WYOMING STATE GEOLOGICAL SURVEY
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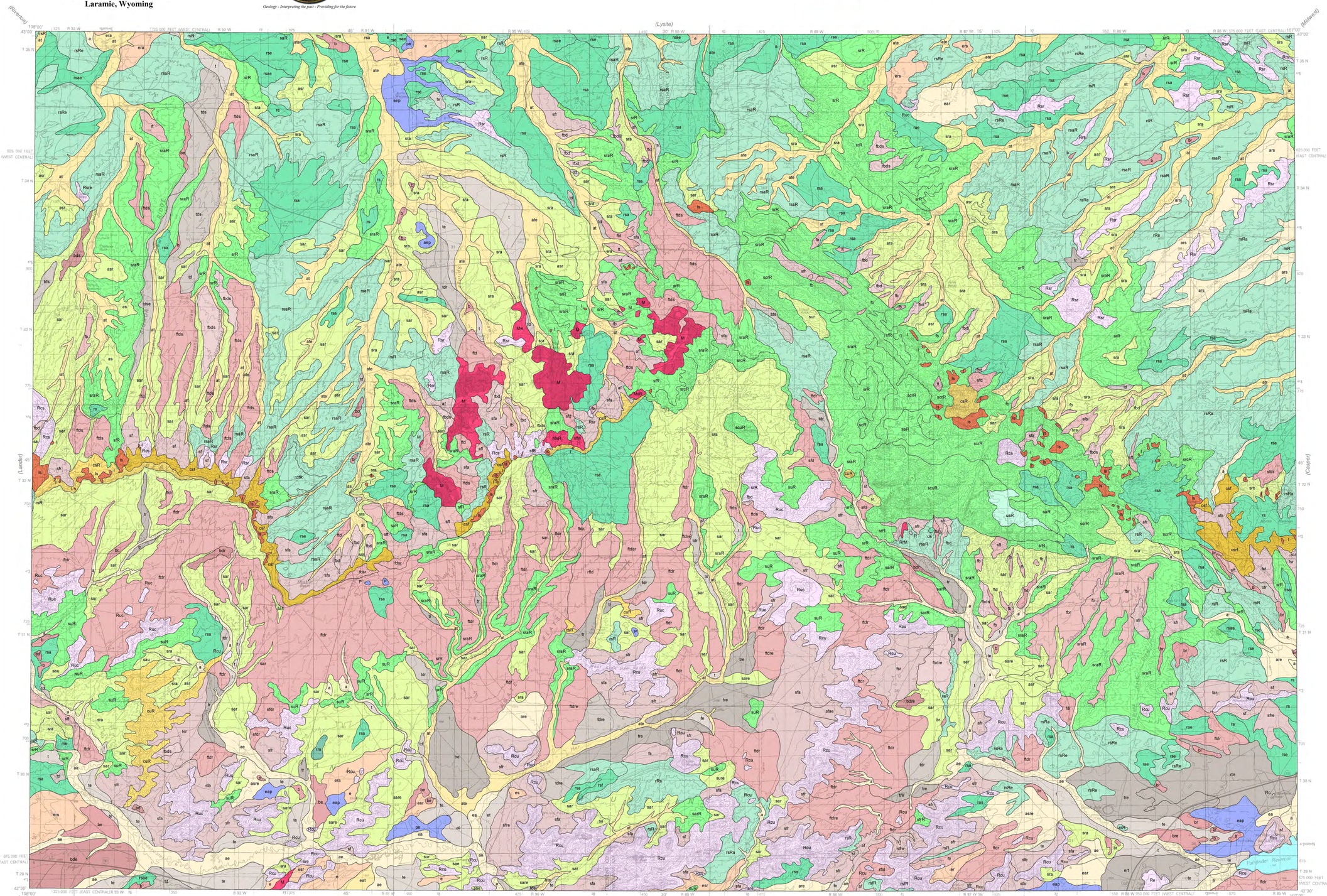
Laramie, Wyoming

Geology - Interpreting the past - Providing for the future

Prepared in cooperation with the U.S. GEOLOGICAL SURVEY

OPEN FILE REPORT 11-3
Rattlesnake Hills 1:100,000 - scale Surficial Geologic Map



Base map compiled from U.S. Geological Survey 1:24,000-scale topographic maps dated 1951-1959. Partially revised from aerial photographs taken 1979 and other source data
Revised information not field checked
Map edited 1981

Projection: Universal Transverse Mercator (UTM), zone 13
North American Datum of 1927 (NAD 27)
10,000-meter grid ticks: UTM, zone 13
25,000-foot grid ticks: Wyoming State Plane Coordinate System, east central and west central zones

National Geodetic Vertical Datum of 1929

0 1 2 4 6 8 10 12 14 16 18 20 Kilometers
0 1 2 4 6 8 10 12 Miles

SCALE 1:100,000
Contour Interval 20 meters

0 1,000 2,000 4,000 6,000 8,000 10,000 12,000 14,000 16,000 18,000 20,000 Meters
0 2,500 5,000 10,000 15,000 20,000 25,000 30,000 35,000 40,000 45,000 50,000 55,000 60,000 65,000 Feet

