

SELECTED REFERENCES FOR THE UINTA BASIN, UTAH

Listed by Topic

Craig D. Morgan
Utah Geological Survey

The following selected reference on the geology of the Uinta Basin is not intended to be a complete bibliography. Craig Morgan who compiled the references has not read every reference cited. Many of the references cited were taken from the reference lists of published articles and were included because the citing or reference title lead me to believe the article was applicable. **This document has not be reviewed or approved for publication by the Utah Geological Survey.**

Last update 03/19/02

CONTENTS

GUIDEBOOKS, TEXT BOOKS, AND PUBLISHED REPORTS	3
STRATIGRAPHY AND PETROLOGY	6
Uinta Basin	6
Analogous Areas	22
STRUCTURE	30
CORE AND GEOPHYSICAL LOGS	34
OIL AND GAS (GENERAL)	37
GEOCHEMISTRY	42
MAPS AND CROSS SECTIONS	47
RESERVOIR ENGINEERING	50
DRILLING AND COMPLETION	52
PRODUCTION	54
GROUND WATER	56
OIL SHALE	57

GUIDEBOOKS, TEXT BOOKS, AND PUBLISHED REPORTS

- Aguilera, Roberto, 1980, Naturally fractured reservoirs: PennWell Publishing Company, Tulsa, Oklahoma, 703 p.
- Allison, M.L., 1995, Increased oil production and reserves from improved completion techniques in the Bluebell field, Uinta Basin, Utah: Annual Report for the Period September 30, 1993 to September 30, 1994, DOE/BC/14953-10 (DE95000171), 123 p.
- Allison, M.L., and Morgan, C.D., 1995, Increased oil production and reserves from improved completion techniques in the Bluebell field, Uinta Basin, Utah: Annual Report for the Period September 30, 1994 to September 30, 1995, DOE/BC/14953-14 (DE96001227), 118 p.
- Anadon, P.L., Cabrera, L., and Kelts, K., editors, 1991, Lacustrine facies analysis: Blackweller Publication, International Association of Sedimentologists Special Publication 13, p.
- Blackett, R.E., compiler, 1996, Tar-sand resources of the Uinta Basin, Utah-a catalog of deposits: Utah Geological Survey Open-File Report 335, 122 p.
- Department of the Interior, Bureau of Land Management, Vernal District, 1993, Diamond Mountain Resource area, resource management plan and environmental impact plan, volume I and II.
- Fleet, A.J., Kelts, K., and Talbot, M.R., editors, 1987, Lacustrine petroleum source rocks: Geological Society Special Publication No. 40, 391 p.
- Flint, S., and Bryant, I., editors, 1993, Quantitative modeling of clastic hydrocarbon reservoirs and outcrop analogues: International Association of Sedimentologists Special Publication 15, p.
- Fouch, T.D., Nuccio, V.F., and Chidsey, T.C., Jr., editors, 1992, Hydrocarbon and Mineral Resources of the Uinta Basin, Utah and Colorado: Utah Geological Association Guidebook 20, 366 p.
- Gierlowski-Kordesch, E.H., and Kelts, K.R., 2000, Lake basins through space and time: American Association of Petroleum Geologists Studies in Geology no. 46,
- Katz, B.J., 1991, Lacustrine basin exploration-case studies and modern analogs: American

- Association of Petroleum Geologists Memoir 50, p.
- Lerman, A., editor, 1978, Lakes-chemistry, geology, physics: Berlin, Springer-Verlag, p.
- Lindsay, J.B., editor, 1969, Geologic Guidebook of the Uinta Mountains, Utah Maverick Range: Intermountain Association of Petroleum Geologists 17th Annual Field Conference Guidebook, 237 p.
- Linville, Bill, editor, 1991, Reservoir characterization III, proceedings third international reservoir characterization technical conference: Tulsa, Oklahoma, PennWell Books, 999 p.
- Marzo, M., and Puigdefabregas, C., editors, 1993, Alluvial sedimentation: International Association of Sedimentologists Special Publication 17, p.
- Morgan, C.D., compiler, 1995c, Increased oil production and reserves from improved completion techniques in the Bluebell field, Uinta Basin, Utah-second annual report: Utah Geology Survey Open-File Report 330, 115 p.
- Mullens, M.C., 1973, Bibliography of the geology of the Green River Formation, Colorado, Utah, and Wyoming, to March 1, 1973: U.S. Geological Survey Circular 675, 20 p.
- Peterson, J.A., editor, 1956, Geology and Economic Deposits of East Central Utah: Intermountain Association of Petroleum Geologists Seventh Annual Field Conference, 225 p.
- Picard, M.D., editor, 1985, Geology and Energy Resources, Uinta Basin of Utah: Utah Geological Association Guidebook 12, 238 p.
- Pitman, J.K., and Carroll, A.R., editors, 1998, Modern and ancient lakes - new problems and perspectives: Utah Geological Association Guidebook 26, 328 p.
- Sabatka, E.F., editor, 1964, Guidebook of the Geology and Mineral Resources of the Uinta Basin, Utah's hydrocarbon Storehouse: Intermountain Association of Petroleum Geologists 13th Annual Field Conference Guidebook, 277 p.
- Seal, O.G., editor, 1957, Guidebook to the Geology of the Uinta Basin: Intermountain Association of Petroleum Geologists 8th Annual Field Conference Guidebook, 224 p.
- Yen, T.F., editor, 1976, Science and technology of oil shale: Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan, 226 p.

Yen, T.F., and Chilingarian, G.V., editors, 1976, Oil shale: Elsevier Science Publishing Company, Amsterdam, Netherlands, 292 p.

STRATIGRAPHY AND PETROLOGY

Uinta Basin

- Abbott, Ward, 1957, Tertiary of the Uinta Basin *in* Seal, O.G., editor, Guidebook to the geology of the Uinta Basin: Intermountain Association of Petroleum Geologists 8th Annual Field Conference Guidebook, p. 102-109.
- Andersen, D.W., and Picard, M.D., 1974, Evolution of synorogenic clastic deposits in the intermontane Uinta Basin of Utah, *in* Dickinson, W.R., editor, Tectonics and sedimentation: Society of Economic Paleontologists and Mineralogists Special Publication 22, p. 167-189.
- Baer, J.L., 1967, Paleoenvironment of cyclic sediments in the lower Green River Formation in central Utah (abstract): Geological Society of America Special Paper 115, p. 10-11.
- 1969, Paleocology of cyclic sediments of the lower Green River Formation, central Utah: Brigham Young University Geology Studies, v. 16, pt. 1, p. 3-95.
- 1987, Green River Formation (Eocene) central Utah; a classic example of fluvial-lacustrine environments, *in* Beus, S.S., editor, The Decade of North American Geology, v. 6: Geological Society America, Boulder, Colorado, p. 247-250.
- Banks, E.Y., 1981, Petrographic characteristics and provenance of fluvial sandstone, Sunnyside oil impregnated sandstone deposit, Carbon County, Utah: MS thesis, Salt Lake City, University of Utah, 112 p.
- Bereskin, S.R., and Morgan, C.D., 2001, Fluvial-lacustrine oil reservoirs in the middle member of the Eocene Green River Formation, south-central, Uinta Basin, Utah: American Association of Petroleum Geologists Annual Conventional program with abstracts p. A16-A17.
- Borer, J.M., 2001, Packaging an outcrop analog - an example from the lacustrine Green River Formation, northeast Uinta Basin: American Association of Petroleum Geologists Annual Conventional program with abstracts p. A22.
- Borer, J.M., 1998, High-resolution stratigraphy of the Lower Green River Formation at Raven Ridge and Red Wash field, NE Uinta Basin-stratigraphic control on petroleum subsystems: American Association of Petroleum Geologists Annual Convention Abstracts CD Rom.
- Borer, J.M., and McPherson, M.L., 1996, High-resolution stratigraphy of the Green River Formation,

- NE Uinta Basin-Implications for Red Wash Reservoir compartmentalization: American Association of Petroleum Geologists Program with Abstracts, p. A18.
- Bradley, W.H., 1925, A contribution to the origin of the Green River Formation and its oil shale: American Association of Petroleum Geologists Bulletin, v. 9, p. 247-262.
- 1929a, The varves and climate of the Green River epoch: U.S. Geological Survey Professional Paper 158-E, p. 87-110.
- 1929b, Algae reefs and oolites of the Green River Formation: U.S. Geological Survey Professional Paper 154-G, p. 203-223 [1930].
- 1930, The occurrence and origin of analcite and meerschaum beds in the Green River Formation of Utah, Colorado, Wyoming: U.S. Geological Survey Professional Paper 158-A, p. 1-7.
- 1931, Origin and microfossils of the oil shale of the Green River Formation of Colorado and Utah: U.S. Geological Survey Professional Paper 168, 58 p.
- 1948, Limnology and the Eocene lakes of the Rocky Mountain region: Geological Society of America Bulletin v. 59, p. 635-648.
- 1970, Green River oil shale - concept of origin extended, an interdisciplinary problem being attacked from both ends: Geological Society of America Bulletin, v. 81, p. 985-1000.
- Brown, R.W., 1929, Additions to the flora of the Green River Formation: U.S. Geological Survey Professional Paper 154-J, p. 279-292.
- 1934, The recognizable species of the Green River flora: U.S. Geological Survey Professional Paper 185-C, p. 45-77.
- Bruhn, R.L., Picard, M.D., and Beck, S.L., 1983, Mesozoic and early Tertiary structure and sedimentology of the central Wasatch Mountains, Uinta Mountains and Uinta Basin: Utah Geological and Mineral Survey Special Studies 59, p. 63-105.
- Bryant, Bruce, Naeser, C.W., Marvin, R.F., and Mehnert, H.H., 1989, Upper Cretaceous and Paleogene sedimentary rocks and isotopic ages of Paleogene tuffs, Uinta Basin, Utah: U.S. Geological Survey Bulletin 1787-J, 22 p.
- Calkin, W.S., 1997, Lacustrine delta, Sunnyside tar sands, northeastern Utah: American Association of Petroleum Geologists Bulletin v. 81, no. 7, p. 1220.

- Cashion, W.B., 1957, Stratigraphic relations and oil shale of the Green River Formation in the eastern Uinta Basin, *in* Seal, O.G., editor, Guidebook to the geology of the Uinta Basin: Intermountain Association of Petroleum Geologists 8th Annual Field Conference Guidebook, p. 131-135.
- 1959, Geology and oil-shale resources of Naval Oil-Shale Reserve No. 2, Uintah and Carbon Counties, Utah: U.S. Geological Survey Bulletin 1072-O, p. 753-793.
- 1967, Geology and fuel resources of the Green River Formation, southeastern Uinta Basin, Utah and Colorado: U.S. Geological Survey Professional Paper 548, 48 p.
- 1981, Results of core drilling in the Mahogany zone and some adjacent beds of Green River Formation, Winter Ridge area, southeastern Uinta Basin Utah: U.S. Geological Survey Open-File Report 81-0175, 27 p.
- 1983, Descriptions of four stratigraphic sections of parts of the Green River and Uinta Formations in the eastern Uinta Basin, Uintah County, Utah, and Rio Blanco County, Colorado: U.S. Geological Survey Open-File Report, 83-0017, 44 p.
- Cashion, W.B., and Donnell, J.R., 1974, Revision of nomenclature of the upper part of the Green River Formation, Piceance Creek Basin, Colorado, and eastern Uinta Basin, Utah: U.S. Geological Survey Bulletin 1394-G, 9 p.
- Castle, J.W., 1991, Sedimentation in Eocene Lake Uinta (lower Green River Formation), northeastern Uinta Basin, Utah, *in* Katz, B.J., editor, Lacustrine basin exploration-case studies and modern analogs: American Association of Petroleum Geologists Memoir 50, p. 243-263.
- Catacosinos, P.A., 1968, Upper Cretaceous-lower Tertiary relations west of Raven Ridge, Uintah County, Utah: American Association of Petroleum Geologists Bulletin, v. 52, no. 2, p. 343-348.
- Clair, J.R., 1952, Ostracod zones as guides to the "fractured reservoir section" of the lower Green River Formation, Uinta Basin, Utah (abstract): American Association of Petroleum Geologists Bulletin, v. 36, no. 5, p. 921.
- Colburn, J.A., Bereskin, S.R., McGinley, D.C., and Schiller, D.M., 1985, Lower Green River Formation in the Pleasant Valley producing area, Duchesne and Uintah Counties, Utah, *in* Picard, M.D., editor, Geology and Energy Resources, Uinta Basin, Utah: Utah Geological Association Publication 12, p. 177-186.

- Cole, R.D., and Picard, M.D., 1975, Primary and secondary sedimentary structures in oil shale and other fine-grained rocks, Green River Formation (Eocene), Utah and Colorado: *Utah Geology*, v. 2, n. 1, p. 49-67.
- 1978, Comparative mineralogy of nearshore and offshore lacustrine lithofacies, Parachute Creek Member of the Green River Formation, Piceance Creek basin, Colorado, and eastern Uinta Basin, Utah: *Geological Society of America Bulletin*, v. 89, p. 1441-1454.
- Crouch, B.W., Hackney, M.L., and Johnson, B.J., 2000, Sequence stratigraphy and reservoir character of lacustrine carbonates in the basal limestone member - lower Green River Formation (Eocene), Duchesne and Antelope Creek fields, Duchesne Co., Utah: *American Association of Petroleum Geologists Annual Convention Program with Abstracts*, p. A34.
- Dane, C.H., 1954, Stratigraphic and facies relationships of upper part of Green River Formation and lower part of Uinta Formation in Duchesne, Uintah, and Wasatch Counties, Utah: *American Association of Petroleum Geologists Bulletin*, no. 38, p. 405-425.
- Dean, W.E., and Fouch, T.D., 1983, lacustrine environments *in* Scholle, P.A., Debout, D.G., and Moore, C.H., editors, *Carbonate depositional environments: American Association of Petroleum Geologists Memoir 33*, p. 98-130.
- Desborough, G.A., 1976, Mineralogy of oil shale in the upper part of the Parachute Creek Member of the Green River Formation in the eastern Uinta Basin, Utah: *U.S. Geological Survey Open-File Report 76-381*, 27 p.
- Desborough, G.A., Pitman, J.K., and Donnell, J.R., 1973, Microprobe analysis of biotites-A method of correlating tuff beds in the Green River Formation, Colorado and Utah: *U.S. Geological Survey Journal of Research*, v. 1, p. 39-44.
- Didericksen, C.J., 1968, Sedimentology of saline facies, Green River-Uinta Formations (Eocene), Uinta Basin, Utah: *University of Nebraska, Lincoln, Nebraska, Master Thesis*.
- Dyni, J.R., 1976, Trioctahedral smectite in the Green River Formation, Duchesne County, Utah: *U.S. Geological Survey Professional Paper 967*, 14 p.
- 1985, Clay mineralogy of the Green River Formation, *in* Hall, R.B., compiler, *Clays and clay minerals, western Colorado and eastern and central Utah: International Clay Conference Field Trip Guidebook*, p. 5-8.
- Dyni, J.R., and Goodwin, J.C., 1972, AAPG field trip roadlog--Vernal, Utah to Rio Blanco, Colorado, *in* *Tertiary and Cretaceous resources of the Southern Rocky Mountains: Mountain Geologist*,

v. 9, no. 2-3, p. 115-134.

Dyni, J.R., and Hawkins, J.E., 1981, Lacustrine turbidites in the Green River Formation, northwestern Colorado: *Geology*, v. 9, no. 5, p. 235-238.

Dyni, J.R., Milton, C., and Cashion, W.R., 1985, the saline facies of the upper part of the Green River Formation near Duchesne, Utah, *in* Picard, M.D., editor, *Geology and energy resources of Utah: Utah Geological Association Guidebook 12*, p. 51-60.

Fahey, J.J., 1962, Saline minerals of the Green River Formation: U.S. Geological Survey Professional Paper 405, 50 p.

Fisher, D.J., Erdmann, C.E., and Reeside, J.B., Jr., 1960, Cretaceous and Tertiary formations of the Book Cliffs, Carbon, Emery, and Grand counties, Utah, and Garfield and Mesa counties, Colorado: U.S. Geological Survey Professional Paper 332, 80 p.

Fouch, T.D., 1975, Lithofacies and related hydrocarbon accumulations in Tertiary strata of the western and central Uinta Basin, Utah, *in* Bolyard, D.W., editor, *Symposium on deep drilling frontiers in the central Rocky Mountains: Rocky Mountain Association of Geologists Special Publication*, p. 163-173.

