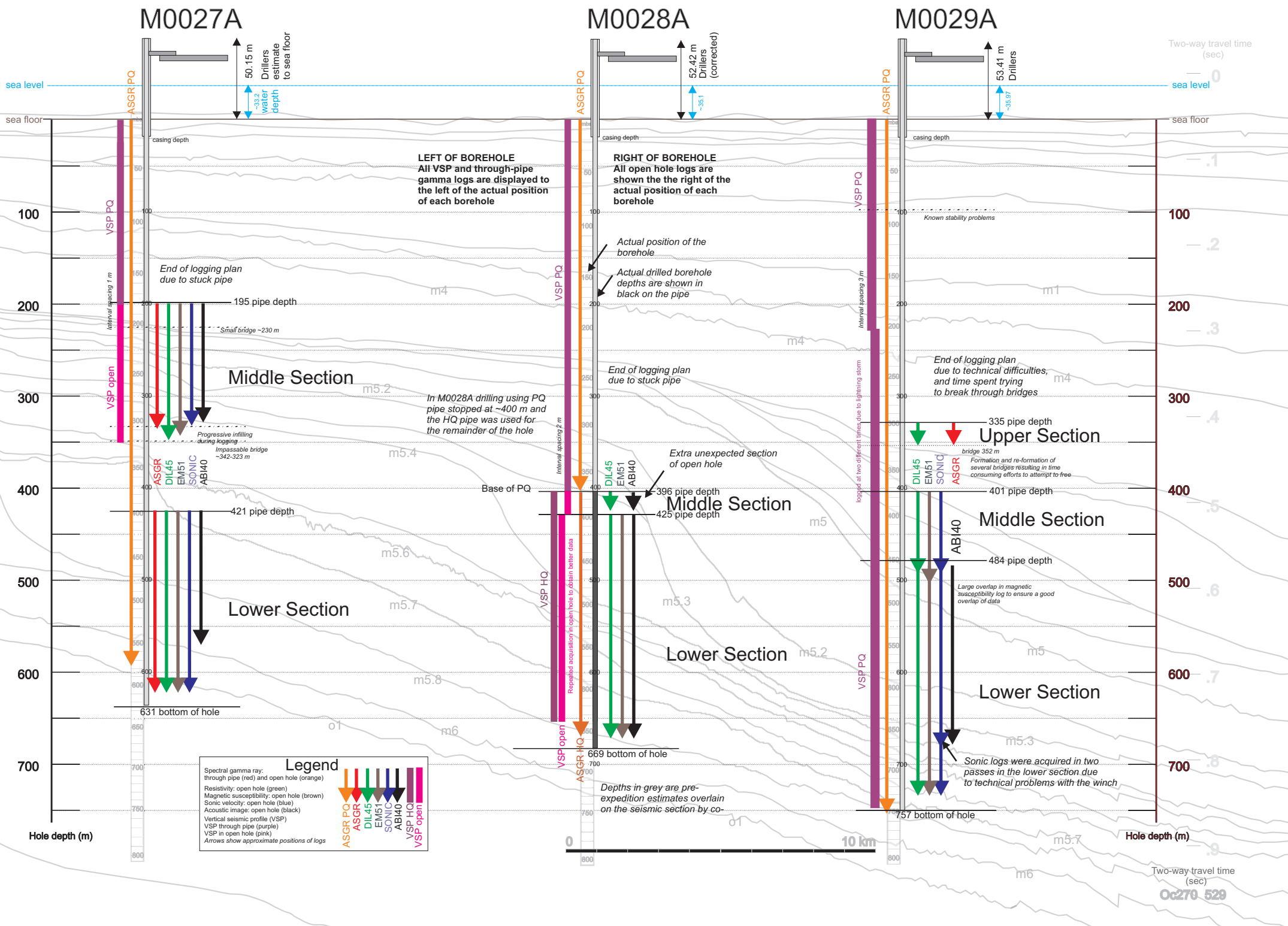
M0027A
M0028A
M0029A
sea level
sea floor
50.15 m Drillers estimate to sea floor
~33.2 water depth
52.42 m Drillers (corrected)
~35.1
53.41 m Drillers
~35.97
Two-way travel time (sec)
ASGR PQ
VSP PQ
VSP open
VSP HQ
ASGR HQ
casing depth
LEFT OF BOREHOLE
All VSP and through-pipe gamma logs are displayed to the left of the actual position of each borehole
RIGHT OF BOREHOLE
All open hole logs are shown the the right of the actual position of each borehole
Actual position of the borehole
Actual drilled borehole depths are shown in black on the pipe
End of logging plan due to stuck pipe
195 pipe depth
Small bridge ~230 m
Middle Section
Progressive infilling during logging
Impassable bridge ~342-323 m
ASGR
DIL45
EM51
SONIC
ABI40
421 pipe depth
Lower Section
631 bottom of hole
In M0028A drilling using PQ pipe stopped at ~400 m and the HQ pipe was used for the remainder of the hole
Extra unexpected section of open hole
Base of PQ
396 pipe depth
425 pipe depth
Repeated acquisition in open hole to obtain better data
669 bottom of hole
Depths in grey are pre-expedition estimates overlain on the seismic section by co-
10 km
Known stability problems
End of logging plan due to technical difficulties, and time spent trying to break through bridges
335 pipe depth
Upper Section
bridge 352 m
Formation and re-formation of several bridges resulting in time consuming efforts to attempt to free
401 pipe depth
484 pipe depth
Large overlap in magnetic susceptibility log to ensure a good overlap of data
Sonic logs were acquired in two passes in the lower section due to technical problems with the winch
757 bottom of hole
Interval spacing 1 m
Interval spacing 2 m
Interval spacing 3 m
logged at two different times due to lightning storm
Hole depth (m)
Legend
Spectral gamma ray: through pipe (red) and open hole (orange)
Resistivity: open hole (green)
Magnetic susceptibility: open hole (brown)
Sonic velocity: open hole (blue)
Acoustic image: open hole (black)
Vertical seismic profile (VSP)
VSP through pipe (purple)
VSP in open hole (pink)
Arrows show approximate positions of logs
m4
m5.2
m5.4
m5.6
m5.7
m5.8
o1
m6
m5
m5.3
m1
.1
.2
.3
.4
.5
.6
.7
.8
.9
Oc270_529