Digital cartography by Suzanne C. Luhr and Robin W. Lyons

Editing by Suzanne C. Luhr

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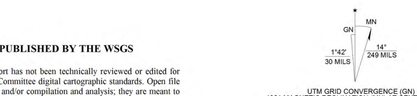
PRELIMINARY SURFICIAL GEOLOGIC MAP OF THE RATTLESNAKE HILLS 30' x 60' QUADRANGLE, NATRONA AND FREMONT COUNTIES, WYOMING

by

James C. Case and Laura L. Hallberg

2011



UTM GRID CONVERGENCE (GN)
1981 MAGNETIC DECLINATION (MN) AT CENTER OF MAP
DIAGRAM IS APPROXIMATE

WYOMING QUADRANGLE LOCATION

EXPLANATION

DESCRIPTION AND CLASSIFICATION OF MAP UNITS

zAlluvial deposits

Alluvium

Alluvium or alluvium mixed with eolian deposits, residuum, and/or slopewash (101)
(a, ae, are, ars, asre, ea, ear)

Alluvium mixed with terrace deposits and scattered eolian deposits or residuum (102)
(at, ate, atr, eat)

Alluvial fan deposits

Alluvial fan deposits mixed with alluvium, colian deposits, slopewash, and/or residuum (201)
(af, far, fs, fsr, sf, sfa, sfae, sfe, sfr, sfre)

Alluvial fan deposits grading into bench or terrace deposits or slopewash, mixed with scattered eolian deposits or residuum (202)
(fb, fbr, ft, ftr, sfb, sft)

Alluvial fan deposits grading into dissected bench deposits, with scattered eolian deposits or slopewash (203)
(fbd, fbdre, fbds)

Dissected alluvial fan deposits grading into dissected terrace deposits, mixed with scattered slopewash, residuum, and/or eolian deposits (204)
(fdr, fdsr, fld, fldar, fldr, fldre, flds, rfld, sfd, sfdr)

Bench deposits

Bench deposits or bench deposits mixed with eolian deposits (401)
(b, be, br, bre)

Dissected bench deposits mixed with slopewash or residuum and scattered playa lake deposits (402)
(bd, bde, bdr, bdre, bds)

Terrace deposits

Terrace deposits or terrace deposits mixed with scattered deposits of slopewash, colian deposits, or glacial outwash, and/or alluvium (601)
(et, t, te, ts)

Dissected terrace deposits; dissected terrace deposits mixed with slopewash, eolian deposits, or residuum; dissected terrace deposits/structural terraces mixed with slopewash and/or residuum (602)
(td, tde, tdr, tdre, tds, tdse)

Dissected shallow terrace deposits covered with residuum and shallow terrace deposits mixed with residuum and/or eolian deposits (603)
(ert, rte, tr, tre)

Eolian deposits

Eolian deposits or eolian deposits mixed with residuum and alluvium or slopewash (701)
(e, er, era, ers, es, esr)

Landslide deposits

Landslides or landslides mixed with slopewash and/or scattered bedrock outcrops (801)
(l, ls)

Mesa caprock

Mesa caprock mixed with a thin cover of residuum and/or eolian deposits (901)
(rm)

Playa lakes/playa lake deposits

Playa lake or playa lake deposits mixed with eolian deposits and/or alluvium (1001)
(aep, eap, pe, P)

Slopewash

Slopewash mixed with alluvium, colluvium, or residuum; slopewash mixed with alluvium and eolian deposits and/or residuum; slopewash mixed with residuum and alluvium, colluvium, aeolian deposits, or alluvial fan deposits (1101)
(as, asr, sa, sae, sar, sare, sau, scr, sr, sra, src, sre, sur, sure)

Slopewash mixed with scattered bedrock outcrops and colluvium, alluvial fan deposits, or residuum, and/or residuum, eolian deposits, dissected alluvial fan deposits, slopewash, alluvium, and colluvium (1102)
(sarR, saR, scrR, scR, scuR, sfrR, sfR, sraR, srcR, srR, suR)

Colluvium

Colluvium mixed with slopewash and/or landslide deposits (1201)
(csf, csrf)

Colluvium mixed with scattered bedrock outcrops and slopewash and/or residuum (1202)
(csR, cuR)

Residuum

Residuum mixed with alluvium or slopewash and/or eolian deposits; residuum mixed with alluvium, slopewash, and eolian deposits (1401)
(r, ra, rae, ras, re, rs, rsa, rsae, rse, rsf, us)

Residuum mixed with scattered bedrock outcrops and slopewash, and/or eolian deposits, colluvium, alluvium, and alluvial fan deposits (1402)
(raRe, rdfR, rRs, rsaR, rsfR, rsR, rsRa, rsRe)

Grus mixed with bedrock outcrops and/or slopewash (1404)
(usR)

Bedrock

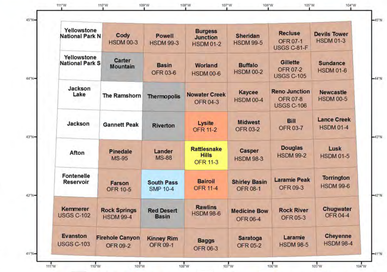
Bedrock; bedrock mixed with slopewash; bedrock mixed with bench deposits and residuum; bedrock mixed with slopewash and/or alluvium, colluvium, residuum, eolian deposits, or alluvial fan deposits (1501)
(R, Rc, Rcs, Rcu, Re, Rrs, Rsc, Rsr, Rsre, Ruc)

Mined areas

Open pit mine/quarry (1710)
(M, MsR, Mw, RrM, sfM)

Water features

Water (1601)



KEY TO ABBREVIATIONS

U.S. Geological Survey maps: Coal Investigations Series (I). Wyoming State Geological Survey maps: Open File Report (OFR), Hazards Section Digital Map (HSDM), and unpublished STATEMAP project (SMP).

INDEX TO 1:100,000 – SCALE SURFICIAL GEOLOGIC MAPS OF WYOMING

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