

Domestic Uranium Production Report Fourth-Quarter 2019

February 2020















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Introduction

In this report, the U.S. Energy Information Administration (EIA) reports U.S. uranium production from 1996 through the fourth quarter of 2019. Data in this report are based on information reported on Form EIA-851A, *Domestic Uranium Production Report (Annual)*, and Form EIA-851Q, *Domestic Uranium Production Report (Quarterly*).

Previous issues of this report are available on the EIA website.

Definitions for terms used in this report are available in EIA's Energy Glossary.

Fourth-quarter 2019

U.S. production of uranium concentrate (U_3O_8) in the fourth quarter of 2019 was 38,614 pounds, up 20% from the third quarter of 2019 and down 88% from the fourth quarter of 2018. During the fourth quarter of 2019, five U.S. uranium facilities produced uranium, one more than in the third quarter of 2019.

U.S. uranium in-situ leach plants in production (state)

- Lost Creek Project (Wyoming)
- Nichols Ranch In-Situ Recovery (ISR) Project (Wyoming)
- Ross Central Processing Plant (CPP) (Wyoming)
- Smith Ranch-Highland Operation (Wyoming)
- Crowe Butte Operation (Nebraska)

Preliminary 2019 total production

Preliminary U.S. uranium concentrate production totaled 173,875 pounds of U_3O_8 in 2019. This amount is 88% lower than the 1,447,875 pounds of U_3O_8 produced in 2018 and is the lowest annual production on record.

Table 1. Total production of uranium concentrate in the United States, 1996 to fourth-quarte 2019 pounds U_3O_8

Calendar- year quarter	First quarter	Second quarter	Third quarter	Fourth quarter	Calendar- year total
1996	1,734,427	1,460,058	1,691,796	1,434,425	6,320,706
1997	1,149,050	1,321,079	1,631,384	1,541,052	5,642,565
1998	1,151,587	1,143,942	1,203,042	1,206,003	4,704,574
1999	1,196,225	1,132,566	1,204,984	1,076,897	4,610,672
2000	1,018,683	983,330	981,948	973,585	3,975,545
2001	709,177	748,298	628,720	553,060	2,639,256
2002	620,952	643,432	579,723	500,000	2,344,107
2003	400,000	600,000	400,000	600,000	2,000,000
2004	600,000	400,000	588,738	600,000	2,282,406
2005	709,600	630,053	663,068	686,456	2,689,178
2006	931,065	894,268	1,083,808	1,196,485	4,105,626
2007	1,162,737	1,119,536	1,075,460	1,175,845	4,533,578
2008	810,189	1,073,315	980,933	1,037,946	3,902,383
2009	880,036	982,760	956,657	888,905	3,708,358
2010	876,084	1,055,102	1,150,725	1,146,281	4,228,192
2011	1,063,047	1,189,083	846,624	892,013	3,990,767
2012	1,078,404	1,061,289	1,048,018	957,936	4,145,647
2013	1,147,031	1,394,232	1,171,278	946,301	4,658,842
2014	1,242,179	1,095,011	1,468,608	1,085,534	4,891,332
2015	1,154,408	789,980	774,541	624,278	3,343,207
2016	626,522	745,306	818,783	725,947	2,916,558
2017	450,215	726,375	643,212	622,987	2,442,789
2018	226,780	365,421	527,064	328,680	1,447,945
P2019	58,481	44,569	32,211	38,614	173,875

E = Estimated data P = Preliminary data NA = Not available -- = Not applicable

Notes: The reported fourth-quarter 2002 production amount was adjusted by rounding to the nearest 100,000 pounds to avoid disclosure of individual company data. This adjustment also affects the 2002 annual production. The reported production amounts in 2003 and the first, second, and fourth quarters of 2004 were adjusted by rounding to the nearest 200,000 pounds to avoid disclosure of individual company data. The reported 2004 total is the actual production for 2004. Totals may not equal the sum of components because of independent rounding.

Table 2. Number of uranium mills and plants producing uranium concentrate in the United States

¹ Milling uranium-bearing ore

² Not milling ore, but producing uranium concentrate from other (non-ore) materials

³ Not including in-situ leach plants that only produced uranium concentrate from restoration

⁴ Uranium concentrate as a byproduct from phosphate production

Table 3. U.S. uranium mills and heap leach facilities by owner, location, capacity, and operating status

		County, state	Capacity (short	Operating status at end of						
Owner	Mill and heap leach ¹ facility name	(existing and planned locations)	tons of ore per day)	2018	First-quarter 2019	Second-quarter 2019	Third-quarter 2019	Fourth-quarter 2019		
Anfield Resources Inc.	Shootaring Canyon Uranium Mill	Garfield, Utah	750	standby	standby	standby	standby	standby		
EFR White Mesa LLC	White Mesa Mill	San Juan, Utah	2,000	operating- processing alternate feed	operating- processing alternate feed	operating- processing alternate feed	standby	standby		
Energy Fuels Wyoming Inc	Sheep Mountain	Fremont, Wyoming	725	undeveloped	undeveloped	undeveloped	undeveloped	undeveloped		
Kennecott Uranium Company/Wyoming Coal Resource Company	Sweetwater Uranium Project	Sweetwater, Wyoming	3,000	standby	standby	standby	standby	standby		
Total capacity			6,475							

¹ Heap leach solutions: The separation, or dissolving-out from mined rock, of the soluble uranium constituents by the natural action of percolating a prepared chemical solution through mounded (heaped) rock material. The mounded material usually contains low-grade mineralized material and/or waste rock produced from open pit or underground mines. The solutions are collected after percolation is completed, and the solutions are processed to recover the valued components.

