

19 October 2011

### Coal Sequence developed to 1.5 km across strike and along strike for a length of 3 km

- Coal sequence across the full width of the south western limb of licence area
- Continuous thick coal sequence confirmed
- Trenching extends coal sub-crop to 700 m length
- Coal sequence shallows to the southern licence boundary
- CFO appointed in Australia

### Drilling Update

With the arrival of two additional drilling rigs in recent weeks, the rate of drilling has increased and the directors of TVN Corporation are pleased to present the following update. Three holes recently completed (NDH10, NDH11 and NDH12) have continued to support the revised exploration target and demonstrate the extent of the Nuurst Project coal seam development in the southwestern limb of the Nuurst Licence. In this area the coal seam development appears to be bound by the licence boundary, remaining open to the north.

Coal seam development has now been defined to the full width of the licence in this area (1.5 km) and for a length of at least 3 km from the southern boundary to the north which remains open.

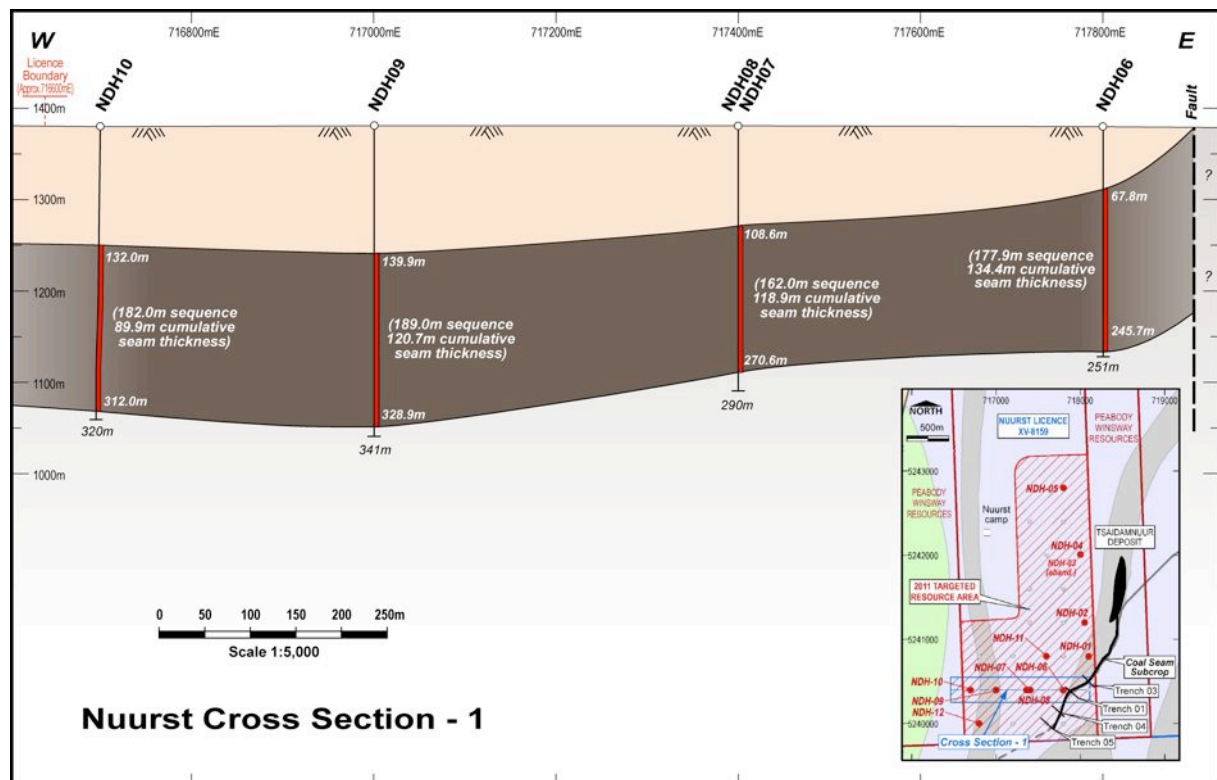


Figure 1: Cross section showing coal seam development, through the Exploration Target Area.

Trenching activities in the area of the fault in the south eastern portion of the Targeted Resource Area have now extended the sub-cropping coal sequence for over 700 m of strike length, extending south westerly from Peabody Winsway Resources' Tsaidam Deposit which contains a NI 43-101 Reportable Mineral Resource of 149.7 Mt. The map below outlines the areas of recent drilling activities and the area of sub-cropping coal seam development.

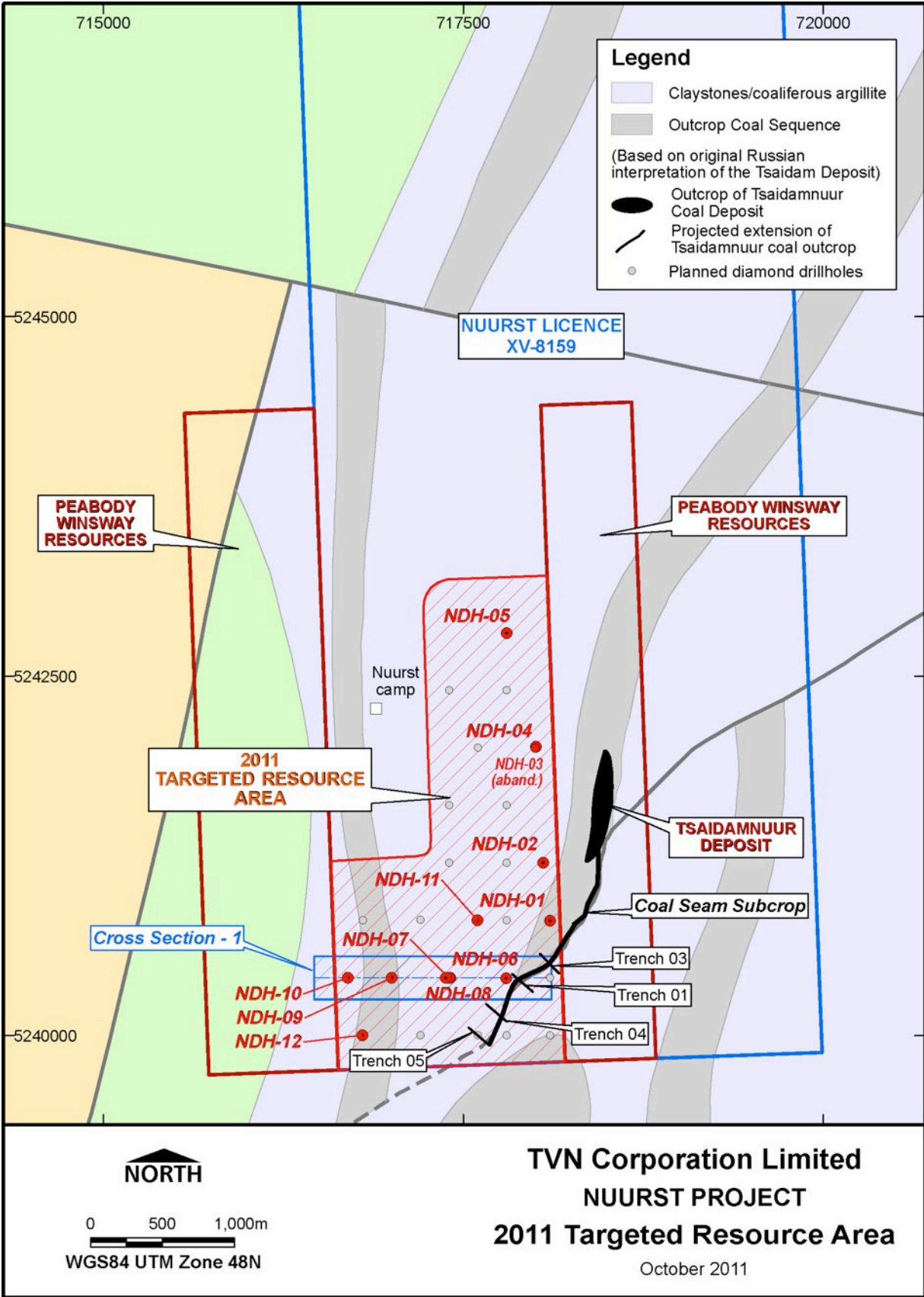


Figure 2: Recent Drilling Activity and Coal Seam Subcrop.