---1976, Revision of the lower part of the Tertiary system in the central and western Uinta Basin, Utah: U.S. Geological Survey Bulletin 1405-C, 7 p.

---1985, Oil and gas-bearing upper Cretaceous and Paleogene fluvial rocks in central and northeast Utah: *Society of Economic Paleontologists and Mineralogists Short Course Notes 19*, p. 241-271.

Fouch, T.D., Cashion, W.B., Ryder, R.T., and Campbell, J.A., 1976, Field guide to lacustrine and related nonmarine depositional environments in Tertiary rocks, Uinta Basin, Utah, *in* Epis, R.C., and Weimer, R.J., editors, *Studies in Colorado Field Geology: Professional Contributions of Colorado School of Mines no. 8*, p. 358-385.

Fouch, T.D., and Dean, W.E., 1982, Lacustrine and associated clastic depositional environments, *in* Scholle, P.A., and Spearing, Darwin, editors, *Sandstone Depositional Environments: American Association of Petroleum Geologists Memoir 31*, p. 87-114.

Fouch, T.D., Nuccio, V.F., Anders, D.E., Rice, D.D., Pitman, J.K., and Mast, R.F., 1995, The Green River petroleum system, Uinta Basin, Utah, USA, *in* Magoon, L.B., and Dow, W.G., editors, *The petroleum system from source to trap: American Association of Petroleum Geologists*

Memoir 60, p. 399-421.

- Fouch, T.D., and Pitman, J.K., 1991, Tectonic and climate changes expressed as sedimentary cycles and stratigraphic sequences in the paleogene Lake Uinta system, central Rocky Mountains, Utah and Colorado (abstract): American Association of Petroleum Geologists Bulletin, v. 75, n. 3, p. 575.
- 1992, Tectonic and climate changes expressed as sedimentary and geochemical cycles - Paleogene Lake systems, Utah and Colorado - implications for petroleum source and reservoir rocks, *in* Carter, L.J., editor, U.S. Geological Research on Energy Resources, 1992 McKelvey Forum Program and Abstracts (abstract): U.S. Geological Survey Circular 1074, p. 29-30.
- Fouch, T.D., Pitman, J.K., Wesley, J.B., Szantay, Adam, and Ethidge, F.G., 1990, Sedimentology, diagenesis, and reservoir character of Paleogene fluvial and lacustrine rocks, Uinta Basin, Utah - evidence from the Altamont and Red Wash fields, *in* Carter, L.M., editor, Sixth V. E. McKelvey forum on mineral and energy resources, USGS Research on Energy Resources - 1990 - Program and Abstracts: U.S. Geological Survey Circular 1060, p. 31-32.
- Fouch, T.D., Wandrey, C.J., Pitman, J.K., Nuccio, V.F., Schmoker, J.W., Rice, D.D., Johnson, R.C., and Dolton, G.L., 1992, Natural gas accumulations in low-permeability Tertiary, and Cretaceous (Campanian and Maastrichtian) rock, Uinta Basin, Utah: Final Report to the U.S. Department of Energy NTIS no. DE92001132, 81 p.
- Franczyk, K.J., Fouch, T.D., Johnson, R.C., Molenaar, C.M., and Cobban, W.A., 1992, Cretaceous and Tertiary paleogeographic reconstructions for the Uinta-Piceance Basin study area, Colorado and Utah: U.S. Geological Survey Bulletin 1787-Q, 37 p.
- Franczyk, K.J., Pitman, J.K., Cashion, W.B., Dyni, J.R., Fouch, T.D., Johnson, R.C., Chan, M.A., Donnell, J.R., Lawton, T.F., and Remy, R.R., 1989, Evolution of resource-rich foreland and intramontane basins in eastern Utah and western Colorado, *in* Hanshaw, P.M., editor, 28th International Geological Congress Field Trip Guidebook T324: American Geophysical Union, 53 p.
- Garner, Ann, 1995a, Reservoir characterization through facies analysis of the lower Green River Formation for hydrocarbon production enhancement in the Altamont-Bluebell field, Uinta Basin, Utah (abstract): American Association of Petroleum Geologists Bulletin v. 79, no. 2, p. 313.
- 1995b, Reservoir characterization through facies analysis of the lower Green River Formation for

hydrocarbon production enhancement in the Altamont-Bluebell field, Uinta Basin, Utah: Physical and Mathematical Sciences and the Central Utah Section of the American Chemical Society Ninth Annual Spring Research Conference Program with Abstracts.

---1996, Outcrop study of the Lower Green River Formation for the purpose of reservoir characterization and hydrocarbon production enhancement in the Altamont- Bluebell field, Uinta Basin, Utah: Provo, Brigham Young University, M.S. thesis, 192p.

Garner, Ann, and Morris, T.H., 1996, Outcrop study of the Lower Green River Formation for reservoir characterization and hydrocarbon production enhancement in the Altamont- Bluebell field, Uinta Basin, Utah: Utah Geological Survey Miscellaneous Publication 96-2, 61p.

---1994, Reservoir characterization through facies analysis of the lower Green River Formation for hydrocarbon production enhancement in the Altamont-Bluebell field, Uinta Basin, Utah (abstract): Geological Society of America Abstracts with Programs, v. 26, no. 7.

Hackney, M.L., and Crouch, B.W., 2000, The Castle peak Member of the lower Green River Formation, Antelope Creek field, Duchesne Co., Utah - an example of the effects of a migrating shoreline on the expression of an open-lacustrine carbonate facies: American Association of Petroleum Geologists Annual Convention Program with Abstracts, p. A62.

Henderson, Junius, 1924, The origin of the Green River Formation: American Association of Petroleum Geologists Bulletin, v. 8, no. 5, p. 662-668.

High, L.R., Jr., and Picard, M.D., 1971, Nearshore facies relations, Eocene Lake Uinta, Utah (abstract): American Association of Petroleum Geologists Bulletin, v. 55, p. 343.

Houzay, Jean-Pierre, and Pradier, Bernard, 2002, High-resolution sequence stratigraphy and organic geochemistry study of the Raven Ridge lacustrine Eocene series (Uinta basin, Colorado, USA): Implications on organic matter accumulation: American Association of Petroleum Geologists Annual Convention Official Program with abstracts [abs.], vol 11, p. A81.

Jacob, A.F., 1969, Delta facies of the Green River Formation (Eocene) Carbon and Duchesne Counties, Utah: Boulder, University of Colorado, unpublished Ph.D thesis, 182 p.

Jacob, A.F., 1969, Delta facies, Green River Formation, Carbon and Duchesne Counties, Utah (abstract): Geological Society of America Abstracts with Programs, part 5, p. 36-37.

Johnson, R.C., 1985, Early Cenozoic history of the Uinta and Piceance Creek basins, Utah and Colorado, with special reference to the development of Eocene lake Uinta, *in* Flores, R.M., and Kaplan, S.S., editors, Cenozoic paleogeography of the west-central United States: Rocky

- Mountain Section, Society of Economic Paleontologists and Mineralogists, p. 247-276.
- Keighin, C.W., 1982, Characteristics and description of cores for U.S. Geological Survey core hole CRU-1, Parachute Creek Member, Green River Formation, east-central Uinta Basin, Utah: U.S. Geological Survey Open-File Report 82-528, 46 p.
- Keighin, C.W., and Fouch, T.D., 1981, Depositional environments and diagenesis of some nonmarine Upper Cretaceous reservoir rocks, Uinta Basin, Utah *in* Ethridge, F.G., and Flores, R.M., editors, Recent and Ancient Nonmarine Depositional Environments-Models for Exploration: Society of Economic Paleontologists and Mineralogists Special Publication 31, p. 109-125.
- Keighin, C.W., and Sampath, K., 1982, Evaluation of pore geometry of some low-permeability sandstones - Uinta Basin: *Journal of Petroleum Technology*, v. 34, no. 1, p. 65-70.
- Keighley, David, Anderson, Daniel, Flint, Stephen, and Howell, John, 1998, Soft-sediment deformation structures as potential indicators of synsedimentary tectonic control in alluvial-lacustrine sequences, Green River Formation, Nine Mile Canyon, Uinta Basin, east-central Utah: American Association of Petroleum Geologists Annual Convention Abstract CD ROM.
- Keighley, David, Collins, S., Flint, S., and Howell, J., 1999, Reservoir-scale distribution of fluvial sandbodies in lacustrine closed basins, and some sequence-stratigraphic implications: Green River Formation, SW Uinta basin, east-central Utah: American Association of Petroleum Geologists Annual Convention Program with abstracts, p. A71.
- Keighley, David, Flint, Stephen, and Howell, John, 2001, High resolution lacustrine sequence stratigraphy - an example from the Green River Formation, Uinta Basin, east central Utah: American Association of Petroleum Geologists Annual Convention Program with Abstracts, p. A102.
- Keighley, David, Flint, Stephen, Howell, John, Anderson, Daniel, Collins, Stephen, Moscariello, Andrea, and Stone, Greg, 2002, Surface and subsurface correlation of the Green River Formation in central Nine Mile Canyon, SW Uinta Basin, Carbon and Duchesne Counties, east-central Utah: Utah Geological Survey Miscellaneous Publication 02-1, CD-ROM.
- Koesoemadinata, R.P., 1970, Stratigraphy and petroleum occurrence, Green River Formation, Red Wash field, Utah: *Colorado School of Mines Quarterly*, v. 65, no. 1, p. 1-77.
- Kusumanegara, Yohan, 1994, Stratigraphic controls on petrophysical attributes and fluid-flow pathways in an exhumed fluvial reservoir, Sunnyside quarry, Carbon County, Utah: Boulder, Colorado School of Mines, M.S. thesis, 108 p.

- La Rocque, A., 1956, Tertiary mollusks of central Utah *in* Peterson, J.A., editor, *Geology and Economic Deposits of East Central Utah: Intermountain Association of Petroleum Geologists Seventh Annual Field Conference*, p. 140-145.
- 1960, *Molluscan faunas of the Flagstaff Formation of central Utah: Geological Society of America Memoir 78*, 100 p.
- Little, T.M., 1988, *Depositional environments, petrology, and diagenesis of the basal limestone facies, Green River Formation (Eocene), Uinta Basin, Utah: University of Utah M.S. Thesis*, Salt Lake City, Utah, 154 p.
- Little, T.M., and Bereskin, S.R., 1986, Diagenesis, depositional environments, and hydrocarbon potential of the basal limestone, Green River Formation, Uinta Basin, Utah (abstract): *American Association of Petroleum Geologists Bulletin*, v. 70, no. 8, p. 1047.
- Lutz, S.J., Nielson, D.L., and Lomax, J.D., 1994, Lacustrine turbidite deposits in the lower portion of the Green River Formation, Monument Butte Field, Uinta Basin, Utah: *American Association of Petroleum Geologists Annual Meeting Program with Abstracts*, v. 3, p. 203.
- Moncure, G., and Surdam, R.C., 1980, Depositional environment of the Green River Formation in the vicinity of the Douglas Creek Arch, Colorado and Utah: *University of Wyoming Contributions to Geology* no. 19, p. 9-24.
- Morgan, C.D., 1999, Using gamma-ray log correlations to understand depositional patterns of a fluvial-deltaic lacustrine reservoir: *American Association of Petroleum Geologists Annual Convention Program with abstracts*, p. A95-96.
- MacGinitie, H.D., 1969, Eocene Green River flora of northwestern Colorado and northeastern Utah: *University of California Publications in Geological Sciences*, v. 83, 203 p.
- Mauger, R.L., 1977, K-Ar ages of biotites from tuffs in Eocene rocks of the Green River, Washakie, and Uinta Basins, Utah, Wyoming, and Colorado: *Contributions to Geology, University of Wyoming*, v. 15, no. 1, p. 17-41.
- McDonald, R.E., 1972, Eocene and Paleocene rocks of the southern and central basin, *in* Mallory, W.M., editor, *Geologic atlas of the Rocky Mountain region: Rocky Mountain Association of Geologists*, p. 243-256.
- Morgan, C.D., Bereskin, S.R., Chidsey, Jr., T.C., and McClure, K.P., 2000, Nine Mile Canyon - outcrop analogue for oil and gas reservoirs in the Monument Butte area, Uinta Basin, Utah:

- AAPG Bulletin, v. 84, no. 8, p. 1242-1243.
- Moussa, M.T., 1965, Geology of the Soldier Summit Quadrangle, Utah: Ph.D thesis University of Utah, Salt Lake City, 129 p.
- 1968, Fossil tracks from the Green River Formation (Eocene) near Soldier Summit, Utah: Journal of Paleontology, v. 42, no. 6, p. 1433-1438.
- 1969, Green River Formation (Eocene) in the Soldier Summit area, Utah: Geological Society of America Bulletin, v. 80, p. 1737-1748.
- 1976, Green River Formation of Utah and Colorado and playa lake deposition: Geology, v. 4, no. 6, p. 326-382.
- Murrany, E.E., 1963, Subsurface stratigraphy of the Wasatch Formation of the Uinta Basin, Utah: thesis, University of Utah
- Newman, K.R., 1974, Palynomorph zones in early Tertiary formations of the Piceance Creek and Uinta Basins, Colorado and Utah, *in* Guidebook to the energy resources of the Piceance Creek basin, Colorado: Rocky Mountain Association of Geologists 25th Annual Field Conference Guidebook, p. 47-55.
- Oleson, N.E., 1986, Petroleum geology of the Eocene Lower Green River Formation, Duchesne and Uintah Counties, Utah: Waco, Baylor University, M.S. thesis, 173 p.
- Olsen, Torben, 1995, Fluvial and fluvio-lacustrine facies and depositional environments of the Maastrichtian to Paleocene North Horn Formation, Price Canyon, Utah: Rocky Mountain Association of Geologists, The Mountain Geologist, vol 32, n. 2, p. 27-44.
- Osmond, J.C., 1965, Geologic history of site of Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 49, 1957-1973.
- 1985, Reservoir sandstone patterns, Green River Formation, Duck Creek oil field, Uintah County, *in* Picard, M.D., editor, Geology and energy resources, Uinta Basin, Utah: Utah Geological Association Publication 12, p. 187-192.
- 2000, West Willow Creek field: first productive lacustrine stromatolite mound in the Eocene Green River Formation, Uinta Basin, Utah: Rocky Mountain Association of Geologists, The Mountain Geologist, vol. 37, no. 3, p. 157-170.
- Peterson, A.R., 1953, Paleoenvironments of the Colton Formation Colton, Utah: Brigham Young

University Geology Studies v. 23, pt. 1, p. 3-36.

Peterson, P.R., 1975, Lithologic logs and correlation of coreholes, P.R. Spring and Hill Creek oil-impregnated sandstone deposits, Uintah County, Utah: Utah Geological and Mineralogical Survey Report of Investigations 100, 30 p.

Picard, M.D., 1953, Marlstone--a misnomer as used in Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 37, no. 5, p. 1075-1077.

---1955, Subsurface stratigraphy and lithology of Green River Formation in Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 39, no. 1, p. 75-102.

---1957a, Criteria used for distinguishing lacustrine and fluvial sediments in Tertiary beds of Uinta Basin, Utah: Journal of Sedimentary Petrology, v. 27, no. 4, p. 373-377.

---1957b, Green Shale facies, Lower Green River Formation, Utah: American Association of Petroleum Geologists Bulletin, v. 41, no. 10, p. 2323-2336.

---1957c, Subsurface percentage of sandstone and siltstone in lower part of Green River Formation, central and eastern Uinta Basin, Utah (abstract): Geological Society of America Bulletin, v. 68, no. 12, part 2, p. 1869-1870.

---1957e, Green River and Lower Uinta Formations-subsurface stratigraphic changes in central and eastern Uinta Basin, Utah *in* Seal, O.G., editor, Guidebook to the Geology of the Uinta Basin: Intermountain Association of Petroleum Geologists 8th Annual Field Conference Guidebook, p. 116-130.

---1963, Duration of Eocene lake, Uinta Basin, Utah: Geological Society of America Bulletin, v. 74, no. 1, p. 89-90.

---1966, Oriented linear-shrinkage cracks in Green River Formation (Eocene), Raven Ridge area, Uinta Basin, Utah: Journal of Sedimentary Petrology, v. 36, no. 4, p. 1050-1057.

---1967, Paleocurrents and shoreline orientations in Green River Formation (Eocene), Raven Ridge and Red Wash areas, northeastern Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 51, no. 3, p. 383-392.

---1971, Petrographic criteria for recognition of lacustrine and fluvial sandstone, P.R. Spring oil-impregnated sandstone area, southeast Uinta Basin, Utah: Utah Geological and Mineralogical

Survey Special Studies 36, 24 p.

