

# The extra sauce in a U.S.A. uranium power mix

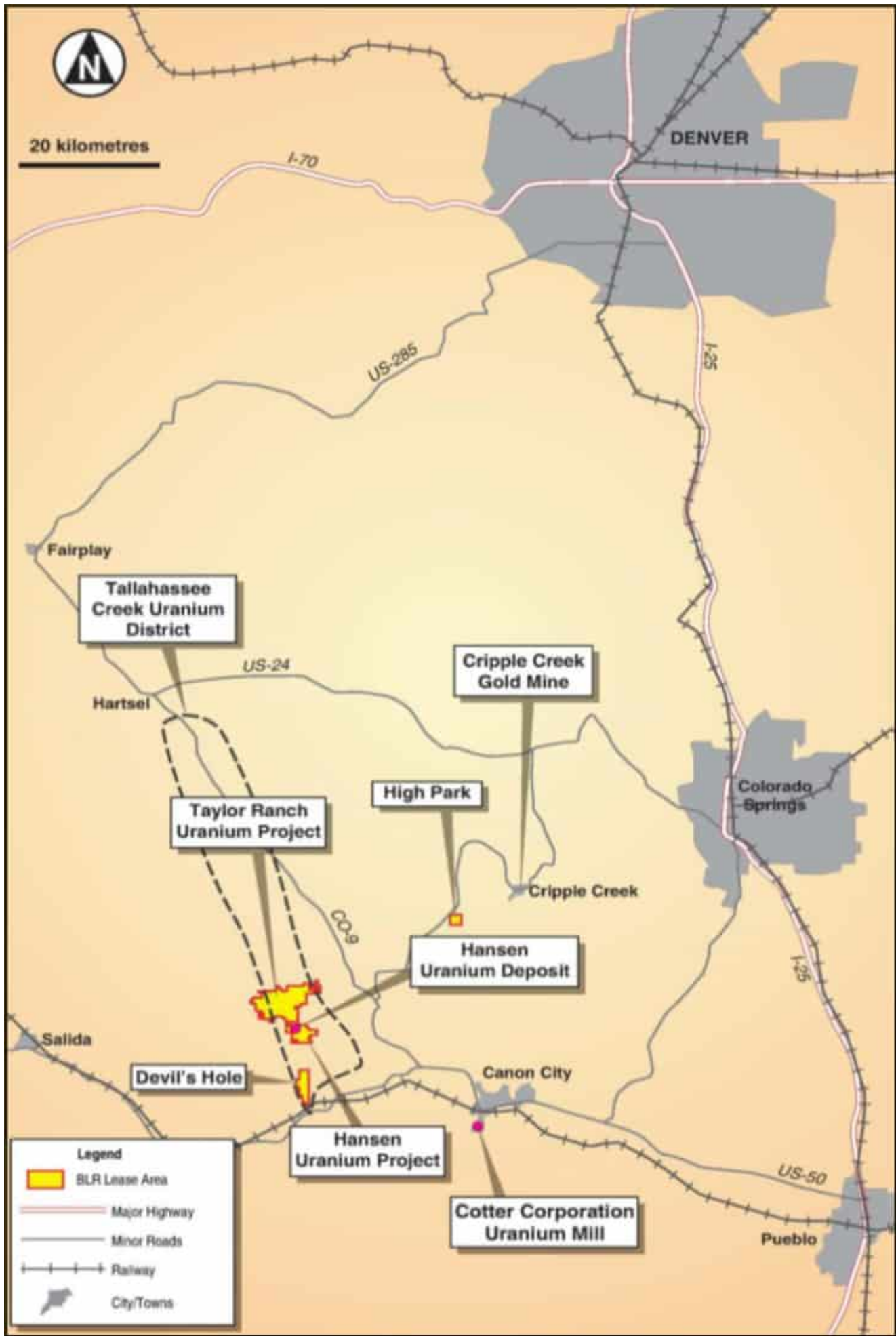
It might be remembered that Western Uranium Corporation's (CSE: WUC | OTCQX: WSTRF) origins are based on the combination of a number of assets (the Sunday Mine Complex, the Pinon Ridge Mill project/license and uranium assets in Utah and Colorado). Some of these assets had their origins in an ASX-listed company called Black Range Minerals which had done extensive work on the portfolio known as the Hansen/Taylor Ranch Project.

It is said that it is only the top ten percent of an iceberg that one sees above the waterline. Though what one sees of Western Uranium is largely the Sunday Mine Complex, the Hansen/Taylor asset needs serious consideration particularly because it is larger in resource than many of the "household names" of the uranium developer space. It has both a resource and a scoping study dating from this decade. Therefore the potential is there for the lights to be switched on at this project should the uranium price make a turn for the better. In this piece we shall look at Hansen/Taylor and its potential.