## **Key Appointment**

The directors of TVN are pleased to announce the appointment of Daniel Rohr to the position of Chief Financial Officer. Daniel Rohr CA, B.Comm has 20 years management, corporate advisory, finance and accounting experience working for a number of listed and unlisted companies. He has extensive experience in managing the development of high growth and start up companies.

## **About the Nuurst Coal Project:**

The Nuurst Project is a wholly owned 3,451 Ha exploration licence located 120 kms south of Ulaanbaatar in an area with a number of operating coal mines. Nuurst is 6 km from existing rail infrastructure providing low cost access to the key coal export markets of China, South Korea and Japan.


Recent drilling has identified significant coal seam development over 3 km of strike in a northerly direction, and 1.5 km across the south western portion of the licence area. This coal seam development remains open to the North.

TVN continues to review the potential acquisition of other coking and thermal coal projects in Mongolia.

Chris Mardon  
Managing Director  
TVN Corporation Ltd.

## **Competent Person Statement**


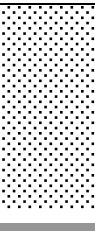
































*The information in this announcement that related to exploration results is based on information obtained from the vendor and Cadastral archives in Mongolia and recent drilling and trenching activities on site. This information has been reviewed by Mr Geoff Richards of CSA Global Pty Ltd, Western Australia. Mr Richards is a member of the Australian Institute of Geoscientists and has sufficient experience which 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 Richards consents to the inclusion in the report of the matters based on his information in form and context in which it appears.*

		PROJECT NAME		Collar location	
		LICENSE INFORMATION		Nurust	EASTING 716700
DRILL HOLE NUMBER		XV-008159		NORTHING 5240400	
DATE COLLARED		NDH-10		GRID UTM WGS-84	
DATE COMPLETED		2011.09.24		ZONE North 48	
DESCRIPTION		From	To	Coal	
GRAPH	ROCK CODE	(Colour, Weathering, Rock Type, Grain size etc) Note: reference to the "core axis", refers to the short core axis. ie contacts are largely shallow dipping.	m	m	m
	OSS	Reddish brown, coarse grained well sorted sand with clay.	0.00	5.00	
	OSS	Light brown, very coarse grained, moderately sorted sand. At 18.00-20.00m core loss	5.00	20.00	
	CL	Dark to light brownish yellow clay. At 20.00-23.00m core loss 1.70m, and 24.50-26.00m.	20.00	26.00	
	CONGL	Grey colored, poorly sorted, subrounded, very large pebbles of conglomerate. $\phi$ 10.00-50.00mm. Core is washed core loss A126.00-29.00m: 2.50m, A129.00-32.00m: 2.80m, A132.00-38.00m: 5.80m.	26.00	38.00	
	CONGL	Dark grey to grey colored very poorly sorted, subrounded conglomerate with medium grained sandstone	38.00	40.30	
	CL	Brownish yellow colored clay with poorly sorted, subrounded medium pebbles.	40.30	40.93	
	CONGL	Grey colored, poorly sorted, subrounded, small to very large pebbles or conglomerate. $\phi$ up to 60mm, very well washed. Core loss 5.55m	40.93	47.00	
	MS	Grey to dark brownish grey colored, sandy carbonaceous mudstone. Lower contact with shaly coal planar, 15° to core axis.	47.00	48.30	
	SHC	Black to dark brown colored shaly coal with thin CS (<10% bright) coal beds.	48.30	48.58	
	MS	Dark to dark grey colored, sandy carbonaceous mudstone. Upper contact is planar 10° to core axis, lower contact with CONGL irregular.	48.58	49.80	
	CONGL	Dark grey to grey colored, poorly sorted, rounded conglomerate. Rock fragments are >1cm, filled by sand.	49.48	49.80	
		Core loss	49.80	50.00	
	CONGL	Light grey to grey colored, poorly sorted, rounded pebbles and cobbles of conglomerate. Rock fragments >1cm. Very well washed.	50.00	53.00	
	CONGL	Dark grey, very poor sorted, rounded conglomerate. Rock fragments are >1cm. Moderately washed, filled by sand & clay. Core loss A153.00-56.00: 2.30m, A156.00-59.00m: 2.30m.	53.00	59.00	
	SHC	Black shaly coal with grey, sandy carbonaceous mudstone (A1 59.65-60.85m).	59.00	61.25	
	CONGL	Grey, very poor sorted rounded pebbles & cobbles of conglomerate.	61.25	62.00	
	MS	Grey to dark grey colored, sandy carbonaceous mudstone with thin clay layers (5cm) and coaly shale (<5cm). Lower contact with shaly coal planar 5° to core axis.	62.00	74.45	
	SHC	Black to dark grey colored shaly coal.	74.45	74.71	
	C	Black coal. Bright C5 coal layer 5° to core axis.	74.71	75.10	
	CSH	Black to dark grey colored coaly shale bed with thin grey mudstone layer (<10cm)	75.10	76.00	
	MS	Grey sandy carbonaceous mudstone. Upper & lower contacts are irregular.	76.00	77.31	
	C	Coal. Lower contact with mudstone 5° to core axis.	77.31	77.74	
	MS	Dark grey colored, sandy carbonaceous mudstone. Lower contact with shaly coal 5° to core axis.	77.74	78.25	
	SHC	Dark grey and black colored shaly coal with pebbles.	78.25	78.95	
	MS	Dark grey, sandy carbonaceous mudstone. Upper contact with shaly coal 5° to core axis.	78.95	80.70	
	CONGL	Grey colored, poorly sorted, rounded pebbles of conglomerate. weak washed. Filled by clay. Core loss 1.30m.	80.70	83.00	
	MS	Dark grey to grey colored, sandy carbonaceous and non carbonaceous mudstone with clay, coal & shaly coal layers. A185.85-85.94m, 86.75-86.80m, 92.00-92.05m, 93.75-93.85m, dark grey clay. A187.88-88.03, 90.82-90.9m, 97.21-97.41m, 97.90-98m black to dark grey shaly coal. all contacts ~5°-15° to core axis. Core loss A195.00-98.00m: 0.10m.	83.00	99.65	
	C	Coal. Upper & lower contacts are with mudstone planar. 10° to core axis.	99.65	99.89	
	MS	Dark grey to grey colored sandy carbonaceous mudstone with shaly coal layers: A1 102.20-102.32m, 104.05-104.15m, 111.31-111.43m, 113.68-111.71m, 112.69-112.84m, black to dark grey shaly coal layers. Core loss A1 101.00-104.00m: 0.10m ; A1107-110m: 0.30m	99.89	113.40	
	CSH	Dark grey colored coaly shale. A1113.45-113.67m coal bed. Upper & lower contacts are 10° to core axis.	113.40	114.23	
	C	Black brown coal bed with coaly shale.	114.23	114.85	0.62
	MS	Black to light grey colored sandy carbonaceous mudstone with coal and coaly shale layers. A1118.60-118.70m, 119.20-119.42m, 119.47-119.52m coal beds, A1121.30-121.50m, 123.05-123.25m coaly shale layers. Upper contact is 20°, lower contact is broken.	114.85	126.05	
	C	black brown colored dull coal bed.	126.05	126.68	0.63
	MS	Light grey colored sandy carbonaceous mudstone with black shaly coal A1129.10-129.40m	126.68	130.04	
	C	black brown coal with shaly coal and mudstone layers.	130.04	134.20	4.16
	CSH	Dark grey colored coaly shale. Lower contact is 20° to core axis, irregular.	134.20	134.41	
	C	Black brown colored, dull and bright coal bed with coaly shale layer A1134.76-134.88m. Core and lower contacts are broken.	134.41	135.67	1.26
	CSH	Black to grey colored coaly shale.	135.67	135.92	
	C	Black colored dull coal bed.	135.92	137.16	1.24
	C	Fault gouge zone. Black shaly coal & coal. Core loss 0.50m	137.16	138.21	
	C	Black brown colored dull coal bed with thin black shaly coal layers. Lower contact is irregular.	138.21	140.15	1.94
	SHC	Black colored shaly coal.	140.15	140.45	
	MS	Grey to dark grey colored carbonaceous mudstone. Lower contact is irregular.	140.45	142.50	
	C	Black colored, dull coal bed. Lower contact is irregular.	142.50	142.65	
	MS	Black to grey colored sandy carbonaceous mudstone. Lower contact irregular.	142.65	146.20	
	C	Black colored, dull and bright coal bed.	146.20	146.52	
	C	black to grey colored interbedded coaly shale and coal beds. Coal beds thick >5cm	146.52	148.20	
	C	Black colored, dull coal bed. Lower contact is planar, 5° to core axis.	148.20	148.53	
	MS	Grey colored, carbonaceous mudstone with black colored dull and bright coal beds. Thick >5cm.	148.53	149.27	
	C	black to grey colored interbedded coaly shale and coal beds. Coal beds thick >5cm	149.27	149.76	
	MS	Grey colored carbonaceous mudstone. Lower contact is 30° to core axis.	149.76	150.64	
	C	Black colored dull and bright coal with thin coaly shale, thick >1cm. Lower contact is 10° to core axis.	150.64	151.27	0.63
	MS	Grey colored carbonaceous mudstone. Lower contact is 30° to core axis.	151.27	151.47	
	C	Black colored dull and bright coal with thin coaly shale, thick >1cm. Lower contact is broken.	151.47	151.89	
	MS	Grey colored carbonaceous mudstone. Lower contact is irregular.	151.89	152.00	
	C	Black colored, dull and bright coal bed. Lower contact is irregular.	152.00	152.08	
	MS	Grey colored carbonaceous mudstone. Lower contact is irregular.	152.08	152.28	
	C	Black colored, dull and bright coal bed. Lower contact is irregular.	152.28	152.38	
	CSH	Grey colored coaly shale. Lower contact is irregular.	152.38	152.65	
	MS	Grey colored, sandy carbonaceous mudstone with thin coal beds. Thick >4cm. Lower contact is 20° to core axis.	152.65	154.24	
	C	Black to grey colored, interbedded coaly shale, coal and mudstone. Coal thick >13cm.	154.24	155.00	
	C	Black brown colored, dull and bright coal bed with coaly shale and clay layers. Thick >7cm.	155.00	158.82	3.82
	MS	Dark grey to grey colored, sandy carbonaceous mudstone with shaly coal layers: A1198.82-198.97m, 199.97-200.13m shaly coal, A1102.10-102.15m, 102.20-102.32m, 104.05-104.15m, 111.31-111.43m, 113.68-111.71m, 112.69-112.84m, black to dark grey shaly coal layers. Core loss A1 101.00-104.00m: 0.10m ; A1107-110m: 0.30m	158.82	163.56	
	C	Black colored, dull and bright coal. Lower contact is irregular.	163.56	163.87	
	MS	Grey to dark grey colored interbedded mudstone and coal beds. Coal bed thick 4.00-7.00cm.	163.87	164.50	
	CSH	Black to grey colored coaly shale with coal beds and clay layer. Coal beds thick >13cm	164.50	166.06	
	MS	grey colored carbonaceous mudstone. Upper and lower contacts are irregular.	166.06	166.84	
	C	Black brown to grey colored, dull and bright coal bed with mudstone and shaly coal layers.	166.84	170.10	3.26
	MS	Dark grey colored carbonaceous mudstone.	170.10	170.22	
	MS	Light brownish yellow colored strong mudstone.	170.22	170.59	
	C	Black to dark grey colored interbedded mudstone with thin coal bed >2cm, and coaly shale.	170.59	171.42	
	C	Black colored, dull and bright coal bed. Lower contact is irregular.	171.42	172.00	0.58
	CSH	Black to dark grey colored coaly shale with coal beds. >4cm lower contact is irregular.	172.00	173.00	
	C	Black colored dull and bright coal bed with thin coaly shale layer	173.00	173.60	0.6
	MS	Dark grey colored carbonaceous mudstone with shaly coal layers. Upper and lower contacts are irregular.	173.60	175.14	

