



**NEWS RELEASE | 29 November 2016**

## **PRAIRIE COMMENCES SCOPING STUDY AT RECENTLY ACQUIRED DEBIENSKO HARD COKING COAL PROJECT**

### **HIGHLIGHTS:**

- ***Prairie has commenced work on a Scoping Study at the Debiensko Hard Coking Coal Project***
- ***The Scoping Study will explore options for the near term development of profitable coal seams whilst minimising upfront capital costs***
- ***Independent mining consultancy, Royal HaskoningDHV, has been appointed to manage the study***
- ***A maiden JORC Resource Estimate for Debiensko will be announced early next year to support the Scoping Study mine plan***
- ***The Debiensko Scoping Study is due for completion during early to mid-2017***

Prairie Mining Limited ("Prairie" or "Company") is pleased to announce the commencement of work on a Scoping Study at its recently acquired Debiensko Hard Coking Coal Project ("Debiensko" or "Project") in southern Poland.

In October 2016, Prairie announced that it had acquired Debiensko, a fully permitted, "mine ready" hard coking coal project of significant scale. This transformational acquisition marked Prairie's entry into the hard coking coal sector, complementing the Company's advanced Jan Karski Mine, and creating a multi-project coal development company based in Poland to supply European industry. Prairie believes Debiensko has the potential to become a strategically important supplier to the European steelmaking industry. Therefore, the Company has accelerated project works by commencing a Scoping Study to be completed early to mid-2017. The Scoping Study will be completed to international standards and will focus on near term production opportunities with minimal upfront capital.

Prairie will publish a maiden JORC Resource Estimate early 2017 which will support the Scoping Study mine plan.

Prairie's CEO Mr. Ben Stoikovich said "*As promised, we are rapidly advancing the assessment of our Debiensko project with a Scoping Study now underway. Royal HaskoningDHV are independent mining consultants who bring significant experience in deep underground coal mining, both in Europe and internationally. We are looking forward to announcing a maiden JORC Resource Estimate early next year which will be used to support the Scoping Study at Debiensko.*"

### **Appointment of Scoping Study Consultants**

Prairie has appointed Royal HaskoningDHV to complete the Scoping Study given their extensive and recent track record of successful involvement in coal projects including Prairie's Jan Karski Mine.

Royal HaskoningDHV has over 135 years of experience and carries out some 30,000 projects every year in planning and transport, infrastructure, water, maritime, aviation, industry, energy, mining and buildings. It has a proud heritage of bringing leading expertise and innovation to the market and is deeply committed to business integrity and sustainable development. In combination with its international office network, Royal HaskoningDHV delivers world-class solutions locally to clients around the globe, for the public and private sector. Royal HaskoningDHV has worked extensively in deep European coal mining including in the UK, Kazakhstan and Poland.

DHV Hydroprojekt, a company of Royal HaskoningDHV has a legacy of providing water solutions for mining in Poland. Established in 1951 and with a head office in Warsaw, DHV Hydroprojekt is one of the leading engineering companies in the country; with over 60 years' experience providing services to the mining, water, power, civils, and transport industries. DHV Hydroprojekt's primary skills include tailings storage facility design, mine rehabilitation, water management, hydraulic engineering and environmental protection.

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## ABOUT THE DEBIENSKO HARD COKING COAL PROJECT

Debiensko is a world class, fully permitted, hard coking coal project situated in Upper Silesia in Poland, a strategic location in the steelmaking heartland of Europe where more than 80% of current coking coal usage is imported and the commodity is classified by the European Commission as a "Critical Raw Material".

A large scale Coal Exploration Target has been estimated based on historical drilling and resource work completed to Polish standards, as well as data from adjacent operating mines. Coal seam qualities are indicative of internationally traded benchmark premium hard coking coals.