Picard, M.D., and High, L.R., Jr., 1968, Sedimentary cycles in the Green River Formation (Eocene), Uinta Basin, Utah: *Journal of Sedimentary Petrology*, v. 38, no. 2, p. 378-383.

---1970, Sedimentology of oil-impregnated lacustrine and fluvial sandstone, P.R. Spring area, southeast Uinta Basin, Utah: *Utah Geological and Mineralogical Survey Special Studies* 33, 32 p.

---1972a, Paleoenvironmental reconstructions in an area of rapid facies change, Parachute Creek Member of Green River Formation (Eocene), Uinta Basin, Utah: *Geological Society of America Bulletin*, v. 83, no. 9, p. 2689-2708.

---1972b, Criteria for recognizing lacustrine rocks, *in* Rigby, J.K., and Hamblin, W.K., editors, *Recognition of ancient sedimentary environments: Society of Economic Paleontologists and Mineralogists Special Publication* 16, p. 108-145.

---1981, Physical stratigraphy of ancient lacustrine deposits, *in* Ethridge, F.G., and Flores, R.M., editors, *Recent and ancient non-marine depositional environments-models for exploration: Society of Economic Paleontologists and Mineralogists Special Publication* 31, p. 233-259.

Picard, M.D., Thompson, W.D., and Williamson, C.R., 1973, Petrology, geochemistry, and stratigraphy of black shale facies of Green River Formation (Eocene), Uinta Basin, Utah: *Utah Geological and Mineralogical Survey Bulletin* 100, 52 p.

Pitman, J.K., Anders, D.E., Fouch, T.D., and Nichols, D.J., 1986, Hydrocarbon potential of nonmarine Upper Cretaceous and Lower Tertiary rocks, eastern Uinta Basin, Utah, *in* Spencer, C.W., and Mast, R.F., editors, *Geology of tight gas reservoirs: American Association of Petroleum Geologists Studies in Geology* 24, p. 235-252.

Pitman, J.K., and Carroll, A.R., editors, 1998, *Modern and ancient lakes - new problems and perspectives: Utah Geological Association Guidebook* 26, 328 p.

Pitman, J.K., Fouch, T.D., and Goldaber, M.B., 1982, Depositional setting and diagenetic evolution of some Tertiary unconventional reservoir rocks, Uinta Basin, Utah: *American Association of Petroleum Geologists Bulletin*, v. 66, no. 10, p. 1581-1596.

Pitman, J.K., Franczyk, K.J., and Anders, D.E., 1987, Marine and nonmarine gas-bearing rocks in Upper Cretaceous Blackhawk and Neslsen formations, eastern Uinta Basin: sedimentology, diagenesis, and source rock potential: *American Association of Petroleum Geologists Bulletin*, v. 71, p. 76-94.

- Porter, Livingstone, Jr., 1963, Stratigraphy and oil possibilities of the Green River Formation in the Uinta Basin, Utah, *in* Oil and gas possibilities of Utah re-evaluated: Utah Geological and Mineralogical Survey Bulletin 54, p. 193-198.
- Pusca, V.A., and Steel, R.J., 2001, Fluvial/marginal-lacustrine sands in the Green River Formation, NE Utah: American Association of Petroleum Geologists Annual Convention, Program with Abstracts, p A163.
- Ray, E.S., 1985, Diagenesis of sandstones from the Douglas Creek Member of the Green River Formation (Eocene) at Red Wash field, Uintah County, Utah: M.S. thesis, Texas A & M University.
- Remy, R.R., 1989a, Deltaic sedimentation and transgressive/regressive cycles in Green River Formation, southern Uinta Basin, Utah (abstract): American Association of Petroleum Geologists Bulletin, v. 73, no. 3, p. 404.
- 1989b, Lacustrine hummocky cross-stratification in Green River Formation, southern Uinta Basin, Utah (abstract): American Association of Petroleum Geologists Bulletin, v. 73, no. 9, p. 1171.
- 1989c, Chapter 1, Deltaic and lacustrine facies of the Green River Formation, southern Uinta Basin, Utah, International Geological Congress Field Trip Guidebook T119, Cretaceous self sandstones and shelf depositional sequences, western interior basin, Utah, Colorado and New Mexico, p. 1-12.
- 1991, Analysis of lacustrine deltaic sedimentation in the Green River Formation, southern Uinta Basin, Utah: Louisiana State University, unpublished Ph.D thesis, 394 p.
- 1992, Stratigraphy of the Eocene part of the Green River Formation in the south-central part of the Uinta Basin, Utah: U.S. Geological Survey Bulletin 1787 BB, 79 p.
- Remy, R.R., and Ferrell, R.E., 1989, Distribution and origin of analcime in marginal lacustrine mudstones of the Green River Formation, south central Uinta Basin, Utah: Clays and Clay Minerals, v. 37, no. 5, p. 419-432.
- Roberts, D.B., 1953, Relationship between lithology and microfossils in the lower Tertiary of northeastern Utah: MS thesis University of Minnesota, Minneapolis Minnesota, 51 p.
- Roberts, P.K., 1964, Stratigraphy of the Green River Formation, Uinta Basin, Utah: Salt Lake City, University of Utah, Ph.D. thesis,

- Ruble, T.E., and Philp, R.P., 1998, Stratigraphy, depositional environments and organic geochemistry of source-rocks in the Green River petroleum system, Uinta Basin, Utah, *in* Pitman, J.K., and Carroll, A.R., editors, Modern and Ancient lakes - new problems and perspectives: Utah Geological Association Guidebook 26, p. 289-328.
- Ryder, R.T., Fouch, T.D., and Elison, J.H., 1976, Early Tertiary sedimentation in the western Uinta Basin, Utah: Geological Society of America Bulletin, v. 87, p. 496-512.
- Sanborn, A.F., and Goodwin, J.C., 1965, Green River Formation at Raven Ridge, Uintah County, Utah: The Mountain Geologist, v. 2, no. 3, p. 109-114.
- Scott, R.W., Jr., and Pantea, M.P., 1982b, Results of U.S. Geological Survey oil shale core drilling in the eastern Uinta Basin, Utah, Coyote Wash-1 drill hole: U.S. Geological Survey Open-File Report 82-0966, 61 p.
- Smith, J.D., 1984, Measured stratigraphic sections from the Tertiary Colton and basal Green River Formations, Emma park, Carbon, Duchesne, and Utah Counties, Utah: Brigham Young University Geology Department Open-File Report 84-1, 78 p.
- Smith, J.D., 1986, Depositional environments of the Tertiary Colton and Basal Green River Formation in Emma Park, Utah: Brigham Young University Geology Studies v. 33 pt. 1, p. 135-174.
- Smith, M.C., 1990, Bibliography of the geology of the Green River Formation, Colorado, Utah, and Wyoming, to July, 1990: U.S. Geological Survey Open-File Report 90-486, 1 diskette.
- Smith, J.W., and Robb, W.A., 1966, Ankerite in the Green River Formation's Mahogany Zone: Journal of Sedimentary Petrology, v. 36, p. 486-490.
- Stanley, K.O., and Collinson, J.W., 1979, Depositional history of Paleocene - Lower Flagstaff Limestone and coeval rocks, Central Utah: American Association of Petroleum Geologists Bulletin, v. 63, no. 3, p. 311-323.
- Strangway, D.W., and McMahon, B.E., 1973, Paleomagnetism of annually banded Eocene Green River sediments: Journal of Geophysical Research, v. 78, no. 23, p. 5237-5245.
- Surdam, R.C., and Stanley, K.O., 1980, Effects of changes in drainage-basin boundaries on sedimentation in Eocene Lakes Gosiute and Uinta of Wyoming, Utah and Colorado: Geology, v. 8, no. 3, p. 135-139.
- Swain, F.M., 1956, Early Tertiary ostracod zones of Uinta Basin *in* Peterson, J.A., editor, Geology

- and Economic Deposits of East Central Utah: Intermountain Association of Petroleum Geologists Seventh Annual Field Conference, p. 125-139.
- Szantat, A.W., 1990, Paleohydrology and paleomorphology of Early Eocene Green River channel sandstones, Uinta Basin, Utah: Fort Collins, Colorado State University, M.S. Thesis, 109 p.
- Taylor, A.W., and Ritts, B.D., 2002, Detailed facies architecture, sedimentology, and reservoir characterization of lacustrine rocks, Eocene Green River and Colton Formations, Uinta Basin, Utah: American Association of Petroleum Geologists Annual Convention Official Program with abstracts [abs.], vol 11, p. A174.
- Tettenhorst, R., and Moore, G.E., Jr., 1978, Stevensite oolites from the Green River Formation of central Utah: *Journal of Sedimentary Petrology*, v. 48, no. 2, p. 587-594.
- Thompson, D.M., 1988, Determining reservoir quality, distribution, and continuity in complex lacustrine margin sandstones, Red Wash (main area), Uintah County, Utah (abstract): *American Association of Petroleum Geologists Bulletin*, v. 72, p. 253.
- Thompson, W.D., 1971, Stratigraphy of black shale facies of Green River Formation (Eocene), Uinta Basin, Utah: University of Utah, Salt Lake City, Utah, Masters thesis.
- Untermann, G.E., and Untermann, B.R., 1968, Geology of Uintah County: *Utah Geological and Mineralogical Survey Bulletin* 72, 98 p.
- Wanty, R.B., Pitman, J.K., and Fouch, T.D., 1991, Ground-water chemistry and diagenetic reactions in Tertiary sandstones of the Green River and Wasatch Formations, Uinta Basin, Utah: *U.S. Geological Survey Bulletin* 1787-X, 21 p.
- Wegner, MaryBeth, 1995, Facies analysis of well cores from the lower Green River Formation, Bluebell field, Uinta Basin, Utah: implications for identifying highly productive zones: *Physical and Mathematical Sciences and the Central Utah Section of the American Chemical Society Ninth Annual Spring Research Conference Program with Abstracts*.
- 1996, Core analysis and description as an aid to hydrocarbon production enhancement - Lower Green River and Wasatch Formations, Bluebell field, Uinta Basin, Utah: Provo, Brigham Young University, M.S. thesis, 233p.
- Wegner, MaryBeth, Garner, Ann, and Morris, T.H., 1995, Reservoir characterization through facies analysis of core and outcrop of the lower Green River Formation-hydrocarbon enhancement in the Altamont-Bluebell field, Uinta Basin, Utah (abstract): *American Association of Petroleum Geologists Bulletin*, v. 79, no. 6, p. 926-927.

- Wells, N., 1983, Carbonate deposition, physical limnology and environmentally-controlled chert formation in Paleocene-Eocene Lake Flagstaff, central Utah: *Sedimentary Geology* v. 35, p. 263-296.
- Wiggins, W.D., and Harris, P.M., 1994, Lithofacies depositional cycles, and stratigraphy of the lower Green River Formation, southwestern Uinta Basin, Utah, *in* Lomando, A.J., Schreiber, B.C., and Harris, P.M., editors, *Lacustrine Reservoirs and Depositional Systems: SEPM Core Workshop No. 19*, p. 105-141.
- Wiley, D.R., 1967, Petrology of bituminous sandstone in the Green River Formation, southeastern Uinta Basin, Utah: Utah University unpublished Masters thesis, 69 p.
- Williams, M.D., 1950, Tertiary stratigraphy of the Uinta Basin: *Utah Geological Society Guidebook to the Geology of Utah*, no. 5, p. 102-114.
- Williamson, C.R., 1972, Carbonate petrology of Green River Formation (Eocene), Utah and Colorado: Utah University Master Thesis, 77 p.
- Williamson, C.R., and Picard, M.D., 1974, Petrology of carbonate rocks of the Green River Formation (Eocene): *Journal of Sedimentary Petrology*, v. 44, p. 738-759.
- Winston, Don, 1998, Ephemeral mud beaches on oolitic sand flats, southeast margin of the Great Salt Lake, Utah: American Association of Petroleum Geologists Annual Convention Abstract CD ROM.
- Yen, Fu-Su, 1974, Correlation of tuff layers in the Green River Formation, Utah, using biotite compositions: Utah University Masters thesis,
- Yen, Fu-Su, and Goodwin, J.H., 1976, Correlation of tuff layers in the Green River Formation, Utah, using biotite compositions: *Journal of Sedimentary Petrology*, v. 46, no. 2, p. 345-354.
- Zawiskie, J., Chapman, D., and Alley, R., 1982, Depositional history of the Paleocene-Eocene Colton Formation, north central Utah, *in* Nielson, D.L., editor, *Overthrust belt of Utah*: Utah Geological Association Publication 10, p. 273-284.

Analogous Areas

- Allen, P.A., and Collinson, J.D., 1986, Lakes, *in* Reading, H.G., editor, Sedimentary environments and facies, 2nd edition: Oxford, United Kingdom, Blackwell Scientific Publications, p. 63-94.
- Anadon, P.L., Cabrera, and Julia, R., 1988, Anoxic-oxic cyclical sedimentation in the Miocene Rubielos De Mora Basin, Spain, *in* Fleet, A.J., Kelts, K., and Talbot, M.R., editors, Lacustrine petroleum source rocks: Geological Society Special Publication 40, p. 353-367.
- Blair, T.C., and Bilodeau, W.L., 1998, Development of tectonic cyclothems in rift, pull-apart, and foreland basins-sedimentary response to episodic tectonism: *Geology* v. 16, p. 517-520.
- Bohacs, K.M., Neal, J.E., Carroll, A.R., and Reynolds, D.J., 2000, Lakes are not small oceans! - sequence stratigraphy in lacustrine basins: American Association of Petroleum Geologists Annual Conventional program with abstracts p. A14.
- Bohacs, K.M., Carroll, A.R., Neal, J.K., and Mankiewicz, P.J., 2000, Lake-basin type, source potential, and hydrocarbon character: an integrated-sequence-stratigraphic-geochemical framework, *in* Gierlowski-Kordesch, E.H., and Kelts, K.R., editors, Lake basins through space and time: American Association of Petroleum Geologists Studies in Geology no. 46, p. 3-34.
- Bohacs, K.M., and Miskell-Gerhardt, Kimberly, 1998, Well-log expression of lake strata-controls of lake-basin type and provenance, contrasts with marine strata: American Association of Petroleum Geologists Annual Convention Abstract CD ROM.
- Boyer, B.W., 1982, Green River laminites - does the playa-lake model really invalidate the stratified-lake model?: *Geology*, v. 10, p. 321-324.
- Bradley, W.H., 1964, Geology of the Green River Formation and associated Eocene rocks in southwestern Wyoming and adjacent parts of Colorado and Utah: U.S. Geological Survey Professional Paper 496-A, 86 p.
- Bradley, W.H., and Eugster, H.P., 1969, Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming: U.S. Geological Survey Professional Paper 496-B, 71 p.

- Buchheim, H.P., and Eugster, H.P., 1998, Eocene fossil lake - the Green River Formation of Fossil Basin, southwestern Wyoming, *in* Pitman, J.K., and Carroll, A.R., editors, Modern and ancient lakes - new problems and perspectives: Utah Geological Association Guidebook 26, p. 191-207.
- Carroll, A.R., and Bohacs, K.M., 2001, Lake-type controls on petroleum source rock potential in non-marine basins: American Association of Petroleum Geologists Bulletin v 85, no 6, p. 1033-1053.
- Carroll, A.R., and Bohacs, K.M., 1999, Stratigraphic classification of ancient lakes: balancing tectonic and climatic controls: *Geology*, v. 27, no. 2, p. 99-102.
- Changlin, Wu, and Nummedal, Dag, 1995, Cyclostratigraphy of the Tertiary Lacustrine Sediments in the Nampu Oil Field of the Bohai Basin, China (abstract): American Association of Petroleum Geologists 1995 Annual Convention Program with Abstracts, p. 106A.
- Cohen, A., 1989, Facies relationships and sedimentation in large rift lakes and implications for hydrocarbon exploration-Example from lakes Turkana and Tanganyika: *Paleogeography, Palaeoclimatology, Paleoecology*, v. 70, p.65-80.
- Cohen, A., Ferguson, D.S., P.M., Hubler, S.L., and Sims, K.W., 1986, The distribution of coarse-grained sediments in modern Lake Turkana, Kenya-implications for clastic sedimentation models of rift lakes, *in* Frostick, L.E., Renaut, R.W., Reid, I., and Tiercelin, J.J., editors, Sedimentation in the African rifts: Geological Society Special Publication 25, p. 127-139.
- Cohen, A., and Thouin, C., 1987, Nearshore carbonate deposits in Lake Tanganyika: *Geology*, v. 15, p. 414-418.
- Cole, R.D., 1998, Possible Milankovitch cycles in the lower Parachute Creek Member of Green River Formation (Eocene), north-central Piceance Creek Basin, Colorado - an analysis, *in* Pitman, J.K., and Carroll, A.R., editors, Modern and ancient lakes - new problems and perspectives: Utah Geological Association Guidebook 26, p. 233-259.
- Cowan, C.A., and James, N.P., 1992, Diastasis cracks-mechanically generated synaeresis-like cracks in Upper Cambrian shallow water oolite and ribbon carbonates: *Sedimentology*, v. 39, p. 1,101-1,118.
- Desborough, G.A., 1978, A biogenic-chemical stratified lake model for the origin of oil shale of the Green River Formation - an alternative to the playa-lake model: *Geological Society of America Bulletin*, v. 89, p. 961-971.

