

2016 National Assessment UTRR Values by Geologic Play

*Updated to include 2017 Beaufort reassessment



Alaska 2016 UTRR by Geologic Play

Region	2016 Alaska Undiscovered Technically Recoverable Oil and Gas Resources (UTRR)									
	Play	Oil (Bbbl)			Gas (Tcf)			BOE (Bbbl)		
		0.95	Mean	0.05	0.95	Mean	0.05	0.95	Mean	0.05
Alaska (OCS)		19.09	27.28	37.43	96.76	131.55	167.98	36.30	50.70	67.32
	Undeformed Pre-Miss. Basement	0.00	0.02	0.06	0.00	0.08	0.32	0.00	0.03	0.12
	Endicott Play	0.03	0.26	0.80	0.07	0.52	1.57	0.05	0.35	1.08
	Lisburne Play	0.00	0.14	0.69	0.00	0.22	0.98	0.00	0.18	0.86
	Upper Ellesmerian Play	0.27	1.25	2.93	0.51	2.28	5.40	0.37	1.66	3.89
	Rift Play	0.00	0.80	2.44	0.00	2.00	4.80	0.00	1.16	3.30
	Brookian Faulted Western Topset	0.00	0.24	0.98	0.00	2.09	7.03	0.00	0.61	2.23
	Nanushuk Topset Clinotherm	0.01	1.08	4.33	0.18	0.68	1.89	0.04	1.21	4.67
	Brookian Faulted Western Turbidite	0.00	0.06	0.20	0.00	0.97	3.46	0.00	0.23	0.81
	Torok Turbidite Clinotherm	0.00	0.15	0.52	0.00	0.21	0.63	0.00	0.18	0.63
	Brookian Faulted Eastern Topset	0.00	1.05	3.05	0.00	9.99	22.86	0.00	2.83	7.11
	Brookian Unstructured Eastern Topset	0.10	0.58	1.44	0.07	0.34	0.76	0.12	0.64	1.58
	Brookian Faulted Eastern Turbidite	0.00	0.24	0.58	0.00	3.94	9.96	0.00	0.94	2.35
	Brookian Unstructured Eastern Turbidite	0.00	0.12	0.39	0.00	0.25	0.79	0.00	0.17	0.53
	Brookian Foldbelt	0.00	2.90	7.63	0.00	4.16	11.35	0.00	3.65	9.65
	Tertiary - Oil	0.00	0.34	0.97	0.00	0.13	0.38	0.00	0.36	1.03
	Mesozoic - Stratigraphic	0.00	0.35	1.11	0.00	0.16	0.51	0.00	0.38	1.20
	Mesozoic - Structural	0.06	0.33	0.77	0.03	0.15	0.35	0.06	0.35	0.83
	Tertiary - Gas	0.00	0.00	0.00	0.00	0.77	2.25	0.00	0.14	0.40
	Endicott - Chukchi Platform	0.00	2.63	6.22	0.00	12.35	26.35	0.00	4.83	10.91
	Endicott - Arctic Platform	0.00	0.03	0.15	0.00	0.49	2.07	0.00	0.12	0.52
	Lisburne	0.00	0.12	0.52	0.00	0.54	2.34	0.00	0.21	0.93
	Ellesmerian - Deep Gas	0.00	0.02	0.09	0.00	0.98	3.54	0.00	0.20	0.72
	Sadlerochit - Chukchi Platform	0.17	0.60	1.25	1.08	4.34	9.18	0.36	1.38	2.88
	Sadlerochit - Arctic Platform	0.00	0.74	2.19	0.00	4.67	15.41	0.00	1.57	4.93
	Rift - Active Margin	1.21	3.89	7.97	4.15	13.24	27.71	1.95	6.25	12.90
	Rift - Stable Shelf	0.27	2.01	5.74	1.42	9.99	28.68	0.52	3.79	10.84
	Rift - Deep Gas	0.00	0.01	0.03	0.00	0.24	1.17	0.00	0.05	0.24
	L. Brookian Foldbelt	0.62	1.46	2.63	3.46	7.85	13.73	1.24	2.85	5.08
	L. Brookian Wrench Zone - Torok Turbidites	0.03	0.23	0.60	0.14	1.50	4.22	0.05	0.50	1.35
	L. Brookian Wrench Zone - Nanushuk Topset	0.00	0.16	0.65	0.00	0.91	3.56	0.00	0.32	1.28
	Brookian North Chukchi High - Sand Apron	0.00	0.66	2.45	0.00	4.47	16.06	0.00	1.46	5.31
	L. Brookian N Chukchi Basin - Topset	0.00	0.14	0.42	0.00	1.57	5.26	0.00	0.41	1.36
	Brookian - Deep Gas	0.00	0.01	0.07	0.00	0.46	2.62	0.00	0.09	0.53
	L. Brookian - Torok-Arctic Platform	0.00	0.08	0.19	0.00	0.34	0.85	0.00	0.14	0.34
	L. Brookian - Nanushuk Arctic Platform	0.02	0.38	1.07	0.06	0.75	2.07	0.03	0.51	1.44
