

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ESTIMATES OF FEDERAL OWNERSHIP OF UNDISCOVERED
OIL AND GAS RESOURCES BY PROVINCE: STATISTICAL
BACKGROUND DATA FOR U.S. GEOLOGICAL SURVEY CIRCULAR 860

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This report is preliminary and has
not been reviewed for conformity with
U.S. Geological Survey editorial standards

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INTRODUCTION

The recent appraisal of the Nation's undiscovered recoverable conventional resources of oil and gas include a percentage estimate of Federal ownership of undiscovered resources by Region (Dolton and others, 1981, Appendix E). Estimates of Federal ownership by province, from which the Regional estimates were derived, are presented here.

Federal ownership here includes those resources estimated to occur offshore under Federal waters and onshore on non-Indian Federal lands and on patented lands with Federally reserved oil and gas rights. No estimates were made for onshore Alaska provinces because questions of land ownership there have not been resolved. All values are rounded to the nearest 5 percent. NA, not applicable, is used for those areas for which no recoverable resource was estimated.

Definitions of commodities and resource terms and a summary of the appraisal methods are included in Dolton and others, 1981. Small-scale maps of the provinces are shown in Figures 1 and 2; large-scale index maps are available as Open-File Reports 81-84A, B and C (Varnes, Dolton, and McMullin, 1981; Varnes, Dolton, and others, 1981; Varnes, Coury, and others, 1981).

The United States has not resolved its offshore boundaries with other States concerned. The lines on this chart are for purposes of illustration only, and do not necessarily reflect the position or views of the United States with respect to the boundary involved.

