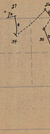
Amoco Production Company

Surface Log

NAME	Milky River Section		
AGE OF ROCK	Post Mesa Ch.Cl. (Cretaceous)	COUNTY	Alaska
LOCATION	Bear Lake area	Sec. 24,25	T. 12 N. R. 25 E. S.T.M.
RECORDED BY	Wm. Connally, J. Lawrence & E. Brown	DATE	18.19.20/7
WITNESSED BY	Bear Lake Pet. and Stagecoach Pet.	DATE	8 Aug 77
REMARKS	Measured on ridge from top down. Exposure excellent, only minor faulting.		

* Samples with the notation only approximately located.



LOCATION 55°.5N° 160°.6W°

MEASURED BY Wm. Connally DATE 8 Aug 77

STRUCTURE	STRATIGRAPHY	LITHOLOGY	DESCRIPTION
Log A	Bear Lake Formation	Mudstone	
Log B			
Log C			
Log D	Bear Lake Formation	Mudstone	
Alaska Formation (?)	Kenai (?)		

Section end because no more exposure in canyon bottom.

Summary: The lowest portion of this section is Kenai. The exact contact between Mudstone and Kenai apparently occurs between Units ⑥ & ⑦ based on a sudden change in pebble-composition and degree of induration. The Kenai section is a coarsening up sequence with dominantly siltstone at the base and a mostly conglomerate top. At all the four contacts, and if go up the section, regular rapid changes are expected in an shelf environment probably below wave base.

Mudstone Units ① & ② are dominantly siltstone with local coal beds. Commonly the small lenticular sedimentary pockets of the siltstone tend coarser and may be fluvial minor abandoned channels. The abrupt thin coarsening are having been deposited in an relatively stable fluvial field of lagoonal environment. Unit ③ & ④ both show a change first to sh of (mostly) but back to ss (shale) and. The coarse ground interval here (Unit ③) is difficult to interpret. Unit ⑤ contains ss in sequence. Unit ⑥ is a transition from these coarse deposits back to fluvial field or lagoonal conditions.

Unit ⑦ to ⑨ are dominantly siltstone and coal with some beds of ss and the top of the section. The siltstone likely were deposited in an relatively stable fluvial field or lagoonal environment.

Units ⑩ to ⑫ contain coal to and minor (only) with dominantly siltstone and local fluvial channel deposits. Unit ⑬ is a fluvial channel deposit and contains well rounded, some granitic pebbles. Paleocurrents change abruptly here to a bimodal northeast direction, likely caused by longshore currents. The lower fluvial field only paleocurrents were predominantly northeast to the NW.