

2021 National Assessment UTRR Values by Geologic Play



Alaska 2021 UTRR by Geologic Play

Region	2021 Alaska Undiscovered Technically Recoverable Oil and Gas Resources (UTRR)									
	Play	Oil (Bbo)			Gas (Tcf)			BOE (Bbo)		
		95%	Mean	5%	95%	Mean	5%	95%	Mean	5%
Alaska OCS		17.00	24.69	34.08	91.07	124.03	161.63	33.21	46.76	62.84
	Undeformed Pre-Miss. Basement	0.00	0.01	0.02	0.00	0.03	0.15	0.00	0.01	0.05
	Endicott	0.00	0.06	0.31	0.00	0.13	0.42	0.00	0.09	0.38
	Lisburne	0.00	0.07	0.37	0.00	0.11	0.45	0.00	0.09	0.45
	Upper Ellesmerian	0.27	1.20	3.00	0.38	2.18	4.04	0.34	1.59	3.72
	Rift	0.05	0.52	0.42	0.09	1.32	11.00	0.06	0.76	2.37
	Brookian Faulted Western Topset	0.00	0.17	0.85	0.00	1.49	5.89	0.00	0.44	1.90
	Brookian Unstructured Western Topset	0.01	1.08	4.33	0.18	0.68	1.89	0.04	1.20	4.67
	Brookian Faulted Western Turbidite	0.00	0.02	0.07	0.00	0.31	1.63	0.00	0.08	0.37
	Brookian Unstructured Western Turbidite	0.00	0.15	0.52	0.00	0.21	0.63	0.00	0.18	0.63
	Brookian Faulted Eastern Topset	0.00	0.64	1.31	0.00	6.01	20.25	0.00	1.71	4.91
	Brookian Unstructured Eastern Topset	0.01	0.33	0.91	0.00	0.19	1.05	0.01	0.36	1.10
	Brookian Faulted Eastern Turbidite	0.00	0.09	0.25	0.00	1.39	6.31	0.00	0.33	1.37
	Brookian Unstructured Eastern Turbidite	0.00	0.04	0.18	0.00	0.09	0.34	0.00	0.06	0.24
	Brookian Foldbelt	0.00	1.37	5.01	0.00	1.96	9.41	0.00	1.71	6.68
	Tertiary - Oil	0.00	0.38	0.99	0.00	0.14	0.32	0.00	0.40	1.05
	Mesozoic - Stratigraphic	0.00	0.18	0.69	0.00	0.08	0.43	0.00	0.20	0.76
	Mesozoic - Structural	0.12	0.48	1.04	0.06	0.22	0.43	0.13	0.52	1.11
	Tertiary - Gas	0.00	0.00	0.00	0.00	0.74	2.01	0.00	0.13	0.36
	Endicott - Chukchi Platform	0.00	2.67	6.61	0.00	12.51	25.09	0.00	4.89	11.07
	Endicott - Arctic Platform	0.00	0.04	0.11	0.00	0.58	2.25	0.00	0.15	0.51
	Lisburne	0.00	0.11	0.43	0.00	0.52	2.55	0.00	0.20	0.88
	Ellesmerian - Deep Gas	0.00	0.03	0.16	0.00	1.07	6.72	0.00	0.22	1.36
	Sadlerochit - Chukchi Platform	0.14	0.58	1.27	0.98	4.19	8.83	0.31	1.33	2.84
	Sadlerochit - Arctic Platform	0.00	0.71	1.52	0.00	4.50	18.95	0.00	1.51	4.89
	Rift - Active Margin	1.01	3.98	7.21	5.59	13.52	34.81	2.00	6.38	13.40
	Rift - Stable Shelf	0.12	1.96	6.56	1.96	9.73	22.86	0.47	3.69	10.63
	Rift - Deep Gas	0.00	0.01	0.03	0.00	0.20	1.07	0.00	0.04	0.22
	L. Brookian Foldbelt	0.64	1.52	2.97	3.85	8.20	12.64	1.32	2.98	5.22
	L. Brookian Wrench Zone - Torok Turbidites	0.03	0.24	0.52	0.05	1.52	4.90	0.04	0.51	1.39
	L. Brookian Wrench Zone - Nanushuk Topset	0.00	0.19	0.87	0.00	1.04	3.40	0.00	0.37	1.48
	Brookian North Chukchi High - Sand Apron	0.00	0.81	3.21	0.00	5.46	15.00	0.00	1.78	5.88
	L. Brookian N Chukchi Basin - Topset	0.00	0.17	0.48	0.00	2.00	6.47	0.00	0.53	1.63
	Brookian - Deep Gas	0.00	0.01	0.07	0.00	0.46	2.59	0.00	0.09	0.53
	L. Brookian - Torok-Arctic Platform	0.00	0.03	0.15	0.00	0.12	0.69	0.00	0.05	0.27
	L. Brookian - Nanushuk Arctic Platform	0.03	0.42	1.33	0.05	0.82	1.34	0.04	0.56	1.57
