



CLASSIFICATION OF MAP UNITS

Alluvial Deposits - Alluvium

- Alluvium and alluvium mixed with residuum, eolian deposits, and/or slopewash
a, ae, ar, ars
- Alluvium mixed with terrace deposits, with scattered deposits of slopewash and/or residuum
ast, at, atr, atrs

Alluvial Deposits - Alluvial Fan Deposits

- Alluvial fan deposits mixed with slopewash, alluvium, and/or residuum
af, fs, sf, sfa, sfar, sfr
- Alluvial fan deposits grading into terrace deposits, mixed with slopewash
fts
- Dissected alluvial fan deposits that grade into terrace deposits, mixed with slopewash
ftds

Alluvial Deposits - Bench Deposits

- Bench deposits and bench deposits mixed with residuum
b, br, bR
- Dissected bench deposits and dissected bench deposits mixed with slopewash, eolian deposits, and/or residuum
bd, bdr, bdrs, bds, ebd, sbd

Alluvial Deposits - Terrace Deposits

- Terrace deposits and terrace deposits mixed with alluvium, eolian deposits, residuum, and/or slopewash
et, st, t, ta, tar, ts, tsr
- Dissected terrace deposits and dissected terrace deposits mixed with slopewash, and/or residuum
std, td, tdr, tds
- Shallow terrace deposits mixed with residuum and/or alluvium
rat, tr

Eolian Deposits

- Eolian deposits and eolian deposits mixed with residuum and slopewash
esr

Landslide Deposits

- Landslides and landslides mixed with slopewash, residuum, and/or colluvium
l, lc, ls, srl

Mesa Deposits

- Mesa caprock mixed with a thin cover of residuum
rm

Playa Lake Deposits

- Playa lake deposits and playa lake deposits
p

Slopewash

- Slopewash mixed with residuum, alluvium and/or alluvial fan deposits
as, asr, sa, saf, sar, sr, sra
- Slopewash mixed with scattered bedrock outcrops and residuum, alluvial fan deposits, alluvium, and/or colluvium
sarR, scR, scRa, scRr, sFR, sraR, srcR, srR, srRa, srRc

Colluvium

- Colluvium mixed with scattered bedrock outcrops and slopewash
csR

Residuum

- Residuum and residuum mixed with slopewash and/or alluvium
r, ra, ras, rs, rsa
- Residuum mixed with scattered bedrock outcrops and slopewash, alluvium, eolian deposits, and/or colluvium
raR, rRs, rRsc, rRse, rsaR, rscR, rsR, rsRa, rsRe