- = No data reported

Notes: Capacity for the fourth-quarter of 2019. An operating status of operating indicates the mill usually was producing uranium concentrate at the end of the period.

Table 4. U.S. uranium in-situ leach plants by owner, location, capacity, and operating status

		County, state (existing and	Production capacity (pounds	Operating status at end of				
In-situ leach plant		planned	U₃O ₈ per		First-quarter	Second-	Third-	Fourth-
owner	In-situ leach plant name	locations)	year)	2018	2019	quarter 2019	quarter 2019	quarter 2019
				partially	partially	partially	partially	partially
		Campbell,		permitted	permitted	permitted	permitted	permitted
AUC LLC	Reno Creek	Wyoming	2,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
		Fall River and		partially	partially	partially	partially	partially
		Custer, South		permitted	permitted	permitted	permitted	permitted
Azarga Uranium Corp	Dewey Burdock Project	Dakota	1,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
		Dawes,						
Cameco	Crow Butte Operation	Nebraska	1,000,000	operating	standby	standby	standby	standby
				partially	partially	partially	partially	partially
		McKinley, New		permitted	permitted	permitted	permitted	permitted
Hydro Resources, Inc.	Church Rock	Mexico	1,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
				partially	partially	partially	partially	partially
		McKinley, New		permitted	permitted	permitted	permitted	permitted
Hydro Resources, Inc.	Crownpoint	Mexico	1,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
		Sweetwater,						
Lost Creek ISR LLC	Lost Creek Project	Wyoming	2,000,000	operating	operating	operating	operating	operating
Mestena Uranium								
LLC	Alta Mesa Project	Brooks, Texas	1,500,000	standby	standby	standby	standby	standby
Power Resources, Inc. doing business as	Could Barel Walted Or cotting	Converse,	5 500 000					
Cameco Resources	Smith Ranch-Highland Operation	Wyoming	5,500,000	operating	operating	operating	operating	operating
South Texas Mining			4 000 000				. "	
Venture	Hobson ISR Plant	Karnes, Texas	1,000,000	standby	standby	standby	standby	standby
South Texas Mining	La Balancana	Donal Tarra	4 000 000	-4		-4	-4	-A
Venture	La Palangana	Duval, Texas	1,000,000	standby	standby	standby	standby	standby
Strata Energy Inc	Ross CPP	Crook, Wyoming	375,000	operating	operating	operating	standby	standby

Table 4. U.S. uranium in-situ-leach plants by owner, location, capacity, and operating status (cont.)

		County, state (existing and	Production capacity (pounds	Operating status at end of				
In-situ-leach plant owner	In-situ-leach plant name	planned locations)	U₃O ₈ per year)	2018	First-quarter 2019	Second- quarter 2019	Third- quarter 2019	Fourth- quarter 2019
Uranerz Energy Corporation (An Energy Fuels company)	Nichols Ranch ISR Project	Johnson and Campbell, Wyoming	2,000,000	operating	operating	operating	operating	operating
Uranium Energy Corp.	Goliad ISR Uranium Project	Goliad, Texas	1,000,000	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed
Uranium One Americas, Inc.	Jab and Antelope	Sweetwater, Wyoming	2,000,000	developing	developing	developing	developing	developing
Uranium One Americas, Inc.	Moore Ranch	Campbell, Wyoming	500,000	partially permitted and licensed				
Uranium One USA, Inc.	Willow Creek Project (Christensen Ranch and Irigaray)	Campbell and Johnson, Wyoming	1,300,000	operating	operating	operating	operating	standby
Total Production Capacity			24,175,000					

Notes: Production capacity for the third-quarter of 2019. An operating status of operating indicates the in-situ-leach plant usually was producing uranium concentrate at the end of the period. Hobson ISR Plant processed uranium concentrate that came from La Palangana. Hobson and La Palangana are part of the same project. ISR stands for insitu recovery. Christensen Ranch and Irigaray are part of the Willow Creek Project. Uranerz Energy has a tolling arrangement with Cameco Resources. Uranium is first processed at the Nichols Ranch plant and then transported to the Smith Ranch-Highland Operation plant for final processing into uranium concentrate. CPP stands for central processing plant.

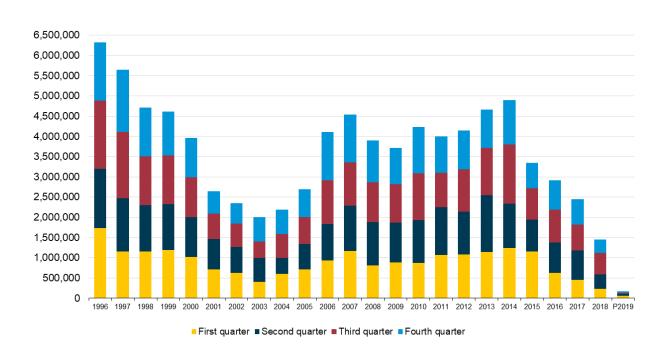


Figure 1. Uranium concentrate production in the United States, 1996 to fourth-quarter 2019 pounds U308

P = Preliminary data