130.0

	C	Black colored, dull and bright coal bed with thin clay layers, >1cm.	175.14	177.50	2.36
		Black to dark grey colored interbedded mudstone with thin coal bed >10cm, and coaly shale. Upper and lower contacts are 20° to core axis.	177.50	179.48	
	MS	Black to grey colored sandy carbonaceous mudstone with coal beds, >12cm. Lower contact is undulose.	179.48	182.54	
	SHC	Black, brown colored, dull and bright coal. Lower contact is irregular.	182.54	183.30	
	MS	Grey colored sandy mudstone.	183.30	183.58	
	C	Black colored, dull and bright coal bed with coaly shale. Thick 8cm. Lower contact is 30° to core axis.	183.58	185.22	1.64
	MS	Dark grey to grey colored, sandy carbonaceous mudstone with thin coaly shale, >16cm. And coal beds, >10cm. Lower contact is irregular.	185.22	192.40	
	C	Black colored, bright coal bed. Lower contact is irregular.	192.40	192.65	
	CSH	Black to dark grey colored coaly shale. Lower contact is undulose.	192.65	192.98	
	C	Black, brown colored, dull and bright coal. Lower contact is planar 15° to core axis.	192.98	194.03	1.05
	CSH	Black to dark grey colored coaly shale with thin coal beds, >10cm. Lower contact is 20° to core axis.	194.03	195.64	
	C	Black colored, dull and bright coal bed. Lower contact is 15° to core axis.	195.64	195.84	
	MS	Dark grey to grey colored sandy carbonaceous mudstone with clays and thin coal bed. Coal bed is >2cm. Lower contact is irregular.	195.84	201.25	
	C	Black and brown colored, dull and bright coal bed. Lower contact is irregular.	201.25	202.44	1.19
	MS	Dark grey colored sandy carbonaceous mudstone with thin coal beds, >1cm, and coaly shale bed, 4cm. At 203.60-203.70m light brownish yellow colored, poorly sorted rounded gravel. Thick 1-2cm. Lower contact is planar 35° to core axis.	202.44	207.39	
	CSH	Dark grey colored thin coaly shale. Lower contact is 20° to core axis.	207.39	207.44	
	C	Black colored, dull and bright coal bed. Lower contact is planar 20° to core axis.	207.44	207.54	
	MS	Dark grey colored carbonaceous mudstone.	207.54	207.90	
	C	Black brown colored, dull and bright coal bed. Lower contact is planar 0° to core axis.	207.90	209.14	1.24
	SHC	Dark grey colored shaly coal. Lower contact is planar 20° to core axis.	209.14	209.29	
	C	Black brown colored, dull and bright coal.	209.29	209.74	
	CSH	Dark, brown colored coaly shale.	209.74	210.00	
	C	Black brown colored, dull and bright clean coal. Lower contact is 25° to core axis.	210.00	221.65	11.65
	CSH	Black, grey colored coaly shale. Lower contact is irregular.	221.65	222.05	
	C	Black brown colored, dull and bright coal bed. Lower contact is irregular.	222.05	224.00	1.95
	CSH	Dark grey colored coaly shale.	224.00	224.17	
	C	Black to grey colored, dull and bright coal with coaly shale layers, thick >4cm. Lower contact is 30° to cor axis.	224.17	226.17	2
	MS	Dark grey colored carbonaceous mudstone. Lower contact is 15° to core axis.	226.17	226.57	
	C	Black to grey colored, dull and bright coal bed. Lower contact is irregular.	226.57	227.00	
	CSH	Dark grey colored coaly shale.	227.00	227.26	
	C	Black brown colored, dull and bright coal bed with thin coaly shale layer and clay. Lower contact is 10° to core axis.	227.26	228.61	1.35
	MS	dark grey colored, carbonaceous mudstone.	228.61	228.74	
	C	Black brown colored, dull and bright coal.	228.74	229.57	0.83
	MS	Dark grey colored, carbonaceous mudstone. Core is broken	229.57	229.82	
	SHC	Dark grey, black colored shaly coal.	229.82	230.52	
	C	Black brown colored dull and bright coal bed.	230.52	231.85	1.33
	MS	Black to dark grey colored, carbonaceous mudstone with >5cm shaly coal layer.	231.85	233.00	
	C	Black brown colored, dull coal bed. Upper contact is 15° to core axis.	233.00	233.33	
	C	Black to grey colored interbedded coal and coaly shale. Lower contact is 20° to core axis.	233.33	233.93	
	C	Black brown colored, dull and bright coal with coaly shale layer.	233.93	234.58	0.65
	MS	Dark grey colored, sandy carbonaceous mudstone. Lower contact is irregular.	234.58	234.76	
	C	Black brown colored dull and bright coal bed. Lower contact is irregular.	234.76	236.30	1.54
	MS	Dark grey colored, sandy carbonaceous mudstone with coal bed and coaly shale layers. Coal thick >7cm. Lower contact is irregular.	236.30	239.38	
	C	Black colored, dull and bright coal bed with thin shaly coal layer. Lower contact is irregular.	239.38	240.28	0.9
	C	Black to grey colored interbedded coal and coaly shale layers. Lower contact is irregular.	240.28	241.30	
	C	Black brown colored, dull and bright coal with coaly shale layer. Lower contact is irregular.	241.30	242.00	0.7
	C	Grey to black colored, coaly shale with thin coal beds >3cm.	242.00	242.72	
	C	Black brown colored, dull and bright coal with thin shaly coal layers. Lower contact is 20° to core axis.	242.72	245.12	2.4
	MS	Grey colored, carbonaceous mudstone with thin coaly shale layer.	245.12	246.56	
	C	Black brown colored, dull and bright coal. Lower contact is irregular.	246.56	247.53	0.97
	MS	Grey colored, carbonaceous mudstone with thin coal bed >1cm. Lower contact is irregular.	247.53	248.85	
	C	Black brown colored, dull and bright coal. Lower contact is irregular.	248.85	249.35	0.5
	CSH	Grey colored coaly shale.	249.35	249.51	
	SHC	Black to grey colored interbedded shaly coal, coal and clays layers.	249.51	250.20	
	C	Black brown colored, dull and bright coal bed with thin clay layer.	250.20	250.70	0.5
	CSH	Black to grey colored coaly shale with mudstone layer. Lower contact is 10° to core axis.	250.70	251.73	
	MS	Grey colored, sandy carbonaceous mudstone. Lower contact is planar 5° to core axis.	251.73	252.21	
	CSH	Black, grey colored coaly shale. Lower contact is irregular.	252.21	253.18	
	SHC	Black colored, shaly coal layer.	253.18	253.79	
	CSH	Black to grey colored coaly shale.	253.79	254.00	
	C	black brown colored, dull and bright coal bed.	254.00	254.34	
	MS	Dark grey to grey colored, sandy carbonaceous mudstone with coal >1cm, coaly shale layers.	254.34	261.20	
	CSH	Black to dark grey colored, coaly shale layer.	261.20	261.55	
	MS	Grey colored, sandy carbonaceous mudstone. Lower contact is planar, 5° to core axis.	261.55	263.03	
	C	Black brown colored, dull and bright coal bed with clay layers. 2-10cm. Lower contact is broken.	263.03	264.03	1
	C	Black colored, interbedded carbonaceous mudstone and shaly coal. Core broken.	264.03	264.28	
	C	Black brown colored, dull and bright, clean coal bed. Lower contact is planar, 5° to core axis.	264.28	264.68	
	MS	Grey colored, carbonaceous mudstone. Core broken in part.	264.68	266.30	
	SHC	Black colored, strong shaly coal.	266.30	266.65	
	C	Black brown, dull and bright coal bed with 1cm clay layers.	266.65	267.07	
	MS	Grey colored, carbonaceous mudstone. Core is broken.	267.07	267.43	
	C	Black brown, dull and bright coal bed with clay layer.	267.43	267.90	
	MS	Black to grey colored, interbedded coal bed and carbonaceous mudstone. Core broken in part.	267.90	268.50	
	C	Brown black colored, clean coal bed.	268.50	270.35	1.85
	CSH	Dark grey, black colored coaly shale. Lower contact is 30° to core axis.	270.35	270.90	
	C	Black brown colored coal bed. Lower contact is irregular.	270.90	272.00	1.1
	MS	Grey colored carbonaceous mudstone.	272.00	272.35	
	C	Black brown colored, dull and bright coal bed. In top and bottom coaly shale layers. 3-4cm.	272.35	272.69	
	MS	Grey colored, carbonaceous mudstone.	272.69	273.13	
	C	Black brown colored, dull and bright clean coal bed.	273.13	276.15	3.02
	SHC	Black to grey colored, interbedded coal and coaly shale layers.	276.15	277.01	
	C	Black brown colored, dull and bright coal bed.	277.01	278.35	1.34
	CSH	Grey to black colored, coaly shale with thin coal beds >1cm. Lower contact is planar 5° to core axis.	278.35	278.87	
	C	Black brown colored, dull and bright coal with 1-2cm shaly coal layers.	278.87	281.00	2.13
	CSH	Black to grey colored, coaly shale with thin coal beds, 1cm.	281.00	282.20	
	C	Black brown colored, dull and bright coal bed.	282.20	283.10	0.9
	MS	Grey colored, carbonaceous mudstone. Lower contact is 5° to core axis, planar.	283.10	283.56	
	C	Black brown colored, dull and bright coal bed. Lower contact is irregular.	283.56	284.99	1.43
	CSH	Dark grey to grey colored coaly shale layer.	284.99	286.15	
	C	Brown-black colored, dull and bright coal with coaly shale and clay layers.	286.15	290.50	4.35
	MS	Black to grey colored, carbonaceous mudstone, and coaly shale layer.	290.50	291.03	
	C	Black brown, dull and bright coal seam. Bedding of the coal seam 3-15° to core axis. Lower contact 10° undulose. At 293.83-293.90m black grey to dark grey colored coaly shale bed. Upper contact irregular. Lower contact is 0-20° curvilinear.	291.03	294.45	3.42
	CSH	Black grey to dark grey colored coaly shale and mudstone bed. Top of parts coaly shale. Lower contact is 20° curvi planar.	294.45	294.70	
	C	Black brown colored, dull and bright coal seam with 1.00-2.00 cm thick shaly coal bed. Bedding of the coal seam 20-25° to core axis.	294.70	295.71	1.01
	C	Black grey shaly coal bed. Lower contact 25° to core axis. Curvi-planar.	295.71	296.53	0.82
	C	Black brown, dull and bright coal seam. 15-25° to core axis mostly, rarely 40-50° to core axis. Coal seam with very rarely 1-2cm thick shaly coal bed.	296.53	306.53	10
	C	Black brown colored, dull and bright coal seam with 1.0-4.0 cm thick shaly coal bed, coal seam 15-20° to core axis.	306.53	308.72	2.19
	CSH	Black grey colored coaly shale bed. Lower contact is 20° planar.	308.72	308.95	
	C	Black brown colored dull and bright coal seam. Bedding of the coal seam 15-25° to core axis mostly, rarely 5-10° to core axis.	308.95	312.02	3.07
	MS	Dark grey colored carbonaceous mudstone bed. Lower contact is irregular.	312.02	312.85	
	MS	Dark grey colored, fine grained, well sorted sandstone bed. Lower contact is irregular.	312.85	313.40	
	MS	Dark grey, black grey colored carbonaceous mudstone bed. Lower contact is 0°. Planar.	313.40	314.00	
	SS	Dark grey colored, carbonaceous, fine grained, well sorted sandstone bed. Broken in some parts. EOH.	314.00	320.00	