Bedrock

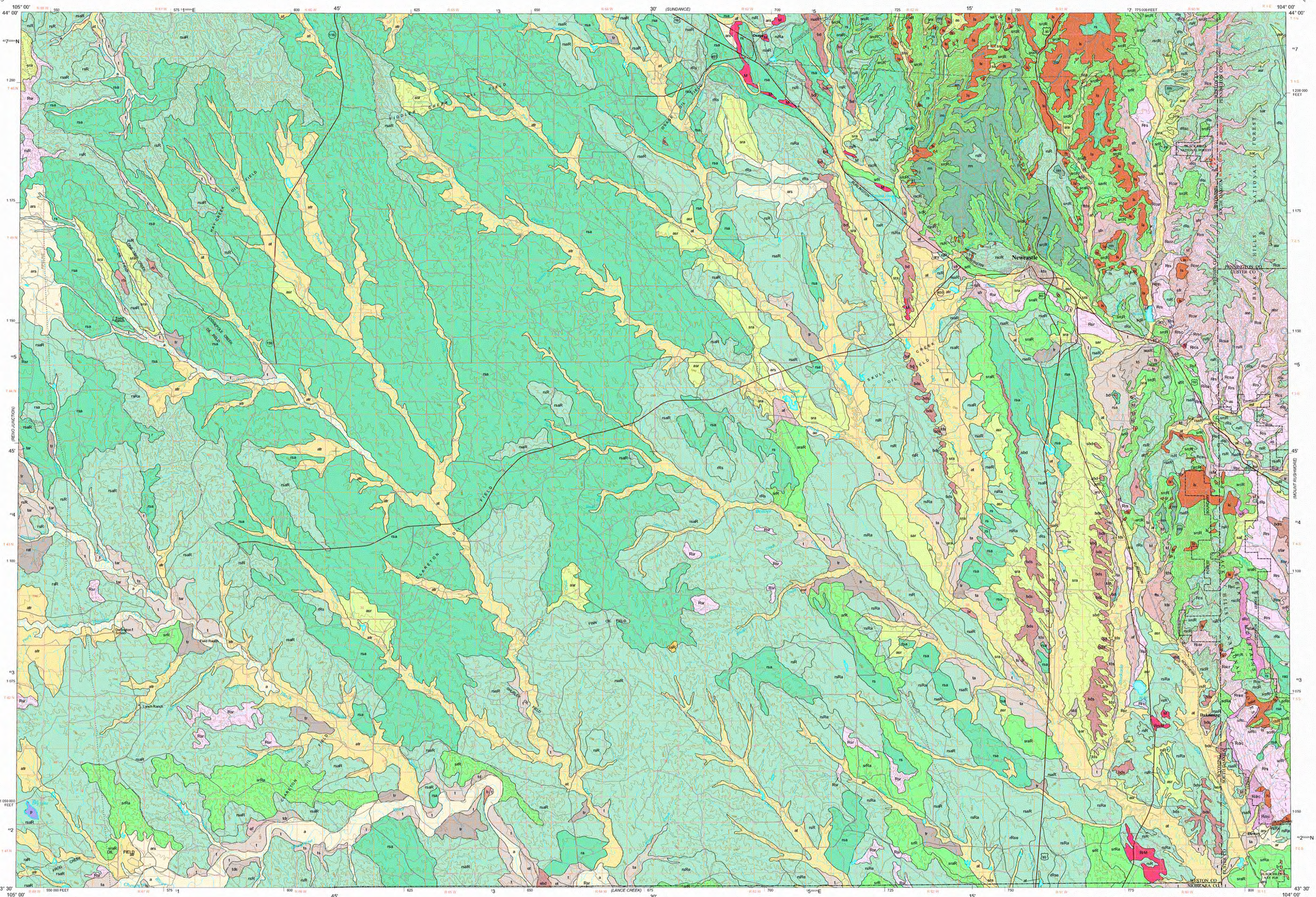
- Bedrock mixed with colluvium, alluvial fan deposits, slopewash, alluvium, and/or residuum
Rcs, Rcsa, Rcsr, Rrcs, Rrs, Rrsa, Rrsc, Rsc, Rscr, Rsf, Rsr
- Bedrock with a thin mantle of colluvium, and/or slopewash
sR, sRc
- Dissected bedrock with a thin mantle of residuum and colluvium
Rdrc

