

Nova Scotia Coal Fields.

Sydney Area.

Description.	Nova Scotia Steel and Coal Co., Ltd.										
	Sydney No. 1 colliery, Sydney Mines.					Sydney No. 3 colliery, Sydney Mines.					
	M13			M213	M2013		M12			M2012	
Sample No.	R	AD	D	D	R	D	R	AD	D	R	D
Moisture condition (see note, p. 2)											
Loss on air-drying.....%	0.8						1.4				
Results obtained by.....	Calc.	Calc.	Anal.	Anal.	Calc.	Anal.	Calc.	Calc.	Anal.	Calc.	Anal.
Proximate analysis:—											
Moisture.....%	3.5	2.7			1.6		5.5	4.1		3.5	
Ash.....%	6.9	7.0	7.2	3.5	11.2	11.4	6.3	6.4	6.7	16.2	16.8
Volatile matter.....%	36.0	36.3	37.3	40.2	35.4	36.0	36.8	37.3	38.9	33.6	34.8
Fixed carbon.....%	53.6	54.0	55.5	56.3	51.8	52.6	51.4	52.2	54.4	46.7	48.4
Ultimate analysis:—											
Carbon.....%	72.8	73.4	75.4	79.3	71.4	72.6	70.8	71.8	74.9	65.0	67.3
Hydrogen.....%	5.3	5.2	5.1	5.4	5.2	5.1	5.4	5.3	5.0	4.9	4.7
Ash.....%	6.9	7.0	7.2	3.5	11.2	11.4	6.3	6.4	6.7	16.2	16.8
Sulphur.....%	2.8	2.8	2.9	1.9	2.2	2.2	2.4	2.4	2.5	3.4	3.5
Nitrogen.....%	1.3	1.3	1.3	0.9	1.4	1.4	1.3	1.4	1.4	1.2	1.3
Oxygen.....%	10.9	10.3	8.1	9.0	8.6	7.3	13.8	12.7	9.5	9.3	6.4
Calorific value:—											
Calories per gram, gross....	7380	7440	7650	8050			7190	7290	7600		
B. Th. U. per lb., gross....	13290	13400	13770	14490			12940	13130	13690		
Fuel ratio.....	1.50			1.40	1.45		1.40		1.40		
Carbon-Hydrogen ratio.....	13.8	14.1	14.9	14.7	13.6	14.1	13.2	13.6	14.8	13.3	14.4
Coking properties.....											
Location in mine.....	Main seam.....				Main seam.....		Main seam.....			Main seam.....	
Kind of sample.....	Commercial—10 tons				Commercial..		Commercial—10 tons			Commercial..	
Quality of coal.....	Over $\frac{1}{4}$ inch bar screen and picking belt.			Washed coal from M13, yield 89%.	Slack.....		Over $\frac{1}{4}$ inch screen and picking belt.			Slack....	
Taken by.....	T. Denis, Mines Branch.				Mine authorities.		T. Denis.....			Mine authorities.	
Date of sampling.....	July 5, 1907.				January, 1909		July 4, 1907.....			January, 1909.	