

USA Mappack (with Alaska and eastern Mexico) (Representative lithologic columns of most major basins)

Data from AAPG's Correlation of Stratigraphic Units in North America (COSUNA, 1983-1986), Compiled by Dr. James Ogg, Justin Wright and Rebecca Bobick

Northeast USA and Appalachians

New England

Eastern Maine

Column 22 of New England Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- James W. Skehan, S.J. Coordinator

Southern Maine

Column 18 of New England Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- James W. Skehan, S.J. Coordinator

Boston Area

Column 24 of New England Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- James W. Skehan, S.J. Coordinator

Atlantic Coast

Lower Santee-Edisto

Column 37 of Atlantic Coastal Plain Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Robert R. Jordan and Richard V. Smith, Coordinators

Piedmont/Blue Ridge

Great Smoky Mountains, South of and above Greenbriar Fault

Column 4 of Piedmont/ Blue Ridge Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Michael Higgins, Coordinator

York- Lancaster Valley and Mine Ridge Area, Pennsylvania

Column 10 of Piedmont/ Blue Ridge Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Michael Higgins, Coordinator

Northern Appalachians

East-Central New York

Column 29 of Northern Appalachian Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Douglas G. Patchen, Katharine Lee Avery, and Robert B. Erwin Coordinators

Northeast Valley and Ridge, West Virginia

Column 10 of Northern Appalachian Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Douglas G. Patchen, Katharine Lee Avery, and Robert B. Erwin Coordinators

Southern Appalachians

Cumberland Plateau and Adjacent Areas (Tennessee)

Column 11 of Southern Appalachian Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Douglas G. Patchen, Katharine Lee Avery and Robert B. Erwin Coordinators

Central USA and Gulf of Mexico

Northern Mid-Continent

Marquette District, Marquette County, Michigan

Column 24 of Northern Mid-Continent Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- D.J. Bergstrom and G.B. Morey, Coordinators

Brown County, South Dakota

Column 3 of Northern Mid-Continent Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- D.J. Bergstrom and G.B. Morey, Coordinators

Mid-Continent

Marion County, Missouri (St. Louis Region)

Column 14 of Mid-Continent Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator

Ellis/ Trego Counties, Kansas

Column 16 of Mid-Continent Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator

Midwestern Basin

Central Michigan

Column 4 of Midwestern Basin and Arches Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Robert H. Shaver, Coordinator

Nashville Dome area (Central Tennessee)

Column 27 of Midwestern Basin and Arches Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Robert H. Shaver, Coordinator

Texas-Oklahoma

Southern Part of Chautauqua Platform

Column 2 of Texas-Oklahoma Tectonic Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Charles Mankin, Coordinator

Black Warrior Basin Oktibbeha County, Mississippi

Column 18 of Texas-Oklahoma Tectonic Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Charles Mankin, Coordinator

Gulf Coast

Sabine Uplift (NW Louisiana)

Column 7 of Gulf Coast Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Paul Huddleston, Jules Braunstein, And Ralph Biel, Coordinators

Gulf of Mexico (including eastern Mexico)

NOTE: A separate "Gulf of Mexico" mappack includes the same suite, plus a detail Biostratigraphy and Sequence stratigraphy suite

Gulf of Mexico "deep-water standard"

S Louisiana - deep ("GoM deep-water standard")

South Louisiana - offshore (DNAG column 14) would be the closest to deep water GOM, as the industry is still using lithostratigraphy for chronostratigraphy -- this is not the best practice, but it is the common practice. (Chengjie Liu (ExxonMobil); 3Aug09 e-mail advice to J.Ogg)

Mexico (preliminary)

Mainly from (1) Salvador, A. & Quezada Muneton, J.M. (1989) Stratigraphic correlation chart Gulf of Mexico Basin, Vol. Journal of the Geology of North America, Geological Society of America, (2) Moran-Zenteno, D. (1984; translated 1994) Geology of the Mexican Republic. AAPG Studies in Geology #39, 160 pp., and (3) Mex. Geol. Map (on-line access; using legends of rock succession in different regions). However, none of these contain useful biostrat and facies diagrams summarizing the generalized stratigraphic column.

