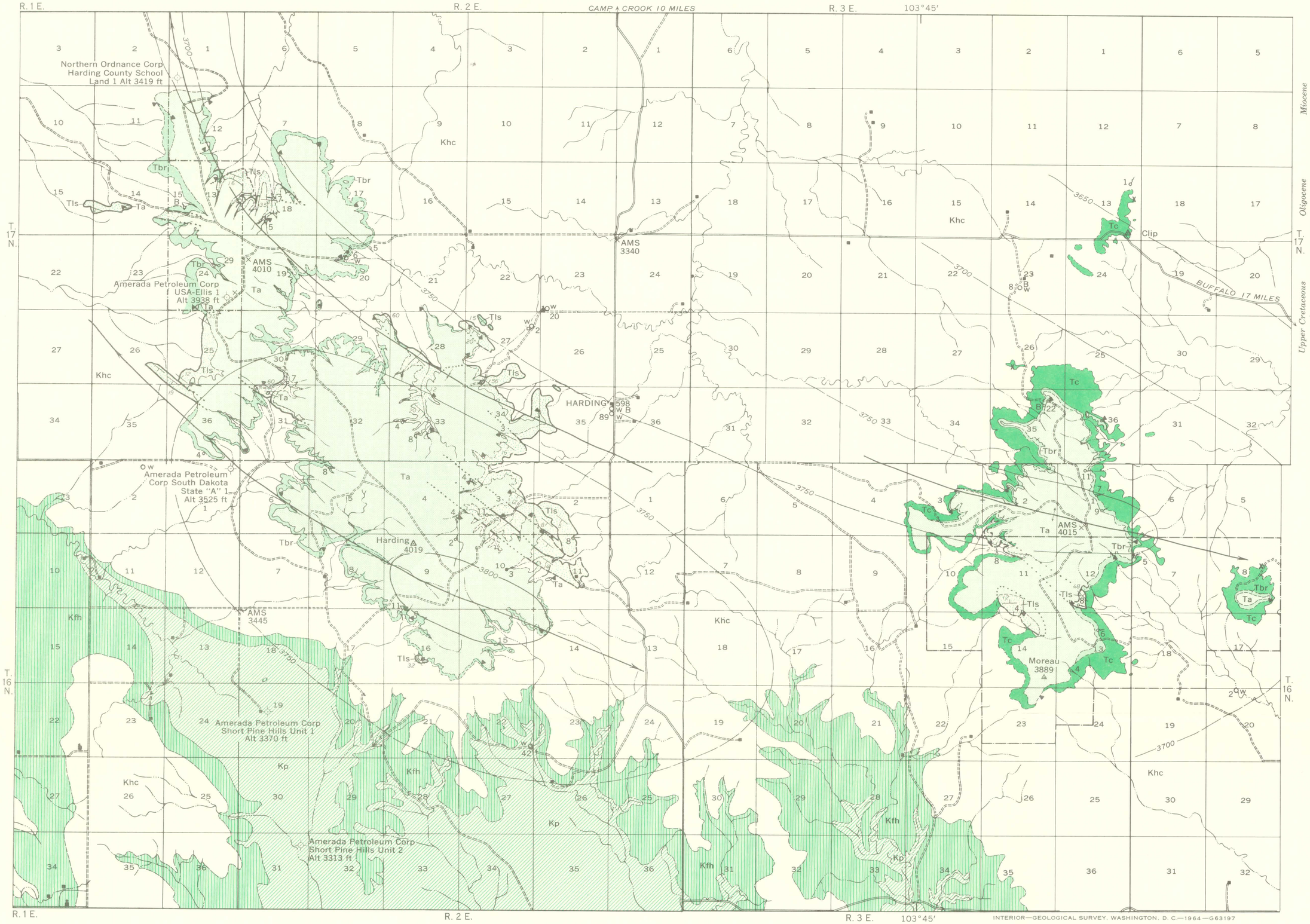

Base from Bureau of Land Management plats

Geology mapped in 1955. Contact of Fox Hills Sandstone and Pierre Shale modified after Curtiss (1956) and Schulte (1956)

GEOLOGIC MAP OF SHORT PINE HILLS, HARDING COUNTY, SOUTH DAKOTA

SCALE 1:63 360

1 ½ 0 1 2 3 4 5 MILES

1 .5 0 1 2 3 4 5 KILOMETERS

DATUM IS MEAN SEA LEVEL

EXPLANATION

TERTIARY

Miocene

Ta — Arikaree Formation
Tuffaceous sandstone and volcanic ash

Tls — Pre-Arikaree landslides
Landslide blocks contain rocks of Hell Creek, Chadron, and Brule Formations

Oligocene, White River Group

Tbr — Brule Formation
Tuffaceous claystone, siltstone, and sandstone

Tc — Chadron Formation
Bentonitic claystone, siltstone, sandstone, and conglomerate

CRETACEOUS

Upper Cretaceous

Khc — Hell Creek Formation
Claystone, shale, impure lignite, and lenticular sandstone

Kfh — Fox Hills Sandstone
Marine sandstone and sandy shale

Kp — Pierre Shale
Marine shale and claystone

Contact
Dashed where approximately located

Boundary of landslide
Dashed where approximately located; dotted where concealed

Strike and dip of beds in landslide blocks

3700 Contour
Showing altitude of base of Arikaree Formation. Dashed where restored. Interval 50 feet. Datum is mean sea level. Vertical control by single base altimetry

Anticline
Showing axis and direction of plunge

Syncline
Showing axis and direction of plunge

Harding 4019
U.S. Coast and Geodetic Survey triangulation station, elevation in feet

AMS 3340
Army Map Service elevation, in feet

Altitude control point

Dry hole

Custer National Forest Boundary

24 B Spring — 20 B W Water well
Number is uranium content, in parts per billion. Letter B indicates water sample analyzed for selected trace elements.

X Uranium occurrence

MAPPED AREA

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1964—G63197