	U. Brookian - Sag Phase-North Chukchi Basin	0.00	0.01	0.07	0.00	0.06	0.38	0.00	0.02	0.13
	U. Brookian - Tertiary Turbidites-North Chukchi Basin	0.00	0.02	0.10	0.00	0.27	1.09	0.00	0.07	0.29
	U. Brookian - Tertiary Fluvial Valleys	0.00	1.01	3.55	0.00	3.39	11.15	0.00	1.61	5.53
	U. Brookian - Intervalley Ridges	0.00	0.32	0.92	0.00	0.52	1.16	0.00	0.41	1.13
	Franklinian-Northeast Chukchi Basin	0.00	0.11	0.46	0.00	1.28	5.08	0.00	0.33	1.36
	L. Brookian - Nuwuk Basin	0.00	0.23	0.90	0.00	1.90	7.55	0.00	0.57	2.25
	U. Brookian - Nuwuk Basin	0.00	0.44	1.57	0.00	3.13	11.64	0.00	1.00	3.64
	Hope - Late Sequence (HB Play 1)	0.00	0.03	0.13	0.00	0.60	2.73	0.00	0.13	0.62
	Hope - Early Sequence (HB Play 2)	0.00	0.02	0.10	0.00	0.59	2.55	0.00	0.13	0.56
	Hope - Shallow Basal Sands (HB Play 3)	0.00	0.01	0.05	0.00	0.34	1.39	0.00	0.07	0.30
	Middleton Fold and Thrust Belt	0.00	0.01	0.06	0.00	0.41	1.75	0.00	0.09	0.37
	Yakataga Fold and Thrust Belt	0.00	0.12	0.45	0.00	0.76	2.89	0.00	0.26	0.96
	Yakutat Shelf- Basal Yakataga Formation	0.00	0.11	0.38	0.00	0.61	2.10	0.00	0.22	0.75
	Yakutat Shelf - Kulthieth Sands	0.00	0.30	0.00	0.00	1.94	2.13	0.00	0.65	0.38
	Subducting Terrane	0.00	0.08	0.28	0.00	0.32	1.10	0.00	0.13	0.47
	Late Tertiary Sequence	0.00	0.09	0.34	0.00	2.07	7.99	0.00	0.46	1.76
	Early Tertiary Sequence	0.00	0.03	0.12	0.00	0.77	3.33	0.00	0.17	0.71
	Shallow Basal Sands	0.00	0.03	0.14	0.00	0.92	3.66	0.00	0.20	0.79
	Miocene Basin Sag Play	0.00	0.03	0.14	0.00	0.16	0.80	0.00	0.06	0.28
	Late Oligocene Basin Shelf Play	0.00	0.08	0.34	0.00	0.60	2.45	0.00	0.19	0.77
	Oligocene Rift Subbasin Neritic Fill Play	0.00	0.01	0.05	0.00	0.07	0.38	0.00	0.02	0.12
	Oligocene Rift Subbasin Bathyal Fill Play	0.00	0.01	0.07	0.00	0.21	1.21	0.00	0.05	0.28
	Eocene Rift Onset Play	0.00	0.01	0.03	0.00	0.17	0.95	0.00	0.04	0.20
	Bear Lake/Stepovak (Miocene/Oligocene)	0.00	0.41	1.18	0.00	5.59	14.46	0.00	1.40	3.75
	Tolstoi Fm. (Eocene/Paleocene)	0.02	0.12	0.28	0.40	2.50	5.69	0.09	0.57	1.29
	Black Hills Uplift - Amak Basin	0.00	0.15	0.74	0.00	0.31	1.88	0.00	0.21	1.08
	Mesozoic - Deformed Sedimentary Rocks	0.00	0.04	0.18	0.00	0.02	0.08	0.00	0.04	0.20
	Mesozoic Basement - Buried 'Granite Hills'	0.00	0.03	0.12	0.00	0.21	1.17	0.00	0.07	0.33
	Upper Tertiary Basin Fill Play	0.00	0.01	0.06	0.00	0.71	3.19	0.00	0.14	0.63
	Mid-Tertiary East Subbasin Fill Play	0.00	0.01	0.03	0.00	0.33	1.79	0.00	0.07	0.35
	Mid-Tertiary West Subbasin Fill Play	0.00	0.04	0.15	0.00	1.94	7.90	0.00	0.38	1.55
	Lower Tertiary Subbasin Fill Play	0.00	0.00	0.01	0.00	0.07	0.39	0.00	0.01	0.08
	Graben Play	0.00	0.08	2.73	0.00	0.86	0.05	0.00	0.23	0.70
	South Platform Play	0.00	0.04	4.18	0.00	0.88	0.01	0.00	0.19	0.87
	North Platform Play	0.00	0.04	2.66	0.00	0.60	0.04	0.00	0.15	0.65
	Pribilof Basin Play	0.00	0.06	1.84	0.00	0.45	0.04	0.00	0.14	0.55
	Neogene Structural Play (Shumagin Shelf)	0.00	0.01	0.05	0.00	0.49	2.04	0.00	0.10	0.42
	Neogene Structural Play (Kodiak)	0.00	0.05	0.20	0.00	1.84	7.62	0.00	0.38	1.55

