Table 13: Proved reserves and production of shale natural gas, 2018 - 2021

billion cubic feet

State and subdivision	Reserves				Production			
	2018	2019	2020	2021	2018	2019	2020	2021
Alaska	0	0	0	0	0	0	0	C
Lower 48 States	342,135	353,682	317,756	393,779	22,054	25,556	26,139	27,985
Arkansas	5,970	5,093	4,210	5,127	521	471	419	387
California	41	0	0	0	4	0	0	0
Colorado	2,727	2,500	1,331	4,149	126	149	116	301
Florida	0	0	0	0	0	0	0	0
Kansas	0	0	0	0	0	0	0	0
Kentucky	0	0	0	0	0	0	0	0
Louisiana	25,598	29,553	28,533	35,630	2,044	2,518	2,555	2,942
North	25,598	29,553	28,533	35,630	2,044	2,518	2,555	2,942
South	0	0	0	0	0	0	0	0
State Offshore	0	0	0	0	0	0	0	0
Michigan	1,457	1,138	823	1,092	77	72	57	53
Mississippi	0	0	0	0	0	0	0	0
Montana	221	268	227	254	18	21	16	15
New Mexico	13,082	14,413	14,667	22,245	785	1,101	1,337	1,642
North Dakota	11,737	12,542	8,376	11,146	840	1,043	970	1,052
Ohio	23,956	34,376	27,775	31,790	2,337	2,558	2,320	2,207
Oklahoma	21,396	20,897	15,483	20,750	1,325	1,490	1,195	1,239
Pennsylvania	103,388	105,394	96,699	105,586	6,079	6,782	7,040	7,546
Texas	100,789	93,487	87,296	116,848	6,392	7,440	7,844	8,262
RRC District 1	11,434	9,511	6,517	9,790	693	729	688	652
RRC District 2 Onshore	4,993	4,345	4,290	5,775	654	631	621	582
RRC District 3 Onshore	451	328	135	177	21	23	21	18
RRC District 4 Onshore	13,953	12,486	11,396	14,235	689	682	599	608
RRC District 5	0	6,728	5,344	6,467	0	586	516	480
RRC District 6	18,690	17,026	16,224	20,453	515	895	1,046	1,358
RRC District 7B	1,673	1,090	679	1,067	118	93	84	77
RRC District 7C	7,454	7,747	7,688	12,282	597	705	798	803
RRC District 8	26,116	27,657	30,026	40,334	1,960	2,683	3,088	3,339
RRC District 8A	104	115	141	120	6	9	15	5
RRC District 9	7,490	6,454	4,856	6,148	459	404	368	340
RRC District 10	0	0	0	0	0	0	0	0
State Offshore	0	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0	0
West Virginia	31,748	34,020	32,335	39,160	1,504	1,911	2,270	2,339
Wyoming	0	0	0	0	0	0	0	0
Federal Offshore	0	0	0	0	0	0	0	0
Other states ^a	25	1	1	2	2	0	0	0
U.S. total	342,135	353,682	317,756	393,779	22,054	25,556	26,139	27,985

Data source: U.S. Energy Information Administration, Form EIA-23L, Annual Report of Domestic Oil and Gas Proved Reserves , 2018-2021

Note: We based this table on proved reserves and production volumes of shale natural gas reported and imputed from data on Form EIA-23L *Annual Report of Domestic Oil and Gas Reserves*. For certain reasons (e.g. incorrect or incomplete respondent submissions,

respondent mis-identification of shale vs non-shale reservoirs) the actual proved reserves and production of natural gas

from shales may be higher or lower. The production estimates are provided as an indicator of production trends and may differ from official U.S. EIA production volumes listed elsewhere on our website.

Natural gas is measured at 60 degrees Farenheit and atmospheric pressure base of 14.73 pounds per square inch (psia)

 $to\ avoid\ disclosure\ of\ operator-level\ reserves\ data,\ or\ because\ of\ other\ statistical\ precision\ or\ data\ quality\ reasons.$

^a Other states include Indiana, Missouri, New York, South Dakota, Tennessee and Utah. Individual state volumes are withheld