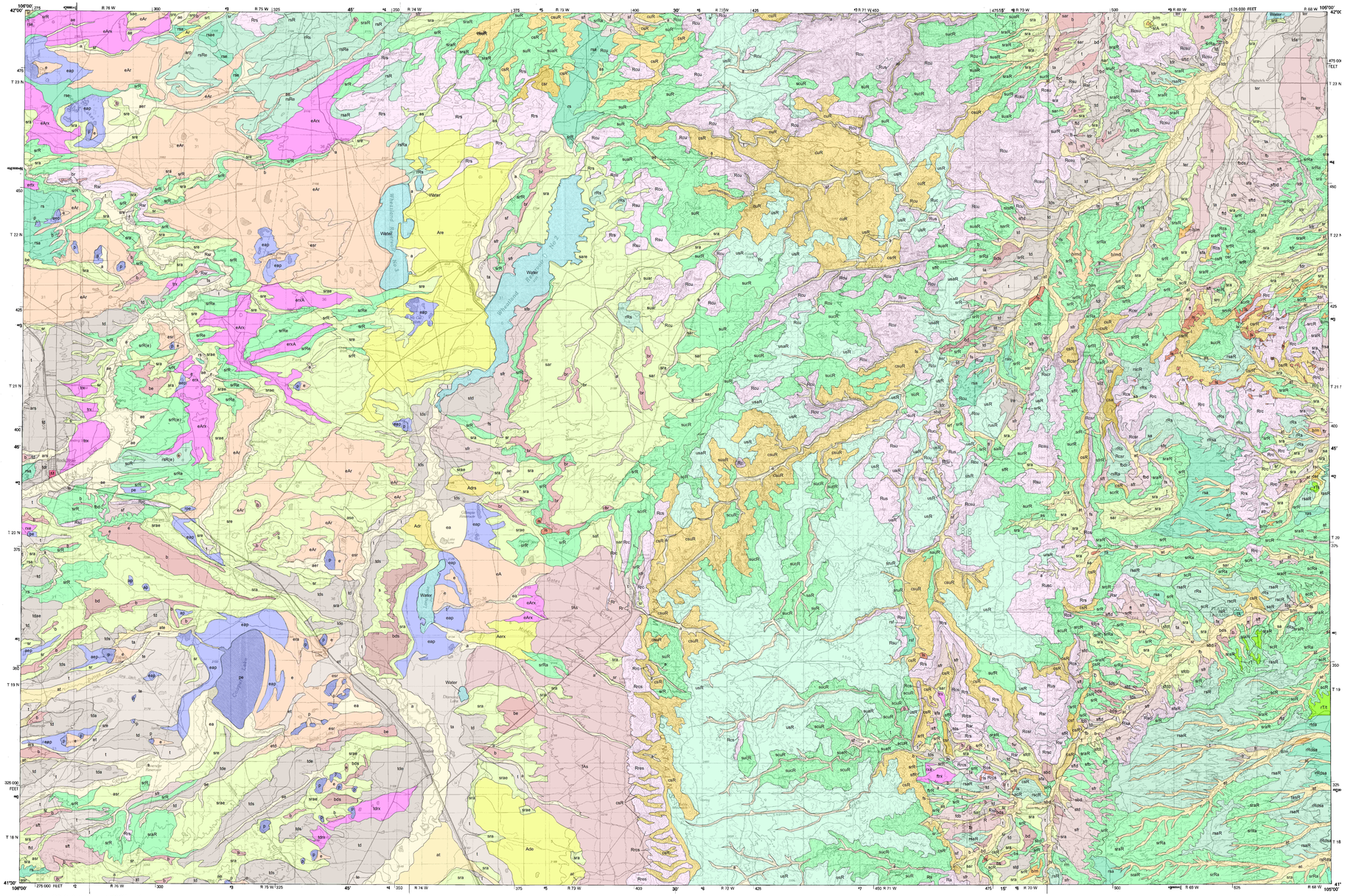
WYOMING STATE GEOLOGICAL SURVEY
Ronald C. Surdam, State Geologist
Laramie, Wyoming

Geology - Interpreting the past to provide for the future

Prepared in cooperation with the
U.S. GEOLOGICAL SURVEY

OPEN FILE REPORT 05-3
Rock River 1:100,000 - scale Surficial Geologic Map



Base map from U.S. Geological Survey 1:100,000 - scale metric topographic map of Rock River, Wyoming Quadrangle, 1982
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 zone

SCALE 1:100,000
Contour Interval 20 meters

Prepared in cooperation with the U.S. Geological Survey, National Cooperative Geologic Mapping Program, under Cooperative Agreement Number AHQAG0045.

