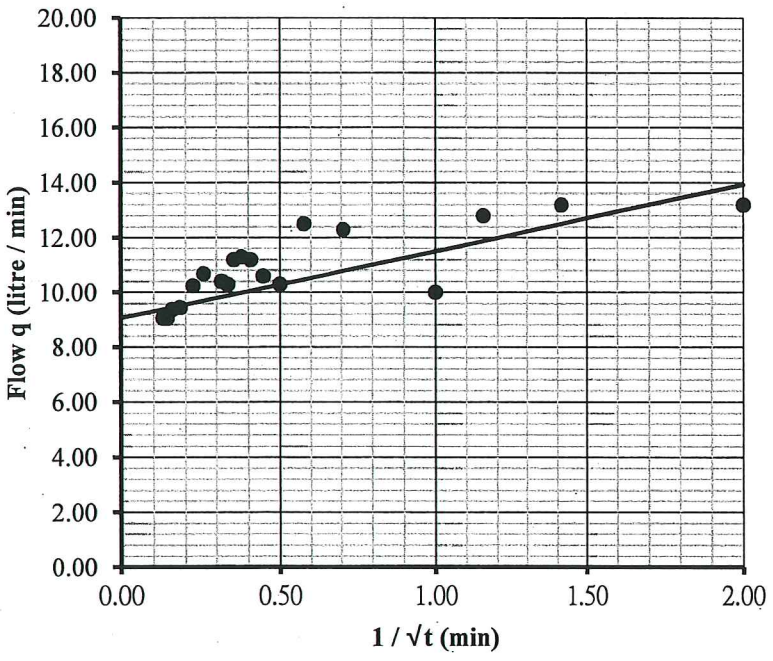
CONSTANT HEAD PERMEABILITY TEST RECORD

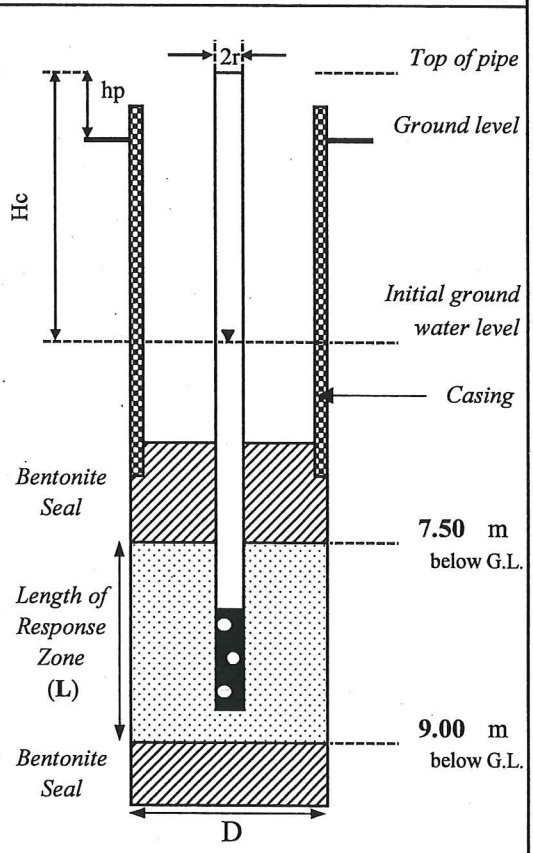
Drillhole No. **S1-DH10**

Contract No. : GE/2014/07	**Date of Test :** 17/Feb/16
Works Order No. : GE/2014/07.34	**Co-ordinates :**
Project : Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**E :** 820715.53 **N :** 833820.85
	Ground Level : +1.11 mPD
Test Supervised By : C.K. Chiu	**Test Zone :** 7.50 m to 9.00 m
Flowmeter I.D. : DT-018-028	**Initial Water Level :** 0.49 m above G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	58.0	223.8	0.00	10.68
0.25	20	2.00	0.22	61.3	275.0	13.20	10.24
0.50	25	1.41	0.20	64.6	324.7	13.20	9.94
0.75	30	1.15	0.18	67.8	371.9	12.80	9.44
1	40	1.00	0.16	70.3	465.6	10.00	9.37
2	50	0.71	0.14	82.6	556.1	12.30	9.05
3	60	0.58	0.13	95.1	646.7	12.50	9.06
4		0.50		105.4		10.30	
5		0.45		116.0		10.60	
6		0.41		127.2		11.20	
7		0.38		138.5		11.30	
8		0.35		149.7		11.20	
9		0.33		160.0		10.30	
10		0.32		170.4		10.40	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	1.20 m
Constant water head	Hc	=	0.71 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\ln[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/ √t tends to zero)

q = **9.06** l / min

which q = **1.51E-04** m^3 / sec

Permeability

k = q / (F Hc)

k = 5.80E-05 m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 7.50m to 9.00m: FILL (Slightly silty clayey sandy fine GRAVEL)

Remarks :

Checked by : R. Chu

Date : 17/Feb/16

DRiLTECH

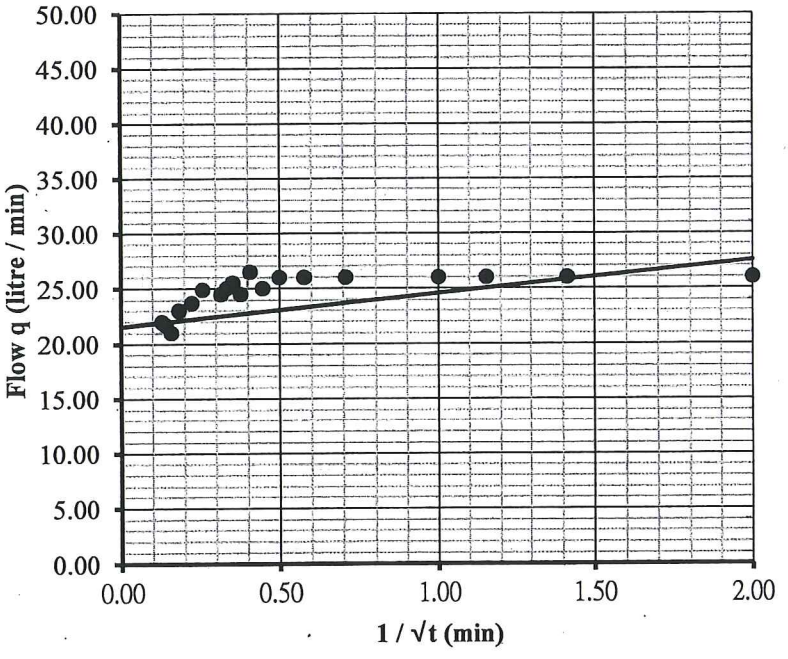
CONSTANT HEAD PERMEABILITY TEST RECORD

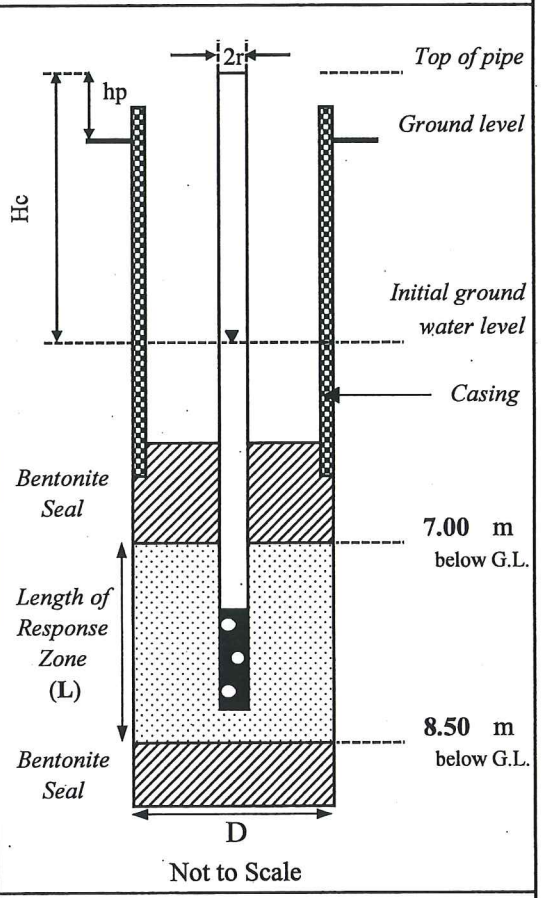
Drillhole No. **S1-DH11**

Contract No. : GE/2014/07	**Date of Test :** 01/Dec/15
Works Order No. : GE/2014/07.34	**Co-ordinates :**
Project : Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**E :** 820728.54
	N : 833792.53
	Ground Level : +4.73 mPD
Test Supervised By : C.K. Chiu	**Test Zone :** 7.00 m to 8.50 m
Flowmeter I.D. : DT-018-028	**Initial Water Level :** 2.15 m below G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	100.0	479.5	0.00	24.90
0.25	20	2.00	0.22	106.5	598.0	26.00	23.70
0.50	25	1.41	0.20	113.0	716.8	26.00	23.76
0.75	30	1.15	0.18	119.5	832.0	26.00	23.04
1	40	1.00	0.16	126.0	1042.0	26.00	21.00
2	50	0.71	0.14	152.0	1259.0	26.00	21.70
3	60	0.58	0.13	178.0	1479.0	26.00	22.00
4		0.50		204.0		26.00	
5		0.45		229.0		25.00	
6		0.41		255.5		26.50	
7		0.38		280.0		24.50	
8		0.35		305.5		25.50	
9		0.33		330.5		25.00	
10		0.32		355.0		24.50	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.141 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	1.50 m
Constant water head	Hc	=	3.65 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\mathrm{Ln}[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.49** m

From the graph, when t tends to infinity (i.e. When 1/√t tends to zero)

q = **21.57** l / min

which q = **3.60E-04** m^3 / sec

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 7.00m to 8.50m: ALLUVIUM (Slightly clayey silty fine to coarse SAND)

Permeability

k = q / (F Hc)

k = 2.82E-05 m/s

Remarks :

Checked by : R. Chu

Date : 01/Dec/15

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

Drillhole No. **S1-DH12A**

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project :
Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

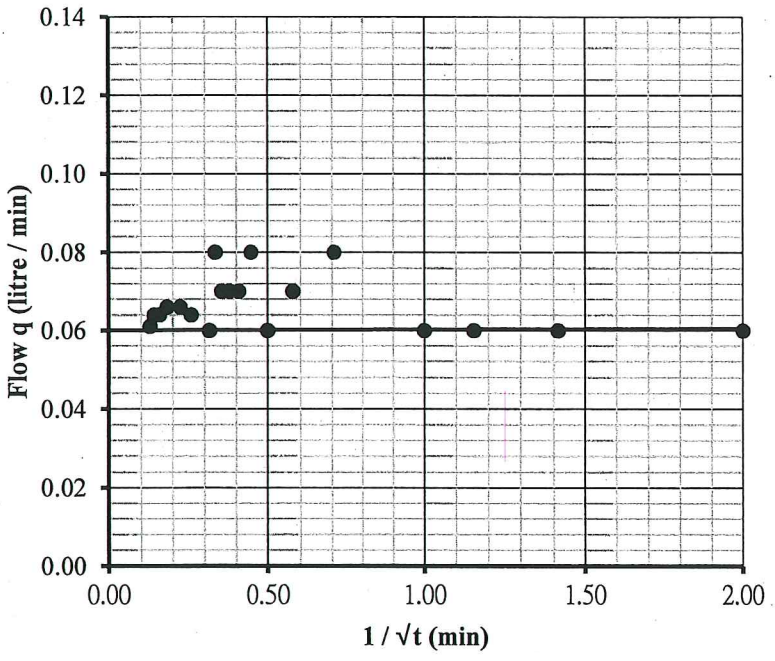
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-033-052

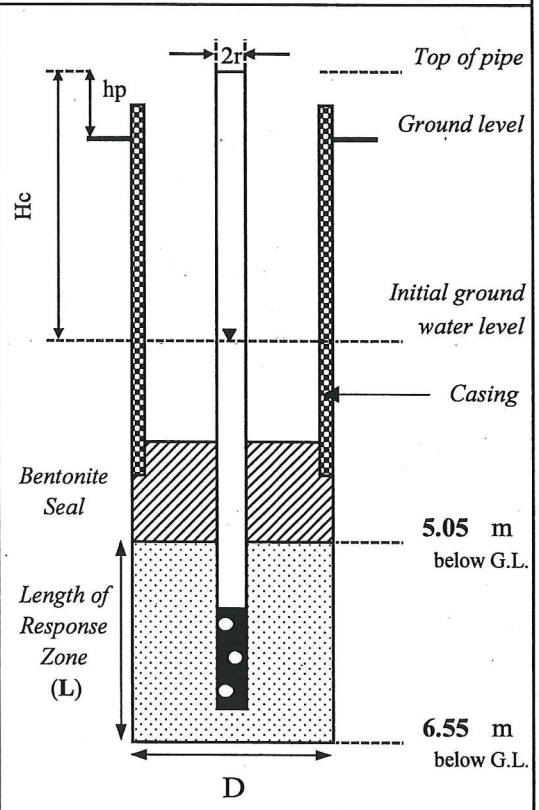
Date of Test : 20/Nov/15
Co-ordinates :
E : 820693.55
N : 833760.48

Ground Level : +5.38 mPD
Test Zone : 5.05 m to 6.55 m
Initial Water Level : 3.64 m below G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	0.000	1.020	0.00	0.06
0.25	20	2.00	0.22	0.015	1.350	0.06	0.07
0.50	25	1.41	0.20	0.030	1.680	0.06	0.07
0.75	30	1.15	0.18	0.045	2.010	0.06	0.07
1	40	1.00	0.16	0.060	2.650	0.06	0.06
2	50	0.71	0.14	0.140	3.290	0.08	0.06
3	60	0.58	0.13	0.210	3.900	0.07	0.06
4		0.50		0.270		0.06	
5		0.45		0.350		0.08	
6		0.41		0.420		0.07	
7		0.38		0.490		0.07	
8		0.35		0.560		0.07	
9		0.33		0.640		0.08	
10		0.32		0.700		0.06	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	0.43 m
Constant water head	Hc	=	4.07 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\ln[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/ √t tends to zero)

q = **0.06** l / min

which q = **1.00E-06** m^3 / sec

Permeability

k = q / (F Hc)

k = 6.70E-08 m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 5.05m to 6.55m: ALLUVIUM (Slightly sandy silty CLAY)

Remarks :

Checked by : R. Chu
Date : 20/Nov/15

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

Drillhole No. **S1-DH13**

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project :
Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

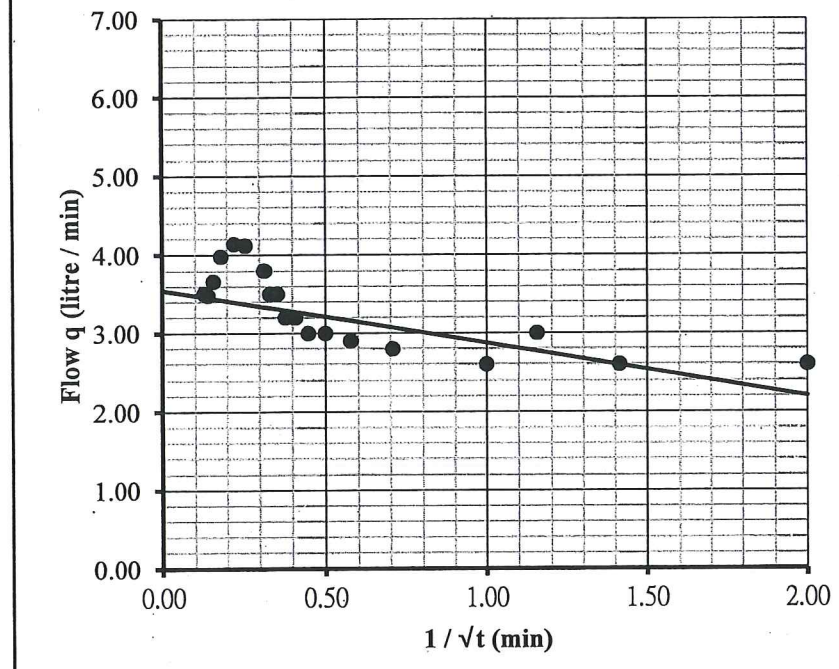
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-028

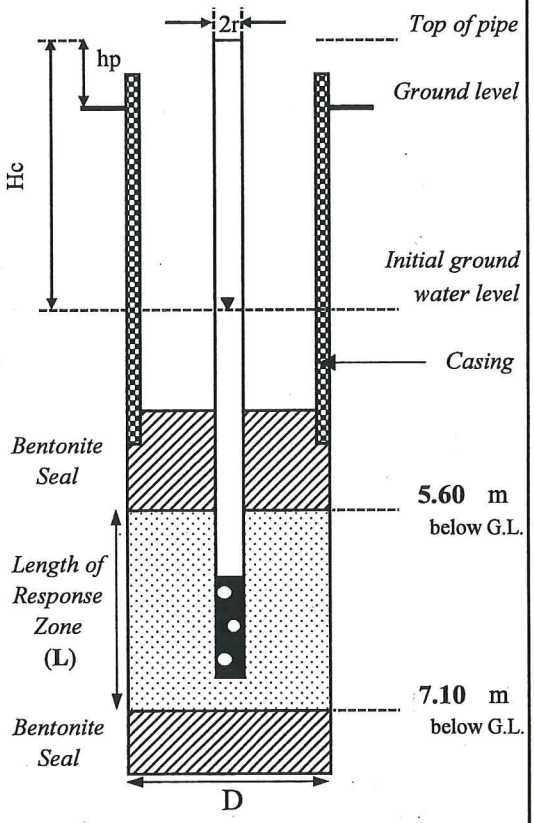
Date of Test : 04/Dec/15
Co-ordinates :
E : 820696.35
N : 833945.40

Ground Level : +4.55 mPD
Test Zone : 5.60 m to 7.10 m
Initial Water Level : 3.62 m below G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	508.0	560.2	0.00	4.12
0.25	20	2.00	0.22	508.7	580.9	2.60	4.14
0.50	25	1.41	0.20	509.3	601.2	2.60	4.06
0.75	30	1.15	0.18	510.1	621.1	3.00	3.98
1	40	1.00	0.16	510.7	657.7	2.60	3.66
2	50	0.71	0.14	513.5	692.5	2.80	3.48
3	60	0.58	0.13	516.4	727.6	2.90	3.51
4		0.50		519.4		3.00	
5		0.45		522.4		3.00	
6		0.41		525.6		3.20	
7		0.38		528.8		3.20	
8		0.35		532.3		3.50	
9		0.33		535.8		3.50	
10		0.32		539.6		3.80	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	0.37 m
Constant water head	Hc	=	3.99 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\mathrm{Ln}[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/ √t tends to zero)

q = **3.55** l / min

which q = **5.92E-05** m^3 / sec

Permeability

k = q / (F Hc)

k = **4.04E-06** m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 5.60m to 6.10m: FILL (Slightly clayey silty fine to coarse SAND)
From 6.10m to 7.10m: ALLUVIUM (Slightly clayey silty fine to coarse SAND / Silty sandy CLAY)

Remarks :

Checked by : R. Chu
Date : 04/Dec/15

DRiLTECH

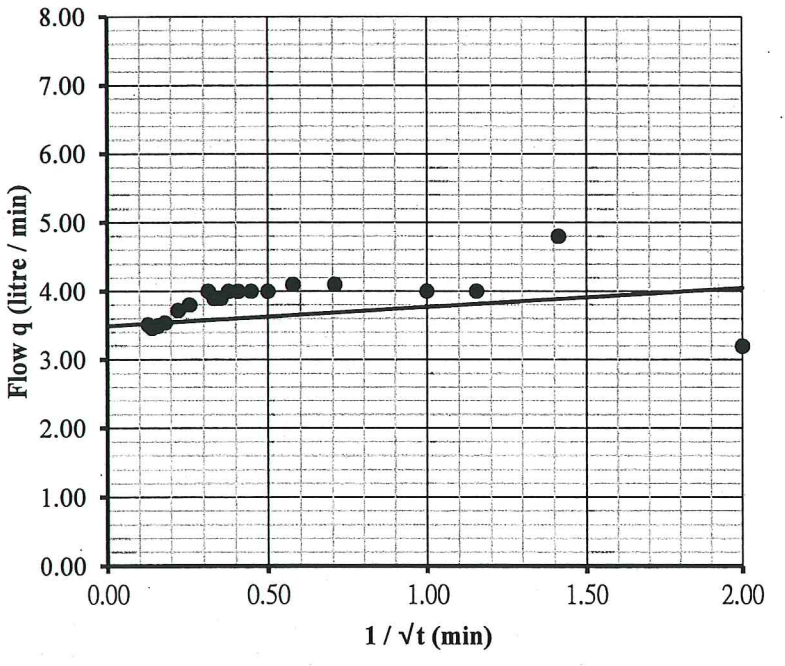
CONSTANT HEAD PERMEABILITY TEST RECORD

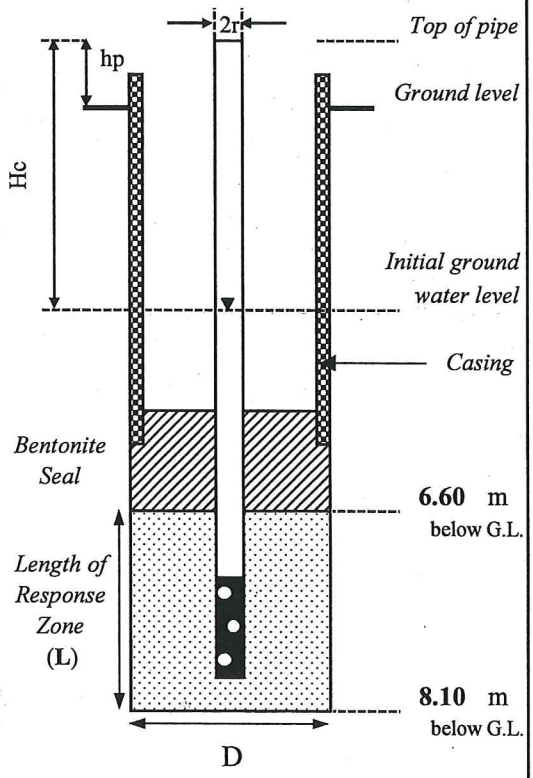
Drillhole No. S1-DH14

Contract No. : GE/2014/07	**Date of Test :** 16/Nov/15
Works Order No. : GE/2014/07.34	**Co-ordinates :**
Project : Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**E :** 820695.13 **N :** 833868.26
	Ground Level : +4.41 mPD
Test Supervised By : C.K. Chiu	**Test Zone :** 6.60 m to 8.10 m
Flowmeter I.D. : DT-018-028	**Initial Water Level :** 2.95 m below G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	439.0	498.0	0.00	3.80
0.25	20	2.00	0.22	439.8	516.6	3.20	3.72
0.50	25	1.41	0.20	441.0	534.8	4.80	3.64
0.75	30	1.15	0.18	442.0	552.5	4.00	3.54
1	40	1.00	0.16	443.0	587.4	4.00	3.49
2	50	0.71	0.14	447.1	622.0	4.10	3.46
3	60	0.58	0.13	451.2	657.1	4.10	3.51
4		0.50		455.2		4.00	
5		0.45		459.2		4.00	
6		0.41		463.2		4.00	
7		0.38		467.2		4.00	
8		0.35		471.1		3.90	
9		0.33		475.0		3.90	
10		0.32		479.0		4.00	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.141 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	1.00 m
Constant water head	Hc	=	3.95 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\ln[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.49** m

From the graph, when t tends to infinity (i.e. When 1/√t tends to zero)

q = **3.49** l / min

which q = **5.82E-05** m^3 / sec

Permeability

k = q / (F Hc)

k = **4.22E-06** m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 6.60m to 8.10m: ALLUVIUM (Slightly silty clayey fine to coarse SAND / Sligthly sandy silty CLAY)

Remarks :

Checked by : R. Chu

Date : 16/Nov/15

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

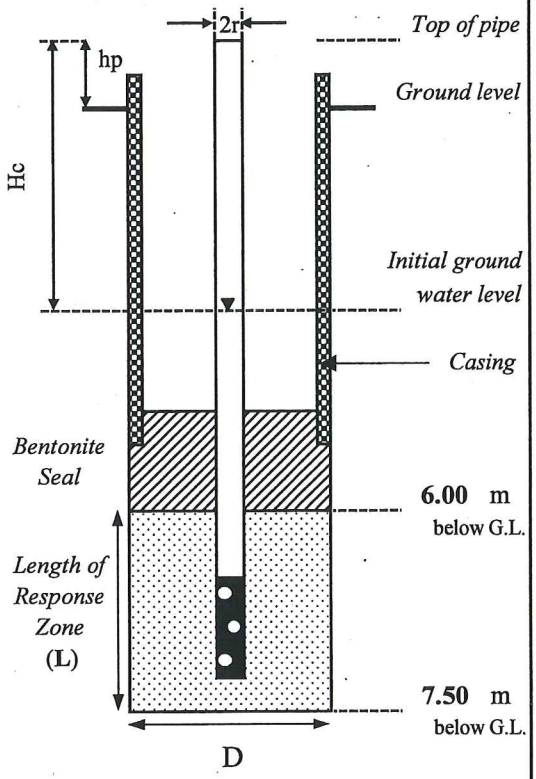
Drillhole No. **S1-DH15**

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project :
Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-028

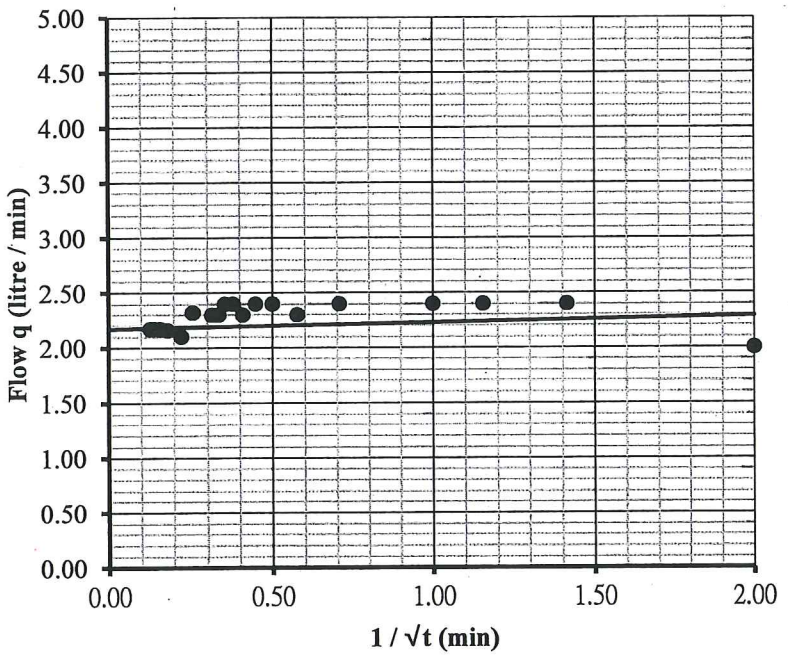
Date of Test : 19/Feb/16
Co-ordinates :
E : 820697.56
N : 833724.20
Ground Level : +1.49 mPD
Test Zone : 6.00 m to 7.50 m
Initial Water Level : 0.08 m above G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	519.6	554.7	0.00	2.32
0.25	20	2.00	0.22	520.1	565.2	2.00	2.10
0.50	25	1.41	0.20	520.7	577.0	2.40	2.36
0.75	30	1.15	0.18	521.3	587.8	2.40	2.16
1	40	1.00	0.16	521.9	609.5	2.40	2.17
2	50	0.71	0.14	524.3	631.2	2.40	2.17
3	60	0.58	0.13	526.6	652.9	2.30	2.17
4		0.50		529.0		2.40	
5		0.45		531.4		2.40	
6		0.41		533.7		2.30	
7		0.38		536.1		2.40	
8		0.35		538.5		2.40	
9		0.33		540.8		2.30	
10		0.32		543.1		2.30	

Internal diameter of the pipe	2r =	0.040 m
Internal diameter of the drillhole	D =	0.165 m
Length of test zone	L =	1.50 m
Length of stick out of the pipe	hp =	0.88 m
Constant water head	Hc =	0.80 m



Not to Scale



Intake Factor

$$F = \frac{2.4\pi L}{\mathrm{Ln}[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/ √t tends to zero)

q = **2.17** l / min

which q = **3.62E-05** m^3 / sec

Permeability

k = q / (F Hc)

k = **1.23E-05** m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 6.00m to 7.50m: ALLUVIUM (Clayey silty fine to coarse SAND)

Remarks :

Checked by : R. Chu
Date : 19/Feb/16

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

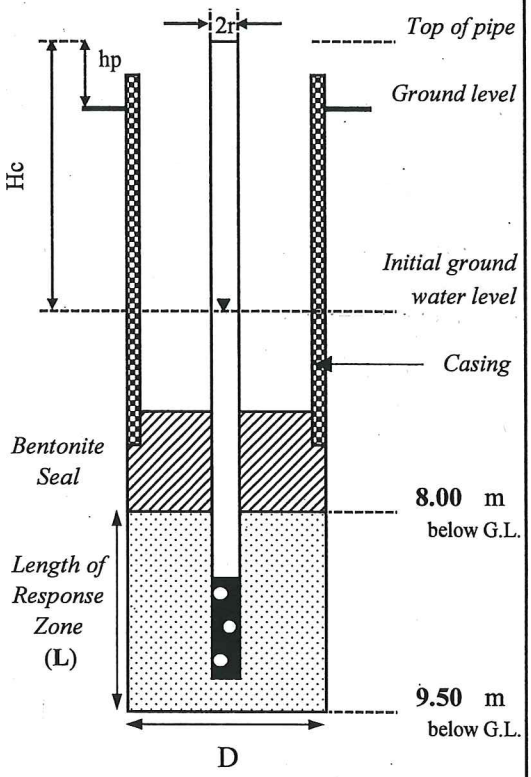
Drillhole No. **S2-DH11**

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project : Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-028

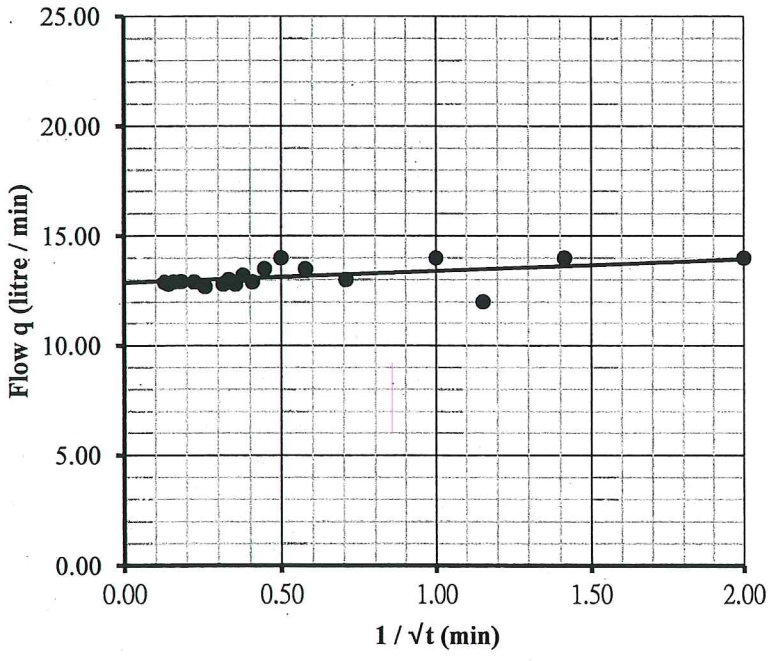
Date of Test : 11/Jan/16
Co-ordinates :
E : 820723.07
N : 833882.60
Ground Level : +1.29 mPD
Test Zone : 8.00 m to 9.50 m
Initial Water Level : 0.51 m above G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	750.0	945.6	0.00	12.68
0.25	20	2.00	0.22	753.5	1010.1	14.00	12.90
0.50	25	1.41	0.20	757.0	1074.2	14.00	12.82
0.75	30	1.15	0.18	760.0	1138.8	12.00	12.92
1	40	1.00	0.16	763.5	1267.8	14.00	12.90
2	50	0.71	0.14	776.5	1395.8	13.00	12.80
3	60	0.58	0.13	790.0	1524.6	13.50	12.88
4		0.50		804.0		14.00	
5		0.45		817.5		13.50	
6		0.41		830.4		12.90	
7		0.38		843.6		13.20	
8		0.35		856.4		12.80	
9		0.33		869.4		13.00	
10		0.32		882.2		12.80	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	1.30 m
Constant water head	Hc	=	0.79 m



Not to Scale



Intake Factor

$$F = \frac{2.4\pi L}{\ln[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/√t tends to zero)

q = **12.86** l / min

which q = **2.14E-04** m^3 / sec

Permeability

k = q / (F Hc)

k = 7.40E-05 m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 8.00m to 9.50m: ALLUVIUM (Slightly clayey silty fine to coarse SAND)

Remarks :

Checked by : R. Chu
Date : 11/Jan/16

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

Drillhole No. **S2-DH15**

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project :
Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

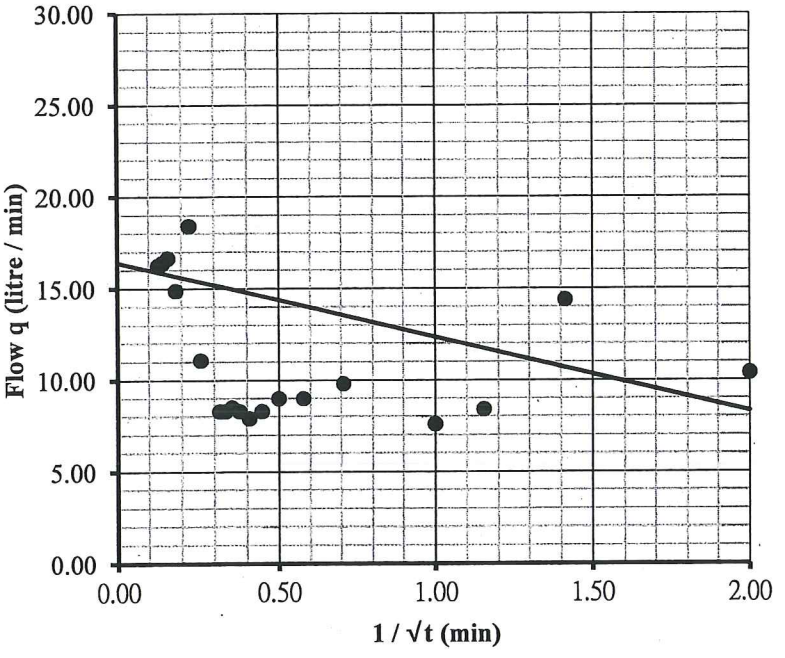
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-028

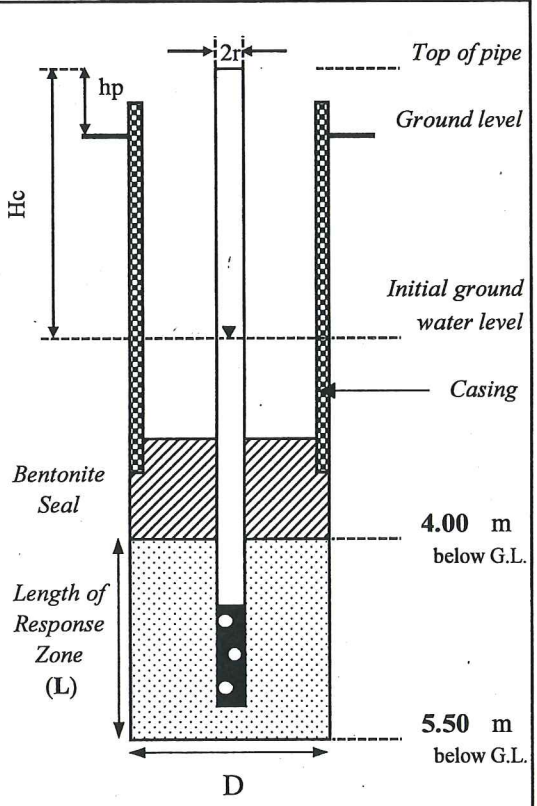
Date of Test : 21/Jan/16
Co-ordinates :
E : 820718.61
N : 833754.06

Ground Level : +1.39 mPD
Test Zone : 4.00 m to 5.50 m
Initial Water Level : 0.33 m above G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	670.0	813.0	0.00	11.08
0.25	20	2.00	0.22	672.6	905.0	10.40	18.40
0.50	25	1.41	0.20	676.2	973.0	14.40	13.60
0.75	30	1.15	0.18	678.3	1047.4	8.40	14.88
1	40	1.00	0.16	680.2	1214.0	7.60	16.66
2	50	0.71	0.14	690.0	1378.0	9.80	16.40
3	60	0.58	0.13	699.0	1540.5	9.00	16.25
4		0.50		708.0		9.00	
5		0.45		716.3		8.30	
6		0.41		724.2		7.90	
7		0.38		732.5		8.30	
8		0.35		741.0		8.50	
9		0.33		749.3		8.30	
10		0.32		757.6		8.30	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	1.02 m
Constant water head	Hc	=	0.72 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\ln[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/ √t tends to zero)

q = **16.44** l / min

which q = **2.74E-04** m^3 / sec

Permeability

k = q / (F Hc)

k = 1.04E-04 m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 4.00m to 5.50m: ALLUVIUM (Sandy fine GRAVEL)

Remarks :

Checked by : R. Chu
Date : 21/Jan/16

DRiLTECH

CONSTANT HEAD PERMEABILITY TEST RECORD

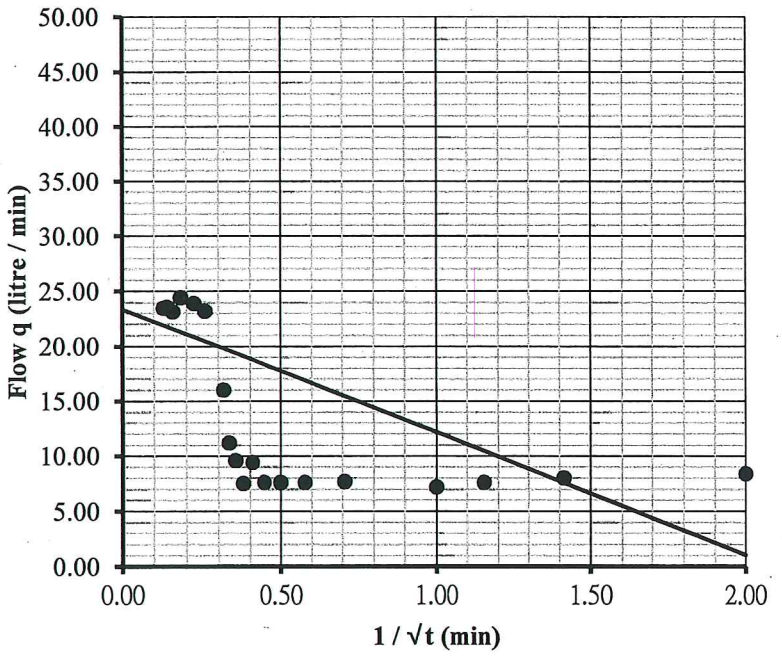
Drillhole No. **S2-DH16**

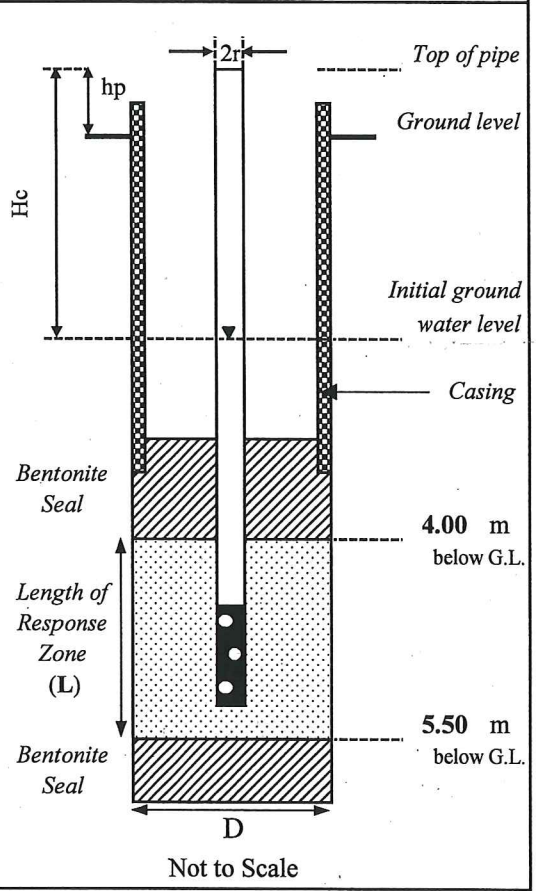
Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project : Agreement No. CE 32/2014 (HY), Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction
Test Supervised By : C.K. Chiu
Flowmeter I.D. : DT-018-028

Date of Test : 05/Feb/16
Co-ordinates :
E : 820722.84
N : 833725.85
Ground Level : +1.52 mPD
Test Zone : 4.00 m to 5.50 m
Initial Water Level : 0.18 m above G.L.

Elapsed Time t (min)		1/√t (min)		Intake Flow Q (litre)		Flow q dQ/dt (litre / min)	
0	15	0.00	0.26	940.0	1148.0	0.00	23.20
0.25	20	2.00	0.22	942.1	1267.5	8.40	23.90
0.50	25	1.41	0.20	944.1	1389.0	8.00	24.30
0.75	30	1.15	0.18	946.0	1511.1	7.60	24.42
1	40	1.00	0.16	947.8	1742.5	7.20	23.14
2	50	0.71	0.14	955.5	1978.0	7.70	23.55
3	60	0.58	0.13	963.1	2212.5	7.60	23.45
4		0.50		970.7		7.60	
5		0.45		978.3		7.60	
6		0.41		987.7		9.40	
7		0.38		995.2		7.50	
8		0.35		1004.8		9.60	
9		0.33		1016.0		11.20	
10		0.32		1032.0		16.00	

Internal diameter of the pipe	2r	=	0.040 m
Internal diameter of the drillhole	D	=	0.165 m
Length of test zone	L	=	1.50 m
Length of stick out of the pipe	hp	=	1.60 m
Constant water head	Hc	=	1.42 m





Not to Scale

Intake Factor

$$F = \frac{2.4\pi L}{\mathrm{Ln}[1.2L/D + \sqrt{(1+(1.2L/D)^2)}]}$$

F = **3.67** m

From the graph, when t tends to infinity (i.e. When 1/√t tends to zero)

q = **23.38** l / min

which q = **3.90E-04** m^3 / sec

Permeability

k = q / (F Hc)

k = 7.48E-05 m/s

Filter Material : Marble Stone

Material Surrounding Response Zone :

From 4.00m to 5.50m: ALLUVIUM (Slightly clayey silty fine to coarse SAND)

Remarks :

Checked by : R. Chu
Date : 05/Feb/16

Appendix F

In-situ Density Test Results

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港黃竹坑道37號利達中心12樓
12/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel: (852) 2873 6860
Fax: (852) 2555 7533

HOKLAS 028 TEST

Test Report

Report No.:	15FS111009
Page:	1 of 4
Date of Issue:	12/11/2015

On Field Density Determination

Tested in Accordance With: GEOSPEC 3, 2001, Clause 11.1

Our job no.:	15FS111009	W.O.no.:	GE/2014/07.34
Contract no.:	GE/2014/07		
Project title:	Ground Investigation - New Territories West (Term Contract)		
Project location:	Agreement No. CE 32/2014(HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction Ground Investigation		
Customer:	Civil Engineering and Development Department		
Contractor:	DrilTech Ground Engineering Limited		
Test location:	0.5m		
Drillhole/Trial pit no.:	TP01	Sample depth (m):	0.5 TO -
Sample Type:	Refer to G.I. Record	Sample origin:	Refer to G.I. Record
Groundwater level:	Groundwater not encountered	Name and affiliation of the person who located the test location:	-
Date sample received:	10/11/2015	Date test(s) commenced:	10/11/2015
Weather and environmental conditions of time of test:	Cloudy	Date test(s) completed:	12/11/2015
Customer sample description:	-		
Lab sample description:	Greyish brown, silty, clayey, gravelly SAND		
Assumed density of concrete	Mg/m³ -	Assumed density of rock	Mg/m³ -
Assumed density of brick	Mg/m³ -	Bulk density of sand used	Mg/m³ 1.260

Test data

In-situ wet density of soil

Customer sample no.		TP01(0.5m)		-		-		-			
Lab sample no.		1		-		-		-			
Mass of wet soil from hole	g	1921		-		-		-			
Mass of sand before pouring	g	3600		-		-		-			
Mass of sand after pouring	g	1933		-		-		-			
Mass of sand in cone	g	358		-		-		-			
Mass of concrete from hole	g	-		-		-		-			
Mass of rock from hole	g	-		-		-		-			
Mass of brick from hole	g	-		-		-		-			
Excess Mass of sand $m_a'(V'p_a)$	g	-		-		-		-			
Mass of sand in hole	g	1309.00		-		-		-			
Wet density of soil	Mg/m³	1.85		-		-		-			
Percentage of concrete retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-		
Percentage of rock retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-		
Percentage of brick retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-		

Moisture content determined by OVEN

GEOSPEC 3, 2001,Clause 5.2

Date received: 10/11/2015 Date of test: 11/11/2015-12/11/2015 Grouping of soils: Medium-grained soils

Oven drying at	°C	105	-	-	-
The duration of oven drying	hours	24	-	-	-
Mass of wet soil + tin	g	675.9	-	-	-
Mass of dry soil + tin	g	624.8	-	-	-
Mass of tin	g	184.7	-	-	-
Mass of water	g	51.10	-	-	-
Mass of dry soil	g	440.10	-	-	-
Moisture content	%	12	-	-	-

In-situ dry density of soil

Dry density of soil	Mg/m³	1.66	-	-	-

Remarks: -

Checked by: Lam Lam

Approved signatory: Huang Jian Min/Yeung Chi San

Form No.:SRRP 009-1/Issue 1/Rev. B/01/11/2007

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港黃竹坑道37號利達中心12樓
12/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel: (852) 2873 6860
Fax: (852) 2555 7533

HOKLAS 028 TEST

Test Report

On Field Density Determination

Report No.:	15FS111009
Page:	2 of 4
Date of Issue:	12/11/2015

Tested in Accordance With: GEOSPEC 3, 2001, Clause 11.1

Our job no.:	15FS111009	W.O.no.:	GE/2014/07.34
Contract no.:	GE/2014/07		
Project title:	Ground Investigation - New Territories West (Term Contract)		
Project location:	Agreement No. CE 32/2014(HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction Ground Investigation		
Customer:	Civil Engineering and Development Department		
Contractor:	DrilTech Ground Engineering Limited		
Test location:	0.5m		
Drillhole/Trial pit no.:	TP08	Sample depth (m):	0.5 TO -
Sample Type:	Refer to G.I. Record	Sample origin:	Refer to G.I. Record
Groundwater level:	Groundwater not encountered	Name and affiliation of the person who located the test location:	-
Date sample received:	10/11/2015	Date test(s) commenced:	10/11/2015
Weather and environmental conditions of time of test:	Cloudy	Date test(s) completed:	12/11/2015
Customer sample description:	-		
Lab sample description:	Greyish brown, silty, clayey, gravelly SAND		
Assumed density of concrete	Mg/m³ -	Assumed density of rock	Mg/m³ -
Assumed density of brick	Mg/m³ -	Bulk density of sand used	Mg/m³ 1.260

Test data

In-situ wet density of soil

Customer sample no.		TP08(0.5m)	-	-	-
Lab sample no.		2	-	-	-
Mass of wet soil from hole	g	1846	-	-	-
Mass of sand before pouring	g	3600	-	-	-
Mass of sand after pouring	g	2010	-	-	-
Mass of sand in cone	g	358	-	-	-
Mass of concrete from hole	g	-	-	-	-
Mass of rock from hole	g	-	-	-	-
Mass of brick from hole	g	-	-	-	-
Excess Mass of sand $m_a'(V'p_a)$	g	-	-	-	-
Mass of sand in hole	g	1232.00	-	-	-
Wet density of soil	Mg/m³	1.89	-	-	-
Percentage of concrete retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -
Percentage of rock retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -
Percentage of brick retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -

Moisture content determined by OVEN

GEOSPEC 3, 2001,Clause 5.2

Date received: 10/11/2015	Date of test:	11/11/2015-12/11/2015	Grouping of soils:	Medium-grained soils	
Oven drying at	°C	105	-	-	-
The duration of oven drying	hours	24	-	-	-
Mass of wet soil + tin	g	642.6	-	-	-
Mass of dry soil + tin	g	600.3	-	-	-
Mass of tin	g	188.3	-	-	-
Mass of water	g	42.30	-	-	-
Mass of dry soil	g	412.00	-	-	-
Moisture content	%	10	-	-	-

In-situ dry density of soil

Dry density of soil	Mg/m³	1.71	-	-	-

Remarks: -

Checked by: Lam Lam Approved signatory: Huang Jian Min/Yeung Chi San

Form No.:SRRP 009-1/Issue 1/Rev. B/01/11/2007

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港黃竹坑道37號利達中心12樓
12/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel: (852) 2873 6860
Fax: (852) 2555 7533

HOKLAS 028 TEST

Test Report

On Field Density Determination

Report No.:	15FS102414
Page:	1 of 3
Date of Issue:	28/10/2015

Tested in Accordance With: GEOSPEC 3, 2001, Clause 11.1

Our job no.:	15FS102414	W.O.no.:	GE/2014/07.34
Contract no.:	GE/2014/07		
Project title:	Ground Investigation - New Territories West (Term Contract)		
Project location:	Agreement No. CE 32/2014(HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction Ground Investigation		
Customer:	Civil Engineering and Development Department		
Contractor:	DrilTech Ground Engineering Limited		
Test location:	0.5m		
Drillhole/Trial pit no.:	TP10	Sample depth (m):	0.5 TO -
Sample Type:	Refer to G.I. Record	Sample origin:	Refer to G.I. Record
Groundwater level:	Groundwater not encountered	Name and affiliation of the person who located the test location:	-
Date sample received:	24/10/2015	Date test(s) commenced:	24/10/2015
Weather and environmental conditions of time of test:	Sunny	Date test(s) completed:	27/10/2015
Customer sample description:	-		
Lab sample description:	Greyish brown, silty, clayey, gravelly SAND		
Assumed density of concrete	Mg/m³ -	Assumed density of rock	Mg/m³ -
Assumed density of brick	Mg/m³ -	Bulk density of sand used	Mg/m³ 1.257

Test data

In-situ wet density of soil

Customer sample no.		TP10(0.5m)		-		-		-		
Lab sample no.		1		-		-		-		
Mass of wet soil from hole	g	2014		-		-		-		
Mass of sand before pouring	g	3600		-		-		-		
Mass of sand after pouring	g	1905		-		-		-		
Mass of sand in cone	g	360		-		-		-		
Mass of concrete from hole	g	-		-		-		-		
Mass of rock from hole	g	-		-		-		-		
Mass of brick from hole	g	-		-		-		-		
Excess Mass of sand $m_a'(V'p_a)$	g	-		-		-		-		
Mass of sand in hole	g	1335.00		-		-		-		
Wet density of soil	Mg/m³	1.90		-		-		-		
Percentage of concrete retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-	
Percentage of rock retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-	
Percentage of brick retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-	

Moisture content determined by OVEN

GEOSPEC 3, 2001,Clause 5.2

Date received:	24/10/2015	Date of test:	26/10/2015-27/10/2015	Grouping of soils:	Medium-grained soils
Oven drying at	°C	105	-	-	-
The duration of oven drying	hours	24	-	-	-
Mass of wet soil + tin	g	596.8	-	-	-
Mass of dry soil + tin	g	558.5	-	-	-
Mass of tin	g	187.4	-	-	-
Mass of water	g	38.30	-	-	-
Mass of dry soil	g	371.10	-	-	-
Moisture content	%	10	-	-	-

In-situ dry density of soil

Dry density of soil	Mg/m³	1.72	-	-	-

Remarks: -

Checked by: Lam Lam

Approved signatory: Huang Jian Min/Yeung Chi San

Form No.:SRRP 009-1/Issue 1/Rev. B/01/11/2007

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港黃竹坑道37號利達中心12樓
12/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel: (852) 2873 6860
Fax: (852) 2555 7533

HOKLAS 028 TEST

Test Report

On Field Density Determination

Report No.:	15FS102414
Page:	2 of 3
Date of Issue:	28/10/2015

Tested in Accordance With: GEOSPEC 3, 2001, Clause 11.1

Our job no.:	15FS102414	W.O.no.:	GE/2014/07.34
Contract no.:	GE/2014/07		
Project title:	Ground Investigation - New Territories West (Term Contract)		
Project location:	Agreement No. CE 32/2014(HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction Ground Investigation		
Customer:	Civil Engineering and Development Department		
Contractor:	DrilTech Ground Engineering Limited		
Test location:	0.5m		
Drillhole/Trial pit no.:	TP11	Sample depth (m):	0.5 TO -
Sample Type:	Refer to G.I. Record	Sample origin:	Refer to G.I. Record
Groundwater level:	Groundwater not encountered	Name and affiliation of the person who located the test location:	-
Date sample received:	24/10/2015	Date test(s) commenced:	24/10/2015
Weather and environmental conditions of time of test:	Sunny	Date test(s) completed:	27/10/2015
Customer sample description:	-		
Lab sample description:	Greyish brown, silty, clayey, gravelly SAND		
Assumed density of concrete	Mg/m³ -	Assumed density of rock	Mg/m³ -
Assumed density of brick	Mg/m³ -	Bulk density of sand used	Mg/m³ 1.257

Test data

In-situ wet density of soil

Customer sample no.		TP11(0.5m)		-		-		-	
Lab sample no.		2		-		-		-	
Mass of wet soil from hole	g	1927		-		-		-	
Mass of sand before pouring	g	3600		-		-		-	
Mass of sand after pouring	g	1984		-		-		-	
Mass of sand in cone	g	360		-		-		-	
Mass of concrete from hole	g	-		-		-		-	
Mass of rock from hole	g	-		-		-		-	
Mass of brick from hole	g	-		-		-		-	
Excess Mass of sand $m_a'(V'p_a)$	g	-		-		-		-	
Mass of sand in hole	g	1256.00		-		-		-	
Wet density of soil	Mg/m³	1.93		-		-		-	
Percentage of concrete retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-
Percentage of rock retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-
Percentage of brick retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-

Moisture content determined by OVEN

GEOSPEC 3, 2001,Clause 5.2

Date received: 24/10/2015	Date of test:	26/10/2015-27/10/2015	Grouping of soils:	Medium-grained soils
Oven drying at	°C	105	-	-
The duration of oven drying	hours	24	-	-
Mass of wet soil + tin	g	523.3	-	-
Mass of dry soil + tin	g	494.0	-	-
Mass of tin	g	184.2	-	-
Mass of water	g	29.30	-	-
Mass of dry soil	g	309.80	-	-
Moisture content	%	9.5	-	-

In-situ dry density of soil

Dry density of soil	Mg/m³	1.76	-	-

Remarks: -

Checked by: Lam Lam

Approved signatory: Huang Jian Min/Yeung Chi San

Form No.:SRRP 009-1/Issue 1/Rev. B/01/11/2007

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港黃竹坑道37號利達中心12樓
12/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel: (852) 2873 6860
Fax: (852) 2555 7533

HOKLAS 028 TEST

Test Report

On Field Density Determination

Report No.:	15FS102414
Page:	3 of 3
Date of Issue:	28/10/2015

Tested in Accordance With: GEOSPEC 3, 2001, Clause 11.1

Our job no.:	15FS102414	W.O.no.:	GE/2014/07.34
Contract no.:	GE/2014/07		
Project title:	Ground Investigation - New Territories West (Term Contract)		
Project location:	Agreement No. CE 32/2014(HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction Ground Investigation		
Customer:	Civil Engineering and Development Department		
Contractor:	DrilTech Ground Engineering Limited		
Test location:	0.5m		
Drillhole/Trial pit no.:	TP12	Sample depth (m):	0.5 TO -
Sample Type:	Refer to G.I. Record	Sample origin:	Refer to G.I. Record
Groundwater level:	Groundwater not encountered	Name and affiliation of the person who located the test location:	-
Date sample received:	24/10/2015	Date test(s) commenced:	24/10/2015
Weather and environmental conditions of time of test:	Sunny	Date test(s) completed:	27/10/2015
Customer sample description:	-		
Lab sample description:	Greyish brown, silty, clayey, gravelly SAND		
Assumed density of concrete	Mg/m³ -	Assumed density of rock	Mg/m³ -
Assumed density of brick	Mg/m³ -	Bulk density of sand used	Mg/m³ 1.257

Test data

In-situ wet density of soil

Customer sample no.		TP12(0.5m)	-	-	-
Lab sample no.		3	-	-	-
Mass of wet soil from hole	g	1958	-	-	-
Mass of sand before pouring	g	3600	-	-	-
Mass of sand after pouring	g	1955	-	-	-
Mass of sand in cone	g	360	-	-	-
Mass of concrete from hole	g	-	-	-	-
Mass of rock from hole	g	-	-	-	-
Mass of brick from hole	g	-	-	-	-
Excess Mass of sand $m_a'(V'p_a)$	g	-	-	-	-
Mass of sand in hole	g	1285.00	-	-	-
Wet density of soil	Mg/m³	1.92	-	-	-
Percentage of concrete retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -
Percentage of rock retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -
Percentage of brick retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -

Moisture content determined by OVEN

GEOSPEC 3, 2001,Clause 5.2

Date received: 24/10/2015 Date of test: 26/10/2015-27/10/2015 Grouping of soils: Medium-grained soils

Oven drying at	°C	105	-	-	-
The duration of oven drying	hours	24	-	-	-
Mass of wet soil + tin	g	642.9	-	-	-
Mass of dry soil + tin	g	598.3	-	-	-
Mass of tin	g	186.7	-	-	-
Mass of water	g	44.60	-	-	-
Mass of dry soil	g	411.60	-	-	-
Moisture content	%	11	-	-	-

In-situ dry density of soil

Dry density of soil	Mg/m³	1.73	-	-	-

Remarks: -

-- END --

Checked by: Lam Lam Approved signatory: Huang Jian Min/Yeung Chi San

Form No.:SRRP 009-1/Issue 1/Rev. B/01/11/2007

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港黃竹坑道37號利達中心12樓
12/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel: (852) 2873 6860
Fax: (852) 2555 7533

HOKLAS 028 TEST

Test Report

Report No.:	15FS111009
Page:	3 of 4
Date of Issue:	12/11/2015

On Field Density Determination

Tested in Accordance With: GEOSPEC 3, 2001, Clause 11.1

Our job no.:	15FS111009	W.O.no.:	GE/2014/07.34
Contract no.:	GE/2014/07		
Project title:	Ground Investigation - New Territories West (Term Contract)		
Project location:	Agreement No. CE 32/2014(HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction Ground Investigation		
Customer:	Civil Engineering and Development Department		
Contractor:	DrilTech Ground Engineering Limited		
Test location:	0.5m		
Drillhole/Trial pit no.:	TP13	Sample depth (m):	0.5 TO -
Sample Type:	Refer to G.I. Record	Sample origin:	Refer to G.I. Record
Groundwater level:	Groundwater not encountered	Name and affiliation of the person who located the test location:	-
Date sample received:	10/11/2015	Date test(s) commenced:	10/11/2015
Weather and environmental conditions of time of test:	Cloudy	Date test(s) completed:	12/11/2015
Customer sample description:	-		
Lab sample description:	Greyish brown, silty, clayey, gravelly SAND		
Assumed density of concrete	Mg/m³ -	Assumed density of rock	Mg/m³ -
Assumed density of brick	Mg/m³ -	Bulk density of sand used	Mg/m³ 1.260

Test data

In-situ wet density of soil

Customer sample no.		TP13(0.5m)		-		-		-	
Lab sample no.		3		-		-		-	
Mass of wet soil from hole	g	1953		-		-		-	
Mass of sand before pouring	g	3600		-		-		-	
Mass of sand after pouring	g	1925		-		-		-	
Mass of sand in cone	g	358		-		-		-	
Mass of concrete from hole	g	-		-		-		-	
Mass of rock from hole	g	-		-		-		-	
Mass of brick from hole	g	-		-		-		-	
Excess Mass of sand $m_a'(V'p_a)$	g	-		-		-		-	
Mass of sand in hole	g	1317.00		-		-		-	
Wet density of soil	Mg/m³	1.87		-		-		-	
Percentage of concrete retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-
Percentage of rock retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-
Percentage of brick retained on 37.5 mm | 20 mm sieve	%	-	-	-	-	-	-	-	-

Moisture content determined by OVEN

GEOSPEC 3, 2001,Clause 5.2

Date received: 10/11/2015	Date of test:	11/11/2015-12/11/2015	Grouping of soils:	Medium-grained soils	
Oven drying at	°C	105	-	-	-
The duration of oven drying	hours	24	-	-	-
Mass of wet soil + tin	g	617.2	-	-	-
Mass of dry soil + tin	g	574.7	-	-	-
Mass of tin	g	182.3	-	-	-
Mass of water	g	42.50	-	-	-
Mass of dry soil	g	392.40	-	-	-
Moisture content	%	11	-	-	-

In-situ dry density of soil

Dry density of soil	Mg/m³	1.69	-	-	-

Remarks: -

Checked by: Lam Lam Approved signatory: Huang Jian Min/Yeung Chi San

Form No.:SRRP 009-1/Issue 1/Rev. B/01/11/2007

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港黃竹坑道37號利達中心12樓
12/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel: (852) 2873 6860
Fax: (852) 2555 7533

