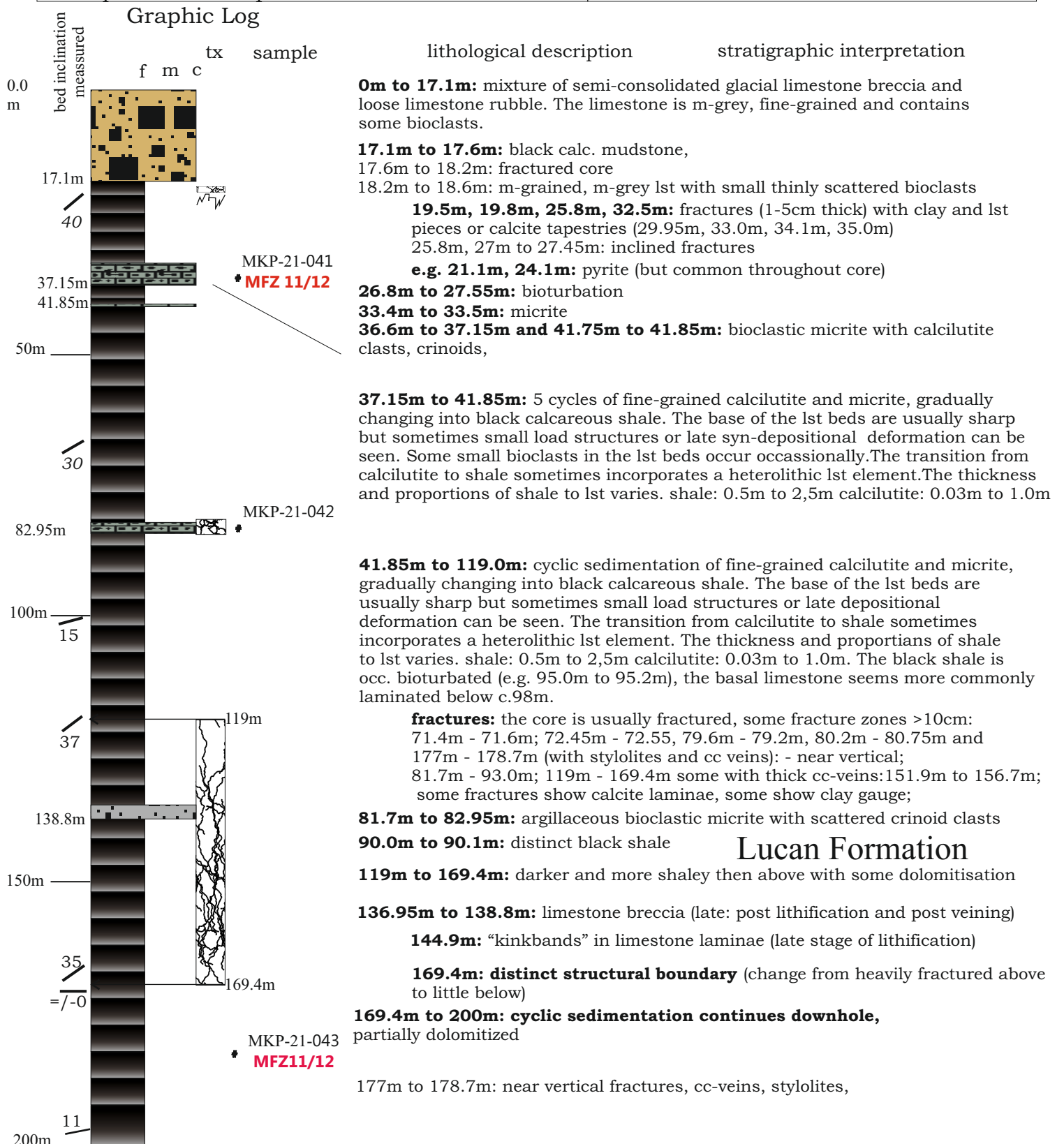
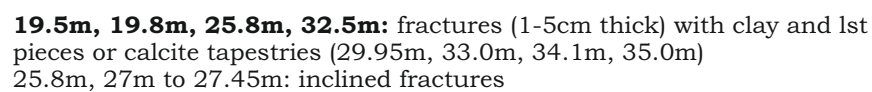


