



**CELSIUS COAL**  
**LIMITED**

ASX RELEASE | 13th January 2014

## **LABORATORY ANALYSIS CONFIRMS COKING COAL POTENTIAL OF CELSIUS' UZGEN BASIN COKING COAL PROJECT**

### **HIGHLIGHTS**

- Raw coal laboratory test results have now been received for 2013 drilling in the Kargasha area of the Uzgen Basin Coking Coal Project. Assay results confirm coking properties in Northern Kargasha (DDTK0010 & DDTK0011) & Southern Kargasha (DDTK0008 & DDTK0009).
- Most sample results from drill holes DDTK0008 to DDTK0011 from the Kargasha area show Free Swell Index (FSI) numbers in the range of 6.5 to 8.5, indicating good coking potential. 46 of the 49 samples analysed from these drill holes show FSI levels greater than 4.5, which is typically assessed as a threshold for coking coal.
- Results from the analysis of DDTK0008 to DDTK0011 from the Kargasha area are consistent with the laboratory results from the 2012 drilling program, suggesting that the majority of the Kargasha area has coking coal potential.
- The 2013 laboratory results from the Kargasha area also show a continuing trend of low sulphur and other deleterious elements.
- Laboratory results are being compiled for the Kokkia area of the Uzgen Basin Coking Coal Project and are expected to be available by the end of January. Further detailed metallurgical analysis, including Coke Strength after Reaction (CSR) analysis, is expected to be available during the March quarter. These results will assist the Company with its ongoing mining studies that are currently underway and in discussions with potential off-take partners.
- Celsius is currently preparing an update to its Inferred Mineral Resource of 255Mt (as released to the ASX on the 15th March 2013) and Exploration Target of 55-110Mt for its Uzgen Basin Coking Coal Project based on the results of the 2013 drilling. This work is expected to be completed by the end of the first quarter of 2013
- Celsius is currently preparing an update to its JORC resource which is expected to be finalised by the end of the first quarter this year.

Celsius Coal Limited (ASX Code: CLA) (Celsius or the Company) is pleased to release coal quality data received from SGS Labs for 2013 drilling in the Kargasha area of the Company's Uzgen Basin Coking Coal Project located in the Central Kyrgyz-Republic (Figure 1).

### Analysis of Diamond Drill Core

Celsius has previously reported the following coal intercepts for drill holes DDTK0008 to DDTK0011 in the Company's ASX release dated October 24th 2013.

Drill hole	Completed Depth	Intervals of Interest
DDTK0008	401.0m	2.08m interval with 1.94m of coal at 370.40m 1.80m interval with 0.87m of coal at 375.81m
DDTK0009	497.0m	1.64m interval with 1.57m of coal at 352.92m
DDTK0010	203.0m	1.67m interval with 1.37m of coal at 55.69m 1.00m interval with 0.91m of coal at 59.00m 0.52m interval with 0.48m of coal at 68.24m 0.91m interval with 0.64m of coal at 73.58m 0.73m interval with 0.63m of coal at 86.27m 0.82m coal interval at 116.42m 0.90m interval with 0.80m of coal at 126.68m
DDTK0011	293.0m	0.71m coal interval at 29.52m 1.62m interval with 1.54m of coal at 43.79 0.57m coal interval at 52.00m 1.54m interval with 1.44m of coal at 78.53m 1.22m interval with 0.85m of coal at 90.62m 0.65m interval with 0.53m of coal at 108.88m 1.79m interval with 1.66m of coal at 116.75m 0.60m coal interval at 166.00m 0.78m coal interval at 198.43m

Results of the raw coal sample testing on the core from these drill holes are shown below. This work was undertaken in the internationally accredited SGS laboratory in Novokuznetsk Russia using industry standard procedures. **These laboratory results confirm that all drill holes tested from the Kargasha area have returned intercepts with good coking coal potential.** Results were also used to validate thickness of coal intersected in drilling from prior visual inspection.

