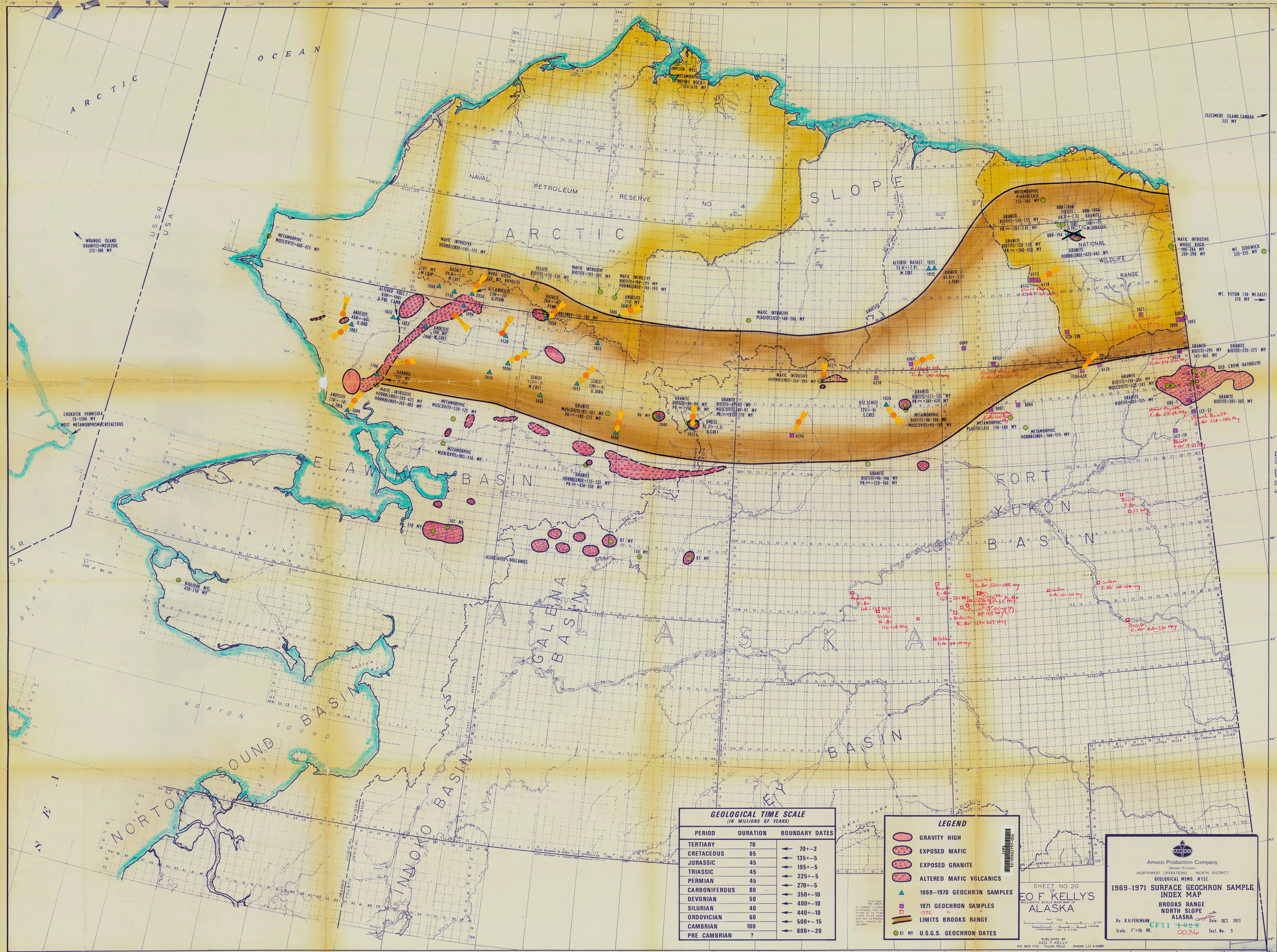
ARCTIC OCEAN
NAVAL PETROLEUM RESERVE NO 4
ARCTIC SLOPE
SELAWIK BASIN
ARCTIC CIRCLE
GALENA BASIN
INNOKO BASIN
NORTON SOUND BASIN
NORTON SOUND
SEWARD PENINSULA
KOTZEBUE SOUND
FORT YUKON BASIN
ALASKA
ARCTIC NATIONAL WILDLIFE RANGE
OLD CROW BATHOLITH
ELLESMERE ISLAND, CANADA 335 MY
WRANGEL ISLAND GRANITES=MESOZOIC 212-300 MY
CHUKOTSK PENNISULA 70-1500 MY MOST METAMORPHISM=CRETACEOUS
KIGLUIAK MTS. 450-750 MY
MT. SEDGWICK 335-355 MY
MT. FITTON (50 MI. EAST) 370 MY
SIMPSON WELL METAMORPHIC WHOLE ROCK 574-610 MY
METAMORPHIC MUSCOVITE=400-425 MY
MAFIC INTRUSIVE HORNBLENDE=145-175 MY
MAFIC INTRUSIVE WHOLE ROCK 190-284 MY 209-298 MY
MAFIC INTRUSIVE PLAGIOCLASE=160-206 MY
MAFIC INTRUSIVE HORNBLENDE=360-390 MY
MAFIC INTRUSIVE HORNBLENDE=205-425 MY HORNBLENDE=265-485 MY
METAMORPHIC MUSCOVITE=120-125 MY
METAMORPHIC MUSCOVITE=105-110 MY
GRANITE HORNBLENDE=115-125 MY PB/∝=430-550 MY
GRANITE BIOTITE=96-106 MY PB/∝=120-160 MY
GRANITE BIOTITE=295 MY 345-365 MY
GRANITE BIOTITE=255-275 MY
GRANITE BIOTITE=285-305 MY