Borehole Number/Name: **GSI-21-004, Grangegorman (G'Gorman)**

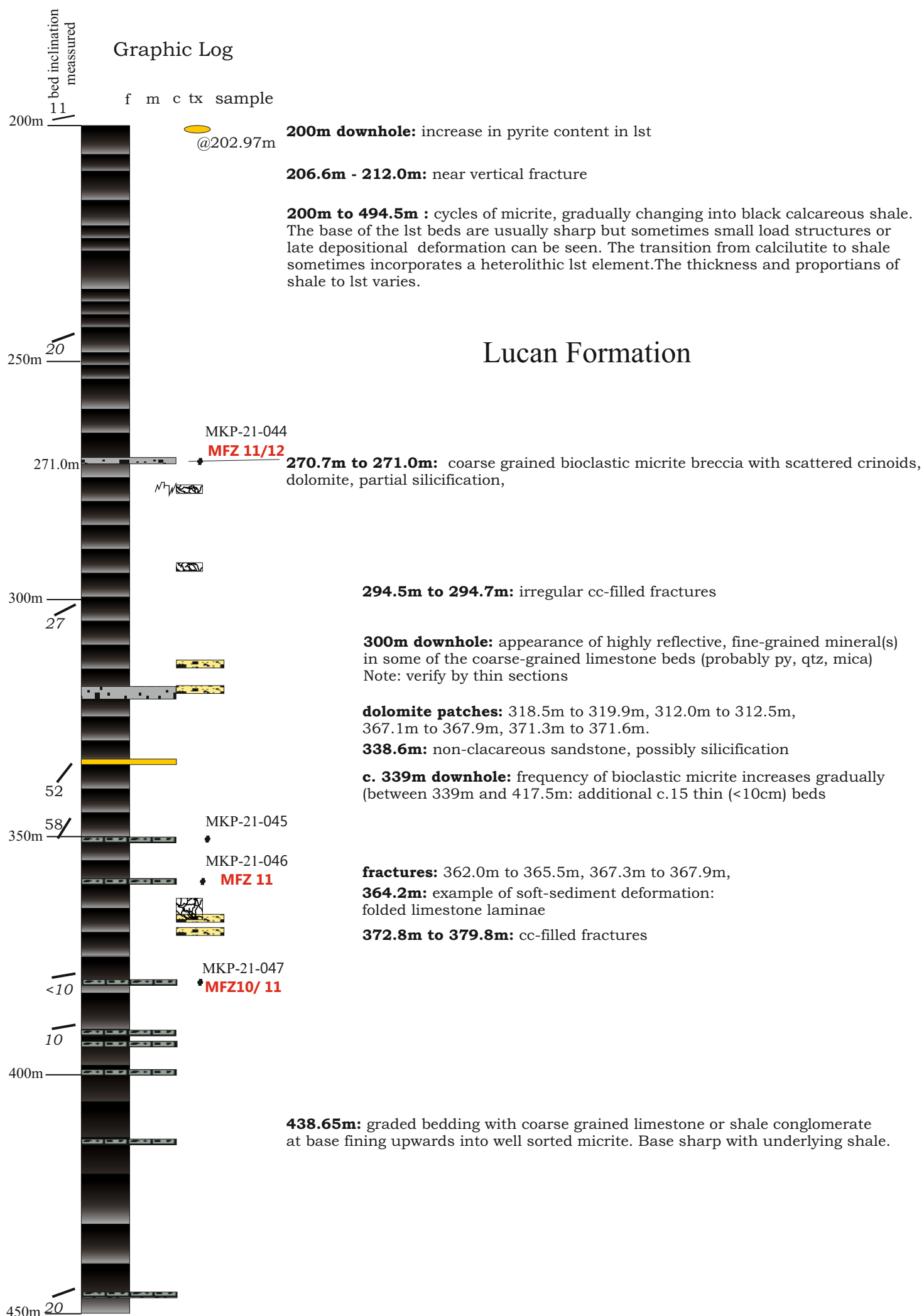
GridCoords: (714119/735319 ITM)	Scale: 1:1000
Author: Dr. M. Pracht, drilled by Geothermal Section, GSI Year: 2021	Rockhead: 17.1m
	End of Hole: 998m
	Elevation: approx.40m (from map)
Note: siliciclastic content not quantified, all tested lithologies are calcareous bed inclination: not orientated. Depth: drilled depth.	micro-palaeontology: tbd
	Stratigraphy: VIS, Interpretation preliminary Jan. 2022