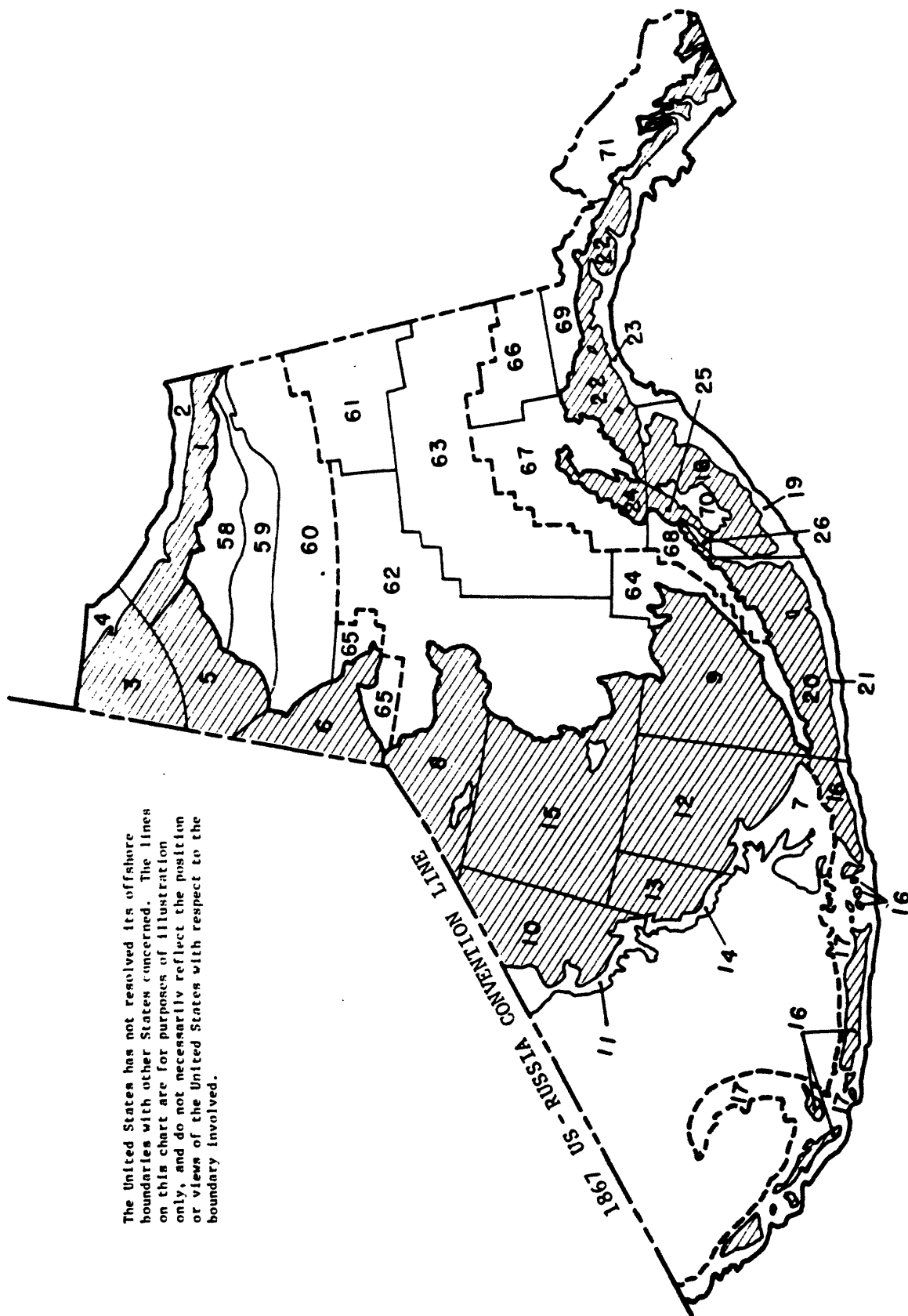


Figure 1.--Index map of Alaska showing provinces assessed. Shading denotes offshore shelf areas; names of provinces are listed by number in the table.

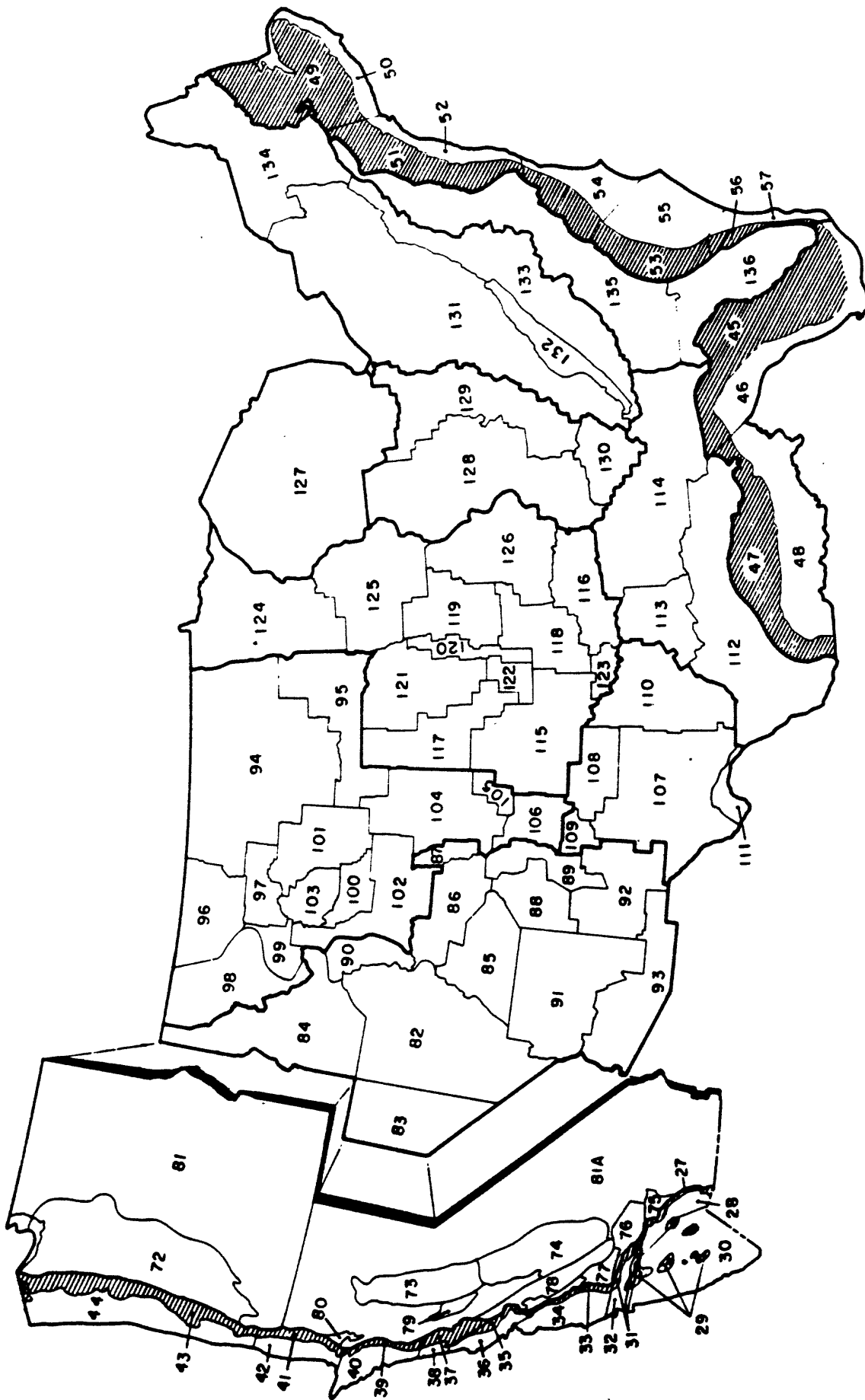


Figure 2.--Index map of lower 48 States showing provinces assessed. Shading denotes offshore shelf areas; names of provinces are listed by number in table.