312.0

		PROJECT NAME	Nuurst			
		LICENSE INFORMATION	XV-008159	Collar location		
		DRILL HOLE NUMBER	NDH-II	EASTING	717600	
		DATE COLLARED	2011.09.24	NORTHING	5240800	
		DATE COMPLETED	2011.10.05	GRID	UTM WGS-84	
		DESCRIPTION		ZONE	North 48	
GRAPHI	ROCK CODE	DESCRIPTION	From	To	Coal	
		(Colour, Weathering, Rock Type, Grain size etc) Note: reference to the "core axis", refers to the <i>short core axis</i> . ie contacts are largely shallow dipping.	m	m	m	
	OSS	Triconed HQ Bit. Dark brown, brown colored, very coarse to coarse grained, poorly sorted sand.	0.00	32.00		
	NK	No core, core loss.	32.00	32.90		
	CL	Dark, greenish gray colored sandy clay bed. Lower contact is broken.	32.90	34.95		
	CONGL	Core is very washed. 35.00-37.00 m core loss 1.60 m. 37.00-41.00 m core loss 3.65 m. 1.0-6.0 cm diameter, subrounded pebbles /Conglomerate bed/.	34.95	41.00		
	MS	sandy mudstone. Core is washed. 41.00-44.00 m core loss 1.10 m, 44.00-47.00 m core loss 1.80 m. Lower contact is broken.	41.00	47.00		
	MS	Dark gray colored, sandy carbonaceous mudstone with rarely as far as 14.00 cm thick coal, shaly coal bed. Core is washed. At 48.37-48.51 m black brown dull coal bed, upper contact is 25 degrees, undulose, lower contact 15 degrees curvi-planar. At 50.57-50.80 m black brown, black gray, banded shaly coal and coal bed. core is broken.	47.00	56.72		
	CONGL	Core is washed. 56.00-58.00 m core loss 0.90 m. Greenish, dark brown colored conglomerate, with as far as 1.0 cm thick, rounded pebbles.	56.72	58.00		
	CONGL	Core loss 2.70 m. >1.0 cm thick, rounded pebbles. Core is washed. Cement sand material.	58.00	61.00		
	CONGL	Core loss 2.60 m. Bluish gray to greenish yellow, gray colored conglomerate. Rock fragments and sand material. Rock fragments 0.5-5.0 cm diameter, rounded, in total to 30-35%. Some parts oxidized rock fragments.	61.00	65.00		
	MS	Dark gray colored mudstone bed with shaly coal, coal bed. At 72.29-72.51 m broken shaly coal bed. At 74.57-74.81 m banded shaly coal and coal bed, upper contact 0 degrees, lower contact is 5 degrees to core axis.	65.00	74.92		
	MS	Medium, dark gray, carbonaceous mudstone bed with rarely 1.0-5.0 cm thick coal bed and shale bed. Lower contact is 20 degrees, curvi-planar. At 74.80-77.00 m core loss 0.60 m. at 75.12-75.17 m black brown coal bed, upper and lower contact is broken.	74.92	81.50		
	C	Black brown, dull and bright coal bed with 1.0-3.0 cm thick shaly coal bed. Lower contact is 20 degrees to core axis, planar.	81.50	82.12	0.62	
	MS	Dark gray, carbonaceous mudstone. Lower contact 20 degrees, planar.	82.12	86.22		
	SHC	Black gray shaly coal bed. Lower contact is 25 degrees, curvi-planar.	86.22	86.42		
	C	Black brown, dull coal bed with 1.0-4.0 cm thick shaly coal bed. Lower contact 15 degrees to core axis, planar. At 86.86-86.90 m shaly coal bed.	86.42	87.15	0.73	
	MS	Medium, dark gray, carbonaceous mudstone bed. Coaly shale at top 12.0 cm. Lower contact is 15 degrees to core axis, planar.	87.15	89.71		
	C	Black brown, dull and bright coal bed. Bedding of the coal bed 15-20 degrees to core axis. Lower contact is 20 degrees to core axis, curvi-planar.	89.71	90.56	0.85	
	MS	Black gray to medium gray colored, interbedded carbonaceous mudstone, carbonaceous-sandy mudstone bed. Lower contact broken. At 92.60-92.82 m mudstone with , rounded gravels. Gravels in total to 5-10%. At 93.31-93.56 m sandy mudstone with 0.2-3.0 cm diameter, rounded gravels, in total to 10-15%, core is broken. at 94.95-95.06 m black gray coaly shale bed, upper contact 15 degrees, irregular, lower contact 5 degrees, irregular. at 99.64-100.02 m core is rounded, broken, shear zone. At 100.90-101.00 m shaly coal bed.	90.56	101.32		
	C	Black brown, dull and bright coal bed. Core is broken, fault gauge zone.	101.32	101.62		
	MS	Medium, dark gray carbonaceous-sandy mudstone bed. Broken, washed in some parts. At 108.45-108.61 m black brown, dull coal bed, upper contact 45 degrees, planar, lower contact 0 degrees, planar. Core is washed in some parts.	101.62	118.20		
	MS	Dark gray, carbonaceous mudstone bed with rarely 1.0-9.0 cm thick coaly shale and shaly coal bed. Core is washed, broken in some parts. Lower contact 5-10 degrees curvi-planar.	118.20	137.41		
	C	Black brown colored, dull and bright coal bed. Lower contact is 15 degrees to core axis, undulose. Bedding of the coal bed 10-15 degrees to core axis, core loss 0.80 m. core is washed and broken. Dark gray colored, coarse grained, poorly sorted sandstone bed and carbonaceous-sandy mudstone bed.	137.41	138.05	0.64	
	SS-CG		138.05	139.40		
	MS	Dark gray colored, interbedded carbonaceous-sandy mudstone and 5.0-25.0 cm thick shale bed with rarely 1.0-21.0 cm thick coal bed. Lower contact is 5 degrees to core axis, undulose. At 139.62-139.83 m black brown coal bed, upper contact is 25 degrees, planar, lower contact is 15 degrees to core axis, undulose.	139.40	151.10		
	CSH	Black gray colored coaly shale bed. Lower contact is 5 degrees, undulose.	151.10	152.80		
	MS	Dark gray and black gray colored, interbedded carbonaceous-sandy mudstone, shale and coaly shale bed. Shale bed is as far as 17.0 cm thick.	152.80	162.86		
	C	Black brown colored, dull and bright coal bed. Bedding of the coal bed 10-20 degrees to core axis. Lower contact is 20 degrees to core axis, planar.	162.86	163.46	0.6	
	MS	Dark gray, gray colored, carbonaceous mudstone bed. Lower contact is 5 degrees, planar.	163.46	167.67		
	C	Black brown colored, dull coal bed. Coal bed is 20-25 degrees to core axis. Lower contact is 20 degrees to core axis, undulose.	167.67	168.07		
	CSH	Black gray, black brown colored, interbedded coaly shale, shaly coal and coal bed.	168.07	169.16		
	MS	Dark gray colored, interbedded carbonaceous-sandy mudstone and shale bed. Lower contact is broken. Core is broken in some parts. At 172.70-173.07 m mudstone bed is very hard /strong rock/.	169.16	176.00		
	C	Black brown, dull and bright coal bed. bedding of the coal bed 20-25 degrees to core axis. Lower contact is 25 degrees to core axis, planar.	176.00	177.25	1.25	
	MS	Black gray to dark gray colored, carbonaceous-sandy mudstone bed. Lower contact is 20 degrees, undulose.	177.25	179.10		
	C	Black brown, dull and bright coal seam. Bedding of the coal seam 10-20 degrees to core axis. Lower contact is 10 degrees, planar. At 179.98-180.12 m black gray shaly coal bed. At 185.00-185.10 m black gray shaly coal bed.	179.10	186.65	7.55	
	SH	Dark gray and black gray colored, interbedded carbonaceous shale, coaly shale bed. Lower contact is 20 degrees, undulose. Top of parts shale.	186.65	187.75		
	C	Black brown, dull and bright coal bed. Bedding of the coal bed 15-25 degrees to core axis. Lower contact is 0 degrees, undulose.	187.75	192.50	4.75	
	MS	Dark gray colored, carbonaceous mudstone bed. Lower contact is 0-5 degrees, undulose.	192.50	197.00		
	SHC	Gray, dark gray, black brown colored, interbedded shaly coal, coal and sandy-carbonaceous mudstone bed.	197.00	197.00		
	C	Black brown, dull and bright coal bed with coaly shale. Coal bed 20-25 degrees to core axis. Lower contact 40 degrees, curvi-planar.	197.00	199.25	1.55	
	CSH	Black gray to dark gray colored coaly shale bed with coal bed. HOLE ABANDONED, RODS STUCK.	199.25	200.60		







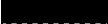



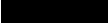

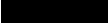







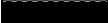
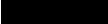
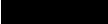




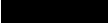
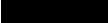









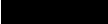
Cumulative coal seam thickness

18.34



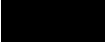

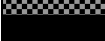




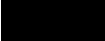
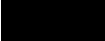

















