

# Domestic Uranium Production Report, First-Quarter 2018

May 2018















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### **Preface**

The U.S. Energy Information Administration (EIA) reports data spanning 1996 through first quarter 2018 on U.S. uranium production activities in this report, *Domestic Uranium Production Report 1st Quarter 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 may be found 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 can be found in EIA's Energy Glossary: <a href="http://www.eia.gov/tools/glossary/">http://www.eia.gov/tools/glossary/</a>.

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#### 1st Quarter 2018

U.S. production of uranium concentrate in the first quarter 2018 was 226,780 pounds  $U_3O_8$ , down 64% from the fourth quarter 2017 and down 50% from the first quarter 2017. During the first quarter 2018, U.S. uranium was produced at seven U.S. uranium facilities, the same number as in the fourth quarter 2017.

U.S. uranium mill in production (state)

1. White Mesa Mill (Utah)

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

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

Table 1. Total production of uranium concentrate in the United States, 1996 – 1st Quarter 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	NA	NA	NA	226,780

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 also affects the 2002 annual production. The reported 2003 and 1st, 2nd, and 4th quarter 2004 production amounts 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 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 U308 produced from alternative feeds. The company's financial filings are, at this writing, available at http://www.energyfuels.com/investors/financials/.

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

<sup>&</sup>lt;sup>1</sup> Milling uranium-bearing ore.

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

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

<sup>&</sup>lt;sup>4</sup> 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 <i>Heap</i> <i>Leach¹ Facility</i> 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					
				Operating-	Operating-					
		San Juan,		Processing	Processing					
EFR White Mesa LLC	White Mesa Mill	Utah	2,000	Alternate Feed	Alternate Feed					
Energy Fuels Wyoming		Fremont,								
Inc	Sheep Mountain	Wyoming	725	Undeveloped	Undeveloped					
Kennecott Uranium Company/Wyoming										
Coal Resource	Sweetwater	Sweetwater,								
Company	Uranium Project	Wyoming	3,000	Standby	Standby					
Pinon Ridge		Montrose,		Permitted and	Permitted and					
Corporation	Pinon Ridge Mill	Colorado	500	Licensed	Licensed					
Total Capacity:			6,975							

<sup>&</sup>lt;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 1st Quarter 2018. 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	Production capacity					
		(existing and	(pounds	Operating status at end 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			
		Campbell,		Permitted	Permitted			
AUC LLC	Reno Creek	Wyoming	2,000,000	And Licensed	And Licensed			
		Fall River and		Partially	Partially			
		Custer, South		Permitted	Permitted			
Azarga Uranium Corp	Dewey Burdock Project	Dakota	1,000,000	And Licensed	And Licensed			
Cameco	Crow Butte Operation	Dawes, Nebraska	1,000,000	Operating	Operating			
				Partially	Partially			
		McKinley, New		Permitted	Permitted			
Hydro Resources, Inc.	Church Rock	Mexico	1,000,000	And Licensed	And Licensed			
				Partially	Partially			
		McKinley, New		Permitted	Permitted			
Hydro Resources, Inc.	Crownpoint	Mexico	1,000,000	And Licensed	And Licensed			
		Sweetwater,						
Lost Creek ISR LLC	Lost Creek Project	Wyoming	2,000,000	Operating	Operating			
Mestena Uranium LLC	Alta Mesa Project	Brooks, Texas	1,500,000	Standby	Standby			
Power Resources, Inc.	Smith Ranch-Highland	Converse,						
dba Cameco Resources	Operation	Wyoming	5,500,000	Operating	Operating			
South Texas Mining								
Venture	Hobson ISR Plant	Karnes, Texas	1,000,000	Standby	Standby			
South Texas Mining								
Venture	La Palangana	Duval, Texas	1,000,000	Standby	Standby			
Strata Energy Inc	Ross CPP	Crook, Wyoming	375,000	Operating	Operating			
Strata Energy Inc	NU33 CF F	Crook, wyoning	373,000	Operating	Operating			

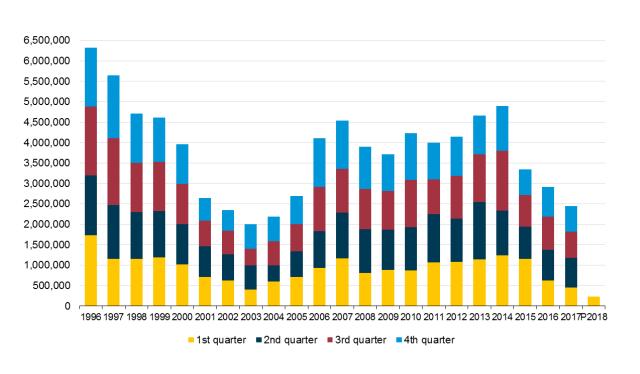
Table 4. U.S. uranium in-situ-leach plants by owner, location, capacity, and operating status (cont.)

		County, state (existing and	Production capacity (pounds		Operating status at end of			
In-situ-leach plant owner	In-situ-leach plant name	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,						
Fuels company)	Nichols Ranch ISR Project	Wyoming	2,000,000	Operating	Operating			
	Goliad ISR Uranium			Permitted	Permitted			
Uranium Energy Corp.	Project	Goliad, Texas	1,000,000	And Licensed	And Licensed			
Uranium One		Sweetwater,						
Americas, Inc.	Jab and Antelope	Wyoming	2,000,000	Developing	Developing			
Uranium One		Campbell,		Permitted	Permitted			
Americas, Inc.	Moore Ranch	Wyoming	500,000	And Licensed	And Licensed			
	Willow Creek Project (Christensen Ranch and	Campbell and Johnson,						
Uranium One USA, Inc.	Irigaray)	Wyoming	1,300,000	Operating	Operating			
Total Production Capacity:			24,175,000					

Notes: Production capacity for 1st Quarter 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 in-situ 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.

Figure 1. Uranium concentrate production in the United States, 1996 – 1st Quarter 2018

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



P = Preliminary data.