Yucatan Platform

Yucatan - shallow

Yucatan - deep

Macuspana Basin - Gulf of Campeche and Villahermosa uplift

Macuspana and Campeche - shallow

Macuspana and Campeche - deep

Sierra de Chiapas

Chiapas - shallow

Chiapas - shallow to intermediate

Chiapas - intermediate

Chiapas - intermediate to deep

Chiapas - deep

Comalcalco Basin & Isthmus Saline Basin

Comalcalco & Isthmus - general

Veracruz Basin

Veracruz - shallow

Veracruz - deep

Tampico-Misantala Basin

Tampico - shallow

Tampico - intermediate

Tampico - deep

Sierra Madre Oriental

Sierra Madre Oriental - shallow

Sierra Madre Oriental - shallow to intermediate

Sierra Madre Oriental - intermediate to deep

Sierra Madre Oriental - deep

Burgos Basin

Burgos - shallow

	Sabinas Basin	<i>Burgos - deep</i>	
		<i>Sabinas - shallow</i>	
		<i>Sabinas - intermediate</i>	
		<i>Sabinas - deep</i>	
	Texas to Alabama		Salvador, A. & Quezada Muneton, J.M. (1989) Stratigraphic correlation chart Gulf of Mexico Basin, Vol. Journal of the Geology of North America, Geological Society of America.
	Rio Grande (South Texas)		DNAG Chart Column set 10
		<i>South Texas - shallow</i>	
		<i>South Texas - intermediate</i>	
		<i>South Texas - deep</i>	
	San Marcos Arch - Central Texas		DNAG Chart Column set 11
		<i>Central Texas - shallow</i>	
		<i>Central Texas - shallow to intermediate</i>	
		<i>Central Texas - intermediate to deep</i>	
		<i>Central Texas - deep</i>	
	East Texas Basin		DNAG Chart Column set 12
		<i>East Texas - shallow</i>	
		<i>East Texas - intermediate</i>	
		<i>East Texas - deep</i>	
	Southeast Texas, Southwest Louisiana & offshore		DNAG Chart Column set 13
		<i>SE Texas, SW Louisiana - shallow</i>	
		<i>SE Texas, SW Louisiana - Intermediate</i>	
		<i>SE Texas, SW Louisiana - deep</i>	
	South Louisiana and offshore		DNAG Chart Column set 14
		<i>S Louisiana - shallow</i>	
		<i>S Louisiana - deep ("GoM deep-water standard")</i>	
	South Arkansas, North Louisiana & West-central Mississippi		DNAG Chart Column set 15
		<i>S Arkansas to central Mississippi - shallow</i>	
		<i>S Arkansas to central Mississippi - intermediate</i>	
		<i>S Arkansas to central Mississippi - deep</i>	
	Florida to Mississippi		Salvador, A. & Quezada Muneton, J.M. (1989) Stratigraphic correlation chart Gulf of Mexico Basin, Vol. Journal of the Geology of North America, Geological Society of America.
	Southeast Mississippi, Southwest Alabama, W. Florida panhandle & offshore		DNAG Chart Column set 16
		<i>SE Mississippi, SW Alabama, W. Florida panhandle - offshore</i>	
		<i>SE Mississippi, SW Alabama, W. Florida panhandle - intermediate</i>	
		<i>SE Mississippi, SW Alabama, W. Florida panhandle - deep</i>	
	Southeast Alabama, Central Florida panhandle & Southwest Georgia		DNAG Chart Column set 17
		<i>SE Alabama, Florida panhandle & SW Georgia - shallow</i>	
		<i>SE Alabama, Florida panhandle & SW Georgia - deep</i>	
	South Georgia & North Florida		DNAG Chart Column set 18
		<i>S Georgia & N Florida - shallow</i>	
		<i>S Georgia & N Florida - intermediate</i>	
		<i>S Georgia & N Florida - deep</i>	
	Central and South Florida		DNAG Chart Column set 19
		<i>S Florida - shallow</i>	
		<i>S Florida - intermediate</i>	
		<i>S Florida - deep</i>	
Rocky Mountains and western USA			
	Northern Rockies		
	Missoula, Drummon - Helena Area, Central Western Montana		Column 8 of Northern Rockies Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Bottineau County, Northeast Basin, North Dakota		Column 20 of Northern Rockies Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Central and Southern Rockies		
	Yellowstone		Column 1 of Central and Southern Rockies Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	San Juan Basin		Column 29 of Central and Southern Rockies Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Northwest		
	John Day- Suplee, Central Oregon		Column 25 of Northwest Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Northwest Olympic Peninsula		Column 15 of Northwest Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Great Basin		
	Death Valley		Column 10 of Great Basin Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Pocatello, Idaho		Column 22 of Great Basin Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Southwest		
	Delaware Basin		Column 19 of Southwest Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Sonoita Area		Column 3 of Southwest Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	North California		
	Klamath - East of McCloud River		Column 3 of North California Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Berkeley		Column 18 of North California Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Central California		
	Tejon		Column 25 of Central California Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Lost Hills		Column 20 of Central California Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	South California		
	Santa Maria		Column 2 of South California Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	Barstow		Column 27 of South California Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
Main Shale Gas-Oil Basins			
Data from AAPG's Correlation of Stratigraphic Units in North America (COSUNA, 1983-1986), Compiled by Dr. James Ogg, Justin Wright, and Rebecca Bobick.			
	Marcellus and Utica Shale (Appalachian Basin)		
	Southwestern Pennsylvania		Column 17 of Northern Appalachian Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)-Douglas G. Patchen, Katharine Lee Avary, and Robert B. Erwin Coordinators