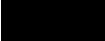






176.0

		PROJECT NAME		Nuurst			
		LICENSE INFORMATION		Collar location			
		DRILL HOLE NUMBER		XV-008159	EASTING	716800	
		DATE COLLARED		NDH-12	NORTHING	5240000	
		DATE COMPLETED		2011.10.01	GRID	UTM WGS-84	
		DESCRIPTION		2011.10.08	ZONE	North 48	
GRAPH	ROCK CODE	(Colour, Weathering, Rock Type, Grain size etc) Note: reference to the "core axis", refers to the <i>short core axis</i> . ie contacts are largely shallow dipping.	From	To	Coal		
	OSS-VCG	Drilled HQ-PCD bit. Light brown colored, very coarse grained, poorly sorted sand.	0.00	17.00			
	CL	Core loss 2.30 m. Reddish brown colored clay bed. Sand bed washed ???	17.00	20.00			
	CL	Light brown, reddish brown sandy clay bed.	20.00	23.00			
	NK	No core, core loss.	23.00	25.00			
	CL	Reddish brown colored sandy clay bed.	25.00	26.00			
	OSS-VCG	Light brown colored, very coarse grained, very poorly sorted sand bed. Core is broken. Sand bed with 0.5-4.0 cm diameter, rounded gravels. Gravels in total to 15-15%.	26.00	26.82			
	CL	Reddish brown, light brown colored clay bed.	26.82	29.00			
	CONGL	Core loss 5.85 m. 2.0-4.0 cm diameter, rounded gravels.	29.00	35.00			
	MS	Black gray, black brown, dark gray colored, interbedded carbonaceous mudstone, carbonaceous-sandy mudstone and coaly shale bed. Lower contact is 25 degrees to core axis, planar. At 35.62-36.03 m black brown coaly shale bed, upper contact 20 degrees, lower contact is 5 degrees to core axis, undulose.	35.00	40.32			
	SHC	Black brown, black gray colored shaly coal bed with banded 1.0-2.0 cm thick coal bed. Lower contact is broken.	40.32	40.78			
	MS	Black gray colored carbonaceous mudstone. Core is broken.	40.78	41.00			
	MS	Dark gray, black gray colored, interbedded carbonaceous mudstone, carbonaceous-sandy mudstone and coaly shale bed. Lower contact is 5-10 degrees to core axis, undulose. At 42.76-43.13 m black brown, dull coal bed, upper contact 20 degrees, planar, lower contact is 25 degrees, undulose. At 51.18-51.40 m black brown, dull coal bed, upper contact is 15 degrees, lower contact broken.	41.00	58.03			
	CSH	Black gray coaly shale. Broken in some parts. Lower contact is broken.	58.03	58.48			
	MS	Black gray carbonaceous mudstone. Lower contact irregular.	58.48	58.86			
	CSH	Black gray coaly shale, shaly coal bed with coal bed. Coal bed 3.0-8.0 cm thick, banded. Lower contact is broken. At 59.00-62.00 m core loss 1.90 m, at 62.00-63.90 m core loss 1.60 m.	58.86	63.90			
	C	Black brown, dull coal bed. Lower contact is 25 degrees, undulose.	63.90	64.22			
	SHC	Black gray shaly coal bed. Lower contact 20 degrees, undulose.	64.22	64.36			
	C	Black brown colored, dull coal bed. Core is broken some parts. Lower contact is 20 degrees, curvi-planar.	64.36	65.00	0.64		
	SHC	Black gray colored shaly coal bed. Lower contact is broken.	65.00	65.73			
	NK	No core, core loss.	65.73	67.28			
	C	Black brown coal bed. Core is broken.	67.28	67.40			
	MS	Dark gray, carbonaceous mudstone. Lower contact broken.	67.40	71.00			
	CSH	Black gray colored coaly shale bed. Lower contact is irregular.	71.00	72.07			
	C	Black brown, dull and bright coal seam with shaly coal bed. Shaly coal bed is 3.0-10.0 cm thick. Bedding of the coal seam 10-15 degrees mostly, rarely 20 degrees to core axis. Lower contact is broken. At 73.68-73.78 m shaly coal bed, upper and lower contact are irregular. at 76.54-76.64 m shaly coal bed, upper contact is 5 degrees, planar, lower contact 10 degrees, curvi-planar. At 77.80-77.84 m shaly coal bed. core is broken some parts. at 74.70-74.86 m fault gauge zone.	72.07	79.66	7.59		
	SHC	Black gray shaly coal bed. Core is broken, that interval is fault gauge zone.???	79.66	79.93			
	C	Black brown, dull and bright coal bed. Coal bed 15-20 degrees to core axis, lower contact is broken. Coal bed with rarely 1.0-6.0 cm thick shaly coal bed. At 82.78-82.84 m shaly coal bed, upper and lower contact are irregular.	79.93	83.00	3.07		
	CSH	Black gray coaly shale bed. Lower contact is 20 degrees, curvi-planar.	83.00	83.97			
	C	Black gray brown colored coal bed with banded 1.0-20 cm thick shaly coal. Lower contact is 30 degrees to core axis, planar.	83.97	84.33			
	CSH	Black gray coaly shale bed. Lower contact is broken.	84.33	84.55			
	MS	Dark gray carbonaceous mudstone /siltstone/. Core is very hard /strong rock/, broken in some parts.	84.55	85.27			
	CSH	Black gray coaly shale bed. Broken in some parts, lower contact broken.	85.27	86.05			
	C	Black brown, dull and bright coal bed. Coal bed 20-25 degrees to core axis, lower contact is broken. At 86.46-86.52 m black gray coaly shale bed. Upper and lower contact are 20 degrees, curvi-planar.	86.05	87.30	1.25		
	CSH	Dark gray coaly shale bed. Lower contact 5 degrees, undulose.	87.30	87.73			
	C	Black brown colored, dull coal bed. Core is broken some parts. Lower contact is broken.	87.73	88.61	0.88		
	SHC	Black gray shaly coal bed. Lower contact is broken. At 88.83-88.90 m black brown coal bed.	88.61	89.00			
	C	Black brown colored, dull coal bed. Lower contact 30 degrees, undulose. At 89.33-89.37 m shaly coal bed, upper and lower contact are irregular.	89.00	89.65	0.65		
	SHC	Black gray shaly coal bed. Lower contact is 20 degrees, planar.	89.65	90.54			
	C	Black brown, dull coal bed. Broken in some parts, lower contact broken.	90.54	91.15	0.61		
	CSH	Dark gray to black gray colored coaly shale to shaly coal bed with coal debris, coal tiny bed. Lower contact broken.	91.15	92.95			