	U. Brookian - Sag Phase-North Chukchi Basin	0.00	0.01	0.11	0.00	0.07	0.21	0.00	0.03	0.15
	U. Brookian - Tertiary Turbidites-North Chukchi Basin	0.00	0.02	0.09	0.00	0.27	1.16	0.00	0.07	0.30
	U. Brookian - Tertiary Fluvial Valleys	0.00	0.91	3.52	0.00	3.09	8.89	0.00	1.46	5.11
	U. Brookian - Intervalley Ridges	0.00	0.35	0.93	0.00	0.57	1.56	0.00	0.45	1.21
	Franklinian-Northeast Chukchi Basin	0.00	0.21	0.46	0.00	2.50	8.38	0.00	0.65	1.95
	L. Brookian - Nuwuk Basin	0.00	0.25	0.82	0.00	2.06	8.37	0.00	0.61	2.31
	U. Brookian - Nuwuk Basin	0.00	0.44	2.36	0.00	3.14	7.54	0.00	1.00	3.71
	Hope - Late Sequence (HB Play 1)	0.00	0.02	0.09	0.00	0.53	2.69	0.00	0.12	0.57
	Hope - Early Sequence (HB Play 2)	0.00	0.02	0.07	0.00	0.57	2.71	0.00	0.12	0.55
	Hope - Shallow Basal Sands (HB Play 3)	0.00	0.01	0.04	0.00	0.34	1.51	0.00	0.07	0.31
	Middleton Fold and Thrust Belt	0.00	0.01	0.04	0.00	0.41	1.79	0.00	0.08	0.36
	Yakataga Fold and Thrust Belt	0.00	0.15	0.56	0.00	0.93	3.71	0.00	0.31	1.22
	Yakutat Shelf- Basal Yakataga Formation	0.00	0.12	0.42	0.00	0.64	2.28	0.00	0.23	0.83
	Yakutat Shelf - Kulthieth Sands	0.00	0.31	0.90	0.00	2.05	6.83	0.00	0.68	2.12
	Subducting Terrane	0.00	0.07	0.27	0.00	0.30	1.12	0.00	0.13	0.47
	Late Tertiary Sequence	0.00	0.08	0.22	0.00	1.95	8.16	0.00	0.43	1.68
	Early Tertiary Sequence	0.00	0.03	0.09	0.00	0.72	3.30	0.00	0.15	0.68
	Shallow Basal Sands	0.00	0.03	0.10	0.00	0.84	3.57	0.00	0.18	0.74
	Miocene Basin Sag	0.00	0.03	0.13	0.00	0.16	0.78	0.00	0.05	0.27
	Late Oligocene Basin Shelf	0.00	0.20	0.59	0.00	1.49	5.12	0.00	0.46	1.50
	Oligocene Rift Subbasin Neritic Fill	0.00	0.02	0.07	0.00	0.15	0.87	0.00	0.04	0.23
	Oligocene Rift Subbasin Bathyal Fill	0.00	0.01	0.05	0.00	0.19	1.19	0.00	0.05	0.26
	Eocene Rift Onset	0.00	0.01	0.03	0.00	0.15	0.88	0.00	0.03	0.18
	Bear Lake/Stepovak (Miocene/Oligocene)	0.00	0.45	3.45	0.00	6.17	3.82	0.00	1.55	4.13
	Tolstoi Fm. (Eocene/Paleocene)	0.00	0.11	0.18	0.25	2.29	5.86	0.05	0.52	1.22
	Black Hills Uplift - Amak Basin	0.00	0.15	0.88	0.00	0.29	0.65	0.00	0.20	1.00
	Mesozoic - Deformed Sedimentary Rocks	0.00	0.04	0.20	0.00	0.02	0.10	0.00	0.05	0.22
	Mesozoic Basement - Buried 'Granite Hills'	0.00	0.04	0.30	0.00	0.24	0.58	0.00	0.08	0.41
	Upper Tertiary Basin Fill	0.00	0.01	0.05	0.00	0.55	2.52	0.00	0.11	0.49
	Mid-Tertiary East Subbasin Fill Play	0.00	0.00	0.03	0.00	0.24	1.36	0.00	0.05	0.27
	Mid-Tertiary West Subbasin Fill	0.00	0.05	0.18	0.00	2.50	9.97	0.00	0.49	1.95
	Lower Tertiary Subbasin Fill	0.00	0.00	0.01	0.00	0.07	0.38	0.00	0.01	0.08
	Graben	0.00	0.10	0.25	0.00	1.07	2.67	0.00	0.29	0.72
	South Platform	0.00	0.03	0.14	0.00	0.80	3.71	0.00	0.18	0.80
	North Platform	0.00	0.03	0.08	0.00	0.54	3.04	0.00	0.13	0.62
	Pribilof Basin	0.00	0.05	0.15	0.00	0.39	2.04	0.00	0.12	0.51
	Neogene Structural Play (Shumagin Shelf)	0.00	0.01	0.04	0.00	0.41	1.79	0.00	0.08	0.36
	Neogene Structural Play (Kodiak)	0.000	0.042	0.105	0.000	1.60	7.138	0.000	0.33	1.375

