W-14

AMOÇO PRODUCTION

SURFACE LOG

CVMS
92-00662834-027

CF 800101

NAME W-14: SOUTH FLANK TUPICHAK SYNCLINE ALONG KUKPOWRUK RIVER.

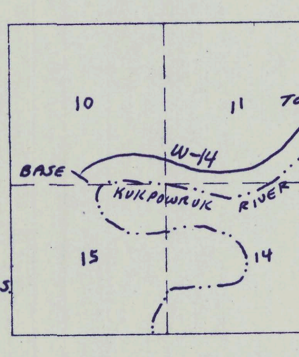
AREA OR QUAD DELONG MTS. D-2 QUAD. STATE WESTERN NORTH SLOPE, ALASKA

LOCATION SEC. 10, 11, 14 TWN. 6S RNG. 47W

MEASURED BY K. Sherwood, C. Williamson, R. Stewart DATE 7/77

INTERVAL KUKPOWRUK FORMATION

REMARKS SAMPLES DESIGNATED "PL77 TS". CORRESPONDS TO U.S.G.S. SECTION #3, CHAPMAN AND SABLE, PROF. PAPER 303, PL. 11.



plotted by Beth King

PERIOD	EPOCH/STAGE	FORMATION/MEMBER	CUMULATIVE FOOTAGE	SAMPLES WITH LAB DATA OR PALEO DATA	LITHOLOGY	MASTER BEDDING	PALEOCURRENT DATA	INTERVAL THICKNESS	DESCRIPTIONS

✱ = SOURCE ROCK ANALYSIS AVAILABLE.

CRETACEOUS — KUKPOWRUK FORMATION

480 — Corresponds to 1875' on Chapman + Sable Sec. #3

Shale, partly covered

43.5 Sandstone, fine to med, mod. well sorted, very calcareous near top. Lower most 10-20' massive thick bedded, lg-scale trough cross-stratification with abundant mudstone rip up clast lining scour surfaces. Upper most part thin bedded, horizontal lamination, ripples & sm.-scale trough cross-lamination.

RLS-40; PL77 TS 40 ø-6.5 Kmd-0.0086

11.8 Shale, partly covered.

6.2 Sandstone, vf to f, poor to mod. sorted, very calcareous. Thin bedded, wispy stratification w/mildly deformed small-scale trough cross-lamination. abundant plant fragments.

30.0 Shale, partly covered.

5.0 Sandstone w/2 shale interbeds (0.3' ea.) Sandstone is fine, mod. well sorted, med. gr. weathers tan, very calcareous. Low angle trough cross-stratification w/horizontal lamination upper 8". mod. bioturbated. Poorly developed ripples.

4.5 Shale

0.8 Sandstone, same as 0.7' sandstone below.

7.4 Shale, partly covered.

0.7 Sandstone vf, slightly calcareous, med. gr. Horizontal lamination, upper 6" heavily bioturbated w/ripples burrows on base of bed.

23.6 Shale, partly covered.

11.7 Sandstone, siltstone & shale, thinly interbedded. Sandstone beds 2" to 1.2' (upper bed - 1.2') u.f., mod. sorted, dk gr, abundant plant debris. Dominantly horizontal lamination w/med-scale low-angle trough cross-stratification. Tops of beds rippled (strait-crested) wave modified current ripples & abundant trace fossils. Shale partings within sandstone beds. Shale & siltstone bioturbated.

330 — ✱ RLS-39; PL77 TS 39

4.6 Shale, partly covered. Thin (6") sandy siltstone bed.

0.6 Sandstone & siltstone interbedded. 3 sandstone beds (4-10 ft) very fine, mod-sorted, calcareous. Dominantly horizontal lamination w/sm-scale trough cross-lam, upper parts rippled. Siltstone, heavily bioturbated, abundant plant material.

35.2 Shale, partly covered.

CRETACEOUS — KUKPOWRUK FORMATION

N1OE ripples N=1

0.6 Sandstone, fg, mod. to well sorted, well cemented very calcareous, Low-angle cross-stratification. Upper 6" ripples. abundant trace fossils & plants.

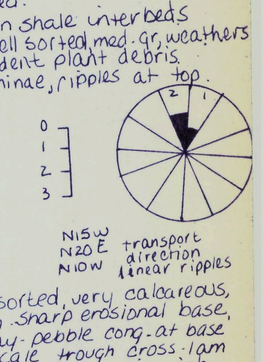
3.1 Shale, partly covered.