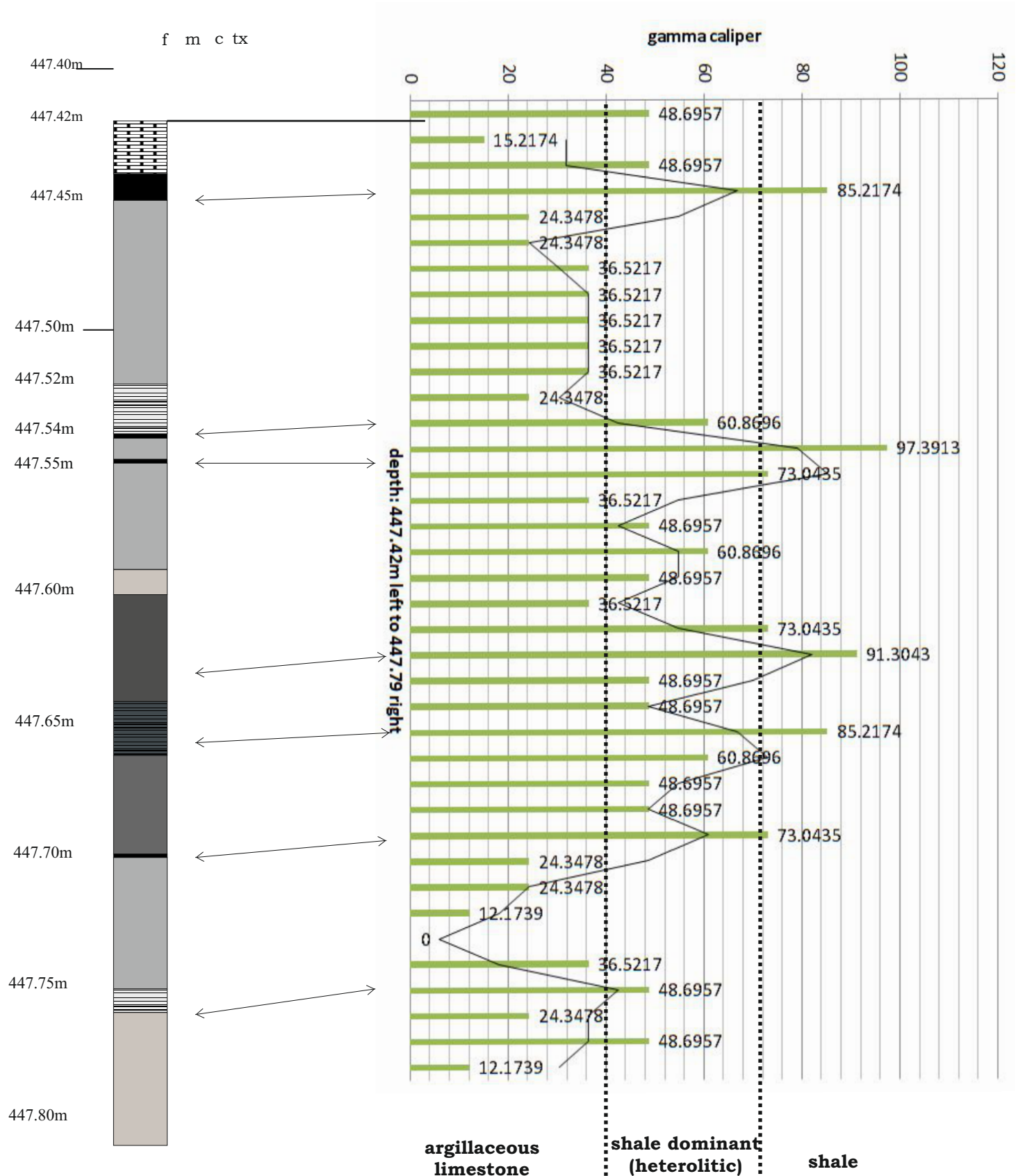


33.4m to 33.5m: micrite

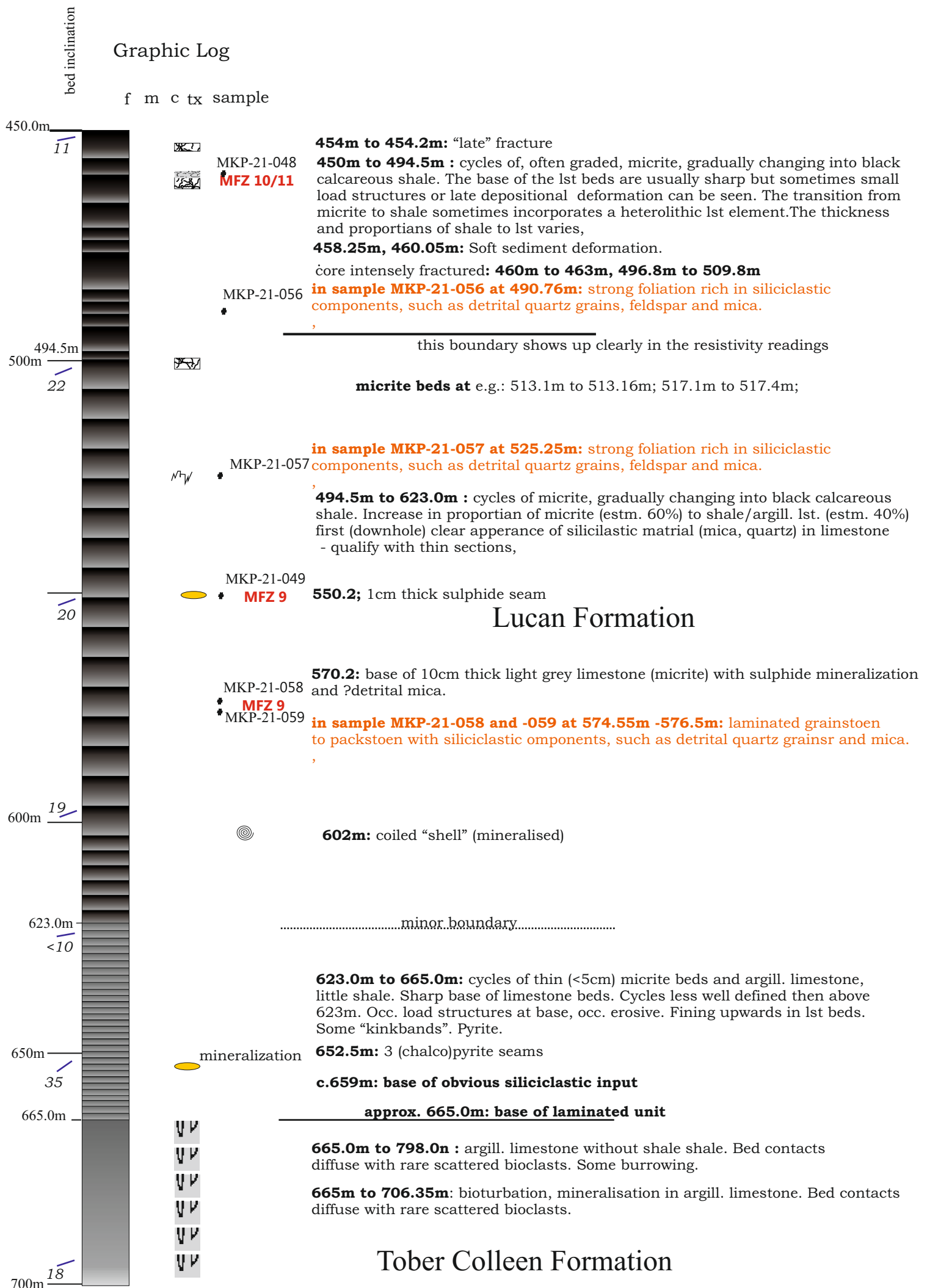
24.95m to 35.55m: 11 cycles of fine-grained calcilitute and micrite, gradually changing into black calcareous shale. The base of the 1st beds are usually sharp but sometimes small load structures or late syn-depositional deformation can be seen. Some small bioclasts in the 1st beds occur occasionally. The transition from calcilitute to shale sometimes incorporates a heterolithic 1st element. The thickness and proportions of shale to 1st varies. shale: 0.5m to 2,5m calcilitute: 0.03m to 1.0m