Atlantic 2021 UTRR by Geologic Play

Region	2021 Atlantic Undiscovered Technically Recoverable Oil and Gas Resources (UTRR)									
	Play	Oil (Bbo)			Gas (Tcf)			BOE (Bbo)		
		95%	Mean	5%	95%	Mean	5%	95%	Mean	5%
Atlantic OCS		0.64	4.31	9.94	5.94	34.09	70.10	1.70	10.38	22.41
	Late Jurassic - Early Cretaceous Atlantic Carbonate Margin	0.00	0.18	0.48	0.00	4.05	20.04	0.00	0.90	4.04
	Cretaceous & Jurassic Atlantic Marginal Fault Belt	0.00	0.19	0.96	0.00	4.26	16.08	0.00	0.95	3.82
	Cenozoic - Cretaceous & Jurassic Carolina Trough Salt Basin	0.00	0.51	1.91	0.00	6.71	17.95	0.00	1.70	5.10
	Jurassic Shelf Stratigraphic	0.00	0.06	0.29	0.00	1.27	6.61	0.00	0.28	1.47
	Cretaceous & Jurassic Interior Shelf Structure	0.00	0.04	0.18	0.00	0.93	1.70	0.00	0.21	0.48
	Cretaceous & Jurassic Blake Plateau Basin	0.00	0.14	0.64	0.00	0.19	0.76	0.00	0.17	0.77
	Triassic - Jurassic Rift Basin	0.00	0.24	1.14	0.00	0.33	0.27	0.00	0.29	1.19
	Cretaceous & Jurassic Hydrothermal Dolomite	0.00	0.04	0.31	0.00	0.05	0.02	0.00	0.04	0.32
	Cenozoic - Cretaceous & Jurassic Paleo Slope Siliciclastic (core)	0.00	2.39	14.23	0.00	13.40	42.16	0.00	4.78	21.73
	Cenozoic - Cretaceous & Jurassic Paleo Slope Siliciclastic (extension)	0.00	0.53	2.28	0.00	2.89	24.96	0.00	1.05	6.72