	Basin Center, West Virginia	Column 2 of Northern Appalachian Region Correlation Chart of COSUNA (Correlation of Stratigraphic units in North America)-Douglas G. Patchen, Katharine Lee Avary, and Robert B. Erwin Coordinators
	West-Central New York	Column 28 of Northern Appalachian Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)-Douglas G. Patchen, Katharine Lee Avary, and Robert B. Erwin Coordinators
	Northwest Pennsylvania	Column 21 of Northern Appalachian Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)-Douglas G. Patchen, Katharine Lee Avary, and Robert B. Erwin Coordinators
	East-Central New York	Column 29 of Northern Appalachian Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)-Douglas G. Patchen, Katharine Lee Avary, and Robert B. Erwin Coordinators
	Antrim Shale (Michigan Basin, in MI, IN, and OH)	
	N. Michigan	Column 3 of Midwestern Basin and Arches Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Robert H. Shaver, Coordinator
	Central Michigan (Shale Gas and Oil)	Column 4 of Midwestern Basin and Arches Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Robert H. Shaver, Coordinator
	Haynesville-Bossier formations (found in AR, northwest LA, and east TX)	
	East Texas Basin (East) left	Column 6 of Gulf Coast Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Paul Huddleston, Jules Braunstein, and Ralph Biel, Coordinators
	Sabine Uplift Northwest Louisiana East Texas (left)	Column 7 of Gulf Coast Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Paul Huddleston, Jules Braunstein, and Ralph Biel, Coordinators
	Sabine Uplift Northwest Louisiana East Texas (right)	Column 7 of Gulf Coast Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Paul Huddleston, Jules Braunstein, and Ralph Biel, Coordinators
	Eagle Ford Shale (South TX)	
	Waco Uplift Portion of Ouachita Tectonic Belt	Column 15 of Texas-Oklahoma Tectonic Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)-Charles J. Mankin, Coordinator
	Maverick Basin	Column 1 of Gulf Coast Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Paul Huddleston, Jules Braunstein, and Ralph Biel, Coordinators
	San Marcos Arch	Column 4 of Gulf Coast Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Paul Huddleston, Jules Braunstein, and Ralph Biel, Coordinators
	Barnett Shale (Bend Arch-Fort Worth Basin Province through TX and OK)	
	Fort Worth Basin	Column 9 of Texas-Oklahoma Tectonic Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)-Charles J. Mankin, Coordinator
	Central Basin Platform	Column 20 of Southwest/Southwest Mid-Continent Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- John M. Hills and Frank E. Kottowski, Coordinators
	Niobrara (Underlies the Great Plains)	
	Western Denver Basin	Column 20 of Central and Southern Rockies Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Harry C. Kent, Elton L. Couch and Rex A. Knepp, Coordinators