Coking coal potential is demonstrated by the results from Free Swell Index (FSI) coking tests, with 46 of 49 coal samples from drill holes DDTK0008 to DDTK0011 submitted for FSI tests returning results greater than 4.5, which is generally considered a threshold for coking coals.



All coal samples also show very good thermal characteristics with high GCV<sup>ad</sup> (air dried gross calorific value), very low inherent moisture (IM), and acceptable total sulphur (TS<sup>d</sup>). Coking coals with low concentrations of deleterious elements such as phosphorus (confirmed in 2012 programme laboratory analysis) and total sulphur are preferred by steel producers.

Results from DDTK0008 to DDTK0011 are consistent with the 2012 laboratory results and continue to show a consistently high FSI and a low to moderate total sulphur trend. Given the spacing of the drill holes (Figure 2) it suggests that most of the Kargasha area has coking coal potential.

#### DDTK0008

Samp. No.	From	To	Thick	RD	IM	Ash	VM	CV	TS	FSI
	m	m	m	g/cm <sup>3</sup>	%(ad)	%(ad)	%(ad)	Kcal/Kg(ad)	%(db)	
<b>3156</b>	342.66	342.88	0.22	1.40	1.24	17.70	28.60	6930	3.22	<b>8.0</b>
<b>3159</b>	370.40	371.35	0.95	1.35	1.26	3.90	20.60	8088	0.32	<b>1.5</b>
<b>3160</b>	371.35	371.79	0.44	1.31	0.99	7.30	29.40	7933	0.37	<b>8.0</b>
<b>3161</b>	371.79	372.45	0.66	1.28	0.90	4.10	33.10	8184	0.46	<b>9.0</b>
<b>3164</b>	375.81	376.37	0.56	1.40	1.11	17.80	29.80	6865	1.59	<b>8.5</b>

#### DDTK0009

Samp. No.	From	To	Thick	RD	IM	Ash	VM	CV	TS	FSI
	m	m	m	g/cm <sup>3</sup>	%(ad)	%(ad)	%(ad)	Kcal/kg (ad)	%(db)	
<b>3170</b>	321.51	321.83	0.32	1.37	1.21	15.1	34.00	7104	1.21	<b>7.5</b>
<b>3175</b>	353.23	354.56	1.33	1.39	1.22	3.5	22.10	8044	0.10	<b>0.5</b>

#### DDTK0010

Samp. No.	From	To	Thick	RD	IM	Ash	VM	CV	TS	FSI
	m	m	m	g/cm <sup>3</sup>	%(ad)	%(ad)	%(ad)	Kcal/Kg(ad)	%(db)	
<b>3178</b>	56.69	57.73	1.04	1.33	1.26	8.0	37.70	7703	0.65	<b>6.5</b>
<b>3180</b>	58.00	58.36	0.36	1.34	1.19	9.2	38.10	7590	0.52	<b>6.0</b>
<b>3183</b>	59.00	60.00	1.00	1.36	1.36	12.9	35.40	7164	0.49	<b>5.5</b>
<b>3185</b>	63.9	64.15	0.25	1.35	1.26	11.30	32.50	7226	1.04	<b>6.5</b>
<b>3187</b>	68.24	68.76	0.52	1.46	1.11	19.60	32.40	6363	0.75	<b>3.0</b>
<b>3190</b>	73.58	74.08	0.50	1.39	0.95	15.30	38.30	6781	0.71	<b>5.0</b>
<b>3192</b>	74.35	74.49	0.14	1.39	1.15	13.10	33.80	7005	2.62	<b>6.5</b>
<b>3199</b>	79.77	79.92	0.15	1.36	0.85	11.40	40.00	7232	1.10	<b>7.0</b>
<b>3202</b>	86.27	86.45	0.18	1.32	1.14	6.90	36.40	7752	0.85	<b>7.5</b>
<b>3203</b>	86.45	86.51	0.06	1.35	0.98	11.60	35.60	7313	0.75	<b>8.0</b>