Atlantic 2016 UTRR by Geologic Play

Region	2016 Atlantic Undiscovered Technically Recoverable Oil and Gas Resources (UTRR)									
	Play	Oil (Bbbl)			Gas (Tcf)			BOE (Bbbl)		
		0.95	Mean	0.05	0.95	Mean	0.05	0.95	Mean	0.05
Atlantic OCS	1.15	4.59	9.19	12.80	38.17	68.71	3.43	11.39	21.41	
Late Jurassic - Early Cretaceous Atlantic Carbonate Margin	0.00	0.23	0.97	0.00	5.21	22.57	0.00	1.15	4.98	
Cretaceous & Jurassic Atlantic Marginal Fault Belt	0.00	0.24	0.75	0.00	5.44	15.31	0.00	1.21	3.48	
Cenozoic - Cretaceous & Jurassic Carolina Trough Salt Basin	0.00	0.61	1.72	0.00	7.94	21.31	0.00	2.02	5.51	
Jurassic Shelf Stratigraphic	0.00	0.07	0.29	0.00	1.55	6.68	0.00	0.34	1.47	
Cretaceous & Jurassic Interior Shelf Structure	0.02	0.06	0.10	0.47	1.29	2.30	0.11	0.29	0.51	
Cretaceous & Jurassic Blake Plateau Basin	0.00	0.33	0.87	0.00	0.46	1.21	0.00	0.41	1.09	
Triassic - Jurassic Rift Basin	0.00	0.20	0.92	0.00	0.28	1.30	0.00	0.25	1.15	
Cretaceous & Jurassic Hydrothermal Dolomite	0.00	0.10	0.52	0.00	0.15	0.90	0.00	0.12	0.68	
Cenozoic - Cretaceous & Jurassic Paleo Slope Siliciclastic (core)	0.00	1.86	8.11	0.00	10.62	46.63	0.00	3.75	16.41	
Cenozoic - Cretaceous & Jurassic Paleo Slope Siliciclastic (extension)	0.00	0.90	4.12	0.00	5.23	24.33	0.00	1.83	8.45	