	Eastern Denver Basin	Column 21 of Central and Southern Rockies Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Harry C. Kent, Elton L. Couch and Rex A. Knepp, Coordinators
	Laramie Mountains	Column 10 of Central and Southern Rockies Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Harry C. Kent, Elton L. Couch and Rex A. Knepp, Coordinators
	Bakken Formation (Williston Basin in MT, ND, Saskatchewan and Manitoba)	
	Roosevelt County West Basin	Column 15 of Northern Rockies/ Williston Basin Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- William W. Ballard, John P. Bluemle, and Lee C. Gerhard, Coordinators
	Williams County Nesson Anticline	Column 18 of Northern Rockies/ Williston Basin Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- William W. Ballard, John P. Bluemle, and Lee C. Gerhard, Coordinators
	Monterey Formation (California)	
	Central Santa Ynez Mountains	Column 3 of Southern California Province Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Charles C. Bishop and James F. Davis, Coordinators
	Fillmore	Column 4 of Southern California Province Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Charles C. Bishop and James F. Davis, Coordinators
	Alaska region	
	Arctic Alaska	
	Major Arctic Petroleum Discoveries	Mainly from Beaufort Sea Planning Area (Alaska)-Province Summary
	Beaufort Sea	Strat column, lithologies, and calibrations as drawn in Figure 4 of MMS (2006); Exploring the Frontier-Alaska's Beaufort Sea, by Sherwood.
	North Slope	Strat column, lithologies, and calibrations from The Oil and Gas Resource Potential of The Arctic National Wildlife Refuge: USGS Fig. 3
	Chukchi Sea	Strat column, lithologies, and calibrations from MMS: Exploring the Frontier-Chukchi Sea and Hope Basin
	Bering Shelf Basins	
	Hope Basin	Strat column from Page 23 of the ChukchiSea_Summary-2006_MMS.pdf (Based on Cape Espenberg 1 and Nimiuk Pt 1 Wells) -- by Sherwood.
	Norton Sound	Strat column, lithologies, and calibrations from MMS: Exploring the Frontier-Alaska's Norton Sound
	St. George Basin	Strat column, lithologies, and calibrations from St. George Basin Planning Area-Province Summary
	North Aleutian Basin	Strat Column, lithologies, calibrations, and oil potential from North Aleutian Basin Planning Area-Province Summary
	Alaska's Pacific Margin Basins	
	Shumagin Area	Strat Column, lithologies, and calibrations from Shumagin Planning Area-Province Summary
	Cook Inlet	Strat column, lithologies, calibrations, and hydrocarbon potential from MMS: Exploring the Frontier-Alaska's Cook Inlet
	Kodiak Area	Strat Column, lithologies, and calibrations from Kodiak Planning Area-Province Summary
	Gulf of Alaska	Strat Column from Gulf of Alaska Planning Area-Province Summary
	North Alaska	
	West Charlie River	Column 25 of North Alaska Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator
	South Alaska	
	Northern Wrangell Mtns	Column 18 of South Alaska Region Correlation Chart of COSUNA (Correlation of Stratigraphic Units in North America)- Frank J. Adler, Coordinator