Samp. No.	From	To	Thick	RD	IM	Ash	VM	CV	TS	FSI
	m	m	m	g/cm <sup>3</sup>	%(ad)	%(ad)	%(ad)	Kcal/Kg(ad)	%(db)	
3208	95.14	95.3	0.16	1.37	0.97	16.70	35.30	7035	0.98	6.0
3211	116.42	117.24	0.82	1.31	1.62	6.50	34.30	7888	0.88	7.5
3216	133.06	133.16	0.10	1.44	1.42	18.90	30.20	6755	0.99	6.0
3218	133.51	134.00	0.49	1.36	1.53	12.90	32.20	7351	0.97	7.0
3220	140.82	141.00	0.18	1.30	1.33	6.60	35.50	7820	1.28	6.5
3221	146.00	146.1	0.10	1.44	1.58	16.90	27.40	7088	0.87	8.5

DDTK0011

Samp. No.	From	To	Thick	RD	IM	Ash	VM	CV	TS	FSI
	m	m	m	g/cm <sup>3</sup>	%(ad)	%(ad)	%(ad)	Kcal/Kg(ad)	%(db)	
3223	29.52	30.23	0.71	1.32	1.05	9.2	36.40	7586	1.02	7.5
3227	43.88	45.41	1.53	1.37	1.05	10.7	35.30	7429	0.61	7.5
3229	48.94	49.13	0.19	1.36	0.94	12	36.30	7245	0.78	7.5
3231	52.00	52.57	0.57	1.34	0.97	4.6	38.30	8104	0.62	7.5
3237	67.68	67.84	0.16	1.41	0.94	11.6	35.10	7106	0.82	7.5
3238	73.37	73.59	0.22	1.34	0.92	10.5	36.50	7435	1.08	8.0
3240	78.53	79.7	1.20	1.40	1.04	12.1	38.00	7012	0.95	7.5
3246	90.70	91.03	0.33	1.40	1.05	15.5	33.40	7093	1.22	6.0
3249	91.40	91.84	0.44	1.34	0.98	9.9	35.20	7621	0.80	7.5
3252	108.87	109.20	0.33	1.41	1.01	16.7	31.70	6981	0.78	7.5
3256	116.75	117.50	0.75	1.28	1.36	8.3	33.30	7673	0.61	7.5
3258	117.59	118.54	0.95	1.32	1.18	7.4	35.60	7629	0.64	8.0
3264	150.37	150.53	0.16	1.29	1.08	8.4	34.90	7718	0.77	8.5
3266	150.63	150.85	0.22	1.28	1.06	11.0	35.70	7389	0.83	8.5
3268	158.72	159.12	0.40	1.40	1.17	13.3	34.10	7145	1.20	8.0
3270	159.46	159.62	0.16	1.35	1.01	13.8	31.00	7185	0.83	7.5
3271	160.17	160.32	0.15	1.33	1.45	6.6	29.20	7771	1.12	7.5
3273	166.00	166.60	0.60	1.31	1.08	6.6	36.10	7845	0.70	8.5
3275	190.17	190.39	0.22	1.37	0.87	13.4	32.40	7270	1.02	8.5
3276	193.44	193.57	0.13	1.35	0.99	12.2	33.00	7309	0.73	8.0
3278	195.67	196.09	0.42	1.40	1.12	13.1	32.90	7175	0.65	8.0
3281	198.43	199.21	0.78	1.33	1.21	10.2	31.20	7517	0.78	8.0
3283	222.10	222.25	0.15	1.34	1.32	9.3	28.10	7780	0.89	7.5
3284	232.72	232.88	0.16	1.32	1.14	5.3	33.20	8059	0.98	8.0
3285	241.87	242.00	0.13	1.33	1.13	5.6	33.60	7983	1.31	8.5
3286	253.87	254.00	0.13	1.40	1.13	19.9	26.70	6573	0.79	8.0



## On-going Testing Program

Samples for DDTK0012, located in the previously untested eastern side of Kargasha, and 5 drill holes from the neighbouring Kokkia tenement, where significant coal intercepts have been returned in the recent drilling campaign, have now been received at SGS Novokuznetsk laboratory and work has commenced on their analysis.

