

Independent Statistics & Analysis U.S. Energy Information Administration

# Domestic Uranium Production Report 2nd Quarter 2018

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### Introduction

In this report, the U.S. Energy Information Administration (EIA) reports U.S. uranium production from 1996 through the second quarter of 2018. 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 at <a href="http://www.eia.gov/uranium/production/quarterly">http://www.eia.gov/uranium/production/quarterly</a>.

Definitions for terms used in this report are available in EIA's Energy Glossary at <u>http://www.eia.gov/tools/glossary/</u>.

### Second Quarter of 2018

U.S. production of uranium concentrate in the second quarter of 2018 was 365,421 pounds  $U_3O_8$ , up 61% from the first quarter of 2018 but down 50% from the second quarter of 2017. During the second quarter of 2018, U.S. uranium was produced at seven U.S. uranium facilities, the same number as in the first quarter of 2018.

The Pinon Ridge Mill that was in development in Colorado was removed from the uranium mill and heap leach list in Table 3 after the Colorado Department of Public Health & Environment revoked the mill's Radioactive Materials License.

U.S. uranium mill in production (state)

1. White Mesa Mill (Utah)

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

- 1. Crow Butte Operation (Nebraska)
- 2. Lost Creek Project (Wyoming)
- 3. Nichols Ranch ISR Project (Wyoming)
- 4. Ross CPP (Wyoming)
- 5. Smith Ranch-Highland Operation (Wyoming)
- 6. Willow Creek Project (Wyoming)

#### Table 1. Total production of uranium concentrate in the United States, 1996–2nd Quarter of 2018

pounds U<sub>3</sub>O<sub>8</sub>

Calendar- year quarter	1st quarter	2nd quarter	3rd quarter	4th 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
P2018	226,780	365,421	NA	NA	592,201

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

Notes: The reported 4th-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 1st, 2nd, and 4th quarter 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.

Production reflects primary-source uranium from the six operating in-situ leach facilities as well as primary, alternate, and recycled feed at the White Mesa Mill in Utah. The owner of the White Mesa Mill, Energy Fuels Inc. provides additional information on the mill's operations in its financial filings, including the amount of  $U_3O_8$  produced from alternative feeds. The company's financial filings are, at this writing, available at http://www.energyfuels.com/investors/financials/.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, *Domestic Uranium Production Report* 

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

	Uranium concentrate processing facilities							
End of	Mills - conventional milling <sup>1</sup>	Mills - other operations <sup>2</sup>	In-situ-leach plants <sup>3</sup>	Byproduct recovery plants <sup>4</sup>	Total			
1996	0	2	5	2	9			
1997	0	3	6	2	11			
1998	0	2	6	1	9			
1999	1	2	4	0	7			
2000	1	2	3	0	6			
2001	0	1	3	0	4			
2002	0	1	2	0	3			
2003	0	0	2	0	2			
2004	0	0	3	0	3			
2005	0	1	3	0	4			
2006	0	1	5	0	6			
2007	0	1	5	0	6			
2008	1	0	6	0	7			
2009	0	1	3	0	4			
2010	1	0	4	0	5			
2011	1	0	5	0	6			
2012	1	0	5	0	6			
2013	0	1	6	0	7			
2014	0	0	7	0	7			
2015	0	0	4	0	4			
2016	0	1	6	0	7			
2017	0	1	6	0	7			
2nd quarter of 2018	0	1	6	0	7			

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<sup>1</sup> Milling uranium-bearing ore.

<sup>2</sup> Not milling ore, but producing uranium concentrate from other (non-ore) materials.

<sup>3</sup> Not including in-situ-leach plants that only produced uranium concentrate from restoration.

<sup>4</sup> Uranium concentrate as a byproduct from phosphate production.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, Domestic Uranium Production Report

		County, state	Capacity (short	Operating status at end of						
Owner	Mill and Heap Leach <sup>1</sup> Facility name	(existing and planned locations)	tons of ore per day)	2017	1st quarter 2018	2nd quarter 2018	3rd quarter 2018	4th quarter 2018		
	Shootaring Canyon	Garfield,								
Anfield Resources Inc.	Uranium Mill	Utah	750	Standby	Standby	Standby				
				Operating-	Operating-	Operating-				
		San Juan,		Processing	Processing	Processing				
EFR White Mesa LLC	White Mesa Mill	Utah	2,000	Alternate Feed	Alternate Feed	Alternate Feed				
Energy Fuels Wyoming		Fremont,								
Inc	Sheep Mountain	Wyoming	725	Undeveloped	Undeveloped	Undeveloped				
Kennecott Uranium Company/Wyoming										
Coal Resource	Sweetwater	Sweetwater,								
Company	Uranium Project	Wyoming	3,000	Standby	Standby	Standby				

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

**Total Capacity** 

6,475

<sup>1</sup> 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 processed to recover the valued components.