Table 1: Exploration Target Range					
Depth				Exploration Target Tonnage Range (Mt)	
All seams to depth approx. 1,100 m*				120 Mt – 150 Mt	
Depth 1,100 – 1,250 m				90 Mt – 110 Mt	
<b>Total</b>				<b>210 Mt – 260 Mt**</b>	
Quality***	Moisture	Ash	Volatile Matter	Sulphur	FSI
<b>Weighted Average Whole Exploration Target Range (+/-20%)</b>	0.7 – 1.1%	6.3 – 9.5%	18.1 – 27.1%	0.6 – 0.8%	5½ – 8
*Depths are from surface – c250 m above datum **Figures are reported to the nearest 10 Mt which is deemed appropriate for this level of estimation ***Figures are reported to one decimal place which is deemed appropriate for this level of estimation <i>The potential quantity and grade of the exploration targets are conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.</i>					

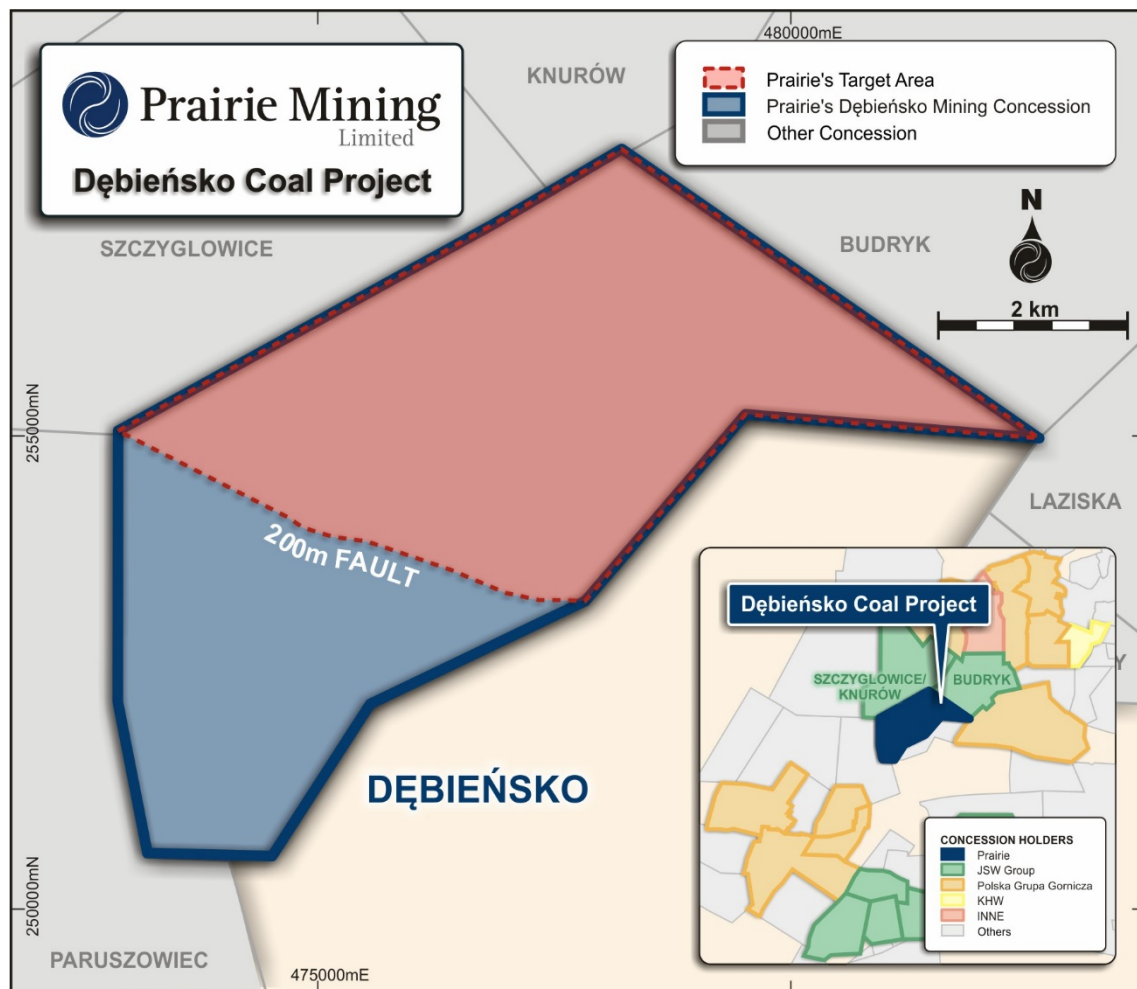
Debiensko is fully permitted with a 50-year mining concession, established on-site facilities including rail, road and power infrastructure, comprehensive historical drilling data and all environmental consents. As a brownfield development project, significant historical capital investment positions Debiensko to become a meaningful, near-term regional hard coking coal producer.