GRANITE BIOTITE=290-308 MY MUSCOVITE=325-345 MY
GRANITE BIOTITE=305-325 MY
METAMORPHIC PLAGIOCLASE 150-160 MY
METAMORPHIC HORNBLENDE 160-175 MY
ASSOCIATED VOLCANICS
GEOLOGICAL TIME SCALE
(IN MILLIONS OF YEARS)
PERIOD | DURATION | BOUNDARY DATES
TERTIARY 70 ← 70+-2
CRETACEOUS 65 ← 135+-5
JURASSIC 45 ← 195+-5
TRIASSIC 45 ← 225+-5
PERMIAN 45 ← 270+-5
CARBONIFEROUS 80 ← 350+-10
DEVONIAN 50 ← 400+-10
SILURIAN 40 ← 440+-10
ORDOVICIAN 60 ← 500+-15
CAMBRIAN 100 ← 600+-20
PRE CAMBRIAN ?
LEGEND
GRAVITY HIGH
EXPOSED MAFIC
EXPOSED GRANITE
ALTERED MAFIC VOLCANICS
1969-1970 GEOCHRON SAMPLES
1971 GEOCHRON SAMPLES
LIMITS BROOKS RANGE
81 MY U.S.G.S. GEOCHRON DATES
SHEET NO. 20 OF GEO. F. KELLY'S MILLIONTH SCALE BASE MAP OF ALASKA
PUBLISHED BY GEO. F. KELLY P.O. BOX 1773 TULSA, OKLA. PHONE LU 4-5286
Amoco Production Company
Denver Division
NORTHWEST OPERATIONS - NORTH DISTRICT
GEOLOGICAL MEMO. #152
1969-1971 SURFACE GEOCHRON SAMPLE INDEX MAP
BROOKS RANGE
NORTH SLOPE
ALASKA
By: R.H.FEHLMANN
Date: OCT. 1971
Scale: 1"=16 MI.
Encl. No. 5
CF71 1028 0036