Gulf of Mexico 2021 UTRR by Geologic Play

Region	2021 Gulf of Mexico Undiscovered Technically Recoverable Oil and Gas Resources (UTRR)									
	Play	Oil (Bbo)			Gas (Tcf)			BOE (Bbo)		
		95%	Mean	5%	95%	Mean	5%	95%	Mean	5%
Gulf of Mexico OCS		23.31	29.59	36.27	46.88	54.84	62.56	31.65	39.35	47.40
	Pleistocene Shelf	0.00	0.01	0.04	0.01	0.23	0.79	0.00	0.05	0.18
	Pleistocene Slope	0.02	0.05	0.13	0.11	0.34	0.91	0.04	0.11	0.29
	Pliocene Shelf	0.01	0.04	0.08	0.10	0.36	0.84	0.03	0.10	0.23
	Pliocene Slope	0.14	0.39	1.10	0.37	1.02	3.00	0.21	0.57	1.64
	Upper Miocene Shelf	0.26	0.45	0.75	1.97	3.35	5.55	0.62	1.05	1.73
	Upper Miocene Slope	2.30	3.72	5.34	6.32	10.68	15.56	3.42	5.63	8.11
	Middle Miocene Shelf	0.05	0.09	0.19	2.26	4.57	8.38	0.45	0.91	1.68
	Middle Miocene Slope	2.05	3.92	6.31	3.33	6.62	10.36	2.64	5.10	8.15
	Lower Miocene Shelf	0.01	0.03	0.09	0.62	3.08	7.97	0.12	0.58	1.51
	Lower Miocene Slope	2.10	4.39	7.44	0.92	1.92	3.25	2.26	4.73	8.02
	Lower Tertiary Shelf	0.01	0.01	0.02	0.49	1.11	1.89	0.09	0.21	0.36
	Lower Tertiary Slope	0.03	0.19	0.47	0.02	0.11	0.27	0.03	0.21	0.52
	Wilcox Slope	4.76	8.66	12.81	2.55	4.64	6.86	5.21	9.48	14.03
	Lower Tertiary Basin Floor	0.00	0.99	3.00	0.00	0.26	0.78	0.00	1.04	3.14
	Mesozoic Shelf	0.00	0.01	0.02	0.00	0.37	1.42	0.00	0.07	0.27
	Mesozoic Slope	0.00	0.21	0.75	0.00	0.22	0.80	0.00	0.25	0.89
	Lower Tuscaloosa Shelf	0.01	0.06	0.13	0.04	0.42	0.97	0.01	0.13	0.30
	Lower Tuscaloosa Slope	0.00	0.18	0.71	0.00	0.13	0.51	0.00	0.21	0.80
	Lower Cretaceous Clastic Shelf	0.00	0.01	0.05	0.00	0.10	0.42	0.00	0.03	0.13
	Lower Cretaceous Clastic Slope	0.01	0.20	0.59	0.01	0.14	0.42	0.01	0.22	0.66
	Lower Cretaceous Carbonate	0.06	0.26	0.52	0.47	1.86	3.64	0.14	0.59	1.17
	Sunniland	0.00	0.11	0.34	0.00	0.00	0.00	0.00	0.11	0.34
	Cotton Valley Clastic Shelf	0.00	0.02	0.04	0.02	0.12	0.32	0.01	0.04	0.10
	Cotton Valley Clastic Slope	0.00	0.21	0.84	0.00	0.15	0.61	0.00	0.24	0.95
	Florida Basement Clastic	0.00	0.02	0.10	0.00	0.03	0.12	0.00	0.03	0.12
	Smackover	0.24	0.82	1.62	1.54	5.76	11.51	0.52	1.85	3.67
	Norphlet Shelf	0.00	0.00	0.00	1.65	3.77	6.32	0.29	0.67	1.13
	Norphlet Slope	1.75	3.35	5.15	1.26	2.41	3.71	1.97	3.78	5.81
	Expanded Jurassic	0.00	0.37	1.56	0.00	0.27	1.12	0.00	0.42	1.76
	Pre-Salt or Equivalent	0.00	0.82	2.60	0.00	0.84	2.66	0.00	0.97	3.08

