SR16-SH13

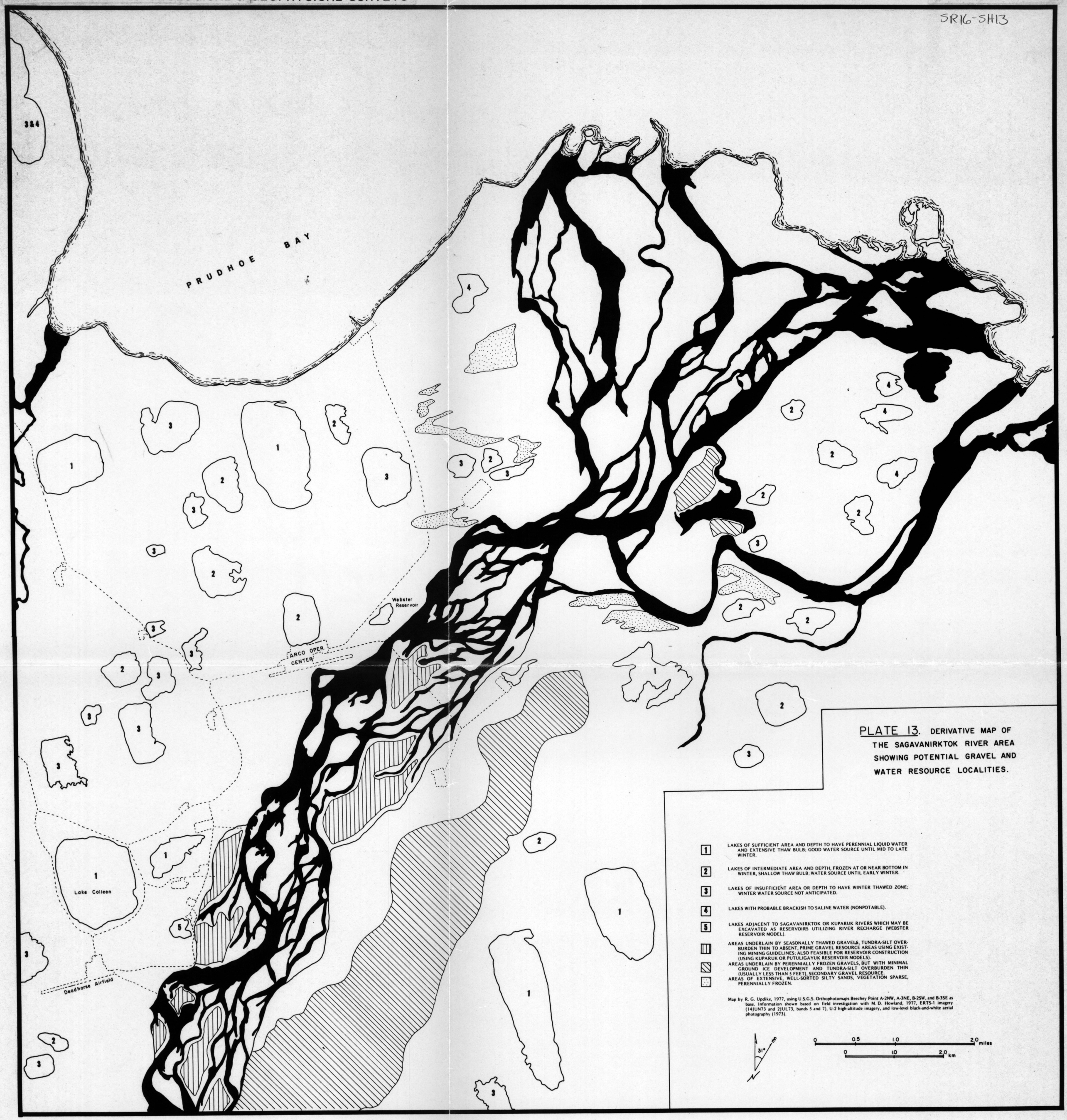

PLATE 13. DERIVATIVE MAP OF THE SAGAVANIRKTOK RIVER AREA SHOWING POTENTIAL GRAVEL AND WATER RESOURCE LOCALITIES.

1 LAKES OF SUFFICIENT AREA AND DEPTH TO HAVE PERENNIAL LIQUID WATER AND EXTENSIVE THAW BULB; GOOD WATER SOURCE UNTIL MID TO LATE WINTER.

2 LAKES OF INTERMEDIATE AREA AND DEPTH, FROZEN AT OR NEAR BOTTOM IN WINTER, SHALLOW THAW BULB; WATER SOURCE UNTIL EARLY WINTER.

3 LAKES OF INSUFFICIENT AREA OR DEPTH TO HAVE WINTER THAWED ZONE; WINTER WATER SOURCE NOT ANTICIPATED.

4 LAKES WITH PROBABLE BRACKISH TO SALINE WATER (NONPOTABLE).

5 LAKES ADJACENT TO SAGAVANIRKTOK OR KUPARUK RIVERS WHICH MAY BE EXCAVATED AS RESERVOIRS UTILIZING RIVER RECHARGE (WEBSTER RESERVOIR MODEL).

AREAS UNDERLAIN BY SEASONALLY THAWED GRAVELS, TUNDRA-SILT OVERBURDEN THIN TO ABSENT, PRIME GRAVEL RESOURCE AREAS USING EXISTING MINING GUIDELINES; ALSO FEASIBLE FOR RESERVOIR CONSTRUCTION (USING KUPARUK OR PUTULIGAYUK RESERVOIR MODELS).

AREAS UNDERLAIN BY PERENNIALLY FROZEN GRAVELS, BUT WITH MINIMAL GROUND ICE DEVELOPMENT AND TUNDRA-SILT OVERBURDEN THIN (USUALLY LESS THAN 5 FEET), SECONDARY GRAVEL RESOURCE.

AREAS OF EXTENSIVE, WELL-SORTED SILTY SANDS, VEGETATION SPARSE, PERENNIALLY FROZEN.

Map by R. G. Updike, 1977, using U.S.G.S. Orthophotomaps Beechey Point A-2NW, A-3NE, B-2SW, and B-3SE as base. Information shown based on field investigation with M. D. Howland, 1977, ERTS-1 imagery (14JUN73 and 2JUL73, bands 5 and 7), U-2 high-altitude imagery, and low-level black-and-white aerial photography (1973).