## **A Brief History**

With the Black Range deal a major uranium asset was brought on board at Western Uranium in the form of the Hansen/Taylor Ranch property, which is located around 100kms south of Denver and several hundred kilometres to the East of the planned Piñon Ridge mill.

Uranium was first discovered in the Tallahassee Creek Uranium District in 1954.

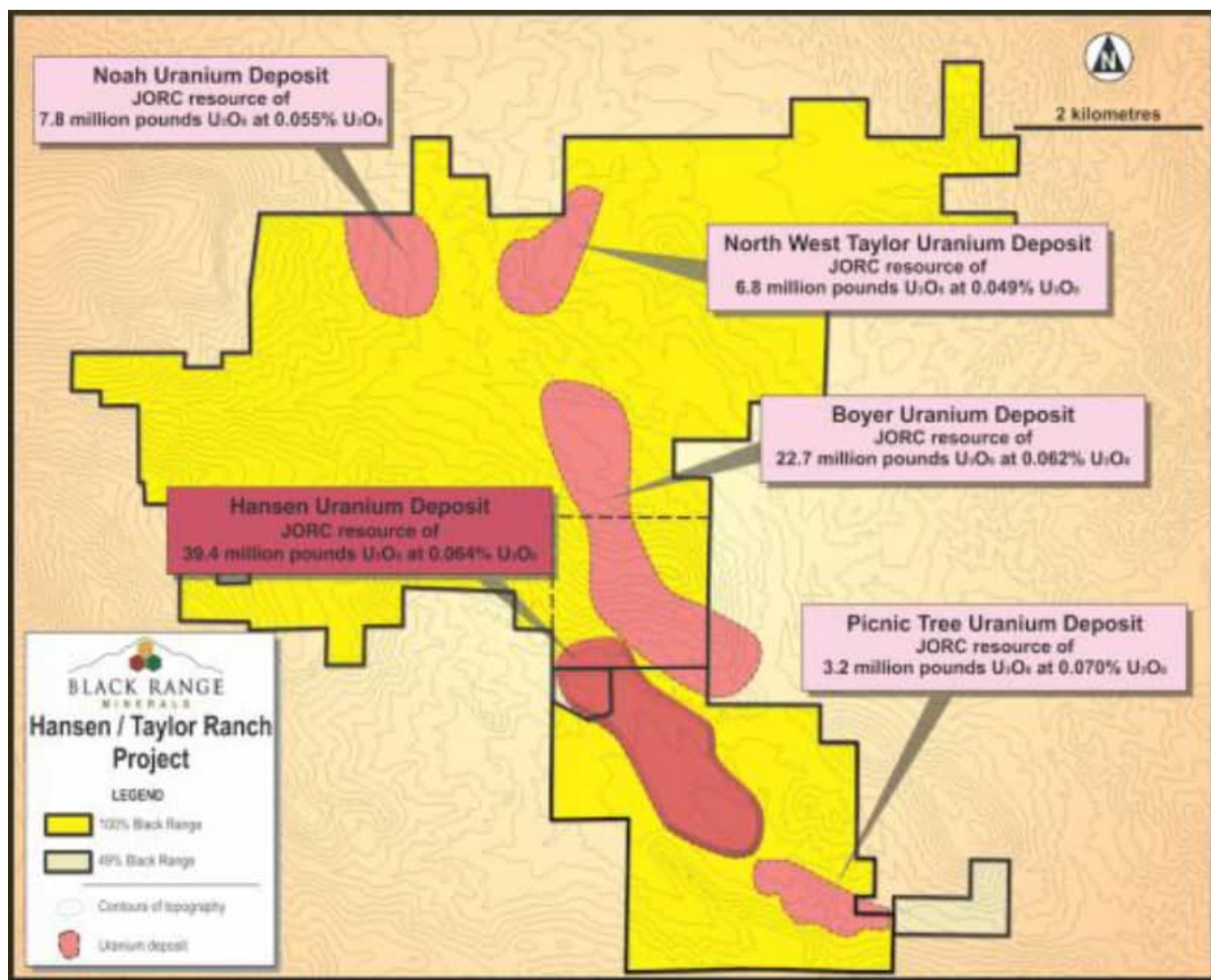


**Legend**

- BLR Lease Area
- Major Highway
- Minor Roads
- Railway
- City/Towns

From then until 1972 some 16 small open pit and underground uranium mines operated in the district. The Hansen Deposit discovered in 1977 and was fully permitted for open-pit mining in 1981 (but never developed).

The property incorporates a series of large deposits over 6 miles of strike and these are shown below.



## Geology

The deposits that make up the Hansen/Taylor project are tabular sandstone deposits associated with redox interfaces. The mineralisation is hosted in Tertiary sandstones and/or clay bearing conglomerates within an extinct braided stream, fluvial system or palaeochannel. Mineralisation occurred post sediment deposition when oxygenated uraniferous groundwater

moving through the host rocks came into contact with redox interfaces, the resultant chemical change caused the precipitation of uranium oxides. The most common cause of redox interfaces is the presence of carbonaceous material that was deposited simultaneously with the host sediments.

