

EDMONTON AND JUDITH RIVER COALS AND LIGNITES.

Bow River.

A seam of good lignite outcrops on the Bow river opposite the mouth of Coal creek (S.E. $\frac{1}{4}$, sec. 13, tp. 26, R. V.), but as the mine workings are now all caved in a section could not be seen; it appears, however, to be quite regular and of sufficient width to work near the river, but becomes very irregular and broken, up the creek. The horizon is probably near the base of the Edmonton. The seam is well exposed on the north bank of the river, just at the mouth of Coal creek, and at several points within a mile from the river. At the last point seen farthest from the river (S.W. $\frac{1}{4}$, sec. 24, tp. 26, R. V.), the seam is only three feet wide with ten inches of clayey parting near the centre. Considerable work has also been done here, being locally known as the Cochrane property. The workings on the south side of the river are known as the "Vaughan coal," "Mitford coal," or "Merritt coal."

Mr. J. B. Tyrrell has published in the Annual Report of this Department in 1886, the following section of the "Vaughan coal" property, furnished Dr. G. M. Dawson, by Mr. Vaughan; also the coal analyses given below, furnished by Dr. Hoffmann, of this Department: -

	Feet.	Inches
Coal	1	0
Black shale	2	9
Coal	1	6
Clay	0	1
Coal	2	6
Clay	0	2
Coal	2	7

From the north side of the Bow river:

Water.	Vol comb. matter.	Fixed carbon.	Ash
4.93%	27.22%	52.54%	15.31%

From the south side of the Bow river:

4.41%	40.32%	48.27%	7.00%
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A one foot seam outcrops on the north bank of the Bow midway between the Railway bridge at Mitford and the mouth of Coal creek, or Grand Valley creek, as it is locally called.

On Mr. McPierson's place are several narrow seams of good lignite from six to eight inches wide:

S.W. $\frac{1}{4}$, sec. 16, tp. 26, R. V.
S.W. $\frac{1}{4}$, sec. 15, tp. 26, R. V.

An eighteen inch seam of somewhat powdered lignite outcrops on the south bank of the Bow river opposite Radnor; also a seam, possibly the same one, of soft shaly coal is exposed on the east bank of Ghost river. (S.W. $\frac{1}{4}$, sec. 24, tp. 26, R. V.)