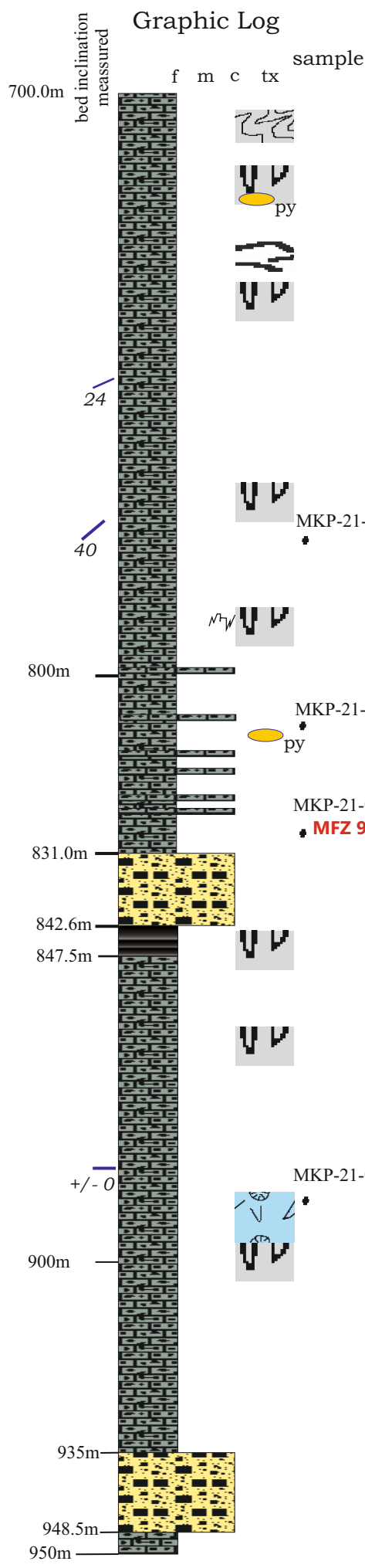


Graphic Log



Detail for log interval 447.42m to 447.79m (37.3cm). Right downhole geophisic survey, carried out by Rpbertson Geo Services in 2021 for the Geological Survey of Ireland, left lithological log. The lithological interpretation is based on detailed logging by the author. Core selected at random. **Note:** Log measurement at 447.5 = top of first black shale has been adjusted to 447.44m, allowing for discrepancy in methodology of data acquisition. Black line in bar chart: 2 per. moving average. Bar units: API. limits of argillaceous limestone, shale dominant (heterolitic) and shale by author.