Further, samples for float/sink beneficiation testing on drill holes DDTK0008 to DDTK0011 have been identified and testing is also underway.

Samples from PQ drill holes DDTK0013 & DDKK0004 have been received at ALS Richlands laboratory in Australia and work has commenced on Coke Strength after Reaction (CSR) analysis.

The Company expects to receive the results from the ongoing test work over the balance of the March quarter. These results will assist the Company with its mining studies that are currently underway and in discussions with potential off-take partners.

Commenting on the test results received for Kargasha, Executive Chairman Mr. Alex Molyneux stated "We're very pleased with the results we have received for Kargasha to date, particularly the continuing strong FSI figures and low sulphur levels. We're eagerly looking forward to seeing results from our first drilling campaign in the Kokkia tenement and will be sharing those with the market and potential customers as soon as we receive them."

## Uzgen Coal Basin Geology

The Uzgen coal basin is located mainly on the south-western slopes of the Fergana Range and is enclosed within the Paleozoic Fergana-Kokshaal structural zone. Paleozoic rocks served as a source of clastic material for the Jurassic coal-bearing formations within the Basin.

The Uzgen coal basin is comprised of Paleozoic (Silurian, Devonian, Carboniferous, Permian), Mesozoic (Triassic, Jurassic) and Cenozoic (Pleistocene, Neogene) rocks which contains the main coal deposits of the Kyrgyz Republic including Kargasha, Kokkia, Min Teke, Kumbel, Zindan Chitty and Besh-Terek Coal Deposits (figure 1).

The Uzgen Basin Coking Coal Project is located at the northern end of the main Uzgen Basin where seams are normally closer to the surface, thicker and better developed than elsewhere in the Basin. The northern portion of the basin has also been identified as having the potential to host coal with coking qualities. To the south of the basin coals are thought to be anthracitic and therefore of too high a rank to be able to produce coke.