Pacific 2021 UTRR by Geologic Play

Basin	Region	2021 Pacific Undiscovered Technically Recoverable Oil and Gas Resources (UTRR)									
		Play	Oil (Bbo)			Gas (Tcf)			BOE (Bbo)		
			95%	Mean	5%	95%	Mean	5%	95%	Mean	5%
	Pacific OCS		6.91	10.20	14.20	10.15	16.07	23.43	8.72	13.06	18.37
Washington-Oregon Area	Growth Fault	0.00	0.13	0.42	0.00	0.45	1.42	0.00	0.21	0.67	
	Neogene Channel/Fan Sandstone	0.00	0.11	0.31	0.00	0.84	2.12	0.00	0.26	0.69	
	Neogene Shelf Sandstone	0.00	0.15	0.36	0.00	0.57	1.43	0.00	0.25	0.62	
	Paleocene Sandstone	0.00	0.01	0.03	0.00	0.36	0.96	0.00	0.07	0.20	
Eel River Basin	Neogene Channel/Fan Sandstone	0.01	0.03	0.06	0.23	0.60	1.05	0.06	0.13	0.24	
	Neogene Shelf Sandstone	0.00	0.04	0.08	0.00	0.90	1.46	0.00	0.20	0.34	
	Paleocene Sandstone	0.00	0.01	0.03	0.00	0.03	0.09	0.00	0.01	0.04	
Point Arena Basin	Neogene Sandstone	0.00	0.08	0.23	0.00	0.09	0.30	0.00	0.09	0.29	
	Monterey Fractured	0.99	1.76	2.77	0.95	1.76	3.26	1.16	2.07	3.35	
	Pre-Monterey Sandstone	0.00	0.16	0.35	0.00	0.22	0.50	0.00	0.20	0.44	
Bodega-La Honda Basin	Neogene Sandstone	0.00	0.05	0.17	0.00	0.06	0.23	0.00	0.06	0.21	
	Monterey Fractured	0.50	1.09	1.86	0.51	1.10	2.30	0.59	1.29	2.27	
	Pre-Monterey Sandstone	0.00	0.27	0.61	0.00	0.36	0.79	0.00	0.33	0.75	
Ana Nuevo Basin	Neogene Sandstone	0.00	0.08	0.17	0.00	0.09	0.24	0.00	0.09	0.22	
	Monterey Fractured	0.22	0.58	1.13	0.24	0.59	0.96	0.26	0.68	1.30	
	Pre-Monterey Sandstone	0.00	0.05	0.13	0.00	0.07	0.36	0.00	0.07	0.20	
Santa Maria-Partington Basin	Basal Sisquoc Sandstone	0.03	0.08	0.15	0.03	0.08	0.11	0.04	0.09	0.17	
	Paleogene Sandstone	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.01	
	Breccia	0.00	0.01	0.05	0.00	0.01	0.06	0.00	0.01	0.07	
	Monterey Fractured Subjective	0.38	1.02	2.11	0.26	0.74	1.49	0.43	1.15	2.37	
Santa Barbara-Ventura Basin	Gaviota-Sacate-Matilija Sandstone	0.00	0.11	0.31	0.03	0.45	1.46	0.01	0.19	0.56	
	Pico Repetto Sandstone	0.00	0.20	1.13	0.05	0.40	0.42	0.01	0.27	1.21	
	Rincon-Monterey-Topanga Sandstone	0.05	0.28	0.74	0.21	1.23	2.71	0.09	0.50	1.22	
	Monterey Fractured Subjective	0.28	0.77	1.68	0.30	0.70	1.15	0.33	0.89	1.88	
Oceanside-Capistrano Basin	Upper Miocene Sandstone	0.00	0.50	1.31	0.00	0.26	0.63	0.00	0.55	1.43	
	Miocene Fractured	0.00	0.39	0.97	0.00	0.44	1.12	0.00	0.46	1.17	
	Lower Miocene Sandstone	0.00	0.18	0.79	0.00	0.42	0.96	0.00	0.25	0.97	
Santa Cruz-Santa Rosa Basin	Paleogene-Cretaceous Sandstone	0.00	0.08	0.31	0.00	0.19	1.11	0.00	0.11	0.51	
	Santa Cruz Monterey Fractured	0.00	0.19	0.58	0.00	0.22	0.52	0.00	0.23	0.67	
	Santa Cruz Lower Monterey Sandstone	0.00	0.08	0.22	0.00	0.18	0.82	0.00	0.11	0.36	
	Santa Rosa Lower Miocene Sandstone	0.00	0.02	0.15	0.00	0.06	0.26	0.00	0.04	0.19	
	Santa Rosa Monterey Fractured	0.00	0.03	0.13	0.00	0.04	0.21	0.00	0.04	0.16	
San Nicholas Basin	Upper Miocene Sandstone	0.00	0.07	0.29	0.00	0.04	0.15	0.00	0.08	0.32	
	Miocene Fractured	0.00	0.20	0.59	0.00	0.22	1.12	0.00	0.24	0.79	
	Lower Miocene Sandstone	0.00	0.13	0.46	0.00	0.30	1.44	0.00	0.18	0.72	
	Paleogene-Cretaceous Sandstone	0.00	0.09	0.36	0.00	0.22	1.11	0.00	0.13	0.56	
Cortez-Valero-Long Area	Lower Miocene Sandstone	0.00	0.18	0.70	0.00	0.44	1.55	0.00	0.26	0.98	
	Paleogene-Cretaceous Sandstone	0.00	0.13	0.70	0.00	0.31	1.05	0.00	0.19	0.89	
Los Angeles-Santa Monica-San Pedro	Puente Fan Sandstone	0.10	0.30	0.62	0.09	0.33	0.61	0.12	0.35	0.73	
	Upper Miocene Sandstone	0.00	0.04	0.09	0.00	0.02	0.03	0.00	0.04	0.10	
	Modelo	0.00	0.15	0.43	0.00	0.21	0.48	0.00	0.18	0.51	
	Dume Thrust Fault	0.00	0.35	0.93	0.00	0.46	1.20	0.00	0.43	1.14	
	San Onofre Breccia	0.00	0.07	0.16	0.00	0.03	0.11	0.00	0.08	0.18	