HOKLAS 028 TEST

Test Report

Report No.:	15FS110205
Page:	1 of 1
Date of Issue:	04/11/2015

On Field Density Determination

Tested in Accordance With: GEOSPEC 3, 2001, Clause 11.1

Our job no.:	15FS110205	W.O.no.:	GE/2014/07.34
Contract no.:	GE/2014/07		
Project title:	Ground Investigation - New Territories West (Term Contract)		
Project location:	Agreement No. CE 32/2014(HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction Ground Investigation		
Customer:	Civil Engineering and Development Department		
Contractor:	DrilTech Ground Engineering Limited		
Test location:	0.5m		
Drillhole/Trial pit no.:	TP15	Sample depth (m):	0.5 TO -
Sample Type:	Refer to G.I. Record	Sample origin:	Refer to G.I. Record
Groundwater level:	Groundwater not encountered	Name and affiliation of the person who located the test location:	-
Date sample received:	02/11/2015	Date test(s) commenced:	02/11/2015
Weather and environmental conditions of time of test:	Sunny	Date test(s) completed:	04/11/2015
Customer sample description:	-		
Lab sample description:	Yellowish brown, slightly silty & clayey, gravelly SAND		
Assumed density of concrete	Mg/m³ -	Assumed density of rock	Mg/m³ -
Assumed density of brick	Mg/m³ -	Bulk density of sand used	Mg/m³ 1.259

Test data

In-situ wet density of soil

Customer sample no.		TP15(0.5m)	-	-	-
Lab sample no.		1	-	-	-
Mass of wet soil from hole	g	1924	-	-	-
Mass of sand before pouring	g	3600	-	-	-
Mass of sand after pouring	g	1881	-	-	-
Mass of sand in cone	g	357	-	-	-
Mass of concrete from hole	g	-	-	-	-
Mass of rock from hole	g	-	-	-	-
Mass of brick from hole	g	-	-	-	-
Excess Mass of sand $m_a'(V'p_a)$	g	-	-	-	-
Mass of sand in hole	g	1362.00	-	-	-
Wet density of soil	Mg/m³	1.78	-	-	-
Percentage of concrete retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -
Percentage of rock retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -
Percentage of brick retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -

Moisture content determined by OVEN

GEOSPEC 3, 2001,Clause 5.2

Date received: 02/11/2015		Date of test: 03/11/2015-04/11/2015	Grouping of soils:	Medium-grained soils
Oven drying at	°C	105	-	-
The duration of oven drying	hours	24	-	-
Mass of wet soil + tin	g	583.9	-	-
Mass of dry soil + tin	g	533.4	-	-
Mass of tin	g	188.2	-	-
Mass of water	g	50.50	-	-
Mass of dry soil	g	345.20	-	-
Moisture content	%	15	-	-

In-situ dry density of soil

Dry density of soil	Mg/m³	1.55	-	-

Remarks: -

-- END --

Checked by: Lam Lam Approved signatory: Huang Jian Min/Yeung Chi San

Form No.:SRRP 009-1/Issue 1/Rev. B/01/11/2007

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港黃竹坑道37號利達中心12樓
12/F., Leader Centre, 37 Wong Chuk Hang Road, Aberdeen, Hong Kong.
E-mail: smec@cigismec.com Website: www.cigismec.com
Tel: (852) 2873 6860
Fax: (852) 2555 7533

HOKLAS 028 TEST

Test Report

Report No.:	15FS111009
Page:	4 of 4
Date of Issue:	12/11/2015

On Field Density Determination

Tested in Accordance With: GEOSPEC 3, 2001, Clause 11.1

Our job no.:	15FS111009	W.O.no.:	GE/2014/07.34
Contract no.:	GE/2014/07		
Project title:	Ground Investigation - New Territories West (Term Contract)		
Project location:	Agreement No. CE 32/2014(HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction Ground Investigation		
Customer:	Civil Engineering and Development Department		
Contractor:	DrilTech Ground Engineering Limited		
Test location:	0.5m		
Drillhole/Trial pit no.:	TP17	Sample depth (m):	0.5 TO -
Sample Type:	Refer to G.I. Record	Sample origin:	Refer to G.I. Record
Groundwater level:	Groundwater not encountered	Name and affiliation of the person who located the test location:	-
Date sample received:	10/11/2015	Date test(s) commenced:	10/11/2015
Weather and environmental conditions of time of test:	Cloudy	Date test(s) completed:	12/11/2015
Customer sample description:	-		
Lab sample description:	Greyish brown, silty, clayey, gravelly SAND		
Assumed density of concrete	Mg/m³ -	Assumed density of rock	Mg/m³ -
Assumed density of brick	Mg/m³ -	Bulk density of sand used	Mg/m³ 1.260

Test data

In-situ wet density of soil

Customer sample no.		TP17(0.5m)	-	-	-
Lab sample no.		4	-	-	-
Mass of wet soil from hole	g	1814	-	-	-
Mass of sand before pouring	g	3600	-	-	-
Mass of sand after pouring	g	2007	-	-	-
Mass of sand in cone	g	358	-	-	-
Mass of concrete from hole	g	-	-	-	-
Mass of rock from hole	g	-	-	-	-
Mass of brick from hole	g	-	-	-	-
Excess Mass of sand $m_a'(V'p_a)$	g	-	-	-	-
Mass of sand in hole	g	1235.00	-	-	-
Wet density of soil	Mg/m³	1.85	-	-	-
Percentage of concrete retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -
Percentage of rock retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -
Percentage of brick retained on 37.5 mm | 20 mm sieve	%	- -	- -	- -	- -

Moisture content determined by OVEN

GEOSPEC 3, 2001,Clause 5.2

Date received: 10/11/2015	Date of test:	11/11/2015-12/11/2015	Grouping of soils:	Medium-grained soils
Oven drying at	°C	105	-	-
The duration of oven drying	hours	24	-	-
Mass of wet soil + tin	g	563.4	-	-
Mass of dry soil + tin	g	522.4	-	-
Mass of tin	g	185.8	-	-
Mass of water	g	41.00	-	-
Mass of dry soil	g	336.60	-	-
Moisture content	%	12	-	-

In-situ dry density of soil

Dry density of soil	Mg/m³	1.65	-	-	-

Remarks: -

-- END --

Checked by: Lam Lam Approved signatory: Huang Jian Min/Yeung Chi San

Form No.:SRRP 009-1/Issue 1/Rev. B/01/11/2007

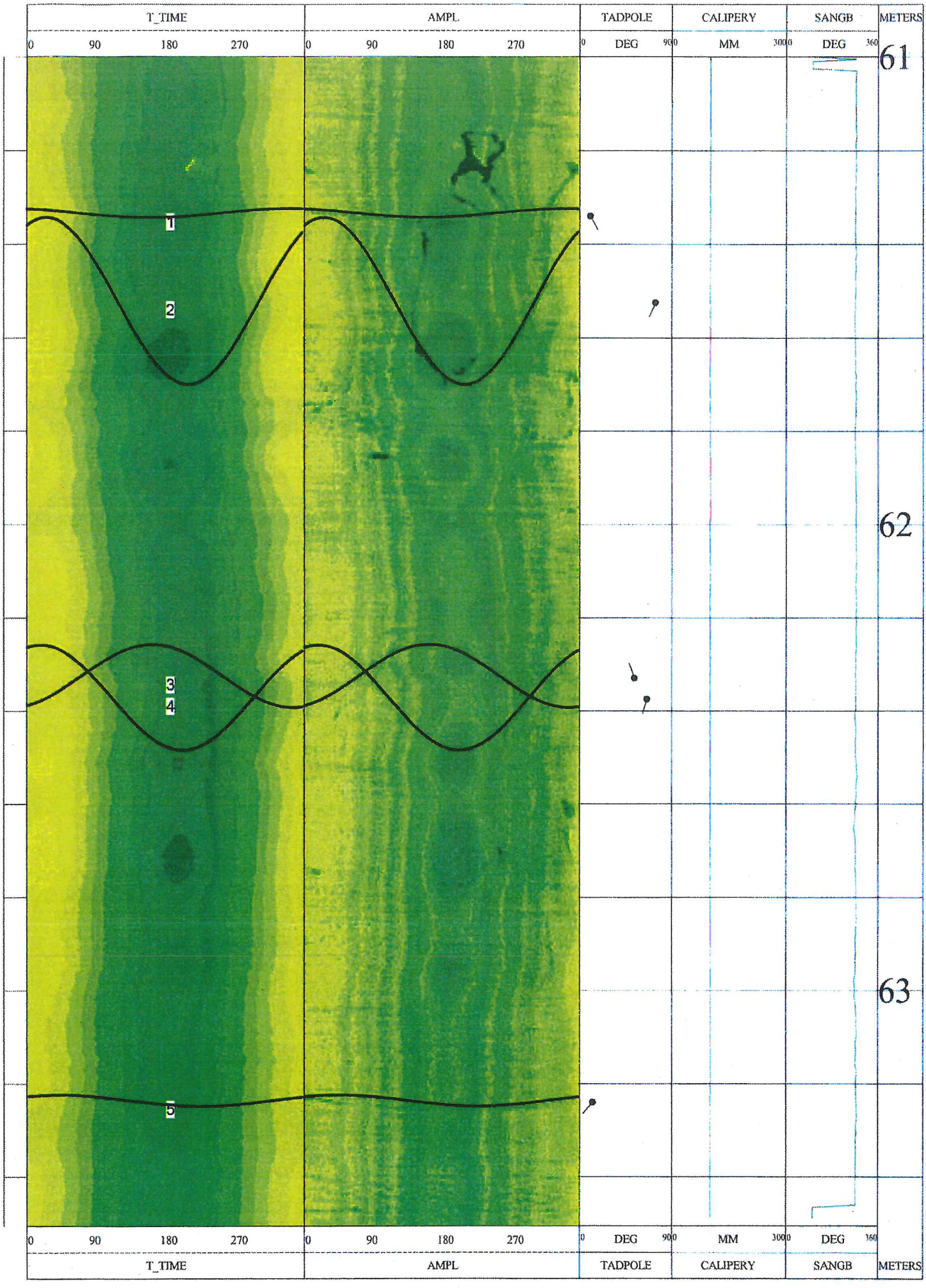
Appendix G

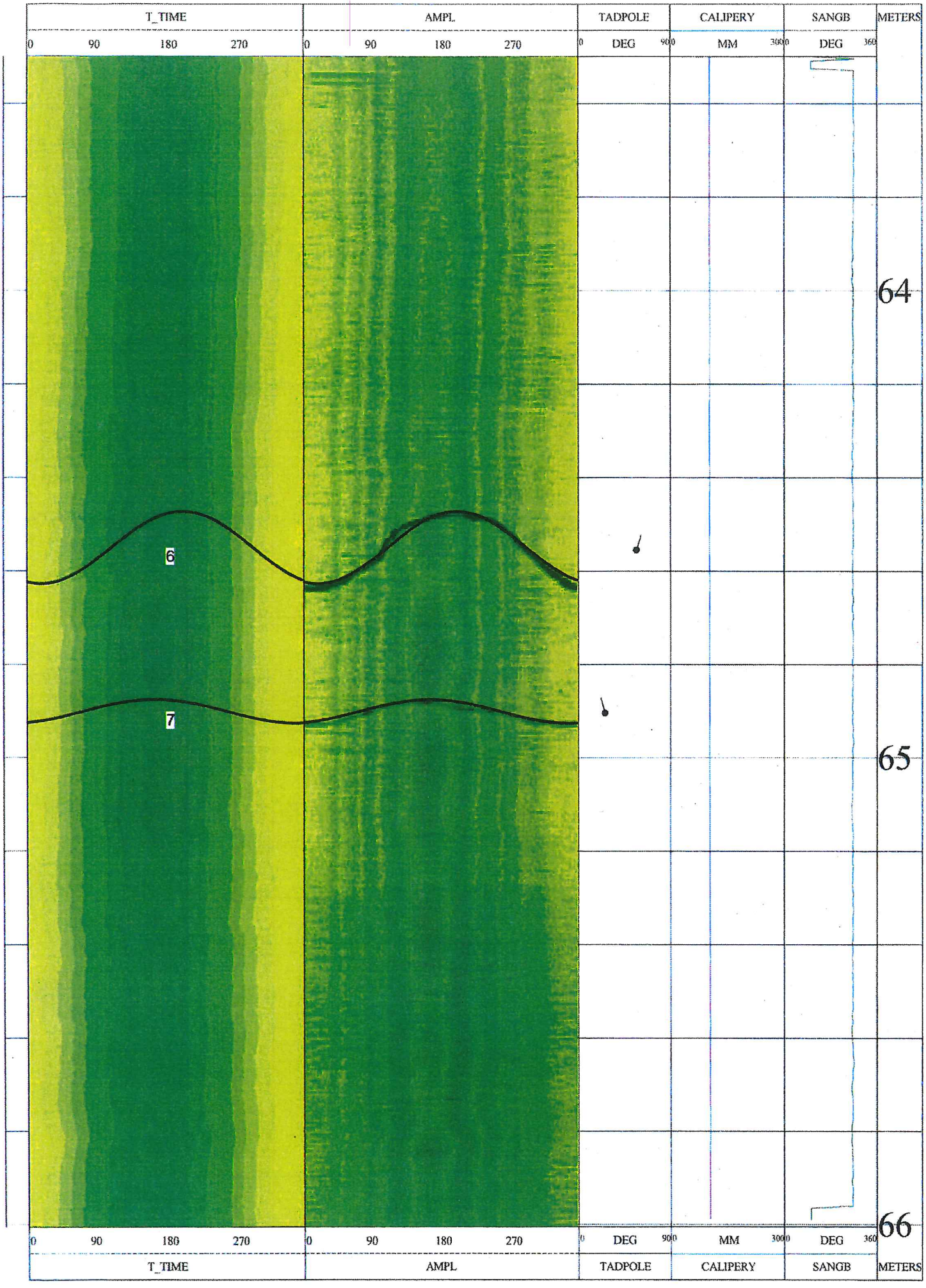
Digital Acoustic Borehole Televiewer Survey Records (Travel Time and Amplitude, Joints Interpretation and Stereographic Plots Records)

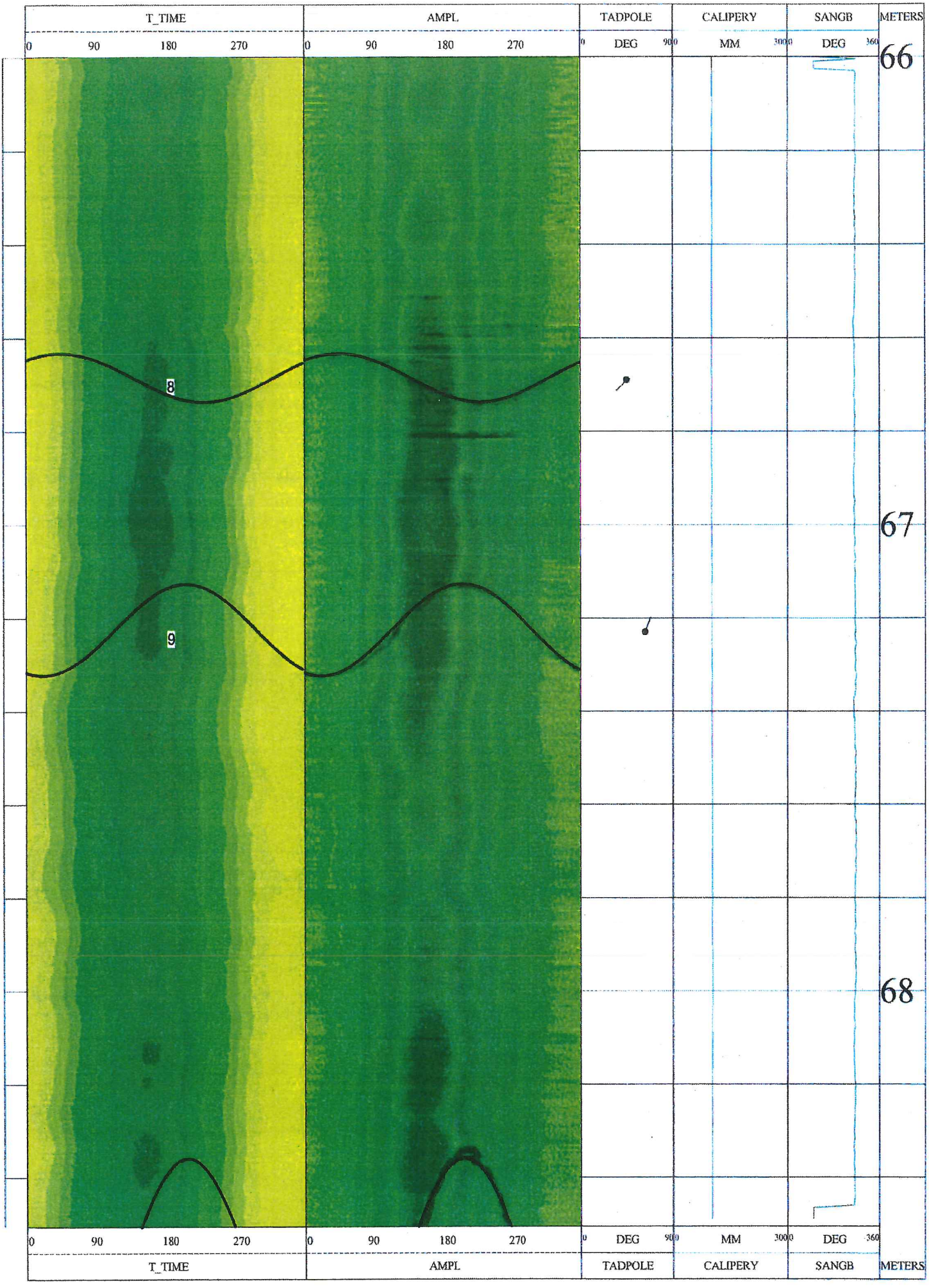
Company	: DrilTech Ground Engineering Ltd		
Borehole No.	: S1-DH02		
Contract	: Ground Investigation - New Territories West (Term Contract)		
Contract No.	: GE/2014/07.34		
Location	: Yuen Long		
Test Date	: 03-03-2016	Permanent Datum	: None
Depth Driller	: 72.1m	Elev.Perm.Datum	: None
Log Bottom	: 71m	Log Measured From	: GL
Log Top	: 61m	Drl Measured From	: GL
Casing Driller	: 52.02m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A
Remark	: All directions are relative to magnetic north from Hong Kong Metric Grid System North		

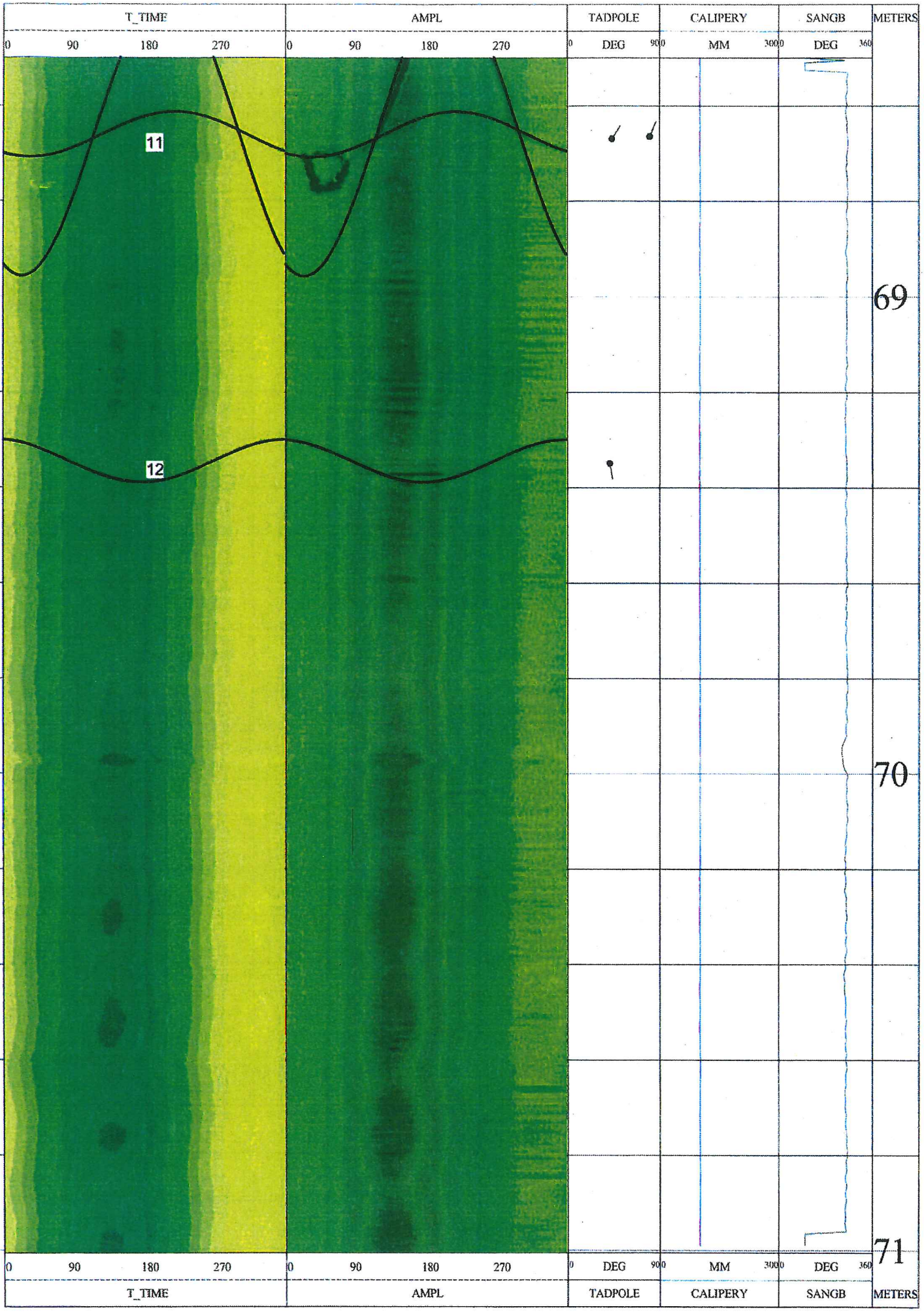
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	11	153	61.32	61.34	10.31	0.6	265.1	Joint
2	74	205	61.34	61.70	10.27	0.5	275.3	Joint
3	53	340	62.26	62.39	10.27	0.7	274.1	Joint
4	66	198	62.26	62.48	10.27	0.5	263.2	Joint
5	13	221	63.22	63.25	10.27	0.4	264.6	Joint
6	57	017	64.47	64.63	10.23	0.5	263.2	Joint
7	26	343	64.88	64.93	10.27	0.5	273.9	Joint
8	45	224	66.63	66.74	10.27	0.5	254.9	Joint
9	63	021	67.13	67.32	10.23	0.5	265.0	Joint
10	81	023	68.36	68.96	10.27	0.4	264.5	Joint
11	44	033	68.61	68.71	10.27	0.4	264.5	Joint
12	41	171	69.30	69.39	10.23	0.4	254.9	Joint

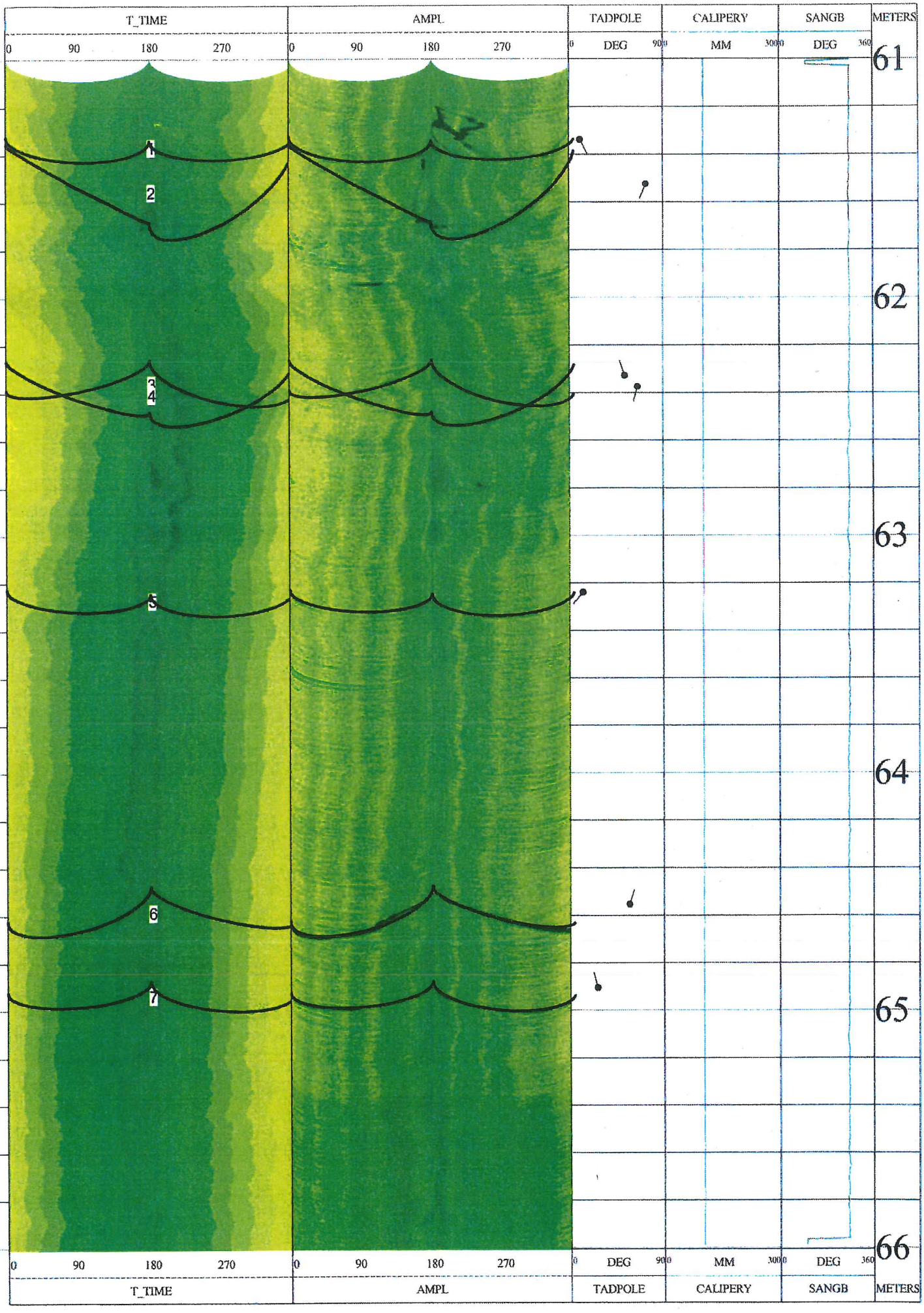
Checked by:

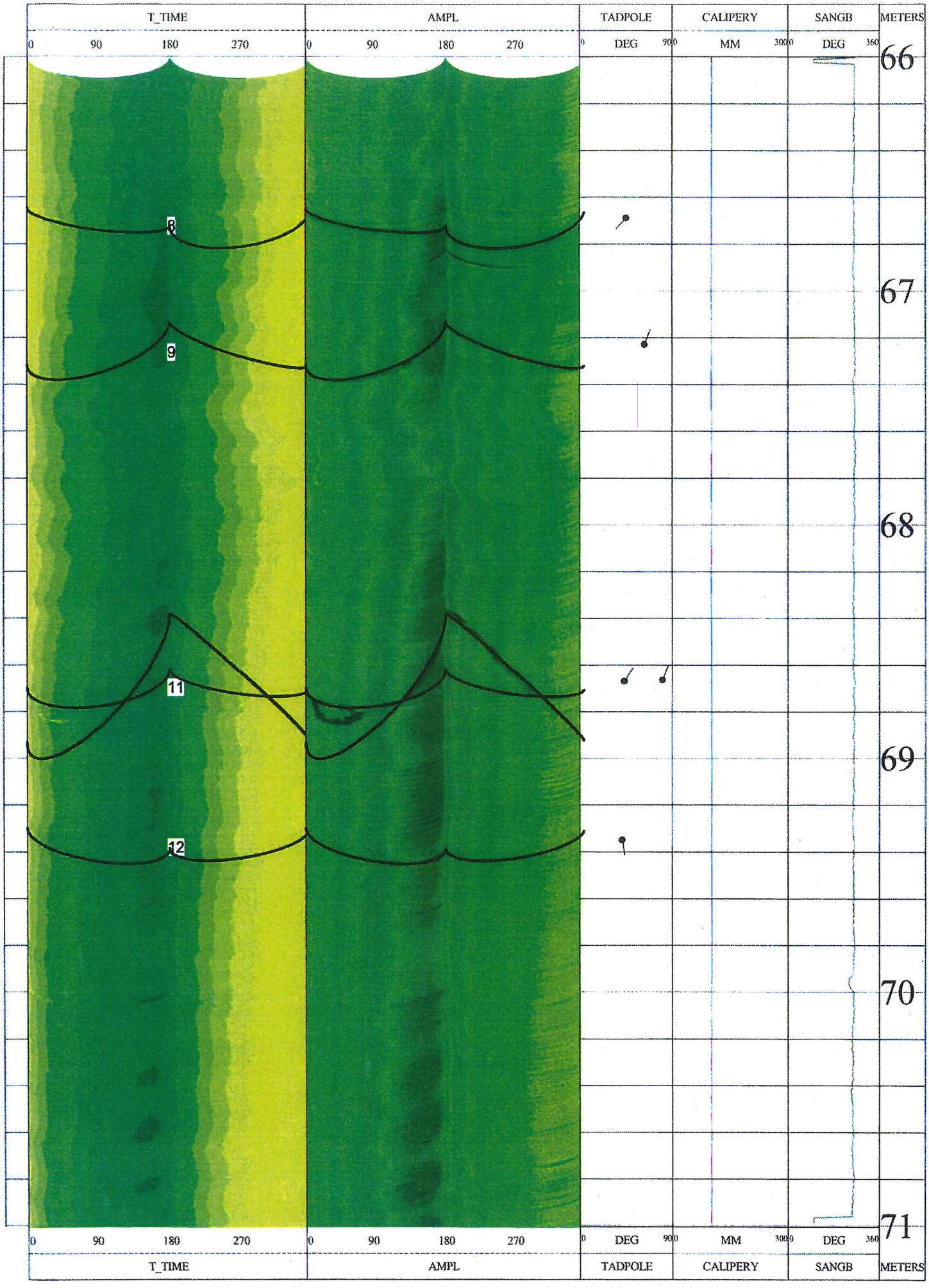

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
61
62
63
1
2
3
4
5

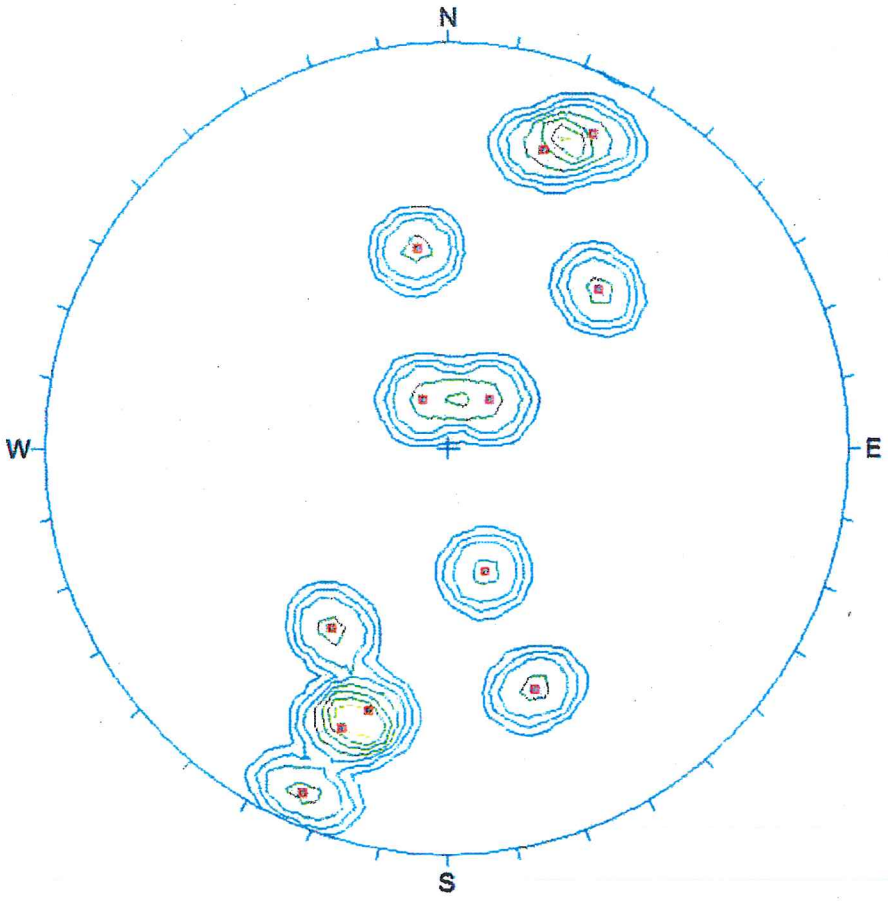

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
360
6
7
64
65
66


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
360
66
67
68
8
9


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
11
12
69
70
71


T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
MM 3000
SANGB
0 DEG 360
METERS
1
2
3
4
5
6
7
61
62
63
64
65
66


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
360
66
67
68
69
70
71
8
9
11
12



Poles

Equal Area
Lower Hemisphere
12 Poles
12 Entries

Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.34
Location	:	Yuen Long
Borehole No.	:	S1-DH02

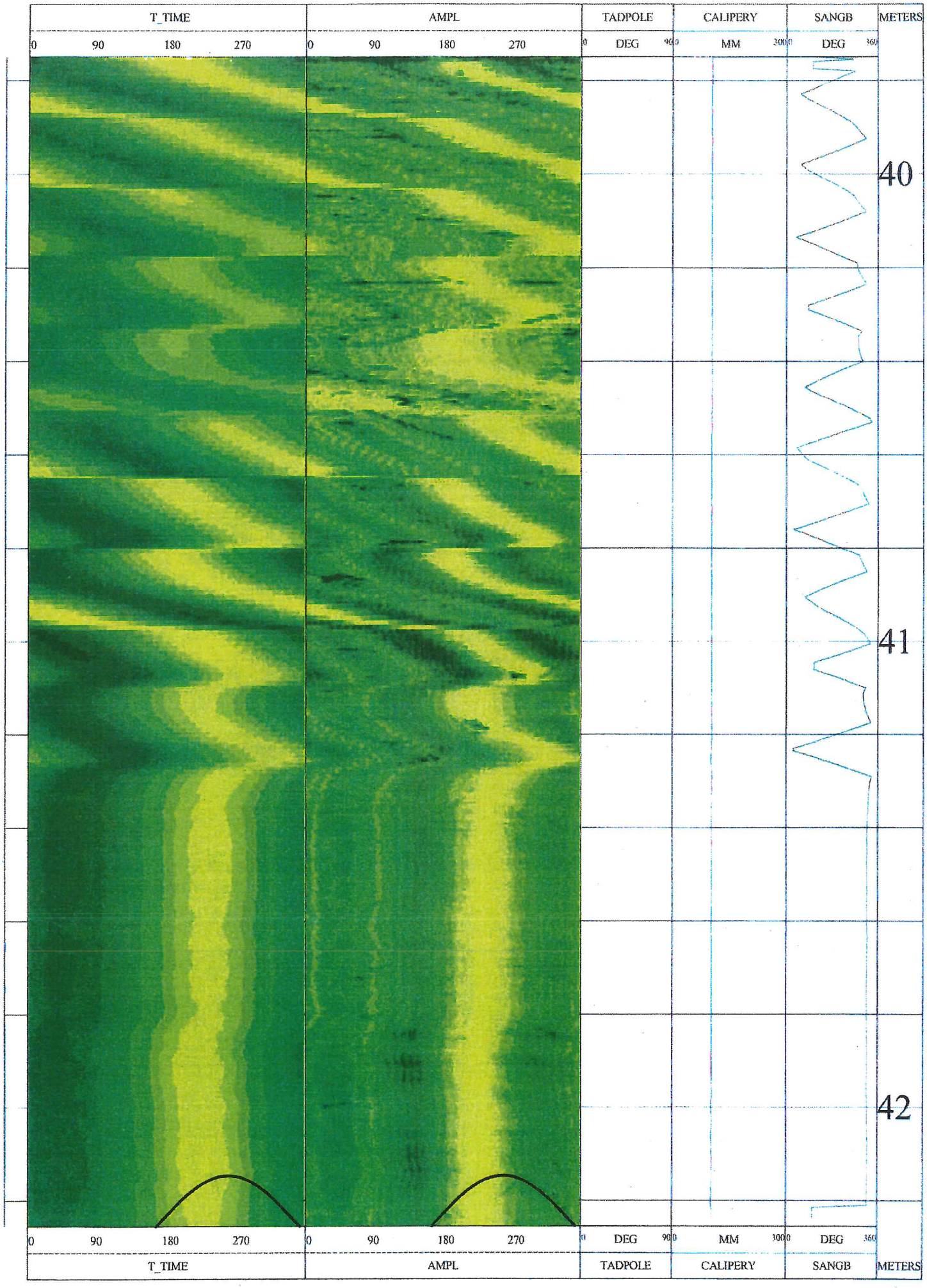
Company	: DrilTech Ground Engineering Ltd
Borehole No.	: S1-DH07
Contract	: Ground Investigation - New Territories West (Term Contract)
Contract No.	: GE/2014/07.34
Location	: Yuen Long

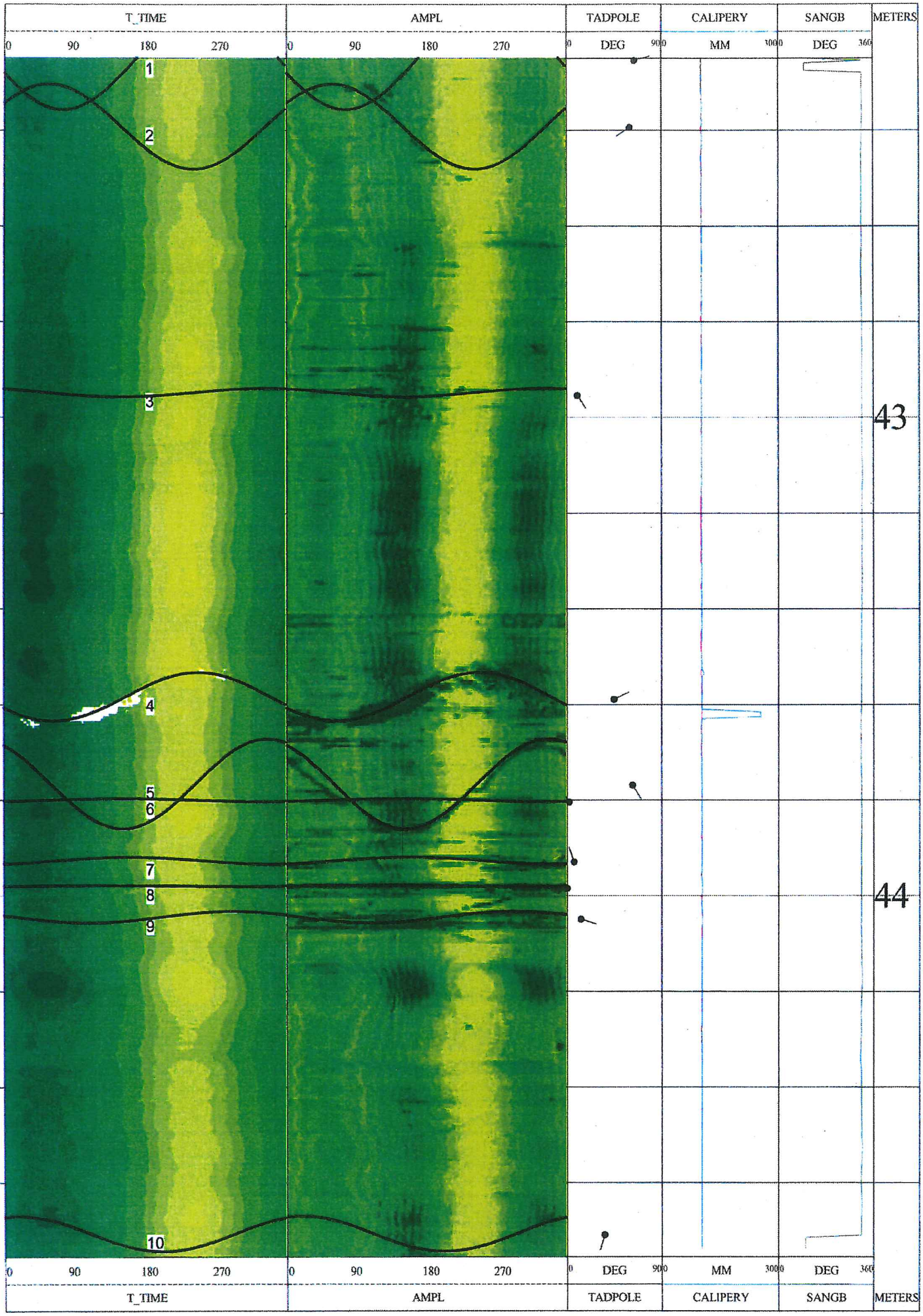
Test Date	: 03-12-2015	Permanent Datum	: None
Depth Driller	: 59.99m	Elev.Perm.Datum	: None
Log Bottom	: 59.89m	Log Measured From	: GL
Log Top	: 39.75m	Drl Measured From	: GL
Casing Driller	: 39.75m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: GC/MC
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A

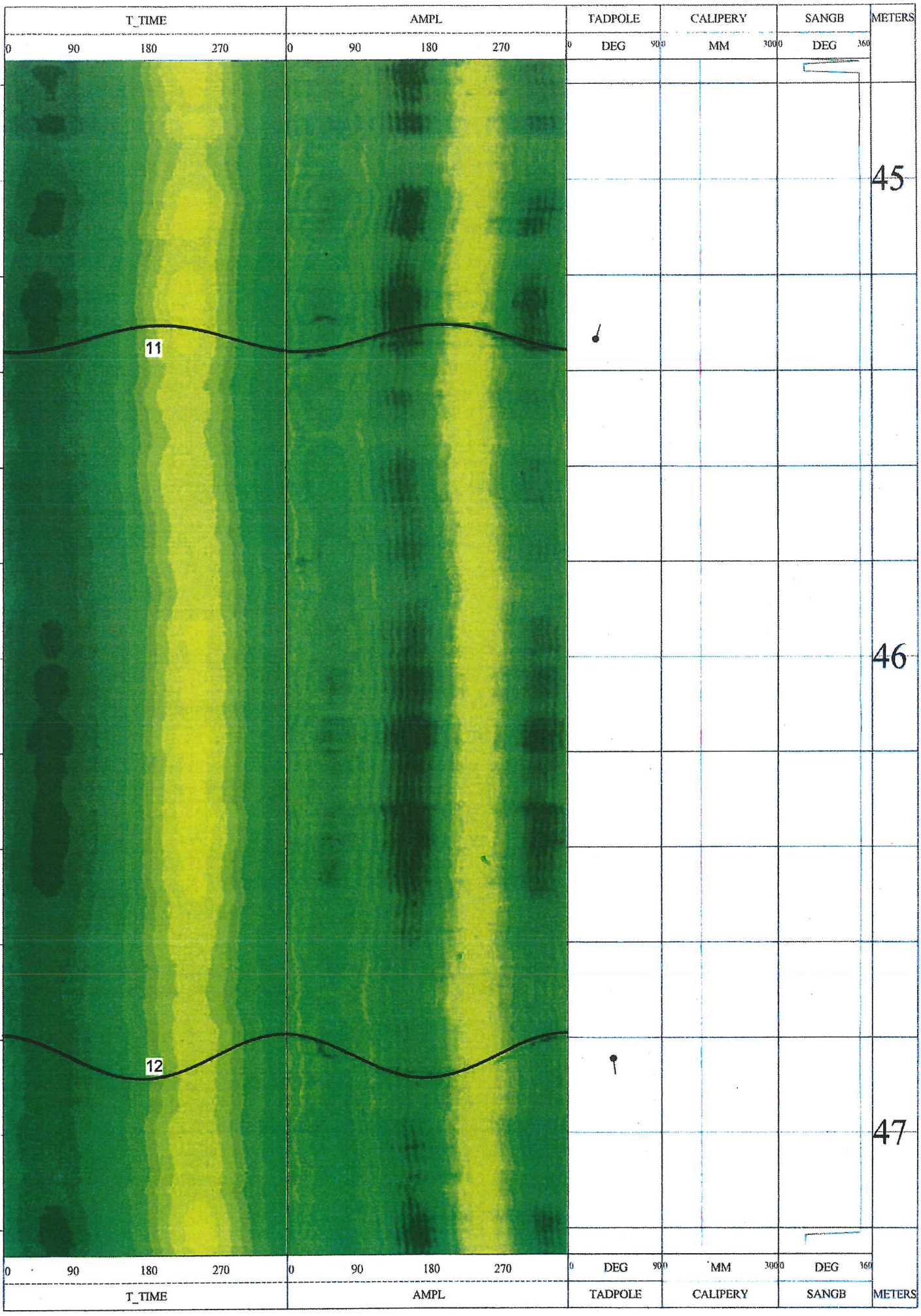
Remark : All directions are relative to magnetic north from Hong Kong Metric Grid System North

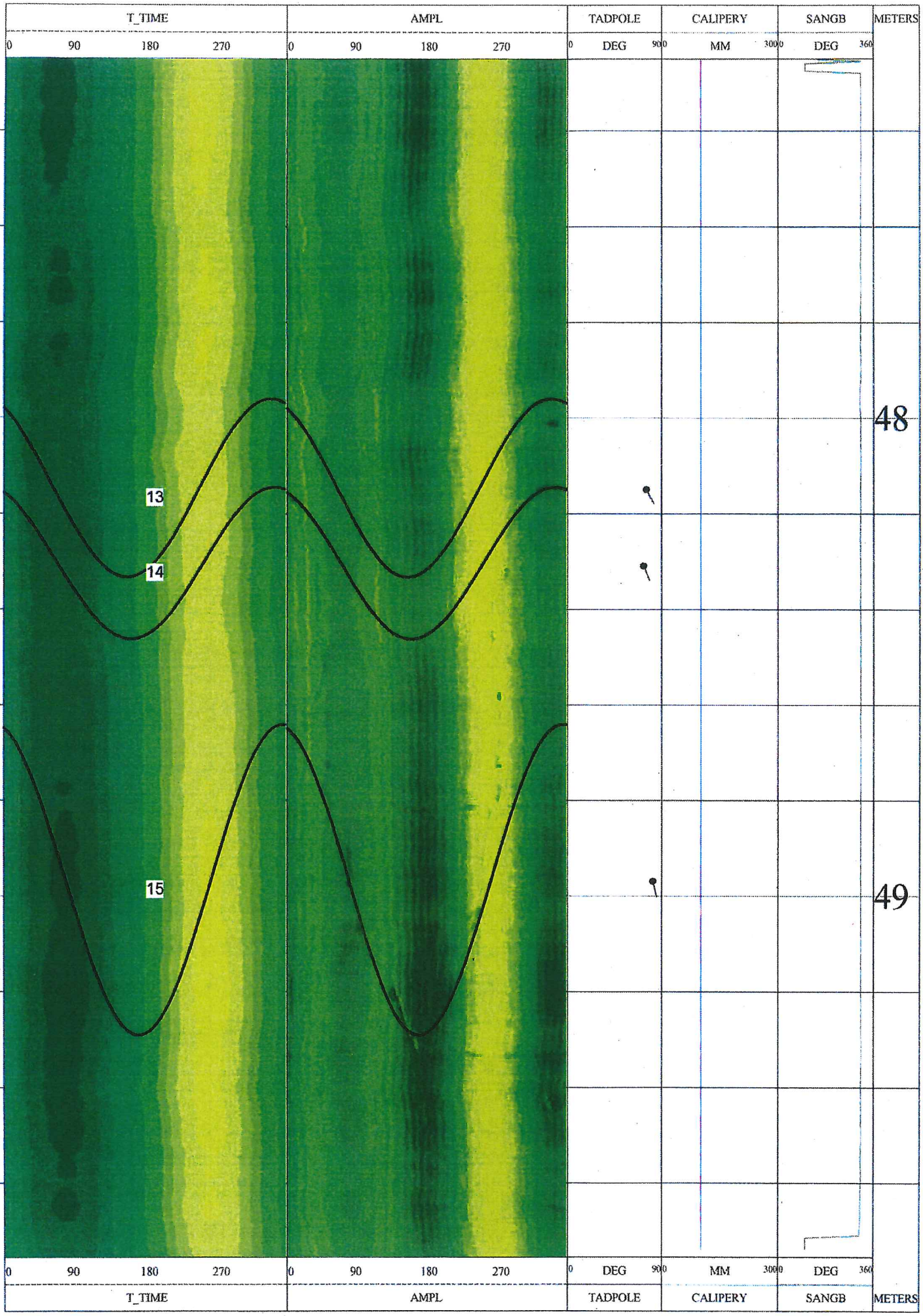
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	65	075	42.15	42.36	10.23	1.1	317.7	Joint
2	60	236	42.30	42.48	10.23	1.1	319.6	Joint
3	11	146	42.94	42.96	10.23	1.1	315.1	Joint
4	45	063	43.53	43.63	10.35	1.1	312.5	Joint
5	63	148	43.67	43.86	10.20	1.1	311.3	Joint
6	03	323	43.80	43.80	10.23	1.1	311.2	Joint
7	07	338	43.92	43.93	10.27	1.2	312.8	Joint
8	00	238	43.98	43.98	10.31	1.0	311.6	Joint
9	14	108	44.03	44.06	10.39	1.0	309.1	Joint
10	37	197	44.67	44.74	10.20	1.1	308.7	Joint
11	28	017	45.30	45.36	10.20	1.1	316.3	Joint
12	44	173	46.79	46.88	10.13	1.1	311.1	Joint
13	76	153	47.96	48.33	10.20	1.0	309.5	Joint
14	73	158	48.15	48.46	10.23	1.0	307.2	Joint
15	82	167	48.64	49.29	10.16	1.0	308.0	Joint
16	31	163	50.00	50.06	10.16	1.1	303.2	Incipient Joint
17	37	343	50.23	50.31	10.16	0.8	305.9	Incipient Joint
18	11	213	51.80	51.82	10.20	0.8	305.0	Joint
19	13	236	51.84	51.86	10.20	0.8	303.8	Joint
20	58	121	51.92	52.07	10.16	0.8	303.4	Incipient Joint
21	73	145	52.06	52.37	10.16	0.8	296.7	Joint
22	67	339	56.69	56.93	10.20	0.8	282.6	Joint
23	55	335	56.79	56.94	10.16	0.8	279.4	Joint
24	40	008	57.12	57.20	10.23	0.8	279.5	Joint
25	44	008	57.15	57.25	14.08	0.7	280.1	Joint
26	53	001	57.17	57.31	15.28	0.7	278.1	Weather Zone Top
27	37	351	57.27	57.35	10.20	0.7	276.8	Weather Zone Bottom
28	40	357	57.29	57.38	10.31	0.8	281.6	Joint
29	41	349	57.34	57.43	10.16	0.8	281.7	Joint
30	45	352	57.44	57.55	10.20	0.7	283.2	Joint
31	44	006	57.51	57.61	10.20	0.8	283.8	Joint
32	46	354	57.85	57.95	10.13	0.7	280.9	Joint
33	24	344	58.00	58.05	10.20	0.8	277.4	Joint
34	56	342	58.29	58.44	10.23	0.9	277.4	Joint
35	34	318	58.33	58.41	10.16	0.9	277.4	Joint
36	30	350	58.40	58.46	10.20	0.9	276.7	Joint
37	22	017	58.53	58.57	10.20	0.8	275.8	Joint

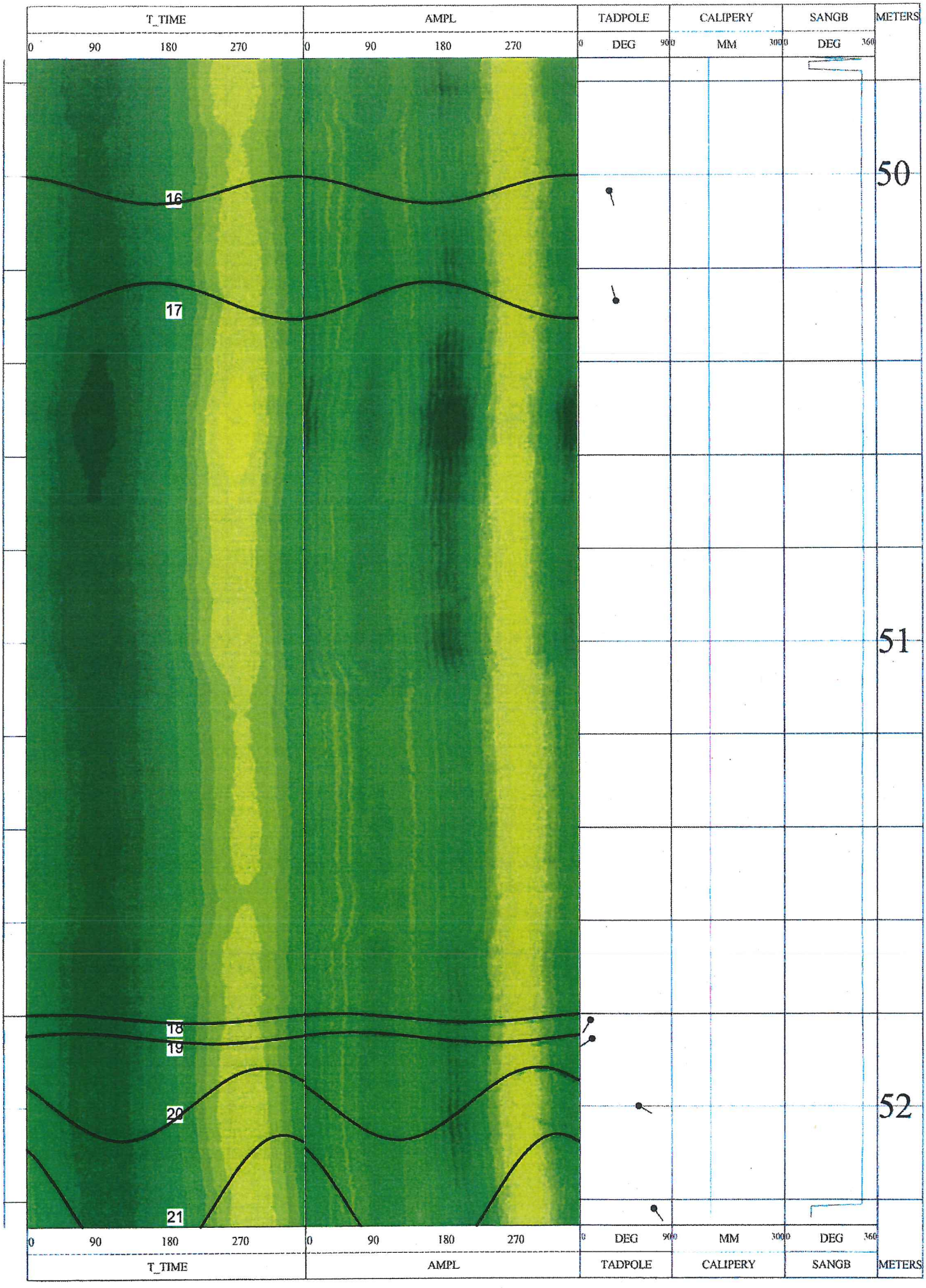
Checked by:

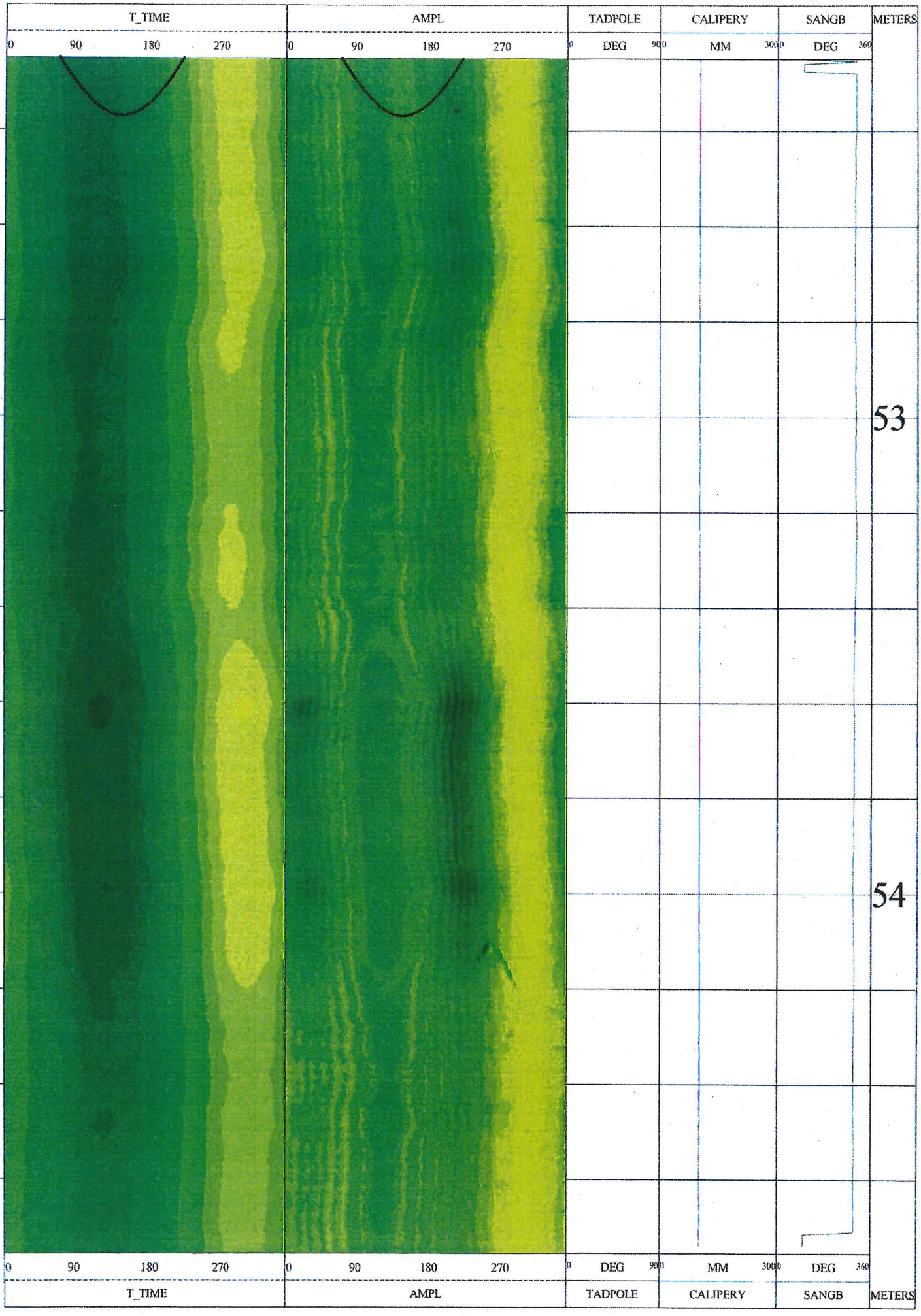

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
360
3000
40
41
42

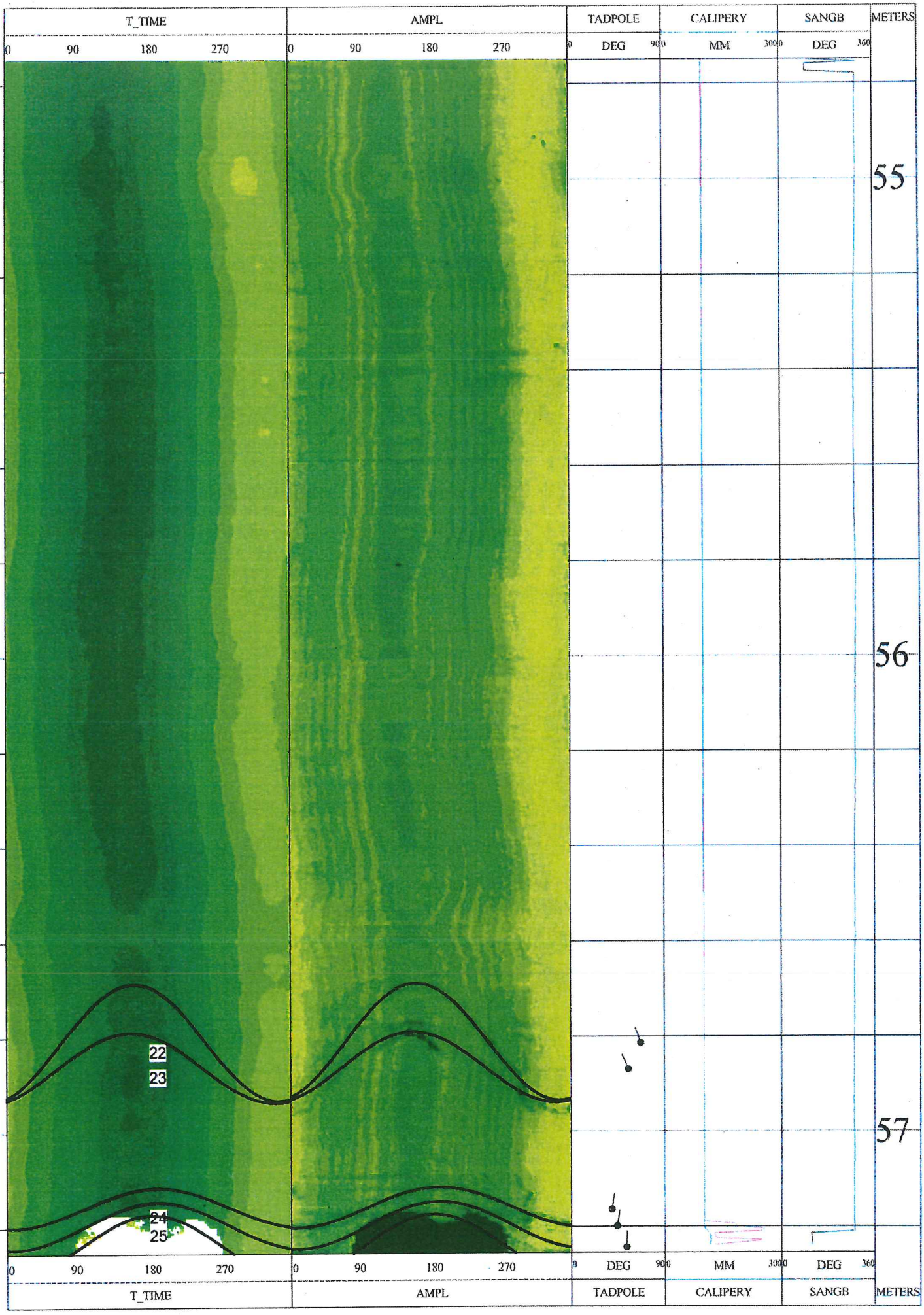

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
1
2
3
4
5
6
7
8
9
10
43
44

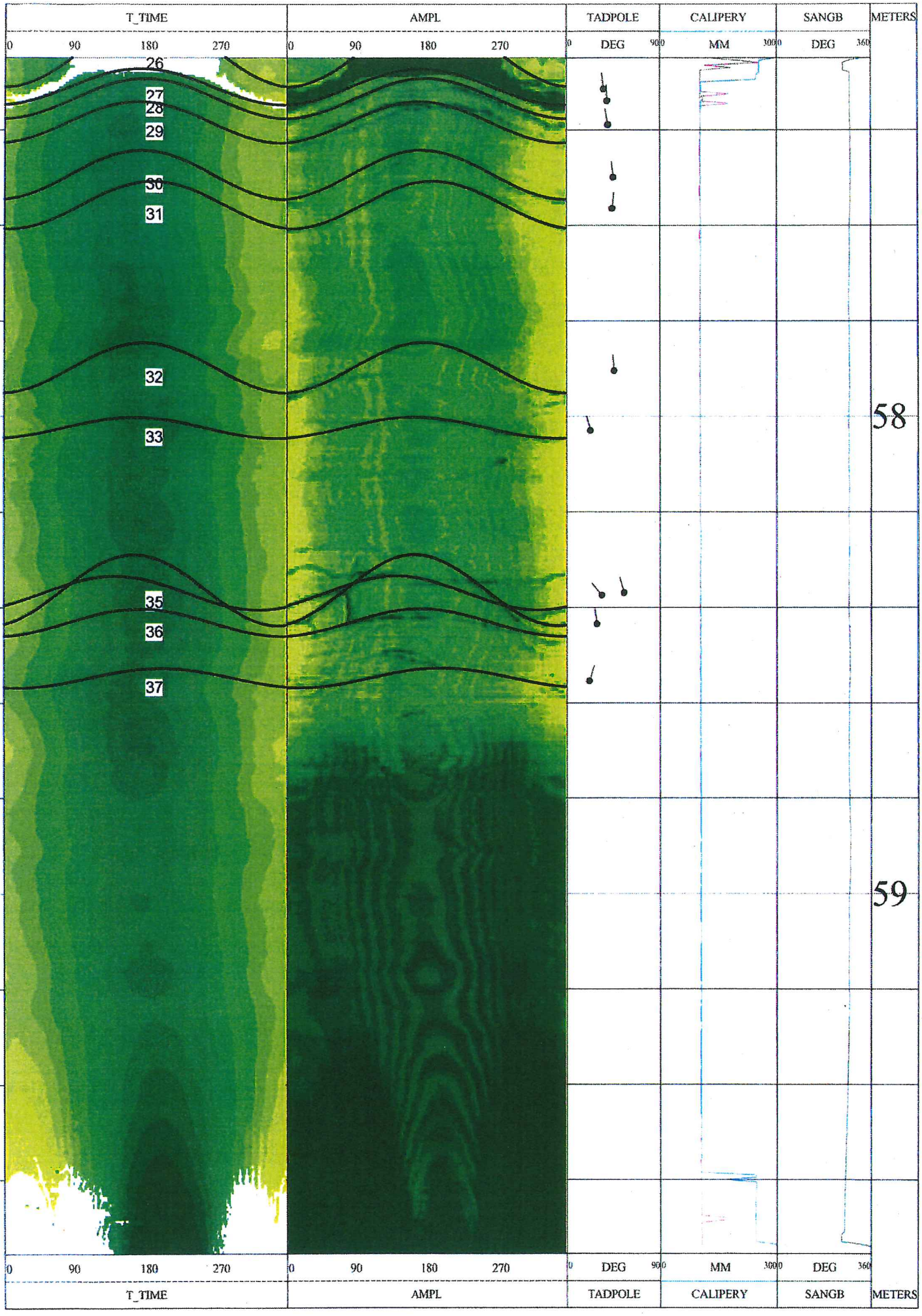

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 90 180 270
0 DEG 90
0 MM 3000
0 DEG 360
45
46
47
11
12
0 90 180 270
0 90 180 270
0 DEG 90
0 MM 3000
0 DEG 360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS

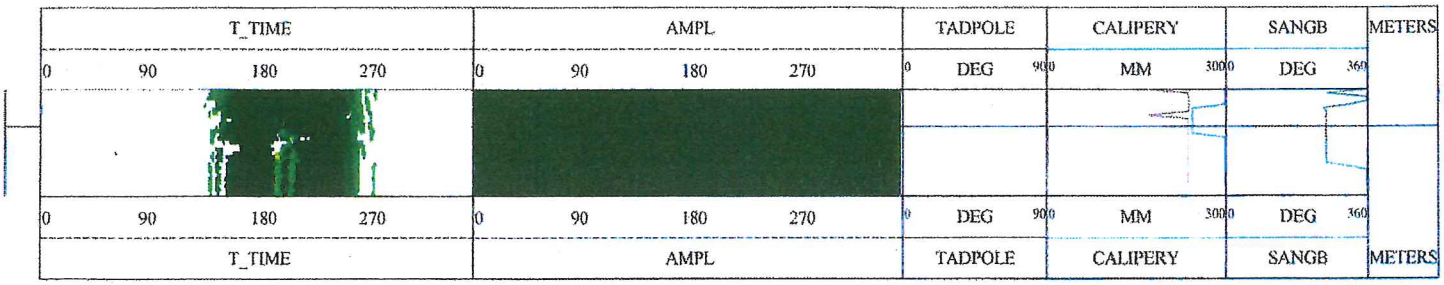

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
13
14
15
48
49

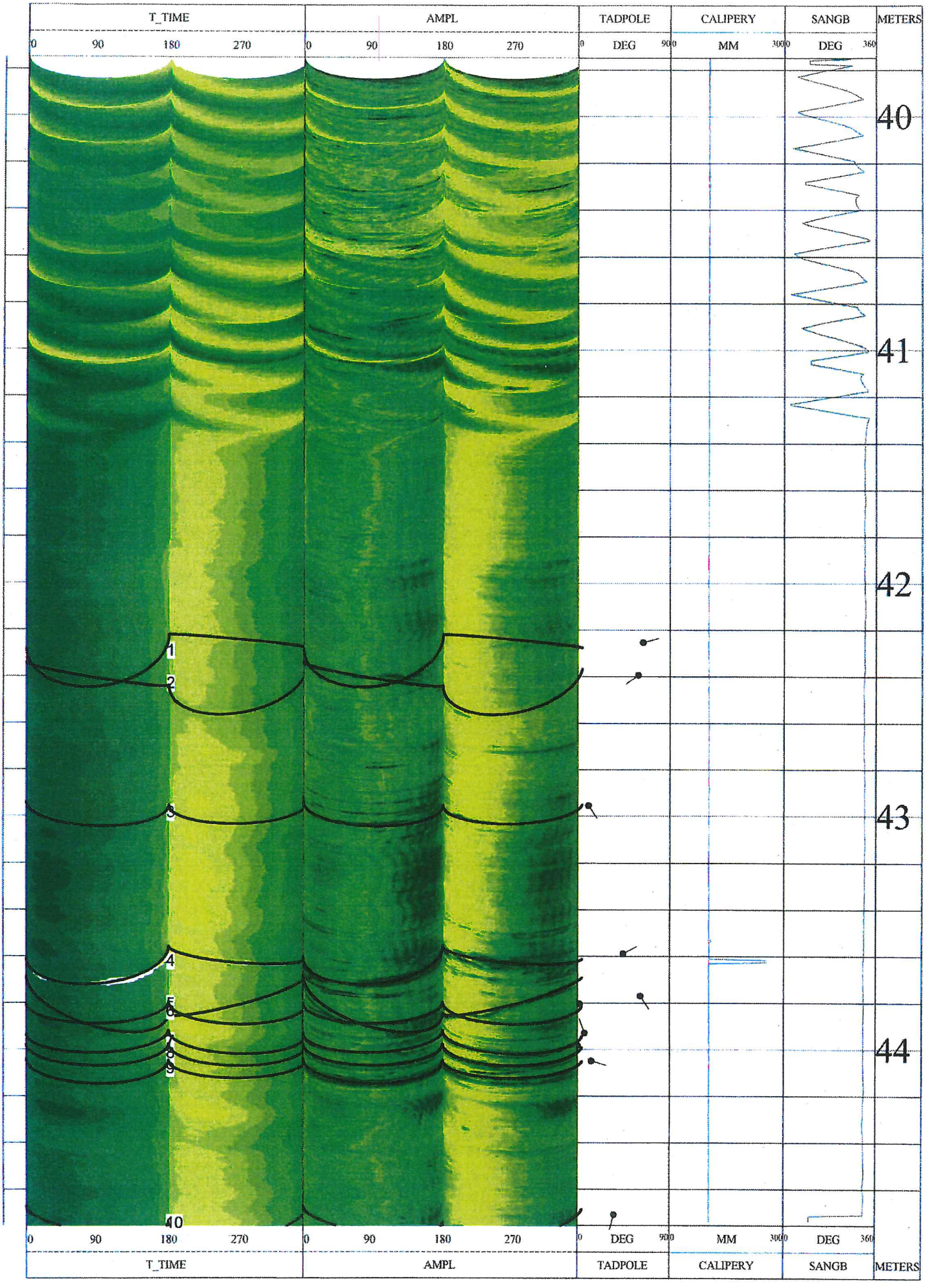

T_TIME
0
90
180
270
AMPL
0
90
180
270
TADPOLE
0
DEG
90
CALIPERY
MM
3000
SANGB
DEG
360
METERS
16
17
18
19
20
21
50
51
52

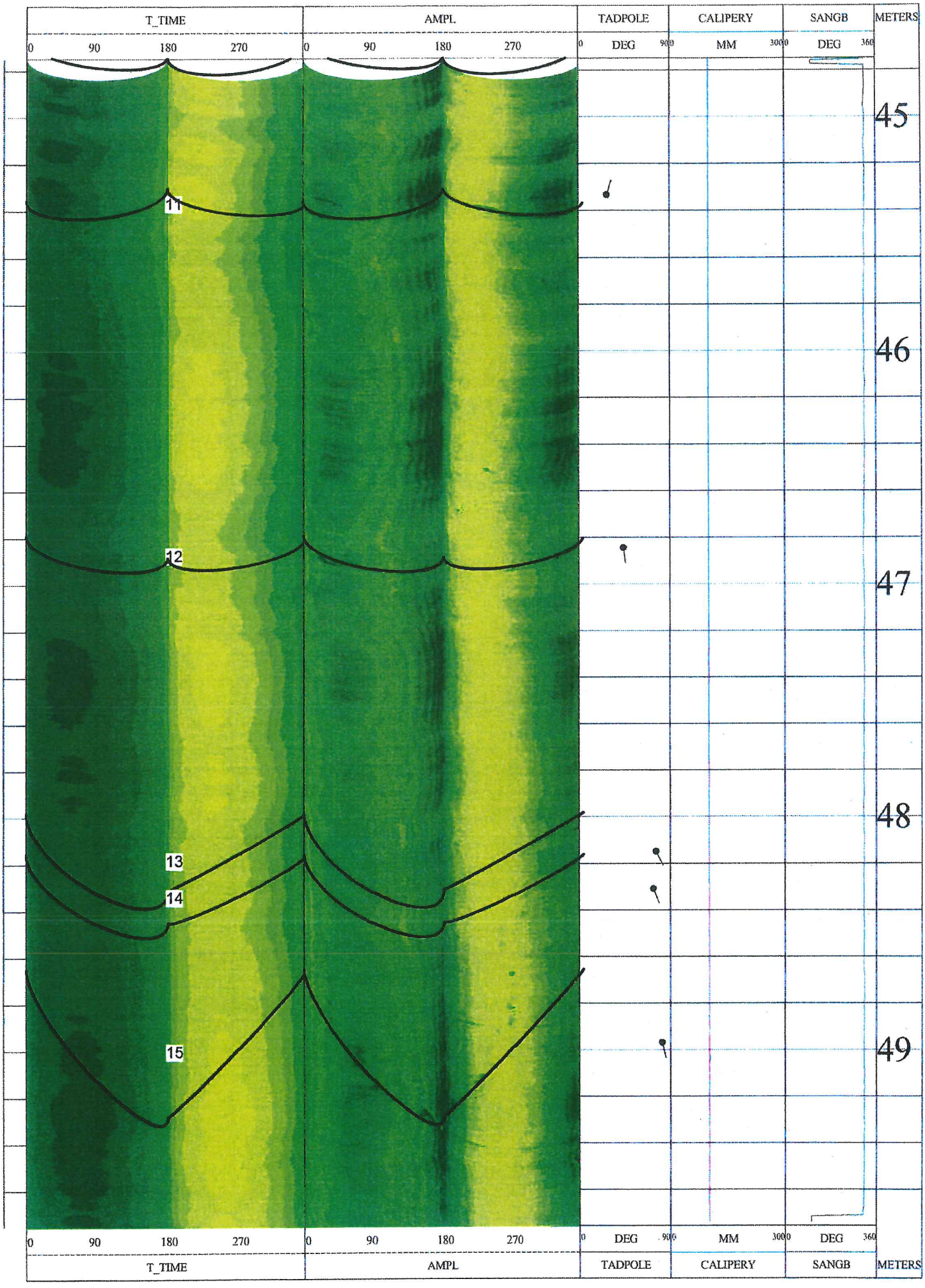

T_TIME
0
90
180
270
AMPL
0
90
180
270
TADPOLE
0
DEG
90
CALIPERY
0
MM
30
SANGB
0
DEG
360
METERS
53
54
0
90
180
270
0
90
180
270
0
DEG
90
0
MM
30
0
DEG
360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS

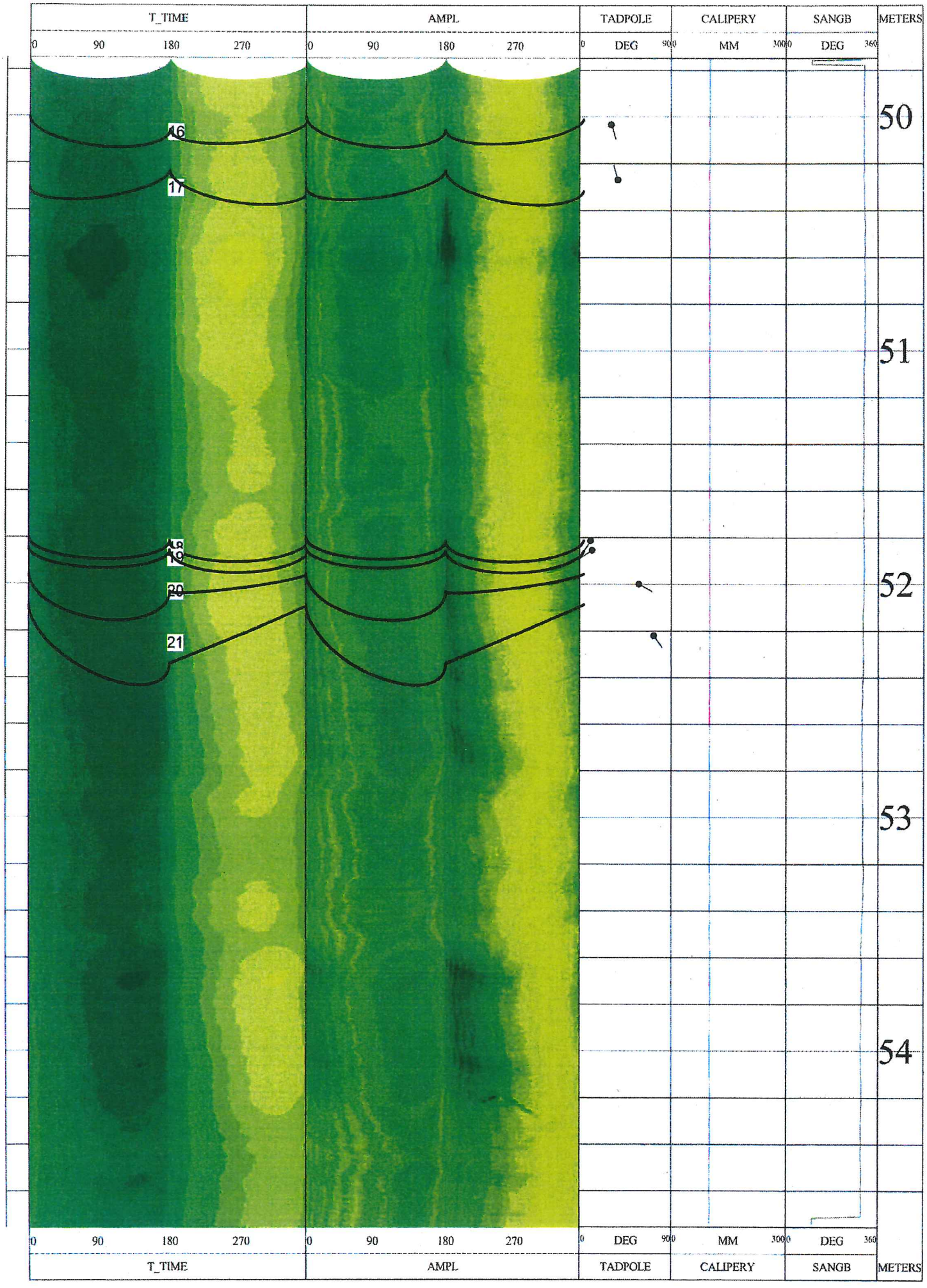

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
360
55
56
57
22
23
24
25

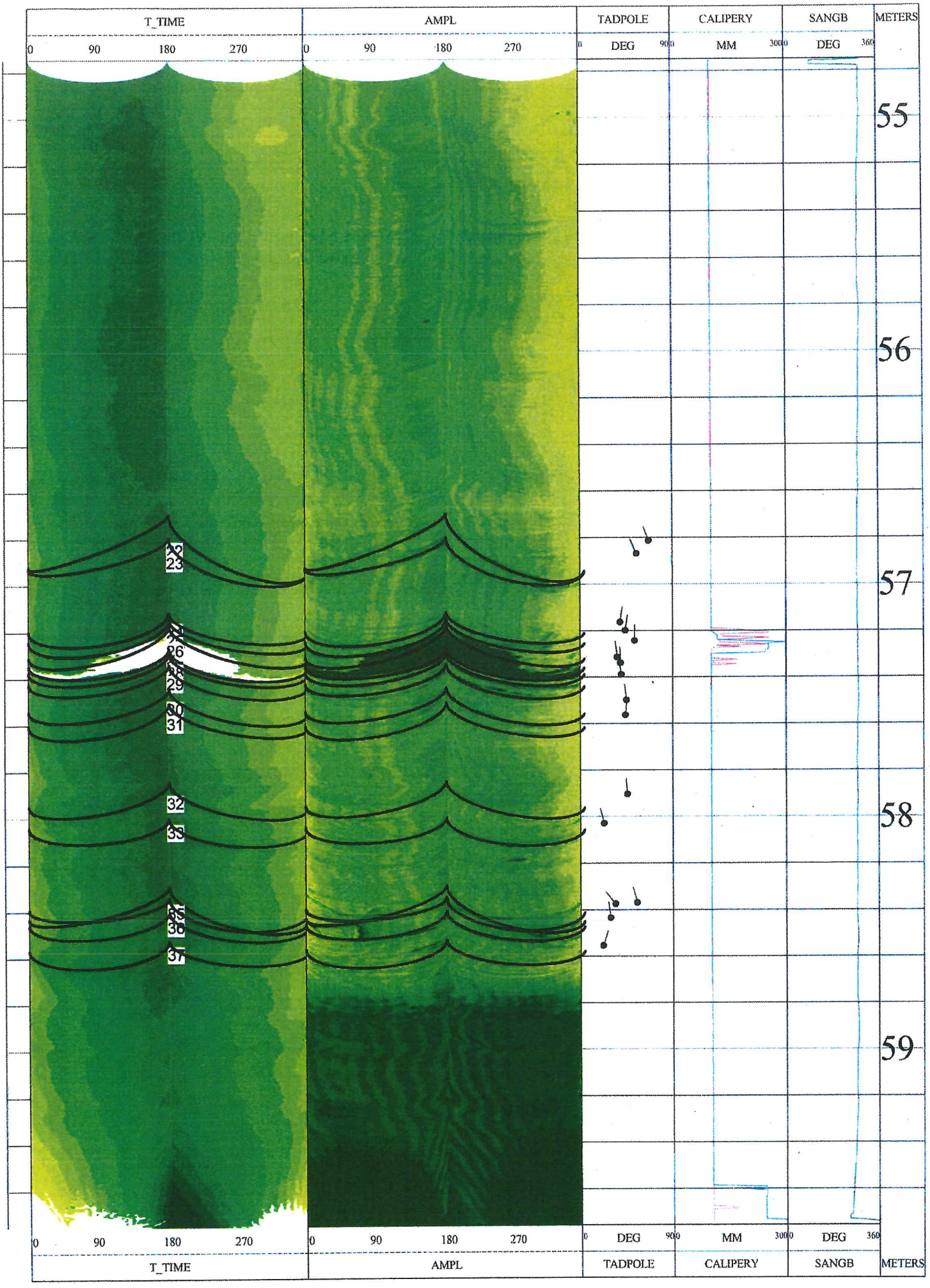

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
360
26
27
28
29
30
31
32
33
35
36
37
58
59

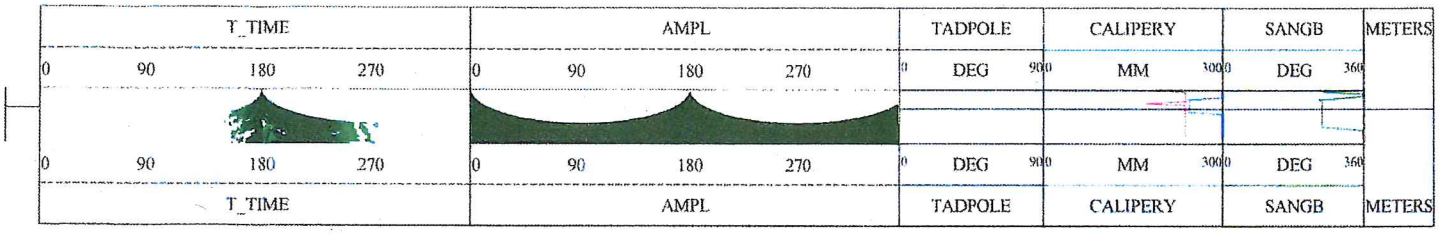

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360

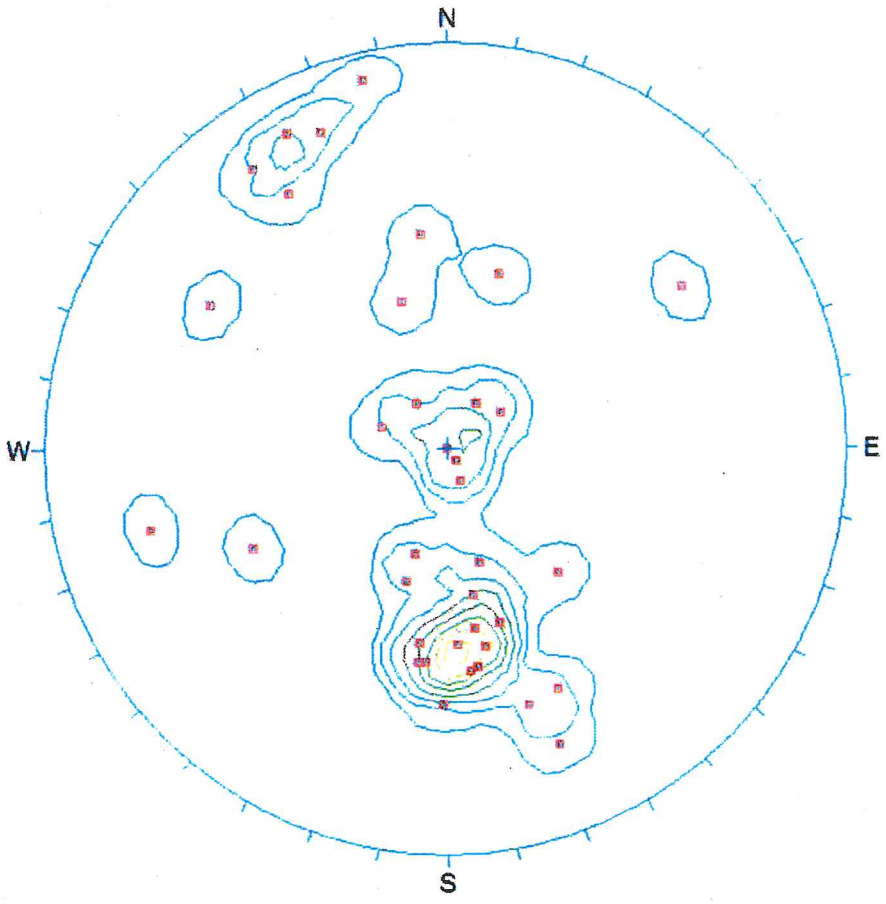

T_TIME
0
90
180
270
AMPL
0
90
180
270
TADPOLE
0
DEG
90
CALIPERY
0
MM
30
SANGB
0
DEG
360
METERS
40
41
42
43
44
1
2
3
4
5
6
7
8
9
10
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
45
46
47
48
49
11
12
13
14
15


T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 900
CALIPERY
MM 3000
SANGB
0 DEG 360
METERS
46
17
21
50
51
52
53
54


T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
MM 3000
SANGB
DEG 360
METERS
55
56
57
58
59
23
26
29
30
31
32
33
36
37
0 90 180 270
T_TIME
0 90 180 270
AMPL
0 DEG 90
TADPOLE
MM 3000
CALIPERY
DEG 360
SANGB
METERS


T_TIME
0
90
180
270
AMPL
0
90
180
270
TADPOLE
0
DEG
900
CALIPERY
MM
3000
SANGB
DEG
360
METERS
0
90
180
270
0
90
180
270
0
DEG
900
MM
3000
0
DEG
360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS



Poles

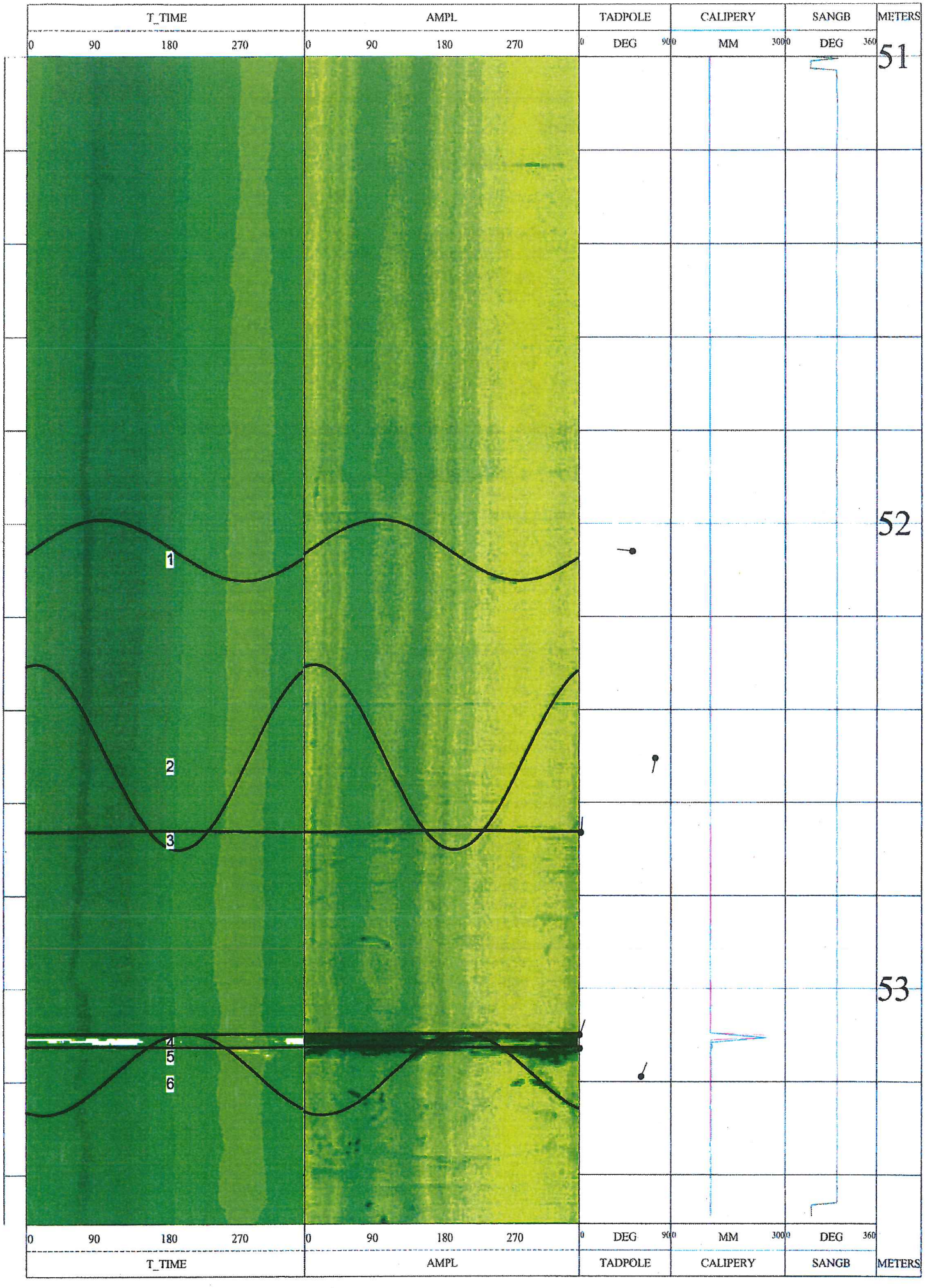
Equal Area
Lower Hemisphere
37 Poles
37 Entries

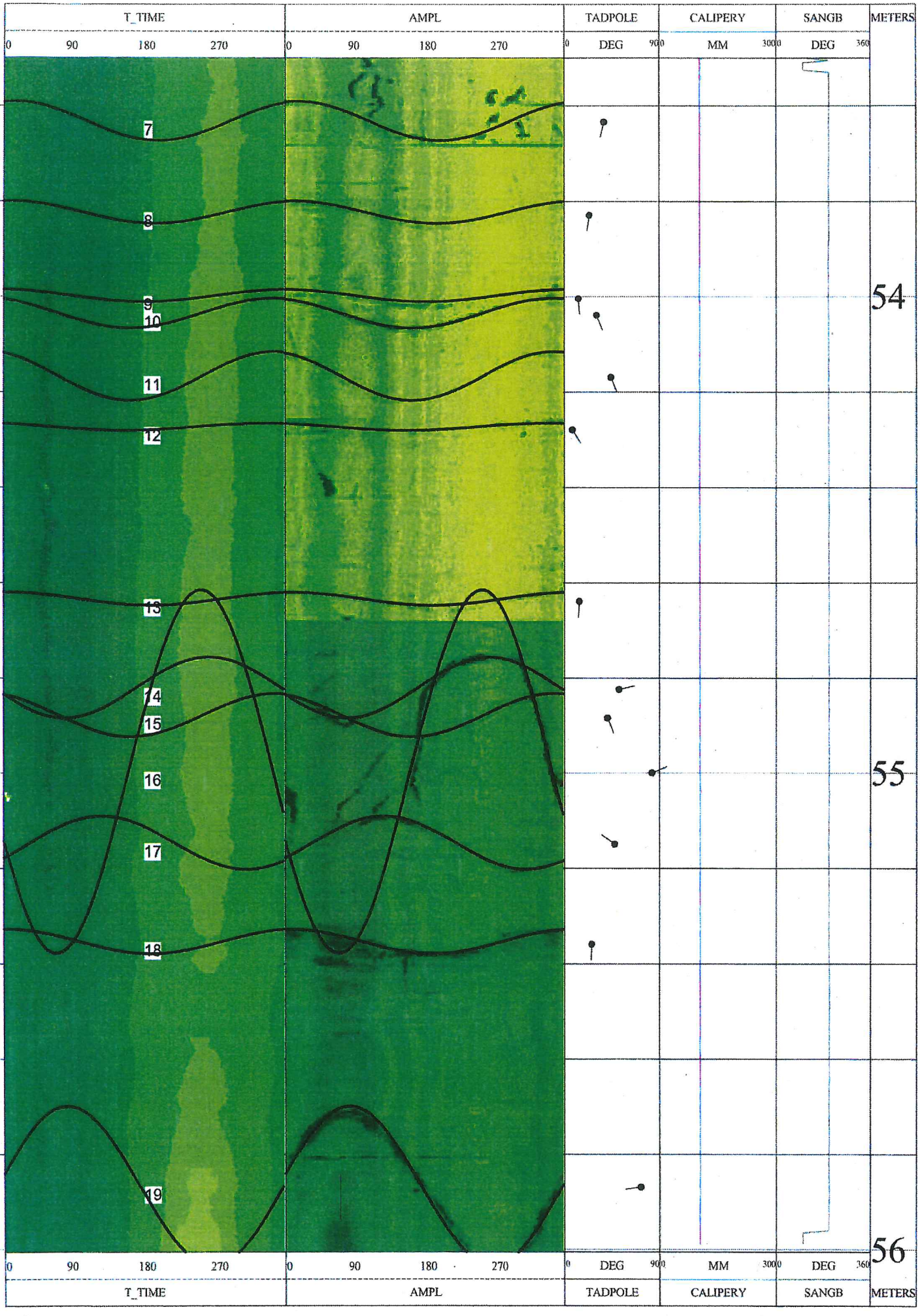
Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.34
Location	:	Yuen Long
Borehole No.	:	S1-DH07

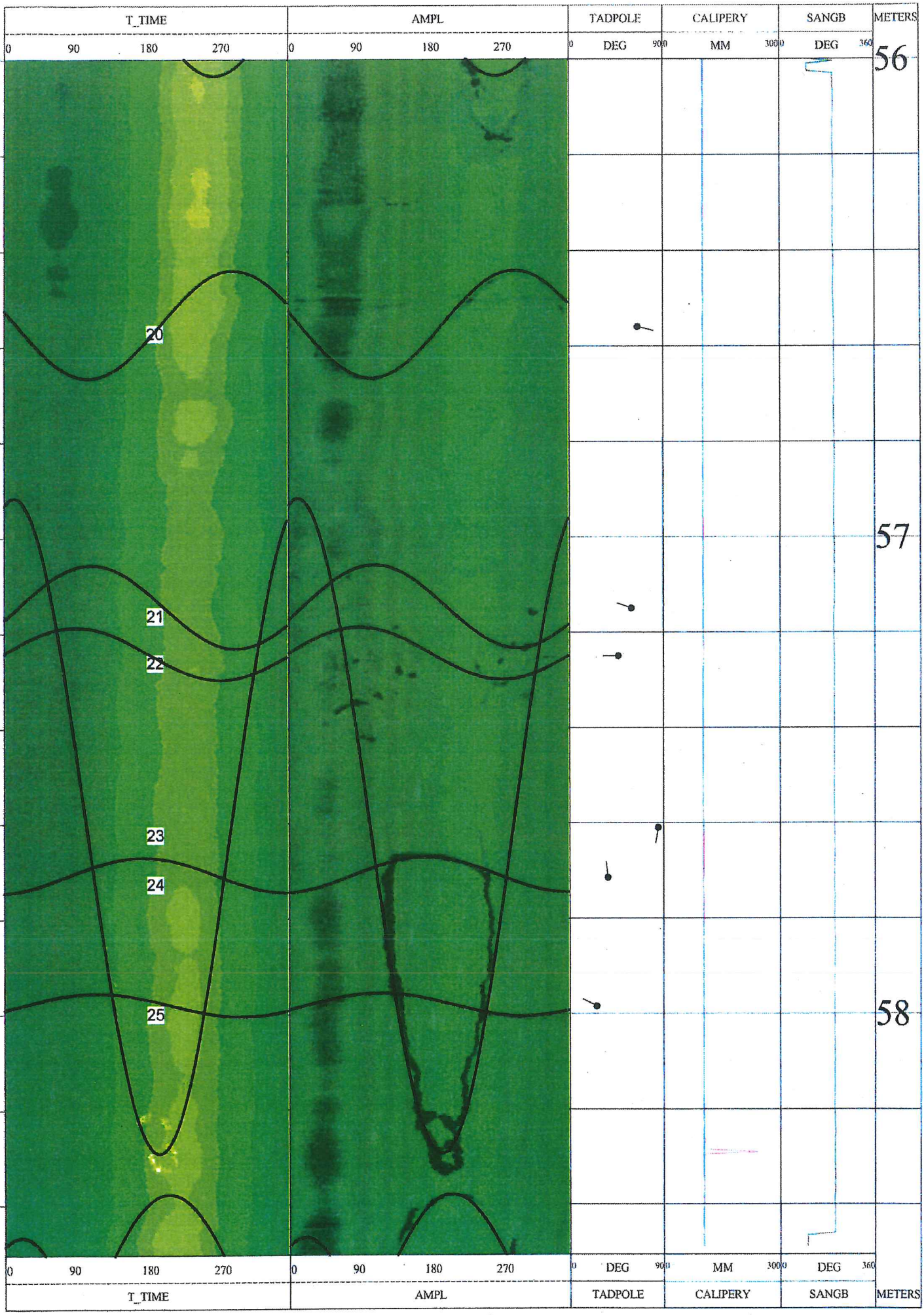
Company	: DrilTech Ground Engineering Ltd		
Borehole No.	: S1-DH10		
Contract	: Ground Investigation - New Territories West (Term Contract)		
Contract No.	: GE/2014/07.34		
Location	: Yuen Long		
Test Date	: 27-02-2016	Permanent Datum	: None
Depth Driller	: 65.56m	Elev.Perm.Datum	: None
Log Bottom	: 60m	Log Measured From	: GL
Log Top	: 51m	Drl Measured From	: GL
Casing Driller	: 45.64m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC/HT
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A
Remark	: All directions are relative to magnetic north from Hong Kong Metric Grid System North		

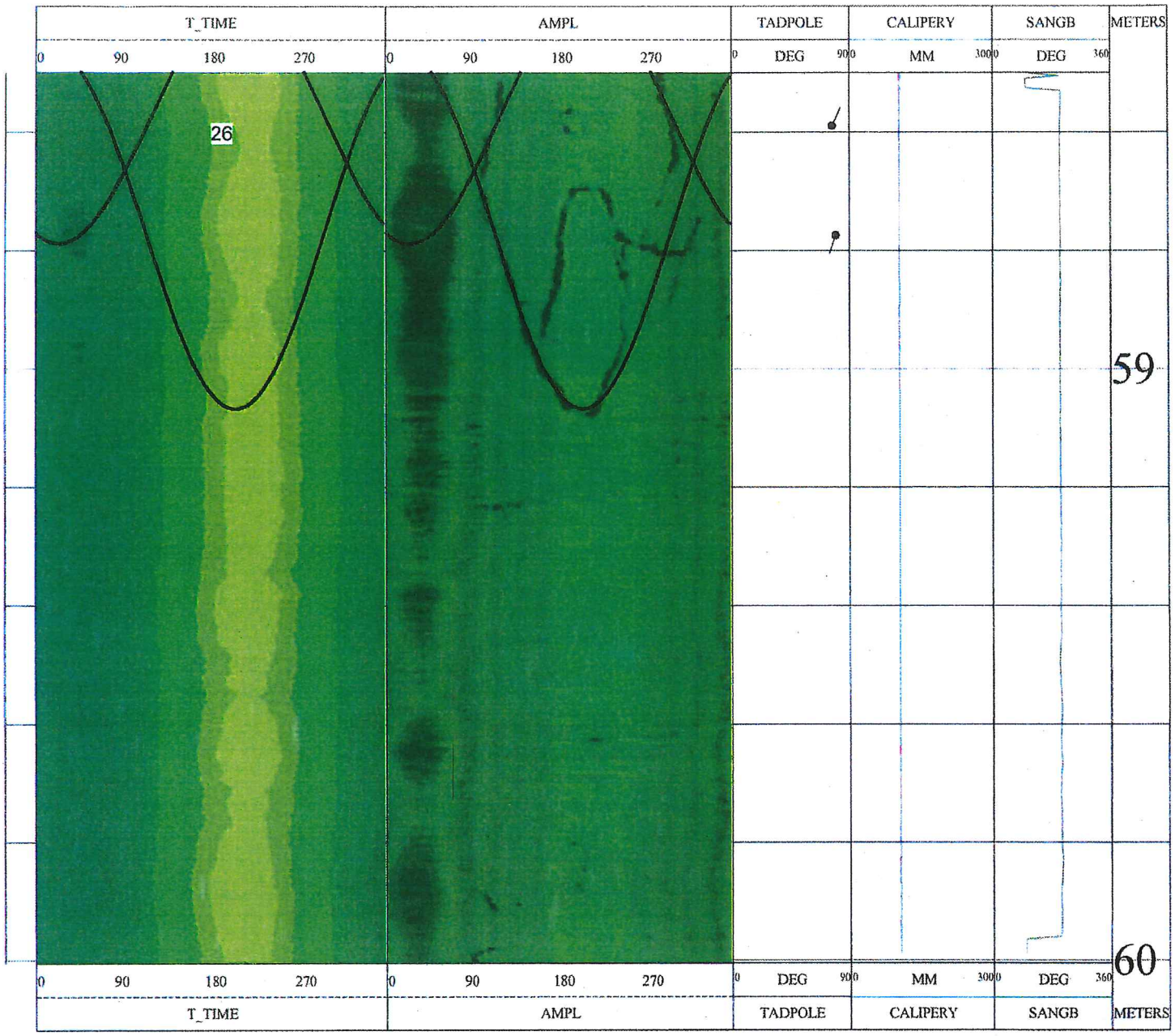
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	52	277	51.99	52.12	10.27	0.9	197.5	Joint
2	75	193	52.30	52.70	10.31	0.9	201.8	Joint
3	02	005	52.66	52.66	10.27	0.8	199.0	Joint
4	01	021	53.10	53.10	10.31	0.9	200.6	Joint
5	01	302	53.12	53.13	10.42	0.9	202.2	Joint
6	61	022	53.10	53.27	10.27	0.9	203.7	Incipient Joint
7	38	195	53.59	53.67	10.27	0.8	198.5	Joint
8	24	190	53.80	53.85	10.27	0.9	201.1	Joint
9	14	175	53.98	54.01	10.23	0.8	199.1	Joint
10	31	158	54.00	54.07	10.31	0.7	201.7	Joint
11	45	159	54.12	54.22	10.27	0.8	197.4	Incipient Joint
12	08	148	54.27	54.28	10.27	0.8	199.2	Joint
13	14	184	54.62	54.65	10.27	0.8	199.2	Joint
14	52	077	54.76	54.88	10.31	0.9	199.6	Joint
15	41	159	54.83	54.92	10.27	0.8	201.5	Joint
16	83	067	54.62	55.38	10.27	0.9	199.7	Joint
17	48	305	55.09	55.20	10.31	0.7	198.7	Joint
18	26	185	55.33	55.38	10.31	0.8	199.3	Joint
19	73	261	55.70	56.03	10.31	0.8	202.4	Joint
20	66	104	56.44	56.67	10.31	0.8	201.9	Joint
21	60	288	57.06	57.23	10.31	0.9	205.4	Joint
22	47	269	57.19	57.30	10.31	0.8	205.6	Joint
23	85	192	56.92	58.29	10.27	0.8	203.3	Joint
24	37	352	57.67	57.74	10.27	0.8	204.2	Joint
25	26	296	57.96	58.00	10.23	0.8	203.5	Joint
26	77	024	58.38	58.79	10.27	0.8	206.6	Joint
27	80	201	58.47	59.07	10.23	0.8	202.1	Joint

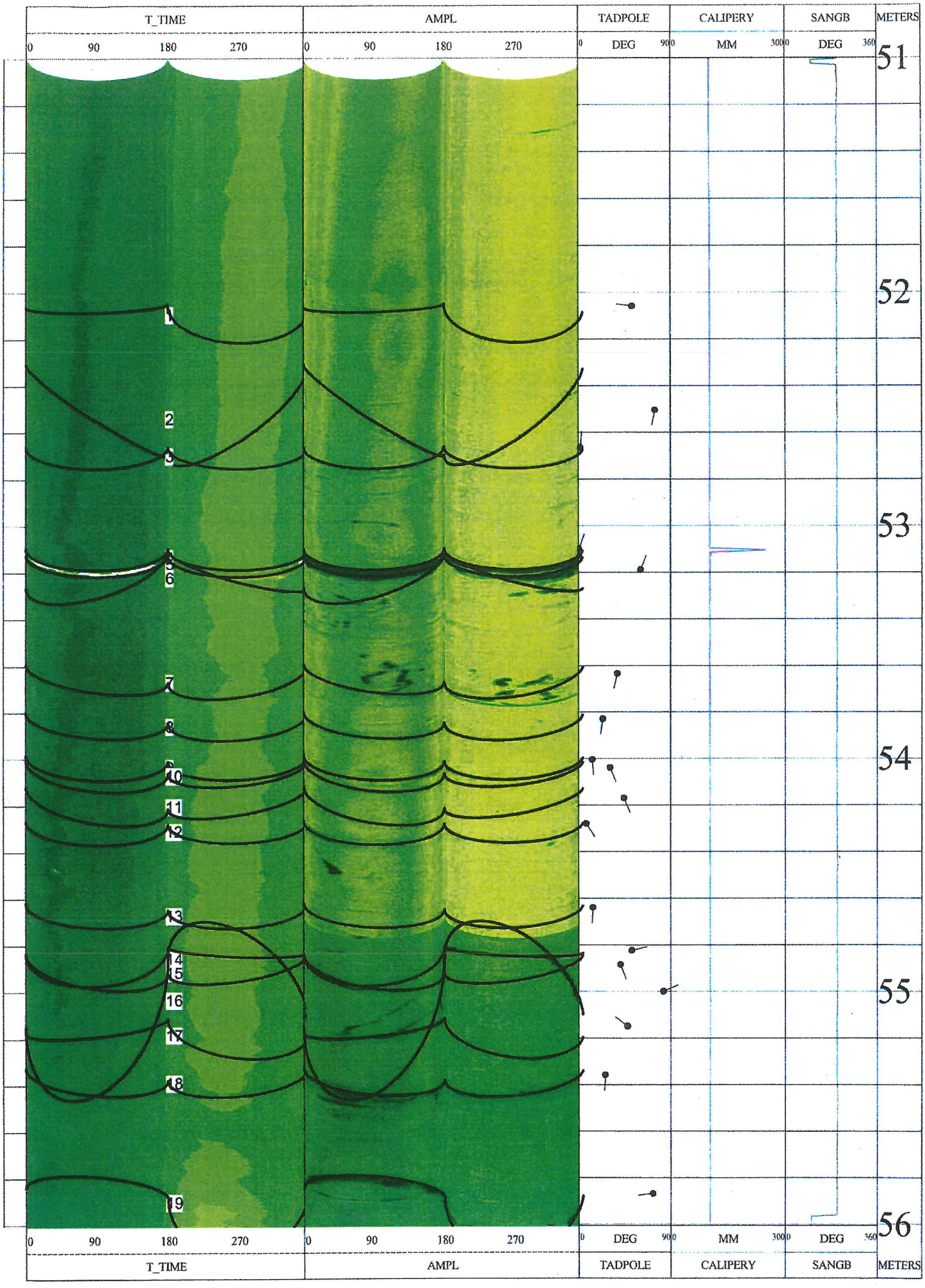
Checked by:

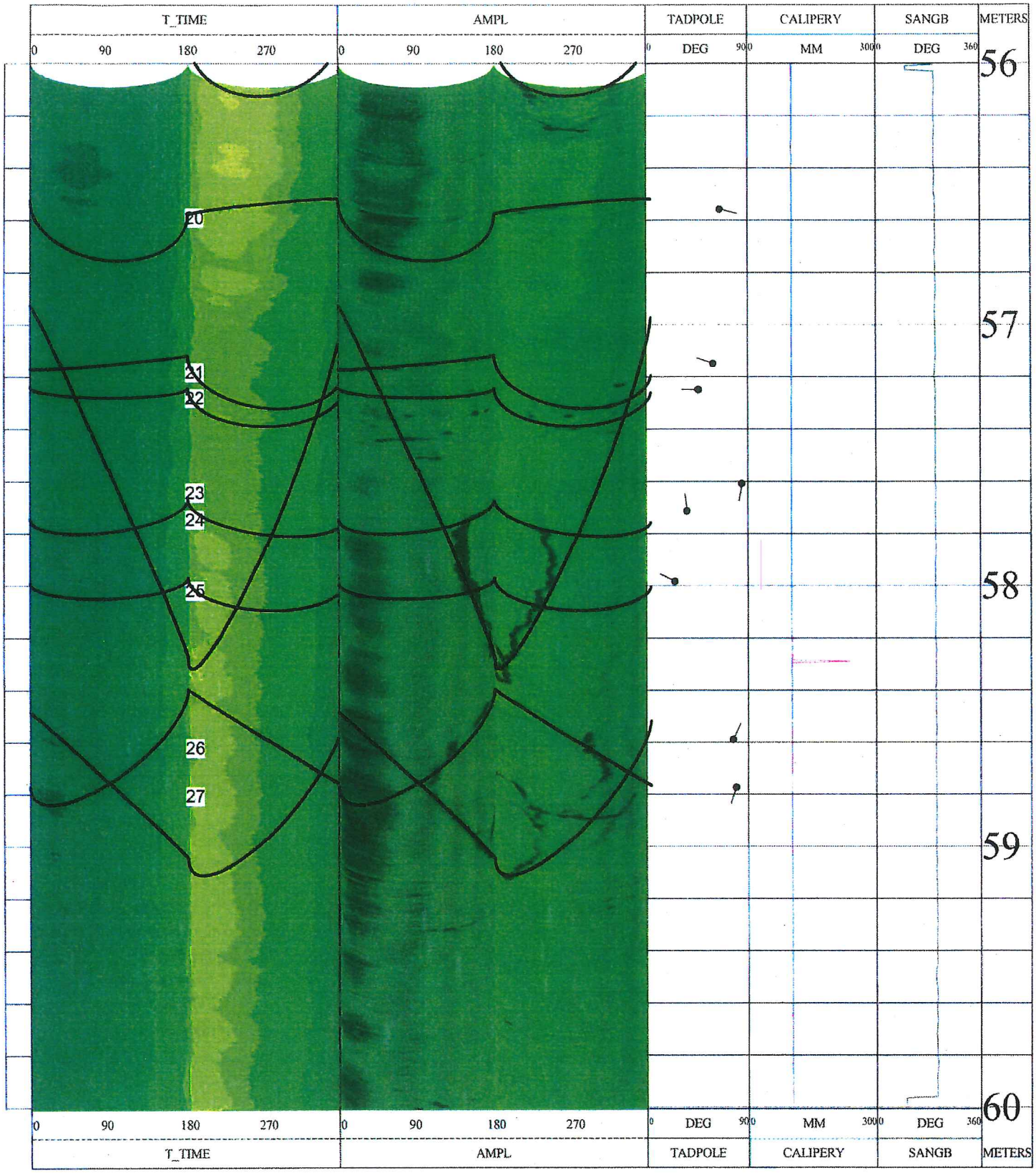

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
51
52
53
1
2
3
4
5
6

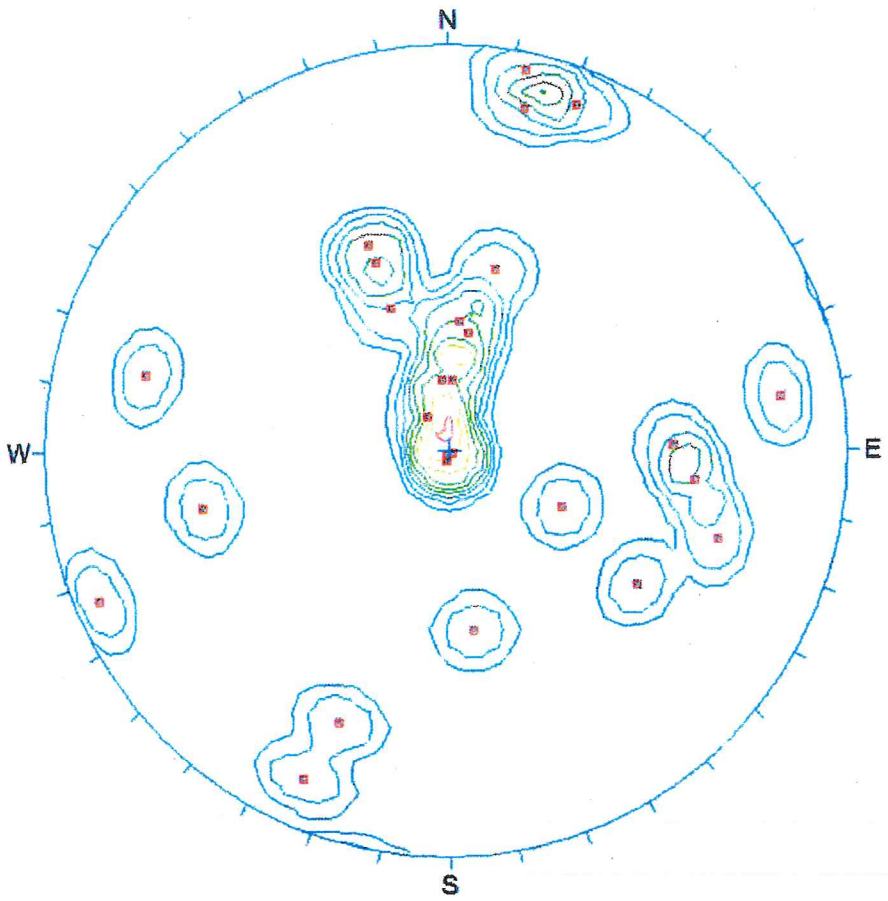

T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
0 MM 3000
SANGB
0 DEG 360
METERS
7
8
9
10
11
12
13
14
15
16
17
18
19
54
55
56
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS


T_TIME
0
90
180
270
AMPL
0
90
180
270
TADPOLE
0
DEG
90
CALIPERY
MM
300
SANGB
0
DEG
360
METERS
56
57
58
20
21
22
23
24
25
0
90
180
270
0
DEG
90
MM
300
0
DEG
360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 90 180 270
0 DEG 900
0 MM 3000
0 DEG 360
26
59
60
0 90 180 270
0 90 180 270
0 DEG 900
0 MM 3000
0 DEG 360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
DEG 90 0
MM 3000
DEG 360
51
52
53
54
55
56
1
2
3
6
7
8
10
11
12
13
14
15
16
17
18
19


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 DEG 900
0 MM 3000
0 DEG 360
20
21
22
23
24
25
26
27
56
57
58
59
60



Poles

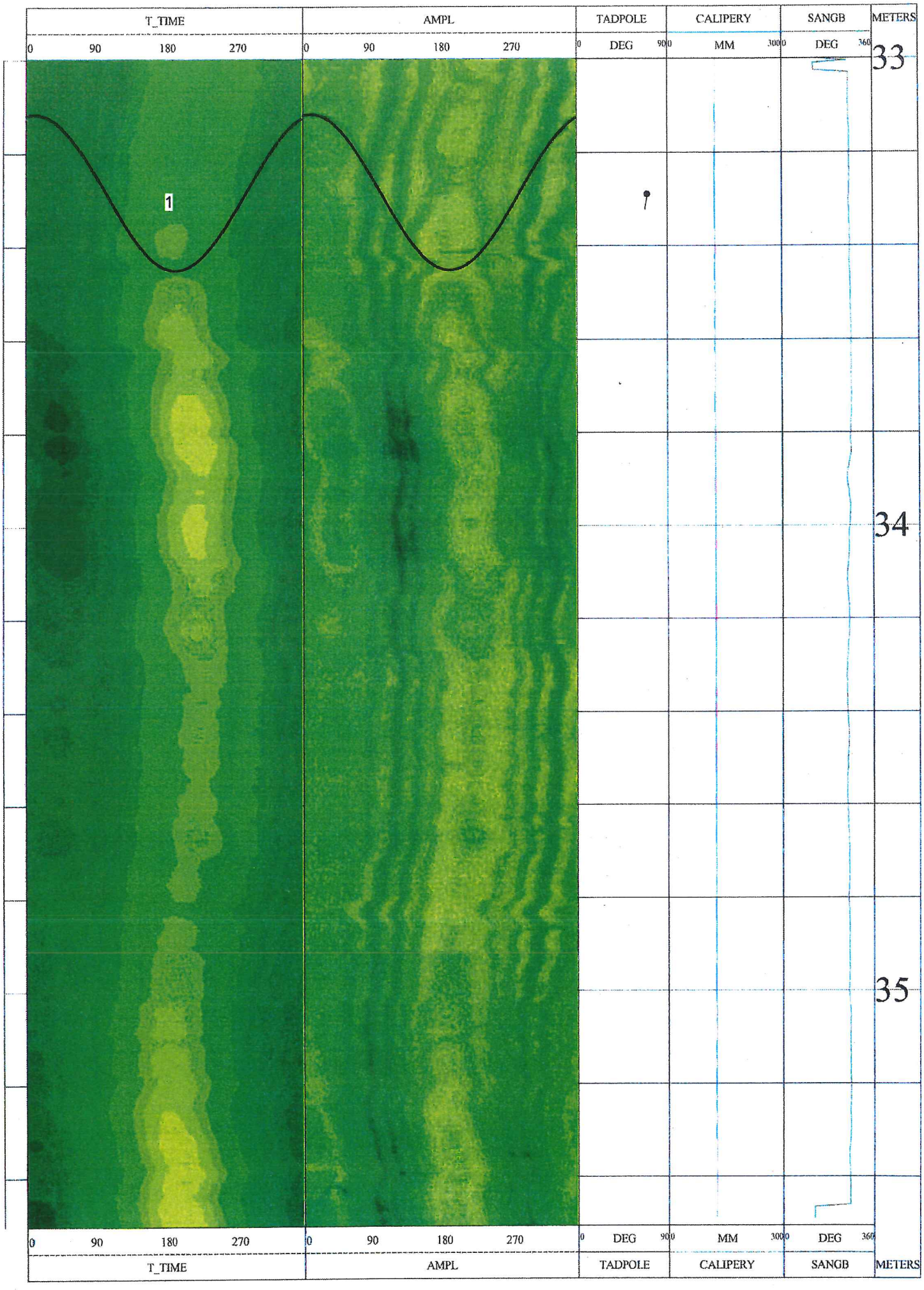
Equal Area
Lower Hemisphere
27 Poles
27 Entries

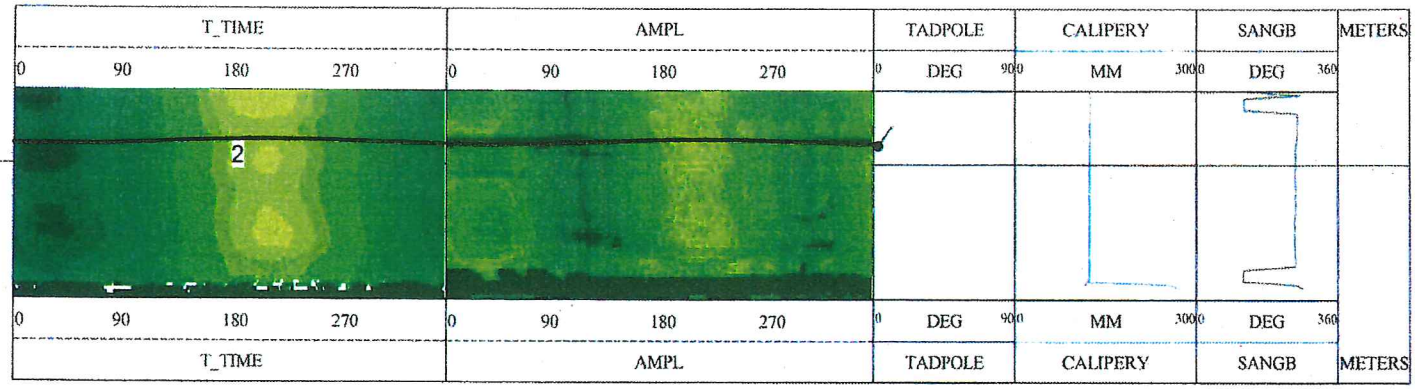
Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.34
Location	:	Yuen Long
Borehole No.	:	S1-DH10