- Dueholm, K.S., and Olsen, T., 1993, Reservoir analog studies using multimodel photogrammetry-A new tool for the petroleum industry: *American Association of Petroleum Geologists Bulletin*, v. 77, no. 12, p. 2023-2030.
- Dunagan, S.P., 2000, lacustrine carbonates of the Morrison Formation (Upper Jurassic, western interior), east-central Colorado, U.S.A., *in* Gierlowski-Kordesch, E.H., and Kelts, K.R., editors, *Lake basins through space and time: American Association of Petroleum Geologists Studies in Geology* no. 46, p. 181-188.
- Eardley, A.J., 1938, Sediments of the Great Salt Lake: *American Association of Petroleum Geologists Bulletin*, v. 22, no. 10, p. 1305-1410.
- Eardley, A.J., 1966, Sediments of Great Salt Lake: *Utah Geological Society Guidebook* 20, p. 105-120.
- Eugster, H.P., and Hardie, L.A., 1975, Sedimentation in an ancient playa-lake complex-The Wilkins Peak Member of the Green River Formation of Wyoming: *Geological Society of America Bulletin*, v. 68, p. 319-334.
- Eugster, H.P., and Surdam, R.C., 1973, Depositional environment of the Green River Formation of Wyoming-A preliminary report: *Geological Society of America Bulletin*, v. 84, p. 1115-1120.
- 1973, Depositional environment of the Green River Formation of Wyoming; reply: *Geological Society of America Bulletin*, v. 85, no. 7, p. 1192.
- Eyles, N., and Clark, B.M, 1986, Significance of hummocky and swaley cross-stratification in Late Pleistocene lacustrine sediments of the Ontario Basin, Canada: *Geology* v. 14, p. 679-682.
- Galloway, W.E., 1989, Genetic stratigraphic sequences in basin analysis I - Architecture and genesis of flooding-surface bounded depositional units: *American Association of Petroleum Geologists Bulletin* v. 73, p. 125-142.
- Glaser, K.S., and Miskell-Gerhardt, K.J., 1995, Core, well log, and seismic integrated stratigraphic study of humid and arid climate lacustrine oil shales-Green River Formation, Washakie Basin, Wyoming: *American Association of Petroleum Geologists Annual Convention Program with Abstracts*, p. 33A-34A.
- Goodwin, J.H., 1971, Geochemical history of Lake Gosiute: *Wyoming University Contributions to Geology*, v. 10, no. 1, p. 9-13.

- Gwynn, J.W., and Murphy, P.J., 1980, Recent sediments of the Great Salt Lake basin *in* Gwynn, J.W., editor, Great Salt Lake - a scientific, historical and economic overview: Utah Geological and Mineral Survey Bulletin 116, p. 84-96.
- Hyne, N.J., Cooper, W.A., and Dickey, P.A., 1979, Stratigraphy of intermontane, lacustrine delta, Catatumbo River, lake Maracaibo, Venezuela: American Association of Petroleum Geologists Bulletin, v. 63, no. 11, p. 2042-2057.
- Johnson, R.C., 1981, Stratigraphic evidence for a deep Eocene Lake Uinta, Piceance Creek basin, Colorado: Geology, v. 9, no. 2, p. 55-62.
- 1984, New names for units in the lower part of the Green River Formation, Piceance Creek Basin, Colorado: U.S. Geological Survey Bulletin 1529-I, 20 p.
- Johnson, T.C., 1984, Sedimentation in large lakes: Annual Review of Earth and Planetary Sciences, v. 12, p. 179-204.
- Katz, B.J. 1990, Controls on distribution of lacustrine source rocks through time and space, *in* Katz, B.J., editor, Lacustrine basin exploration -case studies and modern analogs: American Association of Petroleum Geologists Memoir 50, p. 61-76.
- Kazanci, N., 1990, Fan delta sequences in the Pleistocene and Holocene Burdur basin, Turkey - the role of basin margin development, *in* Colella, A., and Prior, D.B., editors, Coarse-grained deltas: International Association of Sedimentologists Special Publication 10, p. 185-198.
- Larsen, Daniel, 2000, Upper Eocene and Oligocene lacustrine deposits of the southwestern United States, with emphasis on the Creede and Florissant Formations, *in* Gierlowski-Kordesch, E.H., and Kelts, K.R., editors, Lake basins through space and time: American Association of Petroleum Geologists Studies in Geology no. 46, p. 425-438.
- Lemons, D.R., and Chan, M.A., 1999, Facies architecture and sequence stratigraphy of fine-grained lacustrine deltas along the eastern margin of Late Pleistocene lake Bonneville, northern Utah and southern Idaho: American Association of Petroleum Geologists Bulletin v. 83, no. 4, p. 635-665.
- Lemons, D.R., Milligan, M.R., and Chan, M.A., 1996, Paleoclimatic implications of late Pleistocene sediment yield rates for the Bonneville basin, northern Utah: Palaeogeography, Palaeoclimatology, Paleoecology, v. 123, p. 147-159.

- Liro, L.M., 1990, Seismic facies analysis of fluvial-deltaic lacustrine systems - upper Fort Union Formation (Paleocene), Wind River Basin, Wyoming, *in* Katz, B.J., editor, Lacustrine basin exploration -case studies and modern analogs: American Association of Petroleum Geologists Memoir 50, p. 225-242.
- Lomando, A.J., 1996, Exploration for lacustrine carbonate reservoirs-insights from West Africa (abstract): American Association of Petroleum Geologists Bulletin v. 80, no. 8, p. 1,308-1,309.
- Lucas, S.G., and Anderson, O.J., 2000, The Todilto Salina Basin, Middle Jurassic of the U.S. southwest, *in* Gierlowski-Kordesch, E.H., and Kelts, K.R., editors, Lake basins through space and time: American Association of Petroleum Geologists Studies in Geology no. 46, p. 153-158.
- Lundell, L.L., and Surdam, R.C., 1975, Playa-lake deposition Green River Formation, Piceance Creek Basin, Colorado: *Geology*, v. 3, p. 493-497.
- Martel, A.T., and Gibling, M.R., 1991, Wave-dominated lacustrine facies and tectonically controlled cyclicity in the Lower Carboniferous Horton Bluff Formation, Nova Scotia, Canada: Special Publication of the International Association of Sedimentologists, v. 13, p. 223-243.
- Mathews, M.D., and Perimutter, M.A., 1994, Global cyclostratigraphy - an application to the Eocene Green River Basin: Special Publication of the International Association of Sedimentologists, v. 19, p. 459-481.
- McPherson, J.G., Shanmugam, G., and Moiola, R.J., 1987, Fan-deltas and braid deltas-varieties of coarse-grained deltas: *Geological Society of America Bulletin*, v. 99, p. 331-340.
- Milligan, M.R., 1995, Late Pleistocene coarse-grained Gilbert deltas at the eastern margin of Lake Bonneville, northern Utah: Salt Lake City, University of Utah M.S. thesis, 161 p.
- Milligan, M.R., and Lemons, D.R., 1998, A sequence stratigraphic overview of sandy and gravelly lacustrine deltas deposited along the eastern margin of Late Pleistocene Lake Bonneville, northern Utah and southern Idaho, *in* Pitman, J.K., and Carroll, A.R., editors, Modern and ancient lakes - new problems and perspectives: Utah Geological Association Guidebook 26, p. 105-129.

- Nio, S.D., Yang, C.S., Baumfalk, Y.A, Hurk, J.J. Van Den, Jonkman, H., Scheele, E., Veen, H. Van Der, and Weerd, A. Van De, 1993, Computer analysis of depositional sequences using wireline logs - a new method for determining rates of geologic processes, *in* Armentrout, J.M., Bloch, Roger, Olson, H.C., and Perkins, B.E., editors, Rates of geologic processes - tectonics, sedimentation, eustasy and climate - implications for hydrocarbon exploration: Gulf Coast Section Society of Economic Paleontologists and Mineralogists Foundation Fourteenth Annual Research Conference, p. 141-154.
- Owen, R.B., 2000, Late Cretaceous-Early Tertiary continental and lacustrine basins of Hong Kong and southeast China *in* Gierlowski-Kordesch, E.H., and Kelts, K.R., editors, Lake basins through space and time: American Association of Petroleum Geologists Studies in Geology no. 46, p. 329-334.
- Platt, N.H., and Wright, V.P., 1991, lacustrine carbonates-facies distributions and hydrocarbon aspects: Special Publication of the International Association of Sedimentologists, v. 13, p. 57-74.
- Sanberg, P.A., 1975, New interpretation of Great Salt Lake ooids and of ancient non-skeletal carbonate mineralogy: *Sedimentology* v. 22, p. 497-538.
- Scholz, C.A., and Rosendahl, B.R., 1988, Low lake stands in lakes Malawi and Tanganyika, east Africa, delineated with multifold seismic data: *Science*, v. 240, p. 1645-1648.
- Scholz, C.A., and Rosendahl, B.R., 1990, Coarse-clastic facies and stratigraphic sequence models from lakes Malawi and Tanganyika, East Africa, *in* Katz, B.J., editor, Lacustrine basin exploration -case studies and modern analogs: American Association of Petroleum Geologists Memoir 50, p. 151-168.
- Scholz, C.A., Rosendahl, B.R., and Scott, D.L., 1990, Development of coarse-grained facies in lacustrine rift basins-examples from east Africa: *Geology*, v. 18, p. 140-144.
- Scholz, C.A., Johnson, T.C., and McGill, J.W., 1993, Deltaic sedimentation in a rift valley lake-new seismic reflection data from Lake Malawi (Nyasa), east Africa: *Geology*, v. 21, p. 395-398.
- Sears, J.D., and Bradley, W.H., 1924, Relations of the Wasatch and Green River Formations in northwestern Colorado and southern Wyoming: U.S. Geological Survey Professional Paper 132C-F, p. 93-107.
- Shanley, K.W., and McCabe, P.J., 1994, Perspectives on the sequence stratigraphy of continental strata: American Association of Petroleum Geologists Bulletin, v. 78, no. 4, p. 544-568.

- Smith, M.A., 1990, Lacustrine oil shale in the geologic record, *in* Katz, B.J., editor, Lacustrine basin exploration -case studies and modern analogs: American Association of Petroleum Geologists Memoir 50, p. 43-60.
- Smoot, J.P., 1978, Origin of the carbonate sediments in the Wilkins Peak Member of the Green River Formation (Eocene), Wyoming, U.S.A., *in* Matter, A., and Tucker, M.F., editors, Modern and ancient lake sediments: International Association of Sedimentologists Special Publication 2, p. 109-127.
- Stanley, K.O., and Surdam, P.C., 1978, Sedimentation on the front of Eocene Gilbert-type deltas, Washakie Basin, Wyoming: *Journal of Sedimentary Petrology*, v. 48, p. 557-573.
- Strecker, Uwe, Steidtmann, J.R., and Smithson, S.B., 1999, A conceptual tectonostratigraphic model for seismic facies migrations in a fluvio-lacustrine extensional basin: *American Association of Petroleum Geologists Bulletin* v. 83, no. 1, p. 43-61.
- Street-Perrot, F.A., and Harrison, S.P., 1985, Lake levels and climate reconstruction, *in* Hecht, A.D., editor, Paleoclimate analysis and modeling: New York, John Wiley, p. 291-340.
- Surdam, R.C., and Stanley, K.O., 1979, Lacustrine sedimentation during the culminating phase of Eocene lake Gosiute, Wyoming (Green River Formation): *Geological Society of America Bulletin*, Part 1, v. 90, p. 93-110.
- Surdam, R.C., and Stanley, K.O., 1980, Effects of changes in drainage-basin boundaries on sedimentation in Eocene Lakes Gosiute and Uinta of Wyoming, Utah and Colorado: *Geology*, v. 8, p. 135-139.
- Surdam, R.C., and Wolfbauer, C.A., 1973, The Green River Formation, Wyoming; a playa-lake complex: *Geological Society of America Bulletin*, v. 86, no. 3, p. 335-345.
- Tanner, W.F., 1971, Numerical estimates of ancient waves, water depth and fetch: *Sedimentology*, v. 16, p. 71-88.
- Wolfbauer, C.A., and Surdam, R.C., 1974, Origin of nonmarine dolomite in Eocene Lake Gosiute, Green River Basin, Wyoming: *Geological Society of America Bulletin*, v. 85, p. 1733-1740.
- Xue, L., and Galloway, W.E., 1993, Genetic sequence stratigraphic framework, depositional style, and hydrocarbon occurrence of the Cretaceous QYN Formation in the Songliao lacustrine basin, northeastern China: *American Association of Petroleum Geologists Bulletin*, v. 77, p. 1792-1808.

Yang, Hong, 2000, The Shanwang Basin (Miocene) in Shandong Province, eastern China, *in* Gierlowski-Kordesch, E.H., and Kelts, K.R., editors, Lake basins through space and time: American Association of Petroleum Geologists Studies in Geology no. 46, p. 473-480.

STRUCTURE

- Bodell, J.M., and Chapman, D.S., 1982, Heat flow in the north-central Colorado Plateau: *Journal of Geophysical Research*, v. 87, p. 2869-2884.
- Bruhn, R.L., Picard, M.D., and Isby, J.S., 1986, Tectonics and sedimentology of the Uinta arch, western Uinta Mountains, and Uinta Basin, *in* Peterson, J.A., editor, *Paleotectonics and sedimentation in Rocky Mountain region, United States: American Association of Petroleum Geologists Memoir 32*, p. 333-352.
- Campbell, J.A., 1975, Structural geology and petroleum potential of the south flank of the Uinta Mountain uplift, northeastern Utah: *Utah Geology*, v. 2, p. 129-132.
- CER Corporation, 1992a, Analysis of natural and induced fractures in the Barnett Shale: Gas Research Institute Topical Report, February, GRI contract 5091-212-2242, 17 p.
- 1992b, Geological, petrophysical and engineering analysis of the Barnett Shale: Gas Research Institute Topical Report, November, GRI contract 5091-212-2242, 61 p.
- Chapman, D.S., Keho, T.H., Bauer, M.S., and Picard, M.D., 1984, Heat flow in the Uinta Basin determined from bottom hole temperature (BHT) data: *Geophysics*, v. 49, p. 453-466.
- Groeger, Alicia, and Bruhn, Ronald, 2001, Structure and geomorphology of the Duchesne graben, Uinta basin, Utah, and its enhancement of a hydrocarbon reservoir: *American Association of Petroleum Geologists Bulletin* v. 85, no. 9, p. 1661-1678.
- Hansen, W.R., 1984, Post-Laramide tectonic history of the eastern Uinta Mountains, Utah, Colorado, and Wyoming: *The Mountain Geologist*, v. 21, no. 1, p. 5-29.
- Harthill, Norman, and Bates, C.R., 1996, Fracture definition in the Rocky Mountain Foreland: *Rocky Mountain Association of Geologists The Outcrop* vol. 45, no. 2, p. 4 and 9.
- 1996, Open fracture prediction and detection at the Bluebell - Altamont field, Uinta Basin, Utah: *American Association of Petroleum Geologists Program with Abstracts*, p. A62.
- Harthill, Norman, Bates, C.R., Lynn, H.B., and Simon, K.M., 1997, Fracture definition by surface seismic at the Bluebell-Altamont field, Uinta Basin, Utah, *in* Hoak, T.E., Klawitter, A.L., and Blomquist, P.K., editors *Fractured reservoirs - characterization and modeling: Rocky Mountain Association of Geologists Guidebook* p. 155-163.