## Revised Development Approach

Following detailed technical due diligence conducted by Prairie, the Company is confident that a revised development approach would allow for the early mining of profitable coal seams, whilst minimising upfront capital costs.

This is likely to include focusing on a smaller area of Debiensko to target coal seams that are more readily accessible. Prairie has proven expertise in defining commercially robust projects and applying international standards in Poland.

Prairie has reported an Exploration Target for this target area in accordance with the JORC Code (2012).



**Figure 1 – Debiensko Project Licence and Target Area**

## Exploration Target Range

Extensive drilling was carried out historically at Debiensko and historical resources published to Polish reporting standards (non-JORC). Prairie's Exploration Target has been estimated for the following seams 401/1, 401/2, 402/1, 403/1, 403/2, 404/3, 404/5, 404/9, 405, 406/1, 407/2, 407/3, 408/1, 408/3, 408/5 and 409/1. To allow for possible geological and modelling uncertainty a deduction of 20% has been applied to give the range of tonnages reported in Table 2. The tonnages in Table 2 are for the seams that have been assessed and for which there has been insufficient exploration to be considered as resources at this time. The figures therefore represent the potential which is dependent on further exploration and reviews of the area.

Table 2: Exploration Target Range	
Depth	Exploration Target Tonnage Range (Mt)
All seams to depth approx. 1,100 m*	120 Mt – 150 Mt
Depth 1,100 – 1,250 m	90 Mt- 110 Mt
<b>Total</b>	<b>210 Mt - 260 Mt**</b>

\* Depths are from surface – c250 m above datum

\*\*Figures are reported to the nearest 10 Mt which is deemed appropriate for this level of estimation

### Potential Coal Quality

Historical coal quality analysis completed at the Project, and based on Polish reporting standards, has demonstrated coal qualities indicative of internationally traded benchmark premium hard coking coals.

Table 3 below gives the potential range of weighted average seam qualities. These are on an air dried basis. It was standard practice, at the time of sampling, to include dirt partings up to 5 cm in thickness in the coal sample, however, if the percentage ash was greater than 12% the sample was washed before further analysis. Partings greater than 5 cm in thickness were not analysed.

Table 3: Potential Debiensko Coal Qualities			
Quality*	Exploration Target Range to 1,100 m	Exploration Target Range from 1,100 to 1,250 m	Weighted Average Whole Exploration Target Range (+/- 20%)
Moisture	0.6 – 1.7%	0.7 – 1.6%	0.7 – 1.1%
Ash	5.2 – 15.9%	4.8 – 14.9%	6.3 – 9.5%
Volatile Matter	20.3 – 27.1%	17.8 – 26.1%	18.1 – 27.1%
Sulphur	0.4 – 1.2%	0.4 – 1.1%	0.6 – 0.8%
FSI	6 – 7½	5 – 8	5½ – 8

\*Figures are reported to one decimal place which is deemed appropriate for this level of estimation

The above potential ranges of weighted average seam qualities are comparable to qualities of internationally traded benchmark Medium Volatile Matter and Low Volatile Matter coals. This is illustrated in Table 4 below.

Table 4: Coking Coals Comparison including Debiensko Weighted Average Range to 1,250m							
Quality	Debiensko (Poland) (+/- 20% weighted ave. range)	Goonyella (Australia) Mid Vol	Peace River (Canada) Mid Vol	Peak Downs (Australia) Low Vol	Blue Creek (USA) Low Vol	JSW-Zofiwka (Poland) Type 35	JSW-Jas Mos (Poland) Type 35
Ash	6.3 – 9.5	8.9%	8.0%	10.0%	8.4%	8.5%	7.8%
Volatile Matter	18.1 – 27.1	23.8%	27.5%	20.5%	19.0%	22.2%	21.4%
Sulphur	0.6 – 0.8	0.52%	0.70%	0.60%	0.60%	0.55%	0.56%
FSI	5½ – 8	8	7	8½	7	7	7½



## Infrastructure

As part of the transaction, Prairie has acquired approximately 15Ha of land and all related facilities critical to the development of the Project. Significant historical capital investment positions Debiensko to become a meaningful and near term regional hard coking coal producer.