72.07

	C	Black brown colored, dull and bright coal bed. Bedding of coal bed 15-20 degrees to core axis. Coal bed with 2.0-10.0 cm thick shaly coal bed. At 95.10-95.19m shaly coal bed. Upper contact is 20 degrees, lower contact is 15 degrees, undulose. At 95.25-95.32 m shaly coal bed, upper contact is 20 degrees, lower contact broken. At 95.84-95.93 m shaly coal bed, upper contact 0 degrees, lower contact is 5 degrees, undulose. At 97.05-97.15 m shaly coal bed, upper contact is 20 degrees, lower contact is 5 degrees, undulose.	92.95	97.90	4.95
	MS	Dark gray, carbonaceous mudstone. Lower contact broken.	97.90	98.80	
	SHC	Black gray shaly coal bed with dark gray, strong strength mudstone bed. Core is broken in some parts.	98.80	100.40	
	C	Black brown, dull coal bed. Core is broken.	100.40	100.76	
	SHC	Black gray, black colored shaly coal bed. Lower contact is 5 degrees, undulose.	100.76	101.82	
	C	Black brown, dull coal bed with 1.0-5.0 cm thick coaly shale bed. Lower contact is 5 degrees, undulose.	101.82	102.35	0.53
	CSH	Black gray coaly shale bed. Lower contact is 5 degrees, undulose.	102.35	102.69	
	C	Black brown, dull coal bed. Lower contact irregular.	102.69	103.12	
	CSH	Black gray coaly shale bed. Lower contact is irregular.	103.12	103.36	
	C	Black brown, dull coal bed. Lower contact is 10 degrees to core axis, undulose.	103.36	103.84	
	CSH	Black gray, coaly shale bed. Lower contact 15 degrees, undulose.	103.84	104.72	
	C	Black brown, dull and bright coal bed. Bedding of the coal bed 5-15 degrees to core axis. Lower contact is 5 degrees, curvi-planar.	104.72	105.51	0.79
	CSH	Black gray to dark gray colored coaly shale to carbonaceous mudstone bed. Lower contact is 20 degrees, undulose.	105.51	107.75	
	SHC	Black gray, black brown colored, interbedded shaly coal, coaly shale and coal bed. Lower contact is 10-15 degrees, undulose. Top 19.0 cm coal bed.	107.75	108.67	
	C	Black brown, dull and bright coal bed. Coal bed 10-20 degrees to core axis. Lower contact 15 degrees, undulose.	108.67	109.61	0.94
	CSH	Black gray colored coaly shale bed. Lower contact is 15 degrees, curvi-planar.	109.61	110.68	
	C	Black brown, dull and bright coal bed. Coal bed is 10-15 degrees to core axis. Coal bed with 5.0-10.0 cm thick coaly shale. Lower contact is 10 degrees, undulose. At 111.65-111.70 m dark gray coaly shale bed. At 111.80-111.90 m black gray coaly shale bed, upper and lower contact is 20 degrees, curvi-planar.	110.68	112.30	1.62
	MS	Dark, black gray colored, carbonaceous mudstone. Core is broken in some parts. Lower contact broken.	112.30	112.81	
	CSH	Black gray coaly shale bed. Top 5.0 cm coal bed. Lower contact is broken.	112.81	113.00	
	C	Black brown, dull and bright coal bed with coaly shale bed. Lower contact is 20 degrees, planar. At 113.42-113.51 m coaly shale bed, upper contact is broken, lower contact is 5 degrees, undulose.	113.00	113.77	0.77
	CSH	Black gray and black brown, interbedded coaly shale and banded shaly coal, coal bed. Coal bed 5.0-27.0 cm thick. At bottom 27.0 cm coal bed, upper contact 20 degrees, planar, lower contact is 0 degrees, irregular.	113.77	115.30	
	MS	Dark gray colored, carbonaceous mudstone bed. Lower contact is 20 degrees, undulose.	115.30	119.13	
	C	Black brown, dull and bright coal bed. Bedding of the coal bed 15-20 degrees to core axis. Lower contact is 0 degrees, irregular.	119.13	120.34	1.21
	MS	Dark gray, interbedded carbonaceous mudstone, carbonaceous-sandy mudstone and shale bed. Lower contact is 20 degrees, planar. At 123.37-123.57 m black brown coal bed, upper contact 20, lower contact is 30 degrees to core axis, undulose.	120.34	124.41	
	C	Black brown, dull and bright coal bed with 1.0-5.0 cm thick coaly shale bed. Coal bed 15-20 degrees to core axis. Lower contact is broken.	124.41	125.73	1.32
	MS	Dark gray colored, interbedded carbonaceous mudstone, carbonaceous-sandy mudstone bed and rarely medium grained, well sorted sandstone bed.	125.73	134.00	
	C	Black brown colored, dull and bright coal bed. Lower contact is 20 degrees, undulose..	134.00	134.24	
	MS	Black gray, dark gray colored, carbonaceous mudstone bed with shale bed. Lower contact irregular.	134.24	137.00	
	C	Black brown colored, dull and bright coal seam. Coal seam 15-20 degrees to core axis. Coal seam with very rarely 1.0-2.0 cm thick coaly shale, shaly coal bed.	137.00	147.00	10
	C	Black brown, dull and bright coal seam. Coal seam 15-20 degrees to core axis. Lower contact is 20 degrees, curvi-planar.	147.00	150.55	3.55
	SH	Dark gray shale bed. Top 20.0 cm coaly shale bed. Lower contact is 20 degrees to core axis, curvi-planar.	150.55	151.58	
	C	Black brown, dull and bright coal bed with coaly shale bed. Lower contact is 20 degrees, irregular. Coal bedding 15-20 degrees to core axis. At 153.95-154.48 m coal and banded, 2.0-6.0 cm thick shaly coal, coaly shale bed.	151.58	154.95	3.37
	CSH	Black gray coaly shale bed. Lower contact is 10-15 degrees, undulose.	154.95	155.20	
	C	Black brown, dull and bright coal bed. Bedding of the coal bed 15-20 degrees to core axis. Lower contact is 20 degrees, undulose.	155.20	156.48	1.28
	SHC	Black gray shaly coal bed. Lower contact is irregular.	156.48	156.74	
	C	Black brown, dull and bright coal bed. Lower contact is 15 degrees, undulose.	156.74	157.61	0.87
	SHC	Black gray shaly coal bed. Lower contact is 15 degrees to core axis, irregular.	157.61	158.00	
	C	Black brown, dull and bright coal bed with rarely 1.0-2.0 cm thick shaly coal bed. Lower contact is 20 degrees, undulose.	158.00	160.35	2.35
	CSH	Black gray to dark gray colored coaly shale and carbonaceous mudstone bed. At top 37.0 cm coaly shale bed. Lower contact is irregular. At 161.53-161.76 m coaly shale bed, upper contact is 15 degrees, curvi-planar, lower contact is ~20 degrees, irregular.	160.35	162.01	