#### - = No data reported

Notes: Capacity for the 2nd Quarter of 2018. An operating status of Operating indicates the mill usually was producing uranium concentrate at the end of the period.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, Domestic Uranium Production Report

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

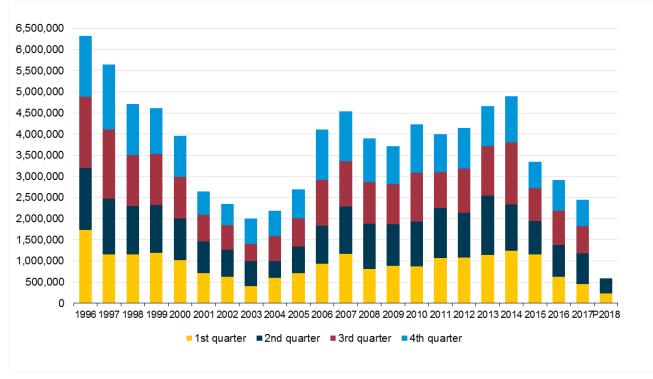
		County, state	Production capacity					
		(existing and	(pounds		Oper	ating status at en	d of	
In-situ-leach plant		planned	U₃O <sub>8</sub> per		1st quarter	2nd quarter	3rd quarter	4th quarter
owner	In-situ-leach plant name	locations)	year)	2017	2018	2018	2018	2018
				Partially	Partially	Partially		
		Campbell,		Permitted	Permitted	Permitted		
AUC LLC	Reno Creek	Wyoming	2,000,000	And Licensed	And Licensed	And Licensed		
		Fall River and		Partially	Partially	Partially		
		Custer, South		Permitted	Permitted	Permitted		
Azarga Uranium Corp	Dewey Burdock Project	Dakota	1,000,000	And Licensed	And Licensed	And Licensed		
Cameco	Crow Butte Operation	Dawes, Nebraska	1,000,000	Operating	Operating	Operating		
			_,,	Partially	Partially	Partially		
		McKinley, New		Permitted	Permitted	Permitted		
Hydro Resources, Inc.	Church Rock	Mexico	1,000,000	And Licensed	And Licensed	And Licensed		
				Partially	Partially	Partially		
		McKinley, New		Permitted	Permitted	Permitted		
Hydro Resources, Inc.	Crownpoint	Mexico	1,000,000	And Licensed	And Licensed	And Licensed		
		Sweetwater,						
Lost Creek ISR LLC	Lost Creek Project	Wyoming	2,000,000	Operating	Operating	Operating		
Mestena Uranium LLC	Alta Mesa Project	Brooks, Texas	1,500,000	Standby	Standby	Standby		
Power Resources, Inc.		DIOOK3, TCX03	1,500,000	Standby	Standby	Standby		
doing business as	Smith Ranch-Highland	Converse,						
Cameco Resources	Operation	Wyoming	5,500,000	Operating	Operating	Operating		
South Texas Mining		wyoning	3,300,000	operating	operating	Operating		
Venture	Hobson ISR Plant	Karnes, Texas	1,000,000	Standby	Standby	Standby		
South Texas Mining		· · · · · · · · · · · · · · · · · · ·						
Venture	La Palangana	Duval, Texas	1,000,000	Standby	Standby	Standby		
Strata Energy Inc	Ross CPP	Crook, Wyoming	375,000	Operating	Operating	Operating		

#### 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	pla	planned locations)	U₃O <sub>8</sub> per year)	2017	1st quarter 2018	2nd quarter 2018	3rd quarter 2018	4th quarter 2018	
Uranerz Energy Corporation (An Energy		Johnson and Campbell,	2 000 000	<b>.</b>		<b>.</b>			
Fuels company)	Nichols Ranch ISR Project	Wyoming	2,000,000	Operating	Operating	Operating			
	Goliad ISR Uranium			Permitted	Permitted	Permitted			
Uranium Energy Corp.	Project	Goliad, Texas	1,000,000	And Licensed	And Licensed	And Licensed			
Uranium One Americas,		Sweetwater,							
Inc.	Jab and Antelope	Wyoming	2,000,000	Developing	Developing	Developing			
Uranium One Americas,		Campbell,		Permitted	Permitted	Permitted			
Inc.	Moore Ranch	Wyoming	500,000	And Licensed	And Licensed	And Licensed			
	Willow Creek Project (Christensen Ranch and	Campbell and Johnson,							
Uranium One USA, Inc.	Irigaray)	Wyoming	1,300,000	Operating	Operating	Operating			
Total Production									
Capacity			24,175,000						

Notes: Production capacity for the 2nd Quarter of 2018. 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 Uranerz's uranium concentrate. CPP stands for central processing plant.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, Domestic Uranium Production Report.



## Figure 1. Uranium concentrate production in the United States, 1996–2nd Quarter of 2018

pounds  $U_3O_8$ 

P = Preliminary data

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, Domestic Uranium Production Report.