Hole	Objective
KC3L	Site KC3 was originally intended as a reference site, but now is paired with Site KC1 to log and core comparable sediments at an offset location where there is no well-developed BSR.
KC1L	KC1 targets the highest amplitude portion of the BSR and an underlying, high amplitude layer we interpret as a gas-charged sand layer. This high-reflectivity layer will also be sampled by KC6; however, at KC6 the layer has lower reflectivity and overlies the BSR. KC1 has the additional benefit that it does not cross the fault providing an unfaulted sedimentary section to the BSR. This site will constrain local variability of hydrate above the BSR but also provides an opportunity to sample high concentration gas layer underneath the hydrate stability zone. Separate analyses of gas and hydrate might provide insights into the formation of the hydrate and whether the gas has been trapped after hydrate formation or if the hydrate was formed during the migration of the gas. KC5 is an alternative location that will penetrate the BSR without penetrating the regional fault system.
AT2L	Site AT2 is intended to penetrate continuous, undisturbed, low reflectivity sediments, a regional unconformity, and underlying disturbed, high amplitude sediments. Seismic data at AT2 lack a geophysical indicator of hydrate, but a BSR could be parallel to the local strata. Drilling will provide measurements of in situ conditions and will document if hydrate is present. If no hydrate is present, AT2 will provide a baseline of geological, physical, and geochemical conditions for comparison to Mound F and will serve as a valuable comparison for the baseline site in the Keathley Canyon 195 region.
AT1L	Logging/coring at AT1 will penetrate a mound structure at which hydrate has previously been recovered (unpublished JIP data) and for which a high-reflectivity feature is interpreted at approximately 100 ft below the sea floor. Coring and logging will recover sediments, hydrate, and pore fluid data to look at vertical variability and its relation to variation in seismic attributes. A velocity pull-down is interpreted in the seismic data, and gas analyses will provide direct measurement of the gas concentration and composition that created the observed pull-down.
AT1C	Logging/coring at AT1C will penetrate sediments adjacent to a mound structure at which hydrate has previously been recovered (unpublished JIP data) and for which a high-reflectivity feature is interpreted at approximately 30 m below the sea floor. Coring and logging will recover sediments, hydrate, and pore fluid data to look at vertical variability and its relation to variation in seismic attributes. A velocity pull-down is interpreted in the seismic data, and gas analyses will provide direct measurement of the gas concentration and composition that created the observed pull-down.
AT2C	Site AT2 is intended to penetrate continuous, undisturbed, low reflectivity sediments, a regional unconformity, and underlying disturbed, high amplitude sediments. Seismic data at AT2 lack a geophysical indicator of hydrate, but a BSR could be parallel to the local strata. Drilling will provide measurements of in situ conditions and will document if hydrate is present. If no hydrate is present, AT2 will provide a baseline of geological, physical, and geochemical conditions for comparison to Mound F and will serve as a valuable comparison for the baseline site in the Keathley Canyon 195 region.
KC1C	KC1 targets the highest amplitude portion of the BSR and an underlying, high amplitude layer we interpret as a gas-charged sand layer. This high-reflectivity layer will also be sampled by KC6; however, at KC6 the layer has lower reflectivity and overlies the BSR. KC1 has the additional benefit that it does not cross the fault providing an unfaulted sedimentary section to the BSR. This site will constrain local variability of hydrate above the BSR but also provides an opportunity to sample high concentration gas layer underneath the hydrate stability zone. Separate analyses of gas and hydrate might provide insights into the formation of the hydrate and whether the gas has been trapped after hydrate formation or if the hydrate was formed during the migration of the gas. KC5 is an alternative location that will penetrate the BSR without penetrating the regional fault system.
KC3C	Site KC3 was originally intended as a reference site, but now is paired with Site KC1 to log and core comparable sediments at an offset location where there is no well-developed BSR.
ATM1	Site ATM1 (AT14a in site survey) will penetrate a mound structure at which hydrate has previously been recovered (unpublished JIP data) and at which a high-reflectivity amplitude anomaly is located approximately 30 meters below the sea floor. Coring and logging will recover sediments, hydrate, and pore fluid data to investigate vertical variability and its relation to variation in seismic attributes. A velocity pull-down is interpreted in the seismic data, and gas analyses will provide direct measurement of the gas concentration and composition that created the observed pull-down
ATM2	Site ATM2 (AT14 #5 from hazard risk meeting) will penetrate a mound structure at which hydrate has previously been recovered (unpublished JIP data) and at which a high-reflectivity amplitude anomaly is located approximately 30 metres below the sea floor. Coring and logging will recover sediments, hydrate, and pore fluid data to investigate vertical variability and its relation to variation in seismic attributes. A velocity pull-down is interpreted in the seismic data, and gas analyses will provide direct measurement of the gas concentration and composition that created the observed pull-down