Figure 1 - Geology of the Kyrgyz Republic showing the Uzgen Basin

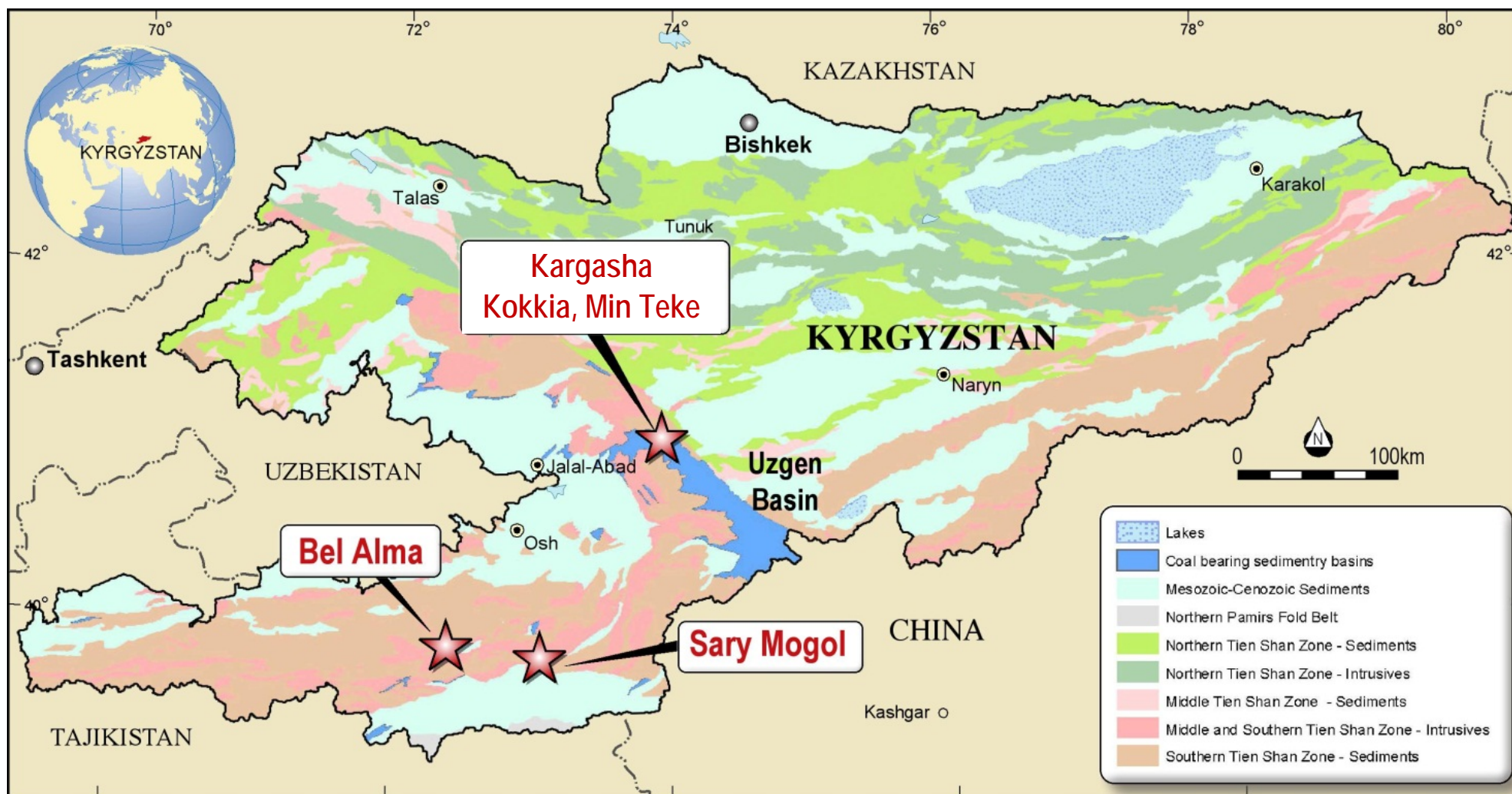
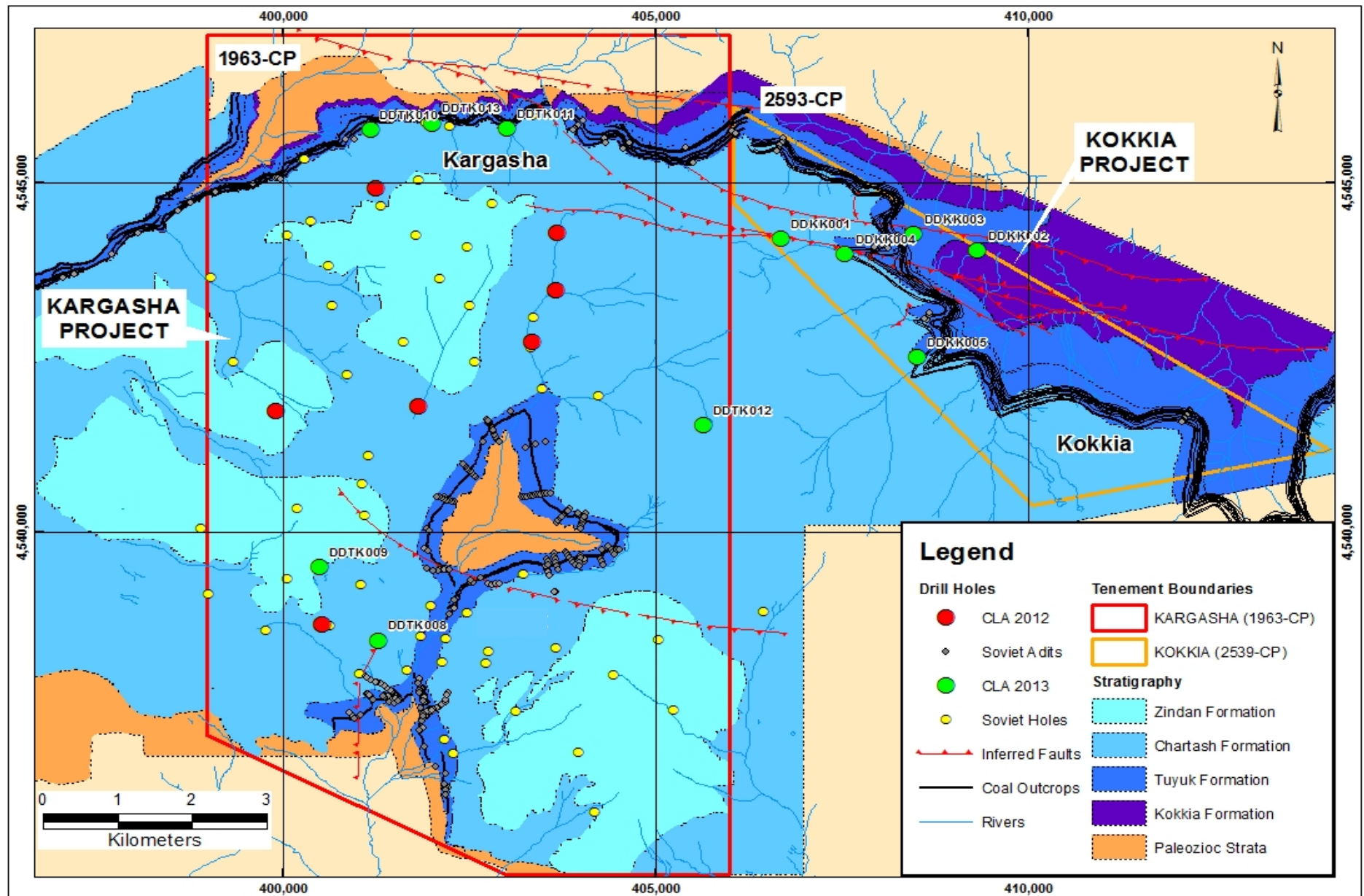