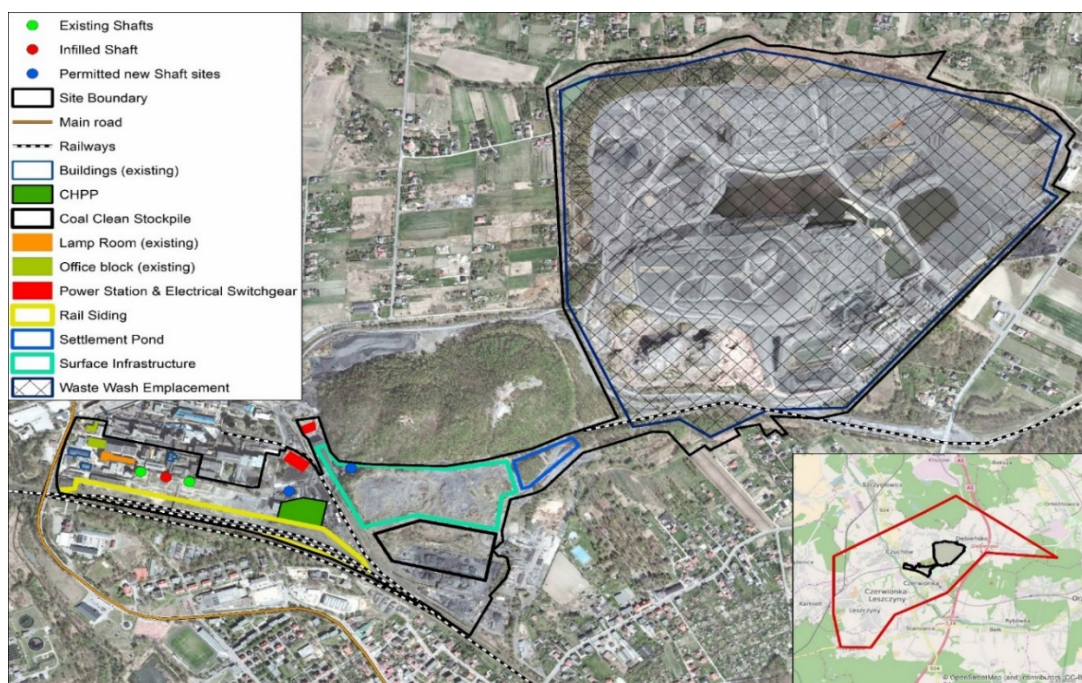
**Figure 2 – Aerial view of the Debiensko Mine Site**



**Figure 3 – Rail Yard next to Debiensko**

With existing site facilities and necessary infrastructure including power, water, rail and road in addition to the mining concession, environmental consent and local planning all being in place, the Project is considered “development-ready”.

The Debiensko mine was previously connected to the main Polish rail network and a currently inactive railway siding is still in place and in sound condition. Poland is served by ~23,420 kilometres (14,550 mi) of railway tracks using standard international gauge, and provides rail connections to major regional end users of coking coal and for export. Further, asphalt roads surround and connect the Debiensko mine site to the major road network.



**Figure 4 – Existing Site Facilities and Infrastructure**

## **Appendix 1 – Exploration Target Additional Information**

### **Sources of Information**

Seam thicknesses and depths are derived from the historical borehole cards (strip logs), overlying and adjacent mine workings and the New World Resources Karbonia (“NWRK”) database. Information on seam quality is taken from the official Polish Government approved “Geological Documentation”, which was approved by the State in 2009. There are 9 deep boreholes within the concession. In addition data from 15 boreholes and mine workings in the surrounding area have been used in the model. Co-ordinates are in Poland 2000, zone 6 system.

### **Site Visits**

The site was visited by the Competent Person and other members of the Prairie Team on 6 September 2016.

### **Topography, Elevation, Vegetation and Climate**

The Upper Silesian Coal Basin is located in the south-western part of Poland and towards the border with the Czech Republic. The concessions are located in a relatively flat-lying area at elevations of between 230 – 320 mASL (metres above sea level). The Bierawka River flows northwards through the area eventually joining the Odra River.