- Havertz, M.J., and McCoy, R.M., 1985, Combining remote sensing and geochemistry to estimate oil production in the Uinta Basin: Association of Petroleum Geochemical Explorationists Bulletin, v. 1, p. 85-101.
- Horn, M.K., 1998, Combining subsurface natural fracture predictions with oil generation estimates-an example from Uinta Basin, Utah: American Association of Petroleum Geologists Annual Convention Abstract CD ROM.
- Lorenz, J.C., 1994, Subsurface fracture spacing - comparison of inferences from slant/horizontal and vertical cores: Society of Petroleum Engineers Formation Evaluation, v. 9, no. 1, p. 66-72.
- Lucas, P.T., and Drexler, J.M., 1975, Altamont-Bluebell - A major naturally fractured and overpressured stratigraphic trap, Uinta Basin, Utah, *in* , Bolyard, D.W., editor, Symposium on deep drilling frontiers in the central Rocky Mountains: Rocky Mountain Association of Geologists Special Publication, p. 265-273.
- 1976, Altamont-Bluebell - A major naturally fractured stratigraphic trap, *in* Braunstein, J., editor, North American oil and gas fields: American Association of Petroleum Geologists Memoir 24, p. 121-135.
- Lynn, H.B., Bates, Coleman, Layman, Mike, and Jones, Mike, 1995, Natural fracture characterization using P-wave reflection seismic data, VSP, borehole imaging logs, and in-situ stress field determination: Society of Petroleum Engineers Proceedings of the Joint Rocky Mountain Meeting/Low-Permeability Reservoirs Symposium, SPE 29595, p. 493-506.
- McCoy, R.M., Havertz, M.J., Clem, Keith, Brandt, Cynthia, and Young, Stephen, 1986, Associations among lineaments, subsurface fractures, hydrocarbon microseepage, and production in the Uinta Basin, Utah: Remote sensing for exploration geology, the Fifth Thematic Conference proceedings, p. 117-125.
- Monson, B., and Parnell, J., 1992, The origin of Gilsonite vein deposits in the Uinta Basin, Utah, *in* Fouch, T.D., Nuccio, V.F., and Chidsey, T.C., editors, Hydrocarbon and mineral resources of the Uinta Basin, Utah: Utah Geological Association Guidebook 20, p. 257-270.
- Narr, W.N., 1977, The origin of fractures in Tertiary strata of the Altamont field, Uinta Basin, Utah: M.S. thesis University of Toronto, 132 p.
- Narr, Wayne, and Currie, J.B., 1982, Origin of fracture porosity - example from Altamont field, Utah: American Association of Petroleum Geologists Bulletin, v. 66, no. 9, p. 1231-1247.

- 1964, Tectonic history of the Uinta basin, *in* Sabatka, E.F., editor, Guidebook of the geology and mineral resources of the Uinta Basin, Utah's hydrocarbon Storehouse: Intermountain Association of Petroleum Geologists 13th Annual Field Conference Guidebook, p. 47-58.
- Pitman, J.K., and Sprunt, E.S., 1986, Origin and distribution of fractures in lower Tertiary and Upper Cretaceous rocks, Piceance Basin, Colorado, and their relation to the occurrence of hydrocarbons, *in* Spencer, C.W., and Mast, R.F., editors, Geology of tight gas reservoirs: American Association of Petroleum Geologists Studies in Geology 24, p. 221-233.
- Smith, R.S., 1980, A regional study of joints in the northern Piceance Basin, northwest Colorado: Colorado School of Mines, Golden. M.S. thesis, 126 p.
- Smith, R.S., and Whitney, J.W., 1979, Map of joint sets and airphoto lineaments of the Piceance Creek basin, northwestern Colorado: U.S. Geological Survey Miscellaneous Field Studies Map MF-1128.
- Spencer, C.W., 1987, Hydrocarbon generation as a mechanism for overpressuring in Rocky Mountain region: American Association of Petroleum Geologists Bulletin, v. 71, no. 4, p. 368-387.
- Stearns, D.W., and Friedman, Melvin, 1972, Reservoirs in fractured rocks, *in* King, R.E., editor, Stratigraphic oil and gas fields - classification, exploration methods, and case histories: American Association of Petroleum Geologists Memoir 16, p. 82-106.
- Tweto, Ogden, 1975, Laramide (Late Cretaceous-early Tertiary) orogeny in the southern Rocky Mountains, *in* Curtis, B.F., editor, Cenozoic history of the southern Rocky Mountains: Geologic Society of America Memoir 144, p. 1-44.
- Verbeek, E.R., and Grout, M.A., 1993, Structural evolution of gilsonite dikes, eastern Uinta Basin, Utah, *in* Fouch, T.D., Nuccio, V.F., and Chidsey, T.C., editors, Hydrocarbon and mineral resources of the Uinta Basin, Utah: Utah Geological Association Guidebook 20, p. 237-255.
- 1984, Fracture studies in Cretaceous and Paleocene strata in and around the Piceance basin, Colorado - preliminary results and their bearing on a fracture-controlled natural-gas reservoir at the MWX site: U.S. Geological Survey Open-File Report 84-156, 30 p.
- Willet, S.D., 1988, Spatial variation of temperature and thermal history of the Uinta Basin: Salt Lake City, University of Utah, Ph.D thesis, 121 p.
- Willet, S.D., and Chapman, D.S, 1987, Analysis of temperatures and thermal processes in the Uinta Basin, *in* Beaumont, C., and Tankard, A.J., editors, Sedimentary basins and basin-forming mechanisms: Canadian Society of Petroleum Geologists Memoir 12, p. 447-461.

Wesley, J.B., 1990, Finite difference modeling of present day overpressures maintained by hydrocarbon generation, and regional fluid flow in the Green River Formation, Uinta Basin, Utah: Colorado School of Mines, Golden, M.S. thesis T-3826, 139 p.

CORE AND GEOPHYSICAL LOGS

- Bardsley, S.R., 1962, Evaluating oil shale by log analysis: Utah University M.S. thesis.
- Bardsley, S.R., and Algermissen, S.T., 1963, Evaluating oil shale by log analysis: *Journal of Petroleum Technology*, v. 15, no. 1, p. 81-84. [Also *Colorado School Mines Quarterly*, v. 58, no. 4, p. 178-184, 1963, and *American Institute of Mining, Metallurgical and Petroleum Engineers Transactions* 228, p. 81-84, 1963.]
- Bereskin, S.R., and Morgan, C.D., 2001, Fluvial-lacustrine oil reservoirs in the middle member of the Eocene Green River Formation, south-central, Uinta Basin, Utah: *American Association of Petroleum Geologists Annual Conventional program with abstracts* p.
- Bohacs, K.M., and Miskell-Gerhardt, Kimberly, 1998, Well-log expression of lake strata-controls of lake-basin type and provenance, contrasts with marine strata: *American Association of Petroleum Geologists Annual Convention Abstract CD ROM*.
- Brigaud, Frederic, Chapman, D.S., and Douaran, S.L., 1990, Estimating thermal conductivity in sedimentary basins using lithologic data and geophysical well logs: *American Association of Petroleum Geologists Bulletin*, v. 74, no. 9, p. 1459-1477.
- Buller, Dan, 1992, Locate thin, low-resistivity channel sand pay in old wells: *World Oil*, May 1992, p. 65-70.
- Craft, Milton, and Keelan, Dare, 1985, Coring, part 7 - analytical aspects of sidewall coring: *World Oil*, Sept., p. 77-90.
- Eubanks, Darrell, Seiler, Doug, and Russell, Bill, 1995, Geological applications using an electrical micro imaging tool: *Oil and Gas Journal* vol. 93, no. 47, p. 84-89.
- Grigsby, J.D., Sippel, M.A., and Vidal, J.M., 1993, Using log-derived permeability data to better characterize reservoir architecture and permeability distribution in a fluvially dominated deltaic gas reservoir (abstract): *Geologic Society of America Abstracts with Programs*, p. A-300.
- Gwinner, D.M., Laude, L.S., Olmos, J.L., Quirein, J.A., and Reimer, L.J., 1992, Improved porosity/lithology estimates can locate productive zones: *World Oil*, May 1992, p. 57-63.
- Haley, R.A., 1995, Pulsed neutron capture log interpretation in laminated formations-a dual-exponential-decay model: *Society of Petroleum Engineers Journal of Formation Evaluation*, v. 10, no. 1, p. 20-25.

- Lomax, John, and Howard, Allen, 1994, New logging tool identifies permeability in shaley sands: Oil and Gas Journal, v. 92, no. 51, p. 104-108.
- Ma, T.A., and Bigelow, E.L., 1993, Borehole imaging tool detects well bore fractures: Oil and Gas Journal, v. 91, no. 2, p. 33-36.
- Meyer, B.L., and Nederlof, M.H., 1984, Identification of source rocks on wireline logs by density/resistivity and sonic transit time/resistivity crossplots: American Association of Petroleum Geologists Bulletin, v. 68, p. 121-129.
- Mathews, W.R., and Kelly, John, 1967, How to predict formation pressure and fracture gradient...from electric and sonic logs: Oil and Gas Journal, Feb. 20, p. 92-106.
- Morgan, C.D., 1999, Using gamma-ray log correlations to understand depositional patterns of a fluvial-deltaic lacustrine reservoir: American Association of Petroleum Geologists Annual Convention Program with abstracts, p. A95-96.
- Morgan, C.D., Sprinkel, D.S., and Waite, K.A., 1995, Bluebell field drill-hole database, Duchesne and Uintah Counties, Utah: Utah Geological Survey Circular 90 DF, 23 p. 1 diskette.
- Murphy, D.P., 1995, NMR logging and core analysis-simplified: World Oil, v. 216, no. 4, p. 65-70.
- North, C.P., and Boering, Martijn, 1999, Spectral gamma-ray logging for facies discrimination in mixed fluvial-eolian successions - a cautionary tale: American Association of Petroleum Geologists Bulletin v. 83, no. 1, p. 155-169.
- Peterson, P.R., 1975, Lithologic logs and correlation of coreholes, P.R. Spring and Hill Creek oil-impregnated sandstone deposits, Uintah County, Utah: Utah Geological and Mineralogical Survey Report of Investigations 100, 30 p.
- Prensky, S.E., 1994, A survey of recent developments and emerging technology in well logging and rock characterization: The Log Analyst, March-April 1994, p. 15-45.
- Scott, R.W., Jr., and Pantea, M.P., 1982, Results of U.S. Geological Survey oil shale core drilling in the eastern Uinta Basin, Utah, Coyote Wash-1 drill hole: U.S. Geological Survey Open-File Report 82-0966, 61 p.
- Shade, M.E., and Hansen, D.K., 1992, Drilled sidewall cores aid in interpretation of the Tertiary Wasatch Formation, Natural Buttes field, Utah, *in* Fouch, T.D., Nuccio, V.F., and Chidsey, T.C., Jr., editors, Hydrocarbon and mineral resources of the Uinta Basin, Utah and Colorado:

Utah Geological Association Publication 20, p. 193-217.

Smith, J.W., Thomas, H.E., and Trudell, L.G., 1968, Geologic factors affecting density logs in oil shale, *in* Society of Professional Well Log Analysts Logging Symposium, 9th Annual, New Orleans, Louisiana, 1968, Transaction: Houston, Texas Society of Professional Well Log Analysts, p. p1-p17.

Toney, J.B., and Speights, J.L., 1985, Coring, part 6 - sidewall operations: *World Oil*, Aug. 1, p. 29-36.

Wegner, MaryBeth, 1995, Facies analysis of well cores from the lower Green River Formation, Bluebell field, Uinta Basin, Utah: implications for identifying highly productive zones: Physical and Mathematical Sciences and the Central Utah Section of the American Chemical Society Ninth Annual Spring Research Conference Program with Abstracts.

---1996, Core analysis and description as an aid to hydrocarbon production enhancement - Lower Green River and Wasatch Formations, Bluebell field, Uinta Basin, Utah: Provo, Brigham Young University, M.S. thesis, 233p.

Wegner, MaryBeth, Garner, Ann, and Morris, T.H., 1995, Reservoir characterization through facies analysis of core and outcrop of the lower Green River Formation-hydrocarbon enhancement in the Altamont-Bluebell field, Uinta Basin, Utah (abstract): *American Association of Petroleum Geologists Bulletin*, v. 79, no. 6, p. 926-927.

OIL AND GAS (GENERAL)

- Baker, D.A., and Lucas, P.T., 1972, Major discovery in Utah - strat trap production may cover over 280 square miles: *World Oil*, v. 174, no. 5, p. 66-68.
- Barb, C.F., 1945, The origin of the hydrocarbons in the Uinta Basin: *Mines Magazine*, v. 35, no. 10, p. 555-557.
- Barb, C.F., and Ball, J.O., 1944, Hydrocarbons of the Uinta Basin of Utah and Colorado: *Colorado School Mines Quarterly*, v. 39, no. 1, 115 p.
- Bleakley, W.B., 1973, How Shell solves Uinta Basin problems: *Oil and Gas Journal*, v. 71, no. 6, p. 45-50.
- Borer, J.M., 1998, High-resolution stratigraphy of the Lower Green River Formation at Raven Ridge and Red Wash field, NE Uinta Basin-stratigraphic control on petroleum subsystems: American Association of Petroleum Geologists Annual Convention Abstracts CD Rom.
- Borer, J.M., and McPherson, M.L., 1996, High-resolution stratigraphy of the Green River Formation, NE Uinta Basin-Implications for Red Wash Reservoir compartmentalization: American Association of Petroleum Geologists Program with Abstracts, p. A18.
- Byrd, W.D., 2d, 1967, Geology of the bituminous sandstone deposits, southeastern Uinta Basin, Uintah and Grand Counties, Utah: Utah University unpublished M.S. thesis, 43 p.
- Byrd, W.D., 2d, 1970, P.R. Spring oil-impregnated sandstone deposit, Uintah and Grand Counties, Utah: Utah Geological and Mineralogical Survey Special Studies 31, 34 p.
- Cameron, R.J., 1969, A comparative study of oil shale, tar sands and coal as sources of oil: *Journal of Petroleum Technology*, v. 21, no. 3, p. 253.
- Chatfield, John, 1965, Petroleum geology of the greater Red Wash are, Uintah County, Utah: *The Mountain Geologist*, v. 2, no. 3, p. 115-121.
- 1972, Case history of Red Wash field, Uintah County, Utah, *in* King, R.E., editor, Stratigraphic oil and gas fields-classification, exploration methods, and case histories: American Association of Petroleum Geologists Memoir 50, p. 243-264.
- Chidsey, T.C., Jr., 1993a, Uinta Basin [UN] plays - overview, *in* Robertson, J.M., and Broadhead, R.F., project directors, Atlas of major Rocky Mountain gas reservoirs: New Mexico Bureau

- of Mines and Mineral Resources, p. 83.
- 1993b, Green River Formation, *in* Robertson, J.M., and Broadhead, R.F., project directors, Atlas of major Rocky Mountain gas reservoirs: New Mexico Bureau of Mines and Mineral Resources, p. 85-86.
- 1993c, Wasatch Formation, *in* Robertson, J.M., and Broadhead, R.F., project directors, Atlas of major Rocky Mountain gas reservoirs: New Mexico Bureau of Mines and Mineral Resources, p. 87-88.
- Colburn, J.A., Bereskin, S.R., McGinley, D.C., and Schiller, D.M., 1985, Lower Green River Formation in the Pleasant Valley producing area, Duchesne and Uintah Counties, Utah, *in* Picard, M.D., editor, Geology and Energy Resources, Uinta Basin, Utah: Utah Geological Association Publication 12, p. 177-186.
- Crawford, A.L., 1949, Origin of gilsonite and related hydrocarbons of the Uinta Basin, Utah, *in* Hansen, G.H., and Bell, M.M., editors, The oil and gas possibilities of Utah: Utah Geological and Mineralogical Survey, p. 235-260.
- Crawford, A.L., and Pruitt, R.G., 1963, Gilsonite and other bituminous substances of central Uintah County, Utah: Utah Geological and Mineralogical Survey Bulletin 54, p. 215-224.
- Cross, A.T., and Wood, G.D., 1976, Palynology and petrography of some solid hydrocarbons of Utah: Brigham Young University Geologic Studies, v. 22, part 3, p. 157-173.
- Crouch, B.W., Hackney, M.L., and Johnson, B.J., 2000, Sequence stratigraphy and reservoir character of lacustrine carbonates in the basal limestone member - lower Green River Formation (Eocene), Duchesne and Antelope Creek fields, Duchesne Co., Utah: American Association of Petroleum Geologists Annual Convention Program with Abstracts, p. A34.
- Fouch, T.D., Nuccio, V.F., Anders, D.E., Rice, D.D., Pitman, J.K., and Mast, R.F., 1995, The Green River petroleum system, Uinta Basin, Utah, USA, *in* Magoon, L.B., and Dow, W.G., editors, The petroleum system from source to trap: American Association of Petroleum Geologists Memoir 60, p. 399-421.
- Findley, L.D., 1972, Why Uinta Basin drilling is costly, difficult: World Oil, v. 174, no. 5, p. 77-81.
- Gustavson Associates, 1996, Final report, study of alternatives for future operations of the Naval Petroleum and Oil Shale Reserves (NOSR-2), Uintah and Carbon counties, Utah as of October 1, 1996: U.S. Department of Energy contract DE-AC01-96FE64202, document DOE/FE/64202-T2-ADD, 115 p.