	C	Black brown, dull and bright coal bed. Bedding of the coal bed 15-20 degrees to core axis. Lower contact is 5 degrees, undulose.	162.01	163.75	1.74
	CSH	Black, black gray colored coaly shale, shaly coal bed. Lower contact is 0 degrees, undulose.	163.75	164.13	
	C	Black brown, dull and bright coal bed. Coal bed 20-25 degrees mostly, rarely 15 degrees to core axis. Lower contact 25-30 degrees, curvi-planar.	164.13	166.72	2.59
	CSH	Dark gray to black gray colored coaly shale bed. Lower contact is 20 degrees to core axis, planar.	166.72	167.68	
	C	Black brown, dull and bright coal bed. Coal bed 15-20 degrees to core axis. Lower contact is 15-20 degrees to core axis, planar.	167.68	168.40	0.72
	SH	Dark gray colored, carbonaceous shale bed. Lower contact is 20 degrees, planar. At bottom 5.0 cm coaly shale.	168.40	169.14	
	C	Black brown, dull and bright coal bed. Lower contact is 15 degrees, planar.	169.14	169.41	
	SH	Dark gray colored carbonaceous shale. Lower contact is irregular.	169.41	169.68	
	C	Black brown, dull and bright coal bed. Coal bed with rarely 2.0-8.0 cm thick shaly coal bed. At top 10.0 cm banded, as far as 1.0 cm thick shaly coal bed. At 171.26-171.34 m shaly coal bed, upper and lower contact irregular. At 172.72-172.80 m shaly coal bed, upper contact is 20 degrees, curvi-planar, lower contact is 0 degrees, irregular.	169.68	173.00	3.32
	SH	Dark gray colored carbonaceous shale. Core is broken in some parts. Lower contact is 20 degrees undulose. At 173.25-173.30 m coal bed.	173.00	174.12	
	C	Black brown, dull and bright coal bed. Lower contact is broken.	174.12	174.51	
	SH	Dark gray carbonaceous shale and coaly shale bed. Broken in some parts. At 175.00-175.14 m shaly coal bed, upper contact is broken, lower contact is 10 degrees, curvi-planar.	174.51	175.96	
	CSH	Black brown to black gray, coal to coaly shale bed. Lower contact is 10 degrees, irregular.	175.96	176.16	
	CONGL	Dark gray, very poorly sorted conglomerate. Rock fragments >0.5 cm diameter, rounded, in total to 35-40%. Lower contact is ~0 degrees, irregular. Broken in some parts.	176.16	178.18	
	MS	Dark gray colored, interbedded carbonaceous mudstone, coaly shale and conglomerate bed. Lower contact is broken. At 179.00-179.10 m conglomerate bed, core is broken. At 180.05-180.49 m dark gray, very poorly sorted conglomerate bed with >0.5 cm diameter, rounded rock fragments. Rock fragments in total to 35-40%, cement sandy clay material. Upper and lower contact are irregular.	178.18	184.95	
	C	Black brown, dull and bright coal bed. Lower contact is 20 degrees, undulose.	184.95	185.20	
	CSH	Black gray coaly shale bed with 1.0-2.0 cm coal bed, lower contact irregular.	185.20	185.48	
	C	Black brown, dull and bright coal bed. Lower contact is 5 degrees, undulose.	185.48	185.75	
	SH	Dark gray carbonaceous shale bed. Lower contact is broken.	185.75	186.60	
	MS	Dark gray colored carbonaceous mudstone bed. Lower contact is broken.	186.60	191.27	
	C	Black brown, dull and bright coal bed. Lower contact broken.	191.27	191.71	
	MS	Dark gray, carbonaceous mudstone. Lower contact broken.	191.71	192.45	
	C	Black brown, dull and bright coal bed. Lower contact is broken.	192.45	192.88	
	SHC	Black gray shaly coal and coaly shale bed. Top 9.0 cm shaly coal. Broken in bottom parts.	192.88	193.22	
	C	Black brown, dull and bright coal bed. Bedding of the coal bed 15-20 degrees to core axis. Lower contact is 0 degrees, planar. At 193.62-193.66 m dark gray shale bed, upper contact 5 degrees, curvi-planar, lower contact is 5 degrees, curvi-planar.	193.22	195.96	2.74
	MS	Dark gray colored carbonaceous mudstone bed. Lower contact is broken.	195.96	197.70	
	CONGL	Dark gray, very poorly sorted conglomerate. Sandy clay and rock fragments material. Rock fragments is >0.5 cm diameter, rounded, in total to 35-40%. Lower contact is broken. At 199.15-199.38 m dark gray coaly shale bed, upper and lower contact is broken.	197.70	200.00	
	SH	Dark gray, interbedded carbonaceous shale, carbonaceous mudstone bed. Lower contact broken.	200.00	203.55	
	CONGL	Dark gray, gray colored very poorly sorted conglomerate. Core is broken in some parts. Sandy clay and rock fragments material. Rock fragments >0.5 cm diameter, rounded. In total to 25-30 degrees to core axis. Lower contact 10 degrees, irregular.	203.55	207.14	
	MS	Dark gray, carbonaceous mudstone bed with coal bed. Lower contact broken. At 207.57-207.69 m black brown coal bed, upper and lower contact is 20 degrees, undulose.	207.14	208.00	
	CONGL	Dark gray colored, very poorly sorted conglomerate bed. Core is broken in some parts and very strong in some parts. Cement is sandy clay material. Rock fragments 0.5-6.0 cm diameter, rounded, in total to 25-30%. Lower contact is broken.	208.00	212.12	
	SH	Dark gray colored, carbonaceous shale bed. Lower contact is ~10 degrees, irregular.	212.12	212.96	
	CONGL	Dark gray, very poorly sorted conglomerate bed. Core is broken some parts and very hard some parts. Cement sandy clay material. Rock fragments is >0.5 cm thick, rounded, in total to 25-30%. Lower contact is 15 degrees, irregular. Conglomerate bed with rarely 5.0-36.0 cm thick shale, mudstone bed. At 216.44-216.66 m mudstone bed, upper and lower contact is broken. At 222.33-222.69 m dark gray carbonaceous mudstone bed, upper contact is 20-30 degrees to core axis, curvi-planar, lower contact 5 degrees, irregular. At 223.40-223.58 m shale bed, upper contact is broken, lower contact is 5 degrees, irregular.	212.96	224.00	
	CSH	Black gray, dark gray colored coaly shale bed. Lower contact is 20 degrees, irregular.	224.00	224.54	
	CONGL	Dark gray conglomerate bed. Lower contact is irregular.	224.54	225.64	