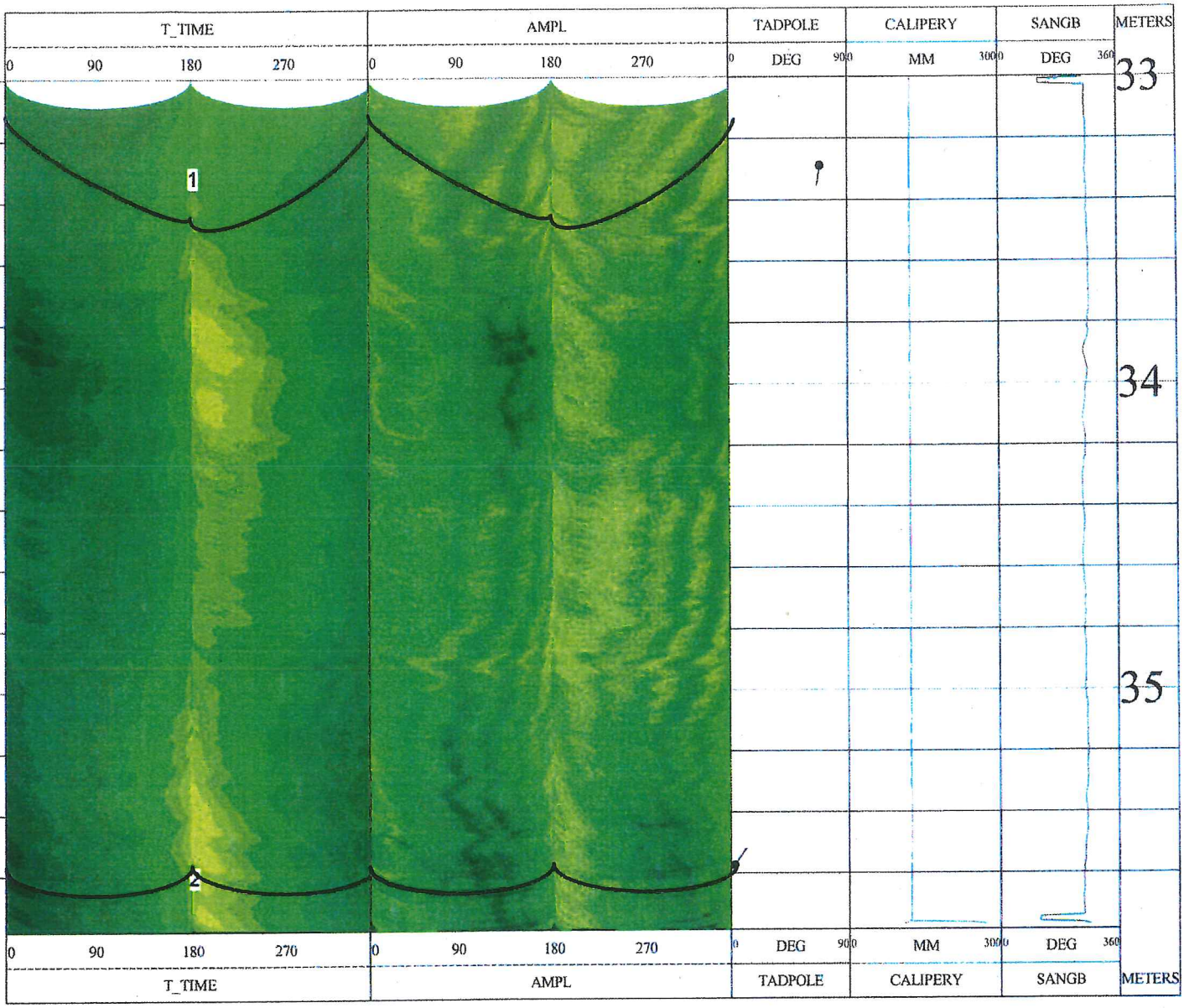
Company	: DrilTech Ground Engineering Ltd		
Borehole No.	: S1-DH11		
Contract	: Ground Investigation - New Territories West (Term Contract)		
Contract No.	: GE/2014/07.34		
Location	: Yuen Long		
Test Date	: 08-12-2015	Permanent Datum	: None
Depth Driller	: 50.33m	Elev.Perm.Datum	: None
Log Bottom	: 35.78m	Log Measured From	: GL
Log Top	: 33m	Drl Measured From	: GL
Casing Driller	: 30m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC
Bit Size	: 12cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A
Remark	: All directions are relative to magnetic north from Hong Kong Metric Grid System North		

Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	70	190	33.12	33.45	12.33	0.3	261.0	Joint
2	03	035	35.57	35.57	12.40	0.3	242.7	Joint

Checked by:


T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
0 MM 30
SANGB
0 DEG 360
METERS
33
34
35
1


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
2


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 90 180 270
0 DEG 90 0
0 MM 3000
0 DEG 360
33
34
35
1
2
0 90 180 270
0 90 180 270
0 DEG 90 0
0 MM 3000
0 DEG 360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS

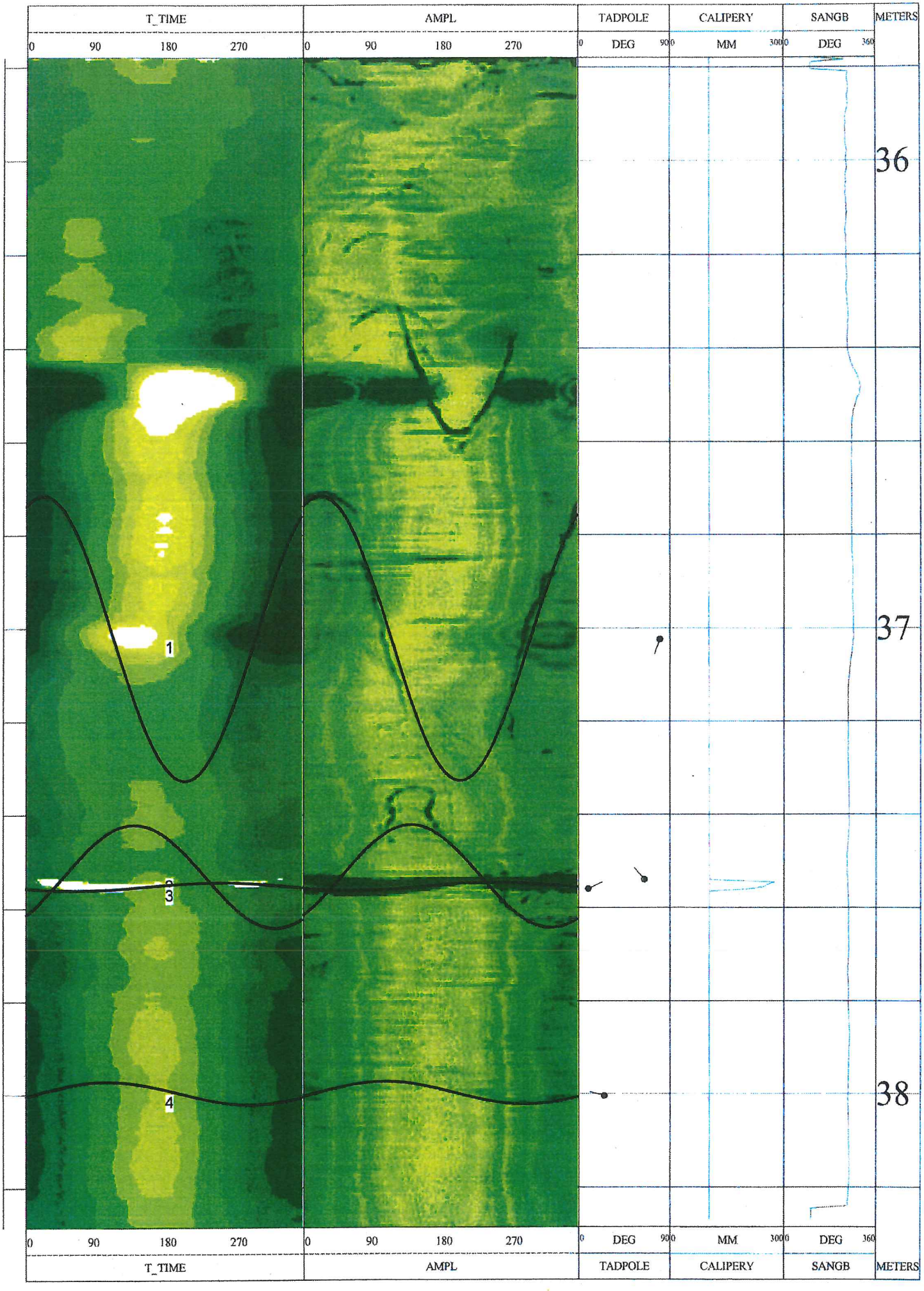
Company	: DrilTech Ground Engineering Ltd
Borehole No.	: S1-DH11
Contract	: Ground Investigation - New Territories West (Term Contract)
Contract No.	: GE/2014/07.34
Location	: Yuen Long

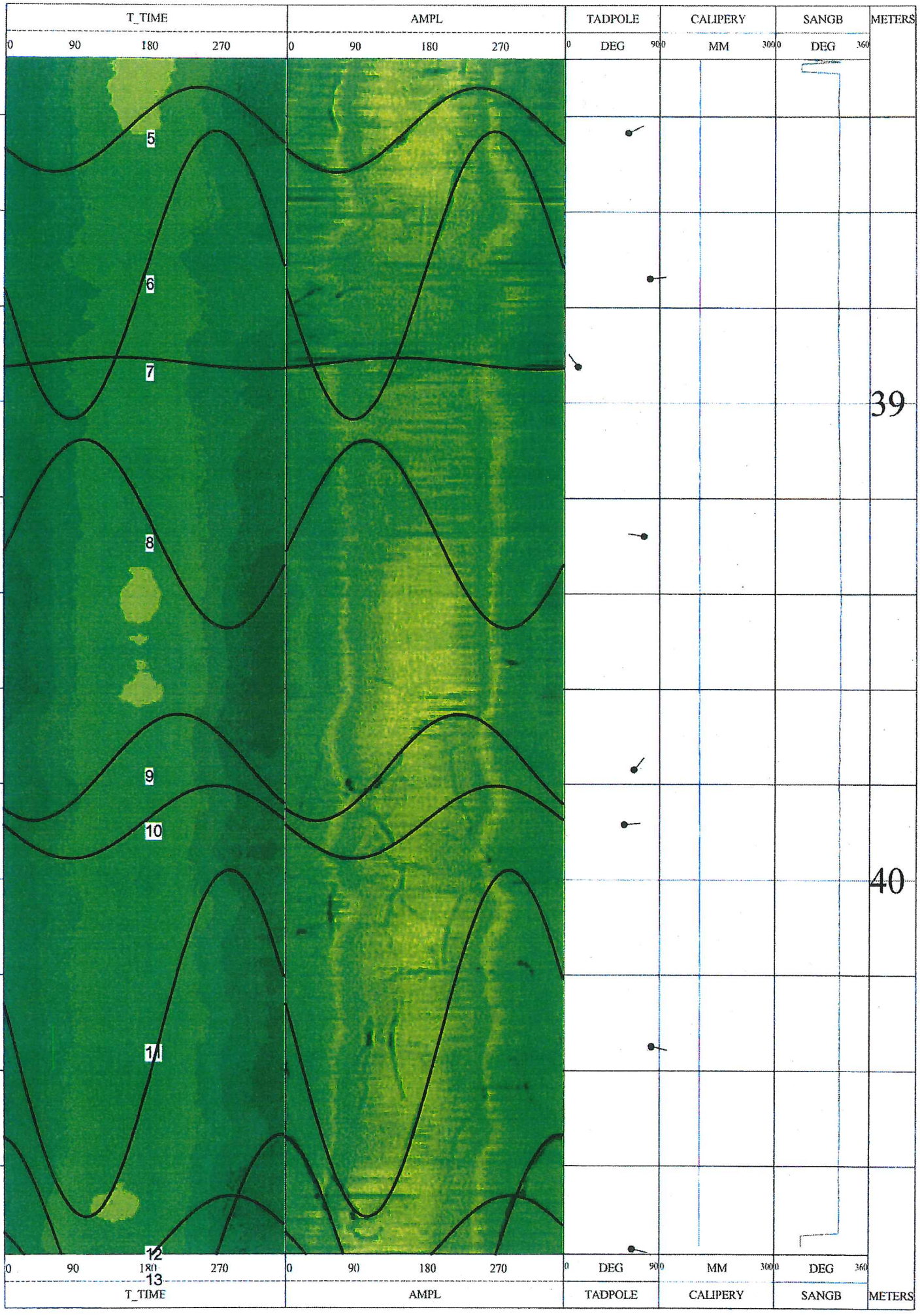
Test Date	: 08-12-2015	Permanent Datum	: None
Depth Driller	: 50.33m	Elev.Perm.Datum	: None
Log Bottom	: 48.1m	Log Measured From	: GL
Log Top	: 35.78m	Drl Measured From	: GL
Casing Driller	: 35.78m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A

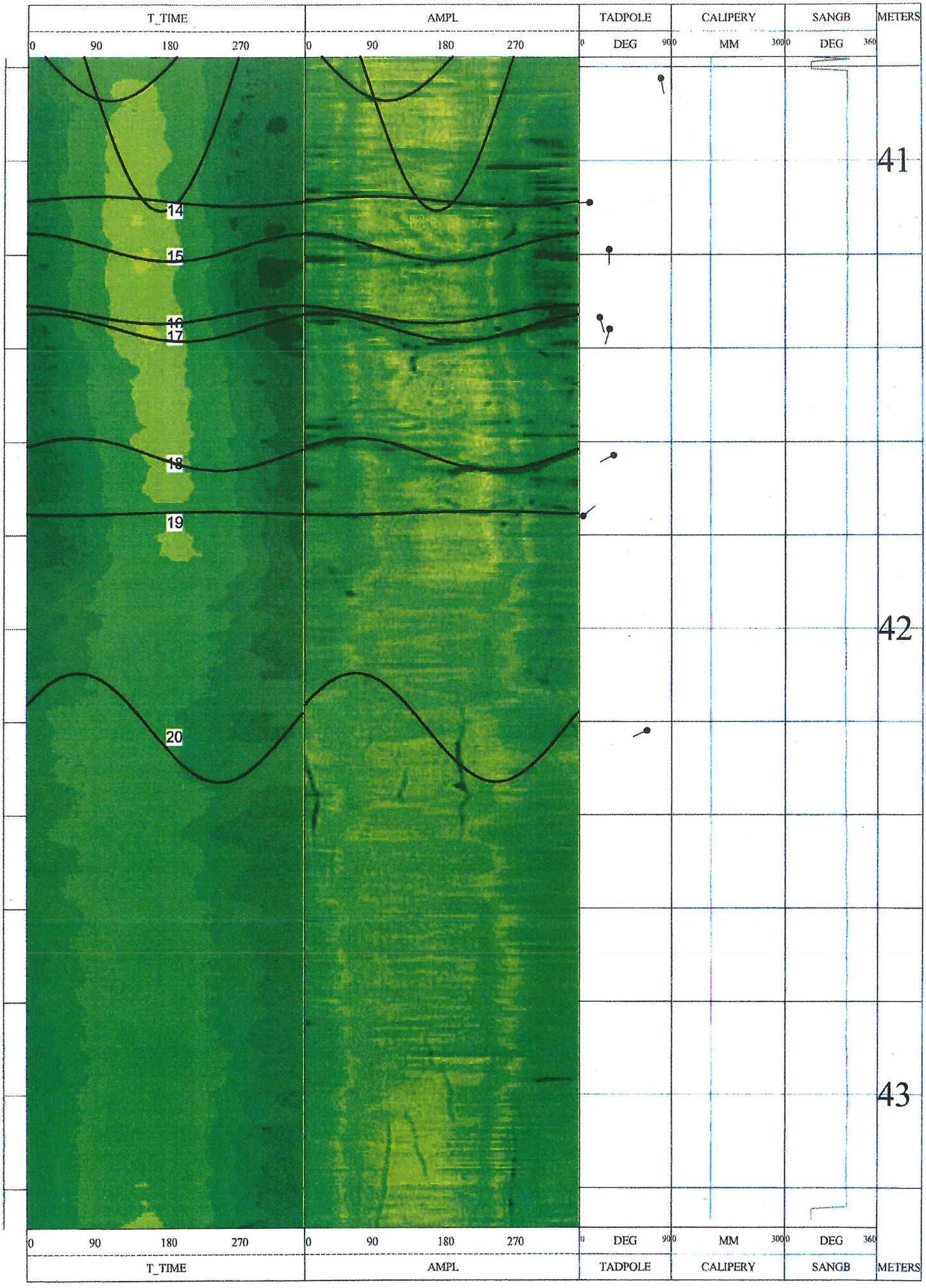
Remark : All directions are relative to magnetic north from Hong Kong Metric Grid System North

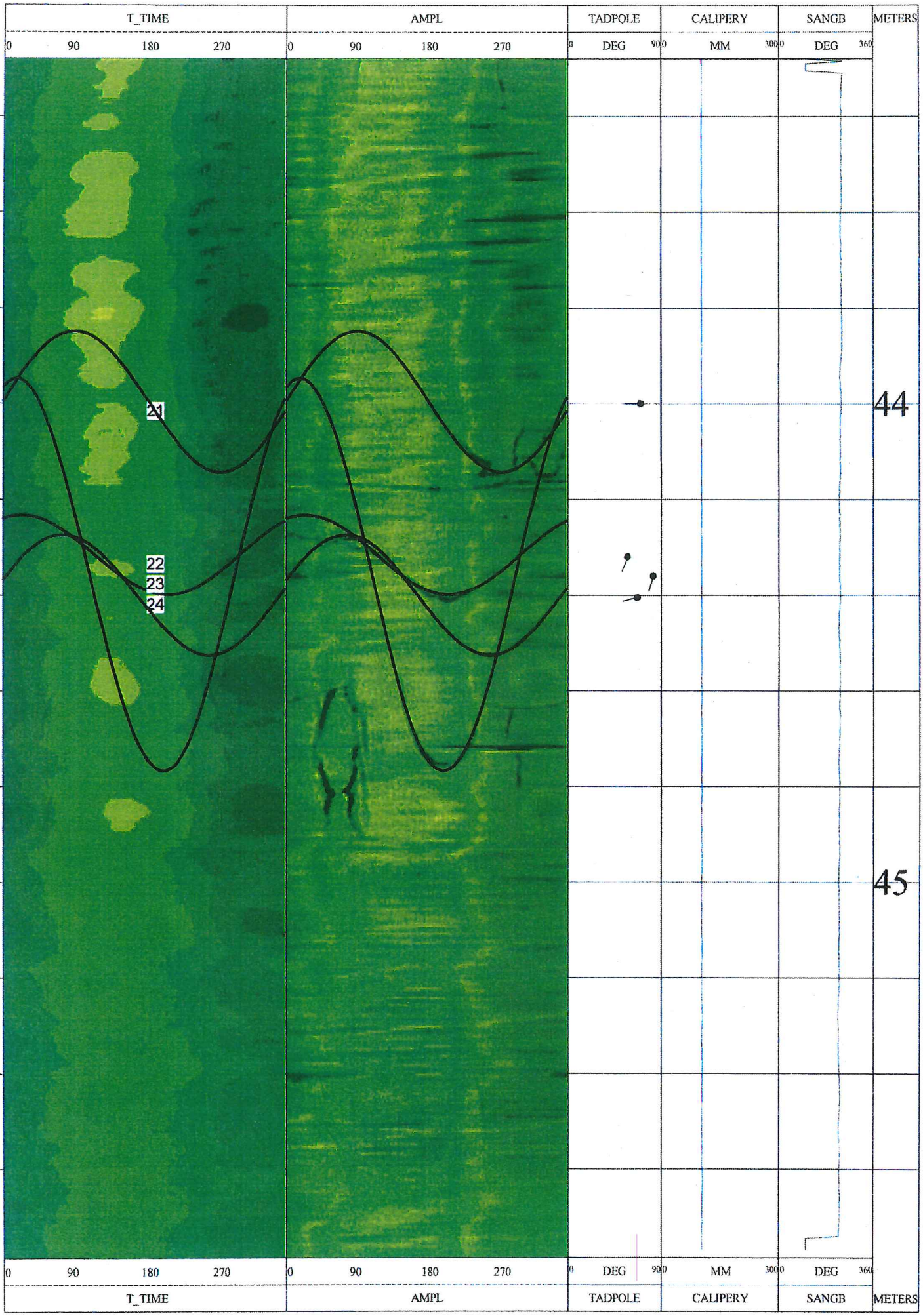
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	80	202	36.72	37.33	10.31	0.5	268.0	Joint
2	65	318	37.42	37.64	10.31	0.5	249.7	Joint
3	10	065	37.55	37.56	18.00	0.4	245.0	Joint
4	26	285	37.97	38.02	10.31	0.4	240.6	Joint
5	61	063	38.34	38.52	10.27	0.4	238.7	Joint
6	81	084	38.43	39.04	10.31	0.5	237.3	Joint
7	13	322	38.91	38.93	10.27	0.5	237.0	Joint
8	75	280	39.08	39.47	10.27	0.4	236.8	Joint
9	66	039	39.65	39.88	10.31	0.5	255.2	Joint
10	57	085	39.80	39.96	10.27	0.4	244.3	Joint
11	82	103	39.98	40.71	10.27	0.4	251.9	Joint
12	64	105	40.66	40.87	10.31	0.5	242.1	Joint
13	80	169	40.53	41.11	10.31	0.4	247.2	Joint
14	11	267	41.08	41.10	10.31	0.5	250.0	Joint
15	30	180	41.15	41.21	10.31	0.5	244.2	Joint
16	21	164	41.31	41.35	10.27	0.4	238.0	Joint
17	30	197	41.33	41.39	10.27	0.3	233.3	Joint
18	34	244	41.59	41.66	10.27	0.4	246.9	Joint
19	04	050	41.75	41.76	10.31	0.4	245.0	Joint
20	66	245	42.10	42.33	10.27	0.5	235.5	Joint
21	71	269	43.85	44.14	10.31	0.6	235.1	Joint
22	58	204	44.23	44.40	10.31	0.5	227.2	Joint
23	83	197	43.95	44.77	10.27	0.5	219.0	Joint
24	68	255	44.27	44.53	10.27	0.5	242.1	Joint
25	35	281	46.39	46.47	10.27	0.6	227.6	Joint
26	82	311	46.35	47.11	10.23	0.5	221.9	Joint
27	34	179	47.06	47.13	10.31	0.6	227.4	Joint
28	28	173	47.21	47.26	10.31	0.5	228.6	Joint
29	40	148	47.36	47.44	10.31	0.5	226.1	Joint
30	69	357	47.50	47.77	24.80	0.5	225.7	Weather Zone Top

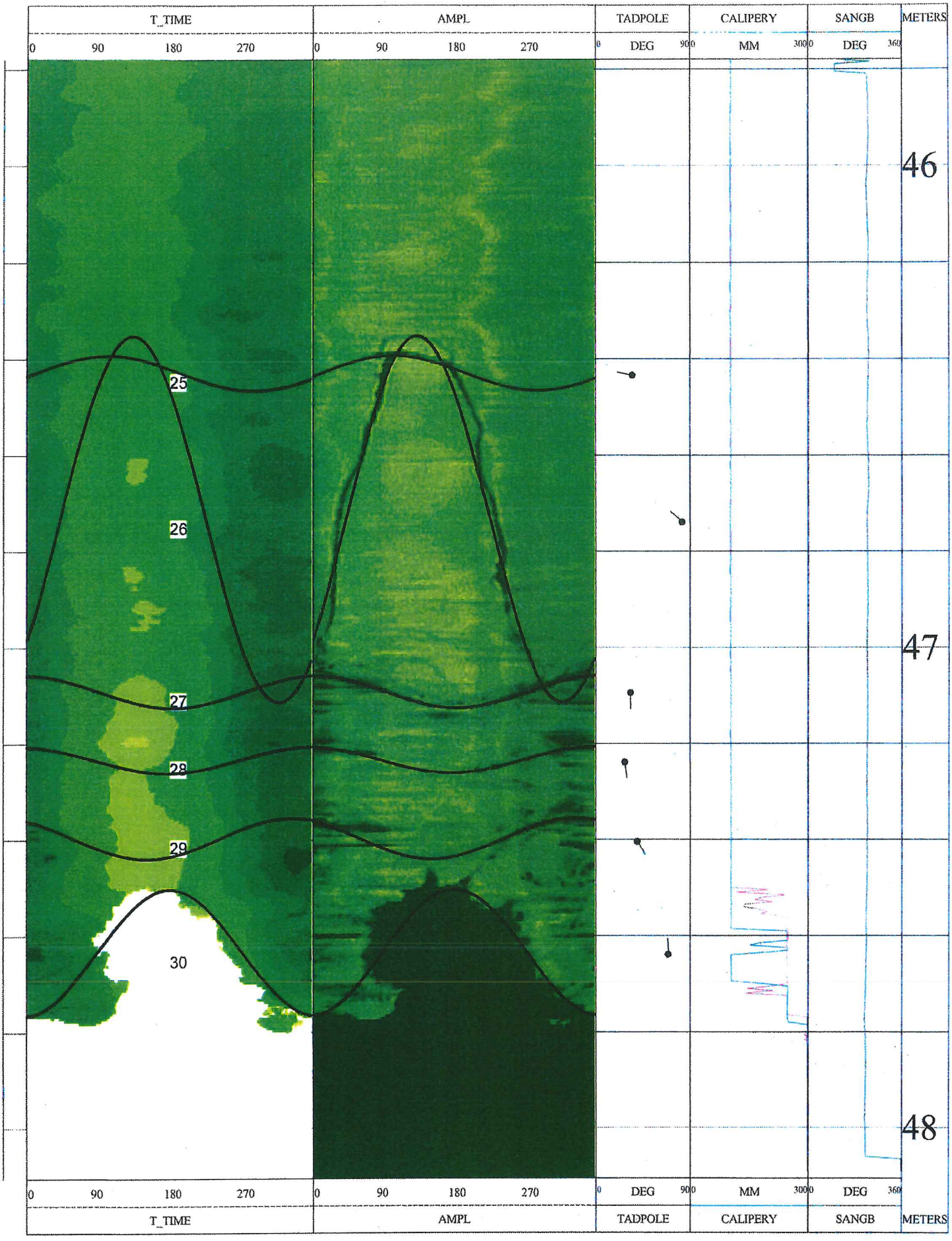
Checked by:

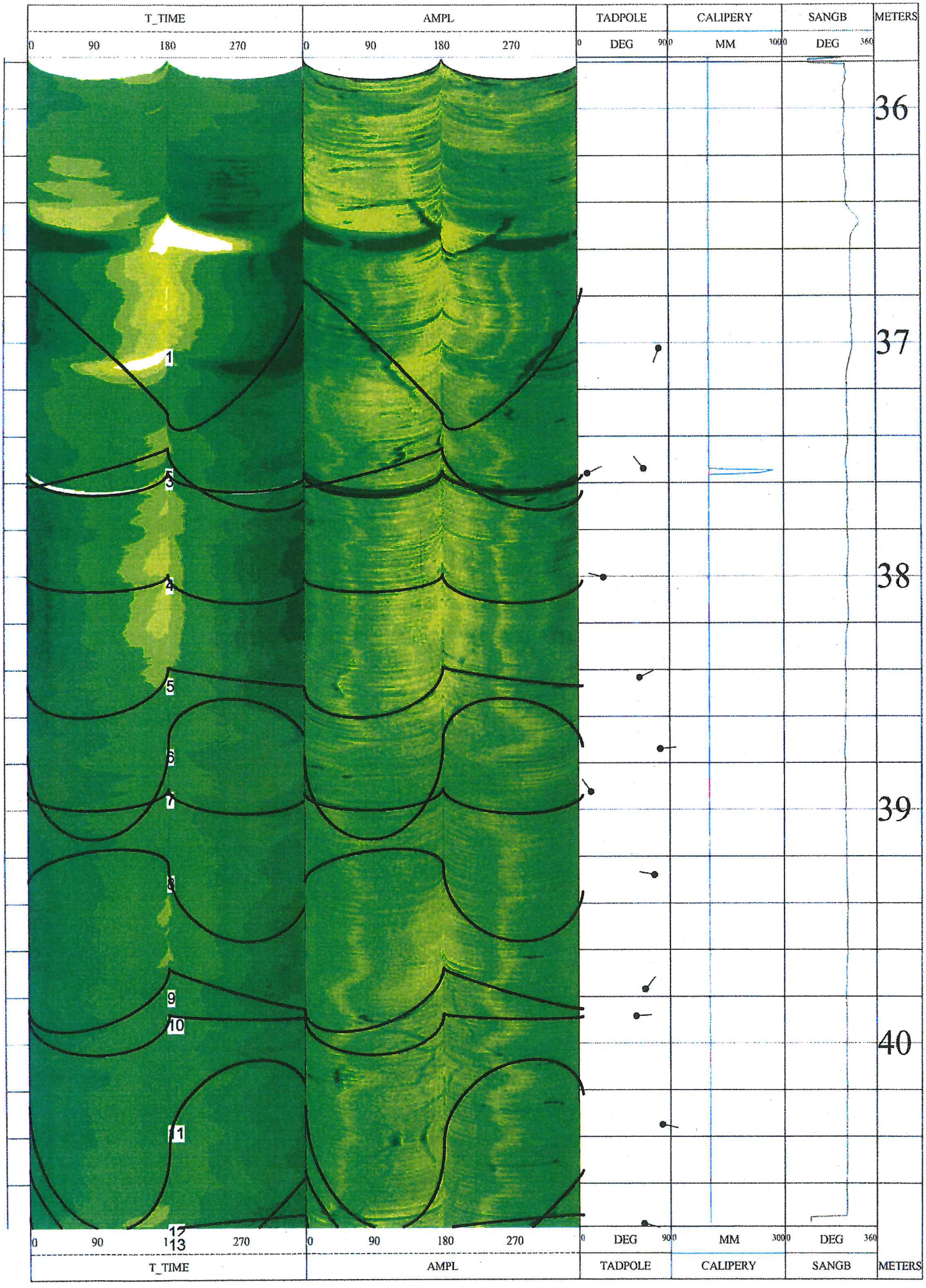

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 DEG 900
MM 3000
DEG 360
36
37
38
1
3
4

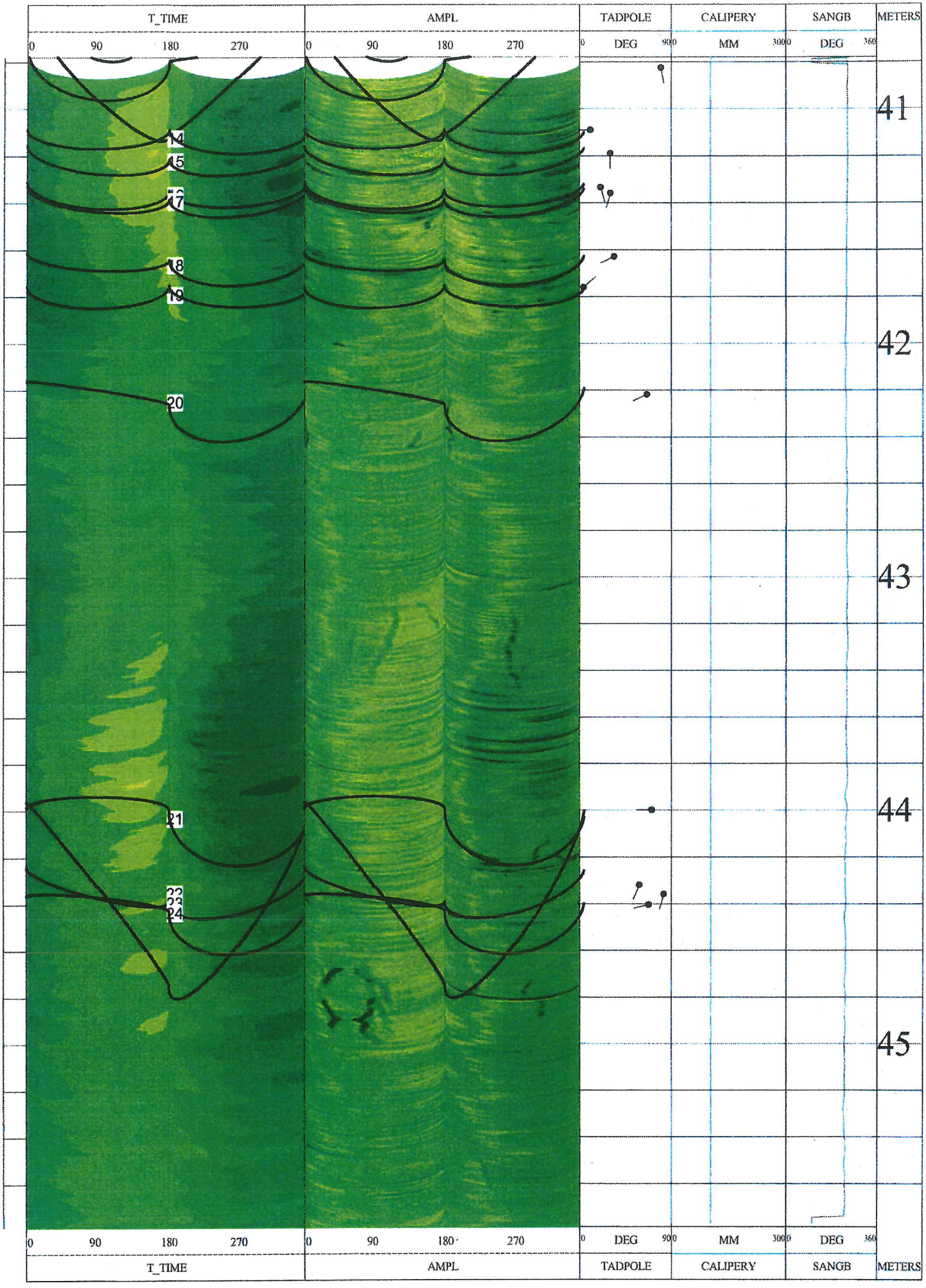

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
DEG
MM
5
6
7
8
9
10
11
12
13
39
40

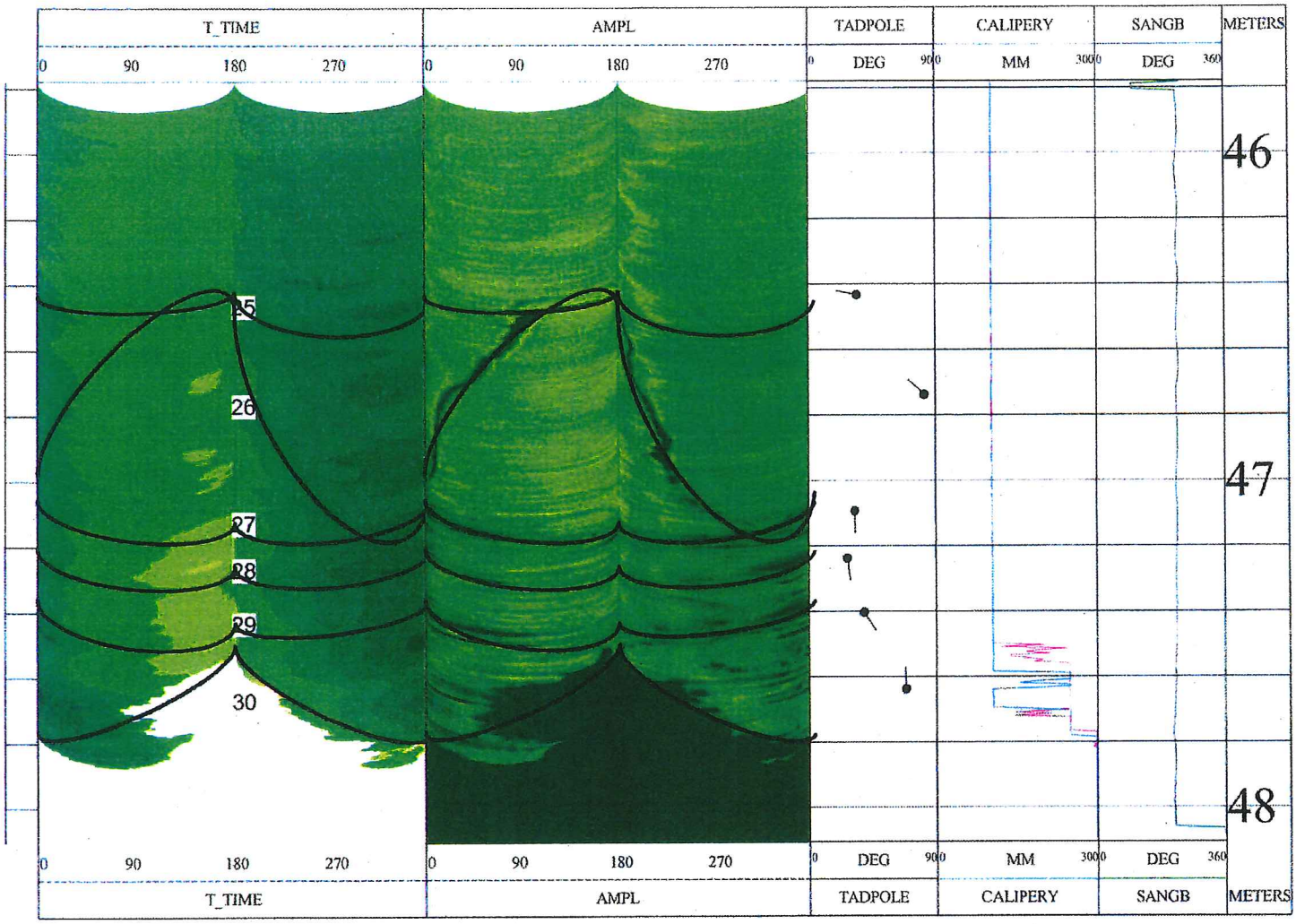

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
14
15
16
17
18
19
20
41
42
43

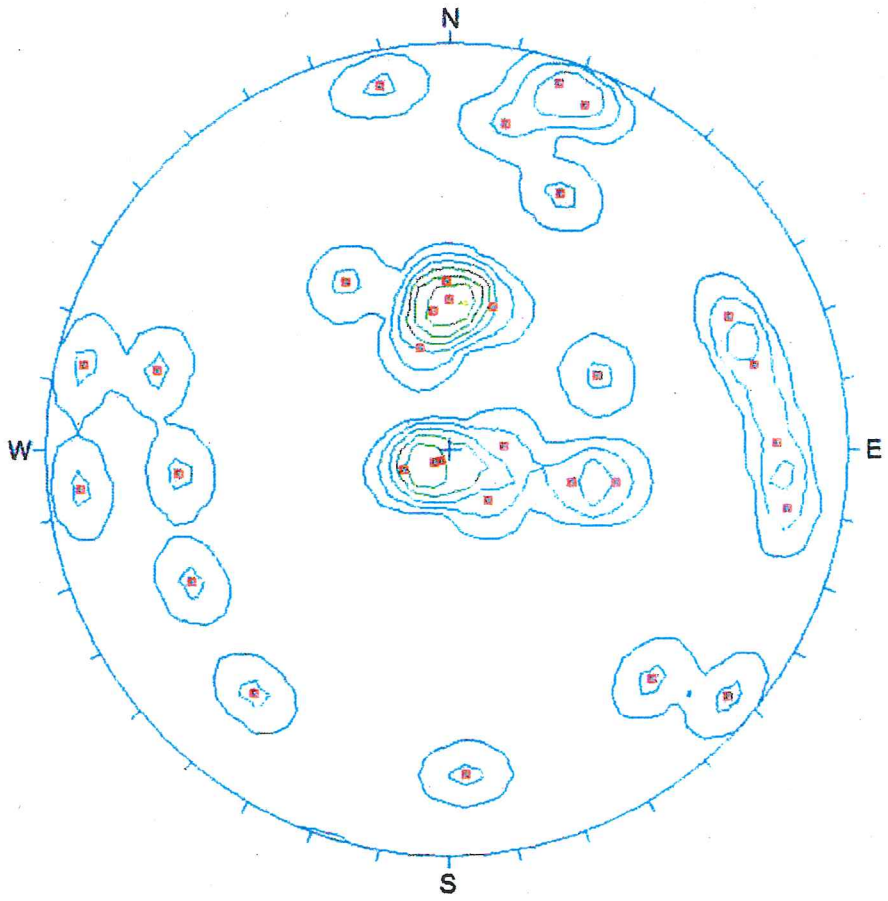

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 DEG 900
0 MM 3000
0 DEG 360
21
22
23
24
44
45


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
46
47
48
25
26
27
28
29
30


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
DEG 900
MM 3000
DEG 360
36
37
38
39
40
1
3
4
5
6
7
8
9
10
11
12
13


T_TIME
0
90
180
270
AMPL
0
90
180
270
TADPOLE
0
DEG
900
CALIPERY
MM
3000
SANGB
DEG
360
METERS
41
42
43
44
45
14
15
17
18
19
20
21
22
23
24
0
90
180
270
DEG
900
MM
3000
DEG
360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
46
47
48
25
26
27
28
29
30



Poles

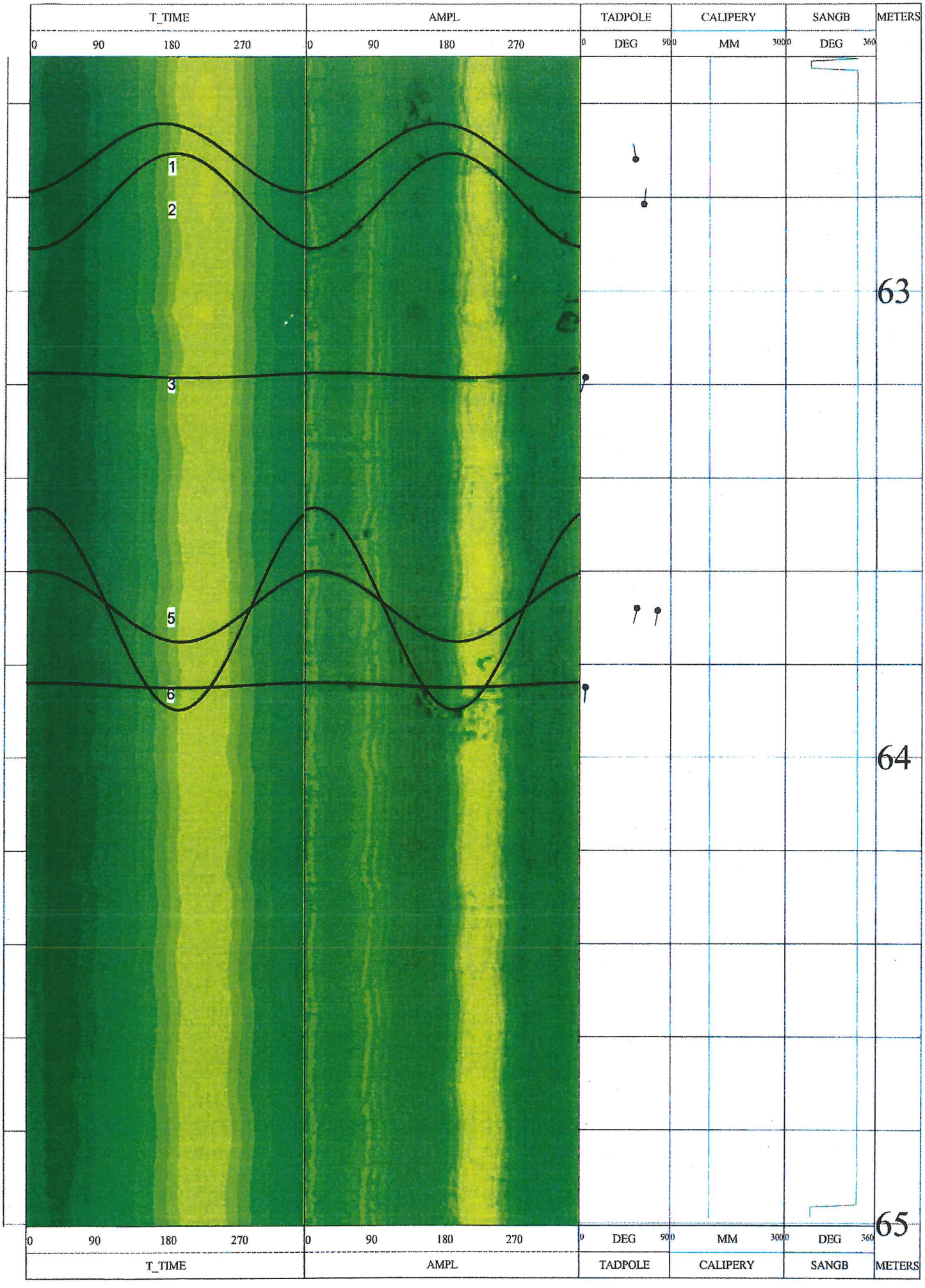
Equal Area
Lower Hemisphere
32 Poles
32 Entries

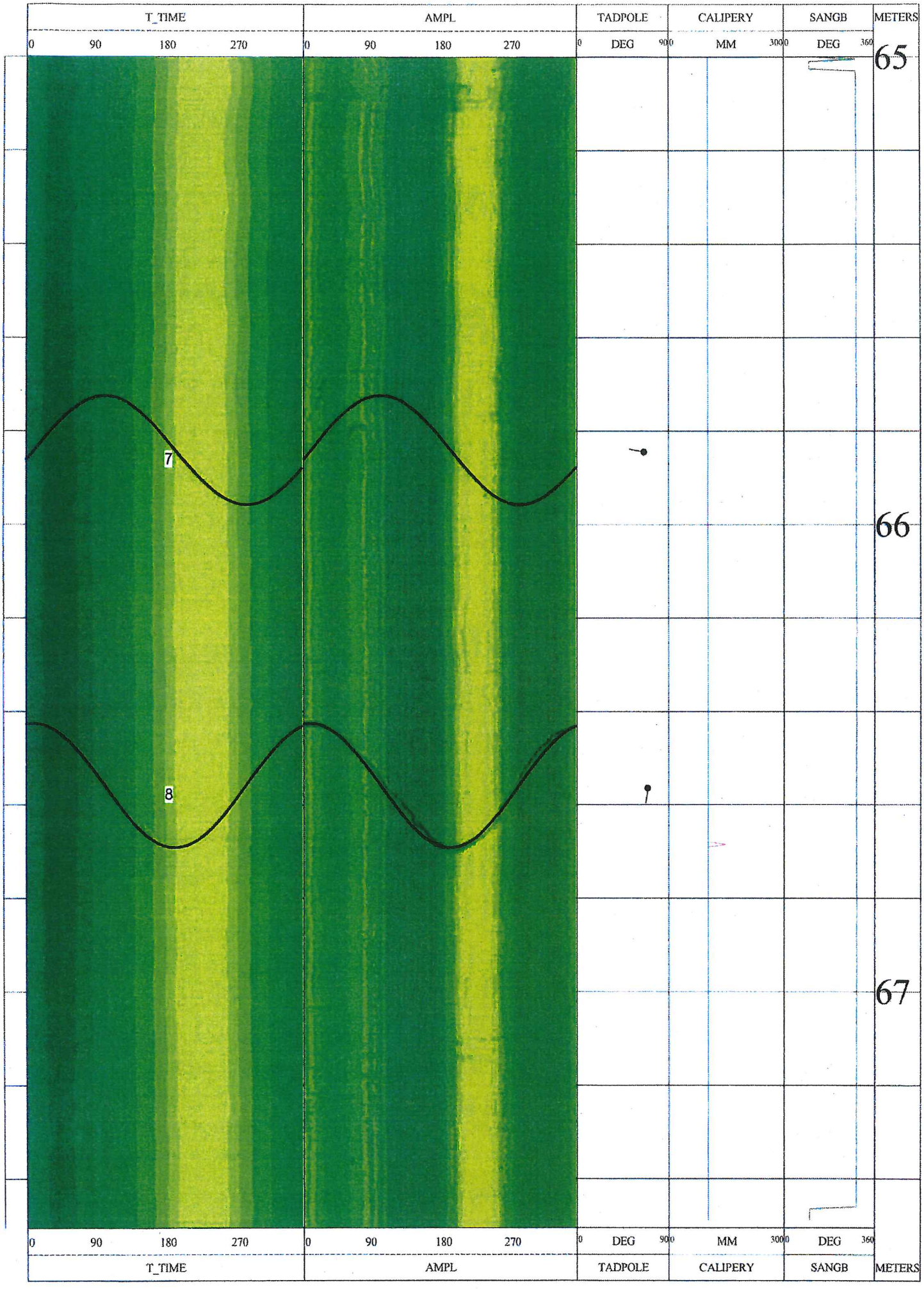
Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.31
Location	:	Yuen Long
Borehole No.	:	S1-DH11

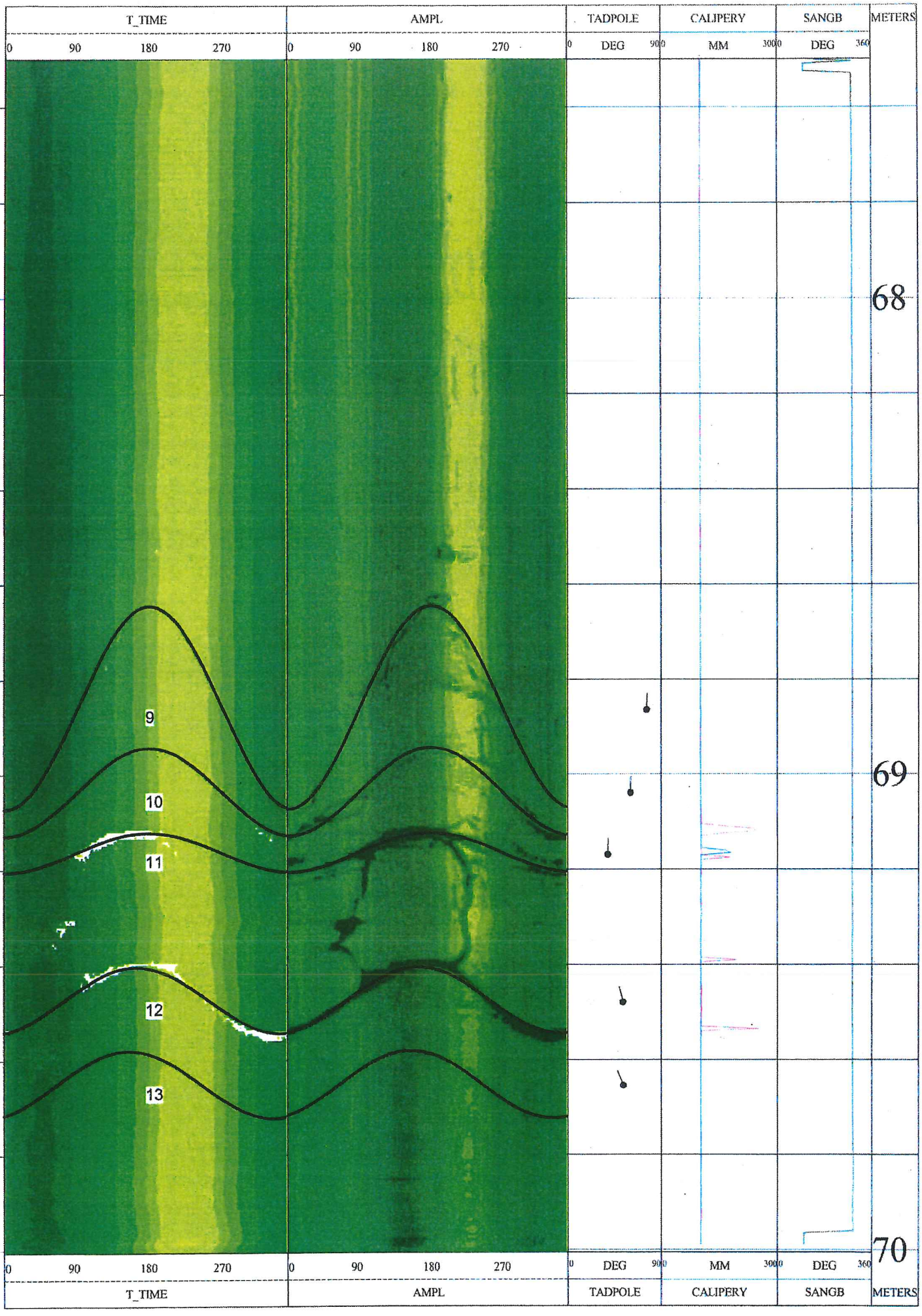
Company	: DrilTech Ground Engineering Ltd		
Borehole No.	: S1-DH11		
Contract	: Ground Investigation - New Territories West (Term Contract)		
Contract No.	: GE/2014/07.34		
Location	: Yuen Long		
Test Date	: 14-12-2015	Permanent Datum	: None
Depth Driller	: 80.99m	Elev.Perm.Datum	: None
Log Bottom	: 78m	Log Measured From	: GL
Log Top	: 62.5m	Drl Measured From	: GL
Casing Driller	: 52.7m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A
Remark	: All directions are relative to magnetic north from Hong Kong Metric Grid System North		

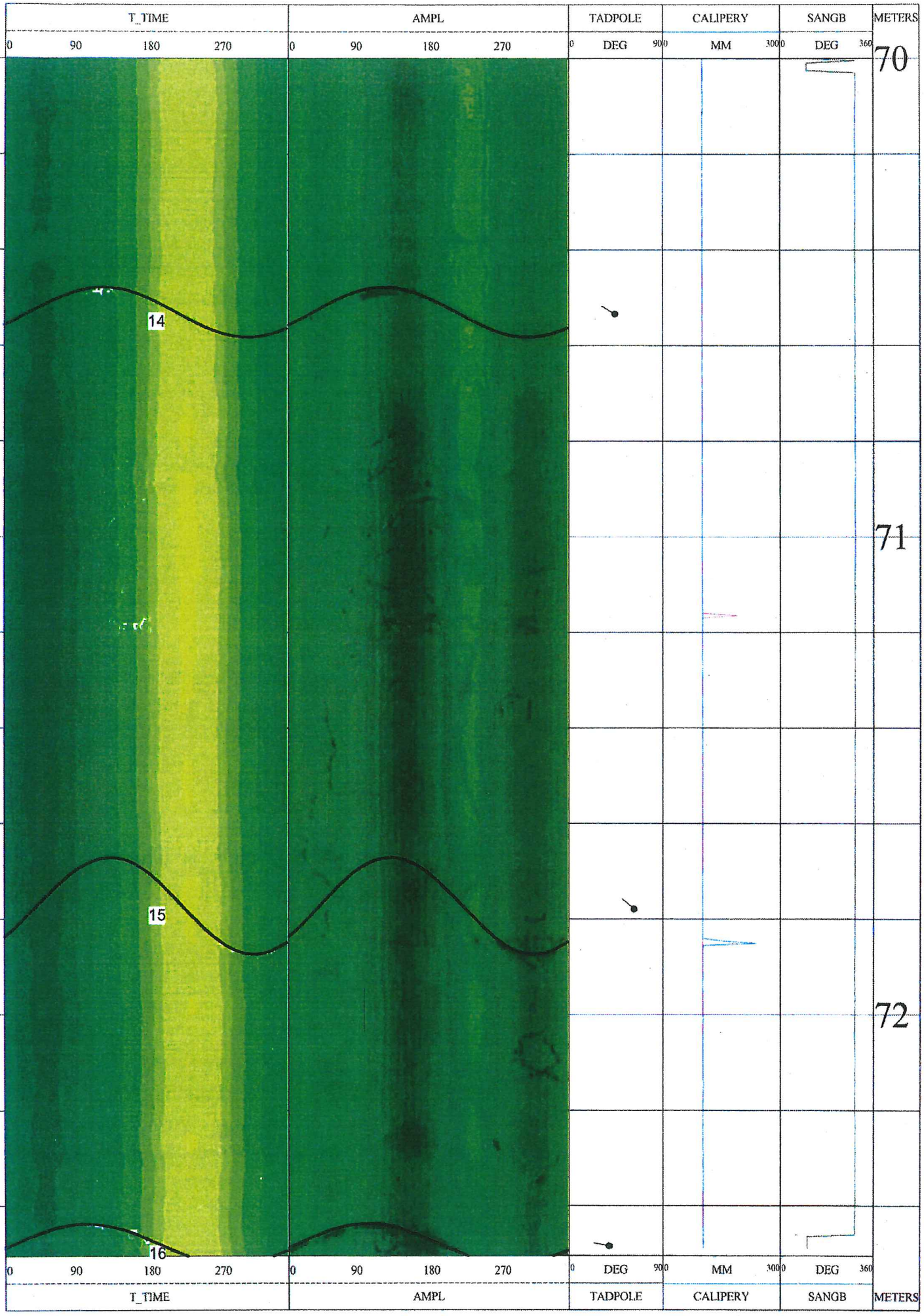
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	55	350	62.64	62.79	10.20	0.9	291.9	Joint
2	63	007	62.71	62.91	10.23	1.0	283.5	Joint
3	06	200	63.17	63.19	10.20	1.0	284.4	Joint
4	57	194	63.60	63.75	10.20	1.0	287.3	Joint
5	77	192	63.46	63.90	10.20	1.0	287.3	Joint
6	06	185	63.84	63.85	10.20	1.0	284.0	Joint
7	66	280	65.72	65.96	10.23	0.8	288.2	Joint
8	69	189	66.43	66.69	10.23	1.0	287.6	Joint
9	77	001	68.65	69.07	10.20	1.0	282.8	Joint
10	61	001	68.94	69.13	10.23	0.9	290.1	Joint
11	39	001	69.12	69.21	10.34	0.9	287.2	Joint
12	54	345	69.40	69.54	10.27	0.9	284.0	Joint
13	54	336	69.58	69.72	10.23	0.9	287.6	Joint
14	45	302	70.48	70.58	10.27	1.0	288.2	Joint
15	63	310	71.67	71.87	10.23	1.0	287.0	Joint
16	39	280	72.44	72.52	10.39	1.0	284.5	Joint
17	45	203	72.63	72.73	10.31	1.0	290.4	Joint
18	67	088	72.79	73.02	10.23	1.0	285.6	Joint
19	57	176	72.89	73.04	10.23	1.0	289.2	Joint
20	09	038	74.25	74.27	10.52	0.9	285.8	Joint
21	45	336	74.29	74.39	10.35	1.0	286.0	Joint
22	15	341	75.87	75.90	10.29	1.0	288.7	Joint
23	66	093	75.93	76.14	10.27	1.0	284.5	Joint
24	68	352	75.99	76.24	10.27	1.0	284.8	Joint
25	56	294	76.23	76.39	10.27	1.0	286.1	Joint
26	02	160	77.72	77.72	10.27	1.0	288.8	Joint

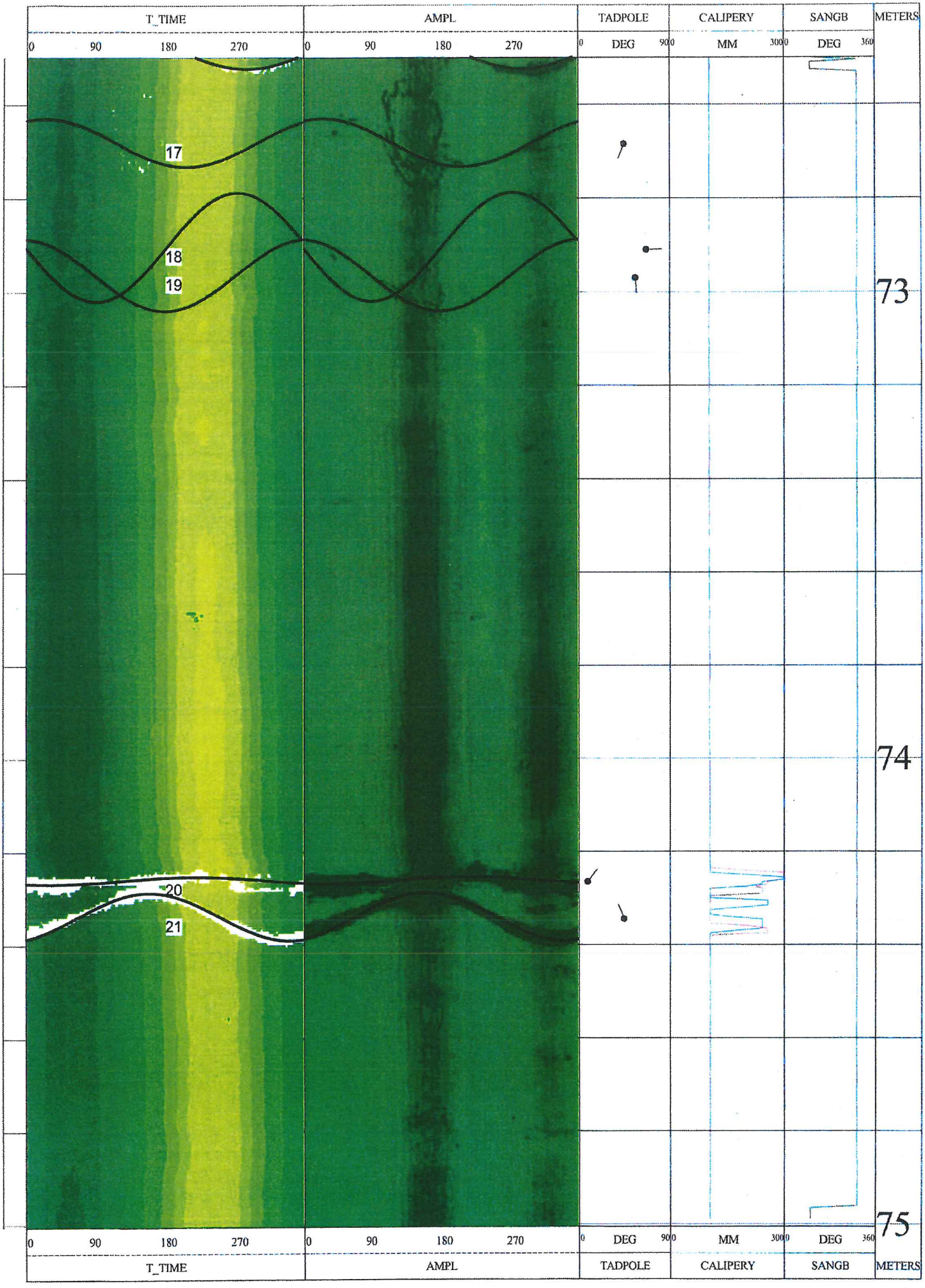
Checked by:

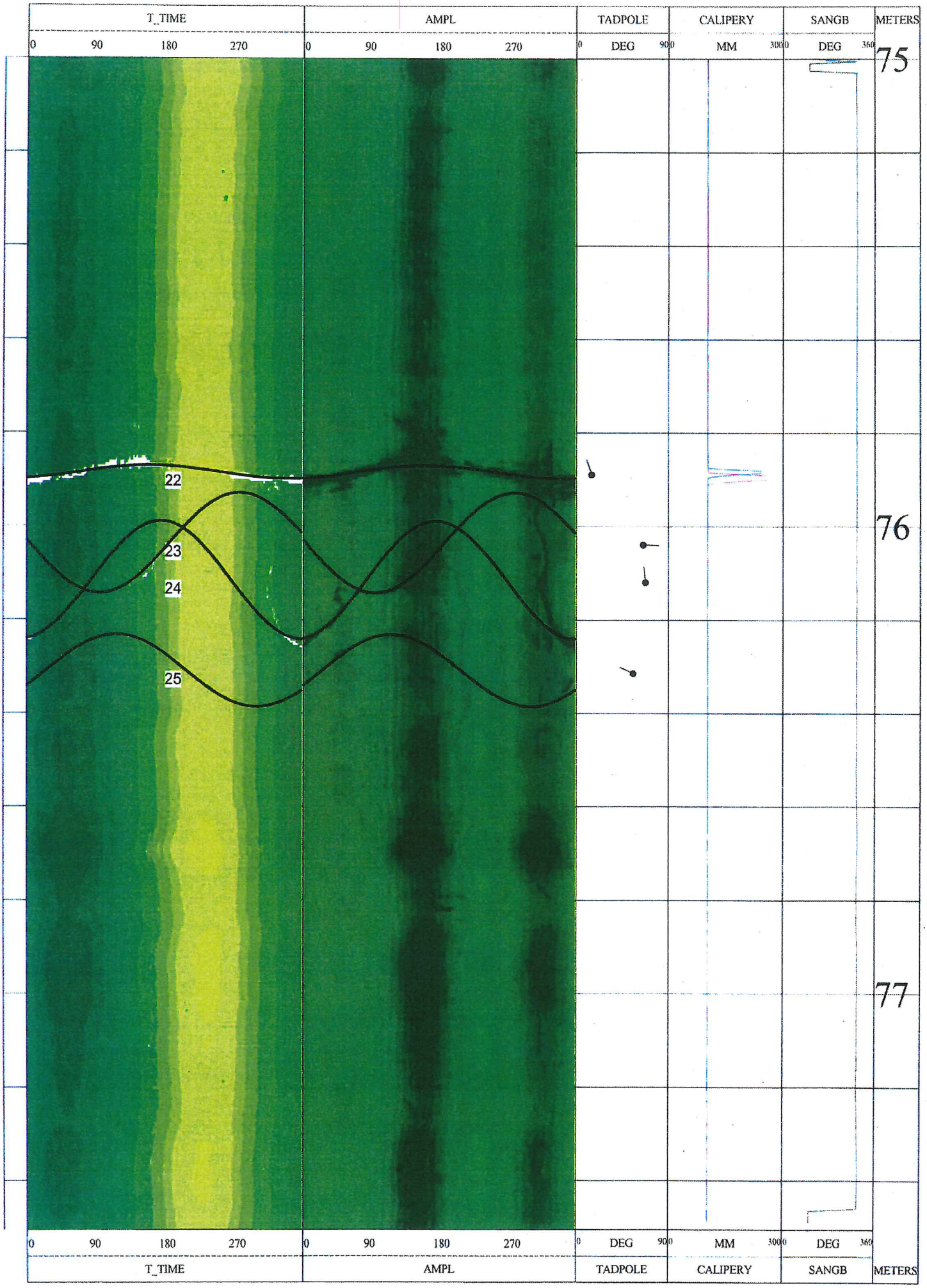

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 DEG 900
MM 3000
DEG 360
1
2
3
5
6
63
64
65

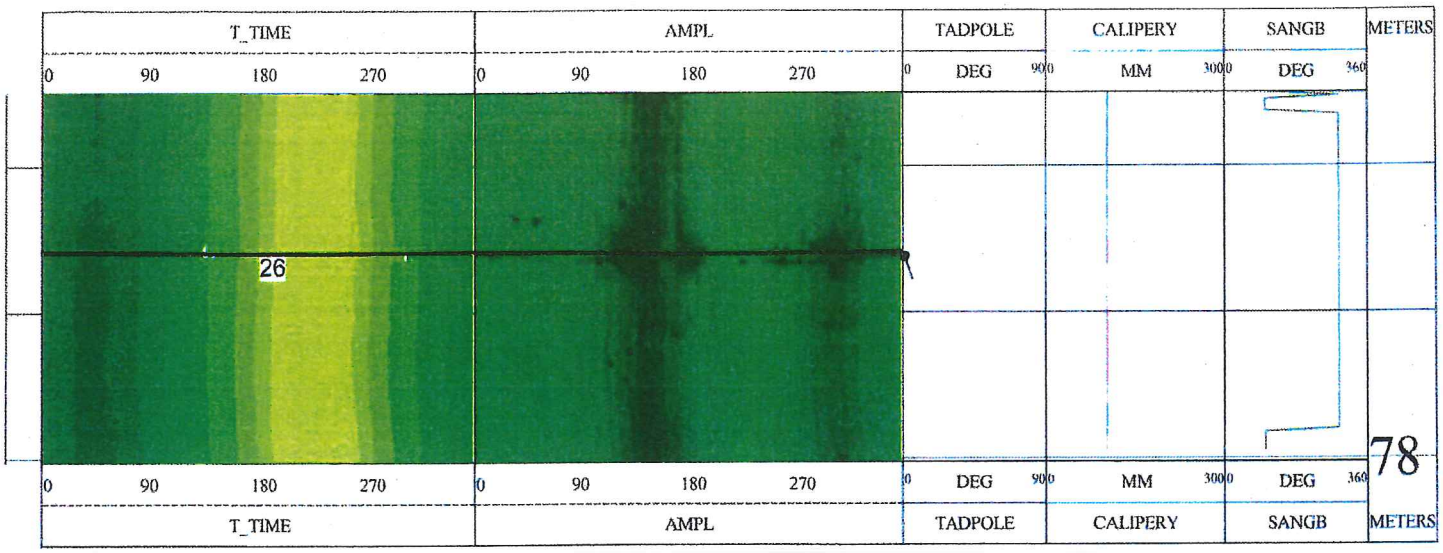

T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
0 MM 300
SANGB
0 DEG 360
METERS
65
66
67
7
8
0 90 180 270
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS

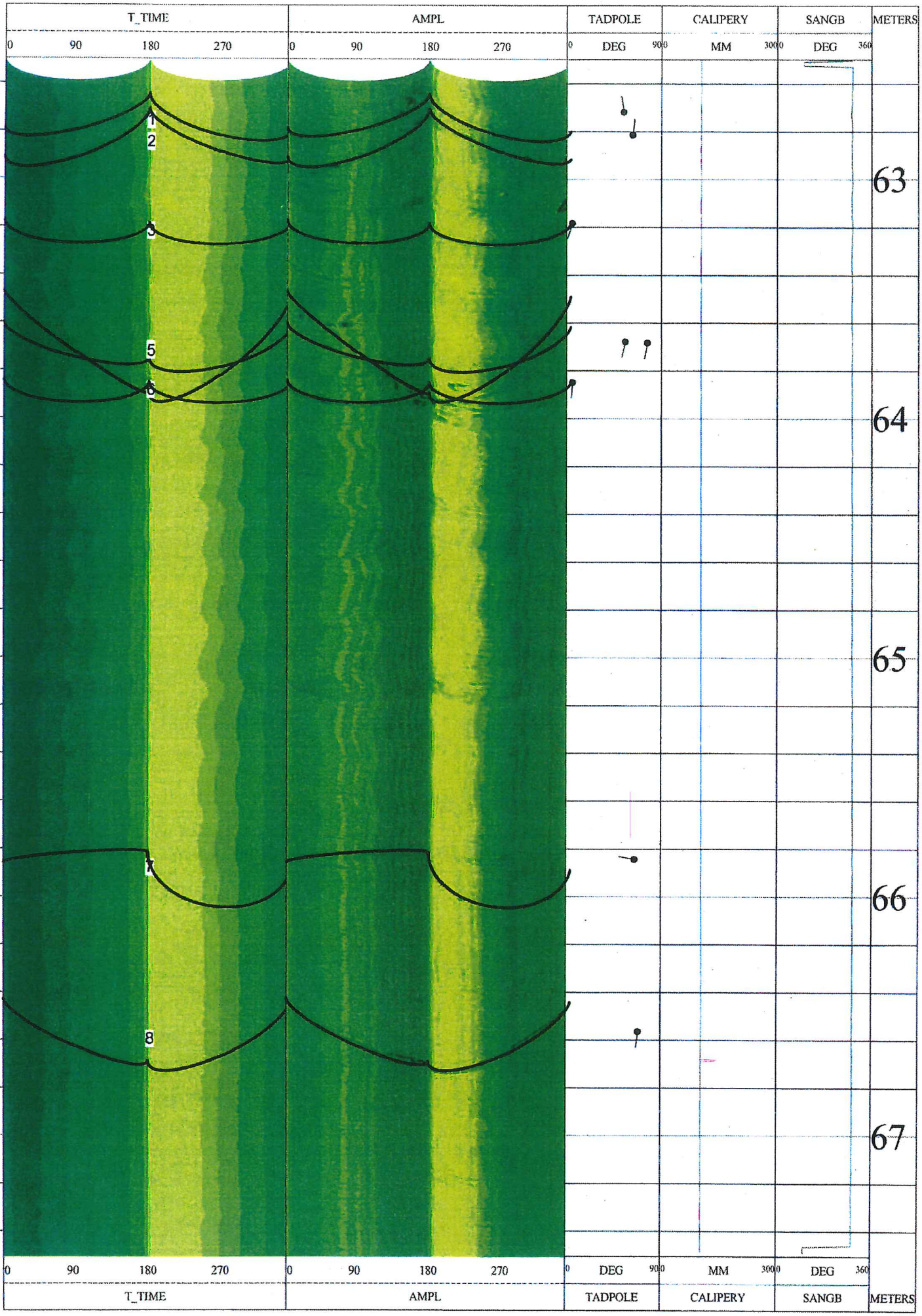

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
3000
360
68
69
70
9
10
11
12
13

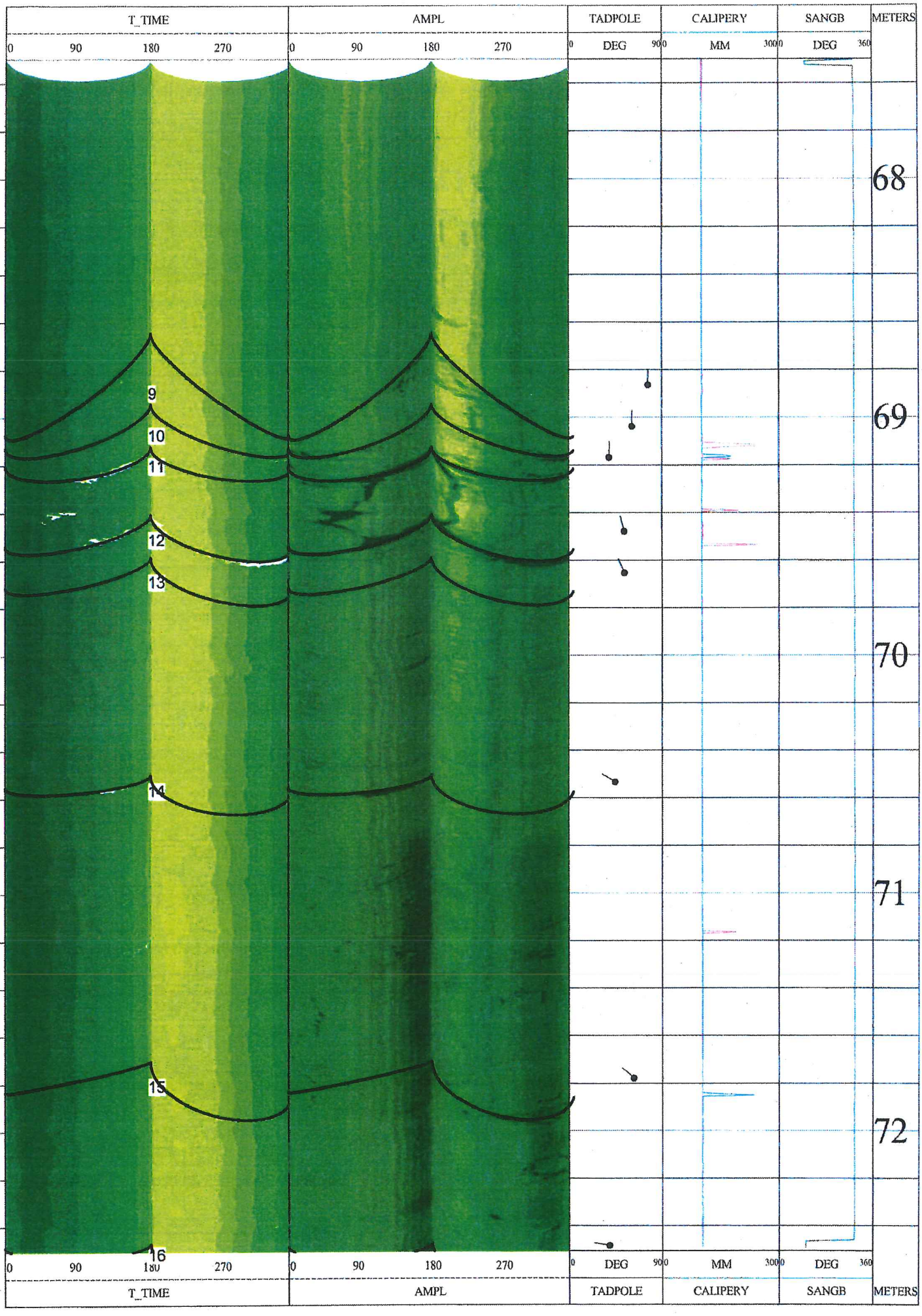

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 DEG 900
0 MM 3000
0 DEG 360
70
71
72
14
15
16

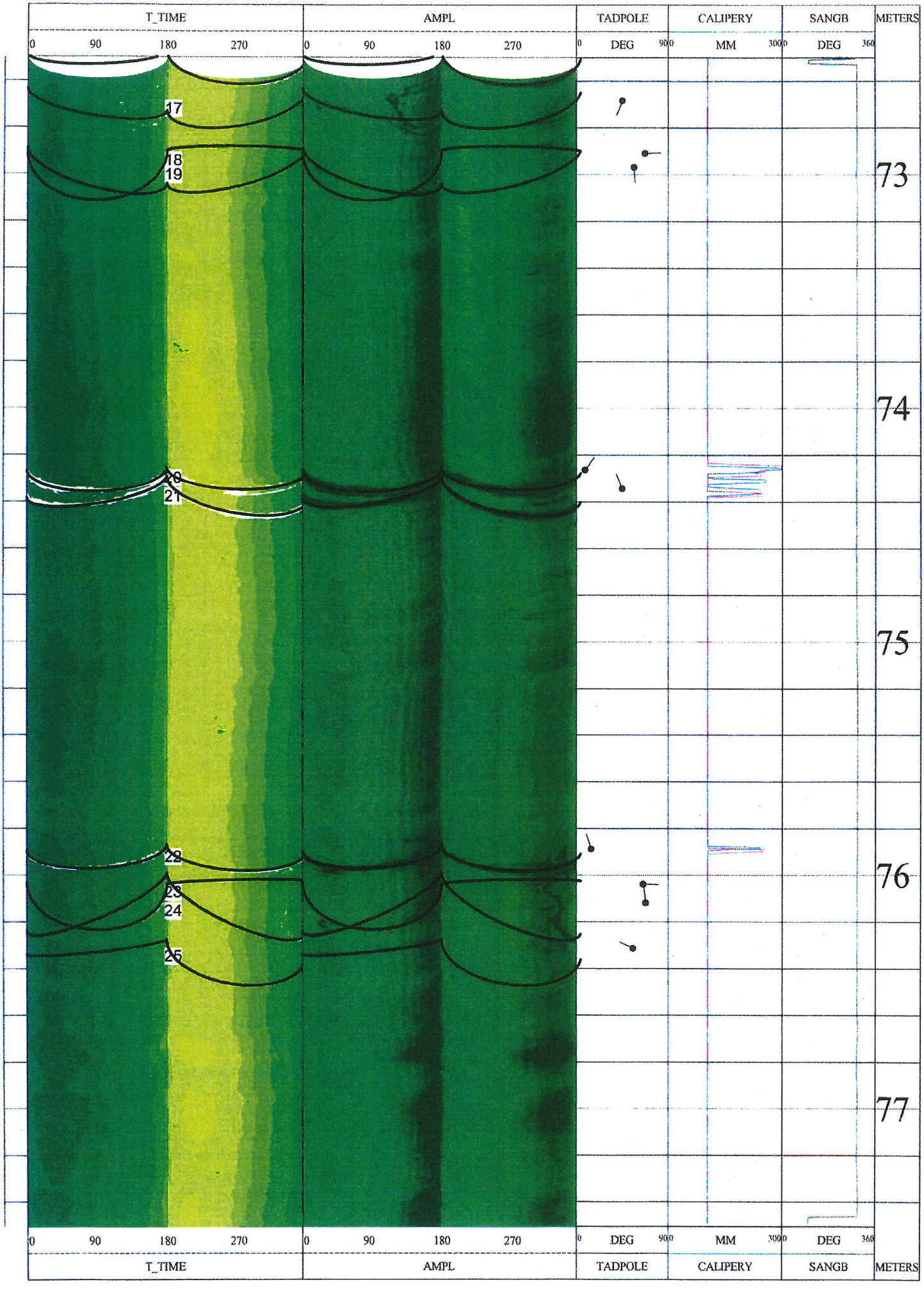

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
DEG 90 0
MM 3000
DEG 360
17
18
19
20
21
73
74
75

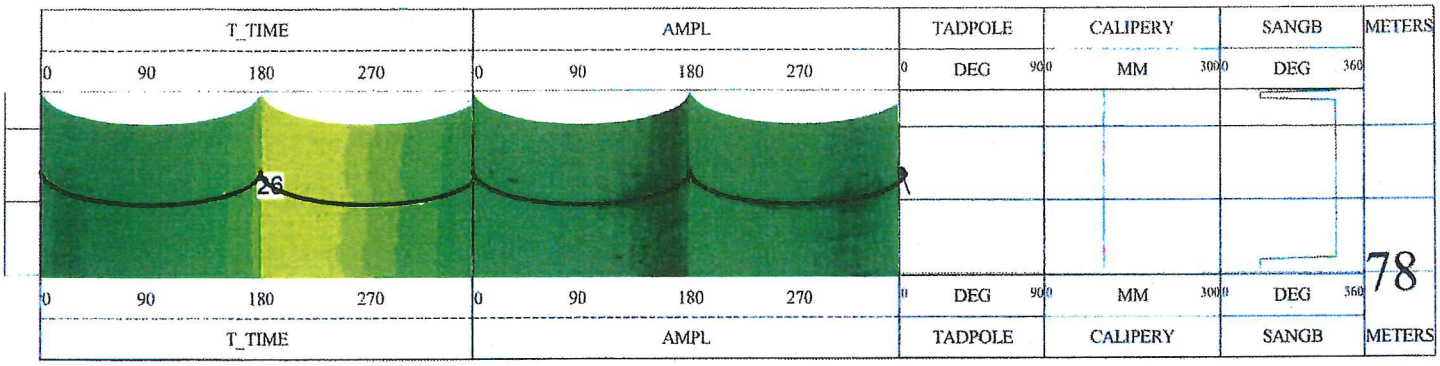

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 DEG 900
0 MM 3000
0 DEG 360
75
22
23
24
25
76
77

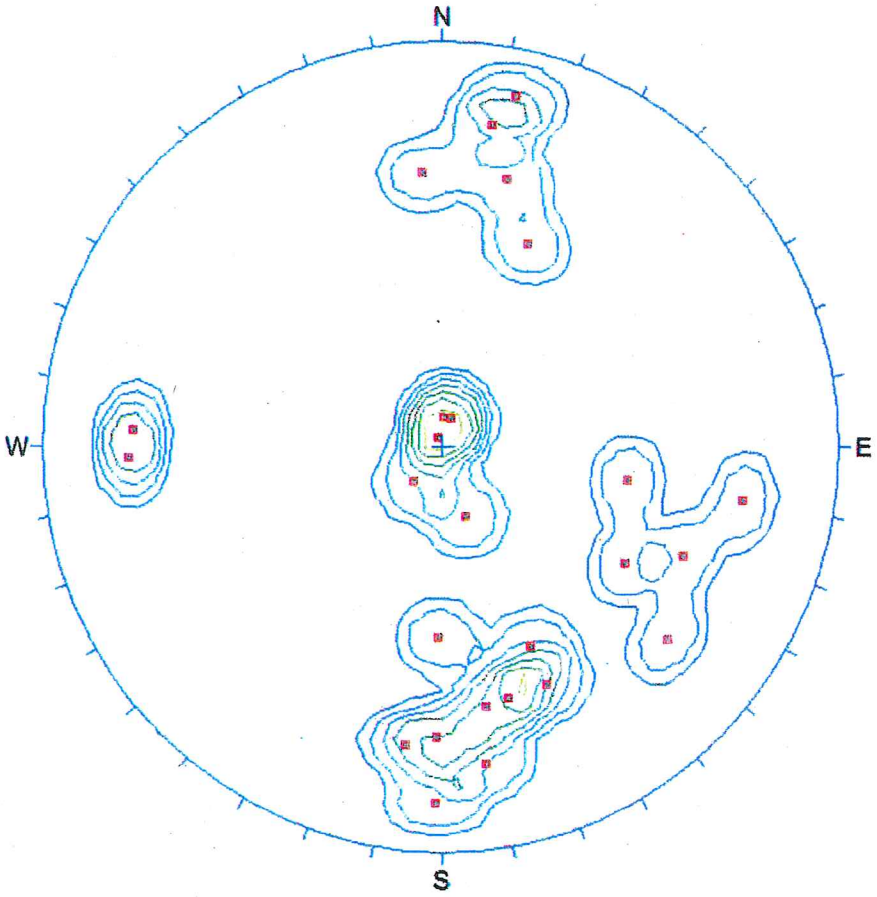

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 90 180 270
0 DEG 90
MM 3000
DEG 360
26
78


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
DEG
MM
63
64
65
66
67
1
2
3
5
6
7
8


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
360
3000
9
10
11
12
13
14
15
16
68
69
70
71
72


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
17
18
19
20
21
22
23
24
25
73
74
75
76
77


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
78



Poles

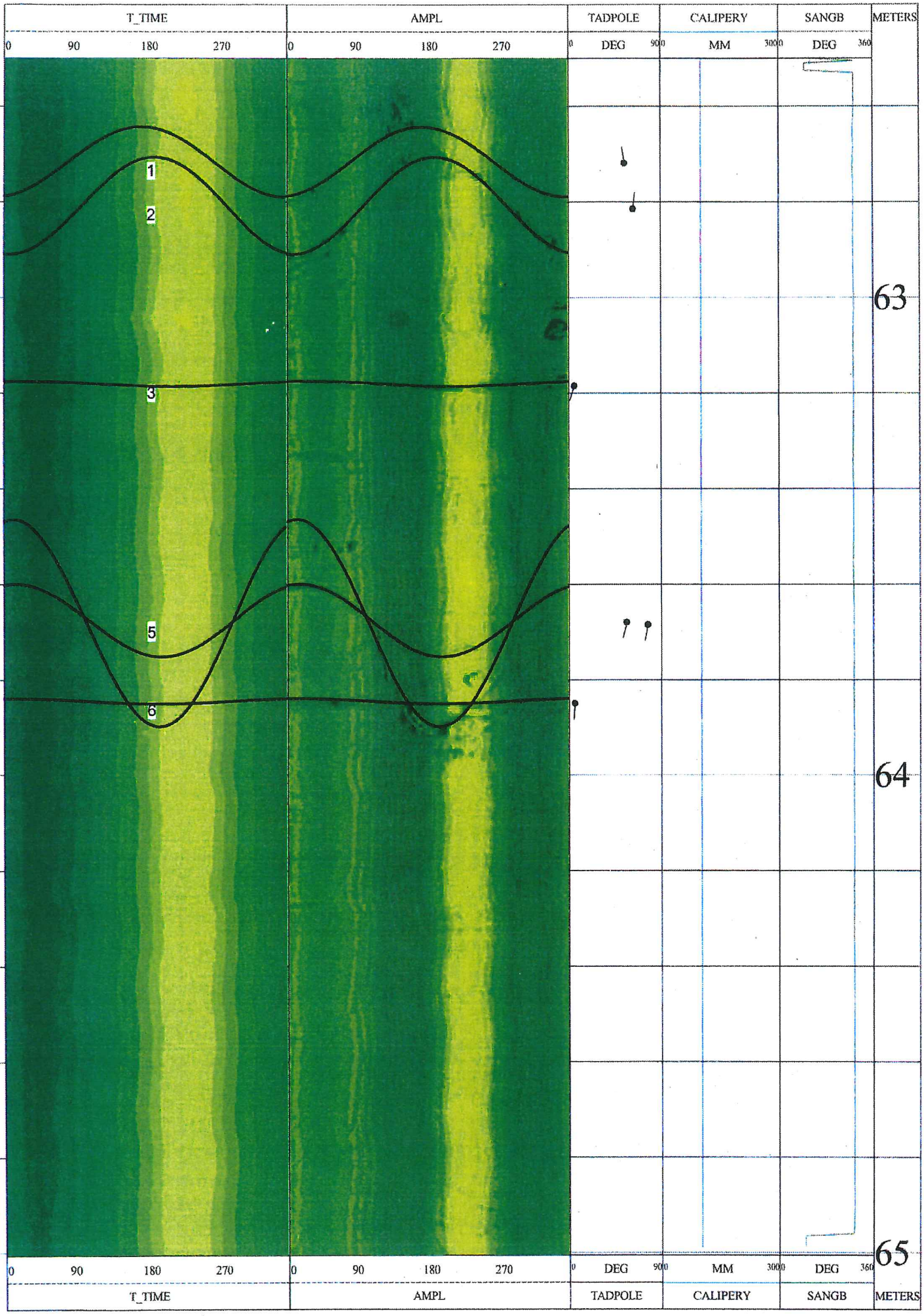
Equal Area
Lower Hemisphere
26 Poles
26 Entries

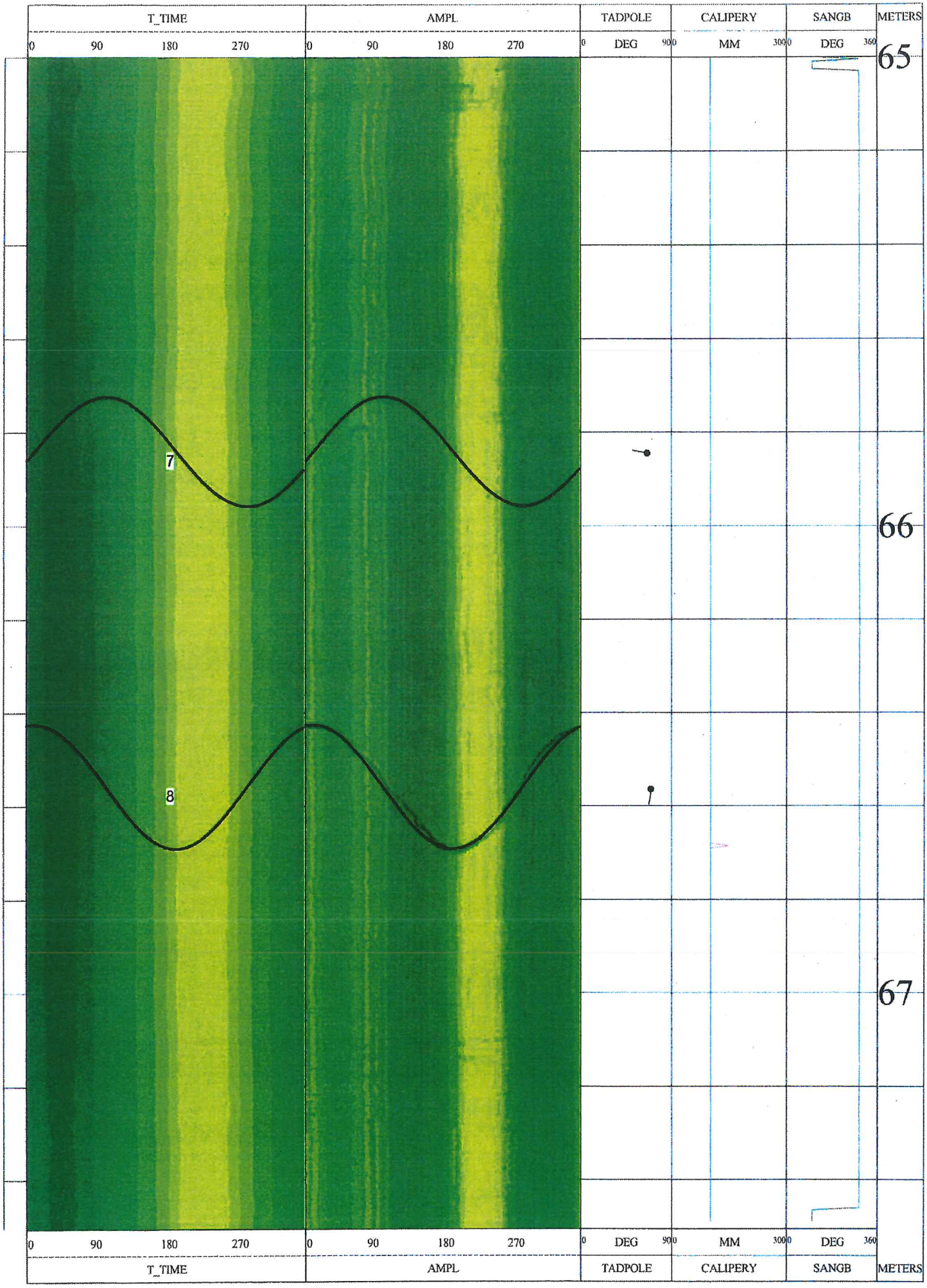
Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.34
Location	:	Yuen Long
Borehole No.	:	S1-DH11

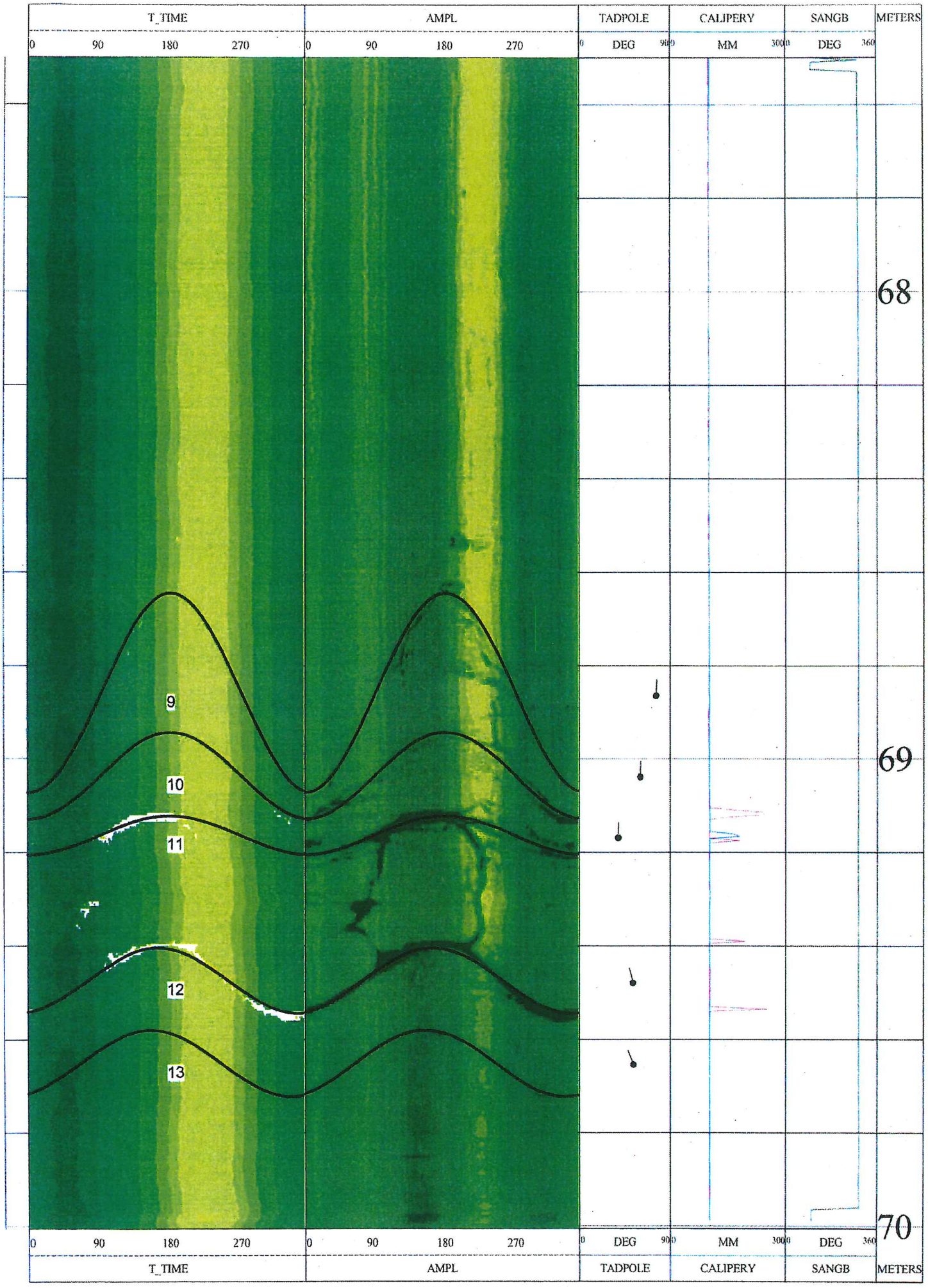
Company	: DrilTech Ground Engineering Ltd		
Borehole No.	: S1-DH11		
Contract	: Ground Investigation - New Territories West (Term Contract)		
Contract No.	: GE/2014/07.34		
Location	: Yuen Long		
Test Date	: 14-12-2015	Permanent Datum	: None
Depth Driller	: 80.99m	Elev.Perm.Datum	: None
Log Bottom	: 78m	Log Measured From	: GL
Log Top	: 62.5m	Drl Measured From	: GL
Casing Driller	: 52.7m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A
Remark	: All directions are relative to magnetic north from Hong Kong Metric Grid System North		

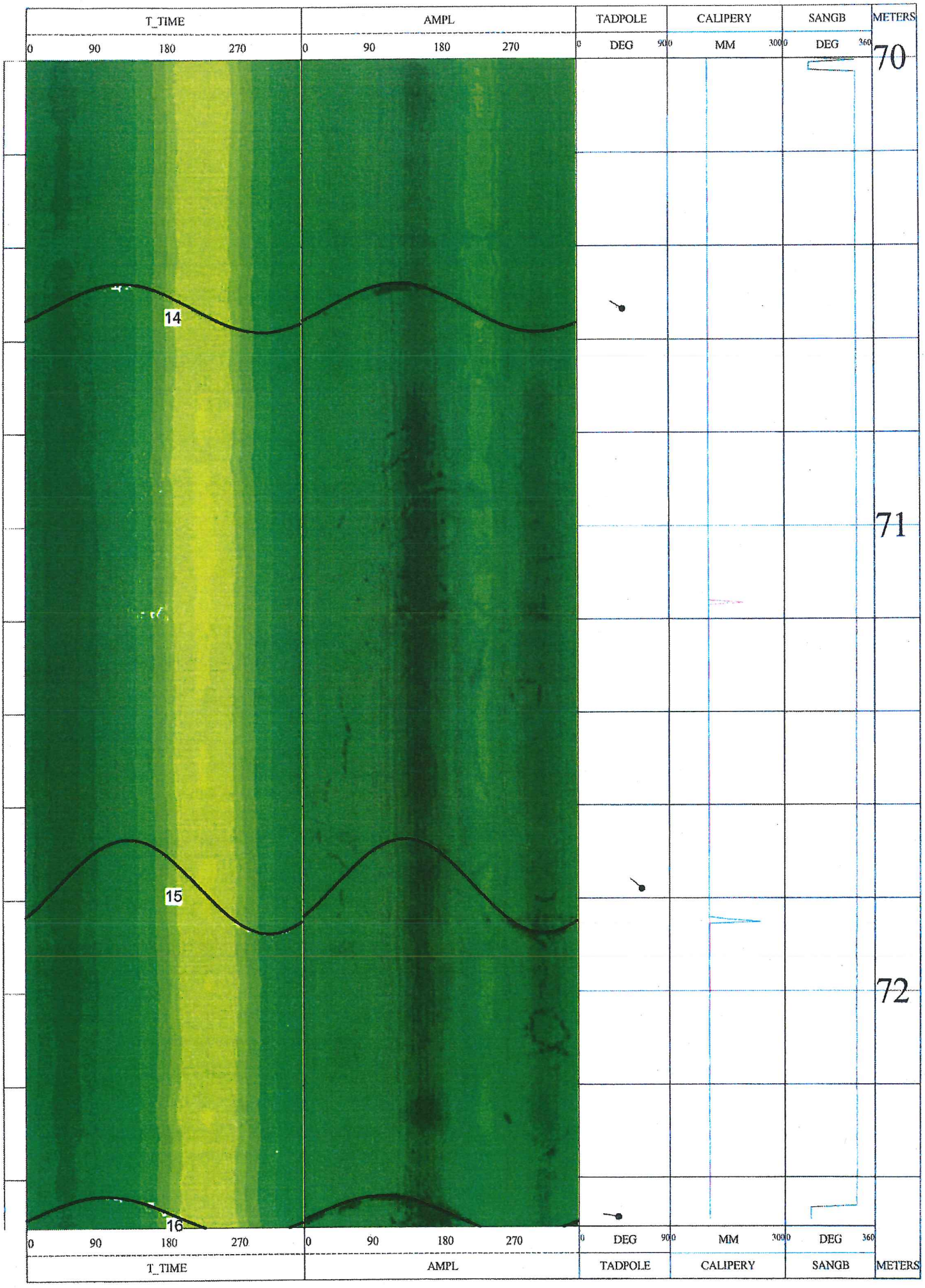
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	55	350	62.64	62.79	10.20	0.9	291.9	Joint
2	63	007	62.71	62.91	10.23	1.0	283.5	Joint
3	06	200	63.17	63.19	10.20	1.0	284.4	Joint
4	57	194	63.60	63.75	10.20	1.0	287.3	Joint
5	77	192	63.46	63.90	10.20	1.0	287.3	Joint
6	06	185	63.84	63.85	10.20	1.0	284.0	Joint
7	66	280	65.72	65.96	10.23	0.8	288.2	Joint
8	69	189	66.43	66.69	10.23	1.0	287.6	Joint
9	77	001	68.65	69.07	10.20	1.0	282.8	Joint
10	61	001	68.94	69.13	10.23	0.9	290.1	Joint
11	39	001	69.12	69.21	10.34	0.9	287.2	Joint
12	54	345	69.40	69.54	10.27	0.9	284.0	Joint
13	54	336	69.58	69.72	10.23	0.9	287.6	Joint
14	45	302	70.48	70.58	10.27	1.0	288.2	Joint
15	63	310	71.67	71.87	10.23	1.0	287.0	Joint
16	39	280	72.44	72.52	10.39	1.0	284.5	Joint
17	45	203	72.63	72.73	10.31	1.0	290.4	Joint
18	67	088	72.79	73.02	10.23	1.0	285.6	Joint
19	57	176	72.89	73.04	10.23	1.0	289.2	Joint
20	09	038	74.25	74.27	10.52	0.9	285.8	Joint
21	45	336	74.29	74.39	10.35	1.0	286.0	Joint
22	15	341	75.87	75.90	10.29	1.0	288.7	Joint
23	66	093	75.93	76.14	10.27	1.0	284.5	Joint
24	68	352	75.99	76.24	10.27	1.0	284.8	Joint
25	56	294	76.23	76.39	10.27	1.0	286.1	Joint
26	02	160	77.72	77.72	10.27	1.0	288.8	Joint

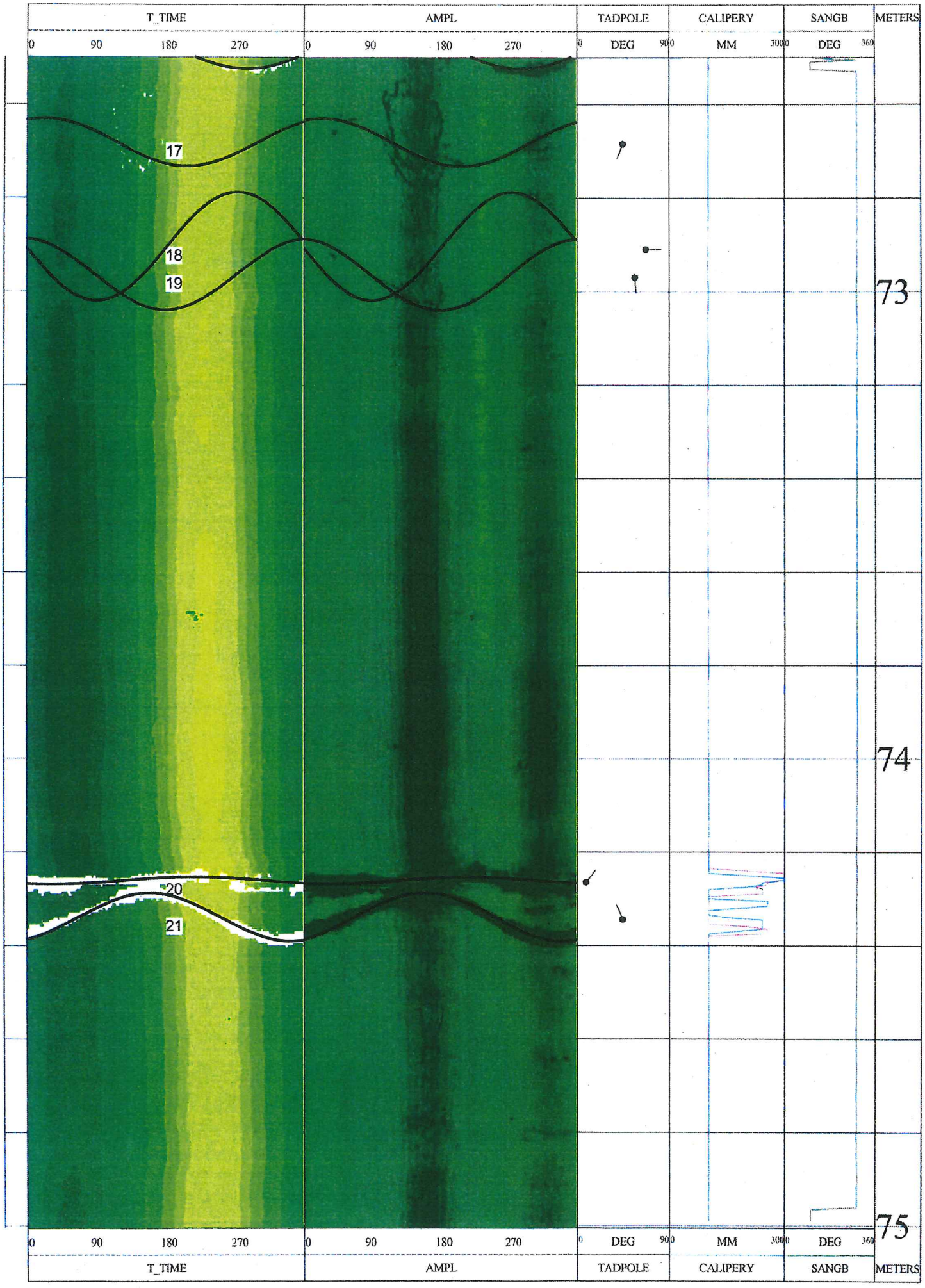
Checked by:

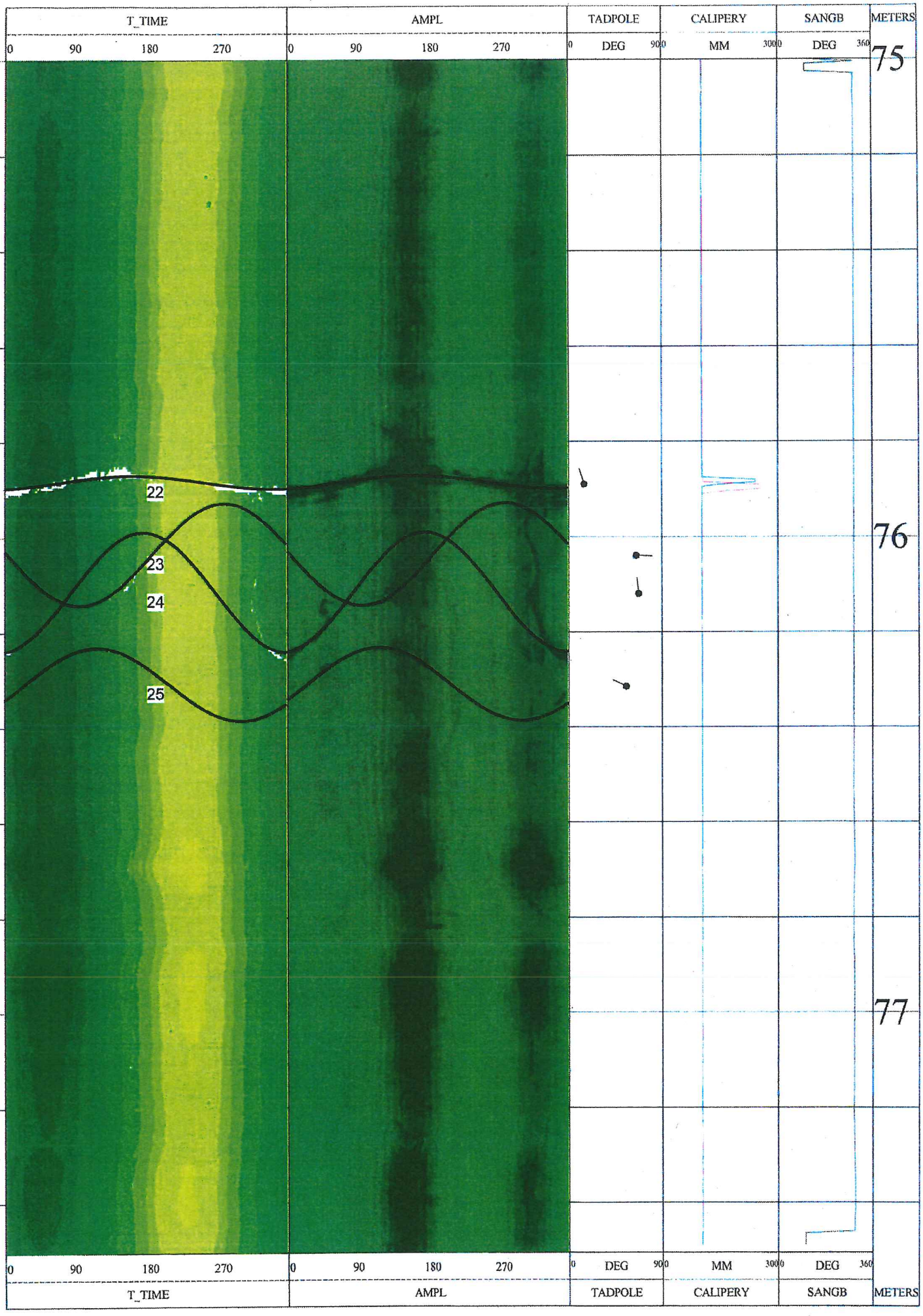

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 90 180 270
0 DEG 900
0 MM 3000
0 DEG 360
1
2
3
5
6
63
64
65
0 90 180 270
0 90 180 270
0 DEG 900
0 MM 3000
0 DEG 360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS

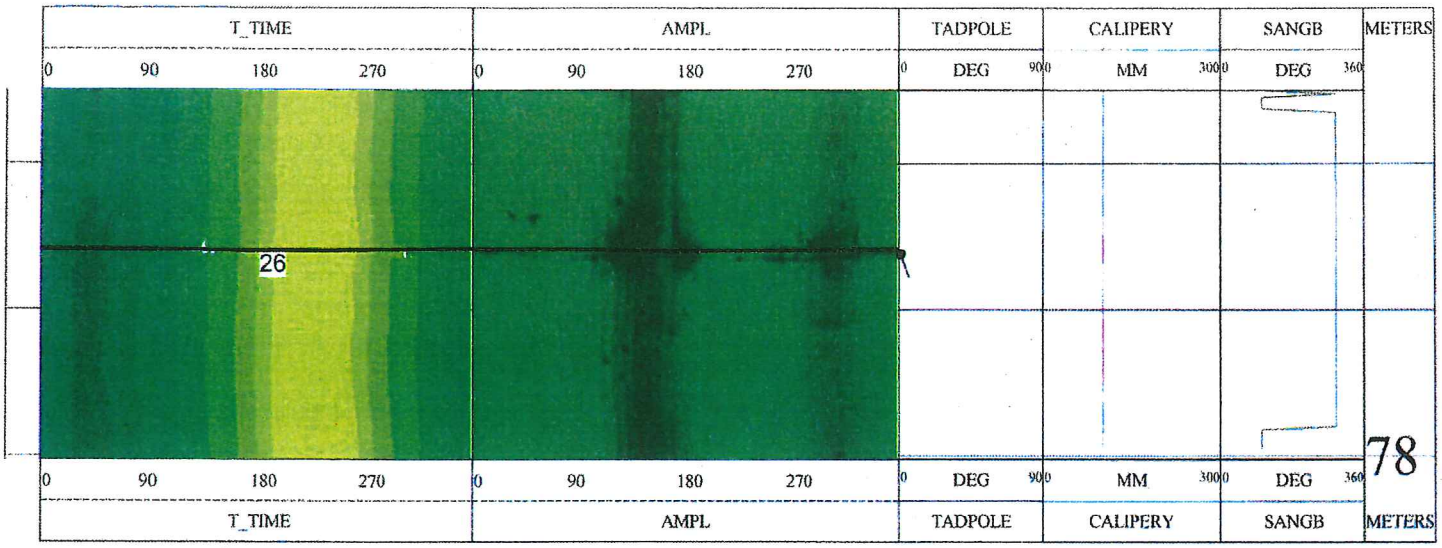

T_TIME
0
90
180
270
AMPL
0
90
180
270
TADPOLE
0
DEG
90
CALIPERY
0
MM
30
SANGB
0
DEG
360
METERS
65
66
67
7
8
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS

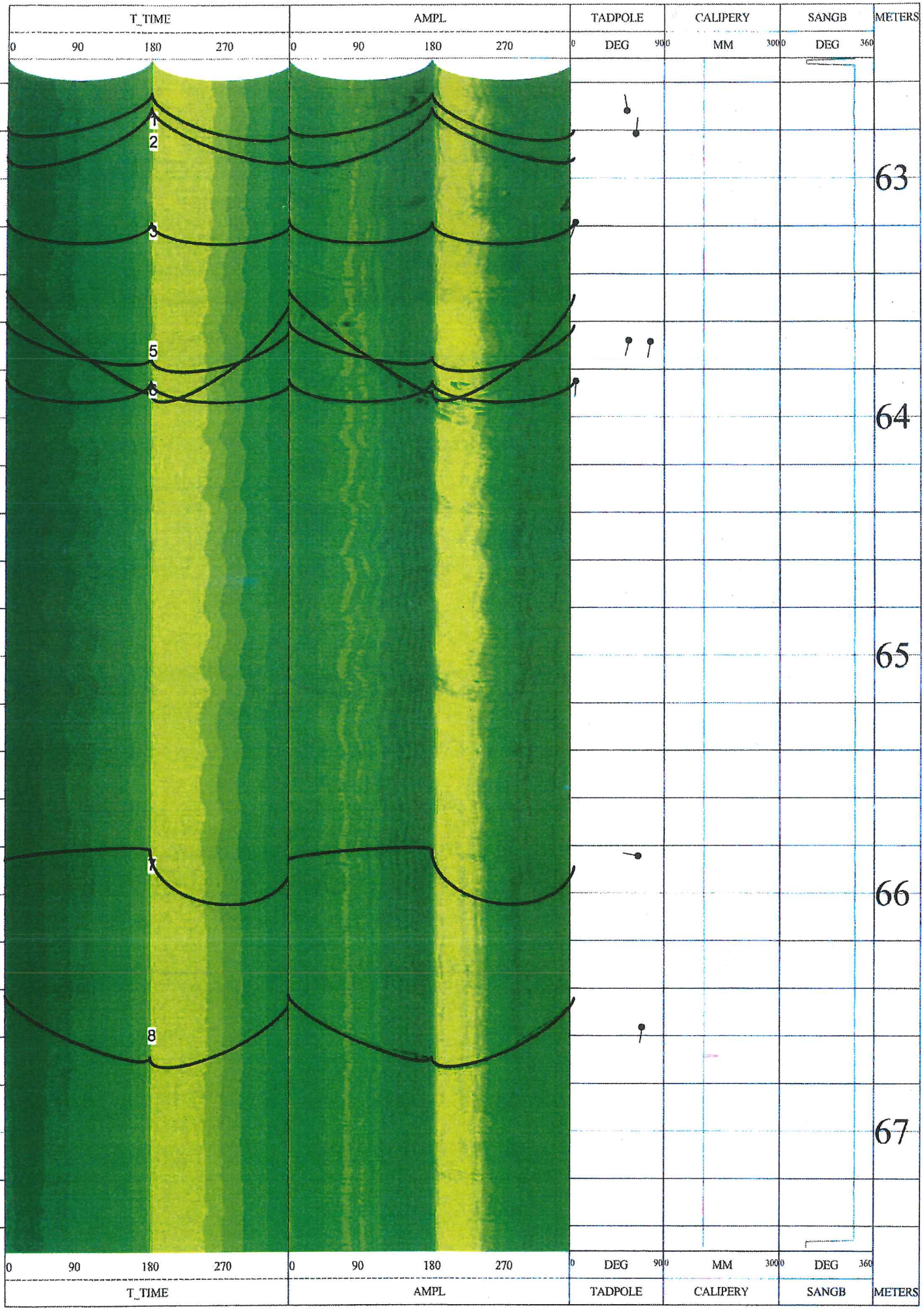

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
68
69
70
9
10
11
12
13

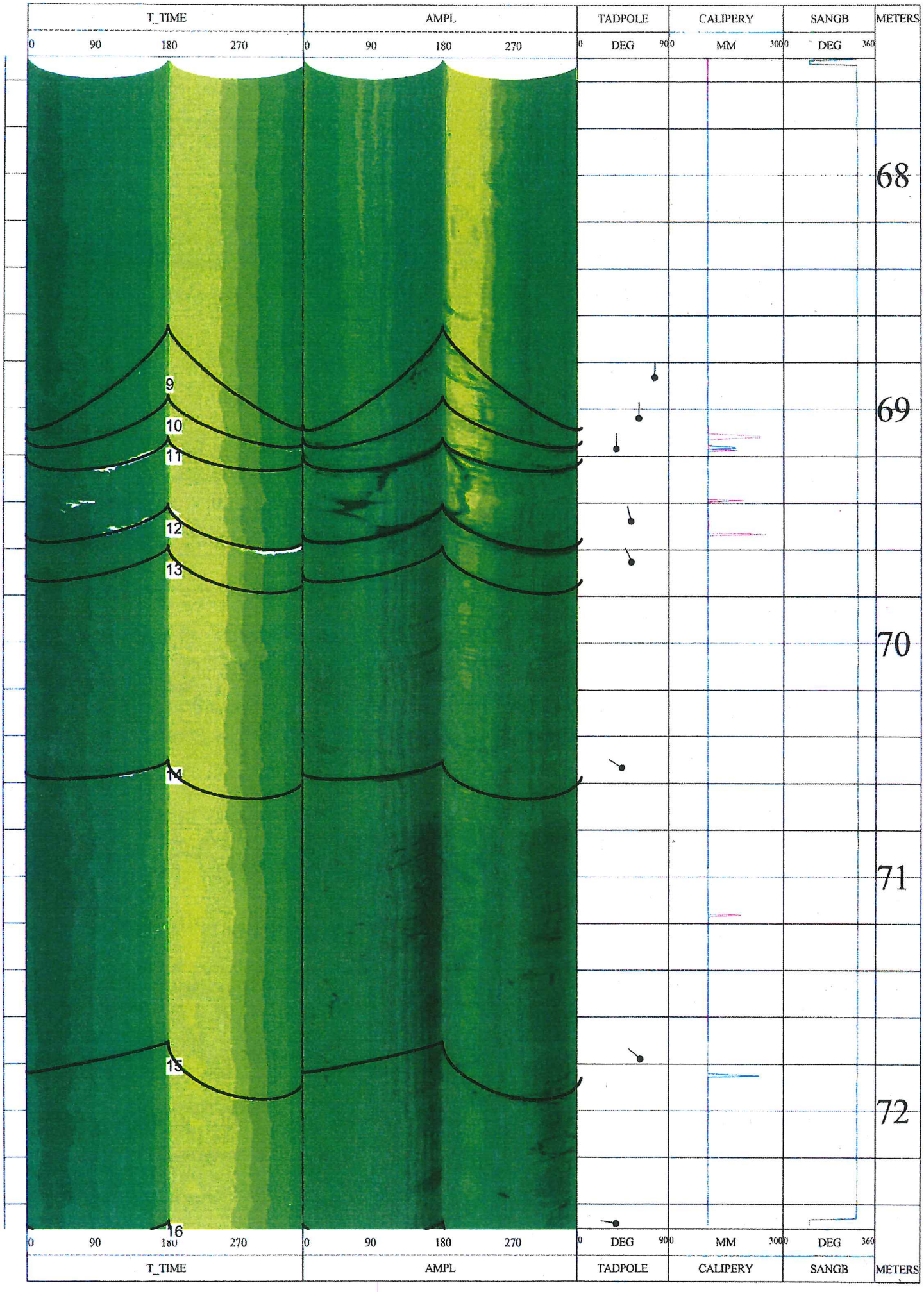

T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 900
CALIPERY
MM 3000
SANGB
DEG 360
METERS
70
71
72
14
15
16

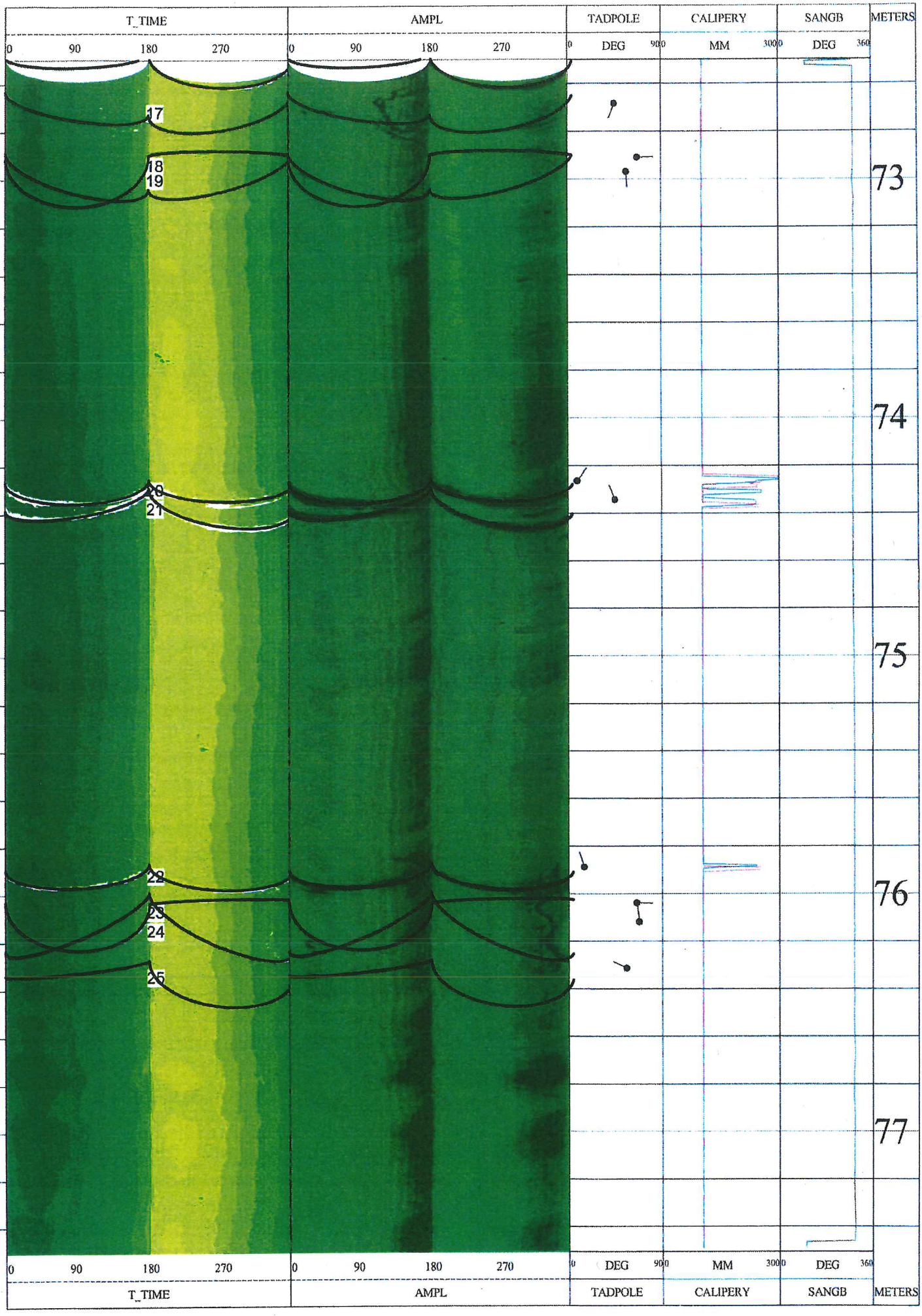

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
17
18
19
20
21
73
74
75

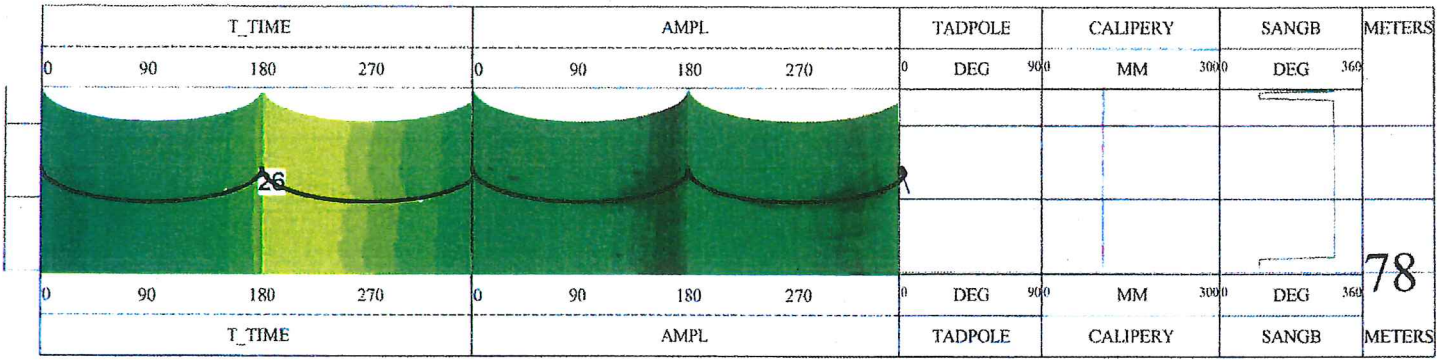

T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
0 MM 300
SANGB
0 DEG 360
METERS
75
76
77
22
23
24
25
0 90 180 270
0 90 180 270
0 DEG 90
0 MM 300
0 DEG 360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS

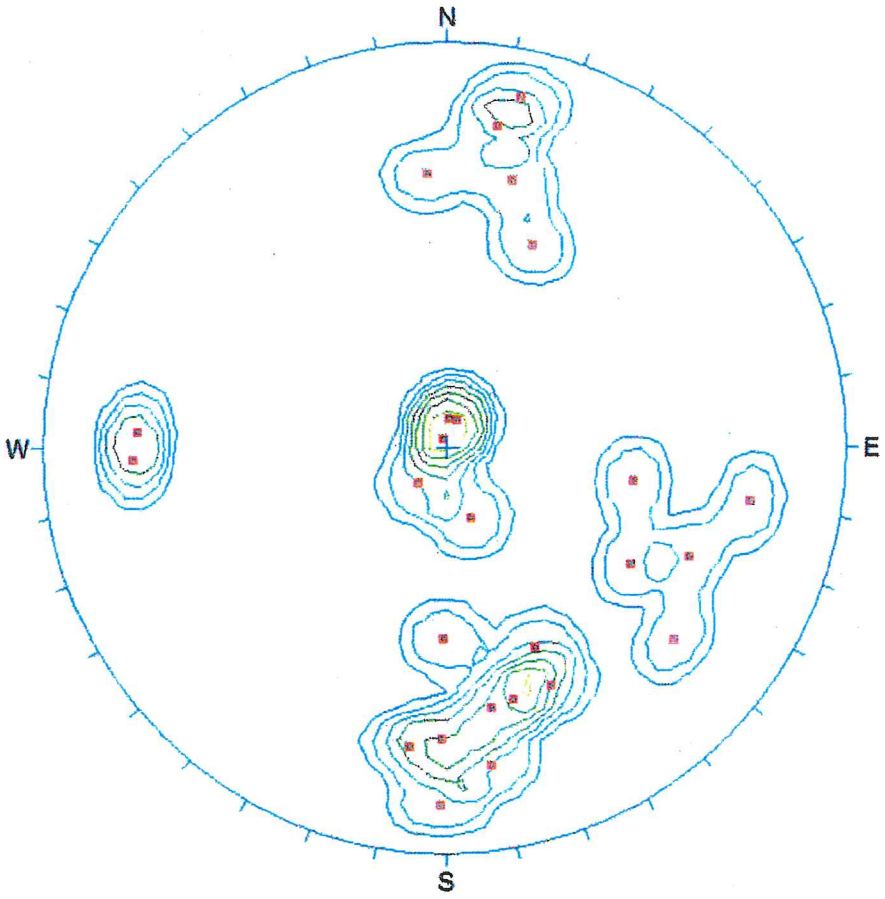

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
26
78


T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
0 MM 30
SANGB
0 DEG 360
METERS
1
2
3
5
6
7
8
63
64
65
66
67


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 DEG 90 0
0 MM 3000
0 DEG 360
9
10
11
12
13
14
15
16
68
69
70
71
72


T_TIME
0
90
180
270
AMPL
0
90
180
270
TADPOLE
0
DEG
90
CALIPERY
MM
SANGB
DEG
360
METERS
17
18
19
21
22
24
25
73
74
75
76
77


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
0 90 180 270
0 DEG 90
0 MM 3000
0 DEG 360
26
78



Poles

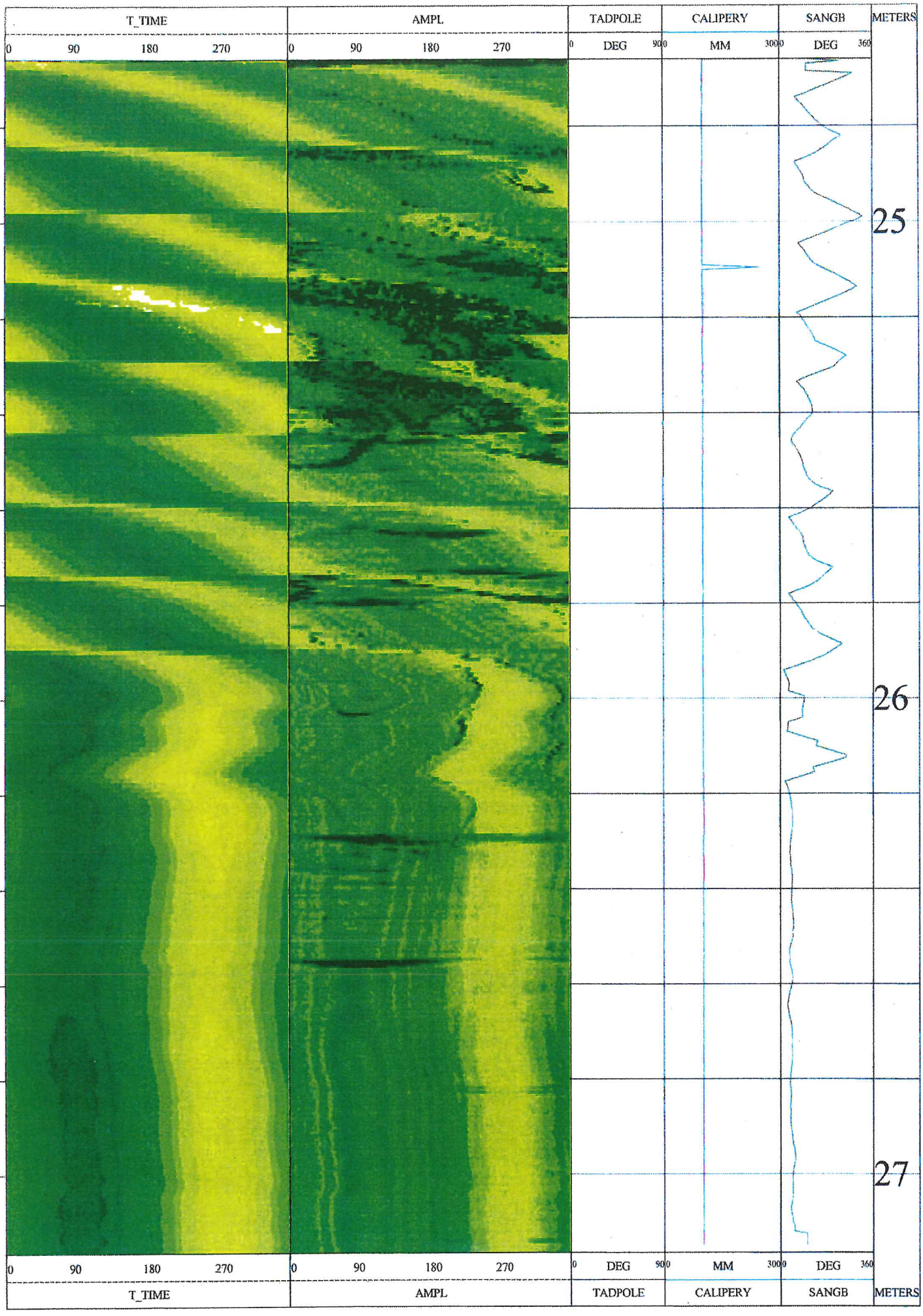
Equal Area
Lower Hemisphere
26 Poles
26 Entries

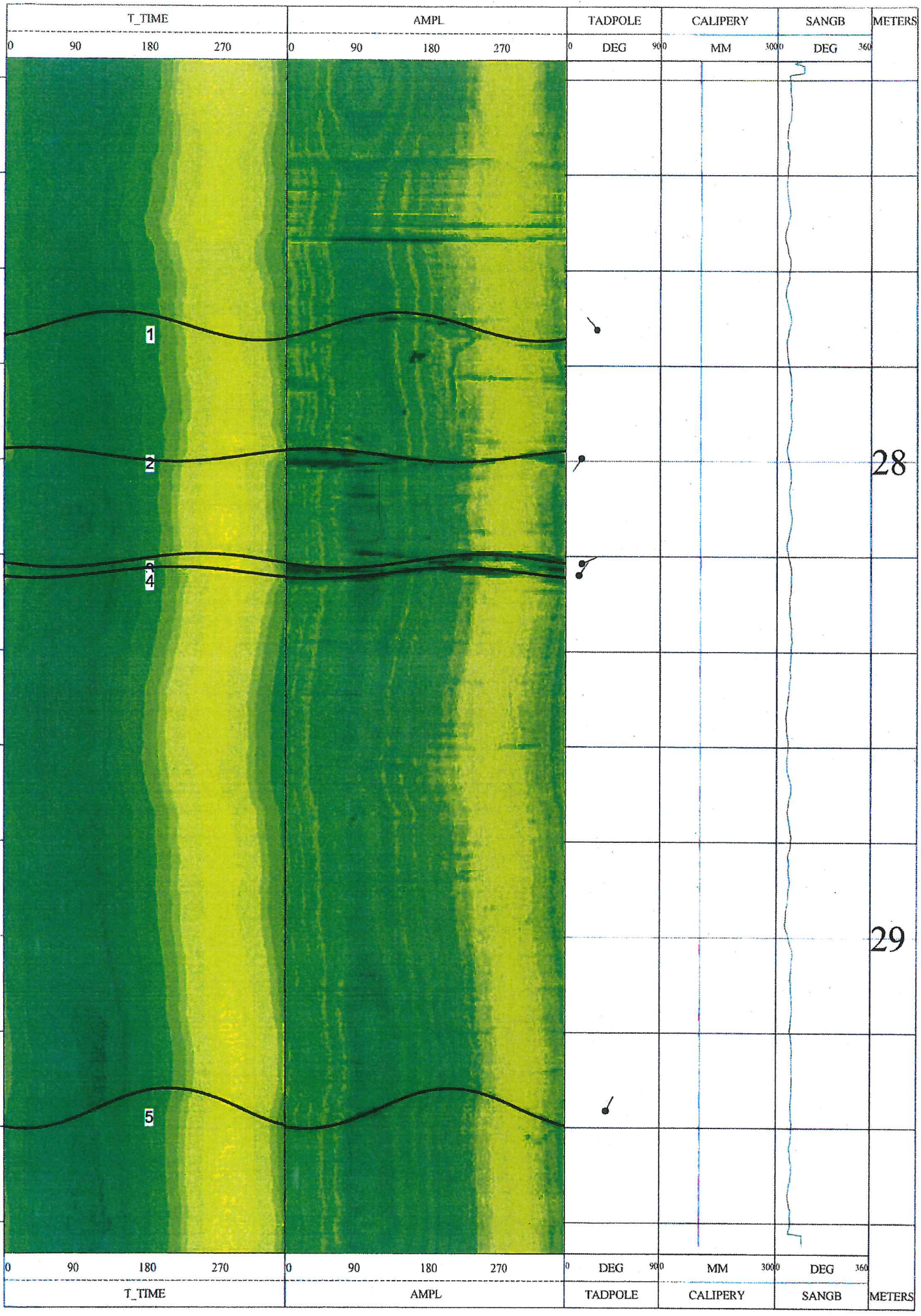
Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.34
Location	:	Yuen Long
Borehole No.	:	S1-DH11

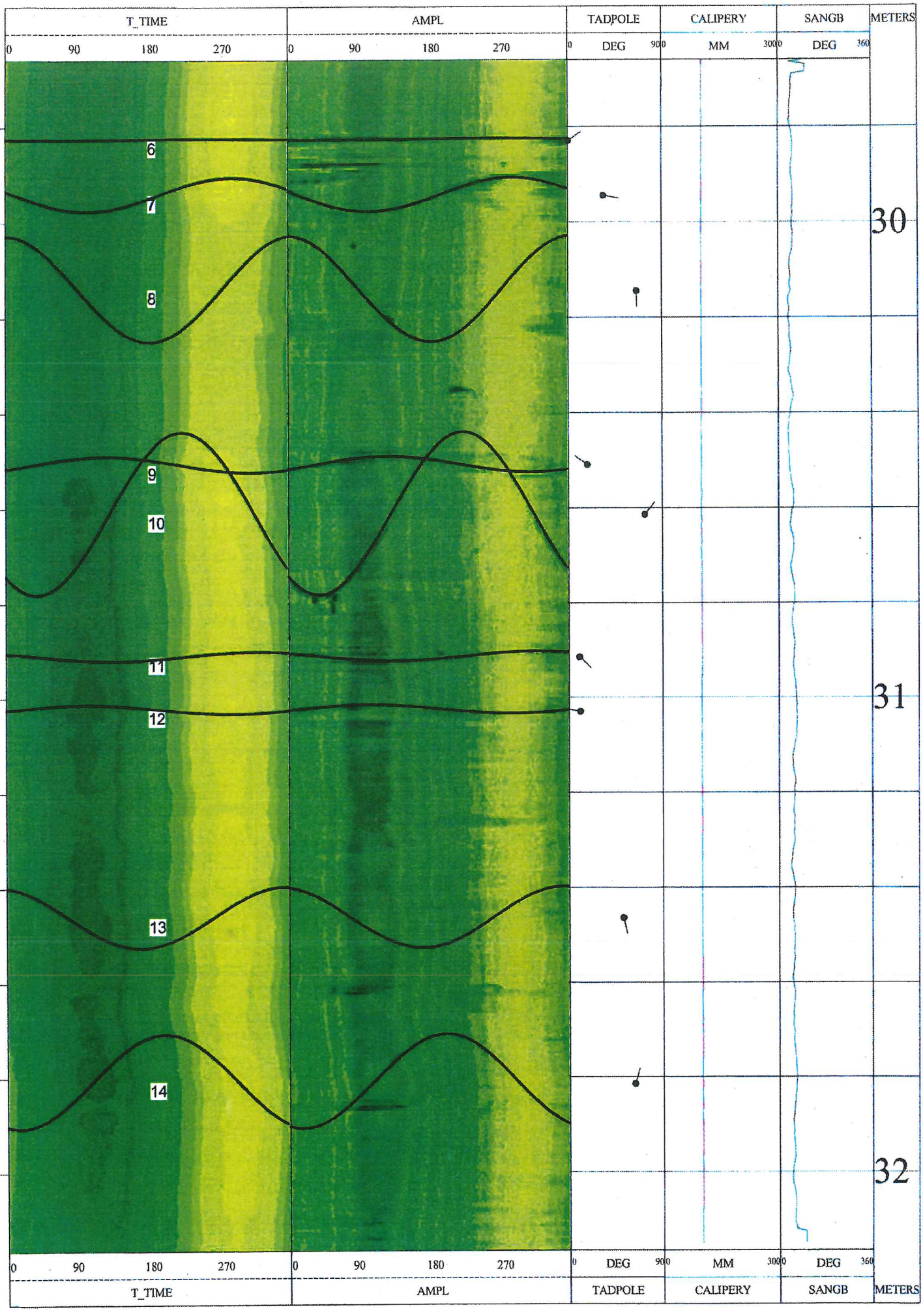
Company	: DrilTech Ground Engineering Ltd		
Borehole No.	: S1-DH15		
Contract	: Ground Investigation - New Territories West (Term Contract)		
Contract No.	: GE/2014/07.34		
Location	: Yuen Long		
Test Date	: 03-03-2016	Permanent Datum	: None
Depth Driller	: 43.42m	Elev.Perm.Datum	: None
Log Bottom	: 41.5m	Log Measured From	: GL
Log Top	: 24.66m	Drl Measured From	: GL
Casing Driller	: 24.66m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A
Remark	: All directions are relative to magnetic north from Hong Kong Metric Grid System North		

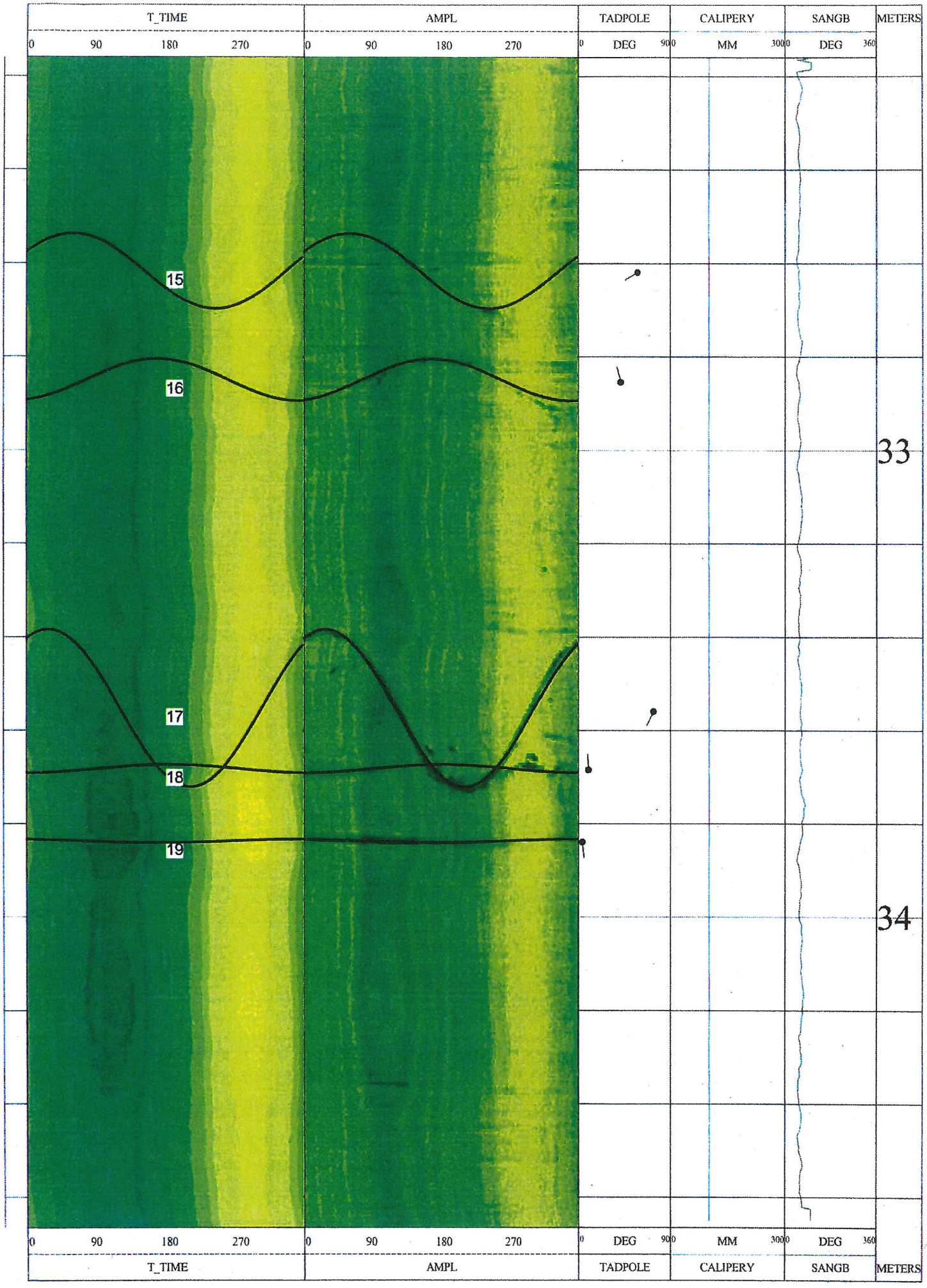
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	30	320	27.69	27.75	10.35	0.5	047.7	Joint
2	16	214	27.98	28.00	10.38	0.3	050.0	Joint
3	16	067	28.20	28.23	10.35	0.3	056.4	Joint
4	13	035	28.22	28.25	10.35	0.5	046.0	Joint
5	40	026	29.32	29.40	10.27	0.3	063.9	Joint
6	01	056	29.82	29.83	10.35	0.4	064.6	Joint
7	35	102	29.91	29.98	10.31	0.5	070.5	Joint
8	66	179	30.03	30.25	10.23	0.5	063.0	Incipient Joint
9	19	303	30.49	30.52	10.27	0.4	045.3	Joint
10	73	039	30.44	30.78	10.23	0.5	053.1	Joint
11	11	135	30.90	30.92	10.31	0.5	071.7	Joint
12	11	280	31.01	31.03	10.27	0.5	082.2	Joint
13	52	168	31.40	31.53	10.23	0.5	053.0	Incipient Joint
14	63	016	31.71	31.91	10.20	0.4	056.4	Joint
15	58	239	32.54	32.70	10.27	0.4	054.6	Incipient Joint
16	41	344	32.80	32.89	10.27	0.3	045.3	Joint
17	74	208	33.38	33.72	10.27	0.4	070.1	Joint
18	10	356	33.67	33.69	10.27	0.4	078.7	Joint
19	04	174	33.83	33.84	10.31	0.4	083.3	Joint
20	12	007	35.45	35.47	10.20	0.5	048.3	Joint
21	73	169	35.78	36.11	10.23	0.4	050.1	Joint
22	18	008	36.97	37.00	10.27	0.3	061.6	Joint
23	30	269	37.14	37.20	10.35	0.4	054.3	Joint
24	21	346	37.32	37.36	10.27	0.5	054.9	Joint
25	56	318	37.44	37.59	10.31	0.4	057.7	Joint
26	03	105	38.22	38.22	10.23	0.3	075.6	Joint
27	15	221	38.71	38.74	10.27	0.3	056.3	Joint
28	68	336	38.98	39.23	10.23	0.4	086.6	Joint
29	66	343	39.12	39.35	10.20	0.4	065.0	Joint
30	63	340	39.68	39.88	10.16	0.3	064.7	Joint
31	04	228	39.95	39.96	10.31	0.5	058.5	Joint
32	69	002	40.26	40.52	10.23	0.2	056.8	Joint

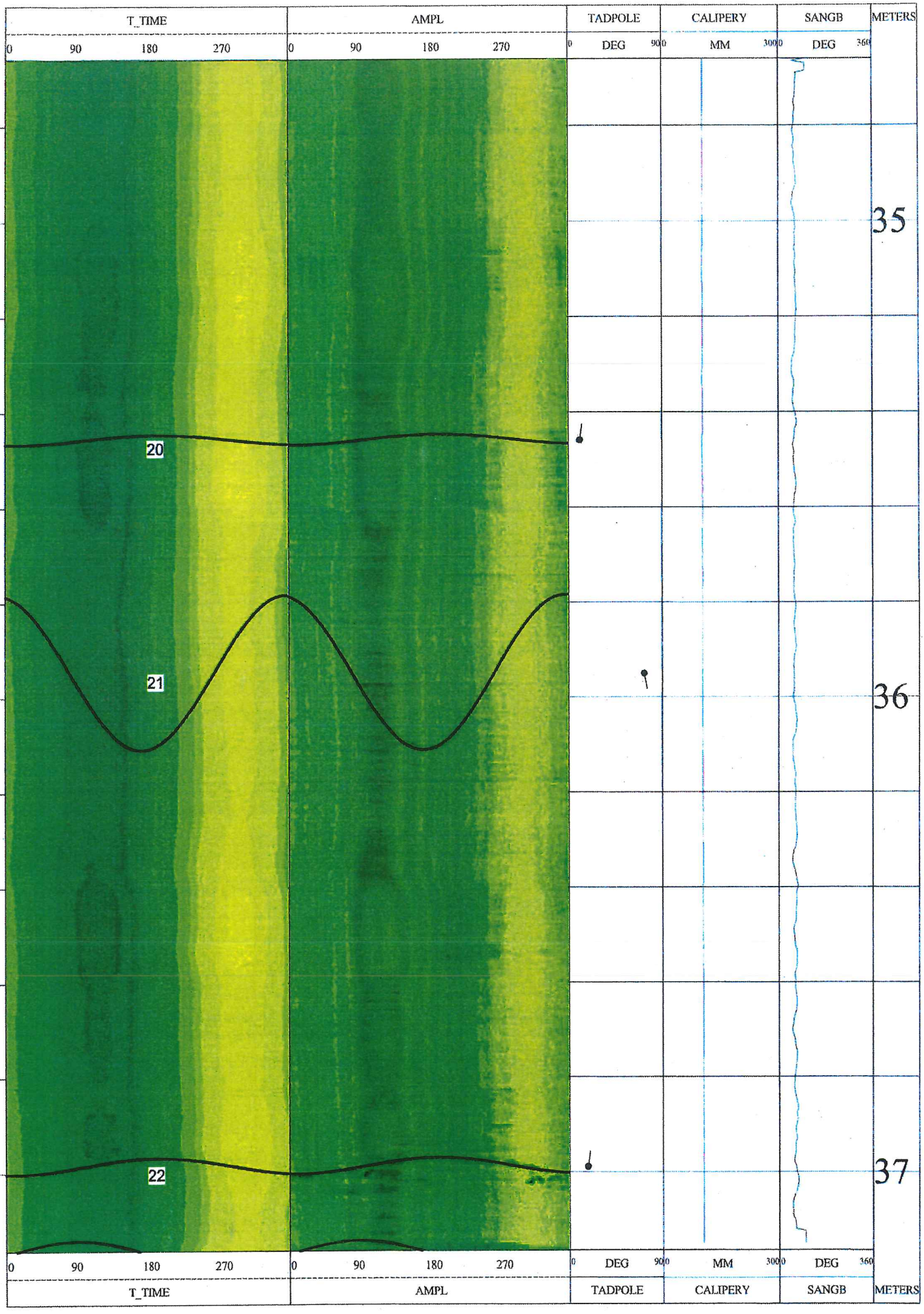
Checked by:

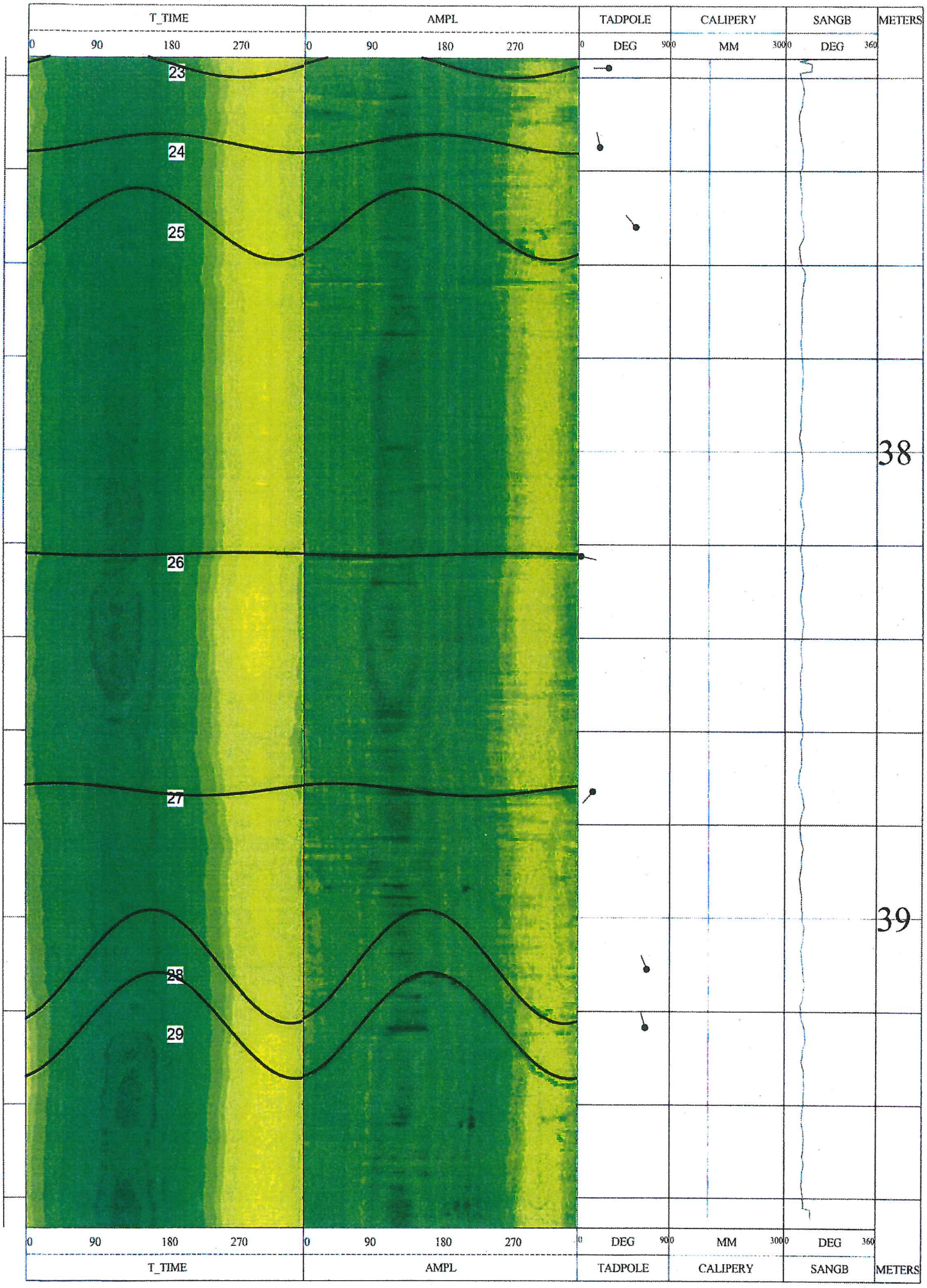

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
25
26
27

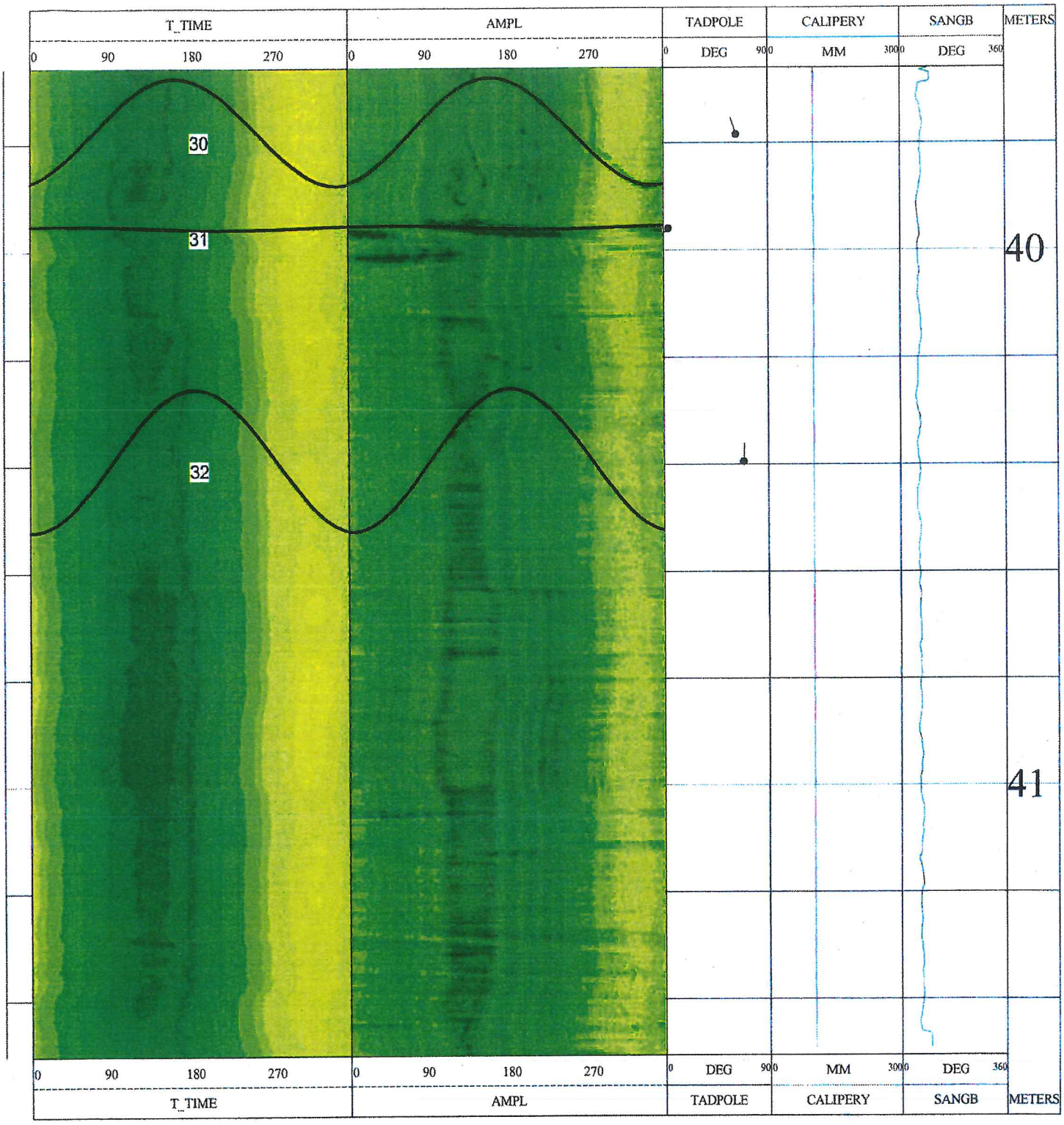

T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
0 MM 3000
SANGB
0 DEG 360
METERS
1
2
3
4
5
28
29
0 90 180 270
0 90 180 270
0 DEG 90
0 MM 3000
0 DEG 360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS

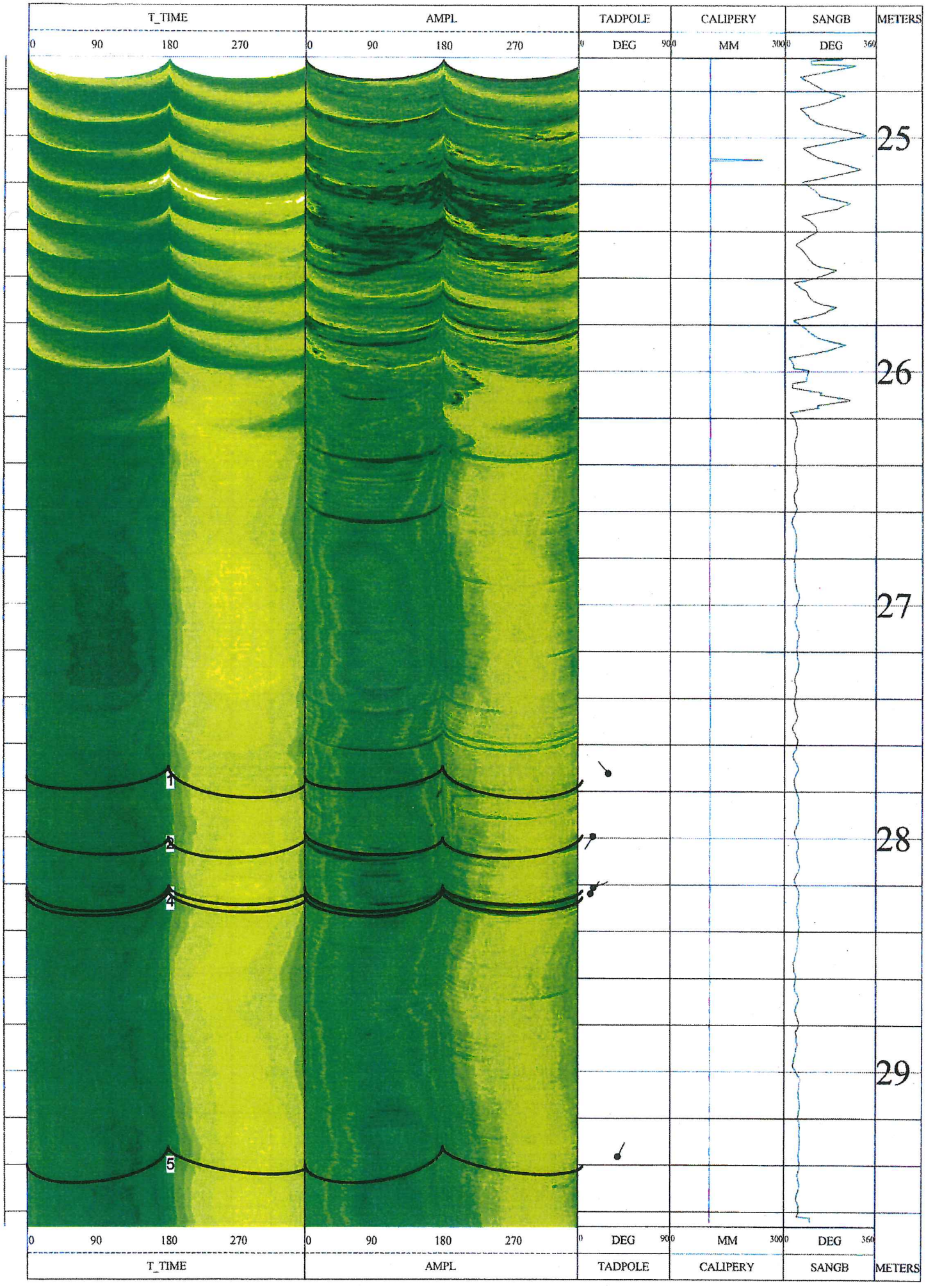

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
6
7
8
9
10
11
12
13
14
30
31
32

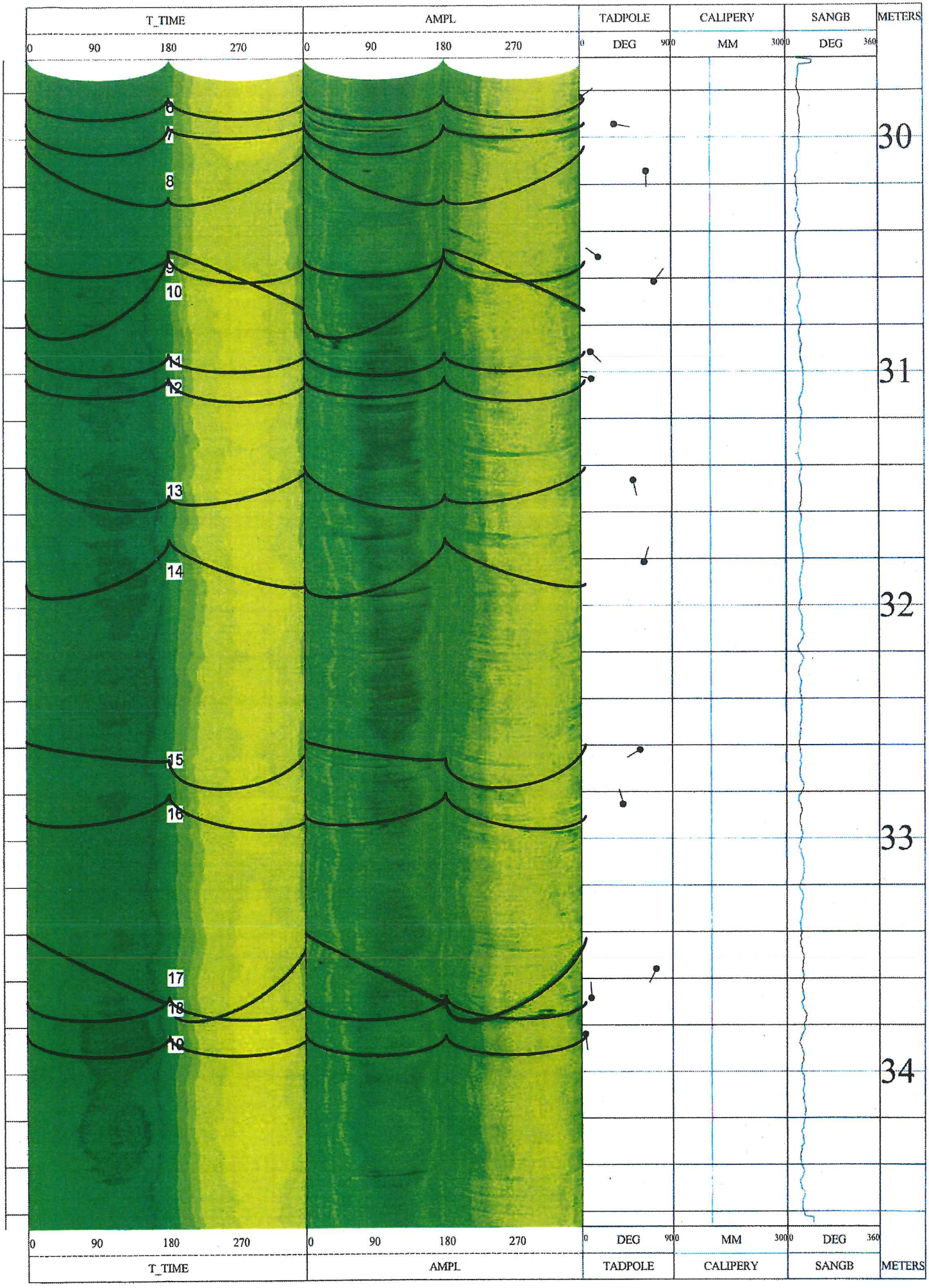

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
15
16
17
18
19
33
34

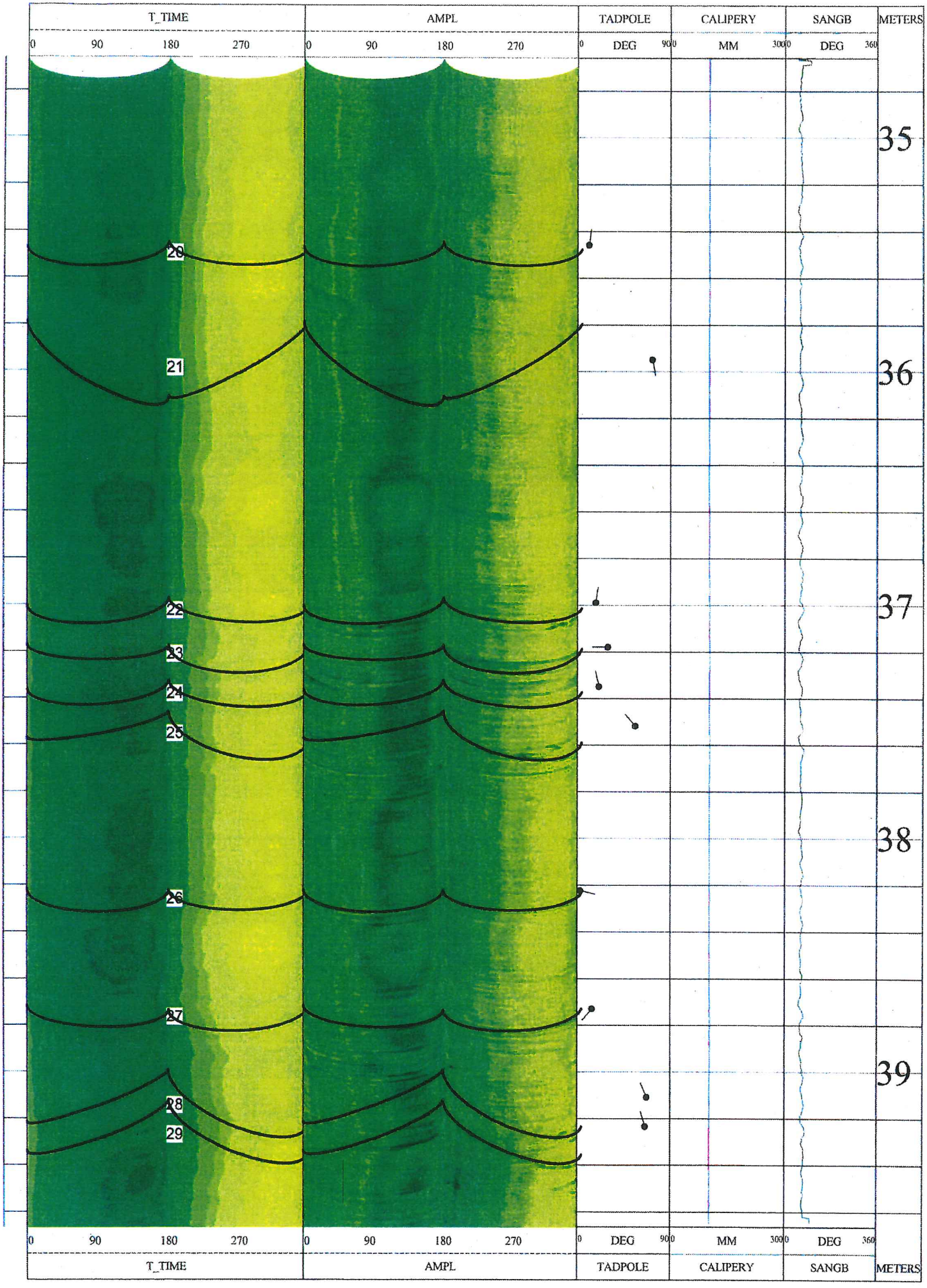

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
35
36
37
20
21
22

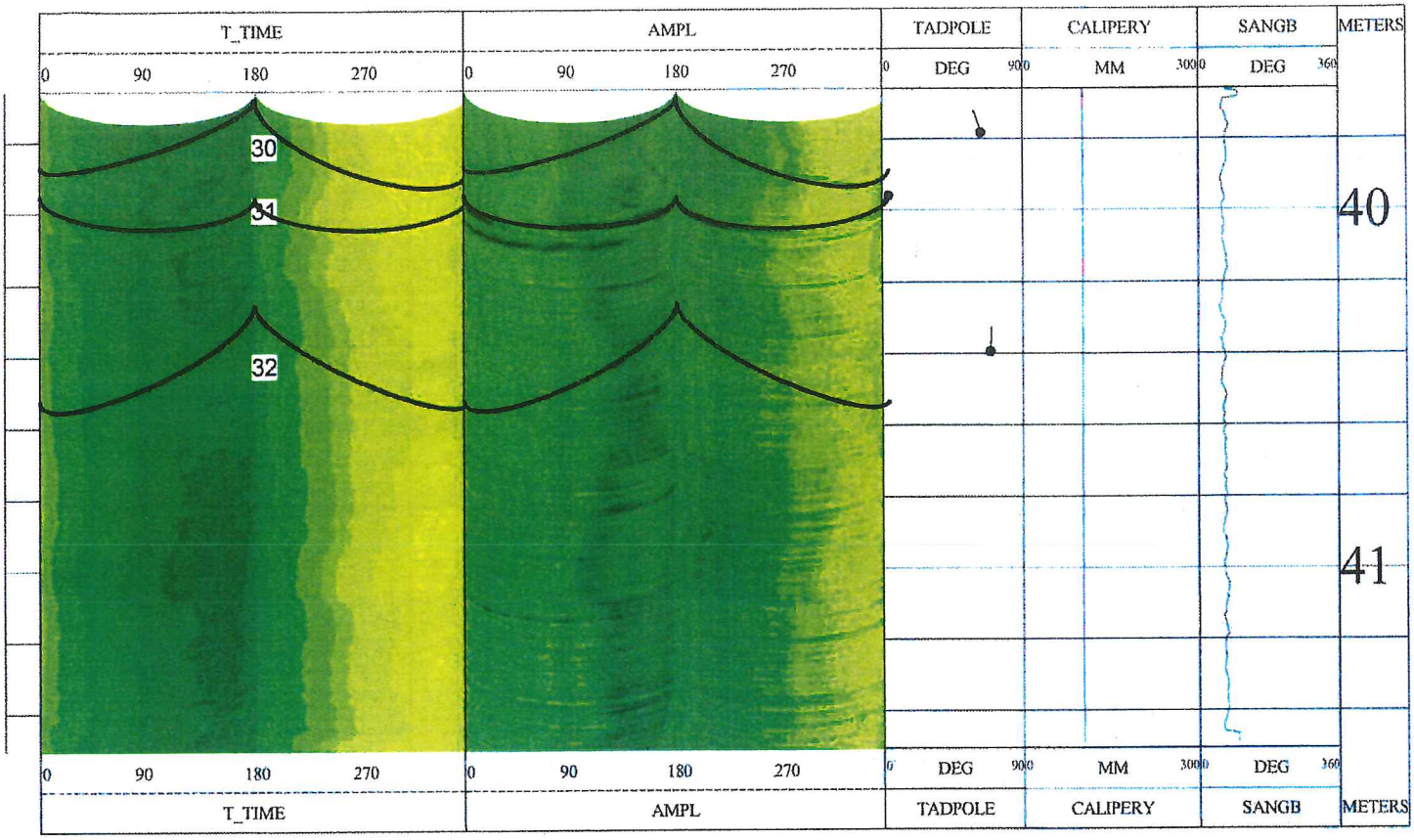

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
23
24
25
26
27
28
29
38
39

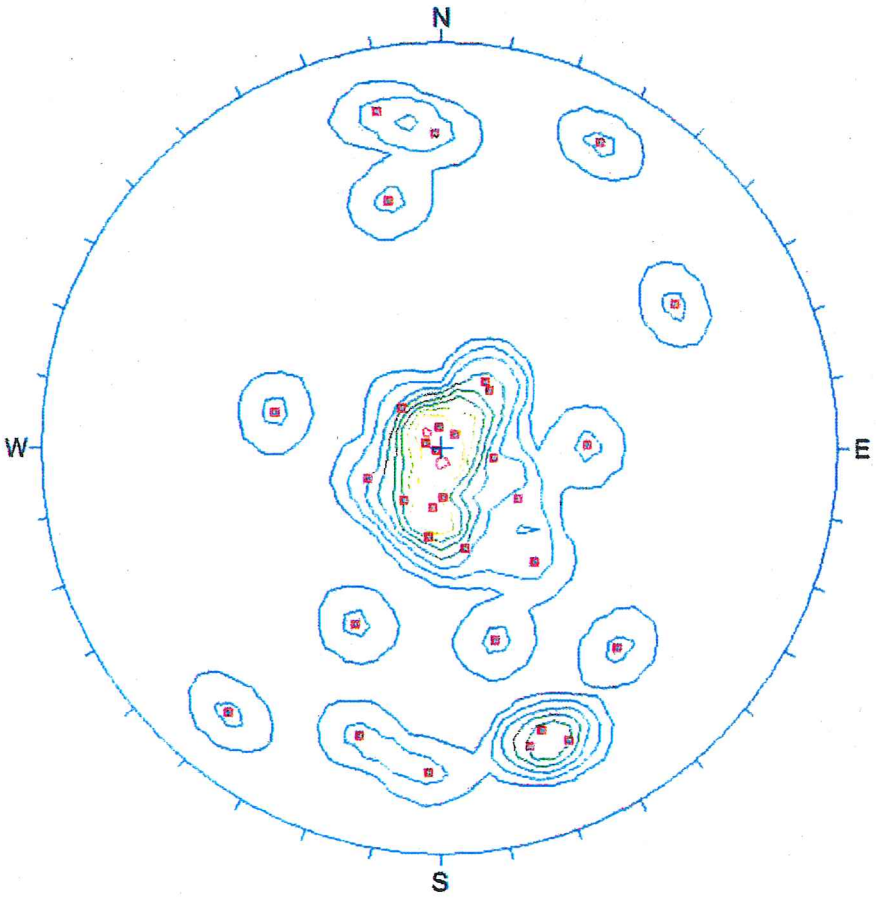

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
30
31
32
40
41


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
360
25
26
27
28
29
1
2
4
5


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
6
7
8
9
10
11
12
13
14
15
16
17
18
19
30
31
32
33
34


T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
0 MM 30
SANGB
0 DEG 360
METERS
35
36
37
38
39
20
21
22
23
24
25
26
27
28
29


T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 900
CALIPERY
MM 3000
SANGB
0 DEG 360
METERS
30
34
32
40
41
0 90 180 270
0 90 180 270
0 DEG 900
MM 3000
0 DEG 360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS



Poles

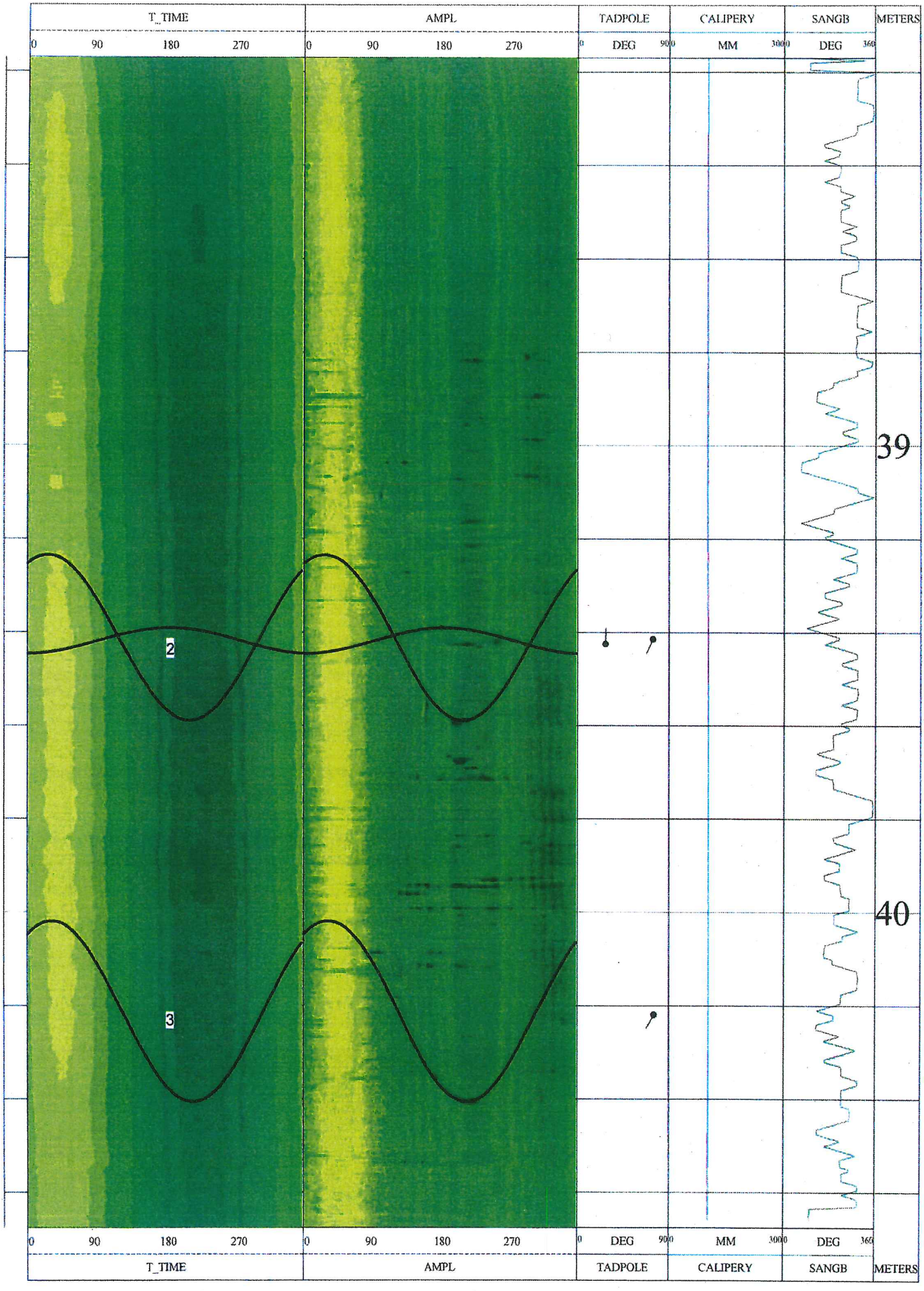
Equal Area
Lower Hemisphere
32 Poles
32 Entries

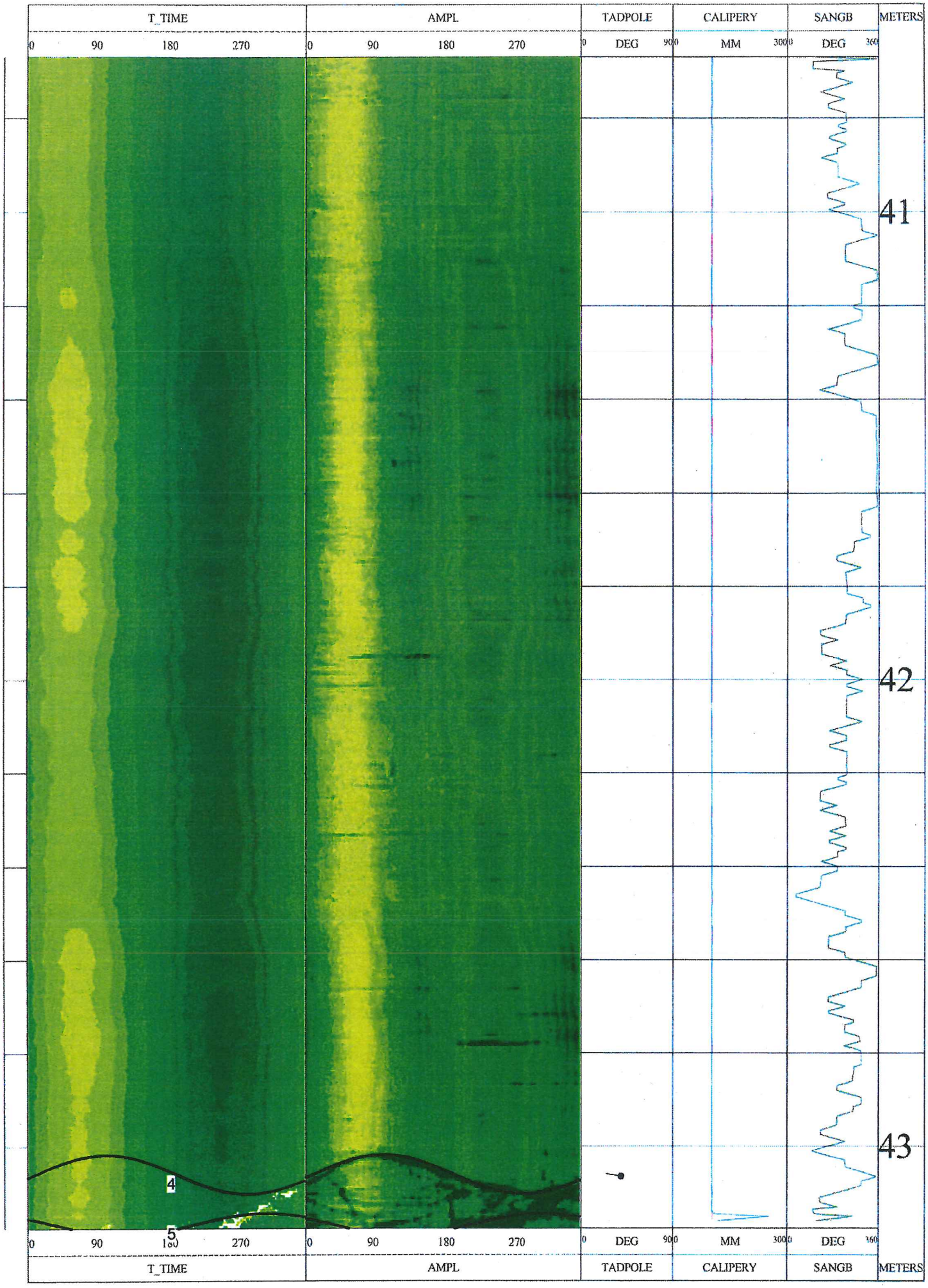
Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.34
Location	:	Yuen Long
Borehole No.	:	S1-DH15