- Hackney, M.L., and Crouch, B.W., 2000, The Castle peak Member of the lower Green River Formation, Antelope Creek field, Duchesne Co., Utah - an example of the effects of a migrating shoreline on the expression of an open-lacustrine carbonate facies: American Association of Petroleum Geologists Annual Convention Program with Abstracts, p. A62.
- Harthill, Norman, and Bates, C.R., 1996, Fracture definition in the Rocky Mountain Foreland: Rocky Mountain Association of Geologists The Outcrop vol. 45, no. 2, p. 4 and 9.
- 1996, Open fracture prediction and detection at the Bluebell - Altamont field, Uinta Basin, Utah: American Association of Petroleum Geologists Program with Abstracts, p. A62.
- Hendel, C.W., 1957, The Peters Point gas field, *in* Seal, O.G., editor, Guidebook to the Geology of the Uinta Basin: Intermountain Association of Petroleum Geologists 8th Annual Field Conference Guidebook, p. 193-201.
- Hunt, J.M., Stewart, Francis, and Dickey, P.A., 1954, Origin of the hydrocarbons of the Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 38, no. 8, p. 1671-1698.
- Kusumanegara, Yohan, 1994, Stratigraphic controls on petrophysical attributes and fluid-flow pathways in an exhumed fluvial reservoir, Sunnyside quarry, Carbon County, Utah: Boulder, Colorado School of Mines, M.S. thesis, 108 p.
- Miller, J.R., 1950, Roosevelt field, Utah: Utah Geological Society Guidebook to the Geology of Utah, no. 5, p. 147-151.
- Monson, B., and Parnell, J., 1992, The origin of Gilsonite vein deposits in the Uinta Basin, Utah, *in* Fouch, T.D., Nuccio, V.F., and Chidsey, T.C., editors, Hydrocarbon and mineral resources of the Uinta Basin, Utah: Utah Geological Association Guidebook 20, p. 257-270.
- Montgomery, S.L., and Morgan, C.D., 1998, Bluebell field, Uinta Basin-reservoir characterization for improved well completion and oil recovery: American Association of Petroleum Geologists Bulletin E & P Notes v. 82, no. 6, p. 1,113-1,132.
- Morgan, C.D., 1995a, A multi-disciplinary team approach to reservoir characterization of the Bluebell field, Uinta Basin, Utah (abstract): American Association of Petroleum Geologists Bulletin, v. 79, no. 6, p. 923.
- 1995b, Bluebell field-increasing production in a fluvial-deltaic reservoir: Utah Geological Association August Newsletter, v. 26, no. 7.

- Morgan, C.D., Bereskin, S.R., Chidsey, Jr., T.C., and McClure, K.P., 2000, Nine Mile Canyon - outcrop analogue for oil and gas reservoirs in the Monument Butte area, Uinta Basin, Utah: AAPG Bulletin, v. 84, no. 8, p. 1242-1243.
- Morgan, C.D., Hill, B.G., and Jarvis, D.J., 1998, Secondary oil recovery (water flood) from the lower Green River Formation, Central Uinta Basin, Utah, *in* Pitman, J.K., and Carroll, A.R., editors, Modern and ancient lakes - new problems and perspectives: Utah Geological Association Guidebook 26, p. 277-288.
- Osmond, J.C., 1957, Brennan Bottom oil field, Uintah County, Utah *in* Seal, O.G., editor, Guidebook to the Geology of the Uinta Basin: Intermountain Association of Petroleum Geologists 8th Annual Field Conference Guidebook, p. 185-187.
- 1985, Reservoir sandstone patterns, Green River Formation, Duck Creek oil field, Uintah County, *in* Picard, M.D., editor, Geology and Energy Resources, Uinta Basin, Utah: Utah Geological Association Publication 12, p. 187-192.
- 2000, West Willow Creek field: first productive lacustrine stromatolite mound in the Eocene Green River Formation, Uinta Basin, Utah: Rocky Mountain Association of Geologists, The Mountain Geologist, vol. 37, no. 3, p. 157-170.
- Picard, M.D., 1957b, The Red Wash-Walker Hollow field, a stratigraphic trap in eastern Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 41, no. 5, p. 923-936.
- 1962, Source beds in Red Wash-Walker Hollow field, eastern Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 46, no. 5, p. 690-694.
- Porter, Livingstone, Jr., 1963, Stratigraphy and oil possibilities of the Green River Formation in the Uinta Basin, Utah, *in* Oil and gas possibilities of Utah re-evaluated: Utah Geological and Mineralogical Survey Bulletin 54, p. 193-198.
- Preston, Don, editor, 1961, A symposium of the oil and gas fields of Utah: Intermountain Association of Petroleum Geologists Guidebook, unpaginated.
- Pruitt, R.G., Jr., 1961, The mineral resources of Uintah County: Utah Geological and Mineralogical Survey Bulletin 71, 101 p.
- Ritzma, H.R., 1973, Exploration and development of oil shales and oil-impregnated rocks, 1970-1975, *in* Future energy outlook: Colorado School Mines Quarterly, v. 68, no. 2, p. 81-94.
- Ritzma, H.R., and Campbell, J.A., 1979, Bibliography of oil-impregnated rock deposits of Utah: Utah Geological and Mineral Survey Circular 64, 17 p.

- Sanborn, A.F., 1971, Possible future petroleum of Uinta and Piceance Basins and vicinity, northeast Utah and northwest Colorado, *in* Future petroleum provinces in the United States, their geology and potential, v. 1: American Association of Petroleum Geologists Memoir 15, p. 489-508.
- Sanborn, A.F., 1981, Potential petroleum resources of northeastern Utah and northwestern Colorado, *in* Epis, Rudy, editor, Western Slope, Colorado; western Colorado and eastern Utah: New Mexico Geological Society Guidebook, no. 32, p. 255-266.
- Smouse, DeForrest, 1993, Altamont-Bluebell, *in* Hill, B.G., and Bereskin, S.R., editors, Oil and gas fields of Utah: Utah Geological Association Publication 22, unpaginated.
- Spencer, C.W., and Wilson, R.J., 1988, Petroleum geology and principle exploration plays in the Uinta-Piceance-Eagle Basins province, Utah and Colorado: U.S. Geological Survey Open-File Report 88-450-G, 35 p.
- Stowe, Carlton, 1972, oil and gas production in Utah to 1970: Utah Geological and Mineralogical Survey Bulletin 94, 179 p.
- Tripp, C.N., 1995, Reservoir characterization of potential targets for horizontal drilling in the Tertiary Green River and Wasatch Formations, Bluebell field, Uintah County, Utah (abstract): American Association of Petroleum Geologists Bulletin, v. 79, no. 6, p. 925-926.
- Wegner, MaryBeth, Garner, Ann, and Morris, T.H., 1995, Reservoir characterization through facies analysis of core and outcrop of the lower Green River Formation-hydrocarbon enhancement in the Altamont-Bluebell field, Uinta Basin, Utah (abstract): American Association of Petroleum Geologists Bulletin, v. 79, no. 6, p. 926-927.
- Wells, L.F., 1958, Petroleum occurrence in the Uinta Basin, *in* Weeks, L.G., editor, Habitat of oil-A symposium: American Association of Petroleum Geologists, p. 344-365.
- Wiley, D.R., 1967, Petrology of bituminous sandstone in the Green River Formation, southeastern Uinta Basin, Utah: Utah University unpublished M.S. thesis, 69 p.
- Williams, R.A., 1993, Play analysis and stratigraphic position of Uinta Basin Tertiary-age oil and gas fields (abstract): American Association of Petroleum Geologists Bulletin, v. 77, no. 8, p. 1464.

GEOCHEMISTRY

- Anders, D.E., 1990, Thermal maturation in the Uinta Basin, Utah, *in* Carter, L.M., editor, Sixth V. E. McKelvey forum on mineral and energy resources, USGS Research on Energy Resources - 1990 - Program and Abstracts: U.S. Geological Survey Circular 1060, p. 2-3.
- Anders, D.E., and Gerrild, P.M., 1984 , Hydrocarbon generation in lacustrine rocks of Tertiary age, Uinta Basin, Utah - organic carbon, pyrolysis yield, and light hydrocarbons, *in* Woodward, Jane, Meissner, F.F., and Clayton, J.L., editors, Hydrocarbon source rocks of the greater Rocky Mountain region: Rocky Mountain Association of Geologists Symposium Guidebook, p. 513-529.
- Anders, D.E., Palacas, J.G., and Johnson, R.C., 1992, Thermal maturity of rocks and hydrocarbon deposits, Uinta Basin, Utah, *in* Fouch, T.D., Nuccio, V.F., and Chidsey, T.C., Jr., editors, hydrocarbon and mineral resources of the Uinta Basin, Utah and Colorado: Utah Geological Association Publication 20, p. 53-76.
- Bass, N.W., 1964, Relationship of crude oils to depositional environment of source rocks in the Uinta Basin, *in* Sabatka, E.F., editor, Guidebook to the geology and mineral resources of the Uinta Basin: Intermountain Association of Petroleum Geologists 13th Annual Field Conference, p. 201-206.
- Bredehoeft, J.D., Wesley, J.B., and Fouch, T.D., 1994, Simulations of the origin of fluid pressure, fracture generation, and the movement of fluids in the Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 78, no. 11, p. 1729-1747.
- Burnham, A.K., and Singleton, M.F., 1983, High-pressure pyrolysis of Green River oil shale, *in* Miknis, F.P., editor, Geochemistry and chemistry of oil shale: American Chemical Society Symposium Series 230, Washington, D.C., p. 335-351.
- Burnham, A.K., Clarkson, J.E., Singleton, M.F., Wong, C.M., and Crawford, R.W., 1982, Biological markers from Green River kerogen decomposition: *Geochimica et Cosmochimica Acta*, v. 46, p. 1243-1251.
- Carroll, A.R., and Bohacs, K.M., 2001, Lake-type controls on petroleum source rock potential in non-marine basins: American Association of Petroleum Geologists Bulletin v 85, no 6, p. 1033-1053.

- Collister, J.W., and Hayes, J.M., 1991, A preliminary study of the carbon and nitrogen isotopic biogeochemistry of lacustrine sedimentary rocks from the Green River Formation, Wyoming, Utah, and Colorado, *in* Tuttle, M.L., editor, Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado: U.S. Geological Survey Bulletin 1973-C, p. C1-C-16.
- Collister, J.W., Summons, R.E., Lichtfouse, E., and Hayes, J.M., 1992, An isotope biogeochemical study of the Green River oil shale, *in* Eckardt, C.B., editor, Advances in organic geochemistry 1991: New York, Pergamon Press, p. 265-276.
- Cole, R.D., and Picard, M.D., 1981, Sulfur-isotope variations in marginal-lacustrine rocks of the Green River Formation, Colorado and Utah: Society of Economic Paleontologists and Mineralogists Special Publication, v. 31, p. 261-275.
- Dean, W.E., and Anders, D.E., 1991, Effects of source, depositional environment, and diagenesis on characteristics of organic matter in oil shale from the Green River Formation, Wyoming, Utah, and Colorado, *in* Tuttle, M.L., editor, Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado: U.S. Geological Survey Bulletin 1973-F, p. F1-F16.
- Evans, R.J., and Felbeck, G.T., Jr., 1983, High temperature simulation of petroleum formation - the pyrolysis of Green River Shale: Organic Geochemistry, v. 4, p. 135-144.
- Fouch, T.D., Claypool, G.E., Hanley, J.H., and Tschudy, R.H., 1977, Newly recognized petroleum source-rock units in east-central Utah - implications for detection of petroleum in nonmarine units (abstract): American Association of Petroleum Geologists Bulletin 61, p. 785-786.
- Fouch, T.D., and Hanley, J.H., 1977, interdisciplinary analysis of some petroleum source rocks in east-central Utah - implications for hydrocarbon exploration in nonmarine rocks of western United States: American Association of Petroleum Geologists Bulletin 61, p. 1,377-1,378.
- Harrison, A.G., and Thode, H.G., 1958, Sulphur isotope abundances in hydrocarbons and source rocks of Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 42, p. 2642-2649.
- Henderson, W., and Reed, W.E., 1974, Proposed stratigraphic controls on the composition of crude oils reservoired in the Green River Formation, Uinta Basin, Utah: Pergamon Press, New York, p. 499-515.
- Horn, M.K., 1998, Combining subsurface natural fracture predictions with oil generation estimates-an example from Uinta Basin, Utah: American Association of Petroleum Geologists Annual

Convention Abstract CD ROM.

- Houzay, Jean-Pierre, and Pradier, Bernard, 2002, High-resolution sequence stratigraphy and organic geochemistry study of the Raven Ridge lacustrine Eocene series (Uinta basin, Colorado, USA): Implications on organic matter accumulation: American Association of Petroleum Geologists Annual Convention Official Program with abstracts [abs.], vol 11, p. A81.
- Hunt, J.M., 1963, Composition and origin of the Uinta Basin bitumens, *in* Crawford, A.L., editor, The oil and gas possibilities of Utah, re-evaluated: Utah Geological and Mineralogical Survey Bulletin 54, p. 249-273.
- Hunt, J.M., Stewart, Francis, and Dickey, P.A., 1954, Origin of the hydrocarbons of the Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 38, no. 8, p. 1671-1698.
- Imbus, S.W., and Elmore, R.D., 1990, Organic geochemistry and sedimentology of Middle Proterozoic Nonesuch Formation - hydrocarbon source rock assessment of a lacustrine rift deposit, *in* Katz, B.J., editor, Lacustrine basin exploration -case studies and modern analogs: American Association of Petroleum Geologists Memoir 50, p. 197-208.
- Mauger, R.L., 1972, A sulfur isotope study of bituminous sands from the Uinta Basin, Utah: 24th International Geology Congress proceedings, Comptes Rendus, sec. 5, p. 19-27.
- Moore, Jessica, and Wavrek, D.A., 2001, Hydrocarbon volumetric yields from fresh vs. hypersaline organic facies - Green River Formation, Uinta Basin, Utah: American Association of Petroleum Geologists Annual Convention, Program with Abstracts, p A137-A138.
- Mueller, Eric, 1998, Temporal and spatial source rock variations and the consequence on crude oil composition in the Tertiary petroleum system of the Uinta Basin, Utah, U.S.A.: Norman, University of Oklahoma, Ph.D. thesis, 170 p.
- Mueller, Eric, and Philp, R.P., 1998, Extraction of high molecular weight hydrocarbons from source rocks: and example from the Green River Formation, Uinta Basin, Utah: Organic Geochemistry vol. 28, p. 625-631.
- Nuccio, V.F. and Fouch, T.D., 1992, Thermal maturity of the Mesaverde Group, Uinta Basin, Utah *in* Magoon, L.B., editor, The Petroleum System- Status of Research and Methods 1992: U.S. Geological Survey Bulletin 2007, p. 70-78.
- Nuccio, V.F., and Johnson, R.C., 1986, Thermal maturity map of the lower part of the Upper Cretaceous Mesaverde Group, Uinta Basin, Utah: U.S. Geological Survey Miscellaneous Field

Studies Map MF-1842, one plate.