	MS	Dark gray, interbedded carbonaceous mudstone, shale bed. Lower contact is 20 degrees, undulose.	225.64	229.58	
	C	Black brown, dull and bright coal bed. Coal bed 15-20 degrees, rarely 25 degrees to core axis. Lower contact is 15-25 degrees, curvi-planar.	229.58	230.00	
	MS	Dark gray, carbonaceous mudstone bed. Lower contact is 10 degrees, undulose.	230.00	234.41	
	SH	Black gray, dark gray colored, interbedded shale, coaly shale and shaly coal bed. Lower contact is 20 degrees, curvi-planar. At 235.41-235.69 m black brown, dull and bright coal tiny bed, upper contact is 15 degrees, lower contact is 15 degrees, planar.	234.41	237.74	
	C	Black brown, dull and bright coal bed. Coal bed 15-20 degrees to core axis. Lower contact is 20 degrees, planar.	237.74	239.20	1.46
	CSH	Dark gray shale and coaly shale bed. Lower contact is 15 degrees, undulose.	239.20	241.17	
	C	Black brown, dull and bright coal bed. Lower contact is 10 degrees curvi-planar.	241.17	241.55	
	SH	Dark gray to black gray shale and coaly shale bed. Top of parts shale. Lower contact is broken. At bottom 10.0 cm fault zone? Core is broken.	241.55	245.00	
	C	Black brown, dull and bright coal bed. Bedding of the coal bed 20-25 degrees, 30 degrees to core axis. Lower contact is broken.	245.00	245.55	0.55
	CSH	Black gray coaly shale. Lower contact is 20 degrees, irregular.	245.55	246.49	
	C	Black brown, dull and bright coal bed. Coal bed 5-15 degrees to core axis. Lower contact is 10 degrees, curvi-planar.	246.49	247.76	1.27
	SH	Dark gray colored, interbedded shale, coaly shale and carbonaceous mudstone bed. Lower contact is 0 degrees, undulose.	247.76	255.37	
	C	Black brown, dull and bright coal bed. Coal bed 0-10 degrees to core axis. Lower contact is 10-15 degrees, curvi-planar.	255.37	255.90	0.53
	CSH	Black gray to dark gray colored coaly shale and carbonaceous mudstone with coal bed. Bottom of parts carbonaceous mudstone bed. At 257.67-257.88 m black brown, dull and bright coal bed, upper contact 0 degrees planar, lower contact is 10 degrees, planar. At 256.48-256.60 m black brown, dull and bright coal bed, upper contact 15 degrees planar, lower contact is 5 degrees, planar. At 259.54-259.68 m black brown, dull and bright coal bed, upper contact 25 degrees, undulose, lower contact is 10 degrees, undulose. At 259.91-260.00 m black brown, dull and bright coal bed, upper contact 20 degrees planar, lower contact is broken.	255.90	261.35	
	C	Black brown, dull and bright coal bed. Coal bedding 5-15 degrees to core axis. Lower contact is 25 degrees, planar.	261.35	262.64	1.29
	SH	Dark gray shale bed. Lower contact is broken.	262.64	262.88	
	C	Black brown, dull and bright coal bed. Coal bedding 5-15 degrees to core axis. Lower contact is 20 degrees, undulose.	262.88	263.52	0.64
	MS	Dark gray, interbedded carbonaceous mudstone and shale bed. Lower contact is 5 degrees, irregular. At 266.41-266.74 m black brown, dull and bright coal bed, upper contact is broken, lower contact is 15 degrees, undulose. At 268.60-268.85 m fault zone.	263.52	268.90	
	C	Black brown, dull and bright coal bed. Bedding of the coal bed 10-15 degrees to core axis. Lower contact is 0 degrees, irregular.	268.90	269.58	0.68
	MS	Dark gray carbonaceous mudstone. Lower contact is 35 degrees, undulose.	269.58	270.48	
	C	Black brown, dull and bright coal bed. Lower contact is 15 degrees, planar.	270.48	270.86	
	SH	Dark gray colored, interbedded shale and carbonaceous mudstone bed. Broken in some parts. Lower contact is 20 degrees, curvi-planar. At 274.60-274.65 m fault gauge zone. At 274.90-274.95 m fault zone?	270.86	276.99	
	SHC	Black gray, interbedded shaly coal, coaly shale and tiny coal bed. Lower contact is ~25 degrees, curvi-planar. At 277.80-278.00 m black brown, dull and bright coal bed, upper contact is 15 degrees, lower contact is 10 degrees, undulose.	276.99	278.12	
	C	Black brown, dull and bright coal bed. Broken in some parts. Lower contact is 15 degrees, irregular. At 278.12-278.42 m fault zone?	278.12	278.52	
	CSH	Dark gray coaly shale bed. Lower contact 5 degrees, curvi-planar.	278.52	279.09	
	C	Black brown, dull and bright coal bed. Coal bed is 0.5 degrees mostly, very rarely 10 degrees to core axis. Lower contact is 10 degrees, planar. Coal bed with rarely 2.0-5.0 cm thick shaly coal bed. At 280.41-280.46 m shaly coal bed.	279.09	283.60	4.51
	MS	Dark gray mudstone bed. Lower contact 5 degrees to core axis, planar.	283.60	284.48	
	C	Black brown, dull and bright coal bed. Coal bed 10-20 degrees to core axis. Lower contact 15 degrees, planar.	284.48	285.12	0.64
285.12	MS	Dark gray, carbonaceous-sandy mudstone bed with fine grained to medium grained, well sorted sandstone bed. Lower contact is broken.	285.12	290.20	
	SS	Core loss 1.50 m. core is washed and broken. Dark gray colored, medium grained, well sorted sandstone bed. Bottom 10.0 cm carbonaceous mudstone bed.	290.20	293.00	
	NK	No core, core loss.	293.00	293.30	
	MS	Dark gray colored sandy-carbonaceous mudstone bed. Lower contact is ~20 degrees, undulose. At 296.39-296.74 m carbonaceous mudstone bed with as far as 1.0 cm thick banded shaly coal and coal bed.	293.30	297.30	
	SS	Gray colored, coarse grained, well sorted sandstone bed. End of hole.	297.30	299.00	

Cumulative coal seam thickness 70.28