659.0m to 798.0m : argill. limestone without shale shale. Bed contacts diffuse with rare scattered bioclasts. Burrowing common (different types). 0.5cm thick pyrite at 716.5m

Tober Colleen Formation

in sample MKP-21-050: strong foliation in spiculitic mudstone/wackestone detrital quartz grains,

argillaceous bioclastic micrite beds with large scattered bioclasts

798.0m to 798.2m
807.2m to 807.4m
812.4m to 812.45m
812.8m to 813.2m
815.3m to 816.3m
819.5m to 819.7m
821.65m to 821.8m

in sample MKP-21-051: strong foliation in wackestone/floatstone to packstone/rudstone

831m to 842.6m: porous dolomitic limestone fault breccia (in situ) several generations. (reflected in Caliper Gamma reading by very low values)

842.6m to 847.5m: alternating black shale (estm. 50%) and argill. bioclastic limestone and conglomerates (843.5m to 843.7m; 844.7m to 844.9m) (estm. 50%) bioturbated, large bioclasts (crinoids), small shell fragments.

847.5m to 935.0: argill. bioclastic limestone with some pockets of scattered bioclasts (crinoids) and bioturbation. Bryozoans abundant. Becoming slightly nodular below c.884m, towards base of unit.

in sample MKP-21-053: strong foliation in spiculitic wackestone/mudstone

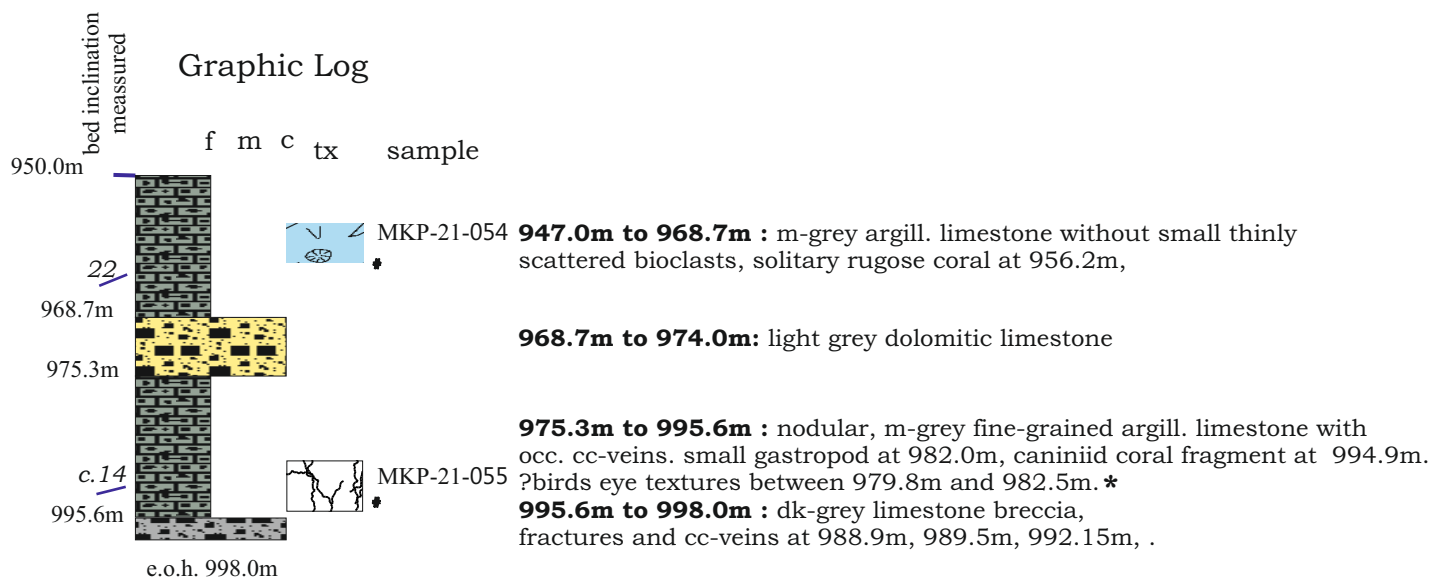
889.1m, 889.4m: large caniniid coral fragment

897.6m to 897.7m (e.g.): bioturbation

Tober Colleen Formation with WA facies (mudbank lithoclasts?)

935.0m to 947.0m: dolomitic limestone, with "zebra" dolomite

947.0m to 968.7m: m-grey, argill. bioclastic limestone with some pockets of small scattered bioclasts (crinoids).



* 979.8m to 982.15m: possible tongue of Allenwood Formation