- 1988, Surface vitrinite-reflectance map of the Uinta, Piceance, and Eagle basins area, Utah and Colorado: U.S. Geological Survey Miscellaneous Field Studies Map MF-2008-B, scale 1:500,000.
- 1962, Source beds in Red Wash-Walker Hollow field, eastern Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 46, no. 5, p. 690-694.
- Pitman, J.K., Franczyk, K.J., and Anders, D.E., 1987, Marine and nonmarine gas-bearing rocks in Upper Cretaceous Blackhawk and Neslsen formations, eastern Uinta Basin: sedimentology, diagenesis, and source rock potential: American Association of Petroleum Geologists Bulletin, v. 71, p. 76-94.
- Reed, W.E., and Henderson, W., 1972, Proposed stratigraphic controls on the composition of crude oils reservoired in the Green River Formation, Uinta Basin, Utah, *in* Advances in Geochemistry: Oxford, Pergamon Press, p. 499-515.
- Robinson, W.E., 1979, The origin, deposition, and alteration of the organic material in the Green River shale: Organic Geochemistry vol. 6, p. 205-218.
- Ruble, T.M., 1996, Geochemical investigations of the mechanisms of hydrocarbon generation and accumulation in the Uinta Basin, Utah: Norman, University of Oklahoma, Ph.D thesis, 333 p.
- Ruble, T.E., Bakel, A.J., and Philp, R.P., 1994, Compound specific isotopic variability in Uinta Basin native bitumens - paleoenvironmental implications: Organic Geochemistry, v. 21, p. 661-671.
- Ruble, T.E., Lewan, M.D., and Philp, R.P., 2001, New insights on the Green River petroleum system in the Uinta Basin from hydrous pyrolysis experiments: American Association of Petroleum Geologists Bulletin v. 85, no. 8, p. 1333-1371.
- Ruble, T.E., Lewan, M.D., Philp, R.P., and Boreham, C.J., 2001, Modeling oil generation in the Green River petroleum system, Uinta Basin - significance of appropriate experimental kinetic parameters: American Association of Petroleum Geologists Annual Convention, Program with Abstracts, p. A174.
- Ruble, T.E., and Philp, R.P., 1991, Geochemical investigation of native bitumens from the Uinta Basin, Utah, U.S.A.: The Compass, v. 68, p. 135-150.
- 1994, Uinta Basin Wurtzilite - a product of natural vulcanization?: Organic Geochemistry, v. 22, p. 127-136

- 1998, Stratigraphy, depositional environments and organic geochemistry of source-rocks in the Green River petroleum system, Uinta Basin, Utah, *in* Pitman, J.K., and Carroll, A.R., editors, Modern and Ancient lakes - new problems and perspectives: Utah Geological Association Guidebook 26, p. 289-328.
- Ruble, T.E., Philp, R.P., Lewan, M.D., and Mueller, Eric, 1998, Organic geochemical characterization of key source facies in the Green River petroleum system, Uinta Basin, Utah: American Association of Petroleum Geologists Annual Convention Abstract CD ROM.
- Schoell, M., Hwang, R.J., Carlson, R.M.K., and Welton, J.E., 1994, Carbon isotopic composition of individual biomarkers in gilsonites (Utah): *Organic Geochemistry*, v. 21, p. 673-683.
- Sweeney, J.J., Burnham, A.K., and Braun, R.L., 1987, A model of hydrocarbon generation from type I kerogen - application to Uinta Basin, Utah: *American Association of Petroleum Geologists Bulletin*, v. 71, no. 8, p. 967-985.
- Tissot, B., Deroo, G., and Hood, A., 1978, Geochemical study of the Uinta Basin - formation of petroleum from the Green River Formation: *Geochimica et Cosmochimica Acta*, v. 42, p. 1469-1485.
- Tuttle, M.L., 1991, Geochemistry, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado: *U.S. Geological Survey Bulletin* 1973, 11 p.
- Tuttle, M.L. and Goldhaber, M.B., 1991, Sulfur geochemistry and isotropy of the Green River Formation, Wyoming, Utah, and Colorado, *in* Tuttle, M.L., editor, Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado: *U.S. Geological Survey Bulletin* 1973-B, p. B1-B20.
- Wood, R.E., and Ritzma, H.R., 1972, Analysis of oil extracted from oil-impregnated sandstone deposits in Utah: *Utah Geological and Mineralogical Survey Special Studies* 39, 74 p.

MAPS AND CROSS SECTIONS

- Carrara, P.E., 1980, Surficial geologic map of the Vernal 1⁰ X 2⁰ quadrangle, Colorado and Utah: U.S. Geological Survey Miscellaneous Investigations Map I-1204, scale 1:250,000.
- Cashion, W.B., 1968, Maps showing structure, overburden, and thickness for a rich oil shale sequence in the Eocene Green River Formation, east-central Uinta Basin, Utah and Colorado: U.S. Geological Survey Open-File Report, 1 p., 4 maps, scale 1:250:000.
- 1973, Geologic and structure map of the Grand Junction quadrangle, Colorado and Utah: U. S. Geological Survey Miscellaneous Investigations Series Map I-736, 1:250,000.
- 1986, Geologic map of the Bonanza quadrangle, Uintah County, Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-1865, scale 1:24,000.
- 1994, Geologic map of the Nutters Hole quadrangle, Uintah and Carbon Counties, Utah: U. S. Geological Survey Miscellaneous Field Studies Map MF-2250, 1:24,000.
- Cashion, W.B. and Brown, J.H., Jr., 1956, Geology of the Bonanza-Dragon Trail oil shale area, Uintah County, Utah, and Rio Blanco County, Colorado: U.S. Geological Survey Oil and Gas Investigation Map OM-153.
- Cashion, W.B., and Dixon, G.H., 1976, Isopach map and cross section of the Mahogany zone of the Green River Formation derived principally from geophysical well logs, eastern Uinta Basin, Utah and Colorado: U.S. Geological Survey Miscellaneous Field Studies Map MF-797, scale 1:250,000.
- Cashion, W.B., and Donnell, J.R., 1972, Chart showing correlation of selected key units in the organic-rich sequence of Green River Formation, Piceance Creek Basin, Colorado, and Uinta Basin, Utah: U.S. Geological Survey Oil and Gas Investigation Chart OC-65.
- Dane, C.H., 1955, Stratigraphic and facies relationships of upper part of Green River Formation and lower part of Uinta Formation in Duchesne, Uintah, and Wasatch Counties, Utah: U.S. Geological Survey Oil and Gas Investigations Chart OC-52.
- Fouch, T.D., 1981, Distribution of rock types, lithologic groups, and interpreted depositional environments for some lower Tertiary and Upper Cretaceous rocks from outcrops at Willow Creek - Indian Canyon through the subsurface of Duchesne and Altamont oil fields, southwest to north-central parts of the Uinta Basin, Utah: U.S. Geological Survey Oil and Gas Investigations Map, Chart OC-81, 2 sheets.

- Fouch, T.D., and Cashion, W.B., 1979, Preliminary chart showing distribution of rock types, lithologic groups, and depositional environments for some lower Tertiary, Upper and Lower Cretaceous, and Upper and Middle Jurassic rocks in the subsurface between Altamont oil field and San Arroyo gas field, north-central to southeastern Uinta Basin, Utah: U.S. Geological Survey Open-File Report 79-365, 2 sheets.
- Franczyk, K.J., 1991, Stratigraphic and time-stratigraphic cross sections of Phanerozoic rocks along line C-C', Uinta and Piceance Basin area, southern Uinta Mountains to northern Henry Mountains, Utah: U.S. Geological Survey Miscellaneous Investigations Series Map I-2184-C, 2 sheets, scale 1:500,000.
- Freethy, G.W., 1992, Maps summarizing geohydrologic information in an area of salt-water disposal, eastern Altamont-Bluebell petroleum field, Uinta Basin, Utah: U.S. Geological Survey Water Resource Investigation Report 92-4043.
- Gualtieri, J.L., 1988, Geologic map of the Westwater 30' X 60' quadrangle, Grand and Uintah Counties, Utah and Garfield and Mesa Counties, Colorado: U. S. Geological Survey Miscellaneous Investigations Series Map I-1765, 1:100,000.
- Holmes, W.F., 1979, Maps showing generalized structure contours on the tops of the Wasatch and Green River Formations, geologic sections and contours of thickness of the Green River Formation, southeastern Uinta Basin, Utah and Colorado: U.S. Geological Survey Miscellaneous Investigations Map I-1156, scale 1:125,000.
- Johnson, R.C., 1989, Detailed cross sections correlating Upper Cretaceous and Lower Tertiary rocks between the Uinta Basin of eastern Utah and western Colorado and the Piceance Basin of western Colorado: U.S. Geological Survey Miscellaneous Investigations Series Map I-1974, 2 sheets.
- Johnson, R.C., and Johnson, S.Y., 1991, Stratigraphic and time-stratigraphic cross sections of Phanerozoic rocks along line B-B', Uinta and Piceance Basin area, west-central Uinta Basin, Utah to eastern Piceance Basin, Colorado: U.S. Geological Survey Miscellaneous Investigations Series Map I-2184-B, scale 1:500,000.
- Morgan, C.D., 1994, Oil and gas production maps of the Bluebell field, Duchesne and Uintah Counties, Utah: Utah Geological Survey Oil and Gas Field Study 15, 4p., 7 plates, scale 1 inch = 0.8 miles.
- Nuccio, V.F., and Johnson, R.C., 1988, Surface vitrinite-reflectance map of the Uinta, Piceance, and

- Eagle basins area, Utah and Colorado: U.S. Geological Survey Miscellaneous Field Studies Map MF-2008-B, scale 1:500,000.
- Ray, R.G., Kent, B.H., and Dane, C.H., 1956, Stratigraphy and photogeology of the southwestern part of the Uinta Basin, Duchesne and Uintah Counties, Utah: U.S. Geological Survey Oil and Gas Investigations Map OM-171, scale 1:63,360.
- Rowley, P.D., Tweto, Ogden, Hansen, W.R., and Carrara, P.E., 1979, Geologic map of the Vernal 1°x2° quadrangle, Colorado, Utah and Wyoming: U.S. Geological Survey Miscellaneous Field Studies Map MF-1163, scale 1:250,000.
- Smith, M.C., 1981, Structure contours and overburden on the top of the Mahogany bed, Green River Formation, in the eastern part of the Uinta Basin, Uintah, Duchesne, and Carbon Counties, Utah, and Rio Blanco County, Colorado: U.S. Geological Survey Miscellaneous Field Studies Map MF-1311, scale 1:126,720.
- Weiss, M.P., Witkind, I.J., and Cashion, W.B., 1990, Geologic map of the Price 30' X 60' quadrangle, Carbon, Duchesne, Uintah, Utah, and Wasatch Counties, Utah: U. S. Geological Survey Miscellaneous Investigations Series Map I-1981, 1:100,000.
- Whittier, W.H., and Becker, R.C., 1962, Geologic maps and sections of the bituminous sandstone deposits in the P.R. Springs area, Grand and Uintah Counties, Utah: U.S. Geological Survey Open-File Report 1 p.
- Witkind, I.J., 1988, Geologic map of the Huntington 30' X 60' quadrangle, Carbon, Emery, Grand, and Uintah Counties, Utah: U. S. Geological Survey Miscellaneous Investigations Series Map I-1764, 1:100,000.
- Witkind, I.J., 1995, Geologic map of the Price 1° X 2° quadrangle, Utah: U. S. Geological Survey Miscellaneous Investigations Series Map I-2462, 1:250,000.

RESERVOIR ENGINEERING

Boardman, C.R., and Knutson, C.F., 1980, Reservoir characteristics in Uinta Basin gas wells: U.S. Department of Energy Report DOE/ET/11399-1, 89 p., 26 tables, 36 figures.

---1981, Uinta Basin lenticular sandstone reservoir characteristics: SPE/DOE Paper 9849, SPE/DOE Low Permeability Symposium, p. 217-222.

Deo, M.L., Miharia, Anupam, and Kumar, Rajinder, draft, Solid precipitation in reservoirs: Society of Petroleum Engineers Paper 28967.

Deo, M.L., Neer, L.A., Whitney, E.M., Nielson, D.L., Lomax, J.D., and Pennington, B.I., 1994, Description and performance of a lacustrine fractured reservoir: Society of Petroleum Engineers 69th Annual Technical Conference and Exhibition, New Orleans, LA., no. 28938. p. 491-492.

Deo, M.D., Pawar, R.J., and Dyer, J.E., 1996, Geostatistical modeling and reservoir simulations of reservoirs in the Greater Monument Butte region, Uinta Basin, Utah: American Association of Petroleum Geologists Bulletin, v. 80, no. 6, p.968-969.

Deo, M.L., Sarkar, Avik, Nielson, D.L., Lomax, J.D., and Pennington, B.I., 1994, Monument Butte case study-Demonstration of a successful waterflood in a fluvial deltaic reservoir: SPE-DOE Improved Oil Recovery Symposium no. 27749. p. 143-150.

Lomax, J.D., 1992, Development of new reserves-the Uinta Basin: The Interstate Oil and Gas Compact and Committee Bulletin, v. 6, no. 2, p. 27-30.

----1994, Green River Formation waterflood demonstration project, Uinta Basin, Utah, *in* U.S. Department of Energy contracts for field projects and supporting research on enhanced oil recovery: Progress Report No. 74, p. 141-144.

Pawar, R.J., Deo, M.D., and Dyer, J.E., 1996, Effect of reservoir connectivity on primary and secondary recovery: Society of Petroleum Engineers SPE/DOE 35414, p. 147-155.

Sampath, K., and Keighin, C.W., 1982, Factors affecting gas slippage in tight sandstones of Cretaceous age in the Uinta Basin: Journal of Petroleum Technology, v. 34, no. 11, p. 2715-2720.

Spath, J.B., Erdal, Ozkan, and Raghavan, Rajagopal, 1994, An efficient algorithm for computation of well responses in commingled reservoirs: Society of Petroleum Engineers Formation

Evaluation, v. 9, no. 2, p. 115-121.

Webb, M.G., 1978, Reservoir description, Kf Sandstone, Red Wash field, Utah, *in* Proceedings, Society of Petroleum Engineers Improved Oil Recovery Symposium: Society of Petroleum Engineers Paper 7046, p. 97-101.

DRILLING AND COMPLETION

- Abass, H.H., 1995, Oriented perforating helps ensure successful well completions: Oil and Gas Journal v. 93, no. 41, p. 80-85.
- Asadi, Mahmoud, and Preston, Floyd, 1994, Characterization of the jet perforation crushed zone by SEM and image analysis: Society of Petroleum Engineers Formation Evaluation, v. 9, no. 2, p. 135-139.
- Bruce, P.L., Hunter, J.L., Kuhlman, R.D., and Weinheimer, D.D., 1992, New fracturing techniques reduce tight gas sand completion problems: Oil and Gas Journal, Oct 12, p. 72-76.
- Chidsey, T.C., Jr., and Laine, M.D., 1992, The fractured Green River and Wasatch Formations of the Uinta Basin, Utah - targets for horizontal drilling, *in* Fouch, T.D., Nuccio, V.F., and Chidsey, T.C., Jr., editors, Hydrocarbon and mineral resources of the Uinta Basin, Utah and Colorado: Utah Geological Association Publication 20, p. 123-134.
- Clark, J.A., 1983, The prediction of hydraulic fracture azimuth through geological, core, and analytical studies: Society of Petroleum Engineers/U.S. Department of Energy Symposium on low permeability gas reservoirs, Society of Petroleum Engineers Paper 1161, p. 107-114.
- French, F.R., and Mclean, M.R., 1993, Development drilling problems in high-pressure reservoirs: Journal of Petroleum Technology, v. 45, no. 8, p. 772-777.
- Hart's Oil and Gas World, 1994, Liquid carbon dioxide frac treatment pulls more pay from Devonian shales: v. 86, no. 5, p. 22-24.
- Juprasert, M.S., 1994, Bullhead acidizing succeeds offshore California: Oil and Gas Journal, v. 92, n. 15, p. 47-52.
- Montgomery, S.L., and Morgan, C.D., 1998, Bluebell field, Uinta Basin-reservoir characterization for improved well completion and oil recovery: American Association of Petroleum Geologists Bulletin E & P Notes v. 82, no. 6, p. 1,113-1,132.
- Morgan, C.D., 1997, Improving primary oil recovery from a (DOE Class I) fluvial-dominated deltaic lacustrine reservoir Uinta Basin, Utah: American Association of Petroleum Geologists Annual Convention Program with Abstracts, p. A85.

Morgan, C.D., Sprinkel, D.S., and Waite, K.A., 1995, Bluebell field drill-hole database, Duchesne and Uintah Counties, Utah: Utah Geological Survey Circular 90 DF, 23 p. 1 diskette.

Reid, Mark, Holcomb, David, and Waak, K.A., 1995, Using low density tracers to evaluate acid treatment diversion: Society of Petroleum Engineers Proceedings of the Joint Rocky Mountain Meeting/Low-Permeability Reservoirs Symposium, Paper 29595, p. 405-414.

Sharma, M.M., and Wunderlich, R.W., 1986, The alteration of rock properties due to interactions with drilling fluid components: Society of Petroleum Engineers Paper 14302.

Tidwell, W.L., and Baijal, S.K., 1985, Taking a second look may prevent bypassed reserves: World Oil, Nov., p. 61-62.