The dominant land use comprises of arable land and partly forested areas with mature and immature trees making up some 80% of the area. The remaining area is largely rural housing with small villages and industrial/post industrial (mining) development.

The climate in Poland is influenced by both European maritime and Eastern Europe continental air masses. The region in the south west of Poland can be categorised as having a cool continental climate. The warmest months are from May to September, with temperatures ranging 10<sup>0</sup>C to 25<sup>0</sup>C. The coldest months are usually from November to March with temperatures in the range 7<sup>0</sup>C to -7<sup>0</sup>C.

### **History of Exploration**

The Upper Silesian Coal Basin has a long history of exploration and exploitation with work starting in the 18<sup>th</sup> Century culminating with the drilling of nine deep boreholes between 1982 and 1989. Within the Debiensko Licence area the upper coals in the Upper 300 Series have been extensively worked providing good structural control.

### **Historical Tonnage Estimates**

The area was assessed in the Geological Documentation carried out in 2009 under the official Polish system for seams 401 to 410 to a depth of 1,400 m. More recently in 2014 and 2015, the previous owner also delineated resource and reserve estimates for the Debiensko deposit based on the historical Polish Government approved Geological Documentation. However, Prairie has opted to estimate tonnages for a smaller area of the Debiensko Project that has the potential to be more readily accessible for early mining.

### **Geological Setting and Coal Seams**

The Debiensko Licence area is situated in The Upper Silesian Coal Basin which contains a thick, up to 8,500 m, sequence of Upper Carboniferous sediments. These have been subject to folding and faulting during the Variscan Orogeny. The upper surface of the Carboniferous sediments now forms an angular unconformity overlain by strata with ages varying from Permian to Quaternary. Igneous intrusions occur in some parts of the Basin but are not known in the area of Debiensko.

The sediments of the 400 Series are mudstone/claystone/siltstone dominated with occasional fine to medium grained sandstones from a few to several 10s of metres in thickness. Seam roofs and floors are generally mudstone/claystone. There are over 30 seams within the series varying from a few centimetres to several metres in thickness. This Estimation has focussed on 16 of the thicker and more laterally consistent seams.

## **Structural Geology**

The structure of the Coal Measures within the Debiensko licence is generally well known from overworking, the seams dip south east at 2 to 15 degrees.

## **Assessment of Coal Seams**

### ***Geological modelling***

GEOVIA MINEX™ modelling software was used to undertake modelling as it is particularly adept at modelling stratiform deposits such as coal. The model was based on the NWRK database which contains all necessary borehole data (collar location, seam depth and thickness, coal quality data). Prairie has conducted spot checks on the data base to ensure data veracity. 3D modelling procedure was conducted in following stages: 1. Raw data loading and validation; 2. Interpolation of borehole data; 3. Seam structure and coal quality modelling; 4. Fault modelling (3D faulting with various throws); 5. Final model validation; 6. Target estimation. For basic modelling fault location and throw was adopted from latest deposit documentation. The basic Minex model provides information relating to coal extent, quality and quantity and allows a Resource to be reliably estimated.

### ***Constraints/Cut Offs***

For the estimation of the Exploration Target the following constraints have been used –

- a minimum clean coal seam thickness of 1 m
- depth cut off at c 1,250 m
- exclusion pillar under Czerwlonka-Leszczyry
- coal to the south of the Belski Fault (200 m downthrow south) has been excluded
- Seams designated Polish Type 36 (meta coking coal) have been excluded

## **Future Exploration**

Prairie Mining has programmed to drill up to five additional boreholes (including a shaft centreline borehole) to improve confidence in seam continuity and confirm quality. Prairie Mining will also conduct a full review and verification of the data and seam correlations.

### ***Forward Looking Statements***

This release may include forward-looking statements. These forward-looking statements are based on Prairie's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Prairie, which could cause actual results to differ materially from such statements. Prairie makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of that release.

### ***Competent Person Statements***

The information in this announcement that relates to Exploration Targets is based on, and fairly represents information compiled or reviewed by Mr Jonathan O'Dell, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr O'Dell is a full time consultant of the Company. Mr O'Dell 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr O'Dell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.