

Appendix
(C.)
1847.

The inferior members of the formation were seen at a turn of the river a short distance above the Alexander Fork, resting on the limestone group, and turned up at a very high angle, inclining to the southward. The lowest beds exhibited were dark brown, hard, fine-grained, pyritiferous sandstones, having carbonized and comminuted remains of plants sprinkled over their divisional plains; they were stained with ferruginous spots and streaks by decomposing pyrites, interstratified with calcareous slaty beds, and parted by thin layers of black carbonaceous shale. These were succeeded by thick beds of a fine conglomerate, chiefly composed of small pebbles of transparent quartz and lumps of black shale, imbedded in a hard calcareous matrix.

This formation appears to occupy the greater proportion of the space between the St. John and Mount Alexander, (which from its appearance I suppose to be trap,) and thence probably across to the Bonaventure. Sandstones and fine conglomerates, of similar character to those seen on the river, were invariably found at a short distance south from the river, and the gravel found at the mouth of the Upper Forks was mainly composed of fragments of the same description of rock, mingled with trap boulders and pebbles.

TERTIARY DEPOSITS.

At the mouths of the rivers there was usually observed a deposit of clay, generally of a blue colour, with sand or gravel over it, forming the banks. Over the clay, in some cases, as at the mouth of the Chat, marine shells were found deposited in layers: the genera *Mytilus*, *Mya*, *Tellina*, and *Balanus*, some of them apparently specifically identical with those which now inhabit the St. Lawrence, were met with at the height of thirty feet above high water mark. At the mouth of the Matan, the clay and gravel banks are upwards of eighty feet high; but I did not observe any organic remains, either there or at Ste. Anne. At Matan, a good example of the recent encroachment made by the sea, is observable in an isolated conical mound, which stands near the entrance to the river; it is evidently the remains of what at one time formed part of the bank, although now a quarter of a mile apart from it. The older residents state that within their recollection there was an area of about an acre of arable land upon its summit, on which they had seen grain growing; it is now reduced to about eight or ten square feet, and it appears by no means improbable that before many more years have passed away, the mound itself will have altogether disappeared.

These clays may be found in some instances to be of good quality for the manufacture of bricks, but I have not heard of an instance where any attempt has been made along this coast to use them for the purpose.

I have the honour to be,
Sir,
Your most obedient servant,
A. MURRAY,
Assistant Provincial Geologist.

Appendix
(C.)
1847.

APPENDIX.

List of various Mineral Springs met with or reported as existing on the Ottawa and its tributaries, arranged under the heads of Sulphurous, Saline and Chalybeate.

Sul. Sal. Cha.

TERREBONNE:—

- On the farm of Mr. M'Allister, on the Grande Côte, between St. Rose Ferry and St. Eustache, there is a spring, which is reported to have a strong sulphurous odour..... 1 0 0
- On the property of Capt. Buchanan, about a mile westward of St. Thérèse, a well was sunk twenty-seven feet, through clay; at this depth gravel occurred, and from it issued a spring which rose up six or seven feet, with a strong sulphurous taste..... 1 0 0

LAKE OF TWO MOUNTAINS:—

- On the farm of Mr. Ogilvie, of Côte des Anges, there is a spring, giving a small quantity of water with a taste of iron..... 0 0 1
- On the property of Mr. Inglis, not far from St. Eustache and Grand Brûlé, there is a spring, reported to be of saline quality..... 0 1 0
- On the property of the late Mr. Colin Robertson, in the vicinity of Lachute, there is said to be a chalybeate spring..... 0 0 1
- On the Rivière du Nord, about a mile and a half below Hoyle's mills, there is a sulphurous spring 1 0 0

EAST HAWKESBURY:—

- On the property of Mr. M'Kinnon, third (P) lot, sixth concession, there is said to be a saline spring..... 0 1 0
- On the ninth lot, sixth concession, on the right bank of the Rivière à la Graise, there are three springs close to one another. Two of them appear to be saline and one of them sulphurous... 1 2 0

CALEDONIA:—

- On the twentieth lot, first concession, are Parker's Springs, so well known to the public; one of them has been analysed by Professor Williamson of Kingston..... 2 2 0

ALFRED:—

- On Horse Creek, flowing into the Petite Nation from the ninth concession, there are said to be two strong springs, one of them sulphurous and the other saline..... 1 1 0

PLANTAGENET:—

- On George's Lake, on the boundary between Alfred and Plantagenet, there is a saline spring, which has been analysed by Dr. Hall of Montreal..... 0 1 0
- On a small creek on the right side of the Petite Nation, a little below Hatt's mills, there is a sulphurous spring, which is said to emit inflammable gas..... 1 0 0
- On the same creek, about sixty yards below the former, there is said to be a saline spring, covered by the water of the creek..... 0 1 0
- About two miles from the mills, and on the opposite side of the river, to the north of the road, there is a great deer-lick, much frequented by pigeons. The water has a slight saline taste..... 0 1 0

CLARENCE:—

- On the fifteenth lot, second concession, on the north side of Cobb Lake, there is said to be a sulphurous spring, called "The Stinking Spring." 1 0 0
- On the eighteenth lot, first concession, on the south side of Cobb Lake, there is said to be a strong saline spring..... 0 1 0

GLOUCESTER:—

- At the head of Bear Brook, in the rear of the township, there is said to be a sulphurous spring, 1 0 0
- On Green's Creek, sixteenth lot, second concession, (New Survey,) at the Bishop's Wells, there are two mineral springs,—one sulphurous and one saline,—and there is another lower down the river..... 2 1 0

TEMPLETON:—

- Within three-quarters of a mile of M'Arthur's mills, on the Blanche River, there are said to be two springs, within nine feet of one another; one sulphurous and the other saline..... 1 1 0