Gulf of Mexico 2016 UTRR by Geologic Play

Region	2016 Gulf of Mexico Undiscovered Technically Recoverable Oil and Gas Resources (UTRR)									
	Play	Oil (Bbbl)			Gas (Tcf)			BOE (Bbbl)		
		0.95	Mean	0.05	0.95	Mean	0.05	0.95	Mean	0.05
Gulf of Mexico OCS		39.48	48.46	58.53	124.01	141.77	159.63	61.55	73.69	86.93
	Pleistocene Shelf	0.03	0.10	0.25	0.65	2.32	5.41	0.15	0.52	1.21
	Pleistocene Slope	0.23	0.51	0.80	2.36	5.11	8.22	0.65	1.42	2.26
	Pliocene Shelf	0.08	0.24	0.71	1.00	3.13	8.14	0.25	0.79	2.15
	Pliocene Slope	0.75	3.58	6.93	2.36	11.37	21.68	1.17	5.61	10.79
	Upper Miocene Shelf	0.45	0.85	1.44	3.14	5.98	10.89	1.01	1.92	3.37
	Upper Miocene Slope	3.12	5.27	7.64	9.56	16.64	24.36	4.82	8.23	11.97
	Middle Miocene Shelf	0.05	0.28	0.56	1.52	8.91	18.52	0.32	1.86	3.85
	Middle Miocene Slope	4.40	7.39	11.27	7.71	13.15	20.23	5.77	9.73	14.87
	Lower Miocene Shelf	0.01	0.13	0.33	0.38	6.62	16.53	0.07	1.31	3.28
	Lower Miocene Slope	1.76	7.26	13.25	0.96	3.59	6.31	1.94	7.90	14.37
	Lower Tertiary Shelf	0.12	0.24	0.34	13.35	25.84	40.96	2.50	4.84	7.62
	Lower Tertiary Slope	6.80	15.63	26.98	2.84	6.38	10.48	7.31	16.76	28.84
	Mesozoic Deep Shelf	0.00	0.00	0.00	0.00	4.34	18.62	0.00	0.77	3.32
	Mesozoic Slope	0.70	1.64	2.85	2.55	5.83	10.20	1.15	2.68	4.67
	Tuscaloosa	0.00	0.04	0.16	0.00	0.24	0.75	0.00	0.09	0.30
	Andrew	0.00	0.05	0.11	0.01	0.12	0.29	0.00	0.07	0.16
	James	0.02	0.05	0.09	0.50	1.15	1.94	0.11	0.26	0.43
	Sligo	0.00	0.04	0.11	0.00	0.21	0.69	0.00	0.07	0.23
	Lower Cretaceous Clastic	0.00	0.01	0.02	0.00	0.04	0.14	0.00	0.01	0.05
	Basement Clastic	0.00	0.00	0.01	0.00	0.08	0.25	0.00	0.02	0.06
	Buried Hill Stratigraphic	0.00	0.49	2.15	0.00	1.46	6.50	0.00	0.75	3.31
	Buried Hill Structural	0.00	1.23	5.33	0.00	2.07	8.69	0.00	1.60	6.88
	Buried Hill Drape	0.00	0.54	2.38	0.00	2.47	10.16	0.00	0.98	4.19
	Smackover	0.02	0.04	0.06	0.06	0.13	0.22	0.03	0.06	0.10
	Cotton Valley Clastic	0.01	0.03	0.08	0.03	0.18	0.41	0.01	0.06	0.15
	Sunniland	0.13	0.25	0.40	0.12	0.24	0.37	0.15	0.29	0.47
	Norphlet	1.00	2.58	4.45	6.81	14.17	23.61	2.21	5.10	8.65