Digital cartography by Robin Lyons

PRELIMINARY SURFICIAL GEOLOGIC MAP OF THE ROCK RIVER 30' x 60' QUADRANGLE, ALBANY, PLATTE, AND LARAMIE COUNTIES, WYOMING

Compiled and mapped by

Laura L. Hallberg and James C. Case

2005

UTM GRID CONVERGENCE (GN)
1982 MAGNETIC DECLINATION (MN) AT CENTER OF SHEET
DIAGRAM IS APPROXIMATE

QUADRANGLE LOCATION

CLASSIFICATION OF MAP UNITS

Alluvial Deposits

Alluvium

Alluvium and alluvium mixed with eolian deposits, residuum, playa lake deposits and/or slopewash (101)
(a, ae, aer, arp, ars, asr, ea)

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

Alluvial Fan Deposits

Alluvial fan deposits and alluvial fan deposits mixed with alluvium, residuum, slopewash, and/or eolian deposits (201)
(f, fa, frsa, fs, fsr, sf, sfa, sfe, sft)

Alluvial fan deposits grading into old alluvial plain, bench or terrace deposits mixed with slopewash, eolian deposits, and/or residuum (202)
(fAs, fb, ft, fte, ftr, sft)

Alluvial fan deposits grading into dissected bench deposits, mixed with residuum and/or slopewash (203)
(fbd, fbdr, fbds, sfbd)

Dissected alluvial fan deposits that grade into bench deposits and dissected terrace deposits, mixed with slopewash and/or residuum (204)
(fdb, fdbs, fdr, fld, sfld, sfdt)

Old Alluvial Plain Deposits

Old alluvial plain deposits mixed with eolian deposits and/or residuum, with some on truncated, upturned bedrock; slopewash and residuum may cover old alluvial plain deposits (301)
(Ae, Aerx, Ar, Are, srA)

Dissected old alluvial plain deposits mixed with eolian deposits or residuum and slopewash (302)
(Ad, Ade, Adrs)

Bench Deposits

Bench deposits and bench deposits mixed with eolian deposits, residuum, or slopewash (401)
(b, be, br, bs)

Dissected bench deposits and dissected bench deposits mixed with slopewash (402)
(bd, bds)

Bench-Mesa Deposits

Bench deposits / mesa caprock (501)
(b/m)

Dissected bench deposits / mesa caprock (502)
(b/md)

Terrace Deposits

Terrace deposits and terrace deposits mixed with alluvium, eolian deposits, residuum, and/or slopewash (601)
(et, t, ta, te, ter, ts)

Dissected terrace deposits and dissected terrace deposits mixed with slopewash, alluvium and/or eolian deposits, residuum, or slopewash (602)
(td, tda, tdae, tde, tdr, tds)

Shallow terrace deposits mixed with residuum and/or eolian deposits (603)
(tr, tre)

Eolian Deposits

Eolian deposits, eolian deposits on old alluvial plains, and eolian deposits on dissected terrace deposits mixed with residuum, slopewash, and alluvium (701) (e, eA, eAr, era, esr, etd)

Landslide Deposits

Landslides and landslides mixed with slopewash (801)
(l, ls)

Mesa Deposits

Mesa caprock mixed with a thin cover of residuum (901)
(rm)

Playa Lake and Playa Lake Deposits

Playa lake, playa lake deposits, and playa lake deposits mixed with eolian deposits, residuum and/or alluvium (1001)
(aep, ap, eap, p, pe, rpe)

Slopewash

Slopewash, slopewash mixed with residuum, alluvium, eolian deposits, alluvial fan deposits, grus, and/or colluvium; and slopewash on dissected benches, alluvial fans, or terraces (1101)
(as, ase, asr, rsc, s, sa, sae, saf, sar, sare, sbd, sfbd, sfdt, sr, sra, srae, src, sre, srf, srt, std, suar)

Slopewash mixed with scattered bedrock outcrops and residuum, alluvial fan deposits, alluvium, grus, colluvium, and/or eolian deposits (1102)
(sarR, scR, scuR, sfR, sfaR, sfrR, sraR, srfR, srR, srRa, srRe, sruR, suaR, sucR, sufR, suR, surR)

Colluvium

Colluvium mixed with slopewash, alluvium, residuum, and/or alluvial fan deposit (1201)
(csa, csr, csf)

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

Residuum

Residuum mixed with slopewash, alluvium, colluvium, eolian deposits, and/or alluvial fan deposits; grades into dissected terrace deposits mixed with alluvium (1401)
(rsa, rs, ras, rsae, rsc, rse, rsf, rsfa)

Residuum mixed with scattered bedrock outcrops or structural terrace/terrace deposits and slopewash, alluvium, colluvium, eolian deposits, alluvial fan deposits, and/or colluvium (1402)
(rfsR, rasR, rRdsa, rRs, rRsa, rsaR, rscR, rsR, rsRa, rsRda, rsRe, rTs)

Grus mixed with scattered bedrock outcrops and slopewash, alluvium, and/or residuum (1404)
(usaR, usR, rusR, uaR, ursR, usR)

Bedrock

Bedrock and bedrock mixed with alluvium, colluvium, alluvial fan deposits, eolian deposits, slopewash, grus, and/or residuum (1501)
(R, Ra, Rc, Rcs, Rcsr, Rcsu, Rcu, Rf, Rfc, Rfcs, Rres, Rrs, Rrsc, Rsa, Rsc, Rscr, Rsr, Rsu, Ruc, Rus, Rusc,)

Upturned and truncated bedrock with a thin mantle of old alluvial plain deposits, residuum, terrace or dissected terrace deposits, alluvium, alluvial fan deposits, and/or eolian deposits (1503)
(eArx, ertx, erx, ersA, ftrx, rxa, rxe, tdrx, trx)

Lake

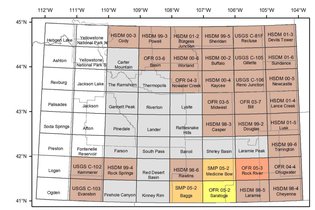
Lake (1601)
(lake)

Mined Areas

Mined Areas (1701)
(M)

Terrace Deposits

Structural terrace/terrace deposits with a mantle of residuum (1801)
(rT, rTr)



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).

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