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
(All values rounded to the nearest 5 percent. NA, not applicable; resource not present.)

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
1A. Alaska Offshore		
1 Beaufort Shelf (0-200 m)	85	85
2 Beaufort Slope (200-2400 m)	100	100
3 North Chukchi Shelf (0-200 m)	100	100
4 North Chukchi Slope (200-2400 m)	100	100
5 Central Chukchi (0-200 m)	95	95
6 Hope Basin (0-200 m)	95	95
7 Umnak Plateau (200-2400 m)	NA	NA
8 Norton Basin (0-200 m)	100	100
9 Bristol Basin (0-200 m)	90	90
10 Navarin Basin Shelf (0-200 m)	100	100
11 Navarin Basin Slope (200-2400 m)	100	100
12 St. George Basin (0-200 m)	100	100
13 Zhemchug Shelf (0-200 m)	100	100
14 Zhemchug Slope (200-2400 m)	NA	NA
15 St. Matthew-Hall Basin (0-200 m)	NA	NA
16 Aleutian Shelf (0-200 m)	NA	NA
17 Aleutian Slope (200-2400 m)	NA	NA

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
(All values rounded to the nearest 5 percent. NA, not applicable; resource not present)--continued

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
18 Kodiak Shelf (0-200 m)	100	100
19 Kodiak Slope (200-2400 m)	100	100
20 Shumagin Shelf (0-200 m)	100	100
21 Shumagin Slope (200-2400 m)	100	100
22 Gulf of Alaska Shelf (0-200 m)	100	100
23 Gulf of Alaska Slope (200-2400 m)	100	100
24 Cook Inlet (0-200 m)	25	25
25 Shelikof Strait Shallow (0-200 m)	95	95
26 Shelikof Strait Deep (200-2400 m)	NA	NA
2A. Pacific Coast Offshore		
27 Inner Basins Shallow (0-200 m)	30	NA
28 Inner Basins Deep (200-2500 m)	95	NA
29 Outer Basins and Ridges Shallow (0-200 m)	65	NA
30 Outer Basins and Ridges Deep (200-2500 m)	100	100
31 Santa Barbara Channel Shelf (0-200 m)	70	NA

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
(All values rounded to the nearest 5 percent. NA, not applicable; resource not present)—continued

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
32 Santa Barbara Channel Deep (200–2500 m)	100	100
33 Santa Maria Shelf (0–200 m)	50	NA
34 Santa Maria Slope (200–2500 m)	100	NA
35 Santa Cruz Shelf (0–200 m)	90	NA
36 Santa Cruz Slope (200–2500 m)	100	NA
37 Bodega Shelf (0–200 m)	80	NA
38 Bodega Slope (200–2500 m)	100	NA
39 Point Arena Shelf (0–200 m)	70	NA
40 Point Arena Slope (200–2500 m)	100	NA
41 Eel River Shelf (0–200 m)	80	80
42 Eel River Slope (200–2500 m)	100	100
43 Oregon-Washington Shelf (0–200 m)	80	80
44 Oregon-Washington Slope (200–2500 m)	100	100
6A. Gulf of Mexico		
45 Eastern Gulf Shelf (0–200 m)	95	80
46 Eastern Gulf Slope (200–2500 m)	100	100
47 Western Gulf Shelf (0–200 m)	95	95
48 Western Gulf Slope (200–2500 m)	100	100

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
(All values rounded to the nearest 5 percent. NA, not applicable; resource not present)—continued

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
11A. Atlantic Coast Offshore		
49 North Atlantic Shelf (0-200 m)	100	100
50 North Atlantic Slope (200-2500 m)	100	100
51 Mid-Atlantic Shelf (0-200 m)	100	100
52 Mid-Atlantic Slope (200-2500 m)	100	100
53 South Atlantic Shelf (0-200 m)	100	100
54 Carolina Trough (200-2500 m)	100	100
55 Blake Plateau (200-2500 m)	100	100
56 Southeast Florida Shelf (0-200 m)	NA	NA
57 Florida Straits (200-2500 m)	NA	NA
1. Alaska Onshore ^{1/}		
58 Arctic Coastal Plain		
59 Northern Foothills		
60 Southern Foothills and Brooks Range		
61 Yukon-Porcupine Basins		
62 Yukon-Koyukuk Basins		
63 Interior Lowlands		

^{1/} Land ownership in Alaska has not been completely determined. Therefore no estimates of percent of resource on Federal lands were made for onshore Alaska.