Pacific 2016 UTRR by Geologic Play

Region	Play	Basin	2016 Pacific Undiscovered Technically Recoverable Oil and Gas Resources (UTRR)								
			Oil (Bbbl)			Gas (Tcf)			BOE (Bbbl)		
			0.95	Mean	0.05	0.95	Mean	0.05	0.95	Mean	0.05
Pacific OCS			6.96	10.20	14.03	10.52	16.10	23.92	8.83	13.07	18.28
	Growth Fault Play	Washington-Oregon Area	0.00	0.13	0.42	0.00	0.45	1.42	0.00	0.21	0.67
	Neogene Channel/Fan Sandstone Play		0.00	0.11	0.29	0.00	0.85	2.15	0.00	0.26	0.67
	Neogene Shelf Sandstone Play		0.00	0.15	0.39	0.00	0.58	1.34	0.00	0.25	0.63
	Paleogene Sandstone Play	Eel River Basin	0.00	0.01	0.03	0.00	0.36	0.94	0.00	0.07	0.19
	Neogene Channel/Fan Sandstone Play		0.01	0.03	0.08	0.28	0.60	0.96	0.06	0.13	0.25
	Neogene Shelf Sandstone Play		0.00	0.04	0.06	0.00	0.90	1.58	0.00	0.20	0.34
	Paleogene Sandstone Play	Ano Nuevo Basin	0.00	0.01	0.03	0.00	0.03	0.09	0.00	0.01	0.04
	Neogene Sandstone Play		0.00	0.08	0.18	0.00	0.09	0.21	0.00	0.09	0.22
	Monterey Fractured Play		0.23	0.58	1.10	0.19	0.59	1.23	0.26	0.68	1.32
	Pre-Monterey Sandstone Play	Bodega-La Honda Basin	0.00	0.05	0.15	0.00	0.07	0.25	0.00	0.07	0.19
	Neogene Sandstone Play		0.00	0.05	0.17	0.00	0.06	0.18	0.00	0.06	0.20
	Monterey Fractured Play		0.49	1.09	1.87	0.54	1.10	2.17	0.58	1.28	2.26
	Pre-Monterey Sandstone Play	Cortez-Velero-Long	0.00	0.27	0.59	0.00	0.36	0.86	0.00	0.33	0.74
	Lower Miocene Sandstone Play		0.00	0.18	0.56	0.00	0.44	2.20	0.00	0.26	0.95
	Paleogene-Cretaceous Sandstone Play		0.00	0.13	0.56	0.00	0.32	1.82	0.00	0.19	0.89
	Upper Miocene Sandstone Play	Oceanside-Capistrano	0.00	0.50	1.31	0.00	0.26	0.67	0.00	0.55	1.43
	Monterey Fractured Play		0.00	0.39	1.01	0.00	0.44	1.01	0.00	0.47	1.19
	Lower Miocene Sandstone Play		0.00	0.17	0.67	0.00	0.42	1.48	0.00	0.25	0.94
	Neogene Sandstone Play	Point Arena Basin	0.00	0.08	0.22	0.00	0.09	0.40	0.00	0.10	0.29
	Monterey Fractured Play		1.03	1.77	2.82	0.84	1.78	3.38	1.18	2.08	3.42
	Pre-Monterey Sandstone Play		0.00	0.16	0.32	0.00	0.22	0.66	0.00	0.20	0.43
	Upper Miocene Sandstone Play	San Nicolas Basin	0.00	0.07	0.29	0.00	0.04	0.19	0.00	0.08	0.32
	Monterey Fractured Play		0.00	0.20	0.68	0.00	0.23	0.72	0.00	0.24	0.80
	Lower Miocene Sandstone Play		0.00	0.12	0.51	0.00	0.30	1.08	0.00	0.18	0.70
	Paleogene-Cretaceous Sandstone Play	Santa Barbara-Ventura	0.00	0.09	0.44	0.00	0.23	0.75	0.00	0.13	0.57
	Pico-Repetto Sandstone Play		0.00	0.19	0.85	0.02	0.39	1.62	0.01	0.26	1.13
	Monterey Fractured Play		0.28	0.76	1.68	0.29	0.70	1.05	0.33	0.89	1.87
	Rincon-Monterey-Topanga Ss Play	Santa Maria-Partington	0.02	0.28	0.34	0.36	1.21	4.76	0.09	0.49	1.19
	Gaviota-Sacate-Matilija Ss Play		0.00	0.11	0.31	0.04	0.45	1.34	0.01	0.19	0.55
	Basal Sisquoc Sandstone Play		0.03	0.08	0.15	0.03	0.08	0.12	0.04	0.09	0.17
	Paleogene Sandstone Play	Los Angeles- Santa Monica-San Pedro	0.00	0.01	0.04	0.00	0.02	0.12	0.00	0.01	0.06
	Breccia Play		0.00	0.01	0.06	0.00	0.01	0.05	0.00	0.01	0.07
	Monterey Frac Subjective		0.37	1.02	2.11	0.30	0.74	1.45	0.43	1.15	2.37
	Puente Fan Ss Play	Santa Cruz - Santa Rosa	0.09	0.30	0.64	0.11	0.33	0.55	0.11	0.35	0.74
	Upper Miocene Ss Play		0.00	0.04	0.09	0.00	0.02	0.04	0.00	0.04	0.10
	Modelo Play		0.00	0.15	0.44	0.00	0.21	0.40	0.00	0.18	0.52
	Dume Thrust Fault Play	Santa Cruz - Santa Rosa	0.00	0.34	0.78	0.00	0.45	1.74	0.00	0.42	1.09
	San Onofre Breccia Play		0.00	0.07	0.16	0.00	0.03	0.08	0.00	0.08	0.17
	Paleogene-Cretaceous Ss Play		0.00	0.07	0.28	0.00	0.18	1.23	0.00	0.11	0.50
	SCruz Monterey Frac Play	Santa Cruz - Santa Rosa	0.00	0.20	0.52	0.00	0.22	0.88	0.00	0.24	0.67
	SCruz L Mio Ss Play		0.00	0.08	0.24	0.00	0.19	0.70	0.00	0.11	0.36
	SRosa L Mio Ss Play		0.00	0.02	0.12	0.00	0.06	0.40	0.00	0.04	0.19
	SRosa Monterey Frac Play		0.00	0.03	0.13	0.00	0.04	0.21	0.00	0.04	0.16