In parts of the project area the palaeochannel has been covered by Tertiary volcanic rocks and throughout the project basement consists of Pre-Cambrian plutonics and metamorphic rocks. The volcanic and Pre-Cambrian rocks are believed to be the source of the uranium.

### **Exploration Work**

Former owners, including the storied Cyprus Mines Corp., conducted an extensive amount of drilling at the project from 1976 through until 1983. They drilled over 1,500 drill holes for in excess of 150,000 metres. Cyprus also conducted three feasibility studies including mine designs, process designs and had all permits in place to commence mining in 1982.

As for the work done by Black Range this was in excess of 2,200 holes drilled for more than 350,000 metres of core.

### **The Resource Estimate**

Back in April of 2014, Black Range Minerals (Western Uranium's previous guise) reported a JORC-compliant mineral resource estimate for the Hansen/Taylor Ranch Uranium Project. Below can be seen the outcomes at two different cut-off points.

<b>Hansen/Taylor Resource</b>			
	Tonnes (millions)	Grade U3O8 (%)	Contained U3O8 lbs mns
Cut-off 0.025% (250ppm) U3O8			
Indicated	28.6	0.062	39.4
Inferred	40	0.058	51
<b>Total</b>	<b>68.6</b>	<b>0.06</b>	<b>90.4</b>
Cut-off 0.075% (750ppm) U3O8			
Indicated	7.7	0.121	20.4
Inferred	8.8	0.119	23.2
<b>Total</b>	<b>16.5</b>	<b>0.12</b>	<b>43.6</b>

## The Scoping Study

Of slightly older vintage is the scoping study produced under Black Range's management in the first half of 2012. The study evaluated the use of open pit, underground, and underground borehole mining with and without the use of ablation and was prepared by TREC, Inc. of Casper, Wyoming. The favoured development was:

- Underground Borehole Mining
- Ablation
- Off-site milling

The production metrics would have been:

- 750,000 tonnes per annum @ 0.127% U<sub>3</sub>O<sub>8</sub> to produce ~2 mn lbs U<sub>3</sub>O<sub>8</sub> per annum
- Capex estimate of <US\$80M with off-site milling
- Opex estimate of ~US\$30 per lb U<sub>3</sub>O<sub>8</sub>
- Initial 7-8 year mine life, to be followed by development of other adjacent deposits

The Hansen/Taylor deposits have not been a high priority for Western Uranium due to the relatively low grades and the distance from the planned mill. However, they will gain

importance once the mill is operational and hungry for feedstock. The onset of production at the mill is loosely penciled in for early 2020.

## Some Perspective

Below can be seen the comparatives of valuations between companies in the near term producer category with at least one US project.

Near Term Producers	Ticker	Mkt Cap	USD Mkt Cap	U3O8 lbs (m)	Mkt cap/lb	CAPEX req'd (USD m)	Production	Deposit Location
Anfield Resources	ARY	9,300,000	6,603,000	12.46	0.53	66	2019	USA
Azarga Uranium	AZZ	28,190,000	20,014,900	32.00	0.63	27	2019	USA, Kyrgyzstan
Denison Mines	DML	442,480,000	314,160,800	74.09	4.24	258	2025	Canada-Athabasca
Laramide Resources	LAM	68,700,000	48,777,000	121.50	0.40	190	2020	Australia, USA-New Mexico, Utah
Uranium Resources	URRE	48,250,000	48,250,000	45.60	1.06	41	2019	Turkey, USA
<b>SECTOR AVERAGE</b>					<b>0.62</b>			
Western Uranium		35,230,000	25,013,300	90	0.28	5		Colorado, Utah
Western Uranium value @ Mkt cap/lb sector ave.			56,089,655					
<small>source: company presentations</small>								

As can be noted Western Uranium is trading at less than half the valuation it would have if it was valued at the average of the mkt cap/lb as the rest of the group. Indeed, WUC has a U<sub>3</sub>O<sub>8</sub> resource that the second largest in this group and in cases by a very large margin over the smaller claimants to investor attention.

## Conclusion

One investor commented to us that Hansen/Taylor was a company maker in its own right and we find it hard to disagree. To put it bluntly its resource is larger than those of three of the companies in our comparative table combined. That it has not got as much press as the Sunday Mine Complex is due to the latter's proximity to the Pinon Ridge mill site and the "extra sauce" from the SMC having Vanadium in the mix. Otherwise the Hansen/Taylor property has the potential to be developed in its own right with ore being sent to White Mesa for processing while Piñon Ridge is developed. That's not the current plan, but certainly a back-up strategy that has a lot to be said for it.