5.2 Sandstone, f to med, mod. well sorted, lt. gr., weathers tan, mod. calcareous. Lg-scale trough cross-stratification, minor tabular cross-strat (2-3' sets). Upper 2', soft-sediment folding, ripples on top. Lower contact not exposed.

1.3 Shale with 8" sandstone bed.

3.4 Sandstone, lower 2' has 3 thin shale interbeds (less than 6" thick). Fg. mod. well sorted, med. gr, weathers tan, slightly calcareous. Abundent plant debris. Dominantly horizontal laminae, ripples at top.

14.7 Shale, partly covered.



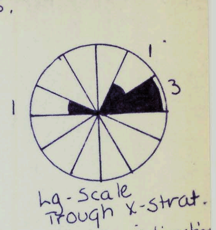
13.4 Sandstone, f-med, mod. well sorted, very calcareous, lt gr, weathers brownish-tan. Sharp erosional base, truncates underlying unit. Clay-pebble cong. at base (lower 1') w/5" pebbles. Lg-scale trough cross-lam dominant. Discontinuous lenses of organic-rich siltstone layers (4"-1' thick) near middle of sandstone (3 lenses). Abundant plant debris. Top of sandstone rippled with burrows - a few vertical.

250 — RLS-38; PL77 TS 38 ø-9.4 Kmd-0.042

3.2 Sandstone & Silty Shale interbedded. Sandstone, vf, poor-mod. sorted, brownish-gr. Beds 1"-5" thick, sm-scale trough x-lam ripples, thin bedded. Abundant plant debris. Upper surface eroded by overlying SS.

240 — ✱ RLS-36; PL77 TS 36

44.5 Shale, partly covered. Suggestion of thin siltstone or sandstone beds.



N=1 ripples N1SE

22.5 Sandstone, fine, mod. sorted, brownish med. gr, weathers tan, abundant muscovite. Massive, thick bedded, lg-scale trough x-stratification (sets 2-4' thick), sharp erosional base with about 2' of relief in outcrop. Conglomerate lag of mud rip-up clasts (max. dia 8"). Ripples at top of unit - linear current ripples w rounded crests (wave modified).

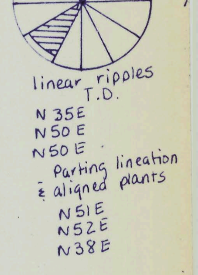
CRETACEOUS — KUKPOWRUK FORMATION

3.4 Sandstone, vf at base, coarsen upwards to fine, mod. well sorted, lt to med gray. Abundant aligned plant fragments. Thin-bedded, horizontal lamination, ripples & sm-scale trough. Parting lineation.

2.0 Sandstone & shale, thinly interbedded. Sandstone is vf, silty, mod-sorted, med-dk gray. Beds 1"-7". Sm-scale trough & ripple.

28.0 Shale, dk gray, fissile, clay shale with thin (<10") siltstone beds. Interval mostly covered. Siltstone beds increase in number upwards.

160 — RLS-37; PL77 TS 37 ø-10.5 Kmd-0.097



30.0 Covered

110 — RLS-35; PL77 TS 35 ø-3.7 Kmd-0.0085

24.1 Sandstone, fine, moderately well sorted, very calcareous, lt gray, weathers tan, Lg-scale trough cross-lamination (<4' sets). Tops of beds rippled (linear wave-modified current ripples) and bioturbated (random non branching trails). Pelecypod molds.

0.5 Shale, silty, dk gr w/horizontal burrows. Iron concretions

0.3 Sandstone, vf, mod. sorted, med-gr, sm-scale troughs.

0.4 Shale, silty, dk gr.

17.0 Sandstone, fine to med. grained, mod. well sorted, lt gray. weathers tan. Low angle trough cross-strat, linear wave-modified current ripples along one bedding plane. Poorly exposed.

7.0 Covered.

3.8 Sandstone, med-grained, well sorted, lt gr, weathers tan, very calcareous, abundant feldspar & lithic grains. Low-angle trough cross-lamination, burrow parallel to bedding surfaces.

6.0 Covered

CRETACEOUS — KUKPOWRUK FORMATION

13.6 Sandstone, med to fine grained, well sorted, lt. brownish gry, very calcareous. thin bedded, horiz. lamination w/sm-scale trough cross-lamination abundant parting lineation, Poorly exposed.

40 — RLS-34; PL77 TS 34 ø-2.4 Kmd-0.00086

3.3 Sandstone, fg, mod-well sorted, feldspathic, Base covered, small-scale trough cross-lam., top transitional to siltstone.

33.0 Covered, probably shale.

0 — Corresponds to 1380' on Chapman + Sable Sec. 3