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
(All values rounded to the nearest 5 percent. NA, not applicable; resource not present)—continued.

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
64 Bristol Basin Onshore		
65 Hope Basin Onshore		
66 Copper River Basin		
67 Cook Inlet		
68 Alaska Peninsula		
69 Gulf of Alaska Onshore		
70 Kodiak Island		
71 Southeastern Alaska		
2. Pacific Coast		
72 Western Oregon-Washington	20	20
73 Sacramento Basin	5	5
74 San Joaquin Basin	5	5
75 Los Angeles Basin	0	0
76 Ventura Basin	5	5
77 Santa Maria Basin	15	NA
78 Central Coastal Basins	5	5
79 Sonoma-Livermore Basins	0	0
80 Humboldt Basin	0	NA
81 Eastern Oregon-Washington	40	40

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
 (All values rounded to the nearest 5 percent. NA, not applicable; resource not present)—continued

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
3. Colorado Plateau and Basin and Range		
82 Eastern Basin and Range	80	80
83 Western Basin and Range	90	90
84 Idaho-Snake River Downwarp	NA	NA
85 Paradox Basin	70	70
86 Uinta-Piceance-Eagle Basins	75	75
87 Park Basins	45	45
88 San Juan Basin	35	35
89 Albuquerque-Santa Fe-San Luis Rift Basins	15	15
90 Wyoming-Utah-Idaho Overthrust Belt	70	70
91 Northern Arizona	30	30
92 South-central New Mexico	70	70
93 Southern Arizona-Southwestern New Mexico	40	40
4. Rocky Mountains and Northern Great Plains		
94 Williston Basin	10	10
95 Sioux Arch	NA	NA
96 Sweetgrass Arch	15	15

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
(All values rounded to the nearest 5 percent. NA, not applicable; resource not present)--continued

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
97 Central Montana	10	10
98 Montana Overthrust Belt	65	65
99 Southwestern Montana	50	50
100 Wind River Basin	70	70
101 Powder River Basin	60	60
102 Southwestern Wyoming Basins	70	70
103 Big Horn Basin	65	65
104 Denver Basin	5	5
105 Las Animas Arch	0	0
106 Raton Basin-Sierra Grande Uplift	5	5
5. West Texas and Eastern New Mexico		
107 Permian Basin	5	5
108 Palo Duro Basin	0	0
109 Pedernal Uplift	NA	NA
110 Bend Arch-Fort Worth Basin	0	0
111 Marathon Fold Belt	0	0
6. Gulf Coast		
112 Western Gulf Basin	0	0

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
 (All values rounded to the nearest 5 percent. NA, not applicable; resource not present)—continued

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
113 East Texas Basin	0	0
114 Louisiana-Mississippi Salt Basins	0	0
7. Mid-Continent		
115 Anadarko Basin	0	0
116 Arkoma Basin	10	10
117 Cambridge Arch-Central Kansas Uplift	0	0
118 Cherokee Platform	0	0
119 Forest City Basin	0	NA
120 Nemaha Ridge	0	0
121 Salina Basin	0	0
122 Sedgwick Basin	0	0
123 Southern Oklahoma	0	0
124 Sioux Uplift	NA	NA
125 Iowa Shelf	NA	NA
126 Ozark Uplift	NA	NA
8. Michigan Basin		
127 Michigan Basin	5	5

Table 1.—Estimated federal ownership of undiscovered recoverable conventional oil and gas resources by province.
 (All values rounded to the nearest 5 percent. NA, not applicable; resource not present)—continued

Region and province (water depth)	Estimates of Federal ownership (percent)	
	Oil and associated- dissolved gas	Non-associated gas
<hr/>		
9. Eastern Interior		
128 Illinois Basin	0	0
129 Cincinnati Arch	0	0
130 Black Warrior Basin	0	0
10. Appalachians		
131 Appalachian Basin	5	5
132 Blue Ridge Overthrust Belt	0	0
133 Piedmont	NA	NA
134 New England-Adirondack	NA	NA
11. Atlantic Coast		
135 Atlantic Coastal Plain	NA	5
136 Florida Peninsula	10	10

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