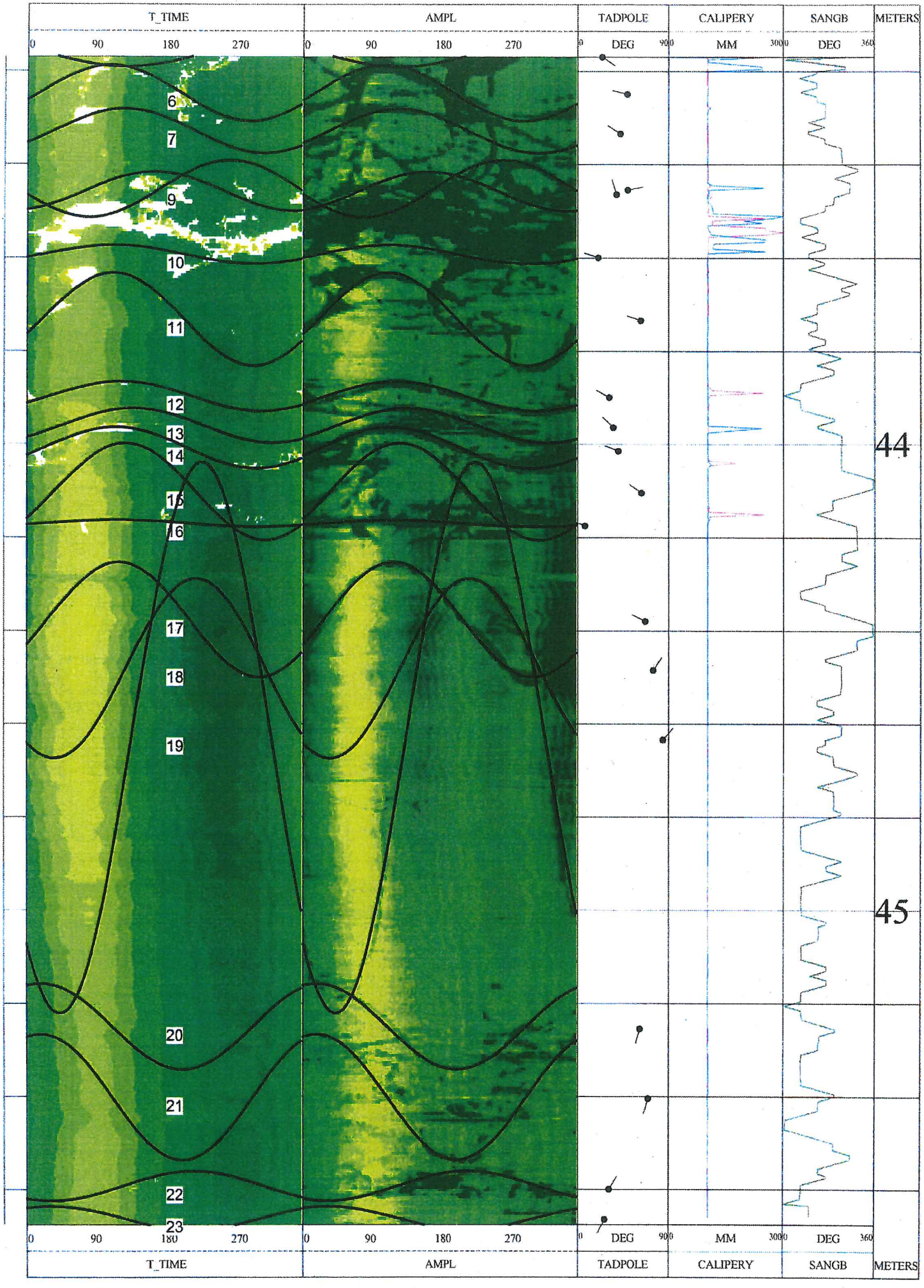
Company	: DrilTech Ground Engineering Ltd		
Borehole No.	: S2-DH15		
Contract	: Ground Investigation - New Territories West (Term Contract)		
Contract No.	: GE/2014/07.34		
Location	: Yuen Long		
Test Date	: 02-02-2016	Permanent Datum	: None
Depth Driller	: 49.67m	Elev.Perm.Datum	: None
Log Bottom	: 48.17m	Log Measured From	: GL
Log Top	: 38.17m	Drl Measured From	: GL
Casing Driller	: 29.68m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A
Remark	: All directions are relative to magnetic north from Hong Kong Metric Grid System North		

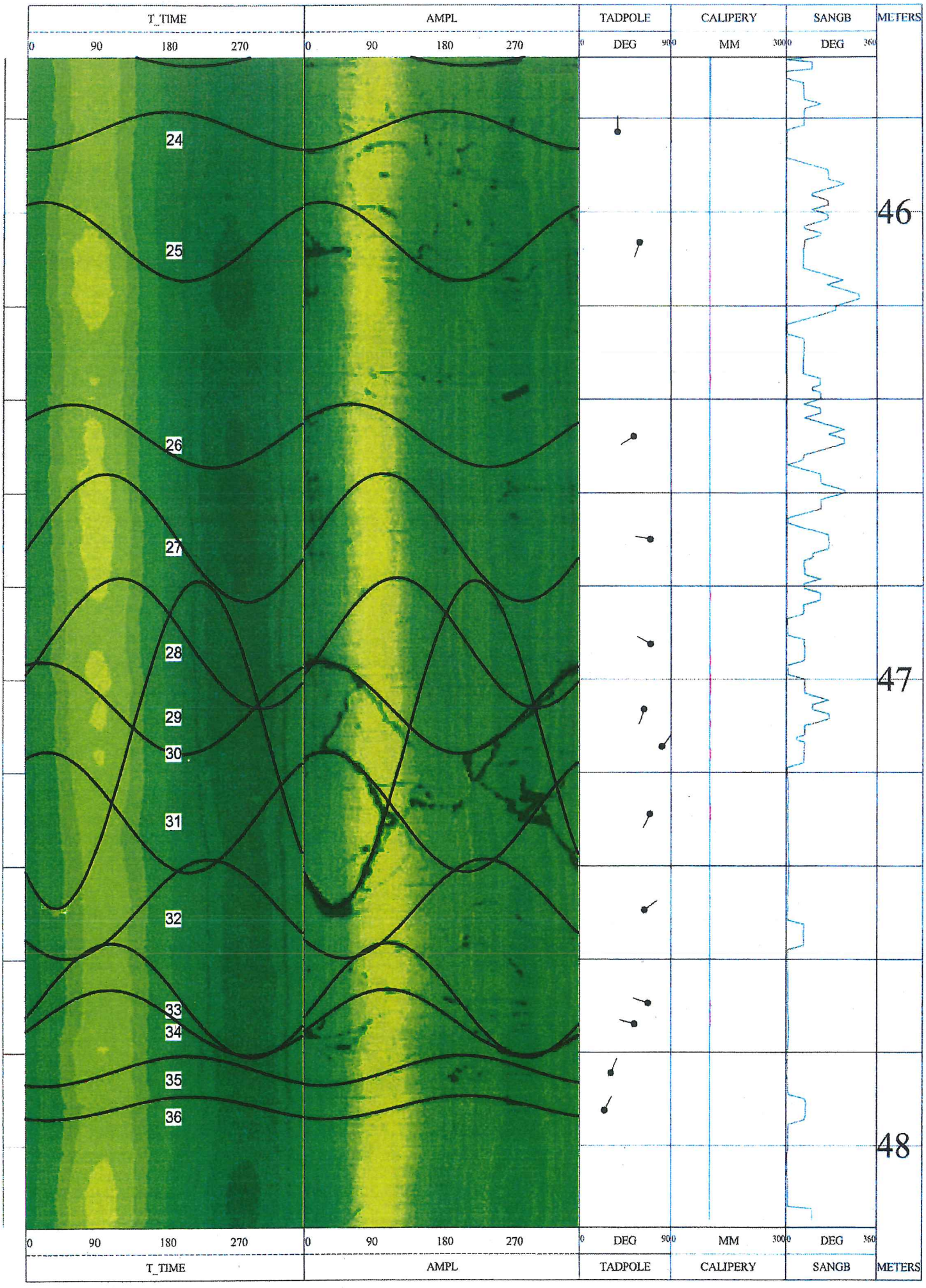
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	75	206	39.24	39.59	10.27	0.5	002.5	Joint
2	28	001	39.39	39.45	10.27	0.5	010.8	Joint
3	76	211	40.02	40.41	10.23	0.4	350.2	Joint
4	40	279	43.02	43.10	10.20	0.6	359.8	Joint
5	25	124	43.14	43.19	10.98	0.6	354.4	Joint
6	50	284	43.19	43.31	10.27	0.6	000.4	Joint
7	43	302	43.28	43.38	10.20	0.6	003.4	Joint
8	50	078	43.39	43.51	11.14	0.6	357.7	Joint
9	39	341	43.42	43.50	10.31	0.5	011.9	Weather Zone Top
10	21	289	43.57	43.61	17.86	0.5	019.8	Weather Zone Bottom
11	63	288	43.63	43.83	10.27	0.6	008.6	Joint
12	32	298	43.87	43.93	10.57	0.5	005.4	Joint
13	36	313	43.92	44.00	10.42	0.6	016.7	Joint
14	41	291	43.96	44.05	10.31	0.6	355.6	Joint
15	64	304	44.00	44.21	10.35	0.6	353.8	Joint
16	08	290	44.16	44.18	10.42	0.6	358.6	Joint
17	67	295	44.25	44.50	10.24	0.6	352.0	Joint
18	75	034	44.29	44.67	10.27	0.6	003.3	Joint
19	85	042	44.04	45.22	10.23	0.6	357.6	Joint
20	62	197	45.16	45.34	10.23	0.7	357.2	Joint
21	70	197	45.27	45.54	10.20	0.7	007.7	Joint
22	31	032	45.56	45.62	10.20	0.8	019.2	Joint
23	27	210	45.64	45.69	10.24	0.8	005.5	Joint
24	38	360	45.78	45.87	10.20	0.7	002.1	Joint
25	60	202	45.98	46.15	10.20	0.7	003.2	Joint
26	53	238	46.41	46.54	10.20	0.7	012.0	Joint
27	70	280	46.56	46.83	10.20	0.7	015.3	Incipient Joint
28	70	298	46.78	47.06	10.20	0.7	011.8	Incipient Joint
29	64	200	46.96	47.16	10.20	0.7	009.8	Joint
30	81	039	46.79	47.49	10.20	0.8	001.9	Joint
31	69	207	47.16	47.41	10.24	0.7	013.8	Joint
32	64	052	47.39	47.60	10.20	0.7	005.0	Joint
33	67	287	47.57	47.81	10.23	0.8	005.3	Joint
34	54	284	47.67	47.81	10.24	0.8	010.7	Joint
35	31	023	47.81	47.87	10.23	0.8	005.8	Incipient Joint
36	25	028	47.89	47.94	10.16	0.7	006.6	Incipient Joint

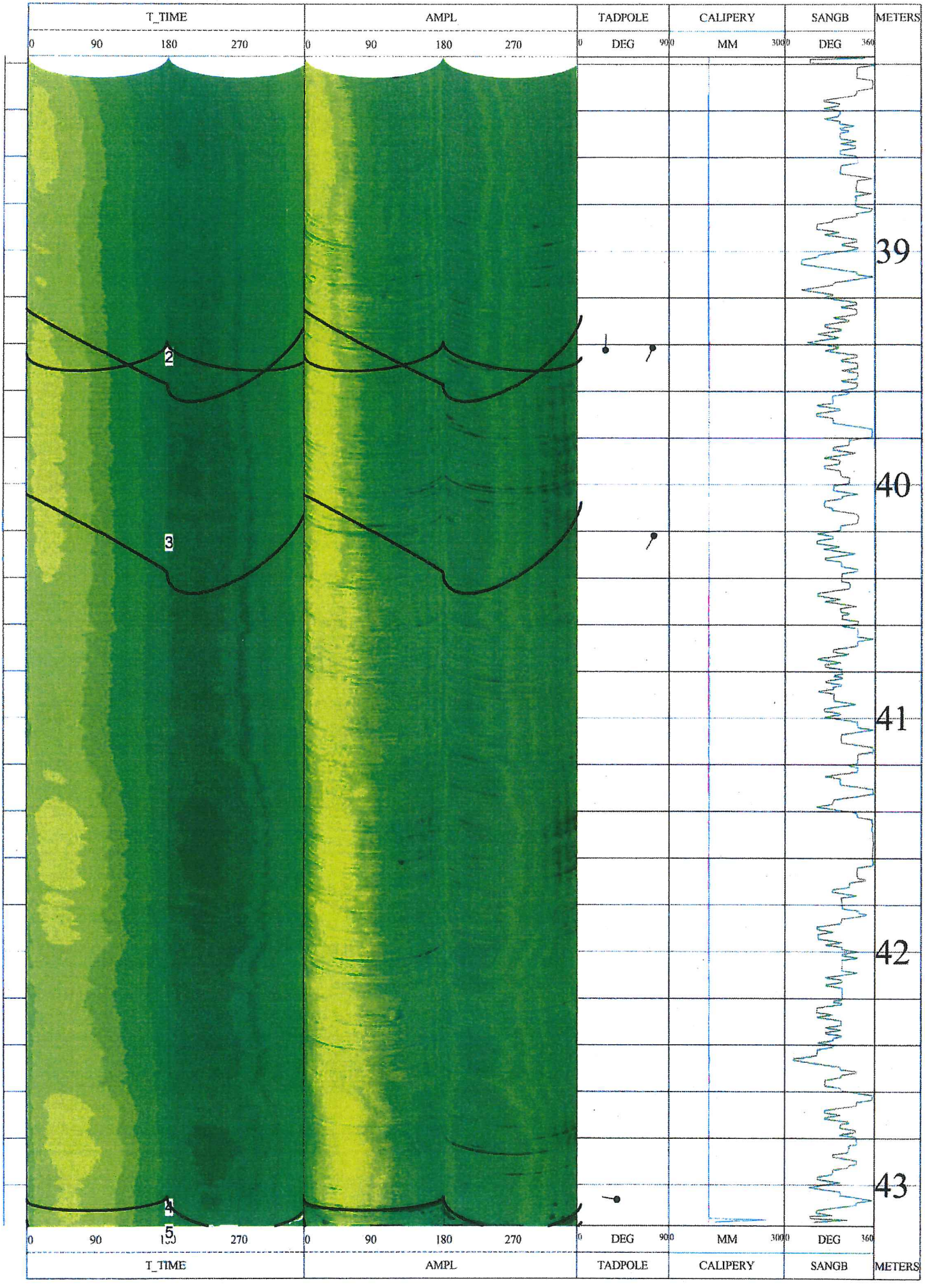
Checked by:

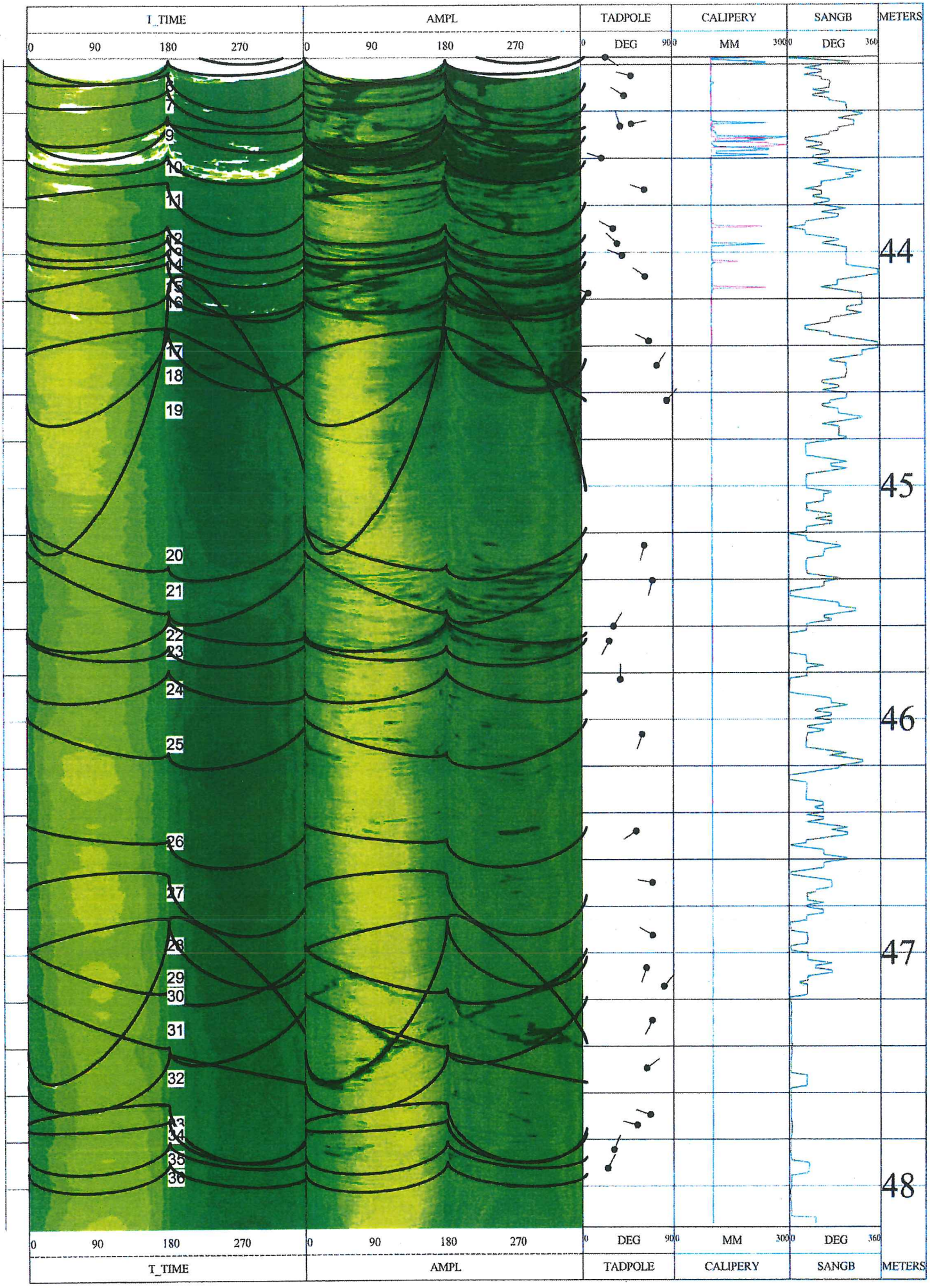

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
39
40
2
3

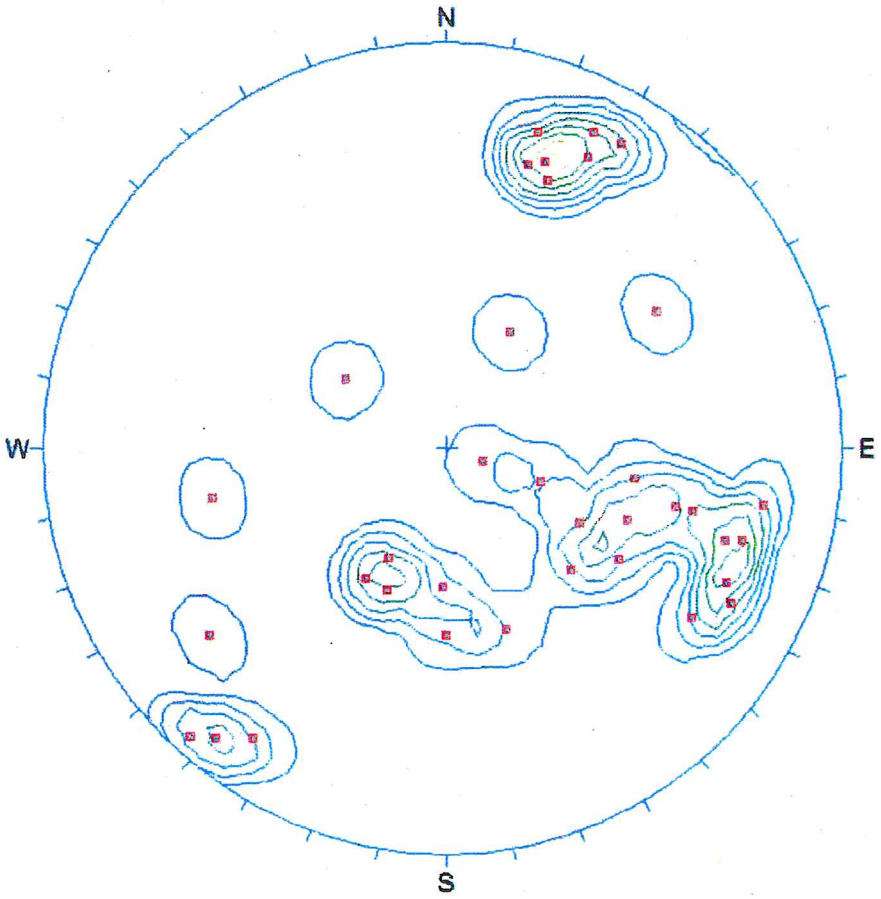

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
41
42
43
4
5


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
6
7
9
10
11
12
13
14
16
17
18
19
20
21
22
23
44
45


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
900
MM
3000
360
24
25
26
27
28
29
30
31
32
33
34
35
36
46
47
48


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
39
40
41
42
43
2
3
4
5


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
44
45
46
47
48



Poles

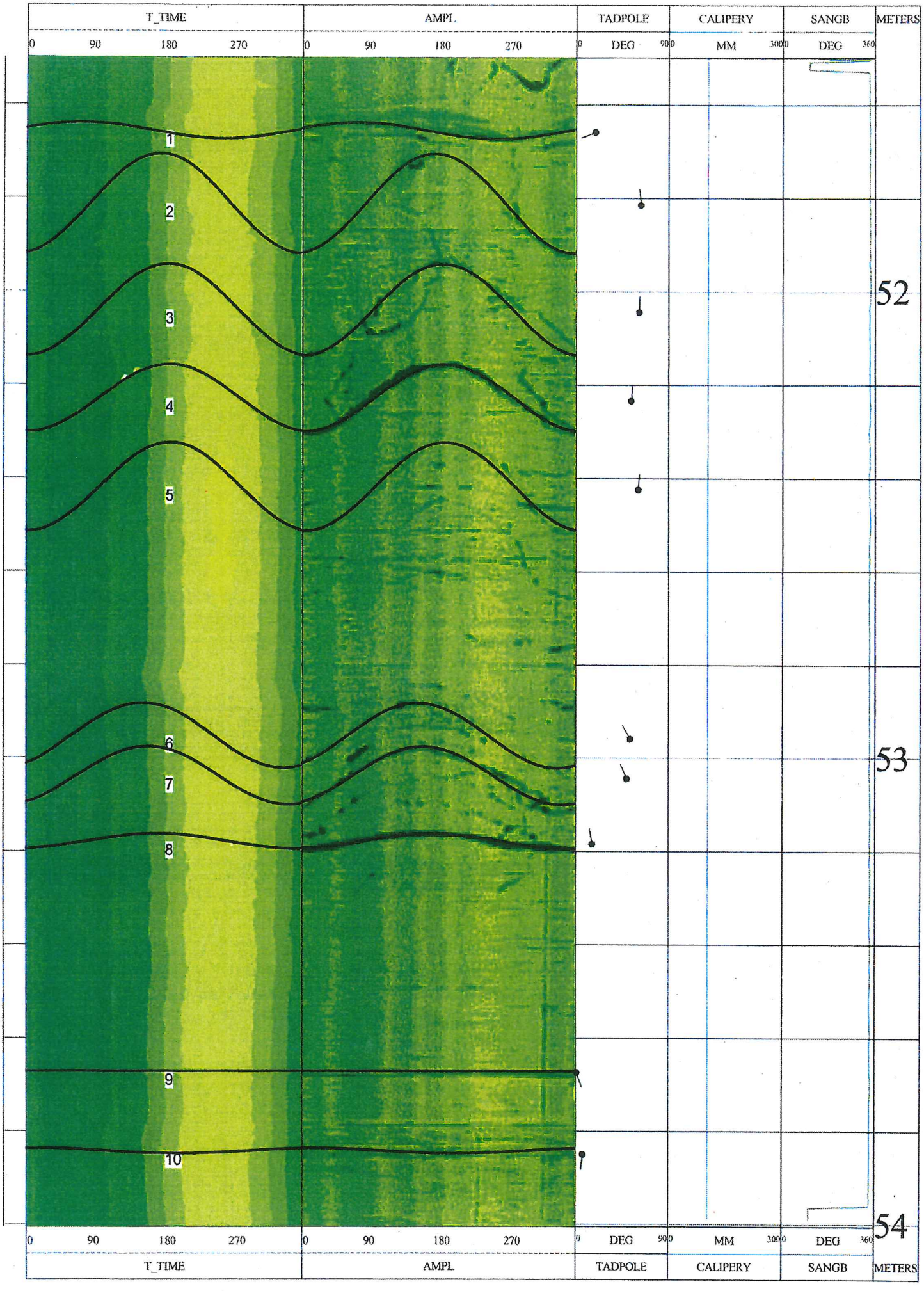
Equal Area
Lower Hemisphere
36 Poles
36 Entries

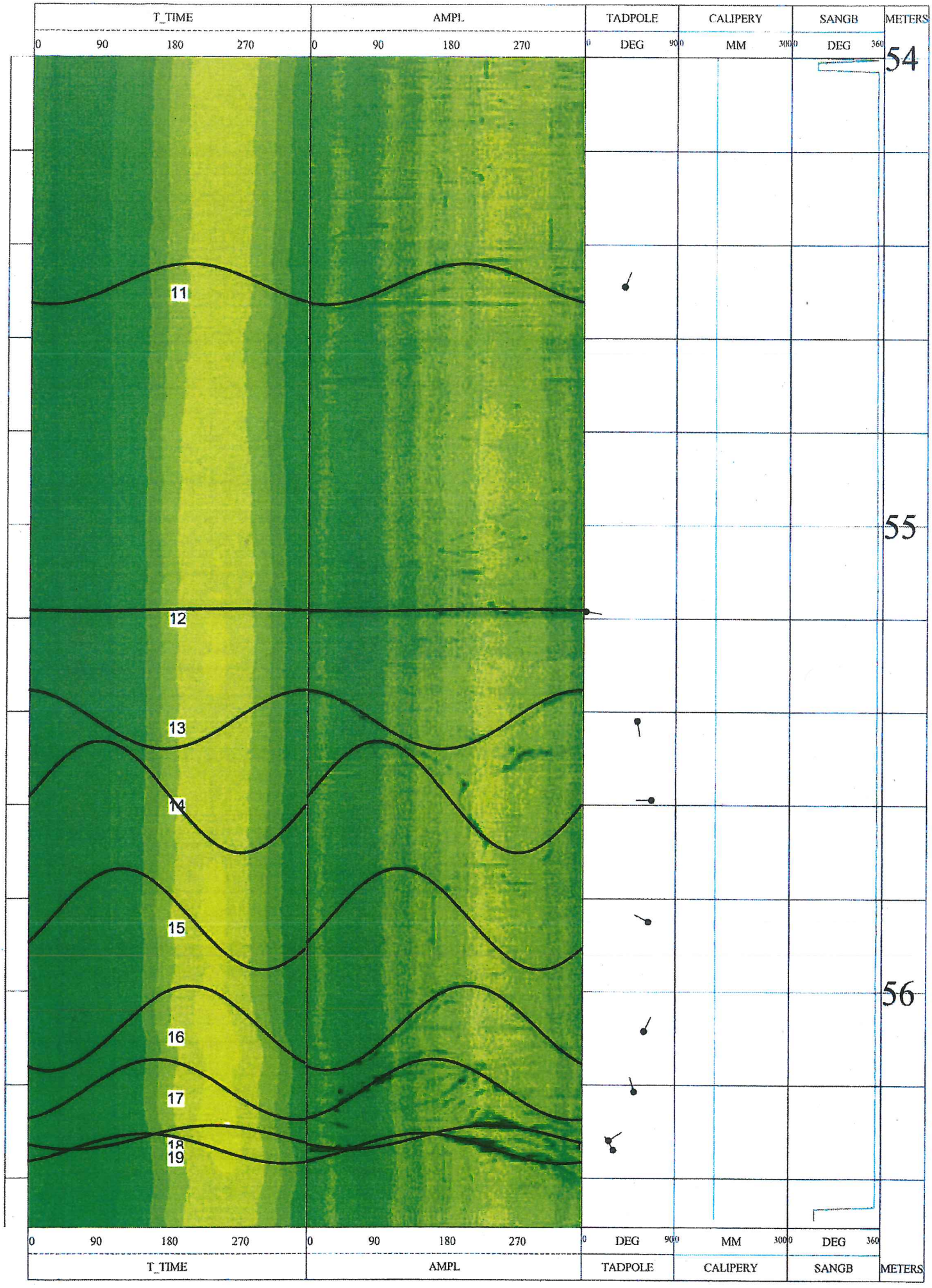
Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.34
Location	:	Yuen Long
Borehole No.	:	S2-DH15

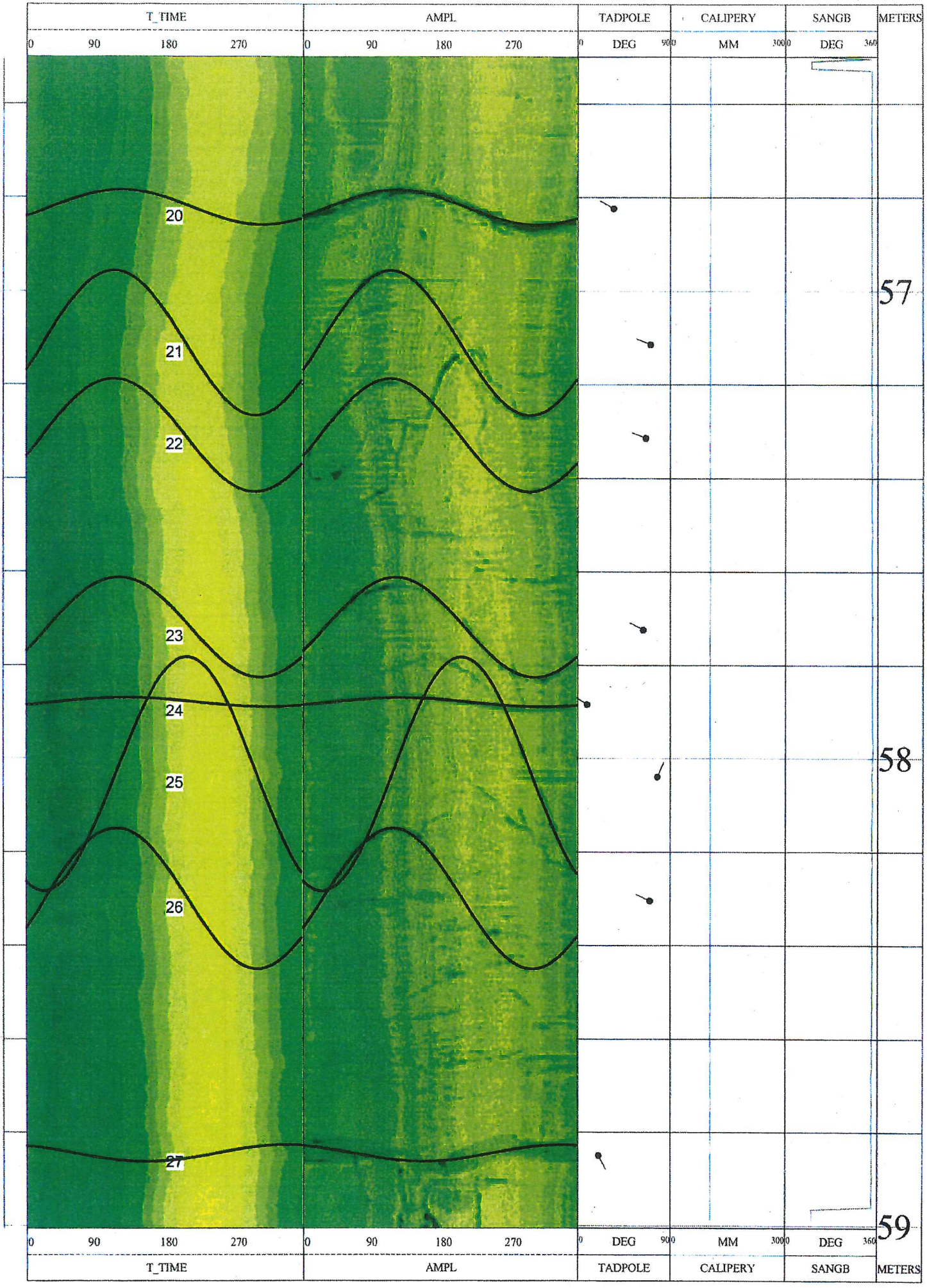
Company	: DrilTech Ground Engineering Ltd		
Borehole No.	: S2-DH16		
Contract	: Ground Investigation - New Territories West (Term Contract)		
Contract No.	: GE/2014/07.34		
Location	: Yuen Long		
Test Date	: 26-02-2016	Permanent Datum	: None
Depth Driller	: 66.4m	Elev.Perm.Datum	: None
Log Bottom	: 61.5m	Log Measured From	: GL
Log Top	: 51.5m	Drl Measured From	: GL
Casing Driller	: 44m	Logging Unit	: S/N 1123
Casing Type	: N/A	Field Office	: F.G.S
Casing Thickness	: N/A	Recorded by	: MC/HT
Bit Size	: 10.1cm	Borehole Fluid	: Water
Magnetic Decl.	: -2	Sonde Type	: 8804A
Remark	: All directions are relative to magnetic north from Hong Kong Metric Grid System North		

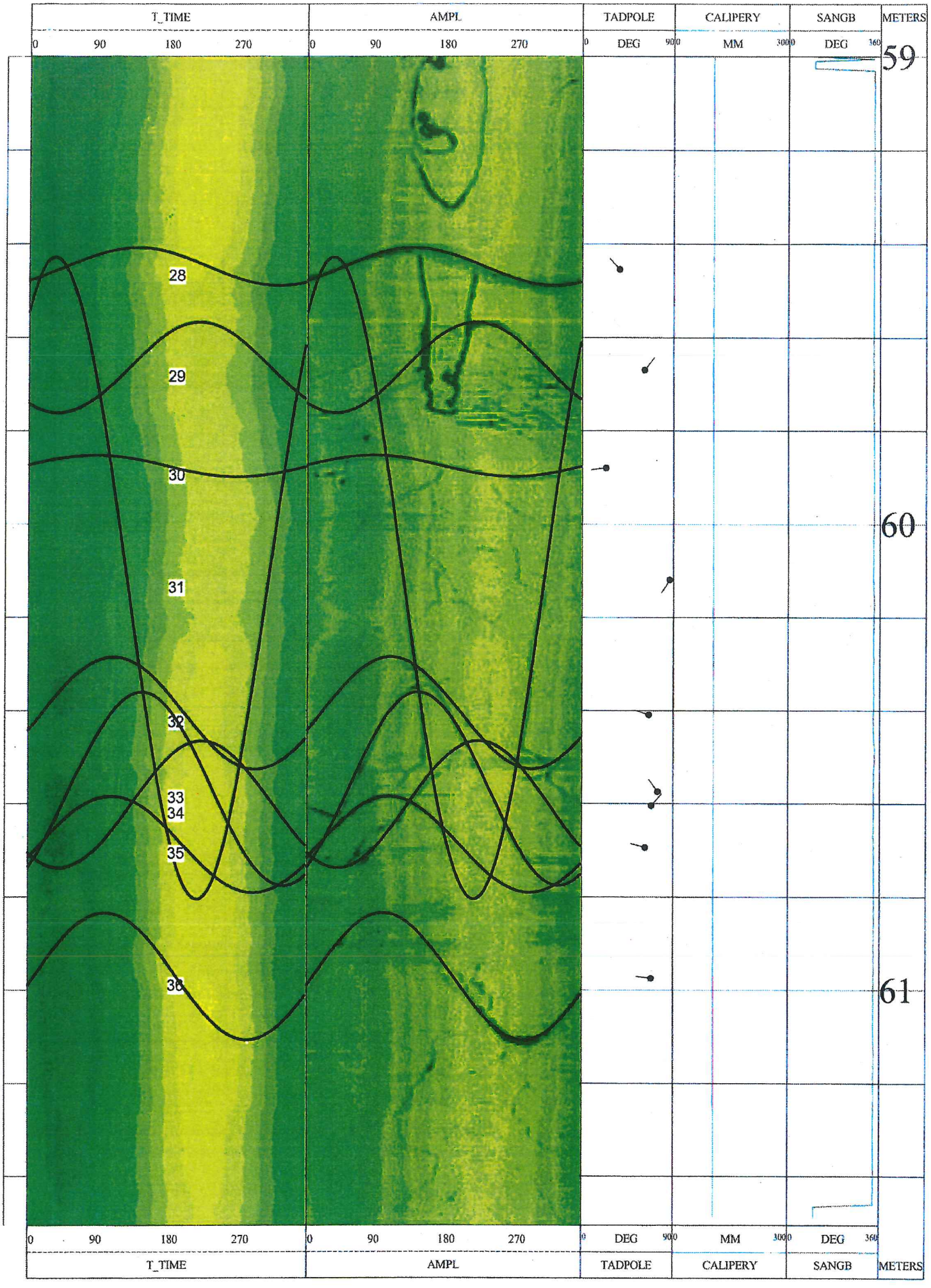
Fracture Number	Dip (deg)	Azimuth (deg)	To (m)	From (m)	Diameter (cm)	Deviation (deg)	Dir. of Deviation (deg)	Category
1	19	248	51.64	51.67	10.35	1.2	340.2	Joint
2	63	351	51.71	51.92	10.31	1.3	336.5	Joint
3	62	002	51.94	52.14	10.31	1.3	334.1	Joint
4	54	003	52.16	52.30	10.31	1.3	338.5	Joint
5	61	004	52.32	52.51	10.35	1.5	334.9	Joint
6	53	329	52.88	53.02	10.35	1.4	334.2	Incipient Joint
7	50	335	52.98	53.10	10.35	1.3	336.4	Joint
8	16	348	53.16	53.20	10.35	1.4	337.2	Joint
9	01	160	53.67	53.67	10.31	1.3	340.2	Joint
10	07	189	53.84	53.85	10.31	1.3	341.3	Joint
11	40	023	54.44	54.53	10.31	1.4	338.1	Joint
12	03	100	55.18	55.18	10.31	1.4	335.6	Joint
13	53	171	55.35	55.48	10.31	1.3	338.0	Joint
14	67	269	55.46	55.70	10.31	1.4	339.2	Joint
15	64	296	55.74	55.95	10.31	1.5	335.7	Incipient Joint
16	60	026	55.99	56.17	10.31	1.4	333.3	Joint
17	51	342	56.15	56.28	10.31	1.3	341.1	Joint
18	27	057	56.29	56.34	10.35	1.3	336.5	Joint
19	31	327	56.31	56.37	10.35	1.3	336.9	Joint
20	35	300	56.78	56.86	10.31	1.4	337.7	Joint
21	71	291	56.96	57.27	10.31	1.4	332.6	Joint
22	66	291	57.19	57.43	10.31	1.5	337.0	Incipient Joint
23	64	297	57.61	57.83	10.31	1.3	341.5	Joint
24	10	301	57.87	57.89	10.27	1.4	338.3	Joint
25	78	023	57.78	58.28	10.31	1.5	337.3	Incipient Joint
26	70	294	58.15	58.45	10.31	1.6	331.7	Joint
27	21	153	58.83	58.86	10.31	1.3	336.3	Joint
28	37	316	59.41	59.49	10.31	1.4	334.6	Joint
29	62	037	59.57	59.76	10.24	1.4	331.3	Joint
30	24	262	59.85	59.90	10.31	1.4	332.5	Joint
31	87	214	59.43	60.81	10.31	1.4	335.9	Joint
32	66	287	60.28	60.53	10.31	1.4	330.4	Joint
33	75	323	60.36	60.78	10.31	1.4	336.5	Joint
34	69	040	60.47	60.74	10.31	1.4	334.2	Joint
35	63	285	60.58	60.79	10.31	1.4	338.9	Joint
36	69	277	60.83	61.11	10.23	1.5	334.3	Joint

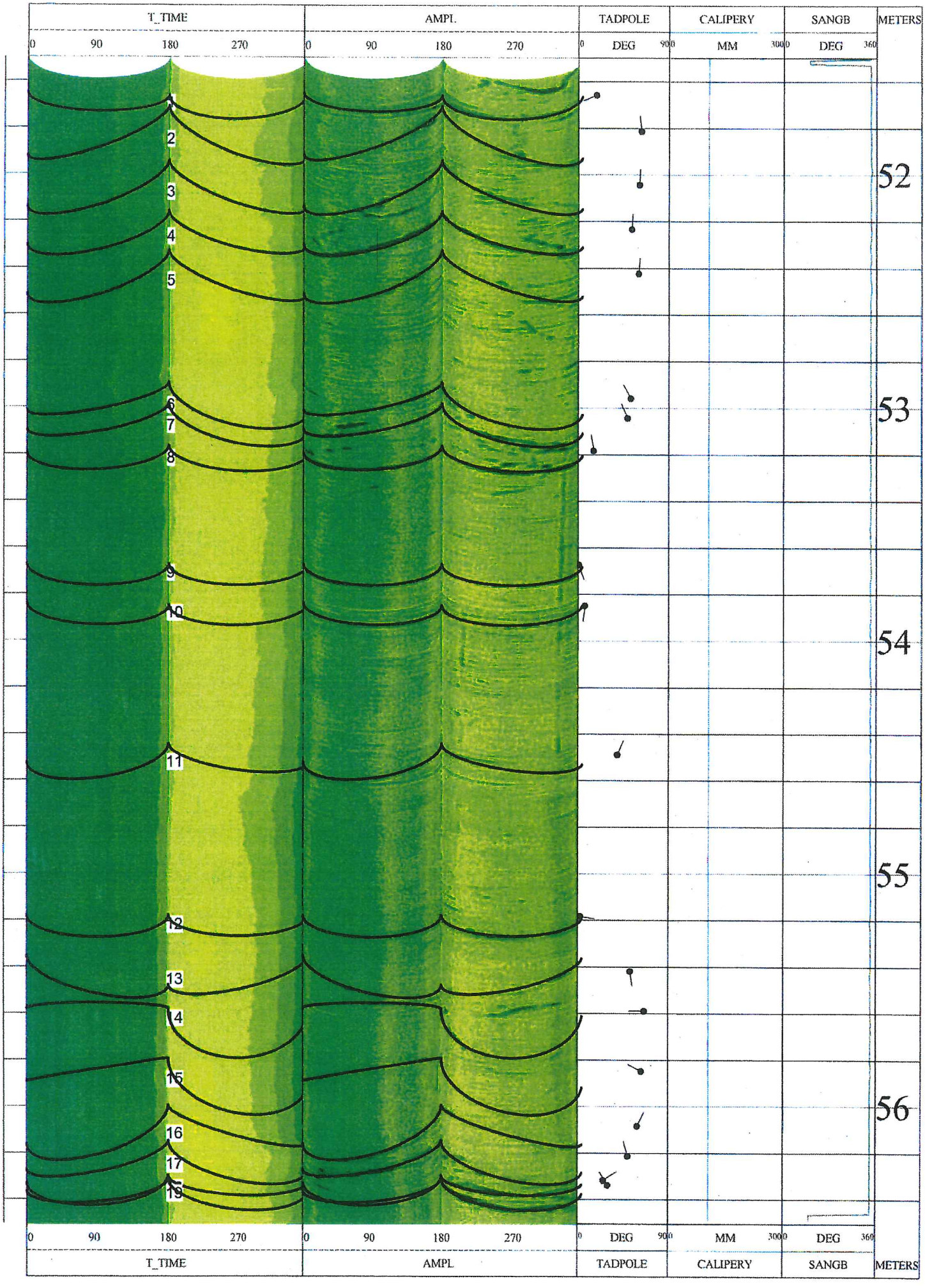
Checked by:

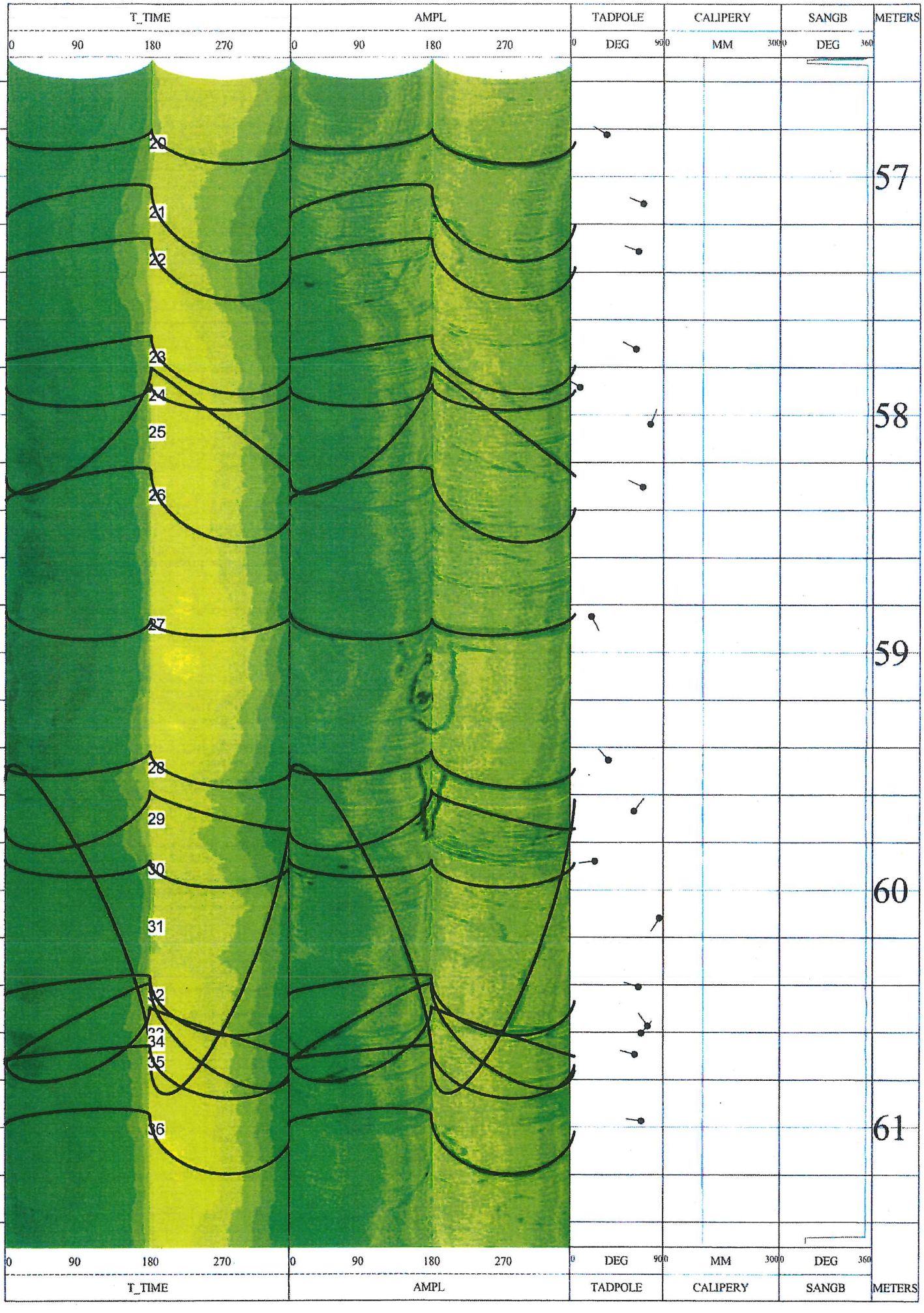

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
1
2
3
4
5
6
7
8
9
10
52
53
54

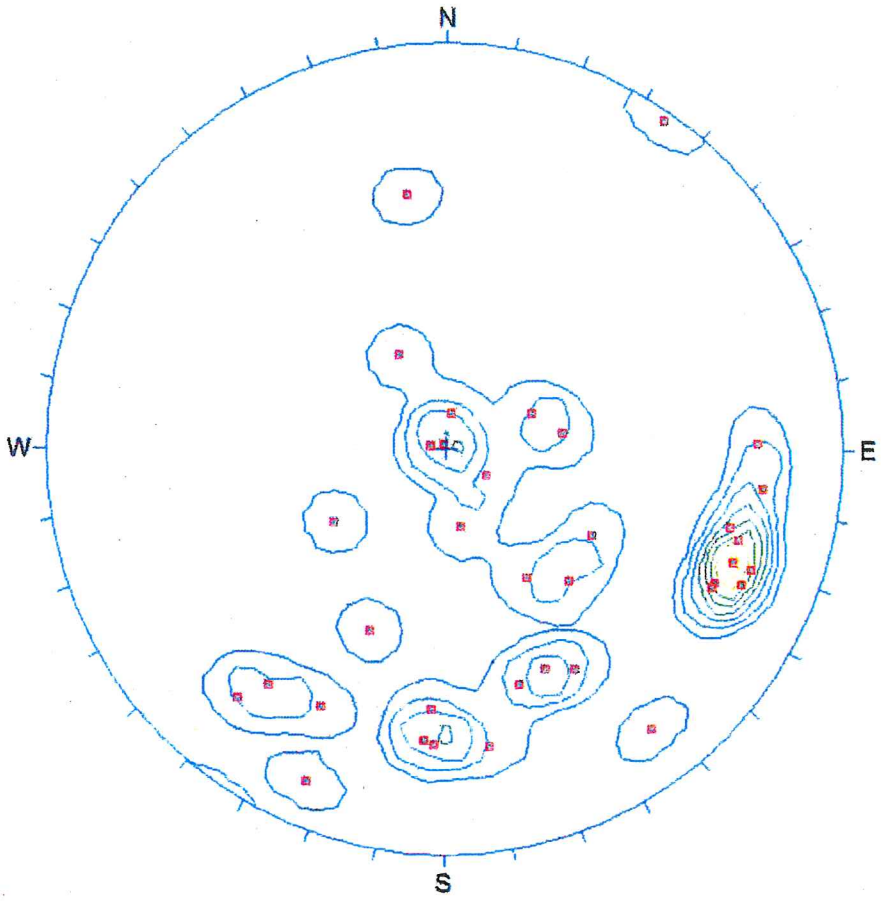

T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
DEG
MM
54
55
56
11
12
13
14
15
16
17
18
19


T_TIME
0 90 180 270
AMPL
0 90 180 270
TADPOLE
0 DEG 90
CALIPERY
0 MM 300
SANGB
0 DEG 360
METERS
20
21
22
23
24
25
26
27
57
58
59


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0
90
180
270
DEG
MM
59
60
61
28
29
30
31
32
33
34
35
36


T_TIME
0
90
180
270
AMPL.
0
90
180
270
TADPOLE
0
DEG
90
CALIPERY
MM
3000
SANGB
DEG
360
METERS
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
52
53
54
55
56
0
90
180
270
0
90
180
270
0
DEG
90
MM
3000
DEG
360
T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS


T_TIME
AMPL
TADPOLE
CALIPERY
SANGB
METERS
0 90 180 270
DEG
MM
20
21
22
23
24
25
26
27
28
29
30
31
32
34
35
36
57
58
59
60
61



Poles

Equal Area
Lower Hemisphere
36 Poles
36 Entries

Contract	:	Ground Investigation - New Territories West (Term Contract)
Contract No.	:	GE/2014/07.34
Location	:	Yuen Long
Borehole No.	:	S2-DH16

Appendix H

Standpipe and Piezometer Detail and Response Test Record Sheets

DRiLTECH

DRILLHOLE STANDPIPE DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH07 (Upper)

Contract No. : GE/2014/07	**Date of Installation :** 4-Dec-15
Works Order No. : GE/2014/07.34	**Date of Test :** 7-Dec-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +4.35 mPD **Co-ordinates :** E 820697.12 N 834114.81
Initial Water Level : 1.93 m below G.L.	**Standpipe Tip Level :** -5.65 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 7-Dec-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	1.32
0.50	1.58
0.75	1.65
1.00	1.68
1.50	1.73
2.00	1.77
3.00	1.79
4.00	1.81
5.00	1.83
6.00	1.85
7.00	1.86
8.00	1.87

Filter Material: Aggregates

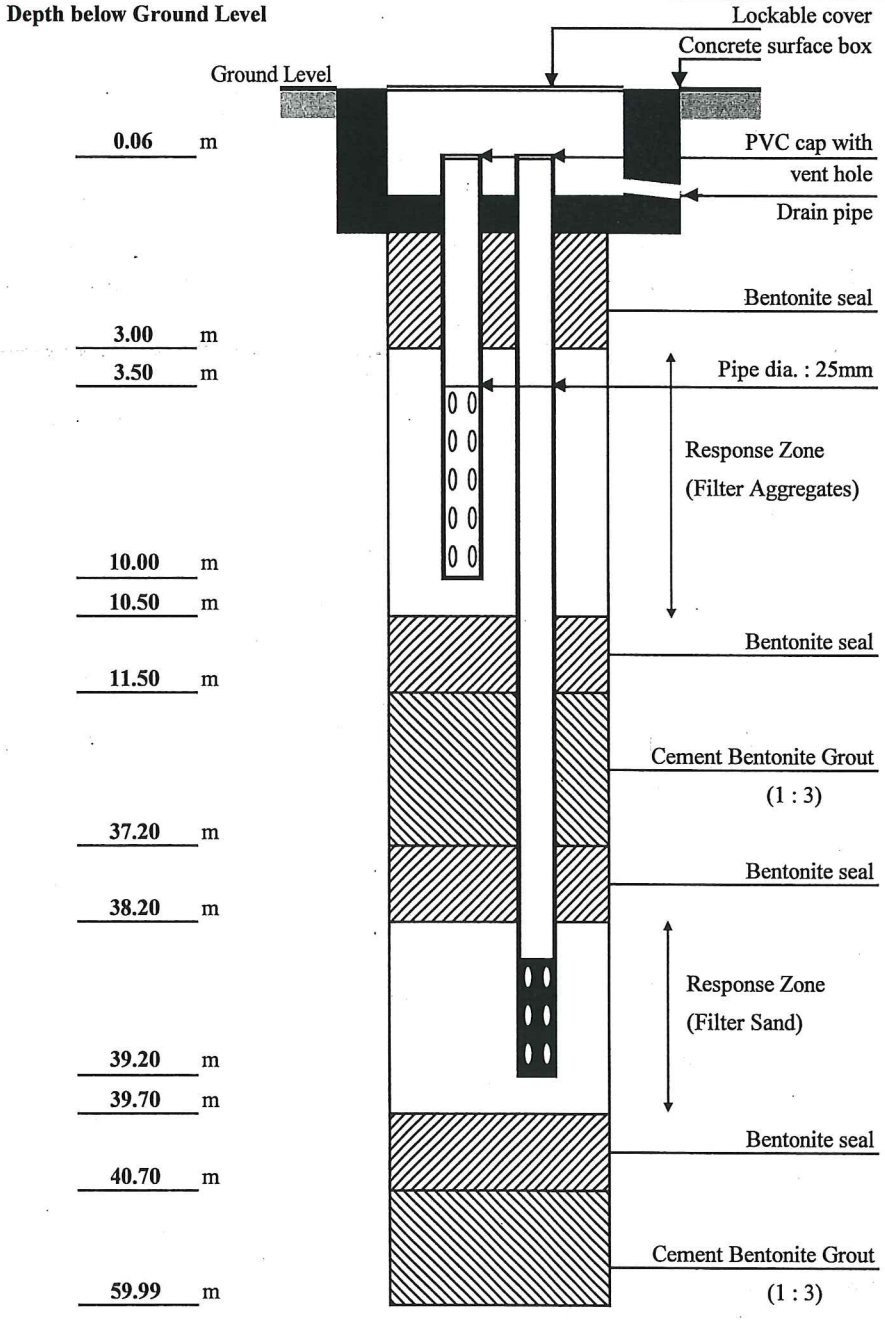
Material Surrounding Response Zone:

From 3.00m to 5.00m: FILL (Slightly clayey silty fine to coarse SAND)

From 5.00m to 10.50m: ALLUVIUM (Slightly sandy silty CLAY / Slightly silty clayey fine to coarse SAND / Slightly silty clayey sandy fine to coarse GRAVEL)

Remarks :

Depth below Ground Level



(N.T.S.)

DRiLTECH

DRILLHOLE PIEZOMETER DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH07 (Lower)

Contract No. : GE/2014/07	**Date of Installation :** 4-Dec-15
Works Order No. : GE/2014/07.34	**Date of Test :** 7-Dec-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +4.35 mPD **Co-ordinates :** E 820697.12 N 834114.81
Initial Water Level : 2.77 m below G.L.	**Piezometer Tip Level :** -34.85 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 7-Dec-15

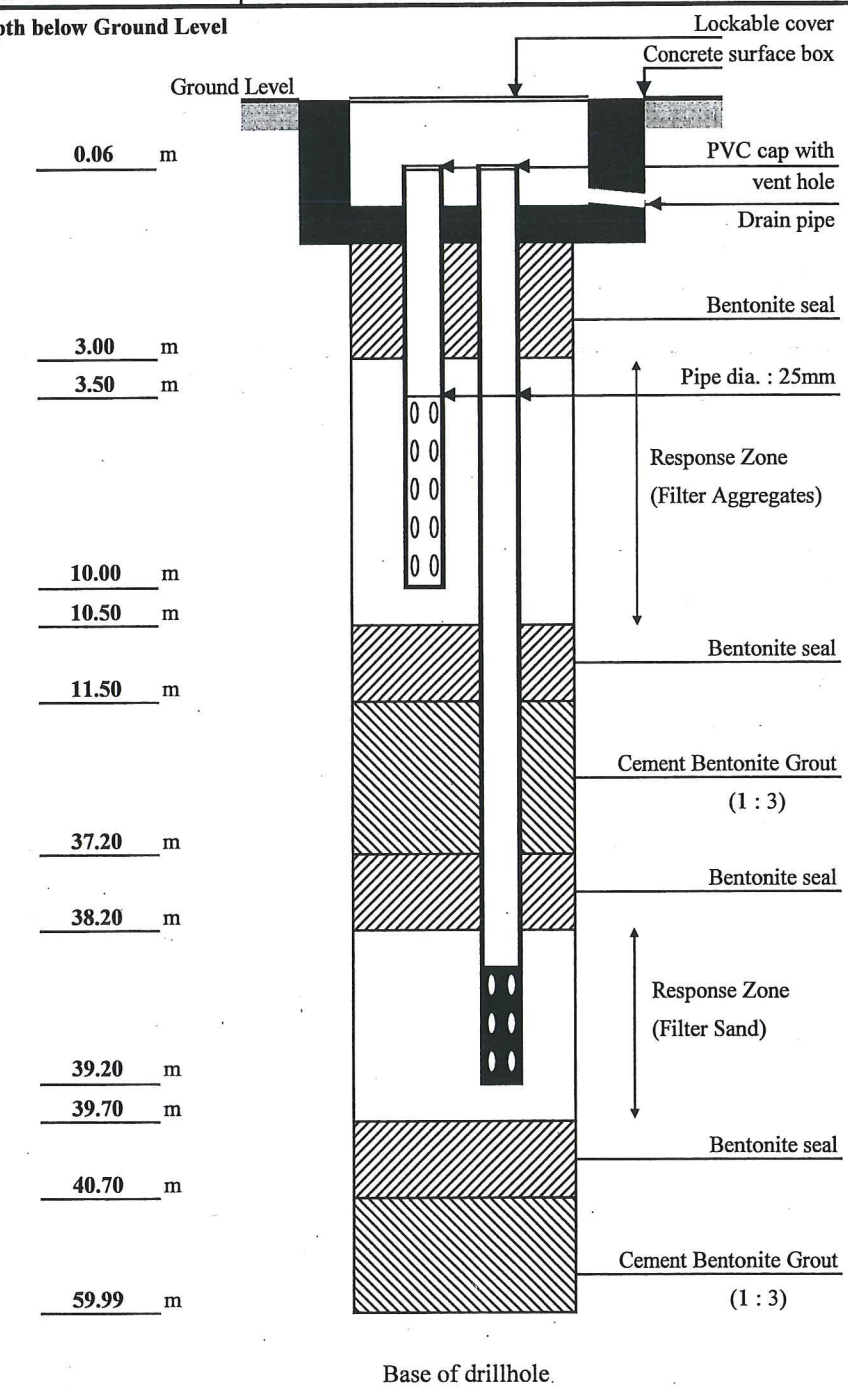
Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	1.71
0.50	2.20
0.75	2.53
1.00	2.62
1.50	2.66
2.00	2.67
3.00	2.68
4.00	2.69
5.00	2.69
6.00	2.70
7.00	2.70
8.00	2.71

Filter Material: Sand

Material Surrounding Response Zone:

From 38.20m to 39.70m: CAVITY-FILL DEPOSITS (Slightly clayey silty sandy fine to coarse GRAVEL)

Remarks :



(N.T.S.)