Figure 2. Geology map of the Kargasha license showing Celsius 2013 and 2012 drilling, coal intersections and historical Soviet-era drilling.





## **ABOUT CELSIUS COAL**

Celsius Coal Ltd is an Australian-based exploration company focused on exploring and developing coking and thermal coal deposits in the Kyrgyz Republic.

Celsius acquired a 90% interest in the Sary Mogol and Bel Alma coal licences located in the Alai Range region in the south of the Kyrgyz Republic in March 2012 and has also acquired an 80% interest in the Kargasha, Kokkia and Min Teke licences in the Uzgen Basin. Celsius' main focus is on its Uzgen Basin Coking Coal Project. In addition to its existing assets, the Company continues to actively pursue new projects in the resources sector, not only in Australia and the Kyrgyz Republic, but elsewhere in the world, with the hope of subsequently developing mining operations on those projects.

For more information, please visit [www.celsiuscoal.com.au](http://www.celsiuscoal.com.au) or contact Mr Ranko Matic, Company Secretary on +61 (08) 9226 4500.

## **Competent Person's Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Alistair Muir, who is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Muir is the Technical and Operations Director of Celsius Coal Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Muir consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

## **Exploration Targets**

It is common practice for a company to comment on and discuss its exploration in terms of target size and type. The information in this announcement relating to Exploration Targets should not be misunderstood or misconstrued as an estimate of Mineral Resources or Ore Reserves. Hence the terms Resource(s) and Reserve(s) have not been used in that context in this announcement. The potential quantity of coal presented in this announcement as Exploration Targets are conceptual in nature.