Lake

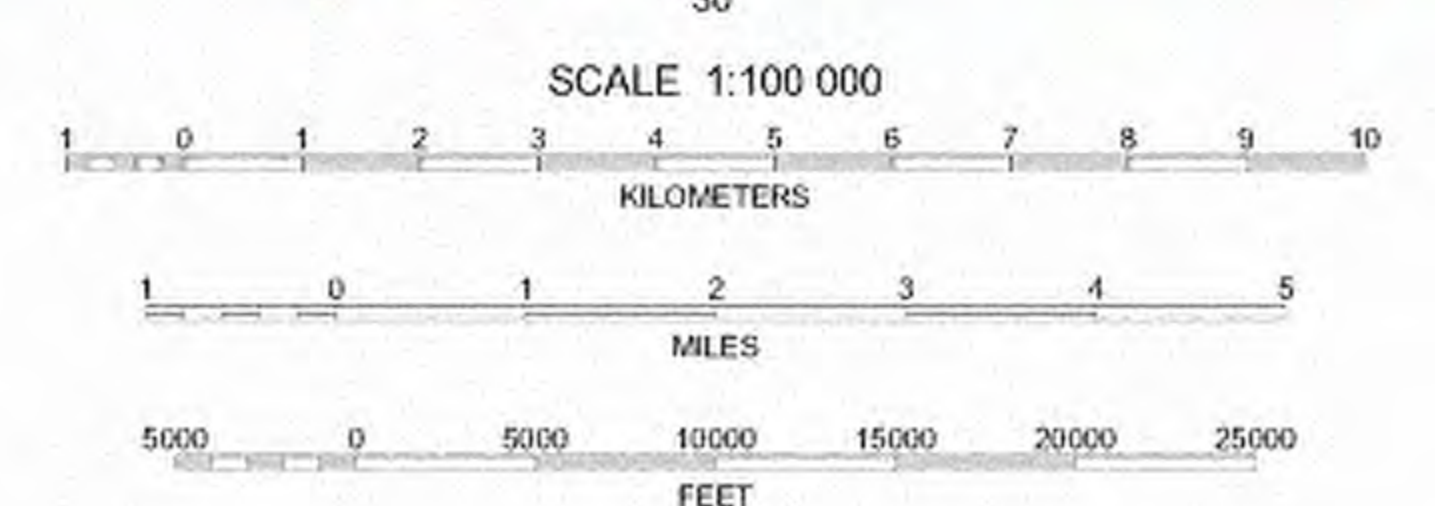
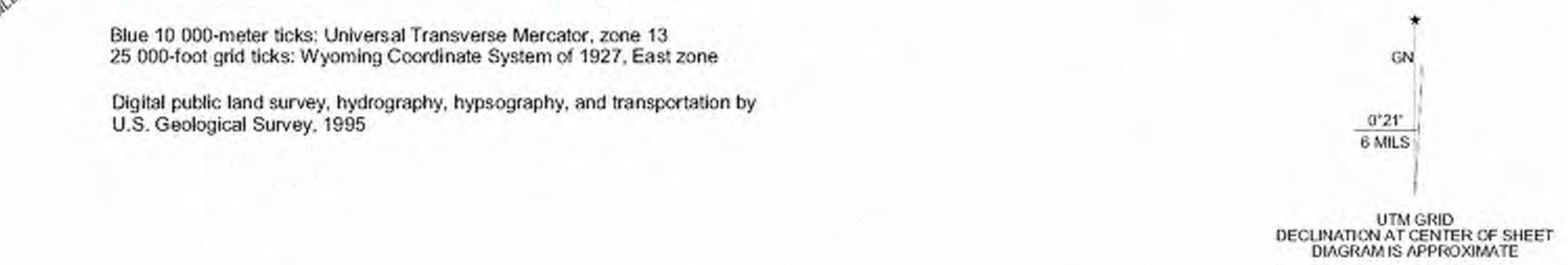
- Lake

Mined Areas

- Mined areas
M, RM, RSM



Blue 10 000-meter ticks: Universal Transverse Mercator, zone 13
25 000-foot grid ticks: Wyoming Coordinate System of 1927, East zone
Digital public land survey, hydrography, hypsography, and transportation by
U.S. Geological Survey, 1995



Produced with QuadView by Geoware
This report is preliminary and has not been reviewed for conformity with
Wyoming State Geological Survey editorial standards
Prepared in cooperation with the U.S. Geological Survey, National
Cooperative Geologic Mapping Program, under Cooperative Agreement
Number 99HQAG0164

PRELIMINARY DIGITAL SURFICIAL GEOLOGIC MAP OF THE NEWCASTLE 30' x 60' QUADRANGLE, WESTON AND NIOBRARA COUNTIES, WYOMING AND WESTERN SOUTH DAKOTA

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