DRiLTECH

DRILLHOLE STANDPIPE DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH11 (Upper)

Contract No. : GE/2014/07	**Date of Installation :** 16-Dec-15
Works Order No. : GE/2014/07.34	**Date of Test :** 17-Dec-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +4.73 mPD **Co-ordinates :** E 820728.54 N 833792.53
Initial Water Level : 3.29 m below G.L.	**Standpipe Tip Level :** -12.77 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 17-Dec-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	3.07
0.50	3.13
0.75	3.17
1.00	3.20
1.50	3.22
2.00	3.23
3.00	3.24
4.00	3.25

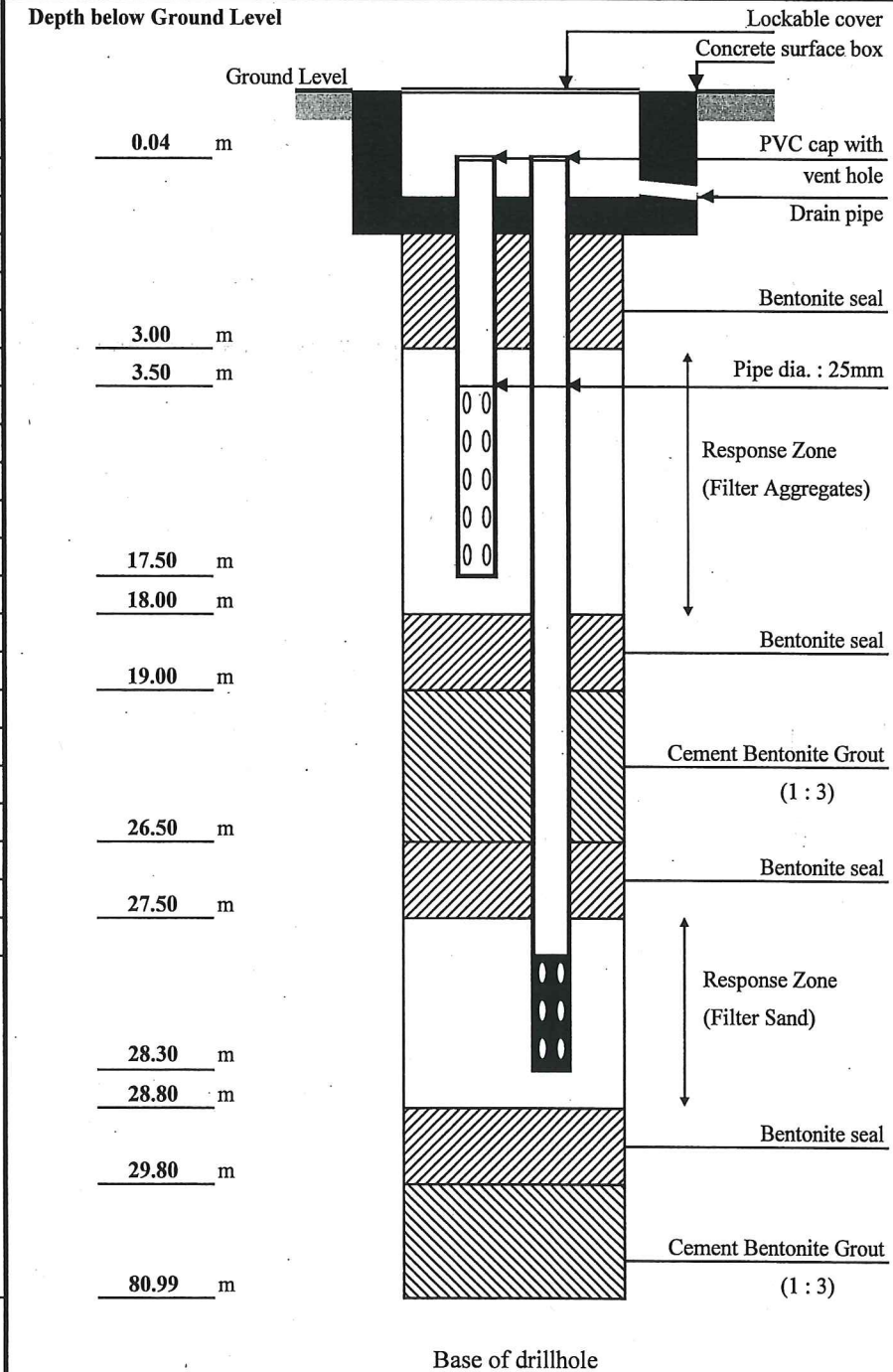
Filter Material: Aggregates

Material Surrounding Response Zone:

From 3.00m to 5.20m: FILL / CONCRETE (Silty sandy CLAY / Fine to coarse GRAVEL)

From 5.20m to 18.00m: ALLUVIUM (Slightly clayey silty fine to coarse SAND / Slightly clayey silty sandy fine GRAVEL)

Remarks :



(N.T.S.)

DRiLTECH

DRILLHOLE PIEZOMETER DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH11 (Lower)

Contract No. :	GE/2014/07	**Date of Installation :**	16-Dec-15
Works Order No. :	GE/2014/07.34	**Date of Test :**	17-Dec-15
Project:	Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :**	+4.73 mPD
		Co-ordinates :	E 820728.54 N 833792.53
Initial Water Level :	3.05 m below G.L.	**Piezometer Tip Level :**	-23.57 mPD
Tested / Supervised By :	C.K. Chiu	**Checked By :**	R. Chu
Dip meter I.D. :	DT-010-008	**Checked Date :**	17-Dec-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	0.46
0.50	1.02
0.75	1.40
1.00	1.70
1.50	2.07
2.00	2.26
3.00	2.48
4.00	2.60
5.00	2.68
6.00	2.73
7.00	2.78
8.00	2.83
9.00	2.87
10.00	2.90
15.00	2.97
20.00	2.99
25.00	3.01

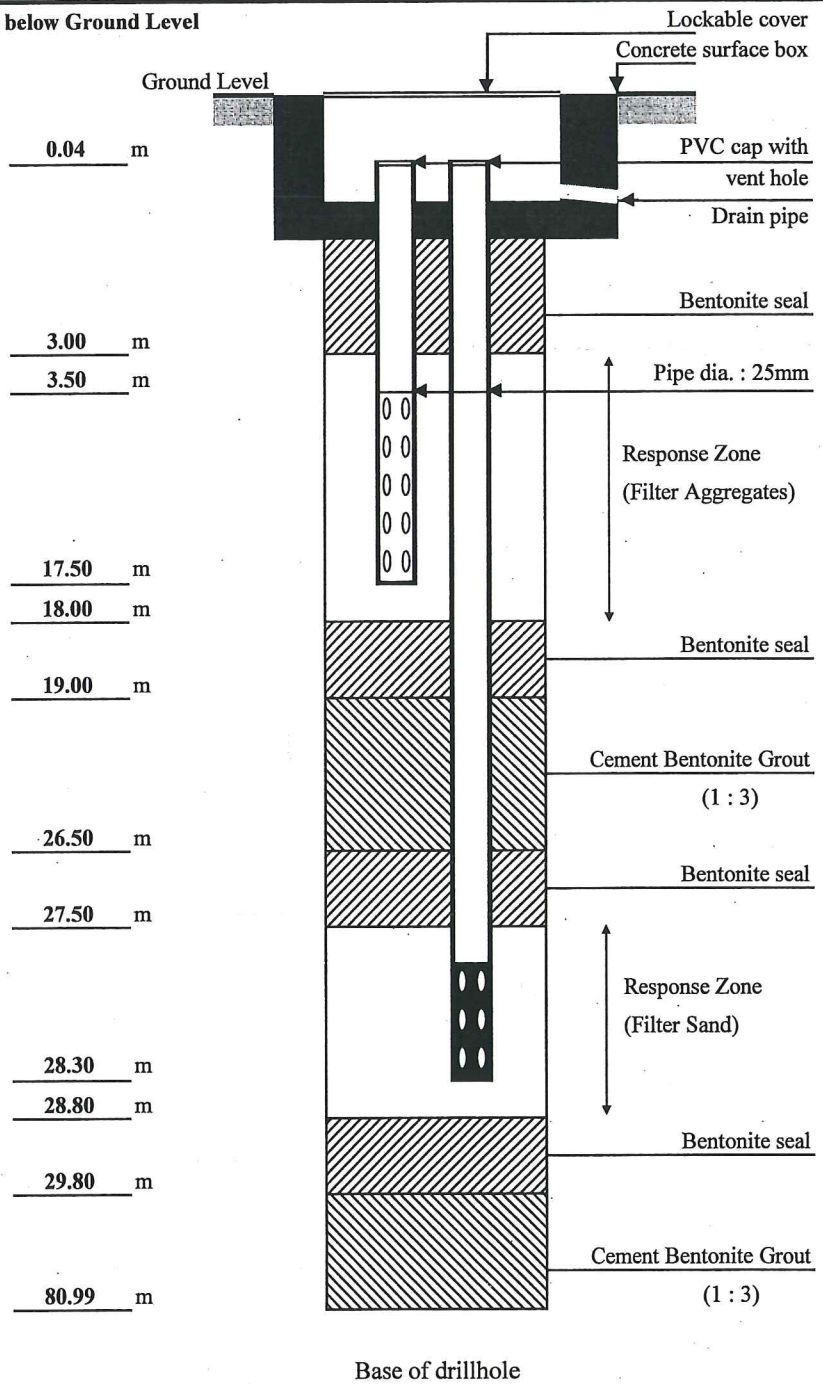
Filter Material: Sand

Material Surrounding Response Zone:

From 27.50m to 28.80m: KARST DEPOSITS (Slightly sandy silty CLAY / Slightly sandy clayey silty fine to coarse GRAVEL)

Remarks :

Depth below Ground Level



(N.T.S.)

DRiLTECH

DRILLHOLE STANDPIPE DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH12A (Upper)

Contract No. : GE/2014/07	**Date of Installation :** 26-Nov-15
Works Order No. : GE/2014/07.34	**Date of Test :** 27-Nov-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +5.38 mPD **Co-ordinates :** E 820693.55 N 833760.48
Initial Water Level : 3.81 m below G.L.	**Standpipe Tip Level :** -12.72 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 27-Nov-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	3.33
0.50	3.60
0.75	3.65
1.00	3.69
1.50	3.71
2.00	3.72
3.00	3.73

Filter Material: Aggregates

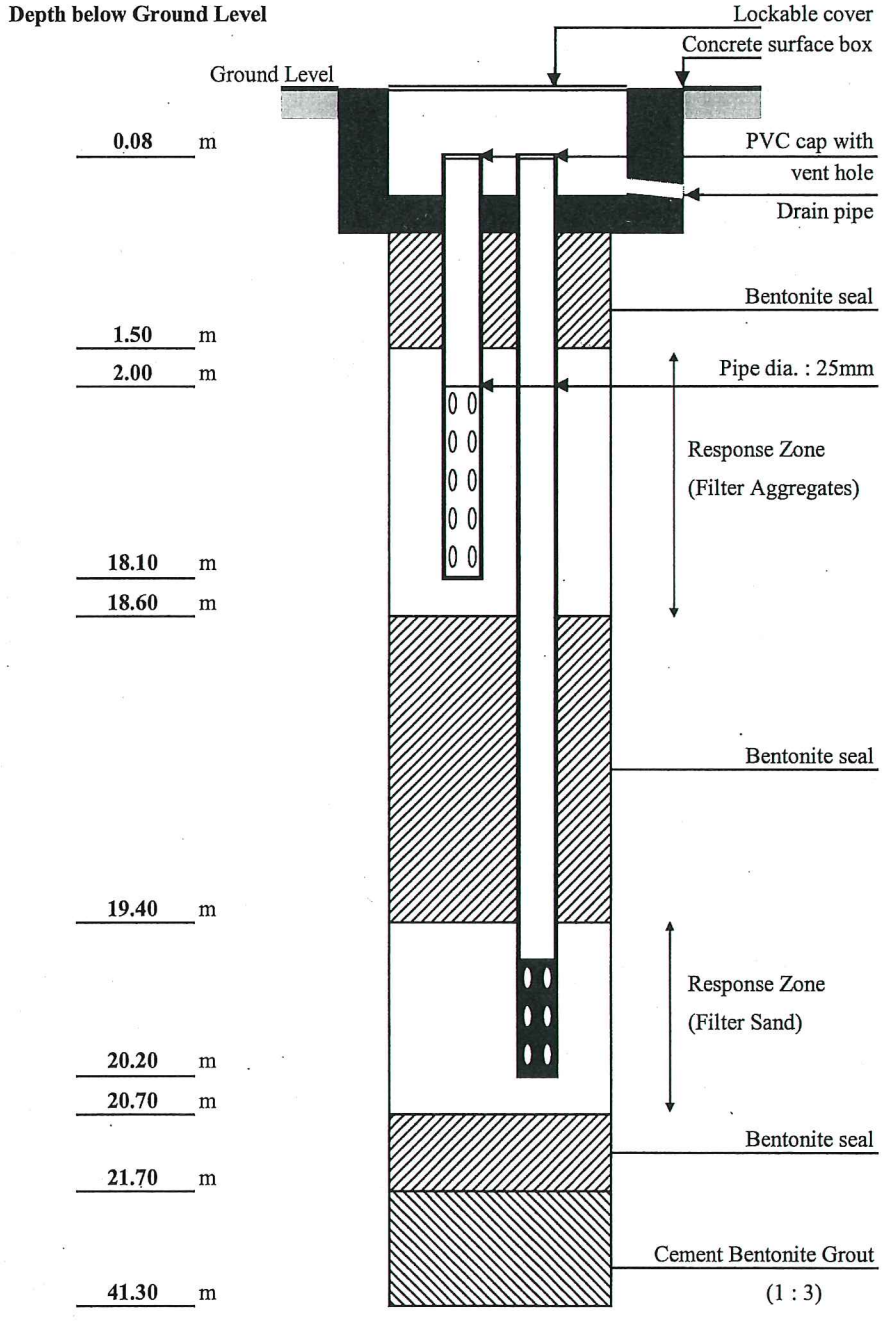
Material Surrounding Response Zone:

From 1.50m to 4.10m: FILL (Silty sandy CLAY / Slightly silty clayey fine to coarse SAND)

From 4.10m to 18.60m: ALLUVIUM (Slightly sandy silty CLAY / Slightly clayey silty fine to coarse SAND)

Remarks :

Depth below Ground Level



(N.T.S.)

DRiLTECH

DRILLHOLE PIEZOMETER DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH12A (Lower)

Contract No. : GE/2014/07	**Date of Installation :** 26-Nov-15
Works Order No. : GE/2014/07.34	**Date of Test :** 27-Nov-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +5.38 mPD **Co-ordinates :** E 820693.55 N 833760.48
Initial Water Level : 3.73 m below G.L.	**Piezometer Tip Level :** -14.82 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 27-Nov-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	2.70
0.50	3.42
0.75	3.50
1.00	3.55
1.50	3.58
2.00	3.60
3.00	3.62
4.00	3.63
5.00	3.64
6.00	3.65

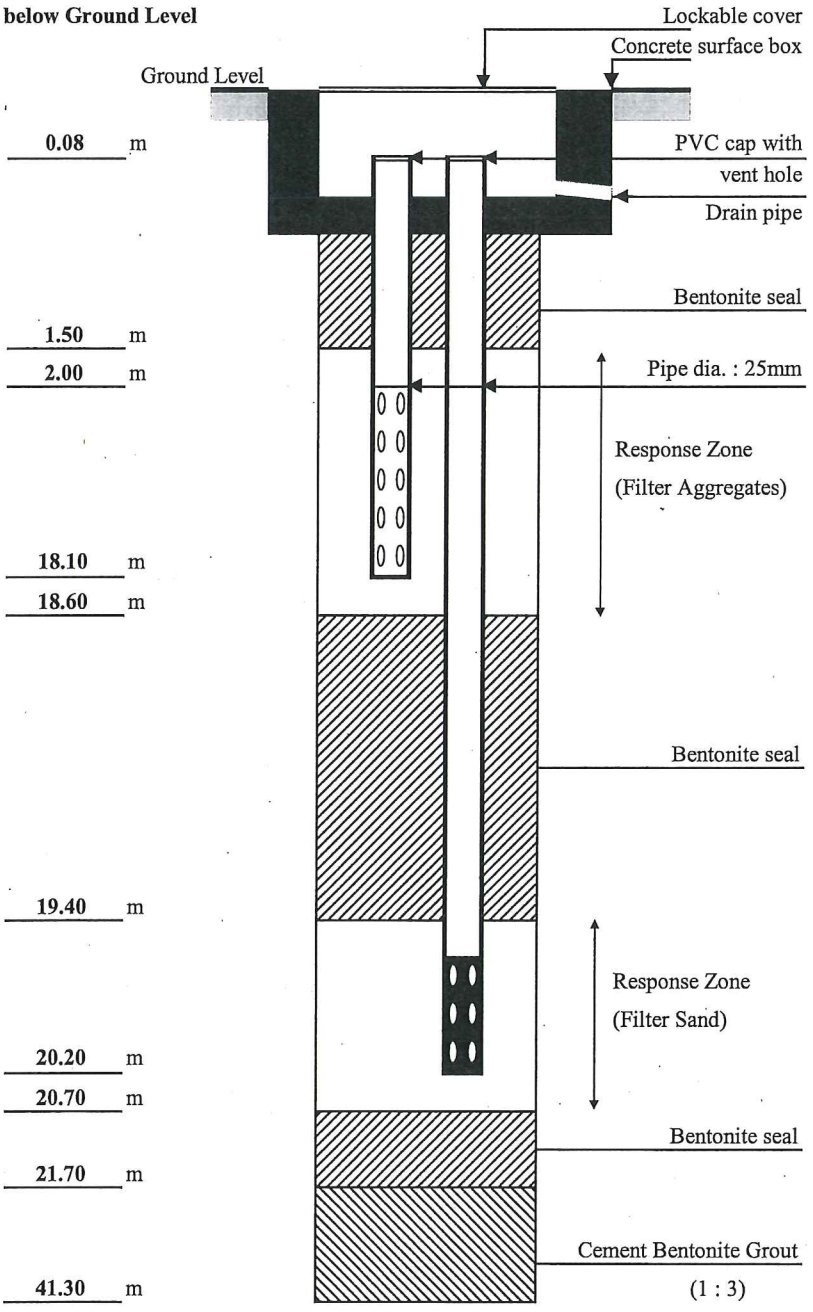
Filter Material: Sand

Material Surrounding Response Zone:

From 19.40m to 20.70m: KARST DEPOSITS (Slightly sandy clayey SILT)

Remarks :

Depth below Ground Level



(N.T.S.)

DRiLTECH

DRILLHOLE STANDPIPE DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH13 (Upper)

Contract No. : GE/2014/07	**Date of Installation :** 10-Dec-15
Works Order No. : GE/2014/07.34	**Date of Test :** 12-Dec-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +4.55 mPD **Co-ordinates :** E 820696.35 N 833945.40
Initial Water Level : 3.37 m below G.L.	**Standpipe Tip Level :** -2.05 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 12-Dec-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	0.40
0.50	0.62
0.75	0.80
1.00	0.99
1.50	1.28
2.00	1.51
3.00	1.93
4.00	2.30
5.00	2.57
6.00	2.79
7.00	2.96
8.00	3.07
9.00	3.14
10.00	3.20
15.00	3.32

Filter Material: Aggregates

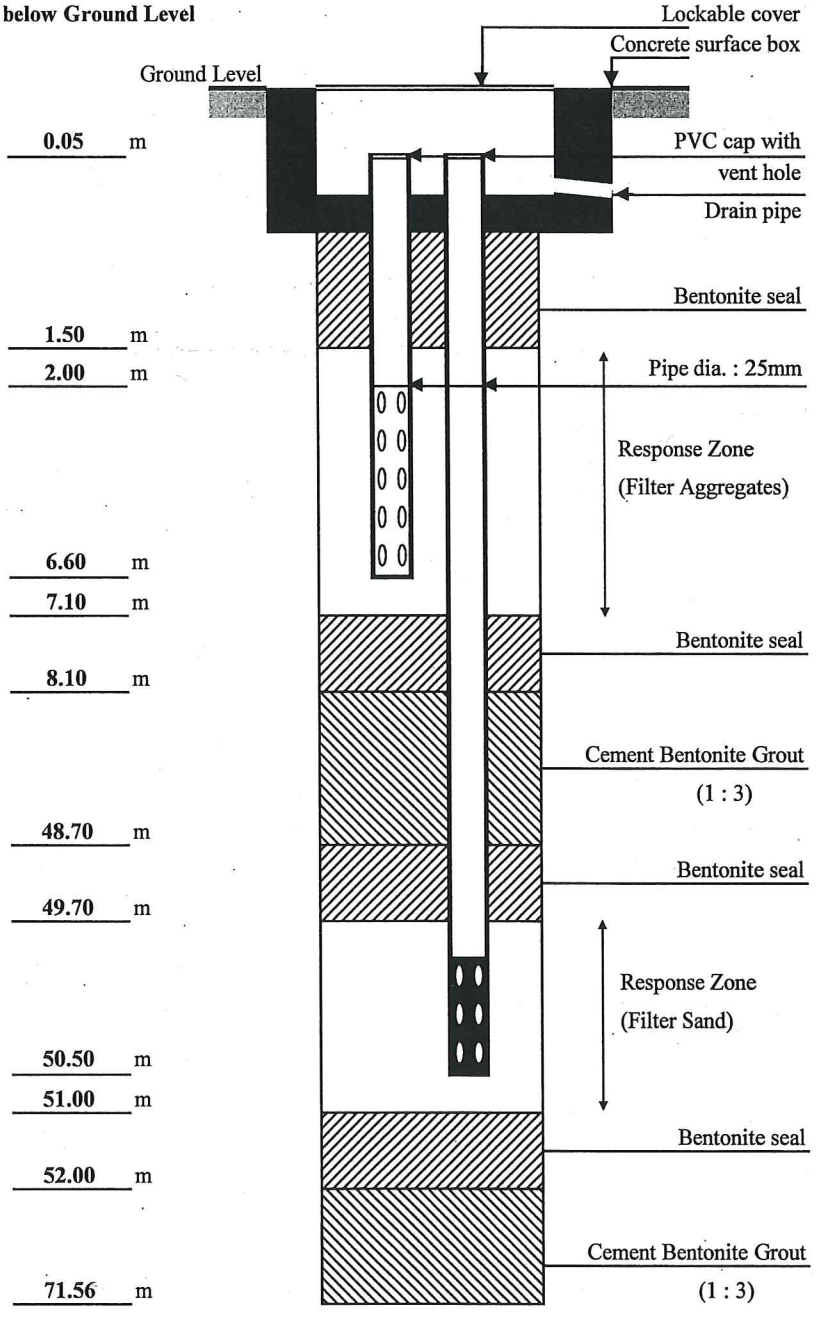
Material Surrounding Response Zone:

From 1.50m to 6.10m: FILL (Clayey silty fine to coarse SAND / Silty sandy CLAY)

From 6.10m to 7.10m: ALLUVIUM (Slightly clayey silty fine to coarse SAND / Silty sandy CLAY)

Remarks :

Depth below Ground Level



(N.T.S.)

DRiLTECH

DRILLHOLE PIEZOMETER DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH13 (Lower)

Contract No. : GE/2014/07	**Date of Installation :** 10-Dec-15
Works Order No. : GE/2014/07.34	**Date of Test :** 12-Dec-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +4.55 mPD **Co-ordinates :** E 820696.35 N 833945.40
Initial Water Level : 2.72 m below G.L.	**Piezometer Tip Level :** -45.95 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 12-Dec-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	0.13
0.50	0.24
0.75	0.37
1.00	0.47
1.50	0.66
2.00	0.86
3.00	1.17
4.00	1.39
5.00	1.60
6.00	1.76
7.00	1.90
8.00	2.02
9.00	2.12
10.00	2.20
15.00	2.46
20.00	2.57
25.00	2.63
30.00	2.65
45.00	2.67

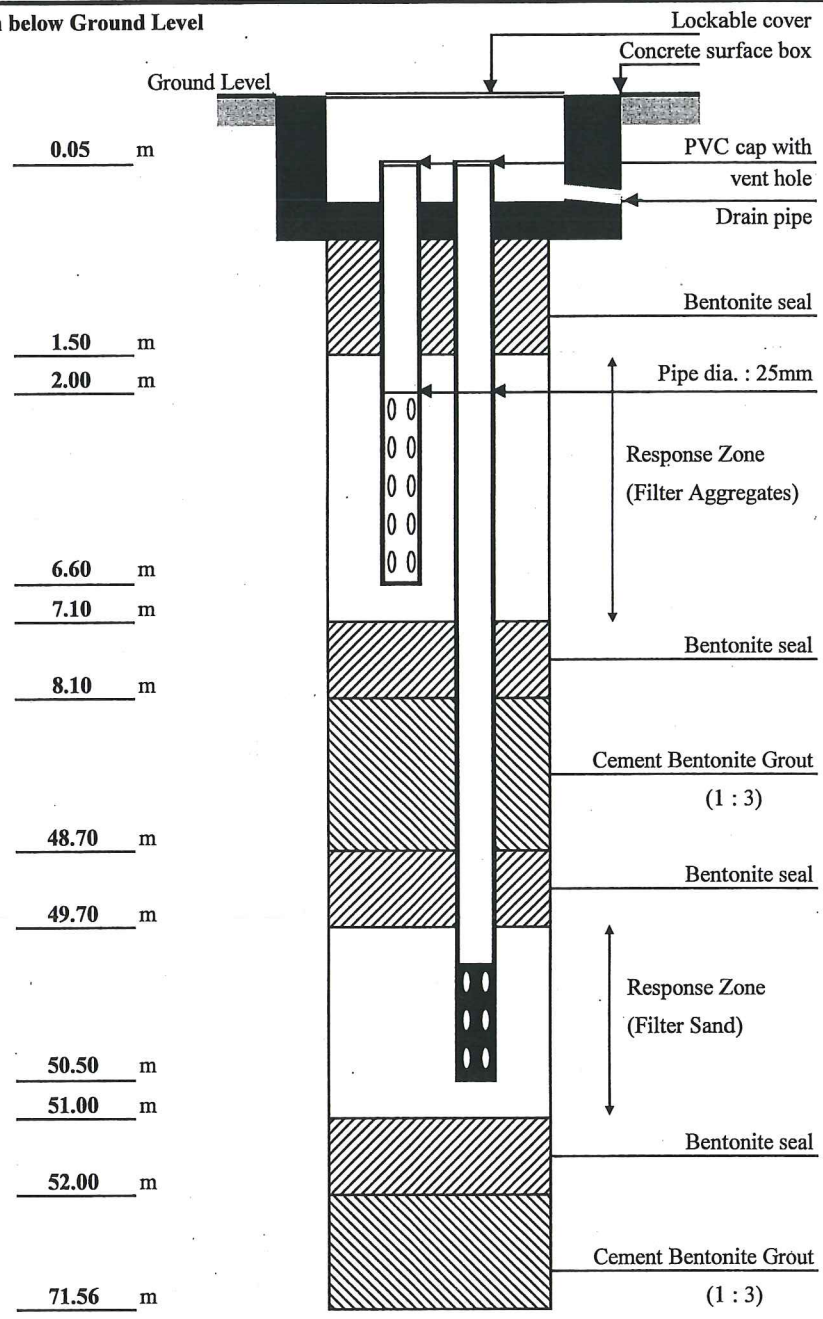
Filter Material: Sand

Material Surrounding Response Zone:

From 49.70m to 51.00m: KARST DEPOSITS (Slightly sandy clayey SILT)

Remarks :

Depth below Ground Level



(N.T.S.)

DRiLTECH

DRILLHOLE STANDPIPE DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH14 (Upper)

Contract No. : GE/2014/07	**Date of Installation :** 24-Dec-15
Works Order No. : GE/2014/07.34	**Date of Test :** 28-Dec-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +4.41 mPD **Co-ordinates :** E 820695.13 N 833868.26
Initial Water Level : 2.89 m below G.L.	**Standpipe Tip Level :** -7.09 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 28-Dec-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	1.87
0.50	2.02
0.75	2.10
1.00	2.15
1.50	2.21
2.00	2.27
3.00	2.39
4.00	2.42
5.00	2.44
6.00	2.48
7.00	2.50
8.00	2.52
9.00	2.55
10.00	2.57
15.00	2.71
20.00	2.79

Filter Material: Aggregates

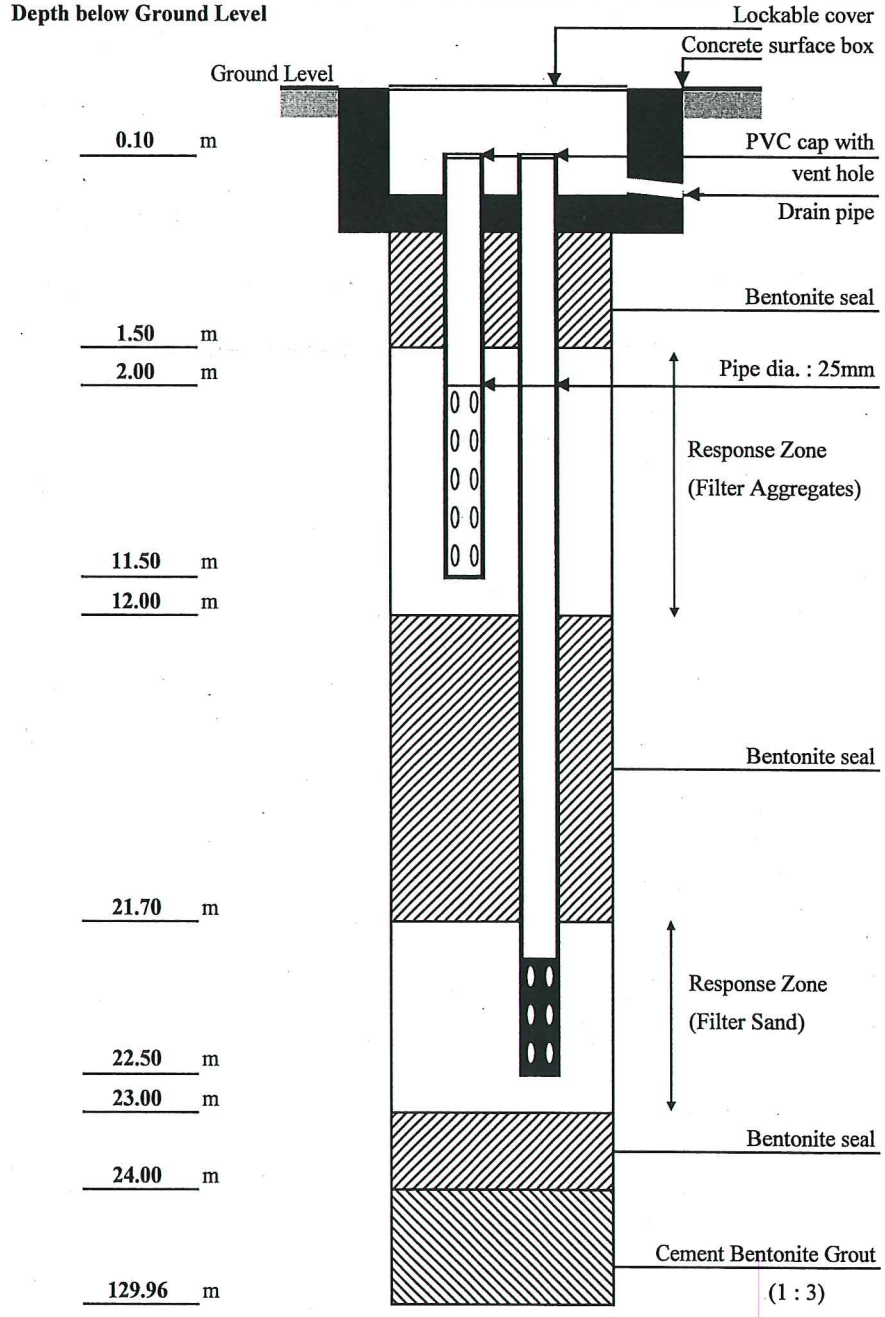
Material Surrounding Response Zone:

From 1.50m to 3.00m: FILL (Slightly silty clayey fine to coarse SAND)

From 3.00m to 12.00m: ALLUVIUM (Slightly sandy silty CLAY / Slightly silty clayey fine to coarse SAND)

Remarks :

Depth below Ground Level



(N.T.S.)

DRiLTECH

DRILLHOLE PIEZOMETER DETAIL AND RESPONSE TEST RECORD SHEET

Drillhole No. : S1-DH14 (Lower)

Contract No. : GE/2014/07	**Date of Installation :** 24-Dec-15
Works Order No. : GE/2014/07.34	**Date of Test :** 28-Dec-15
Project: Ground Investigation - New Territories West (Term Contract) Agreement No. CE 32/2014 (HY) Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction	**Ground Level :** +4.41 mPD **Co-ordinates :** E 820695.13 N 833868.26
Initial Water Level : 3.00 m below G.L.	**Piezometer Tip Level :** -18.09 mPD
Tested / Supervised By : C.K. Chiu	**Checked By :** R. Chu
Dip meter I.D. : DT-010-008	**Checked Date :** 28-Dec-15

Time Elapsed (minutes)	Depth of Water from top of pipe (m)
0	0.00
0.25	0.30
0.50	0.67
0.75	0.86
1.00	1.11
1.50	1.40
2.00	1.66
3.00	1.91
4.00	2.11
5.00	2.24
6.00	2.35
7.00	2.42
8.00	2.48
9.00	2.53
10.00	2.57
15.00	2.69
20.00	2.76
25.00	2.80
30.00	2.81
45.00	2.82
60.00	2.83

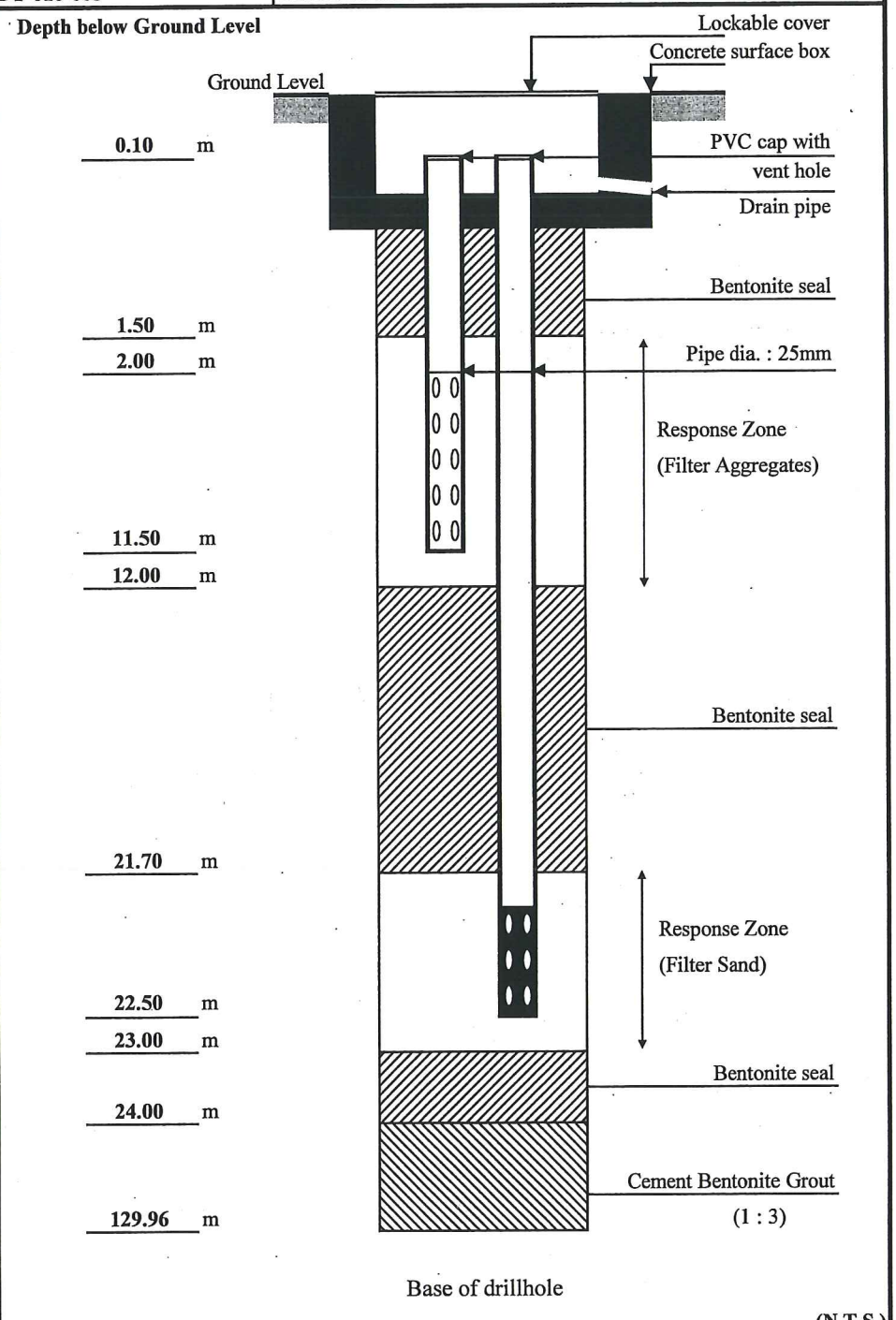
Filter Material: Aggregates

Material Surrounding Response Zone:

From 21.70m to 22.60m: ALLUVIUM (Slightly clayey silty fine to coarse SAND)

From 22.60m to 23.00m: Grade V SILTSTONE (Slightly sandy silty CLAY)

Remarks :



(N.T.S.)

Appendix I

Water Level Monitoring Records

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No.
S1-DH07 (Upper)

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project:
Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 4-Dec-15
Measured By : C.K. Chiu

Standpipe
Co-ordinates :
E 820697.12 N 834114.81
Ground Level : +4.35mPD
Depth : 10.00m
Tip Level : -5.65mPD
Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
8-Dec-15	13:00	1.93	+2.42	Cloudy
9-Dec-15	14:00	1.95	+2.40	Rain
10-Dec-15	9:00	2.20	+2.15	Cloudy
11-Dec-15	9:30	2.23	+2.12	Cloudy
12-Dec-15	10:00	3.02	+1.33	Cloudy
14-Dec-15	9:00	3.10	+1.25	Fine
15-Dec-15	13:00	3.11	+1.24	Fine

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No. S1-DH07 (Lower)

Contract No. : GE/2014/07

Works Order No. : GE/2014/07.34

Project:

Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 4-Dec-15

Measured By : C.K. Chiu

Piezometer

Co-ordinates :

E 820697.12 N 834114.81

Ground Level : +4.35mPD

Depth : 39.20m

Tip Level : -34.85mPD

Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
8-Dec-15	13:02	2.77	+1.58	Cloudy
9-Dec-15	14:02	2.76	+1.59	Rain
10-Dec-15	9:02	2.78	+1.57	Cloudy
11-Dec-15	9:32	2.76	+1.59	Cloudy
12-Dec-15	10:02	2.74	+1.61	Cloudy
14-Dec-15	9:02	2.73	+1.62	Fine
15-Dec-15	13:02	2.73	+1.62	Fine

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No.
S1-DH11 (Upper)

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project:
Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 16-Dec-15
Measured By : C.K. Chiu

Standpipe
Co-ordinates :
E 820728.54 N 833792.53
Ground Level : +4.73mPD
Depth : 17.50m
Tip Level : -12.77mPD
Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
18-Dec-15	13:15	3.29	+1.44	Fine
19-Dec-15	14:10	3.28	+1.45	Fine
21-Dec-15	8:45	3.33	+1.40	Cloudy
22-Dec-15	9:00	3.31	+1.42	Cloudy
23-Dec-15	9:00	3.32	+1.41	Cloudy
24-Dec-15	9:10	3.32	+1.41	Cloudy
28-Dec-15	9:10	3.32	+1.41	Cloudy

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No. S1-DH11 (Lower)

Contract No. : GE/2014/07

Works Order No. : GE/2014/07.34

Project:

Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 16-Dec-15

Measured By : C.K. Chiu

Piezometer Co-ordinates :

E 820728.54 N 833792.53

Ground Level : +4.73mPD

Depth : 28.30m

Tip Level : -23.57mPD

Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
18-Dec-15	13:17	3.10	+1.63	Fine
19-Dec-15	14:12	3.15	+1.58	Cloudy
21-Dec-15	8:47	3.13	+1.60	Cloudy
22-Dec-15	9:02	3.18	+1.55	Cloudy
23-Dec-15	9:02	3.17	+1.56	Cloudy
24-Dec-15	9:12	3.15	+1.58	Cloudy
28-Dec-15	9:12	3.16	+1.57	Cloudy

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No. S1-DH12A (Upper)

Contract No. : GE/2014/07

Works Order No. : GE/2014/07.34

Project:

Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 26-Nov-15

Measured By : C.K. Chiu

Standpipe

Co-ordinates :

E 820693.55 N 833760.48

Ground Level : +5.38mPD

Depth : 18.10m

Tip Level : -12.72mPD

Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
28-Nov-15	13:30	3.57	+1.81	Fine
30-Nov-15	13:00	3.57	+1.81	Fine
1-Dec-15	9:30	3.58	+1.80	Cloudy
2-Dec-15	9:30	3.55	+1.83	Cloudy
3-Dec-15	9:00	3.56	+1.82	Cloudy
4-Dec-15	11:20	3.56	+1.82	Fine
5-Dec-15	11:00	3.59	+1.79	Rain

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No. S1-DH12A (Lower)

Contract No. : GE/2014/07

Works Order No. : GE/2014/07.34

Project:

Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 26-Nov-15

Measured By : C.K. Chiu

Piezometer

Co-ordinates :

E 820693.55 N 833760.48

Ground Level : +5.38mPD

Depth : 20.20m

Tip Level : -14.82mPD

Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
28-Nov-15	13:32	3.57	+1.81	Fine
30-Nov-15	13:02	3.58	+1.80	Fine
1-Dec-15	9:32	3.59	+1.79	Cloudy
2-Dec-15	9:32	3.57	+1.81	Cloudy
3-Dec-15	9:02	3.57	+1.81	Cloudy
4-Dec-15	11:22	3.57	+1.81	Fine
5-Dec-15	11:02	3.59	+1.79	Rain

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No. S1-DH13 (Upper)

Contract No. : GE/2014/07

Works Order No. : GE/2014/07.34

Project:

Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 10-Dec-15

Measured By : C.K. Chiu

Standpipe

Co-ordinates :

E 820696.35 N 833945.40

Ground Level : +4.55mPD

Depth : 6.60m

Tip Level : -2.05mPD

Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
14-Dec-15	9:15	3.32	+1.23	Cloudy
15-Dec-15	13:15	3.30	+1.25	Cloudy
16-Dec-15	9:00	3.25	+1.30	Cloudy
17-Dec-15	9:00	3.25	+1.30	Fine
18-Dec-15	13:00	3.23	+1.32	Fine
19-Dec-15	14:20	3.21	+1.34	Fine
21-Dec-15	9:00	3.19	+1.36	Cloudy

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No. S1-DH13 (Lower)

Contract No. : GE/2014/07

Works Order No. : GE/2014/07.34

Project:

Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 10-Dec-15

Measured By : C.K. Chiu

Piezometer

Co-ordinates :

E 820696.35 N 833945.40

Ground Level : +4.55mPD

Depth : 50.50m

Tip Level : -45.95mPD

Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
14-Dec-15	9:17	2.68	+1.87	Cloudy
15-Dec-15	13:17	2.70	+1.85	Cloudy
16-Dec-15	9:02	2.71	+1.84	Cloudy
17-Dec-15	9:02	2.73	+1.82	Fine
18-Dec-15	13:02	2.74	+1.81	Fine
19-Dec-15	14:22	2.70	+1.85	Fine
21-Dec-15	9:02	2.74	+1.81	Cloudy

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No.
S1-DH14 (Upper)

Contract No. : GE/2014/07
Works Order No. : GE/2014/07.34
Project:
Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 24-Dec-15
Measured By : C.K. Chiu

Standpipe
Co-ordinates :
E 820695.13 N 833868.26
Ground Level : +4.41mPD
Depth : 11.50m
Tip Level : -7.09mPD
Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
29-Dec-15	13:00	2.97	+1.44	Fine
30-Dec-15	13:00	3.03	+1.38	Fine
31-Dec-15	9:00	3.06	+1.35	Fine
2-Jan-16	9:00	3.07	+1.34	Fine
4-Jan-16	13:00	3.08	+1.33	Cloudy
5-Jan-16	13:00	3.08	+1.33	Rainy
6-Jan-16	9:15	3.02	+1.39	Fine

Remarks :

DRiLTECH

WATER LEVEL MONITORING RECORD

Drillhole No. S1-DH14 (Lower)

Contract No. : GE/2014/07

Works Order No. : GE/2014/07.34

Project:

Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town connecting with Long Ping Station - Investigation, Design and Construction

Date of Installation : 24-Dec-15

Measured By : C.K. Chiu

Piezometer

Co-ordinates :

E 820695.13 N 833868.26

Ground Level : +4.41mPD

Depth : 22.50m

Tip Level : -18.09mPD

Dip Meter I.D. : DT-010-008

Date	Time	Ground Water Level		Weather
		Depth below Ground Level (m)	Reduced Level (mPD)	
29-Dec-15	13:02	3.16	+1.25	Fine
30-Dec-15	13:02	3.21	+1.20	Fine
31-Dec-15	9:02	3.25	+1.16	Fine
2-Jan-16	9:02	3.27	+1.14	Fine
4-Jan-16	13:02	3.28	+1.13	Cloudy
5-Jan-16	13:02	3.28	+1.13	Rainy
6-Jan-16	9:17	3.29	+1.12	Fine

Remarks :

Appendix J

Chain of Custody Documentations and Photographs of Environmental Samples

CHAIN OF CUSTODY DOCUMENTATION

H 031547

0734

ALS Laboratory Group

CLIENT: (EDD).	SAMPLER: Klaine Wong
ADDRESS / OFFICE:	MOBILE: 4209 7012
PROJECT MANAGER (PM): Frankie Chui	PHONE 2908 4901
PROJECT ID: Yuen Long GE 12014/31.24	EMAIL REPORT TO: klainewong@arup.com, arthur.chiu@arup.com
SITE: Yuen Long	EMAIL INVOICE TO: (if different to report)
RESULTS REQUIRED (Date): P.O. NO.:	ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)
QUOTE NO.:	

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No (N/A)
SAMPLE TEMPERATURE
CHILLED: (Yes) No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

Notes: e.g. Highly contaminated samples
e.g. "High PAHs expected"
Extra volume for QC or trace LORs etc.

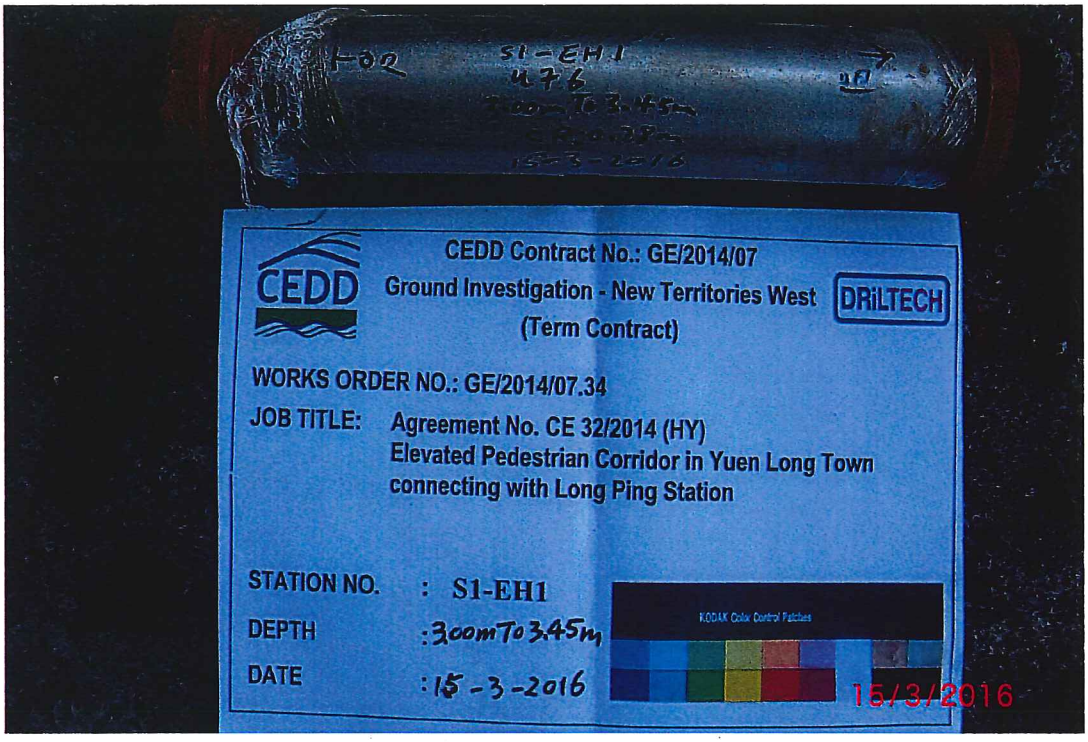
SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION		Metals	PAHs	Total PCB	TBT
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles				
	S1-EH1 (3.0-3.9m).	W76	15/3		1 sample	1 set x 2	✓	✓	✓	✓
	S1-EH1 (3.0-3.9m)-Duplicate	W76	15/3				✓	✓	✓	✓
	Equipment Blank (S1-EH1)	W	15/3			1 set	✓	✓	✓	✓
	Field Blank (S1-EH1)	W	15/3			1 set	✓	✓	✓	✓

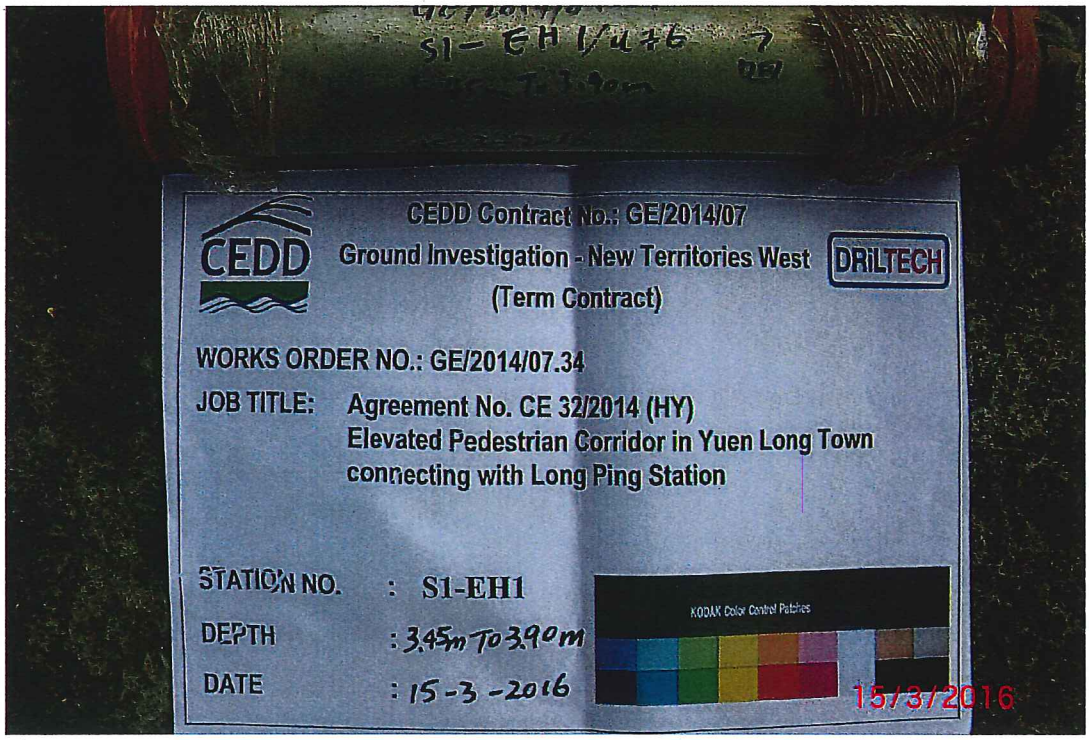
RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Klaine Wong	Date: 15-3-2016	Name: [illegible]	Date: 15/3/2016	Con' Note No:
Of: Arup	Time:	Of: ALS	Time: 16:30	
Name: Chui Chung Keung	Date: 15-3-2016	Name:	Date:	Transport Co:
Of: DidTech	Time:	Of:	Time:	

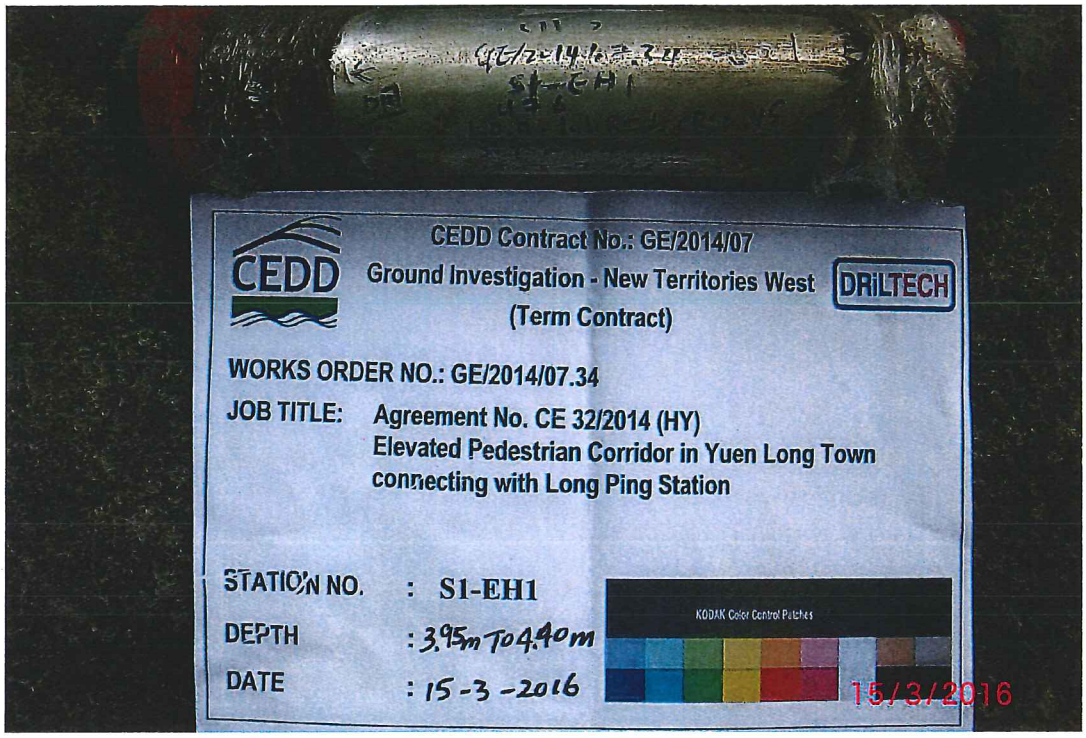
Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl Preserved Plastic; HS = HCl Preserved Speciation Bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soil; B = Unpreserved Bag.

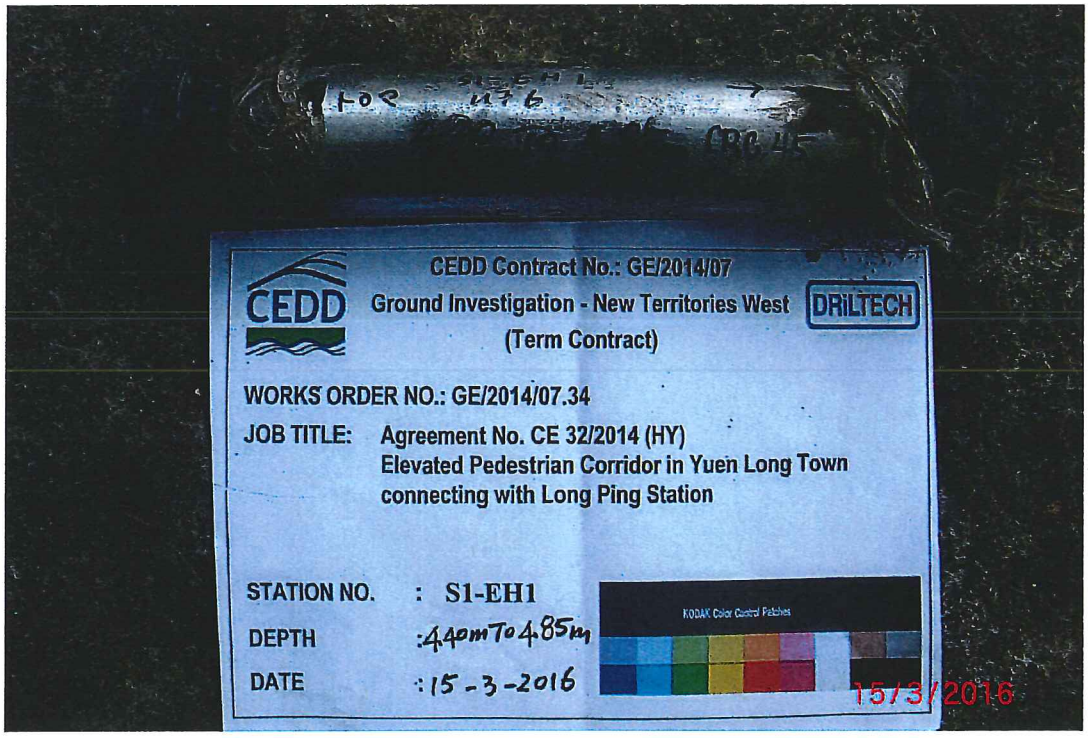
ALS Laboratory Group

WHITE - LAB COPY
YELLOW - CUSTOMER COPY
PINK - BOOK COPY

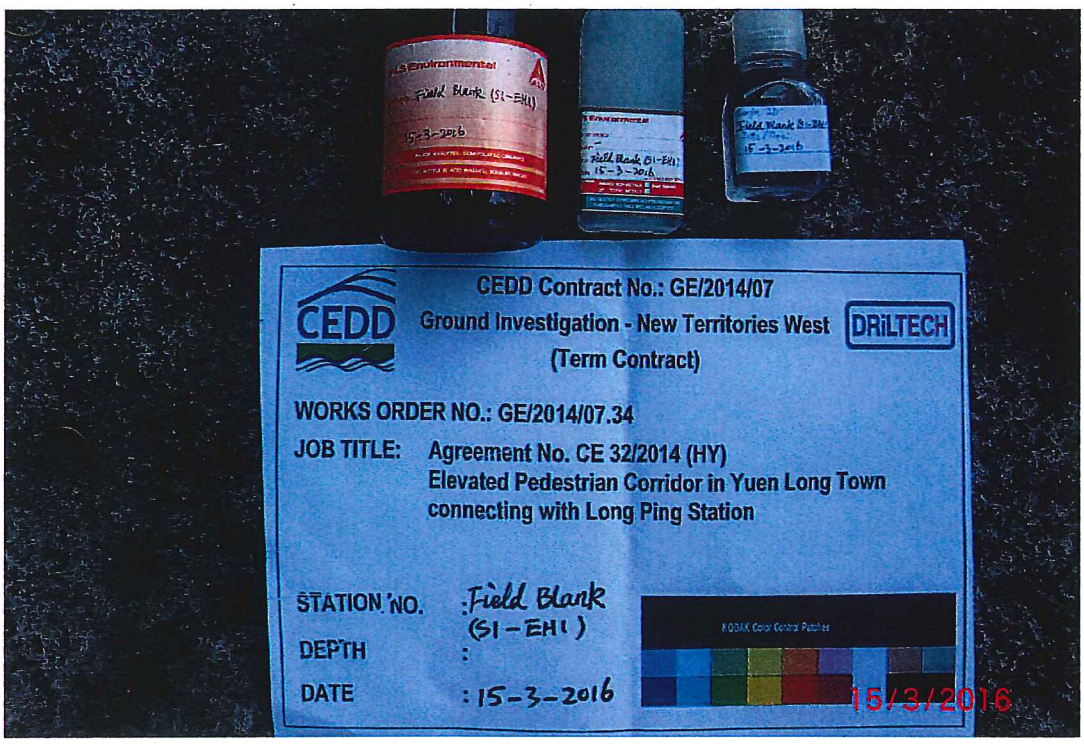

S1-EH1
4.76
CEDD Contract No.: GE/2014/07
Ground Investigation - New Territories West
(Term Contract)
DRILTECH
WORKS ORDER NO.: GE/2014/07.34
JOB TITLE: Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town
connecting with Long Ping Station
STATION NO. : S1-EH1
DEPTH : 3.00m To 3.45m
DATE : 15-3-2016
KODAK Color Control Patches
15/3/2016


S1-EH1/4.76
CEDD Contract No.: GE/2014/07
Ground Investigation - New Territories West
(Term Contract)
DRILTECH
WORKS ORDER NO.: GE/2014/07.34
JOB TITLE: Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town
connecting with Long Ping Station
STATION NO. : S1-EH1
DEPTH : 3.45m To 3.90m
DATE : 15-3-2016
KODAK Color Control Patches
15/3/2016


CEDD
CEDD Contract No.: GE/2014/07
Ground Investigation - New Territories West
(Term Contract)
DRILTECH
WORKS ORDER NO.: GE/2014/07.34
JOB TITLE: Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town
connecting with Long Ping Station
STATION NO. : S1-EH1
DEPTH : 3.95m To 4.40m
DATE : 15-3-2016
KODAK Color Control Patches
15/3/2016


CEDD
CEDD Contract No.: GE/2014/07
Ground Investigation - New Territories West
(Term Contract)
DRILTECH
WORKS ORDER NO.: GE/2014/07.34
JOB TITLE: Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town
connecting with Long Ping Station
STATION NO. : S1-EH1
DEPTH : 4.40m To 4.85m
DATE : 15-3-2016
KODAK Color Control Patches
15/3/2016


CEDD Contract No.: GE/2014/07
Ground Investigation - New Territories West
(Term Contract)
DRILTECH
WORKS ORDER NO.: GE/2014/07.34
JOB TITLE: Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town
connecting with Long Ping Station
STATION NO. : Equipment Blank (S1-EH1)
DEPTH :
DATE : 15-3-2016
15/3/2016


CEDD Contract No.: GE/2014/07
Ground Investigation - New Territories West
(Term Contract)
DRILTECH
WORKS ORDER NO.: GE/2014/07.34
JOB TITLE: Agreement No. CE 32/2014 (HY)
Elevated Pedestrian Corridor in Yuen Long Town
connecting with Long Ping Station
STATION NO. : Field Blank (S1-EH1)
DEPTH :
DATE : 15-3-2016
15/3/2016

Appendix K

Digital Data Records (AGS and PDF in CD-ROM)

DRiLTECH

Media Index Record

Project Identification	**D-626**
Project Name	**Contract No. GE/2014/07** **Ground Investigation - New Territories West (Term Contract)**
Works Order No.	**GE/2014/07.34**
Location	**Agreement No. CE 32/2014 (HY)** **Elevated Pedestrian Corridor in** **Yuen Long Town connecting with Long Ping Station -** **Investigation, Design and Construction**
Client	**Geotechnical Engineering Office,** **Civil Engineering and Development Department**
From	**DrilTech Ground Engineering Ltd.**

Issue Sequence Number	**Date of Issue**	**Issued To**		**General Notes**
D626_GE201407.34.00	20/May/16	Geotechnical Engineering Office, Civil Engineering and Development Department		
File Name	**Creation Date**	**Creation Time**	**File Size in Bytes**	**General Description of Data Transferred**
GE201407.34.ags	20/May/16	9:55	291KB	Digital Data in AGS Format for Final Field Work Report
GE201407.34.pdf	20/May/16	12:06	207,827KB	Digital Data in PDF Format for Final Field Work Report
Photographs_201407.34.jpg	20/May/16	11:21	904MB	Digital Data in JPG Format for Final Field Work Report
Individual Investigation Stations.pdf	20/May/16	11:26	133MB	Digital Data in PDF Format for Final Field Work Report

End of Report