PRODUCTION

- Baud, Wayne, and Eastlund, Bernard, 1994, Electric tubing heater improves well production in CO₂ flood: *Oil & Gas Journal*, v. 92, no. 16, p. 60-61.
- Buckley, J.S., 1993, Asphaltene precipitation and crude oil wetting: 68th annual technical conference and exhibition of the Society of Petroleum Engineers Paper 26642, p. 729-741.
- Carnahan, N.F., 1989, Paraffin deposition in petroleum production: *Journal of Petroleum Technology*, v. n. 10, p. 1024-1025.
- Hunter, J.L., Leonard, R.S., Andrus, D.G., Tschirhart, L.R., and Daigle, J.A., 1992, Cotton Valley production enhancement team points way to full gas production potential: Society of Petroleum Engineers 67th Annual Technical Conference Paper 24887, p. 265-280.
- Jacobs, I.C., Chemical treatments for the control of asphaltene sludge during oil well acidizing treatments: Society of Petroleum Engineers Paper 18475.
- Jacobs, I.C., and Thorne, M.A., , Asphaltene precipitation during acid stimulation treatments: Society of Petroleum Engineers Paper 14823.
- Leontaritis, K.J., Amaefule, J.O., and Charles, R.E., 1992, A systematic approach for the prevention and treatment of formation damage caused by asphaltene deposition: International symposium on formation damage control, Society of Petroleum Engineers Paper 23810.
- Lyle, Don, 1995, Microbes aid hydrocarbon production in Coastal's Altamont-Bluebell wells: *Oil and Gas World*, v. 87, no. 5, p. 55-57.
- Matlach, W.J., and Newberry, M.E., 1983, Paraffin deposition and rheological evaluation of high wax content Altamont crude oils: Rocky Mountain Regional Meeting, Society of Petroleum Engineers Paper 11851, p. 321-328.
- Morgan, C.D., Sprinkel, D.S., and Waite, K.A., 1995, Bluebell field drill-hole database, Duchesne and Uintah Counties, Utah: Utah Geological Survey Circular 90 DF, 23 p. 1 diskette.
- Newberry, M.E., and Barker, K.M., , Formation damage prevention through the control of paraffin and asphaltene deposition: Society of Petroleum Engineers paper 13796.

Nghiem, L.X., Hassam, M.S., Nutakki, Ram, and George, A.E.D., 1993, Efficient modeling of asphaltene precipitation: 68th annual technical conference and exhibition of the Society of Petroleum Engineers Paper 26642, p. 375-384.

Oddo, J.E., and Tomson, M.B., 1994, Why scale forms and how to predict it: Society of Petroleum Engineers Journal of Production and Facilities, Paper 21710, p. 47-54.

Tuttle, R.N., 1983, High-pour-point and asphaltic crude oils and condensates: Journal of Petroleum Technology, June, p. 1192-1196. (First presented at the 1982 International Petroleum Exhibition and Technical Symposium Paper 10004).

GROUND WATER

- Freethy, G.W., 1988, Models, data available, and data requirements for estimating the effects of injecting saltwater into disposal wells in the Greater Altamont-Bluebell oil and gas field, northern Uinta Basin, Utah: U.S. Geological Survey Open-File Report 88-475, 30 p.
- 1992, Maps summarizing geohydrologic information in an area of salt-water disposal, eastern Altamont-Bluebell petroleum field, Uinta Basin, Utah: U.S. Geological Survey Water Resource Investigation Report 92-4043.
- Hood, J.W., 1976, Characteristics of aquifers in the northern Uinta Basin area, Utah and Colorado: Utah Department of Natural Resources Technical Publication No. 53, 71 p.
- Hood, J.W., and Fields, F.K., 1978, Water resources of the northern Uinta Basin area, Utah and Colorado, with special emphasis on ground-water supply: Utah Department of Natural Resources Technical Publication No. 62, 75 p.
- Hood, J.W., Mundorff, J.C., and Price, Don, 1976, Selected hydrologic data, Uinta Basin area, Utah and Colorado: Utah Department of Natural Resources Basic-Data Release No. 26, 321 p.
- Howells, Lewis, Longson, M.S., and Hunt, G.L., 1987, Base of moderately saline ground water in the Uinta Basin, Utah, with an introductory section describing the methods used in determining its position: Utah Department of Natural Resources Technical Publication No. 92, 59 p.
- Kimball, B.A., 1981, Geochemistry of spring water, southeastern Uinta Basin, Utah and Colorado: U.S. Geological Survey Water Supply Paper W-2074, 30 p.
- Price, Don, and Miller, L.L., 1975, Hydrologic reconnaissance of the southern Uinta Basin, Colorado and Utah: Utah Department of Natural Resources Technical Publication 49, 66 p.

OIL SHALE

- Anders, D. E., and Robinson, W. E., 1973, Geochemical aspects of the saturated hydrocarbon constituents of Green River oil shale--Colorado no. 1 core: U.S. Bureau of Mines Report of Investigations 7737, 28 p.
- Bakhshandeh, F., 1976, A study of the aromatic fraction of oil shales and other carbonaceous deposits from the Green River Formation in Utah: MS Thesis Colorado School of Mines, Boulder.
- Balogh, B., Wilson, D. M., and Burlingame, A. L., 1971, Carbon-13 NMR study of the stereochemistry of steranes from oil shale of the Green River Formation (Eocene): *Nature*, v. 233, no. 5317, p. 261-263.
- Balogh, B., Wilson, D. M., Christiansen, P., and Burlingame, A. L., 1973, 17a (H) Hopane identified in oil shale of the Green River Formation (Eocene) by Carbon-13 NMR: *Nature*, v. 242, no. 5400, p. 603-605.
- Bardsley, S. R., 1962, Evaluating oil shale by log analysis: University of Utah M.S. thesis.
- Bardsley, S. R., and Algermissen, S. T., 1963, Evaluating oil shale by log analysis: *Journal of Petroleum Technology*, v. 15, no. 1, p. 81-84. [Also *Colorado School Mines Quarterly*, v. 58, no. 4, p. 178-184, 1963, and *American Institute of Mining, Metallurgical and Petroleum Engineers. Trans.* 228, p. 81-84, 1963.]
- Billo, S. M., 1980, Oil shale and its relation to petroleum and other fuels: *Oil and Gas Journal*, v. 78, no. 51, p. 115-118.
- Bradley, W. H., 1970, Green River oil shale--concept of origin extended, an interdisciplinary problem being attacked from both ends: *Geological Society of America Bulletin*, v. 81, no. 4, p. 985-1000.
- Brobst, D. A., and Tucker, J. D., 1973, X-ray mineralogy of the Parachute Creek Member, Green River Formation in the northern Piceance Creek basin, Colorado: U.S. Geological Survey Professional Paper 803, 53 p.
- Bunger, J. W., and Wells, H. M., 1981, Economic evaluation of oil shale and tar sands located in the State of Utah: Utah Engineering Experiment Station Report VI, no. 6.
- Burnham, A. K., and Singleton, M. F., 1983, High-pressure pyrolysis of Green River oil shale in *Geochemistry and chemistry of oil shales* (Miknis, F. P., and others, editors.): American

Chemical Society Symposium Series 230, p. 335-351.

Burroughs, E. H., and Gavin, M. J., 1921, Selected bibliography on oil shale: U.S. Bureau of Mines Report of Investigations 2277, 66 p.

Carey, G. A., and Roberts, I. C., 1949, Dissertation on the history, occurrence, mining, and economics of gilsonite: University of Utah unpublished B.S. thesis, 89 p.

Cashion, W.B., 1957, Stratigraphic relations and oil shale of the Green River Formation in the eastern Uinta Basin, *in* Seal, O.G., editor, Guidebook to the geology of the Uinta Basin: Intermountain Association of Petroleum Geologists 8th Annual Field Conference Guidebook, p. 131-135.

---1968, Maps showing structure, overburden, and thickness for a rich oil shale sequence in the Eocene Green River Formation, east-central Uinta Basin, Utah and Colorado: U.S. Geological Survey Open-File Report, 1 p., 4 maps, scale: 1:250,000.

----1959, Geology and oil-shale resources of Naval Oil-Shale Reserve No. 2, Uintah and Carbon Counties, Utah: U.S. Geological Survey Bulletin 1072-O, p. 753-793 [1960].

----1961, Potential oil-shale reserves of the Green River Formation in the southeastern Uinta Basin, Utah and Colorado, in Short papers in the geologic and hydrologic sciences: U.S. Geological Survey Professional Paper 424-C, p. C22-C24.

----1964, The distribution and quality of oil shale in the Green River Formation of the Uinta Basin, Utah-Colorado, in Geological Survey research 1964: U.S. Geological Survey Professional Paper 501-D, p. D86-D89.

----1981, Results of core drilling in the Mahogany zone and some adjacent beds of Green River Formation, Winter Ridge area, southeastern Uinta Basin Utah: U.S. Geological Survey Open-File Report OF 81-0175, 27 p.

Cashion, W. B., and Dixon, G. H., 1976, Isopach map and cross section of the Mahogany zone of the Green River Formation derived principally from geophysical well logs, eastern Uinta Basin, Utah and Colorado: U.S. Geological Survey Miscellaneous Field Studies Map MF-797, scale 1:250,000.

Cashion, W. B., and Donnell, J. R., 1972, Chart showing correlation of selected key units in the organic-rich sequence of Green River Formation, Piceance Creek basin, Colorado, and Uinta Basin, Utah: U.S. Geological Survey Oil and Gas Investigations Chart OC-65.

Cole, R. D., 1975, Sedimentology and sulfur isotope geochemistry of Green River Formation

- (Eocene), Uinta Basin, Utah, Piceance Creek basin, Colorado: University of Utah Ph. D. thesis, 290 p.
- Cole, R.D., 1984, Sedimentological, mineralogical and geochemical definition of oil-shale facies in the lower Parachute Creek Member of the Green River Formation, Colorado, *in* Gary, J.H., editor, Proceedings of the 17th Oil Shale Symposium: Golden, Colorado, Colorado School of Mines Press, p. 143-158.
- Cole, R. D., and Picard, M. D. 1975, Primary and secondary sedimentary structures in oil shale and other fine-grained rocks, Green River Formation (Eocene), Utah and Colorado: *Utah Geology*, v. 2, no. 1, p. 49-67.
- 1978, Comparative mineralogy of nearshore and offshore lacustrine lithofacies, Parachute Creek Member of the Green River Formation, Piceance Creek basin, Colorado and eastern Uinta Basin, Utah: *Geological Society of America Bulletin*, v. 89, no. 10, p. 1441-1454.
- 1981, Sulfur-isotope variations in marginal-lacustrine rocks of the Green River Formation, Colorado and Utah, in *Recent and ancient non-marine depositional environments; models for exploration*, Ethridge, F. G., editor, Society of Economic Paleontologists and Mineralogists, Special Publication no. 31, p. 261-275.
- Dana, G.F., Smith, J.W., and Trudell, L.G., 1980, Shallow oil shale resources of the southern Uinta Basin, Utah: U.S. Department of Energy, Laramie Energy Technology Center Report of Investigations 80/11, 35 p.
- Grissom, M.C., 1981, Oil shales and tar sands; a bibliography: National Technical Information Service, Springfield, Virginia, DOE/TIC-3367, 950 p.
- Hundemann, A.S., 1975, Oil Shale--A bibliography with abstracts: Available from National Technical Information Service as report NTIS/PS-75/362, 136 p.
- Keighin, C.W., 1982, Characteristics and description of cores for U.S. Geological Survey core hole CRU-1, Parachute Creek Member, Green River Formation, east-central Uinta Basin, Utah: U.S. Geological Survey Open-File Report 82-528, 46 p.
- Leon, H.I., 1980, Comparative analysis of nine selected oil shale properties: Colorado School of Mines Oil Shale Symposium Proceedings, no. 13, p. 26-34.
- Paul, B.C., 1985, Geostatistical evolution of the Mahogany oil zone in the eastern Uinta Basin of Utah, using a rotating cartesian coordinate system: University of Utah Masters Thesis, 112 p., Salt Lake City, Utah.

- Ritzma, H.R., 1972, Exploration and development of oil shale and oil-impregnated rock 1970-1975 [abs.]: American Association of Petroleum Geologists Bulletin 56, no. 3, p. 649-650.
- 1973, Exploration and development of oil shales and oil-impregnated rocks, 1970-1975, in Future energy outlook: Colorado School Mines Quarterly, v. 68, no. 2, p. 81-94.
- 1977, Assay of oil shale cuttings and cores, P.R. Spring and Hill Creek--Oil impregnated sandstone deposits: Utah Geological and Mineral Survey Report of Investigations 118.
- Ritzma, H.R., and Campbell, J.A., 1979, Bibliography of oil-impregnated rock deposits of Utah: Utah Geological and Mineral Survey Circular 64, 17 p.
- Ritzma, H.R., and Seely, deB.K., 1969, Determination of oil shale potential, Green River Formation, Uinta Basin, northeast Utah: Utah Geological and Mineralogical Survey Special Studies 26, 15 p.
- Robinson, W.E., 1979, The origin, deposition, and alteration of the organic material in the Green River shale: Organic Geochemistry vol. 6, p. 205-218.
- Robinson, W.E., and Cook, G.L., 1975, Compositional variations of organic material from Green River oil shale--WOSCO EX-1 core (Utah): U.S. Bureau of Mines Report of Investigations 8017, 40 p.
- Rogers, M.P., 1973, A bibliography of Bureau of Mines publications dealing with oil shale and shale oil: U.S. Bureau of Mines OSRD 69, 55 p.
- Rogers, M.P., 1974, A bibliography of Bureau of Mines publications dealing with oil shale and shale oil, 1917-1974: U.S. Bureau of Mines OSRD 59, 44 p.
- Schmitt, L.J., 1987, Annotated bibliography of potential oil shales of the western United States exclusive of the Green River Formation: U.S. Geological Survey Open File Report OF 87-0628, 21 p.
- Scott, R.W., Jr., and Pantea, M.P., 1982a, Results of U.S. Geological Survey oil shale core drilling in the eastern Uinta Basin, Red Wash-1 drill hole: U.S. Geological Survey Open-File Report OF 82-0965, 41 p.
- Scott, R.W., Jr., and Pantea, M.P., 1982b, Results of U.S. Geological Survey oil shale core drilling in the eastern Uinta Basin, Utah, Coyote Wash-1 drill hole: U.S. Geological Survey Open-File Report OF 82-0966, 61 p.

- Smith, J.W., and Stanfield, K.E., 1964, Oil yields and properties of Green River oil shales in the Uinta Basin, Utah, in Intermountain Association of Petroleum Geologists Guidebook, 13th Annual Field Conference, p. 213-221.
- Smith, J.W., Trudell, L.G., and Robb, W.A., 1972, Oil yields and characteristics of Green River Formation oil shales at WOSCO-EX-1, Uintah County, Utah: U.S. Bureau of Mines Report of Investigations 7693, 150 p.
- Smith, M.C., 1981, Structure contours and overburden on the top of the Mahogany bed, Green River Formation, in the eastern part of the Uinta Basin, Uintah, Duchesne, and Carbon Counties, Utah, and Rio Blanco County, Colorado: U.S. Geological Survey Miscellaneous Field Studies Map MF-1311, scale 1:126,720.
- Stanfield, K.E., Smith, J.W., and Trudell, L.G., 1964, Oil yields of sections of Green River oil shale in Utah, 1952-62: U.S. Bureau of Mines Report of Investigations 6420, 217 p.
- Trudell, L.G., Mason, G.M., Smith, J.W., and Beard, T.N., 1982, Utah's principal oil shale resources in the Uinta Basin, in Gary, J.H., ed., Oil Shale Symposium Proceedings, 15th: Colorado School of Mines Press, p. 38-49.
- Van West, F.P., 1972, Green River oil shale, in Geologic atlas of the Rocky Mountain region: Denver, Colorado, Rocky Mountain Association of Geologists, p. 287-289.
- Wood, J.A., 1985, Oil shale development, Uinta Basin, in Picard, M.D., ed., Geology and energy resources, Uinta Basin of Utah: Utah Geological Association Publication no. 12, p. 225-226.
- Yen, T.F., editor, 1976, Science and technology of oil shale: Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan, 226 p.
- Yen, T.F., and Chilingarian, G.V., editors, 1976, Oil shale: Elsevier Science Publishing Company, Amsterdam, Netherlands, 292 p.
- Zanzon, H.A., 1980, A joint analysis of oil shale with implications on mine design, Uinta Basin, Utah: Colorado School of Mines M.S. thesis, Boulder,